City of Biddeford
Planning Board
May 01, 2024 6:00 PM City Hall
Council Chambers, & Zoom

STATUS: Planning Board Meeting, Wednesday, May 1, 2024, 6:00 PM, City Council Chambers & Zoom

1. PLEDGE OF ALLEGIANCE

2. DECLARATION OF QUORUM/VOTING MEMBERS

3. ADJUSTMENTS TO THE AGENDA

4. PLANNER'S BUSINESS

4.A. Members of the Planning Board asked for the Maine Housing Income Chart.
2023-rent-income-charts.pdf

5. CONSENT AGENDA

5.A. Review and approve Meeting Minutes from April 17, 2024.
4-17-24-Meeting Minutes-DRAFT.pdf

6. UNFINISHED BUSINESS-OPEN PUBLIC HEARING

6.A. 2024.17 The Biddeford Planning Board will have a continuation of the FIRST READING in a Public Hearing to review and discuss a proposed change of zone from MSRD 2 to MSRD 1. This item was tabled at the April 17, 2024 Planning Board meeting. The property is located at 118 Alfred Street (Tax Map 38, Lot 303-1).

7. CLOSE PUBLIC HEARING

8. NEW BUSINESS

8.A. 2024.22 The Biddeford Planning Board will hold a public meeting to review and discuss of a Conditional Use Permit request for Pine Tree Maine 2, LLC to open an adult-use cannabis retail store at 588 Elm Street, (Map 21, Lot 2-1) in the I-1 & B-2 zones.

2024.22 Pine Tree Maine 2, LLC Cannabis adult use FOF - COA.pdf
2024.22 Pine Tree Maine 2, LLC Staff Report.pdf
3-12-24 Intent Letter for Code Office.pdf
Application.pdf

8.B. 2021.42 The Biddeford Planning Board will hold a Public Meeting and take comments regarding the Final Site Plan Subdivision Application for South Street Village, LLC to create a 195 Unit over 55 Manufactured Housing Park called Hidden Hills at 413 South Street, (Tax Map 7, Lot 8) in the SR1 & RF Zones with the MHP Overlay.

Hidden Hills FINAL PB PLAN APPROVAL STAFF REPORT DCMG Report 5-1-2024.pdf
Hidden Hills FINAL FOF and COA 5-1-24.pdf
Hidden Hills Final Submission Materials.pdf
Hidden Hills Plans.pdf

2-26-24 Drapeau to Staff Lack of Progress.pdf
4-25-24 Nevers.pdf

8.C. 2023.33 The Biddeford Planning Board will hold a public meeting and take comments regarding a Final Subdivision Application for Beachwood Development, LLC to create an 8-lot residential single-family subdivision at 781 Pool Street (Tax Map 5, Lot 17-2) in the Coastal Residential & Shoreland Overlay zone.

2023.33 Beachwood Development FINAL FOF and COA.pdf
2023.33 Beachwood Development LLC Final Staff Review 5-1-24.pdf
2023.33 Longboard Ridge Subdivision Final Submission.pdf
2023.33 Longboard Ridge Subdivision Final Plans.pdf
2023.33_Longboard_Ridge_Subdivision_Final_Plans.pdf

8.D. 2024.01 The Biddeford Planning Board will have a public meeting to review and discuss Final Site Plan request for the proposed expansion of the Biddeford Primary School located at 320 Hill Street (Tax Map 82, Lot 32) in the R-1A Zone.

2024.01 Biddeford School Department - Primary School Final Site Plan Review 5-1-2024.pdf
2024.01 Biddeford School Department Findings of Fact and Conditions of Approval 5-1-24.pdf
Final Submission.pdf

9. OTHER BUSINESS

10. ADJOURN

The Board reserves the right to halt official business at 9:30 p.m. Items not heard at tonight's meeting shall be rescheduled to the next meeting of the Board. All materials pertaining to items on the agenda are available for public review at the Biddeford Planning Department, second floor, Biddeford City Hall during normal business hours.

MaineHousing - Rent Restricted Programs

Income Eligibility Limits and Maximum Rent Levels

Income and Rents Effective 5-15-2023
FedHOME Rents Effective 6-15-2023
Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
Lewiston-Auburn MSA: Auburn, Durham, Greene, Leeds, Lewiston, Lisbon, Livermore, Livermore Falls, Mechanic Falls, Minot, Poland, Sabattus, Turner, Wales													
HERA 30%	18,990	21,690	24,390	27,090	29,280	31,440	33,600	35,760	474	508	609	704	786
HERA 40%	25,320	28,920	32,520	36,120	39,040	41,920	44,800	47,680	633	678	813	939	1,048
HERA 50%	31,650	36,150	40,650	45,150	48,800	52,400	56,000	59,600	791	847	1,016	1,174	1,310
HERA 60%	37,980	43,380	48,780	54,180	58,560	62,880	67,200	71,520	949	1,017	1,219	1,409	1,572
30% AMI	17,750	20,250	22,800	25,300	27,350	29,350	31,400	33,400	443	475	570	658	733
50% AMI	29,550	33,750	37,950	42,150	45,550	48,900	52,300	55,650	738	791	948	1,096	1,222
60% AMI	35,460	40,500	45,540	50,580	54,660	58,680	62,760	66,780	886	949	1,138	1,315	1,467
80% AMI	47,250	54,000	60,750	67,450	72,850	78,250	83,650	89,050	1,181	1,265	1,518	1,753	1,956
Low HOME	29,550	33,750	37,950	42,150	45,550	48,900	52,300	55,650	738	791	948	1,096	1,222
High HOME	35,460	40,500	45,540	50,580	54,660	58,680	62,760	66,780	747	834	1,060	1,391	1,533
HTF	17,750	20,250	24,860	30,000	35,140	40,280	45,420	50,560	443	475	621	814	1,007
FMR Effective 10-1-2022									747	834	1,060	1,393	1,576
Aroostook County													
HERA 30%	17,400	19,890	22,380	24,840	26,850	28,830	30,810	32,790	435	466	559	646	720
HERA 40%	23,200	26,520	29,840	33,120	35,800	38,440	41,080	43,720	580	621	746	861	961
HERA 50%	29,000	33,150	37,300	41,400	44,750	48,050	51,350	54,650	725	776	932	1,076	1,201
HERA 60%	34,800	39,780	44,760	49,680	53,700	57,660	61,620	65,580	870	932	1,119	1,292	1,441
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	562	672	841	985	1,100
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	562	672	841	1,117	1,266
HTF	15,950	19,720	24,860	30,000	35,140	40,280	45,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									562	672	841	1,117	1,266
Cumberland HMFA													
HERA 30%	21,630	24,720	27,810	30,900	33,390	35,850	38,340	40,800	540	579	695	803	896
HERA 40%	28,840	32,960	37,080	41,200	44,520	47,800	51,120	54,400	721	772	927	1,071	1,195
HERA 50%	36,050	41,200	46,350	51,500	55,650	59,750	63,900	68,000	901	965	1,158	1,339	1,493
HERA 60%	43,260	49,440	55,620	61,800	66,780	71,700	76,680	81,600	1,081	1,158	1,390	1,607	1,792
30% AMI	19,500	22,300	25,100	27,850	30,100	32,350	34,550	36,800	487	522	627	724	808
50% AMI	32,550	37,200	41,850	46,450	50,200	53,900	57,600	61,350	813	871	1,046	1,208	1,347
60% AMI	39,060	44,640	50,220	55,740	60,240	64,680	69,120	73,620	976	1,046	1,255	1,449	1,617
80% AMI	52,050	59,450	66,900	74,300	80,250	86,200	92,150	98,100	1,301	1,393	1,672	1,931	2,155
Low HOME	32,550	37,200	41,850	46,450	50,200	53,900	57,600	61,350	813	871	1,046	1,208	1,347
High HOME	39,060	44,640	50,220	55,740	60,240	64,680	69,120	73,620	1,003	1,113	1,338	1,537	1,695
HTF	19,500	22,300	25,100	30,000	35,140	40,280	45,420	50,560	487	522	627	814	1,007
FMR Effective 10-1-2022									1,003	1,123	1,478	1,863	2,014

MaineHousing - Rent Restricted Programs

Income Eligibility Limits and Maximum Rent Levels

Income and Rents Effective 5-15-2023
FedHOME Rents Effective 6-15-2023
Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
Portland HMFA: Cape Elizabeth, Casco, Cumberland, Falmouth, Freeport, Frye Island, Gorham, Gray, Long Island, North Yarmouth, Portland, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham, Yarmouth, Buxton, Hollis, Limington, Old Orchard Beach													
HERA 30%	25,350	28,950	32,580	36,180	39,090	41,970	44,880	47,760	633	678	814	940	1,049
HERA 40%	33,800	38,600	43,440	48,240	52,120	55,960	59,840	63,680	845	905	1,086	1,254	1,399
HERA 50%	42,250	48,250	54,300	60,300	65,150	69,950	74,800	79,600	1,056	1,131	1,357	1,568	1,748
HERA 60%	50,700	57,900	65,160	72,360	78,180	83,940	89,760	95,520	1,267	1,357	1,629	1,881	2,098
30% AMI	24,850	28,400	31,950	35,500	38,350	41,200	44,050	46,900	621	665	798	923	1,030
50% AMI	41,450	47,350	53,250	59,150	63,900	68,650	73,350	78,100	1,036	1,110	1,331	1,538	1,716
60% AMI	49,740	56,820	63,900	70,980	76,680	82,380	88,020	93,720	1,243	1,332	1,597	1,845	2,059
80% AMI	66,250	75,700	85,150	94,600	102,200	109,750	117,350	124,900	1,656	1,774	2,128	2,460	2,743
Low HOME	41,450	47,350	53,250	59,150	63,900	68,650	73,350	78,100	1,036	1,110	1,331	1,538	1,716
High HOME	49,740	56,820	63,900	70,980	76,680	82,380	88,020	93,720	1,243	1,421	1,708	1,964	2,171
HTF	24,850	28,400	31,950	35,500	38,350	41,200	45,420	50,560	621	665	798	923	1,030
FMR Effective 4-11-22									1,243	1,448	1,859	2,344	2,732
Franklin County													
HERA 30%	17,370	19,860	22,350	24,810	26,820	28,800	30,780	32,760	434	465	558	645	720
HERA 40%	23,160	26,480	29,800	33,080	35,760	38,400	41,040	43,680	579	620	745	860	960
HERA 50%	28,950	33,100	37,250	41,350	44,700	48,000	51,300	54,600	723	775	931	1,075	1,200
HERA 60%	34,740	39,720	44,700	49,620	53,640	57,600	61,560	65,520	868	930	1,117	1,290	1,440
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	632	711	853	985	1,100
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	632	713	939	1,247	1,261
HTF	15,950	19,720	24,860	30,000	35,140	40,280	45,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									632	713	939	1,257	1,261
Hancock County													
HERA 30%	18,240	20,850	23,460	26,040	28,140	30,210	32,310	34,380	456	488	586	677	755
HERA 40%	24,320	27,800	31,280	34,720	37,520	40,280	43,080	45,840	608	651	782	903	1,007
HERA 50%	30,400	34,750	39,100	43,400	46,900	50,350	53,850	57,300	760	814	977	1,128	1,258
HERA 60%	36,480	41,700	46,920	52,080	56,280	60,420	64,620	68,760	912	977	1,173	1,354	1,510
30% AMI	17,850	20,400	22,950	25,500	27,550	29,600	31,650	33,700	446	478	573	663	740
50% AMI	29,750	34,000	38,250	42,500	45,900	49,300	52,700	56,100	743	796	956	1,105	1,232
60% AMI	35,700	40,800	45,900	51,000	55,080	59,160	63,240	67,320	892	956	1,147	1,326	1,479
80% AMI	47,600	54,400	61,200	68,000	73,450	78,900	84,350	89,800	1,190	1,275	1,530	1,768	1,972
Low HOME	29,750	34,000	38,250	42,500	45,900	49,300	52,700	56,100	743	796	956	1,105	1,232
High HOME	35,700	40,800	45,900	51,000	55,080	59,160	63,240	67,320	877	882	1,036	1,383	1,392
HTF	17,850	20,400	24,860	30,000	35,140	40,280	45,420	50,560	446	478	621	814	1,007
FMR Effective 10-1-2022									877	882	1,036	1,383	1,392

MaineHousing - Rent Restricted Programs

Income Eligibility Limits and Maximum Rent Levels

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FedHOME Rents Effective 6-15-2023
Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
Kennebec County													
30% AMI	17,050	19,500	21,950	24,350	26,300	28,250	30,200	32,150	426	456	548	633	706
40% AMI	22,750	26,000	29,250	32,475	35,075	37,675	40,275	42,875	568	609	731	844	941
50% AMI	28,450	32,500	36,550	40,600	43,850	47,100	50,350	53,600	711	761	913	1,055	1,177
60% AMI	34,140	39,000	43,860	48,720	52,620	56,520	60,420	64,320	853	914	1,096	1,266	1,413
80% AMI	45,500	52,000	58,500	64,950	70,150	75,350	80,550	85,750	1,137	1,218	1,462	1,688	1,883
Low HOME	28,450	32,500	36,550	40,600	43,850	47,100	50,350	53,600	711	759	913	1,055	1,177
High HOME	34,140	39,000	43,860	48,720	52,620	56,520	60,420	64,320	754	759	971	1,203	1,443
HTF	17,050	19,720	24,860	30,000	35,140	40,280	45,420	50,560	426	456	621	814	1,007
FMR Effective 10-1-2022									754	759	971	1,203	1,443
Knox County													
HERA 30%	18,960	21,660	24,360	27,060	29,250	31,410	33,570	35,730	474	507	609	703	785
HERA 40%	25,280	28,880	32,480	36,080	39,000	41,880	44,760	47,640	632	677	812	938	1,047
HERA 50%	31,600	36,100	40,600	45,100	48,750	52,350	55,950	59,550	790	846	1,015	1,173	1,308
HERA 60%	37,920	43,320	48,720	54,120	58,500	62,820	67,140	71,460	948	1,015	1,218	1,407	1,570
30% AMI	17,500	20,000	22,500	25,000	27,000	29,000	31,000	33,000	437	468	562	650	725
50% AMI	29,200	33,350	37,500	41,650	45,000	48,350	51,650	55,000	730	781	937	1,083	1,208
60% AMI	35,040	40,020	45,000	49,980	54,000	58,020	61,980	66,000	876	938	1,125	1,299	1,450
80% AMI	46,700	53,350	60,000	66,650	72,000	77,350	82,650	88,000	1,167	1,250	1,500	1,733	1,933
Low HOME	29,200	33,350	37,500	41,650	45,000	48,350	51,650	55,000	730	781	937	1,083	1,208
High HOME	35,040	40,020	45,000	49,980	54,000	58,020	61,980	66,000	738	918	1,103	1,374	1,482
HTF	17,500	20,000	24,860	30,000	35,140	40,280	45,420	50,560	437	468	621	814	1,007
FMR Effective 10-1-2022									738	918	1,103	1,419	1,482
Lincoln County													
HERA 30%	19,740	22,560	25,380	28,170	30,450	32,700	34,950	37,200	493	528	634	732	817
HERA 40%	26,320	30,080	33,840	37,560	40,600	43,600	46,600	49,600	658	705	846	977	1,090
HERA 50%	32,900	37,600	42,300	46,950	50,750	54,500	58,250	62,000	822	881	1,057	1,221	1,362
HERA 60%	39,480	45,120	50,760	56,340	60,900	65,400	69,900	74,400	987	1,057	1,269	1,465	1,635
30% AMI	17,900	20,450	23,000	25,550	27,600	29,650	31,700	33,750	447	479	575	664	741
50% AMI	29,850	34,100	38,350	42,600	46,050	49,450	52,850	56,250	746	799	958	1,108	1,236
60% AMI	35,820	40,920	46,020	51,120	55,260	59,340	63,420	67,500	895	959	1,150	1,329	1,483
80% AMI	47,750	54,550	61,350	68,150	73,650	79,100	84,550	90,000	1,193	1,278	1,533	1,772	1,977
Low HOME	29,850	34,100	38,350	42,600	46,050	49,450	52,850	56,250	746	799	958	1,108	1,236
High HOME	35,820	40,920	46,020	51,120	55,260	59,340	63,420	67,500	913	918	1,165	1,407	1,550
HTF	17,900	20,450	24,860	30,000	35,140	40,280	45,420	50,560	447	479	621	814	1,007
FMR Effective 10-1-2022									913	918	1,165	1,418	1,773

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Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
Oxford County													
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
40% AMI	21,250	24,275	27,325	30,325	32,775	35,200	37,625	40,050	531	569	683	788	880
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	729	734	966	1,176	1,371
HTF	15,950	19,720	24,860	30,000	35,140	40,280	45,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									729	734	966	1,176	1,534
Penobscot HMFA													
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
40% AMI	21,250	24,275	27,325	30,325	32,775	35,200	37,625	40,050	531	569	683	788	880
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	753	807	968	1,119	1,248
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	802	907	1,166	1,421	1,566
HTF	15,950	19,720	24,860	30,000	35,140	40,280	45,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									802	907	1,166	1,469	1,672
Bangor HMFA: Bangor, Brewer, Eddington, Glenburn, Hampden, Hermon, Holden, Kenduskeag, Milford, Old Town, Orono, Orrington, Penobscot Indian Island Reservation, Veazie													
HERA 30%	21,570	24,630	27,720	30,780	33,270	35,730	38,190	40,650	539	577	693	800	893
HERA 40%	28,760	32,840	36,960	41,040	44,360	47,640	50,920	54,200	719	770	924	1,067	1,191
HERA 50%	35,950	41,050	46,200	51,300	55,450	59,550	63,650	67,750	898	962	1,155	1,334	1,488
HERA 60%	43,140	49,260	55,440	61,560	66,540	71,460	76,380	81,300	1,078	1,155	1,386	1,601	1,786
30% AMI	18,100	20,700	23,300	25,850	27,950	30,000	32,100	34,150	452	485	582	672	750
50% AMI	30,150	34,450	38,750	43,050	46,500	49,950	53,400	56,850	753	807	968	1,119	1,248
60% AMI	36,180	41,340	46,500	51,660	55,800	59,940	64,080	68,220	904	969	1,162	1,343	1,498
80% AMI	48,250	55,150	62,050	68,900	74,450	79,950	85,450	90,950	1,206	1,292	1,551	1,791	1,998
Low HOME	30,150	34,450	38,750	43,050	46,500	49,950	53,400	56,850	753	807	968	1,119	1,248
High HOME	36,180	41,340	46,500	51,660	55,800	59,940	64,080	68,220	802	907	1,166	1,421	1,566
HTF	18,100	20,700	24,860	30,000	35,140	40,280	45,420	50,560	452	485	621	814	1,007
FMR Effective 10-1-2022									802	907	1,166	1,469	1,672

MaineHousing - Rent Restricted Programs

Income Eligibility Limits and Maximum Rent Levels

Income and Rents Effective 5-15-2023
FedHOME Rents Effective 6-15-2023
Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
Piscataquis County													
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
40% AMI	21,250	24,275	27,325	30,325	32,775	35,200	37,625	40,050	531	569	683	788	880
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	657	661	853	985	1,100
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	657	661	860	1,105	1,371
HTF	15,950	19,720	24,860	30,000	35,140	40,280	42,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									657	661	860	1,105	1,444
Sagadahoc HMFA													
HERA 30%	20,490	23,400	26,340	29,250	31,590	33,930	36,270	38,610	512	548	658	760	848
HERA 40%	27,320	31,200	35,120	39,000	42,120	45,240	48,360	51,480	683	731	878	1,014	1,131
HERA 50%	34,150	39,000	43,900	48,750	52,650	56,550	60,450	64,350	853	914	1,097	1,267	1,413
HERA 60%	40,980	46,800	52,680	58,500	63,180	67,860	72,540	77,220	1,024	1,097	1,317	1,521	1,696
30% AMI	19,450	22,200	25,000	27,750	30,000	32,200	34,450	36,650	486	520	625	721	805
50% AMI	32,400	37,000	41,650	46,250	49,950	53,650	57,350	61,050	810	867	1,041	1,202	1,341
60% AMI	38,880	44,400	49,980	55,500	59,940	64,380	68,820	73,260	972	1,041	1,249	1,443	1,609
80% AMI	51,800	59,200	66,600	74,000	79,950	85,850	91,800	97,700	1,295	1,387	1,665	1,924	2,146
Low HOME	32,400	37,000	41,650	46,250	49,950	53,650	57,350	61,050	810	867	1,041	1,202	1,341
High HOME	38,880	44,400	49,980	55,500	59,940	64,380	68,820	73,260	826	1,016	1,236	1,530	1,688
HTF	19,450	22,200	25,000	30,000	35,140	40,280	45,420	50,560	486	520	625	814	1,007
FMR Effective 10-1-2022									826	1,016	1,236	1,688	2,017
Somerset County													
HERA 30%	16,440	18,780	21,120	23,460	25,350	27,240	29,100	30,990	411	440	528	610	681
HERA 40%	21,920	25,040	28,160	31,280	33,800	36,320	38,800	41,320	548	587	704	813	908
HERA 50%	27,400	31,300	35,200	39,100	42,250	45,400	48,500	51,650	685	733	880	1,016	1,135
HERA 60%	32,880	37,560	42,240	46,920	50,700	54,480	58,200	61,980	822	880	1,056	1,220	1,362
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	717	721	920	1,140	1,288
HTF	15,950	19,720	24,860	30,000	35,140	40,280	45,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									717	721	920	1,140	1,288

MaineHousing - Rent Restricted Programs

Income Eligibility Limits and Maximum Rent Levels

Income and Rents Effective 5-15-2023
FedHOME Rents Effective 6-15-2023
Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
Waldo County													
HERA 30%	16,830	19,230	21,630	24,030	25,980	27,900	29,820	31,740	420	450	540	625	697
HERA 40%	22,440	25,640	28,840	32,040	34,640	37,200	39,760	42,320	561	601	721	833	930
HERA 50%	28,050	32,050	36,050	40,050	43,300	46,500	49,700	52,900	701	751	901	1,041	1,162
HERA 60%	33,660	38,460	43,260	48,060	51,960	55,800	59,640	63,480	841	901	1,081	1,250	1,395
30% AMI	16,050	18,350	20,650	22,900	24,750	26,600	28,400	30,250	401	430	516	595	665
50% AMI	26,750	30,550	34,350	38,150	41,250	44,300	47,350	50,400	668	716	858	992	1,107
60% AMI	32,100	36,660	41,220	45,780	49,500	53,160	56,820	60,480	802	859	1,030	1,191	1,329
80% AMI	42,750	48,850	54,950	61,050	65,950	70,850	75,750	80,600	1,068	1,145	1,373	1,587	1,771
Low HOME	26,750	30,550	34,350	38,150	41,250	44,300	47,350	50,400	668	716	858	992	1,107
High HOME	32,100	36,660	41,220	45,780	49,500	53,160	56,820	60,480	849	896	1,094	1,256	1,381
HTF	16,050	19,720	24,860	30,000	35,140	40,280	45,420	50,560	401	430	621	814	1,007
FMR Effective 10-1-2022									891	896	1,142	1,390	1,694
Washington County													
HERA 30%	18,510	21,150	23,790	26,430	28,560	30,660	32,790	34,890	462	495	594	687	766
HERA 40%	24,680	28,200	31,720	35,240	38,080	40,880	43,720	46,520	617	661	793	916	1,022
HERA 50%	30,850	35,250	39,650	44,050	47,600	51,100	54,650	58,150	771	826	991	1,145	1,277
HERA 60%	37,020	42,300	47,580	52,860	57,120	61,320	65,580	69,780	925	991	1,189	1,374	1,533
30% AMI	15,950	18,200	20,500	22,750	24,600	26,400	28,250	30,050	398	426	512	591	660
50% AMI	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	663	711	853	985	1,100
60% AMI	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	796	853	1,024	1,182	1,320
80% AMI	42,450	48,500	54,550	60,600	65,450	70,300	75,150	80,000	1,061	1,136	1,363	1,575	1,757
Low HOME	26,550	30,350	34,150	37,900	40,950	44,000	47,000	50,050	651	675	853	985	1,100
High HOME	31,860	36,420	40,980	45,480	49,140	52,800	56,400	60,060	651	675	889	1,181	1,271
HTF	15,950	19,720	24,860	30,000	35,140	40,280	45,420	50,560	398	428	621	814	1,007
FMR Effective 10-1-2022									651	675	889	1,181	1,271
York HMFA													
HERA 30%	20,670	23,610	26,550	29,490	31,860	34,230	36,570	38,940	516	553	663	766	855
HERA 40%	27,560	31,480	35,400	39,320	42,480	45,640	48,760	51,920	689	738	885	1,022	1,141
HERA 50%	34,450	39,350	44,250	49,150	53,100	57,050	60,950	64,900	861	922	1,106	1,278	1,426
HERA 60%	41,340	47,220	53,100	58,980	63,720	68,460	73,140	77,880	1,033	1,107	1,327	1,533	1,711
30% AMI	20,300	23,200	26,100	28,950	31,300	33,600	35,900	38,250	507	543	652	753	840
50% AMI	33,800	38,600	43,450	48,250	52,150	56,000	59,850	63,700	845	905	1,086	1,255	1,400
60% AMI	40,560	46,320	52,140	57,900	62,580	67,200	71,820	76,440	1,014	1,086	1,303	1,506	1,680
80% AMI	54,050	61,800	69,500	77,200	83,400	89,600	95,750	101,950	1,351	1,448	1,737	2,007	2,240
Low HOME	33,800	38,600	43,450	48,250	52,150	56,000	59,850	63,700	845	905	1,086	1,255	1,400
High HOME	40,560	46,320	52,140	57,900	62,580	67,200	71,820	76,440	1,049	1,106	1,372	1,598	1,763
HTF	20,300	23,200	26,100	30,000	35,140	40,280	45,420	50,560	507	543	652	814	1,007
FMR Effective 10-1-2022									1,049	1,106	1,372	1,783	2,006

MaineHousing - Rent Restricted Programs

Income Eligibility Limits and Maximum Rent Levels

Income and Rents Effective 5-15-2023
FedHOME Rents Effective 6-15-2023
Housing Trust Fund Income and Rents Effective 6-15-2023

	% Median Income - Adjusted by Family Size								Maximum Gross Rents				
	One	Two	Three	Four	Five	Six	Seven	Eight	0BR	1BR	2BR	3BR	4BR
York-Kittery-So. Berwick HMFA: Berwick, Eliot, Kittery, South Berwick, York													
HERA 30%	26,160	29,880	33,630	37,350	40,350	43,350	46,320	49,320	654	700	840	971	1,083
HERA 40%	34,880	39,840	44,840	49,800	53,800	57,800	61,760	65,760	872	934	1,121	1,295	1,445
HERA 50%	43,600	49,800	56,050	62,250	67,250	72,250	77,200	82,200	1,090	1,167	1,401	1,618	1,806
HERA 60%	52,320	59,760	67,260	74,700	80,700	86,700	92,640	98,640	1,308	1,401	1,681	1,942	2,167
30% AMI	25,600	29,250	32,900	36,550	39,500	42,400	45,350	48,250	640	685	822	950	1,060
50% AMI	42,650	48,750	54,850	60,900	65,800	70,650	75,550	80,400	1,066	1,142	1,371	1,583	1,766
60% AMI	51,180	58,500	65,820	73,080	78,960	84,780	90,660	96,480	1,279	1,371	1,645	1,900	2,119
80% AMI	66,300	75,750	85,200	94,650	102,250	109,800	117,400	124,950	1,657	1,775	2,130	2,461	2,745
Low HOME	42,650	48,750	54,850	60,900	65,800	70,650	75,550	80,400	1,066	1,142	1,371	1,583	1,766
High HOME	51,180	58,500	65,820	73,080	78,960	84,780	90,660	96,480	1,115	1,247	1,642	2,024	2,239
HTF	25,600	29,250	32,900	36,550	39,500	42,400	45,420	50,560	640	685	822	950	1,060
FMR Effective 10-1-2022									1,115	1,247	1,642	2,263	2,797

For all NL, SHP, LIHTC and Tax Exempt Projects that were Place in Service before 1-1-2009, use the HERA Income and Rent Limits.

The 30% AMI Income Limits for the Section 8 Program are different than those included in this chart.

HOME designated units should use the lower of the applicable rent or the appropriate HOME rent.

HERA does not apply to the following Counties: Kennebec, Oxford, Penobscot, Piscataquis and Somerset.

CITY OF BIDDEFORD

Planning and Development Department

205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

Planning Board Meeting
Meeting Minutes
DRAFT

Date: April 17, 2024
Time: 6:00 PM
Location: Council Chambers & Zoom

1. Pledge of Allegiance
2. Declaration of Quorum/Voting Members
   Quorum Present: Larry Patoine, Chair, Susan Deschambault, Roch Angers, Alexa Plotkin, Stephen Beaudette & Dylan Doughty, Alternate Member
   Staff Present: David Galbraith & Nan Whitten
   Chair Patoine opened the meeting at 6:00PM
3. Adjustments to the Agenda-None
4. Planner's Business
5. Consent Agenda
   5. A. Approval of Meeting Minutes from 4-3-24
   MOTIONS: 6:02 PM
   Motion-Deschambault -Motion to approve minutes as presented
   Second-Angers
   Motion passed unanimously
6. Open Public Hearing
   6. A. 2024.17 The Planning Board will discuss and have the FIRST READING of the proposal to change the zone at 118 Alfred Street (Tax Map 38, Lot 303-1) from MSRD-2 to MSRD-1.
      - Galbraith introduced the proposal
      - MSRD 1 surrounds property on north and east
      - No public comments
      - Plotkin does not want piece mail changing things, property is surrounded by residences. Does not want traffic and commercial aspect in her neighborhood.
      - Deschambault concerned about parking, using other areas for parking.
      - Patoine pointed out that there is parking behind building.
      - Client who wants building is being displaced by an MDOT City project.
      - Abutters were notified.
      - Angers when it was a credit union it was very active. Another business is asking to go in there, safety and neighborhood appeal is a concern due to traffic. He has mixed feelings, it worked before will it work now? Most of the volume would be 4-midnight. He was hoping the public would turn out but none have spoken up. This will go to City Council after 2 readings.

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- **Patoine MSRD 1 comes all the way up so it's not a stretch**
- **Beaudette there is a pizza shop right across the street. He would support it.**
- **Patoine: There are 19 parking spots to support this property. 2 egresses to this property**
- **Deschambault it is pick-up and delivery**
- **Doughty what other buildings have been looked at**
- **Galbraith-They looked at a few buildings but this one met all their needs with the exception of the zone which they were told we could apply for a change. They want to stay in Biddeford.**
- **Angers-Did proposed buyer come up with any numbers such as deliveries and traffic patterns.**
- **Galbraith will have to check on what he can ask for**
- **Plotkin-this change would be forever not just for Dominos, she feels very personal about this because she lives so close. She feels very strongly we shouldn't make changes for one person and a pizza place is not a pressing issue.**
- **Doughty wants to make sure the applicant has exhausted their options, especially where the City has their hand in the search**

  MOTION: 6:15 PM

  Motion-Deschambault- Table Case # 2024.17 Preliminary Rezoning Review for the property located at 118 Alfred Street (Tax Map & Lot# 38-303-1) from the MSRD-2 zoning district to the MSRD-1 zoning district, based upon the following reasons: Obtain more information such as what other locations have been looked into, specifications, traffic numbers.

  Angers-Second

  Motion passed 3-1 (Deschambault, Angers, Beaudette in favor, Plotkin against)

6.B. 2024.21 First Reading of proposed Contract Zone #23 on Barra Road (Tax Map 7, Lot 15) for Indian Cliff Development Corp.

- **Doughty recused himself from this item and AVESTA Housing**
- **Galbraith introduced the project, there is a Sketch Plan request for this as well.**
- **Mike Eon represented Indian Cliff Development as president of the corp.**
- **No public comments**
- **David Gould Sawmill Properties is involved**
- **Moving Master Plan ahead**
- **Affordable Housing at 60% of Median income.**
- **Need state & city permits by June to get this going.**
- **Site is ¼ mile from the stream that has been stocked.**
- **Offshoot road is being called West Trail Way**
- **Working with Eastern Trail as well. Area will be busy with bicycles and walkers. The Riverwalk will be stretched down to the railroad trestle.**
- **Galbraith-part of the original agreement with the City is that he will bring in at least 30 affordable housing units in, this is why we need the Contract**

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Zone. This is also going with the Reveler Property at 60 Barra Road which is not for the elderly.

- **Eon just looking for the Contract Zone for the AVESTA site only.**
- **Traffic and environmental studies have been done.**
- **8 Lot subdivision, 8 of the 55 acres**
- **Patoine-LMI? Eon- Ryan Fecteau will talk about that, he only is obligated to do 80% but they are shooting for 60% through MSHA Grant.**
- **Over 55 or handicapped is eligible.**

7. **Close Public Hearing 6:18 PM**
8. **New Business**

8. A. 2024.02 The Biddeford Planning Board will hold a public meeting to review and discuss a Preliminary & Final Site Plan Application submitted by Bryan Holden to reconfigure the structure on 129 Main Street, (the Marble Block) creating a bowling alley, restaurant & bar on the ground floor, apartments on the second and third floors (Tax Map 38, Lot 386) in the MSRD1 Zone.

- **Galbraith introduced the project, first floor bowling alley & bar. Apartments in the upper floors**
- **Bryan Holden represented himself and Marble Block Co.**
- **He is in agreement with the Conditions**
- **No public comments**
- **Angers-thank you for committing to the residential portion of the project.**
- **Deschambault-what kind of bowling, candle pin-no standard**
- **Patoine-what about the I beam-that can be done but it will add time and cost. At this time they will clean and paint it and the post which will be enclosed. Rusty post will be scraped and painted as well as another post being added to add symmetry to the front. Holden has faith in the architect. Patoine is fine with what is being done.**
- **Holden if it is an eyesore once they get up and running he will look at it at another time**
- **Deschambault what will it be called-The Gutter**
- **The apartments-The Marble Block possibly, he hasn't really thought about it.**
- **Holden thankful for great partners**

MOTION: 6:49 PM

Plotkin-Motion-To approve Case # 2024.02 Final Plan Review for Holden Real Estate LLC to redevelop the "Marble Block" building into a bowling alley, restaurant/bar on the ground floor and a total of eight (8) residential apartments on the 2nd and 3rd floor, located at 129 Main Street (Tax Map 38, Lot 386), with the recommended Conditions of Approval.

Angers Second

Motion passed unanimously

8. B. 2024.17 The Planning Board will review & discuss a Sketch Plan application by AVESTA Housing to create a 46-unit elderly affordable housing project on Barra Road (Tax Map 7, Lot 15) in the R-3 zone.

- **Chris McDonald of BH2M represented the applicant**

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- This project part of a JDA 9-21-21 between Eon & City
- JDA is also tied to 60 Barra Rd called Saxon but is now Reveler
- 2 years after CO for 60 Barra then affordable elderly housing should being. They are 3 years ahead of schedule.
- City permitting by September
- Ryan Fecteau represented AVESTA Housing. Has been with AVESTA a little over a year.
- York County 60% $40,000 single occupants
- Dual $46,320
- Seeking funding for Maine Housing applications are opened in September. If they do not get funding they have to wait another year.
- It is important to get local approvals to give a better chance for funding.
- They have a good analysis of the tenants and their car uses. They can provide this information.
- Public:
- Eloise-(Journalist) is this the first project in Biddeford
- This is the 4th-Graham, Hill Street, Birch Street
- Galbraith has met with the team on different occasions as well as with the staff.
- Patoine would like LMI information in the next packet
- Plotkin- are they taking into consideration elderly issues such as windows being too heavy to open & close.
- Fecteau this building will replicate River Turn in Conway NH, taking this feedback from this project and putting it towards Barra Road
- Plotkin-Amenities space-any consideration for outdoor furniture up against the building. Outdoor gathering space is very important.
- Fecteau yes that has been discussed, this area comes off the community room. Making this space usable for the residents is important to them.
- Deschambault-Some of the buildings in town have affordable/market value and some of the things the market value has that affordable does not is creating a class distinction in the complex.
- Angers-Height of the building is the infrastructure and fire department going to be able to handle this, what is the city going to do?
- Galbraith-we work with the fire team constantly to make sure this is going to be accessible by the fire department ladder truck.
- McDonald they have worked with the Deputy Fire Chief closely in designing this layout. Have had very good early discussions with the fire department.
- Angers-are the fire fighters going to be able to take care of all the fires that may happen?
- Galbraith-we meet with all of the staff on each project to make sure these issues are taken care of and we have agreements with surrounding towns.
- Angers worries that as the City grows we may run low on assistance. Does the City Council keep an eye on this?
- Deschambault-46 units 35 spaces with 7 handicapped included?

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- **McDonald-public transportation is factored into the project.**
- **Deschambault-what happens is someone moves in with 2 cars what happens?**
- **McDonald that is addressed in the traffic study**
- **Fecteau our experience with our other properties that this group does not all have vehicles. There is a bus stop very close.**
- **Eon-Eastern Trail is involved, roads have been upgraded for bike lanes. Everyone is happy with the width of the roads. You can come out of the project and walk. With the buses that are right there, less is best with pavement. It's the same he had in OOB. This is ¼ mile from the Y where they can go down and swim. In his OOB place 1/3 of the tenants would walk down to the beach and back. In Amsterdam the buildings are 6 floors high. The trucks can handle 4 floors.**
- **Deschambault-is there a walking path going from this lot to Village Lane.**
- **Eon that is an old walking path that would remain open.**
- **Angers-Village Lane and other areas-is there any intention of connecting to any of the surrounding roads.**
- **Eon-first thing they did was sat with all the public officials and decided it made no sense to connect to the other roads, possibly a walking path.**
- **Patoine-South Street will never connect with Barra Road? Eon-Right**
- **Patoine No motion is needed but the Board is agreeable to this project-correct**

8. C. 2024.21 The Planning Board will review and discuss a Sketch Plan presented by Indian Cliff Development Corp for an 8-lot subdivision on Barra Road (Tax Map 7, Lot 15) in the R-3 & R-1 zones.

- **Chris McDonald of BH2M represented the applicant**
- **McDonald explained how the portion will be divided up**
- **Utilities will be City utilities some overhead some underground.**
- **This is in the Thatcher Brook Watershed.**
- **They are working with DEP on wastewater**
- **No Public Comments**
- **Patoine-it's a mix-AVESTA and single lot homes, 8th lot is non-buildable.**
- **Angers-Thatcher Brook is always an issue, who are you working with in the City to take care of this?**
- **Eon-Thatcher Brook goes through the middle of his properties it is impaired from Arundle to the end. The City hired GZA and I got to know them well so they are working with us also. The water has been testing fine in some places but not near the airport. We have to make sure we do not impair the stream at all. All the remaining land near the stream is going into preservation.**
- **Angers wants to make sure what happened 15 years ago doesn't happen again.**
- **Eon no that's why we brought GZA in.**
- **Angers-wants to make sure he's giving the same commitment to Thatcher Brook as he has in the past.**

DRAFT

- **Eon-it will go way up, everything will go through a filter bed.**
- **Patoine-looks like the Board is comfortable with what is being planned at this point.**
- **Eon-he wants to be ahead of schedule for this portion of the Master Plan.**
- **Patoine-dual track with the Council**
- **Galbraith-dual track with AVESTA & Indian Cliff as well as Contract Zone.**

9. Other Business

10. Adjourn 7:45 PM

Planning Board Chair/Vice Chair **Date**

These minutes are summary and are not intended to be verbatim. Archived meetings are viewable on the City's website: www.biddefordmaine.org.

DRAFT

CITY OF BIDDEFORD

Planning and Development Department

FINDINGS OF FACT AND CONCLUSIONS OF LAW
Conditional Use Permit
Adult-use Retail Marijuana Store
Pine Tree Maine 2, LLC 588 Elm Street, Biddeford, ME
Case # 2024.22 – May 1, 2024

Pursuant to the provisions of the City of Biddeford Land Development Regulations, Article VI (Performance Standards), Section 77 – Marijuana Establishments, the Biddeford Planning Board has considered the application of Pine Tree Maine 2, LLC to convert an existing warehouse into an "adult use marijuana retail store", including supportive data, public hearing testimony and related materials contained in the record. Based on Public Comment and Staff's review and recommendation, the Planning Board makes the following Findings of Fact and Conclusions of Law:

1. Project Data:

	SUBJECT	***DATA/INFORMATION***
1.	Applicant:	Pine Tree Maine 2, LLC 22 Smada Drive Sanford, ME 04073
2.	Owner of Property:	Dube Drywall PO Box 112 Biddeford, ME 04005
3.	Surveyor/Engineer:	N/A
4.	Project Location:	588 Elm Street
5.	Project Tax Map #/Lot #:	12/2-1
6.	Existing Zoning:	I-1 & B-2– Adult-Use Retail Marijuana Facility is a Conditional Use in I-1
7.	Overlay Zoning:	None
8.	Existing Use:	Warehouse
9.	Proposed Use:	Establishment of a new Adult-Use Retail Marijuana Facility
10.	Approvals Required:	Conditional Use
11.	Uses in the Vicinity:	Commercial/Industrial/Residential
12.	Number of Lots/Units in Subdivision:	N/A
13.	Minimum Lot Size Required: Provided:	None 1.22 acres
14.	Frontage Required: Provided:	50' 190' +/-
15.	Front Setback Required: Provided:	40' >40'
16.	Side Setbacks Required: Provided:	25' >25'
17.	Rear Setback Requires: Provided:	25' >25'
18.	Height Requirements: Provided:	60 feet or 6 stories. < 60 feet
19.	Water Supply:	Maine Water Company

20.	Sewerage Disposal:	City of Biddeford
21.	Solid Waste Disposal:	Private Hauler
22.	Fire Protection:	City of Biddeford
23.	Floodplain Status:	Property is not within a NFIP Zone A or V flood zone
24.	Wetland/Surface Water Impacts:	None
25.	Soil Study Provided:	N/A
26.	Parking Spaces Required:	
27.	Parking Spaces Provided (total): # Handicapped Spaces:	
28.	Ownership of Road:	Elm Street is a Public Road
29.	Impervious Surface Area:	0 SF Change
30.	Total Disturbed Area:	0 SF of previously undisturbed area.
31.	Estimated Site Development Costs:	N/A
35.	Financial Capacity Letter:	N/A – Internal Construction Only
36.	Waivers Requested/Needed:	a. Article XI, Full Site Plan Review as per Article XI, Section 9.B.2.
37.	Waivers Granted:	
38.	Variances Needed for Approval:	None.
39.	Other Permits Obtained:	N/A
40.	Other Non-City Permits Required:	None.
41.	Covenants, By-laws, Restrictions Required:	None
42.	LDR Attachment A: Fees Paid:	Yes
42.		
43.	Planning Board Review History: Conditional Use Permit	May 1, 2024

2. **Performance Standards:** The Board made the following conclusions in their review standards of Article VI (Performance Standards), Section 77 (Marijuana Establishments) states as follows:

A. Before submission of a conditional use application, the applicant must demonstrate his or her authorization to cultivate, process and store medical marijuana pursuant to the Maine Use of Marijuana Program.

FINDING: The Applicant has provided evidence that Pine Tree Maine 2, LLC is certified by the State of Maine for adult use sales.

B. As an accessory use, medical marijuana home production shall be allowed in any qualifying patient's residence or any medical marijuana caregiver's primary year-round residence in every base zone and overlay zone, without any requirement for land use permitting.

FINDING: N/A

C. *No medical marijuana dispensary or medical marijuana growing facility shall be closer than 250 linear feet, measured in a straight line from the dispensary or facility building entrance, to the nearest point on the boundary of any property which is occupied by a licensed day-care facility, school, Town park, Town playground or church.*

FINDING: N/A - The proposal is not within 250 feet of any of the buffered land uses.

D. *Before granting an approval, the Planning Board shall ensure the applicant has reviewed his or her property and building security plans with the Biddeford Police Department and the Police Department finds the security measures are consistent with state requirements.*

FINDING: Prior to the issuance of an Occupancy Permit the Biddeford Police Department is required to conduct an on-site inspection of the facilities security system. The system shall be operational prior to an Occupancy Permit being issued.

E. *No signs containing the word "marijuana," or a graphic/image of any portion of a marijuana plant or otherwise identifying medical marijuana shall be erected, posted or in any way displayed on the outside of a medical marijuana dispensary or a medical marijuana growing facility. Interior advertisements, displays of merchandise or signs depicting the activities of a medical marijuana dispensary or a medical marijuana growing facility shall be screened to prevent public viewing from outside such facility.*

FINDING: The application indicates that no signage will be presented which is not in compliance with this standard.

F. *No use shall emit offensive, harmful, or noxious odors beyond the property line.*

FINDING: See the recommended Conditions of Approval for Staff's recommended means of ensuring compliance with this standard.

i. *The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;*

FINDING: The applicant shall obtain all applicable state and federal permits.

ii. *The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;*

FINDING: The site is an existing developed site and adequate emergency access is provided. The Fire Department will also be involved in the Code Enforcement Department's consideration of building and occupancy permits.

iii. *The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;*

FINDING: No new exterior lighting is being proposed.

iv. *The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;*

FINDING: There is no development proposed by this project and the site is located in a business/industrial area.

v. *The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;*

FINDING: All activities are proposed within the existing building. Conditions of Approval include those for adequate odor control reinforcing the performance standards in the Ordinance.

vi. *The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;*

FINDING: Ample parking is provided on-site to meet the expected need.

vii. *The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;*

FINDING: Staff anticipates no issues with hazards to public safety or traffic congestion in this area. The building site was previously used as a storage warehouse. There should be little increase in traffic.

viii. *The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;*

FINDING: Adjacent parcels are industrial/commercial. The operation should not change in any way that may impact this standard negatively given the recommended Conditions of Approval and existing Performance Standards.

ix. *The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;*

FINDING: All activities will be conducted inside the building.

x. *The proposed use would be in compliance with Biddeford's Comprehensive Plan;*

FINDING: Although the Comprehensive Plan does not specifically address Adult Retail, this type of use is retail use which is permitted in the I-1 zone as per the Future Land Use Plan of the Comprehensive Plan.

xi. *The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;*

FINDING: Other than windows being enlarged, there are no modifications to the site or the building's exterior proposed.

xii. *The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;*

FINDING: The property is not located in a flood zone.

xiii. *Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;*

FINDING: The property was previously a warehouse and the water demands are not expected to change.

xiv. *Adequate provision has been made to control erosion or sedimentation;*

FINDING: There are no site improvements/disturbances proposed.

xv. *Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;*

FINDING: There are no site improvements/disturbances proposed that would affect existing stormwater.

xvi. *The proposed water supply would meet the demands of the proposed use for fire protection purposes;*

FINDING: Maine Water Company serves this site and has provided an Ability to Serve letter.

xvii. *Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;*

FINDING: The applicant has not indicated there will be a presence of hazardous substances, and if there were, State Law must be adhered (Condition of Approval #2).

xviii. *The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;*

FINDING: No site alterations are proposed for the site.

xix. *When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.*

FINDING: The parcel is not located in a Shoreland Zone.

APPROVAL GRANTED: Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the Conditional Use Permit for the proposed project summarized above, located at 588 Elm Street in accordance with the submitted application, supporting data, representations made, other related materials on file, and the following Conditions of Approval:

1. Standard Conditions of Approval apply.
2. All conditions previously approved by the Planning Board are hereby reaffirmed.

_____ _____

Mr. Larry Patoine, Planning Board Chair Date:

CITY OF BIDDEFORD

Planning and Development Department

David CM Galbraith
City Planner/Deputy Director
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
david.galbraith@biddefordmaine.or

PLANNING BOARD REPORT

TO: Larry Patoine, Chair & the Biddeford Planning Board

FROM: David CM Galbraith, City Planner / Deputy Director of Planning

DATE: April 24, 2024

RE: 2024.22 Conditional Use Permit for an Adult-Use Retail Marijuana Facility for Pine Tree Maine 2, LLC at 588 Elm Street(Tax Map 12, Lot 2-1) in the I-1 & B-2 Zones.

MEETING DATE: May 1, 2024 @ 6:00 PM

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1. INTRODUCTION

The Applicant, Pine Tree Maine 2, LLC, is seeking Planning Board approval for an adult use marijuana retail sales facility at 588 Elm Street (Property ID # Map 21, Lot 2-1). The subject property is 1.22 acres, is zoned I-1 and B-2.



588 Elm Street – Proposed Adult Use Marijuana Retail Store

2024.22 Conditional Use Permit for a Adult-Use Retail Marijuana Facility for Pine Tree Maine 2, LLC at 588 Elm Street (Tax Map 12, Lot 2-1) in the I-1 & B-2 Zones.
Planning Board Hearing Date: May 1, 2024

Pine Tree Maine 2, LLC is new to Biddeford, they hold the following cannabis business licenses, cultivation, manufacturing and retail. Pine Tree is a Maine family-owned business and the owners oversee the daily operation of the business. The Applicant is seeking approval to operate an adult use marijuana retail store from this location. Pine Tree cultivates and manufactures in Sanford, they have retail stores in Sanford, Hollis, Portland, Woolwich and are opening a new facility in Casco.

The subject property is 1.22 acres, and has a split zoning, almost down the center of the lot as viewed from Elm Street. The left side of the property is zoned I-1 and the right side of the property is zoned B-2. The proposed adult use marijuana retail store is being proposed within the portion of the building that is zoned I-1. Adult-Use Retail Marijuana Facilities are a Conditional Use in the Industrial-1 (I-1) Zone.



588 Elm Street Zoning – I-1 zoning shown in purple and B-2 illustrated in orange

As the Board is aware, at the December 19, 2023 meeting the City Council adopted new regulations that allow adult-use recreational marijuana retail stores within the City's I-1, I-3 & I-3 zoning districts as a "conditional use". This is the sixth application for an adult use recreational marijuana retail store being requested. The retail facility will be located within an existing building. Staff believes the existing site parking is adequate to support the proposed retail use. The City's Land Use Ordinance defines adult use marijuana stores as:

MARIJUANA STORE, ADULT USE
A facility licensed by the State of Maine to purchase adult use marijuana, immature marijuana plants and seedlings from a cultivation facility, to purchase adult use marijuana and adult use marijuana products from a products manufacturing facility, to collect and transport samples of marijuana, marijuana concentrate and marijuana products in a marijuana store's possession for mandatory testing, and to sell adult use marijuana, adult use marijuana products, immature marijuana plants and seedlings to consumers.

[Added 1-19-2021 by Ord. No. 2021.1]

2. PROJECT DATA

	SUBJECT	***DATA/INFORMATION***
1.	Applicant:	Pine Tree Maine 2, LLC 22 Smada Drive Sanford, ME 04073
2.	Owner of Property:	Dube Drywall PO Box 112 Biddeford, ME 04005
3.	Surveyor/Engineer:	N/A
4.	Project Location:	588 Elm Street
5.	Project Tax Map #/Lot #:	12/2-1
6.	Existing Zoning:	I-1 & B-2 – Adult-Use Retail Marijuana Facility is a Conditional Use in I-1
7.	Overlay Zoning:	None
8.	Existing Use:	Warehouse
9.	Proposed Use:	Establishment of a new Adult Use Retail Marijuana Facility
10.	Approvals Required:	Conditional Use
11.	Uses in the Vicinity:	Commercial/Industrial/Residential
12.	Number of Lots/Units in Subdivision:	N/A
13.	Minimum Lot Size Required: Provided:	None 1.6 acres
14.	Frontage Required: Provided:	50’ 190’ +/-
15.	Front Setback Required: Provided:	40’ >40’
16.	Side Setbacks Required: Provided:	25’ >25’
17.	Rear Setback Requires: Provided:	25’ >25’
18.	Height Requirements: Provided:	60 feet or 6 stories. < 60 feet
19.	Water Supply:	Maine Water Company
20.	Sewerage Disposal:	City of Biddeford
21.	Solid Waste Disposal:	Private Hauler
22.	Fire Protection:	City of Biddeford
23.	Floodplain Status:	Property is not within a NFIP Zone A or V floodzone
24.	Wetland/Surface Water Impacts:	None
25.	Soil Study Provided:	N/A
26.	Parking Spaces Required:	
27.	Parking Spaces Provided (total): # Handicapped Spaces:	
28.	Ownership of Road:	Elm Street is a Public Road
29.	Impervious Surface Area:	0 SF Change

30.	Total Disturbed Area:	0 SF of previously undisturbed area.
31.	Estimated Site Development Costs:	N/A
35.	Financial Capacity Letter:	N/A – Internal Construction Only
36.	Waivers Requested/Needed:	a. Article XI, Full Site Plan Review as per Article XI, Section 9.B.2.
37.	Waivers Granted:	
38.	Variances Needed for Approval:	None.
39.	Other Permits Obtained:	Conditional Adult Use Cannabis Permit
40.	Other Non-City Permits Required:	None.
41.	Covenants, By-laws, Restrictions Required:	None
42.	LDR Attachment A: Fees Paid:	Yes
42.		
43.	Planning Board Review History: Conditional Use Permit	May 1, 2024

3. EXISTING CONDITIONS

588 Elm Street existing warehouse commercial/industrial. The existing property is 1.22 acres in size and was developed with a 1 story building approximately 6,150 square feet in area. The Applicant is not proposing any exterior modifications, with the exception of additional windows, to the building, or any changes to the existing site plan. The property is devoid of trees and shrubs. Staff believes that the visiual appeal of the site could be greatly enhanced by, at minimum, landscape plantings in front of the building to increase the property's curb appeal.



588 Elm Street – Street View

4. PROJECT PROPOSAL

Adult-Use Retail Marijuana Facility.

5. OUTSTANDING ISSUES TO BE ADDRESSED PRIOR TO APPROVAL:

6. STAFF REVIEW

a. ZONING: Adult-Use Retail Marijuana Facility, is a Conditional Use in the I-1 Zone. However it is not allowed in the B-2 zone. There is no minimum lot size.

b. REVIEW STANDARDS:

Article VI (Performance Standards), Section 77 (Marijuana Establishments) states as follows:

Section 77
Marijuana Establishments
[Added 1-17-2017 by Ord. No. 2016.88]

A. Before submission of a conditional use application, the applicant must demonstrate his or her authorization to cultivate, process and store medical marijuana pursuant to the Maine Use of Medical Marijuana Program.

The Applicant has provided evidence that Pinetree Maine II is certified by the State of Maine for adult use marijuana sales.

B. As an accessory use, medical marijuana home production shall be allowed in any qualifying patient's residence or any medical marijuana caregiver's primary year-round residence in every base zone and overlay zone, without any requirement for land use permitting.

N/A

C. No medical marijuana dispensary or medical marijuana growing facility shall be closer than 250 linear feet, measured in a straight line from the dispensary or facility building entrance, to the nearest point on the boundary of any property which is occupied by a licensed day-care facility, school, Town park, Town playground or church.

The proposal is not within 250 feet of any of the required buffered land uses.

D. Before granting an approval, the Planning Board shall ensure the applicant has reviewed his or her property and building security plans with the Biddeford Police Department and the Police Department finds the security measures are consistent with state requirements.

The applicant has indicated that they have met with, and received approval from, the Biddeford Police Department regarding their security plan. The City Planner has asked the applicant to provide verification of this in writing from the Police Department.

E. No signs containing the word "marijuana," or a graphic/image of any portion of a marijuana plant or otherwise identifying medical marijuana shall be erected, posted or in any way displayed on the outside of a medical marijuana dispensary or a medical marijuana growing facility. Interior advertisements, displays of merchandise or signs depicting the activities of a medical marijuana dispensary or a medical marijuana growing facility shall be screened to prevent public viewing from outside such facility.

The application indicates that no signage will be presented which is not in compliance with this standard.

F. No use shall emit offensive, harmful, or noxious odors beyond the property line.

See the recommended Conditions of Approval for Staff's recommended means of ensuring compliance with this standard.

c. WAIVERS REQUESTED / REQUIRED: Article XI, Full Site Plan Review.

Staff Recommendation: Given there are no building expansions proposed and not increase in impervious surface proposed Staff recommend the Board grant this waiver which says that sufficient information has been provided to consider this application for review.

d. CONDITIONAL USE STANDARDS: The following are the standards for review under a Conditional Use Permit (standards in *italic*, Staff Comments in regular font):

i. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;

The applicant shall obtain all applicable state and federal permits.

ii. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;

The site is an existing developed site was previously reviewed by representatives of the Staff Review Committee (SRC) and was reviewed and approved by the Planning Board.

The Fire Department will also be involved in the Code Enforcement Department's consideration of building and occupancy permits.

iii. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;

The applicant does not intend to install any additional exterior lighting and the location is in a discreet location with no known existing lighting issues.

iv. *The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;*

There is no development proposed by this project and the site is located in a business/industrial area.

v. *The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;*

All activities are proposed within the existing building. Conditions of Approval include those for adequate odor control reinforcing the performance standards in the Ordinance.

vi. *The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;*

Ample parking is provided on-site to meet the expected need.

vii. *The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;*

Staff anticipates no issues with hazards to public safety or traffic congestion in this area. The building site was previously used for medical marijuana retail sales and the proposed use is anticipated to generate the same amount of traffic.

viii. *The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;*

Adjacent parcels are industrial/commercial. The operation should not change in any way that may impact this standard negatively given the recommended Conditions of Approval and existing Performance Standards.

ix. *The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;*

The proposed adult use marijuana sales is not anticipated to have an adverse impacts to neighboring property owners. The products offered for sale will be pre-packaged so odor is not a concern.

x. *The proposed use would be in compliance with Biddeford's Comprehensive Plan;*

Although the Comprehensive Plan does not specifically address Medical Marijuana Growing Facilities, this type of use is specialized light industrial use which is permitted in the I-1 zone as per the Future Land Use Plan of the Comprehensive Plan.

xi. *The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;*

There are no modifications to the Site or the building's exterior proposed.

xii. *The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;*

The property is not located in a flood zone.

xiii. *Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;*

Maine Water Company serves this site and has provided an Ability to Serve letter.

xiv. *Adequate provision has been made to control erosion or sedimentation;*

N/A

xv. *Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;*

There are no site improvements/disturbances proposed that would affect existing stormwater.

xvi. *The proposed water supply would meet the demands of the proposed use for fire protection purposes;*

Maine Water Company serves this site and has provided an Ability to Serve letter.

xvii. *Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;*

The applicant has not indicated there will be a presence of hazardous substances, and if there were, State Law must be adhered.

xviii. *The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;*

No site alterations are proposed for the site.

xix. *When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.*

The parcel is not located in a Shoreland Zone.

7. NEXT STEPS/SUGGESTED ACTIONS

Recommend the Planning Board grant the waiver request for a full site plan review submittal given no site alterations are proposed.

Recommend that if the Planning Board approves the Conditional Use Permit it be approved with the following minimum conditions of approval:

1. Standard Conditions of Approval apply.
2. The applicant shall obtain all other pertinent local, state and federal permits/licenses/insurance such as building, electrical, plumbing, etc., prior to commencing business.
3. No cannabis odors may be detectable from any place outside the structure(s) in which the use occurs. The applicant must submit to the Code Enforcement Department for review and approval an Odor Abatement Plan. The Odor Abatement Plan must be reviewed and approved by the City prior to permit issuance. The Odor Abatement Plan must be implemented prior to the issuance of an occupancy permit. The Odor Abatement Plan must include the following:
    a. A floor plan, specifying locations of odor-emitting activity(ies) and emissions.
    b. A description of the specific odor-emitting activity(ies) that will occur.
    c. A description of all equipment and methods to be used for reducing odors and ensuring that odors do not migrate outside of the structure(s). Odor control equipment should consist of a building, or if applicable, room ventilation system that collects the air from all potential odor generating activities and direct to a control device such as an activated carbon system. A Professional Engineer and a Certified Industrial Hygienist must review and certify that the equipment and methods to be used for reducing odors and ensuring adequate indoor air quality consistent with accepted and available industry-specific best control technologies and methods designed to ensure that odors from the use do not migrate outside of the structure(s) and that air quality inside the structure(s) meet acceptable industry standards.

8. SAMPLE MOTIONS:

I. *Motion to waive Article XI, Full Site Plan Review. I motion to waive Article XI, full site plan review, as no site improvements are being made.*

II. Motion to approve the Conditional Use Permit and the Findings of Fact and Conclusions of Law for Pine Treet Maine 2, LLC for an adult-use recreational marijuana retail facility at 588 Elm Street(Tax Map 21, Lot 2-1).

III. Motion to Table the Conditional Use Permit and the Findings of Fact and Conclusions of Law for Pine Tree Maine 2, LLC for an adult-use recreational marijuana retail facility at 588 Elm Street(Tax Map 12, Lot 2-1), based upon the following reasons:

*a)*_____

*b)*_____

*c)*_____

IV. Motion to deny the Conditional Use Permit and the Findings of Fact and Conclusions of Law for Pine Tree Maine 2, LLC for an adult-use recreational marijuana retail facility at 588 Elm Street(Tax Map 12, Lot 2-1), based upon the following reasons:

*a)*_____

*b)*_____

*c)*_____

ATTACHMENTS

1. Conditional Use Permit Application Package
2. Draft Findings of Fact and Conclusions of Law

dm 3/12

March 12, 2024

To Whom It May Concern:

Pine Tree Maine 2, LLC dba Landrace Cannabis Co. is requesting an Adult Use Retail Cannabis license for 588 Elm Street in Biddeford (Mbl 12/2/1). The building is a 6150 square foot warehouse currently. We would like to build a retail store in 1500 square feet of this building. This would require dividing walls, a bathroom, replacement of windows to allow more light in, a heating and cooling source, security and retail fit out.

We are aware the building and lot are divided by two zones, I1 and B2. The I1 zone is on the south side of the building, and we are willing to use that side for retail. The remaining portion of the building will be used for unheated storage and a business office if allowed.

Pine Tree Maine, LLC is a vertically integrated business holding the following cannabis business licenses, cultivation, manufacturing and 5 retail stores. We are a Maine family-owned business, and the owners oversee and operate the daily business. We currently own a 15k square foot building in Sanford where we cultivate, manufacture and have a retail store, we have additional retail stores in Hollis, Portland, Woolwich and soon to open in Casco.

Biddeford has been through tremendous growth over the past 10 years, and we look forward to being part of the Biddeford business community.

Look forward to hearing from you to get this process started.

Sincerely,

Lindsay Holden
Pine Tree Maine, LLC
Partner
Lindsay@landracecanna.com
207-807-5641

March 21, 2024

City of Biddeford Planning Board,

Enclosed please find the Adult Use Retail Cannabis conditional use permit request for Pine Tree Maine 2, LLC dba Landrace Cannabis Co. at 588 Elm Street in Biddeford.

Pine Tree Maine is a well established in the Adult Use Cannabis market. We have a 10k square foot cultivation facility in Sanford that has been licensed since 2021, a manufacturing lab in Sanford and 4 operating retail stores in Sanford, Hollis, Portland and Woolwich and an additional store that is due to open soon in Casco.

The conditional use application requests minimal changes to the exterior windows, we hope to make them larger. We will be adding security cameras to the exterior and interior of the property, please see attached security plan and a retail build out for the interior, the retail store on the left side and a 1000 square foot office (no cannabis) on the right side. This will allow us to conform to the split zoning of the building. We are not proposing any changes to the exterior landscaping or parking area.

Due to the current existence of the building at 588 Elm Street and the minimal changes to the exterior we are requesting a waiver for a full site plan review, and waiver for engineering plans and a stormwater management report.

Included in this application packet:
-Signed Application Document
-Proof of compliance with Performance Standards
-Floor Plan with security cameras, and odor mitigation
-Aerial photograph of parking, ingress and egress
-Google map photo with 500 foot buffer circle centered on 588 Elm Street
-Site photos
-Letter of intent to lease

Sincerely,

Lindsay Holden
Pine Tree Maine 2, LLC
Partner

City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

__ Shoreland Zoning Permit __ Site Plan Review __ Extraction
X Conditional Use Permit __ Subdivision __ Private Way
__ Other: _____

Applicant Information:

Name: Pine Tree Maine 2, LLC
Mailing Address: 22 Smada Drive Sanford, Maine 04073
Telephone: 807 5641
Email: lindsay@landracecanna.com

What is your legal interest in the property?

__ Owner __ Potential Buyer with Contract X Lease/Rental Agreement

Owner's Information:

Name: Dube Drywall
Mailing Address: PO Box 112 Biddeford, Maine 04005
Telephone: 284.7181
Email: dubedrywall supply@~~aol.com~~ gmail.com

Agent's Information:

Name: David Perkins
Mailing Address: 1 Canal Plaza Portland, Maine 04101
Telephone: 774.9000
Email: dperkins@curtisthaxter.com

Engineer/Surveyor's Information:

Name: none
Mailing Address: _____
Telephone: _____
Email: _____

Project Location and Lot Information:

Street Address: 588 Elm Street Drainage Watershed: _____
Tax Map: 21 Lot: 2/1
Current Zoning: I1/B2 Shoreland Zoning: _____
Size of Lot: 1.22 (X)acres ( )s.f. Lot Frontage: 193.70 feet
Existing Use of Property: Warehouse for storage

Property currently serviced by:

X City Road ~~Municipal Sewer~~ X Public Water __ Public Trash
__ Private Road X Septic System __ Private Well X Private Hauler

Slope Conditions in Area of Construction (if applicable):

X Flat (0-3% slope) __Rolling (3-8% slope) __Hilly (8-15% slope) __Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? __ (Yes) X (No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes) X (No) if yes attach information
Do you plan to bring fill onto the lot? __(Yes) X (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:
We are requesting a conditional use permit for an Adult use marijuana retail store

Property to be Serviced by:

X City Road __ Public Sewer X Public Water __ Public Trash
__ Private Road X Septic System __ Private Well X Private Hauler

Limits of Disturbance: none ( )acres ( )s.f.
Net change in impervious cover: none ( )acres ( )s.f.
Is this project part of a larger project? __(Yes) X(No)
Is the project proposing a new Private or Public Road? __(Yes, Private) __(Yes, Public) X(No)
Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) __(Yes) X(No)
Is the project proposing any Stormwater facilities/BMPs? __(Yes) X(No)
Will a Traffic Movement Permit (TMP) be required?: __(Yes) X(No)

__ **If in a Shoreland Zone:** N/A
Percent of residential lot coverage (Max 20%): _____
Percent of structure expansion (Max 30%): _____
__ **If Subdivision Review, number of lots proposed:** _____
__ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: no square footage changes
Total new square feet paving/parking: no parking changes

Waiver Requests (attach details):

1. due to no exterior changes we reqvest a wavier
2. for full site plan review
3. wavier for engineering plans
4. wavier for stormwater management report
5. _____

Required Submittal Attachments:

A. Letters of Approval
property existing and serviced
__ Fire Department – Contact Chief or Deputy Chief – 282-9986
__ Ability to Serve for Water Service – Maine Water – 282-1543
__ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
__ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127

B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
C. Photographs of Site.
D. Architectural renderings/drawings of proposed buildings, as required.
E. Engineering Plans, as required.
F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __(Yes) X (No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: [signature] **Date** 3/21/24

Signature of Property Owner: DJBE Daywalk Inc **Date** 4-2-24
Vinton Dube Pres

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

Pine Tree Maine 2, LLC
Biddeford Planning Board
Performance Standards

Performance Standards for Marijuana Establishments

A. All marijuana establishments shall be located indoors. Any common areas, including, but not limited to, storage areas and building facilities, shared with another marijuana establishment shall be clearly identified as such on the site plan or conditional use application.

The proposed Adult Use Marijuana Retail Establishment at 588 Elm Street, Biddeford shall be the only business operated from this address.

B. Odor management. For all marijuana establishments, the odor of marijuana shall not be detectable off-premises, meaning not detectable on any property that is not under the control of the establishment. To prevent and control marijuana odors, an odor control plan shall be submitted as part of the site plan application describing the odor(s) originating or anticipated to originate at the premises and the control technologies to be used to prevent such odor(s) from leaving the premises. The odor control plan shall, at a minimum, include the following:

1. A facility floor plan that identifies the locations of all odor-emitting activities and sources. The plan shall also identify the location of doors, windows, vents, HVAC systems, odor control systems and other relevant information.

See attached Floorplan for 588 Elm Street, Biddeford.

2. A list of specific odor-emitting activities and sources, and a description of the processes that will take place at the facility, including, but not limited to, vegetative flowering, processing and storage.

The proposed Adult Use Cannabis Store will not be growing or processing cannabis at 588 Elm Street. All products received from a cultivation or manufacturing license will be packaged in tamper evident packaging that should emit no odor. We will employ carbon filtration units in the store and product storage room.

3. For each odor-emitting activity or source, a description of the administrative procedures as well as the engineering processes, technologies, and equipment the facility will use.

a. Administrative controls shall include, at a minimum: management practices to isolate odor activities and sources, use of standard operating procedures, employee training, regular equipment inspections and maintenance of inspection logs.

The proposed Adult Use Cannabis Store will utilize carbon filtration systems sized for the location to mitigate any odor. Most product will be stored in the back room that has no doors or windows leading outside. Employees will be trained to be aware of and report any odor issues, inspect equipment and complete inspection logs monthly.

b. Engineering controls shall include, at a minimum, building design features; use of equipment and technology to address each specific odor-emitting activity or source; a systems and equipment maintenance and replacement schedule; and evidence that proposed equipment and technology are sufficiently capable and appropriately sized consistent with marijuana industry best practices for control technologies designed to effectively mitigate odors.
Marijuana establishments shall implement appropriate ventilation and filtration systems to satisfy the odor standard contained herein. While the City does not mandate any particular equipment specifications with regard to filtration, all marijuana establishments are strongly encouraged to adopt best management practices with regard to implementing state-of-the-art technologies in mitigating marijuana odor, such as air scrubbers and charcoal filtration systems.

The proposed Adult Use Cannabis Store will utilize both carbon filtration and HEPA filtration to control odor and maintain compliance with Biddeford's Odor control regulations. Carbon filtration and HEPA filtration will be placed in the store and storage room to minimize any odor coming off the stored and packaged products. Climate control in these rooms is maintained by ductless heat pumps which do not exchange air to the outside.

c. Noxious gases and fumes. Marijuana establishments shall have appropriate ventilation systems to mitigate noxious gases or other fumes used or created as part of the establishment. Gases or fumes shall not extend beyond the premises of any establishment, meaning not detectable on any property that is not under the control of the establishment.

The proposed Adult Use Cannabis Store will not be conducting any activity that would produce noxious gases or fumes.

d. Sufficient measures and means of preventing smoke, debris, dust, fluids and other substances from exiting a marijuana establishment shall be provided at all times.

The proposed Adult Use Cannabis Store will not allow consumption of marijuana on the premises. The building will undergo minimal exterior renovations (new windows and security cameras). These renovations will take place before cannabis is brought into the building.

e. All marijuana and marijuana by-products intended for disposal shall be stored indoors in a self-contained room that is intended solely for this purpose and in accordance with all applicable federal, state and local laws and regulations. When moving material from the self-contained storage room for disposal, marijuana and marijuana by-products shall be moved only in receptacles with a cover or lid. Security cameras shall be installed to record activities in the area of

the storage room as well the areas between the storage room and where said material is loaded onto vehicle(s) for disposal.

The proposed Adult Use Cannabis Store will utilize a contracted waste removal service for daily waste. Any cannabis that is returned and needs to be destroyed will be kept in a locked bin and brought back to the cultivation facility for destruction. This process will follow all guidelines required by Metrc.

C. Separation of marijuana establishments. No new marijuana establishment may be located within any building that is located within 500 feet of any other building containing a marijuana establishment.

The property at 588 Elm Street, Biddeford is not within 500 ft of a previously existing marijuana establishment. See buffer map included in this submission packet.

Conditional Use Performance Standards

A. Applications for conditional use permits must meet the standards specified in Article VI of this ordinance as well as the standards of subdivision or site review. In addition, because of the unique nature and particular concern that the general public may have relating to a conditional use in a particular zone, the Planning Board shall consider each of the applications in light of the guidelines presented below.

B. The Planning Board shall approve, approve with conditions, or deny all applications for a conditional use permit. The applicant shall have the burden of proving that his or her application is in compliance with the requirements of this ordinance and that none of the conditions listed below would result from the approval of the conditional use permit. Failure of the applicant to submit required information shall constitute a basis for denial without a review of the remainder of the application. After the submission of a complete application and a review of the required submissions, the Planning Board shall approve the application or approve it with conditions if the application meets the following standards:

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;

The proposed use meets the specific requirements set forth in this ordinance and will be in compliance with applicable state or federal laws.

2. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;

The proposed use will not create fire safety hazards and will always be adequately accessible by emergency vehicles. The proposed use does not affect vehicle access to the building. The proposed use does not include the storage or use of hazardous chemicals.

3. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;

The proposed use will ensure sufficient lighting to create a secure location, they will be downcast lights as to not interfere with neighbors or traffic.

4. The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development.

The proposed use does not include changes to landscaping and will not have any unsightly areas that would affect neighbors.

5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes.

The proposed use of this property is exclusively indoor retail operations. Odor mitigations systems will be in place to control any odors. The retail establishment will keep hours of operation will be 8am-10 pm Monday through Sunday.

6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;

The property at 588 Elm Street, Biddeford has a large parking area on the right side of the building and wide driveway entrance. Customers are directed to park in the lot with 10 spaces and walk to the left side of the building to enter the retail space, deliveries are directed to do the same. This proposal will not create traffic congestion as the site lines entering and exiting the property are wide open.

7. The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;

The proposed use should not be a burden to existing traffic patterns. A retail business currently operates next door with no issues.

8. The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;

The proposed use will not have any impact on the value of adjacent properties.

9. The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;
City of Biddeford, ME
Downloaded from https://ecode360.com/BI3074 on 2024-02-09

The proposed use includes minimal buildout construction that will happen in a timely manner. The privacy of residents in the immediate area will not be adversely affected.

10. The proposed use would be in compliance with Biddeford's Comprehensive Plan;

Biddeford's City Council voted to approve the conditional use of Adult Use Cannabis Store in the I-1 in December of 2023. This proposal for a conditional use permit for an Adult Use Marijuana Store in the I-1 Zone is consistent with Bldddeford's Comprehensive Plan.

11. The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity

and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;

The proposed use will be making minimal changes to the exterior of the property. There will be no landscaping or structural renovation changes. The only changes will be to increase the size of the windows and an interior retail fit up along with a security system to comply with Adult Use Cannabis Program rule and will not impact the community or neighborhood.

12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;

The proposed use does not make any changes to the exterior of the building or to the land on the property. There will be no change and no resulting flood risks or hazards.

13. Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;

The proposed use does not anticipate any change to disposal of wastewater or solid waste. This property on Elm Street is connected to a private septic system. Solid waste is contracted to a local trash hauler and will be collected in toters that are kept inside until trash pick up. Cannabis waste will be tracked, treated and rendered inert before being disposed of, in accordance with state law.

14. Adequate provision has been made to control erosion or sedimentation;

The proposed use will not disturb the property or cause erosion or sedimentation, as the proposed use does not include any construction, landscaping or renovation.

15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;

The proposed use will not affect storm water drainage as there is no change to the building or property.

16. The proposed water supply would meet the demands of the proposed use for fire protection purposes;

Public water is available at the site should a fire suppression system be required.

17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;

The proposed use will have no hazardous substances on the property or in use as a part of its operation.

18. The proposed use would not have an adverse impact on scenic vistas or on significant

wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;

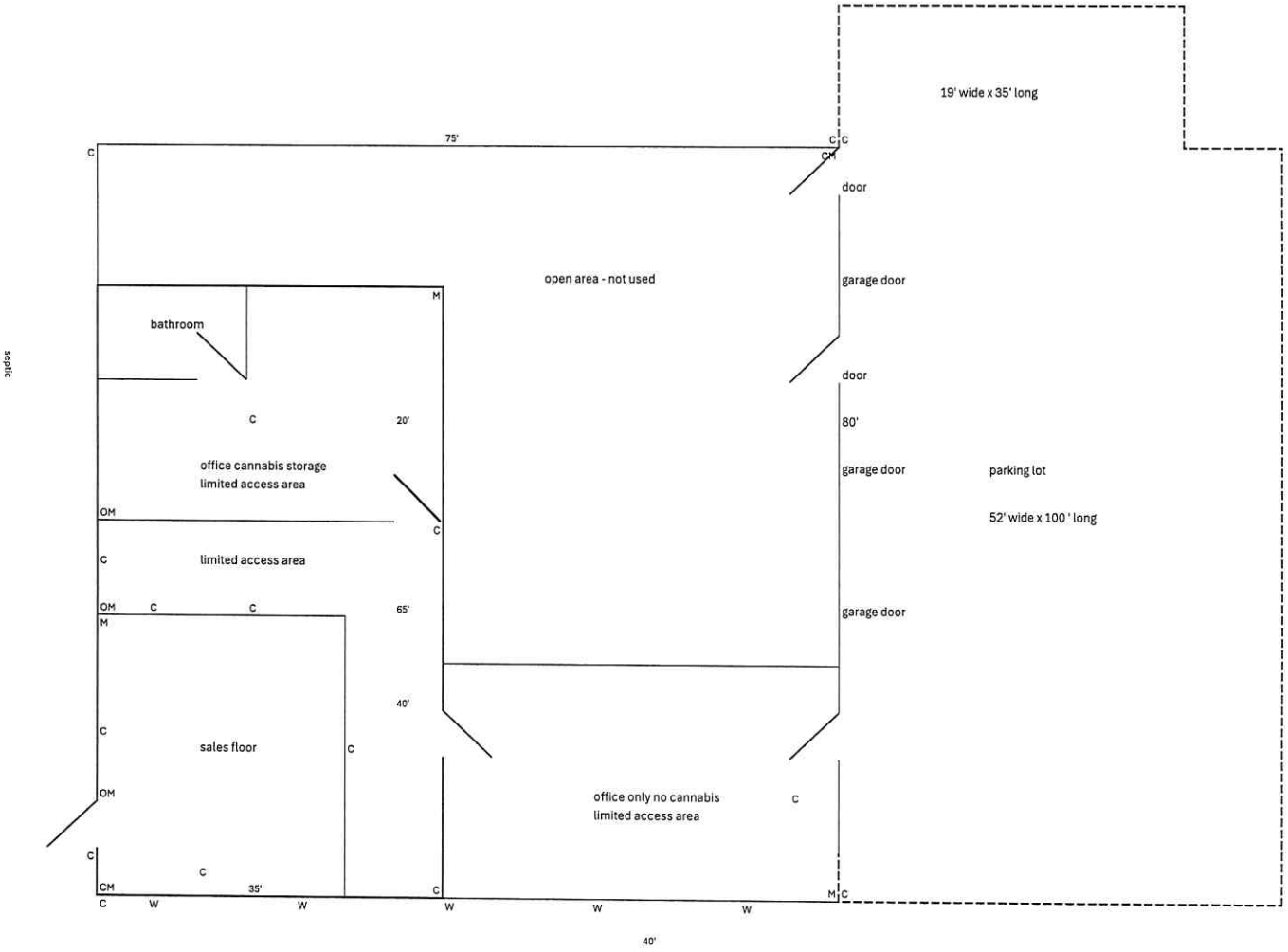
The proposed use will not have an adverse impact on vistas, wildlife habitat or wetlands as it does not propose to conduct any construction, landscaping or renovation.

When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.

The proposed use and property are not in the Shoreland Zone.

Pine Tree Maine 2, LLC

588 Elm Street Biddeford, Maine 04005



Store is 2100 sq feet

C = Camera

M = Motion

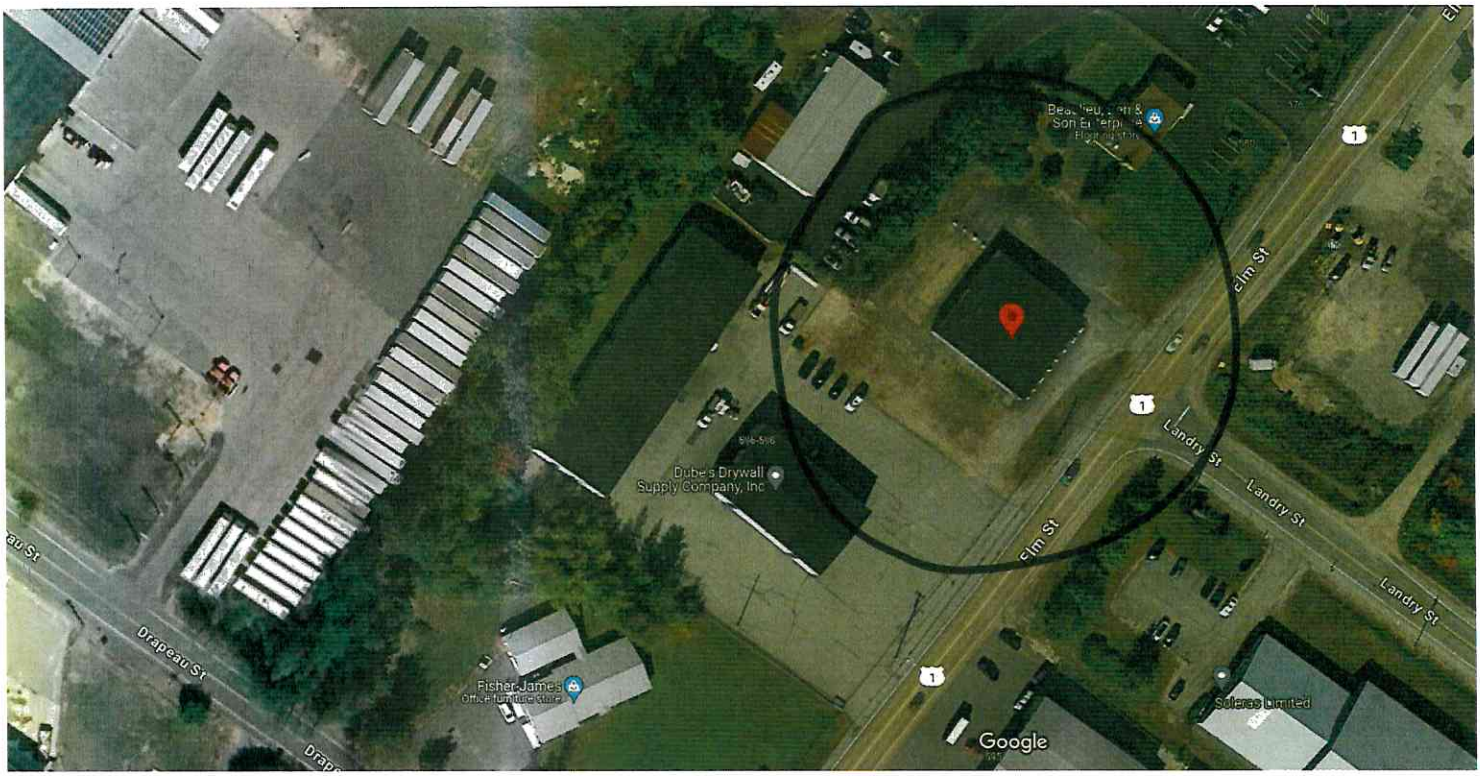
W = Window

C = 360 Camera

OM= Odor Mitigation

588 Elm Street Biddeford, Maine 04005

Google Maps 588 Elm St



Imagery ©2024 Airbus, Maine GeoLibrary, Maxar Technologies, U.S. Geological Survey, Map data ©2024 Google 50 ft



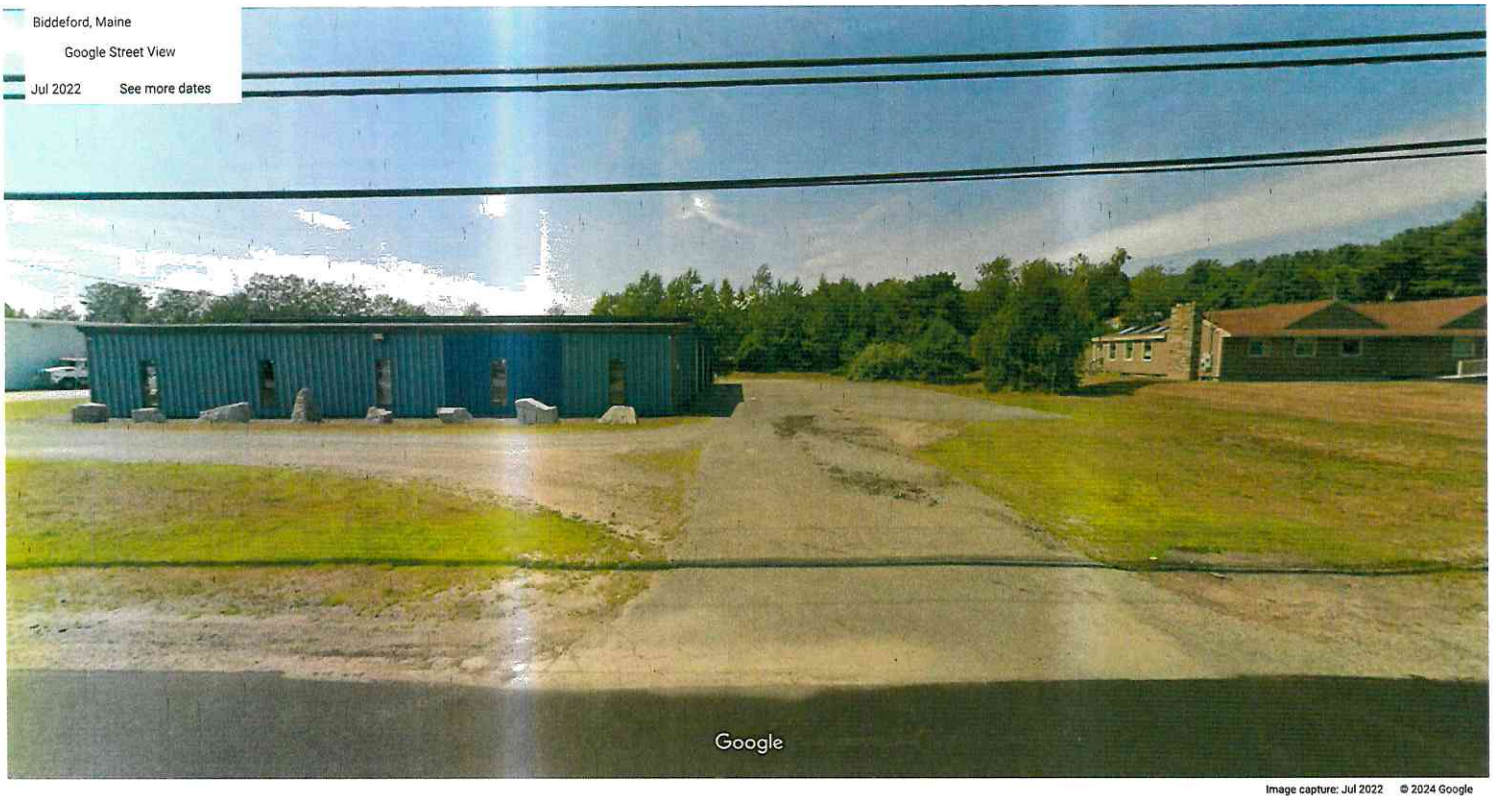
588 Elm St
Building

Directions Save Nearby Send to phone Share

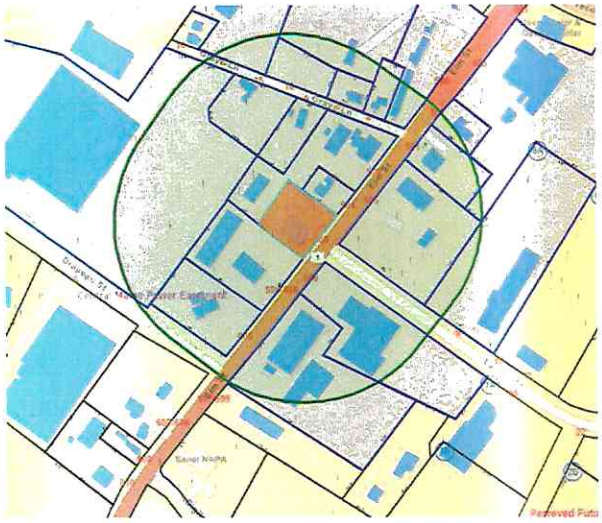
588 Elm St, Biddeford, ME 04005

Photos

Google Maps 585 US-1






Brewer St
Saner NAPA

this will be the sign design



March 12, 2024
Pine Tree Maine 2, LLC
Landrace Cannabis Co.
22 Smada Drive
Sanford, ME 04073

RE: 588 Elm Street Biddeford, Maine 04005

Dear Victor Dube - Dube Drywall,

We respectfully submit the following proposal to lease the building at the above referenced address under the following terms:

LOCATION:	588 Elm Street Biddeford, Maine 04005
SIZE:	Ground: Approx. 6,150 Square Feet
TERM:	Ten (10) Years, One Five (5) year renewals
USE:	Recreational Cannabis Store, and additional storage space
BASE RENT:	$6,000 Per Month / $72,000 Per Annum
ESCALATIONS:	2% Per Annum
POSSESSION:	TBD, working with the Town of Biddeford as of 3/11/2024 on licensing
RENT COMMENCEMENT:	At lease signing
ADDITIONAL RENT:	Tenant to pay real estate tax
UTILITIES:	To be paid by tenant directly
SIGNAGE:	Tenant shall have the right to install maximum signage to the extent permitted by local code.
ASSIGNMENT/SUBLET:	Tenant has the right to assign and/or sublet lease with Landlord's consent, which shall not be unreasonably withheld, conditioned, or delayed.
SECURITY:	Two (2) Months Base Rent.
GUARANTEE:	(3) Three month "Good Guy Guarantee"
TENANT ALLOWANCE:	No tenant allowance.

LANDLORDS WORK: To deliver the premises in broom clean condition

This offer is submitted directly by the tenant requiring no commission to be paid by landlord.

The principals welcome the opportunity meet with ownership and discuss their concept and ideas for the prospective premises in greater detail.

Very Truly Yours,

Pine Tree Maine 2, LLC
Landrace Cannabis Co
Lindsay Holden
Tyler Holden

This offer to lease the building at 588 Elm Street Biddeford, Maine has been accepted by both parties on

March 26, 2024. A deposit of 6000.00 has been made to Dube Drywall and the lease will be executed upon city approval. Should the city deny Pine Tree Maine 2, LLC request for a business license the contract will be void.

Lessor — Date: 3-26-24

Lessee — Date: 3/26/24

DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES
OFFICE OF CANNABIS POLICY
MAINE ADULT USE CANNABIS PROGRAM

This certifies that

PINE TREE MAINE 2, LLC

License Number AMS1596

DBA: LANDRACE CANNABIS CO

has been issued a CONDITIONAL license as an
ADULT USE CANNABIS STORE
under 28-B MRS. This does NOT permit the licensee to engage in any activity.

NOTE: THIS IS NOT AN ACTIVE LICENSE

Issued on:
March 29, 2024

Expires on:
March 28, 2025

Elisa C Ellis

Elisa C Ellis, Director of Licensing
OFFICE OF CANNABIS POLICY
MAINE ADULT USE CANNABIS PROGRAM

To make a complaint about this licensed Adult Use Cannabis Establishment:
Email: Licensing.OCP@maine.gov

The Conditional License for AMS1596 has been issued based on the following organizational structure:

Principals:

LINDSAY JANE HOLDEN, GENPART
TYLER JAMES HOLDEN, GENPART

Owners:

100.00% - PINE TREE MAINE LLC

NOTICE: This conditional license was issued based upon the information indicated above and submitted on application forms provided by the conditional licensee. The conditional licensee acknowledged and affirmed that the foregoing information was truthful and complete in the presence of a notary. Any changes to the information indicated above must be timely reported to the Office of Cannabis Policy and may affect the conditional licensee's licensure status. A conditional licensee will be required, at a minimum, to obtain a new local authorization based upon any changes to the entity ownership structure listed above.

CITY OF BIDDEFORD

PLANNING DEPARTMENT

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
Biddeford, ME 04005
(207) 284-9115
David.Galbraith@Biddefordmaine.org

PLANNING BOARD REPORT

TO: Larry Patoine, Chair & Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: April 23, 2024

RE: **Case # 2021.42: Hidden Hills Housing Park - Final Plan and Subdivision Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone.**

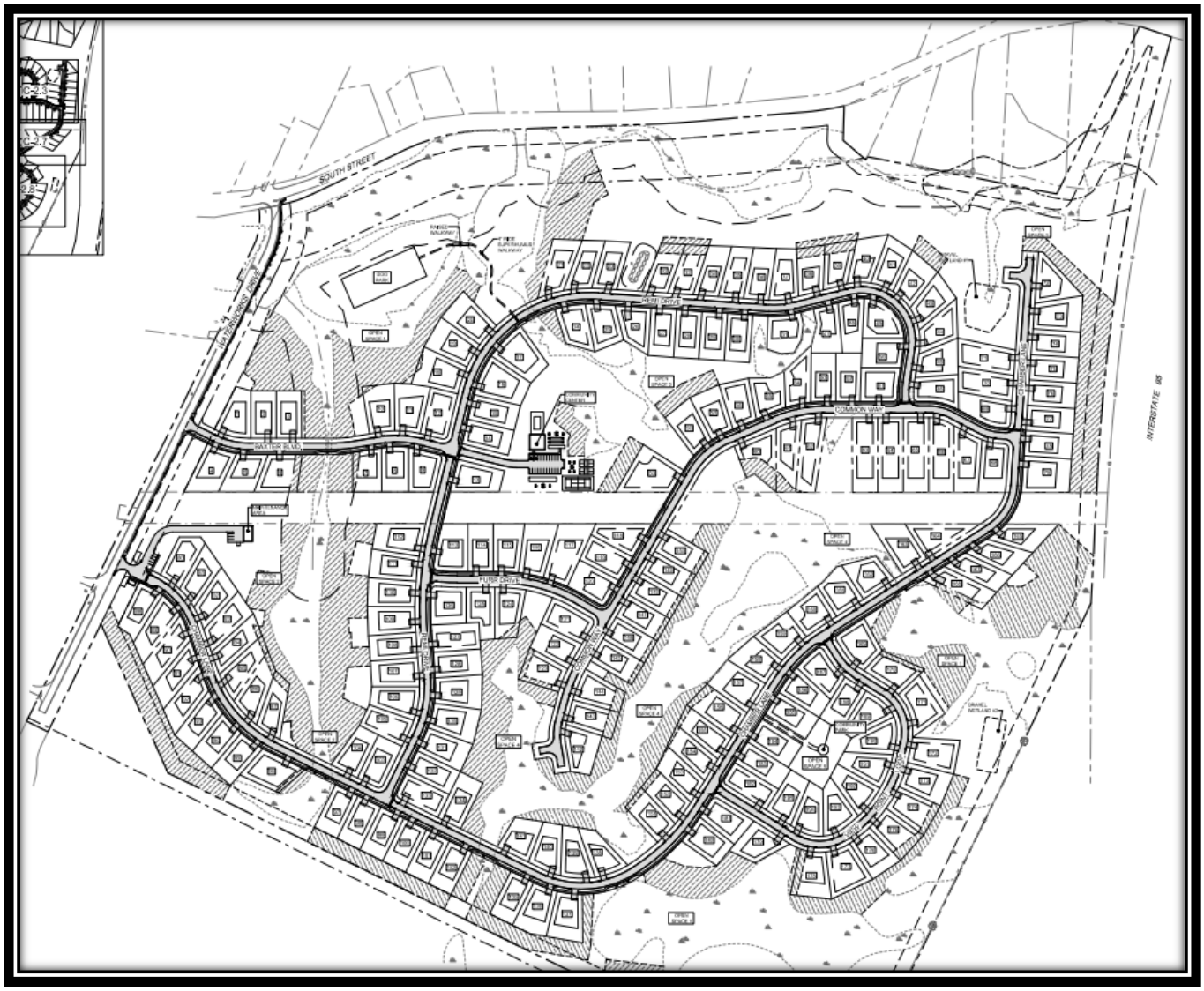
I. INTRODUCTION / UPDATE:

The application before the Planning Board is a Final Subdivision Plan to create a 195-unit manufactured housing park, called Hidden Hills, located at 413 South Street in the SR1, RF Zones and in the Mobile Home Park Overlay District. The project was last before the Board on January 8, 2024. The project has been before the Planning Board on numerous occasions since the submittal of the Hidden Hills Mobile Home Park project, and the key dates / meetings are listed below:

1. May 2022: 1st Preliminary Plan Review
2. September 2022: 2nd Preliminary Plan Review
3. November 2, 2022: Planning Board Site Walk (Conservation Commission Invited)
4. December 7, 2022: 3rd Preliminary Plan Review - Approval Received
5. May 17, 2023: Planning Board meeting concerning a potential “illegal subdivision”, Peer Review of the environmental study, and need for a 6 month extension of the preliminary plan approval.
6. June 21, 2023: Preliminary Approval 6 month extension granted.
7. December 6, 2023: Applicant requested Workshop, to discuss South Street and Waterworks Drive sidewalks, internal sidewalks and monetary contributions.
8. December 20, 2023: Planning Board Executive Session (interior and exterior sidewalks, monetary contributions, roadway improvements).
9. January 17, 2024: 2nd Applicant requested Workshop, to discuss South Street and Waterworks Drive sidewalks, internal sidewalks and monetary contributions

Case # 2021.42: Hidden Hills Housing Park – Site Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone / Final Site Plan and Subdivision Review

Memorandum Date: April 23, 2024



Hidden Hills – Overall Site Plan (SheetC-2.0)

As the Board is aware, the Hidden Hills project has an extensive project review history and this report will not delve into all the details of such, but instead will focus on the modifications to the project / plans. However, copies of prior Staff Reports, meeting minutes and meeting videos, may all be found on the City's website. On December 6, 2023 the Planning Board held a Workshop on the project, at the Applicant's request. At that meeting the Applicant and the Board discussed the sidewalks on the interior and exterior of the site; Waterworks Drive improvements and monetary contributions towards future South Street sidewalk system. Following that Workshop, the Board held an Executive Session with the City Solicitor on December 20, 2023. Following the Executive Session the Board and the Applicant reconvened, and the Board provided Staff and the Applicant direction on the unresolved sidewalk and roadway improvements, which are outlined below:

A. **Waterworks Drive:** Since the inception of the Hidden Hills project, City Staff has informed the Applicant that Waterworks Drive needed to be dedicated as a public street which included recommended improvements was based upon a number of issues, namely:

1. Waterworks Street Acceptance: The *City of Biddeford Ordinance Section 45 "Manufactured Housing / Mobile Home Parks" Division 2(E)(5)(c)(i) which requires: "Any mobile home park expected to generate average daily traffic of 200 trips per day or more shall have at least two street connections with existing public streets"*. Both of the proposed street connections to the Hidden Hills Development are proposed from Waterworks Drive, which is currently a private roadway. In order for the proposal to comply with the City's Ordinance, Waterworks Drive needs to be petitioned by the Applicant, to be accepted as a City accepted street, and without it the project can't be approved.

2. Public Access to Dedicated Openspace: Maine Water recently dedicated approximately 250-acres of land as public openspace which may be accessed off the end of Waterworks Drive. Waterworks Drive being dedicated as a public street will provide legal public access to the open space beyond the end of Waterworks Drive.

3. Public Access / Future Access to Undeveloped Property: As has been discussed on multiple occasions, Waterworks Drive being dedicated as a public street would provide citizen access to the 250 acres of openspace, located at the end of Waterworks Drive, managed by the Maine Coastal Heritage Trust, and providing public access being provided for residential access (via Waterworks Drive) to the openspace has also been a highly desired goal.

4. Waterworks Drive Dedication: The preliminary plan application dated November 16, 2023, stated *"The development will connect to Waterworks Drive in two locations. Waterworks Drive has been constructed to City of Biddeford standards and will offered to the City Council for acceptance to the prior to final approval".* The Planning Board granted the preliminary approval, in part, due to the representations in the preliminary project application and based upon statements made during the deliberations of the project.

   To be accepted as a city street, Waterworks Drive requires sidewalks / walking paths, meeting City standards, to be installed prior to the petition for roadway acceptance.

Planning Board Direction Regarding Waterworks Drive Design: During deliberations at the two (2) Workshops held the Planning Board, although the Board didn't take an official vote, they seemed to agree on the following improvements to Waterworks Drive:

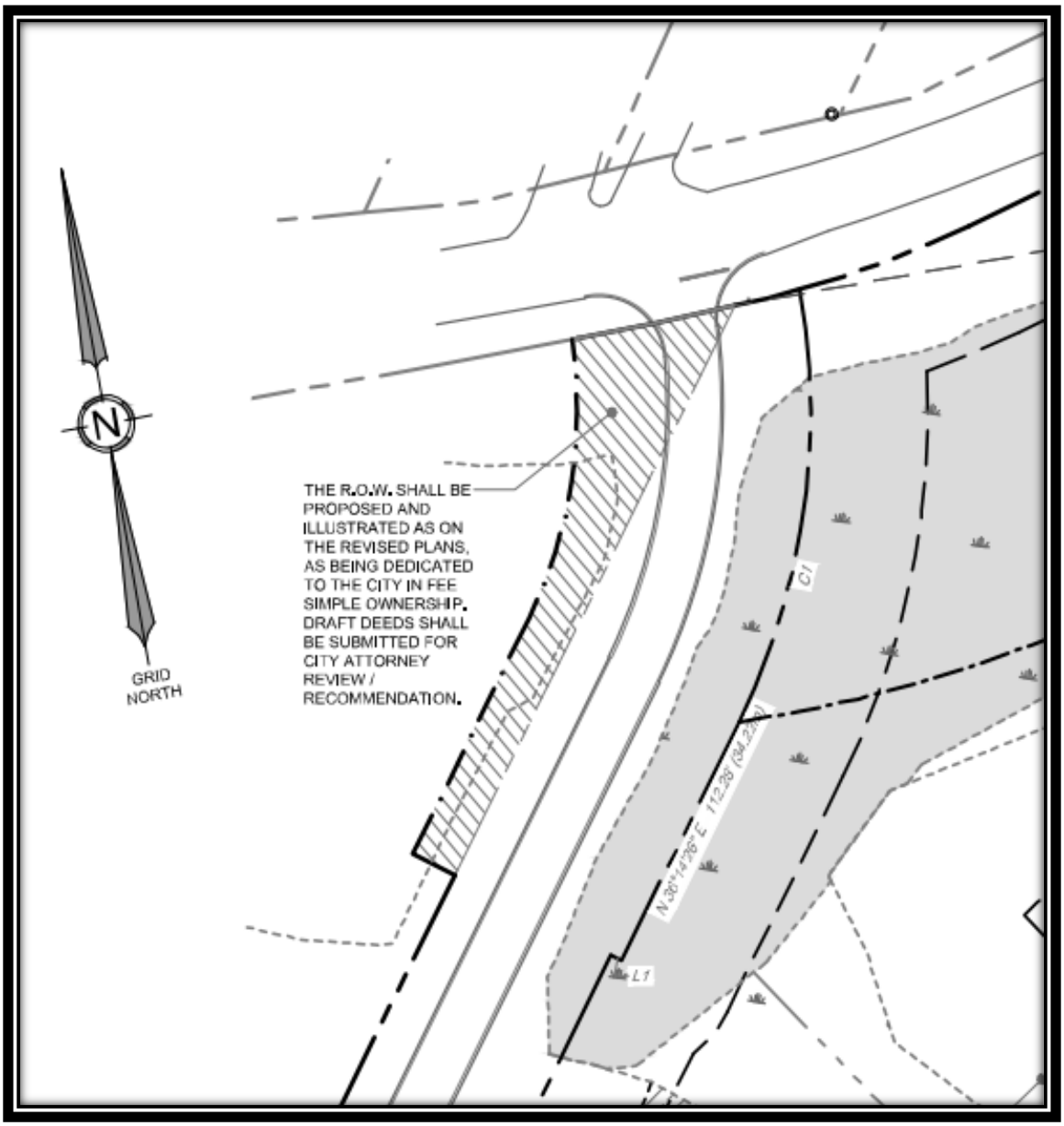
1. Waterworks Drive shall be dedicated as a public street (City Council street acceptance required) and the following, minimum, improvements shall be included in revised plan sets.

   A. A 5' minimum at grade bike/walking path shall be included on the East side of Waterworks Drive. Pavement expansion to accommodate an at grade sidewalk / bike path (extend asphalt and gravel base).

B. Required roadway improvements to be completed, and accepted by the City Council as a public road, prior to the issuance of Occupancy permits for Phase 1 of the project.

C. The roadway dedication needs to be the length of Waterworks Drive, as it exists today, and shall provide access to the recently dedicated 250 acres of dedicated protected openspace.

D. Waterworks Drive / South Street Intersection:



Hidden Hills Subdivision Plan -1 – Sheet C-1.1

A portion of Waterworks Drive at the South Street intersection, shown above, is outside of the Hidden Hills property (which includes Waterworks Dr.) and is actually located on the Maine Water property. The existing 75' right-of-way narrows to 30' at the intersection of Waterworks Dr. and South Street which was not acceptable. The proposed right-of-way (ROW) has been revised on the plan set and includes a note that states that the hatched area, will be dedicated to the City in fee simple ownership, which will need to be dedicated / accepted by the City Council as part of the Waterworks Drive petition for roadway acceptance. Draft deeds shall be submitted for City Attorney review / recommendation to the Council.

E. All Waterworks Drive roadway improvements shall be fully bonded.

B. **Hidden Hills Interior Sidewalks:** The approved preliminary plans illustrated sidewalks being provided on one side of the majority of the proposed streets within the development. Internal sidewalks for mobile home parks are not required under City Ordinances and can't be required of the Applicant. The previously submitted "final application plans" removed the interior sidewalks, but at the December 6, 2023 Workshop meeting the Applicant agreed to include the sidewalks to the development plans. Although not required, I believe providing a sidewalk system in a 55+ old community is a wonderful amenity of the park, and the Planning Board unanimously agreed. At the December 6th and December 20th Workshop meetings the Applicant represented that they will again include these interior sidewalks, despite not being required by the City. The interior sidewalks for the project have been shown / proposed on the "Final Subdivision and Site Plan" which are before the Board at this meeting.

C. **South Street Sidewalk / Roadway Improvements:** The City's long term goal is to provide raised sidewalks along the south side of South Street. During deliberations for this project, the City's Public Works Department conducted a cost estimate for installing a raised sidewalk along the Hidden Hills frontage will cost a total of $620,923., including a 10% contingency. City Staff had been recommending that the Hidden Hills project financially contribute towards the South Street pedestrian upgrades, as envisioned. Staff recommend that the Applicant contribute $40,000., for each of the eight (8) proposed phases for a total contribution of $320,000.

During the Board's deliberations with the Applicant regarding this matter, Board Member Angers believed that a cash contribution of $28,125. per phase, for each of the 8 phases for a total of $225,000. would be a more appropriate Applicant contribution. As proposed the contribution would be placed in a reserve account, and if not used towards South Street sidewalks, within the 10 year time period, the funds with interest would be returned to Mr. Chamberlain (Applicant). Another Board member made a similar suggestion at $25K per phase ($200K total) but the Board already seemed to agree on the originally suggested contribution of $28,125. per phase. The City's cost estimate for sidewalks along South Street is provided below:

Case # 2021.42: Hidden Hills Housing Park – Site Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone / Final Site Plan and Subdivision Review

Memorandum Date: April 23, 2024

SOUTH STREET				
ITEM	AMOUNT	UNIT	UNIT PRICE	COST
GENERAL CONDITIONS/LAYOUT/TRAFFIC LAYOUT	1825	LF	$ 18	$ 32,850
SAWCUT/PREP SUBGRADE	1825	LF	$ 5	$ 9,125
SLIPFORM CURB	1825	LF	$ 20	$ 36,500
5' ASPHALT SIDEWALK	1825	LF	$ 22	$ 40,150
5' ROAD WIDENING FOR BIKE LANE	1825	LF	$ 50	$ 91,250
MISCELLANEOUS SITEWORK (STRIPING, SIGNAGE, FILL)	1	LS	$ 10,000	$ 10,000
LOAM & SEED	1825	LF	$ 8	$ 14,600
DRAINAGE/UNDERDRAIN IMPROVEMENTS	1	LS	$ 30,000	$ 30,000
UTILITY POLE RELOCATION	14	EA	$ 15,000	$ 210,000
DEMOLITION	1	LS	$ 35,000	$ 35,000
ENGINEERING	1	LS	$ 30,000	$ 30,000
INSPECTION	1	LS	$ 10,000	$ 10,000
PERMITTING	1	LS	$ 15,000	$ 15,000
			TOTAL:	**$ 564,475**
			10% CONTINGENCY:	$ 56,448
			SUBTOTAL:	**$ 620,923**

II. Closing Summary: As the Board is aware, this has been a lengthy review process due to the complexities of the case. That being said, Staff remains supportive of the project and recommends the approval of the project.

III. Recommended Motion: Staff recommends the Planning Board approve Case # 2021.42 Hidden Hills Housing Park - Final Plan and Subdivision Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone, with the adoption of the Findings of Fact (FOF) and Conditions of Approval (COA) as written and attached.

IV. <u>SAMPLE MOTIONS:</u>

A. <u>Motion to Approve</u>: I motion to <u>APPROVE</u> Case # 2021.42: Hidden Hills Housing Park - Final Plan and Subdivision Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone, with the adoption of the Findings of Fact (FOF) and Conditions of Approval (COA) as written and attached.

B. <u>Motion to Deny</u> I motion to <u>DENY</u> Case # 2021.42: Hidden Hills Housing Park - Final Plan and Subdivision Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone, for the following reasons:

1) _____.

2) _____.

3) _____.

C. Motion to Table: I motion to TABLE Case # 2021.42: Hidden Hills Housing Park - Final Plan and Subdivision Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone, for the following reasons:

1) _____.

2) _____.

3) _____.

Respectfully submitted,

David C.M. Galbraith

David C.M. Galbraith
Deputy Director / City Planner

CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
City Planner & Deputy Director
of Planning & Development
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

FINDINGS OF FACT AND CONCLUSIONS OF LAW
Hidden Hills (AKA South Street Village LLC)
Final Subdivision and Site Plan Approval
May 1, 2024

RE: 2021.42– Hidden Hills Manufactured Housing Park– South Street Village, LLC. 413 South Street (Tax Map 7 Lot 8) Final Subdivision (Mobile Home Park) and Site Plan Approval for 195-unit manufactured housing park subdivision. Project is located in the Rural Farm (RF), Suburban Residential 1 (SR1) and Mobile Home Overlay District.

Pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has considered the application of Based on its review, including supportive data, public hearing testimony and related materials contained in the record, the Planning Board makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT:

	SUBJECT	***DATA/INFORMATION***
1.	Applicant:	South Street Village, LLC 762 Main Street South Portland, ME 04106
2.	Owner of Property:	Same as Applicant
3.	Agent:	
4.	Engineer/Surveyor:	Jeff Amos P.E. Terradyn Consultants, LLC 41 Campus Drive, Suite 301 New Gloucester, ME 04260
5.	Project Location:	413 South Street
6.	Project Tax Map #/Lot #:	Tax Map 7, Lots 8
7.	Existing Zoning:	RF, & SR1
8.	Overlay Zoning:	Mobile Home
9.	Existing Use:	Vacant property
10.	Proposed Use:	195 unit manufactured housing park
11.	Approvals Required:	Maine Water*, Maine DEP*, Army Corp* *Approvals obtained
12.	Uses in the Vicinity:	Residential
13.	Parcel Size:	164.3 acres
14.	Limits of Disturbance:	68.6 Acres

15.	Drainage Watershed:	Saco River & Thatcher Brook
16.	Water Supply:	Maine Water
17.	Sewerage Disposal:	City of Biddeford
18.	Solid Waste Disposal:	Private Hauler
19.	Fire Protection:	City of Biddeford
20.	Other Non-City Permits Required:	Maine Site Law, Maine Stormwater, DOT Traffic Movement Permit
21.	LDR Attachment A: Fess Paid:	All Required Fees Paid

CONCLUSIONS OF LAW:

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;

2. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;

3. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;

4. The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;

5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;

6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;

7. The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;

8. The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;

9. The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;

10. The proposed use would be in compliance with Biddeford's Comprehensive Plan;

11. The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;

12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;

13. Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;

14. Adequate provision has been made to control erosion or sedimentation;

15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;

16. The proposed water supply would meet the demands of the proposed use for fire protection purposes;

17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;

18. The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;

19. When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.

APPROVAL GRANTED:

Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the proposed project summarized within the attached Staff report and pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has approved the application of Final Major Subdivision and Site Plan and the recommended Findings of Fact (FOF) with the following Conditions of Approval (COA):

1. Standard Conditions of Approval apply.

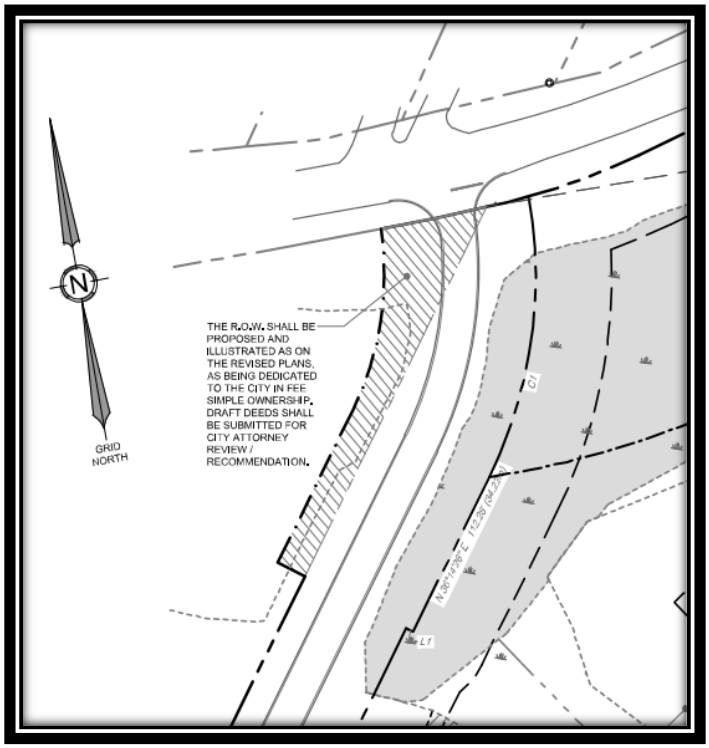
2. Thatcher Brook Watershed Impact Fee: To comply with Chapter 500, § 4(E)(2), the applicant shall submit **a payment in the amount of $55,505.62** to the City of Biddeford to be utilized in accordance with the approved CFUP at other sites in the watershed. **Prior to the start of construction of Phase 4** (or any other phase within the Thatcher Brook watershed), the applicant must make the payment and submit evidence of the payment to the Maine Department of Environmental Protection for their review.

3. Waterworks Drive: Waterworks Drive shall be fully improved, as depicted on the adopted roadway improvement plans, and accepted as a public roadway by the Biddeford City Council, **prior to the issuance of the first occupancy permit within the development**. The Applicant is responsible for leading the administrative request for public road acceptance to City Council. Proper deeds and surveys for the full right-of-way (ROW) shall be provided.

4. Waterworks Drive – Guardrails: Guardrails on waterworks Drive, near the South Street intersection, as previously proposed for Maine Water Company's approved planning drawings, still need to be installed and are required for public road acceptance. Applicant shall coordinate guardrail installation with Maine Water Company directly.

5. Waterworks Drive / South Street Intersection:

A portion of Waterworks Drive at the South Street intersection, shown left, is outside of the Hidden Hills property (which includes Waterworks Dr.) and is actually located on the Maine Water property. Running from south to north, the existing 75' right-of-way narrows to 30' at the intersection of Waterworks Dr. and South Street. The proposed right-of-way (ROW) has been revised on the plan set to include the hatched area, which is the additional ROW required to be dedicated to the City in fee simple ownership. This fee ownership transfer to the City, shall be dedicated / accepted by the City Council as part of the Waterworks Drive petition for roadway acceptance. Draft deeds shall be submitted for City Attorney review / recommendation prior to the Council reviewing the Waterworks Drive street acceptance petition.



Hidden Hills Subdivision Plan # 1 – Sheet C-1.1

6. Waterworks Drive Bonding: All Waterworks Drive roadway improvements shall be fully bonded prior to the commencement of any work.

7. South Street Sidewalk Contribution: The Applicant shall pay a total contribution of $225,000 for future sidewalks on South Street. **The contribution shall be paid in eight (8) installments, each in the amount of $28,125., which shall be paid prior to the start of each of the eight (8) phases of development.** These funds shall be used by the City towards future sidewalks and roadway improvements on South Street and in the general area of the proposed Hidden Hills development. Collected funds shall be returned to the Applicant, with interest, if unused within 10 years from the date of final phase payment.

8. Phased Plans – Site Utility Plans: The project is proposed to be constructed in eight (8) phases. As such, if the development will not be constructed in one phase, individual overall site plans and utility plans for each phase shall be provided to the City, prior to the opening of each phase, for review and approval to:

    a. Confirm limits of site and utility work to be constructed for each phase (including drainage/culverts).
    b. Assign quantities for each individual phase performance bond/letter-of-credit.
    c. Confirm life-safety requirements are met during each individual phase (i.e. hydrant spacing, truck turnarounds)
    d. Engineered phasing plans shall be submitted and approved by City Staff before any building permits are issued.

9. Phasing Plans – Phasing Order: The project shall be constructed in eight (8) phases, beginning with Phase 1 and continuing in numerical order, ending with Phase #8.

10. Open Project Phasing: No more than two (2) phases of the proposed phased development may be under construction at any given time, and bonding for each phase shall be established prior to the opening of any new phase.

11. Bonding and Inspection Fees: Bonding and inspection fees shall be established for each phase. Individual phase units cost estimates will need to be submitted to, and approved by, the City Engineer and City Planner prior to the scheduling of the required Pre-construction meeting/s.

12. Modifications to Approved Development Plans: The project shall be constructed in accordance with the approved development plans. If any changes to the approved development plans are needed, the developer shall submit a letter requesting a “minor modification” to the approved development plans. The letter shall include plans showing the approved plans and proposed modifications which shall be approved, in writing, prior to the construction of any deviation from the approved development plans. Changes

beyond the authority of the City Planner shall be reviewed and approved by the Planning Board.

13. Required Inspections:

A. Erosion & Sediment Control Inspections
   1. Needs to be completed by a City-approved 3rd Party Inspector and paid by the Applicant via the inspection fee escrow being held by the City.
   2. Initial, monthly, and final inspections
   3. The City's Engineering Department, at minimum, shall be notified for an initial E&S inspection prior to each phase breaking ground.

B. Copies of all inspection reports need to be submitted to the Engineering Department.

C. Public right-of-way Inspections
   1. Needs to be completed by City Engineering Department
   2. For all public road, storm, and sewer connections

D. Private right-of-way inspections: Private right-of-way / road and utility inspections shall be completed by the design engineer who shall certify that they have been constructed as approved, prior to the full or partial release of established bonding.

E. Stormwater BMP Installation Inspections
   1. Needs to be completed by the design engineer
   2. Confirming stormwater facilities installed correctly per design
   3. Inspection reports need to be submitted to the Engineering Department

F. Post-construction BMP Maintenance Annual Inspections
   1. Needs to be completed annually by the design engineer or 3rd party inspector
   2. Needs to assess the current condition of each BMP, what repairs are needed, and confirm on-going maintenance has occurred
   3. Annual inspection reports need to be submitted to the Kristie Rabasca & Engineering Department.

G. Site Punch list Inspections

   1. Once stamped As-Built drawings are submitted to the Planning Department (clearly identifying what approved deviations and variances were installed based on the approved permit drawings), the City Engineering Department will conduct an inspection. The "as Built Checklist" shall be submitted for review and approval, for any performance guarantee release.

H. As-Built Drawings and CAD Files need to be submitted to the Planning & Engineering Departments **prior to a 'Site Punch list Inspection' and any bond release.**

I. Sewer Permits: Finalized and paid **prior to Building Permit Issuance**; payment coordination to go through Engineering Department.

J. York County Recorded Drawings: Applicant must submit copies of York County Registry of Deed drawings to Planning & Engineering Department **prior to Building Permit Issuance.**

_____
Larry Patoine
Planning Board Chair

_____
Date

TERRADYN CONSULTANTS, LLC

Pineland
Cumberland Hall
41 Campus Drive, Suite 101
New Gloucester, ME 04260

Portland
565 Congress Street, Suite 201
Portland, ME 04101

April 9, 2024 21-13

David Galbraith
City Planner
Biddeford City Hall
P.O. Box 586
Biddeford, ME 04005

Final Subdivision Application
Hidden Hills – An Age Restricted, Manufactured Housing Park
413 South Street, Biddeford

David,

On behalf of South Street Village LLC, we are pleased to submit this final subdivision application. Since the board has not seen this project in a while and for the sake of clear record keeping, we are attaching all significant materials that were previously submitted with noted exceptions. Most of the information is unchanged. All items that are changed or updated are discussed below.

CHANGES SINCE PREVIOUS SUBMISSIONS

The proposed development and submission materials are largely unchanged from previous submissions. The plan changes & material updates are outlined below:

1. Sidewalks were discussed at length during recent planning board workshops. In response to the input received, the applicant is proposing the following:

    a. Installation of internal sidewalks as previously designed & presented to the planning board during preliminary approval.
    b. Installation of an at-grade sidewalk on Waterworks Drive. That design can be seen on C-3.11 of the attached plan set.
    c. Contribution of $25,000 per phase to be placed in an escrow fund toward the construction of sidewalks on South Street. Over the course of 8 phases, the total contribution equates to $200,000.

2. The original parent parcel was divided so that the project property area now closely aligns with the Mobile Home Park Overlay Zone line. The total project area is now 164.3 acres. It was previously 312 acres. An updated boundary survey can be found in Attachment 2.

3. The change in property area led to some updates to the application:
    a. The property area has been updated on the application. See Attachment 1.
    b. The new property deed is included in Attachment 3.
    c. The applicant has been clarified in the Financial Capacity statement in Attachment 4.

4. Water booster pumps will be required on many of the lots in order to ensure that all units have acceptable water pressure. Note 11 has been added to C-1.0 to reflect this requirement.

5. The project amenities have been more clearly defined. The amenities are shown best on Sheet C-2.2 Site Plan. The project will feature the following amenities:

    a. A larger club house. The building is now proposed to be 2,500 SF.
    b. A pool with spacious patio.
    c. A host of courts & game areas including:
        i. Tennis
        ii. Pickle Ball
        iii. Bocce Ball
        iv. Horseshoes
        v. Shuffle Board
    d. Multiple fire pits & picnic areas
    e. Dog Park

6. We've received final approval from Maine Water, Maine DEP & Army Corp of Engineers. Those approvals can be found in Attachment 5 in addition to sign-off correspondence from City Engineer, the Fire Department and Maine Water. Additionally, the City's 3rd Party Review Engineer signed off on the project in an email dated 3/28/2024 that was sent to the City Planner.

7. Erik Lema, Site Evaluator #419 prepared designs for each septic system. The HHE-200 forms can be found in Attachment 6.

8. The project phasing plan changed per Maine Water Company request to help create looped water lines earlier in the project buildout. That updated plan can be found in Attachment 7.

PLANNING COMMENTS

A. The submitted plans continue to illustrate a portion of Waterworks Drive @ South Street as being outside of the Hidden Hills property (which includes Waterworks Dr.) and is actually located on the Maine Water property. The proposed 75' right-of-way narrows to 30' at the intersection of Waterworks Dr. and South Street which is not acceptable. The proposed right-of-way (ROW) needs to be a minimum of 75' in width and all portions of the ROW shall be proposed and illustrated as on the revised plans, as being dedicated to the City in fee simple ownership. Draft deeds shall be submitted for City Attorney review / recommendation.

Response: We have attached the release deed from the Maine Water Company for their portion of the right of way. We have also attached the proposed deed for the portion of the right of way that is owned by the applicant. The boundary lines on the plan remain unchanged, however we have hatched and labeled the ROW area to be released by MWC on Subdivision Plan C-1.1. The draft deeds & an exhibit that shows the right of way area to be dedicated to the City of Biddeford can be found in Attachment 9.

B. Waterworks Drive Turn Around: The south end of Waterworks Drive shall be shown on revised plans, including full dimensions, security gate, right-of-way, hammer head / turn-around including spot grades.

Response: Additional elements from the Waterworks Drive as-built have been added to our plans as requested. The only element that was not added were the spot grades. That information was not provided to us.

C. Waterworks Drive Improvements: All improvements proposed on Waterworks Drive shall be illustrated on the revised plans and details shall be provided including:

A. Waterworks Drive / South Street ROW as discussed it item #1.
B. Two (2) twelve foot (12') wide travel lanes.
C. At grade five foot (5') wide bike / pedestrian (east side of Waterworks Drive).
D. Bike / pedestrian roadway markings consisting of white thermoplastic fog lines, chevron striping and pedestrian / bike logos every one hundred feet (100').
E. Three foot (3') wide gravel shoulder (east side).
F. At grade pedestrian / bike lane shall be continuous from South Street to Chamber Lane.
G. All existing and proposed grading / contour lines.
H. All proposed / required guardrails including details.

Response: All requested improvements on Waterworks Drive are shown on Sheet C-3.11. Public Works & Engineering looked at the plans and loosely supported what is shown.

D. Internal Emergency Maneuvering: The turnaround hammerheads at the ends of Chamber Lane and Common Way do not meet the City's minimum requirements. The hammerheads require a minimum of 70 feet from the end of the hammerhead to the opposite / parallel curb-line as illustrated to the left. Plans shall be revised to conform to the below and shall be fully dimensioned.

Response: The hammerheads have been revised to correctly show the City's minimum requirements.

E. No Parking: The proposed interior roadway paving widths shall be twenty (20) feet in width. As such, no parking is permitted along any of the internal roadways to allow for emergency access passage. No parking signage shall be provided and compliance will be the responsibility of the developer. The revised application shall include an overview of how the no parking will be enforced (for fire safety).

Response: Signs have been added to the site plans that state "No On Street Parking allowed within Hidden Hills". These signs have been located at each intersection within the project.

The prohibition of on street parking is outlined in the park rules on page 15. The rules state the following:

"No vehicle may be parked within ten (10) feet of any fire hydrant. On-street parking is not permitted. Any vehicle parked overnight in an unauthorized place is subject to being towed at the owner's risk and expense without prior notice. Vehicles may not be parked on the grass. Any vehicle parked on a street during snow removal actions is subject to towing without prior notice at the owner's expense. Guest parking is not permitted except in the driveway of the home, or visitor parking area, unless for short periods of time, e.g. dropping off or picking up persons or items."

F. Overall Site Plan: The Overall Site Plan (Sheet C2.0) does not include the entire property. Portions of the property adjacent to South Street are not shown and the southeast corner of the property is also missing.

Response: The scale of the Overall Site Plan has been adjusted to show the entire property.

G. Overall Subdivision Plan (Sheet C-1.0): Note # 3 lists the project area as being 320 acres which is incorrect, and plans shall be corrected.

Response: The note has been corrected.

H. Engineering Peer Review Comments:

We have reviewed the most recent submission for the referenced project, focusing mainly on the road design revisions. Our November 29, 2022 comments below remain outstanding, assuming a waiver for the monumentation was not sought nor granted.

a) The turnaround layouts do not meet ordinance requirements. The rights of way should extend 20 ft. beyond the ends of pavement, 60 ft. from the centerline
Response: The turnarounds have been corrected as outlined.

b) Spot grades should be provided at the turnarounds.

Response: Spot grades have been added at the turnarounds. See sheets C-3.3 & C-3.6.

c) The culvert proposed under Chamber Lane at Waterworks Drive is located very close to or on the Waterworks Drive right of way. An easement should be provided for a distance of 15 ft. into the site parallel with the Waterworks right of way, extending 30 ft. beyond each end of the proposed culvert to allow for future maintenance by the city, assuming that Waterworks Drive will be accepted by the City.

Response: An easement has been added to Subdivision Plan C-1.3.

d) Our opinion that a waiver of the monumentation requirements for the private road is required remains, and precedent has been set for this on previous private road projects in the city. From a technical standpoint, we would have no concern with such a waiver being granted.

Response: We don't believe that a waiver is required for the private roads.. We ask staff to verify that this is necessary. If so, we will ask for the waiver. Section 62-87(a) begins with "Each street proposed for acceptance by the City Council…". Only Waterworks Drive will be offered for acceptance. The interior roads will be private. No granite monuments are proposed within the private section.

e) The post-construction stormwater I and M plan should be revised to provide separate inspection forms for each of the BMP's as previously requested

Response: The I & M plan has been revised as requested.

FIRE DEPARTMENT COMMENTS

The fire department reissued many of their original comments/guidelines for the project. They are discussed below:

I. All vehicle entrances and exits to parking areas and building access shall be a minimum of 20 feet wide, and a minimum outside turn radius of 50 feet.

Response: All vehicle entrances to parking area and buildings are 20' wide and have a minimum inside radius of 30' as specified below. A 30' inside radius corresponds to a 50' outside radius on a 20' wide road.

J. Fire Hydrants shall be within 600' of each other and within the first building in the development (NFPA 1)

Response: All hydrants were requested to be within 500' of each driveway by the fire department. The fire department previously signed off on the plan. See Attachment 5 for

their approval email and Attachment 20 for the fire hydrant figure that the previously reviewed.

K. We can accept the “No on street parking…” as proposed. "No on street parking" signs should be added to the plans and should be included in your park rules.

Response: Signs have been added to the site plans that state “No On Street Parking allowed within Hidden Hills”. These signs have been located at each intersection within the project.

The prohibition of on street parking is outlined in the park rules on page 15. The rules state the following:

“No vehicle may be parked within ten (10) feet of any fire hydrant. On-street parking is not permitted. Any vehicle parked overnight in an unauthorized place is subject to being towed at the owner's risk and expense without prior notice. Vehicles may not be parked on the grass. Any vehicle parked on a street during snow removal actions is subject to towing without prior notice at the owner's expense. Guest parking is not permitted except in the driveway of the home, or visitor parking area, unless for short periods of time, e.g. dropping off or picking up persons or items.”

L. All turning radii at intersections shall be a minimum of 30'. Only 15' radii are provided.

Response: All turning radii are 30’ at all intersections including the all streets & access to the club house and maintenance building.

WAIVER REQUESTS

A waiver was granted from 66-76(b) that requires all mature trees of 24” caliper to be shown on the plan. This was granted because the site has largely been harvested. Very few large trees remain within the development area. Most of the remaining trees are located within front buffer area along South Street. This area of the property was not disturbed during the harvesting. The project makes widespread use of forested buffers and preserves large wetland systems. The project streetscape will be lined with trees on both sides.

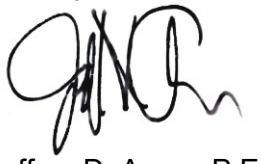
Its unclear if we need a waiver from Section 62-87(a) of the City Land Use Ordinance. The section is titled “Monumentation Requred”. This section states that “Each street proposed for acceptance by the City Council shall be physically marked on the ground by a state registered land surveyor. Granite monuments not less than 36 inches in length and having an exposed end-face measuring four inches by four inches shall be placed on all points of intersection with other rights-of-way, ways or railroads, points of curvature, reverse curvature, compound curvature or tangency, and angle points formed by changes in direction.” Waterworks Drive is shown to be monumented per

66-87(a). All of the internal private roads within Hidden Hills are proposed to be monumented with iron pins. Although the ordinance does not require private roads to be monumented per 66-87(a), the City's 3rd party review engineer believes that we ought to ask for the waiver anyway because he believes the board has asked for it in similar circumstances in the past. In the event that we need it, we are asking for a waiver from 62-87(a) to allow iron pins to be installed along the private internal roads of Hidden Hills.

CLOSING

The project has been designed to meet the review standards of the City of Biddeford's Zoning and Land Use Code. Narratives describing how these criteria and standards are met is attached to the Development Review Application. Please do not hesitate to reach out if you have any questions or require additional information.

Terradyn Consultants, LLC



Jeffrey D. Amos, P.E.

LIST OF ATTACHMENTS

New Information	
Attachment 1	Updated Subdivision Application & Checklist
Attachment 2	Updated Boundary Survey
Attachment 3	Updated Deed
Attachment 4	Updated Financial Capacity
Attachment 5	Copies of Outside Approvals
	1. MDEP SLODA, Tier 1 & PBR 2. ACOE Wetland Alteration Permit 3. Maine Water Company 4. City of Biddeford Engineering Department – Email Sewer Approval 5. City of Biddeford Fire Department – Email Approval
Attachment 6	HHE-200 Forms
Attachment 7	Updated Phasing Plan
Attachment 8	Updated Standards Compliance Narrative
Attachment 9	Waterworks Drive Proposed Deeds & Right of Way Exhibit

Previously Submitted Information	
Attachment 10	Stormwater Report including Urban Impaired Stream Regulations
Attachment 11	Hydrogeologic Assessment
Attachment 12	Traffic Impact Analysis

Attachment 13	Habitat Assessment
Attachment 14	MDIF&W and Unusual Natural Areas Correspondence
Attachment 15	Vernal Pool Letter
Attachment 16	Park Rules – including Open Space Plan
Attachment 17	Exhibit of View from South Street
Attachment 18	Photos of Anticipated Unit Typles
Attachment 19	Abutter List
Attachment 20	Fire Department Hydrant Figure
Attachment 21	High Intensity Soil Survey

Attachment 1

Updated Application Form & Checklist

City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

__ Shoreland Zoning Permit __ Site Plan Review __ Extraction
__ Conditional Use Permit x Subdivision __ Private Way
__ Other: _____

Applicant Information:

Name: South Street Village, LLC
Mailing Address: 762 Main Street, South Portland, ME 04106
Telephone: 207-450-7653
Email: mgchamberlain48@gmail.com

What is your legal interest in the property?

x Owner __ Potential Buyer with Contract __ Lease/Rental Agreement

Owner's Information:

Name: Same as applicant
Mailing Address: _____
Telephone: _____
Email: _____

Agent's Information:

Name: _____
Mailing Address: _____
Telephone: _____
Email: _____

Engineer/Surveyor's Information:

Name: Terradyn Consultants, LLC c/o Jeff Amos, P.E.
Mailing Address: 41 Campus Drive, Suite 301, New Gloucester, ME 04260
Telephone: 207-926-5111
Email: jeff@terradynconsultants.com

Project Location and Lot Information:

Street Address: 413 South Street Drainage Watershed: Saco River & Thatcher Brook
Tax Map: 7 Lot: 8
Current Zoning: SR1, RF & MHP Overlay Shoreland Zoning: No
Size of Lot: 164.3 Ac ( )acres ( )s.f. Lot Frontage: 1,823' on South Street
Existing Use of Property: Vacant/Undeveloped

Property currently serviced by:

x City Road __ Public Sewer x Public Water __ Public Trash
x Private Road __ Septic System __ Private Well __ Private Hauler

Slope Conditions in Area of Construction (if applicable):

__ Flat (0-3% slope) x Rolling (3-8% slope) __Hilly (8-15% slope) __Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? x (Yes)__(No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes)x (No) if yes attach information
Do you plan to bring fill onto the lot? x (Yes) __(No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

195 unit manufactured housing park

Property to be Serviced by:

x City Road __ Public Sewer x Public Water __ Public Trash

x Private Road x Septic System __ Private Well x Private Hauler

Limits of Disturbance: 68.6 (x)acres ( )s.f.

Net change in impervious cover: 14 (x)acres ( )s.f.

Is this project part of a larger project? __(Yes) x (No)

Is the project proposing a new Private or Public Road? x (Yes, Private) __(Yes, Public) __(No)

Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) __(Yes) x (No)

Is the project proposing any Stormwater facilities/BMPs? x (Yes) __(No)

Will a Traffic Movement Permit (TMP) be required?: __(Yes) x (No)

__ **If in a Shoreland Zone:**

Percent of residential lot coverage (Max 20%): _____

Percent of structure expansion (Max 30%): _____

__ **If Subdivision Review, number of lots proposed:** _____

__ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information: N/A

Total new square feet footprint of structure: _____

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. Waiver from 66-76(b) that requires all mature trees of 24" caliper to be shown on the plan. See cover letter
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval
   - x Fire Department – Contact Chief or Deputy Chief – 282-9986
   - x Ability to Serve for Water Service – Maine Water – 282-1543
   - n/a Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
   - x Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127

B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc. See Cover Letter

C. Photographs of Site. See Attachment 17

D. Architectural renderings/drawings of proposed buildings, as required. See Attachment 18

E. Engineering Plans, as required. Plans Attached

F. Stormwater Management Report, as required. See Attachment 10

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: X (Yes) __(No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: Matthew Chamberlain **Date** 1/24/2024

Signature of Property Owner: Matthew Chamberlain **Date** 1/24/2024

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

CITY OF BIDDEFORD - SITE PLAN APPLICATION DRAWING CHECKLIST *LAST REVISED: 05/17/23*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant for any Site Plan submittal to the Planning Department.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing submittal information with non-acceptable reasoning will be rejected.
4. Items in **BLACK** are required for 'Preliminary Site Plan' approval & 'Final Site Plan' approval.
5. Items in **BLUE** are only required for 'Final Site Plan' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	Hidden Hills Housing Park
Planning Board # (if available):	2021.42
Applicant Name/Info:	South Street Village, LLC
Submittal #/Type (Prelim/Final):	Final
Submittal Date:	1/29/2024

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE		CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**				
A	Drawing specific legends (linetypes, hatches, etc.)	Yes			
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	Yes			
C	North arrows, standard engineering scale viewports, dated revision blocks	Yes			
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	Yes			
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	Yes			
2	**COVER SHEET**				
A	Project Name & Property Address	Yes			
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	Yes			
C	Site Location Map	Yes			
D	Sheet Set List of Drawings	Yes			
E	Tax Map and Lot ID	Yes			
F	Zoning & Shoreland Zone Information	Yes			
G	Existing Use Description	Yes			
H	Proposed Use Description	Yes			
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	Yes			
J	Name of Drainage Watershed	Yes			
K	Within the MS4 Urbanized Area (Yes/No)	No			
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	Yes			
M	Within the 100-year Flood Zone (Yes/No)	Yes			
N	Public Road Proposed (Yes/No)	No			
O	Private Road Proposed (Yes/No)	Yes			
P	Public Sewer Connection (Yes/No); if yes, need to include a proposed sewer flow calculation per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	No			
Q	Public Storm Drain Connection (Yes/No)	No			
R	Limits of Disturbance in acres	Yes			
S	Pervious Land Cover square footage, existing and proposed	Yes			
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	Yes			
U	Building Roof square footage, existing and proposed	Yes			
V	Assigned Planning Board Number	Yes			
W	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)	Yes			
3	**EXISTING CONDITIONS PLAN**				
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	Yes			
B	Survey Benchmark Locations (with XYZ Coordinates annotated)	Yes			
C	Property & Right-of-Way Lines	Yes			
D	Boundary line information (bearings, distances, etc.)	Yes			
E	Property pin and monumentation locations	Yes			
F	Existing easements with proper ownership identified	Yes			
G	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	Yes			
H	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
I	100-year Flood Zone Limits & Elevation	Yes			
J	USDA-NRCS Soil Boundaries and Labels	No	High Intensity Soil Survey provided instead.		
K	Existing contours with adequate contour labelling; minimum 1' contour interval	Yes			
L	Existing building FFEs annotated	N/A			
M	Spot elevations for existing building corners, door entrances, accessible parking/walkways, road centerlines, and bottom/top of curbs	N/A			
N	Existing buildings & structures	N/A			
O	Existing pavement areas & number of parking spaces	Yes			
P	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	N/A			
Q	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	Yes			
R	Existing signage and striping	Yes			
S	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	Yes			
T	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	Yes			
U	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	Yes			
V	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	Yes & Waiver	Previously requested waiver from 66-76(b) for all trees over 24" to be shown on plans		
W	Location of any borings, drinking wells, and monitoring wells	Yes			
4	**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**				
A	Limits-of-disturbance outlined and acreage annotated	Yes			
B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
C	100-year Flood Zone Limits	Yes			
D	Callout existing site features to be demolished/removed/replaced	Yes			
E	Callout existing utilities to be demolished/removed/abandoned-in-place	Yes			
F	Hatch existing buildings and pavement to be removed	Yes			

	G	Construction Entrance location(s)	Yes			
	H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	Yes			
	I	Stockpile and staging area(s) identified (with proper perimeter control)	Yes			
	J	Inlet protection location(s)	Yes			
	K	Note requiring contractor to implement dust control measures throughout construction	Yes			
	L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	Yes	See Grading Plan C-3.1, note 27.		
	M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing	Yes			
	N	If large development is proposed with an extensive underground stormwater conveyance network, show sediment trap/basin location(s) needed for constructability/phasing; provide sizing calculations	Yes			
5		**SITE PLAN/SUBDIVISION PLAN**				
	A	Partial Site Plans needed for any viewport scale greater than 1"=20'	No	Plans largely at 40 scale with 20 scale blowups where necessary		
	B	Existing property and right-of-way lines	Yes			
	C	Proposed subdivision lot lines and labels	Yes			
	D	Required Zoning Setbacks shown with dimensions and annotation	Yes			
	E	Bulk requirement summary table (zoning/parking calculations)	Yes			
	F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
	G	100-year Flood Zone Limits	Yes			
	H	Proposed building outlines, door entrances and loading docks	Yes			
	I	Proposed building labels	Yes			
	J	Proposed road extents; provide clear annotation if roads will be public or private	Yes			
	K	Proposed parking and accessible parking locations; annotate parking space counts	Yes			
	L	Proposed signage, parking striping, and traffic striping	Yes			
	M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	Yes			
	N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	Yes			
	O	Separate hatching for buildings, sidewalks, pavement, landscaping	Yes			
	P	Proposed landscaping; detailed landscaping design should be on separate plans	Yes			
	Q	Designated snow storage areas	Yes	Roads will be plowed and snow stored in the private right of way behind the curb		
	R	Proposed dumpster locations and trash removal access	No	Private curbside pickup		
	S	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	Yes			
	T	Radial dimensions for all curbs, landscaped islands, sidewalks	Yes			
	U	Road centerline stationing shown, labelled every 0+50' with curve data	Yes			
	V	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	Yes	See Subdivision Plan C-1.0 Note 13.		
	W	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	Yes	See Subdivision Plan C-1.0 Note 10.		
	X	Planning Board signature block for final recording	Yes			
6		**GRADING PLAN**				
	A	Partial Grading Plans needed for any viewport greater than 1"=20'	Yes			
	B	Limits-of-disturbance outlined and acreage annotated	Yes			
	C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	Yes			
	D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	Yes			
	E	Proposed contours with adequate contour labelling; minimum 1' contour interval	Yes			
	F	Detailed grading for all ditches, swales, outfalls, and riprap	Yes			
	G	All proposed contours tie-into existing contours at limits-of-disturbance outline	Yes			
	H	Existing spot elevations for all asphalt and curb tie-in locations	Yes			
	I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
	J	100-year Flood Zone Limits	Yes			
	K	Proposed spot elevations for all important roadway geometric points and/or on a 50' maximum interval: low/high points, PC/PT, road centerline, edge-of-asphalt	Yes			
	L	Proposed spot elevations for all curblines (bottom/top-of-curb) and sidewalks	Yes			
	M	Proposed spot elevations for all parking and drive aisle geometry points	Yes			
	N	Proposed spot elevations for all building corners and door-entry locations	Yes			
	O	Proposed retaining wall/loading dock elevations (bottom/top of wall)	Yes			
	P	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	Yes			
	Q	Proposed % slope arrows for all ADA parking spaces and sidewalks	Yes			
	R	Proposed longitudinal % slope arrows for drainage ditch centerlines	N/A	No roadway ditches		
	S	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	Yes			
	T	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)	Yes	See Cover Sheet - No disturbance within flood zone		
7		**ROAD PROFILES (if public/private road proposed)**				
	A	Existing surface; dashed and screened	Yes			
	B	Proposed surface; continuous and bold	Yes			
	C	Corresponding centerline stationing and curve data annotation	Yes			
	D	Road cross-section including proposed surface cross slopes; include multiple sections for various road cross slope conditions proposed (crowned, superelevated)	Yes			
	E	Horizontal and vertical scale bars	Yes			
	F	Clear annotation if proposed road will be public or private	Yes			
	G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	Yes	See Subdivision Plan C-1.0 Note 13.		
	H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	Yes	See Subdivision Plan C-1.0 Note 10.		
8		**UTILITY PLAN**				
	A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	Yes			
	B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	Yes			
	C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	Yes			
	D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	Yes			

	E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	Yes			
	F	Proposed storm culverts, outfalls, and riprap locations and sizes	Yes			
	G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	Yes			
	H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	Yes			
	I	Flow directional arrows for storm & sewer pipes	No	All pipes are labeled and all necessary information for construction is shown in the table.		
	J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	Yes			
	K	All storm drains must be sized to convey the 25-year storm	Yes			
	L	Sewer force main sizes and invert elevations	N/A			
	M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W)	N/A			
	N	Grease trap & oil-water separator locations, sizes, elevations	N/A			
	O	Water, gas, electric, and telecom sizes labelled	Yes			
9		**UTILITY PROFILES**				
	A	Utility profiles for **all** gravity storm drains and sewer pipes, including all laterals, catch basins, culverts, and outfalls; profiles preferred to be aligned on the pipe centerline (not superimposed on the road centerline)	Yes			
	B	Existing surface; dashed and screened	Yes			
	C	Proposed surface; continuous and bold	Yes			
	D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	Yes			
	E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	Yes			
	F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated	Yes			
	G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated	Yes			
	H	Known ledge or groundwater elevations	Yes			
	I	For all storm drains, 25-year HGL must be shown on profiles with starting tailwater condition identified	Yes	Shown on Hydroflow Calculations Output		
	J	For storm outfalls, include riprap sizing and grading extents	Yes			
	K	Horizontal and vertical scale bars	Yes			
10		**DETAILS**				
	A	Road section detail, including pavement & gravel depths	Yes			
	B	Sidewalk, paver, crosswalk, and any other pavement section details	Yes			
	C	Pavement sawcut detail	Yes			
	D	Utility trench/backfill detail	Yes			
	E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	Yes			
	F	Signage, striping, and ADA details	Yes			
	G	E&S notes and details; only show applicable/proposed measures	Yes			
	H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	Yes			
	I	Storm outfall & riprap details	Yes			
	J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	Yes			
	K	Pump station, grease trap, and oil-water separator details	N/A			
	L	Conduit section details	Yes			
	M	Miscellaneous details (as needed)	Yes			
11		**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**				
	A	As required by ordinance; at a minimum: locations, counts, and species/models must be identified	Yes			
	B	Landscaping & lighting details	Yes			
12		**DOCUMENTS/REPORTS/CALCULATIONS**				
	A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction v. Site Punchlist/As-Built Inspections post-construction	Yes			
	B	Predevelopment & Post-development Drainage Area Maps, including: i. Subdrainage areas delineated and labeled ii. Points of Interest/Analysis shown and labeled iii. Hatching for different land cover areas (impervious, pervious, gravel) iv. Time of concentration (Tc) paths & durations v. Four City-standardized stormwater summary tables	Yes			
	C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	Yes			
	D	A Performance Guarantee Cost Estimate utilizing Planning's template	Yes			
	E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	Yes			
	F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches) via the rational method; starting tailwater conditions/documentation must be clearly identified	Yes			
	G	If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies	Yes			
	H	Sizing calculations for any SWM water quality BMP or detention facility	Yes			

I	A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: i. Annual maintenance requirements ii. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed iii. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	Yes			
J	Salt Management Plan	Yes			
K	Sewer pump station sizing calculations	N/A			
L	Sewer pump station maintenance plan	N/A			
M	Grease trap sizing calculations	N/A			
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	No	Park Rules provided		
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	Yes			

Attachment 2

Updated Boundary Survey

RECORDING DATA

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____
AT h____ m ____M. RECORDED IN
FILE NUMBER _____

REGISTRAR

LEGEND

- PROPERTY LINE
- ABUTTER LINE
- RIGHT-OF-WAY LINE
- TIE LINE
- SETBACK
- EASEMENT
- BUFFER
- FLOODPLAIN
- WOODS ROAD/TRAIL
- ZONE LINE
- BUILDING
- EDGE WETLAND
- EDGE VERNAL POOL
- STREAM
- WATERCOURSE
- EDGE PAVEMENT
- PAVEMENT PAINT
- EDGE GRAVEL
- CURB LINE
- TREELINE
- 120 / 118 CONTOURS
- ×120.00 SPOT GRADE
- W WATER
- CULVERT
- OHU OVERHEAD UTILITY
- UGU UNDERGROUND UTILITY
- RIPRAP
- N/F NOW OR FORMERLY
- A.G. ABOVE GRADE
- B.G. BELOW GRADE
- MONUMENT FOUND
- IRON PIPE/ROD FOUND
- BLAZED DECIDUOUS TREE
- BLAZED CONIFEROUS TREE
- WATER GATE VALVE
- HYDRANT
- WETLANDS
- CATCH BASIN
- UTILITY POLE
- GUY WIRE

GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS SOUTH STREET VILLAGE, LLC BY DEED DATED AUGUST 15, 2017 AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS IN BOOK 17541, PAGE 869, AND BY DEED DATED FEBRUARY 3, 2023 AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS IN BOOK 19192, PAGE 950, AND IS SHOWN AS LOT 8 ON THE CITY OF BIDDEFORD TAX MAP 7.
2. THE PROPERTY IS LOCATED IN THE RURAL FARM (RF) DISTRICT AND PARTIALLY WITHIN THE SUBURBAN RESIDENTIAL 1 (SR1), MOBILE HOME PARK (MHP), AND SHORELAND OVERLAY ZONES AS SHOWN.

   LAND USE REGULATIONS FOR THE RF ARE AS FOLLOWS:

MINIMUM LOT SIZE:	20,000 S.F.
MINIMUM STREET FRONTAGE:	120' (PUBLIC WATER)
MINIMUM FRONT YARD:	40' (MAJOR R/W) 25' (OTHER R/W)
MINIMUM SIDE YARD:	25'
MINIMUM REAR YARD:	25'
MAXIMUM BUILDING HEIGHT:	3 STORIES OR 35'

   * SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
3. TOTAL AREA OF PARCEL IS APPROXIMATELY 164.249 ACRES.
4. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON PLAN REF. A TIED TO FIELD MEASUREMENTS OBSERVED BY NORTHERN SURVEY ENGINEERING, LLC IN NOVEMBER, 2021. A RECORDS SEARCH WAS COMPLETED AS PART OF THIS SURVEY TO DEFINE ANY RECORD ENCUMBRANCES OR CONVEYANCES, AND ALL FINDINGS ARE SHOWN HEREON.
5. TOPOGRAPHIC INFORMATION SHOWN HEREON IS DERIVED FROM DATA COLLECTED IN NOVEMBER, 2021 USING AN UNMANNED AERIAL VEHICLE (UAV) SURVEY-GRADE LIDAR SENSOR. THE RESULTING SURFACE WAS GROUND-TRUTHED AND VERIFIED TO MEET THE NATIONAL MAP ACCURACY STANDARDS FOR 1-FOOT CONTOURS.
6. BOOK AND PAGE REFERENCES SHOWN HEREON ARE IN REFERENCE TO THE YORK COUNTY REGISTRY OF DEEDS (Y.C.R.D.).
7. BEARINGS SHOWN HEREON ARE IN REFERENCE TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83. ELEVATIONS DEPICTED HEREON ARE IN REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED GPS OBSERVATIONS.
8. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL SURFACE EVIDENCE LOCATED IN THE FIELD IN CONJUNCTION WITH ANY RECORD INFORMATION AVAILABLE AT THE TIME OF THIS SURVEY (SUE LEVEL C), AND MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
9. THE LOCUS PROPERTY AS DEPICTED HEREON FALLS PARTIALLY WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR BIDDEFORD, MAINE, YORK COUNTY, COMMUNITY-PANEL NUMBERS 23015400039 & 23015400088, HAVING AN EFFECTIVE DATE OF MAY 15, 1984. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE A, AREAS OF 100-YEAR FLOOD, BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS NOT DETERMINED. LIMITS ARE SHOWN HEREON BY DIGITIZING THE FEMA MAPPING AND IS APPROXIMATE.
10. A WETLAND DELINEATION AND VERNAL POOL ASSESSMENT WAS COMPLETED BY MARK HAMPTON ASSOCIATES IN APRIL & MAY, 2020, THE RESULTS OF WHICH WERE PROVIDED TO THIS SURVEYOR IN DIGITAL FORMAT AND OVERLAYED ONTO THIS SURVEY. NO WETLAND FLAGGING WAS OBSERVED DURING THE COURSE OF THE FIELD SURVEY.

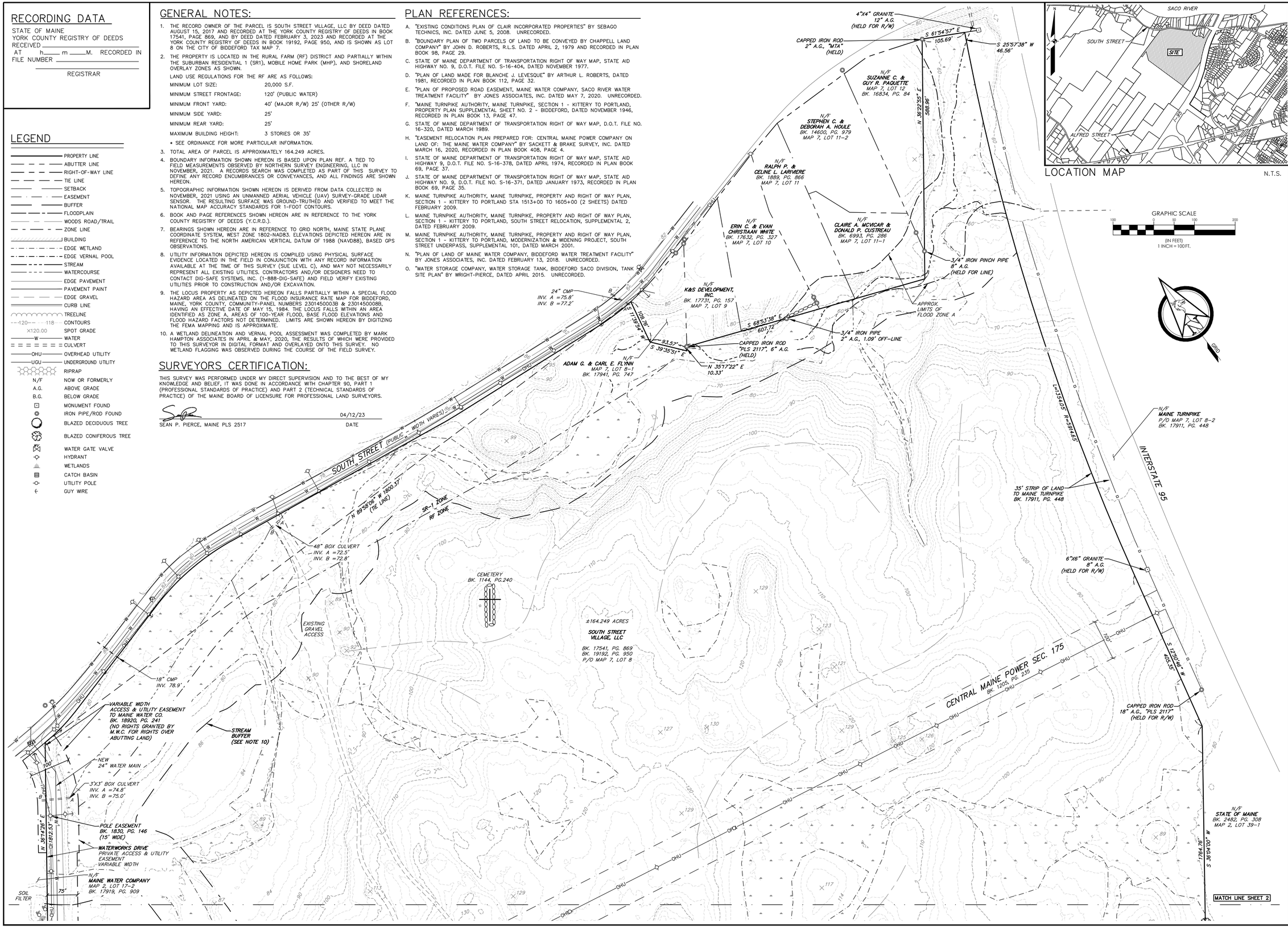
SURVEYORS CERTIFICATION:

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

04/12/23
SEAN P. PIERCE, MAINE PLS 2517 — DATE

PLAN REFERENCES:

A. "EXISTING CONDITIONS PLAN OF CLAIR INCORPORATED PROPERTIES" BY SEBAGO TECHNICS, INC. DATED JUNE 5, 2008. UNRECORDED.
B. "BOUNDARY PLAN OF TWO PARCELS OF LAND TO BE CONVEYED BY CHAPPELL LAND COMPANY" BY JOHN D. ROBERTS, R.L.S. DATED APRIL 2, 1979 AND RECORDED IN PLAN BOOK 98, PAGE 29.
C. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE AID HIGHWAY NO. 9, D.O.T. FILE NO. S-16-404, DATED NOVEMBER 1977.
D. "PLAN OF LAND MADE FOR BLANCHE J. LEVESQUE" BY ARTHUR L. ROBERTS, DATED 1981, RECORDED IN PLAN BOOK 112, PAGE 32.
E. "PLAN OF PROPOSED ROAD EASEMENT, MAINE WATER COMPANY, SACO RIVER WATER TREATMENT FACILITY" BY JONES ASSOCIATES, INC. DATED MAY 7, 2020. UNRECORDED.
F. "MAINE TURNPIKE AUTHORITY, MAINE TURNPIKE, SECTION 1 - KITTERY TO PORTLAND, PROPERTY PLAN SUPPLEMENTAL SHEET NO. 2 - BIDDEFORD, DATED NOVEMBER 1946, RECORDED IN PLAN BOOK 13, PAGE 47.
G. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, D.O.T. FILE NO. 16-320, DATED MARCH 1989.
H. "EASEMENT RELOCATION PLAN PREPARED FOR: CENTRAL MAINE POWER COMPANY ON LAND OF: THE MAINE WATER COMPANY" BY SACKETT & BRAKE SURVEY, INC. DATED MARCH 16, 2020, RECORDED IN PLAN BOOK 408, PAGE 4.
I. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE AID HIGHWAY 9, D.O.T. FILE NO. S-16-378, DATED APRIL 1974, RECORDED IN PLAN BOOK 69, PAGE 37.
J. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE AID HIGHWAY NO. 9, D.O.T. FILE NO. S-16-371, DATED JANUARY 1973, RECORDED IN PLAN BOOK 69, PAGE 35.
K. MAINE TURNPIKE AUTHORITY, MAINE TURNPIKE, PROPERTY AND RIGHT OF WAY PLAN, SECTION 1 - KITTERY TO PORTLAND STA 1513+00 TO 1605+00 (2 SHEETS) DATED FEBRUARY 2009.
L. MAINE TURNPIKE AUTHORITY, MAINE TURNPIKE, PROPERTY AND RIGHT OF WAY PLAN, SECTION 1 - KITTERY TO PORTLAND, SOUTH STREET RELOCATION, SUPPLEMENTAL 2, DATED FEBRUARY 2009.
M. MAINE TURNPIKE AUTHORITY, MAINE TURNPIKE, PROPERTY AND RIGHT OF WAY PLAN, SECTION 1 - KITTERY TO PORTLAND, MODERNIZATION & WIDENING PROJECT, SOUTH STREET UNDERPASS, SUPPLEMENTAL 101, DATED MARCH 2001.
N. "PLAN OF LAND OF MAINE WATER COMPANY, BIDDEFORD WATER TREATMENT FACILITY" BY JONES ASSOCIATES, INC. DATED FEBRUARY 13, 2018. UNRECORDED.
O. "WATER STORAGE COMPANY, WATER STORAGE TANK, BIDDEFORD SACO DIVISION, TANK SITE PLAN" BY WRIGHT-PIERCE, DATED APRIL 2015. UNRECORDED.



LOCATION MAP N.T.S.

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 INCH = 100 FT.

GRID

SEAN P. PIERCE, P.L.S. 2517

REV.	BY:	DATE:	STATUS:
B.	PHB	04/12/23	SHEET 2 ADDED NEW PROPERTY LINE
A.	SPP	07/26/22	UPDATED WETLAND MAPPING

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION AND ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK.

NORTHERN SURVEY ENGINEERING
207.440.3487
41 CHURCH ROAD, BRUNSWICK, MAINE 04011
WWW.NORTHERNSURVEYENGINEERING.COM

EXISTING CONDITIONS SURVEY
OF:
LAND OF SOUTH STREET VILLAGE, LLC
413 SOUTH STREET
BIDDEFORD, MAINE 04005
FOR:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DRAWN	CHECKED
SPP	PHB
PROJECT NO.	DATE
21006473A	06/23/22
SHEET SIZE	SCALE
24" X 36"	1" = 100'

SHEET 1 OF 2

NEW 24" WATER MAIN

3'X3' BOX CULVERT
INV. A =74.8'
INV. B =75.0'

POLE EASEMENT
BK. 1830, PG. 146
(15' WIDE)

WATERWORKS DRIVE
PRIVATE ACCESS & UTILITY EASEMENT
VARIABLE WIDTH

N/F
MAINE WATER COMPANY
MAP 2, LOT 17-2
BK. 17919, PG. 909

SOIL FILTER

ACCESS TO DRYING BEDS

18" HDPE
INV. A =81.6'
INV. B =79.8'

N/F
MAINE WATER COMPANY
MAP 2, LOT 19
BK. 2775, PG. 9

TWIN 15" HDPE
INV. A =95.2'
INV. B =93.5'
INV. C= 95.5'
INV. D = 93.1'

CENTRAL MAINE POWER SEC. 175
BK. 1205, PG. 235

GRAVEL ACCESS

18" HDPE
INV. A =114.5'
INV. B =112.2'

OLD ABANDONED WATER MAIN

18" HDPE
INV. A =122.9'
INV. B =119.8'

SOIL FILTER

NEW 24" WATER MAIN

N 36°14'26" E 1812.53'

WATERWORKS DRIVE (PRIVATE)

W 85°45'35" S 1787.37'

513.44'
N 14°15'11" W

ROAD EASEMENT
BK. 402, PG. 84
(NO WIDTH)

OLD 20" C.I. WATER MAIN RECONNECTED

POLE EASEMENT
BK. 1830, PG. 146
(15' WIDE)

N 53°45'34" W
75.00'

S 36°14'26" W
852.95'

WATERLINE EASEMENT
BK. 439, PG. 145 (NO WIDTH)

GRAVEL ACCESS

GRAVEL ACCESS

±164.249 ACRES
SOUTH STREET VILLAGE, LLC
BK. 17541, PG. 869
BK. 19192, PG. 950
P/O MAP 7, LOT 8

2376.29'
N 53°44'58" W
LIMITS OF MHP OVERLAY

LAND CONVEYED TO
±155.452 ACRES
SPANG 3, LLC
BK. 19192, PG. 636
P/O MAP 7, LOT 8

18" HDPE
INV. A =91.3'
INV. B =92.6'

100' SETBACK APPROXIMATE SHORELAND ZONE

APPROX. LIMITS OF FLOOD ZONE A

THATCHER BROOK

N/F
CITY OF BIDDEFORD
MAP 2, LOT 39
BK. 4008, PG. 133

1583.39'
N 36°14'00" E

1764.78'
S 36°14'00" W

N/F
STATE OF MAINE
BK. 2482, PG. 308
MAP 2, LOT 39-1

MATCH LINE SHEET 1

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 INCH = 100 FT.

RECORDING DATA

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____
AT h____ m____M. RECORDED IN
FILE NUMBER _____

REGISTRAR

SEAN P. PIERCE, PLS 2517

STATE OF MAINE
SEAN P. PIERCE
2517
PROFESSIONAL LAND SURVEYOR

REV.	BY:	DATE:	STATUS:
B.	PHB	04/12/23	SHEET 2, ADDED NEW PROPERTY LINE
A.	SPP	07/26/22	UPDATED WETLAND MAPPING

THIS PLAN SHALL NOT BE COPIED WITHOUT WRITTEN PERMISSION AND ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK.

NORTHERN SURVEY ENGINEERING
41 CHURCH ROAD, BRUNSWICK, MAINE 04011
207.440.3487
www.northernsurveyengineering.com

EXISTING CONDITIONS SURVEY
OF:
LAND OF SOUTH STREET VILLAGE, LLC
413 SOUTH STREET
BIDDEFORD, MAINE 04005
FOR:
SOUTH STREET VILLAGE, LLC
782 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DRAWN	CHECKED
SPP	PHB
PROJECT NO.	DATE
21006473A	06/23/22
SHEET SIZE	SCALE
24" X 36"	1" = 100'

SHEET 2 OF 2

Attachment 3

Updated Deed

NANCY E HAMMOND, REGISTER OF DEEDS
E-RECORDED **Bk 19192 PG 636**
Instr # 2023003046
02/03/2023 10:24:53 AM
Pages 3 YORK CO

DLN: 1002340225775

Space above for recording information

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS that **SOUTH STREET VILLAGE LLC,** a Maine limited liability company with a principal place of business in South Portland, County of Cumberland and State of Maine, for consideration paid, grants to **SPANG 3, LLC**, a Maine limited liability company with a mailing address of 17 Wadlin Road, Biddeford, ME 04005, with Warranty Covenants, the following described real estate:

A certain lot or parcel of land, together with the improvements thereon, situated southerly of South Street, but not adjacent thereto, in the City of Biddeford, County of York, State of Maine, being more specifically bounded and described as follows:

Beginning at the northeasterly corner of land now or formerly of the Estate of Jared P. Boyle and James P. Boyle (Deed Reference: Book 14683 Page 130) and the northwesterly corner of land now or formerly of Daniel Spang (Deed Reference: Book 2964 Page 230);

Thence S 53°40'05" E, along land of Spang, a distance of 470.74 feet to an iron pipe or rod found at land now or formerly of Grantee herein (Deed Reference: Book 18573 Page 93);

Thence N 36°19'23" E, along land of Grantee, a distance of 451.00 feet to an iron pipe or rod found at Grantee's northwesterly corner;

Thence S 53°40'05" E, along land of Grantee, a distance of 513.17 feet to an iron pipe or rod found at Grantee's northeasterly corner;

Thence S 35°27'08" W, along land of Grantee, a distance of 2,302.06 feet to a stone or concrete monument found;

Thence S 54°18'10" E, along land of Grantee, a distance of 190.48 feet to land now or formerly of Central Maine Power (Deed Reference: 5428 Page 256);

Thence N 77°05'21" E, along land of Central Maine Power, a distance of 585.38 feet to an iron pipe or rod found at land now or formerly of the State of Maine (Deed Reference: Book 4892 Page 211);

Thence N 35°42'06" E, along land of the State of Maine, a distance of 704.59 feet to a stone or concrete monument found;

Thence S 51°33'35" E, along land of the State of Maine, a distance of 669.34 feet;

Thence N 35°29'29" E, along land of the State of Maine, a distance of 1,342.20 feet;

No Transfer Tax

Thence N 36°04'00" E, continuing along land of the State of Maine (Deed Reference: Book 4892 Page 211), land now or formerly of the City of Biddeford (Deed Reference: Book 4008 Page 133), and other land now or formerly of the State of Maine (Deed Reference: Book 2482 Page 308) a distance of 1,583.39 feet;

Thence N 53°44'58" W, through land of the Grantor herein, a distance of 2,376.29 feet;

Thence N 14°15'11" W, through land of the Grantor herein, a distance of 513.54 feet to the southeasterly sideline of a variable width private access and utility easement known as Waterworks Drive;

Thence S 36°14'26" W, along the southeasterly sideline of Waterworks Drive, a distance of 377.62 feet;

Thence N 53°45'34" W, through land of the Grantor herein, a distance of 75.00 feet to land now or formerly of the Maine Water Company (Deed Reference: Book 2775 Page 9);

Thence S 36°14'26" W, along land of the Maine Water Company, a distance of 852.95 feet to an iron pipe or rod found;

Thence S 54°33'56" E, along land of the Maine Water Company, a distance of 600.33 feet to an iron pipe or rod found;

Thence S 35°27'25" W, along land of the Maine Water Company, a distance of 600.10 feet to an iron pipe or rod found at the northeasterly corner of other land of the Maine Water Company (Deed Reference: Book 17160 Page 173);

Thence continuing S 35°27'25" W, along land of the Maine Water Company, a distance of 701.53 feet to the Point of Beginning.

Containing approximately 155.452 acres.

Being a portion of the premises described in a warranty deed from Clair's Incorporated to South Street Village, LLC, dated August 15, 2017 and recorded as Book 17541 Page 869.

All bearings refer to Grid North, Maine State Plane Coordinate System, West Zone 1802-NAD83, as referenced on a plan entitled "Existing Conditions Survey of Land of South Street Village, LLC," prepared by Northern Survey Engineering and dated December 21, 2021.

TOGETHER WITH a perpetual non-exclusive right of way and easement to utilize the "Easement Area" as described in an Easement Deed from South Street Village, LLC, to the Maine Water Company, dated June 23, 2020 and recorded as Book 18290 Page 241 for the purposes of (a) pedestrian and vehicular access to and from the above-described premises, or any portion thereof, (b) maintenance and repair of the Easement Area and all improvements therein in order to permit the continued use thereof for the above described purposes, and (c) installation, maintenance, repair and replacement of above-ground and underground utility and communication lines including, but not limited to, water lines, sewer lines, power lines,

telephone and internet communication lines, and gas lines, to serve the above-described premises, or any portion thereof.

This conveyance is a transfer of land to an abutter, and is subject to the restriction that the Grantee shall not within five years of the date hereof, in the absence of subdivision approval, transfer to another person the above described premises unless such conveyance includes all of the merged land including the premises conveyed to Grantee by deed of Timothy C. Spang, Personal Representative of the Estate of Priscilla A. Spang, dated February 26, 2021, and recorded in the York County Registry of Deeds in Book 18573, Page 93.

Also conveying all right title and interest, without any covenants of title, to a certain lot or parcel of land lying southerly of land conveyed to Central Maine Power by Quitclaim Deed of Biddeford and Saco Water Company, dated June 12, 1990, and recorded in the York County Registry of Deeds in Book 5428, Page 256.

IN WITNESS WHEREOF, said South Street Village LLC caused this instrument to be signed in its company name by Matthew Chamberlain, its Member, thereunto duly authorized, this 2 day of February 2023.

Signed, sealed and delivered
in the presence of

South Street Village LLC

By: Matthew Chamberlain
Its: Member

State of Maine
County of York, ss

February 2, 2023

Personally appeared Matthew Chamberlain in his capacity as the Member of South Street Village LLC, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of South Street Village LLC.

Before me,

~~Notary Public~~/Attorney at Law
Paul D. Weinstein Bar # 5255

Attachment 4

Updated Financial Capacity

Financial Capacity

South Street Village, LLC is proposing to develop Hidden Hills Manufactured Housing Park – a 195-unit housing park to be located on the southerly side of South Street, just west of the Maine Turnpike at 413 South Street, Biddeford, ME.

The applicant owns the development parcel described as lot 8 on the City of Biddeford Tax Map #7. The project will be constructed in multiple phases. A phasing plan is attached. Future phases wont be begun until the infrastructure for the previous phase has been completed. A phasing plan is attached.

We prepared an engineer's estimate for the first phase and it is attached. According to our calculations, the infrastructure for the first phase will cost approximately $650,000. This figure is in line with estimates that the applicant has received from bidding contractors. This figure is well below the financial capacity of the applicants. We've attached correspondence from Evergreen Credit Union that that outlines $1,000,000 in immediate capacity.

April 8, 2022

To Whom It May Concern:

RE: Matthew Chamberlain Financial Information Request

This letter will confirm and verify that Matthew Chamberlain has accounts at Evergreen Credit Union. Matthew's accounts are in good standing and have balances in the excess of $850,000.00. Matthew also has the availability of excess of $150,000.00 in open lines of credit. Matthew also has ownership in South Street Villages.

If additional information is needed, please do not hesitate to contact our offices.

Sincerely,

Justin Collett

Justin Collett
AVP/Branch Manager | NMLS# 1492899
Evergreen Credit Union
225 Riverside Street
Portland, ME 04103
(O) 207-221-5000 Ext. 232
(F) 207-221-5017
egcu.org

Cost Estimate Worksheet

PROJECT NAME: Hidden Hills 55+ Community - Phase 1

DEVELOPER: South Street Village, LLC

GENERAL CONTRACTOR:

SITE CONTRACTOR:

DATE: 8/17/2022

BASIS OF FINANCIAL GUARANTEE

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL AMOUNT
SITE PREPARATION				
CLEARING AND GRUBBING	ACRES	9	$ 5,300	$ 47,700.00
EROSION CONTROL	LUMP SUM	1	$ 12,000	$ 12,000.00
EARTHWORK				
EXCAVATE AND FILL TO SUBGRADE	CY	1950	$ 7.00	$ 13,650.00
LEDGE REMOVAL	CY	0	N/A	$ -
PAVEMENT SECTION				
BITUMINOUS SURFACE PAVEMENT	TON	240	$ 100	$ 24,000.00
BITUMINOUS BINDER PAVEMENT	TON	380	$ 90	$ 34,200.00
BASE GRAVEL	CY	321	$ 27	$ 8,667.00
SUBBASE GRAVEL	CY	1754	$ 18	$ 31,572.00
CURB	LF	2005	$ 12	$ 24,060.00
SIDEWALK	CY	250	$ 25	$ 6,250.00
DRIVEWAY TO MAINTENANCE	LF	60	$ 420	$ 25,200.00
STORM DRAIN SYSTEM				
CATCH BASINS	EACH	9	$ 5,000	$ 45,000.00
RAIN GUARD	EACH	2	$ 5,000	$ 10,000.00
6" DIAMETER STORM DRAIN	LF	750	$ 20	$ 15,000.00
12" DIAMETER STORM DRAIN	LF	0	$ 30	$ -
15" DIAMETER STORM DRAIN	LF	691	$ 50	$ 34,550.00
18" DIAMETER STORM DRAIN	LF	0	$ 65	$ -
24" DIAMETER STORM DRAIN	LF	0	$ 80	$ -
48" DIAMETER STORM DRAIN	LF	54	$ 150	$ 8,100.00
VEGETATED SWALE	LF	250	$ 100	$ 25,000.00
LEVEL SPREADER	LF	175	$ 150	$ 26,250.00
STORMWATER MANAGEMENT POND	EACH	0	$ 50,000	$ -
MISCELLANEOUS	LUMP SUM	0		
SANITARY SEWER SYSTEM				
MANHOLE W/ TERMINAL FLUSHING VALVE	EACH	0	$ 3,340	$ -
2" PRIVATE FORCE MAIN	LF	0	$ 15	$ -
MISCELLANEOUS	LUMP SUM	0		
WATER MAIN SYSTEM				
DOMESTIC SERVICES	LF	920	35	$ 32,200.00
WATER MAIN PIPE	LF	1300	80	$ 104,000.00
HYDRANTS	EACH	1	5000	$ 5,000.00

VALVES	EACH	3	2500	$ 7,500.00
UNDERGROUND UTILITIES				
ELEC.\TEL. ABOVE GROUND	LF	1950	$ 20	$ 39,000.00
TRANSFORMER BASES	EACH	0	$ 1,000	$ -
SITE LIGHTING (INCL. BASES)	EACH	0	$ 600	$ -
SURFACE RESTORATION				
LOAM AND SEED	SY	2890	$ 6	$ 17,340.00
RIPRAP	CY	135	$ 35	$ 4,725.00
MULCH BERM	LF	10	$ 1,500	$ 15,000.00
LANDSCAPE PLANTINGS	LUMP SUM	1	$ 15,000	$ 15,000.00
CLEANUP	LUMP SUM	1	$ 5,000	$ 5,000.00

	SUBTOTAL COST		$ 635,964.00
	PROJECT CLOSEOUT FUNDS		$ 15,000.00
		TOTAL COST	$ 650,964.00

PROJECT CLOSEOUT FUNDS HAVE BEEN ESTABLISHED AS A SEPARATE (FIXED) LINE ITEM FOR COMPLETION OF VARIOUS ITEMS, SUCH AS TESTING, "AS-BUILTS" DRAWINGS AND FINAL PUNCH LIST, ETC.

Attachment 5

Outside Agency Approvals

1. MDEP SLODA, Tier 1 & PBR
2. ACOE Wetland Alteration Permit
3. Maine Water Company
4. Biddeford Engineering - Email Sanitary Sewer Sign Off
5. Biddeford Fire Department - Email Sign Off

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

SOUTH STREET VILLAGE LLC	) SITE LOCATION OF DEVELOPMENT ACT
Biddeford, York County	) NATURAL RESOURCES PROTECTION ACT
HIDDEN HILLS	) FRESHWATER WETLAND ALTERATION
L-30087-87-A-N (approval)	) WATER QUALITY CERTIFICATION
L-30087-TC-B-N (approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. §§ 481–489-E and §§ 480-A–480-JJ, Section 401 of the Clean Water Act (33 U. S. C. § 1341), and Chapters 310, 315, 373, 375, 500, 501, and 502 of Department rules, the Department of Environmental Protection (Department) has considered the application of SOUTH STREET VILLAGE LLC (applicant) with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to construct an age-restricted, affordable home development featuring 195 manufactured housing units owned by individuals but located on leased land, commonly owned park property including a community center, pocket parks, a shuffleboard court, access roads and parking areas. The project would be known as Hidden Hills and is shown on a set of plans the first of which is entitled "Hidden Hills Housing Park," prepared by Terradyn Consultant, LLC, and dated February 9, 2022, with a last revision date of July 7, 2023. The project site is a 164.25-acre parcel located on the southerly side of South Street (413 South Street) in the City of Biddeford.

The applicant is also seeking approval under the Natural Resources Protection Act (NRPA) to fill a total of 14,300 square feet of freshwater wetlands as a result of the project. Wetland impacts are discussed in greater detail in Finding 16.

In addition, the applicant submitted a Notice of Intent (NOI #75990) to comply with the requirements of the Maine Construction General Permit and a NRPA Permit-by-Rule Notification Form (PBR #75989) pursuant to Chapter 305 Permit by Rule Standards Section 10 (06-096 Ch. 305, § 2, last amended June 8, 2012) in connection with the applications. NOI #75990 and PBR #75989 were accepted by the Department on November 8, 2022.

B. Current Use of Site: The site of the proposed project is currently a combination of undeveloped fields, woodlands, two streams and freshwater wetlands. There is an existing private road called Waterworks Drive along the northwestern edge of the parcel that serves property owned by the Maine Water Company. The parcel is bisected by an overhead electrical transmission line easement owned by Central Maine Power Company. The project parcel was previously part of a larger 312-acre parcel, which was divided by

the applicant in 2022. The applicant owns the remaining 150 acres to the south of the proposed project which is also undeveloped.

2. FINANCIAL CAPACITY:

The project will be constructed in eight phases as shown on a plan titled "Site Phasing Plan," prepared by Terradyn Consultants, LLC and dated February 9, 2022, with a last revision date of April 26, 2023. Phase 1 is anticipated to cost $1,076,640; Phase 2 $994.489; Phase 3 $1,035,037; Phase 4 $1,694,494; Phase 5 $800,251, Phase 6 $1,179,893; Phase 7 $1,068,241, and Phase 8 $628,097. The applicant submitted two letters, one from Evergreen Credit Union, dated April 2, 2022 and another from W.M. Ely Associates, Inc., certified public accountants, dated April 13, 2022, indicating that the applicant has adequate funds to construct and operate Phase 1.

Prior to the start of construction of any phase of the development after Phase I, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance consistent with Department Rules, Chapter 373, § 1, to the Bureau of Land Resources for review and approval.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards provided that prior to the start of construction of any phase other than Phase 1, the applicant must provide financial capacity as described above.

3. TECHNICAL ABILITY:

The applicant provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant also retained the services of Terradyn Consultants, LLC; Northern Survey Engineering; Mark Hampton Associates, Inc.; Barton & Logudice, Inc.; and Barry Hosmer, a landscape architect, to assist in the design and engineering of the project.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The proposed project is an age-restricted residential development, which is exempt from regulation pursuant to the Site Law, in 38 M.R.S. §484(3)(A).

Construction of the project will be limited to the hours of 7:00 a.m. to 7:00 p.m. or daylight hours, whichever is longer. Noise generated by the construction of developments during these hours is also exempt from regulation pursuant to 38 M.R.S. §484(3)(A).

The Department finds that the proposed project will not generate any regulated sources of noise.

5. SCENIC CHARACTER:

The project site is located on a large undeveloped parcel, with residential properties to the north, along South Street and undeveloped land to the south. The project will have limited visibility from South Street and the Maine Turnpike. The applicant proposes to maintain a minimum 300-foot-wide undisturbed buffer along South Street and a 100-foot-wide undisturbed buffer along the Maine Turnpike.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The applicant consulted with the Maine Department of Inland Fisheries and Wildlife (MDIFW) while designing the project. As a result, the applicant proposes to prohibit tree clearing between June 1 and July 31 to minimize any impacts to bats. The project area was surveyed for vernal pools and none were found. Vernal pools may exist on the remainder of the applicant's parcel (it was not surveyed). To avoid any potential impacts, the applicant has designed the project to be more than 200 feet away from any potential vernal pool. There is a large deer wintering area on the applicant's remaining land and the adjacent water district land. Only Phase 1 of the development will be located within the mapped deer wintering area. The applicant designed the project to maintain a 100-foot-wide buffer along the intermittent stream except for one road crossing, and a 300-foot-wide buffer on the stream near South Street.

MDIFW reviewed the proposed project. In its comments, MDIFW stated that it found no records of any Essential or Significant Wildlife Habitats, or other wildlife habitats of special concern associated with this site. No fisheries concerns were identified.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The Maine Historic Preservation Commission reviewed the proposed project and stated that it will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

The Maine Natural Areas Program database does not contain any records documenting the existence of rare or unique botanical features on the project site and, as discussed in Finding 6, MDIFW did not identify any unusual wildlife habitats located on the project

site. The applicant's consultant surveyed the proposed project site and confirmed that no unusual features exist on-site.

The Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites or unusual natural areas either on or near the development site.

8. BUFFER STRIPS:

The applicant proposes to utilize 20 forested or meadow stormwater buffers within the project.

All stormwater buffers will be protected from alteration in perpetuity through the execution of a deed restriction. The applicant submitted draft deed restrictions that meets Department standards. Prior to the start of construction of any phase, the location of the stormwater buffers within that phase must be permanently marked on the ground.

The applicant must execute and record all required deed restrictions, including the appropriate buffer deed restrictions, within 60 days of the date of this Order unless the deed restriction is to be placed on a leased subdivision lot. In that situation, the applicant must execute and record the required deed restriction prior to the start of construction on the lot. The deed for each lot that contains any portion of the designated buffer must contain deed restrictions relative to the buffer and have attached to it a plot plan for the lot, drawn to scale, that specifies the location of the buffer on the lot. The applicant must submit a copy of the recorded deed restrictions, including the plot plan, to the Department's Bureau of Land Resources (BLR) within 60 days of its recording.

The Department finds that the applicant has made adequate provision for buffer strips provided that, prior to the start of construction of any phase, the location of the stormwater buffers is permanently marked on the ground, and that the applicant executes a deed restriction for each buffer as described above.

9. SOILS:

The applicant submitted a soil survey map and report based on the soils found at the project site. This report was prepared by a certified soils scientist and reviewed by a geologist with the BLR. The applicant anticipates that bedrock removal by blasting may be required in some locations. BLR recommended that if blasting is found to be necessary, the applicant's agents should follow a blasting plan that conforms to the performance standards described in 38 M.R.S. § 490-Z(14).

If a rock crusher is being utilized on site, the applicant must ensure that the crusher is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license.

The Department finds that, based on the geotechnical report and DEA's review, the soils on the project site present no limitations that cannot be overcome through standard engineering practices provided that if blasting is necessary, the applicant and its agents follow a blasting plan and any air crusher used on site is operated properly as described above.

10. STORMWATER MANAGEMENT:

The proposed project includes approximately 68.8 acres of developed area, of which 21.6 acres is impervious area. It lies within the watersheds of the Saco River (Phases 1 – 3) and Thatcher Brook (Phases 4 – 8). Thatcher Brook is an urban impaired stream. The applicant submitted a stormwater management plan based on the Basic, General, Urban Impaired Stream, and Flooding Standards contained in Chapter 500 Stormwater Management rules (06-096 C.M.R. ch. 500, effective August 12, 2015). The proposed stormwater management system consists of two gravel wetlands, 53 roof drain filter strips, a total of 20 stormwater buffers, 19 of which also have level spreaders. The location of all stormwater management structures can be found on the plans and accompanying notes referenced in Finding 1.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan (Section 14 of the application) that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the BLR.

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

Given the size and nature of the project site, the applicant must retain the services of a third-party inspector in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order.

Prior the start of construction, the applicant must conduct a pre-construction meeting to discuss the construction schedule and the erosion and sediment control plan with the appropriate parties. This meeting must be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed by, and revised in response to the comments of, BLR. The applicant will be responsible

for the maintenance of all common facilities including the stormwater management system.

Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on BLR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500, § 4(B) provided that sediment from maintenance activities is disposed of properly, a pre-construction meeting is held, and the applicant hires a third-party inspector, all as described above.

B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from no less than 95.6% of the impervious area and no less than 86.7% of the developed area. The proposed development roads meet the definition of "a linear portion of a project" in Chapter 500 and are eligible for an exception from the General Standard, as outlined in Chapter 500, § 4(B)(5)(c), which reduces the treatment requirements to 75% of the impervious area and no less than 50% of the developed area for roadways. Given this, the applicant is proposing to control runoff volume of the roads from 76.8% of the impervious area and 76.8% of the developed area.

As described in Finding 8, the applicant submitted draft deed restrictions that meets Department standards for the preservation of the twenty forested or meadow stormwater buffers from alteration in perpetuity.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, BLR. After a final review, BLR commented that the proposed stormwater management system is designed in accordance with the General Standards contained in Chapter 500, § 4(C) and recommended that the design engineer or a qualified professional engineer oversee the construction of the two gravel wetlands and level spreaders according to the details and notes specified on the approved plans.

Within 30 days from project completion, or if the project takes more than one year to complete, at least once per year, the applicant must submit a log of inspection reports detailing the items inspected, photographs taken, and the dates of each inspection to the BLR for review. Within six months of project completion the applicant must submit as-

built (record) drawings for stormwater control structures, including all stormwater BMPs, to the BLR.

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the General Standards contained in Chapter 500, § 4(C) provided that construction of the gravel wetlands and level spreaders are overseen and documented, and that the applicant submits as-built drawings as described above.

C. Urban Impaired Stream Standard:

A portion of the proposed project is in the watershed of Thatcher Brook, an urban impaired stream. The Department has approved a compensation fee utilization plan (CFUP) developed by the City of Biddeford to accept compensation fees to reduce the impact of stormwater pollution in the watershed of urban impaired streams. To comply with Chapter 500, § 4(E)(2), the applicant proposes to submit a payment of $55,505.62 to the City of Biddeford to be utilized in accordance with the approved CFUP at other sites in the watershed. Prior to the start of construction of Phase 4 (or any other phase within the Thatcher Brook watershed), the applicant must make the payment and submit evidence of the payment to the Department for review.

Based on the payment of a compensation fee, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Urban Impaired Stream Standard provided that prior to the start of construction of Phase 4 (or any other phase located with the Thatcher Brook watershed), the applicant submits the compensation fee and submits proof of payment as described above.

D. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20, U.S.D.A., Soil Conservation Service and detains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site will not exceed the pre-development peak flow from the site and the peak flow of the receiving waters will not be increased as a result of stormwater runoff from the development site.

BLR commented that the proposed system is designed in accordance with the Flooding Standard contained in Chapter 500, § 4(F).

Based on the system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Flooding Standard contained in Chapter 500, § 4(F) for peak flow from the project site, and channel limits and runoff areas.

The Department further finds that the proposed project will meet the Chapter 500 standards for the discharge to freshwater wetlands.

11. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. The proposed project does not propose any withdrawal from, or discharge to, the groundwater.

The Department finds that the proposed project will not have an unreasonable adverse effect on ground water quality.

12. WATER SUPPLY:

When completed, the proposed project is anticipated to use 35,100 gallons of water per day. Water will be supplied by the Maine Water Company. The applicant submitted a letter from Maine Water Company, dated April 10, 2021, indicating that it will be capable of servicing this project.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

13. WASTEWATER DISPOSAL:

Wastewater will be disposed of by common subsurface wastewater disposal systems. Most of the systems will be shared by two units/lots, a small number will be shared by three units/lots. The applicant submitted the soil survey map and report discussed in Finding 9. Each individual system must be designed to meet the requirements of the Maine State Plumbing Code. This information was reviewed by, and revised in response to comments from, BLR.

Based on BLR's comments, the Department finds that the proposed wastewater disposal systems will be built on suitable soil types.

14. SOLID WASTE:

When completed, the proposed project is anticipated to generate 320 tons of household solid waste per year. All general solid wastes from the proposed project will be disposed of at ecomaine, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

The proposed project will generate approximately 27,200 cubic yards of stumps and grubbings. All stumps and grubbings generated will be disposed of on site, either chipped or burned, with the remainder to be worked into the soil, in compliance with the Maine Solid Waste Management Rules.

The proposed project will generate approximately 725 tons of construction debris and demolition debris. All construction and demolition debris generated will be disposed of at either Juniper Ridge Landfill in Old Town, which is currently in substantial compliance with the Maine Solid Waste Management Rules, or Turnkey Landfill in Rochester New Hampshire, which is also an acceptable method of disposal.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

15. FLOODING:

Portions of the site are located within an A zone according to the Federal Insurance Rate Map. These areas are associated with Thatcher Brook and an area upstream of the unnamed brook near South Street. The applicant designed the project to avoid the mapped flood zones.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

16. NATURAL RESOURCE IMPACTS:

Pursuant to 38 M.R.S. § 480-X in the NRPA, the proposed project meets the eligibility criteria for reduced review procedures in the form of a Tier 1 level of review. Except for the habitat standard and the water quality standard, the Standards of 38 M.R.S. § 480-D do not apply to projects that qualify for Tier 1 review.

Wetland Alterations. The applicant proposes to directly alter 14,300 square feet of freshwater wetlands to construct the proposed development. Wetland impacts are associated with the construction of access roads and gravel wetland #1. The purpose of the project is to develop a 195-lot, age-restricted manufactured housing development. The applicant submitted an avoidance and minimization statement. Because of the amount and distribution of freshwater wetlands across the parcel, it is not possible to completely avoid all wetland impacts. The applicant considered several different designs to reduce wetland impacts, including reducing the number of units, narrowing the width of the access roads at all wetland crossings, 2H:1V fill side slopes in wetlands and installing culverts in all wetland crossings. The applicant stated, and the Department agrees based on its analysis, that as it is currently designed, the proposed project avoids and minimizes impacts to freshwater wetlands to greatest extent practicable while still meeting the project purpose.

Stream Alteration. The applicant designed the stream crossing of an unnamed stream to be compliant with Chapter 305 Permit by Rule Standards Section 10. PBR #75989 was accepted by the Department on November 8, 2022. Approximately 1,377 square feet of the total wetland impacts are associated with and authorized by PBR #75989.

Significant Wildlife Habitat. As described is Finding 6, the site of the proposed project is a mix of forest and meadow, both uplands and wetlands. There are no mapped essential or significant wildlife habitats associated with the project site.

Water Quality. As discussed in Finding 10(A), the applicant proposes to use erosion and sediment control measures during construction to minimize impacts to water quality from siltation.

Given the above and based on the information in the record, the Department finds that that the applicant has avoided and minimized freshwater wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project. The Department further finds that the activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, freshwater, estuarine or marine fisheries, or other aquatic life and that the proposed project will not violate state water quality standards, in 38 M.R.S. § 480-D (3 and 5).

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 480-A–480-JJ and Section 401 of the Clean Water Act:

A. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.

B. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 481–489-E:

A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that prior to the start of construction of any phase other than Phase 1, the applicant must submit evidence of adequate financial capacity as described in Finding 2.

B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities provided that prior to the start of construction of any phase, the locations of the stormwater buffers are permanently marked on the ground, and the applicant executes deed restrictions as described in Finding 8.

C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil provided that if blasting is necessary, the applicant and its agents follow a blasting plan that conforms to the performance standards described in 38 M.R.S. § 490-Z(14) and any air crusher used on site is operated in accordance with the applicable air emissions license.

D. The proposed development meets the standards for storm water management in 38 M.R.S. § 420-D and the standard for erosion and sedimentation control in 38 M.R.S. § 420-C provided that the applicant hires a third party inspector and holds a pre-construction meeting; storm sewer grit is properly disposed; a qualified professional engineer oversees construction of the two gravel wetlands and level spreaders; inspection logs and as-built plans are submitted; and, prior to the start of construction of any phase with the Thatcher Brook watershed, the applicant submits proof that it paid the CFUP , all as described in Finding 10.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.

F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of SOUTH STREET VILLAGE LLC to construct a 195-unit, age restricted manufactured housing development, in phases, as described in Finding 1, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.

2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.

3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. Prior to the start of construction of any phase of the development, other than Phase 1, the applicant shall submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance consistent with Department Rules, Chapter 373, § 1, to the Bureau of Land Resources for review and approval.

5. The applicant shall retain the services of a third-party inspector in accordance with the Special Condition for Third-Party Inspection Program, which is attached to this Order.

6. Prior the start of construction, the applicant shall conduct a pre-construction meeting. This meeting shall be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector.

7. Storm sewer grit and sediment materials removed from stormwater control structures shall be disposed of in compliance with the Maine Solid Waste Management Rules.

8. The applicant shall execute and record all required deed restrictions, including the appropriate buffer deed restrictions, within 60 days of the date of this Order unless the deed restriction is to be placed on a subdivision lot which will be leased. In that situation, the applicant shall execute and record the required deed restriction prior to the start of construction on the lot. The applicant shall submit a copy of the recorded deed restriction, including the plot plan, to the BLR within 60 days of its recording.

9. Prior to the start of construction, the location of forested and meadow stormwater buffers shall be permanently marked on the ground.

10. The design engineer or a qualified professional engineer shall oversee the construction of the two gravel wetlands and level spreaders according to the details and notes specified on the approved plans as stated in Finding 10(B).

11. Within 30 days from project completion, or if the project takes more than one year to complete, at least once per year, the applicant shall submit a log of inspection reports detailing the items inspected, photographs taken, and the dates of each inspection to the BLR for review. Within six months of project completion the applicant shall submit as-built (record) drawings for stormwater control structures, including all stormwater BMPs, to the BLR.

12. Prior to the start of construction of Phase 4 (or any other phase within the Thatcher Brook watershed) the applicant shall submit proof to the Department for review that it paid the CFUP payment to the City of Biddeford.

13. If blasting is necessary, the applicant and its agents shall follow a blasting plan that conforms to the performance standards described in 38 M.R.S. § 490-Z(14).

14. If a rock crusher is being utilized on site, the applicant shall ensure that the crusher is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 24th DAY OF JULY 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
For: Melanie Loyzim, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

DH/L30087ANBN/ATS#90420, 90241

FILED
July 24th, 2023
State of Maine
Board of Environmental Protection

Department of Environmental Protection

SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

A. Approval of Variations from Plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited without prior approval of the Board, and the applicant shall include deed restrictions to that effect.

B. Compliance with All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

C. Compliance with All Terms and Conditions of Approval. The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all preconstruction terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

D. Advertising. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

E. Transfer of Development. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

F. Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

G. Approval Included in Contract Bids. A copy of this approval must be included in or attached to all contract bid specifications for the development.

H. Approval Shown to Contractors. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

Natural Resources Protection Act (NRPA)
Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCES PROTECTION ACT, 38 M.R.S. § 480-A ET SEQ., UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.

B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.

D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.

E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.

G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.

H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

(1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the permittee. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S. §420-D(8) and is subject to penalties under 38 M.R.S. §349.

(2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

(3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

(4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.

(5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

(6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the permittee, and the permittee and each contractor and sub-contractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

(7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the Department. If maintenance responsibility is to be transferred from the permittee to another entity, a transfer request must be filed with the Department which includes the name and contact information for the person or entity responsible for this maintenance. The form must be signed by the responsible person or agent of the responsible entity.

(8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.

(a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

(b) All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.

(c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.

(d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.

(e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.

(9) Transfer of property subject to the license. If any portion of the property subject to the license containing areas of flow or areas that are flooded are transferred to a new property owner, restrictive covenants protecting these areas must be included in any deeds or leases, and recorded at the appropriate county registry of deeds. Also, in all transfers of such areas and areas containing parts of the stormwater management system, deed restrictions must be included making the property transfer subject to all applicable terms and conditions of the permit. These terms and conditions must be incorporated by specific and prominent reference to the permit in the deed. All transfers must include in the restrictions the requirement that any subsequent transfer must specifically include the same restrictions unless their removal or modification is approved by the Department. These restrictions must be written to be enforceable by the Department and must reference the permit number.

(10) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

Special Condition
for
Third Party Inspection Program

THIRD-PARTY INSPECTION PROGRAM

1.0 THE PURPOSE OF THE THIRD-PARTY INSPECTION

As a condition of this permit, the Maine Department of Environmental Protection (MDEP) requires the permit applicant to retain the services of a third-party inspector to monitor compliance with MDEP permit conditions during construction. The objectives of this condition are as follows:

1) to ensure that all construction and stabilization activities comply with the permit conditions and the MDEP-approved drawings and specifications,

2) to ensure that field decisions regarding erosion control implementation, stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations, and

3) to ensure communication between the contractor and MDEP regarding any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan.

This document establishes the inspection program and outlines the responsibilities of the permit applicant, the MDEP, and the inspector.

2.0 SELECTING THE INSPECTOR

At least 30 days prior to starting any construction activity on the site, the applicant will submit the names of at least two inspector candidates to the MDEP. Each candidate must meet the minimum qualifications listed under section 3.0. The candidates may not be employees, partners, or contracted consultants involved with the permitting of the project or otherwise employed by the same company or agency except that the MDEP may accept subcontractors who worked for the project's primary consultant on some aspect of the project such as, but not limited to, completing wetland delineations, identifying significant wildlife habitats, or conducting geotechnical investigations, but who were not directly employed by the applicant, as Third Party inspectors on a case by case basis. The MDEP will have 15 days from receiving the names to select one of the candidates as the inspector or to reject both candidates. If the MDEP rejects both candidates, then the MDEP shall state the particular reasons for the rejections. In this case, the applicant may either dispute the rejection to the Director of the Bureau of Land Resources or start the selection process over by nominating two, new candidates.

3.0 THE INSPECTOR'S QUALIFICATIONS

Each inspector candidate nominated by the applicant shall have the following minimum qualifications:

1) a degree in an environmental science or civil engineering, or other demonstrated expertise,

2) a practical knowledge of erosion control practices and stormwater hydrology,

3) experience in management or supervision on large construction projects,

4) the ability to understand and articulate permit conditions to contractors concerning erosion control or stormwater management,

5) the ability to clearly document activities being inspected,

6) appropriate facilities and, if necessary, support staff to carry out the duties and responsibilities set forth in section 6.0 in a timely manner, and

7) no ownership or financial interest in the development other than that created by being retained as the third-party inspector.

4.0 INITIATING THE INSPECTOR'S SERVICES

The applicant will not formally and finally engage for service any inspector under this permit condition prior to MDEP approval or waiver by omission under section 2.0. No clearing, grubbing, grading, filling, stockpiling, or other construction activity will take place on the development site until the applicant retains the MDEP-approved inspector for service.

5.0 TERMINATING THE INSPECTOR'S SERVICES

The applicant will not terminate the services of the MDEP-approved inspector at any time between commencing construction and completing final site stabilization without first getting written approval to do so from the MDEP.

6.0 THE INSPECTOR'S DUTIES AND RESPONSIBILITIES

The inspector's work shall consist of the duties and responsibilities outlined below.

1) Prior to construction, the inspector will become thoroughly familiar with the terms and conditions of the state-issued site permit, natural resources protection permit, or both.

2) Prior to construction, the inspector will become thoroughly familiar with the proposed construction schedule, including the timing for installing and removing erosion controls, the timing for constructing and stabilizing any basins or ponds, and the deadlines for completing stabilization of disturbed soils.

3) Prior to construction, the inspector will become thoroughly familiar with the project plans and specifications, including those for building detention basins, those for installing the erosion control measures to be used on the site, and those for temporarily or permanently stabilizing disturbed soils in a timely manner.

4) During construction, the inspector will monitor the contractor's installation and maintenance of the erosion control measures called for in the state permit(s) and any additional measures the inspector believes are necessary to prevent sediment discharge to off-site properties or natural resources. This direction will be based on the approved erosion control plan, field conditions at the time of construction, and the natural resources potentially impacted by construction activities.

5) During construction, the inspector will monitor the contractor’s construction of the stormwater system, including the construction and stabilization of ditches, culverts, detention basins, water quality treatment measures, and storm sewers.

6) During construction, the inspector will monitor the contractor’s installation of any stream or wetland crossings.

7) During construction, the inspector will monitor the contractor’s final stabilization of the project site.

8) During construction, the inspector will keep logs recording any rain storms at the site, the contractor’s activities on the site, discussions with the contractor(s), and possible violations of the permit conditions.

9) During construction, the inspector will inspect the project site at least once a week and before and after any significant rain event. The inspector will photograph all protected natural resources both before and after construction and will photograph all areas under construction. All photographs will be identified with, at a minimum the date the photo was taken, the location and the name of the individual taking the photograph. *Note: the frequency of these inspections as contained in this condition may be varied to best address particular project needs.*

10) During construction, the inspector will prepare and submit weekly *(or other frequency)* inspection reports to the MDEP.

11) During construction, the inspector will notify the designated person at the MDEP immediately of any sediment-laden discharges to a protected natural resource or other significant issues such as the improper construction of a stormwater control structure or the use of construction plans not approved by the MDEP.

7.0 INSPECTION REPORTS

The inspector will submit weekly written reports *(or at another designated frequency)*, including photographs of areas that are under construction, on a form provided by the Department to the designated person at the MDEP. Each report will be due at the MDEP by the Friday *(or other designated day)* following the inspection week (Monday through Sunday).

The weekly report will summarize construction activities and events on the site for the previous week as outlined below.

1) The report will state the name of the development, its permit number(s), and the start and end dates for the inspection week (Monday through Sunday).

2) The report will state the date(s) and time(s) when the inspector was on the site making inspections.

3) The report will state the date(s) and approximate duration(s) of any rainfall events on the site for the week.

4) The report will identify and describe any erosion problems that resulted in sediment leaving the property or sediment being discharged into a wetland, brook, stream, river, lake, or public storm sewer system. The report will describe the contractor's actions to repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.

5) The report will list the buildings, roads, parking lots, detention basins, stream crossings or other features open to construction for the week, including those features or areas actively worked and those left unworked (dormant).

6) For each area open to construction, the report will list the date of initial soil disturbance for the area.

7) For each area open to construction, the report will note which areas were actively worked that week and which were left dormant for the week. For those areas actively worked, the report will briefly state the work performed in the area that week and the progress toward final stabilization of the area – e.g. “grubbing in progress,” “grubbing complete,” “rough grading in progress,” “rough grading complete,” “finish grading in progress,” “finish grading complete,” “permanent seeding completed,” “area fully stable and temporary erosion controls removed,” etc.

8) For each area open to construction, the report will list the erosion and sedimentation control measures installed, maintained, or removed during the week.

9) For each erosion control measure in-place, the report will note the condition of the measure and any maintenance performed to bring it to standard.

Third Party Inspection Form

This report is prepared by a Third Party Inspector to meet the requirements of the Third Party Inspector Condition attached as a Special Condition to the Department Order that was issued for the project identified below. The information in this report/form is not intended to serve as a determination of whether the project is in compliance with the Department permit or other applicable Department laws and rules. Only Department staff may make that determination.

TO: *PM, Maine DEP (@maine.gov)*	FROM:	
PROJECT NAME & LOCATION:		DEP #:
DATE OF INSPECTION:	DATE OF REPORT:	
WEATHER:	CONDITIONS:	

CONTRACTOR:	
CONTACT NAME:	PHONE NUMBER:
LANDOWNER:	PHONE NUMBER:

SITE CHARACTERISTICS:

# ACRES OPEN:	# ACRES ACTIVE:	# ACRES INACTIVE:
LOCATION OF OPEN LAND:	LOCATION OF ACTIVE LAND:	LOCATION OF INACTIVE LAND:
OPEN SINCE:	OPEN SINCE:	OPEN SINCE:

PROGRESS OF WORK:

INSPECTION OF:	**Satisfactory**	**Minor Deviation** (corrective action required)	**Unsatisfactory** (include photos)
STORMWATER CONTROL (VEGETATIVE & STRUCTURAL BMP'S)			
EROSION & SEDIMENTATION CONTROL (TEMPORARY & PERMANENT BMP'S)			
OTHER: (PERMIT CONDITIONS, ENGINEERING DESIGN, ETC.)			

COMMENTS/CORRECTIVE ACTIONS TAKEN (attach additional sheets as necessary):

Photos (must be labeled with date, photographer and location)

cc:		
Original and all copies were sent by email only.		

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: August 2021 **Contact: (207) 314-1458**

SUMMARY

This document provides information regarding a person's rights and obligations in filing an administrative or judicial appeal of a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner.

Except as provided below, there are two methods available to an aggrieved person seeking to appeal a licensing decision made by the DEP Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

A person filing an appeal with the Board should review Organization and Powers, 38 M.R.S. §§ 341-D(4) and 346; the Maine Administrative Procedure Act, 5 M.R.S. § 11001; and the DEP's *Rule Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

Not more than 30 days following the filing of a license decision by the Commissioner with the Board, an aggrieved person may appeal to the Board for review of the Commissioner's decision. The filing of an appeal with the Board, in care of the Board Clerk, is complete when the Board receives the submission by the close of business on the due date (5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board, as determined by the received time stamp on the document or electronic mail). Appeals filed after 5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board will be dismissed as untimely, absent a showing of good cause.

HOW TO SUBMIT AN APPEAL TO THE BOARD

An appeal to the Board may be submitted via postal mail or electronic mail and must contain all signatures and required appeal contents. An electronic filing must contain the scanned original signature of the appellant(s). The appeal documents must be sent to the following address.

Chair, Board of Environmental Protection
c/o Board Clerk
17 State House Station
Augusta, ME 04333-0017
ruth.a.burke@maine.gov

The DEP may also request the submittal of the original signed paper appeal documents when the appeal is filed electronically. The risk of material not being received in a timely manner is on the sender, regardless of the method used.

At the time an appeal is filed with the Board, the appellant must send a copy of the appeal to: (1) the Commissioner of the DEP (Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333-0017); (2) the licensee; and if a hearing was held on the application, (3) any intervenors in that hearing proceeding. **Please contact the DEP at 207-287-7688 with questions or for contact information regarding a specific licensing decision.**

REQUIRED APPEAL CONTENTS

A complete appeal must contain the following information at the time the appeal is submitted.

1. *Aggrieved status*. The appeal must explain how the appellant has standing to bring the appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions of law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing criteria that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license to changes in specific license conditions.
5. *All the matters to be contested*. The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for hearing must be filed as part of the notice of appeal, and it must include an offer of proof regarding the testimony and other evidence that would be presented at the hearing. The offer of proof must consist of a statement of the substance of the evidence, its relevance to the issues on appeal, and whether any witnesses would testify. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed supplemental evidence must be submitted with the appeal. The Board may allow new or additional evidence to be considered in an appeal only under limited circumstances. The proposed supplemental evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Requirements for supplemental evidence are set forth in Chapter 2 § 24.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made accessible by the DEP. Upon request, the DEP will make application materials available to review and photocopy during normal working hours. There may be a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing the appeal.* DEP staff will provide this information upon request and answer general questions regarding the appeal process.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a licensee may proceed with a project pending the outcome of an appeal, but the licensee runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will acknowledge receipt of an appeal, and it will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials admitted by the Board as supplementary evidence, any materials admitted in response to the appeal, relevant excerpts from the DEP's administrative record for the application, and the DEP staff's recommendation, in the form of a proposed Board Order, will be provided to Board members. The appellant, the licensee, and parties of record are notified in advance of the date set for the Board's consideration of an appeal or request for a hearing. The appellant and the licensee will have an opportunity to address the Board at the Board meeting. The Board will decide whether to hold a hearing on appeal when one is requested before deciding the merits of the appeal. The Board's decision on appeal may be to affirm all or part, affirm with conditions, order a hearing to be held as expeditiously as possible, reverse all or part of the decision of the Commissioner, or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the licensee, and parties of record of its decision on appeal.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see 38 M.R.S. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board Clerk at 207-287-2811 or the Board Executive Analyst at 207-314-1458 bill.hinkel@maine.gov, or for judicial appeals contact the court clerk's office in which the appeal will be filed.

Note: This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, is provided to help a person to understand their rights and obligations in filing an administrative or judicial appeal. The DEP provides this information sheet for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

US Army Corps of Engineers®
New England District

Section VI: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

At least two weeks before work commences, complete all fields (write "none" if applicable) below or use the fillable form found at www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/ The two-week lead time is not required for emergency situations. **Send this form, an Official Species List, and project plans to the following email address: cenae-r-me@usace.army.mil**

Maine Project Office
U.S. Army Corps of Engineers
442 Civic Center Drive, Suite 350
Augusta, Maine 04330

State Permit #: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: South Street Village, LLC
Address, City, State, Zip: 762 Main Street, South Portland, ME 04106
Email, Phone: mgchamberlain48@gmail.com

Agent: Jeff Amos, P.E. - Terradyn Consultants, LLC
Address, City, State, Zip: 41 Campus Drive, Suite 301, New Gloucester, ME 04260
Email, Phone: jeff@terradynconsultants.com

Contractor: TBD
Address, City, State, Zip:
Email, Phone:

Project Name: Hidden Hills Housing Park
Address, City, State, Zip: 413 South Street, Biddeford, ME 04005
Lat °N, Long °W: 4816271.29 N, 378658.49 E Tax Map/Lot: 7/8
Waterway Name: Saco River
Description of Work: Wetland alteration associated with the construction of the road infrastructure for the 55+ housing development.
Proposed Starting Date: November 2023 Proposed Finish Date: November 2028

Area of wetland impact (SF): Permanent: 12,903 Temporary: 0
Area of waterway impact (SF): Permanent: 1377 Temporary: 300

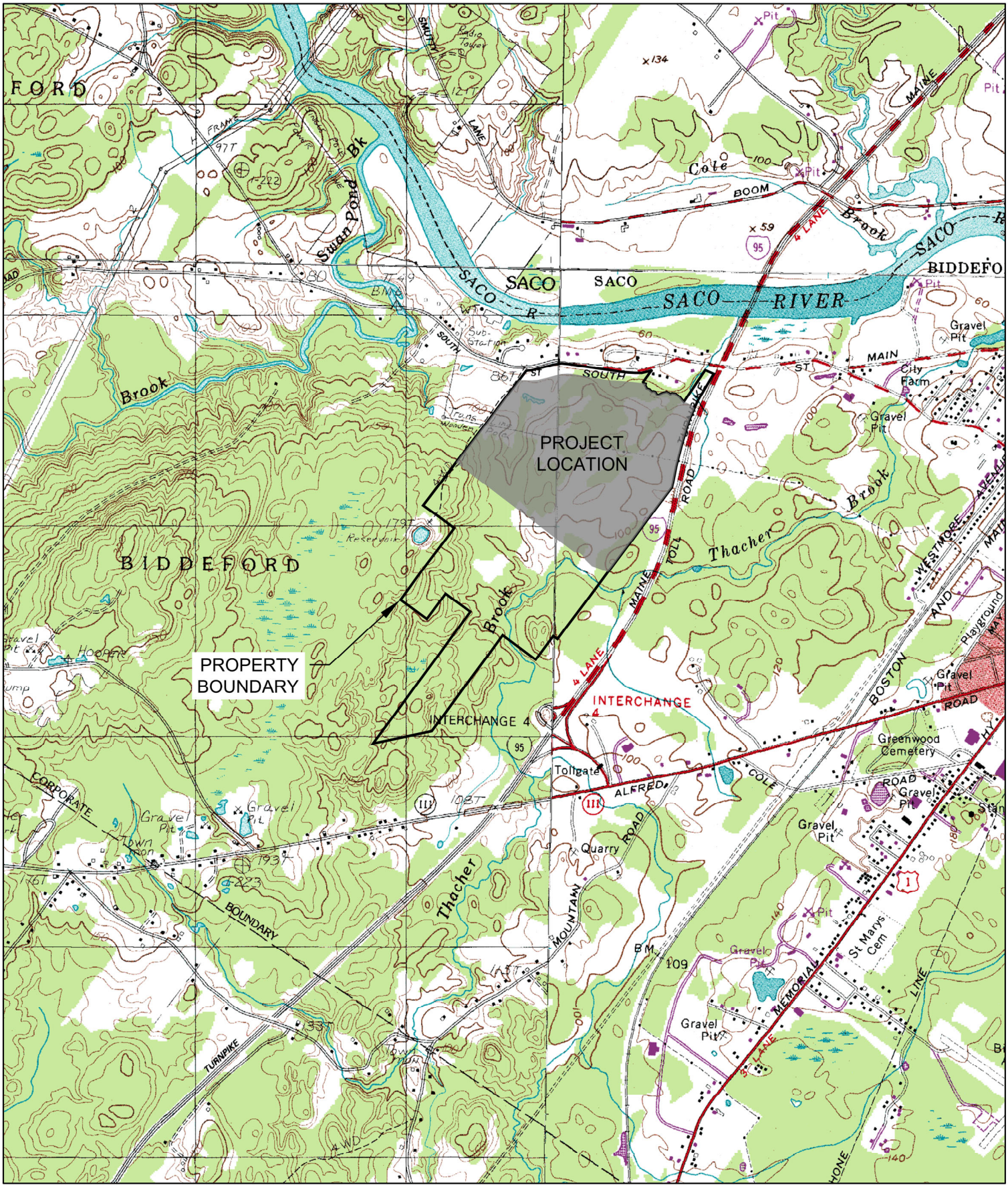
Work will be done under the following Section V General Permits (circle all that apply):

I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Have MHPC and all five federally-recognized tribes in Maine been notified of the proposed work? X Yes ____ No

Your signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions for Self-Verification under the Maine General Permit.

Permittee Signature: Matthew Chamberlain Date: 7-24-2023



USGS QUADRANGLE MAP	TERRADYN CONSULTANTS, LLC	PINELAND 41 CAMPUS DRIVE, SUITE 101 NEW GLOUCESTER, ME 04260 PORTLAND 565 CONGRESS STREET, SUITE 201 PORTLAND, ME 04101	PROJECT NO. 2113	SHEET 1
PROJECT: HIDDEN HILLS MANUFACTURED HOUSING PARK PROJECT ADDRESS			DATE 10/19/2021	OF 1
PREPARED FOR: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, ME 04106	207.926.5111 • info@terradynconsultants.com • www.terradynconsultants.com		SCALE 1"=2,000'	

SOUTH STREET

WATERWORKS DRIVE

GARNET DRIVE

TOPAZ DRIVE

RUBY ROAD

GRIFFINITE WAY

OZOLITE LANE

ONYX CIRCLE

OPEN SPACE 1

OPEN SPACE 2

OPEN SPACE 3

OPEN SPACE 4

OPEN SPACE 5

WETLAND FILL (1)

WETLAND FILL (2)

WETLAND FILL (3)

WETLAND FILL (4)

WETLAND FILL (5)

WETLAND FILL (6)

WETLAND FILL (7)

WETLAND FILL (8)

WETLAND FILL (9)

GRID NORTH

WETLAND FILL AREAS	
FILL NO.	AREA (S.F.)
1	1,377
2	471
3	866
4	842
5	1,757
6	3,686
7	2,701
8	75
9	2,505
TOTAL	14,280

GRAPHIC SCALE

120 0 60 120 240 480

(IN FEET)
1 inch = 120 ft.

STATE OF MAINE
JEFFREY D. AMOS
10167
LICENSED PROFESSIONAL ENGINEER

DATE: 08-17-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
B	08-17-2022	ADDITIONAL INFORMATION AND PEER REVIEW	JDA
A	04-13-2022	PRELIMINARY SUBMISSION	JDA

41 CAMPUS DRIVE
SUITE 201
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

TERRADYN CONSULTANTS, LLC

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

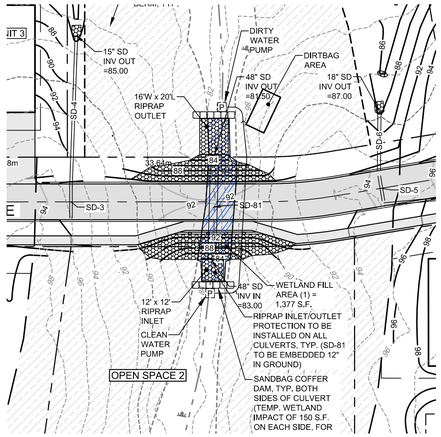
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
OVERALL WETLAND FILL PLAN

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

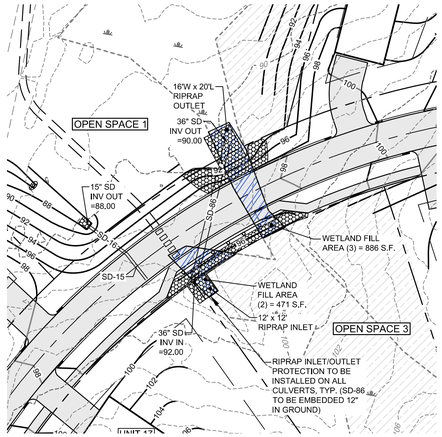
DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	TIER 1 - 1.0

C:\OD\Terradyn Consultants\Project Folders - Documents\2021 Jobs\21-13 South Street MHP\CAD\Permitting\21-13 Tier 1.dwg



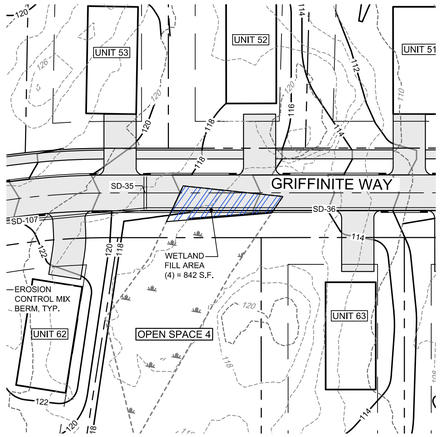
WETLAND FILL AREA 1

SCALE: 1"-40'



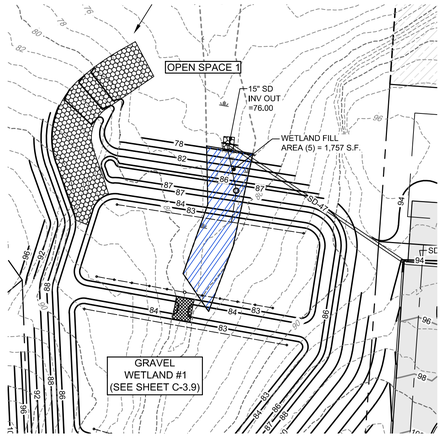
WETLAND FILL AREAS 2 & 3

SCALE: 1"-40'



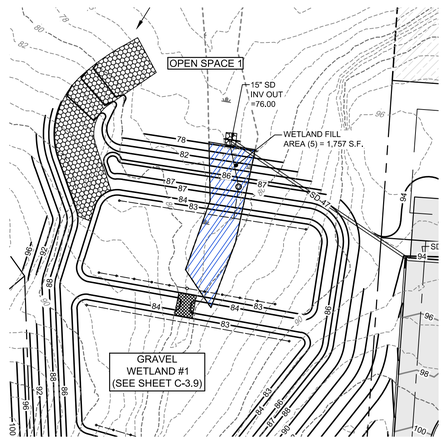
WETLAND FILL AREA 4

SCALE: 1"-40'



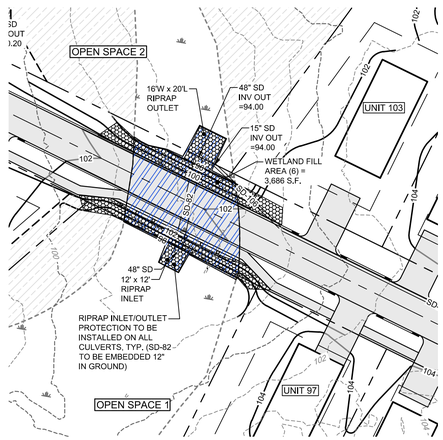
WETLAND FILL AREA 5

SCALE: 1"-40'



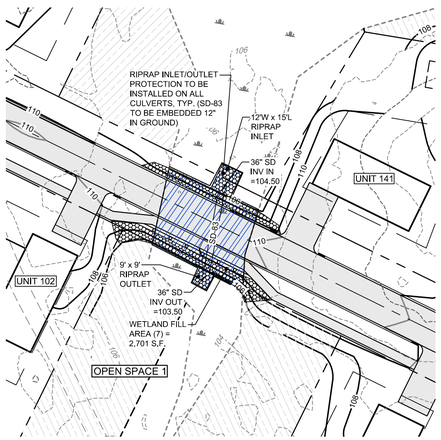
WETLAND FILL AREA 5

SCALE: 1"-40'



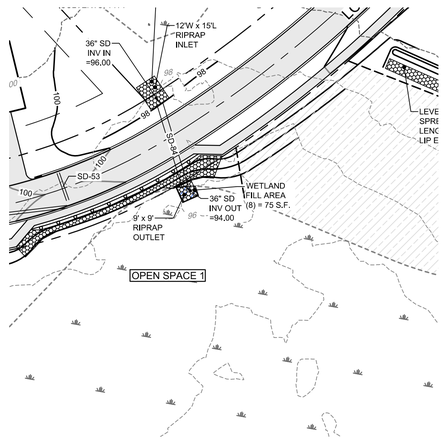
WETLAND FILL AREA 6

SCALE: 1"-40'



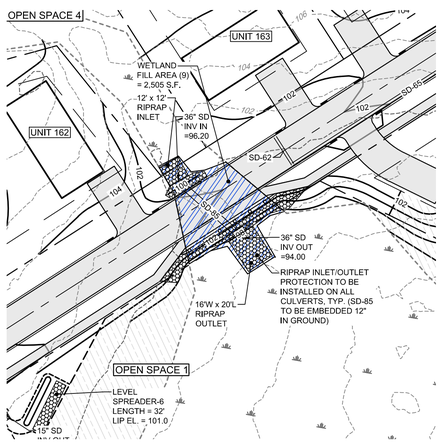
WETLAND FILL AREA 7

SCALE: 1"-40'



WETLAND FILL AREA 8

SCALE: 1"-40'



WETLAND FILL AREA 9

SCALE: 1"-40'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

GRID NORTH

STATE OF MAINE
JEFFREY D. AMOS
10167
LICENSED
PROFESSIONAL ENGINEER

DATE: 08-17-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
B	08-17-2022	ADDITIONAL INFORMATION AND PEER REVIEW	JDA
A	04-13-2022	PRELIMINARY SUBMISSION	

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE
SUITE 201
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
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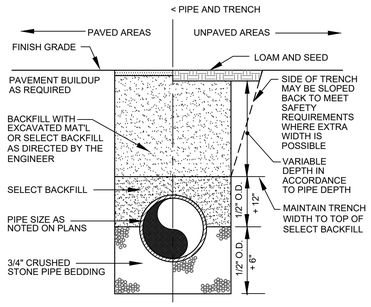
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
FILL AREA DETAIL

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

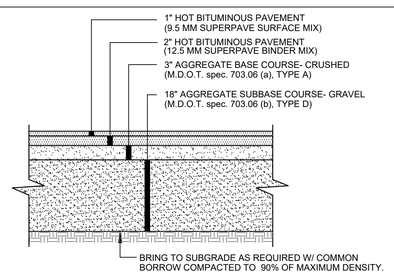
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	TIER 1 - 2.0

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TYPICAL TRENCH SECTION

NOT TO SCALE

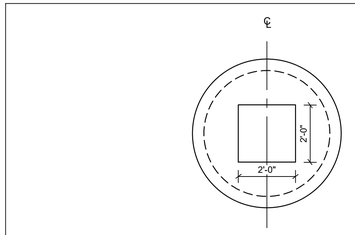


NOTES:

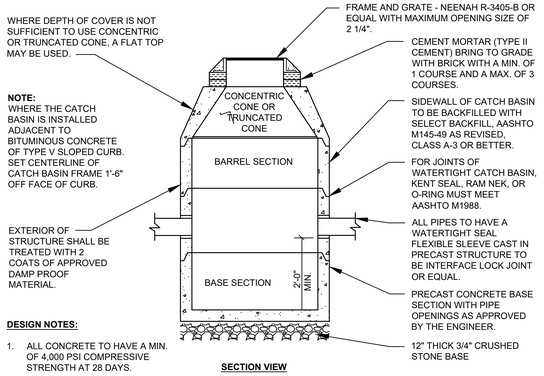
1. COMPACT GRAVEL SUBBASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

PARKING AREA PAVEMENT SECTION

NOT TO SCALE



PLAN VIEW



NOTE:
WHERE THE CATCH BASIN IS INSTALLED ADJACENT TO BITUMINOUS CONCRETE OF TYPE V SLOPED CURB. SET CENTERLINE OF CATCH BASIN FRAME 1'-6" OFF FACE OF CURB.

DESIGN NOTES:

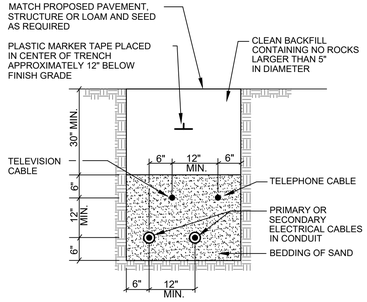
1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..

SECTION VIEW

NOTE:
CASCADE GRATES SHALL BE INSTALLED ON GRADIENT OF GUTTER IF PROFILE GRADE EXCEEDS 5% GRATES SHALL BE DEPRESSED 2" BELOW NORMAL GUTTER GRADE UNLESS THIS DEPRESSION INTERFERES WITH TRAFFIC. PARALLEL BAR GRATES SHALL BE INSTALLED ON A LEVEL GRADIENT.

TYPICAL CATCH BASIN

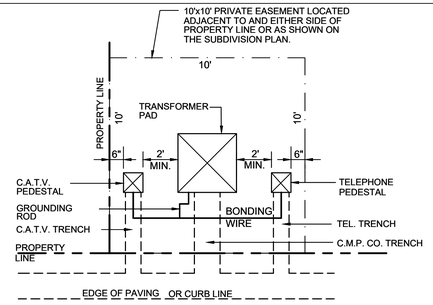
NOT TO SCALE



CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS.

TYPICAL UNDERGROUND CABLE INSTALLATION

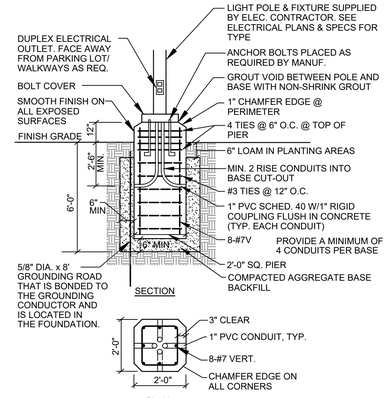
NOT TO SCALE



NOTE:
TRANSFORMER PAD AND COVER TO BE FIBERGLASS MEETING CENTRAL MAINE POWER SPECIFICATIONS.

TRANSFORMER DETAIL

NOT TO SCALE

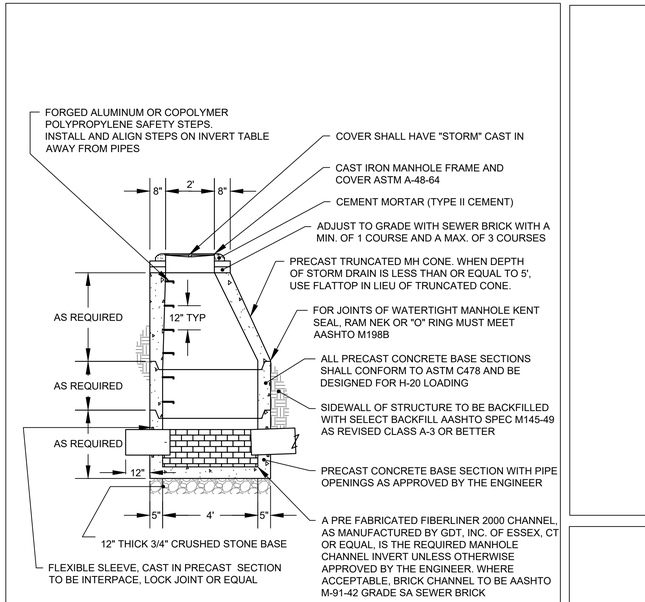


NOTES:

1. CONCRETE f'c=4000 psi.
2. REINF. STEEL GRADE 60 NEW BARS.
3. CONCRETE 3/4" AGG., 6 +/- 1% ENTRAINED AIR.
4. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
5. INSTALL BASE 3'-0" ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE IN PARKING LOT PAVEMENT.
6. BID ALT - CONTRACTOR MAY SUBSTITUTE PRECAST CONCRETE LIGHT POLE BASE EQUAL TO ABOVE SPEC.

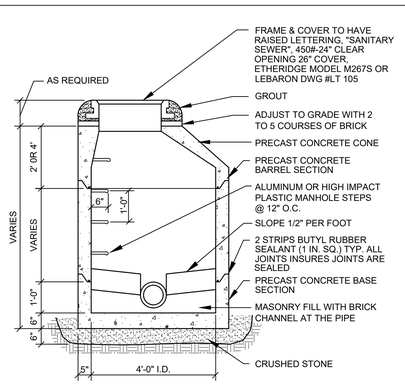
LIGHT POLE BASE

NOT TO SCALE



4' DIAMETER PRECAST STORM DRAIN MANHOLE

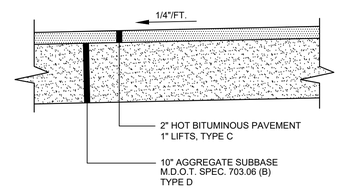
NOT TO SCALE



NOTE: PIPE CONNECTIONS SHALL BE WATERTIGHT FLEXIBLE BOOT CONNECTORS PROVIDES LEAKPROOF CONNECTION

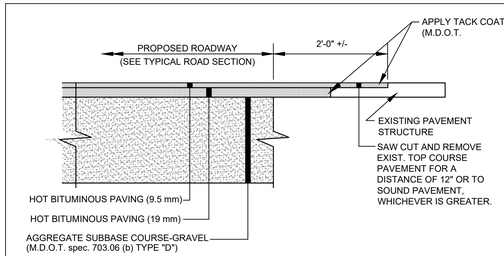
PRECAST SEWER MANHOLE

NOT TO SCALE



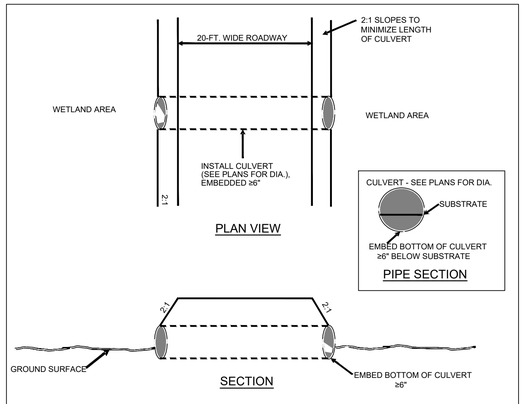
BITUMINOUS SIDEWALK

NOT TO SCALE



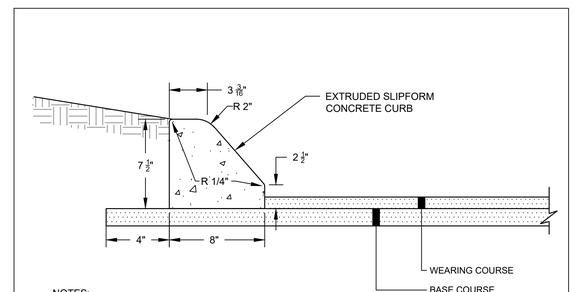
TYPICAL PAVEMENT JOINT

NOT TO SCALE



WETLAND CROSSING DETAIL

NOT TO SCALE

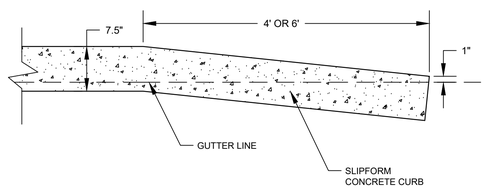


NOTES:

1. APPLY EPOXY BETWEEN BINDER PAVEMENT AND CURB
2. 1" TO 2" SLUMP
3. 5% TO 7% AIR ENTRAINMENT
4. 4,000 PSI CONCRETE WITH FIBER REINFORCEMENT

SLOPED SLIPFORM CONCRETE CURB DETAIL

NOT TO SCALE



SLIPFORM CURB TIPDOWN DETAIL

NOT TO SCALE

JEFFREY D. AMOS, PE 10167
DATE: 07-07-2023
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
A	04-13-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

41 CAMPUS DRIVE
SUITE 305
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyncconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE DETAILS - 2

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-6.2

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July 25th, 2023

Regency Realty Group
Matthew Chamberlain
762 Main Street
South Portland, ME 04106

Re: Final Approval – Hidden Hills Housing Park – South Street Development LLC – Biddeford, Maine

Dear Mr. Chamberlain,

The Maine Water Company (MWC) has approved your request for final approval for the property located at 413 South Street, Biddeford, Maine for the above referenced project. The request provides a final design plan for Hidden Hills Housing Park as shown on Utility Plan – 2, Titled, " Hidden Hills Housing Park" and drawn by Terradyn Consultants, LLC.

Conditions of Service

- The water pressure at this location is substandard and the developer agrees to provide a domestic booster pump to any dwelling unit that does not have at least 35psi of water pressure at all times. This is expected to be a significant majority of the dwellings in this development.
- The water main will be built to MWC specification, but it will be privately owned and maintained by the property owner.
- An easement for access and operation of all water service valves on this property must be signed, notarized and registered with the county registry before activation. MWC will draft and supply this document to be executed by the owner.
- Fire protection is expected to be below 1000gpm while maintaining 20psi in the proposed 8-inch water line until subdivision is fully looped where the fire flow is expected to be approximately 1000gpm while maintaining 20psi in the system according to the hydraulic model simulation from Tata and Howard while using the MWC Biddeford Saco Division Hydraulic Model.
- The water main will be looped during the second Phase of the project. Specifically installed in the area through Phase 3 during Phase 2 to complete the front loop. Later phases of the project may be required to be looped to create better hydraulic conditions before the lots are fully ready for construction similar to Phases 1 through 3.
- Additional coordination with MWC is required before construction. Maine Water requires upfront payment for inspection and paperwork to be fully completed before any construction on waterworks materials. The developer and their engineer will continue to work with MWC through minor design revisions prior to construction.

Should a Customer Agreement for service not be executed within one year of the date of this letter, MWC reserves the right to reevaluate its final approval of this project.

All work must be completed in accordance with MWC Terms and Conditions as well as material specifications. All appropriate paperwork must be completed and deposit paid prior to the start of construction. Please forward all design plan revisions as the project develops to prevent construction delays. Water service will be provided in accordance with Maine Public Utility Commission rules. If you have any additional questions, please do not hesitate to contact our office at 1-800-287-1643 or by email at Marcus.Knipp@mainewater.com. We look forward to working with you throughout design and construction.

Sincerely,
The Maine Water Company

Marcus Knipp, P.E.
Engineer

The Maine Water Company
93 Industrial Park Road
Saco, ME 04072
T: 207.282.1543
www.mainewater.com

Jeff Amos

From: Milligan, Tom <Tom.Milligan@Biddefordmaine.org>
Sent: Wednesday, May 18, 2022 5:11 PM
To: Jeff Amos; Bonine, Hannah
Cc: Demers, Jeff; Chekan, Craig
Subject: RE: Hidden Hills Manufactured Housing Park

This email serves the purpose for the request. I can issue a letter to such if planning needs something for their files that is formal. Tom

---

From: Jeff Amos <jeff@terradynconsultants.com>
Sent: Wednesday, May 18, 2022 5:05 PM
To: Milligan, Tom <Tom.Milligan@Biddefordmaine.org>; Bonine, Hannah <Hannah.Bonine@Biddefordmaine.org>
Cc: Demers, Jeff <Jeff.Demers@Biddefordmaine.org>; Chekan, Craig <Craig.Chekan@Biddefordmaine.org>
Subject: RE: Hidden Hills Manufactured Housing Park

Our property isn't served by the public sewer system. All wastewater from each of the 195 units flows to private subsurface septic systems. I'd imagine that negates the need for you to issue an ability to serve. If not, let me know and I'll make the formal request.

Jeff Amos, P.E.

From: Milligan, Tom <Tom.Milligan@Biddefordmaine.org>
Sent: Wednesday, May 18, 2022 4:52 PM
To: Bonine, Hannah <Hannah.Bonine@Biddefordmaine.org>; Jeff Amos <jeff@terradynconsultants.com>
Cc: Demers, Jeff <Jeff.Demers@Biddefordmaine.org>; Chekan, Craig <Craig.Chekan@Biddefordmaine.org>
Subject: RE: Hidden Hills Manufactured Housing Park

Jeff
Please send an email to request an ability to serve determination. Indicate the proposed use and number of units on site Thanks

---

From: Bonine, Hannah <Hannah.Bonine@Biddefordmaine.org>
Sent: Wednesday, May 18, 2022 4:00 PM
To: Jeff Amos <jeff@terradynconsultants.com>
Cc: Milligan, Tom <Tom.Milligan@Biddefordmaine.org>; Demers, Jeff <Jeff.Demers@Biddefordmaine.org>; Chekan, Craig <Craig.Chekan@Biddefordmaine.org>
Subject: RE: Hidden Hills Manufactured Housing Park

Jeff,

Reading over Chris DiMatteo's report again, it seems he was commenting on the missing Ability to Serve letter for sewer service. In Biddeford, engineering falls under the same structure as sewer/wastewater, and Tom Milligan is typically the one who issues these letters for the department. This is most likely the source of the confusion. So, you will need to provide a letter from Tom in regards to sewer, not engineering specifically. The project was reviewed by our 3rd party engineering reviewer, Tom Saucier.

Hope this clears it up.

Hannah Bonine
Assistant City Planner
P.O. Box 586, 205 Main Street
Biddeford, Maine 04005
Hannah.bonine@biddefordmaine.org
(207) 284-9115

From: Chekan, Craig
Sent: Wednesday, May 18, 2022 11:02 AM
To: Bonine, Hannah <Hannah.Bonine@Biddefordmaine.org>
Cc: Milligan, Tom <Tom.Milligan@Biddefordmaine.org>; Demers, Jeff <Jeff.Demers@Biddefordmaine.org>
Subject: FW: Hidden Hills Manufactured Housing Park

Hannah – can you provide some details of where/what this project is?

Thanks
Craig

From: Jeff Amos [mailto:jeff@terradynconsultants.com]
Sent: Wednesday, May 18, 2022 10:17 AM
To: Chekan, Craig <Craig.Chekan@Biddefordmaine.org>
Subject: FW: Hidden Hills Manufactured Housing Park

Hi Craig,

Perhaps this request is supposed to go to you? Please read below. By the way, I tried calling and leaving a message for Tom and is says his voice mailbox is not available. Didn't know if you guys were aware.

Jeff Amos, P.E.

From: Jeff Amos
Sent: Wednesday, May 18, 2022 9:26 AM
To: Tom.Milligan@biddefordmaine.org
Subject: Hidden Hills Manufactured Housing Park

Hi Tom,

I got our completeness review back from the contract planner and he stated that we didn't not send the project out for review to the City Engineering staff. I assumed that you guys would get your copy from the preliminary submission that

we sent to Planning. Do we need to submit separately to you? If so, I'd be happy to sit down with you guys to introduce the project. There's a lot of material and it may be easier to review with a bit of an overview.

Jeff Amos, P.E.
Terradyn Consultants, LLC
41 Campus Drive
Cumberland Hall, Suite 301
New Gloucester, ME 04260
Office: 207-926-5111
Cell: 207-272-7571

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Jeff Amos

From: Gagne, Scott <Scott.Gagne@Biddefordmaine.org>
Sent: Wednesday, May 18, 2022 2:51 PM
To: Jeff Amos
Subject: RE: Hidden Hills Manufactured Housing Park

Looks good, thank you





Biddeford Fire Department

From: Jeff Amos <jeff@terradynconsultants.com>
Sent: Wednesday, May 18, 2022 2:36 PM
To: Gagne, Scott <Scott.Gagne@Biddefordmaine.org>
Subject: RE: Hidden Hills Manufactured Housing Park

Here's an overall site plan that shows the hydrant locations with a red circle (500' radius). You can see that every lot is well within 500' of a hydrant. Let me know if you need anything else.

Jeff Amos, P.E.

From: Gagne, Scott <Scott.Gagne@Biddefordmaine.org>
Sent: Wednesday, May 18, 2022 11:02 AM
To: Jeff Amos <jeff@terradynconsultants.com>
Subject: RE: Hidden Hills Manufactured Housing Park

Thank you. We would like to see lots that are no more than 500 feet away from a hydrant as possible. Thanks

Scott Gagne
Fire Chief

Biddeford Fire Department
152 Alfred St.
Biddeford, ME 04005

(207) 282-6632 Office



Biddeford Fire Department

From: Jeff Amos <jeff@terradynconsultants.com>
Sent: Wednesday, May 18, 2022 9:58 AM
To: Gagne, Scott <Scott.Gagne@Biddefordmaine.org>; Dexter, Edward <Edward.Dexter@Biddefordmaine.org>
Subject: RE: Hidden Hills Manufactured Housing Park

Great! I've attached our utility plans. I took the liberty of circling all of the hydrants in red so they're easy to find. We tried to adhere to a maximum distance of 500' from hydrant to lot. Let me know if you have any questions.

Jeff Amos, P.E.

From: Gagne, Scott <Scott.Gagne@Biddefordmaine.org>
Sent: Wednesday, May 18, 2022 9:46 AM
To: Jeff Amos <jeff@terradynconsultants.com>; Dexter, Edward <Edward.Dexter@Biddefordmaine.org>
Subject: RE: Hidden Hills Manufactured Housing Park

Emailed info would be fine, thank you.

Scott Gagne
Fire Chief

Biddeford Fire Department
152 Alfred St.
Biddeford, ME 04005

(207) 282-6632 Office



Biddeford Fire Department

From: Jeff Amos <jeff@terradynconsultants.com>
Sent: Wednesday, May 18, 2022 9:39 AM
To: Gagne, Scott <Scott.Gagne@Biddefordmaine.org>; Dexter, Edward <Edward.Dexter@Biddefordmaine.org>
Subject: Hidden Hills Manufactured Housing Park

Hello Chief Gagne & Assistant Chief Dexter,

I'm the project manager for the Hidden Hills Manufactured Housing Park that's located off South Street. I misunderstood the City process and assumed that our preliminary submission would go to you guys for review. It sounds like that's not the case.

In any event, I'd like for your department to review our project. Do you want a PDF via email or do you prefer hard copies? I'm happy to meet with you either in person or on TEAMS/ZOOM to go over the project.

Let me know what you'd like to do.

Jeff Amos, P.E.
Terradyn Consultants, LLC
41 Campus Drive
Cumberland Hall, Suite 301
New Gloucester, ME 04260
Office: 207-926-5111
Cell: 207-272-7571

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Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

Attachment 6

HHE-200 Forms

FORM E Rev. 7/21

SOIL CONDITIONS SUMMARY TABLE

SUMMARY LOG OF SUBSURFACE EXPLORATIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
SOUTH STREET VILLAGE	SOUTH STREET VILLAGE LLC	BIDDEFORD

Lot No.	Exploration Symbol (TP 1, B 2, etc.)	✖ if at SSWD Field	Description of subsurface materials by: ● Soil profile/condition (if by S.E.), ● Soil series name (if by S.S.), or by ● Geologic unit (if by C.G.)	Depths to (inches): Redoximorphic Features	Bedrock	Hydraulically Restrictive Layer	Limit of Exploration	Ground Surface Slope (%)	Ground Surface Elevation
garage	TP-91	☒	8D	13	N/A	N/A	34	2	
garage	TP-91A	☒	8D	13	N/A	N/A	32	0	
garage	TP-91B	☒	85	15	N/A	N/A	36	2	
garage	TP-91C	☒	8D	14	N/A	N/A	34	2	
garage	TP-91D	☒	8D	14	N/A	N/A	34	2	
com ctr	TP-11	☒	8D	13	N/A	N/A	36	6	
com ctr	TP-11A	☒	8D	14	N/A	N/A	35	4	
com ctr	TP-11B	☒	8D	13	N/A	N/A	36	6	
com ctr	TP-11C	☒	8D	13	N/A	N/A	33	4	
com ctr	TP-11D	☒	8D	14	N/A	N/A	36	6	
1-3	TP-5	☒	8D	14	N/A	N/A	37	3	
1-3	TP-5A	☒	8C	15	N/A	N/A	36	3	
1-3	TP-5B	☒	8D	14	N/A	N/A	37	2	
1-3	TP-5C	☒	8D	14	N/A	N/A	38	3	
1-3	TP-5D	☒	8D	14	N/A	N/A	37	3	
4-6	TP-3	☒	8D	14	N/A	N/A	38	4	
4-6	TP-3A	☒	8D	14	N/A	N/A	32	4	
4-6	TP-3B	☒	8D	14	N/A	N/A	35	2	
4-6	TP-3C	☒	8D	14	N/A	N/A	38	3	
4-6	TP-3D	☒	8C	16	N/A	N/A	39	4	
7-9	TP-4	☒	8D	13	N/A	N/A	37	9	
7-9	TP-4A	☒	8D	13	N/A	N/A	35	9	
7-9	TP-4B	☒	8D	13	N/A	N/A	35	9	
7-9	TP-4C	☒	8D	14	N/A	N/A	37	7	
7-9	TP-4D	☒	8D	14	N/A	N/A	37	9	
10-11	TP-6	☒	8C	15	N/A	N/A	38	4	
10-11	TP-6A	☒	8C	16	N/A	N/A	36	4	
10-11	TP-6B	☒	8C	15	N/A	N/A	36	4	
10-11	TP-6C	☒	8C	15	N/A	N/A	37	4	
10-11	TP-6D	☒	8C	17	N/A	N/A	38	5	
12/18	TP-7	☒	8C	16	N/A	N/A	36	6	
12/18	TP-7A	☒	8C	16	N/A	N/A	36	4	

INVESTIGATOR INFORMATION AND SIGNATURE

Signature

ERIK LEMA
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☐ Soil Scientist
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☐ Professional Engineer

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SOIL CONDITIONS SUMMARY TABLE

SUMMARY LOG OF SUBSURFACE EXPLORATIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
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12/18	TP-7B	☒	8C	17	N/A	N/A	36	4	
12/18	TP-7C	☒	8C	16	N/A	N/A	36	6	
12/18	TP-7D	☒	8C	16	N/A	N/A	36	6	
13	TP-9	☒	8D	14	N/A	N/A	38	4	
13	TP-9A	☒	8D	15	N/A	N/A	37	4	
13	TP-9B	☒	8D	15	N/A	N/A	40	4	
13	TP-9C	☒	8D	14	N/A	N/A	38	4	
13	TP-9D	☒	8D	14	N/A	N/A	38	4	
14-15	TP-10	☒	8D	14	N/A	N/A	37	4	
14-15	TP-10A	☒	8D	14	N/A	N/A	34	4	
14-15	TP-10B	☒	8D	15	N/A	N/A	39	4	
14-15	TP-10C	☒	8D	14	N/A	N/A	35	4	
14-15	TP-10D	☒	8D	14	N/A	N/A	37	4	
16-17	TP-12	☒	8D	12	N/A	N/A	36	8	
16-17	TP-12A	☒	8D	14	N/A	N/A	36	8	
16-17	TP-12B	☒	8D	14	N/A	N/A	38	8	
16-17	TP-12C	☒	8D	12	N/A	N/A	39	8	
16-17	TP-12D	☒	8D	12	N/A	N/A	36	8	
19-20	TP-8	☒	8C	16	N/A	N/A	36	4	
19-20	TP-8A	☒	8C	16	N/A	N/A	33	4	
19-20	TP-8B	☒	8C	17	N/A	N/A	34	4	
19-20	TP-8C	☒	8C	16	N/A	N/A	36	4	
19-20	TP-8D	☒	8C	16	N/A	N/A	36	4	
21-22	TP-13	☒	2AIII	16	16	16	16	12	
21-22	TP-13A	☒	2AIII	16	16	16	16	12	
21-22	TP-13B	☒	2AIII	16	16	16	16	12	
21-22	TP-13C	☒	2AIII	16	18	18	18	12	
21-22	TP-13D	☒	2AIII	16	18	18	18	12	
23	TP-14	☒	2AIII	15	15	15	15	8	
23	TP-14A	☒	2AIII	15	15	15	15	6	
23	TP-14B	☒	2AIII	15	15	15	15	6	
23	TP-14C	☒	2AIII	15	15	15	15	8	

INVESTIGATOR INFORMATION AND SIGNATURE

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23	TP-14D	☒	2AIII	15	15	15	15	8	
24-26	TP-20	☒	8D	12	N/A	N/A	35	8	
24-26	TP-20A	☒	8D	12	N/A	N/A	34	8	
24-26	TP-20B	☒	8D	12	N/A	N/A	36	8	
24-26	TP-20C	☒	8D	14	N/A	N/A	35	8	
24-26	TP-20D	☒	8D	12	N/A	N/A	34	8	
27-28	TP-19	☒	8D	13	N/A	N/A	34	4	
27-28	TP-19A	☒	8D	13	N/A	N/A	32	4	
27-28	TP-19B	☒	8D	14	N/A	N/A	36	4	
27-28	TP-19C	☒	8C	15	N/A	N/A	35	4	
27-28	TP-19D	☒	8C	15	N/A	N/A	34	4	
29-30	TP-18	☒	8D	13	N/A	N/A	36	12	
29-30	TP-18A	☒	8D	14	N/A	N/A	37	10	
29-30	TP-18B	☒	8D	13	N/A	N/A	37	10	
29-30	TP-18C	☒	8D	13	N/A	N/A	36	12	
29-30	TP-18D	☒	8D	13	N/A	N/A	36	12	
31	TP-29	☒	8D	12	N/A	N/A	35	2	
31	TP-29A	☒	8D	12	N/A	N/A	35	2	
31	TP-29B	☒	8D	12	N/A	N/A	33	2	
31	TP-29C	☒	8D	12	N/A	N/A	36	2	
31	TP-29D	☒	8D	12	N/A	N/A	35	2	
32-33	TP-15	☒	8D	13	N/A	N/A	37	4	
32-33	TP-15A	☒	8C	15	N/A	N/A	38	4	
32-33	TP-15B	☒	8C	15	N/A	N/A	38	4	
32-33	TP-15C	☒	8D	13	N/A	N/A	37	4	
32-33	TP-15D	☒	8D	13	N/A	N/A	38	4	
34-35	TP-16	☒	8D	12	N/A	N/A	37	8	
34-35	TP-16A	☒	8D	12	N/A	N/A	37	8	
34-35	TP-16B	☒	8D	13	N/A	N/A	35	8	
34-35	TP-16C	☒	8D	12	N/A	N/A	34	10	
34-35	TP-16D	☒	8D	14	N/A	N/A	37	10	
36-37	TP-17	☒	8D	13	N/A	N/A	37	10	

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☐ Soil Scientist
☐ Geologist
☐ Professional Engineer

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36-37	TP-17A	X	8D	13	N/A	N/A	36	8	
36-37	TP-17B	X	8D	14	N/A	N/A	36	9	
36-37	TP-17C	X	8D	13	N/A	N/A	37	10	
36-37	TP-17D	X	8D	14	N/A	N/A	38	9	
38-39	TP-23	X	8D	13	N/A	N/A	34	4	
38-39	TP-23A	X	8D	13	N/A	N/A	34	4	
38-39	TP-23B	X	8D	13	N/A	N/A	33	4	
38-39	TP-23C	X	8D	14	N/A	N/A	32	4	
38-39	TP-23D	X	8D	14	N/A	N/A	34	2	
40-41	TP-24	X	8D	12	N/A	N/A	36	8	
40-41	TP-24A	X	8D	14	N/A	N/A	34	8	
40-41	TP-24B	X	8D	12	N/A	N/A	34	8	
40-41	TP-24C	X	8D	12	N/A	N/A	36	8	
40-41	TP-24D	X	8D	12	N/A	N/A	36	8	
42-44	TP-25	X	8D	12	N/A	N/A	34	8	
42-44	TP-25A	X	8D	12	N/A	N/A	36	8	
42-44	TP-25B	X	8D	13	N/A	N/A	34	9	
42-44	TP-25C	X	8D	13	N/A	N/A	34	8	
42-44	TP-25D	X	8D	12	N/A	N/A	34	8	
45-46	TP-40	X	2AII	14	14	14	14	12	
45-46	TP-40A	X	2AII	14	14	14	14	12	
45-46	TP-40B	X	2AII	14	14	14	14	12	
45-46	TP-40C	X	2AIII	15	15	15	15	12	
45-46	TP-40D	X	2AIII	16	16	16	16	12	
47-48	TP-27	X	8D	14	N/A	N/A	34	4	
47-48	TP-27A	X	8D	14	N/A	N/A	34	4	
47-48	TP-27B	X	8D	15	N/A	N/A	32	4	
47-48	TP-27C	X	8D	14	N/A	N/A	36	4	
47-48	TP-27D	X	8D	14	N/A	N/A	34	4	
49-51	TP-26	X	8D	13	N/A	N/A	32	5	
49-51	TP-26A	X	8D	13	N/A	N/A	34	5	
49-51	TP-26B	X	8D	14	N/A	N/A	34	5	

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49-51	TP-26C	☒	8D	13	N/A	N/A	32	4	
49-51	TP-26D	☒	8D	13	N/A	N/A	32	4	
52-53	TP-28	☒	8D	14	N/A	N/A	36	12	
52-53	TP-28A	☒	8D	14	N/A	N/A	34	12	
52-53	TP-28B	☒	8D	14	N/A	N/A	34	10	
52-53	TP-28C	☒	8C	15	N/A	N/A	34	10	
52-53	TP-28D	☒	8D	14	N/A	N/A	34	12	
54-55	TP-30	☒	8D	10	N/A	N/A	34	2	
54-55	TP-30A	☒	8D	10	N/A	N/A	34	2	
54-55	TP-30B	☒	8D	10	N/A	N/A	34	4	
54-55	TP-30C	☒	8D	10	N/A	N/A	32	2	
54-55	TP-30D	☒	8D	11	N/A	N/A	34	4	
56-58	TP-22	☒	8D	13	N/A	N/A	34	12	
56-58	TP-22A	☒	8D	14	N/A	N/A	36	12	
56-58	TP-22B	☒	8D	14	N/A	N/A	34	12	
56-58	TP-22C	☒	8D	13	N/A	N/A	34	12	
56-58	TP-22D	☒	8D	13	N/A	N/A	36	12	
59	TP-21	☒	8D	12	N/A	N/A	36	4	
59	TP-21A	☒	8D	14	N/A	N/A	36	4	
59	TP-21B	☒	8D	13	N/A	N/A	35	3	
59	TP-21C	☒	8D	12	N/A	N/A	36	4	
59	TP-21D	☒	8D	13	N/A	N/A	36	4	
60-62	TP-31	☒	8D	10	N/A	N/A	36	4	
60-62	TP-31A	☒	8D	12	N/A	N/A	34	4	
60-62	TP-31B	☒	8D	10	N/A	N/A	32	3	
60-62	TP-31C	☒	8D	10	N/A	N/A	32	4	
60-62	TP-31D	☒	8D	11	N/A	N/A	36	4	
63-64	TP-32	☒	8D	14	N/A	N/A	36	12	
63-64	TP-32A	☒	8D	14	N/A	N/A	34	12	
63-64	TP-32B	☒	8C	16	N/A	N/A	38	12	
63-64	TP-32C	☒	8D	14	N/A	N/A	36	12	
63-64	TP-32D	☒	8C	15	N/A	N/A	36	12	

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65-66	TP-33	X	8D	12	N/A	N/A	40	10	
65-66	TP-33A	X	8D	12	N/A	N/A	38	10	
65-66	TP-33B	X	8D	12	N/A	N/A		10	
65-66	TP-33C	X	8D	12	N/A	N/A	36	10	
65-66	TP-33D	X	8D	12	N/A	N/A	40	10	
67-68	TP-34	X	8C	16	N/A	N/A	36	4	
67-68	TP-34A	X	8C	17	N/A	N/A	38	4	
67-68	TP-34B	X	8C	17	N/A	N/A	38	4	
67-68	TP-34C	X	8C	16	N/A	N/A	36	4	
67-68	TP-34D	X	8C	16	N/A	N/A	36	4	
69-71	TP-39	X	8C	15	N/A	N/A	36	4	
69-71	TP-39A	X	8C	15	N/A	N/A	37	4	
69-71	TP-39B	X	8C	16	N/A	N/A	36	4	
69-71	TP-39C	X	8C	15	N/A	N/A	36	2	
69-71	TP-39D	X	8C	15	N/A	N/A	37	4	
72-73	TP-38	X	8D	13	N/A	N/A	38	8	
72-73	TP-38A	X	8D	13	N/A	N/A	40	8	
72-73	TP-38B	X	8D	14	N/A	N/A	38	8	
72-73	TP-38C	X	8D	14	N/A	N/A	36	8	
72-73	TP-38D	X	8D	13	N/A	N/A	38	8	
74-75	TP-37	X	8D	12	N/A	N/A	37	10	
74-75	TP-37A	X	8D	13	N/A	N/A	35	10	
74-75	TP-37B	X	8D	14	N/A	N/A	35	10	
74-75	TP-37C	X	8D	12	N/A	N/A	37	10	
74-75	TP-37D	X	8D	12	N/A	N/A	37	10	
76-77	TP-36	X	8D	14	N/A	N/A	37	9	
76-77	TP-36A	X	8D	14	N/A	N/A	36	9	
76-77	TP-36B	X	8C	16	N/A	N/A	36	8	
76-77	TP-36C	X	8C	16	N/A	N/A	37	9	
76-77	TP-36D	X	8D	14	N/A	N/A	37	9	
78-79	TP-35	X	8D	12	N/A	N/A	38	4	
78-79	TP-35A	X	8D	12	N/A	N/A	36	3	

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78-79	TP-35B	X	8D	12	N/A	N/A	38	3	
78-79	TP-35C	X	8D	12	N/A	N/A	38	4	
78-79	TP-35D	X	8D	14	N/A	N/A	38	4	
80-81	TP-1	X	8D	14	N/A	N/A	40	10	
80-81	TP-1A	X	8D	14	N/A	N/A	36	8	
80-81	TP-1B	X	8D	14	N/A	N/A	36	10	
80-81	TP-1C	X	8D	14	N/A	N/A	40	10	
80-81	TP-1D	X	8C	16	N/A	N/A	40	10	
82-83	TP-2	X	8D	13	N/A	N/A	36	9	
82-83	TP-2A	X	8D	14	N/A	N/A	38	10	
82-83	TP-2B	X	8D	13	N/A	N/A	36	8	
82-83	TP-2C	X	8C	15	N/A	N/A	38	9	
82-83	TP-2D	X	8D	13	N/A	N/A	36	9	
84-85	TP-45	X	8D	10	N/A	N/A	38	4	
84-85	TP-45A	X	8D	10	N/A	N/A	38	3	
84-85	TP-45B	X	8D	11	N/A	N/A	37	4	
84-85	TP-45C	X	8D	11	N/A	N/A	36	3	
84-85	TP-45D	X	8D	10	N/A	N/A	38	4	
86-87	TP-46	X	8D	10	N/A	N/A	36	8	
86-87	TP-46A	X	8D	10	N/A	N/A	38	8	
86-87	TP-46B	X	8D	10	N/A	N/A	38	8	
86-87	TP-46C	X	8D	10	N/A	N/A	36	8	
86-87	TP-46D	X	8D	10	N/A	N/A	35	8	
88-89	TP-41	X	8D	14	N/A	N/A	36	4	
88-89	TP-41A	X	8C	15	N/A	N/A	36	4	
88-89	TP-41B	X	8D	14	N/A	N/A	36	5	
88-89	TP-41C	X	8D	14	N/A	N/A	36	4	
88-89	TP-41D	X	8C	15	N/A	N/A	36	4	
90-91	TP-42	X	8D	13	N/A	N/A	37	8	
90-91	TP-42A	X	8D	14	N/A	N/A	35	8	
90-91	TP-42B	X	8D	13	N/A	N/A	37	8	
90-91	TP-42C	X	8D	13	N/A	N/A	37	8	

INVESTIGATOR INFORMATION AND SIGNATURE

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☐ Geologist
☐ Professional Engineer

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SOIL CONDITIONS SUMMARY TABLE

SUMMARY LOG OF SUBSURFACE EXPLORATIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
SOUTH STREET VILLAGE	SOUTH STREET VILLAGE LLC	BIDDEFORD

Lot No.	Exploration Symbol (TP 1, B 2, etc.)	✖ if at SSWD Field	Description of subsurface materials by: ● Soil profile/condition (if by S.E.), ● Soil series name (if by S.S.), or by ● Geologic unit (if by C.G.)	Depths to (inches): Redoximorphic Features	Bedrock	Hydraulically Restrictive Layer	Limit of Exploration	Ground Surface Slope (%)	Ground Surface Elevation
90-91	TP-42D	☒	8D	13	N/A	N/A	37	6	
92-93	TP-43	☒	8D	13	N/A	N/A	36	4	
92-93	TP-43A	☒	8D	14	N/A	N/A	34	4	
92-93	TP-43B	☒	8D	14	N/A	N/A	36	4	
92-93	TP-43C	☒	8D	13	N/A	N/A	34	6	
92-93	TP-43D	☒	8D	13	N/A	N/A	36	4	
94-96	TP-44	☒	8D	10	N/A	N/A	36	4	
94-96	TP-44A	☒	8D	12	N/A	N/A	34	4	
94-96	TP-44B	☒	8D	11	N/A	N/A	36	4	
94-96	TP-44C	☒	8D	10	N/A	N/A	34	4	
94-96	TP-44D	☒	8D	10	N/A	N/A	36	4	
97-98	TP-47	☒	8D	14	N/A	N/A	37	4	
97-98	TP-47A	☒	8D	14	N/A	N/A	38	4	
97-98	TP-47B	☒	8D	14	N/A	N/A	37	4	
97-98	TP-47C	☒	8D	14	N/A	N/A	37	4	
97-98	TP-47D	☒	8D	14	N/A	N/A	38	4	
99-100	TP-52	☒	8D	13	N/A	N/A	35	6	
99-100	TP-52A	☒	8D	13	N/A	N/A	38	6	
99-100	TP-52B	☒	8D	14	N/A	N/A	37	6	
99-100	TP-52C	☒	8D	13	N/A	N/A	35	5	
99-100	TP-52D	☒	8D	13	N/A	N/A	35	6	
101-102	TP-53	☒	8D	14	N/A	N/A	34	2	
101-102	TP-53A	☒	8D	14	N/A	N/A	37	2	
101-102	TP-53B	☒	8C	15	N/A	N/A	34	2	
101-102	TP-53C	☒	8C	16	N/A	N/A	37	2	
101-102	TP-53D	☒	8D	14	N/A	N/A	34	2	
103-105	TP-48	☒	8D	13	N/A	N/A	37	2	
103-105	TP-48A	☒	8C	15	N/A	N/A	34	2	
103-105	TP-48B	☒	8D	13	N/A	N/A	35	2	
103-105	TP-48C	☒	8D	13	N/A	N/A	37	4	
103-105	TP-48D	☒	8D	13	N/A	N/A	35	2	
106-108	TP-49	☒	8D	14	N/A	N/A	37	2	

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106-108	TP-49A	☒	8D	14	N/A	N/A	37	2	
106-108	TP-49B	☒	8D	14	N/A	N/A	37	2	
106-108	TP-49C	☒	8C	16	N/A	N/A	37	2	
106-108	TP-49D	☒	8C	16	N/A	N/A	37	2	
109-111	TP-50	☒	8D	13	N/A	N/A	36	2	
109-111	TP-50A	☒	8D	14	N/A	N/A	38	2	
109-111	TP-50B	☒	8D	14	N/A	N/A	40	2	
109-111	TP-50C	☒	8D	13	N/A	N/A	38	3	
109-111	TP-50D	☒	8D	13	N/A	N/A	36	3	
112	TP-58	☒	8D	14	N/A	N/A	34	2	
112	TP-58A	☒	8C	16	N/A	N/A	36	2	
112	TP-58B	☒	8D	14	N/A	N/A	34	2	
112	TP-58C	☒	8D	14	N/A	N/A	35	2	
112	TP-58D	☒	8C	15	N/A	N/A	34	2	
113-114	TP-60	☒	8D	13	N/A	N/A	34	8	
113-114	TP-60A	☒	8D	13	N/A	N/A	36	8	
113-114	TP-60B	☒	8D	14	N/A	N/A	34	6	
113-114	TP-60C	☒	8D	13	N/A	N/A	34	8	
113-114	TP-60D	☒	8D	13	N/A	N/A	34	7	
115-116	TP-61	☒	8D	12	N/A	N/A	36	4	
115-116	TP-61A	☒	8D	14	N/A	N/A	36	4	
115-116	TP-61B	☒	8D	14	N/A	N/A	38	4	
115-116	TP-61C	☒	8D	12	N/A	N/A	38	4	
115-116	TP-61D	☒	8D	12	N/A	N/A	36	4	
117-118	TP-62	☒	8D	14	N/A	N/A	34	2	
117-118	TP-62A	☒	8C	16	N/A	N/A	36	2	
117-118	TP-62B	☒	8D	14	N/A	N/A	34	2	
117-118	TP-62C	☒	8D	14	N/A	N/A	34	2	
117-118	TP-62D	☒	8C	15	N/A	N/A	34	2	
119-120	TP-63	☒	8D	14	N/A	N/A	32	2	
119-120	TP-63A	☒	8D	14	N/A	N/A	34	2	
119-120	TP-63B	☒	8D	14	N/A	N/A	32	2	

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119-120	TP-63C	X	8C	15	N/A	N/A	32	2	
119-120	TP-63D	X	8C	15	N/A	N/A	32	2	
121-123	TP-64	X	8D	12	N/A	N/A	34	8	
121-123	TP-64A	X	8D	13	N/A	N/A	38	8	
121-123	TP-64B	X	8D	12	N/A	N/A	34	6	
121-123	TP-64C	X	8D	12	N/A	N/A	34	6	
121-123	TP-64D	X	8D	13	N/A	N/A	34	8	
124-125	TP-65	X	8D	12	N/A	N/A	34	2	
124-125	TP-65A	X	8D	13	N/A	N/A	35	2	
124-125	TP-65B	X	8D	13	N/A	N/A	37	2	
124-125	TP-65C	X	8D	12	N/A	N/A	34	2	
124-125	TP-65D	X	8D	12	N/A	N/A	34	2	
126-127	TP-90	X	8D	13	N/A	N/A	34	2	
126-127	TP-90A	X	8D	13	N/A	N/A	35	2	
126-127	TP-90B	X	8D	13	N/A	N/A	32	2	
126-127	TP-90C	X	8C	15	N/A	N/A	34	2	
126-127	TP-90D	X	8D	13	N/A	N/A	34	2	
128-129	TP-66	X	8D	12	N/A	N/A	36	2	
128-129	TP-66A	X	8D	12	N/A	N/A	36	2	
128-129	TP-66B	X	8D	13	N/A	N/A	33	2	
128-129	TP-66C	X	8D	14	N/A	N/A	34	2	
128-129	TP-66D	X	8D	14	N/A	N/A	36	2	
130-131	TP-67	X	8D	13	N/A	N/A	35	2	
130-131	TP-67A	X	8C	15	N/A	N/A	38	2	
130-131	TP-67B	X	8D	13	N/A	N/A	35	2	
130-131	TP-67C	X	8C	15	N/A	N/A	37	2	
130-131	TP-67D	X	8D	13	N/A	N/A	35	2	
132-134	TP-51	X	8D	14	N/A	N/A	34	4	
132-134	TP-51A	X	8D	14	N/A	N/A	34	4	
132-134	TP-51B	X	8C	16	N/A	N/A	34	4	
132-134	TP-51C	X	8C	16	N/A	N/A	38	4	
132-134	TP-51D	X	8D	14	N/A	N/A	38	4	

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135-137	TP-55	X	8D	14	N/A	N/A	34	4	
135-137	TP-55A	X	8C	15	N/A	N/A	36	4	
135-137	TP-55B	X	8D	14	N/A	N/A	36	4	
135-137	TP-55C	X	8D	14	N/A	N/A	34	4	
135-137	TP-55D	X	8D	14	N/A	N/A	34	4	
138-139	TP-56	X	2AIII	15	15	15	15	4	
138-139	TP-56A	X	2AIII	15	15	15	15	4	
138-139	TP-56B	X	2AIII	16	16	16	16	2	
138-139	TP-56C	X	2AIII	16	16	16	16	2	
138-139	TP-56D	X	2AIII	15	15	15	15	4	
140-141	TP-54	X	2AII	14	14	14	14	2	
140-141	TP-54A	X	2AIII	15	15	15	15	3	
140-141	TP-54B	X	2AII	14	14	14	14	3	
140-141	TP-54C	X	2AII	14	14	14	14	2	
140-141	TP-54D	X	2AII	14	14	14	14	2	
142-144	TP-68	X	8D	12	N/A	N/A	36	2	
142-144	TP-68A	X	8D	13	N/A	N/A	38	2	
142-144	TP-68B	X	8D	12	N/A	N/A	36	2	
142-144	TP-68C	X	8D	14	N/A	N/A	38	2	
142-144	TP-68D	X	8D	12	N/A	N/A	36	2	
145-146	TP-69	X	8D	14	N/A	N/A	34	6	
145-146	TP-69A	X	8D	14	N/A	N/A	37	4	
145-146	TP-69B	X	8D	14	N/A	N/A	36	6	
145-146	TP-69C	X	8D	14	N/A	N/A	34	6	
145-146	TP-69D	X	8C	15	N/A	N/A	34	5	
147-148	TP-70	X	8D	13	N/A	N/A	34	4	
147-148	TP-70A	X	8D	13	N/A	N/A	36	4	
147-148	TP-70B	X	8D	14	N/A	N/A	34	6	
147-148	TP-70C	X	8D	13	N/A	N/A	38	4	
147-148	TP-70D	X	8D	13	N/A	N/A	34	4	
149-150	TP-71	X	8D	13	N/A	N/A	35	6	
149-150	TP-71A	X	8D	13	N/A	N/A	35	6	

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149-150	TP-71B	☒	8D	13	N/A	N/A	35	5	
149-150	TP-71C	☒	8D	14	N/A	N/A	37	6	
149-150	TP-71D	☒	8D	15	N/A	N/A	37	6	
151-152	TP-57	☒	8D	13	N/A	N/A	36	12	
151-152	TP-57A	☒	8D	13	N/A	N/A	36	12	
151-152	TP-57B	☒	8D	13	N/A	N/A	35	10	
151-152	TP-57C	☒	8D	14	N/A	N/A	34	10	
151-152	TP-57D	☒	8D	13	N/A	N/A	32	12	
153-154	TP-78	☒	8D	14	N/A	N/A	32	10	
153-154	TP-78A	☒	8C	16	N/A	N/A	36	10	
153-154	TP-78B	☒	8D	14	N/A	N/A	32	10	
153-154	TP-78C	☒	8D	14	N/A	N/A	35	10	
153-154	TP-78D	☒	8D	14	N/A	N/A	32	18	
155-156	TP-79	☒	8D	10	N/A	N/A	34	4	
155-156	TP-79A	☒	8D	10	N/A	N/A	34	4	
155-156	TP-79B	☒	8D	11	N/A	N/A	38	2	
155-156	TP-79C	☒	8D	12	N/A	N/A	34	4	
155-156	TP-79D	☒	8D	10	N/A	N/A	34	4	
157-158	TP-80	☒	8D	10	N/A	N/A	34	4	
157-158	TP-80A	☒	8D	10	N/A	N/A	34	2	
157-158	TP-80B	☒	8D	10	N/A	N/A	33	4	
157-158	TP-80C	☒	8D	10	N/A	N/A	37	4	
157-158	TP-80D	☒	8D	10	N/A	N/A	34	2	
159-160	TP-72	☒	8D	12	N/A	N/A	37	6	
159-160	TP-72A	☒	8D	12	N/A	N/A	37	6	
159-160	TP-72B	☒	8D	12	N/A	N/A	39	4	
159-160	TP-72C	☒	8D	13	N/A	N/A	36	4	
159-160	TP-72D	☒	8D	14	N/A	N/A	37	6	
161-162	TP-73	☒	8D	10	N/A	N/A	32	2	
161-162	TP-73A	☒	8D	10	N/A	N/A	34	2	
161-162	TP-73B	☒	8D	10	N/A	N/A	32	4	
161-162	TP-73C	☒	8D	12	N/A	N/A	36	2	

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161-162	TP-73D	X	8D	10	N/A	N/A	32	2	
163-164	TP-74	X	8D	13	N/A	N/A	34	10	
163-164	TP-74A	X	8D	14	N/A	N/A	36	10	
163-164	TP-74B	X	8C	15	N/A	N/A	34	10	
163-164	TP-74C	X	8D	13	N/A	N/A	37	10	
163-164	TP-74D	X	8D	14	N/A	N/A	34	10	
165-166	TP-76	X	8C	16	N/A	N/A	34	6	
165-166	TP-76A	X	8C	16	N/A	N/A	36	6	
165-166	TP-76B	X	8C	17	N/A	N/A	36	6	
165-166	TP-76C	X	8C	16	N/A	N/A	34	6	
165-166	TP-76D	X	8C	16	N/A	N/A	38	6	
167-168	TP-75	X	8D	12	N/A	N/A	32	6	
167-168	TP-75A	X	8D	12	N/A	N/A	34	6	
167-168	TP-75B	X	8D	14	N/A	N/A	35	4	
167-168	TP-75C	X	8D	12	N/A	N/A	32	4	
167-168	TP-75D	X	8D	12	N/A	N/A	32	6	
169-171	TP-85	X	8D	14	N/A	N/A	36	6	
169-171	TP-85A	X	8D	14	N/A	N/A	38	6	
169-171	TP-85B	X	8C	15	N/A	N/A	36	6	
169-171	TP-85C	X	8C	15	N/A	N/A	39	6	
169-171	TP-85D	X	8D	14	N/A	N/A	36	6	
172-174	TP-84	X	8D	14	N/A	N/A	33	4	
172-174	TP-84A	X	8D	14	N/A	N/A	35	4	
172-174	TP-84B	X	8D	14	N/A	N/A	35	4	
172-174	TP-84C	X	8D	14	N/A	N/A	35	4	
172-174	TP-84D	X	8C	15	N/A	N/A	33	4	
175-176	TP-83	X	2AIII	16	16	16	16	8	
175-176	TP-83A	X	2AIII	16	16	16	16	8	
175-176	TP-83B	X	2AIII	16	16	16	16	8	
175-176	TP-83C	X	2AIII	16	16	16	16	8	
175-176	TP-83D	X	2AIII	19	19	19	19	8	
177-178	TP-82	X	2AIII	17	17	17	17	10	

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Project Name:	Applicant Name:	Project Location (municipality):
SOUTH STREET VILLAGE	SOUTH STREET VILLAGE LLC	BIDDEFORD

Lot No.	Exploration Symbol (TP 1, B 2, etc.)	✖ if at SSWD Field	Description of subsurface materials by: ● Soil profile/condition (if by S.E.), ● Soil series name (if by S.S.), or by ● Geologic unit (if by C.G.)	Depths to (inches): Redoximorphic Features	Bedrock	Hydraulically Restrictive Layer	Limit of Exploration	Ground Surface Slope (%)	Ground Surface Elevation
177-178	TP-82A	☒	2AIII	17	17	17	17	10	
177-178	TP-82B	☒	2AIII	17	17	17	17	10	
177-178	TP-82C	☒	2AIII	17	17	17	17	10	
177-178	TP-82D	☒	2AIII	18	18	18	18	12	
179-181	TP-81	☒	8D	14	N/A	N/A	34	6	
179-181	TP-81A	☒	8D	14	N/A	N/A	36	6	
179-181	TP-81B	☒	8D	15	N/A	N/A	36	6	
179-181	TP-81C	☒	8D	14	N/A	N/A	34	6	
179-181	TP-81D	☒	8D	14	N/A	N/A	34	6	
182-184	TP-89	☒	8D	14	N/A	N/A	32	6	
182-184	TP-89A	☒	8C	15	N/A	N/A	36	6	
182-184	TP-89B	☒	8C	15	N/A	N/A	36	6	
182-184	TP-89C	☒	8D	14	N/A	N/A	36	6	
182-184	TP-89D	☒	8D	14	N/A	N/A	32	6	
185-187	TP-77	☒	8D	14	N/A	N/A	32	2	
185-187	TP-77A	☒	8D	14	N/A	N/A	36	2	
185-187	TP-77B	☒	8C	15	N/A	N/A	36	4	
185-187	TP-77C	☒	8D	14	N/A	N/A	34	4	
185-187	TP-77D	☒	8D	14	N/A	N/A	34	2	
188-189	TP-86	☒	8D	12	N/A	N/A	34	2	
188-189	TP-86A	☒	8D	14	N/A	N/A	36	4	
188-189	TP-86B	☒	8D	13	N/A	N/A	36	2	
188-189	TP-86C	☒	8D	12	N/A	N/A	34	4	
188-189	TP-86D	☒	8D	14	N/A	N/A	34	4	
190-191	TP-87	☒	8D	14	N/A	N/A	30	2	
190-191	TP-87A	☒	8C	15	N/A	N/A	34	2	
190-191	TP-87B	☒	8D	14	N/A	N/A	36	2	
190-191	TP-87C	☒	8D	14	N/A	N/A	36	2	
190-191	TP-87D	☒	8D	14	N/A	N/A	34	2	
192-193	TP-59	☒	8D	14	N/A	N/A	36	2	
192-193	TP-59A	☒	8D	14	N/A	N/A	36	2	
192-193	TP-59B	☒	8D	14	N/A	N/A	36	4	

INVESTIGATOR INFORMATION AND SIGNATURE

Signature

ERIK LEMA
Name Printed

☒ Site Evaluator
☐ Soil Scientist
☐ Geologist
☐ Professional Engineer

03/27/2023
Date

419
License No.

affix professional seal

FORM E Rev. 7/21

SOIL CONDITIONS SUMMARY TABLE

SUMMARY LOG OF SUBSURFACE EXPLORATIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
SOUTH STREET VILLAGE	SOUTH STREET VILLAGE LLC	BIDDEFORD

Lot No.	Exploration Symbol (TP 1, B 2, etc.)	✖ if at SSWD Field	Description of subsurface materials by: ● Soil profile/condition (if by S.E.), ● Soil series name (if by S.S.), or by ● Geologic unit (if by C.G.)	Depths to (inches): Redoximorphic Features	Bedrock	Hydraulically Restrictive Layer	Limit of Exploration	Ground Surface Slope (%)	Ground Surface Elevation
192-193	TP-59C	☒	8D	14	N/A	N/A	36	4	
192-193	TP-59D	☒	8D	14	N/A	N/A	36	2	
194-195	TP-88	☒	8C	15	N/A	N/A	30	4	
194-195	TP-88A	☒	8C	15	N/A	N/A	34	4	
194-195	TP-88B	☒	8C	17	N/A	N/A	34	4	
194-195	TP-88C	☒	8C	16	N/A	N/A	36	4	
194-195	TP-88D	☒	8C	15	N/A	N/A	32	4	
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INVESTIGATOR INFORMATION AND SIGNATURE

Signature

ERIK LEMA
Name Printed

☒ Site Evaluator
☐ Soil Scientist
☐ Geologist
☐ Professional Engineer

03/27/2023
Date

419
License No.

affix professional seal

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, COMMUNITY CENTER

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: COMMUNITY CENTER (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☐ 1. Table 4A (dwelling unit(s))
☑ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
PLAN NOT FINALIZED, SIZED FOR ~70 PEOPLE AT 8GPD/PERSON
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-11
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.43 s
Lon. 70 d 29 m 56.69 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature ____ SE # 419 Date 3/26/23

ERIK LEMA (Site Evaluator Name Printed) 207-518-8442 (Telephone Number) erik@basswoodenv.com (E-mail Address)

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

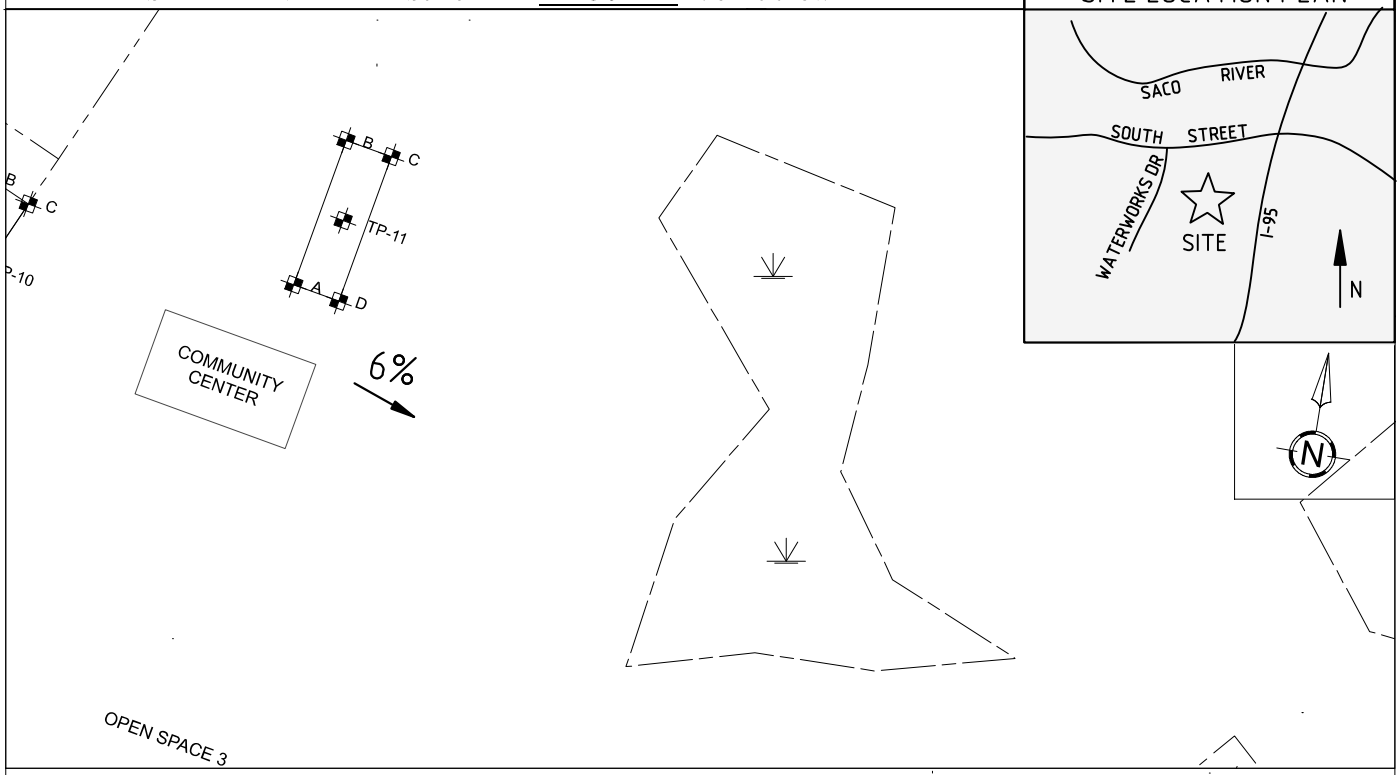
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

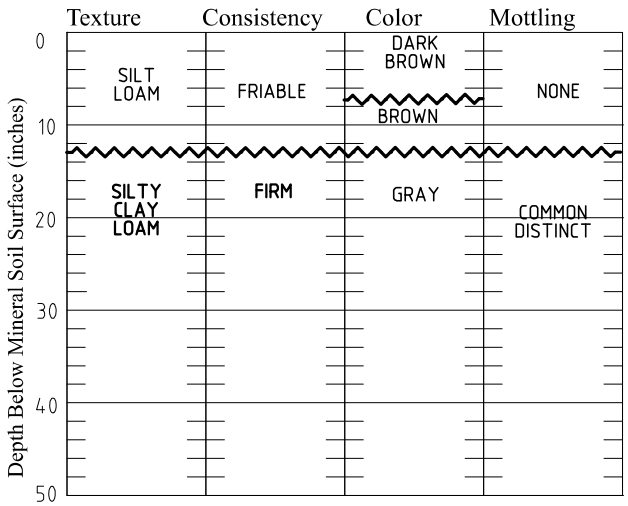


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-11 ☐ Test Pit ☒ Boring

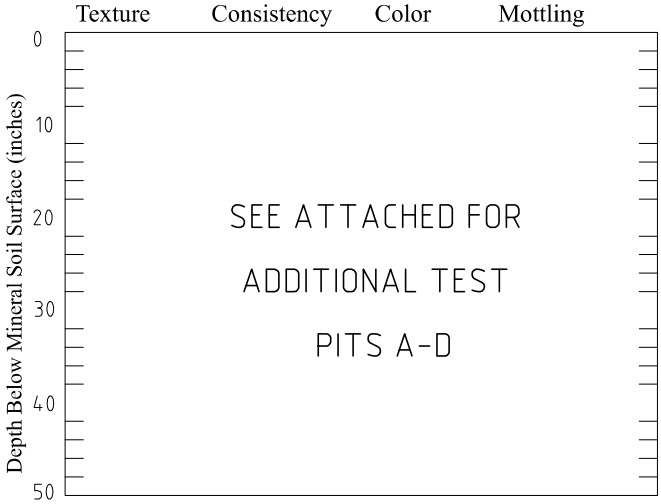
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

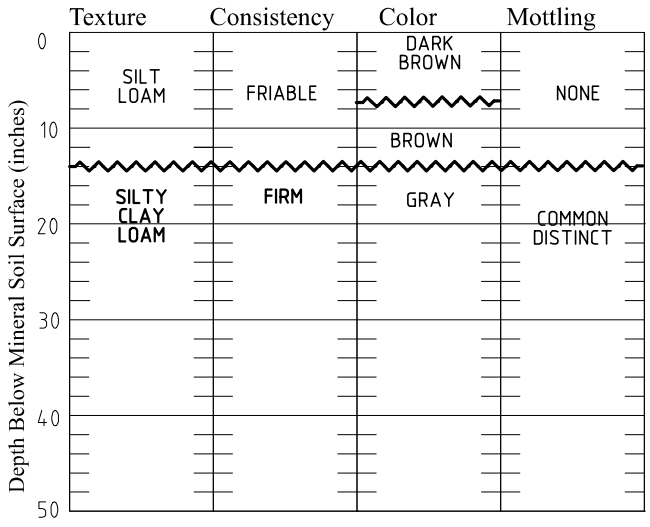
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-11 A ☐ Test Pit ☒ Boring

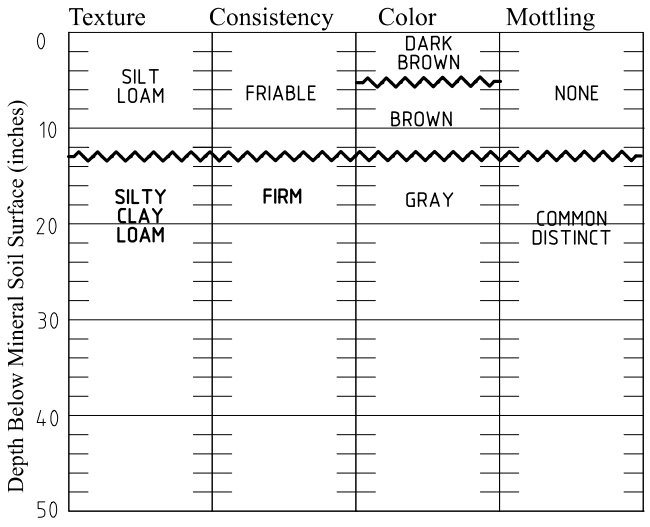
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-11 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

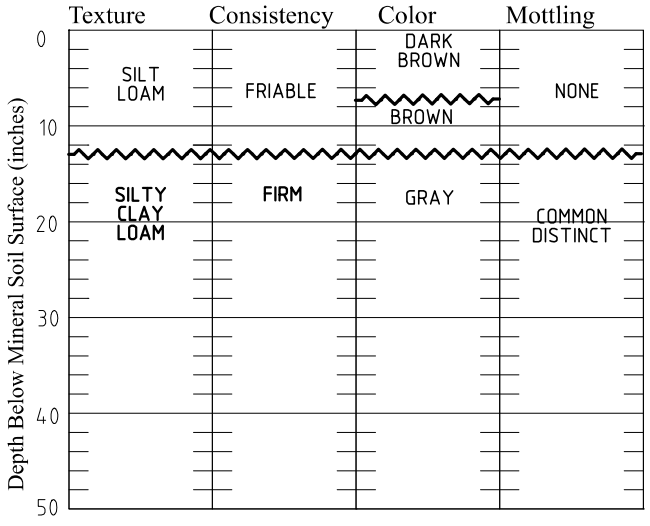


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-11 C ☐ Test Pit ☒ Boring

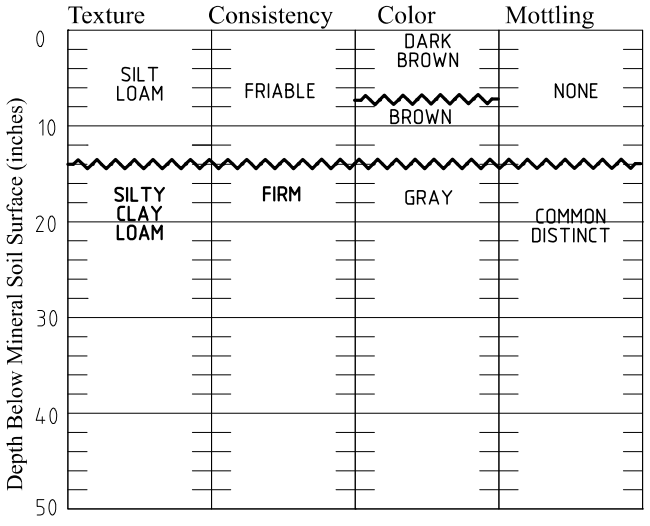
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-11 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

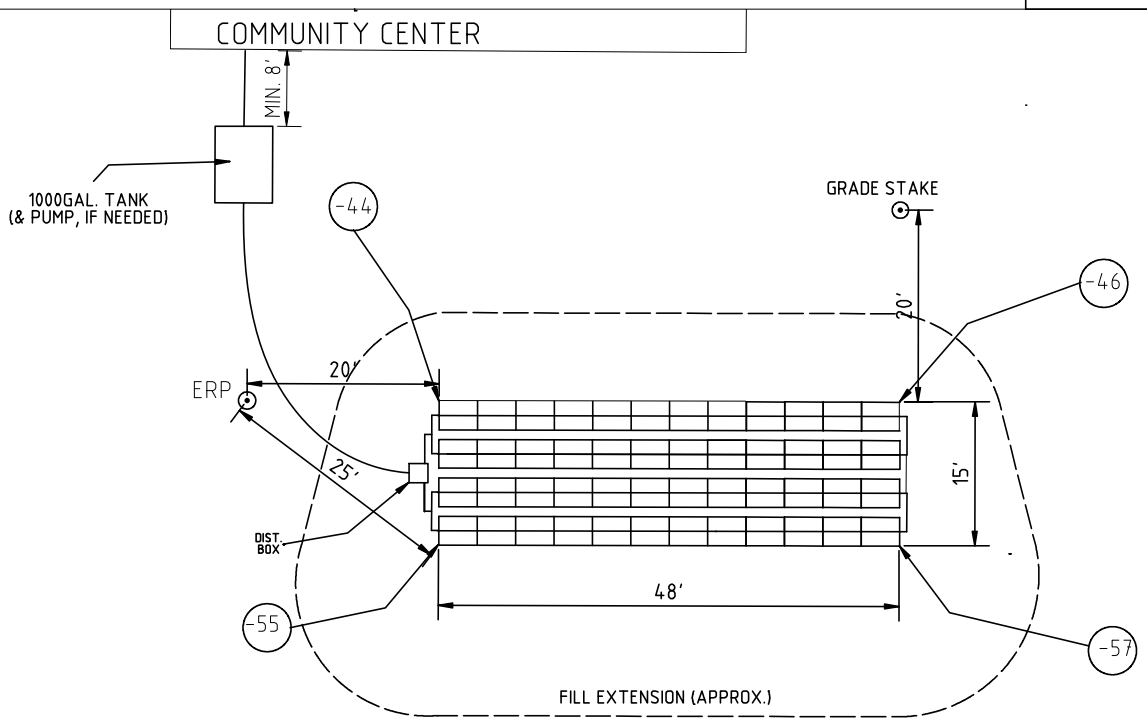
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

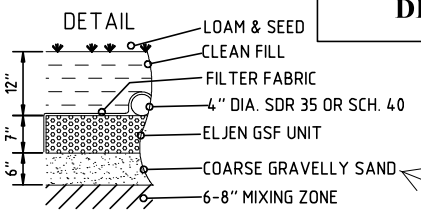
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

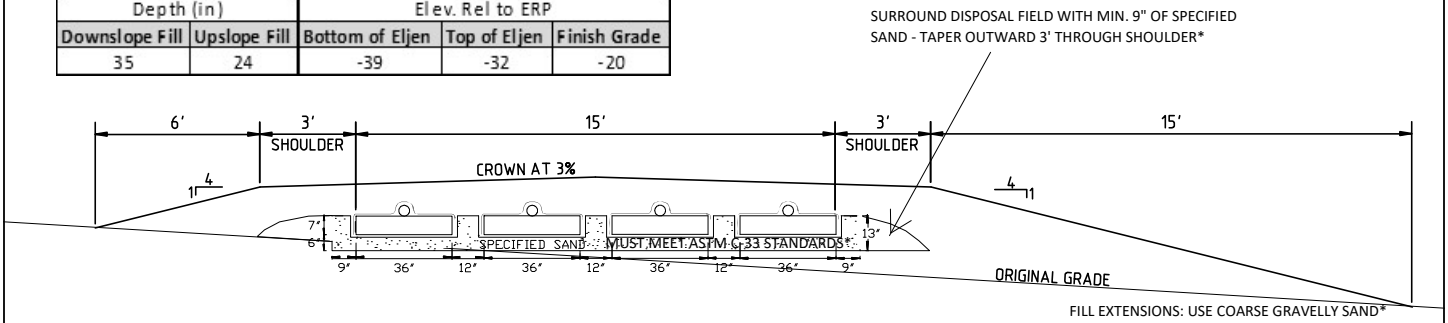
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
35	24	-39	-32	-20



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, O&M FACILITY

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: MAINTENANCE FACILITY (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☐ 1. Table 4A (dwelling unit(s))
☑ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
PLAN NOT FINALIZED, SIZED FOR ~45 PEOPLE AT 12GPD/PERSON
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-91
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 34.44 s
Lon. 70 d 29 m 09.08 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

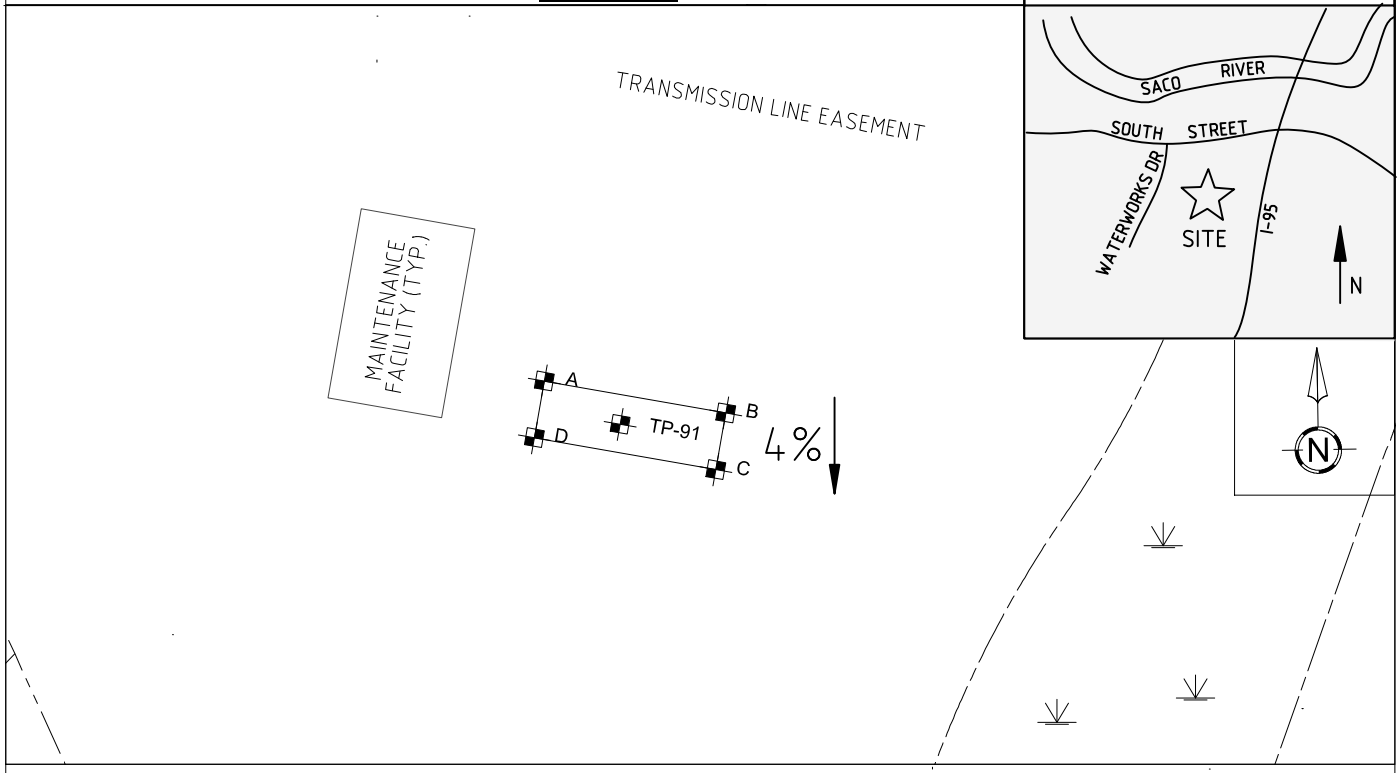
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

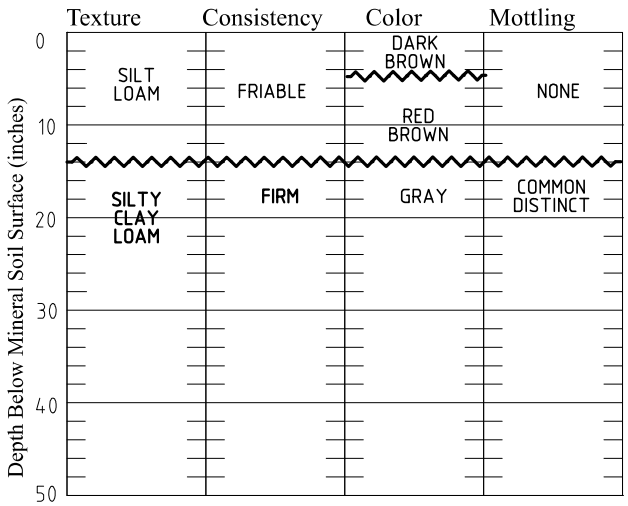


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-91 ☐ Test Pit ☒ Boring

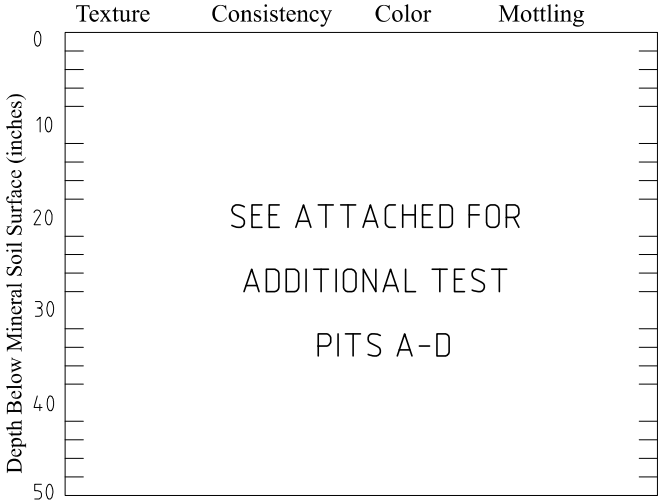
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: [signature] SE #: 419 Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

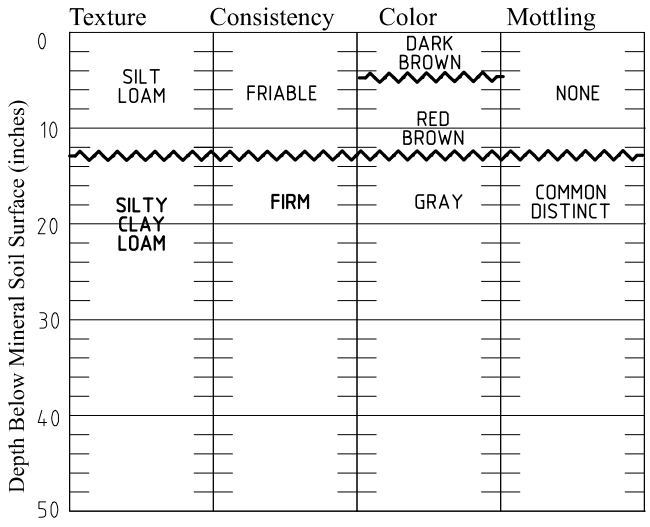
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-91 A ☐ Test Pit ☒ Boring

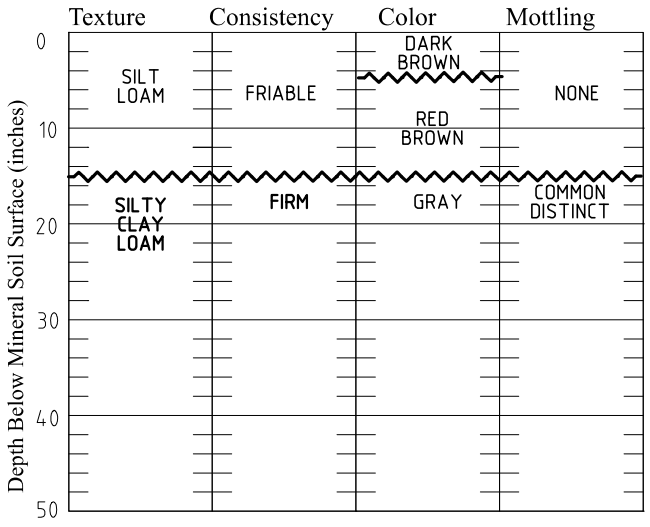
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	0 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-91 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

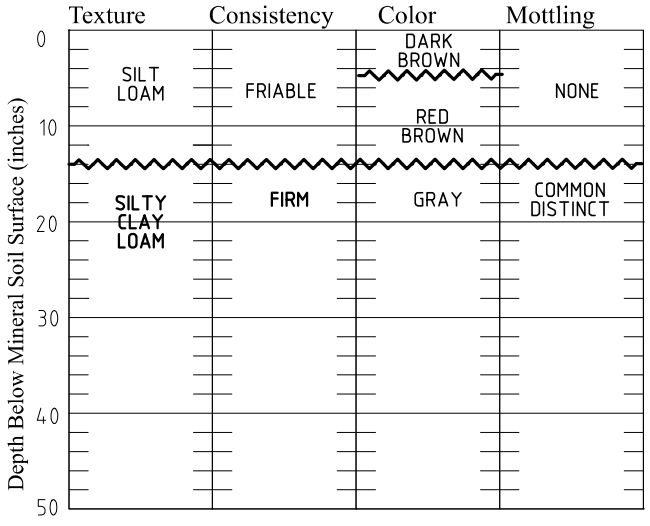


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-91 C ☐ Test Pit ☒ Boring

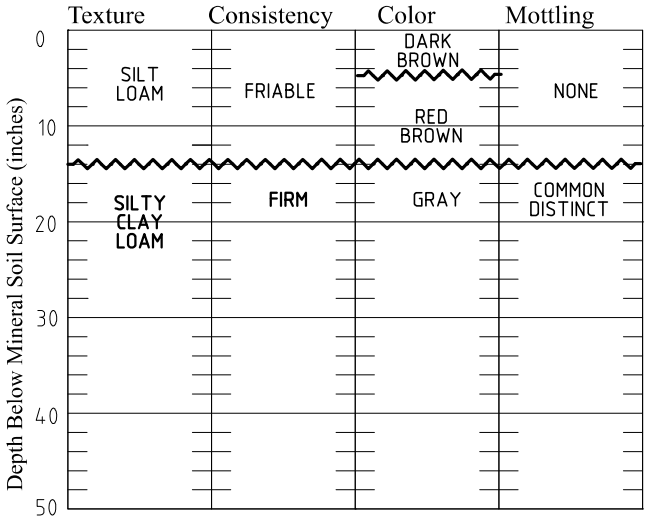
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-91 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/20/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

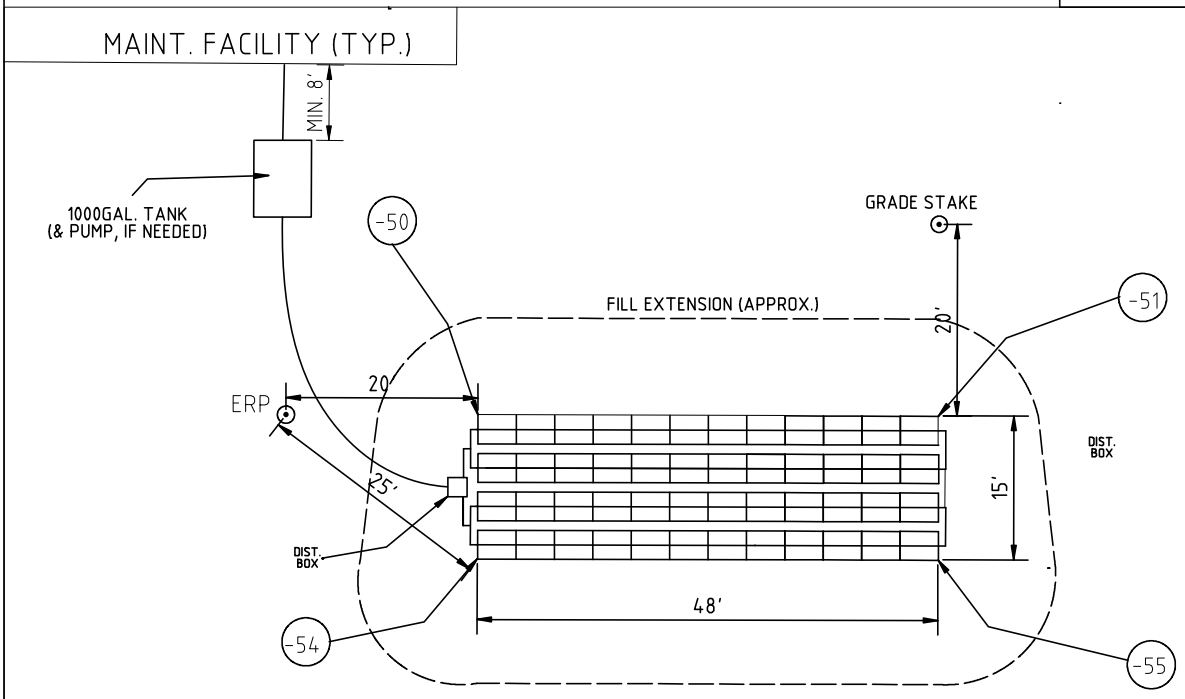
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

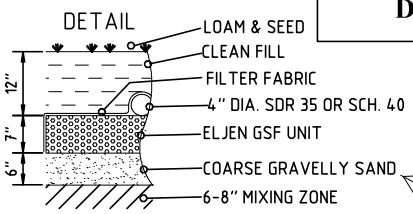
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

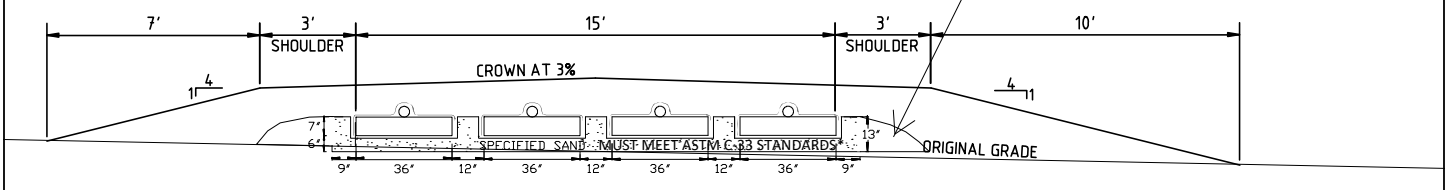
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
28	24	-45	-38	-26

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 1-3

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-5
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 38.94 s
Lon. 70 d 30 m 08.31 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Erik Lema — 419 — 3/26/23
Site Evaluator Signature | SE # | Date

ERIK LEMA — 207-518-8442 — erik@basswoodenv.com
Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

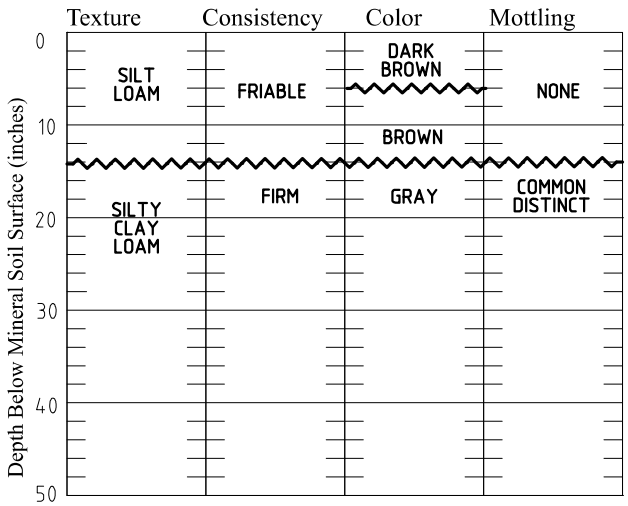


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-5 ☒ Test Pit ☐ Boring

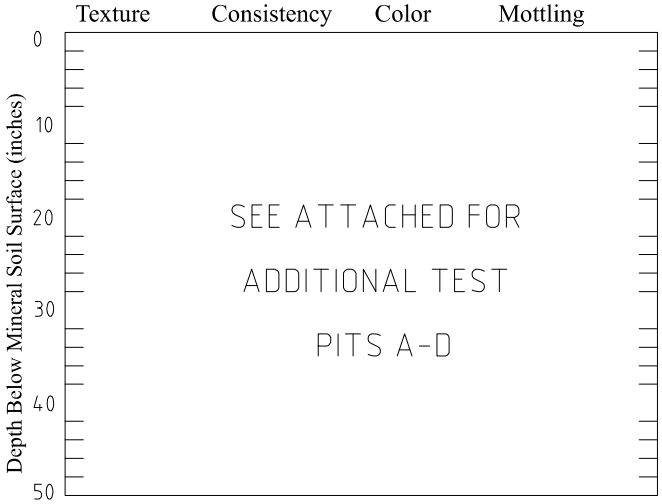
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	3 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

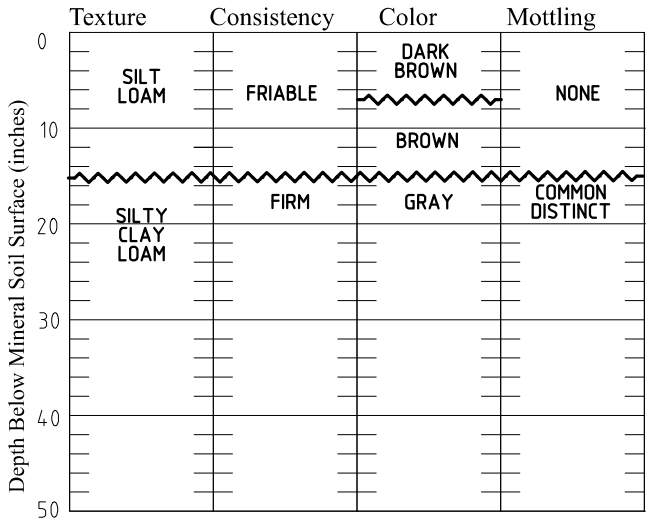
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-5 A ☐ Test Pit ☒ Boring

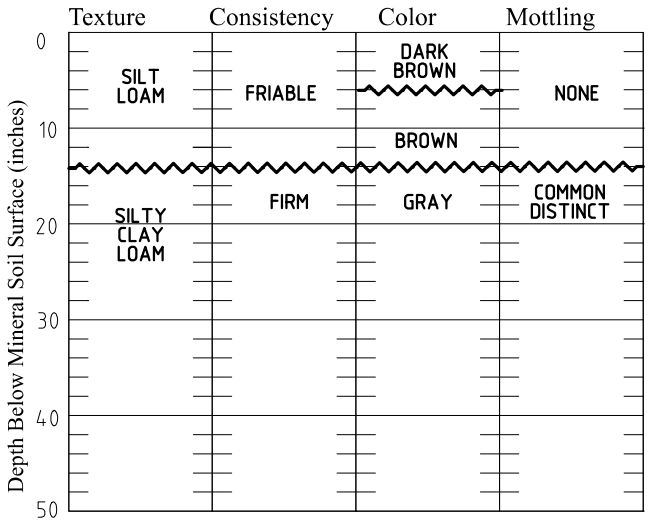
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	3 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-5 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

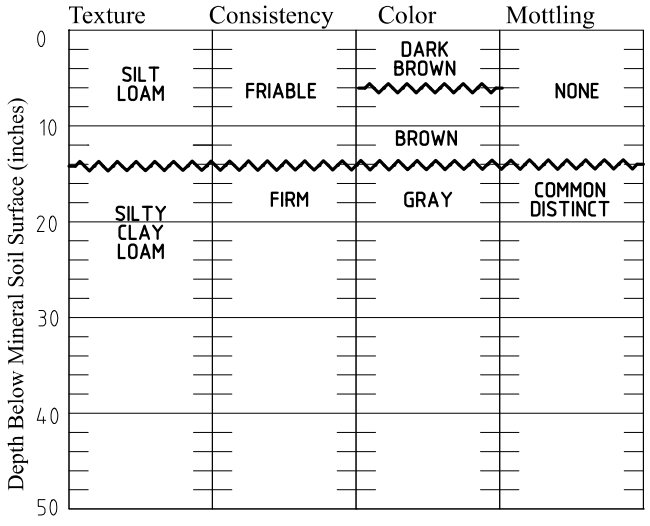


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-5 C ☐ Test Pit ☒ Boring

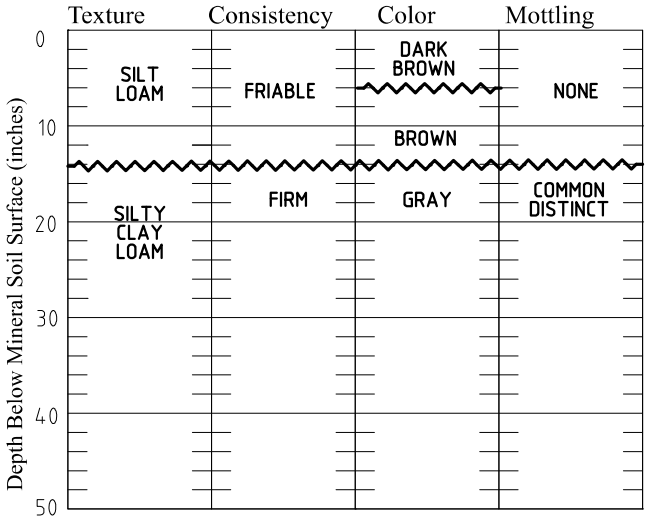
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-5 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

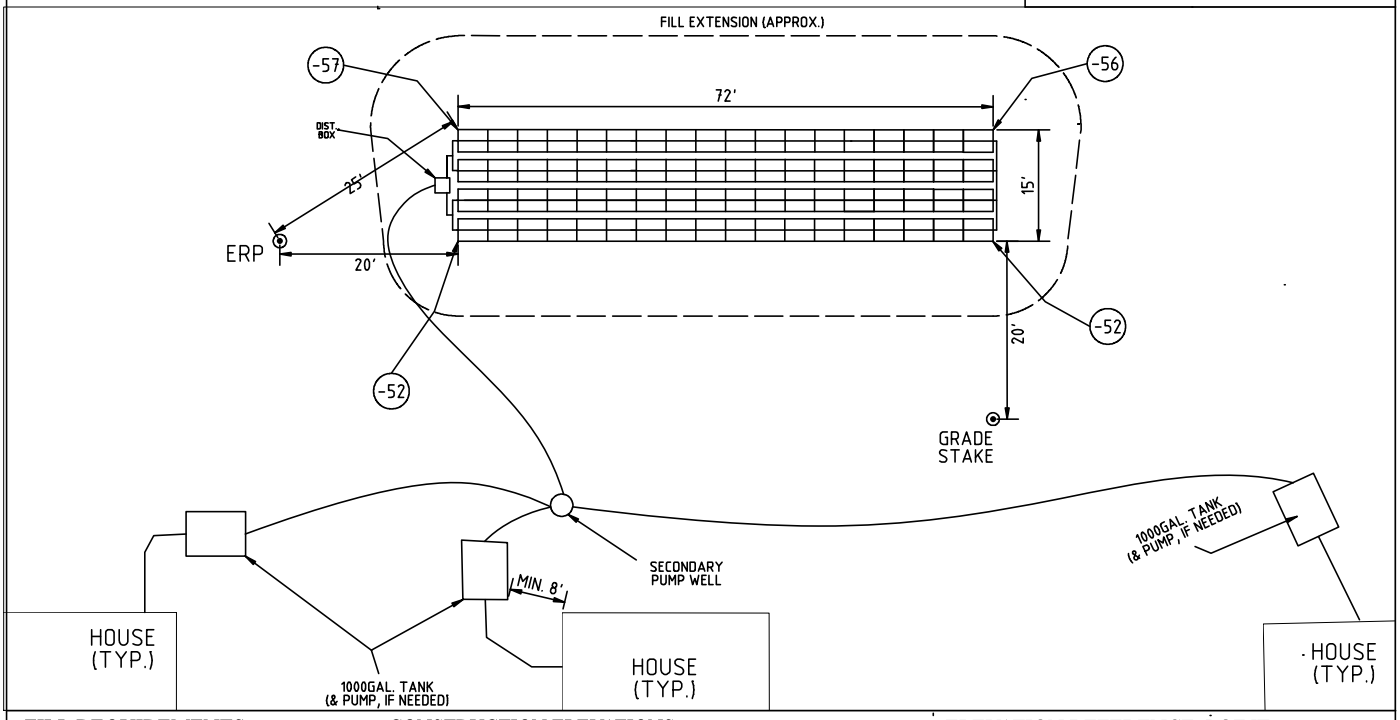
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

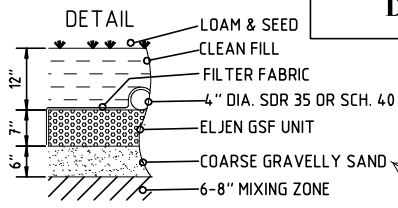
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

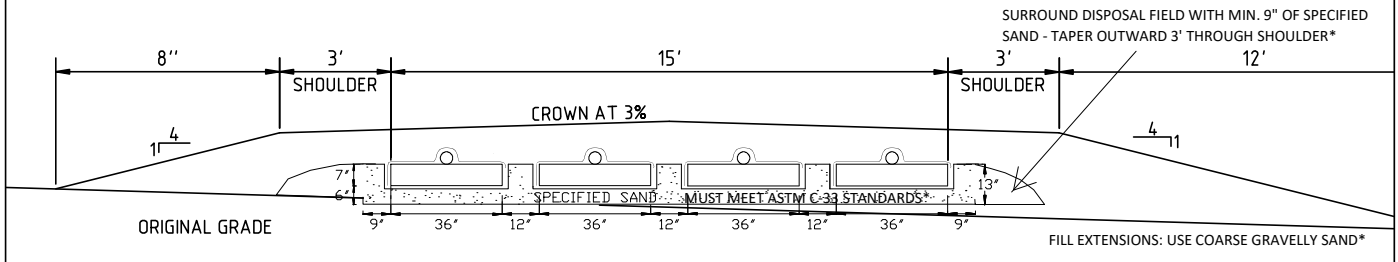
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
28	23	-48	-41	-29

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 4-6

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

Local Plumbing Inspector Signature _____ L.P.I. # _____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

Local Plumbing Inspector Signature _____ (2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-3
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.39 s
Lon. 70 d 30 m 11.35 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

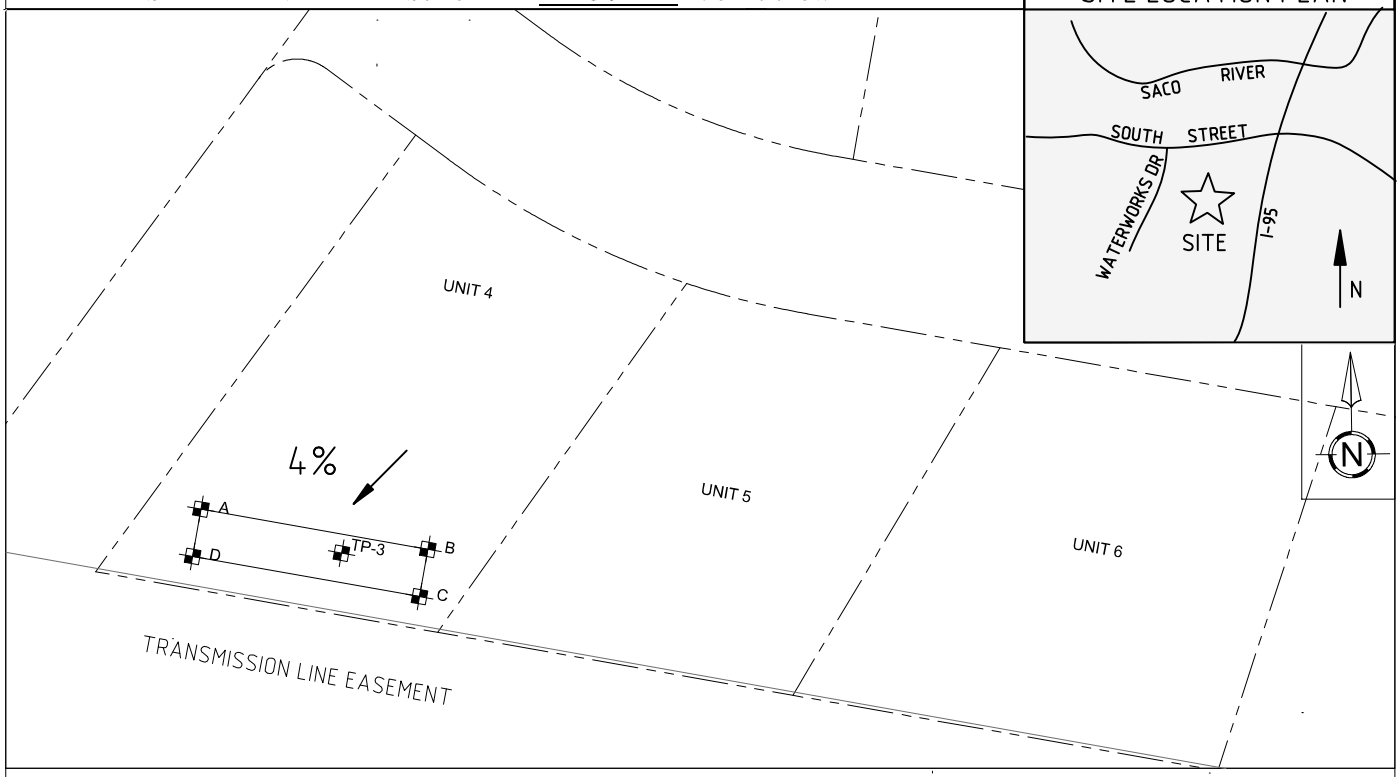
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

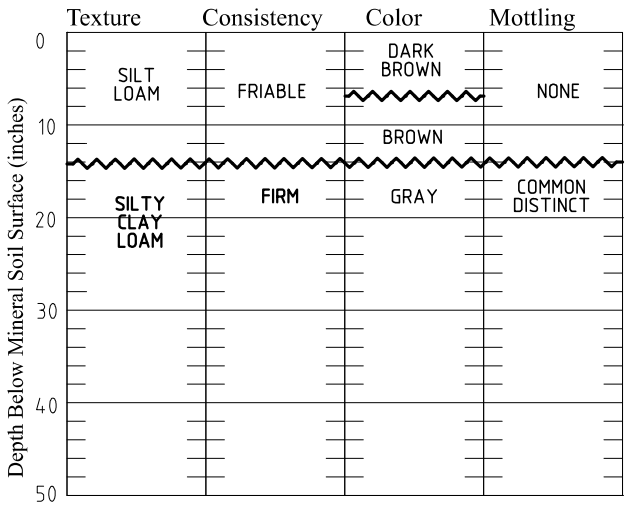


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-3 ☒ Test Pit ☐ Boring

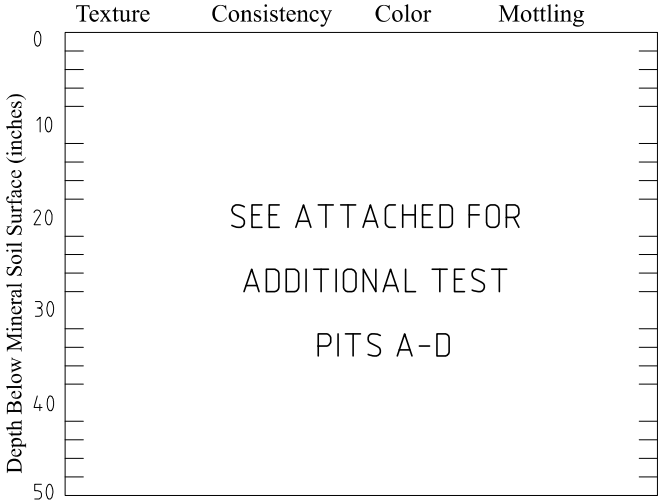
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

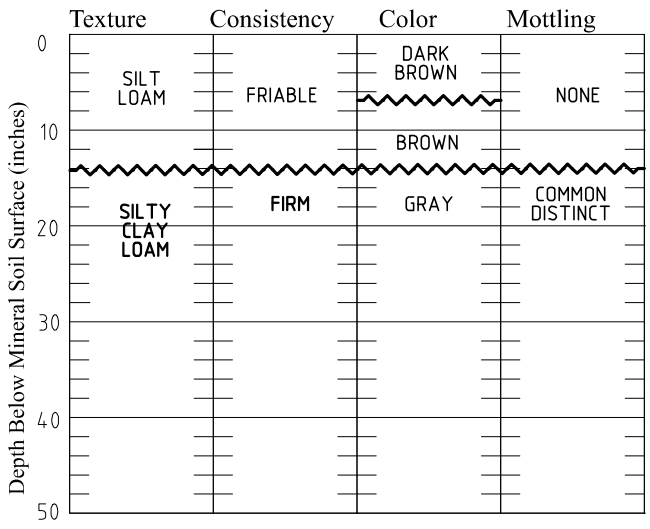
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-3 A ☐ Test Pit ☒ Boring

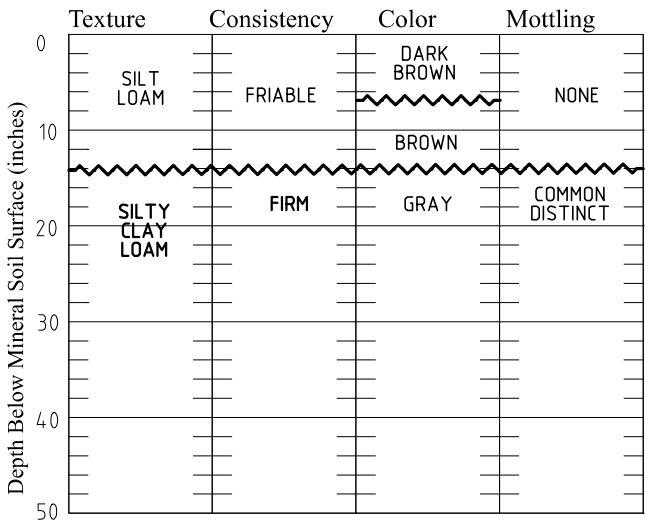
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-3 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

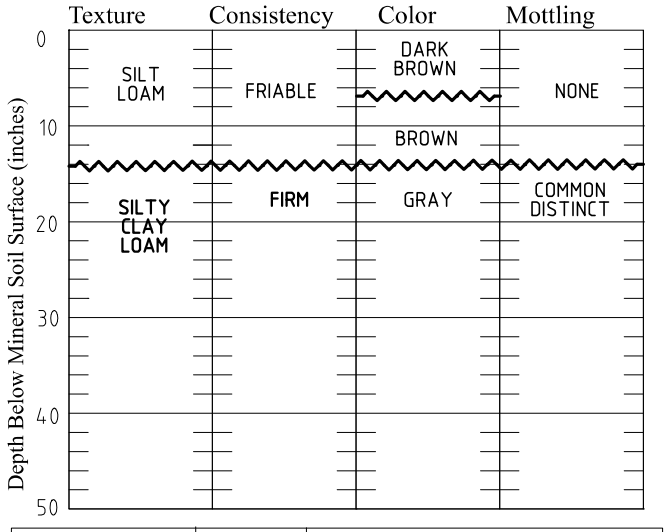


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-3 C ☐ Test Pit ☒ Boring

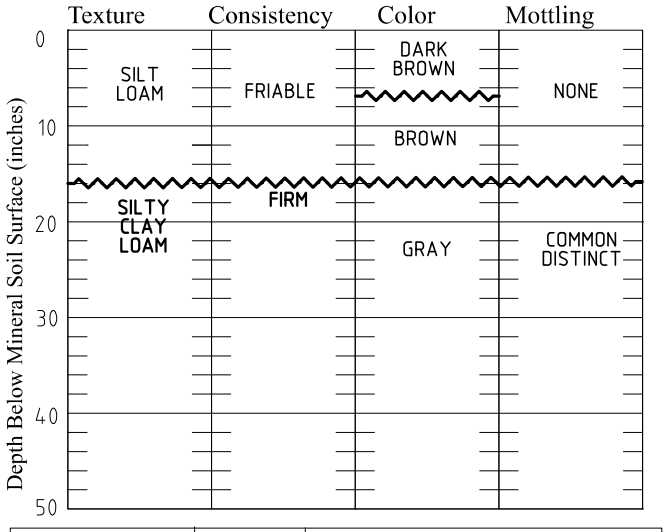
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-3 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/22/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

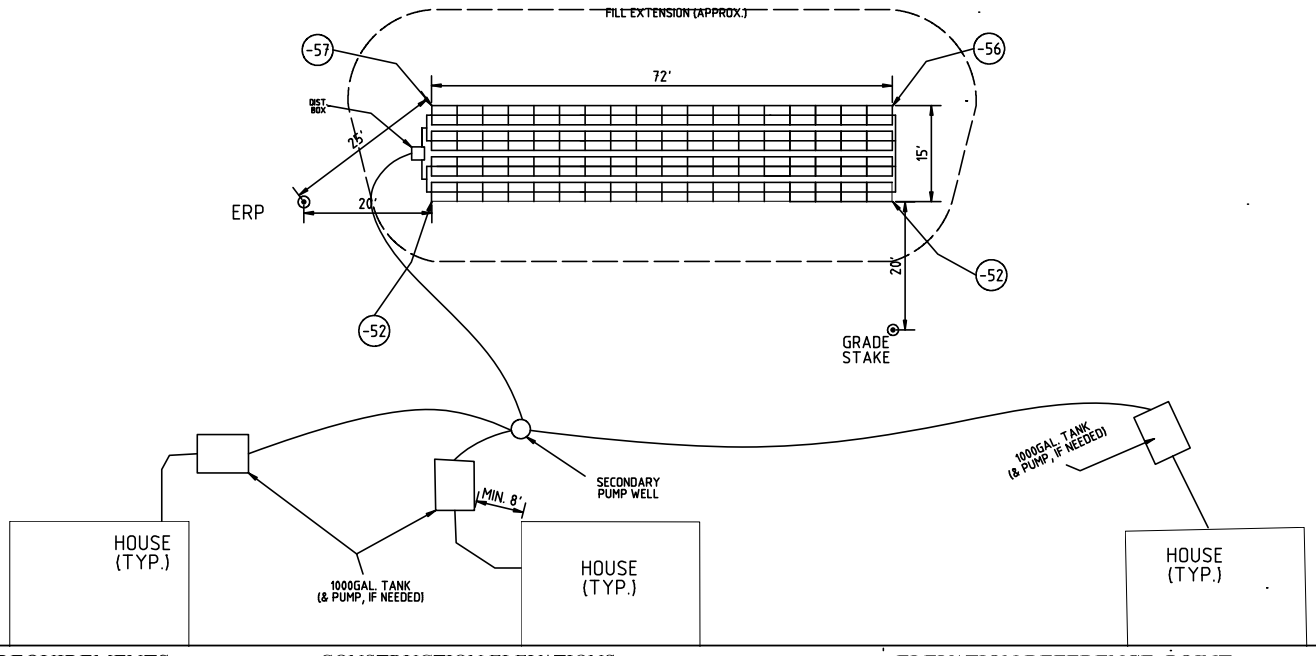
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

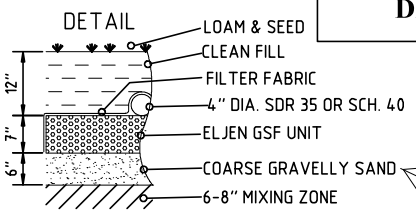
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

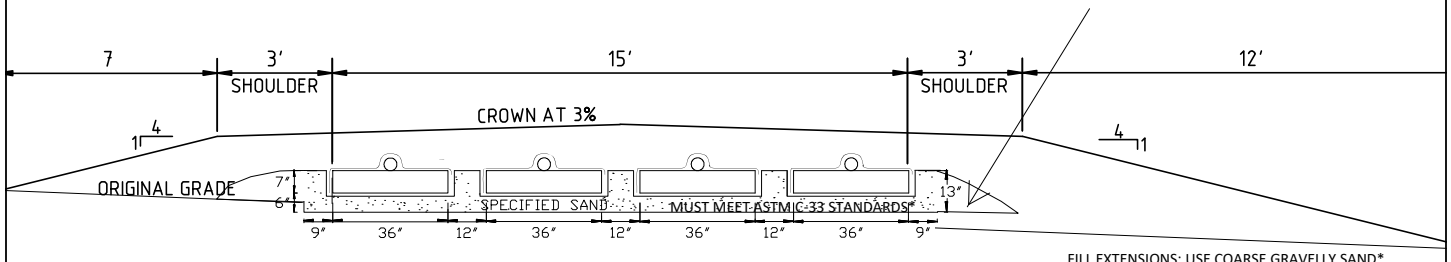
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-42	-35	-23

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 7-9

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-4
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 35.31 s
Lon. 70 d 30 m 04.47 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | SE # 419 | Date 3/26/23

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-4 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN / GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	9 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

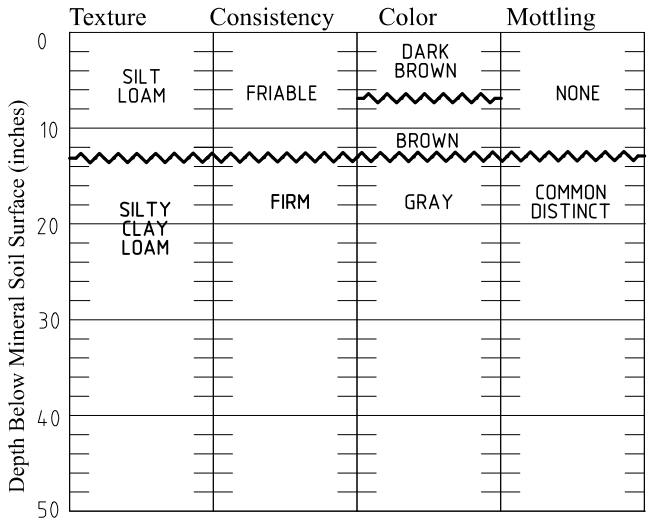
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-4 A ☐ Test Pit ☒ Boring

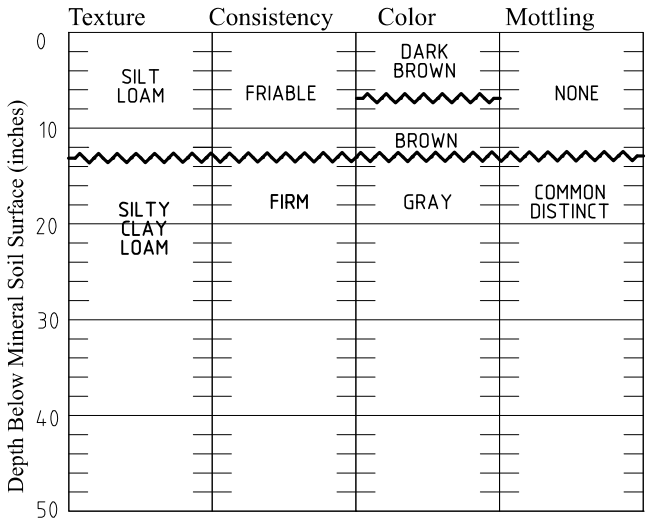
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-4 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

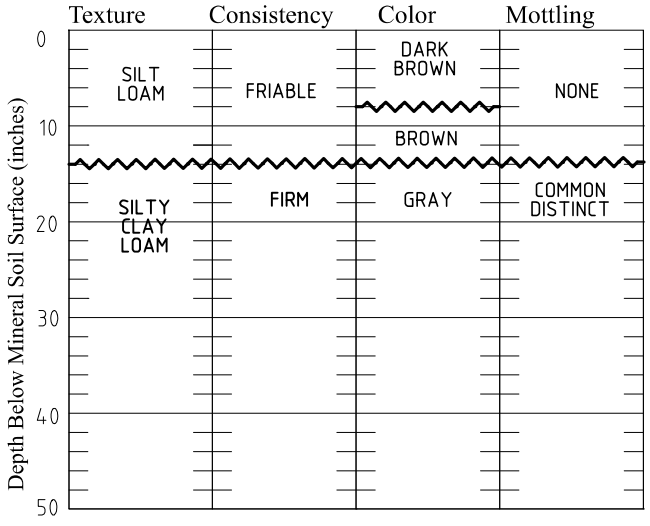


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-4 C ☐ Test Pit ☒ Boring

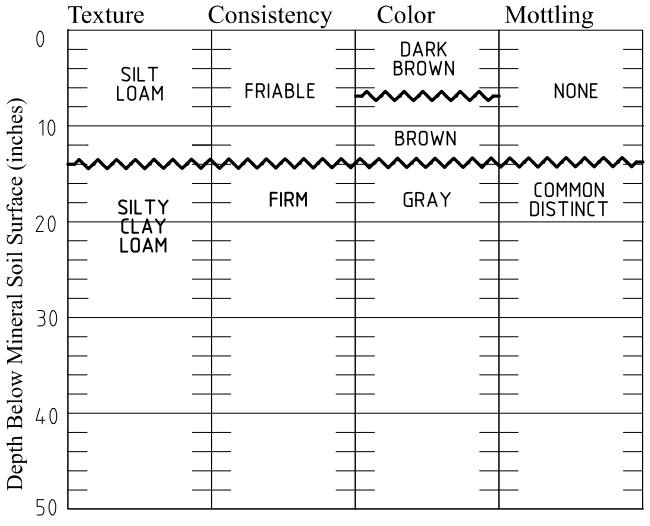
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	7 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-4 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

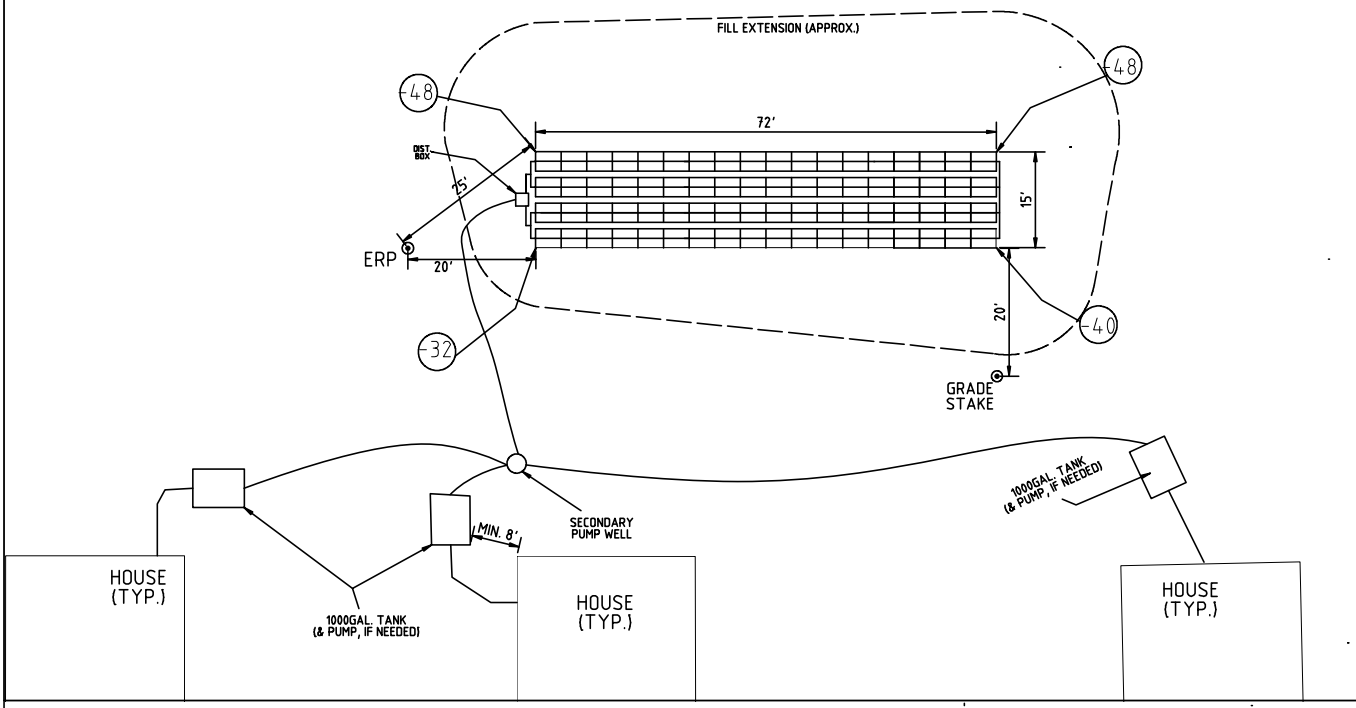
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

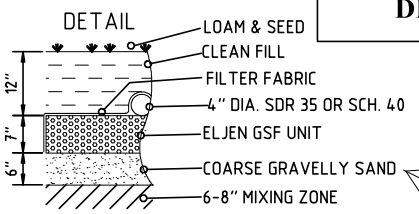
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

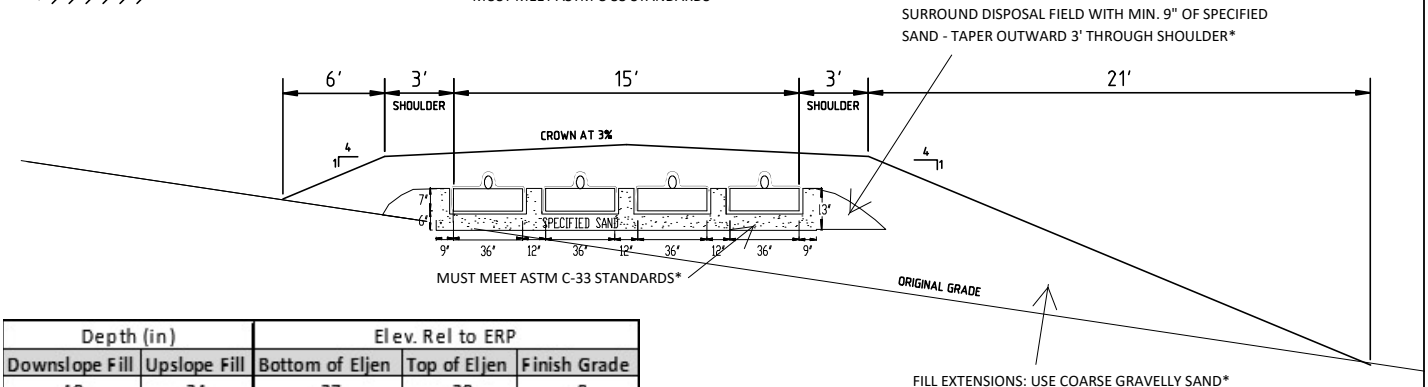
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
40	24	-27	-20	-8

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 10-11

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-6
Depth 15 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 38.33 s
Lon. 70 d 30 m 02.85 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	419 SE #	3/26/23 Date
ERIK LEMA	207-518-8442	erik@basswoodenv.com
Site Evaluator Name Printed	Telephone Number	E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

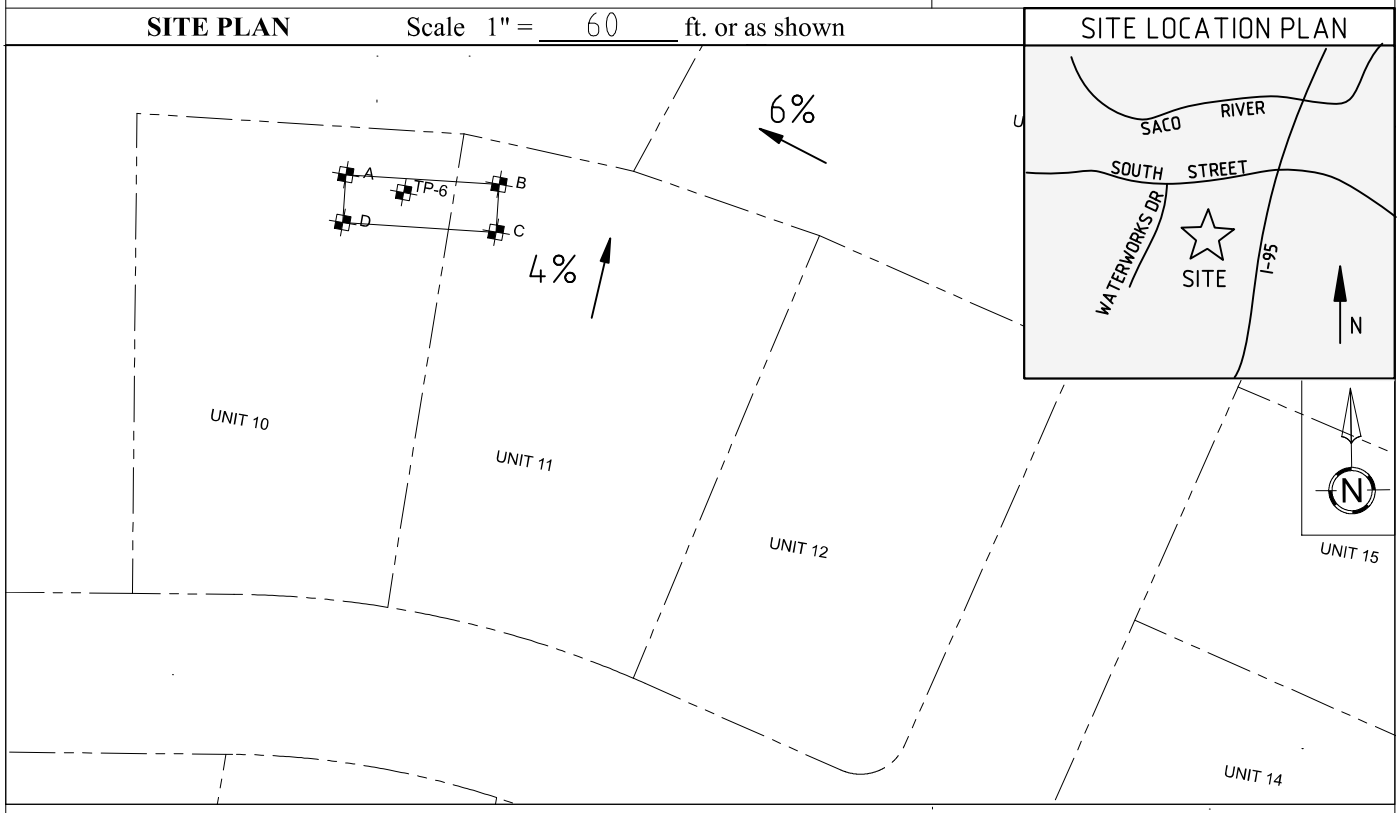
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-6 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN / GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

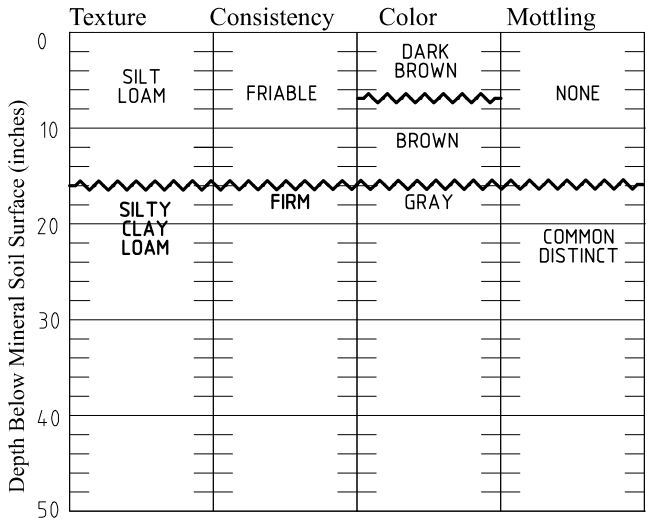
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-6 A ☐ Test Pit ☒ Boring

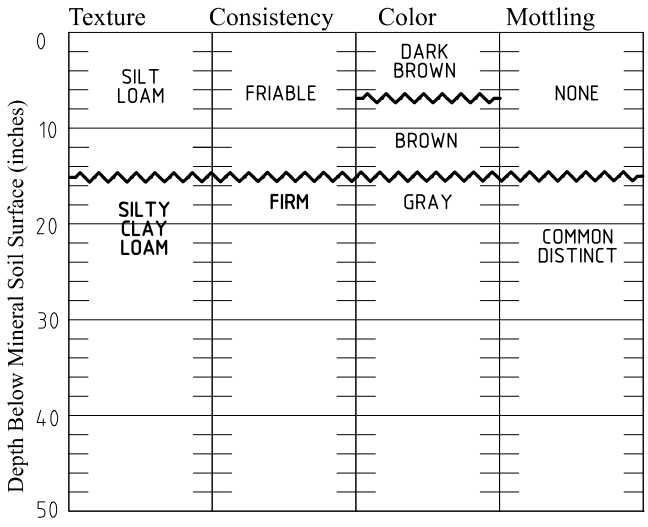
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-6 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

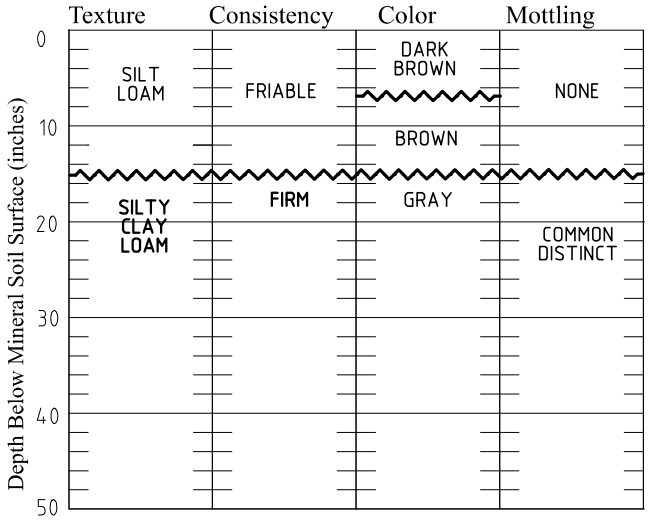


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-6 C ☐ Test Pit ☒ Boring

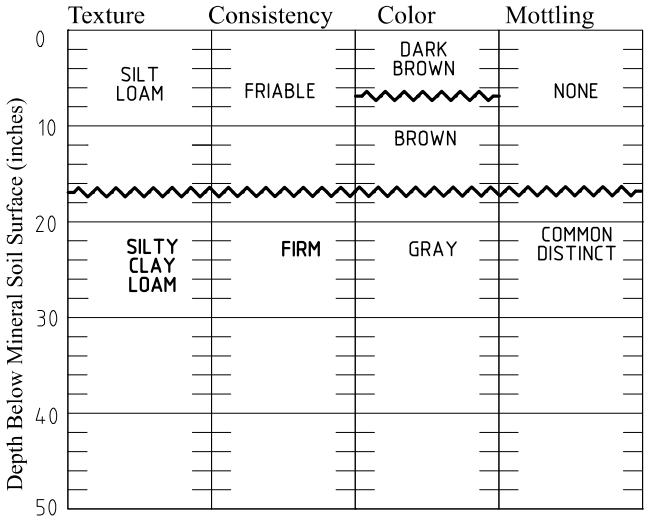
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-6 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	5 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

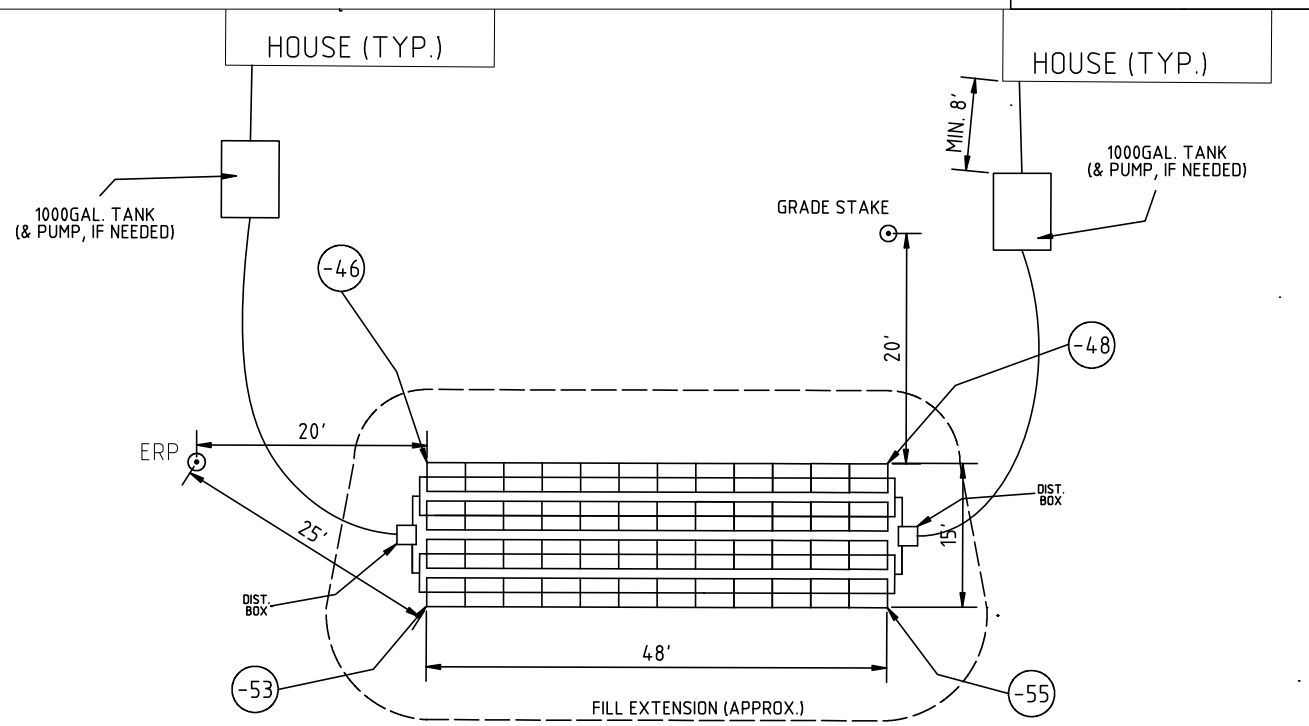
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

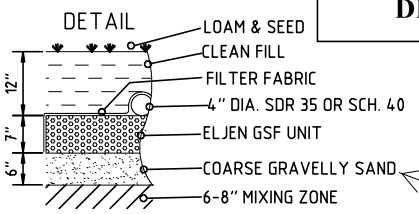
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

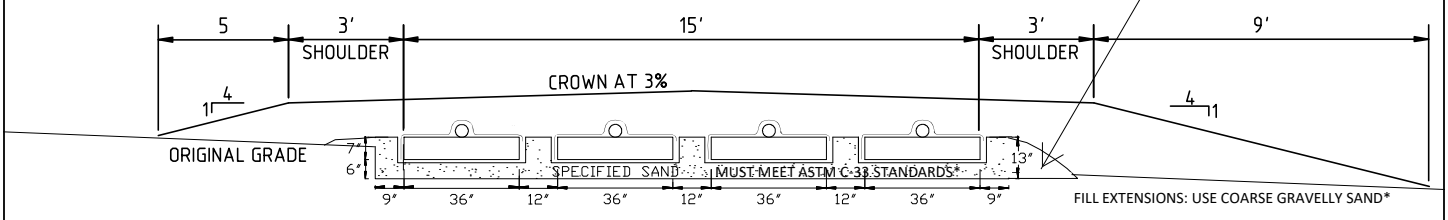
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
23	16	-49	-42	-30

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 12, 18

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-7
Depth 16 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 39.08 s
Lon. 70 d 30 m 01.11 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-7 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20			BROWN	
20–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
Profile: 8 Condition: C	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile _____ Condition _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

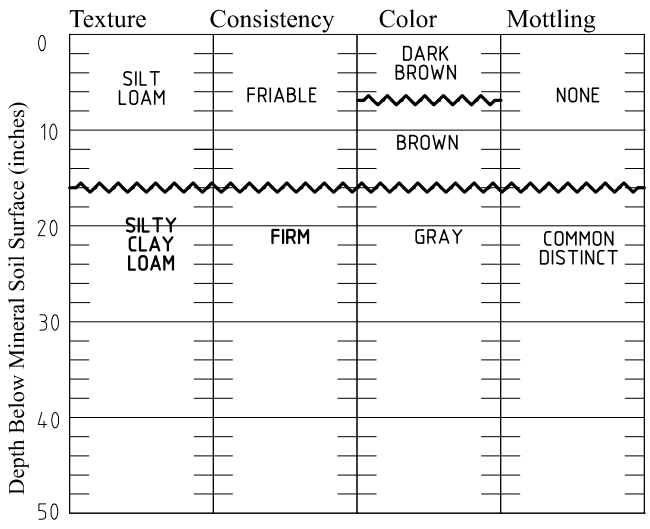
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-7 A ☐ Test Pit ☒ Boring

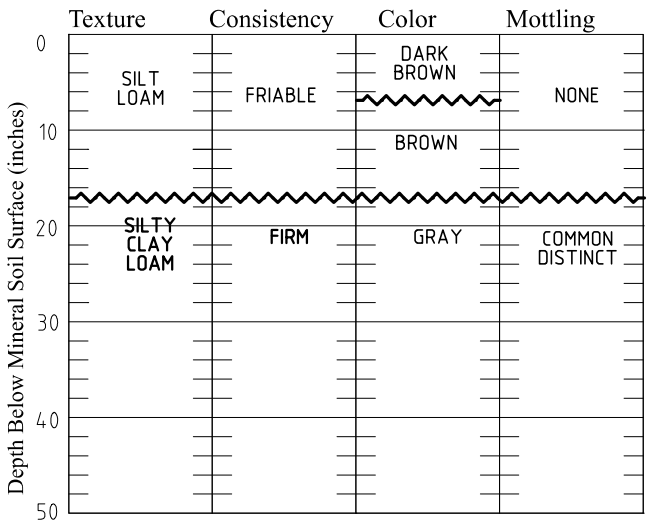
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-7 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

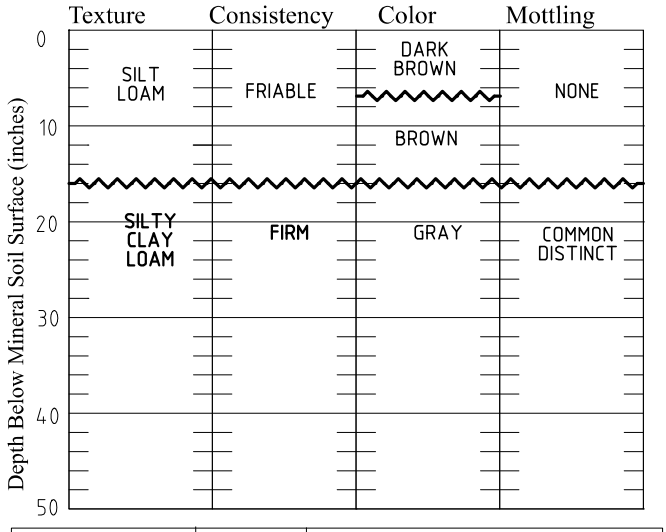


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-7 C ☐ Test Pit ☒ Boring

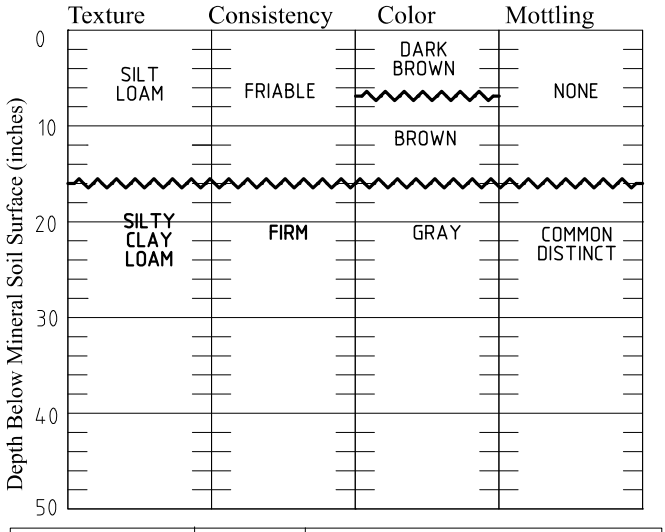
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-7 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

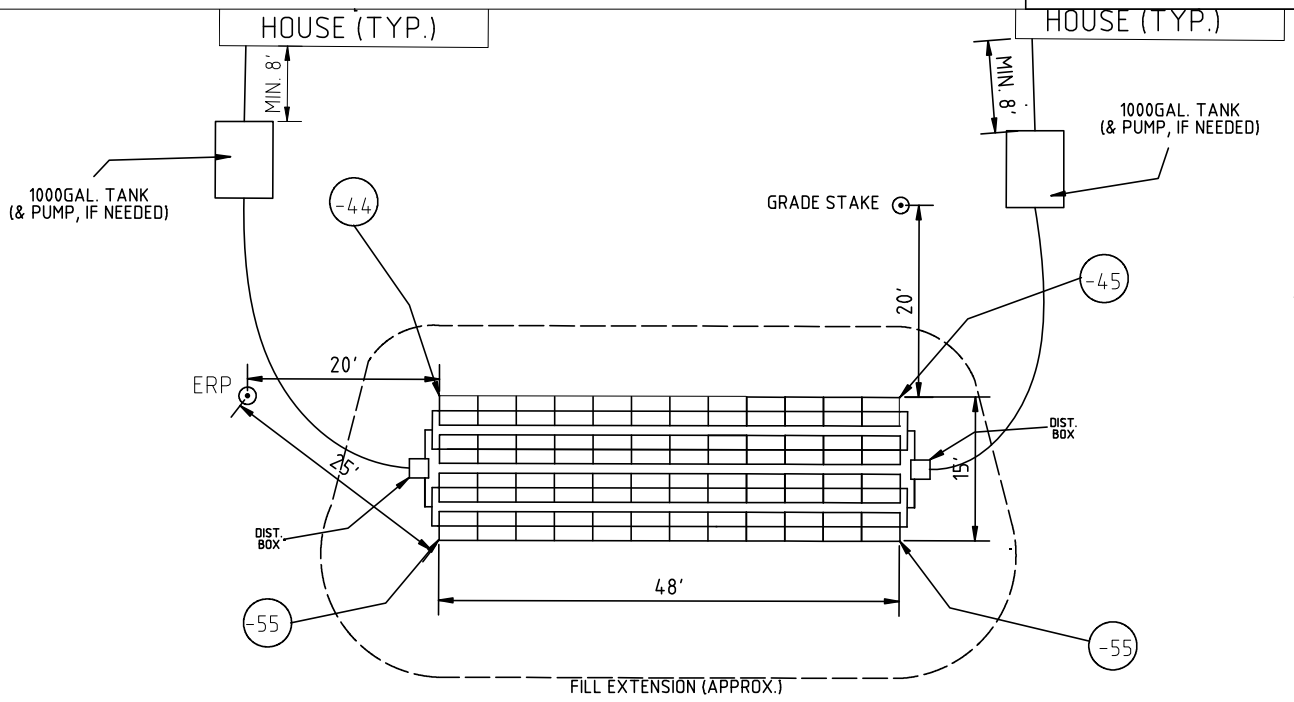
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

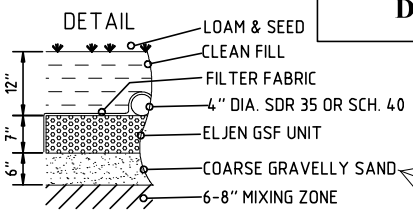
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 58" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

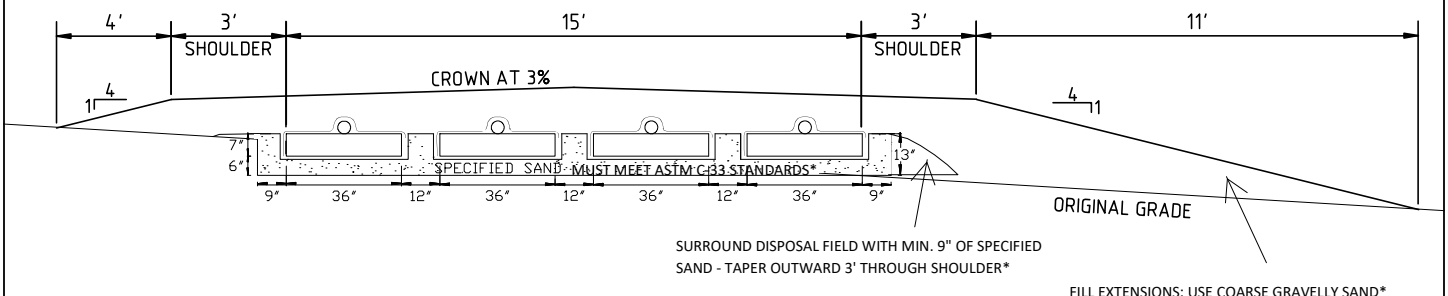
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
26	15	-48	-41	-29



SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*

FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOT 13

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 ____ Lot # 8 ____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved ____

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: ____
☐ 3. Other: ____ (specify)

Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 1107 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-9
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 34.95 s
Lon. 70 d 29 m 58.93 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

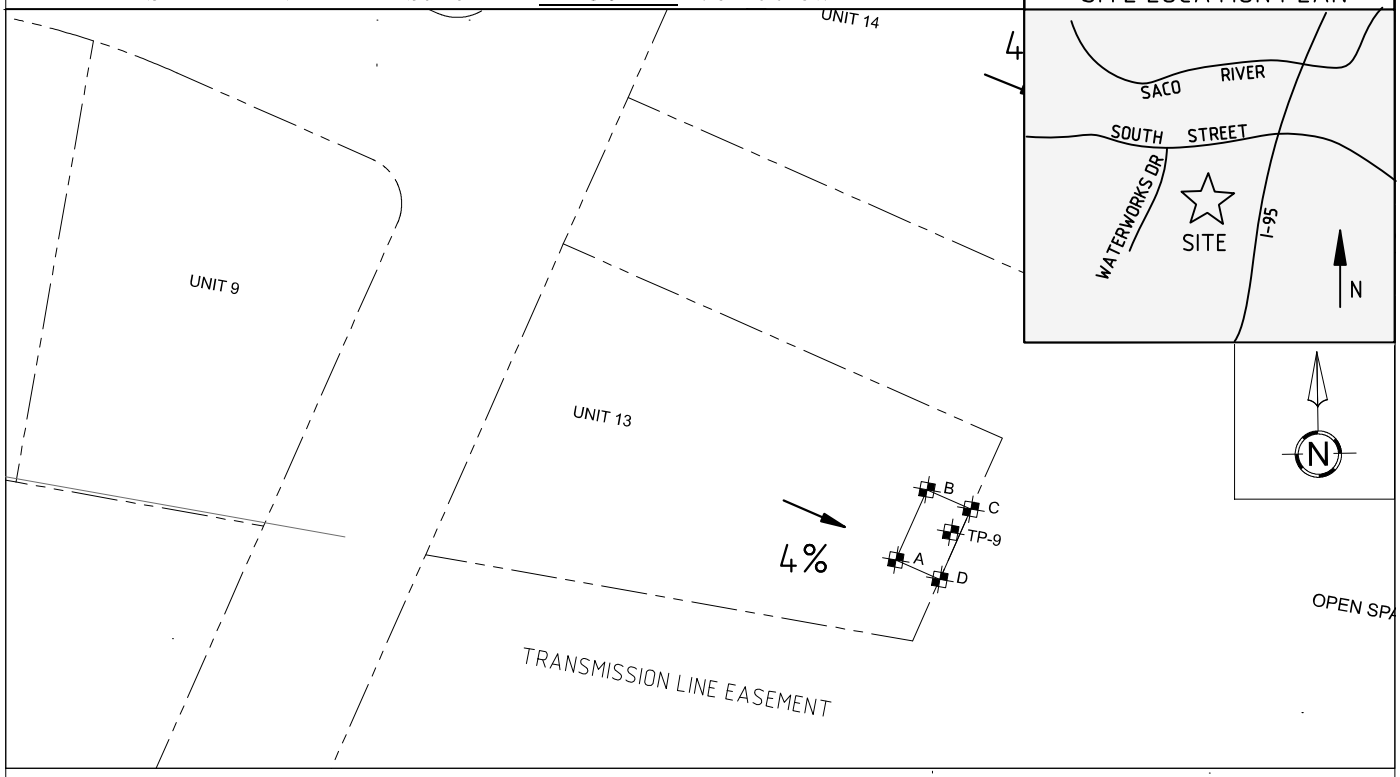
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

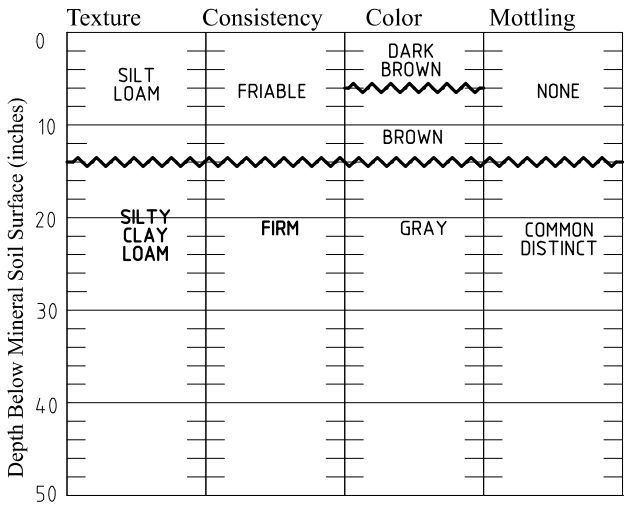


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-9 ☒ Test Pit ☐ Boring

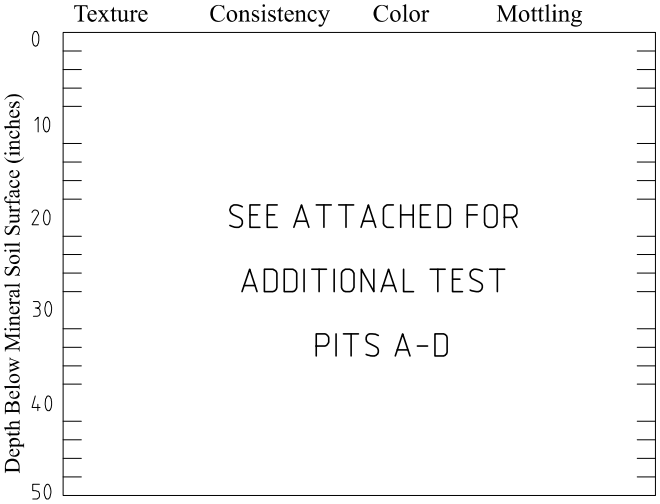
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

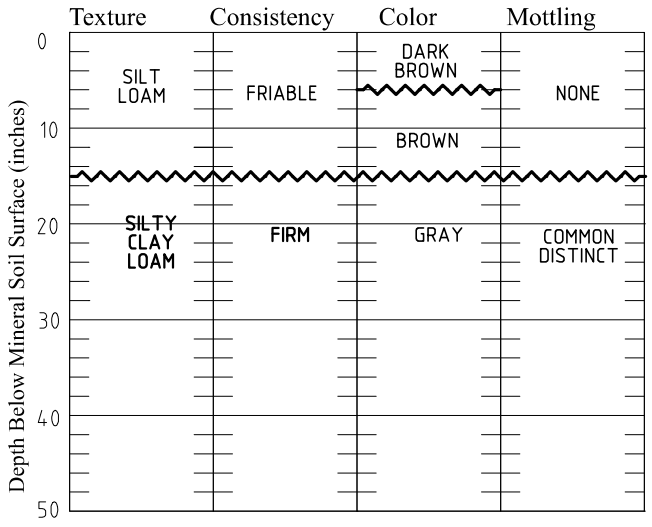
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-9 A ☐ Test Pit ☒ Boring

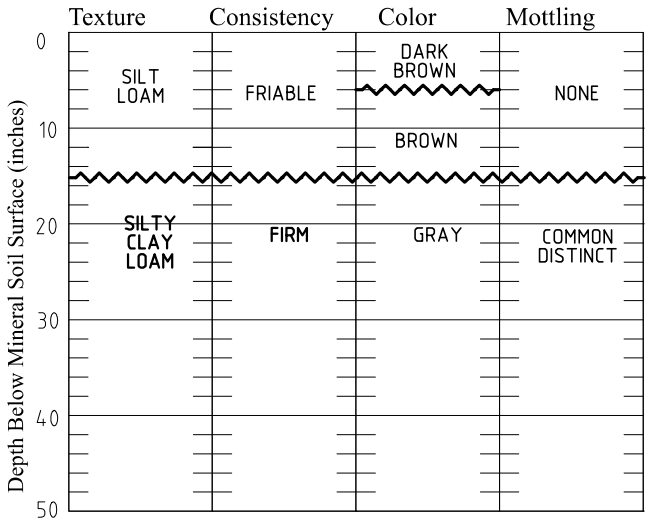
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-9 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

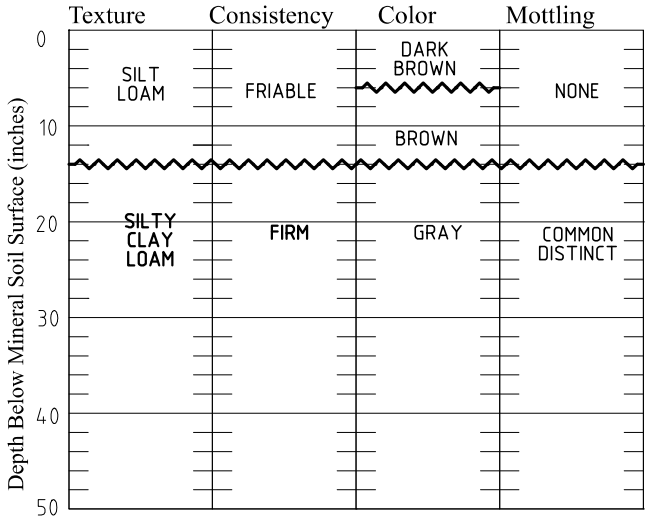


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-9 C ☐ Test Pit ☒ Boring

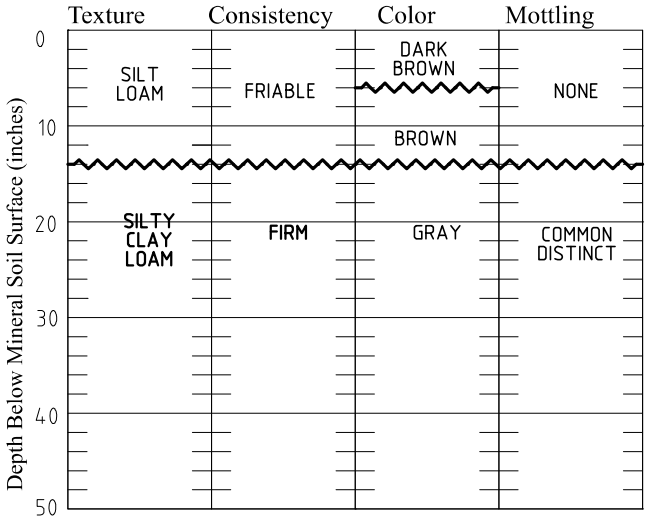
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-9 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

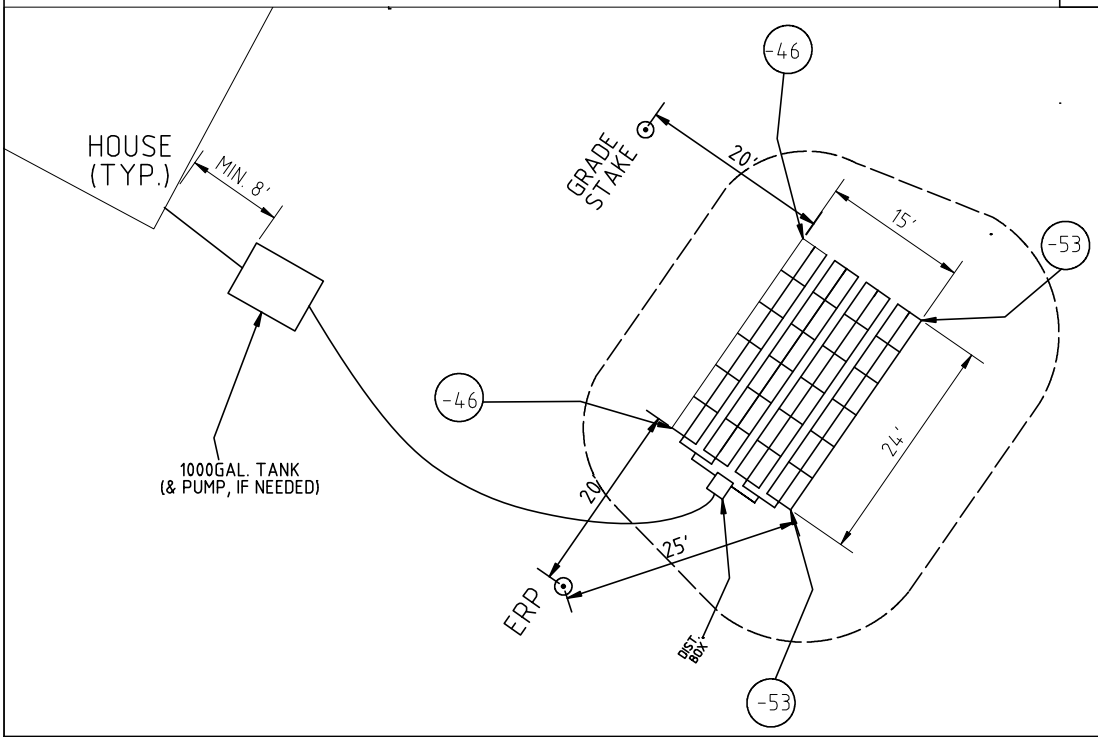
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

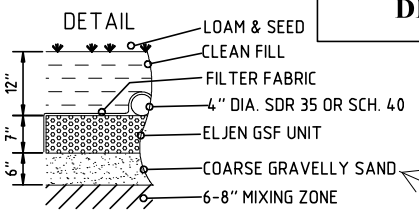
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

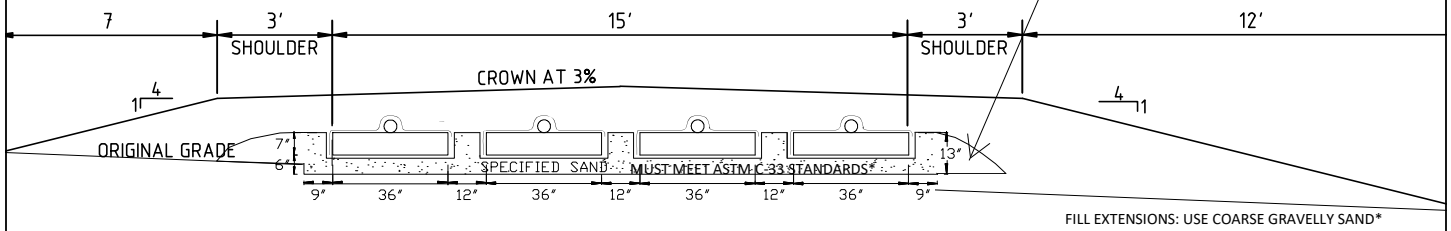
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-42	-35	-23

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 14-15

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-10
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.10 s
Lon. 70 d 29 m 58.29 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

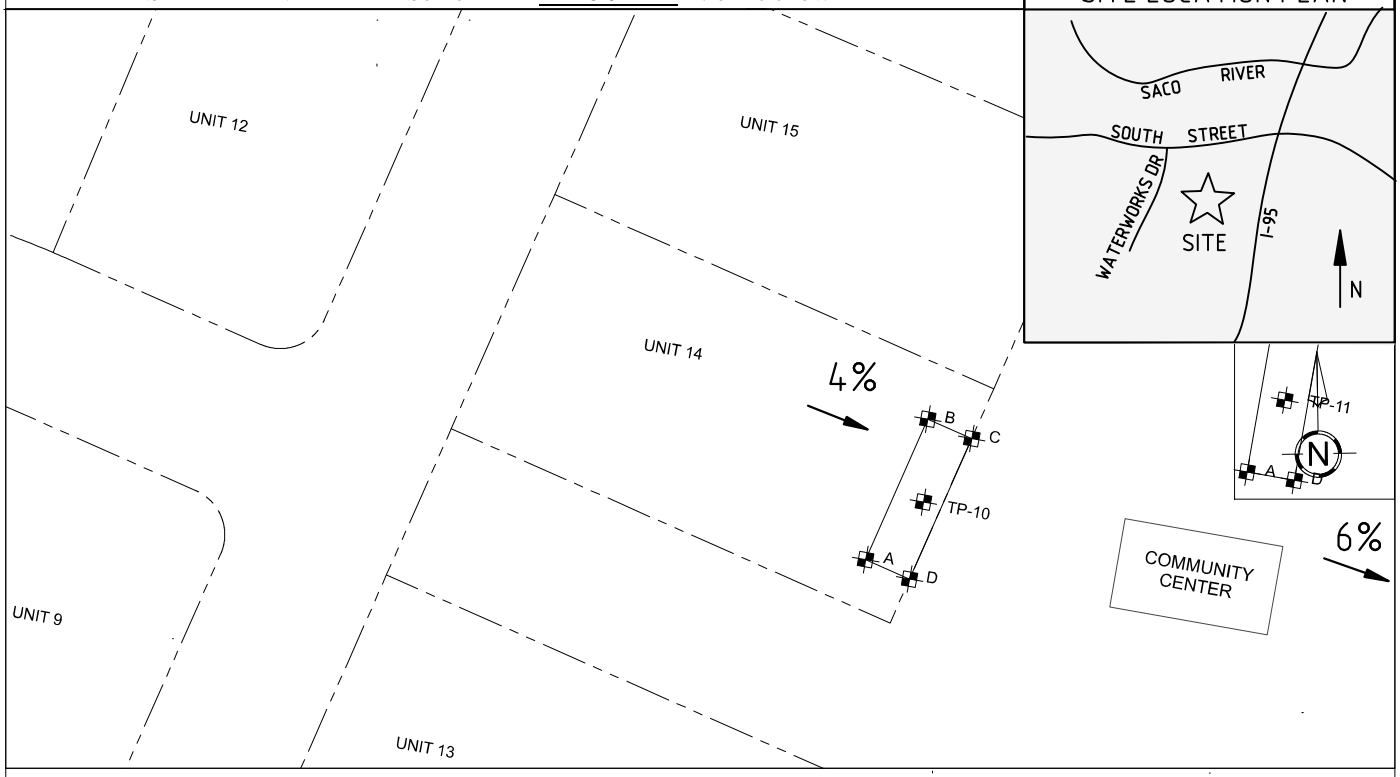
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-10 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN / GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

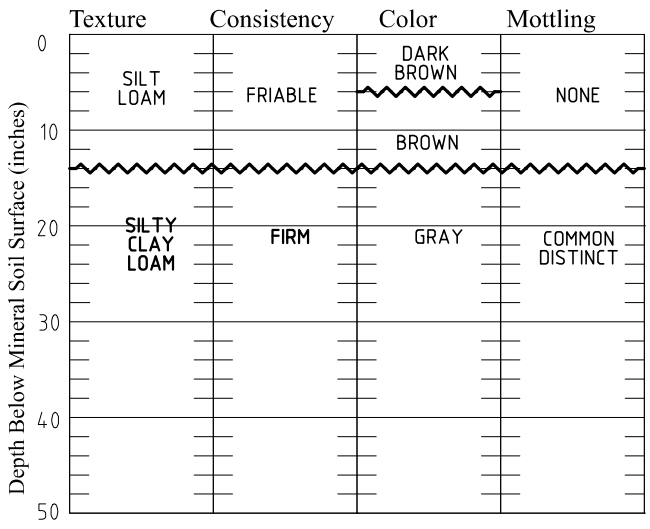
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-10 A ☐ Test Pit ☒ Boring

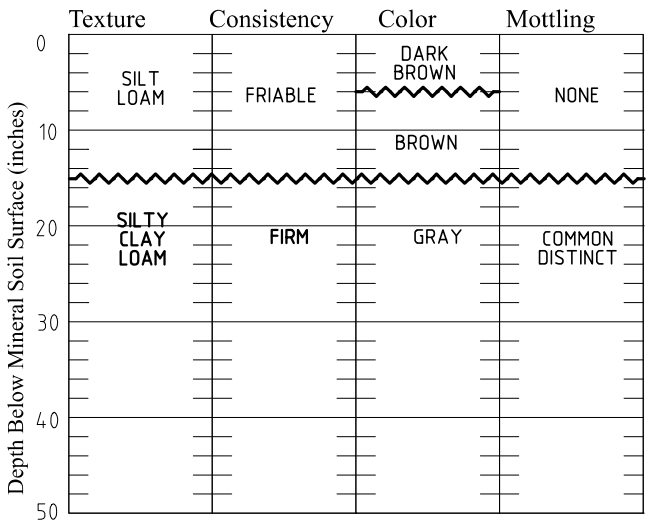
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-10 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

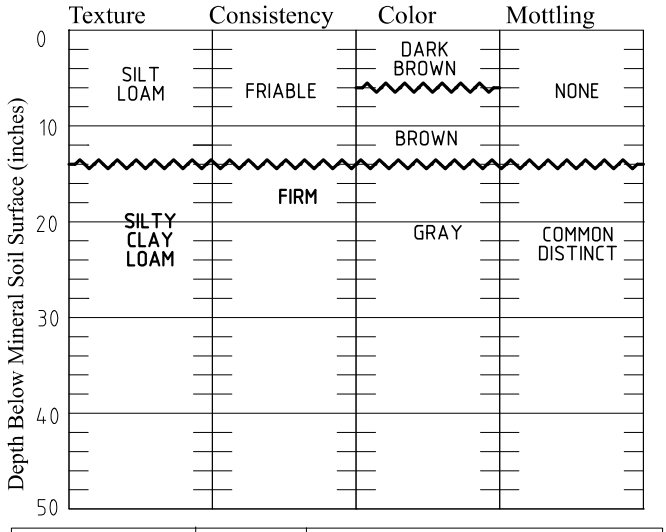


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-10 C ☐ Test Pit ☒ Boring

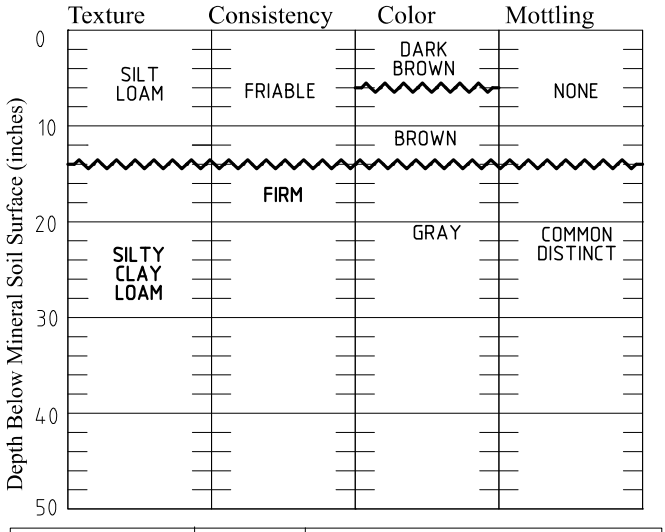
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-10 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Lem

SE #: 419

Date: 3/24/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

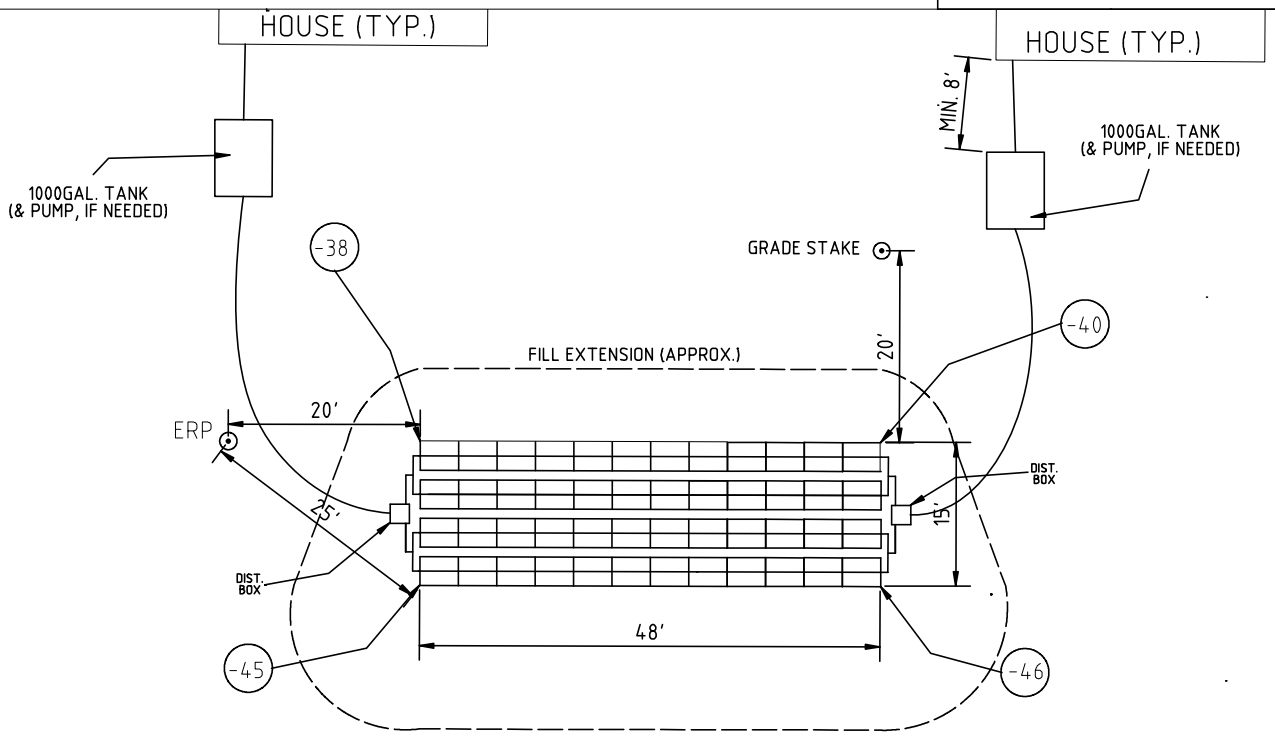
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

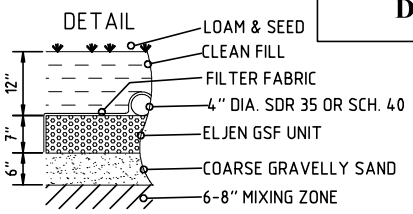
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

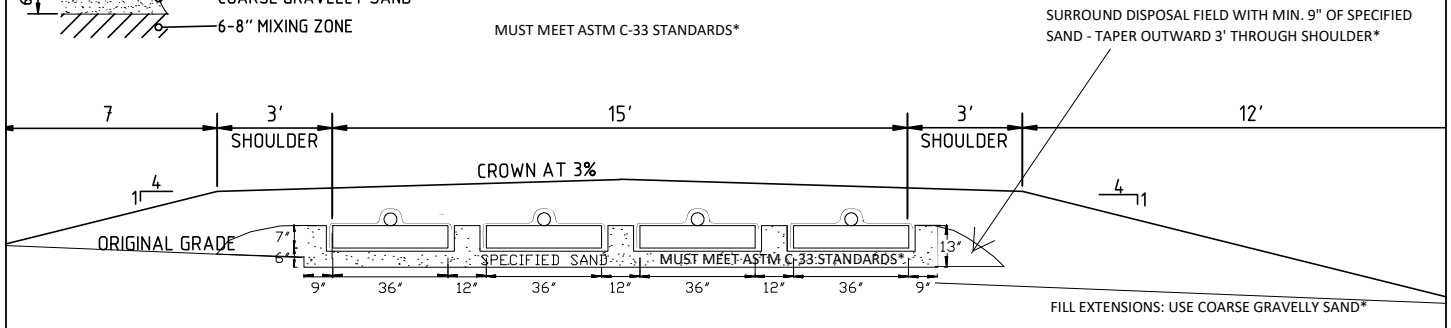


- × INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED
- × ALL LAND TO BE FILLED MUST BE SCARIFIED
- × OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-34	-27	-15

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 16-17

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-12
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.55 s
Lon. 70 d 29 m 57.27 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

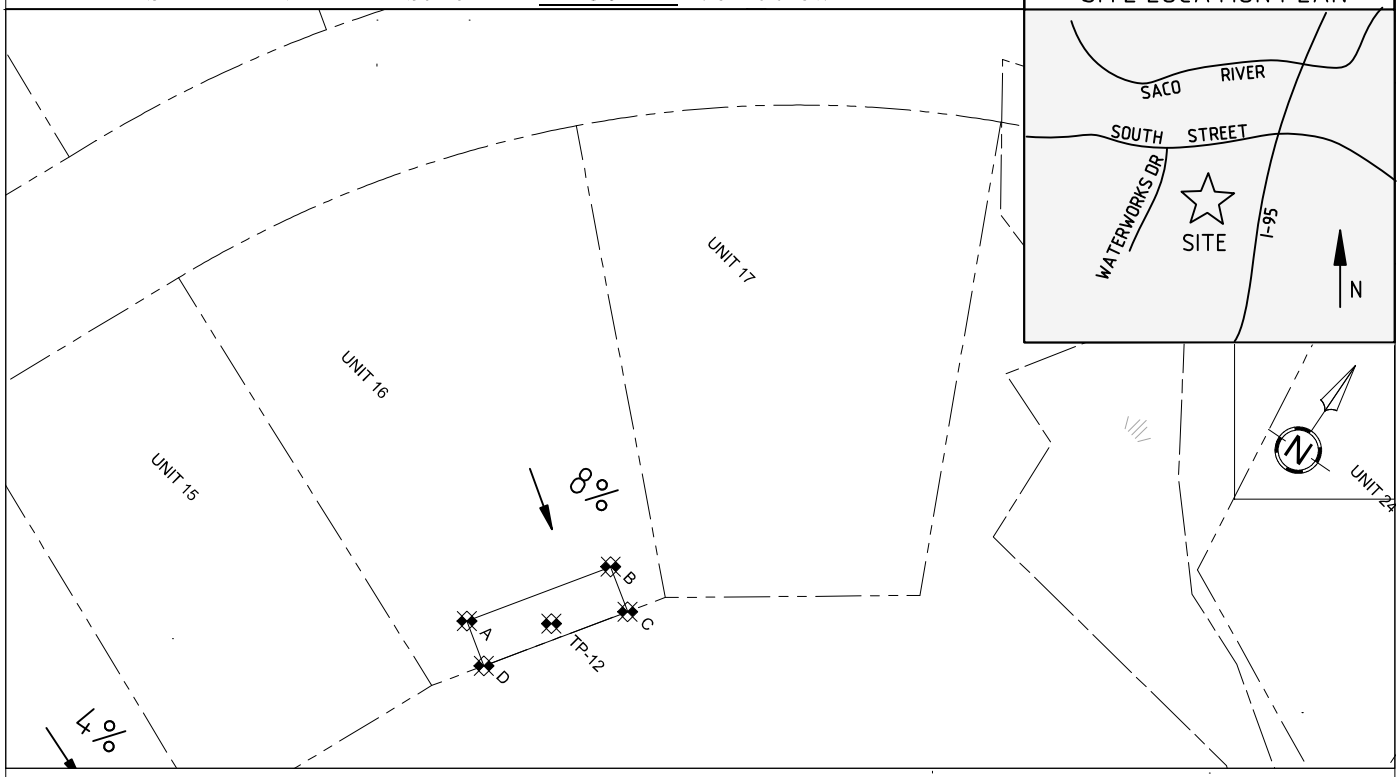
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-12 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile: _____ / Condition: _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

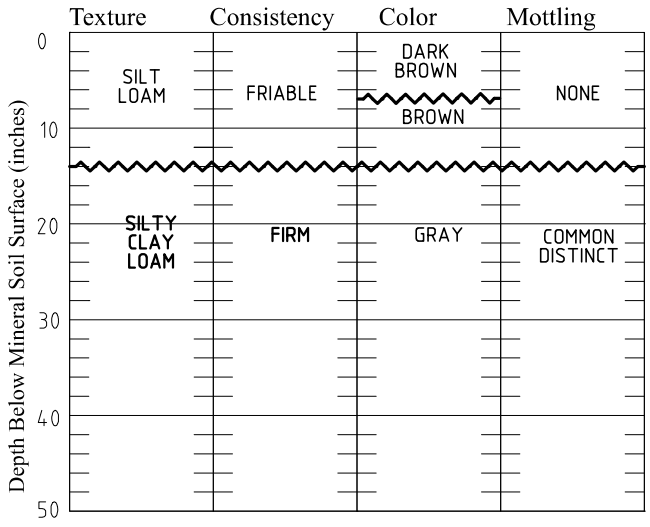
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-12 A ☐ Test Pit ☒ Boring

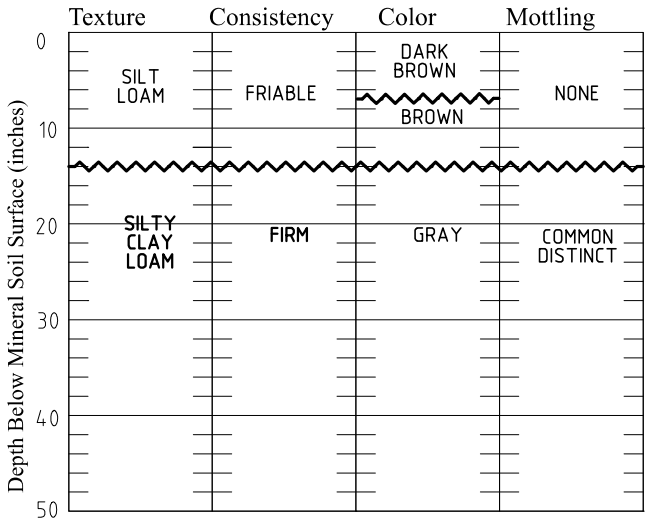
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-12 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

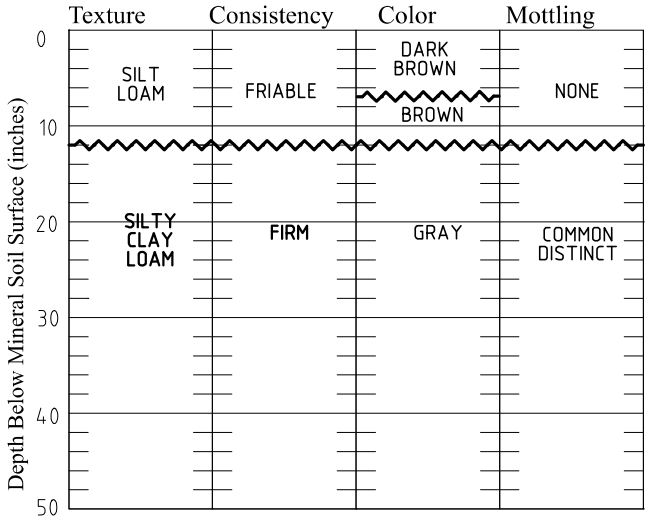


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-12 C ☐ Test Pit ☒ Boring

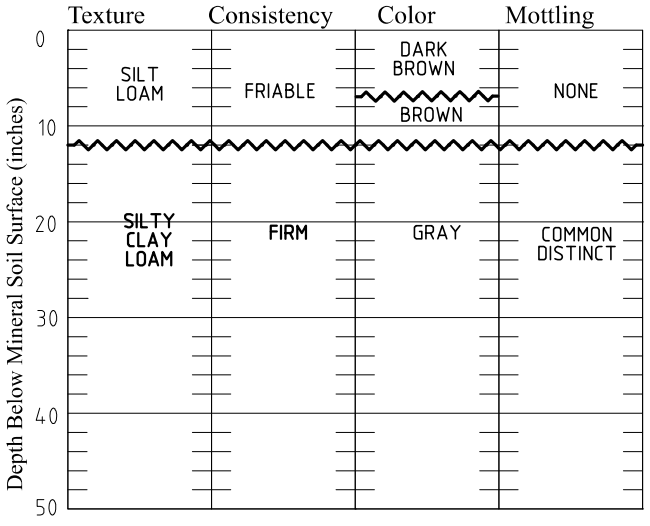
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-12 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

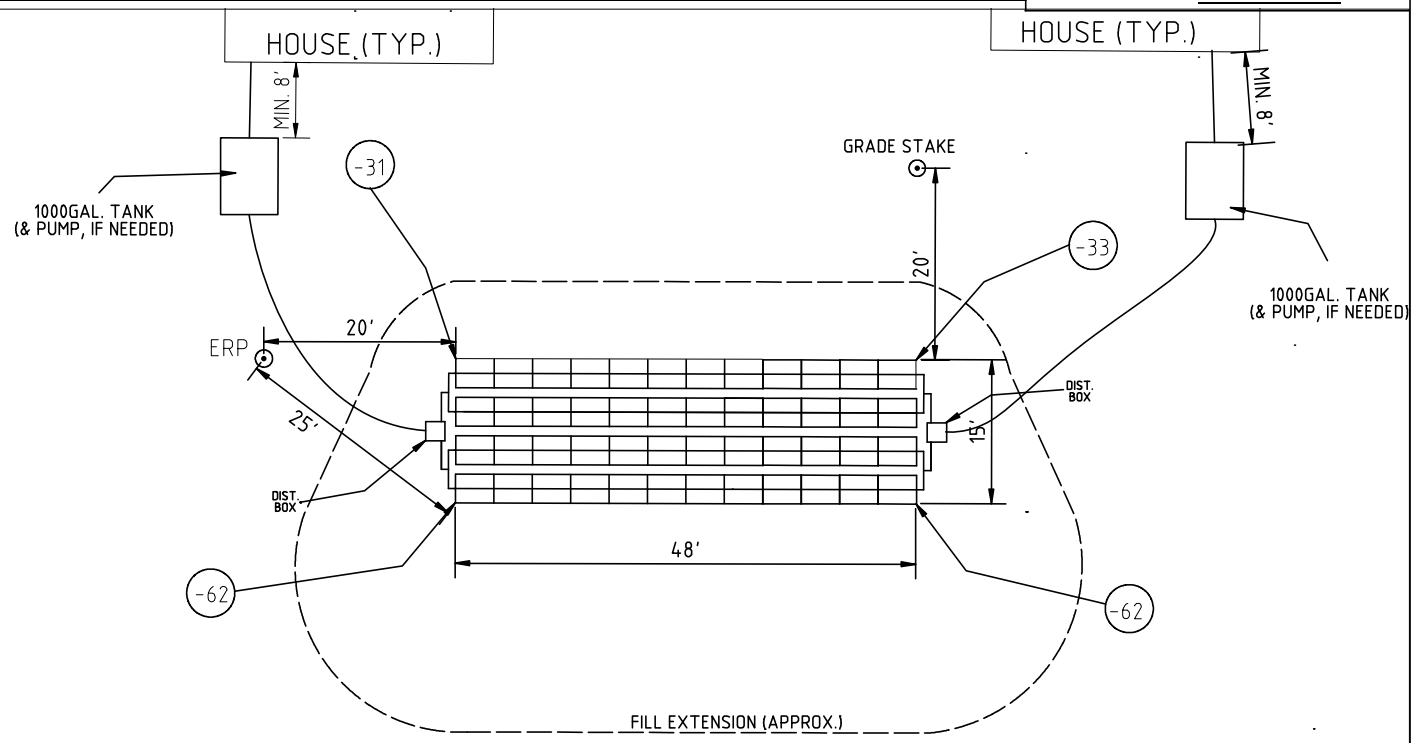
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

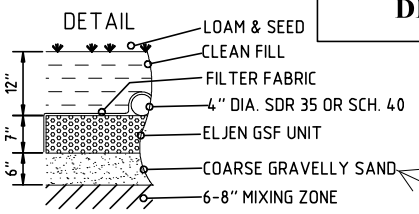
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

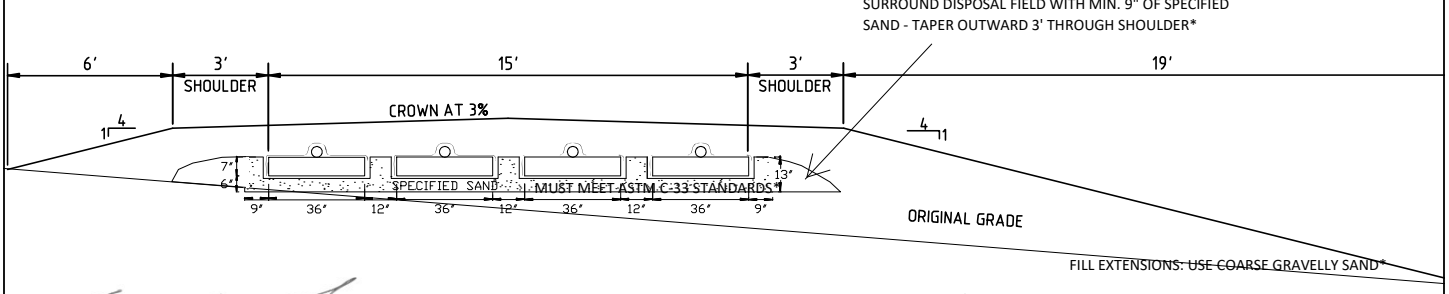
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	25	-25	-18	-6



Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 19-20

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-8
Depth 16 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 40.24 s
Lon. 70 d 29 m 59.83 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-8 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

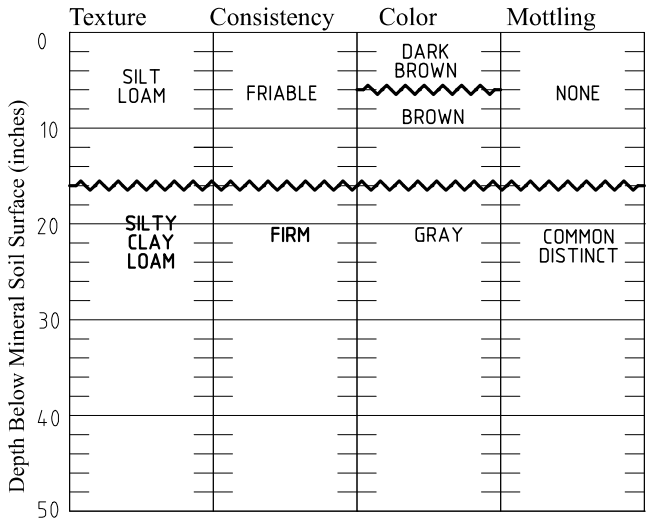
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-8 A ☐ Test Pit ☒ Boring

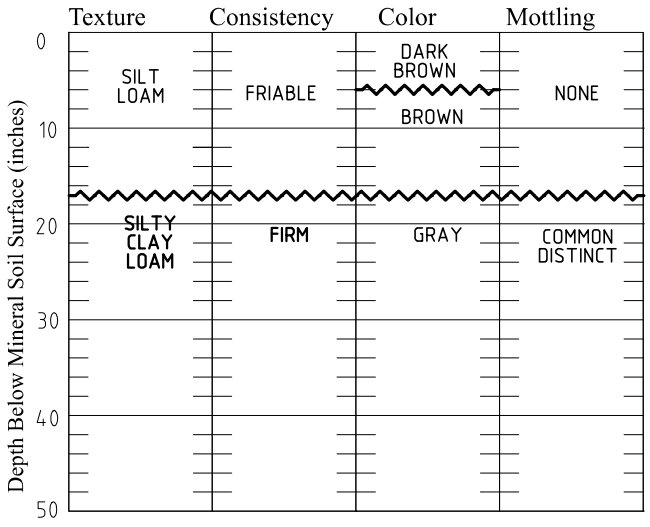
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-8 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

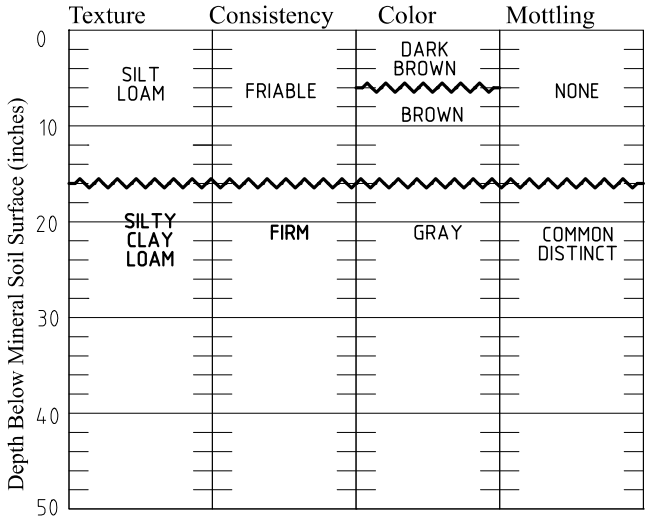


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-8 C ☐ Test Pit ☒ Boring

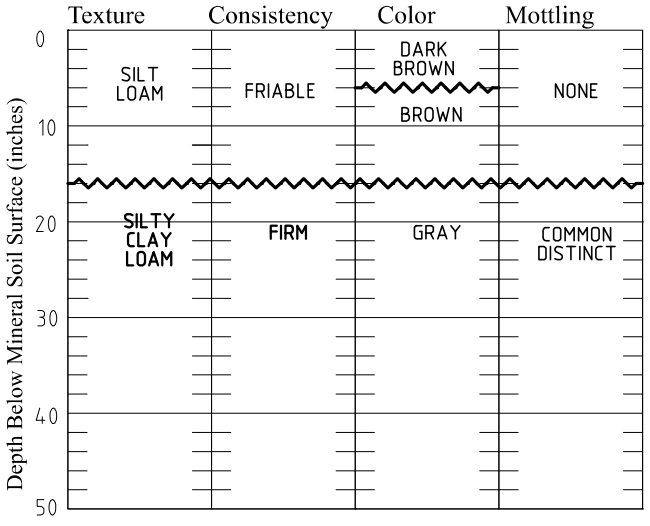
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-8 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

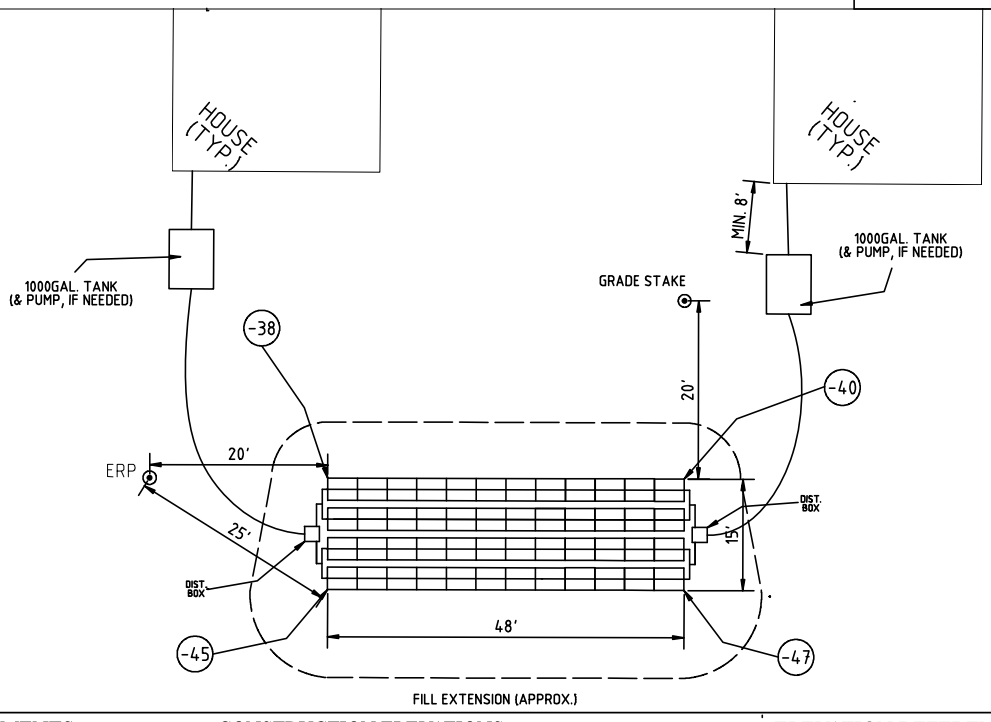
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

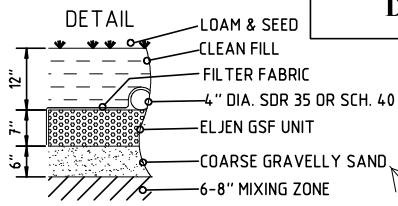
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

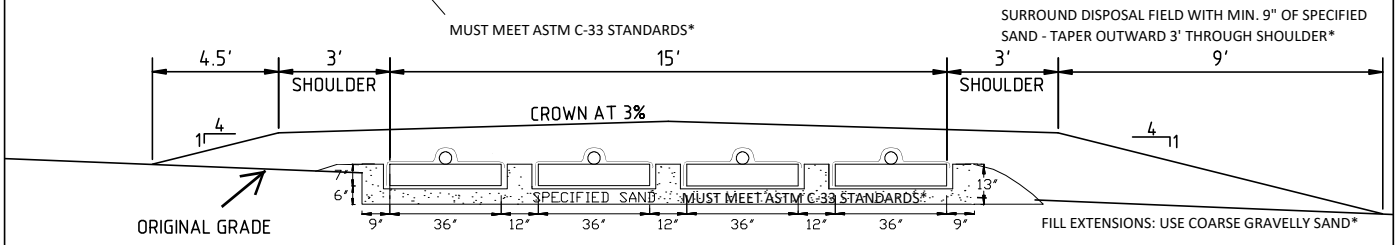
Vertical 1" = 6 ft.



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
22	15	-42	-35	-23

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

Page 3 of 3
HHE-200 Rev. 8/01

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 21-22

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / AIII
at Observation Hole # TP-13
Depth 16 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

SIZED LARGE PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 41.86 s
Lon. 70 d 29 m 54.3 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

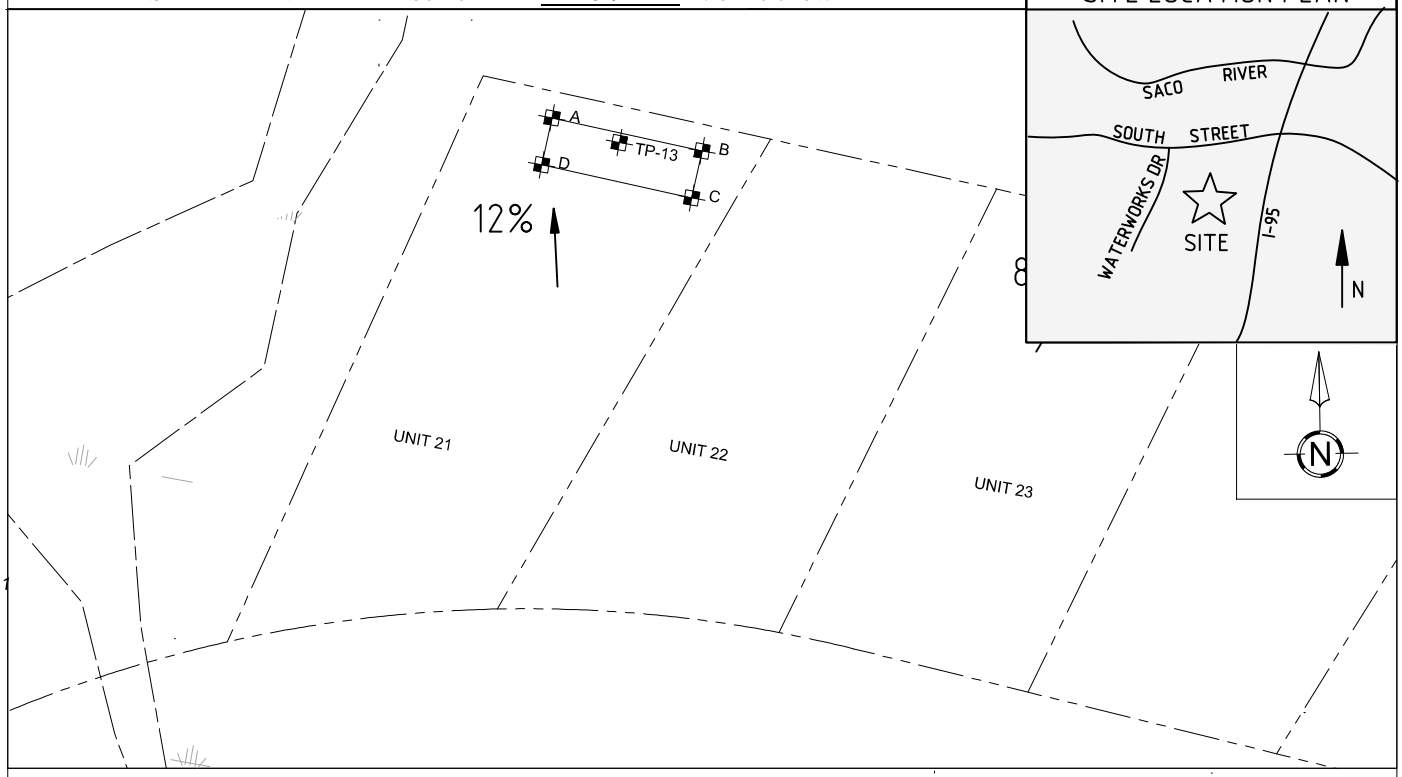
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-13 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SANDY LOAM	FRIABLE	DARK BROWN	NONE
10–20			BROWN	
20–50	LEDGE			

Soil Classification	Slope	Limiting Factor	
Profile: 2 / Condition: AIII	12 %	16 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

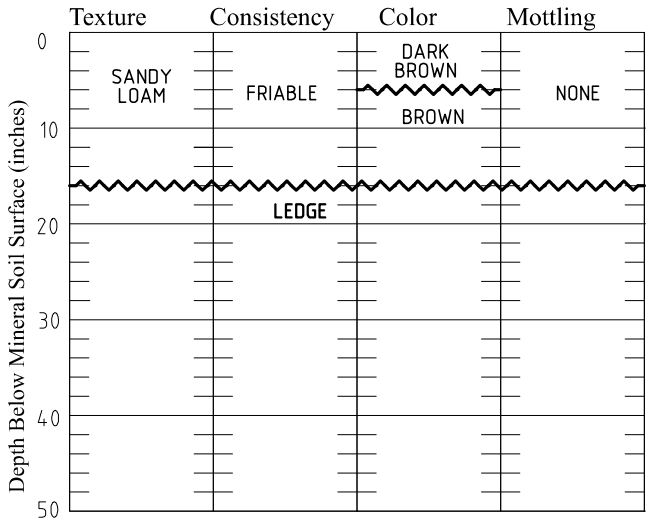
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-13 A ☐ Test Pit ☒ Boring

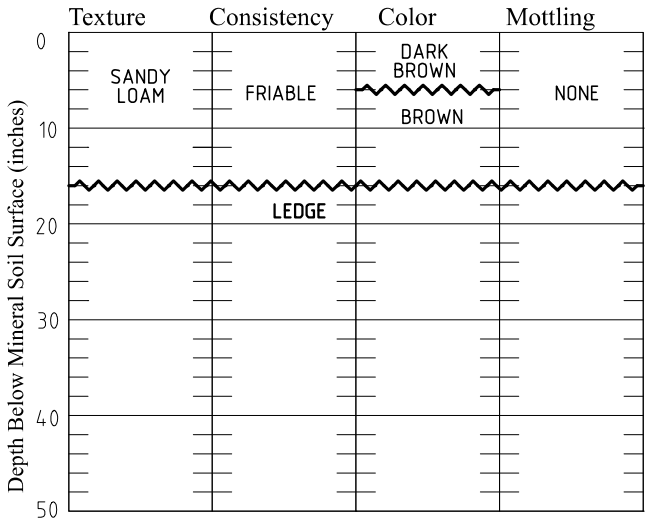
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	16 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole TP-13 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

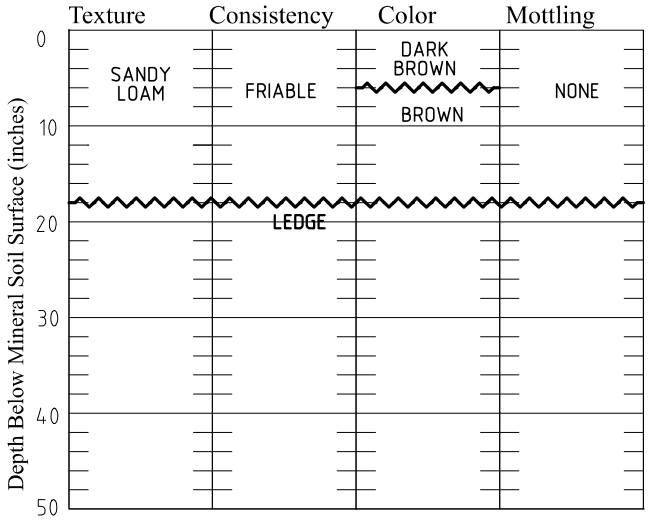


Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	16 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-13 C ☐ Test Pit ☒ Boring

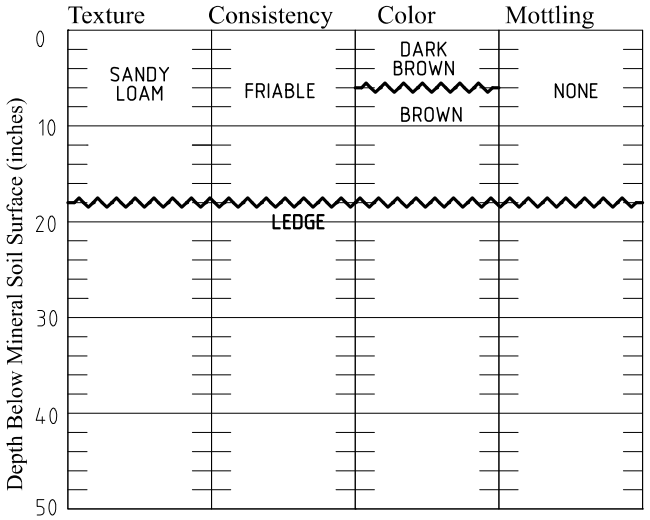
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	18 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole TP-13 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	18 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/24/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

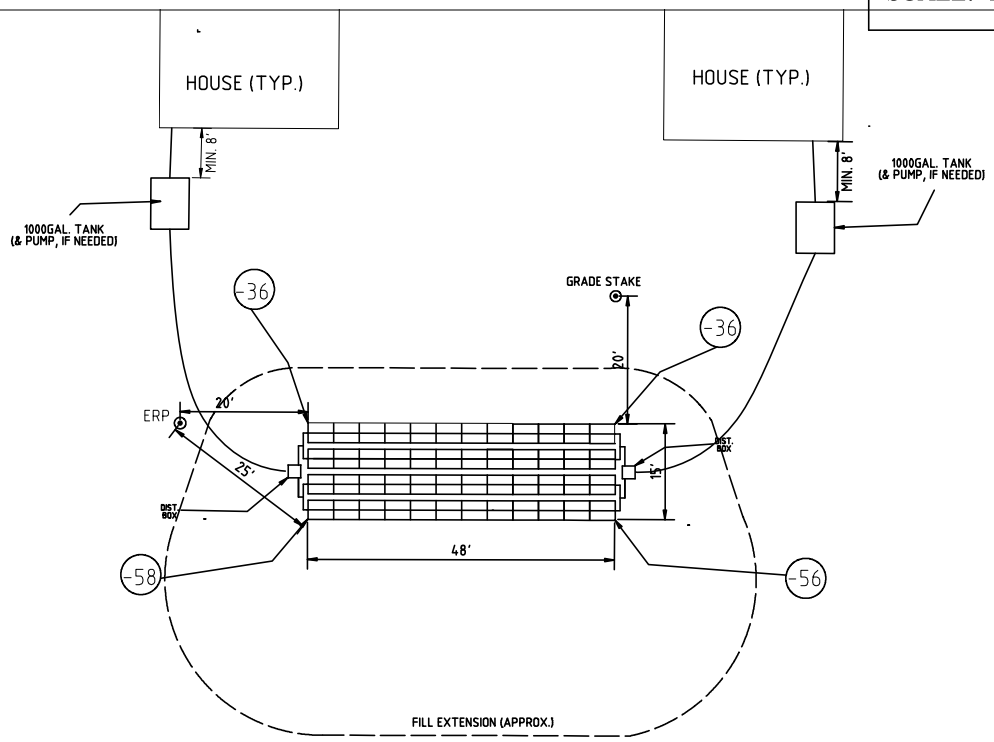
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

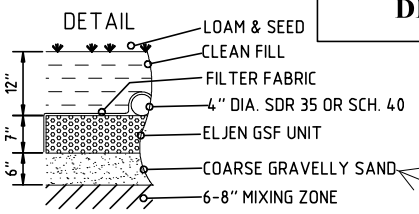
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 48" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

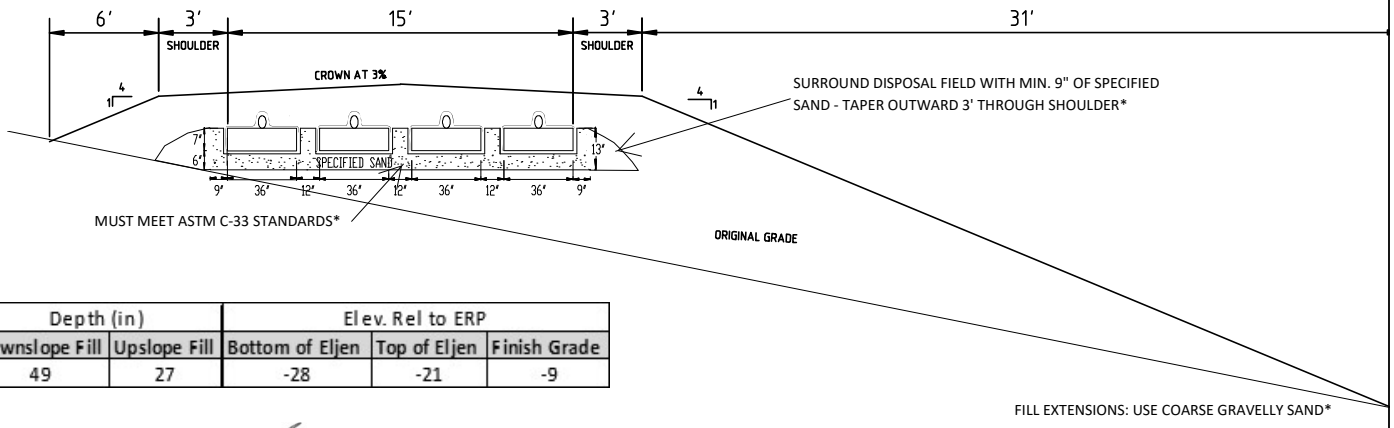
× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
49	27	-28	-21	-9

FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOT 23

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: _____
☐ 3. Other: _____ (specify)

Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 1107 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / AIII
at Observation Hole # TP-14
Depth 15 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

OVERSIZED PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 41.6 s
Lon. 70 d 29 m 52.16 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

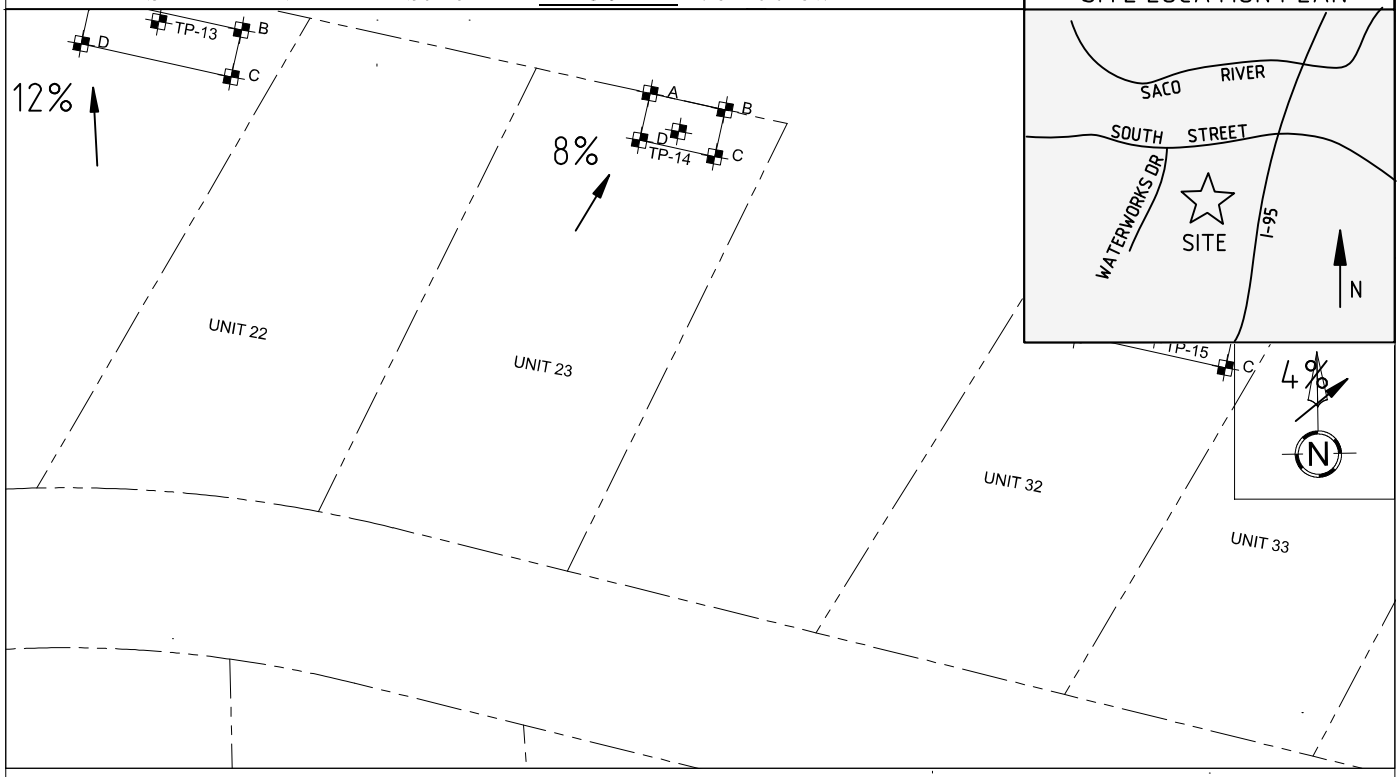
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

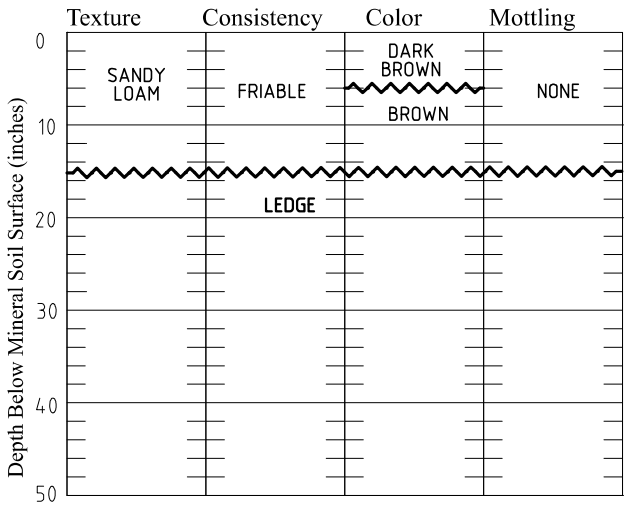


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-14 ☒ Test Pit ☐ Boring

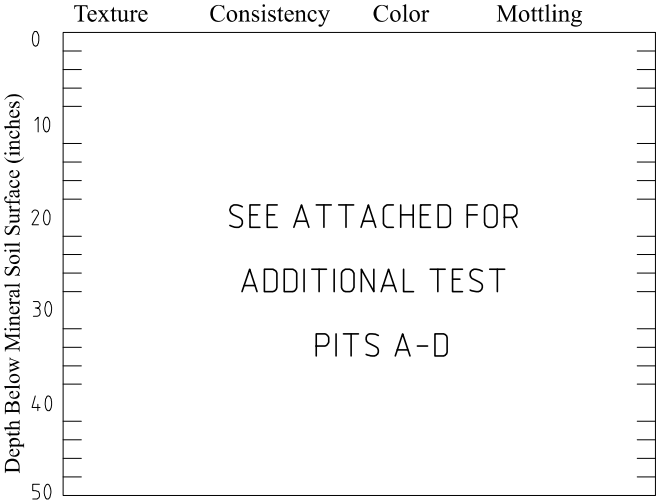
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
2	AIII	8 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

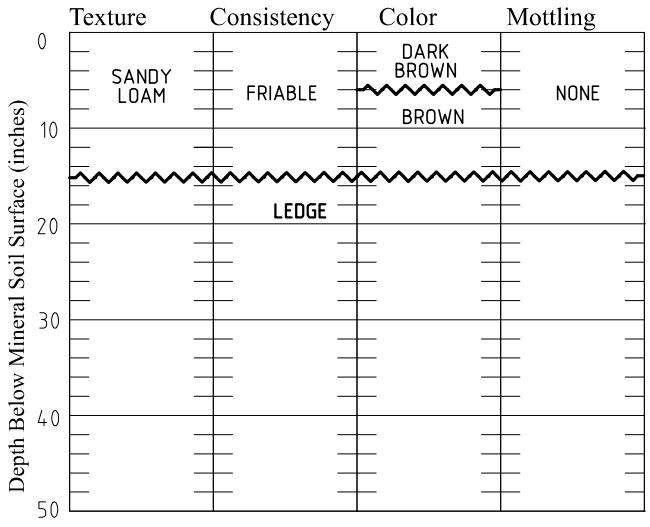
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-14 A ☐ Test Pit ☒ Boring

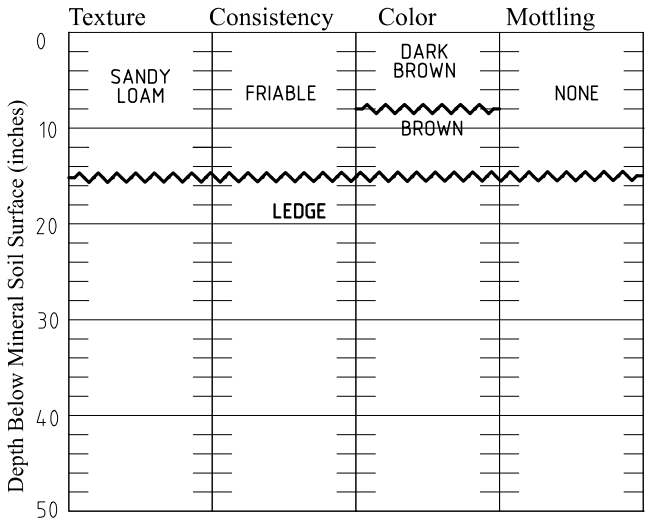
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	6 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole TP-14 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

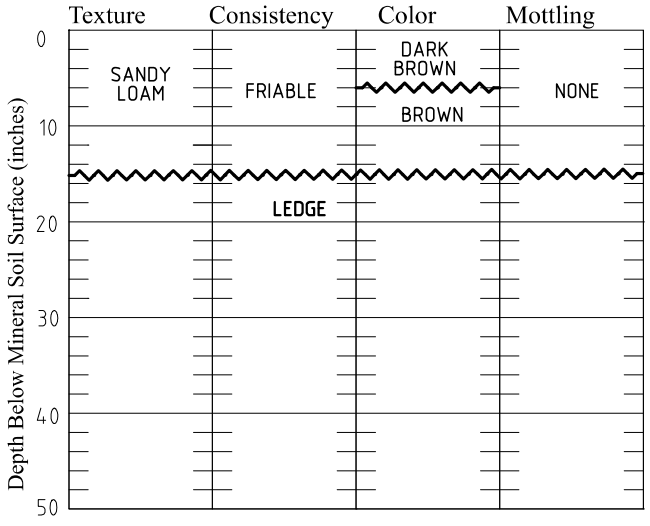


Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	6 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-14 C ☐ Test Pit ☒ Boring

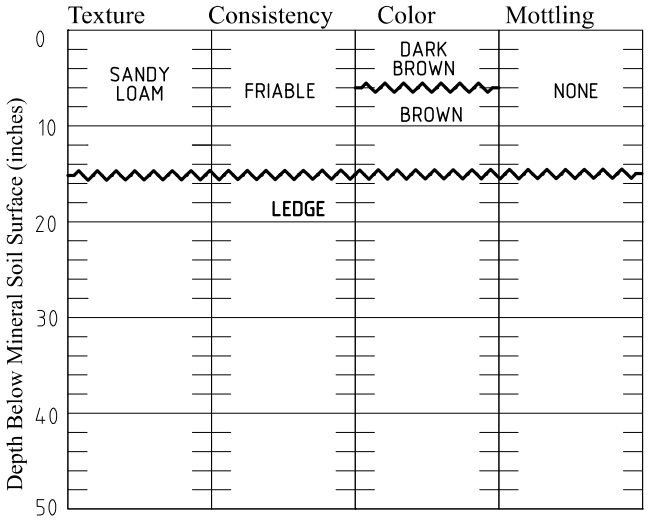
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	8 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole TP-14 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	8 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/24/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

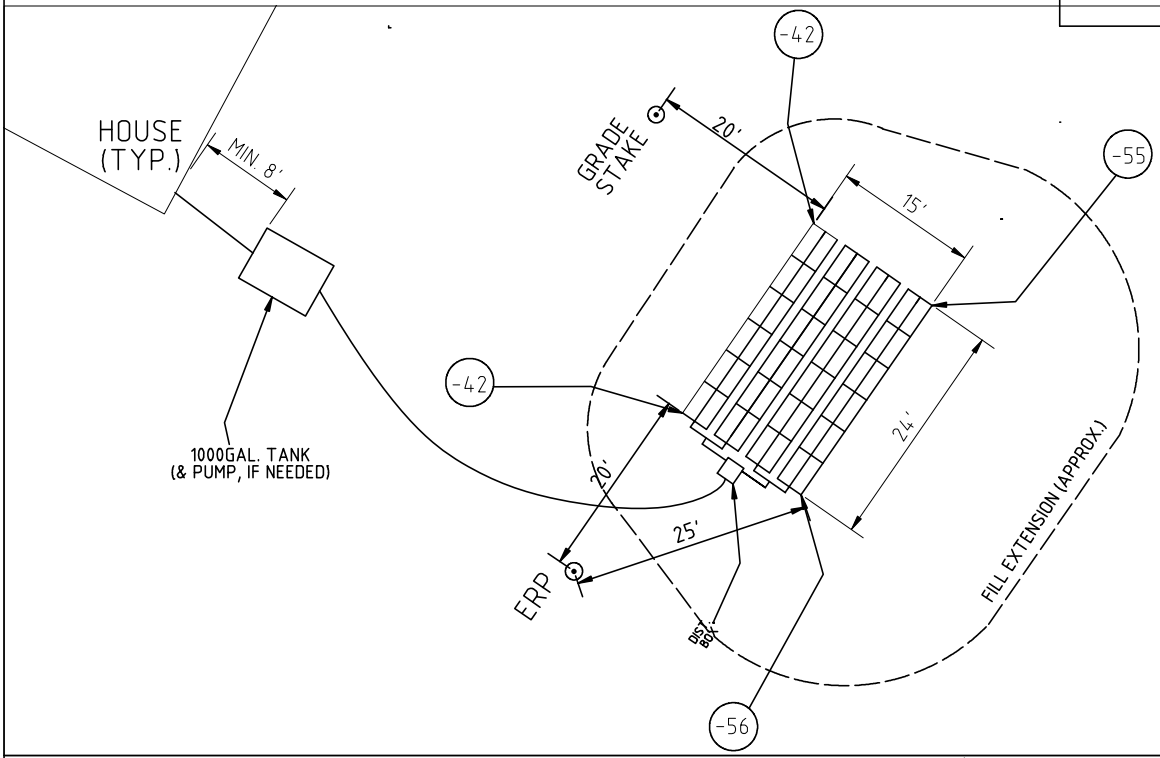
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

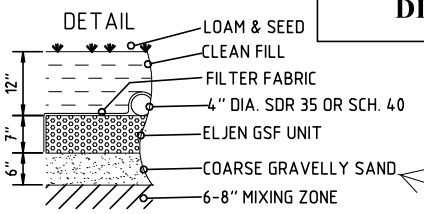
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

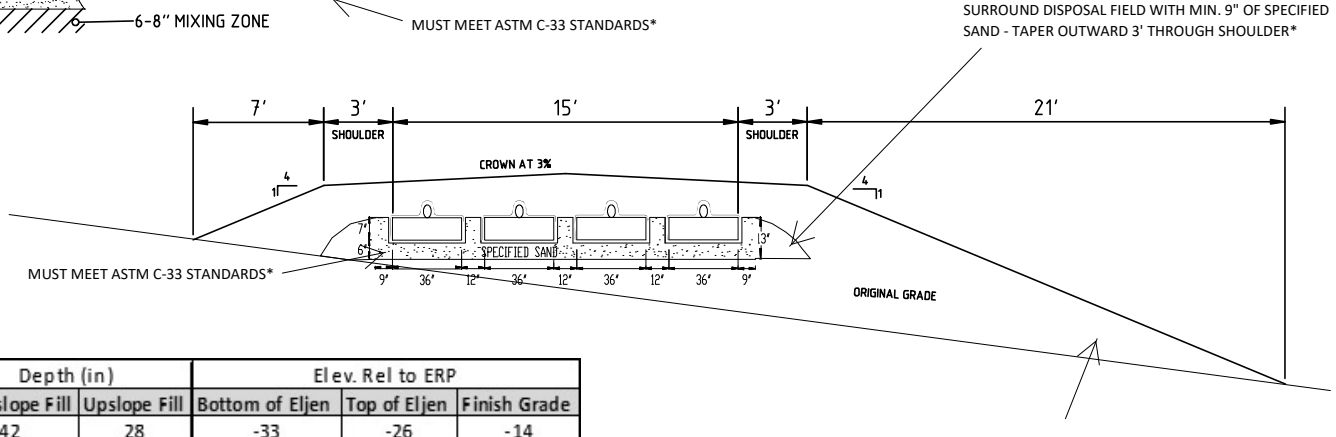
× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
42	28	-33	-26	-14

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 24-26

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-20
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 38.50 s
Lon. 70 d 29 m 53.3 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

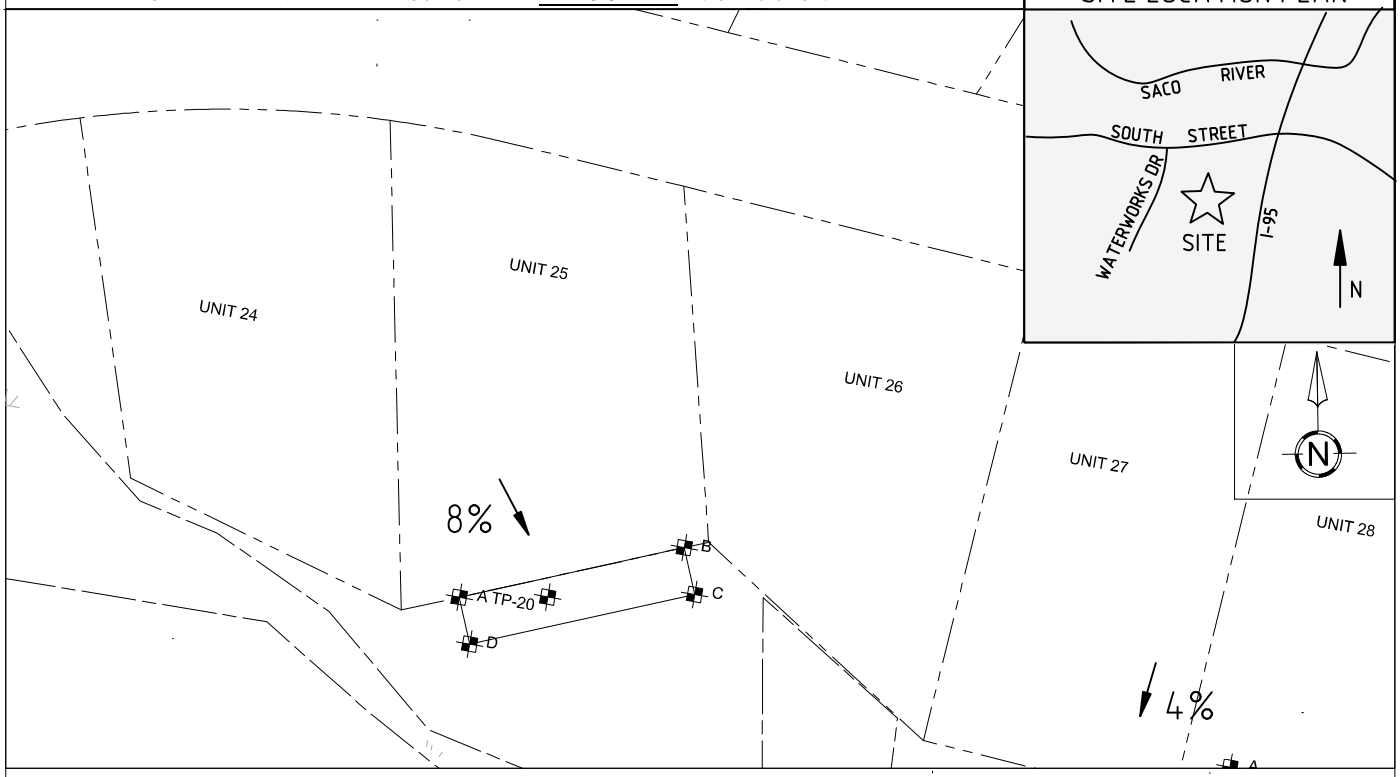
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

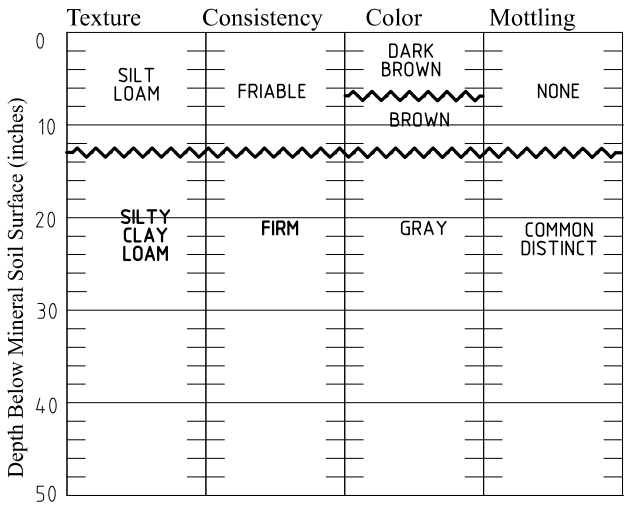
SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-20 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Texture Consistency Color Mottling

Depth Below Mineral Soil Surface (inches): 0, 10, 20, 30, 40, 50

SEE ATTACHED FOR ADDITIONAL TEST PITS A-D

Soil Classification		Slope	Limiting Factor	
_____	_____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

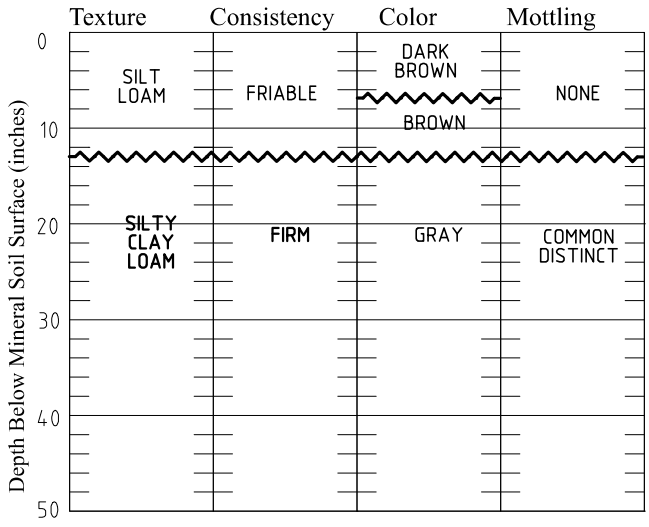
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-20 A ☐ Test Pit ☒ Boring

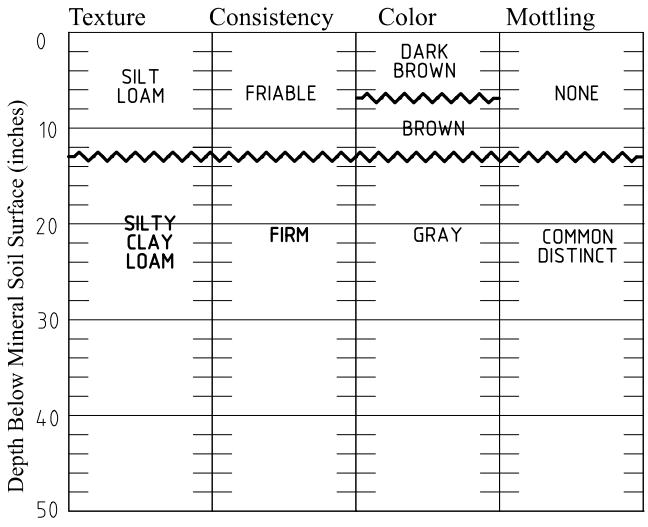
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-20 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

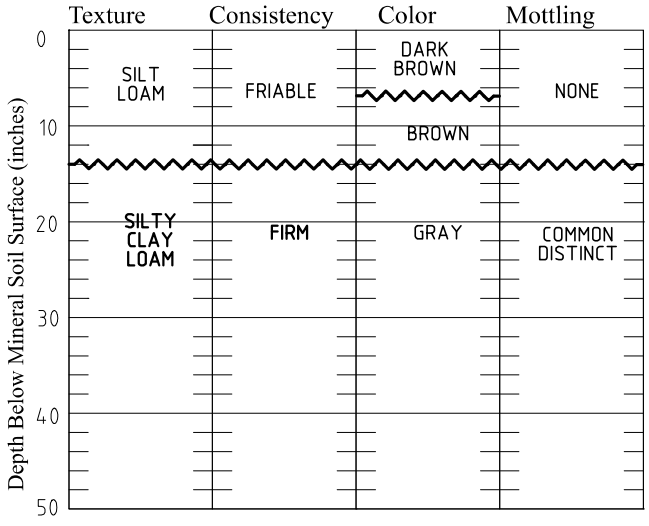


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-20 C ☐ Test Pit ☒ Boring

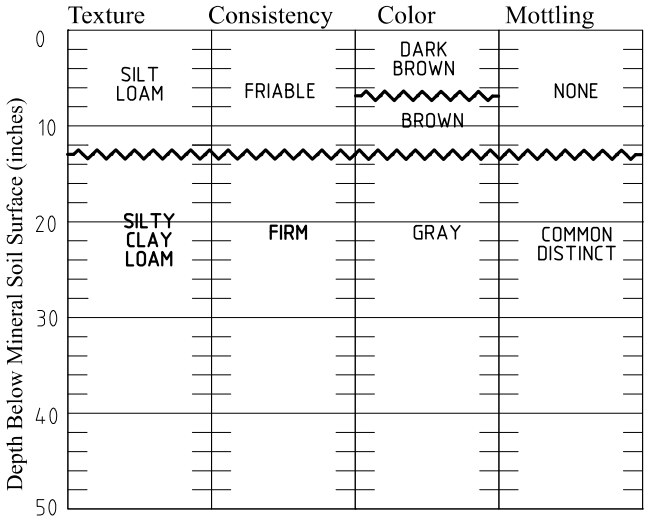
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-20 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

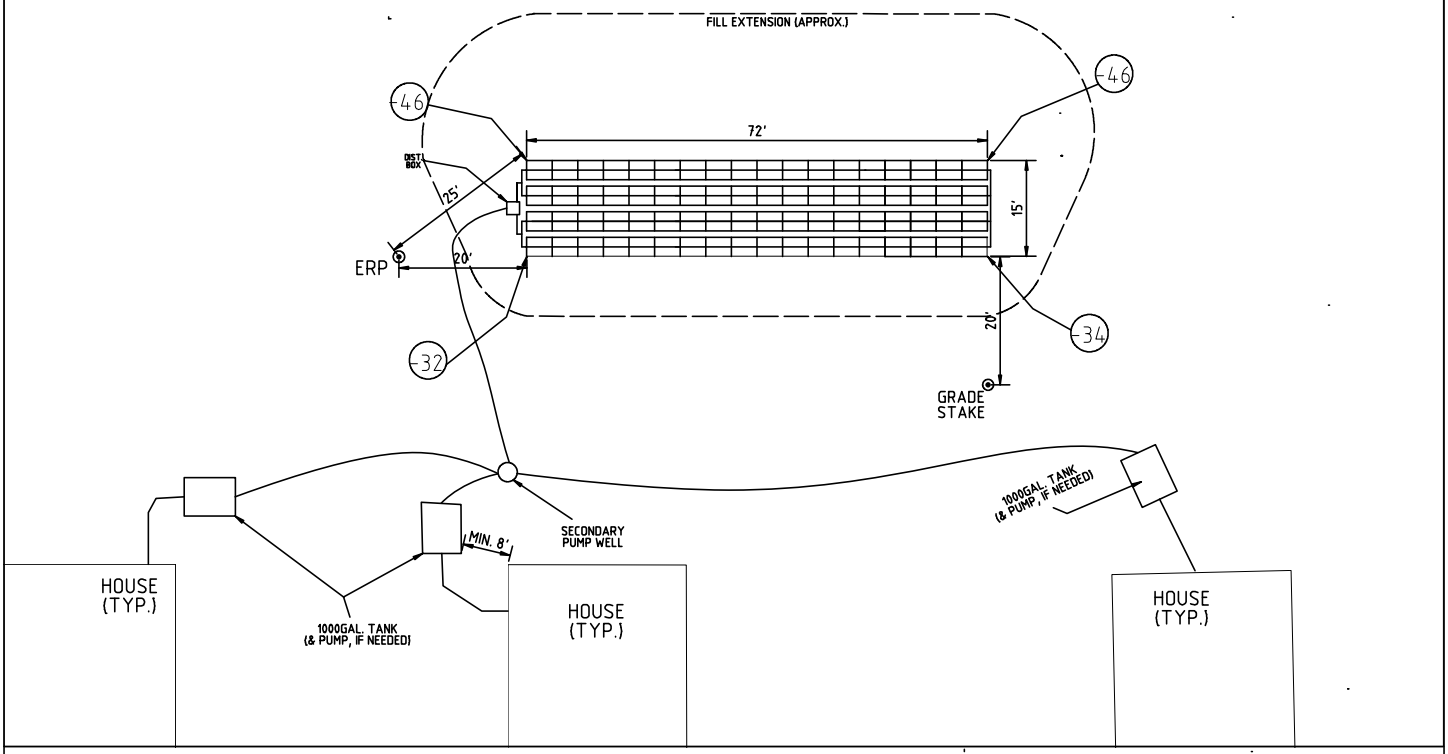
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

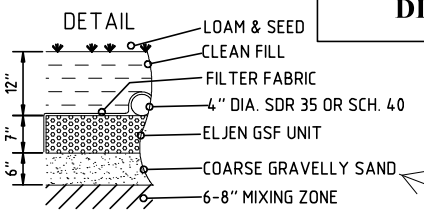
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 58" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

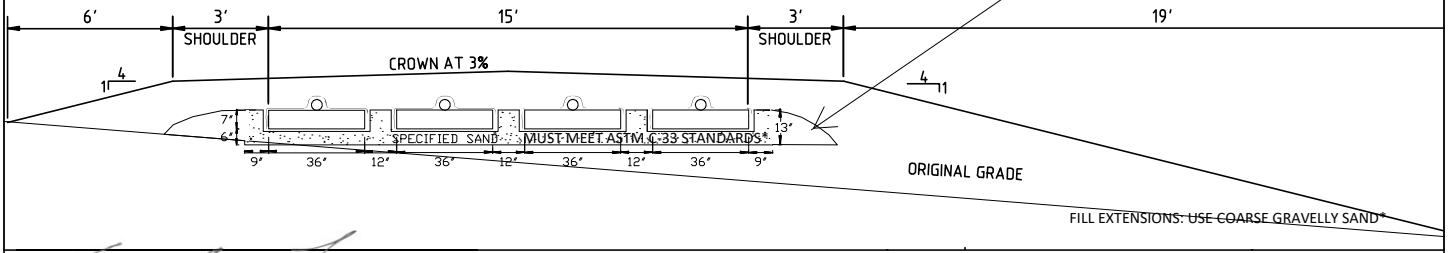
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	25	-26	-19	-7

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



Site Evaluator Signature

SE # 419

Date 3/17/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 27-28

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-19
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.82 s
Lon. 70 d 29 m 50.2 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

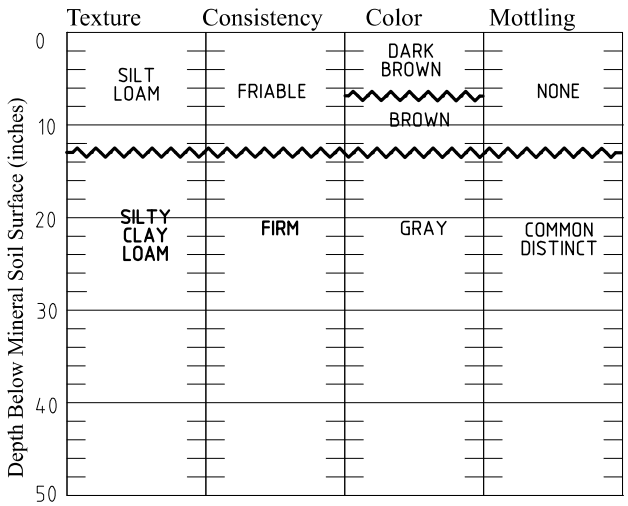


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-19 ☒ Test Pit ☐ Boring

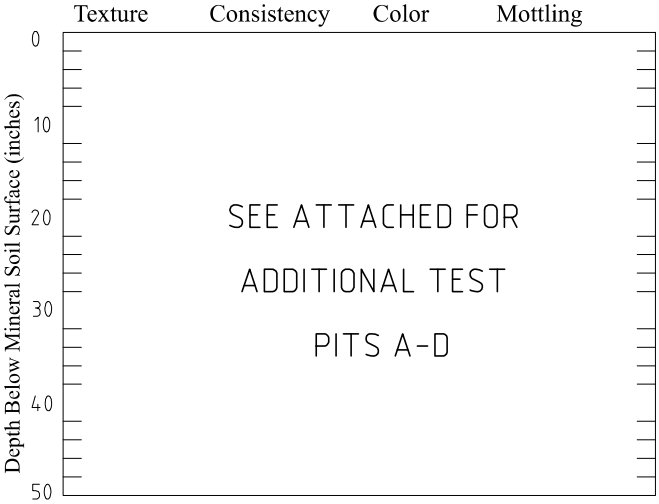
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

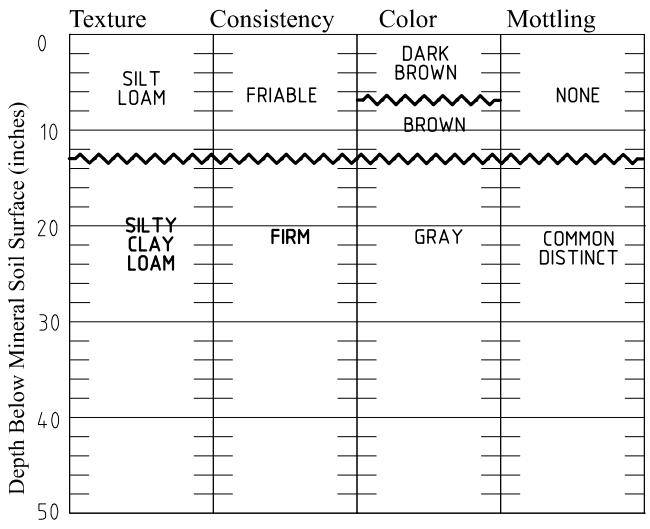
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-19 A ☐ Test Pit ☒ Boring

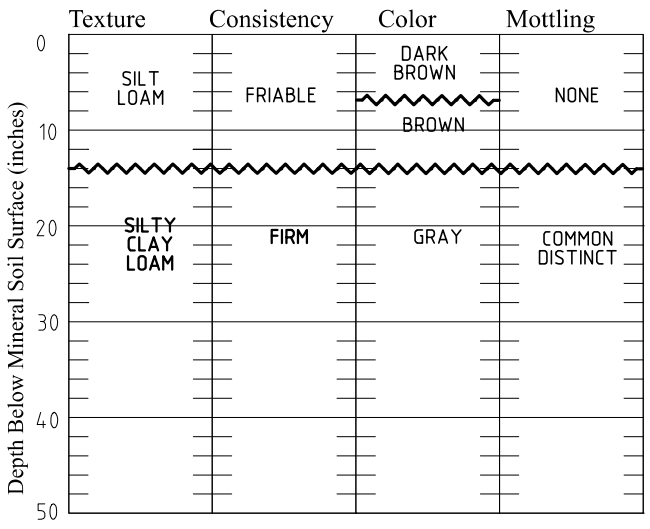
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-19 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

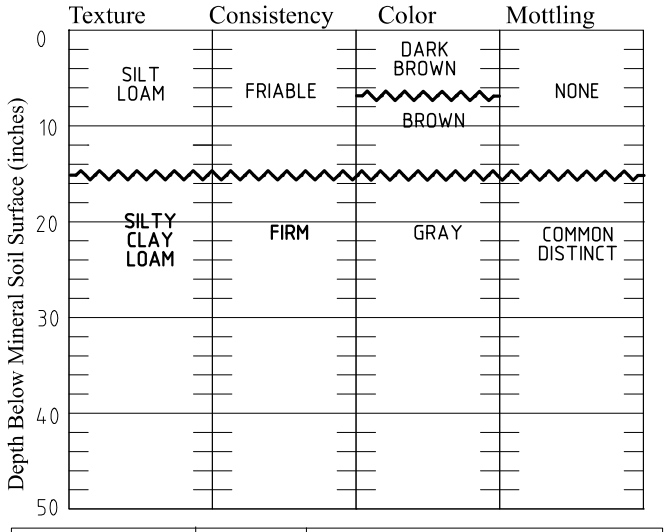


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-19 C ☐ Test Pit ☒ Boring

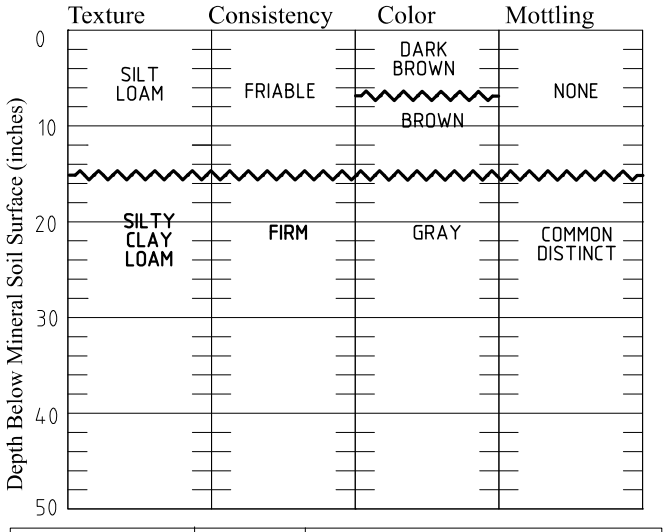
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-19 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

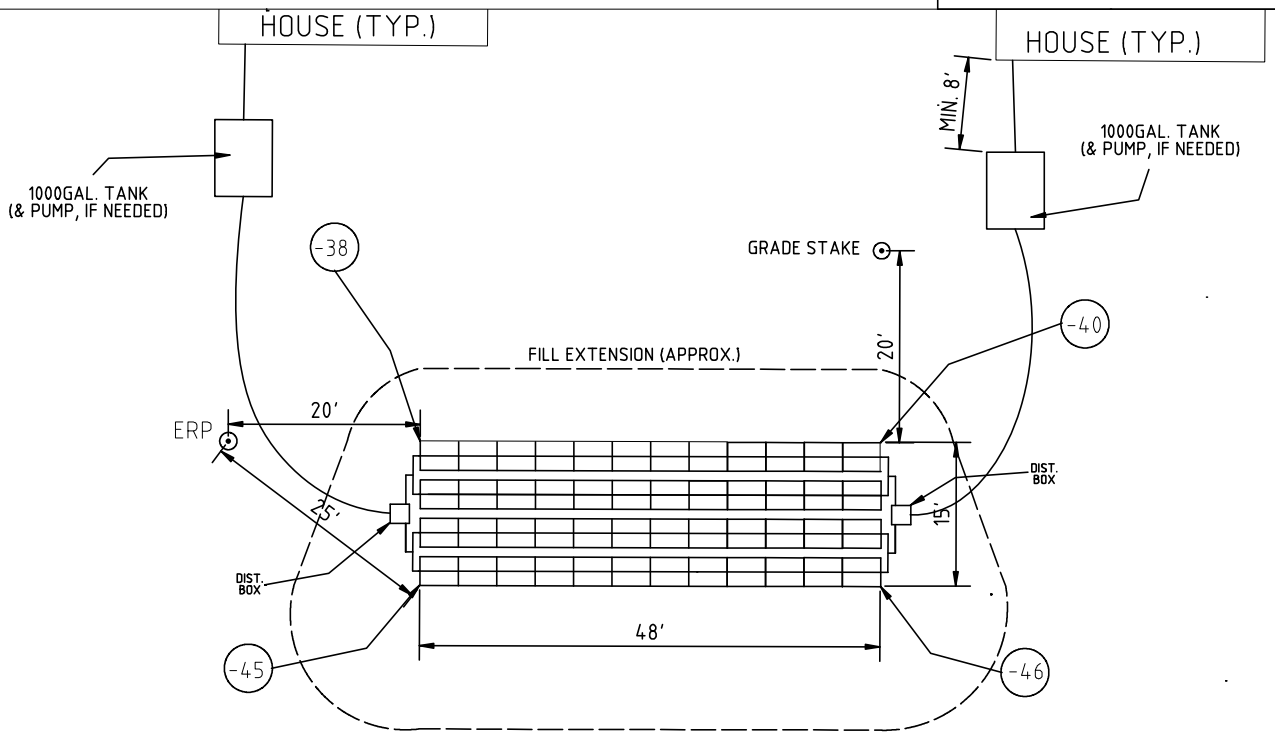
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

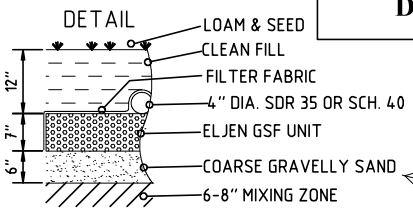
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

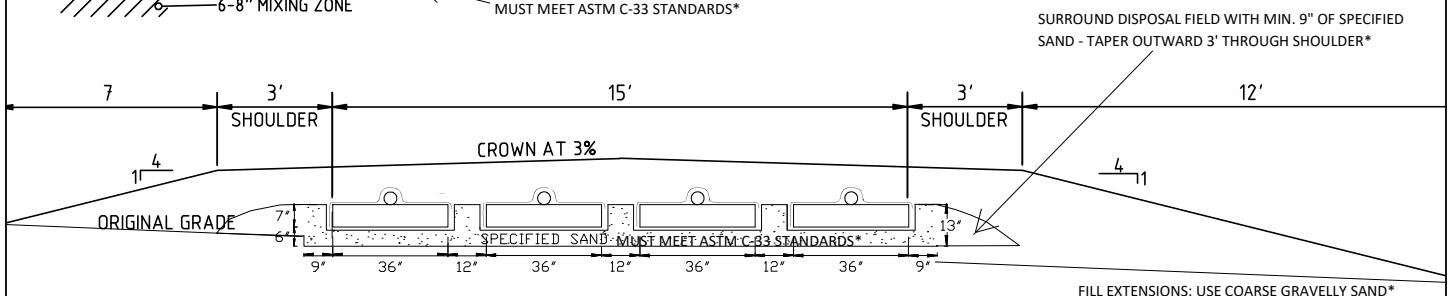
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	24	-33	-26	-14

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 29-30

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved ____

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-18
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.49 s
Lon. 70 d 29 m 48.11 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature ____ SE # 419 Date 3/26/23

ERIK LEMA
Site Evaluator Name Printed

207-518-8442
Telephone Number

erik@basswoodenv.com
E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-18 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

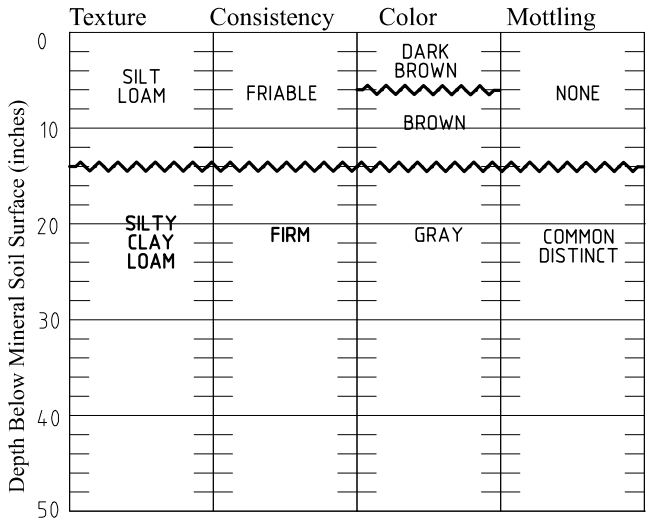
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-18 A ☐ Test Pit ☒ Boring

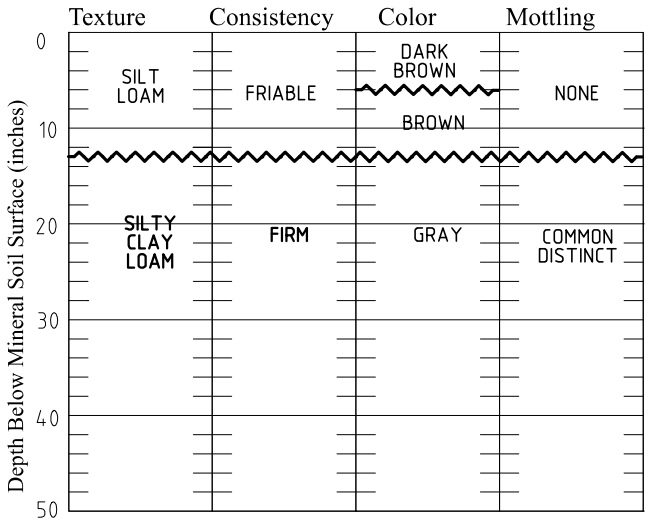
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-18 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

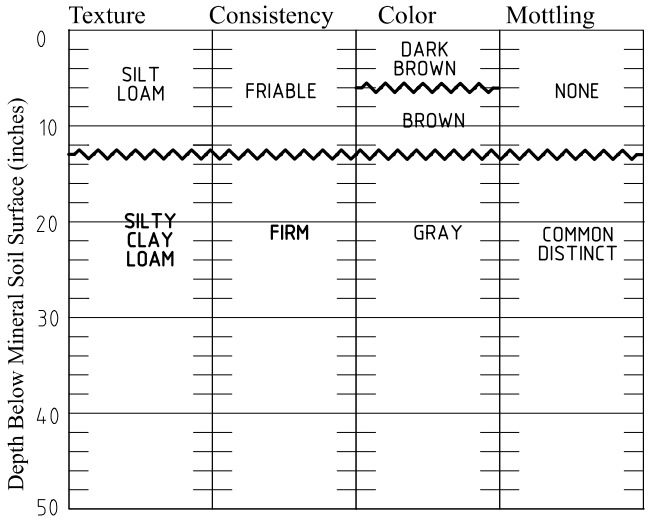


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-18 C ☐ Test Pit ☒ Boring

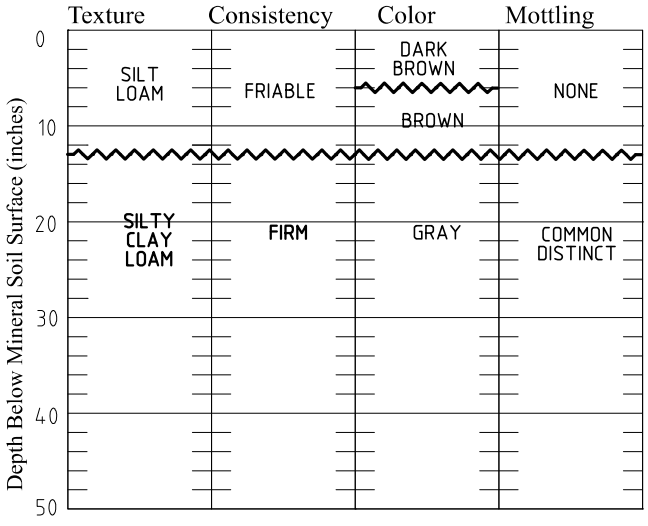
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-18 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

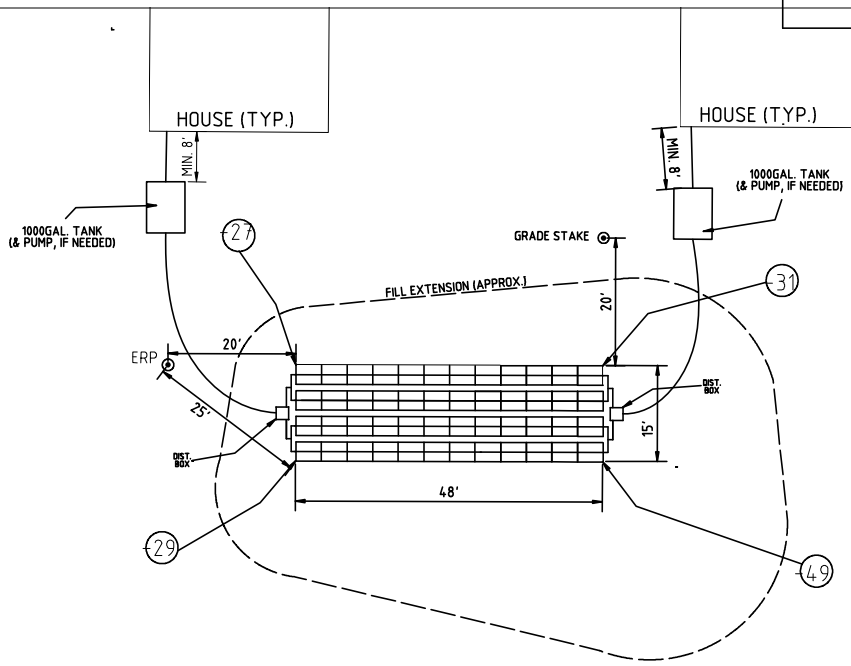
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

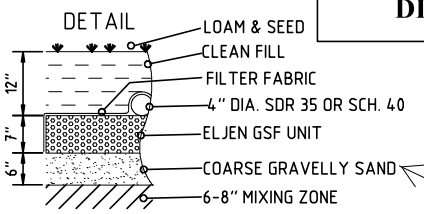
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

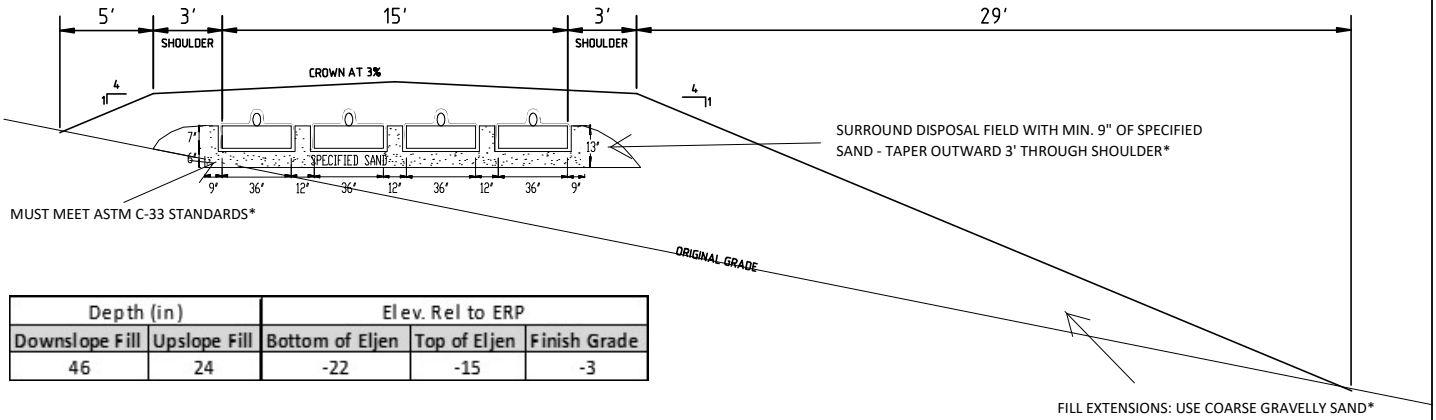
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
46	24	-22	-15	-3

Site Evaluator Signature

SE # 419

Date 3/19/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOT 31

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: _____
☐ 3. Other: _____ (specify)

Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 1107 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-29
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.58 s
Lon. 70 d 29 m 45.9 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

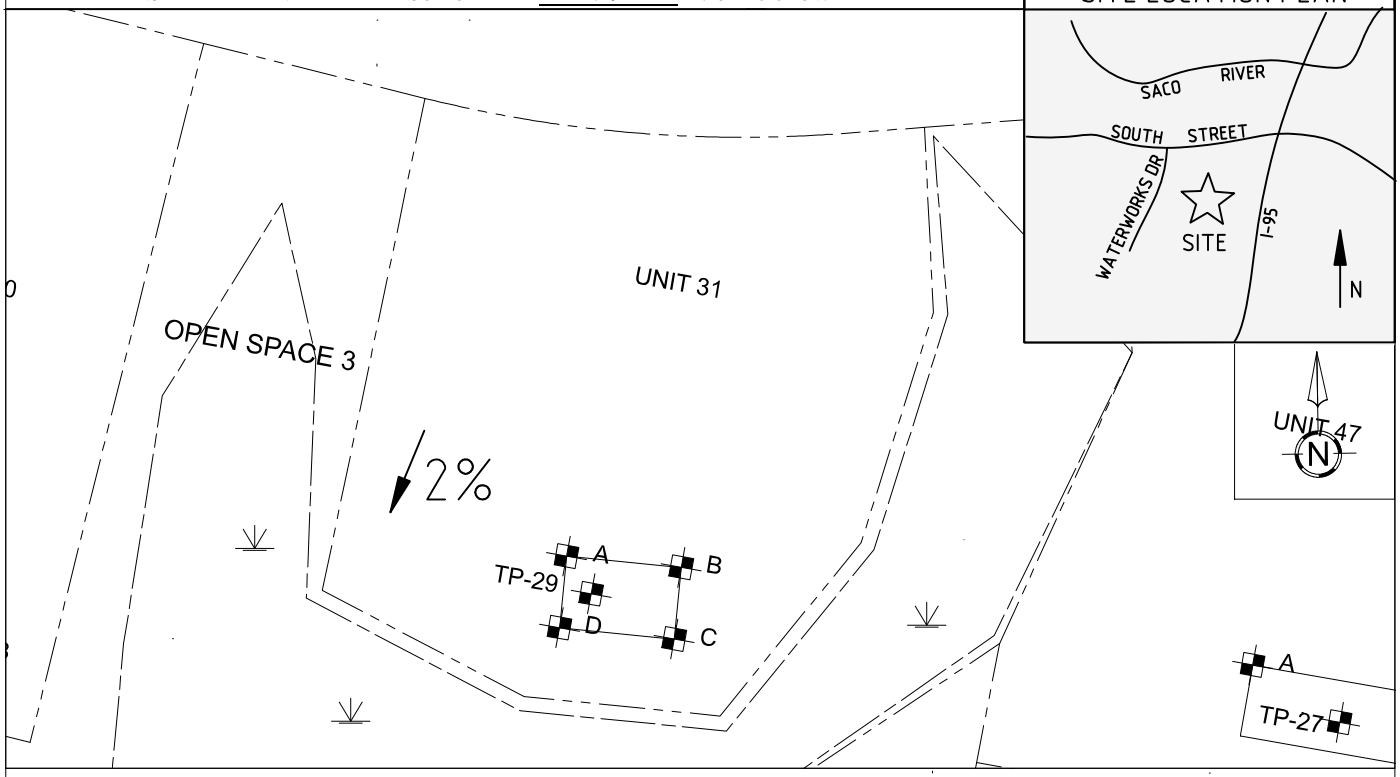
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 40 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-29 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 Condition: D	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile _____ Condition _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature

419
SE #

3/20/23
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

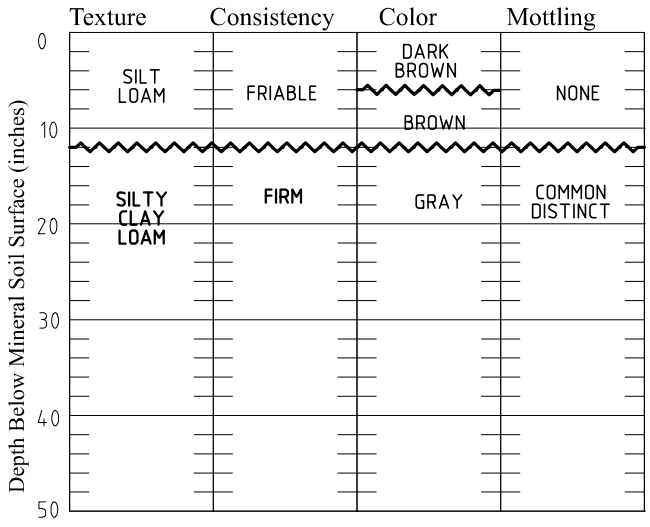
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-29 A ☐ Test Pit ☒ Boring

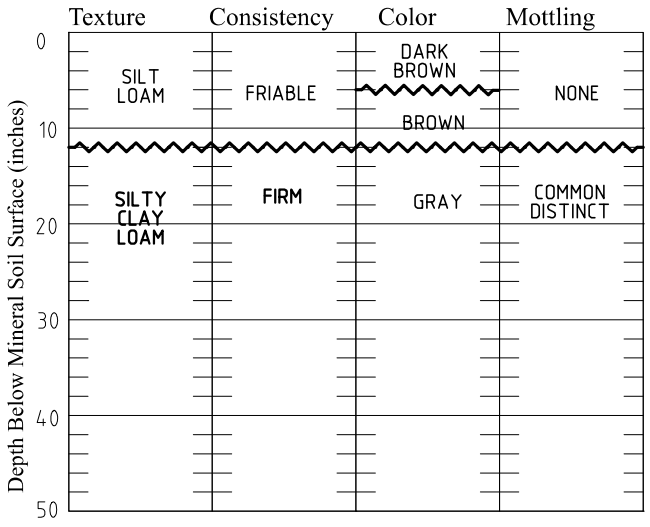
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-29 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

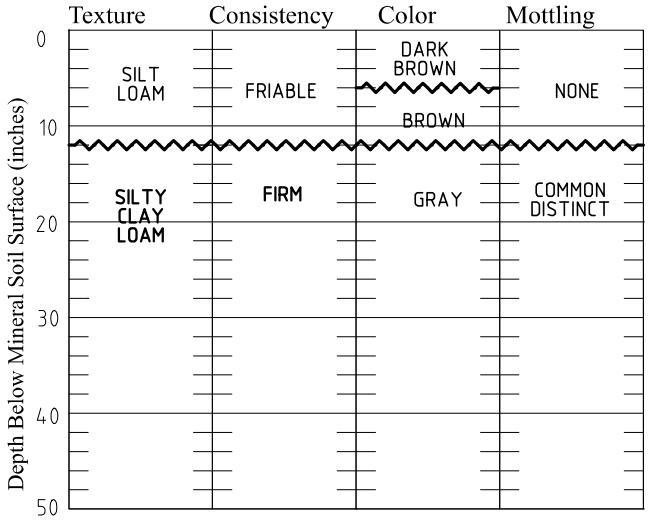


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-29 C ☐ Test Pit ☒ Boring

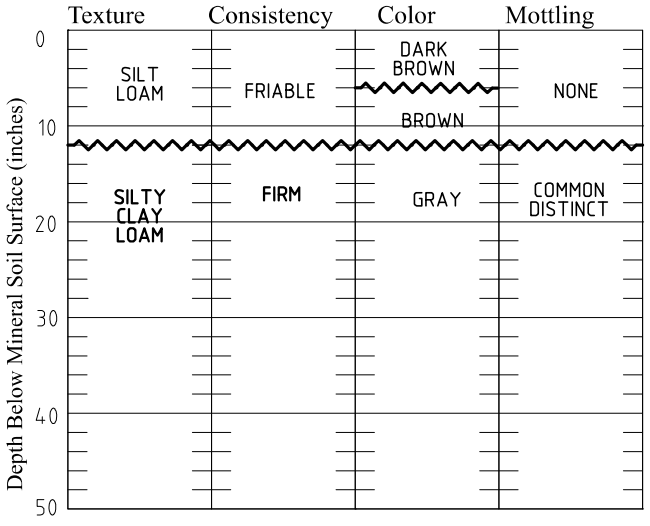
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-29 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/23/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

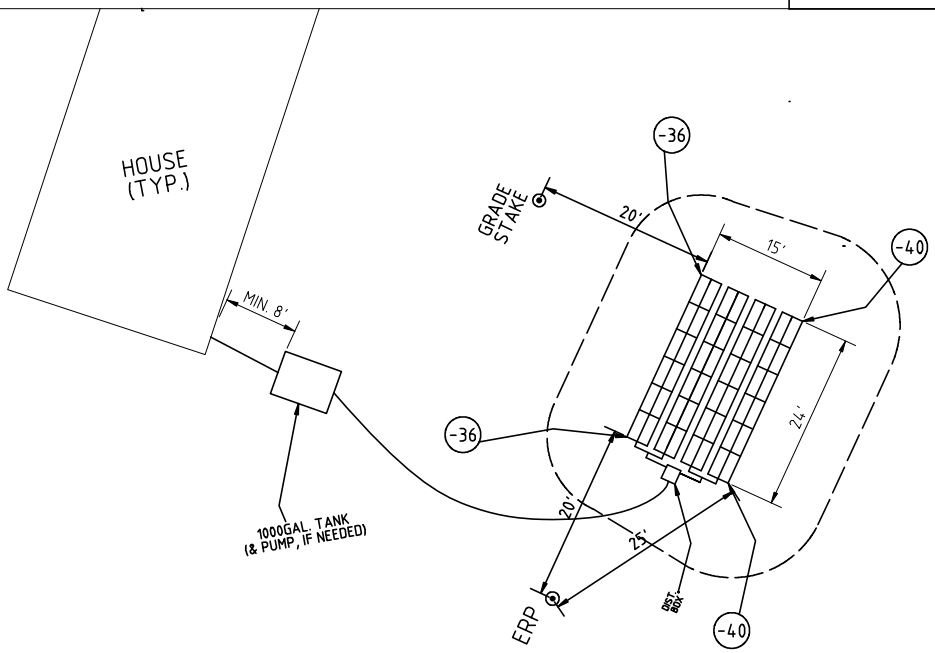
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

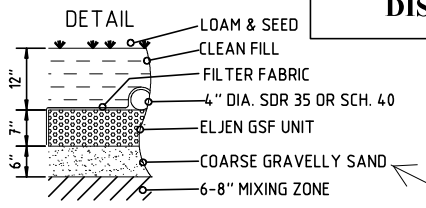
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

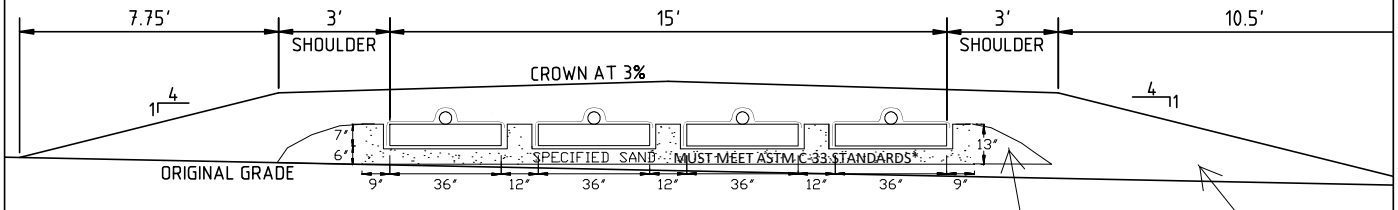
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*

FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
29	25	-30	-23	-11

Site Evaluator Signature

SE # 419

Date 3/14/2023

*REVISIONS 4/6/23

Page 3 of 3
HHE-200 Rev. 8/01

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 32-33

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-15
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 41.01 s
Lon. 70 d 29 m 50.14 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

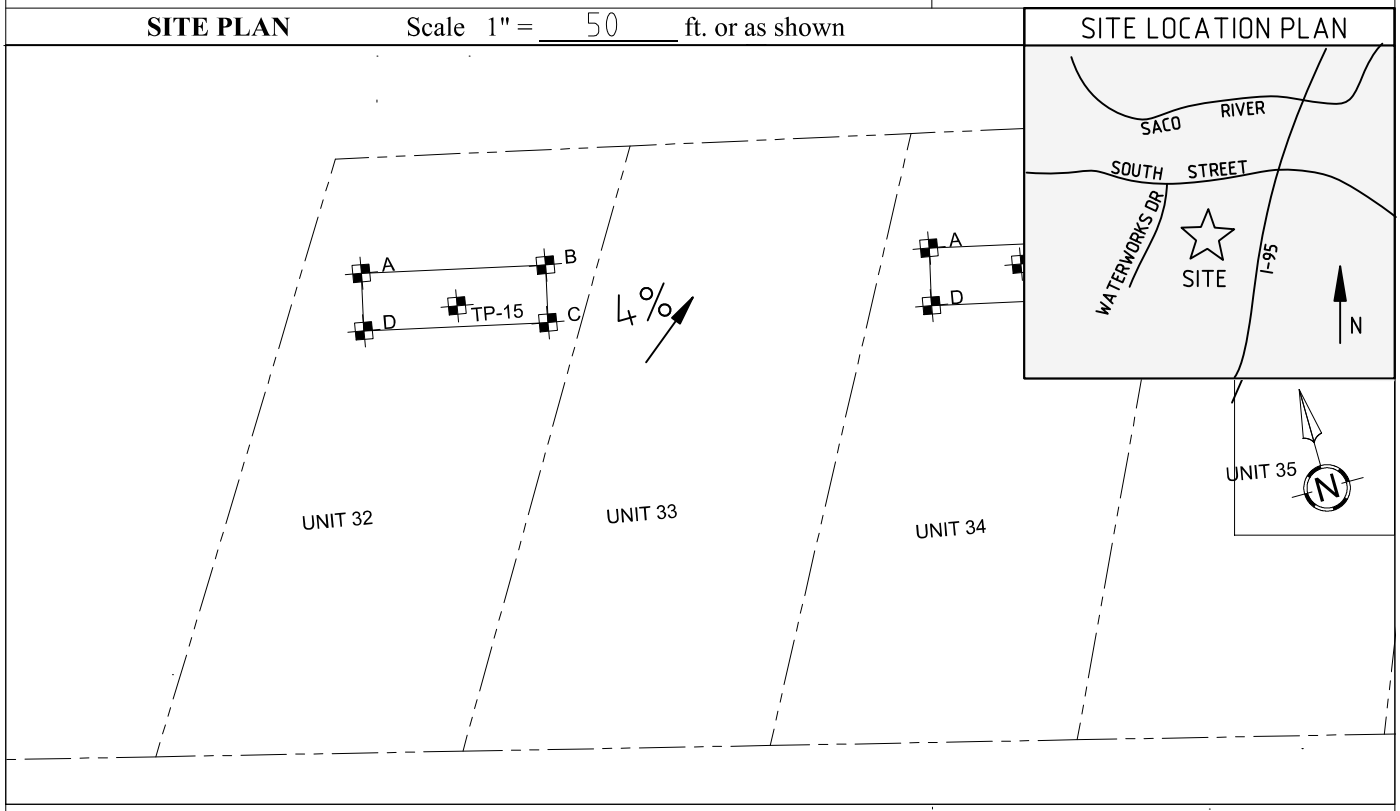
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-15 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

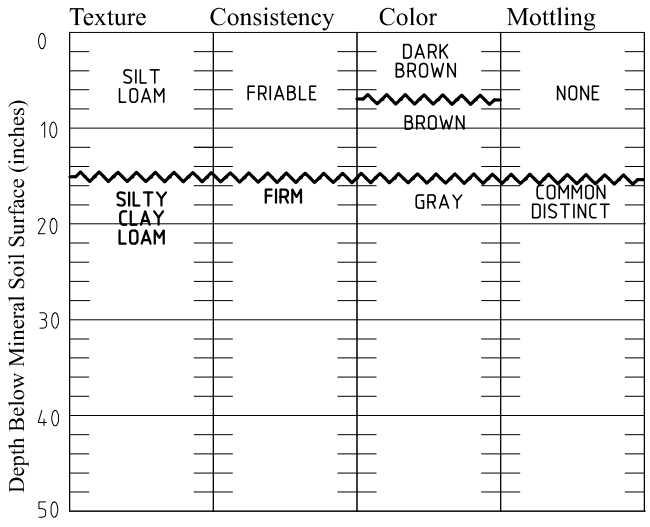
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-15 A ☐ Test Pit ☒ Boring

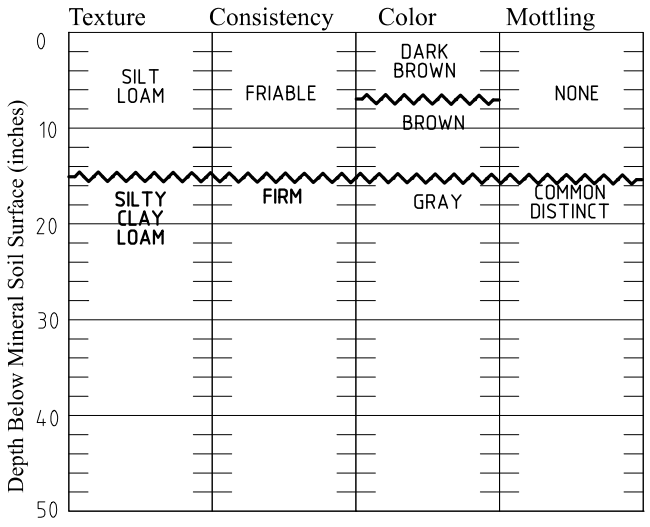
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-15 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

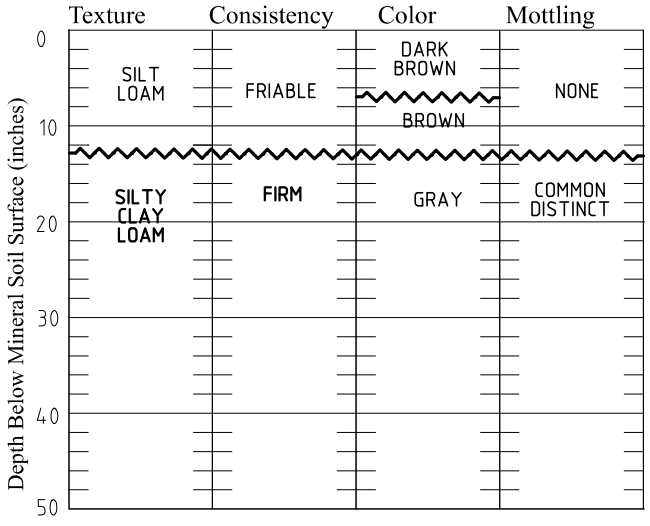


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-15 C ☐ Test Pit ☒ Boring

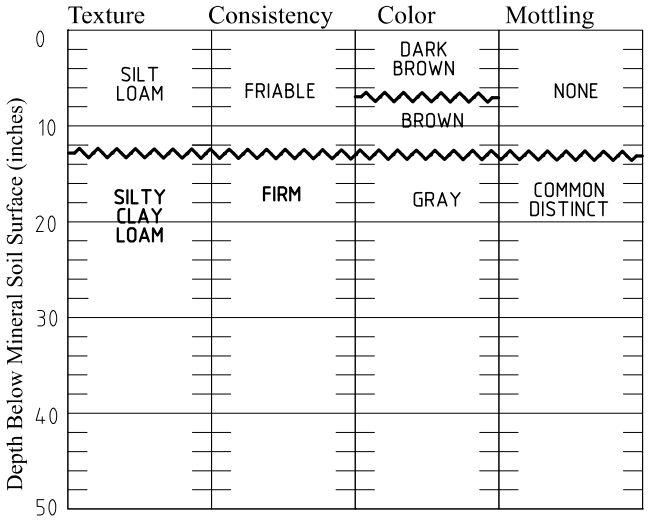
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-15 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/23/23

Page __ of __

HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

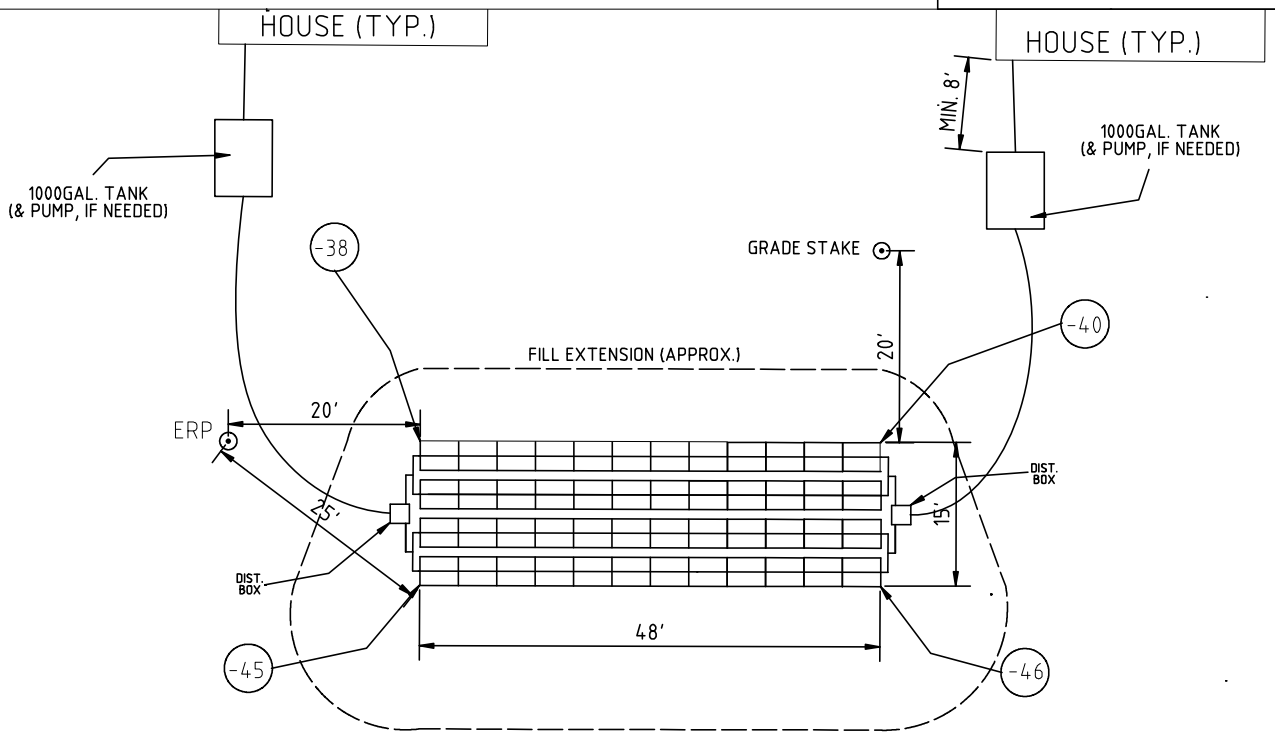
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

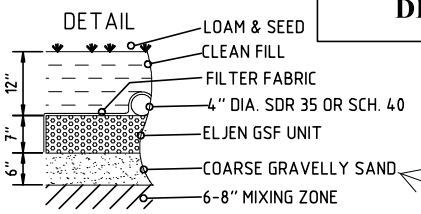
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

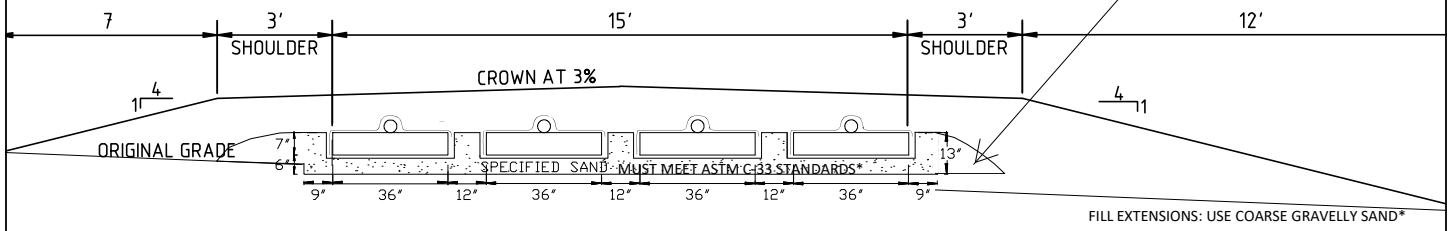
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	24	-33	-26	-14

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 34-35

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-16
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 40.67 s
Lon. 70 d 29 m 48.19 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

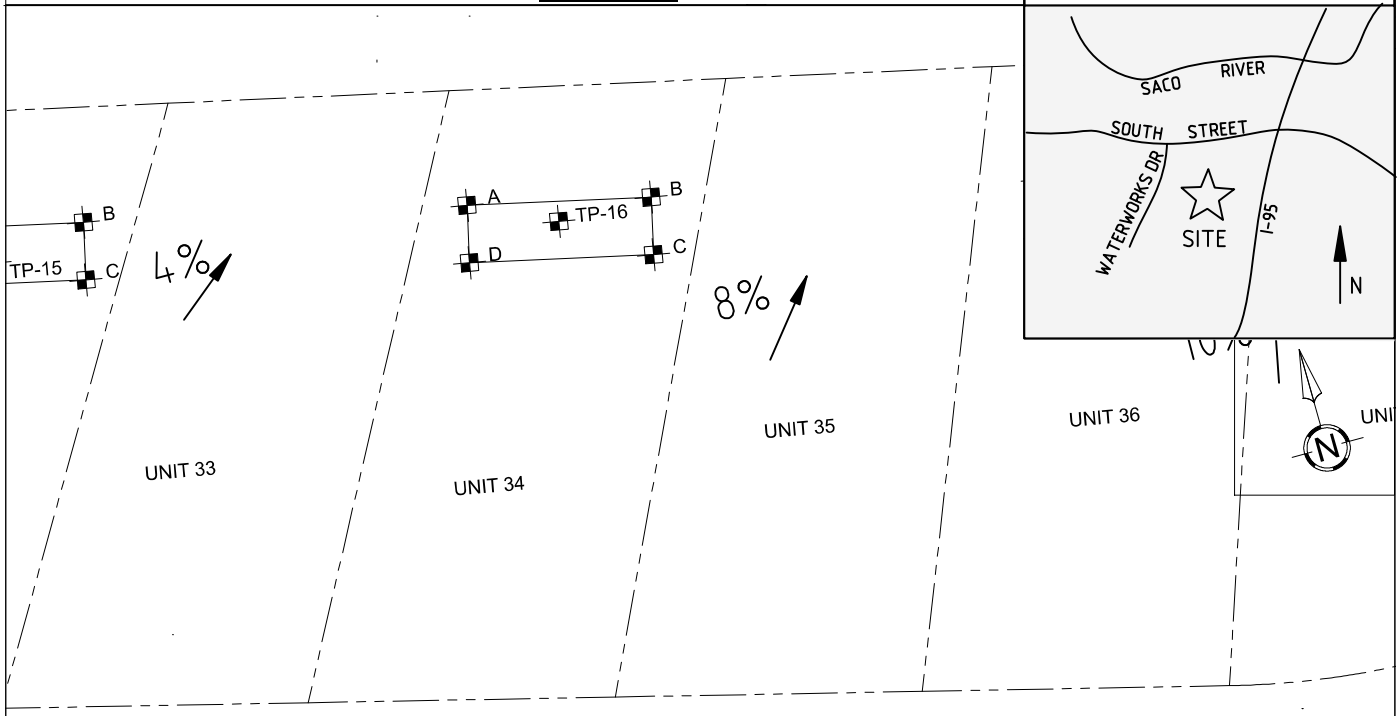
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

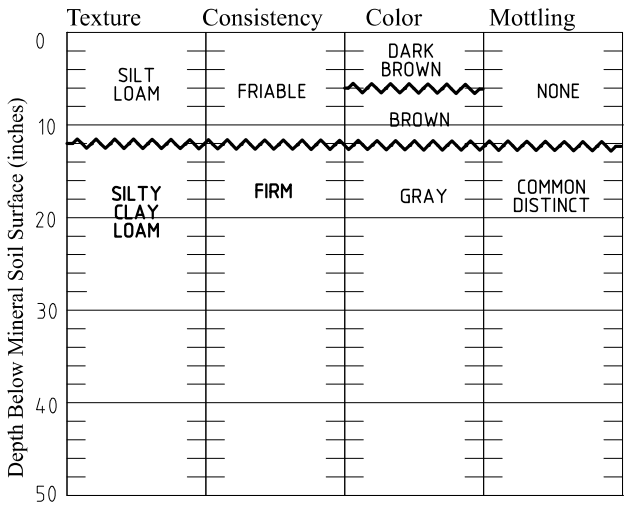


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-16 ☒ Test Pit ☐ Boring

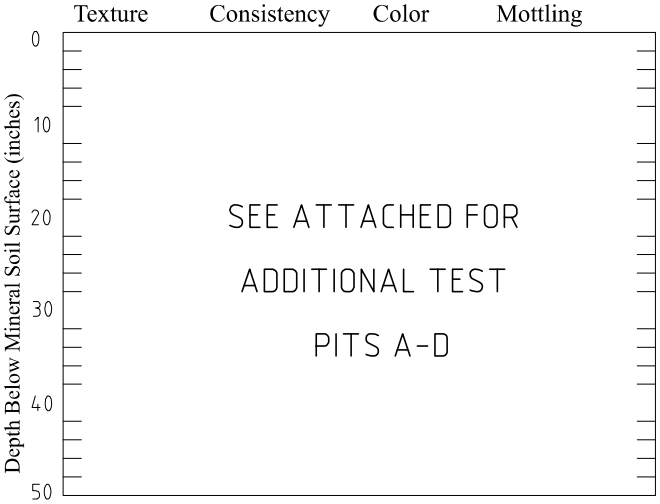
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

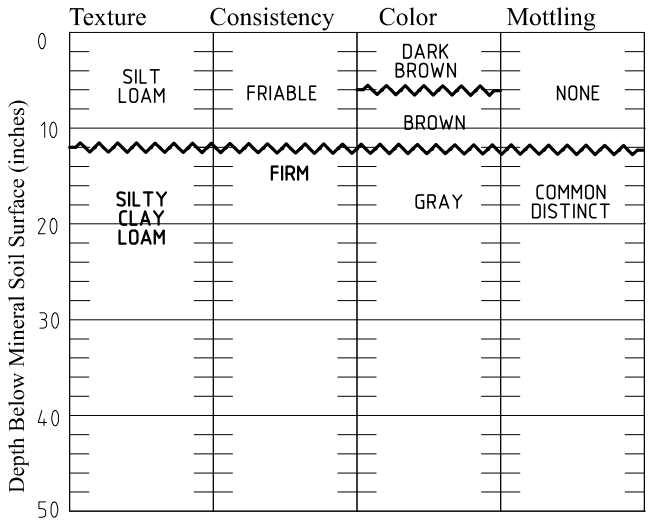
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-16 A ☐ Test Pit ☒ Boring

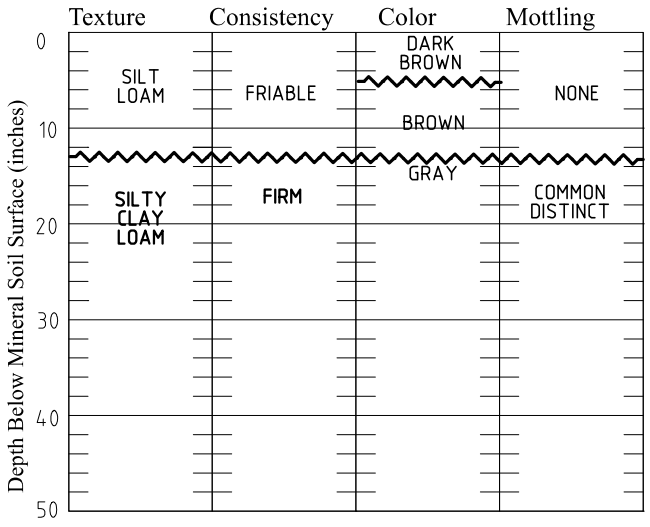
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-16 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

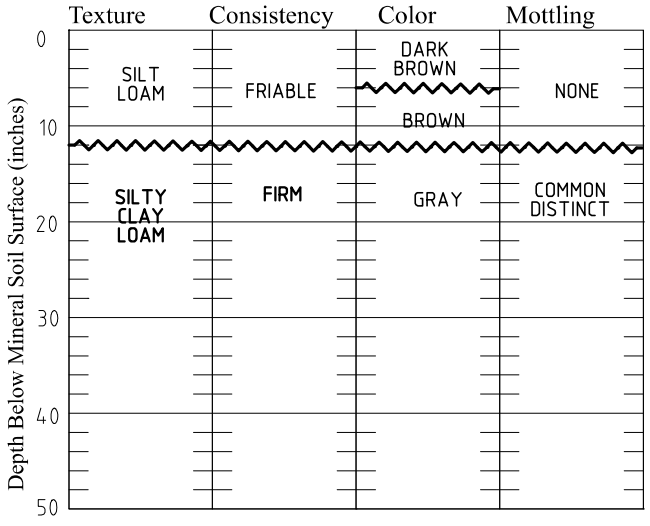


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-16 C ☐ Test Pit ☒ Boring

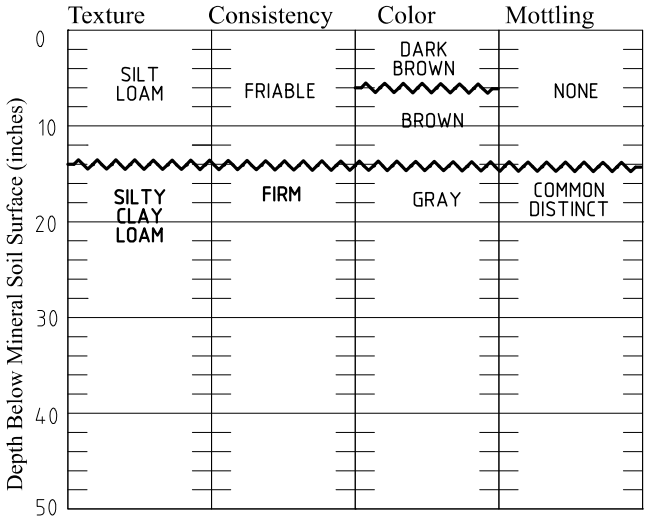
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-16 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

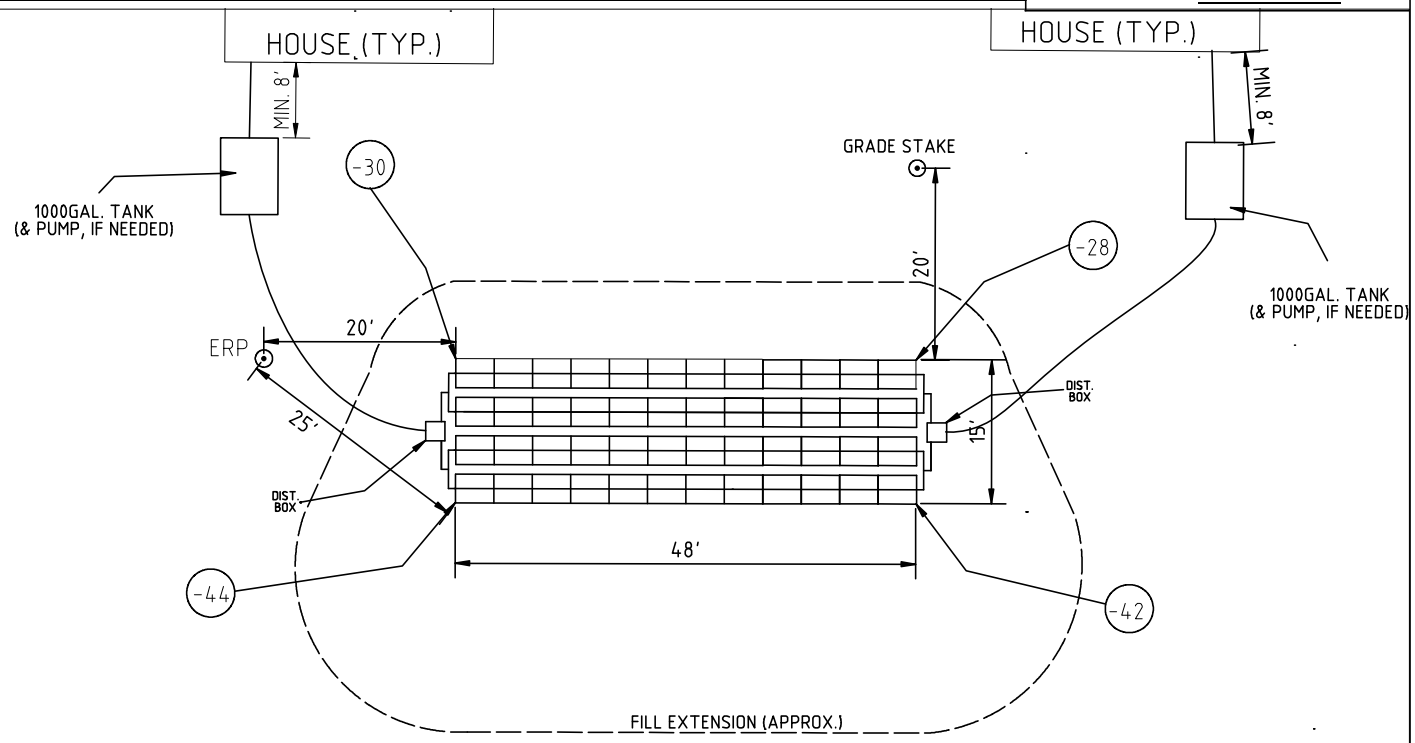
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

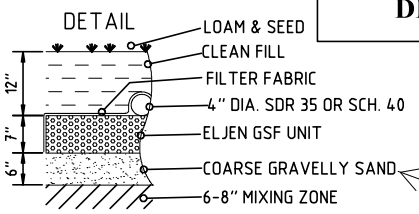
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

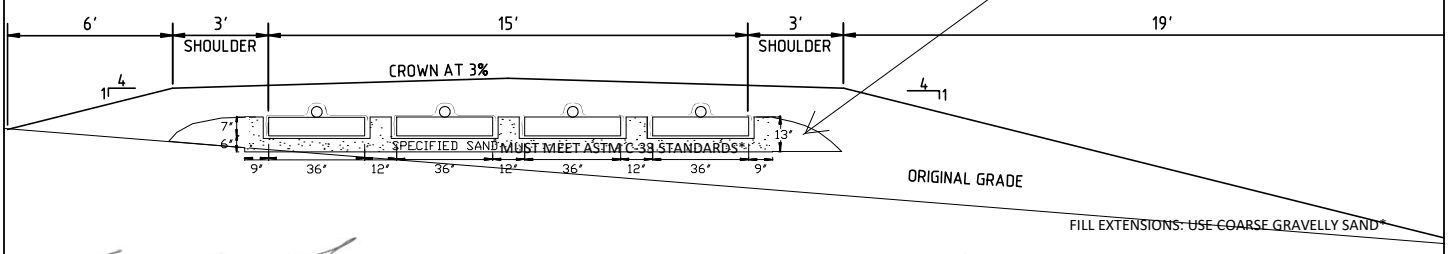
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	25	-22	-15	-3

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 36-37

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-17
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 40.36 s
Lon. 70 d 29 m 46.19 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

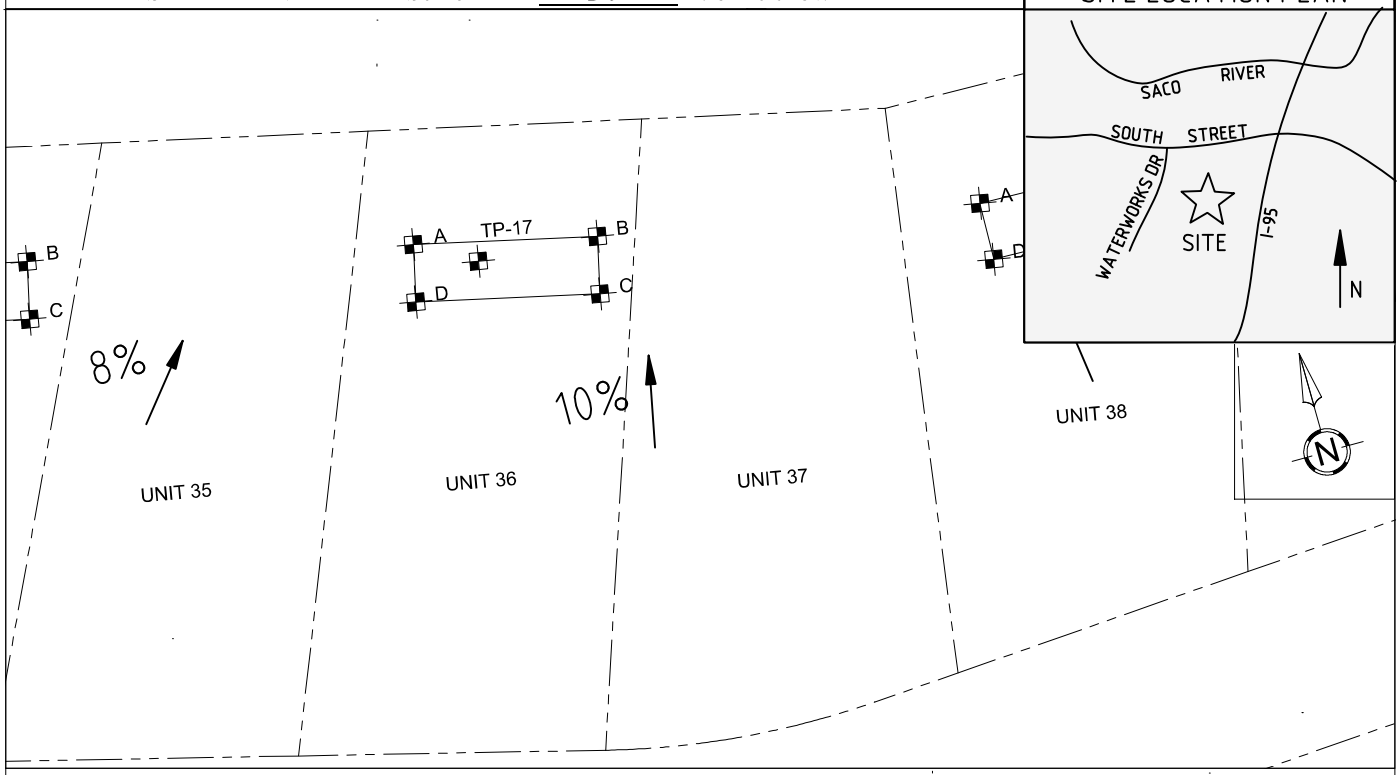
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

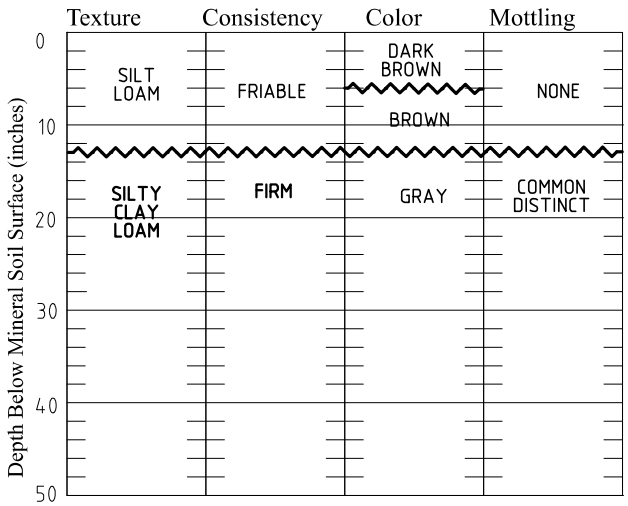


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-17 ☒ Test Pit ☐ Boring

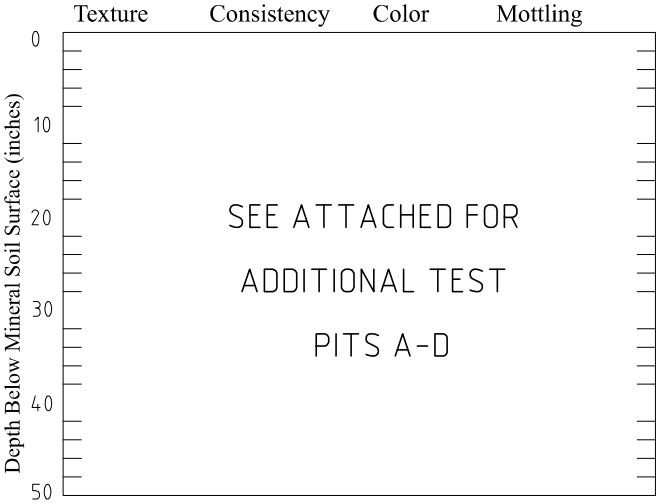
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

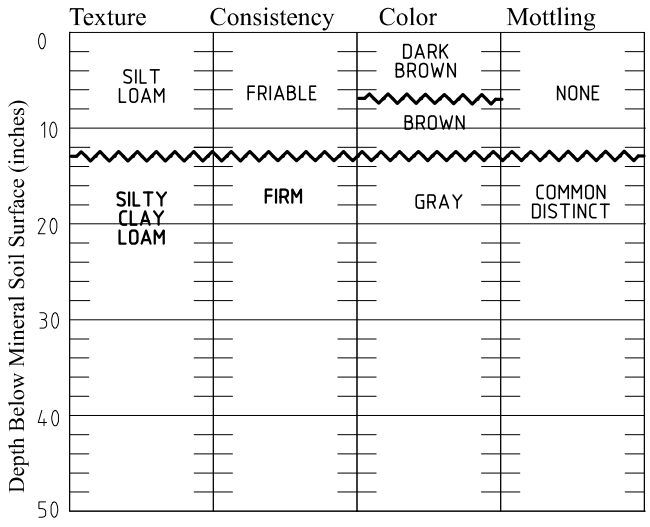
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-17 A ☐ Test Pit ☒ Boring

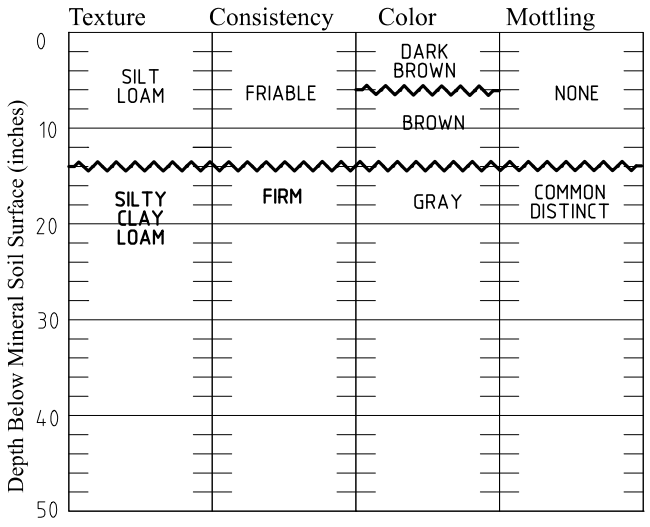
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-17 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

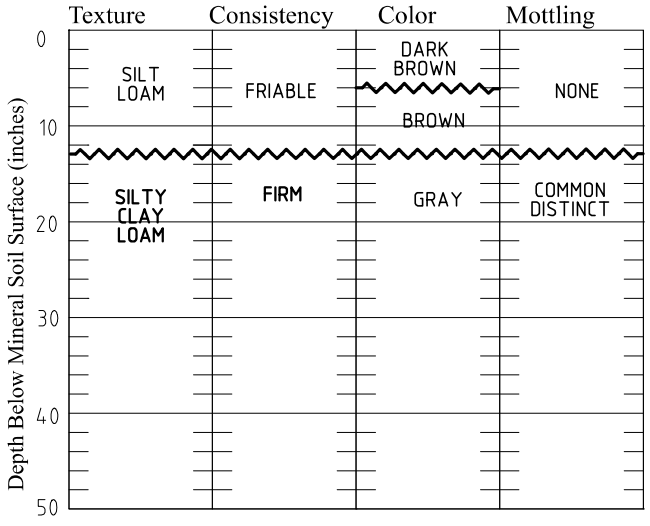


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-17 C ☐ Test Pit ☒ Boring

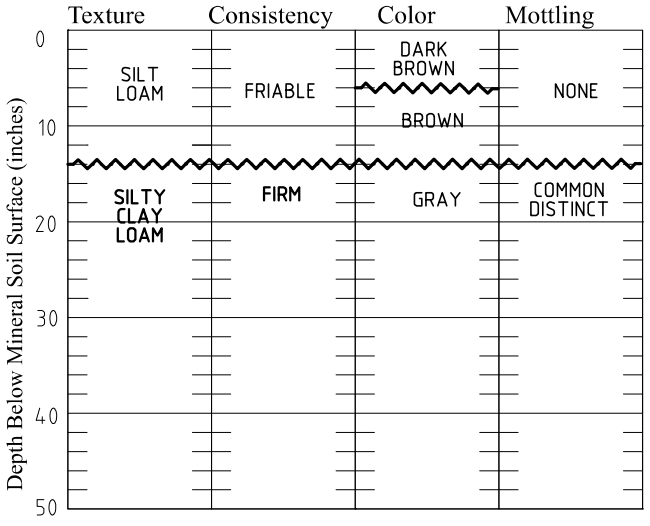
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-17 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/22/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

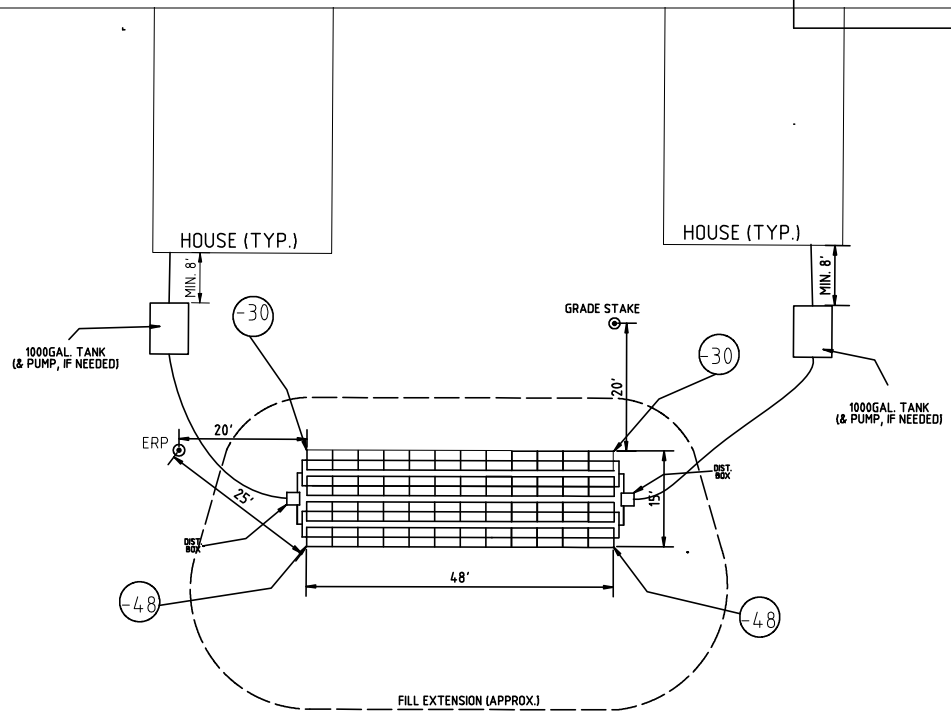
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

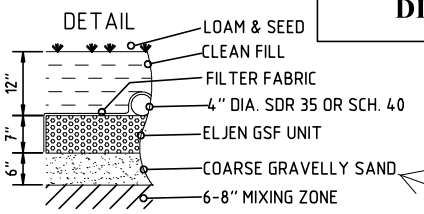
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

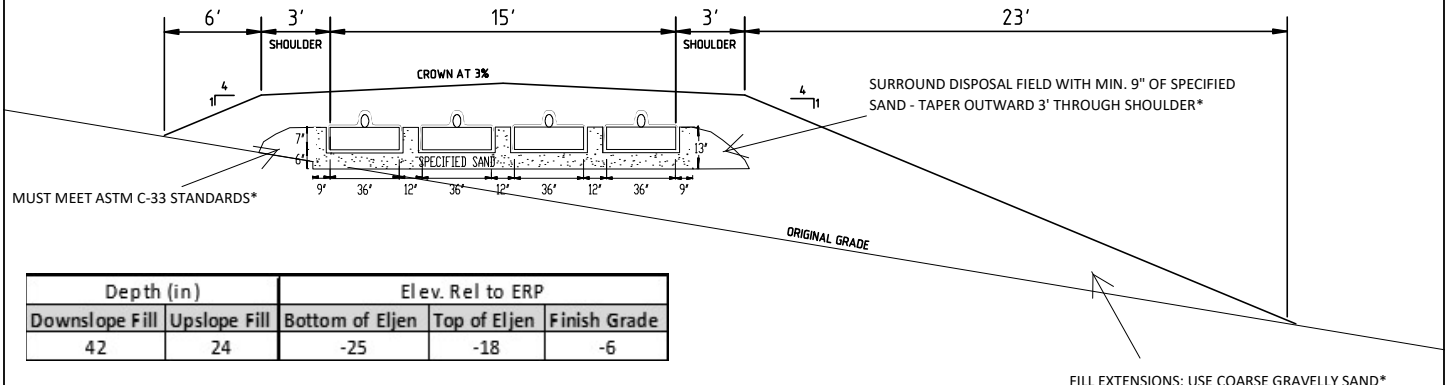
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
42	24	-25	-18	-6

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 38-39

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-23
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 40.13 s
Lon. 70 d 29 m 44.21 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

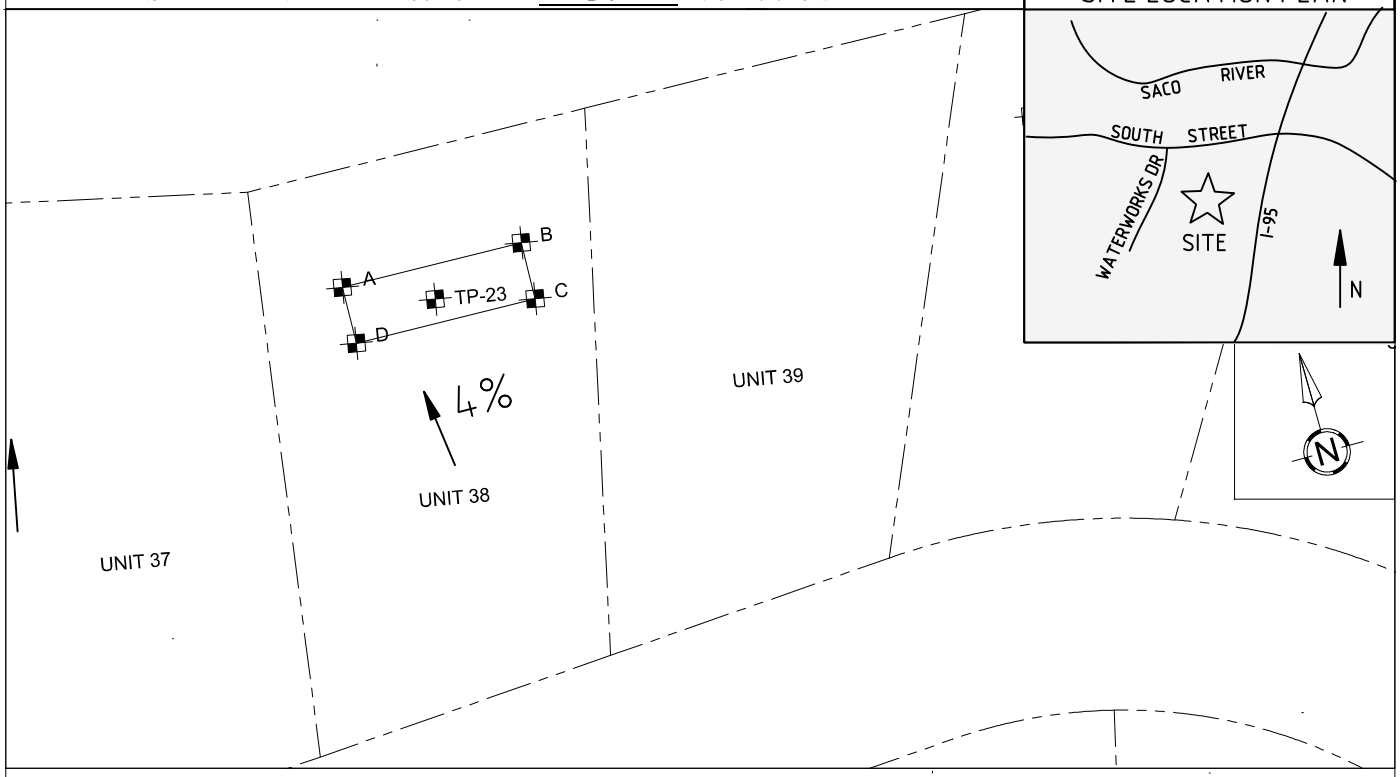
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

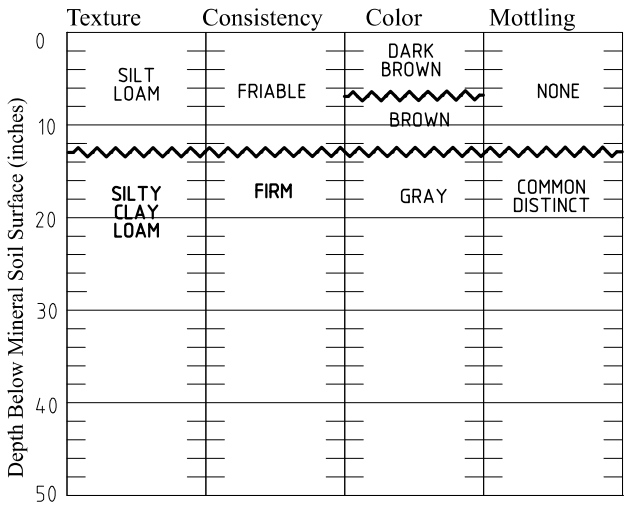


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-23 ☒ Test Pit ☐ Boring

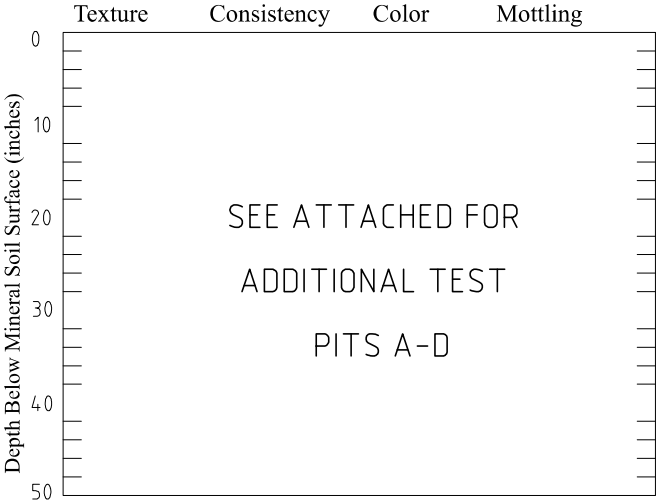
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
_____	_____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

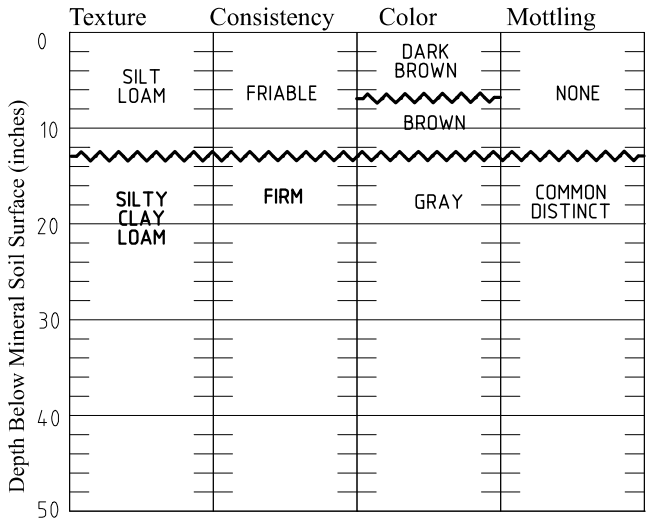
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-23 A ☐ Test Pit ☒ Boring

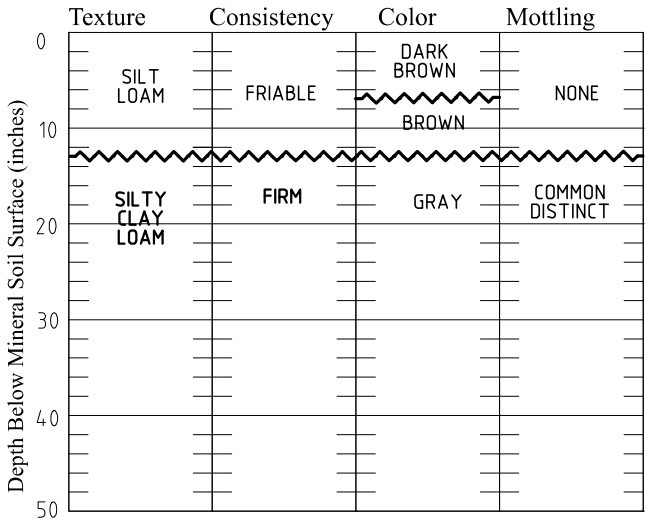
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-23 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

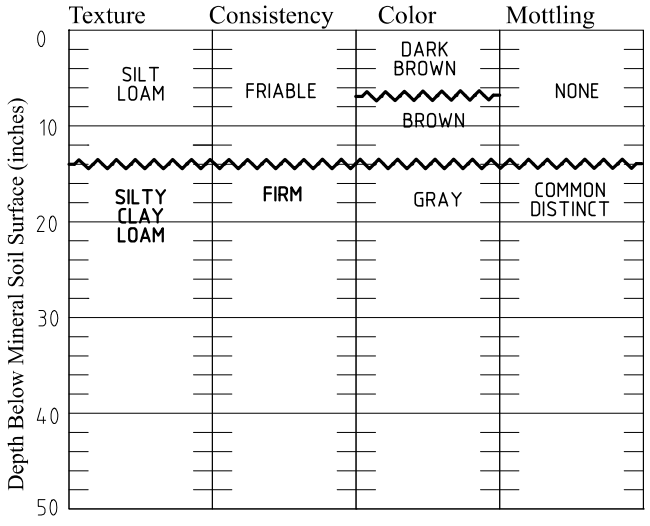


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-23 C ☐ Test Pit ☒ Boring

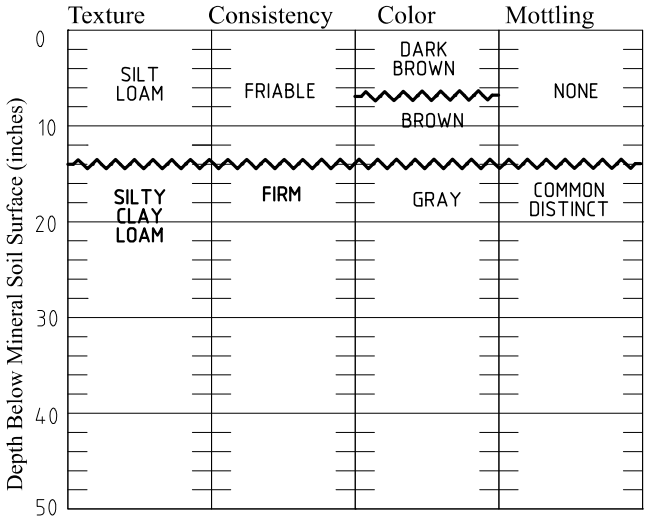
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-23 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/23/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

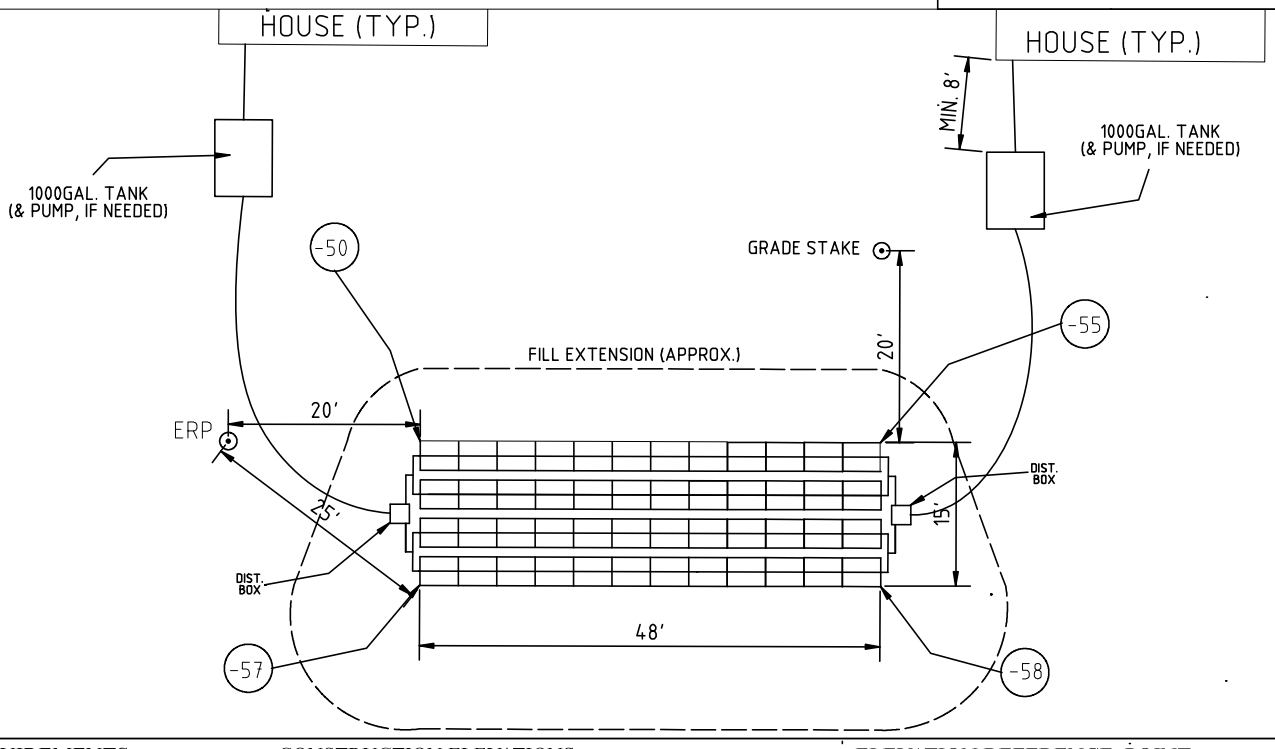
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

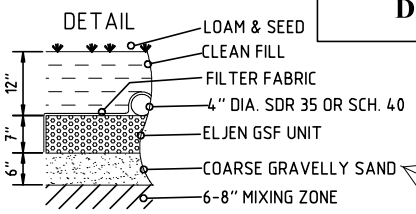
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

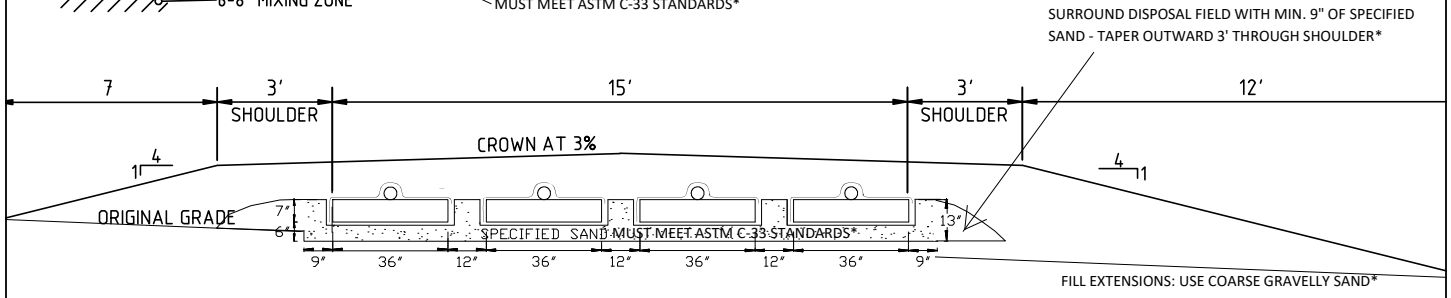
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	24	-45	-38	-26

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 40-41

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-24
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 40.09 s
Lon. 70 d 29 m 41.67 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

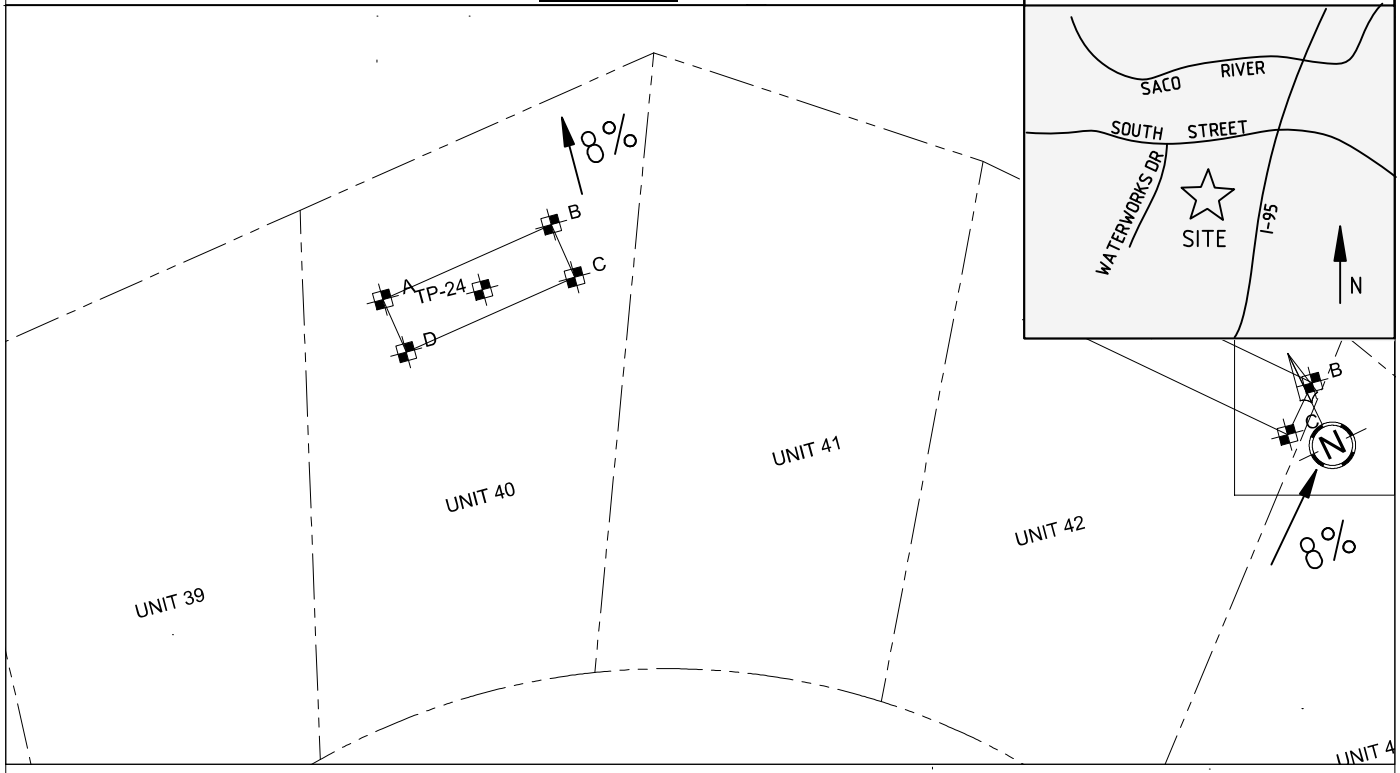
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-24 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN / GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

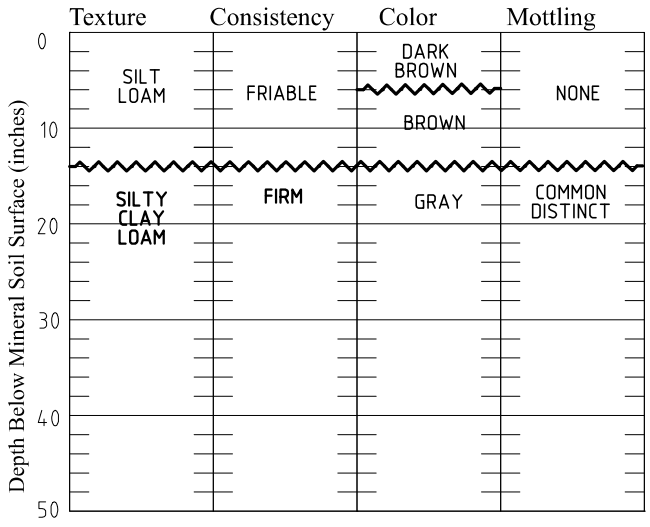
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-24 A ☒ Test Pit ☐ Boring

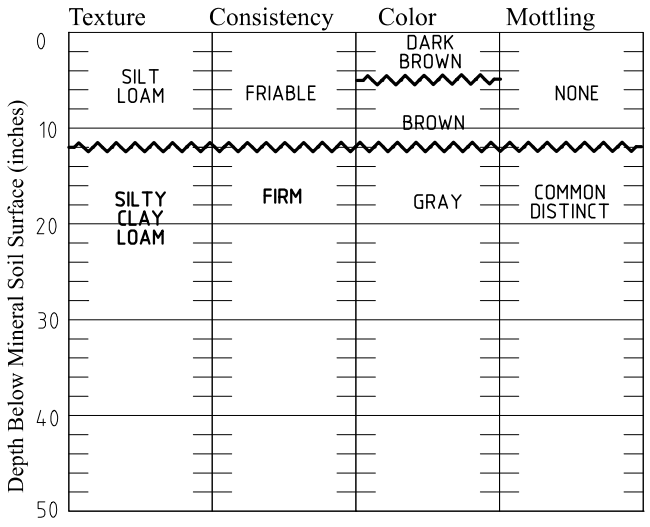
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-24 B ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

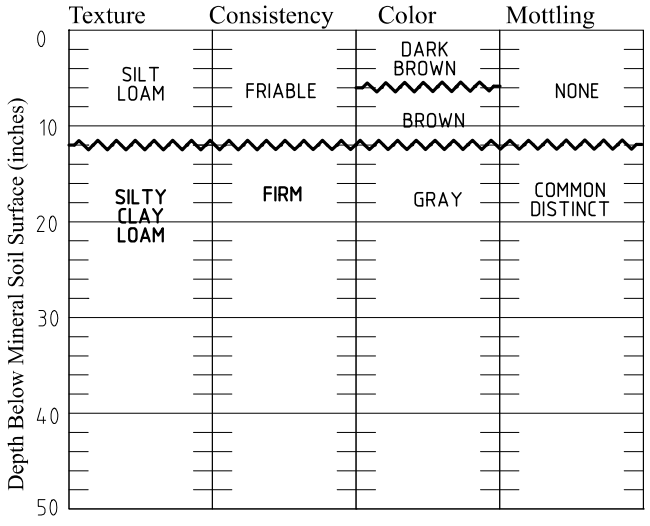


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-24 C ☒ Test Pit ☐ Boring

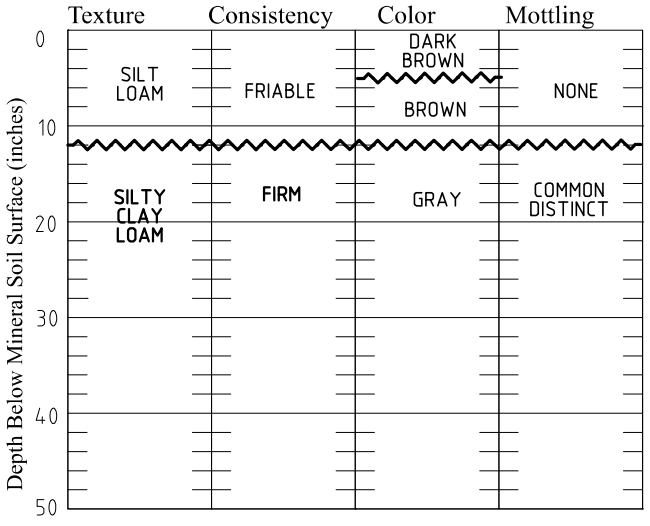
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-24 D ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/23/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

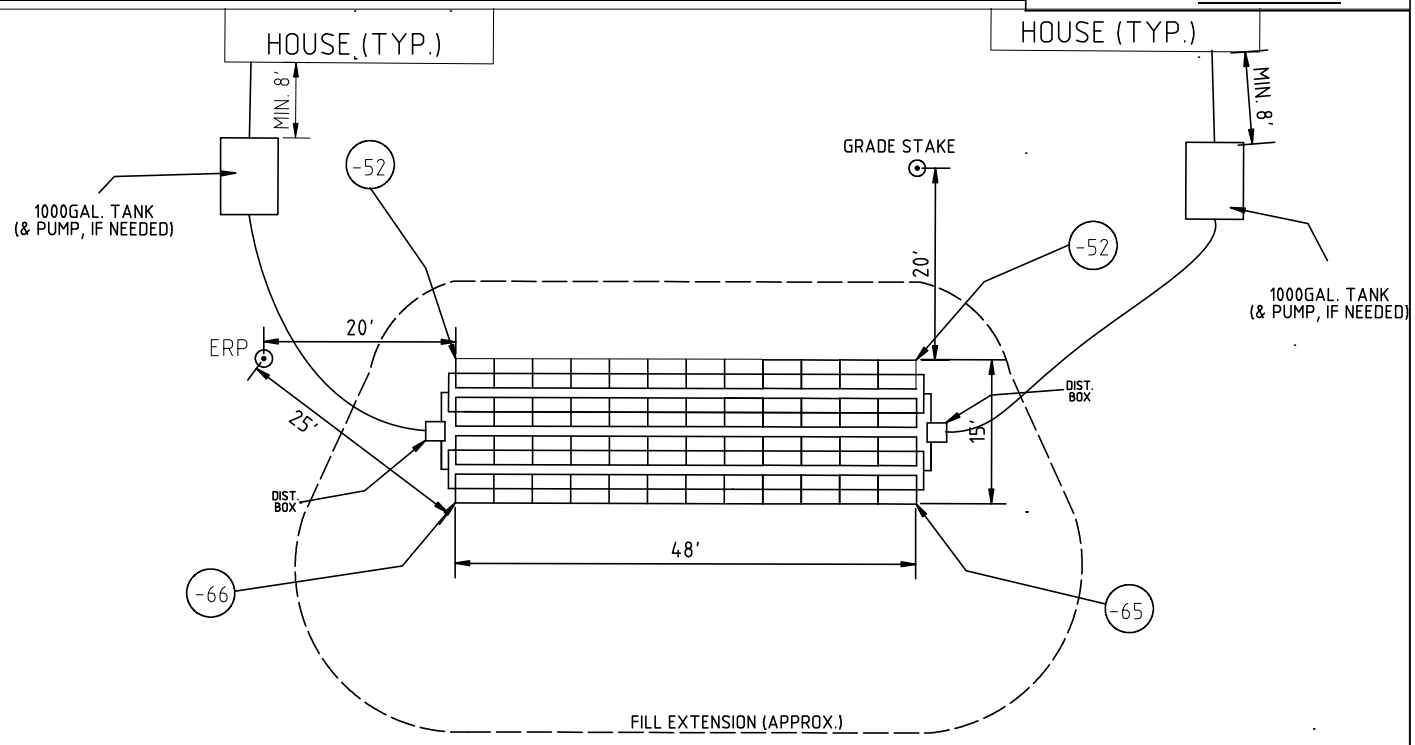
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

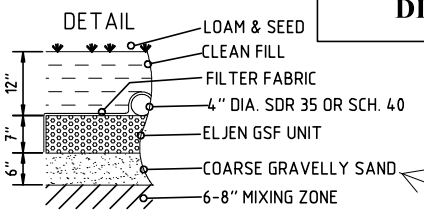
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

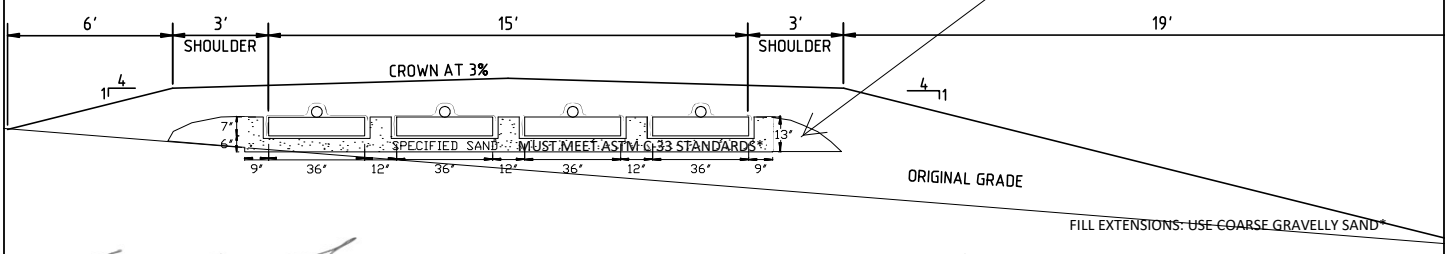
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	25	-46	-39	-27

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 42-44

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-25
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 39.23 s
Lon. 70 d 29 m 39.56 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

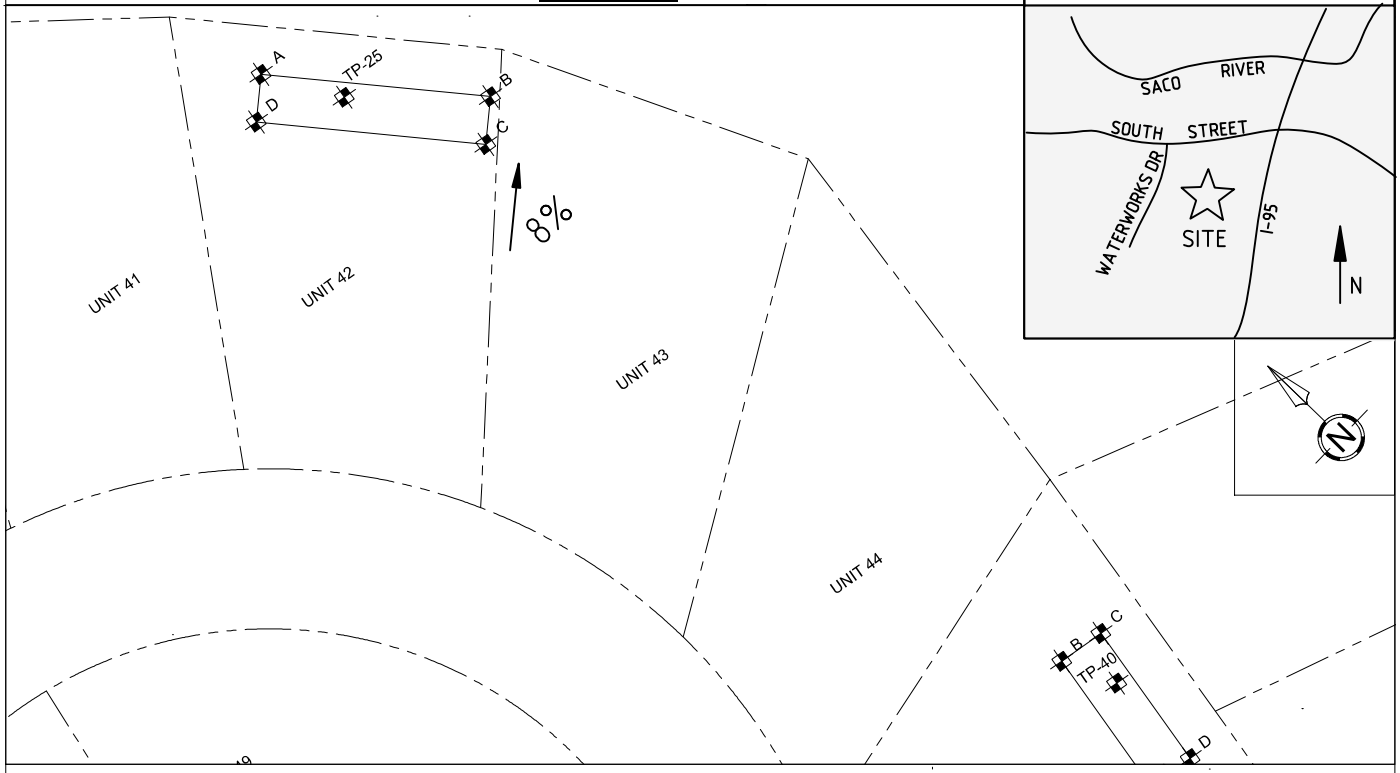
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-25 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN / GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature

419 — SE #

3/20/23 — Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

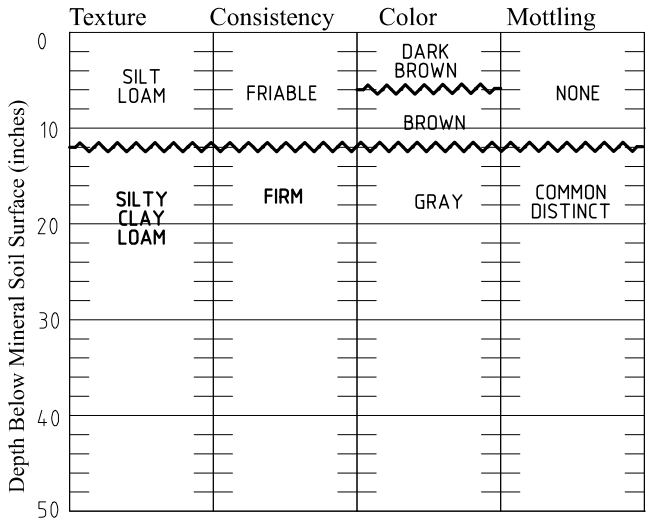
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-25 A ☐ Test Pit ☒ Boring

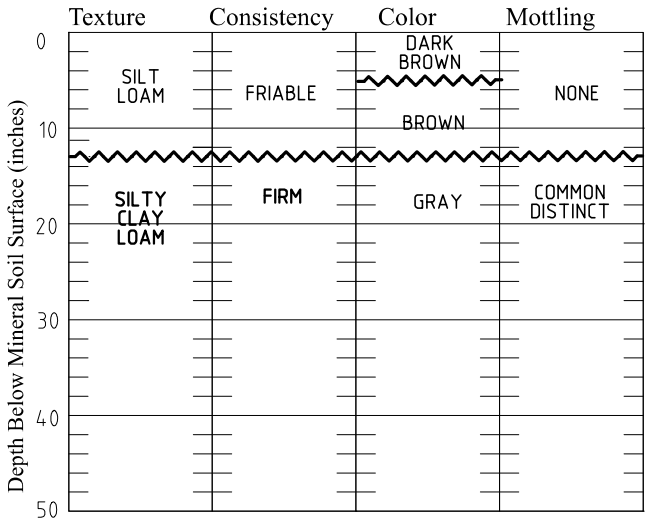
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-25 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

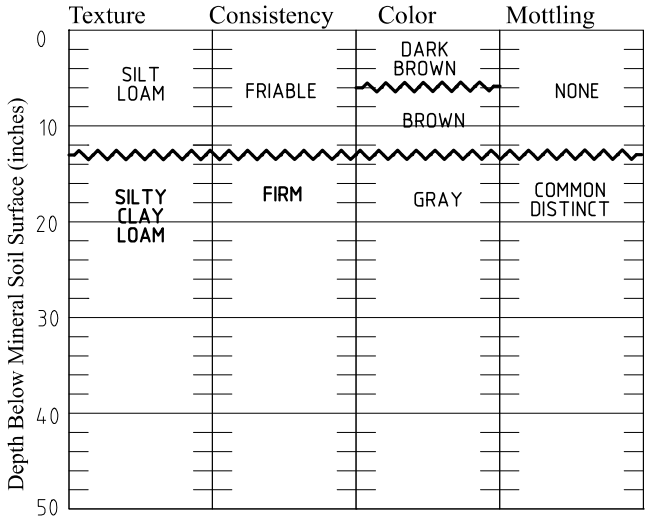


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-25 C ☐ Test Pit ☒ Boring

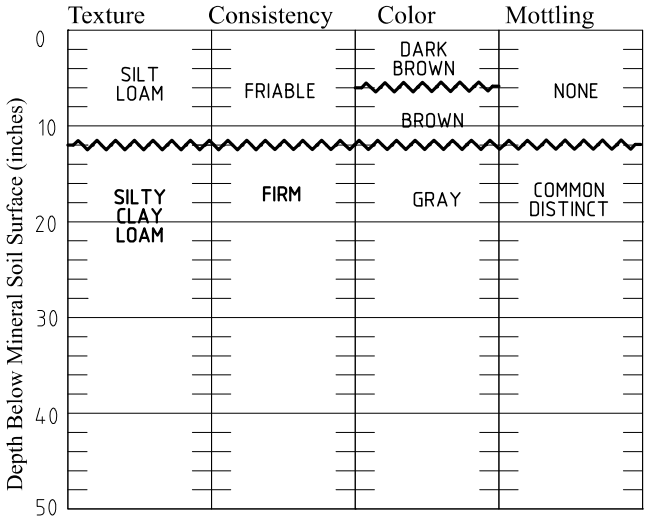
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-25 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/23/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

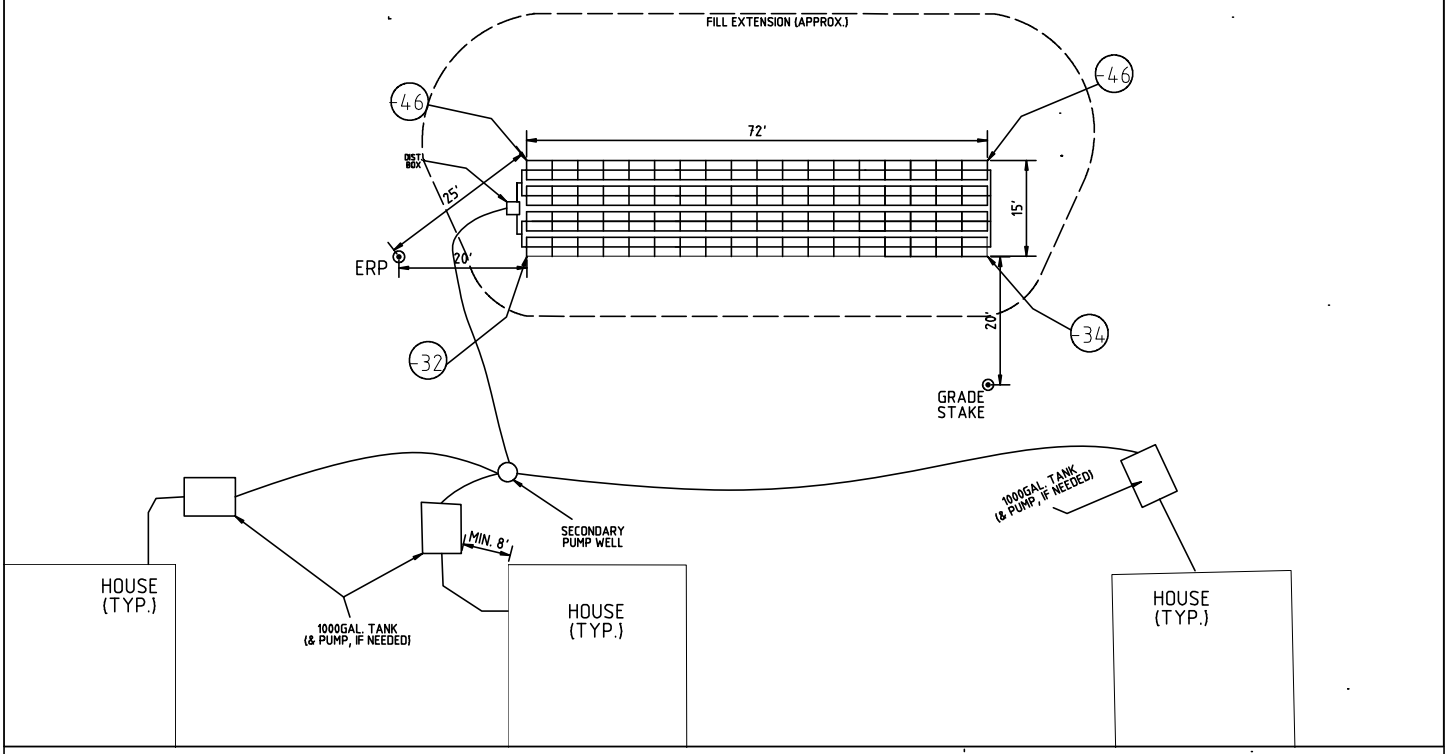
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

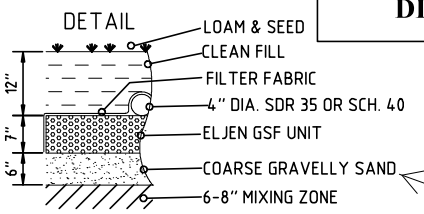
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

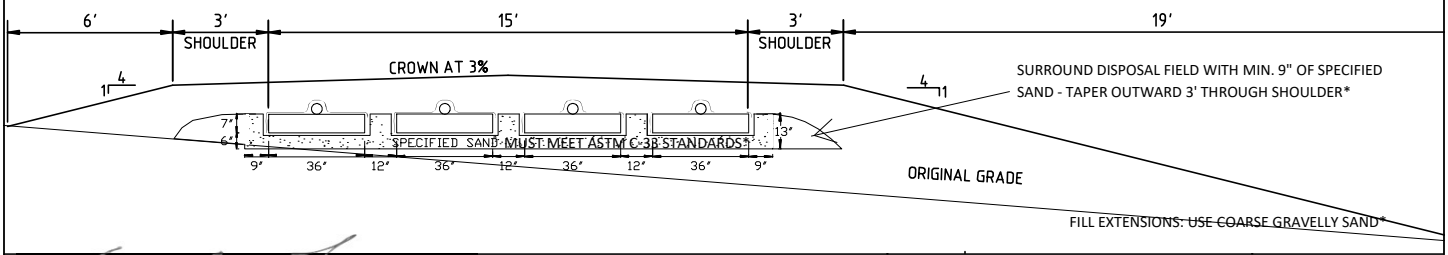
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	25	-26	-19	-7



Site Evaluator Signature

SE # 419

Date 3/17/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 45-46

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / All
at Observation Hole # TP-40
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

SIZED LARGE PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.27 s
Lon. 70 d 29 m 39.07 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

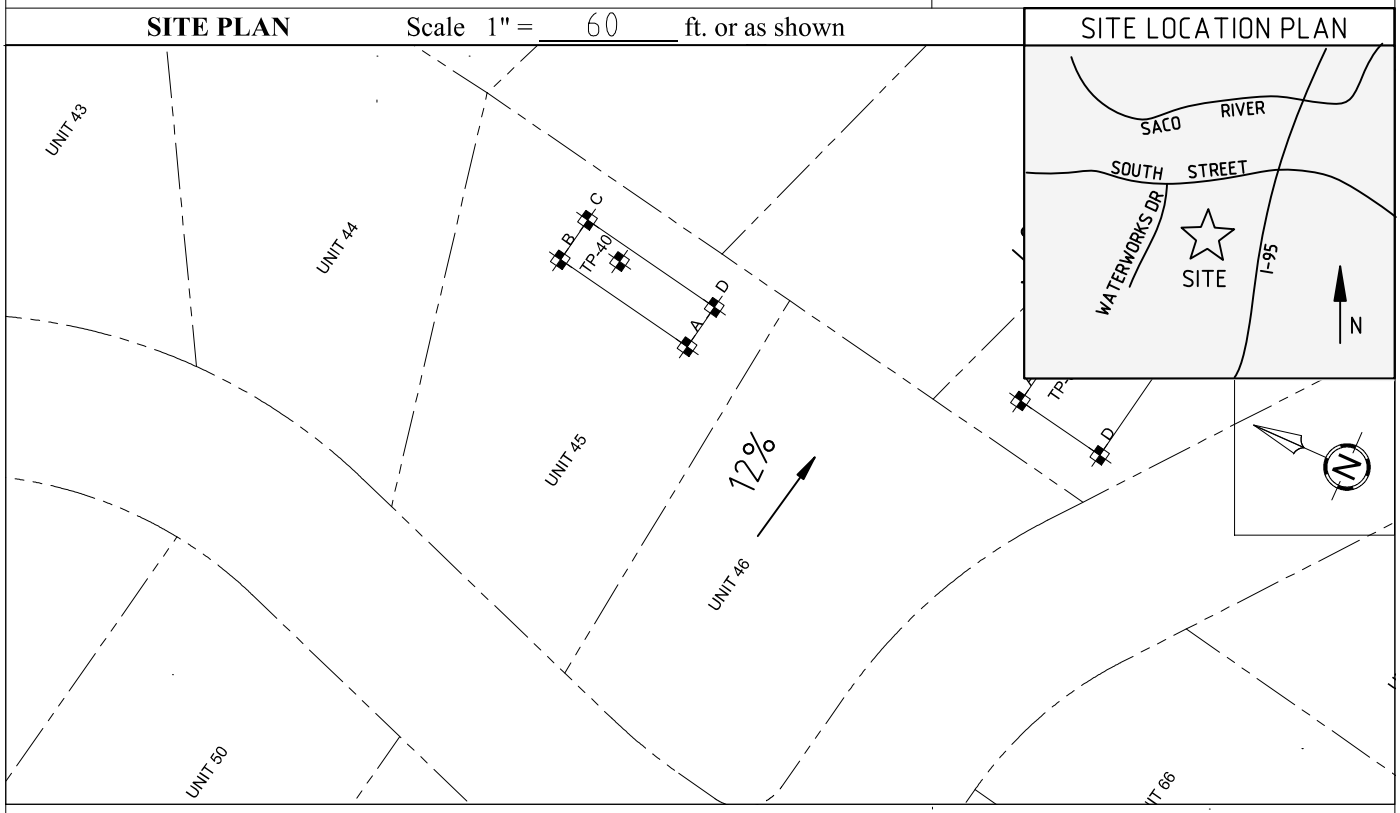
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

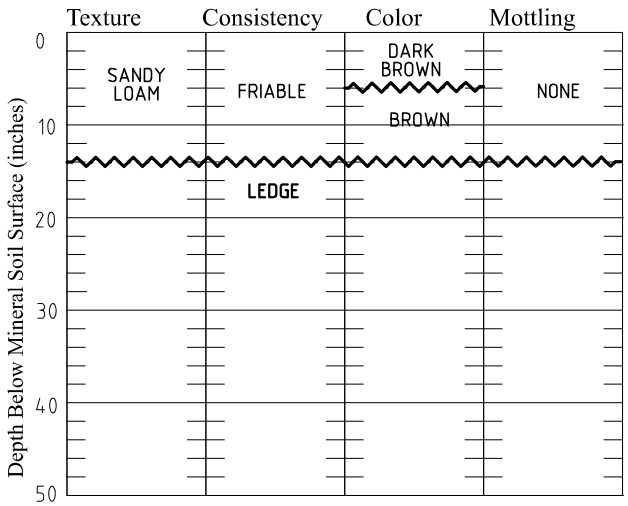


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-40 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 (Profile) / All (Condition)	12 %	14 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Texture Consistency Color Mottling

Depth Below Mineral Soil Surface (inches): 0, 10, 20, 30, 40, 50

SEE ATTACHED FOR ADDITIONAL TEST PITS A-D

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature

419 (SE #)

3/20/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

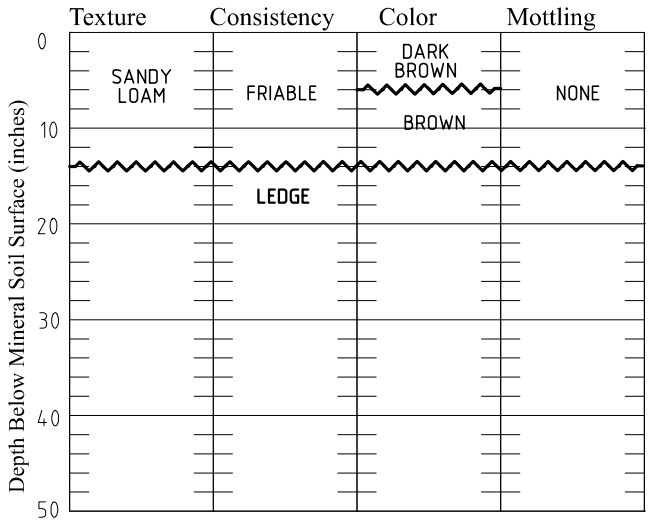
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-40 A ☐ Test Pit ☒ Boring

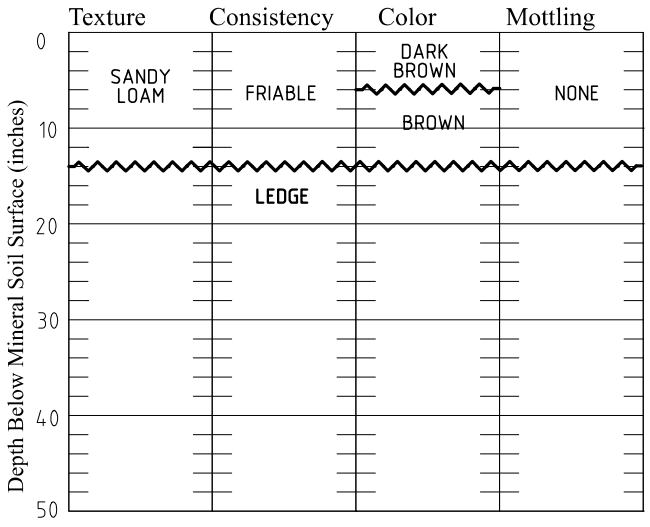
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AII Condition	12 %	14 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole TP-40 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

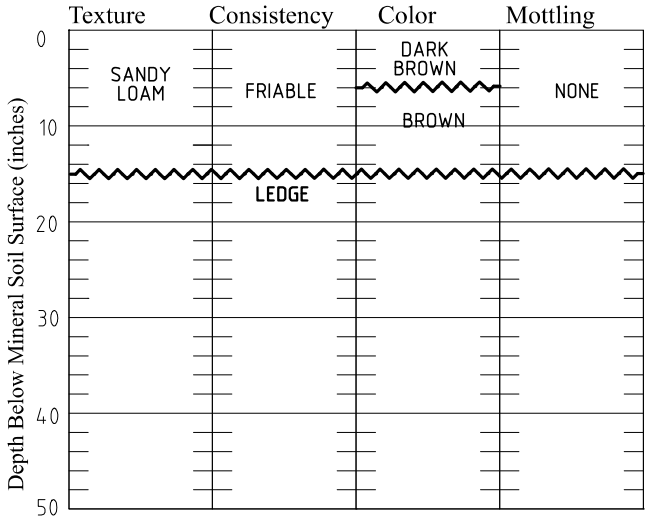


Soil Classification	Slope	Limiting Factor	
2 Profile / AII Condition	12 %	14 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-40 C ☐ Test Pit ☒ Boring

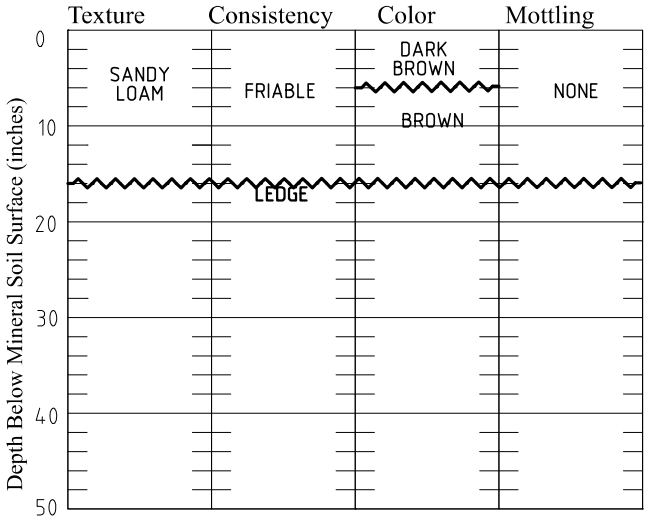
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole TP-40 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	16 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/23/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

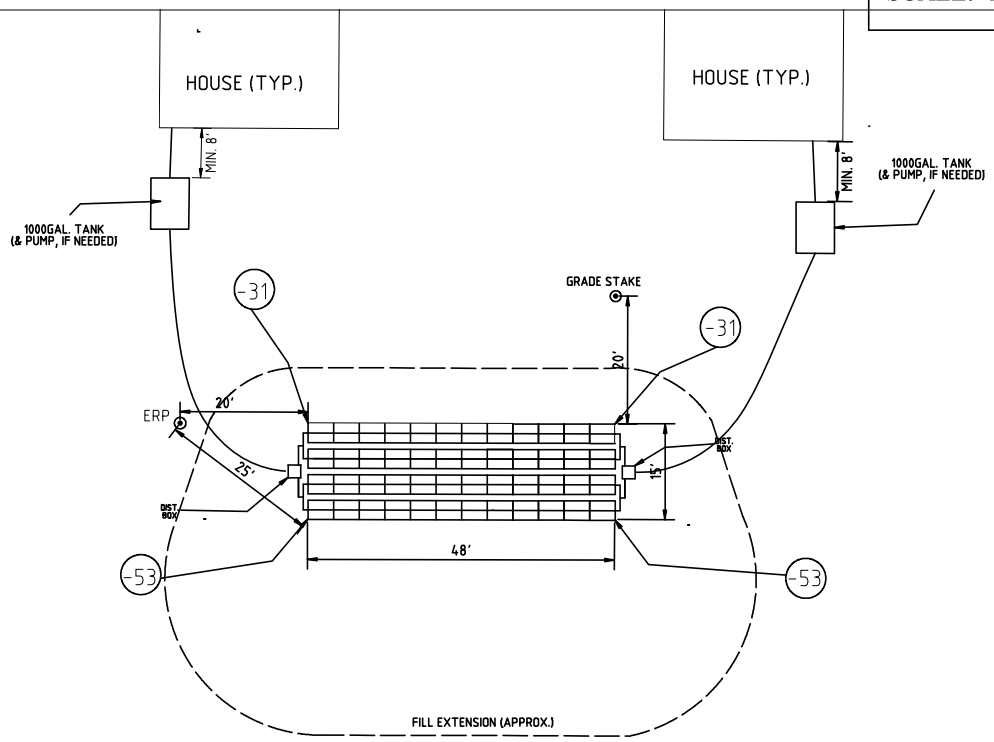
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

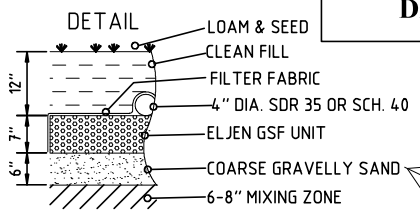
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 48" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

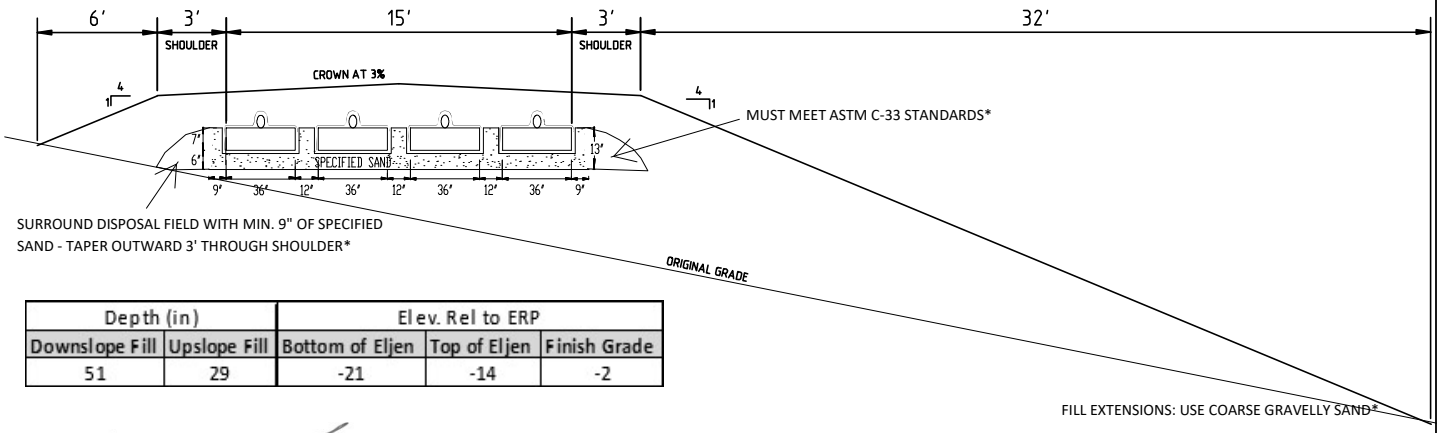
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
51	29	-21	-14	-2

Site Evaluator Signature

SE # 419

Date 3/19/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 47-48

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-27
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.33 s
Lon. 70 d 29 m 43.79 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-27 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile: _____ / Condition: _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

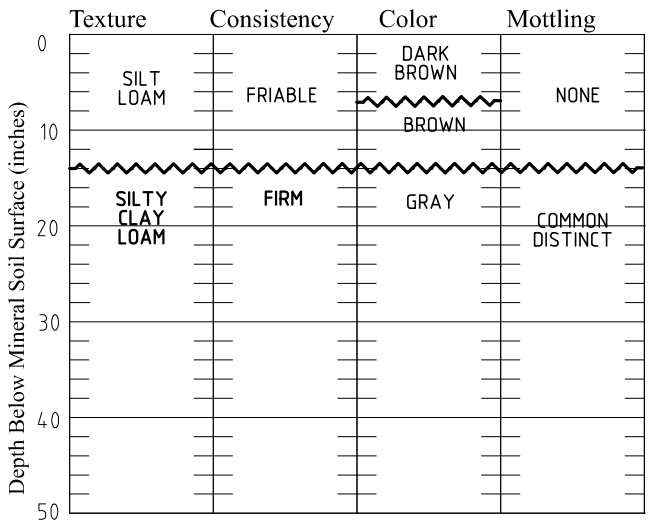
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-27 A ☐ Test Pit ☒ Boring

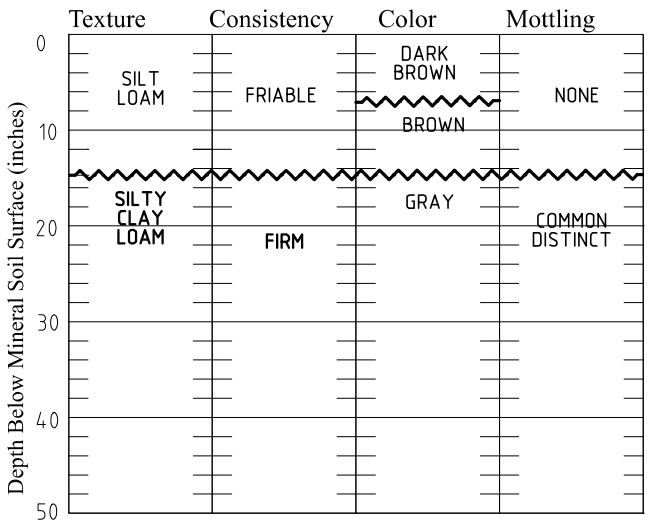
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-27 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

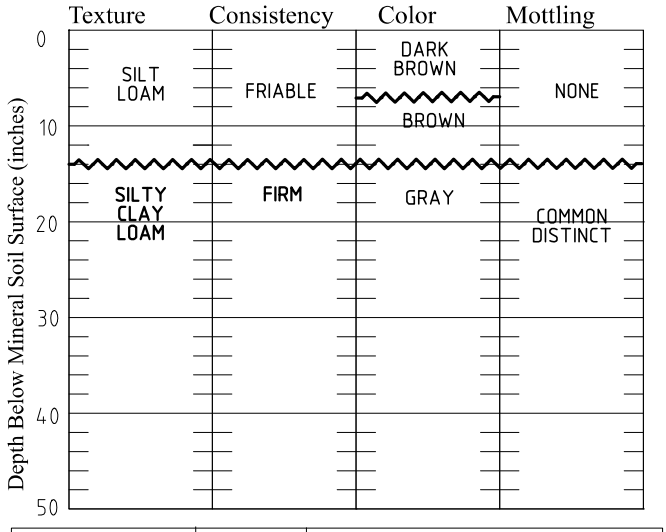


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-27 C ☐ Test Pit ☒ Boring

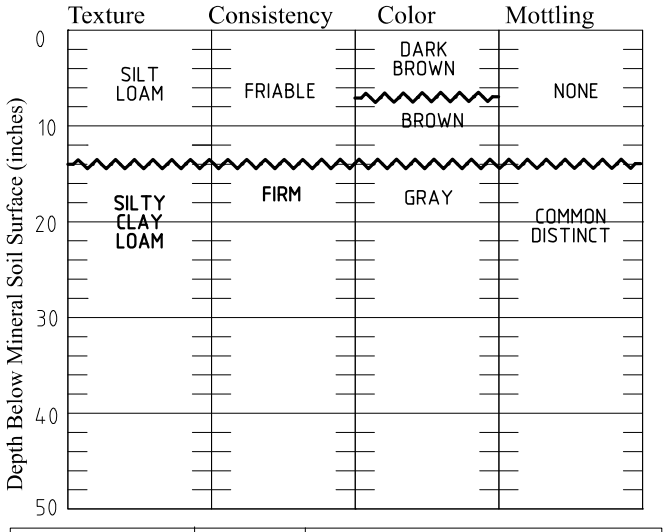
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-27 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

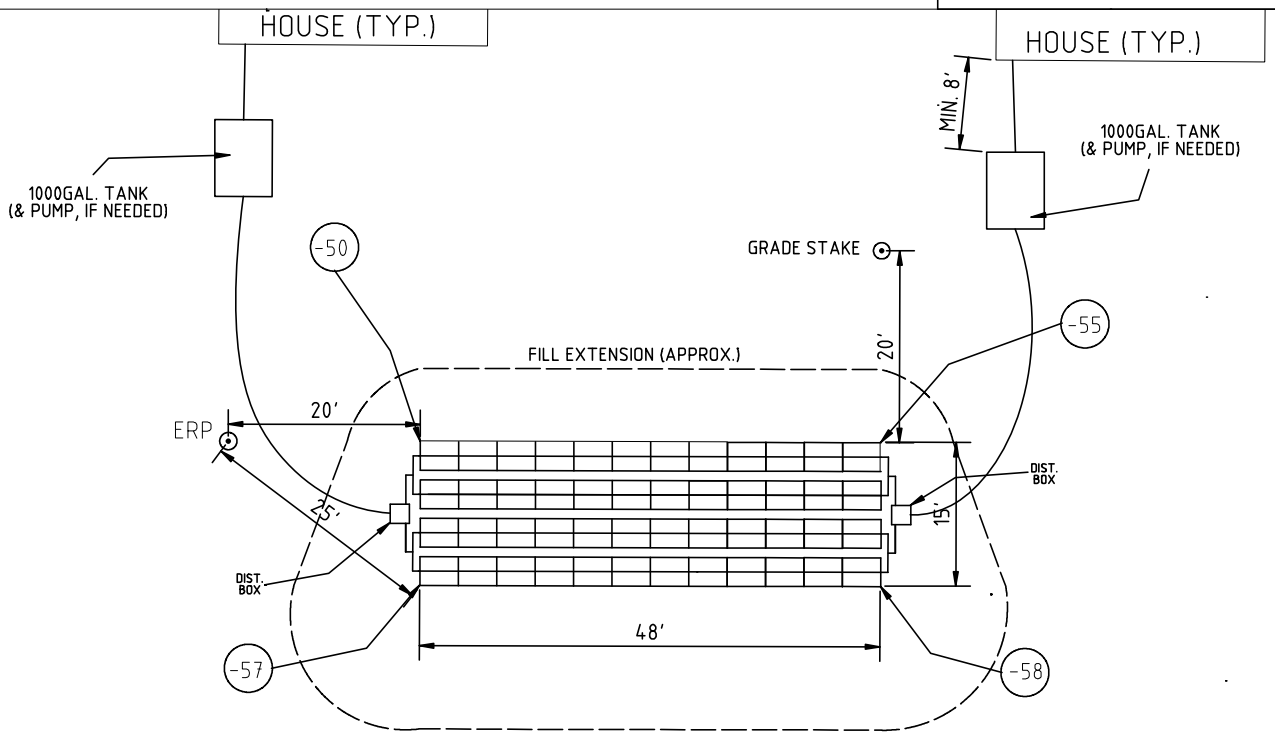
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

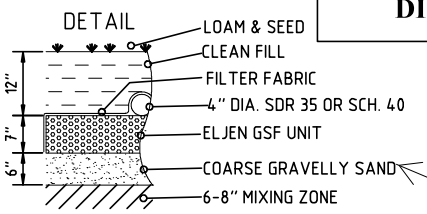
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

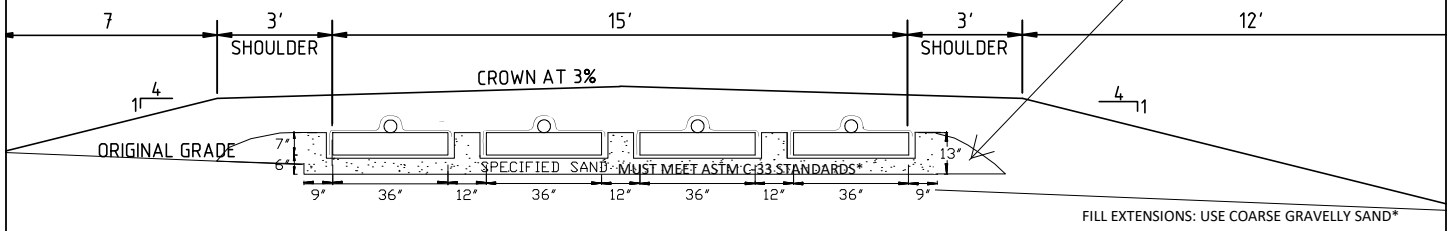
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" OF SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER*



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-46	-39	-27

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 49-51

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE 8 / CONDITION D
at Observation Hole # TP-26
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.06 s
Lon. 70 d 29 m 42.64 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

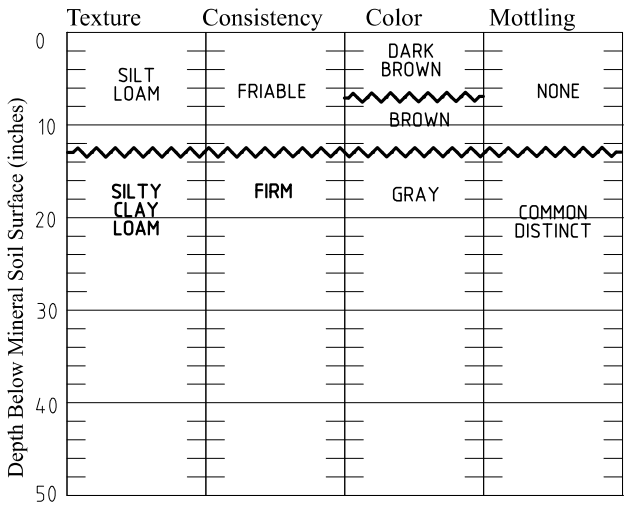
SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-26 ☒ Test Pit ☐ Boring

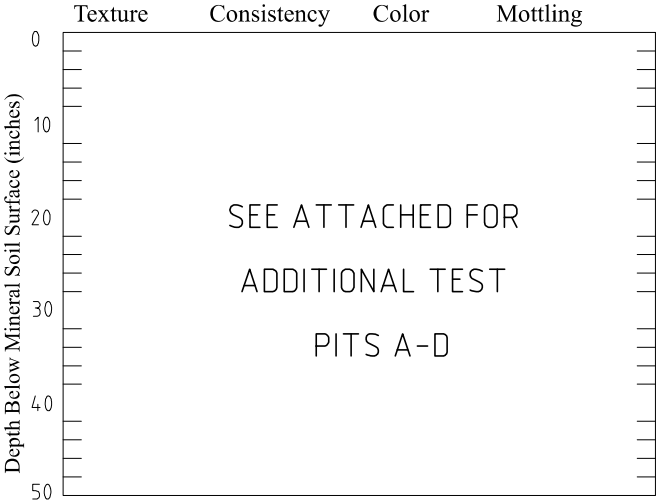
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	5 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

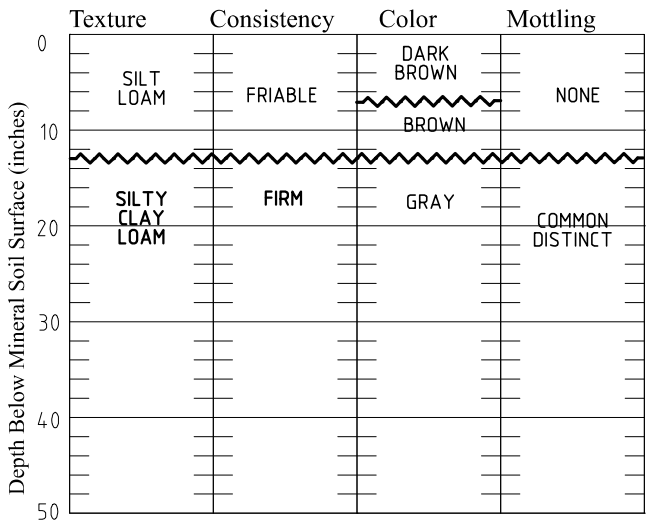
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-26 A ☐ Test Pit ☒ Boring

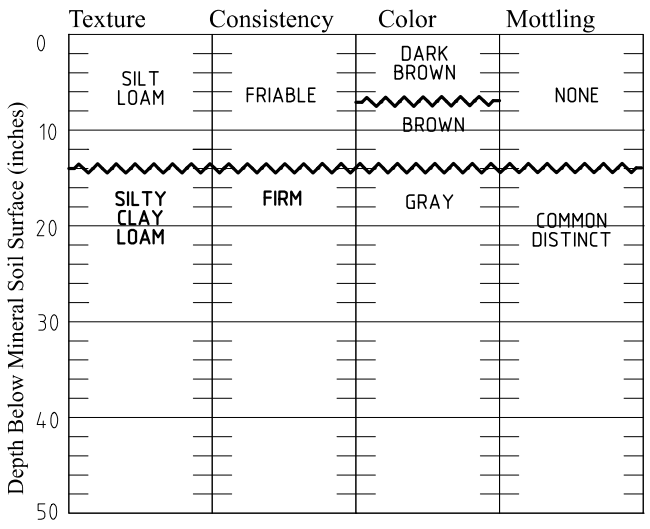
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	5 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-26 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

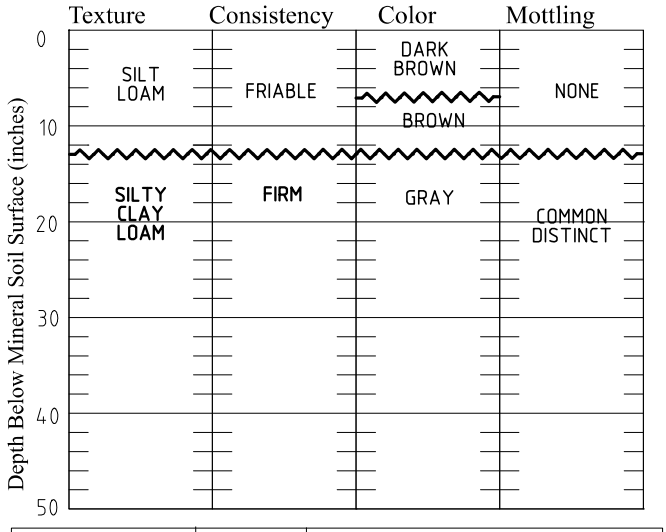


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	5 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-26 C ☐ Test Pit ☒ Boring

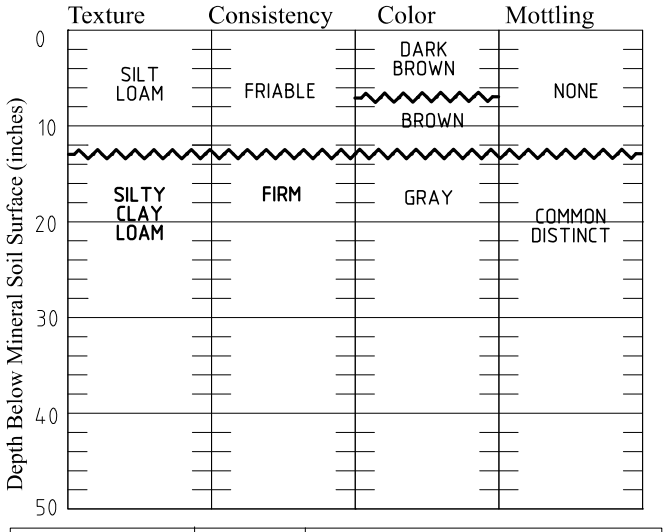
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-26 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

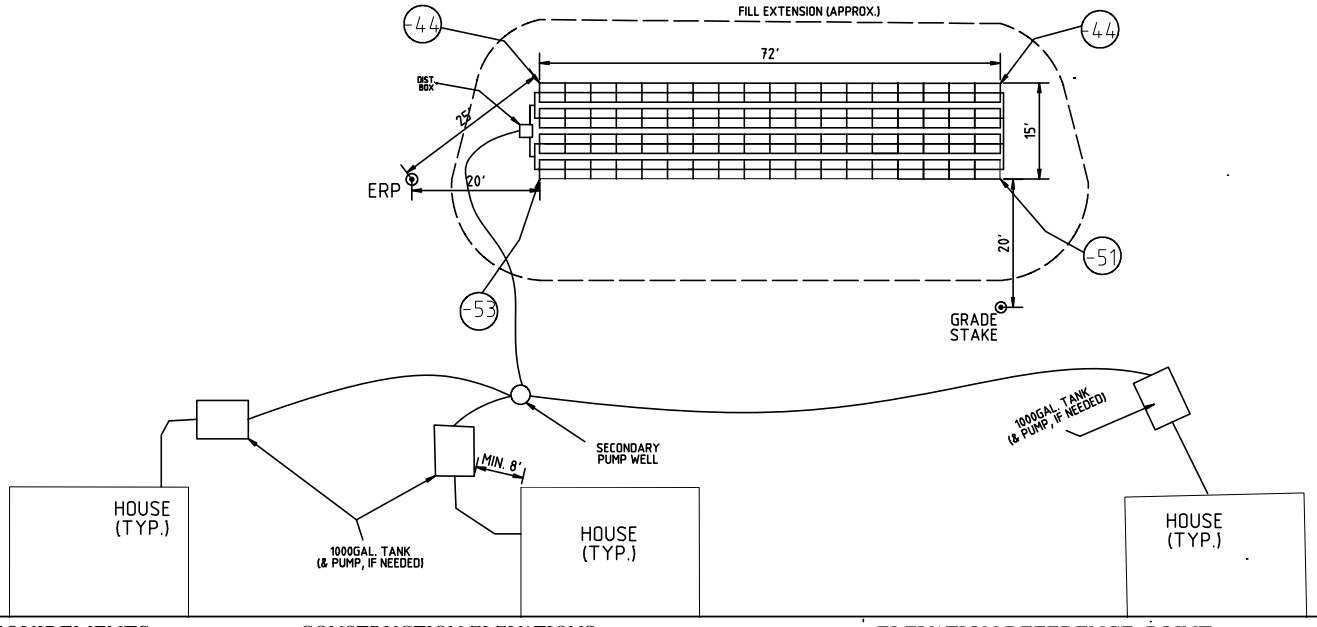
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

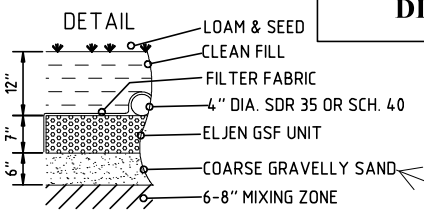
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

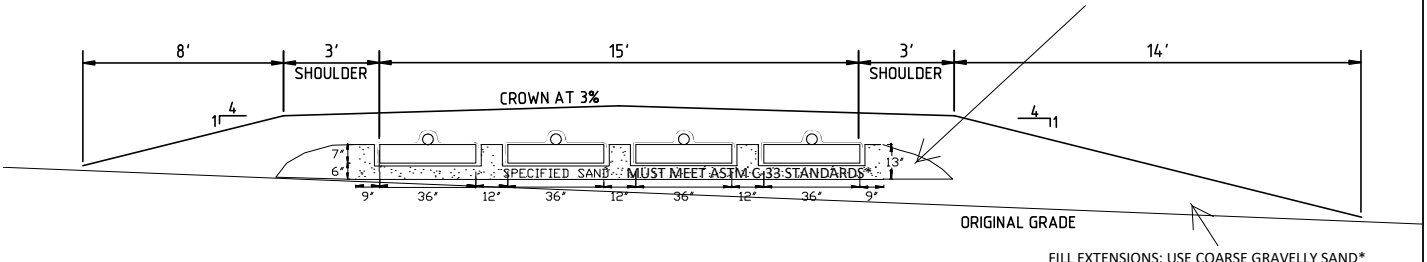
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
33	24	-39	-32	-20

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 52-53

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-28
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.92 s
Lon. 70 d 29 m 43.89 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

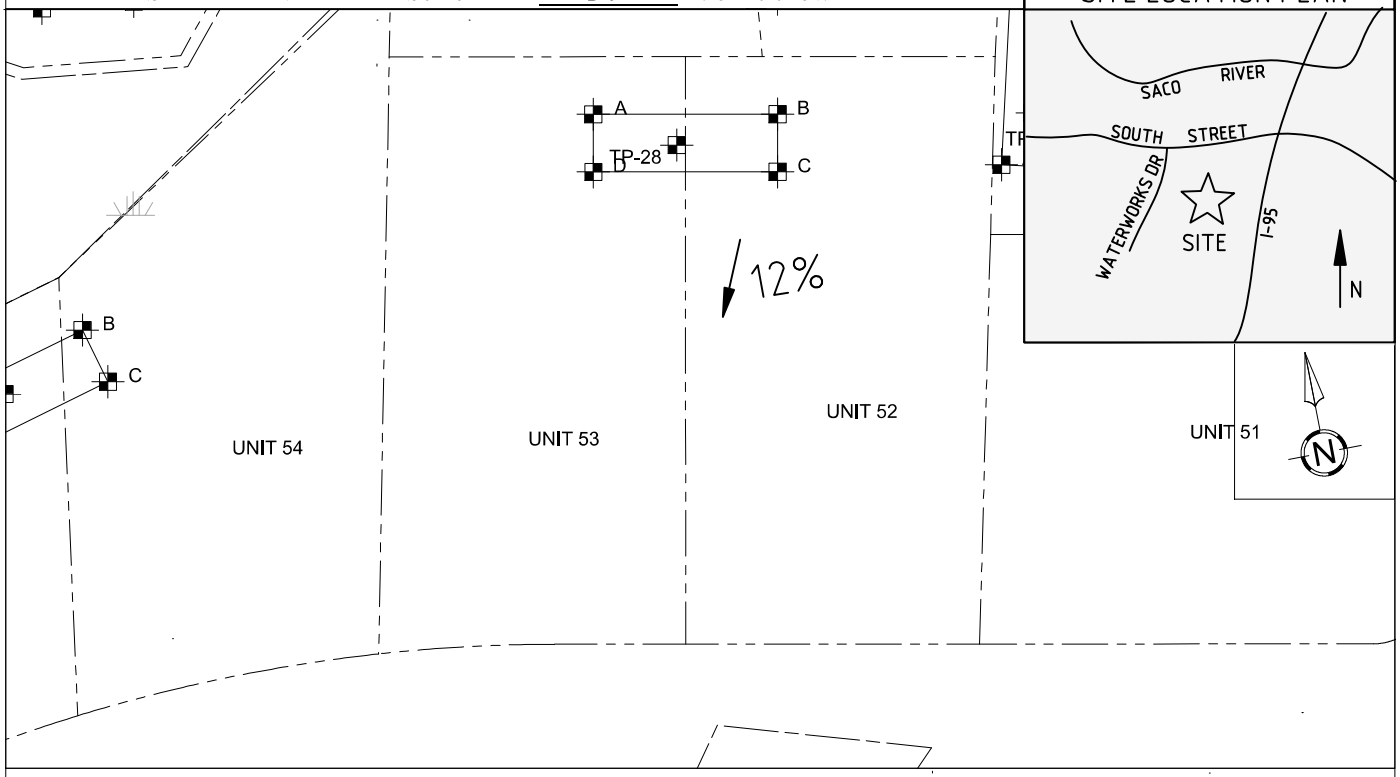
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-28 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

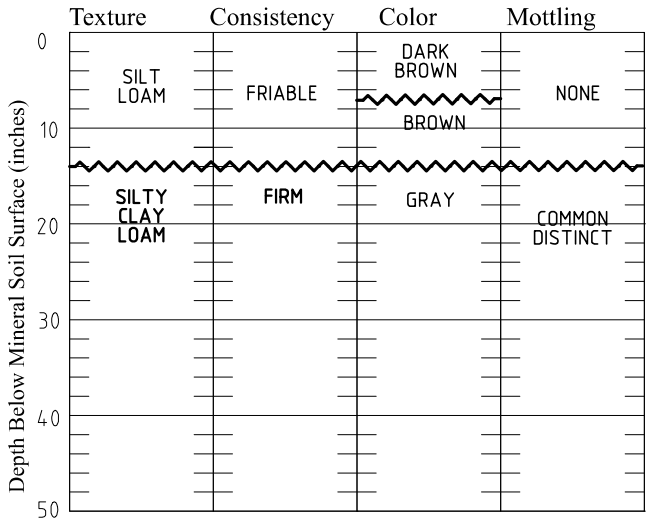
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-28 A ☐ Test Pit ☒ Boring

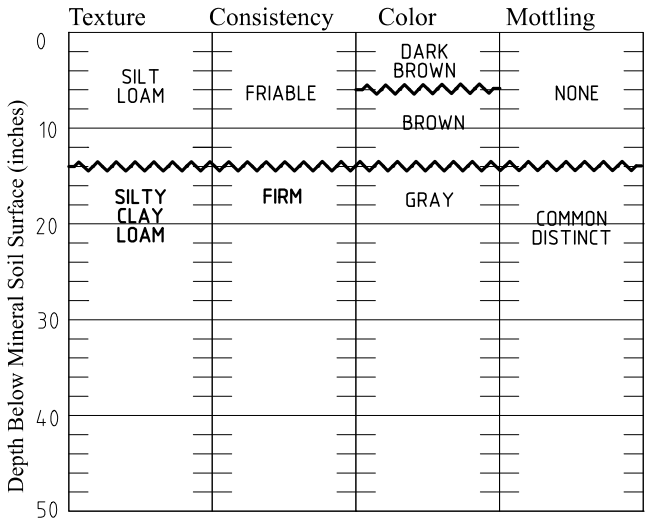
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-28 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

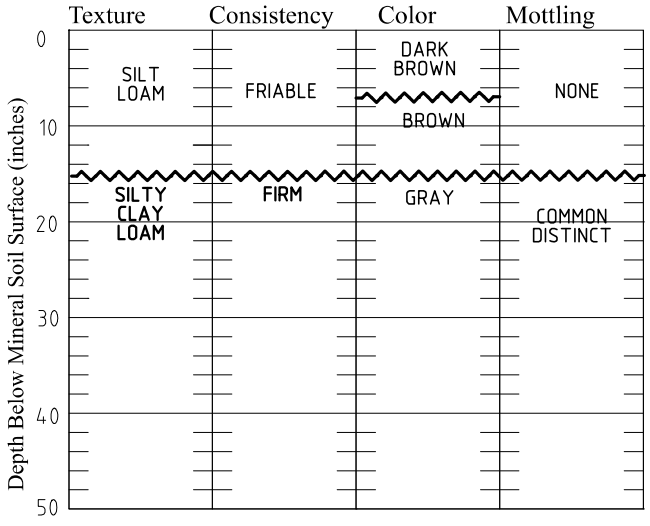


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-28 C ☐ Test Pit ☒ Boring

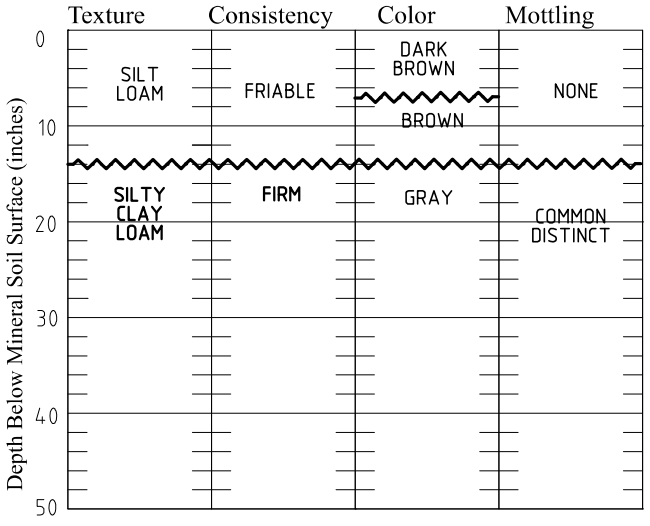
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	10 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-28 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jens

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

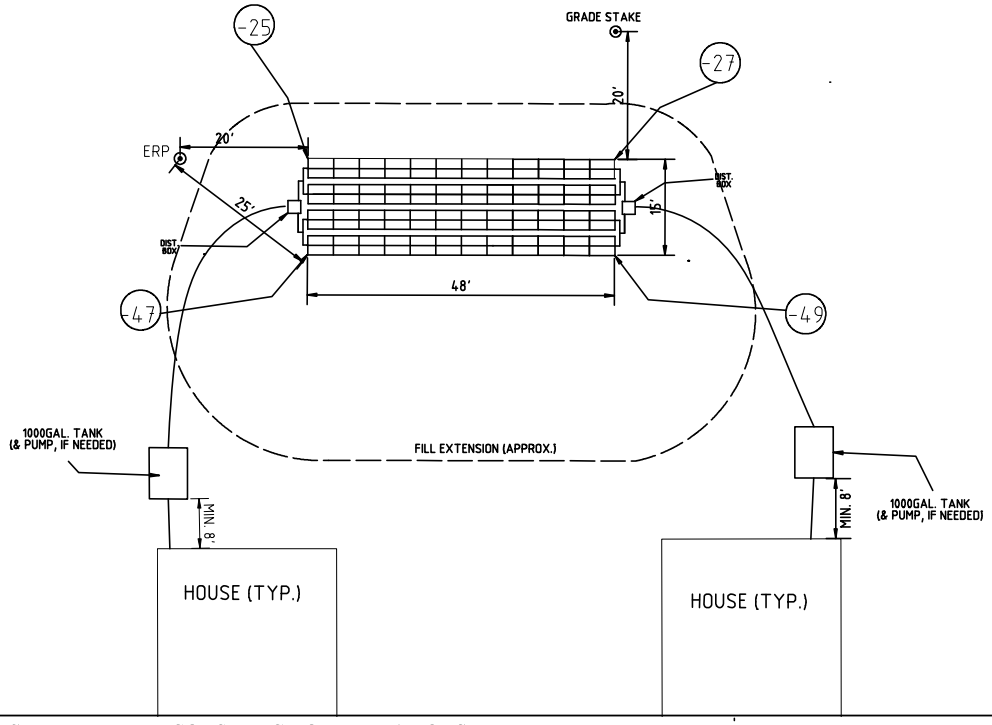
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

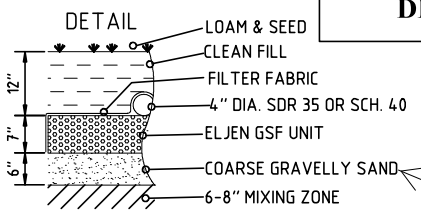
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

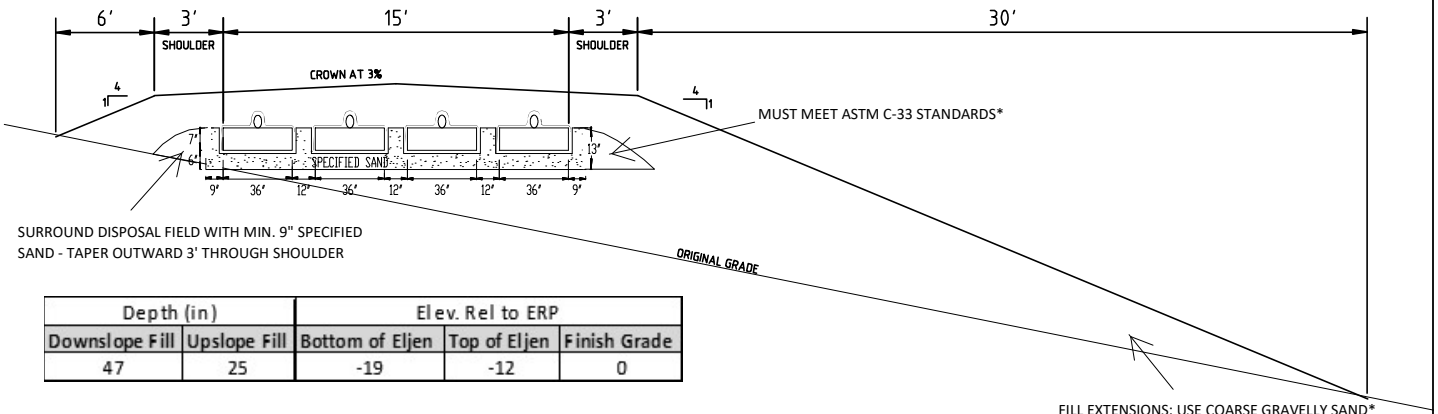
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
47	25	-19	-12	0

Site Evaluator Signature

SE # 419

Date 3/19/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 54-55

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-30
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.56 s
Lon. 70 d 29 m 46.39 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

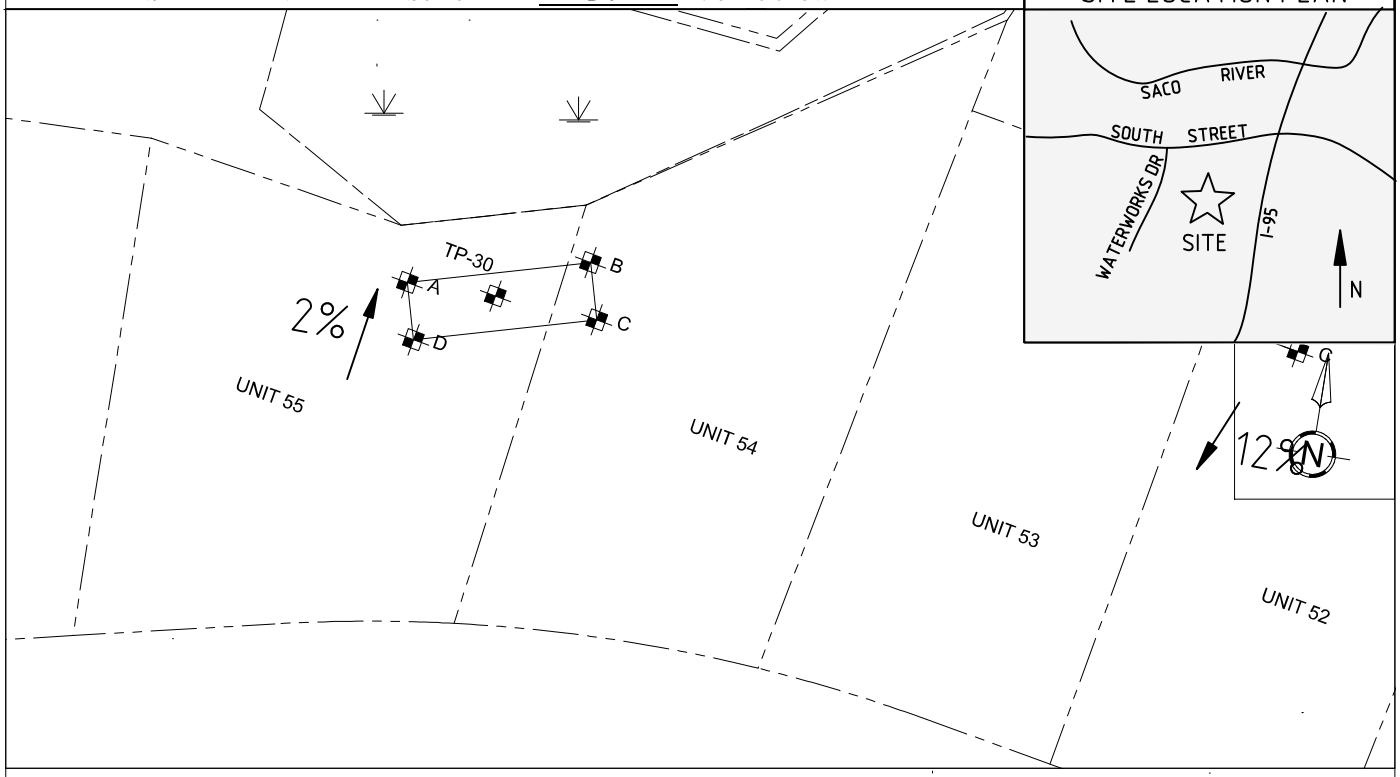
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-30 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

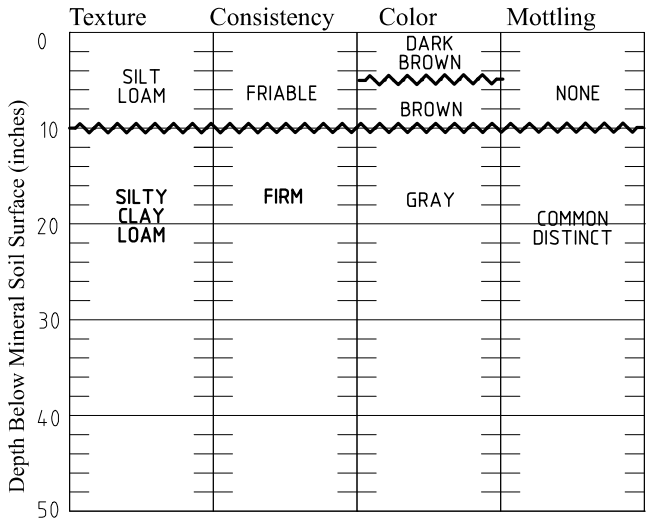
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-30 A ☐ Test Pit ☒ Boring

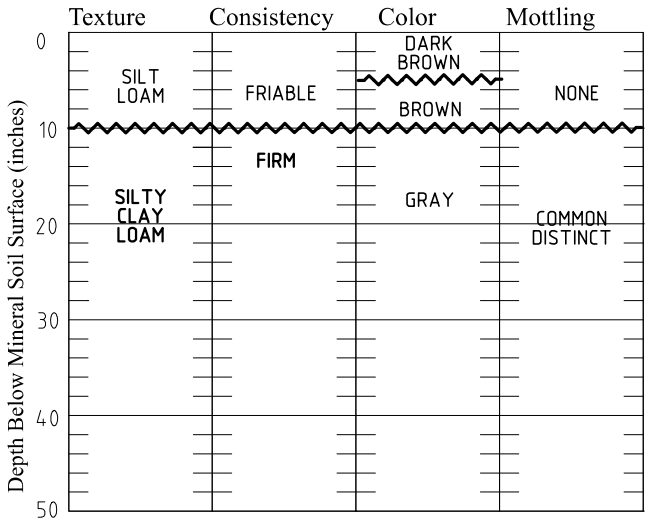
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-30 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

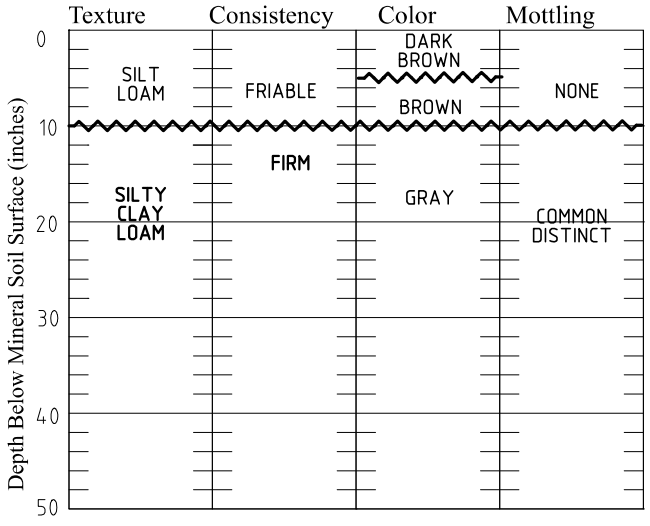


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-30 C ☐ Test Pit ☒ Boring

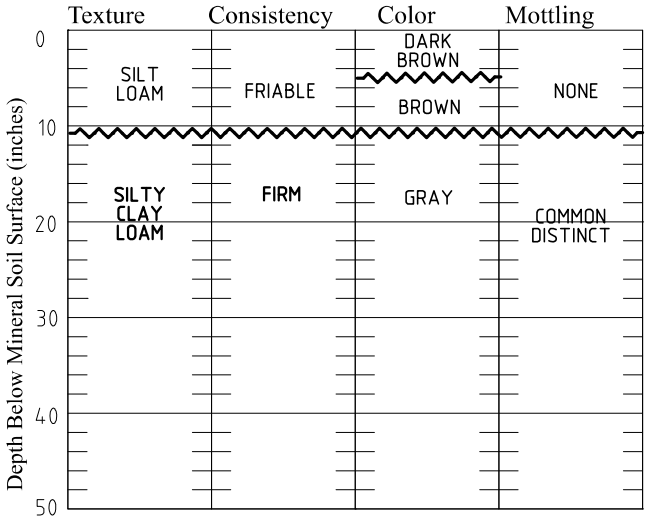
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-30 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	11 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/22/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

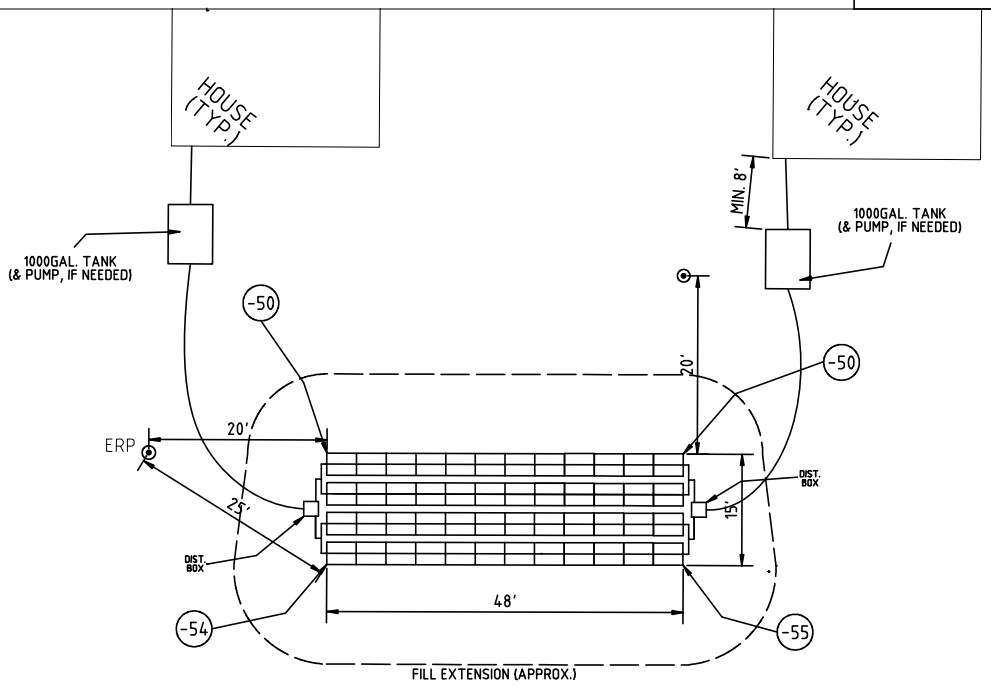
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

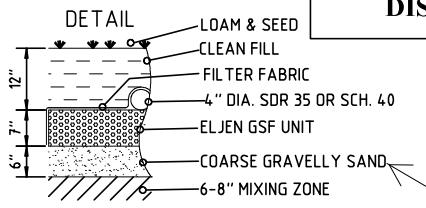
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

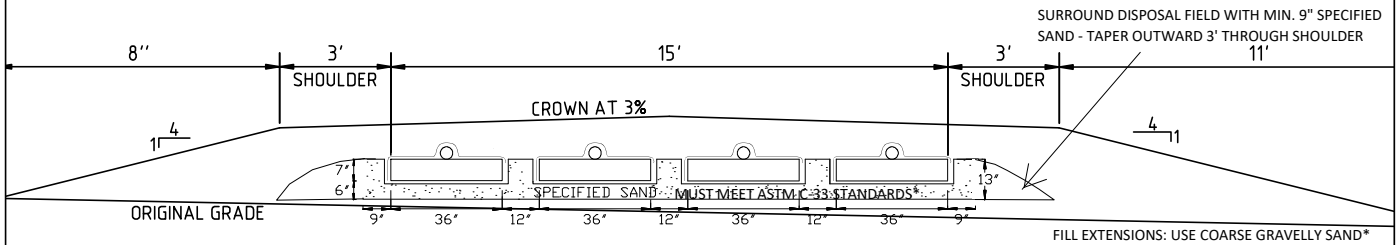


× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	27	-42	-35	-23

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 56-58

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-22
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 36.48 s
Lon. 70 d 29 m 49.59 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

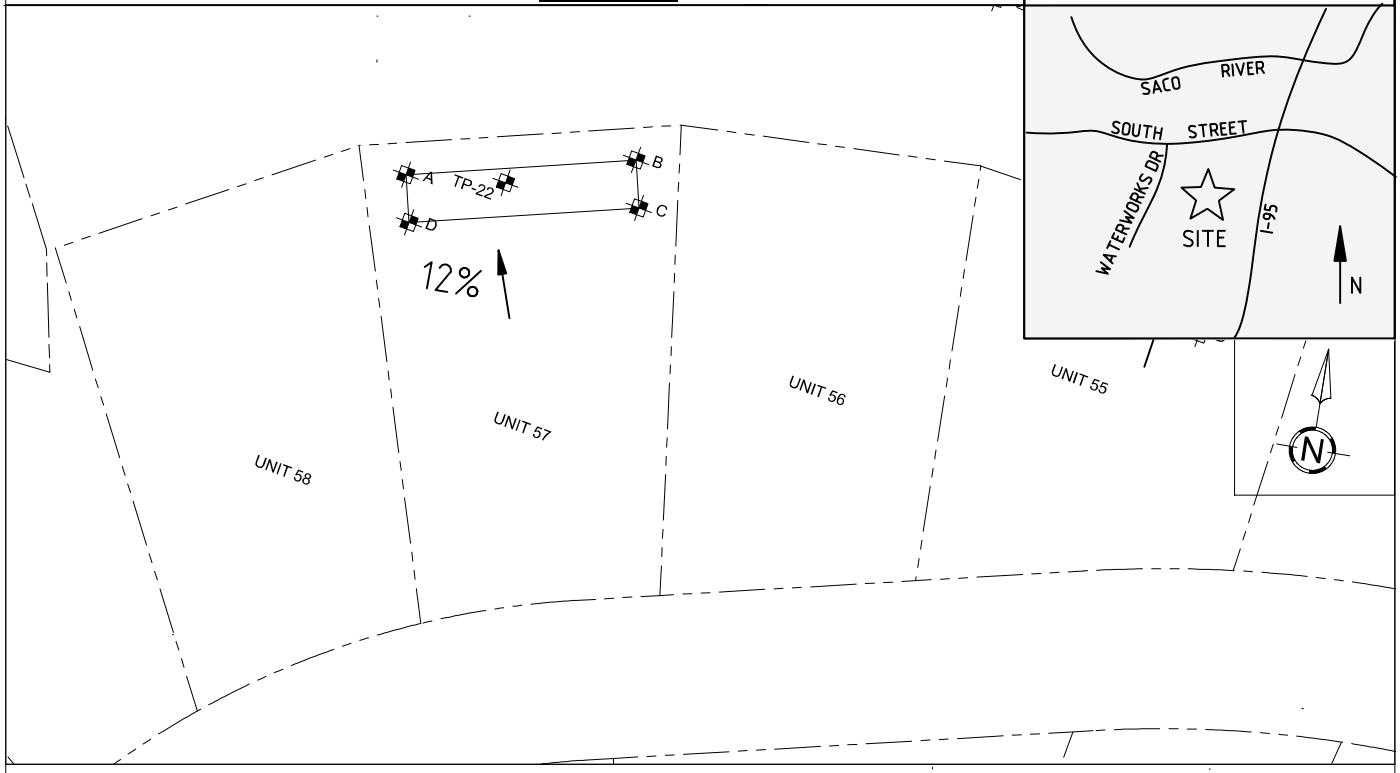
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-22 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

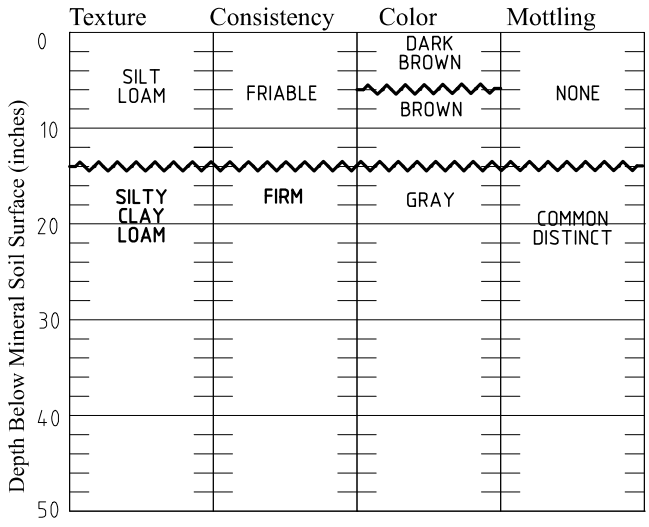
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-22 A ☐ Test Pit ☒ Boring

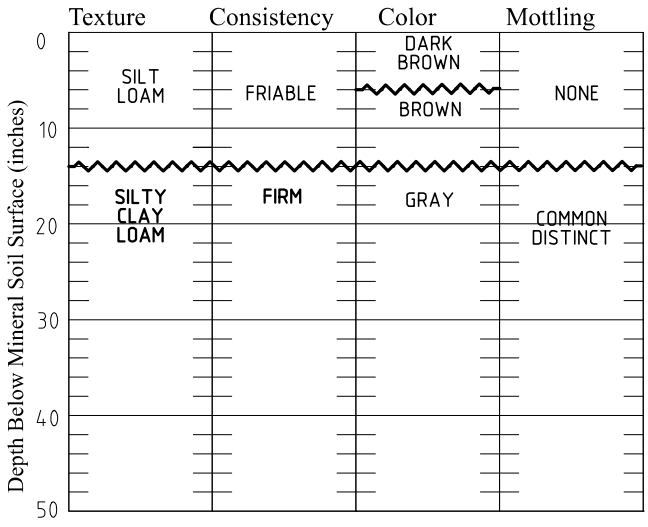
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-22 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

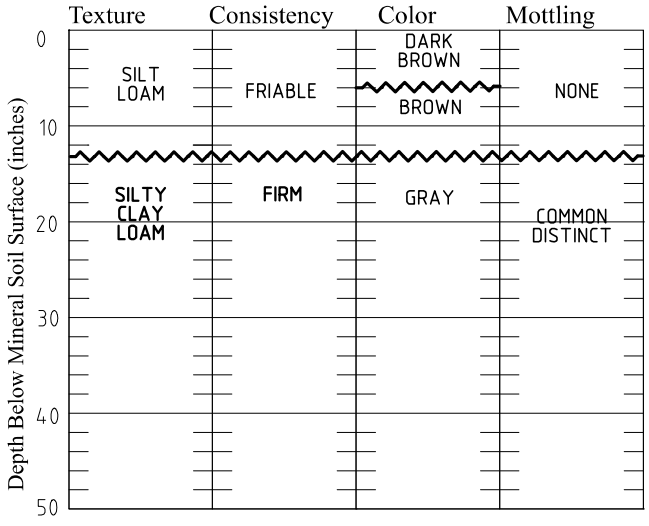


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-22 C ☐ Test Pit ☒ Boring

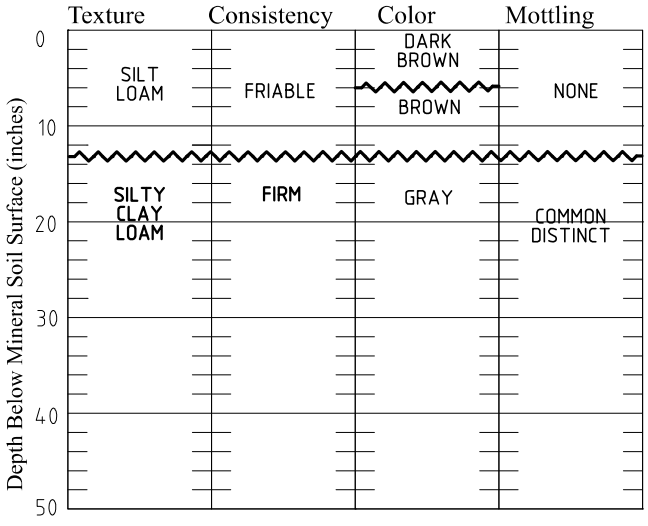
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-22 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/22/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

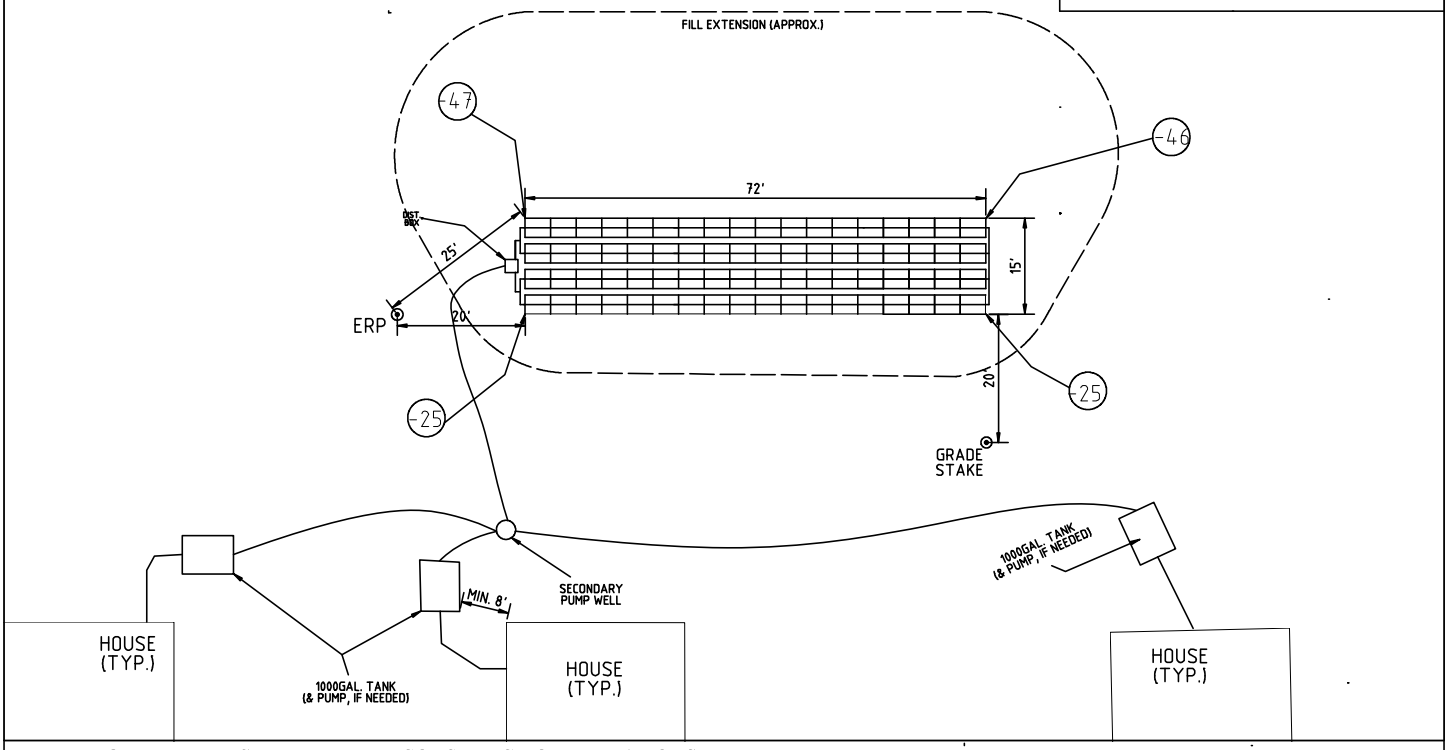
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

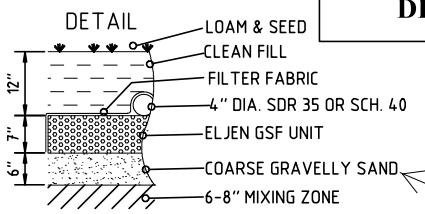
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

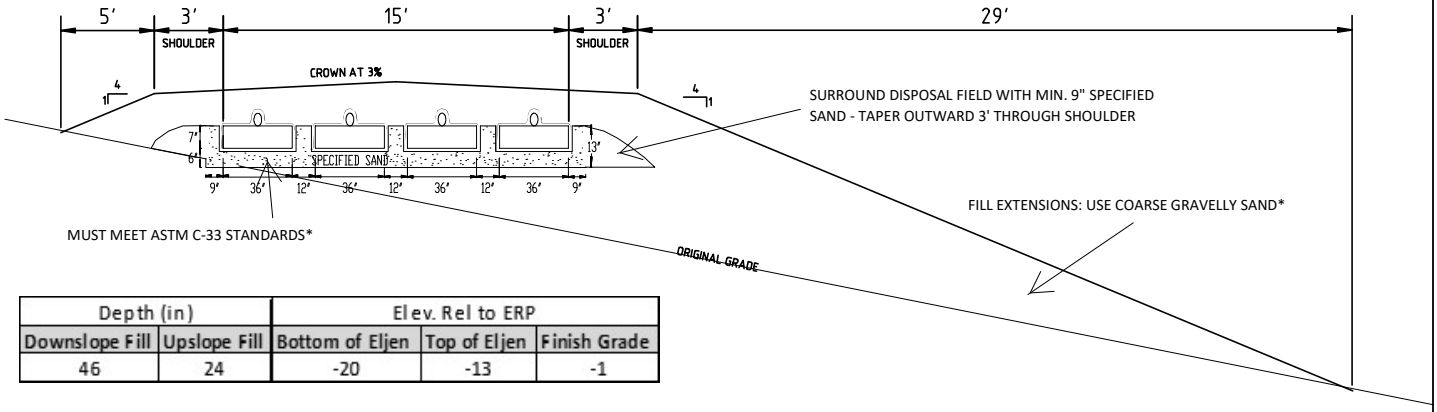
× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
46	24	-20	-13	-1

Site Evaluator Signature

SE # 419

Date 3/19/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOT 59

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved ____

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: ____
☐ 3. Other: ____ (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 1107 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-21
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 35.05 s
Lon. 70 d 29 m 52.65 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature ____ SE # 419 Date 3/26/23

ERIK LEMA (Site Evaluator Name Printed) 207-518-8442 (Telephone Number) erik@basswoodenv.com (E-mail Address)

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

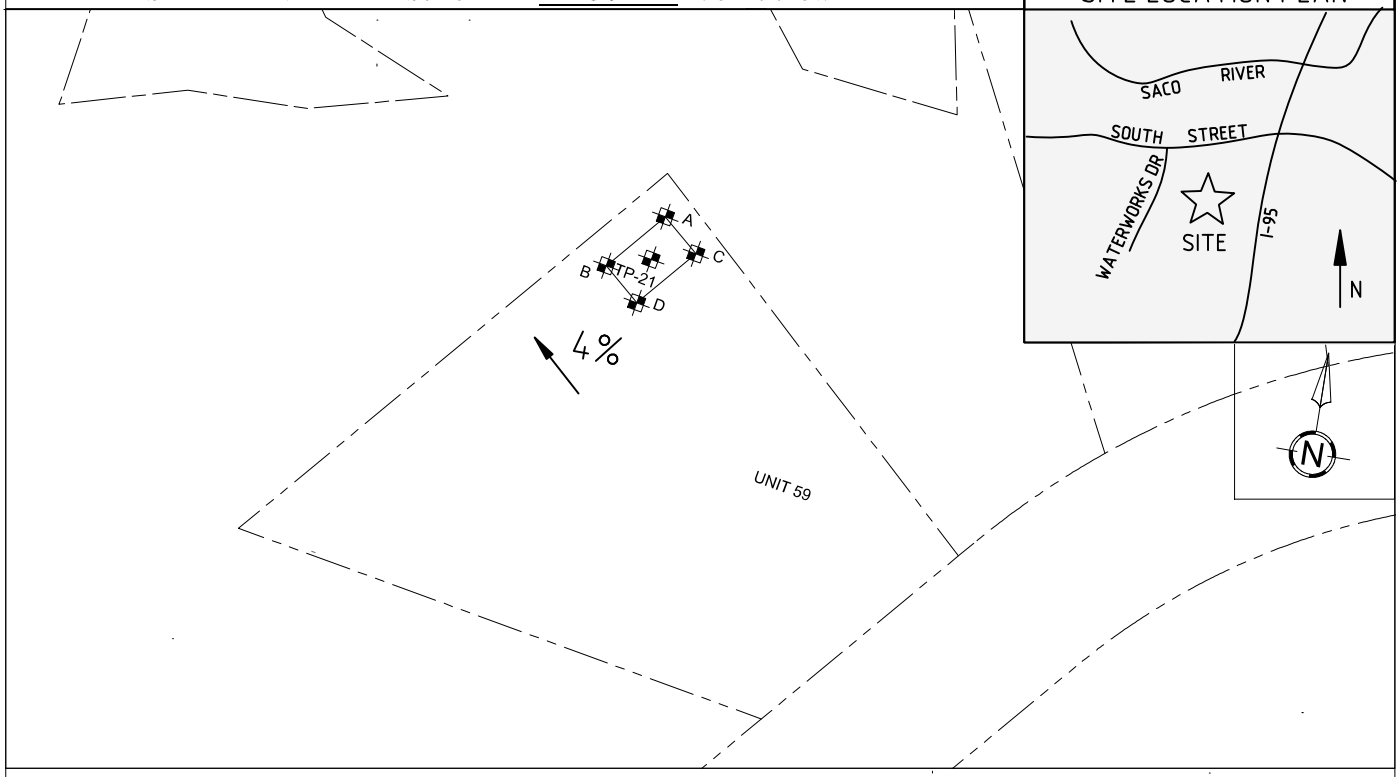
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-21 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

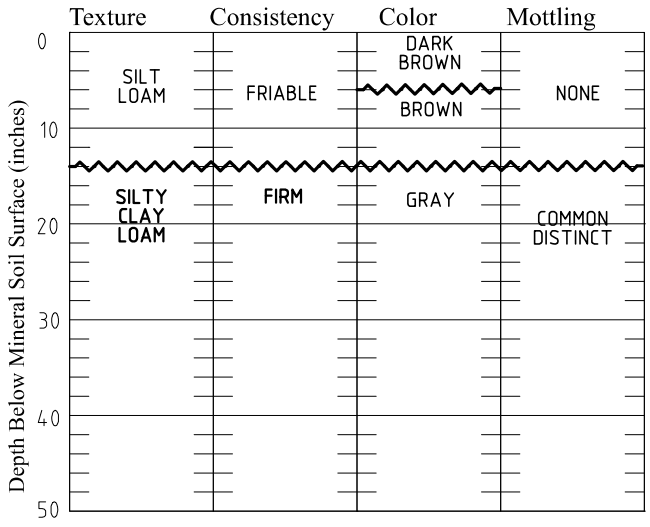
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-21 A ☐ Test Pit ☒ Boring

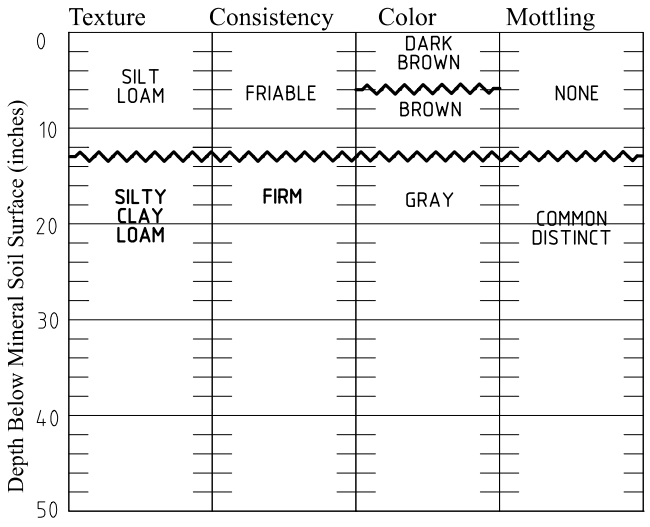
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-21 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

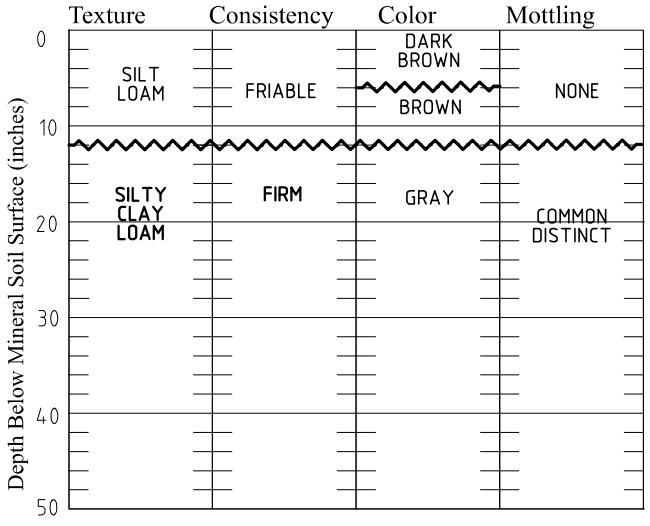


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-21 C ☐ Test Pit ☒ Boring

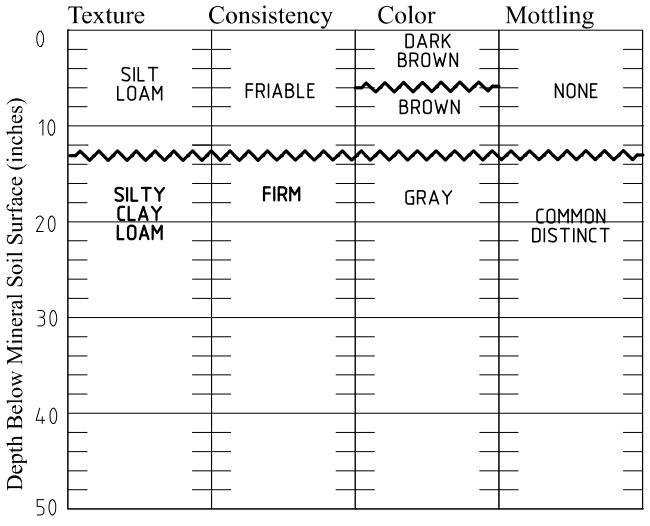
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-21 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/22/23

Page __ of __

HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

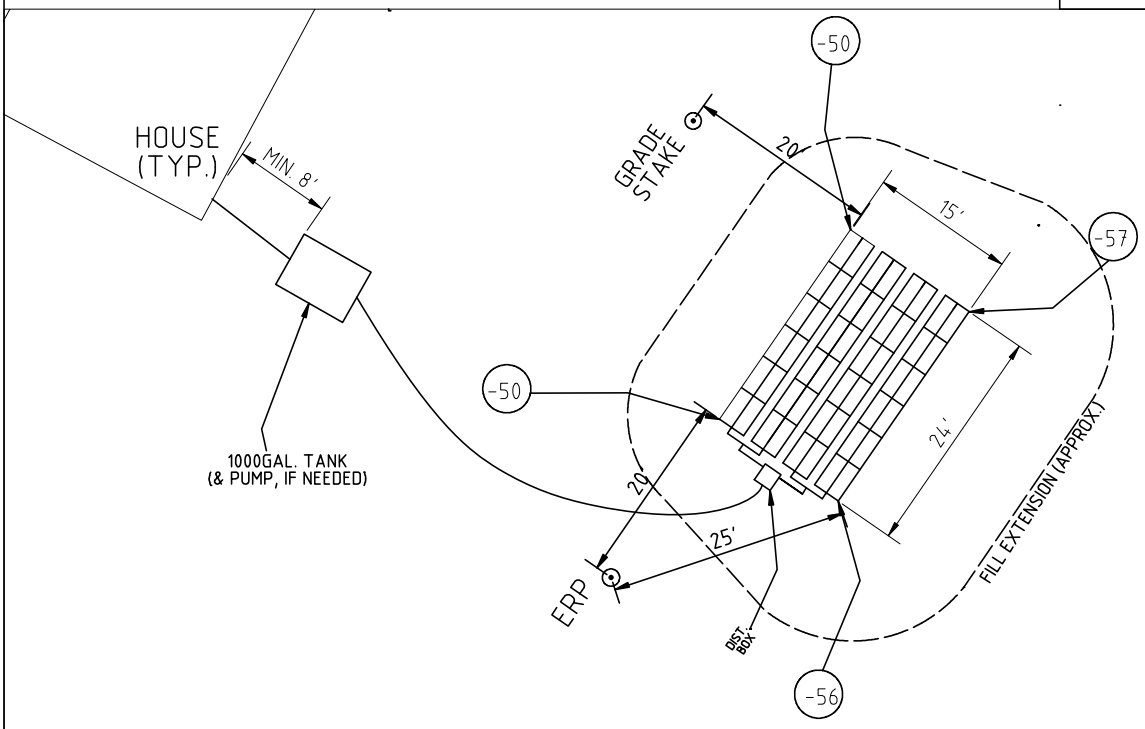
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

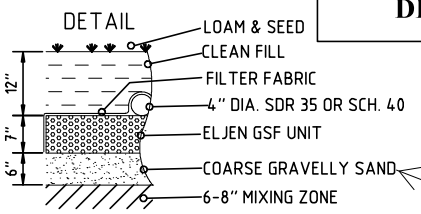
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

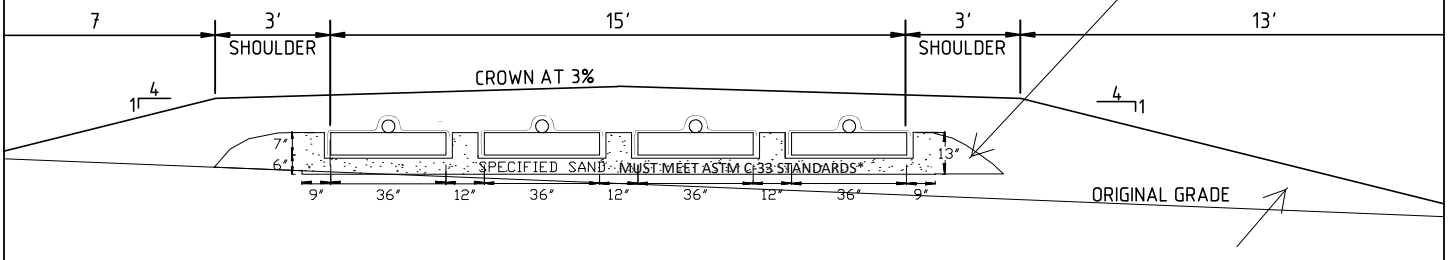
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
32	25	-44	-37	-25

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 60-62

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-31
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 33.72 s
Lon. 70 d 29 m 46.93 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

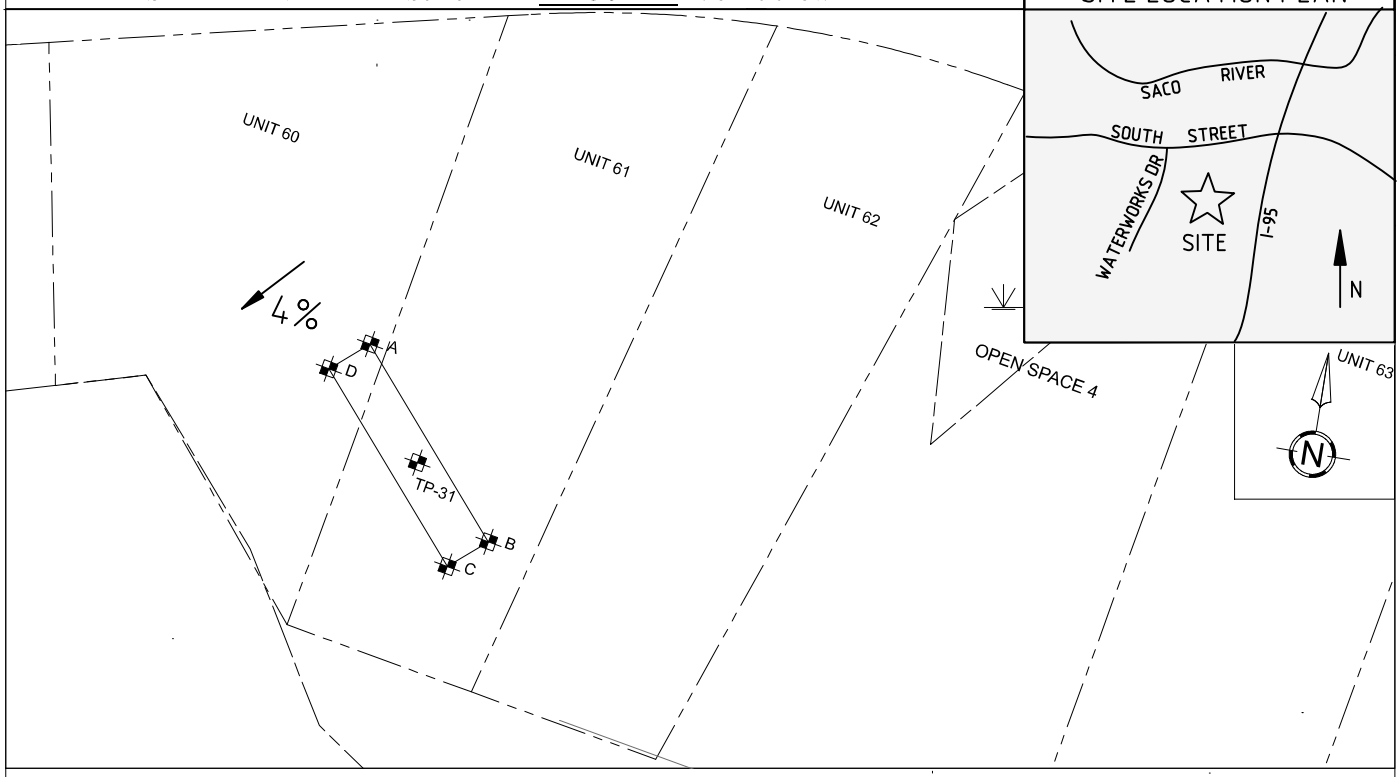
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-31 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile _____ Condition _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

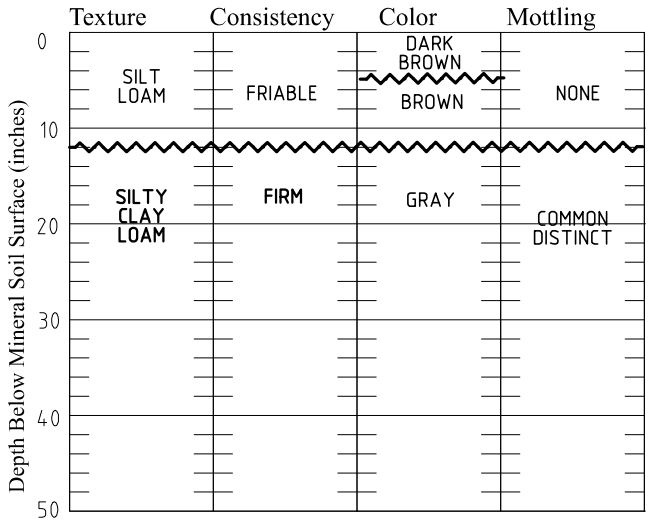
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-31 A ☐ Test Pit ☒ Boring

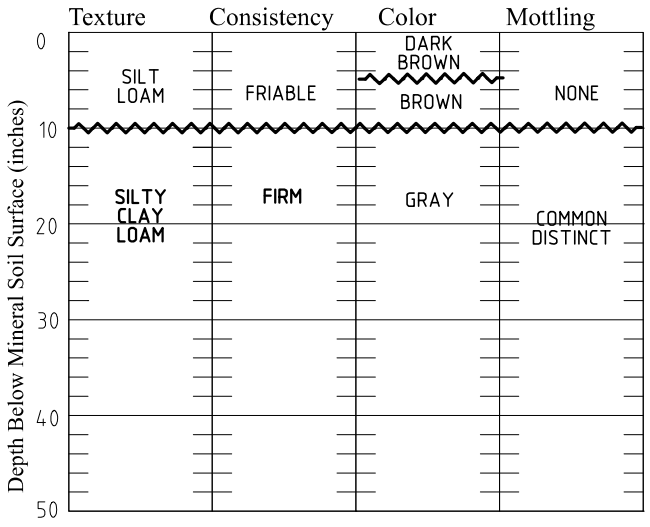
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-31 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

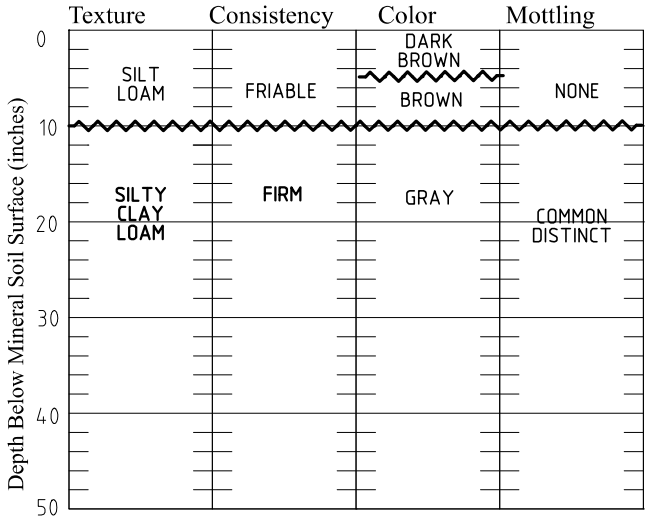


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-31 C ☐ Test Pit ☒ Boring

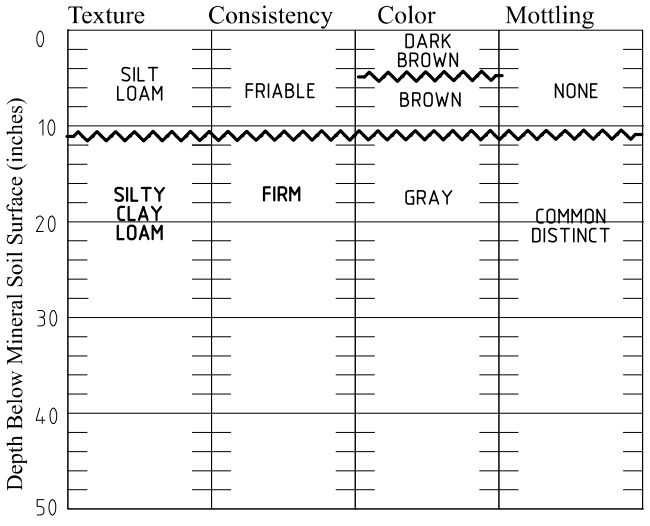
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-31 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	11 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/23/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

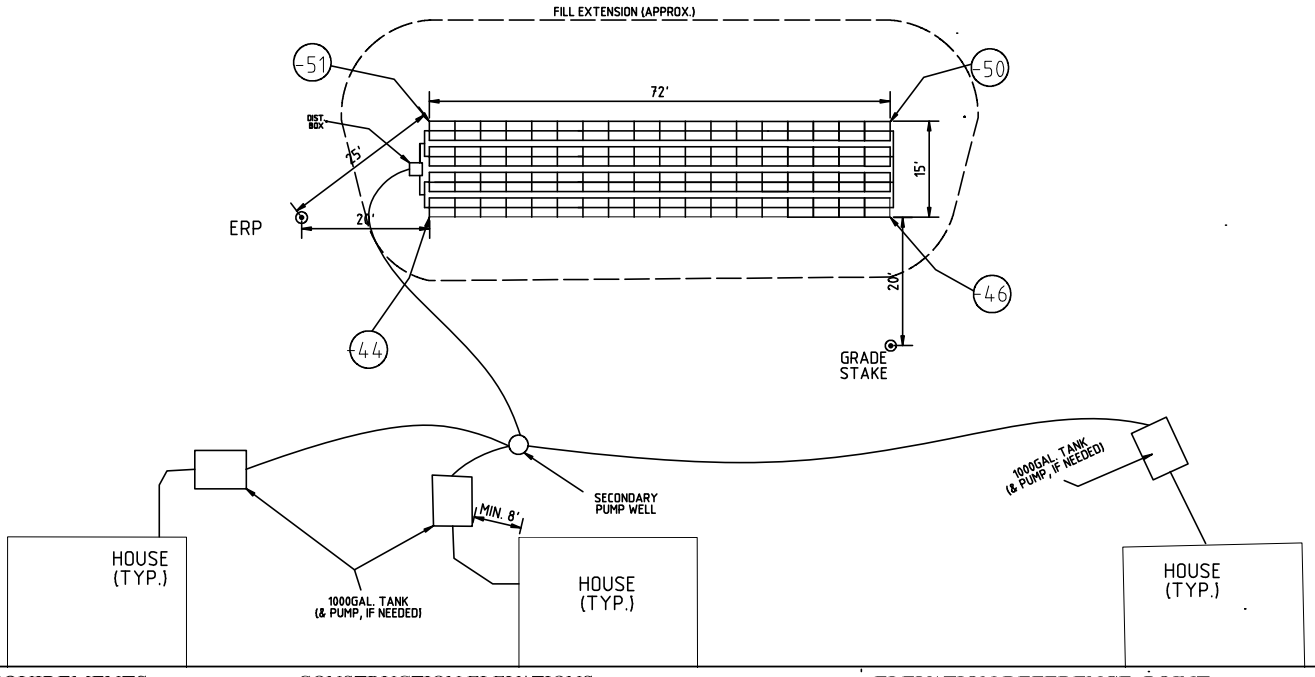
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

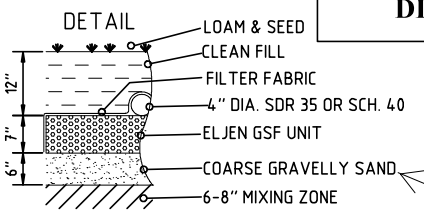
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

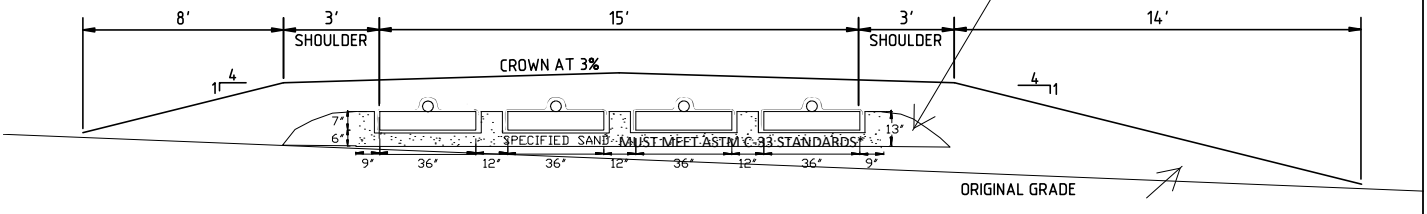
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	27	-36	-29	-17

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 63-64

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-32
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 32.70 s
Lon. 70 d 29 m 42.49 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

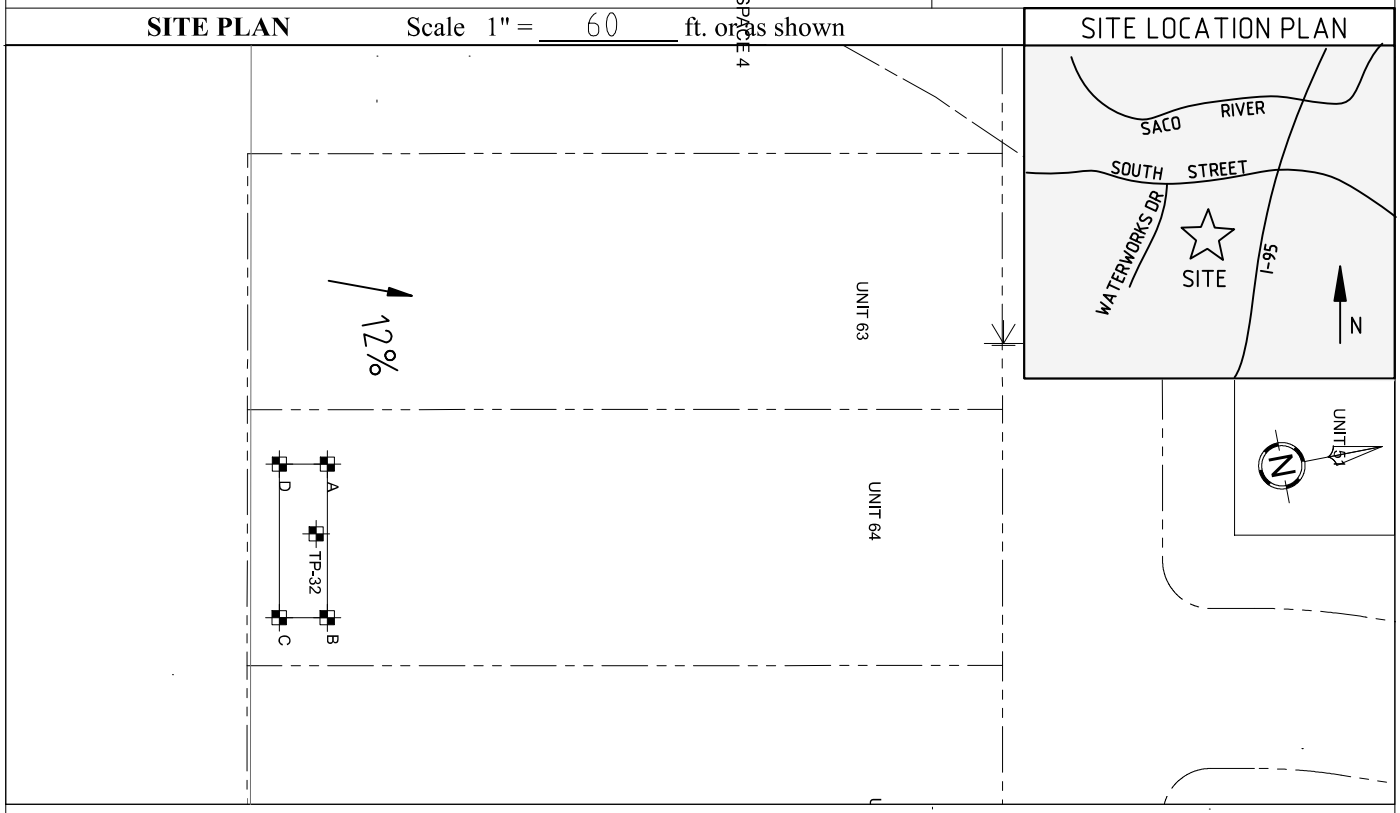
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

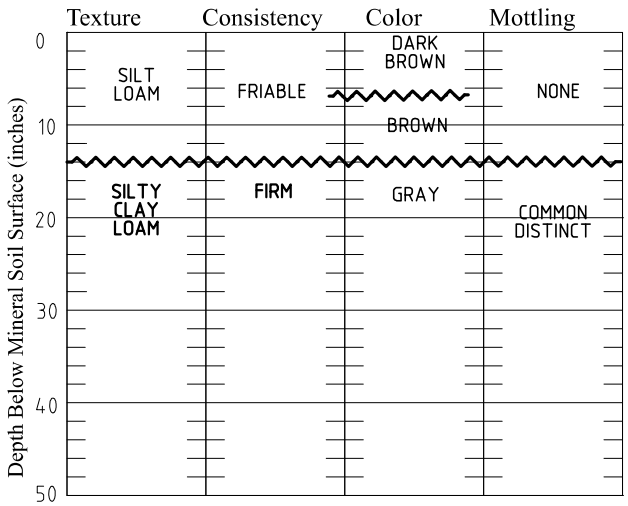


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-32 ☐ Test Pit ☒ Boring

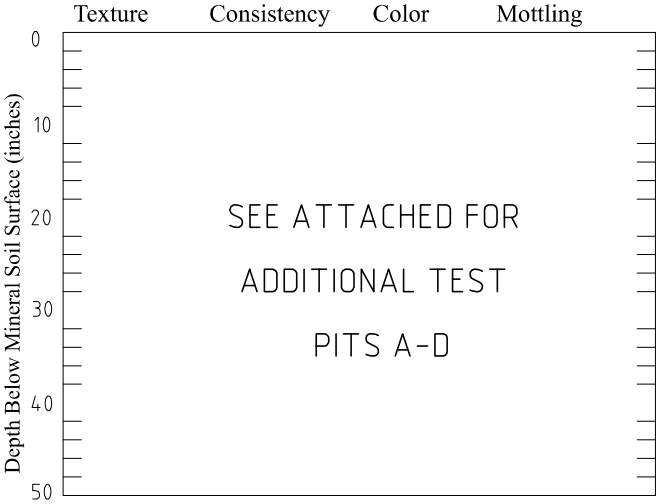
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

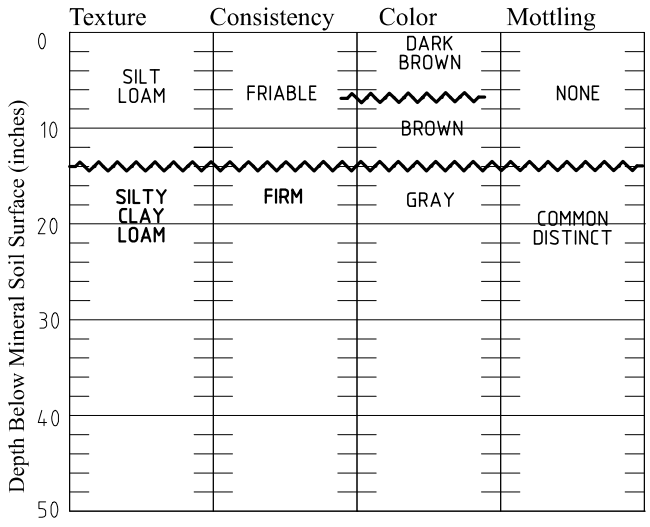
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-32 A ☐ Test Pit ☒ Boring

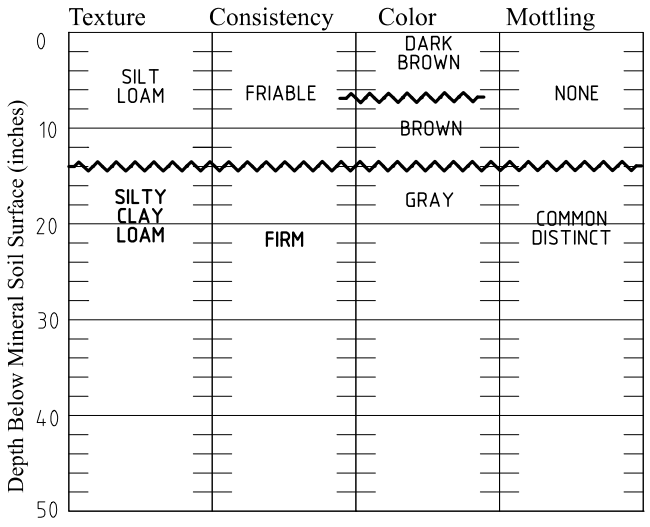
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-32 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

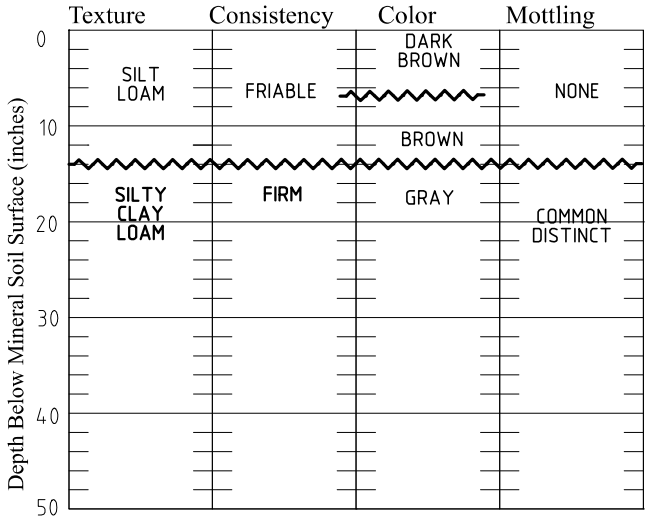


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	12 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-32 C ☐ Test Pit ☒ Boring

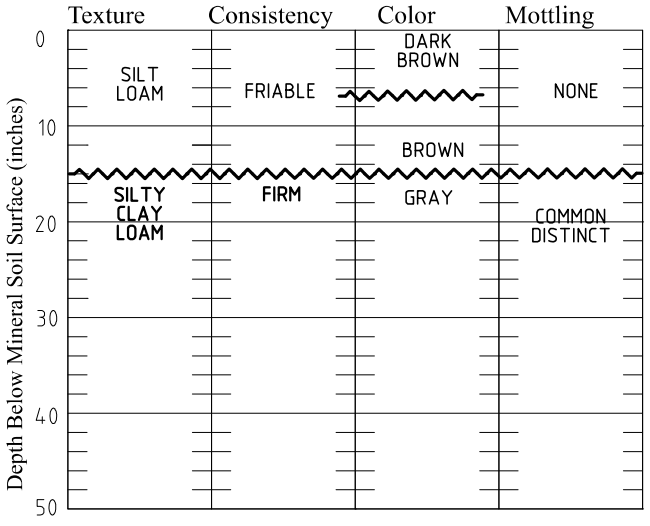
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-32 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	12 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

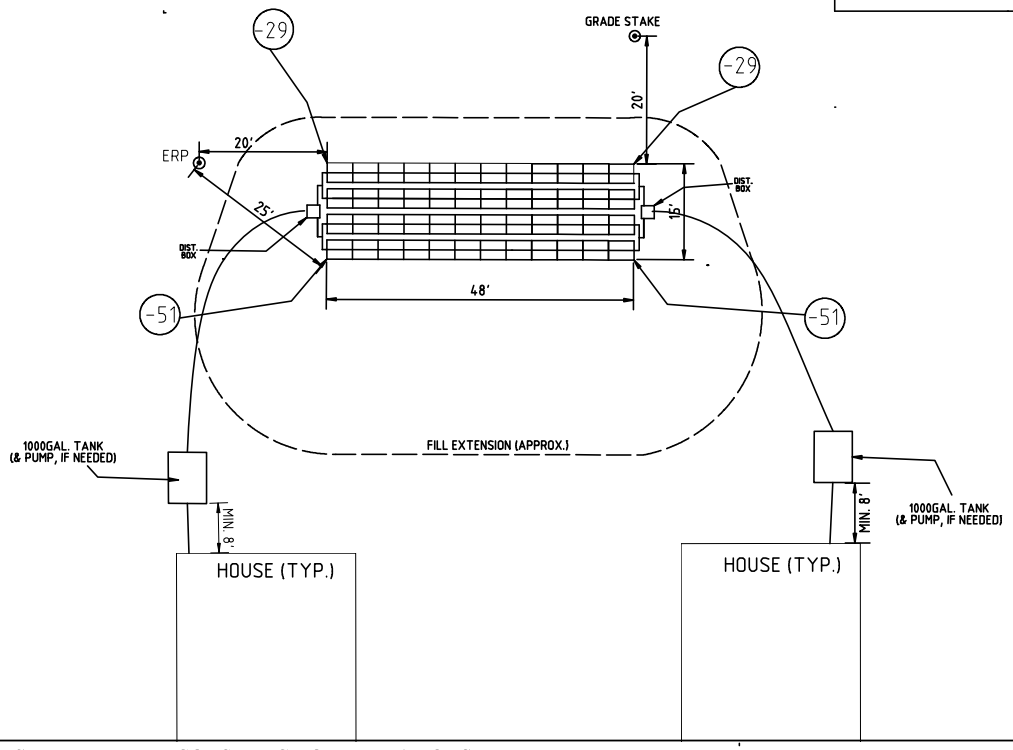
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

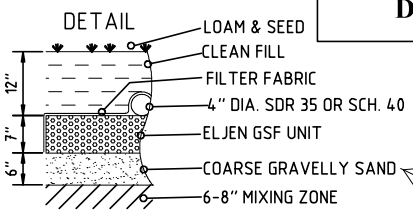
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 48" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

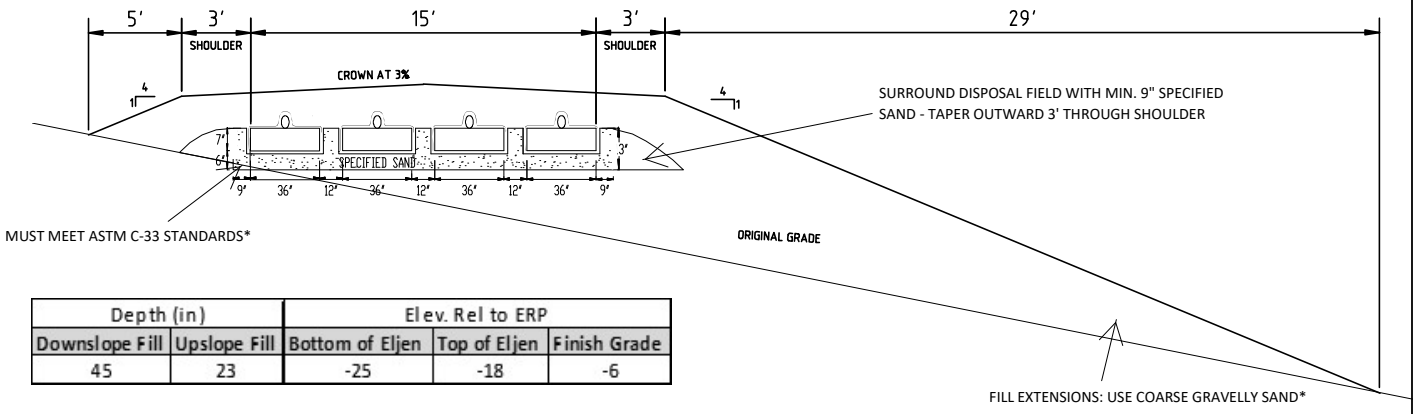
× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
45	23	-25	-18	-6

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 65-66

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-33
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 32.48 s
Lon. 70 d 29 m 40.33 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

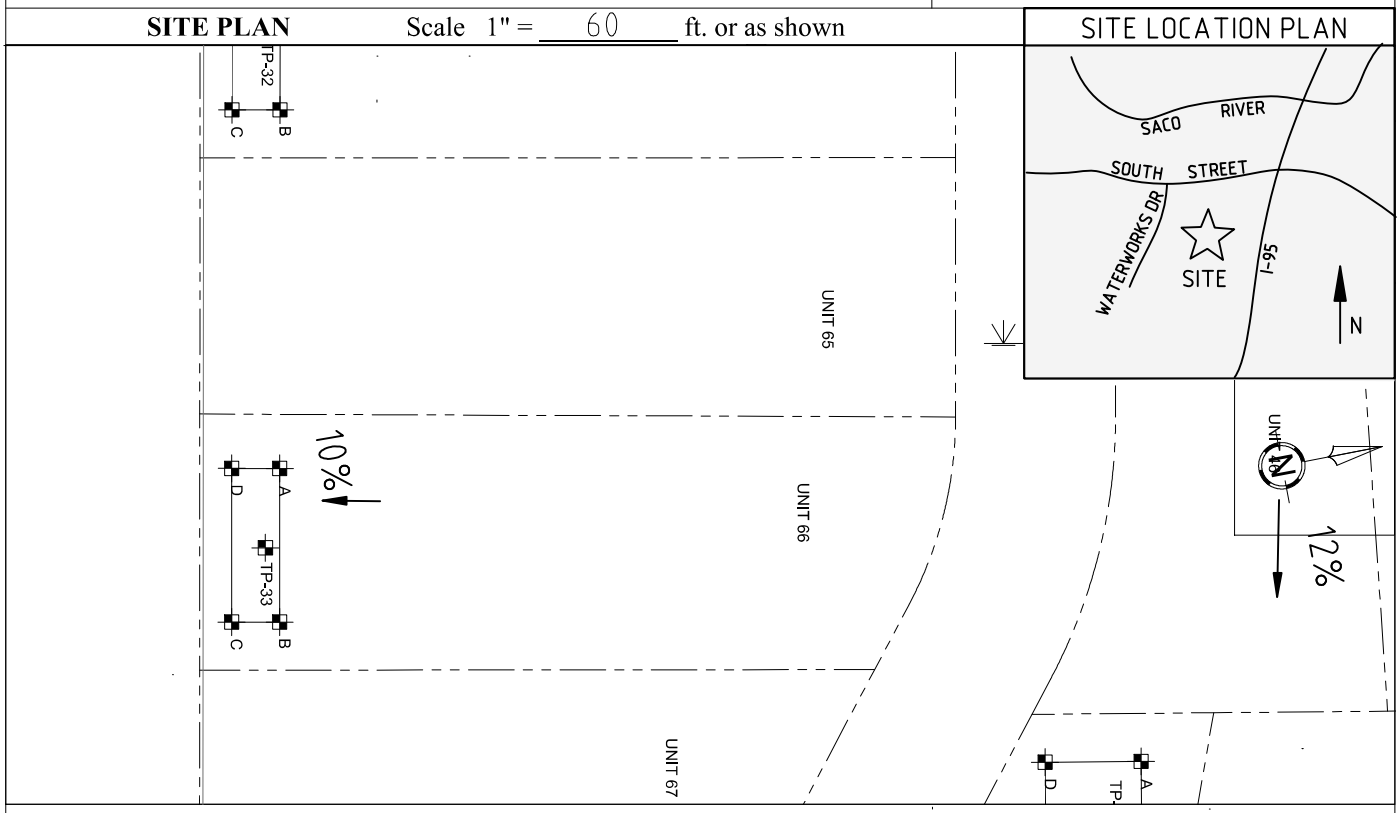
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

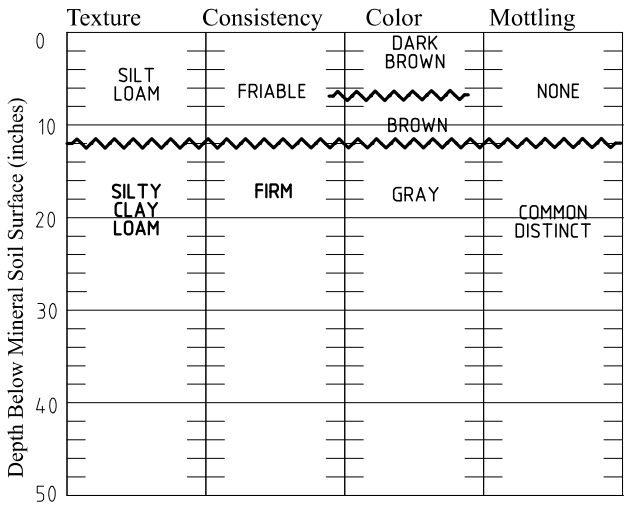


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-33 ☐ Test Pit ☒ Boring

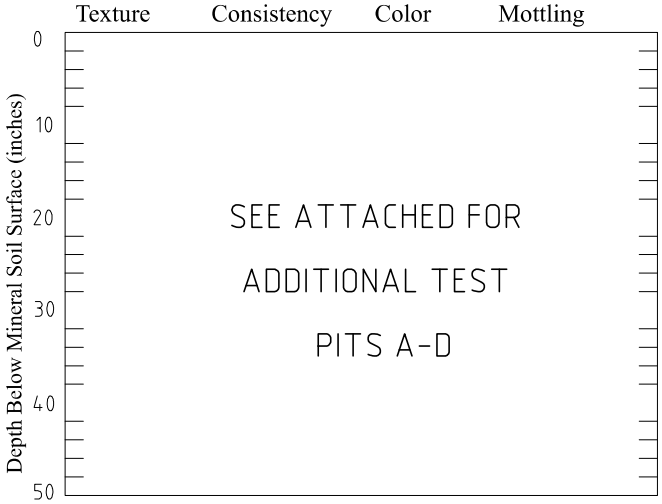
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

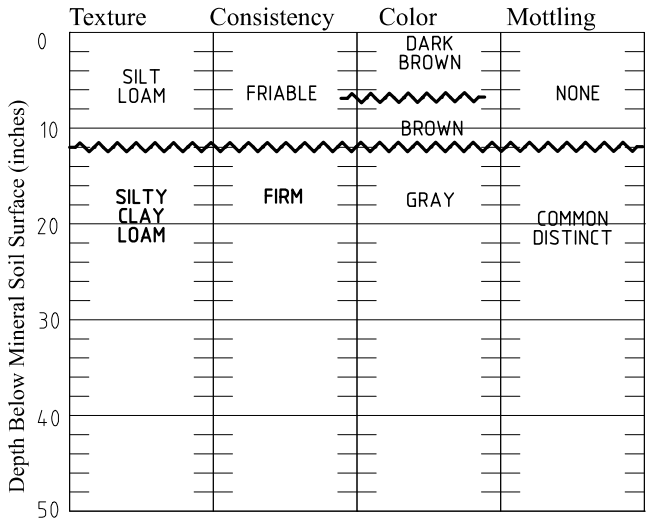
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-33 A ☐ Test Pit ☒ Boring

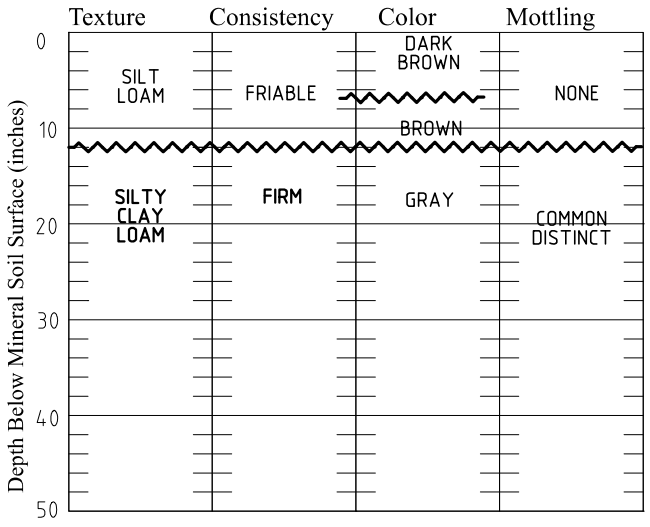
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-33 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

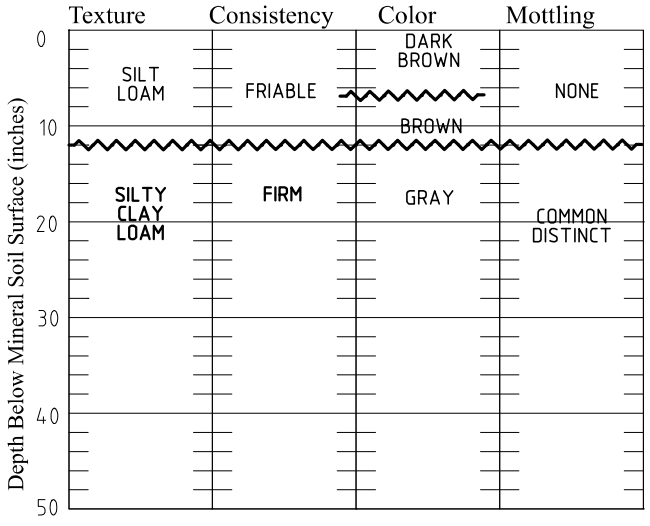


Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-33 C ☐ Test Pit ☒ Boring

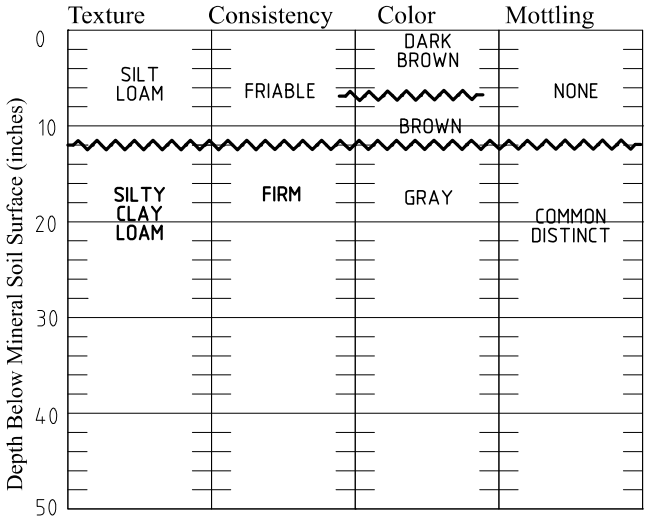
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-33 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/25/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

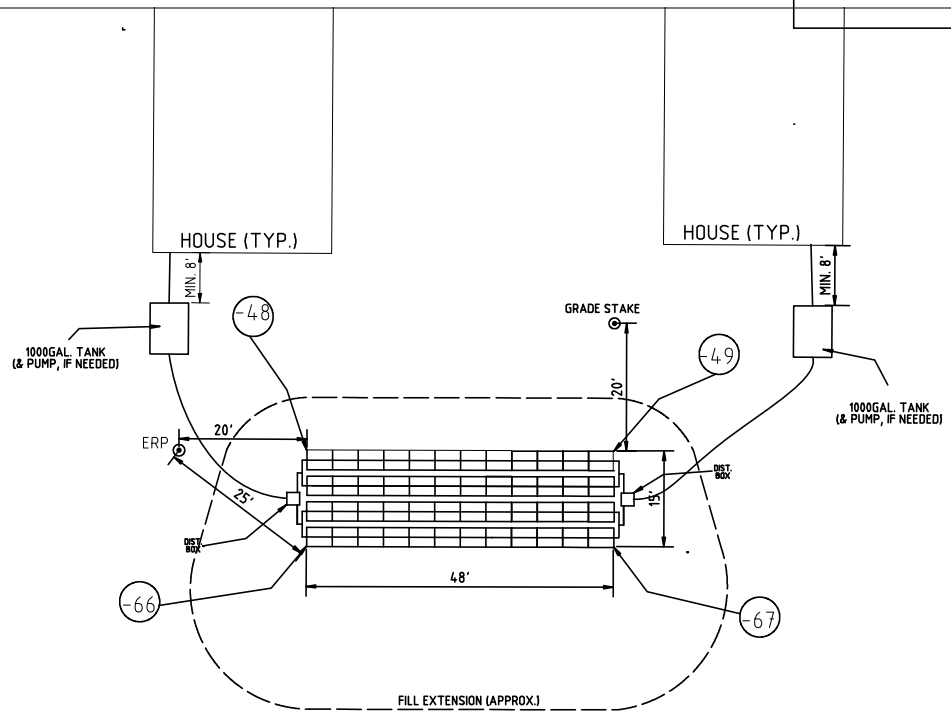
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

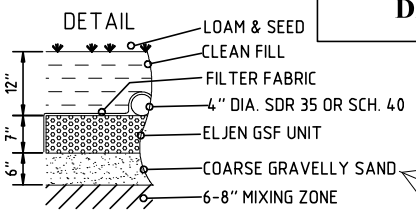
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

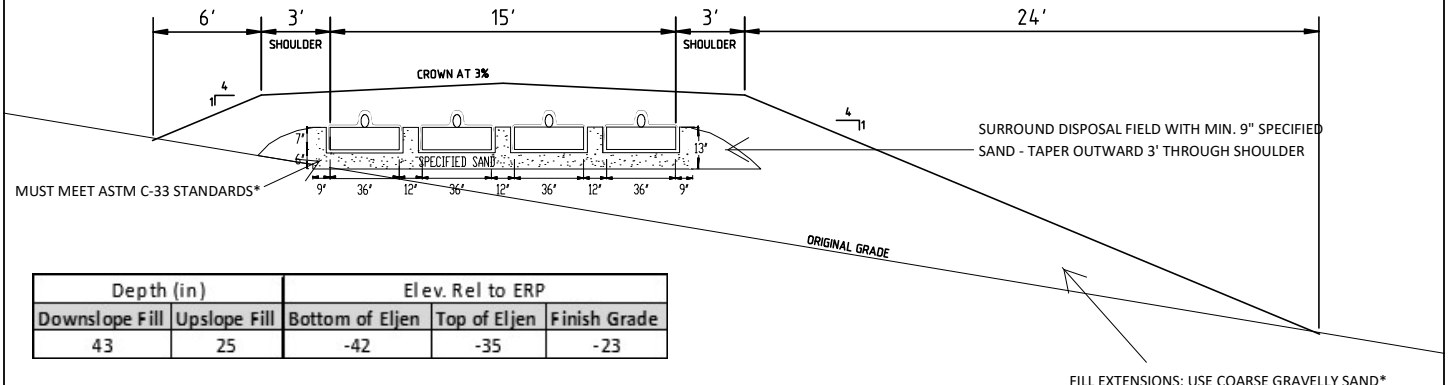
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
43	25	-42	-35	-23

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 67-68

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-34
Depth 16 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 32.2 s
Lon. 70 d 29 m 38.27 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

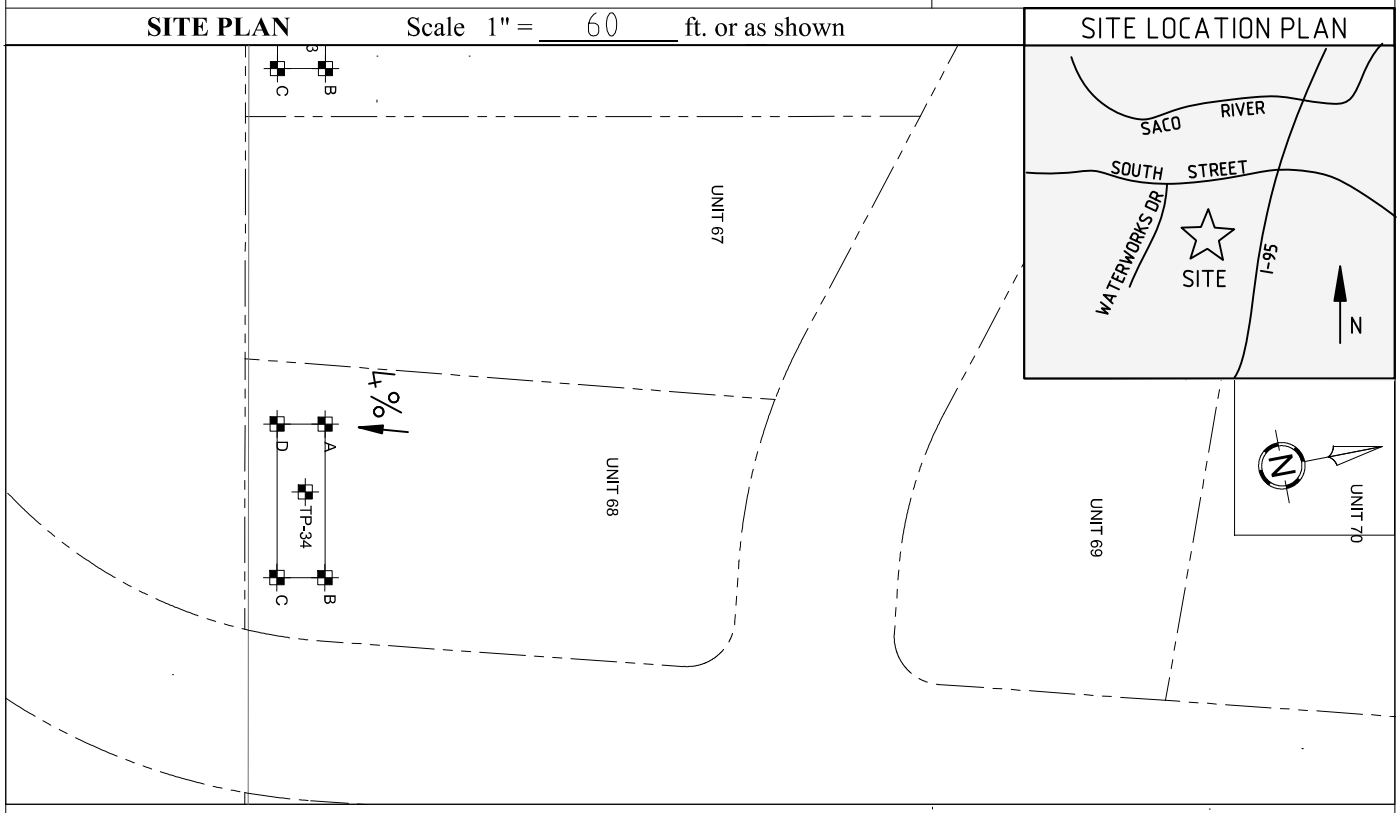
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-34 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	BROWN / GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: C	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

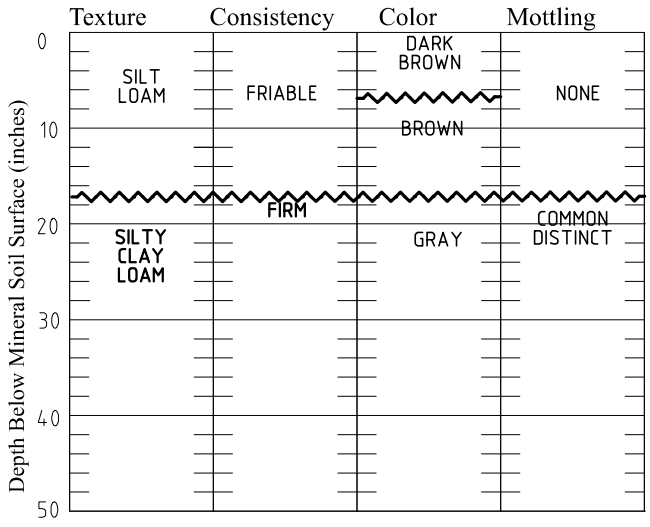
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-34 A ☐ Test Pit ☒ Boring

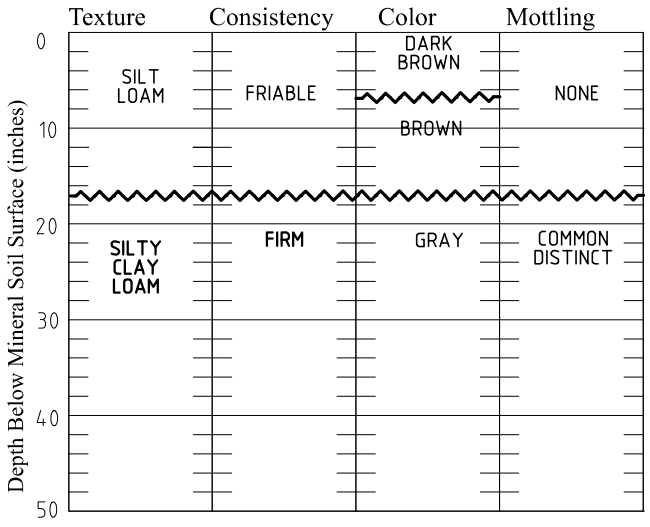
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-34 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

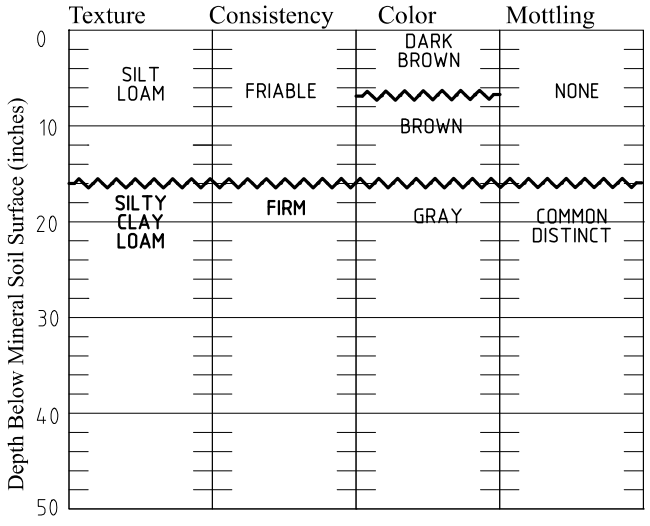


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-34 C ☐ Test Pit ☒ Boring

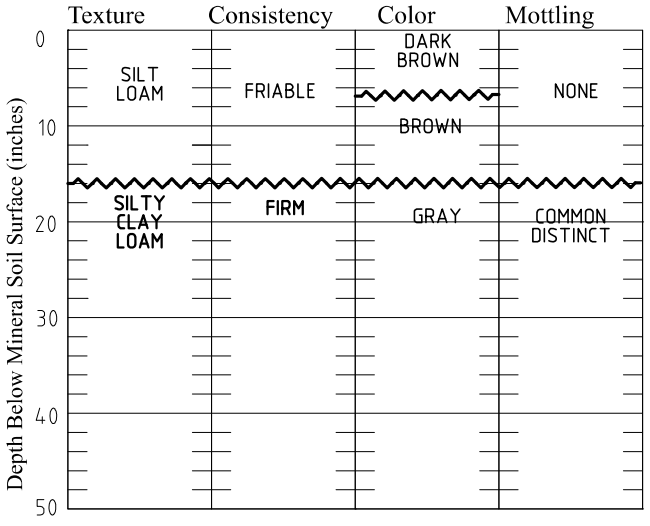
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-34 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/23/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

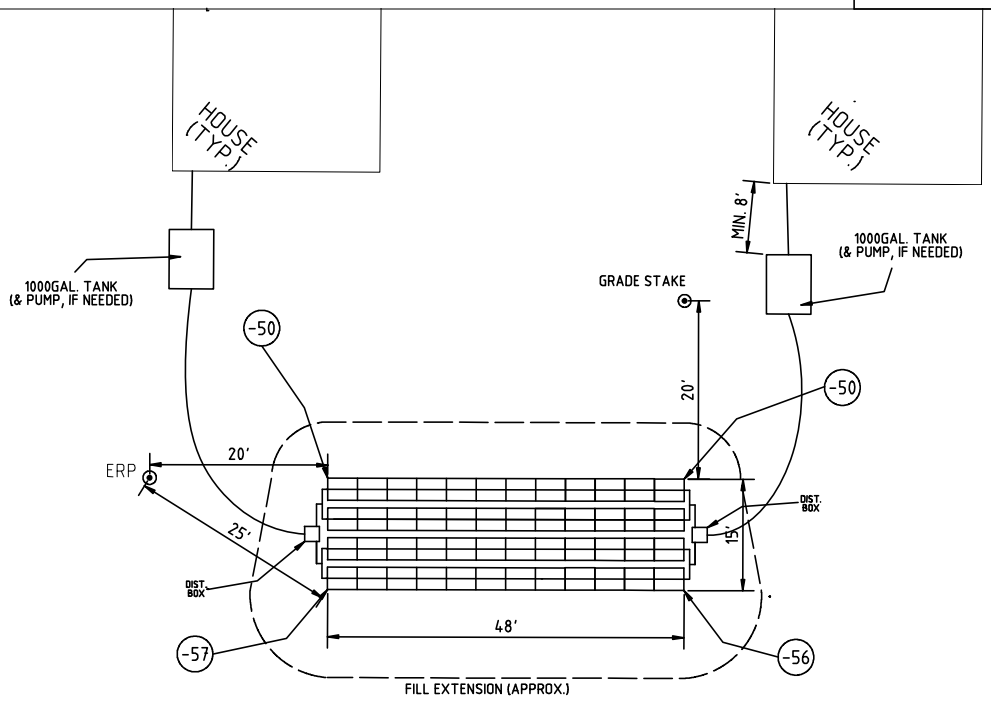
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

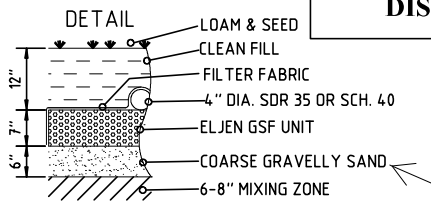
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

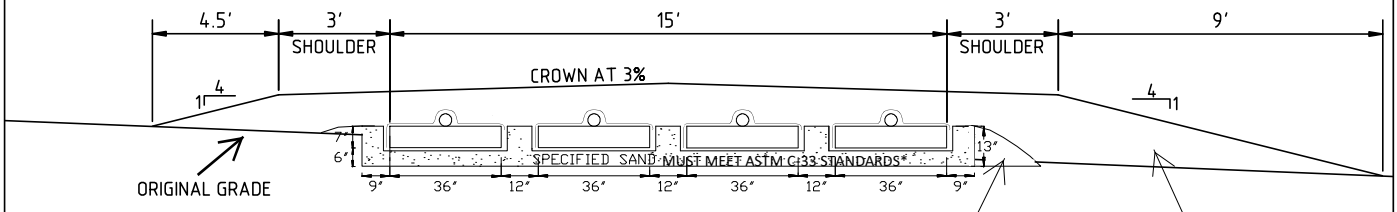


× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
22	15	-54	-47	-35

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 69-71

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-39
Depth 15 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 34.86 s
Lon. 70 d 29 m 38.62 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

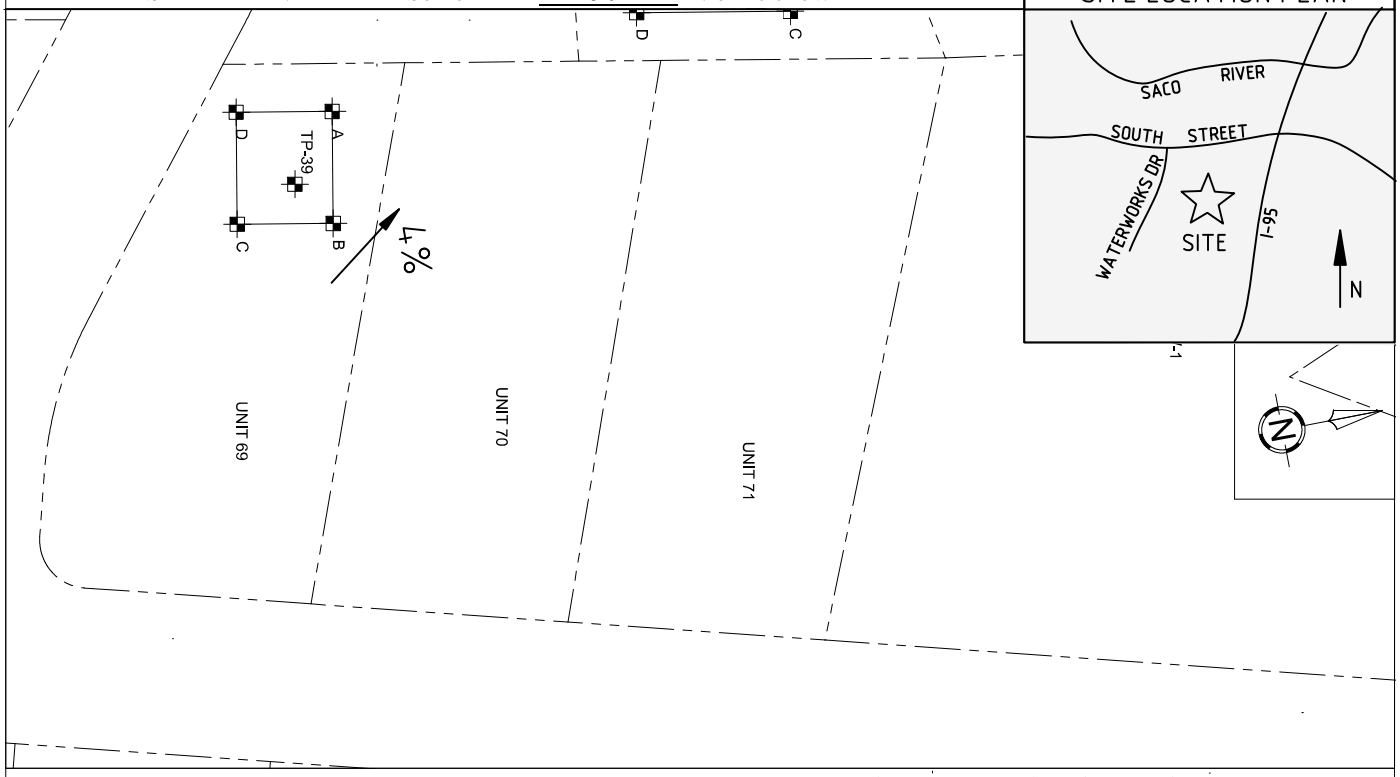
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

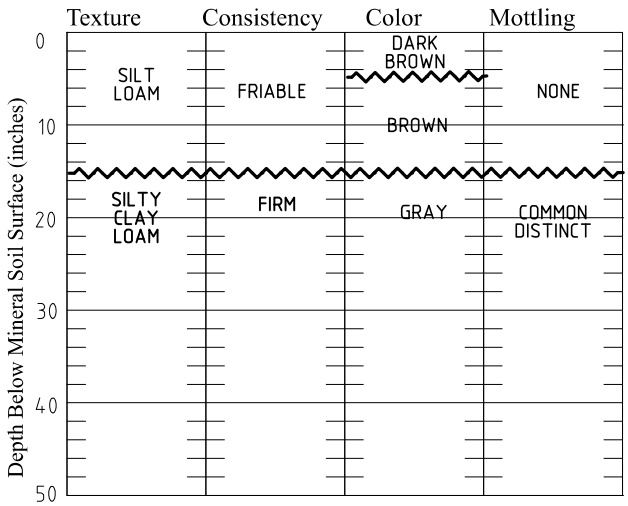


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-39 ☐ Test Pit ☒ Boring

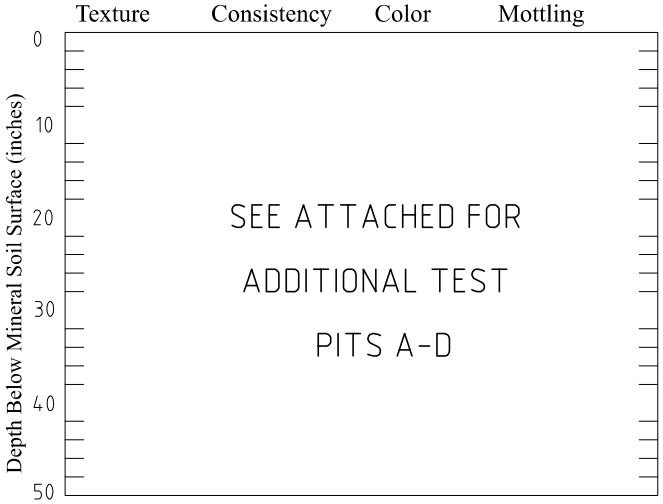
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	C	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

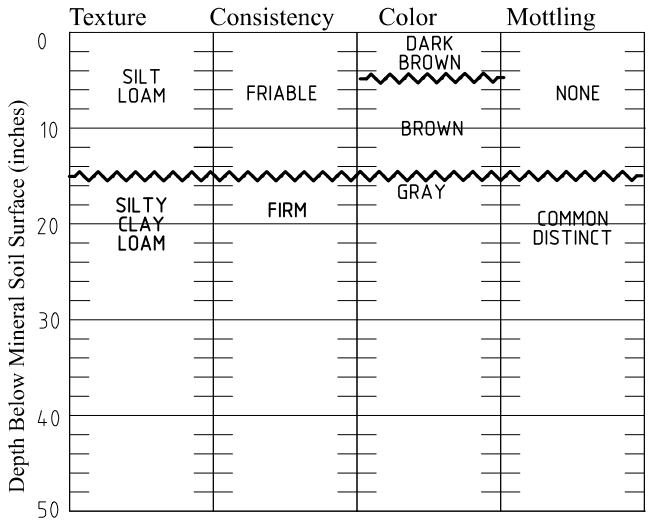
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-39 A ☐ Test Pit ☒ Boring

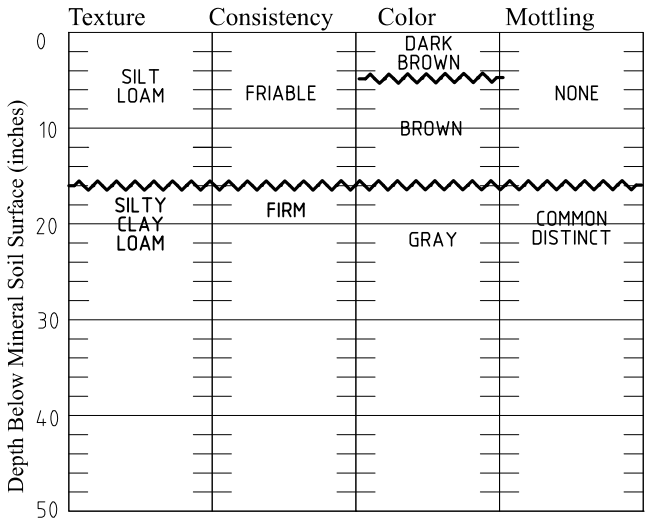
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-39 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

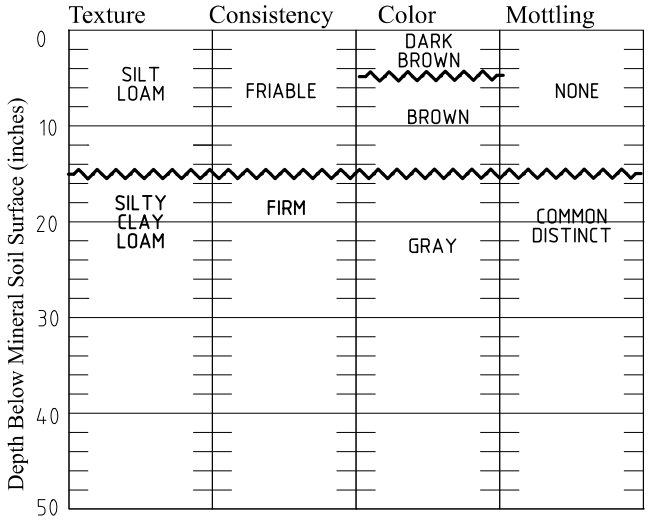


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-39 C ☐ Test Pit ☒ Boring

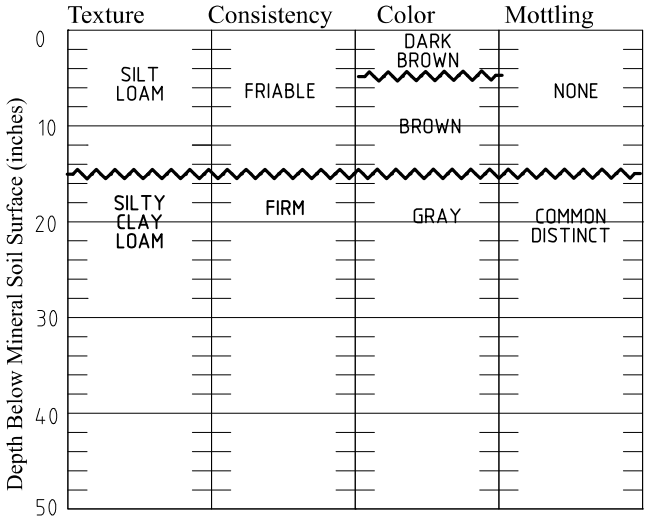
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-39 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/21/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

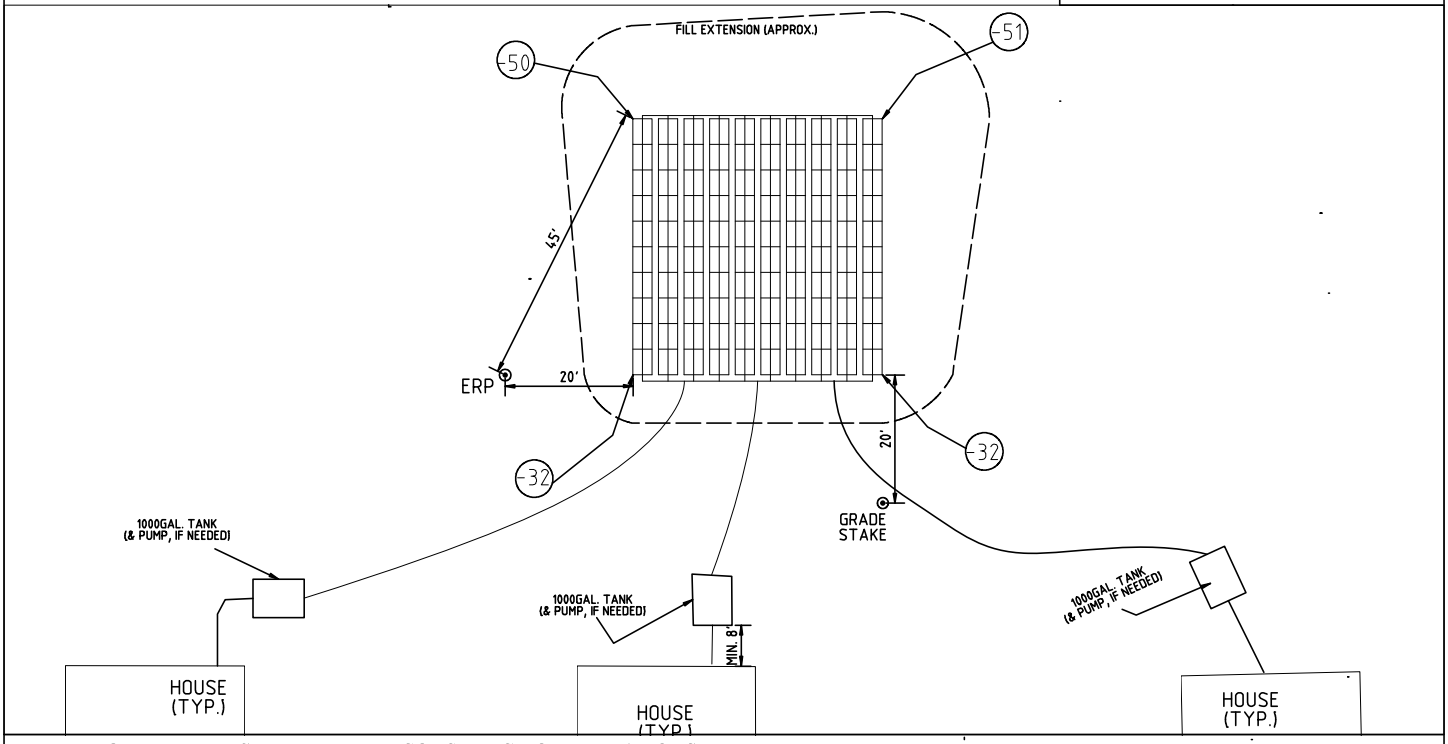
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

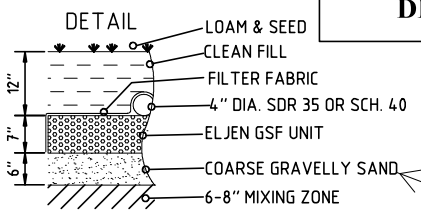
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 10 ft.

Vertical 1" = 5 ft.

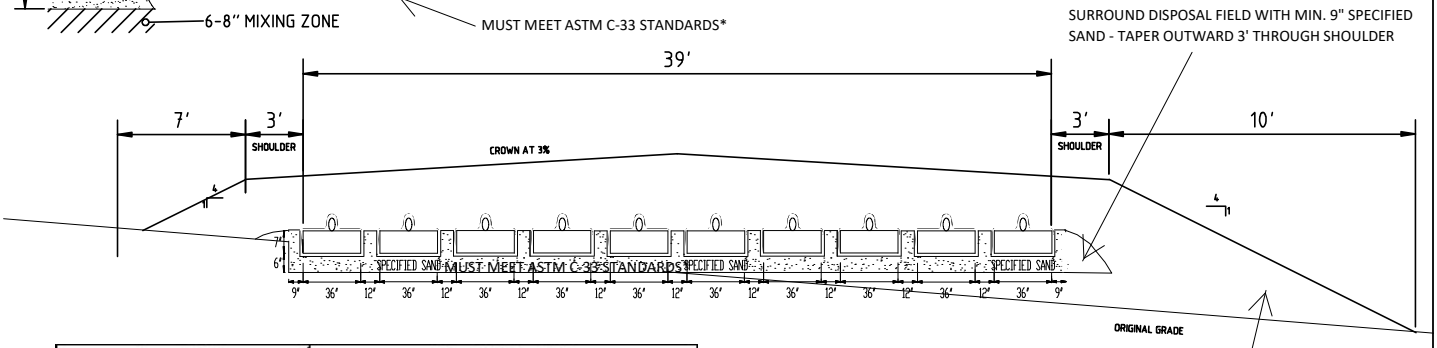


× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
41	22	-35	-28	-10

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 72-73

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-38
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.71 s
Lon. 70 d 29 m 33.41 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

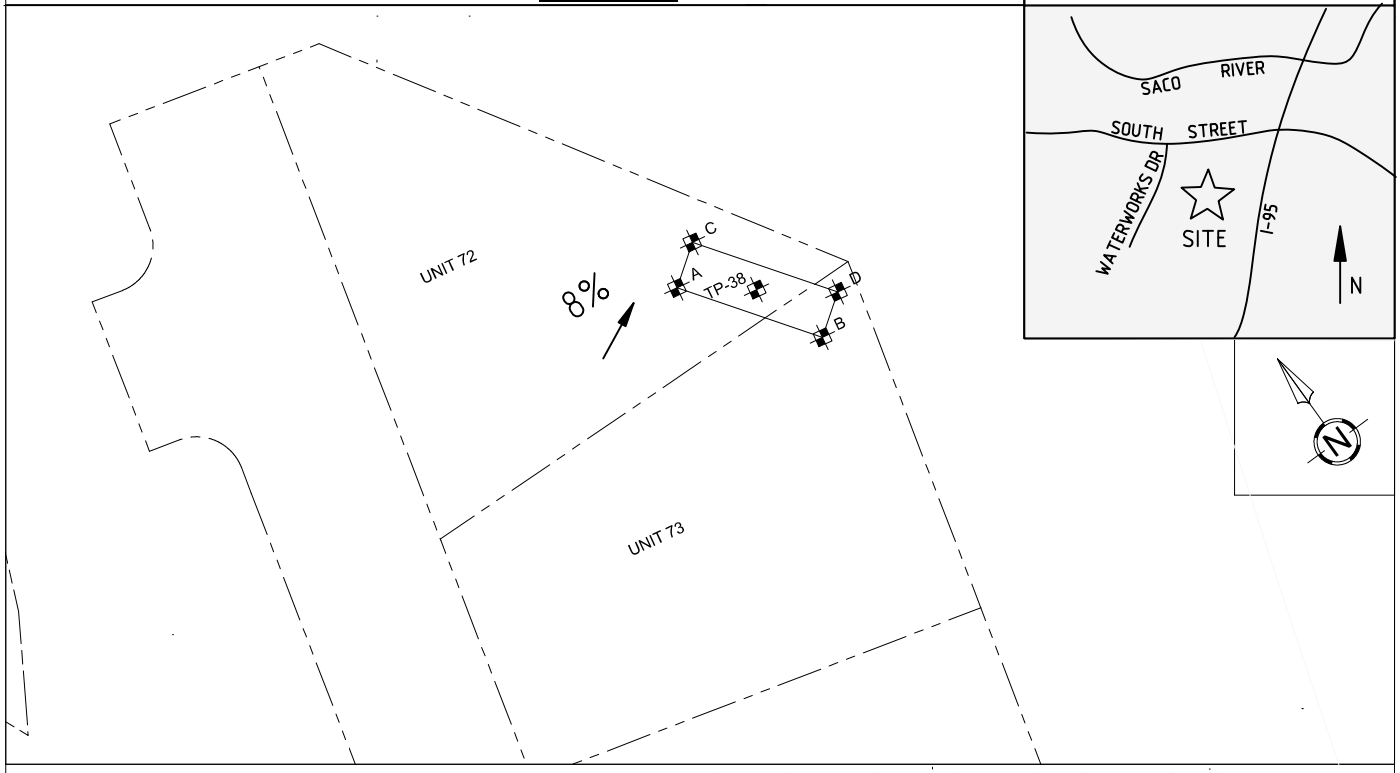
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

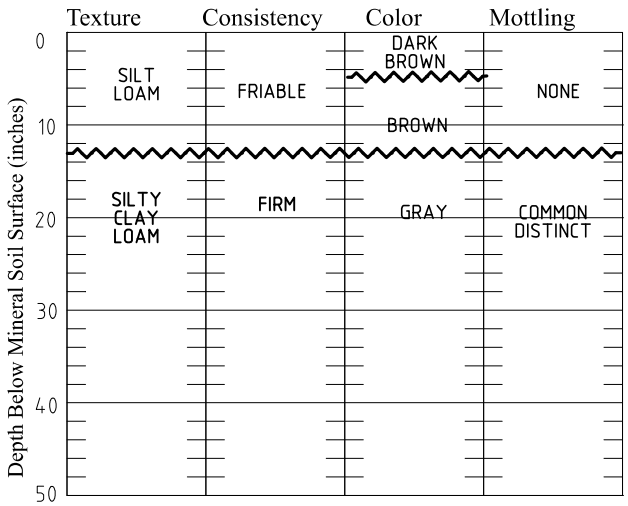


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-38 ☐ Test Pit ☒ Boring

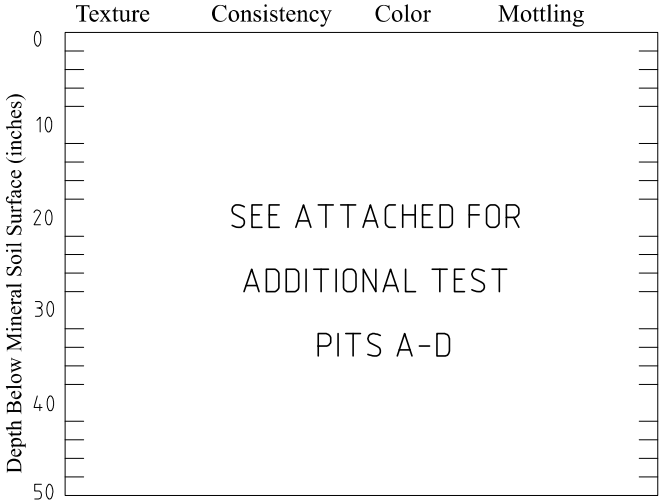
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

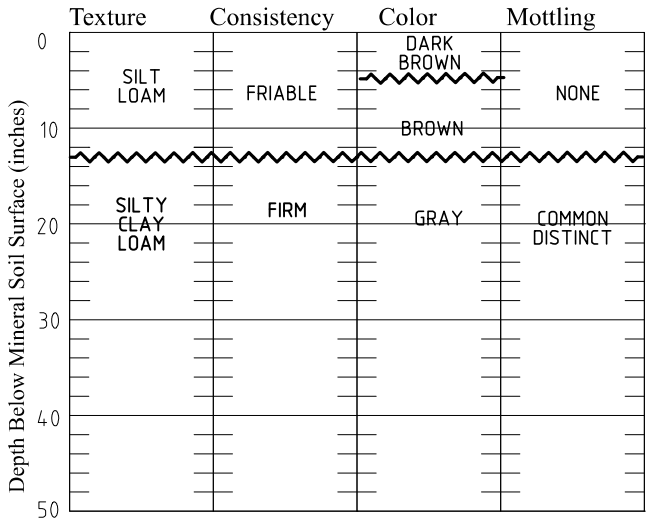
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-38 A ☐ Test Pit ☒ Boring

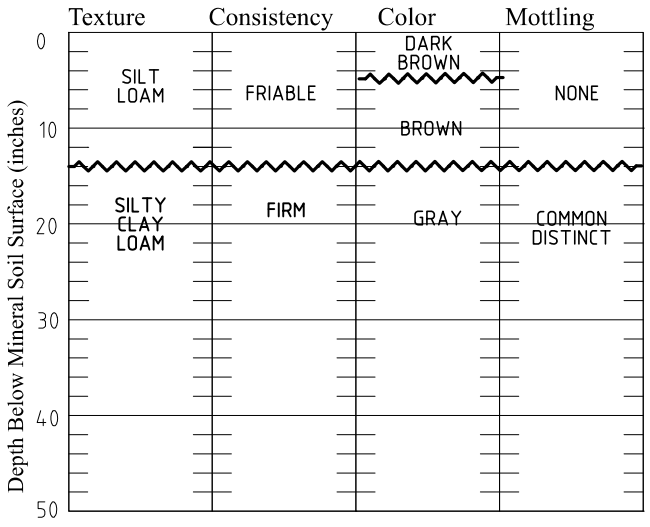
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-38 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

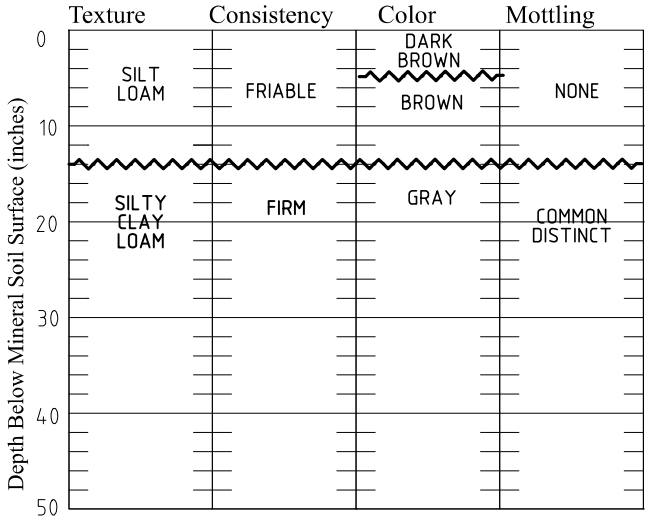


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-38 C ☐ Test Pit ☒ Boring

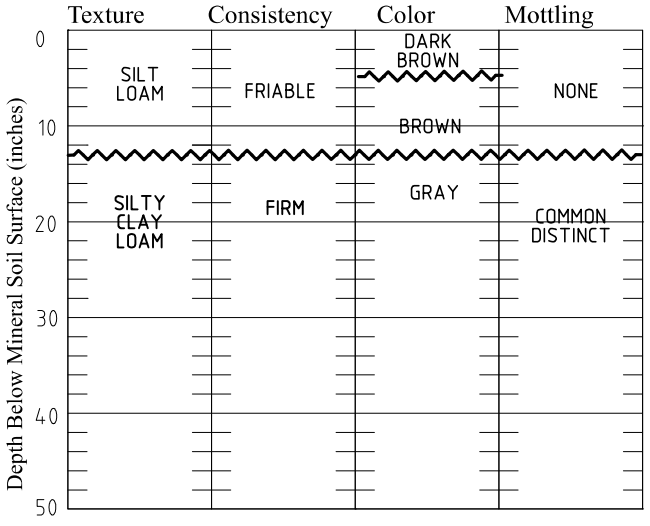
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-38 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/22/23

Page __ of __

HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

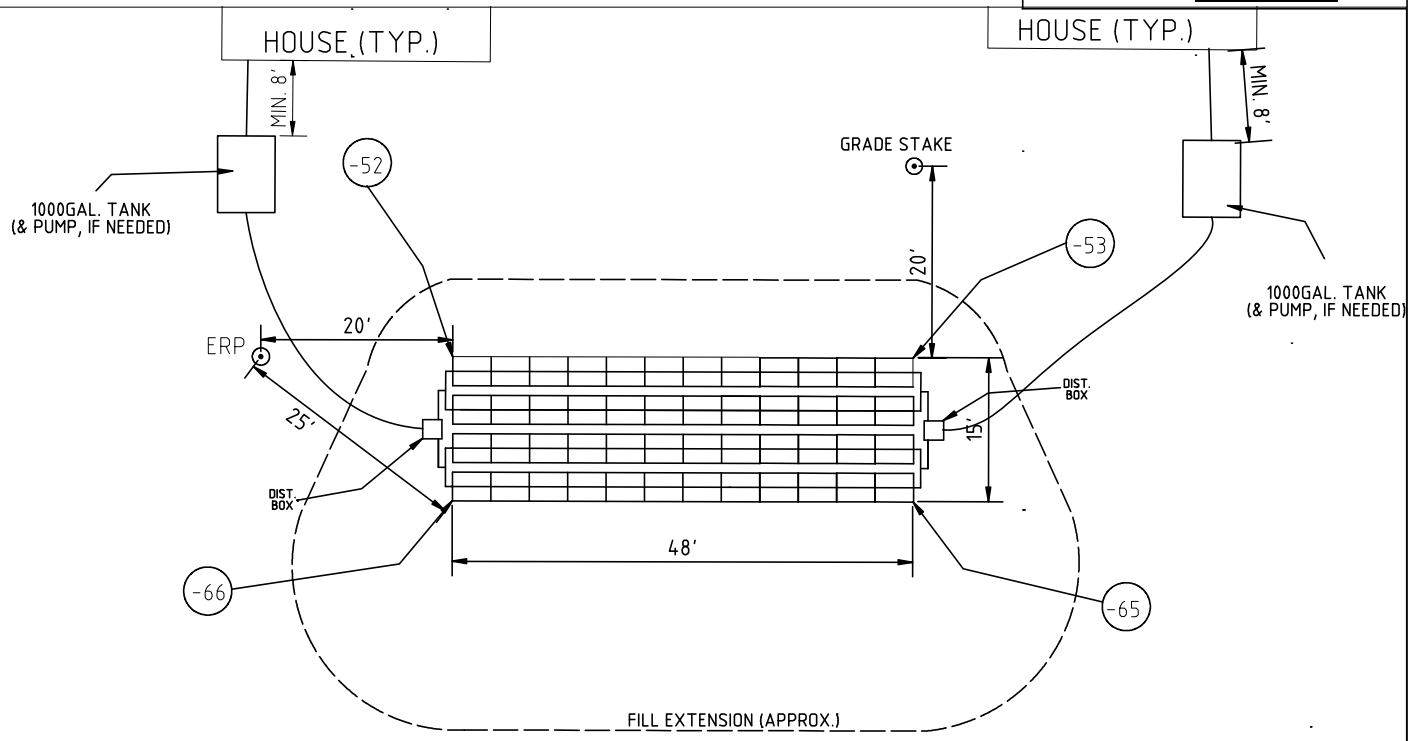
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

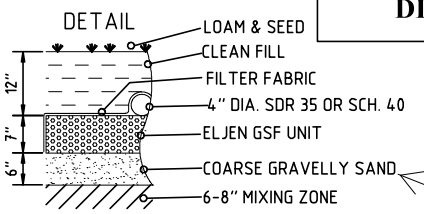
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

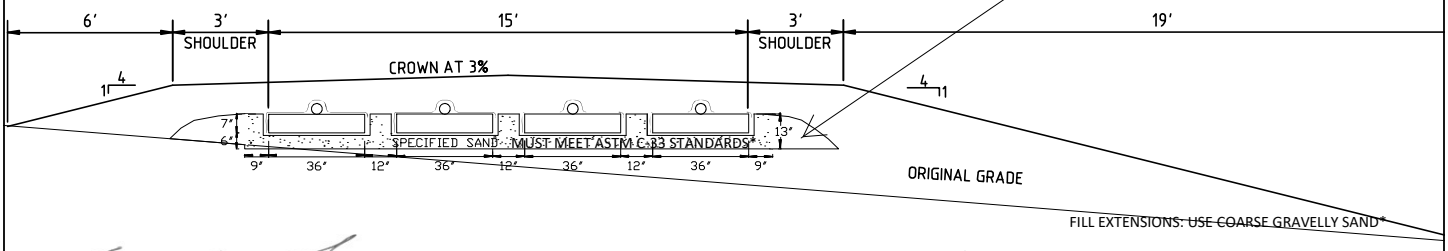
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
38	24	-47	-40	-28

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 74-75

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-37
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 37.68 s
Lon. 70 d 29 m 33.39 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

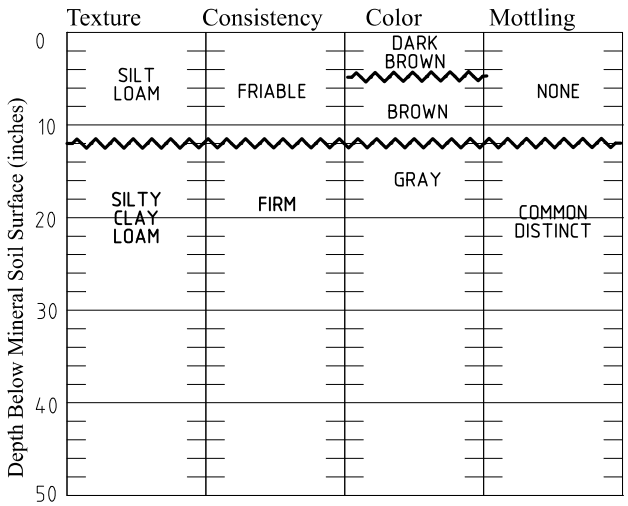


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-37 ☐ Test Pit ☒ Boring

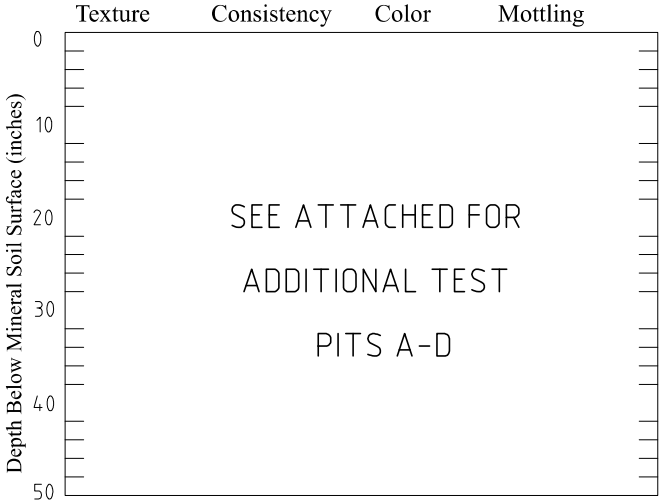
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

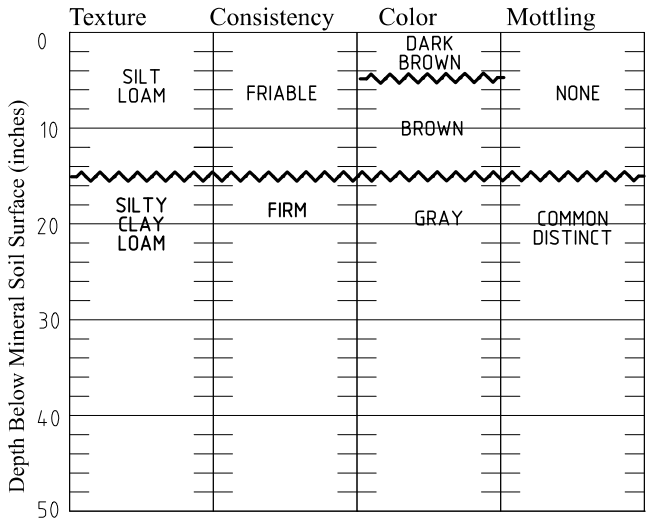
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-37 A ☐ Test Pit ☒ Boring

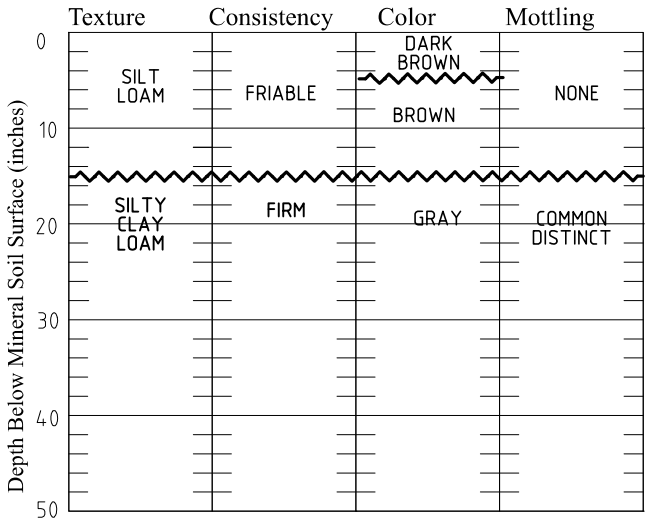
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-37 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

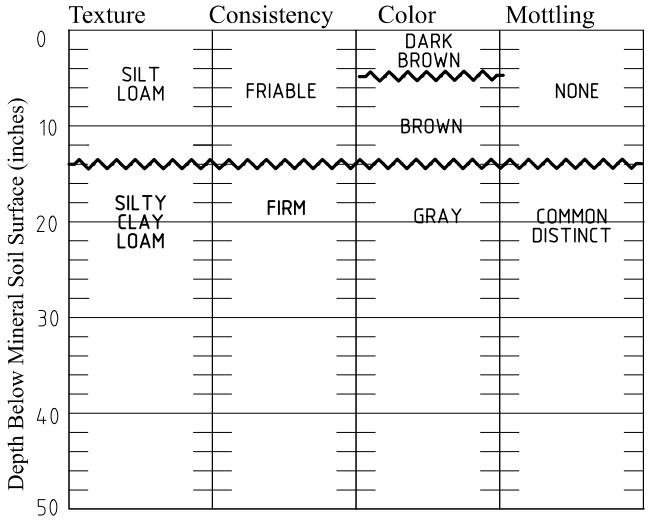


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-37 C ☐ Test Pit ☒ Boring

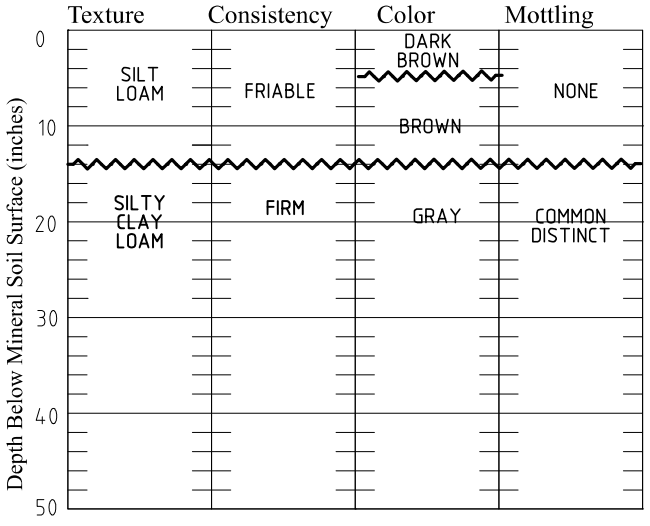
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-37 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature — 419 SE # — 3/22/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

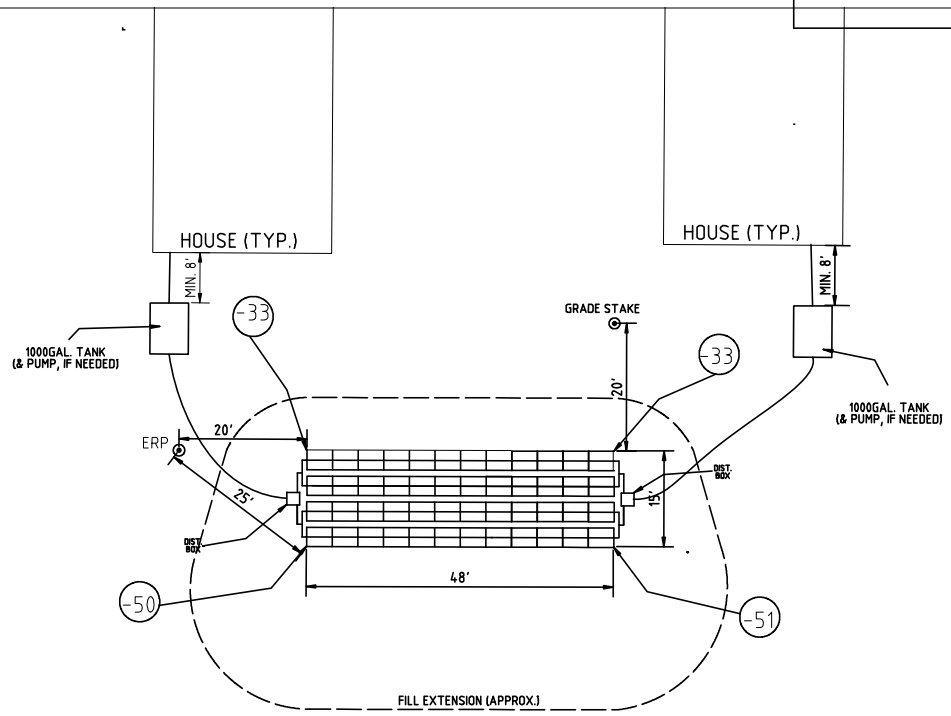
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

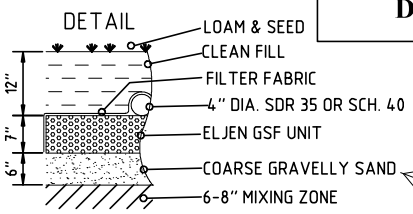
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

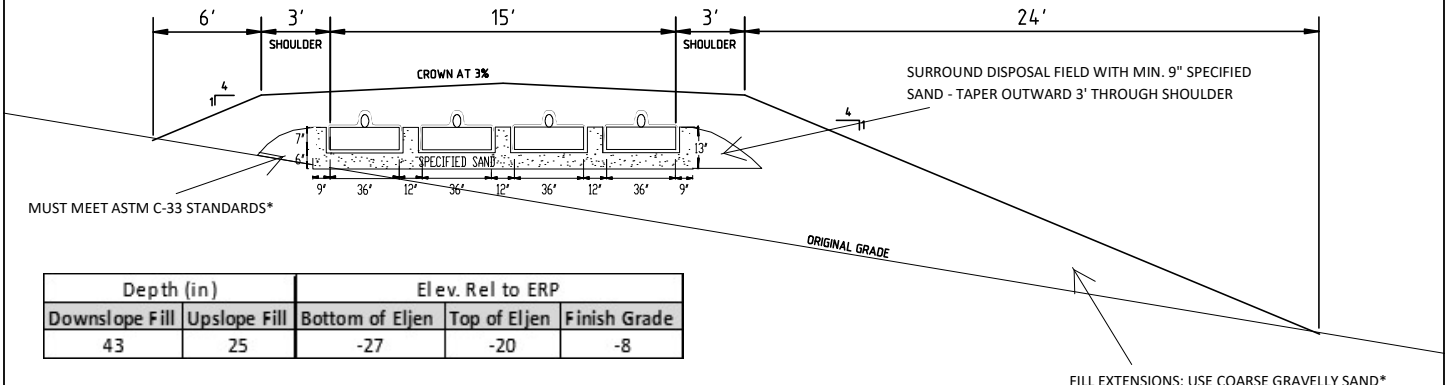
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
43	25	-27	-20	-8

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 76-77

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-36
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 33.81 s
Lon. 70 d 29 m 34.57 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE # 419	Date 3/26/23
ERIK LEMA	207-518-8442	erik@basswoodenv.com
Site Evaluator Name Printed	Telephone Number	E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

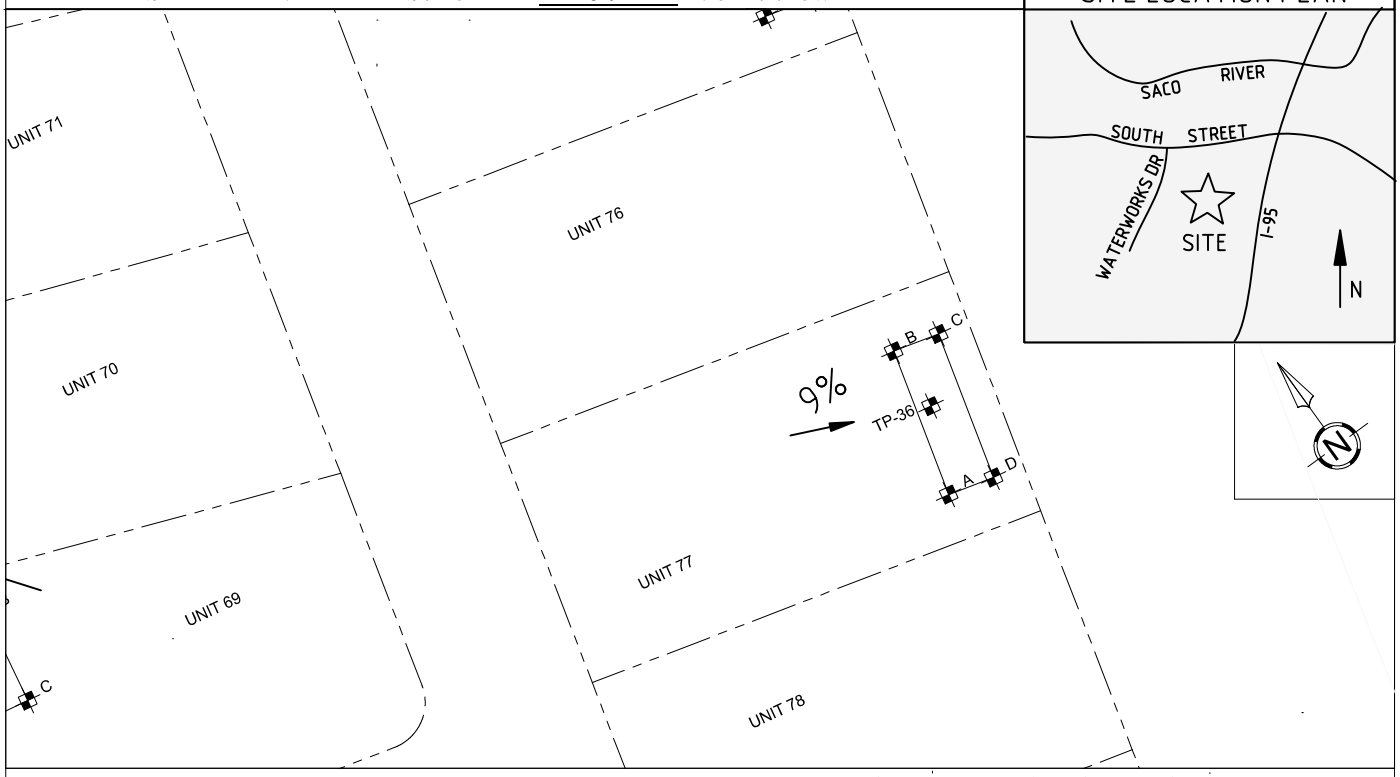
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-36 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20				
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
8	D	9 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			
10				
20				
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: [signature] 419 SE # 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

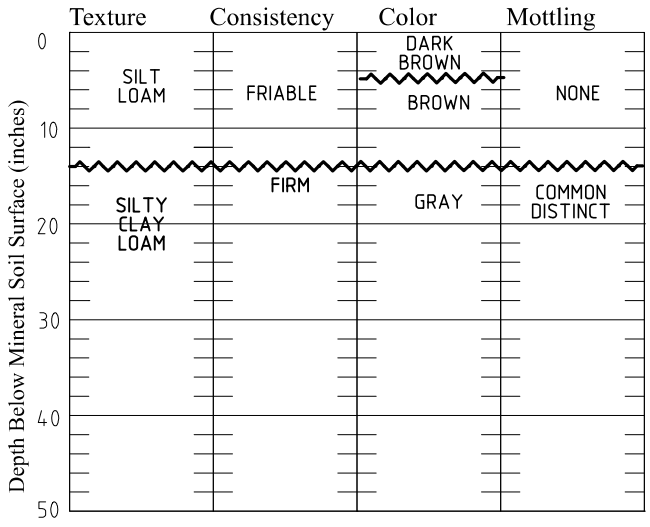
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-36 A ☐ Test Pit ☒ Boring

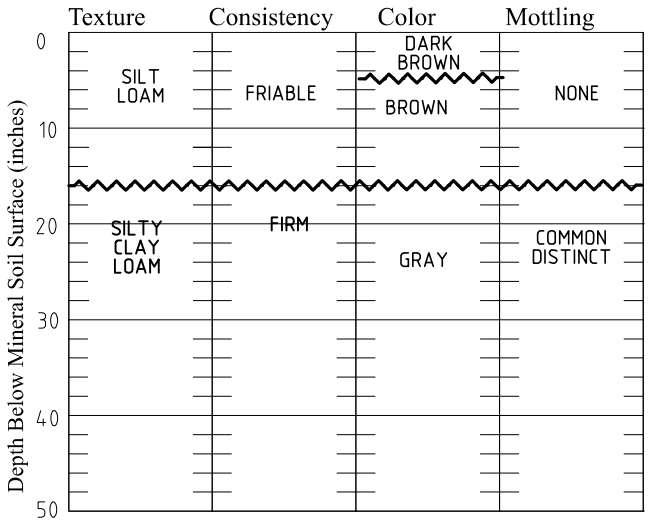
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-36 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

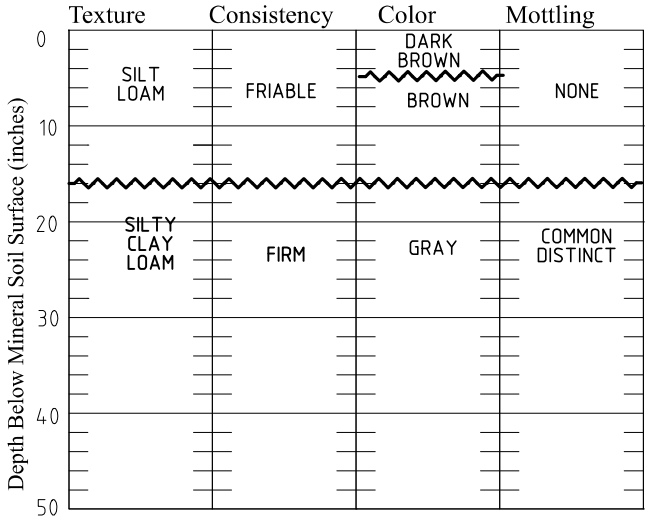


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	8 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-36 C ☐ Test Pit ☒ Boring

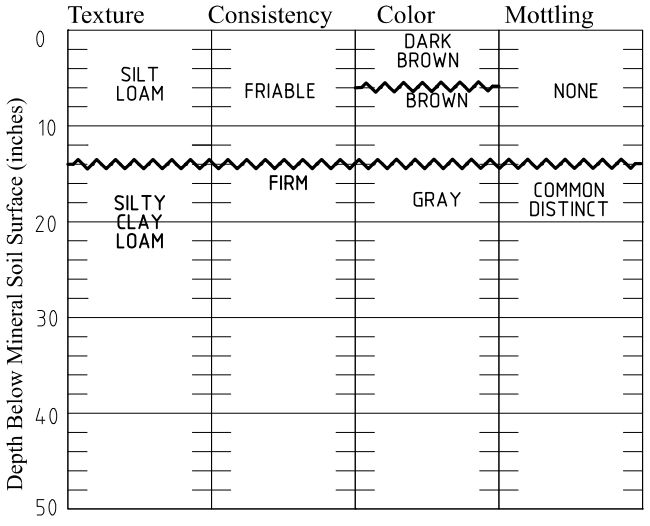
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	9 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-36 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen — SE #: 419 — Date: 3/22/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

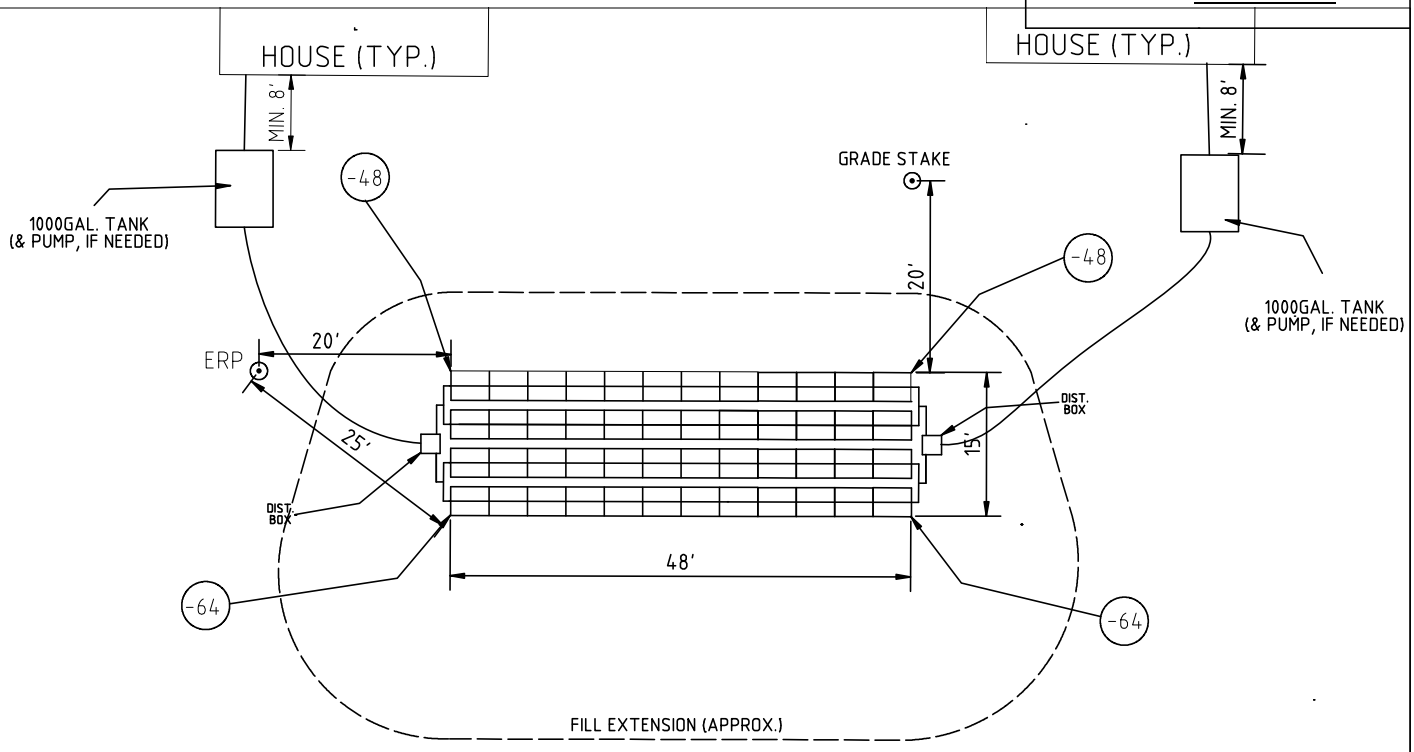
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

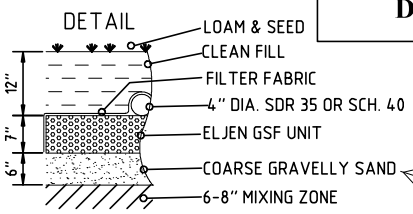
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

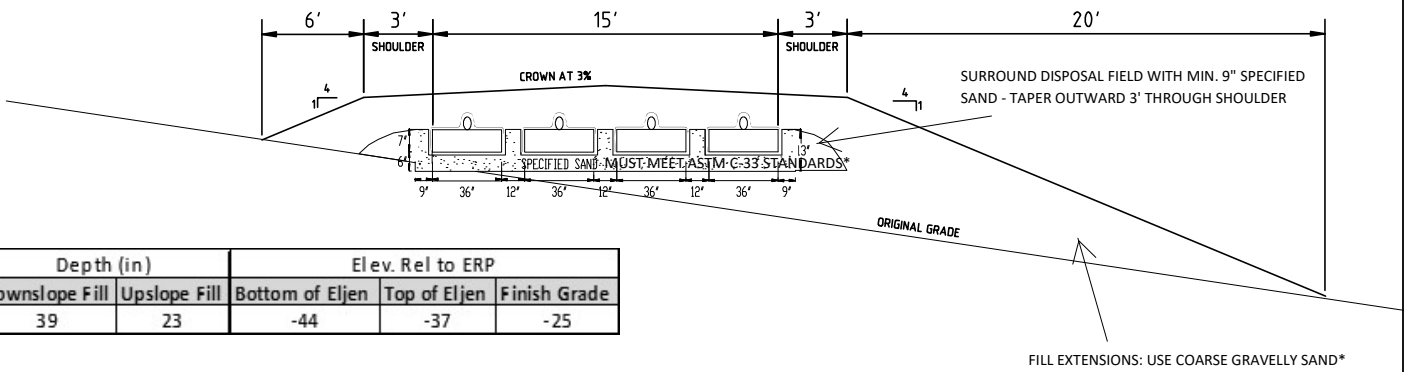
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	23	-44	-37	-25

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 78-79

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-35
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 32.02 s
Lon. 70 d 29 m 35.18 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

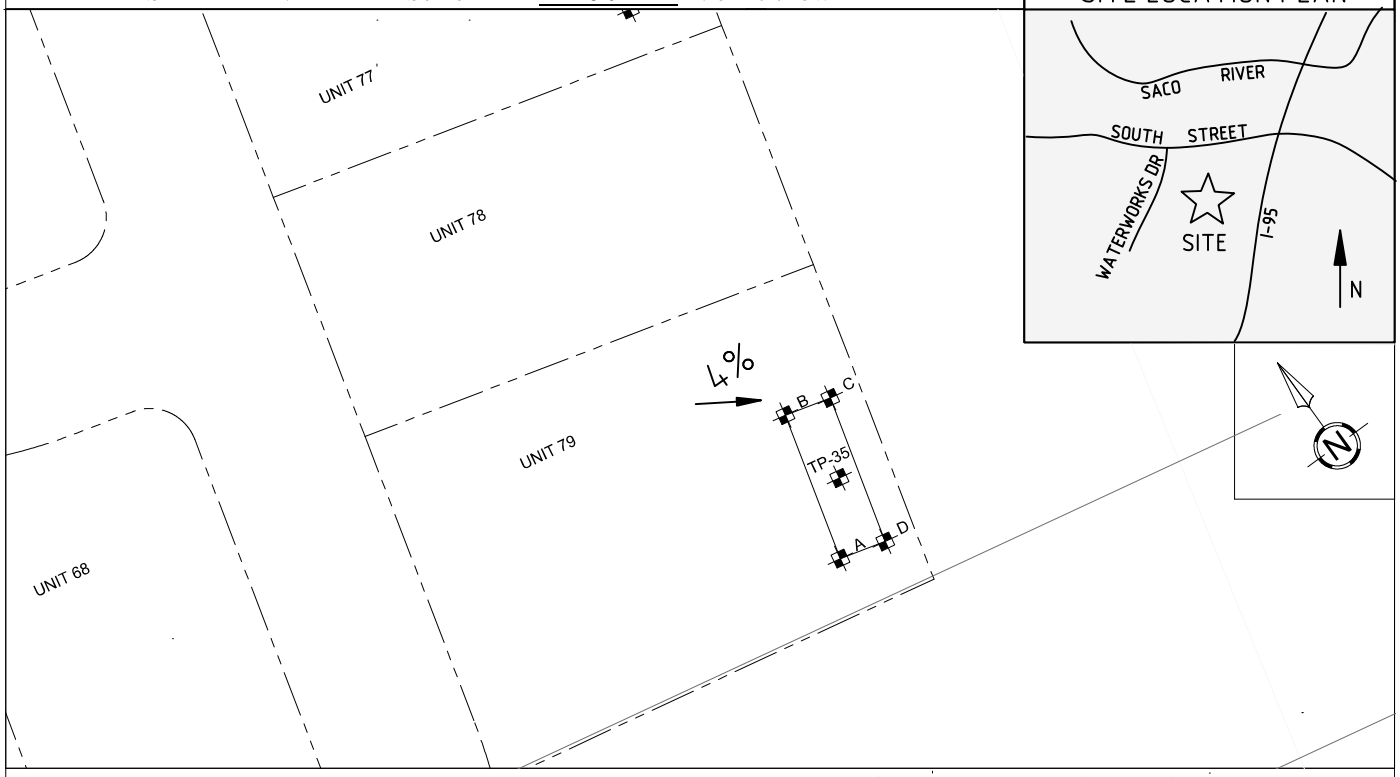
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-35 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–30				
30–40				
40–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

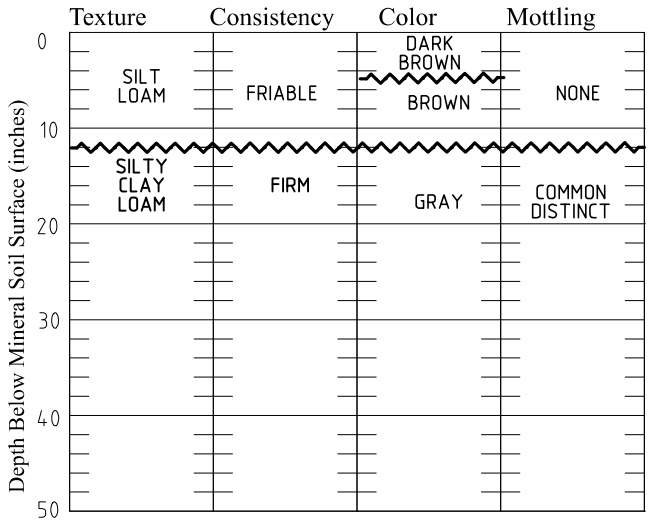
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-35 A ☐ Test Pit ☒ Boring

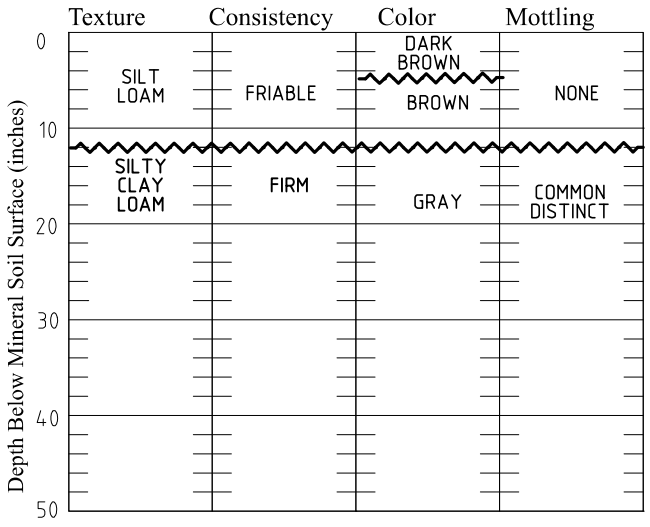
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-35 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

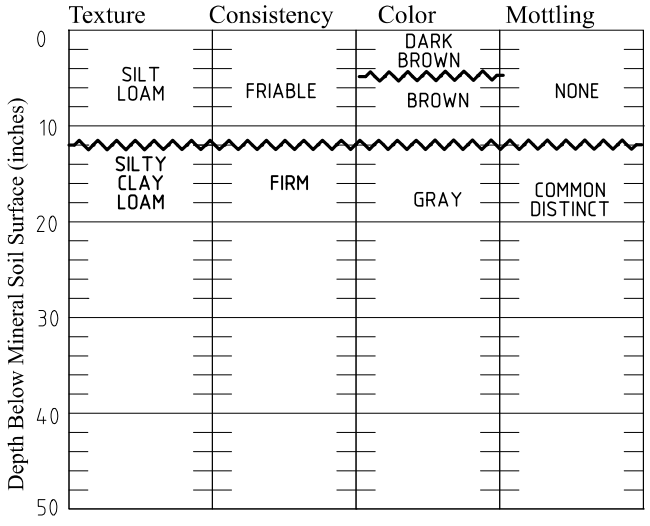


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-35 C ☐ Test Pit ☒ Boring

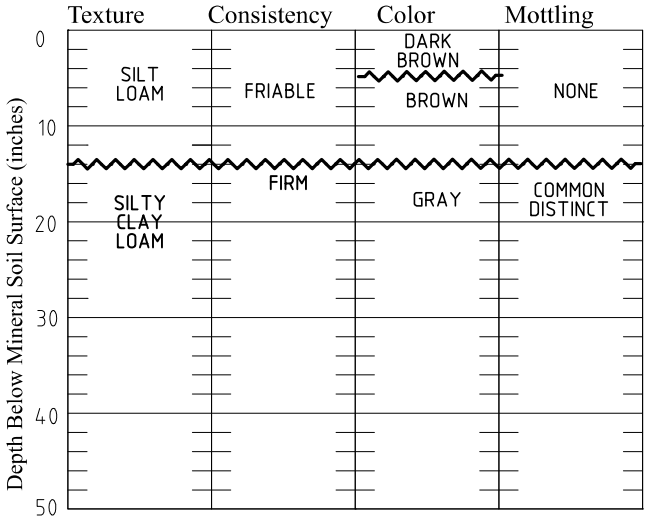
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-35 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen — SE #: 419 — Date: 3/22/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

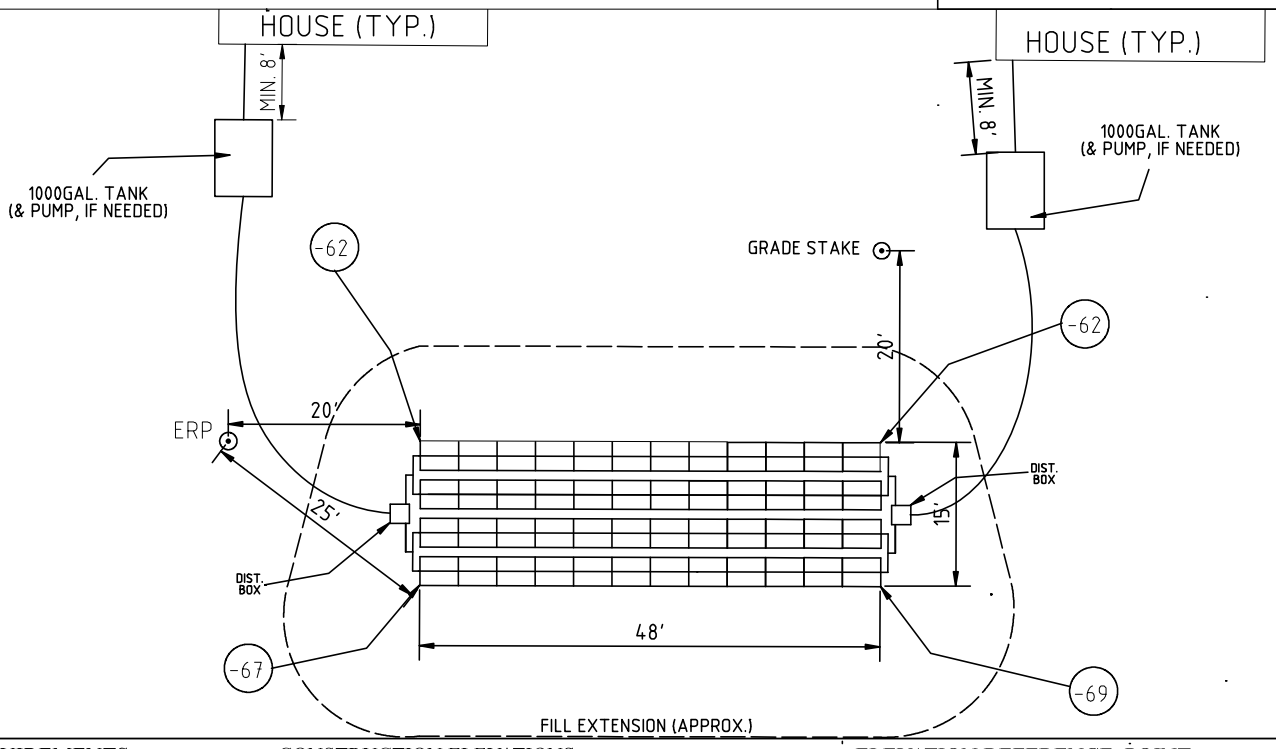
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

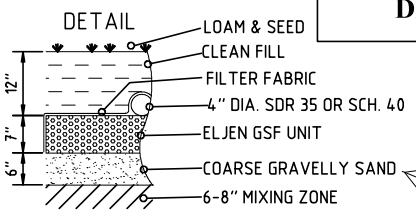
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

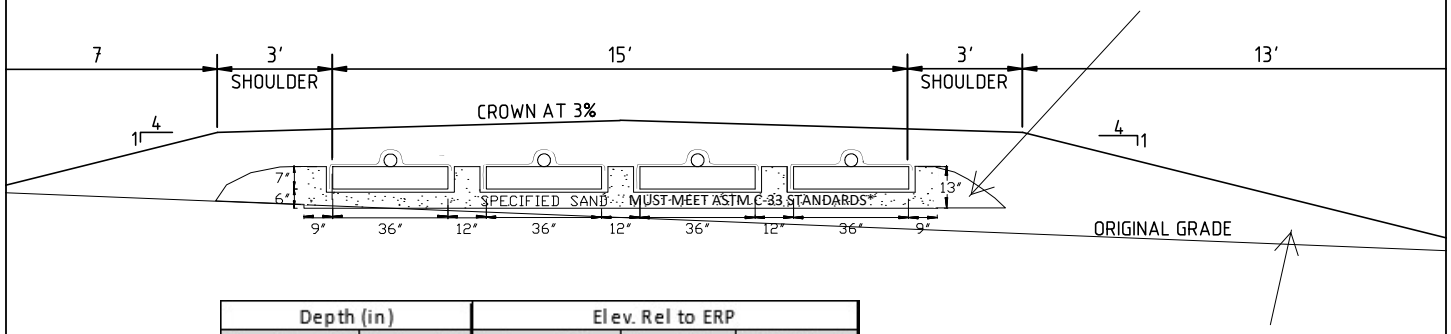
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
32	25	-56	-49	-37

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 80-81

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-1
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 34.41 s
Lon. 70 d 30 m 11.79 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

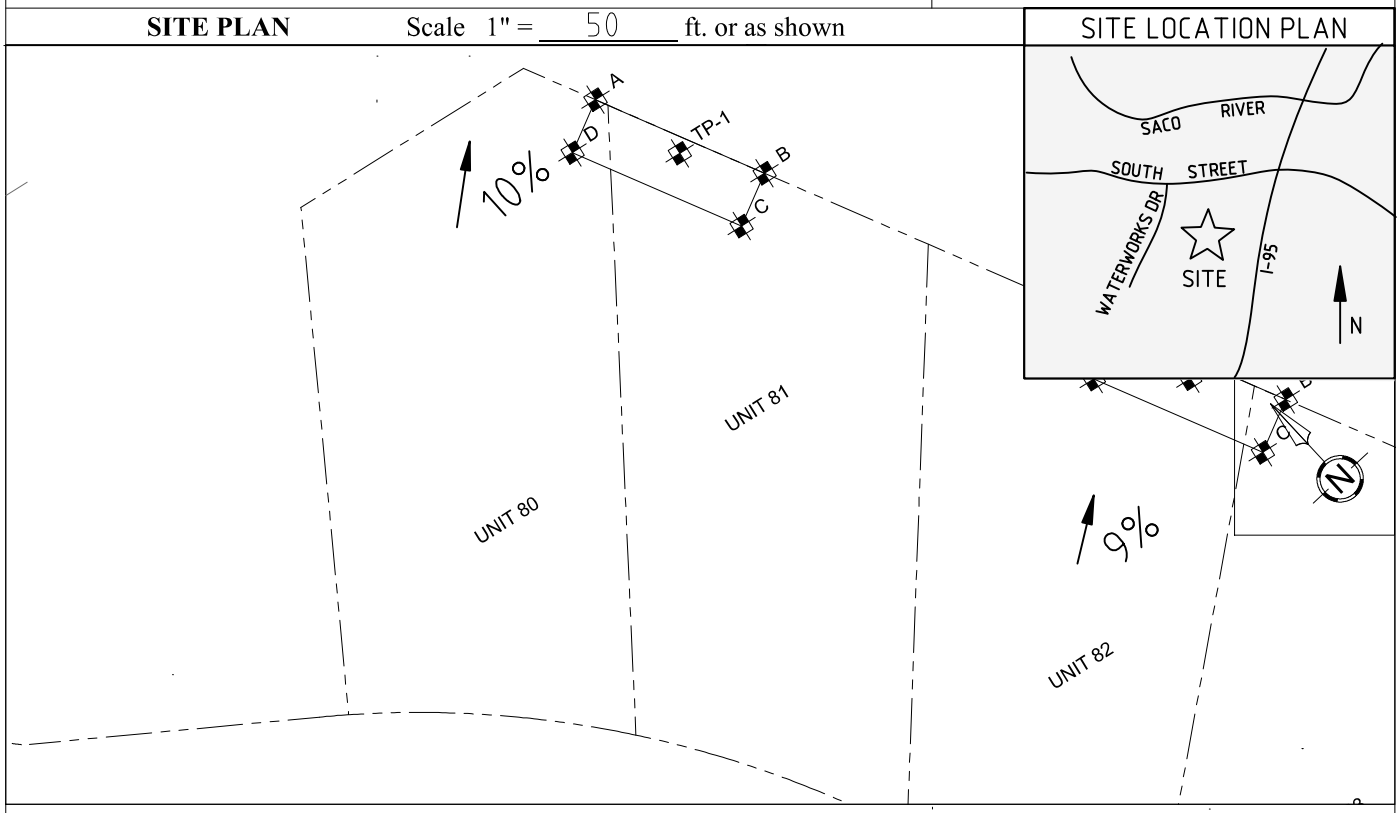
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

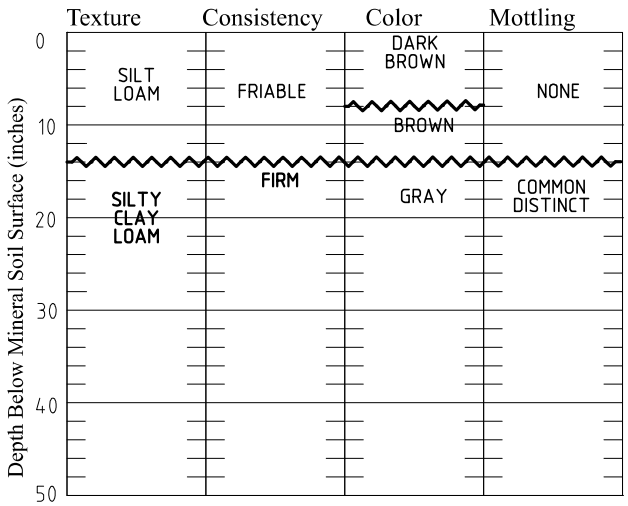


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-01 ☐ Test Pit ☒ Boring

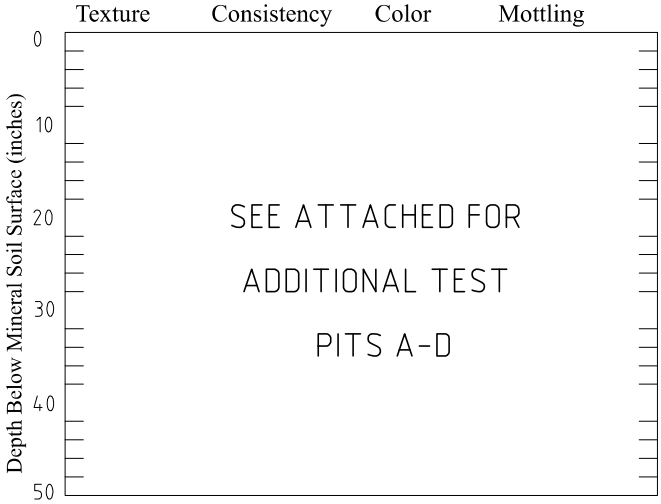
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature

419
SE #

3/21/23
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

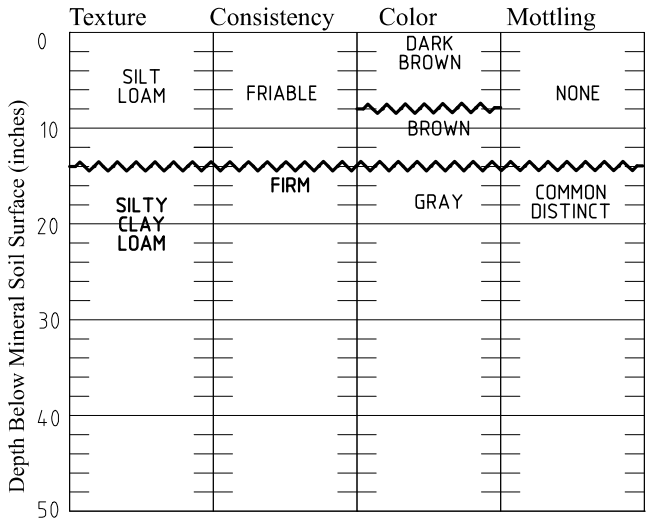
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-01 A ☐ Test Pit ☒ Boring

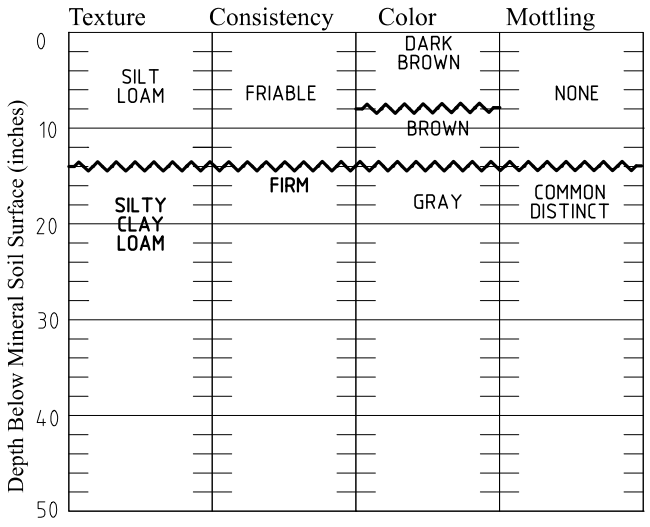
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-01 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

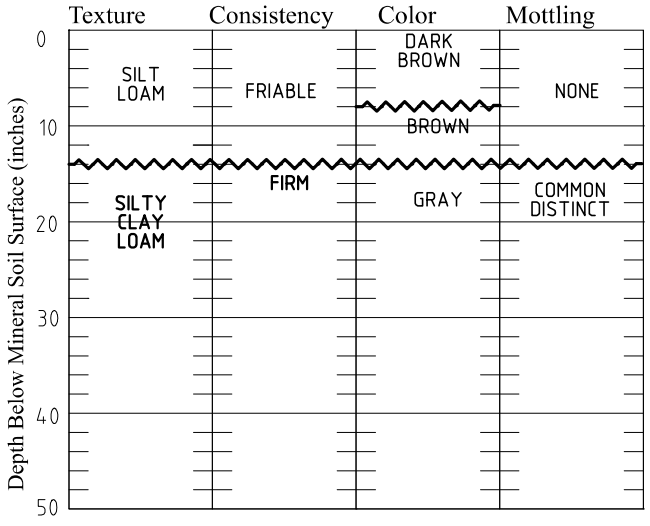


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-01 C ☐ Test Pit ☒ Boring

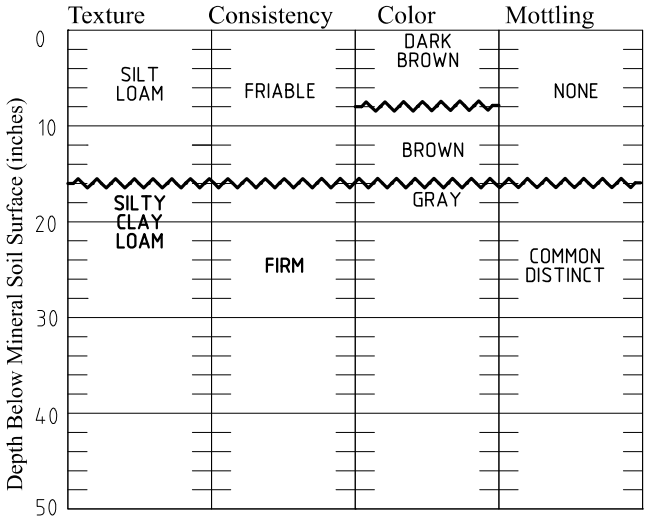
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-01 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	10 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/24/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

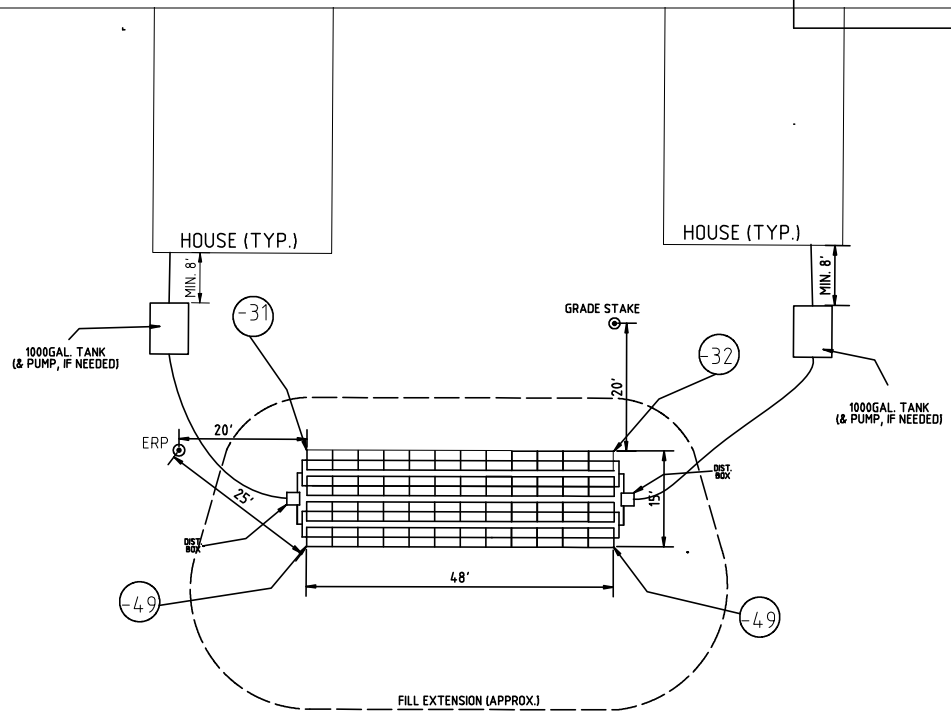
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

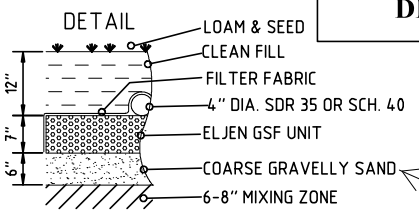
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

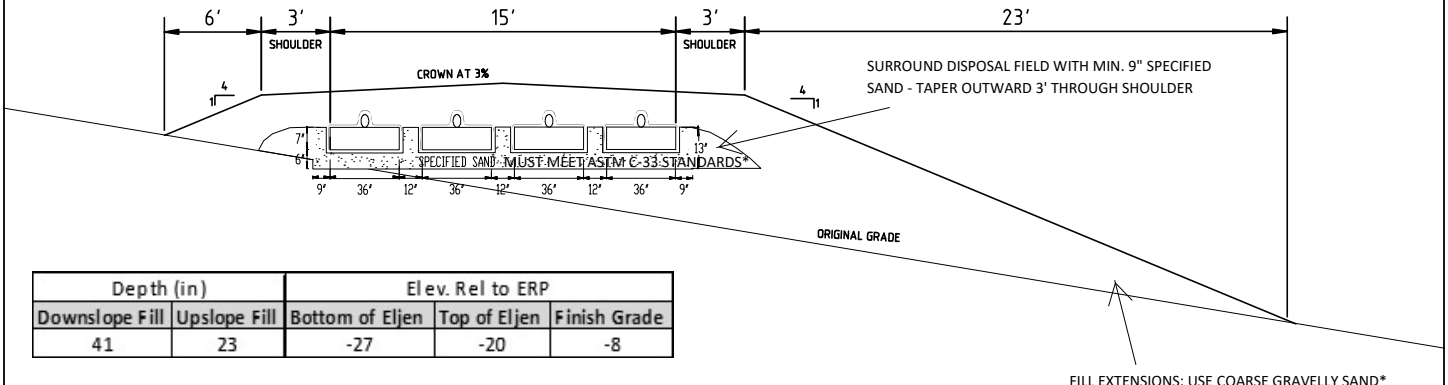
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
41	23	-27	-20	-8

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 82-83

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE 8 CONDITION D
at Observation Hole # TP-2
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 33.07 s
Lon. 70 d 30 m 10.93 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | SE # 419 | Date 3/26/23

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

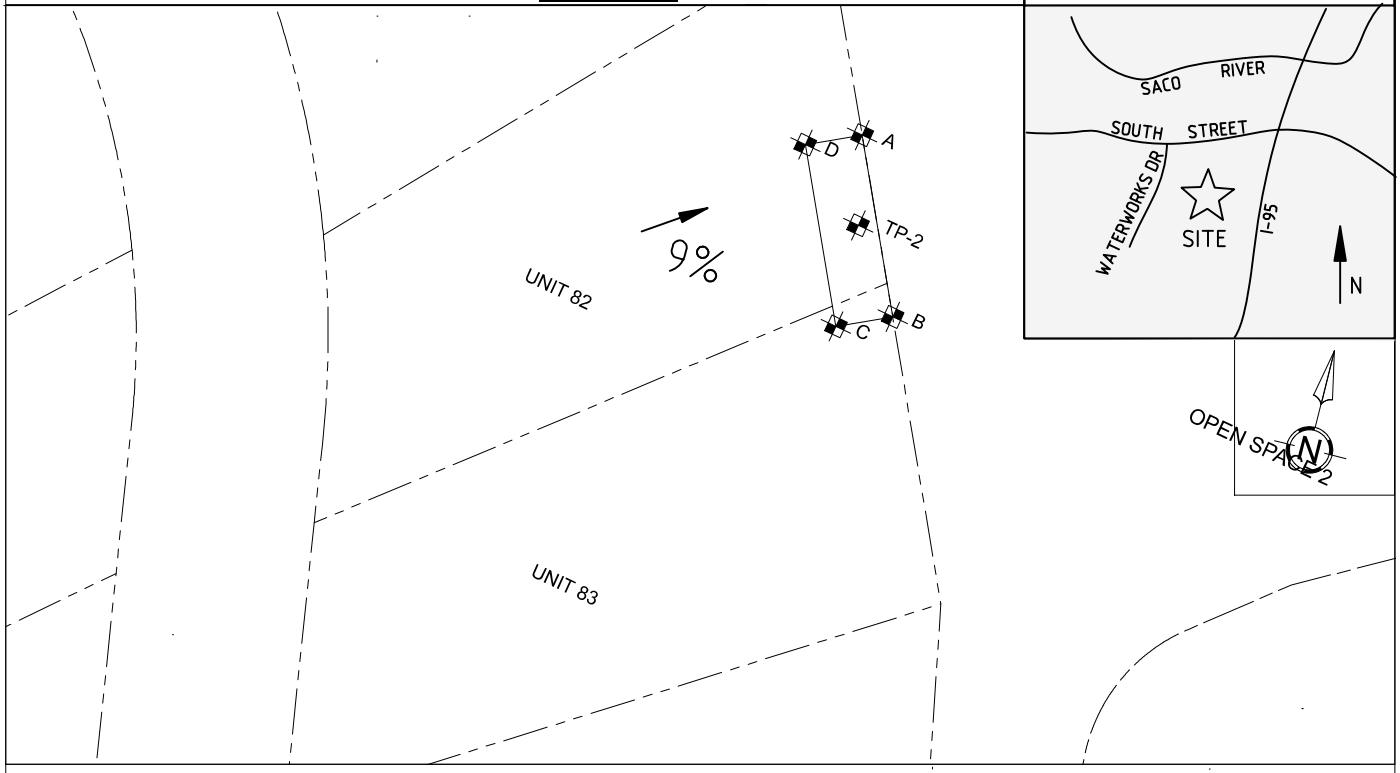
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

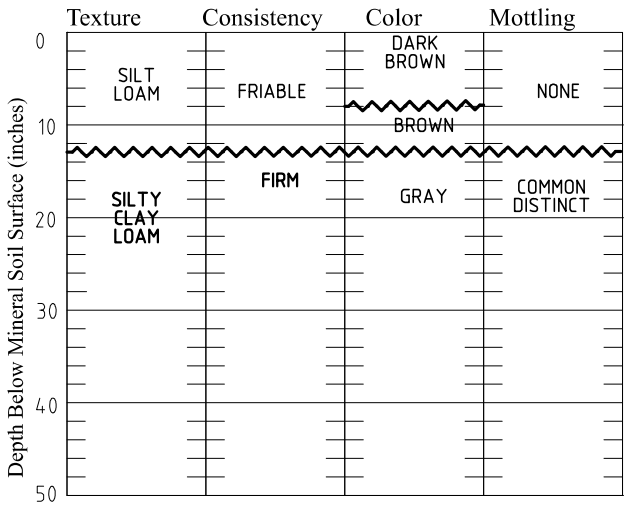


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-02 ☐ Test Pit ☒ Boring

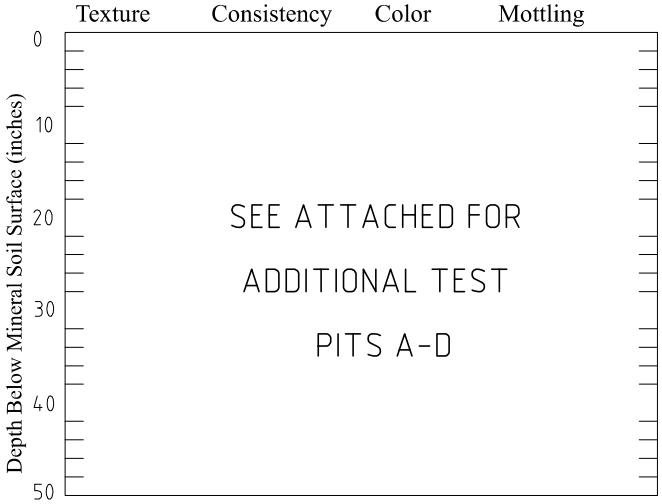
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	9 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

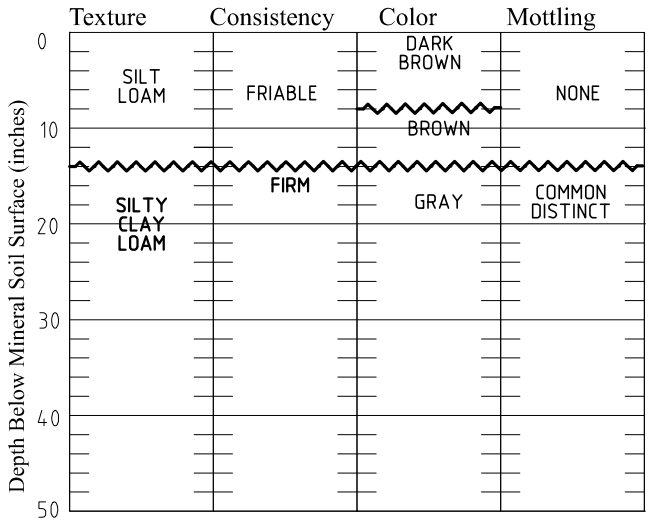
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-02 A ☐ Test Pit ☒ Boring

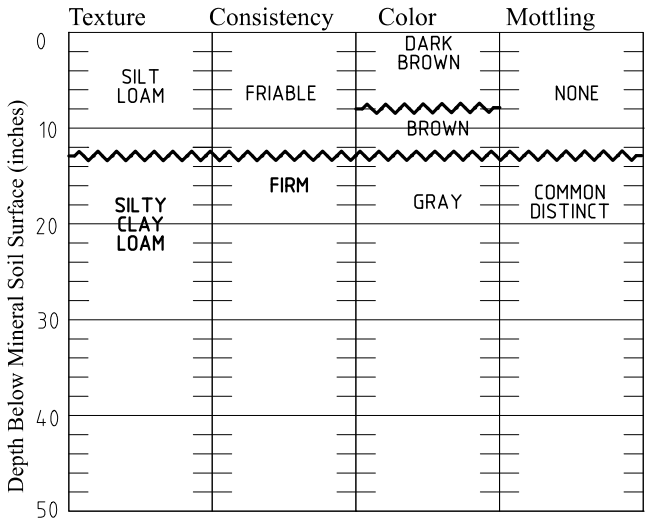
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-02 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

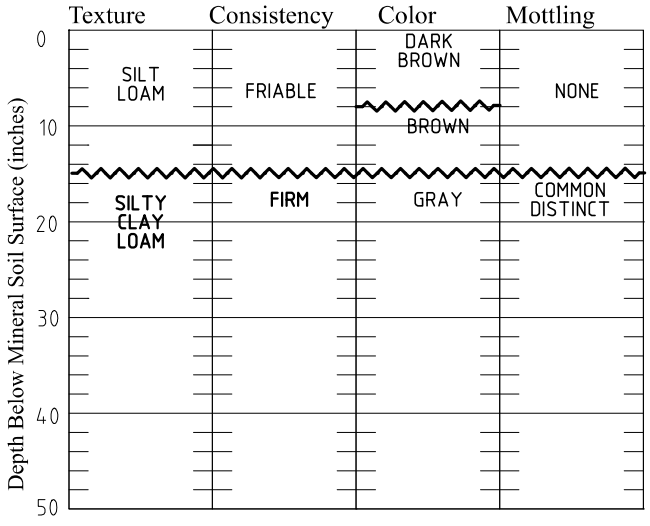


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-02 C ☐ Test Pit ☒ Boring

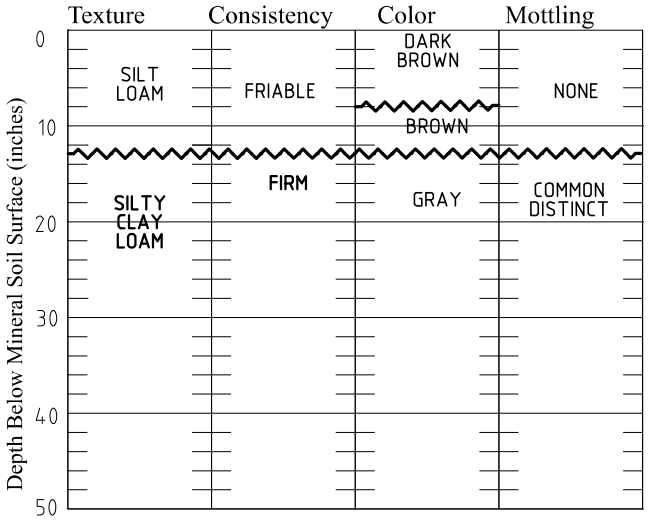
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	9 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-02 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	9 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

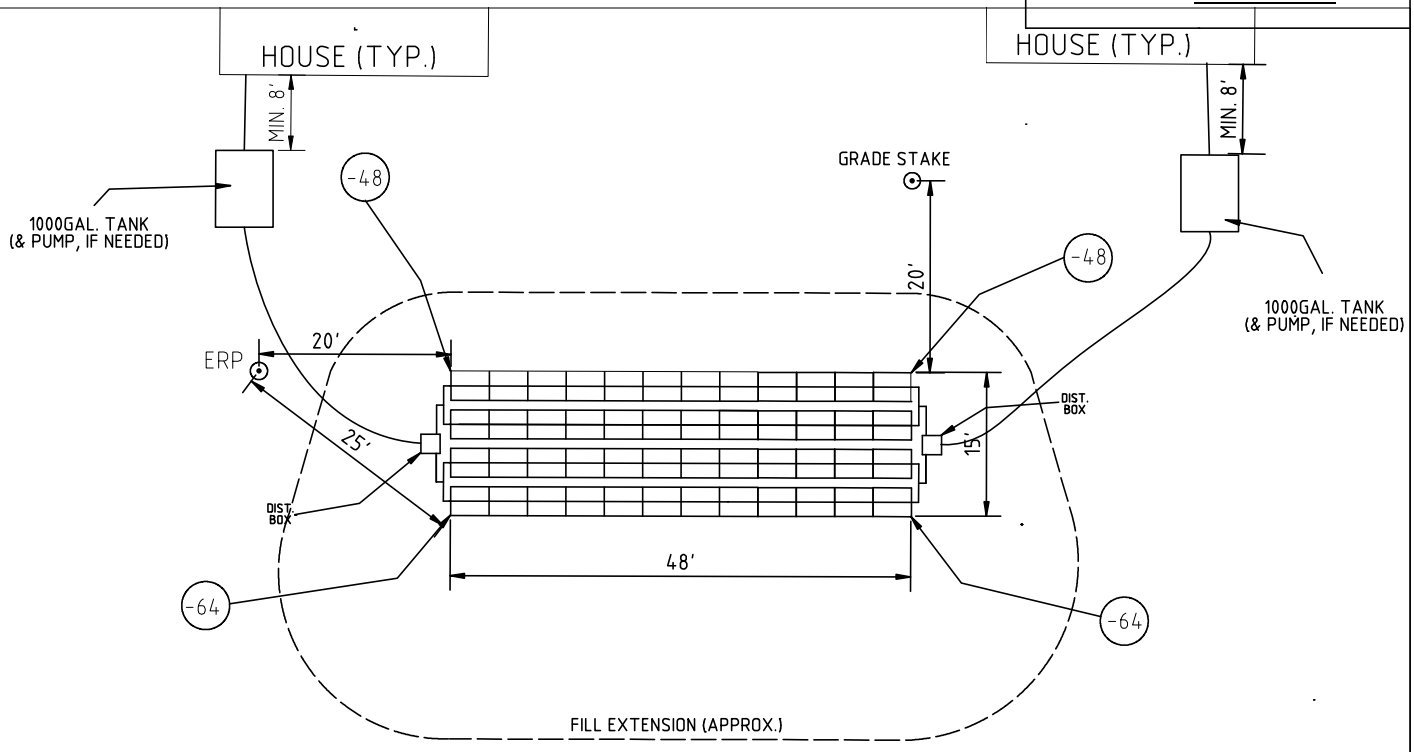
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

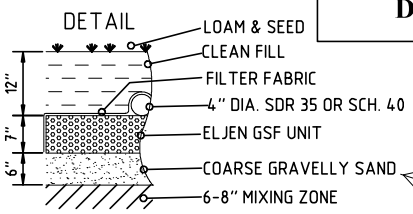
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

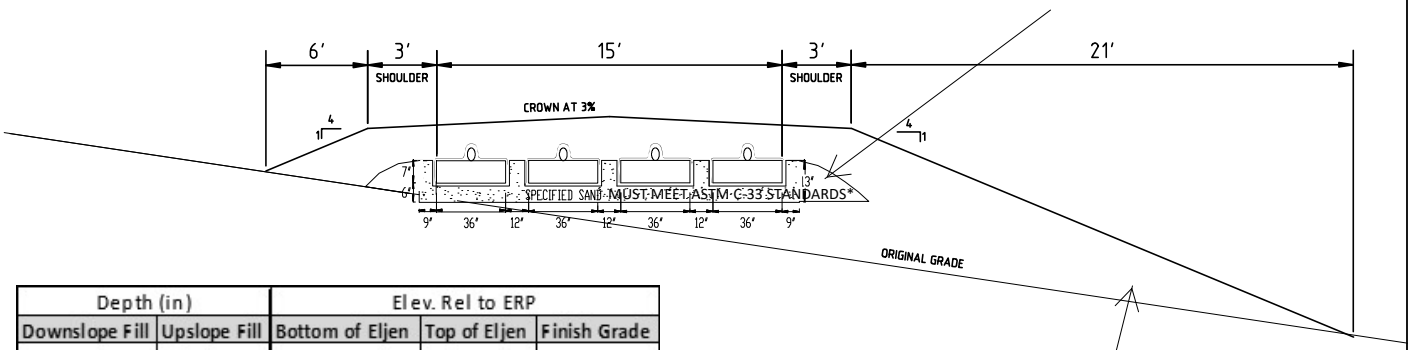
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
40	24	-43	-36	-24

Site Evaluator Signature

419 — SE #

3/18/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 84-85

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-45
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 31.44 s
Lon. 70 d 30 m 10.52 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

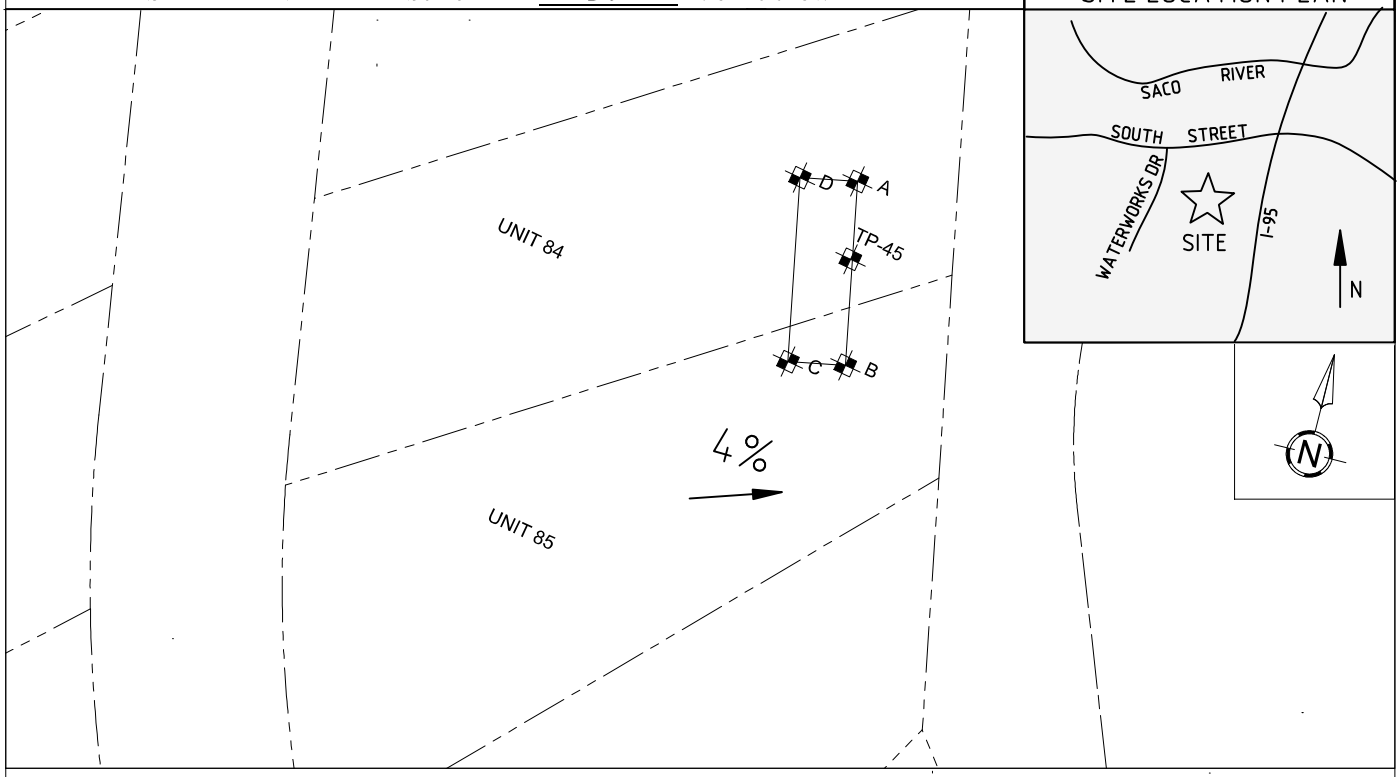
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

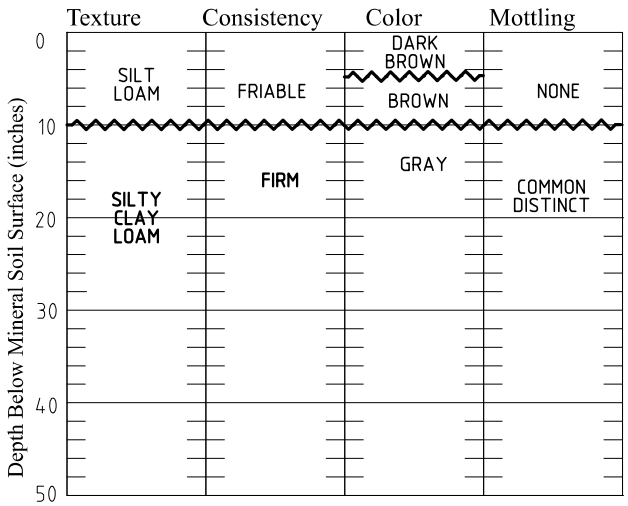


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-45 ☐ Test Pit ☒ Boring

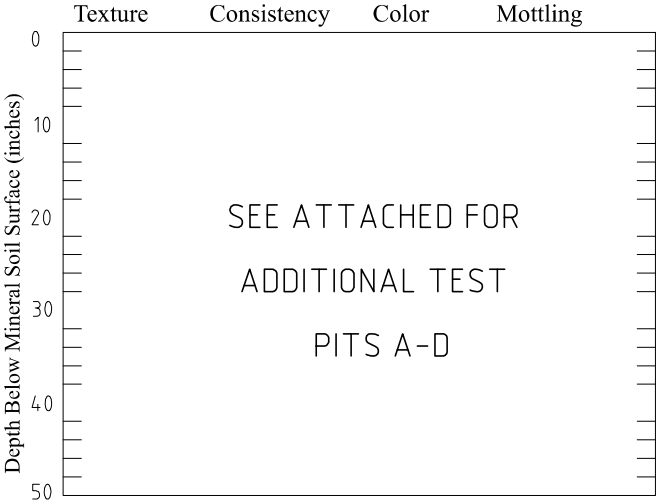
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

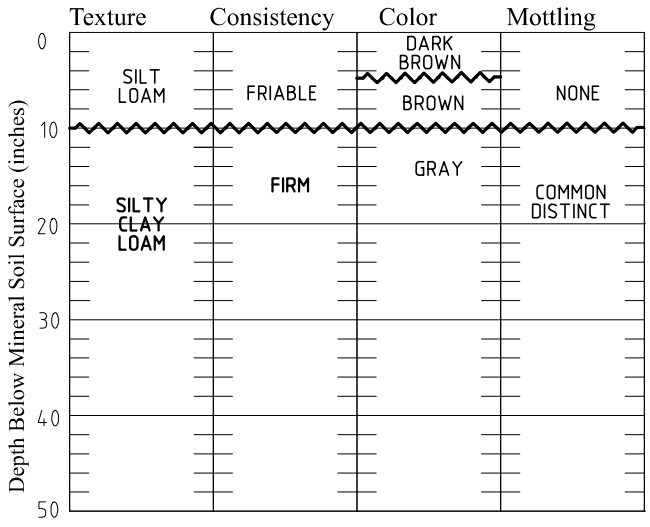
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-45 A ☐ Test Pit ☒ Boring

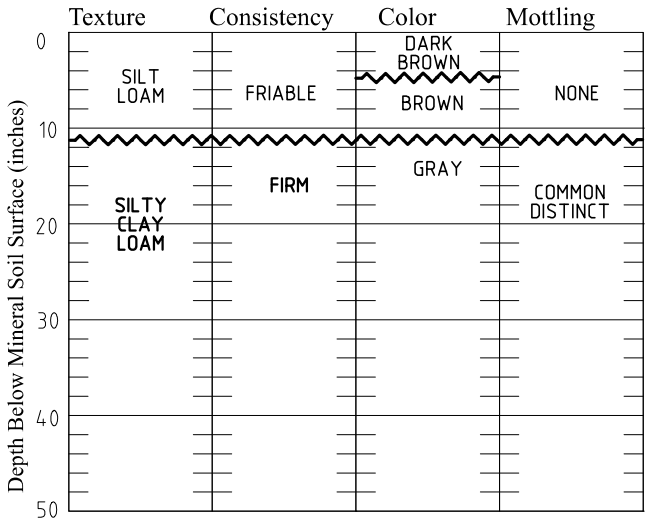
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-45 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

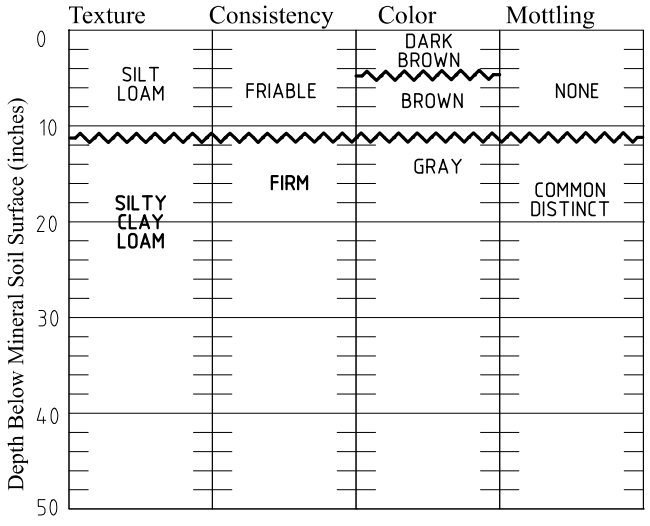


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	11 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-45 C ☐ Test Pit ☒ Boring

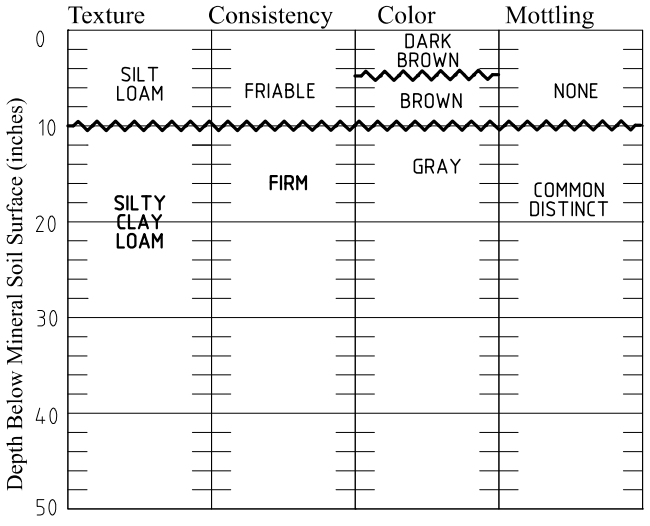
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	11 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-45 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	3 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/20/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

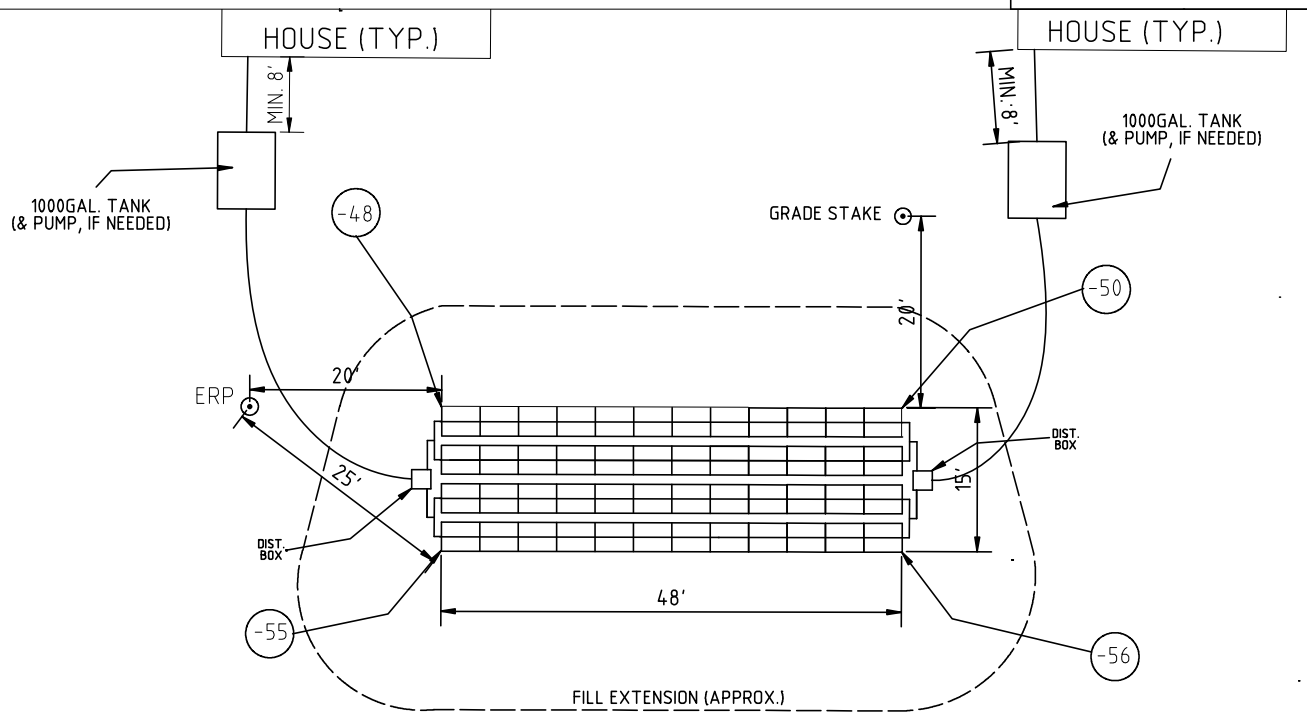
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

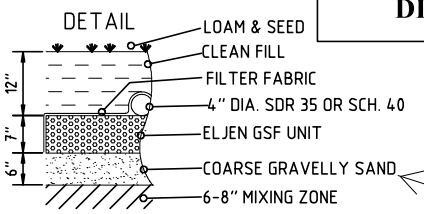
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

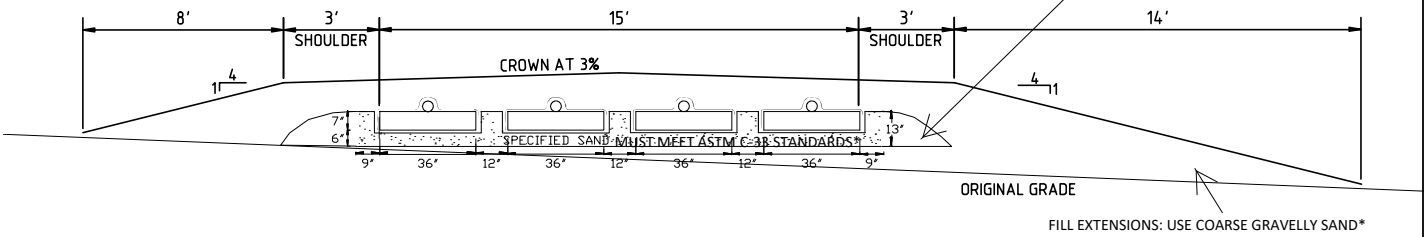
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	27	-40	-33	-21

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 86-87

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-46
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 29.87 s
Lon. 70 d 30 m 09.9 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | SE # 419 | Date 3/26/23

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

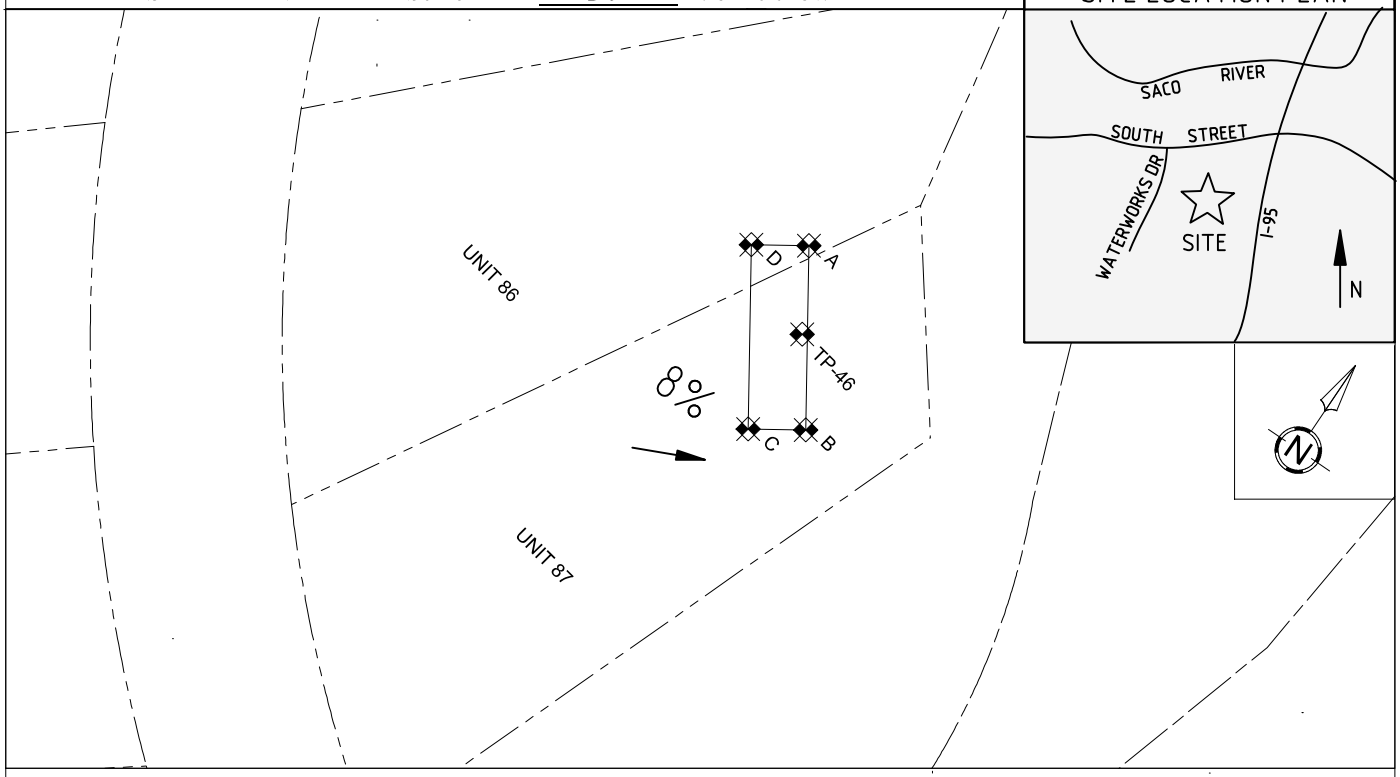
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

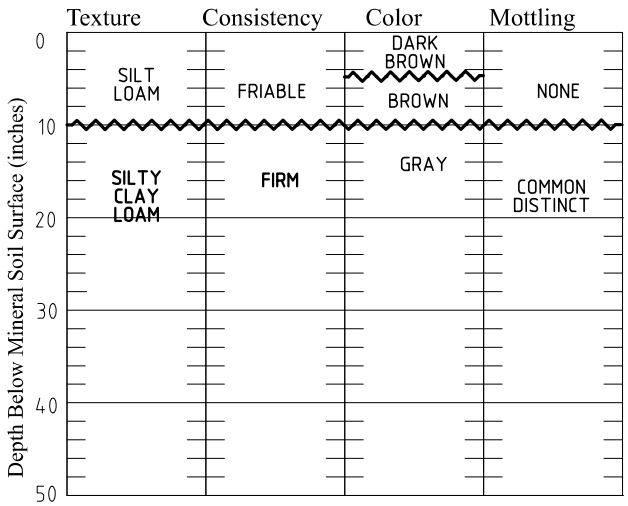


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-46 ☐ Test Pit ☒ Boring

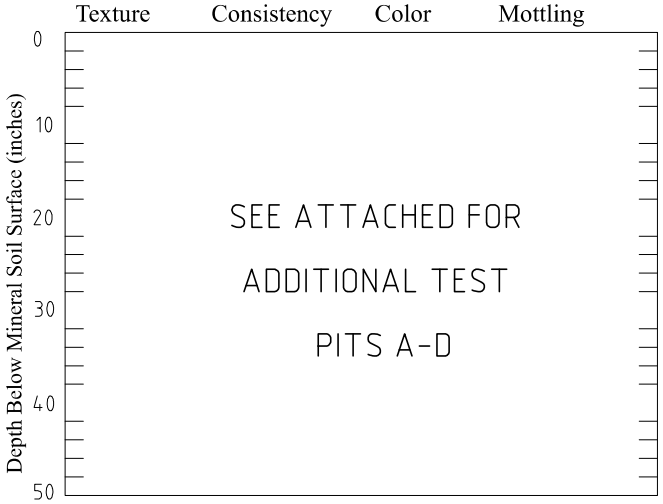
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	8 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

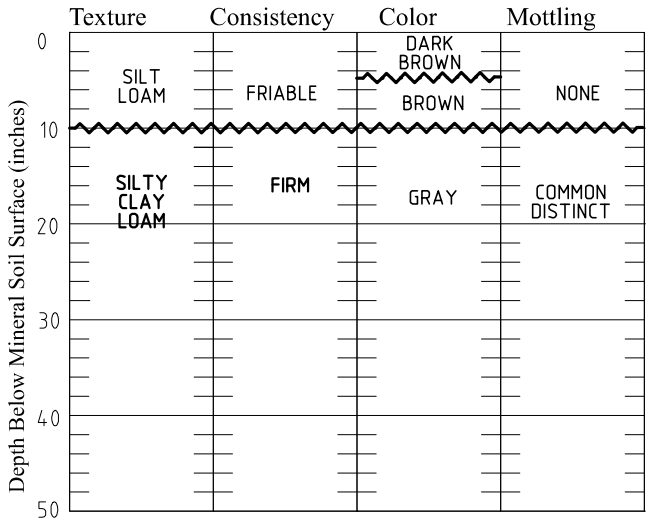
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-46 A ☐ Test Pit ☒ Boring

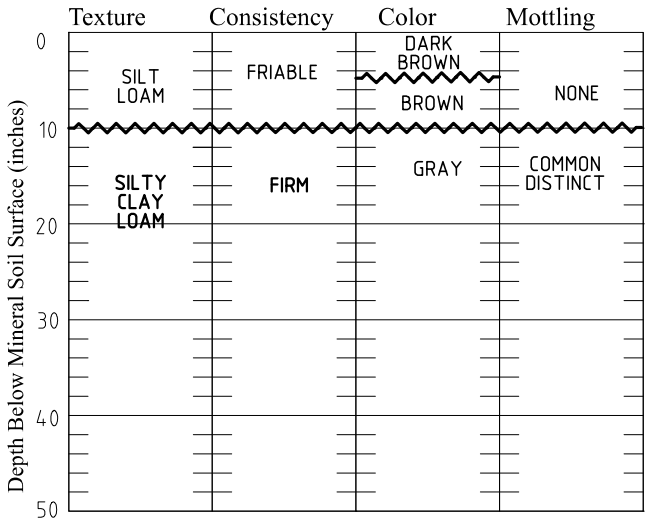
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-46 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

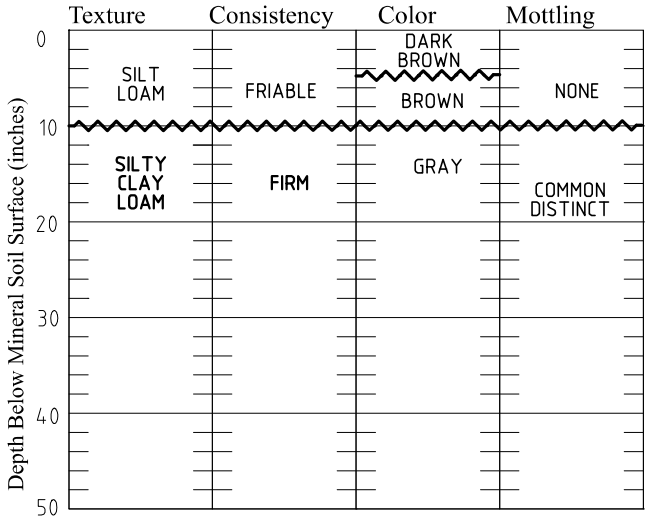


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-46 C ☐ Test Pit ☒ Boring

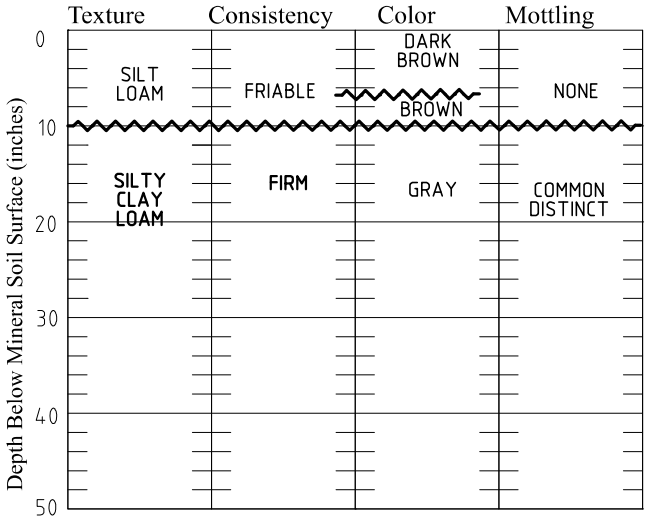
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-46 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/21/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

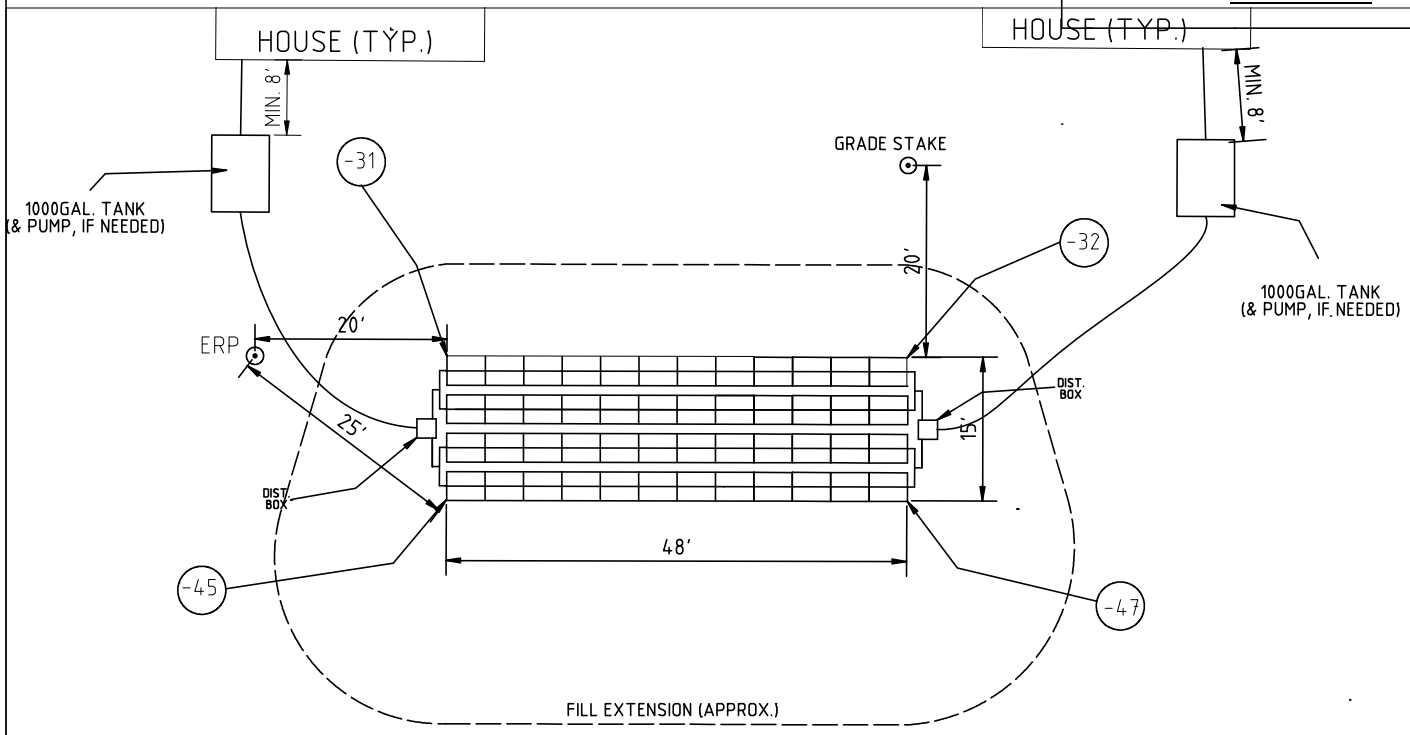
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

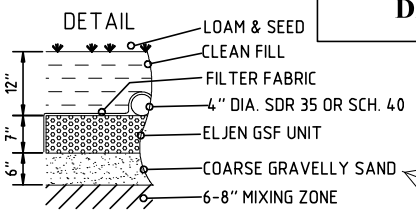
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

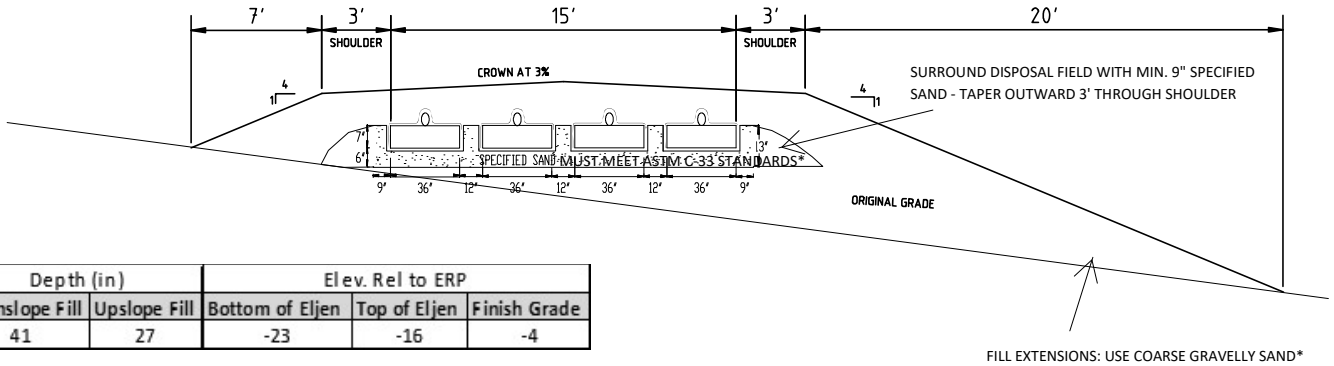
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
41	27	-23	-16	-4

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 88-89

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-41
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 32.04 s
Lon. 70 d 30 m 15.24 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	419 SE #	3/26/23 Date
ERIK LEMA	207-518-8442	erik@basswoodenv.com
Site Evaluator Name Printed	Telephone Number	E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

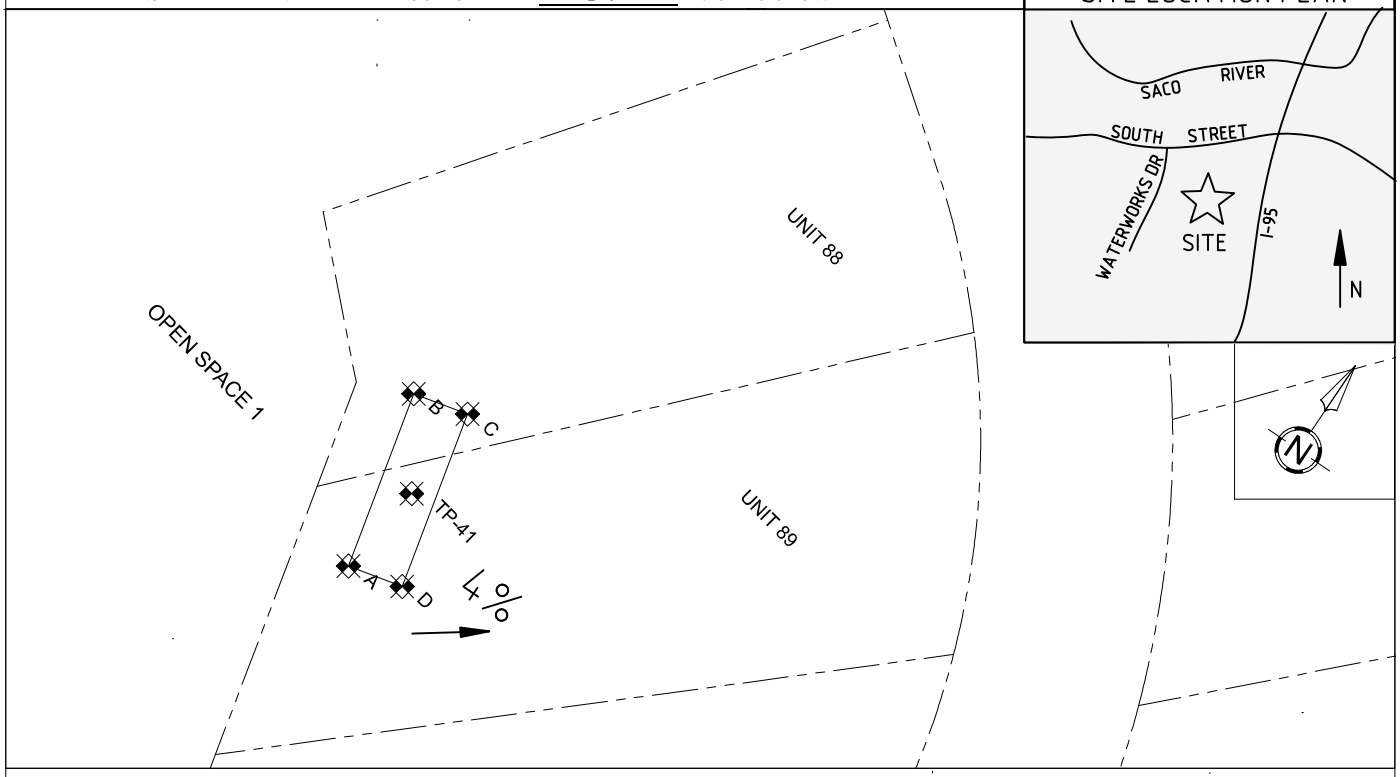
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-41 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

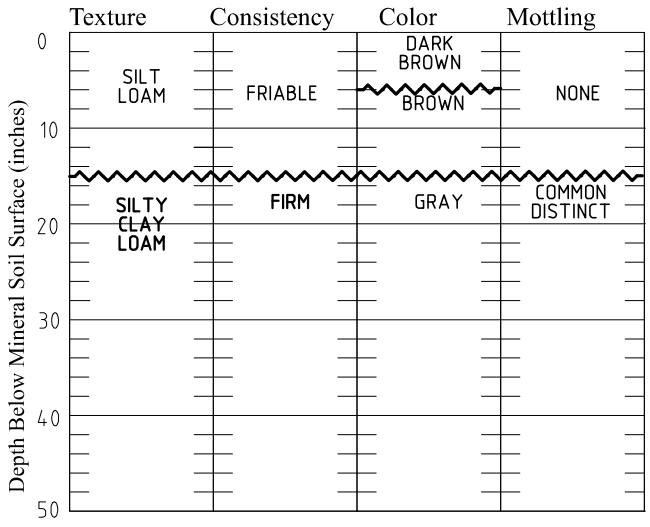
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-41 A ☐ Test Pit ☒ Boring

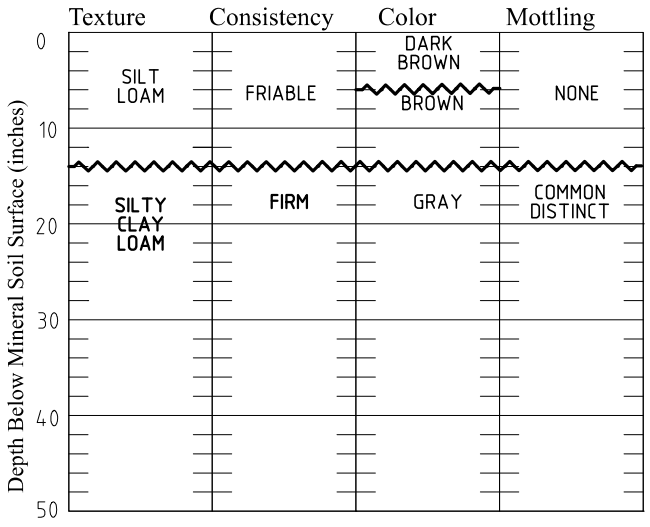
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-41 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

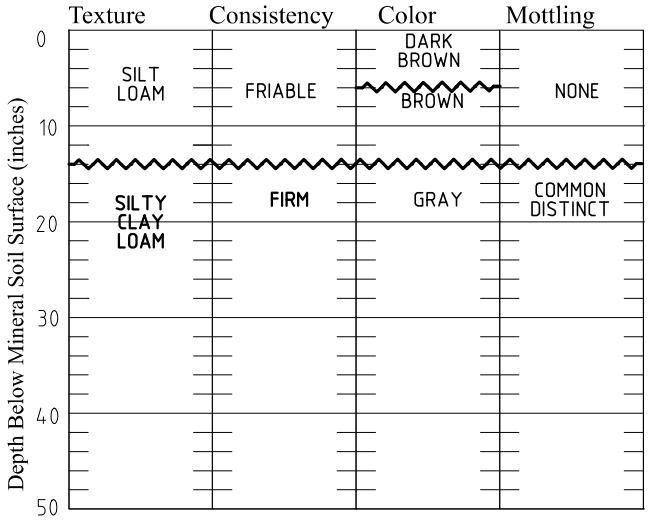


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	5 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-41 C ☐ Test Pit ☒ Boring

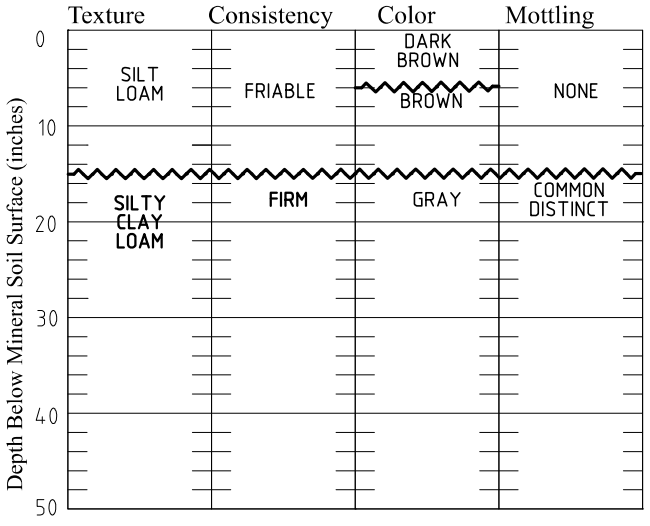
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-41 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

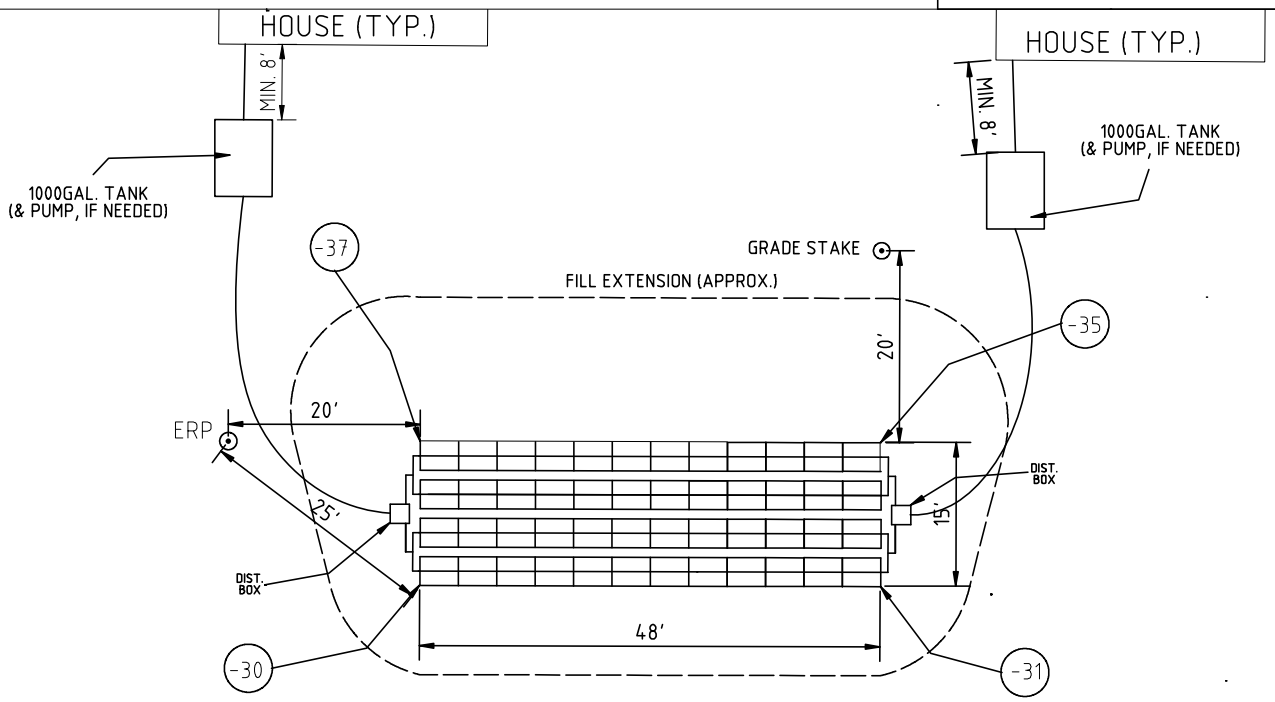
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

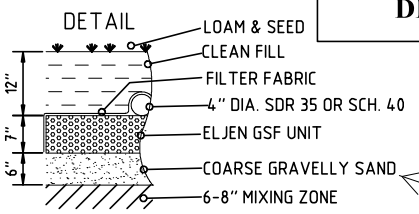
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

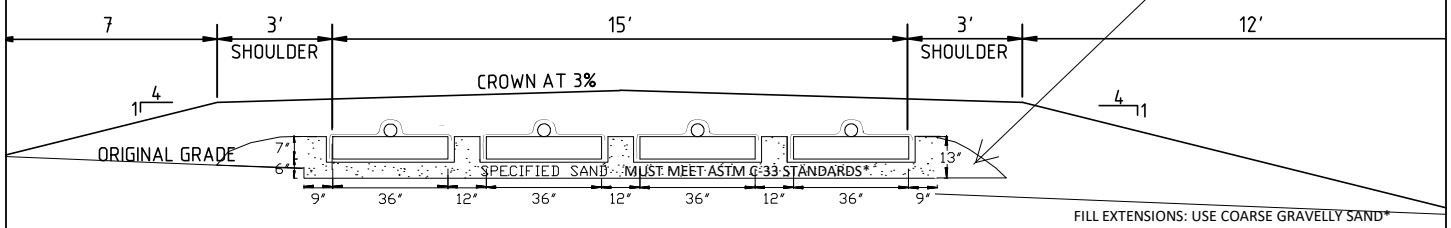
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-26	-19	-7

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 90-91

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-42
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 30.71 s
Lon. 70 d 30 m 14.78 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Erik Lema 419 3/26/23
Site Evaluator Signature SE # Date

ERIK LEMA 207-518-8442 erik@basswoodenv.com
Site Evaluator Name Printed Telephone Number E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

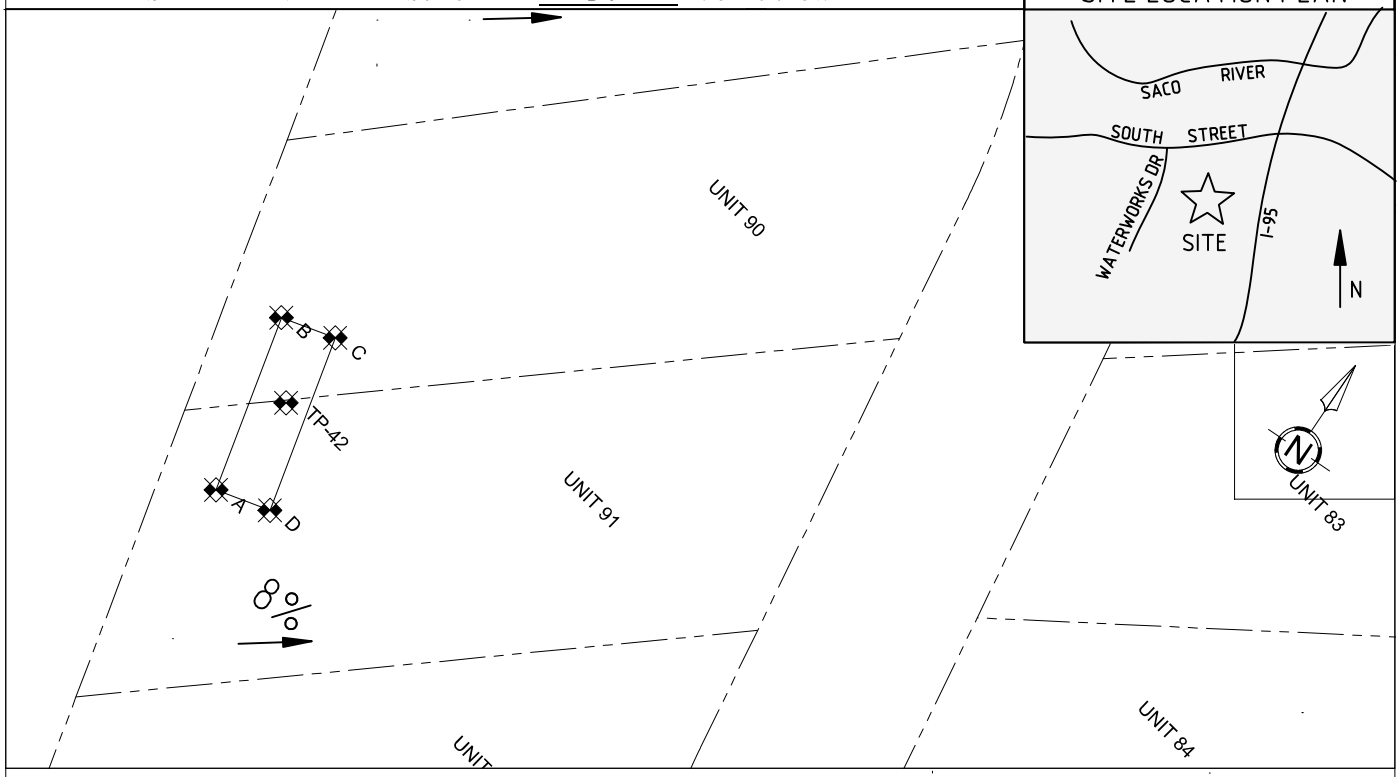
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-42 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

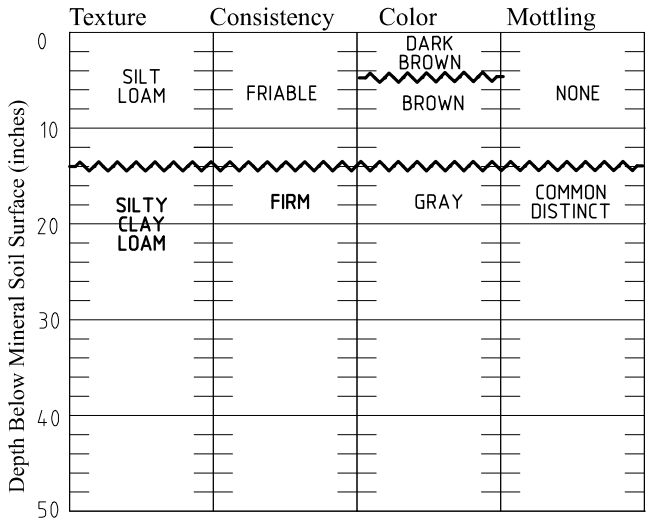
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-42 A ☐ Test Pit ☒ Boring

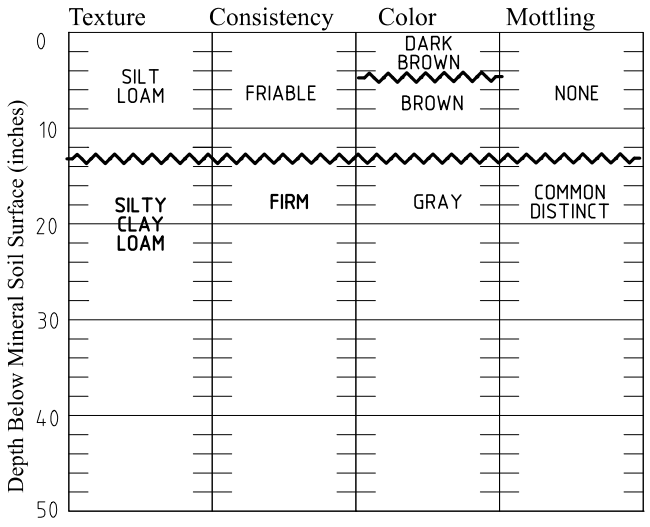
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-42 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

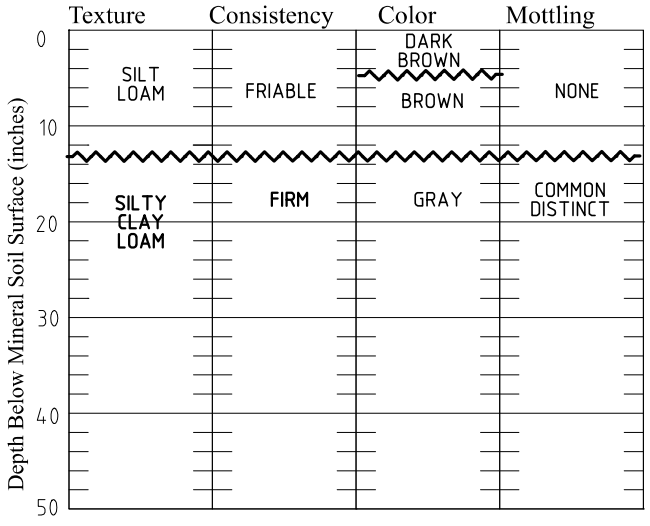


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-42 C ☐ Test Pit ☒ Boring

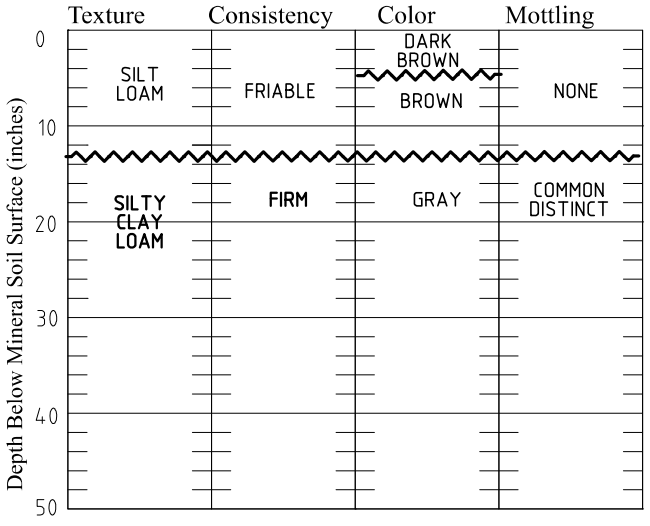
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-42 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/24/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

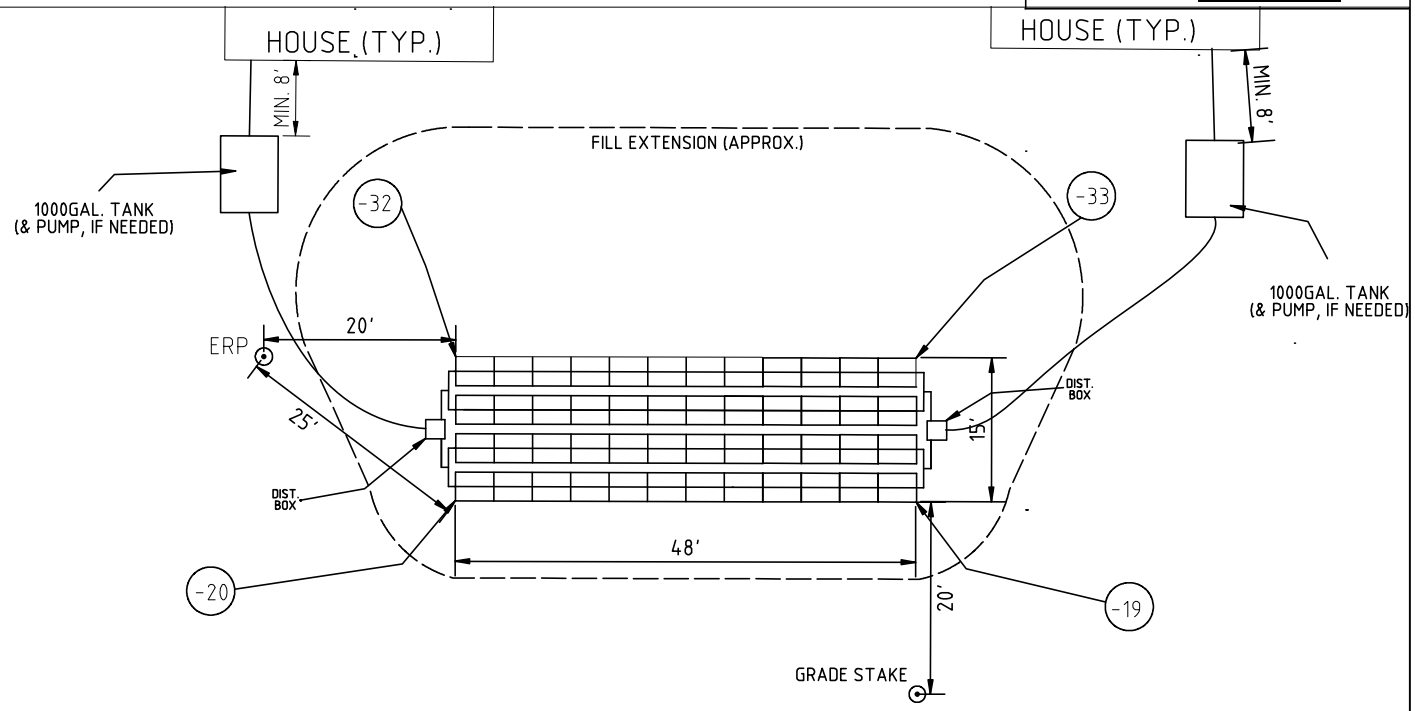
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

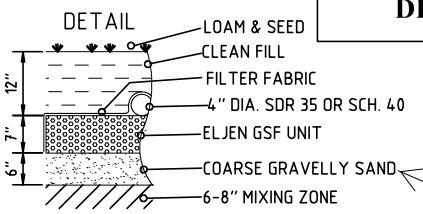
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 58" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

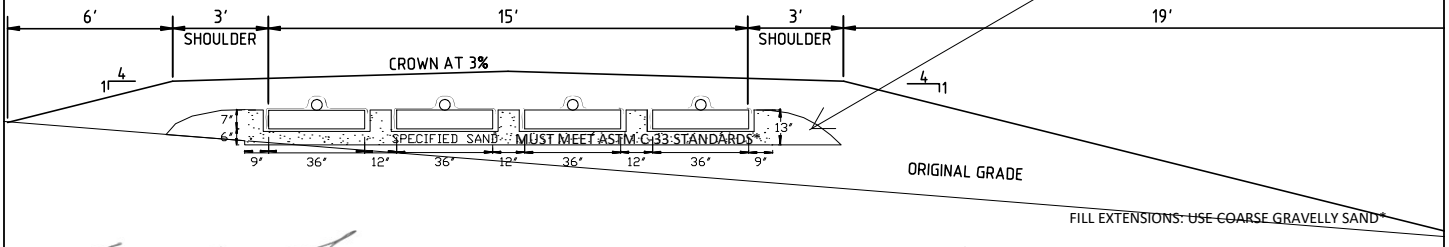
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
38	24	-14	-7	5

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

419 — SE #

3/17/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 92-93

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-43
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 27.55 s
Lon. 70 d 30 m 14.18 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

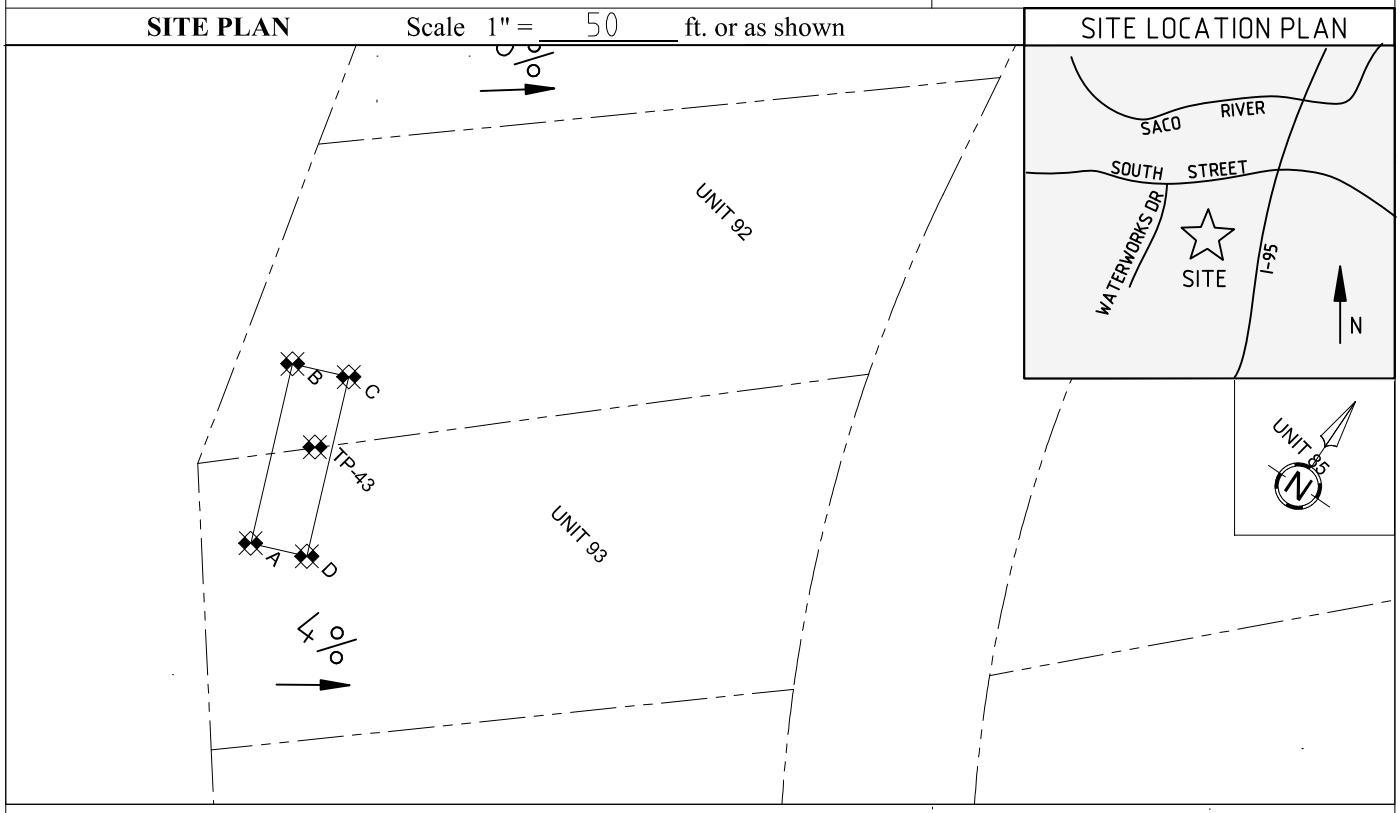
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-43 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–30				
30–40				
40–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

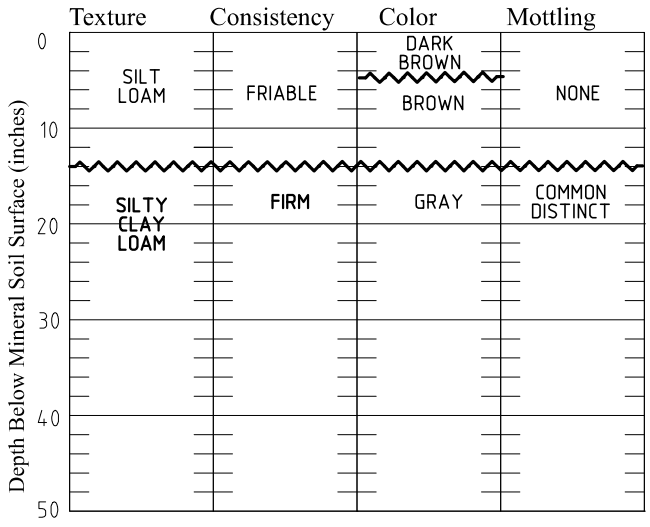
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-43 A ☐ Test Pit ☒ Boring

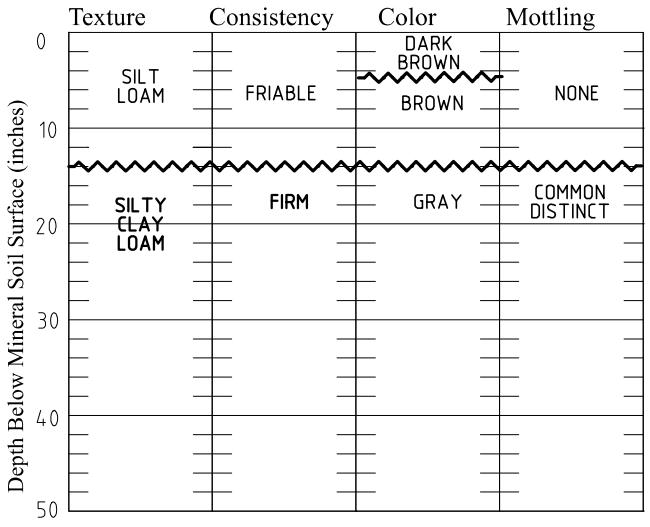
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-43 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

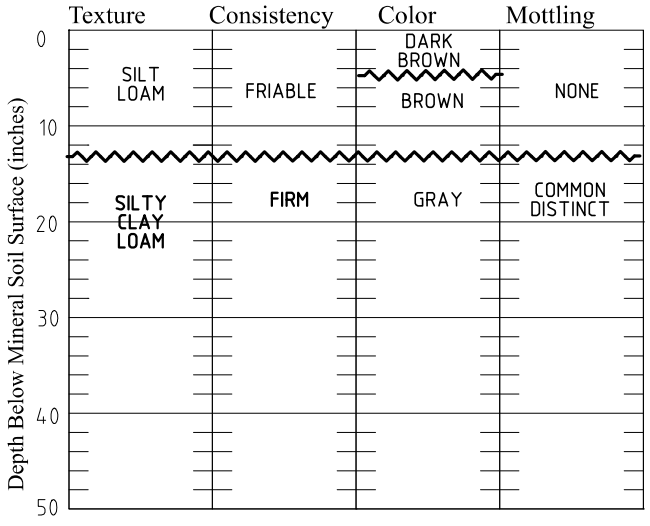


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-43 C ☐ Test Pit ☒ Boring

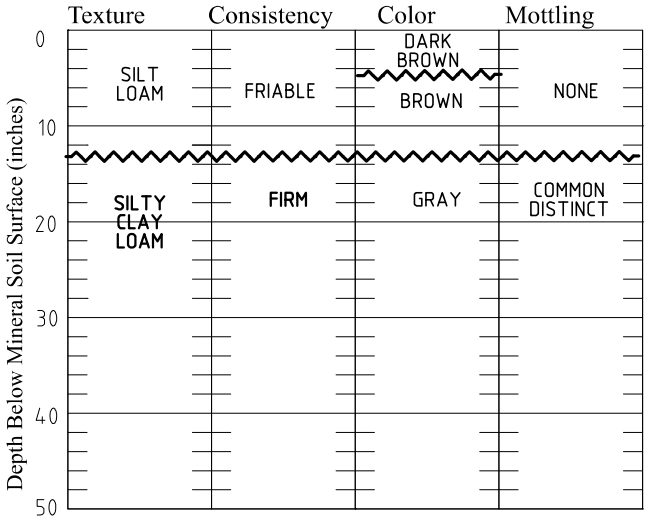
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-43 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/23/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

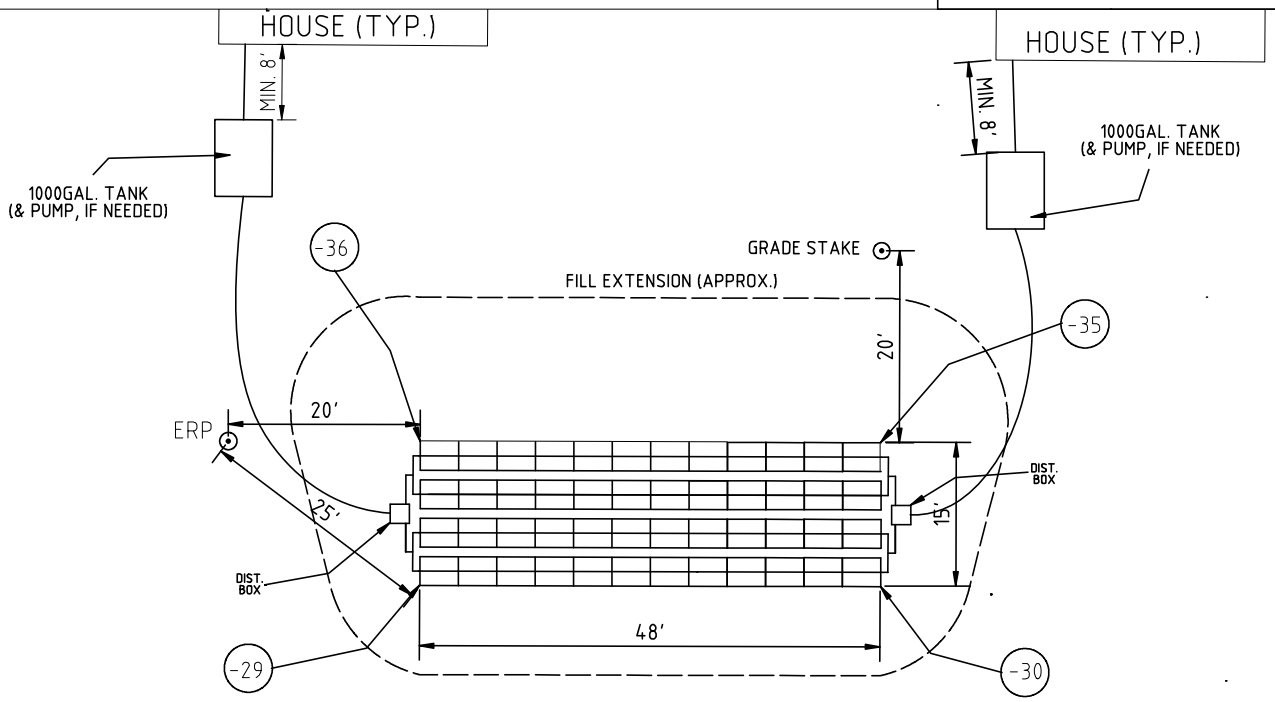
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

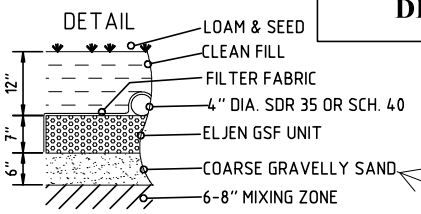
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

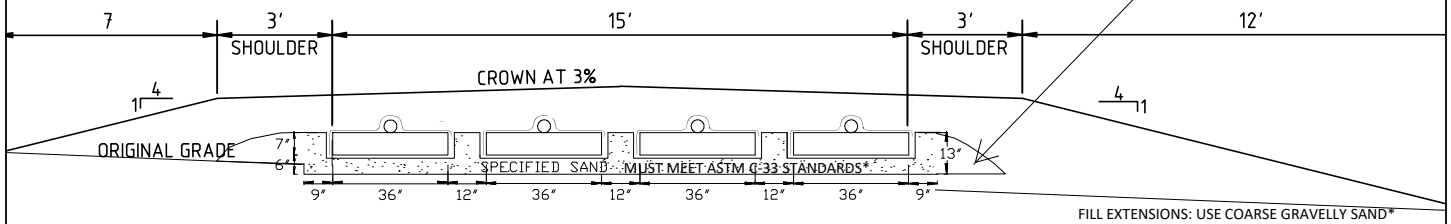
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	24	-24	-17	-5

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 94-96

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE 8 CONDITION D
at Observation Hole # TP-44
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 27.61 s
Lon. 70 d 30 m 12.66 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

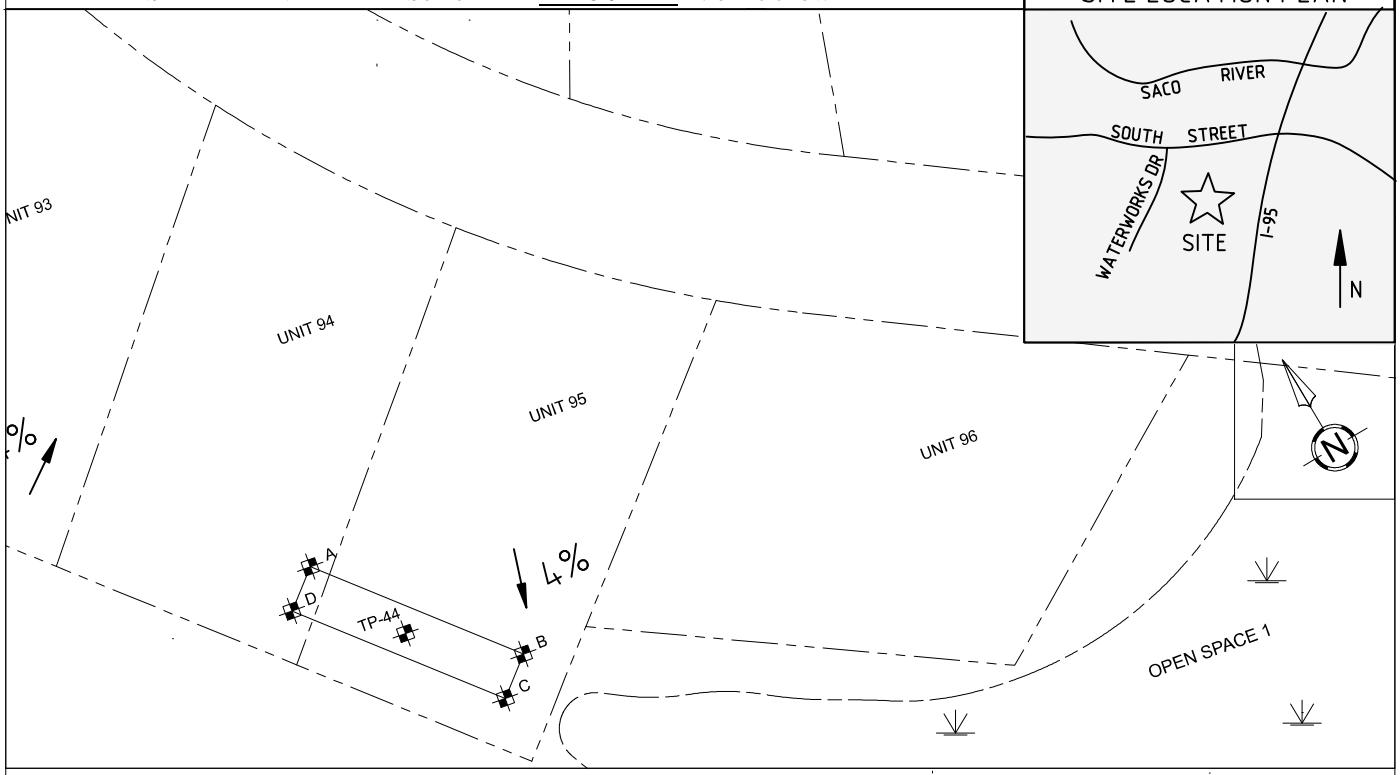
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-44 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification		Slope	Limiting Factor	
8	D	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

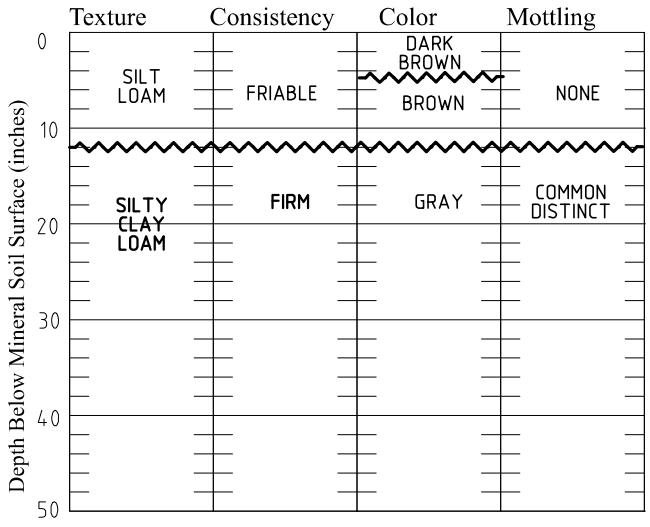
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-44 A ☐ Test Pit ☒ Boring

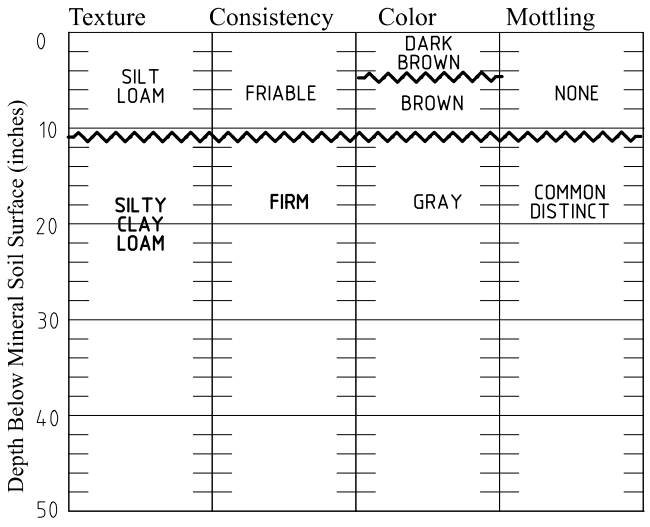
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-44 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

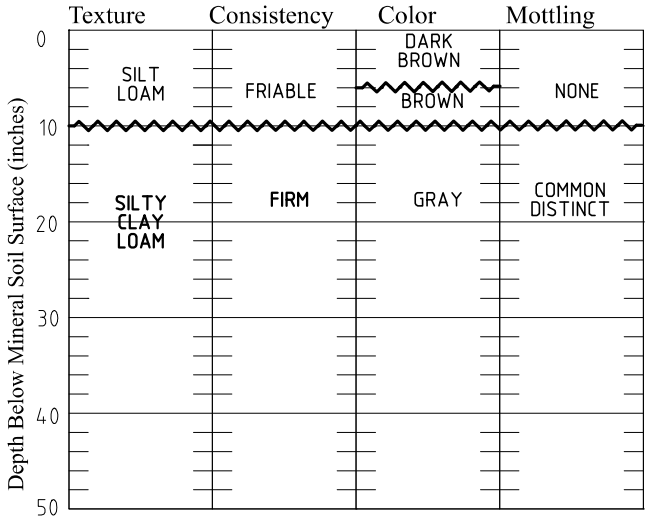


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	11 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-44 C ☐ Test Pit ☒ Boring

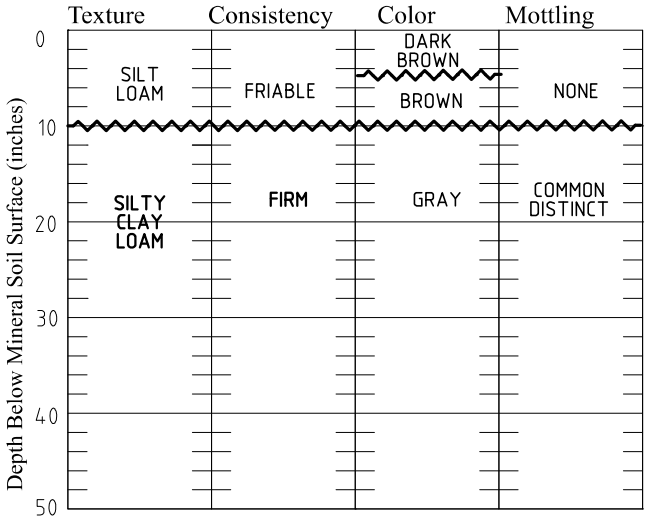
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-44 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

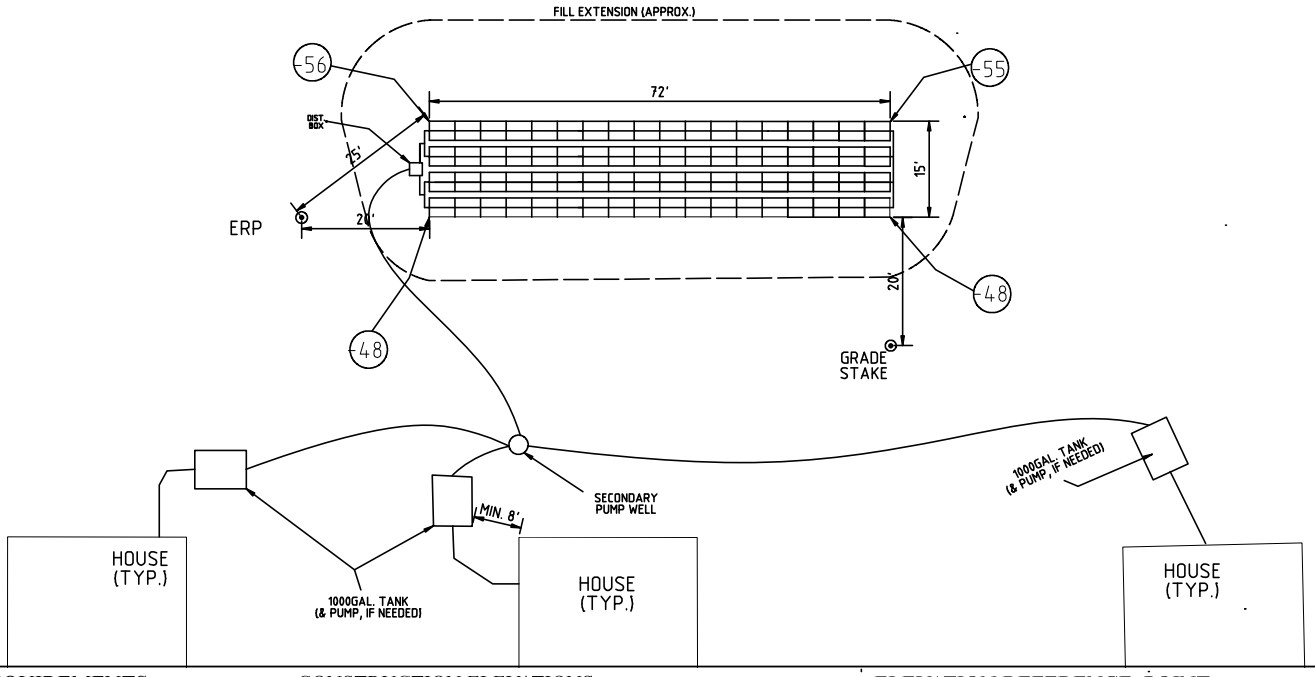
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

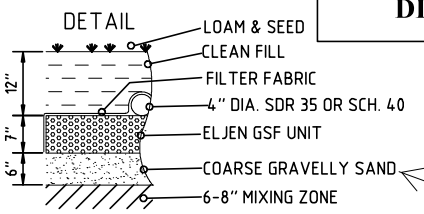
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

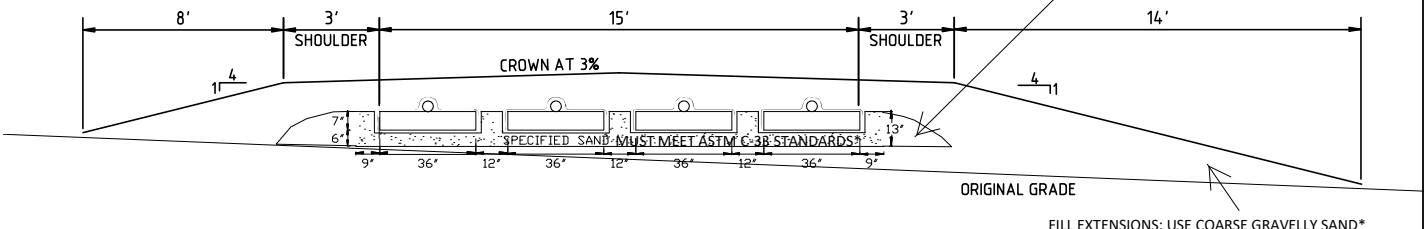
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	27	-40	-33	-21

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 97-98

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE 8 CONDITION D
at Observation Hole # TP-47
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 25.26 s
Lon. 70 d 30 m 08.71 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

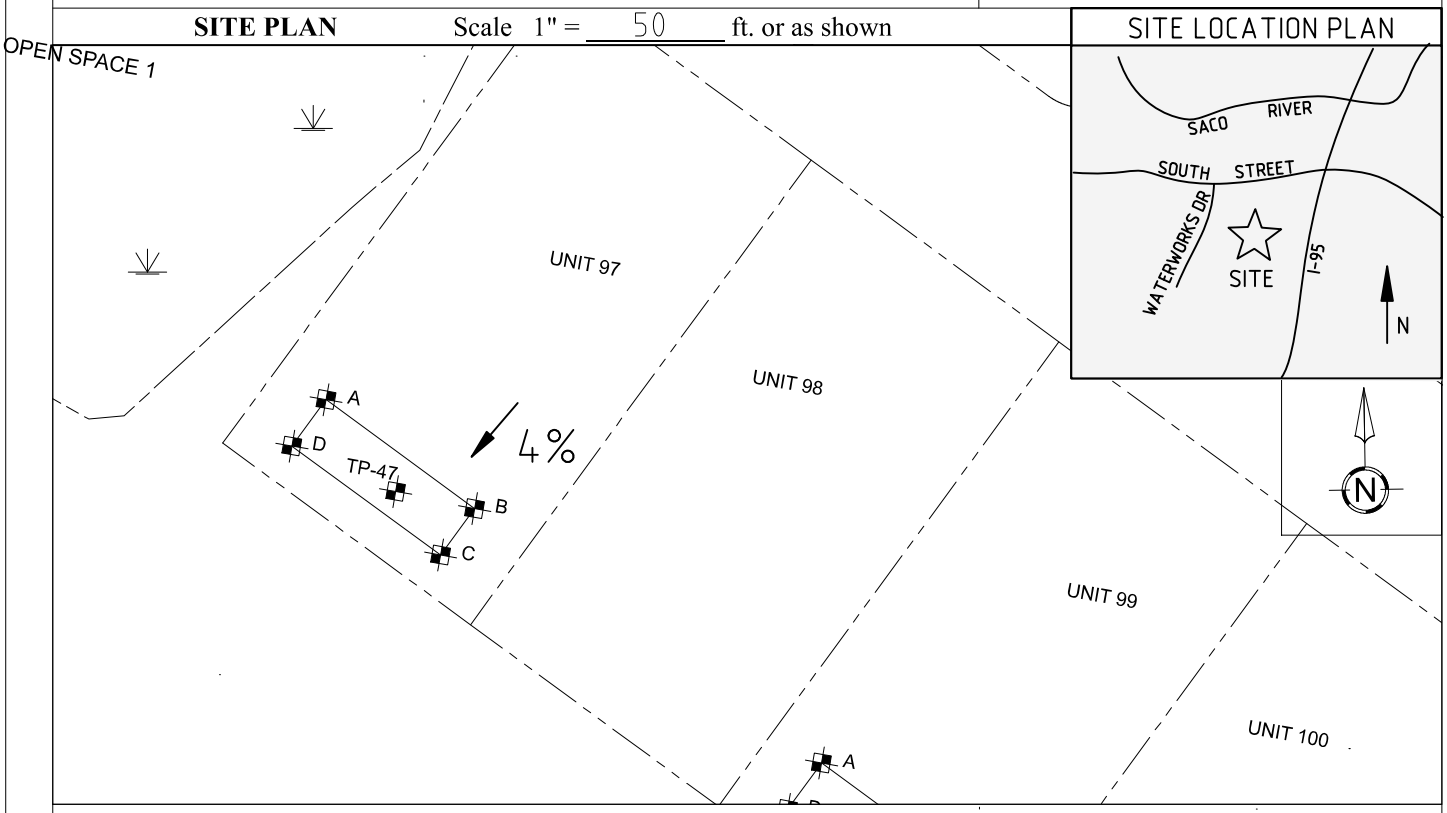
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-47 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 / D (Profile / Condition)	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

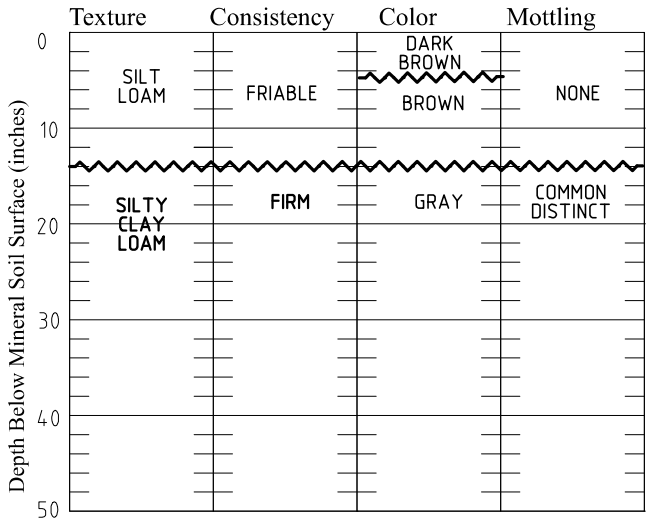
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-47 A ☐ Test Pit ☒ Boring

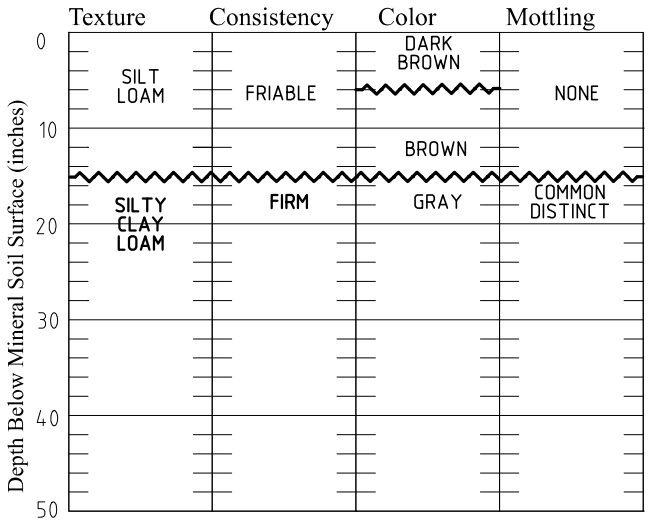
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-47 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

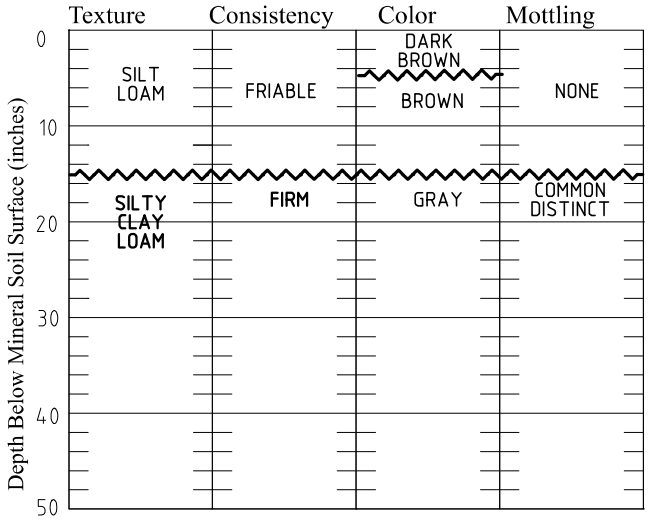


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-47 C ☐ Test Pit ☒ Boring

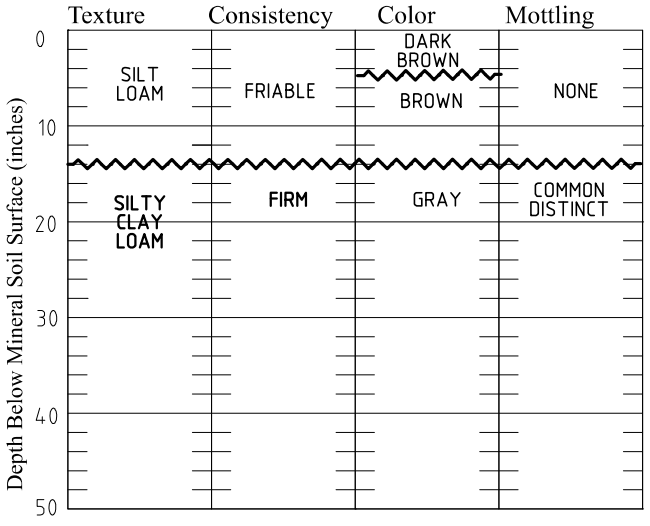
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-47 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

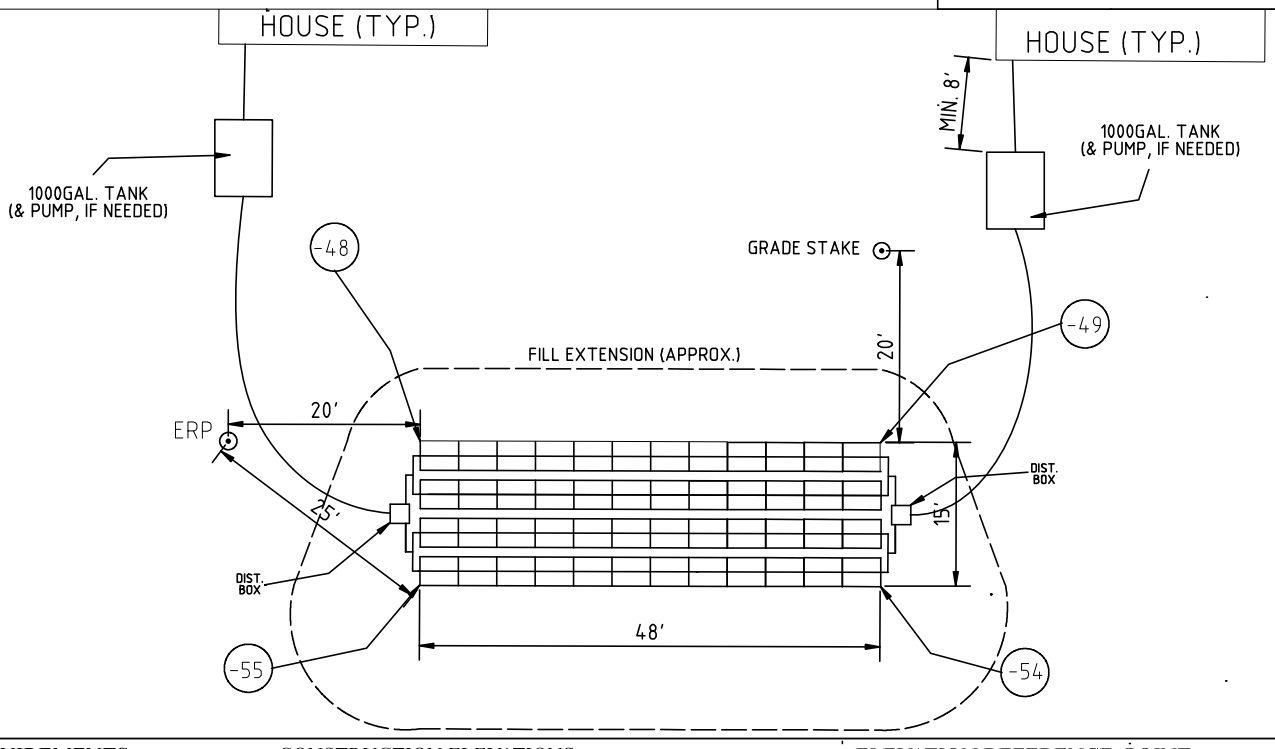
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

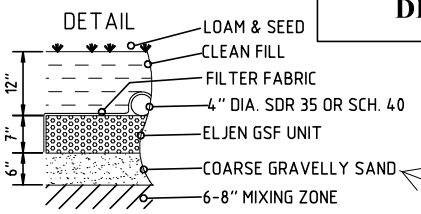
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

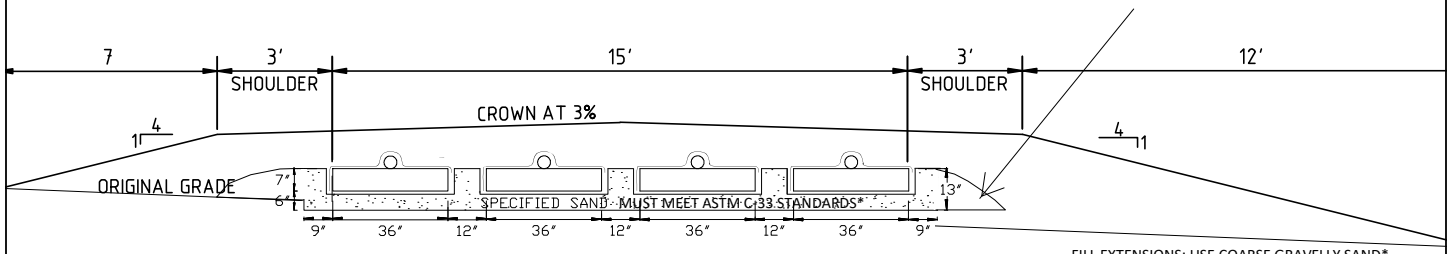
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-44	-37	-25

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 99-100

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-52
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.38 s
Lon. 70 d 30 m 06.92 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Erik Lema — Site Evaluator Signature
419 — SE #
3/26/23 — Date
ERIK LEMA — Site Evaluator Name Printed
207-518-8442 — Telephone Number
erik@basswoodenv.com — E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

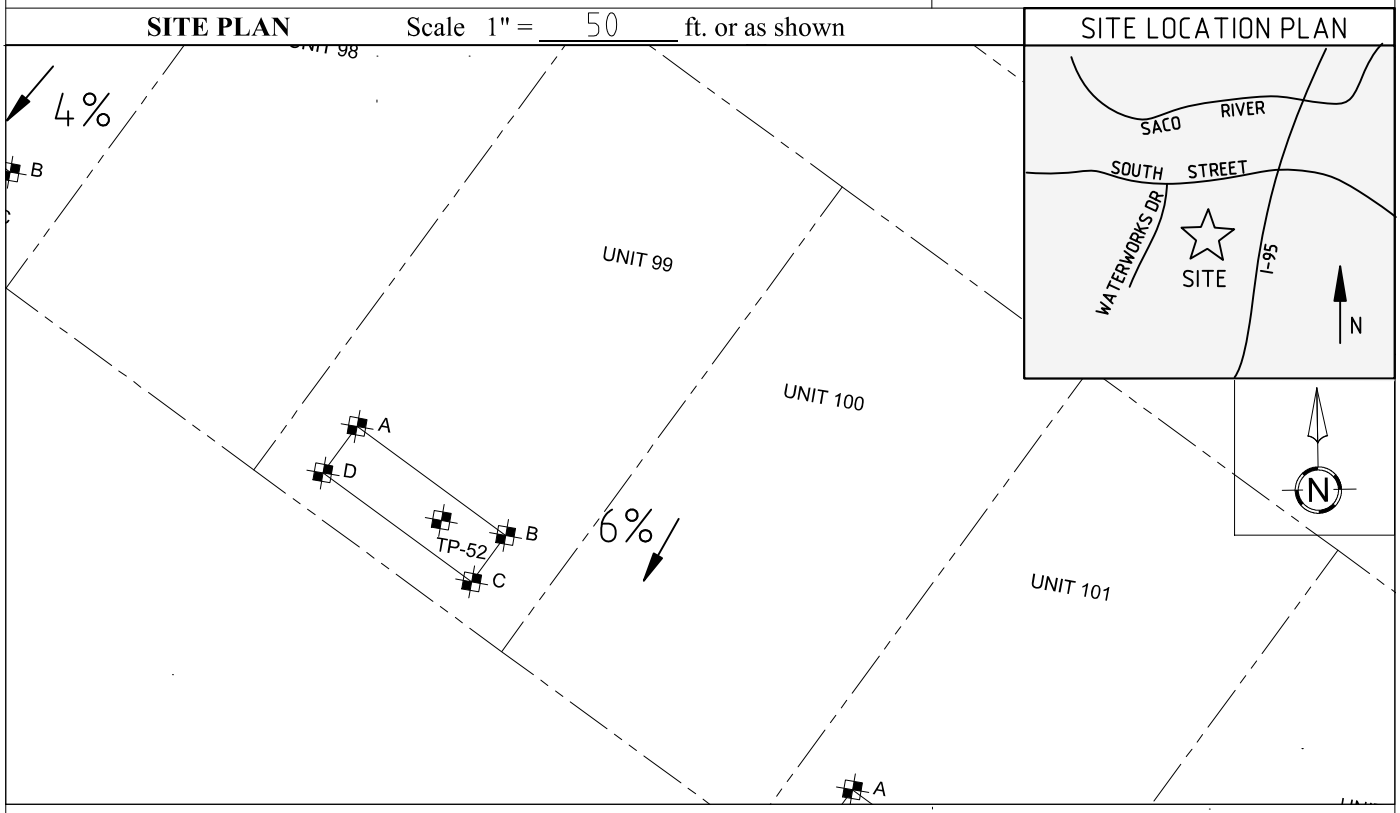
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

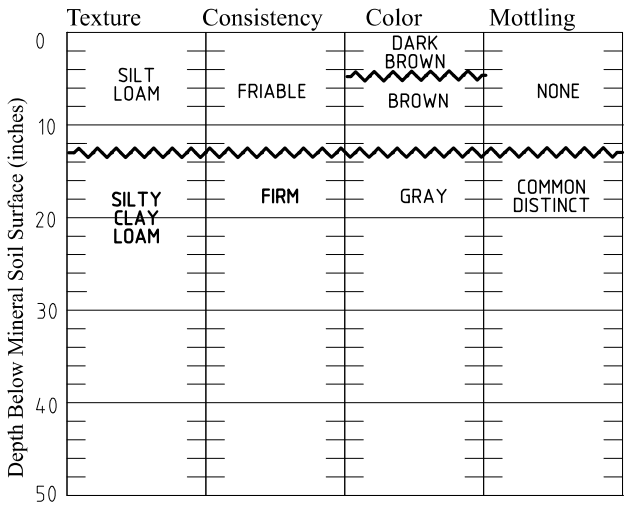
SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

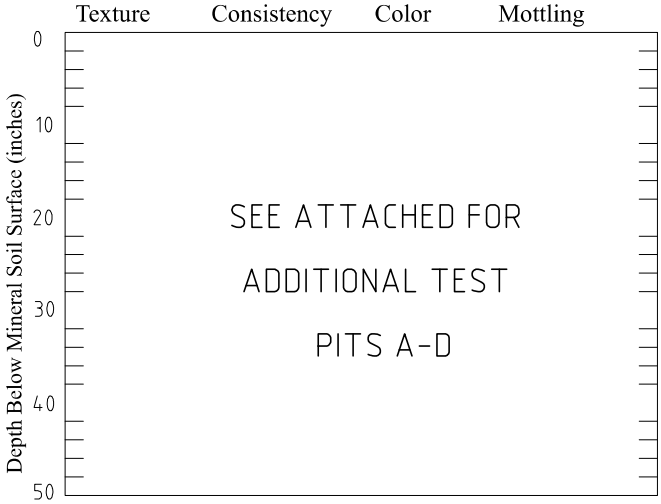
SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-52 ☐ Test Pit ☒ Boring
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring
_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

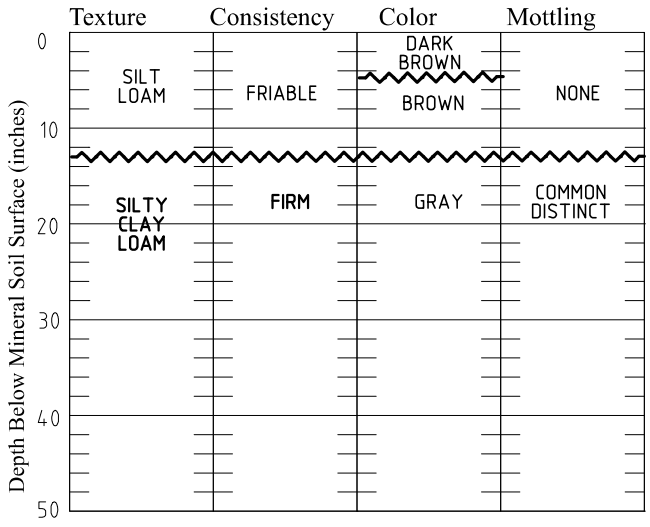
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-52 A ☐ Test Pit ☒ Boring

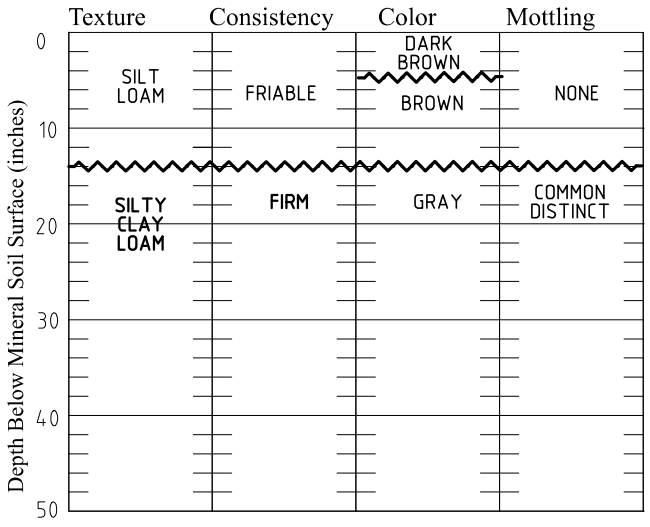
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-52 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

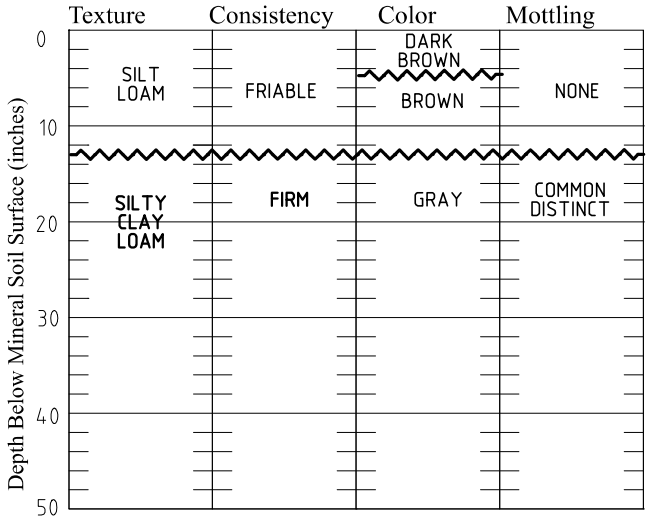


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-52 C ☐ Test Pit ☒ Boring

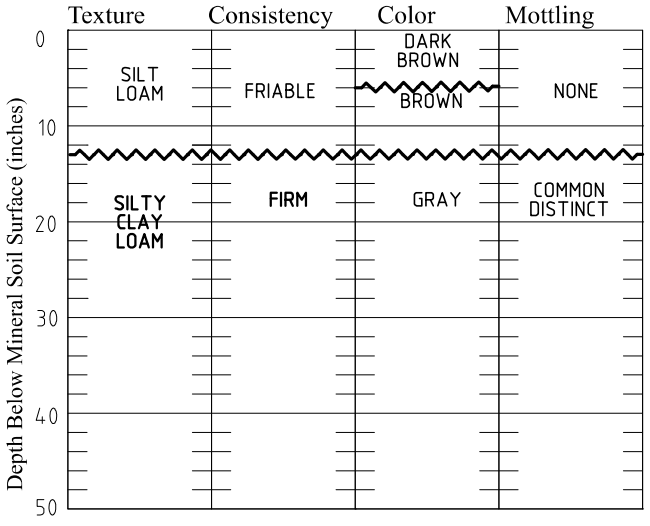
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	5 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-52 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

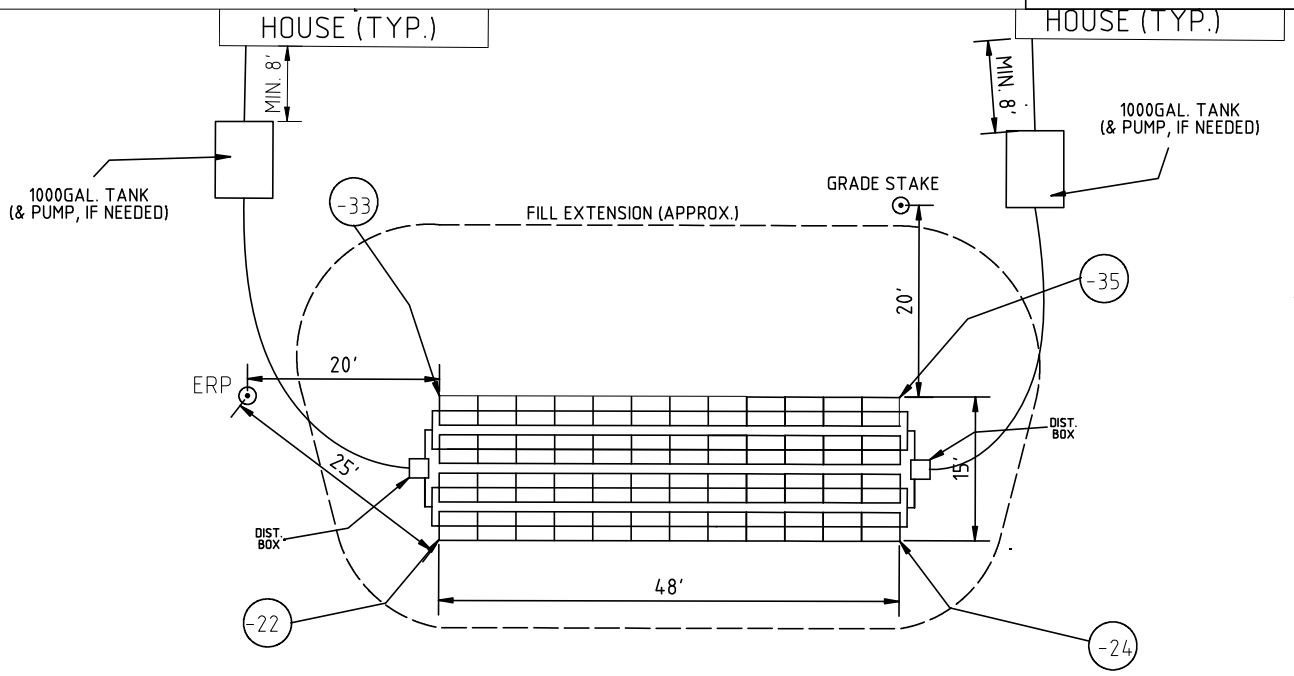
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

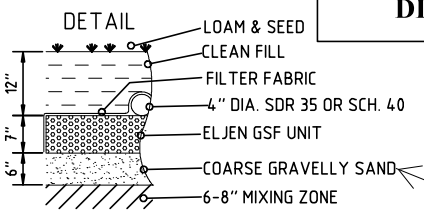
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

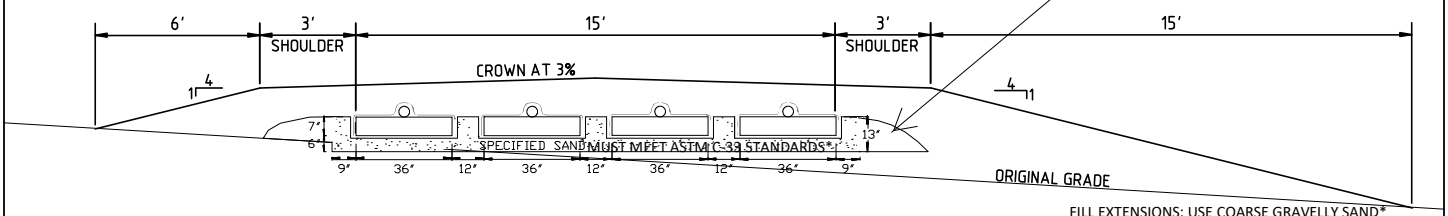
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
35	24	-17	-10	2

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature | SE # 419 | Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 101-102

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-53
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 23.39 s
Lon. 70 d 30 m 05.17 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

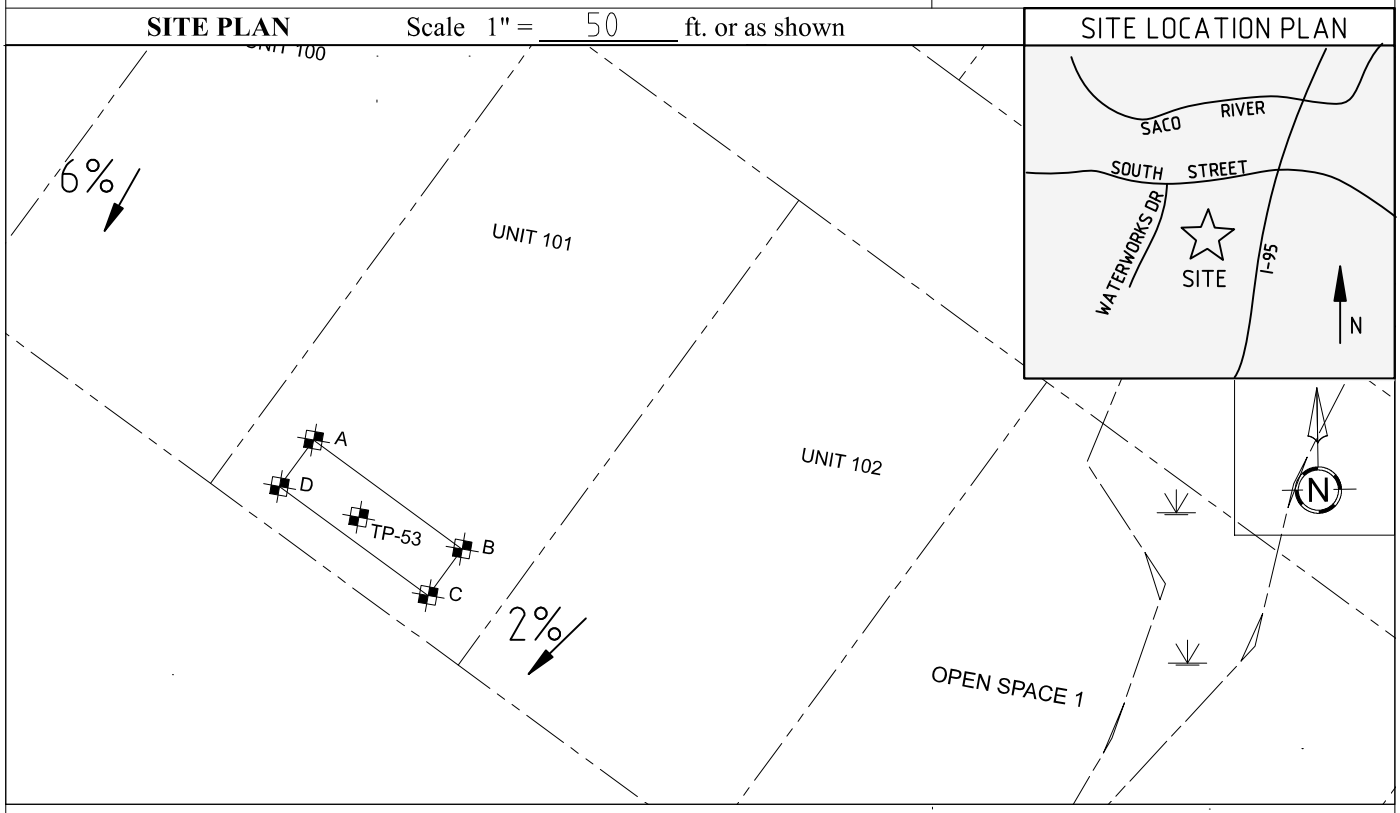
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

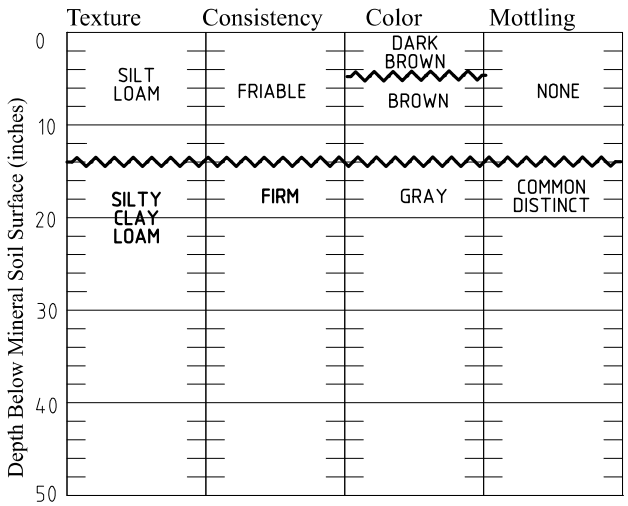


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-53 ☐ Test Pit ☒ Boring

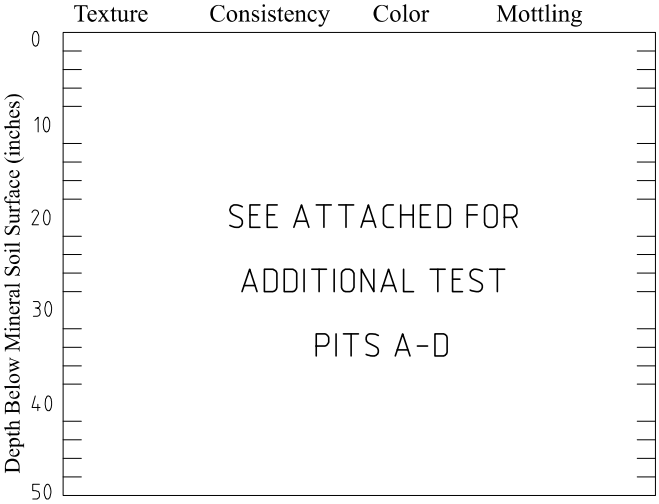
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

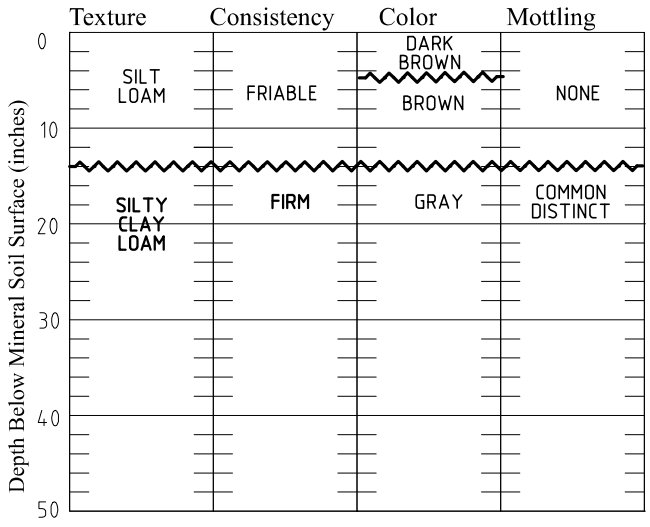
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-53 A ☐ Test Pit ☒ Boring

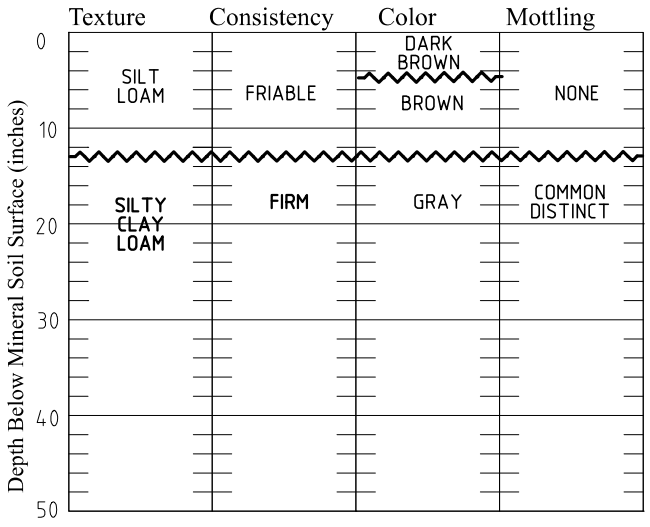
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-53 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

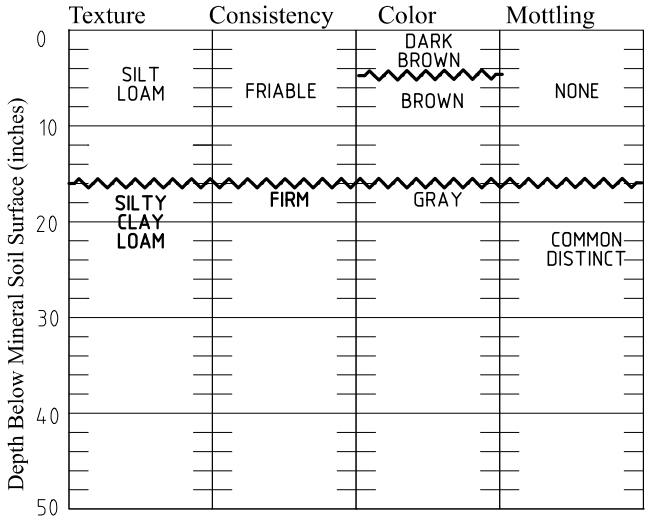


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-53 C ☐ Test Pit ☒ Boring

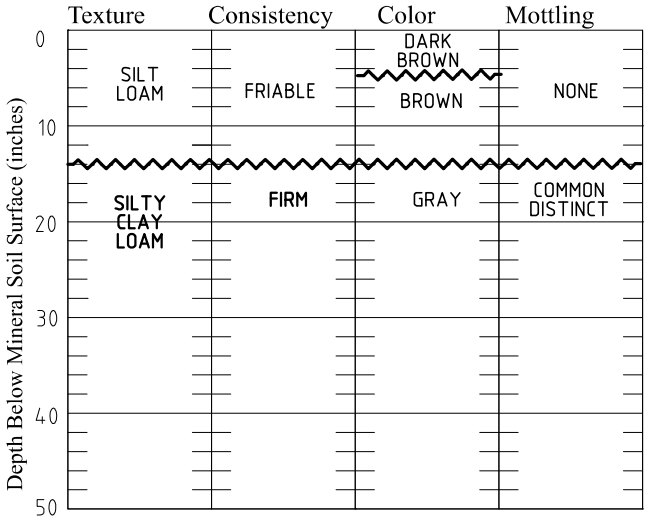
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-53 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

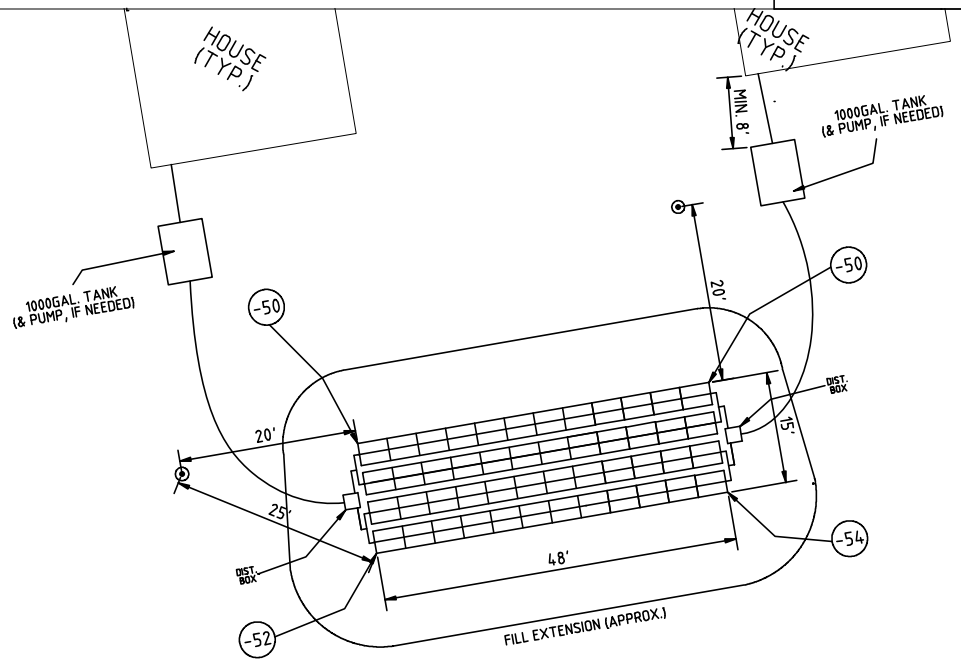
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

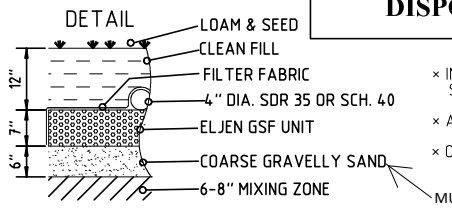
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



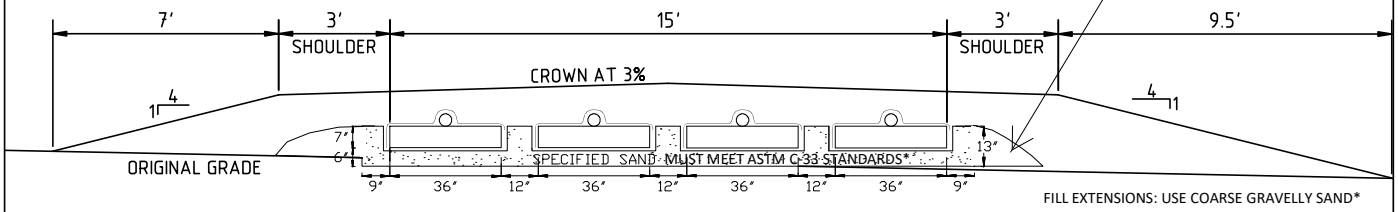
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-46	-39	-27

Site Evaluator Signature | 419 SE # | 3/14/2023 Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 103-105

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-48
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 27.7 s
Lon. 70 d 30 m 05.93 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

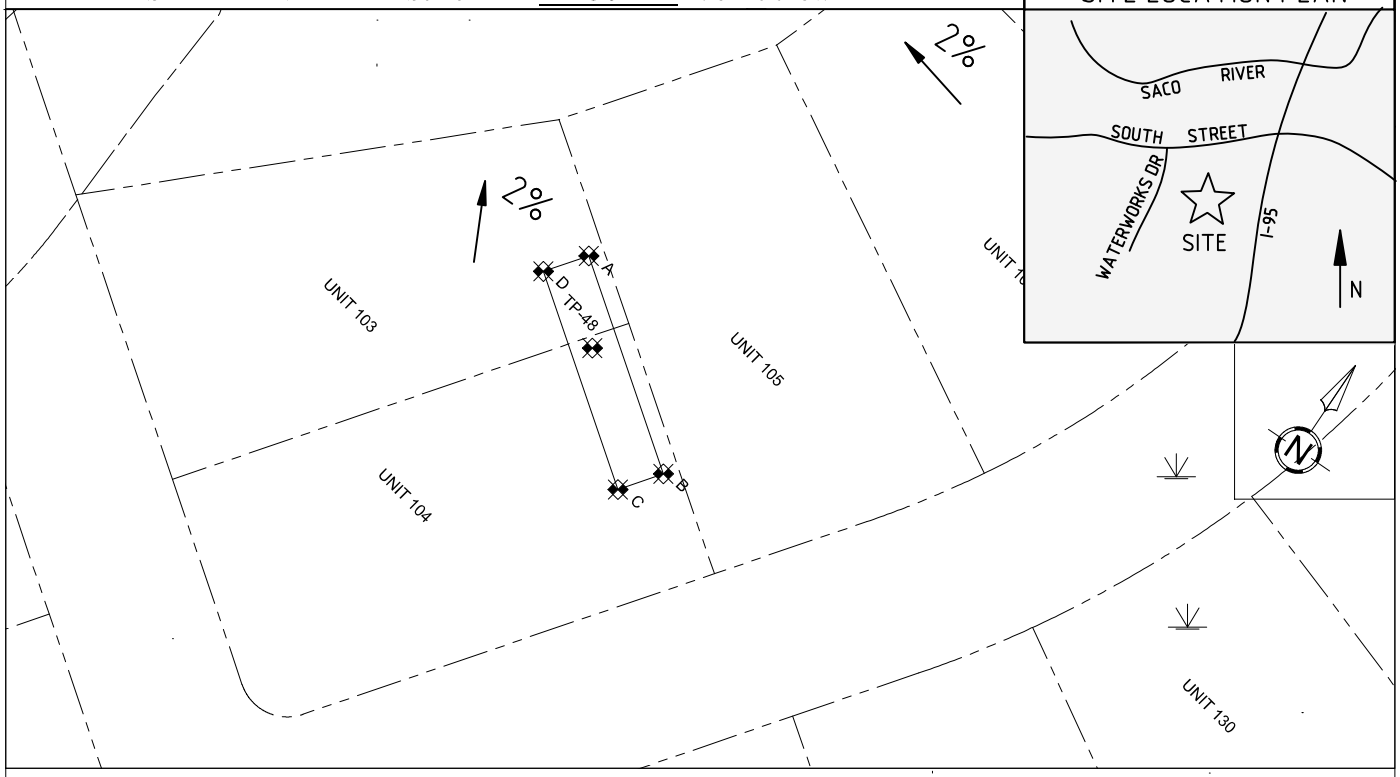
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-48 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

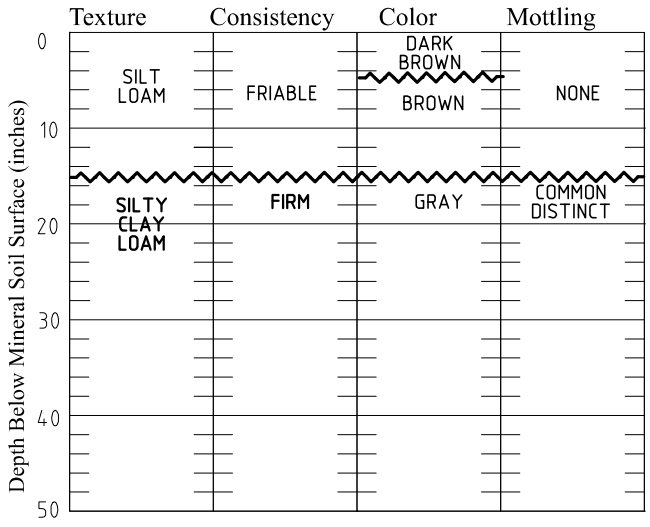
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-48 A ☐ Test Pit ☒ Boring

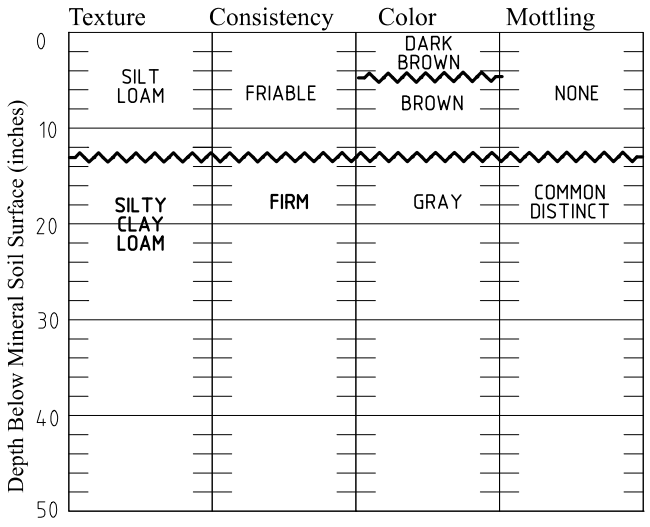
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-48 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

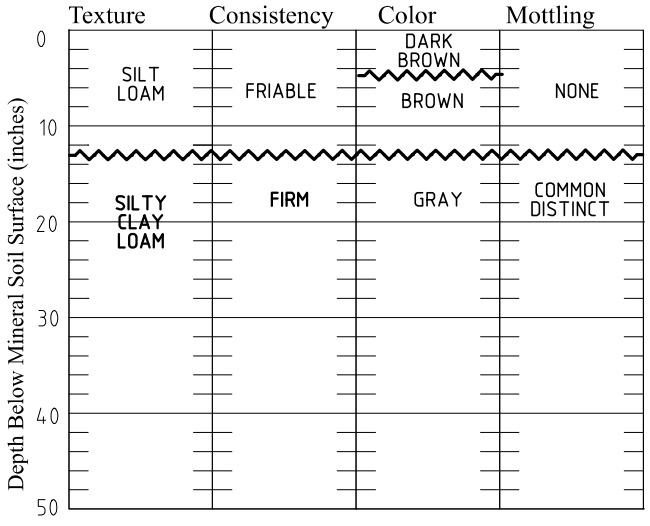


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-48 C ☐ Test Pit ☒ Boring

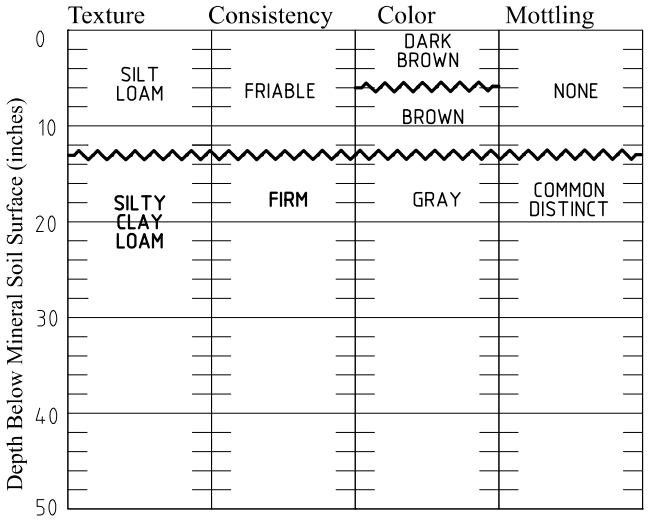
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-48 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jens | SE #: 419 | Date: 3/24/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

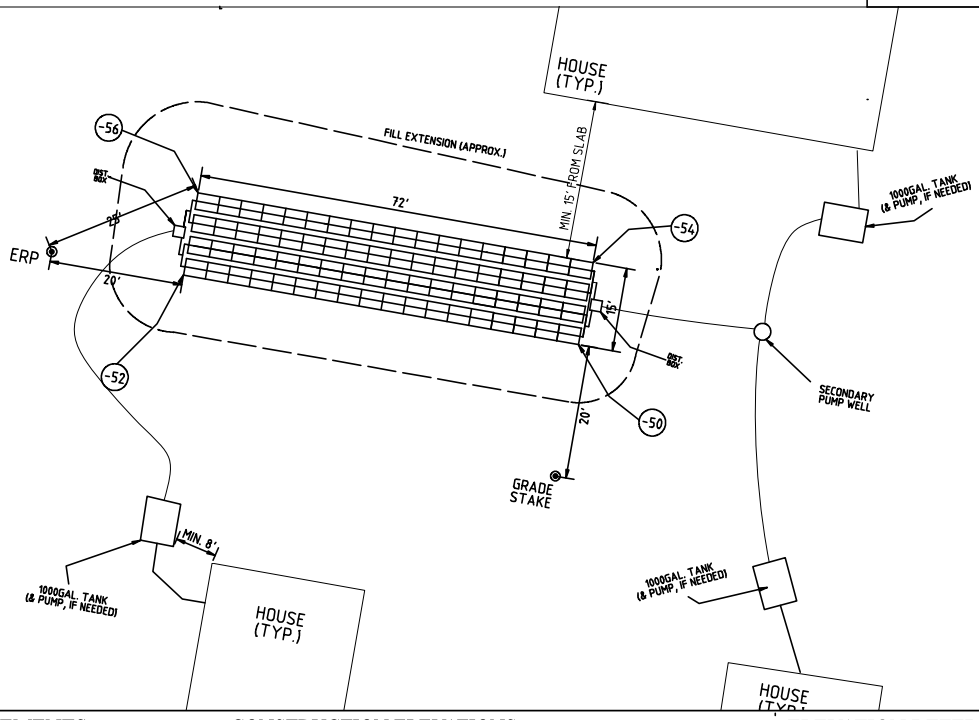
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 40 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

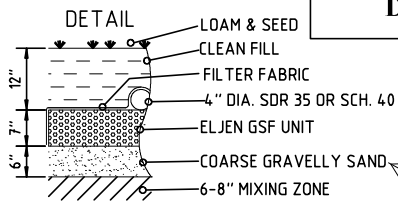
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



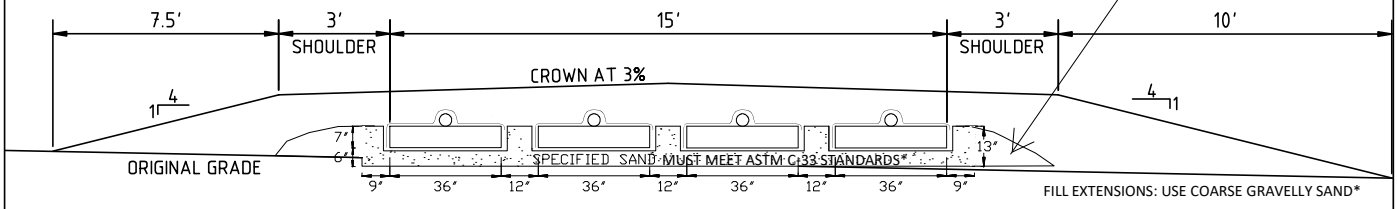
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
28	24	-45	-38	-26

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 106-108

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-49
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 29.61 s
Lon. 70 d 30 m 05.81 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | SE # 419 | Date 3/26/23

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

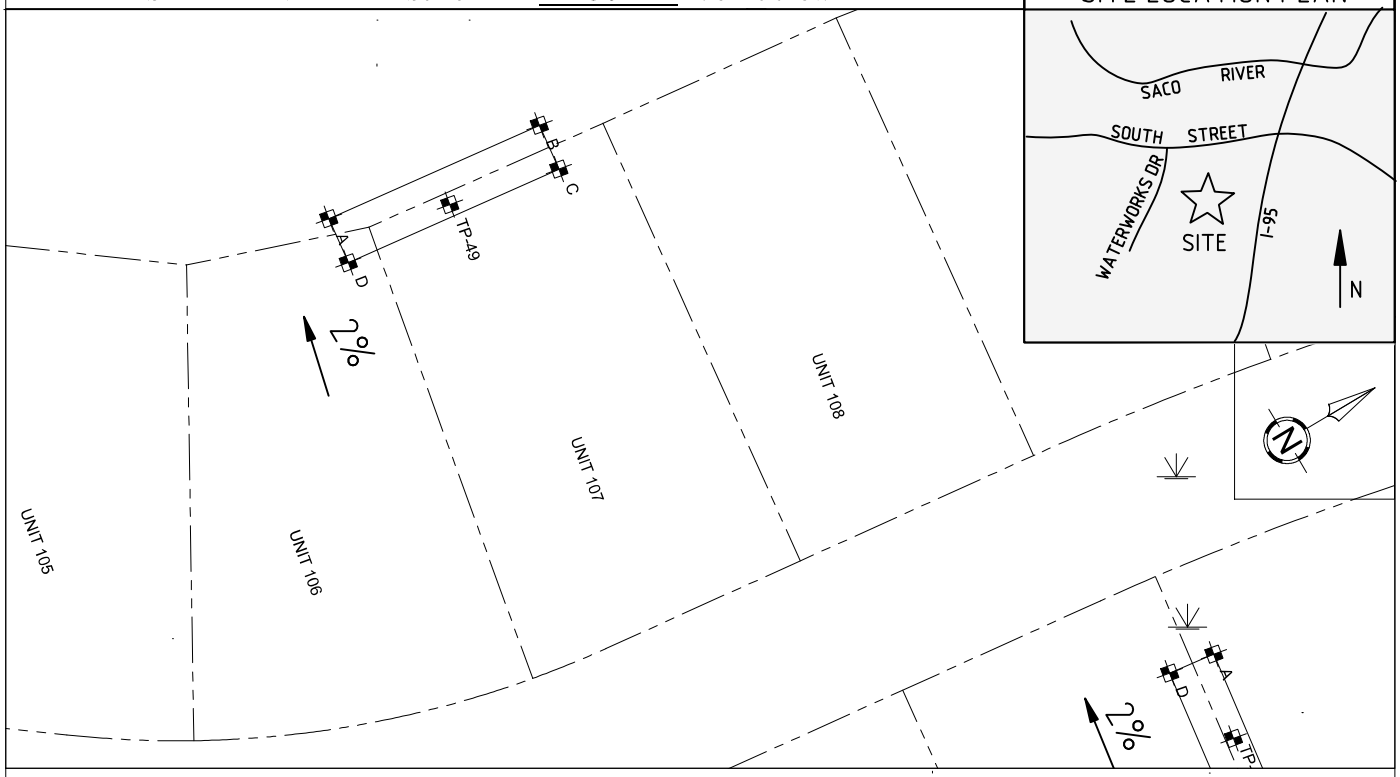
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-49 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

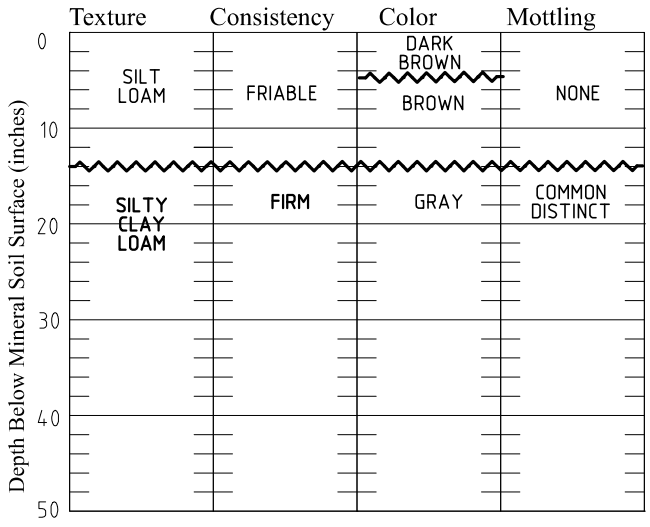
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-49 A ☐ Test Pit ☒ Boring

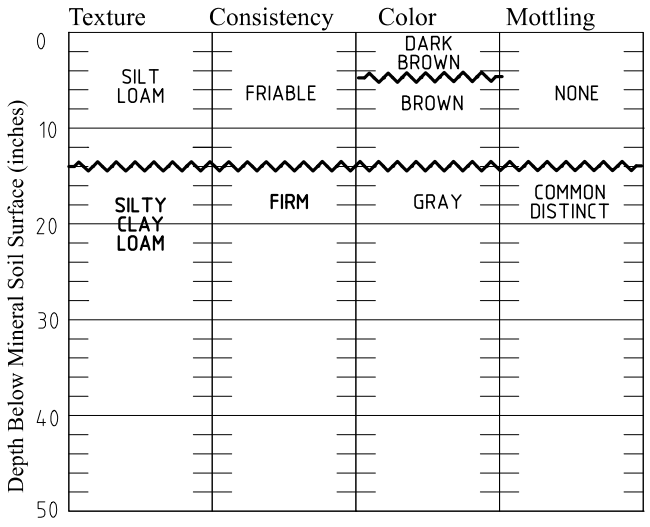
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-49 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

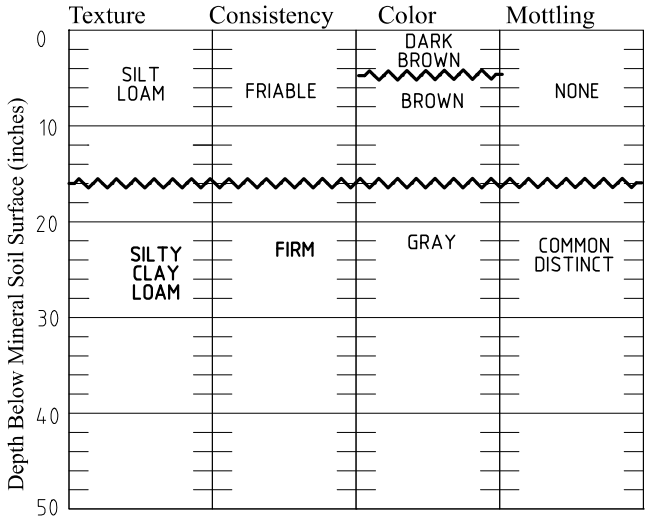


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-49 C ☐ Test Pit ☒ Boring

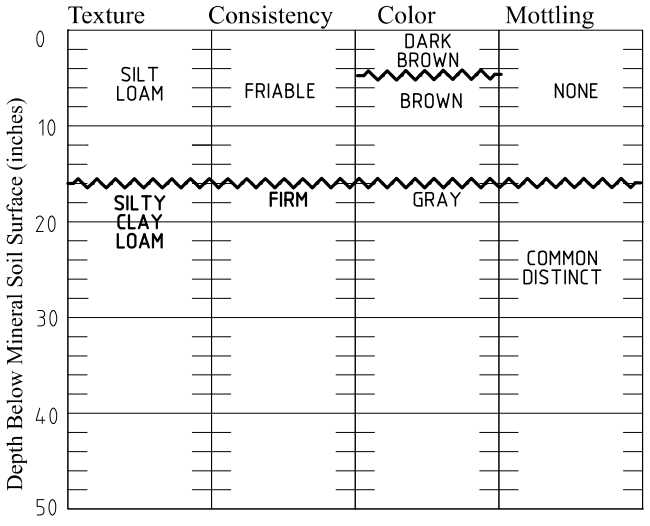
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-49 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

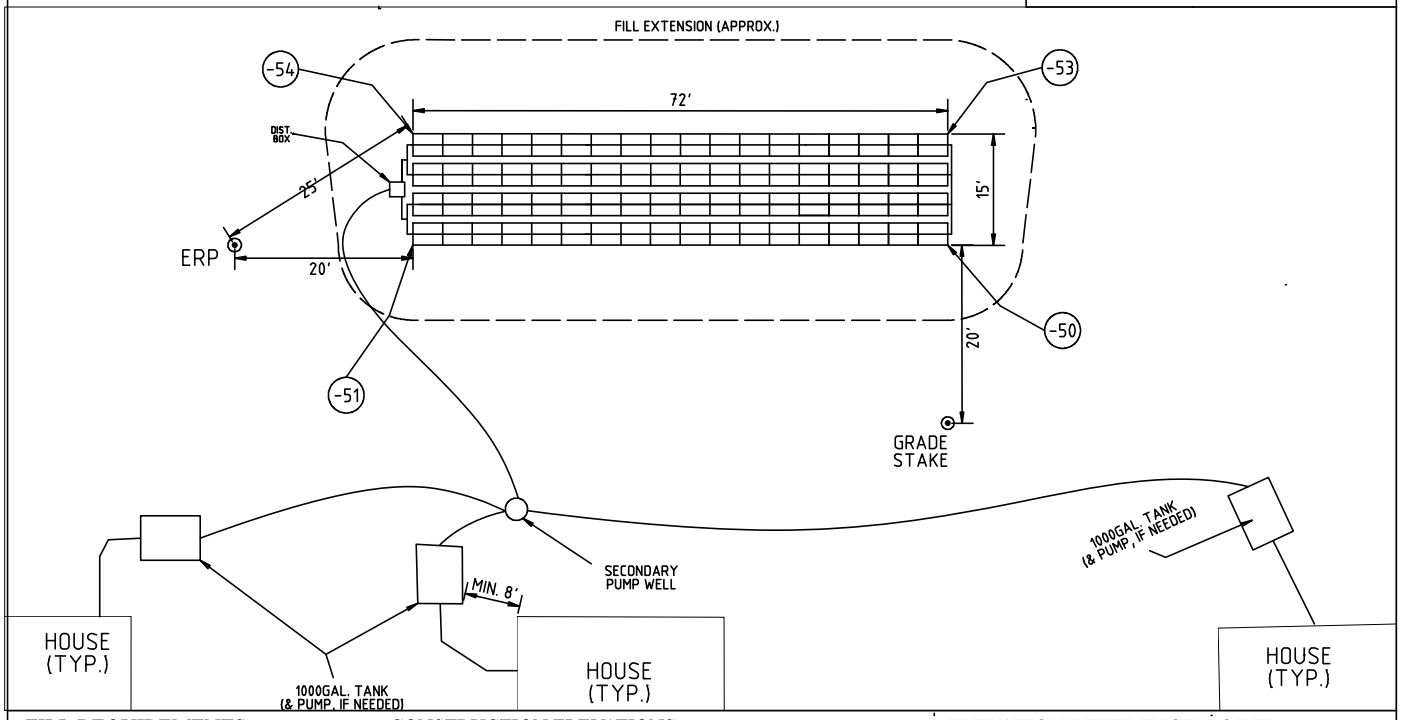
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

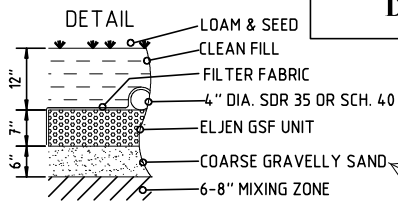
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



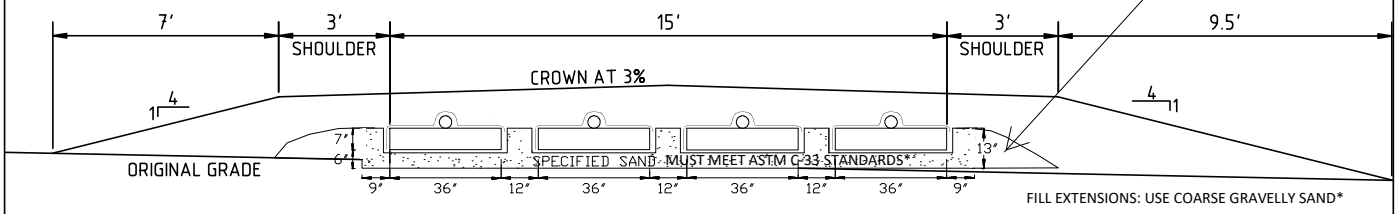
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-46	-39	-27

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 109-111

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-50
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 32.23 s
Lon. 70 d 30 m 05.21 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

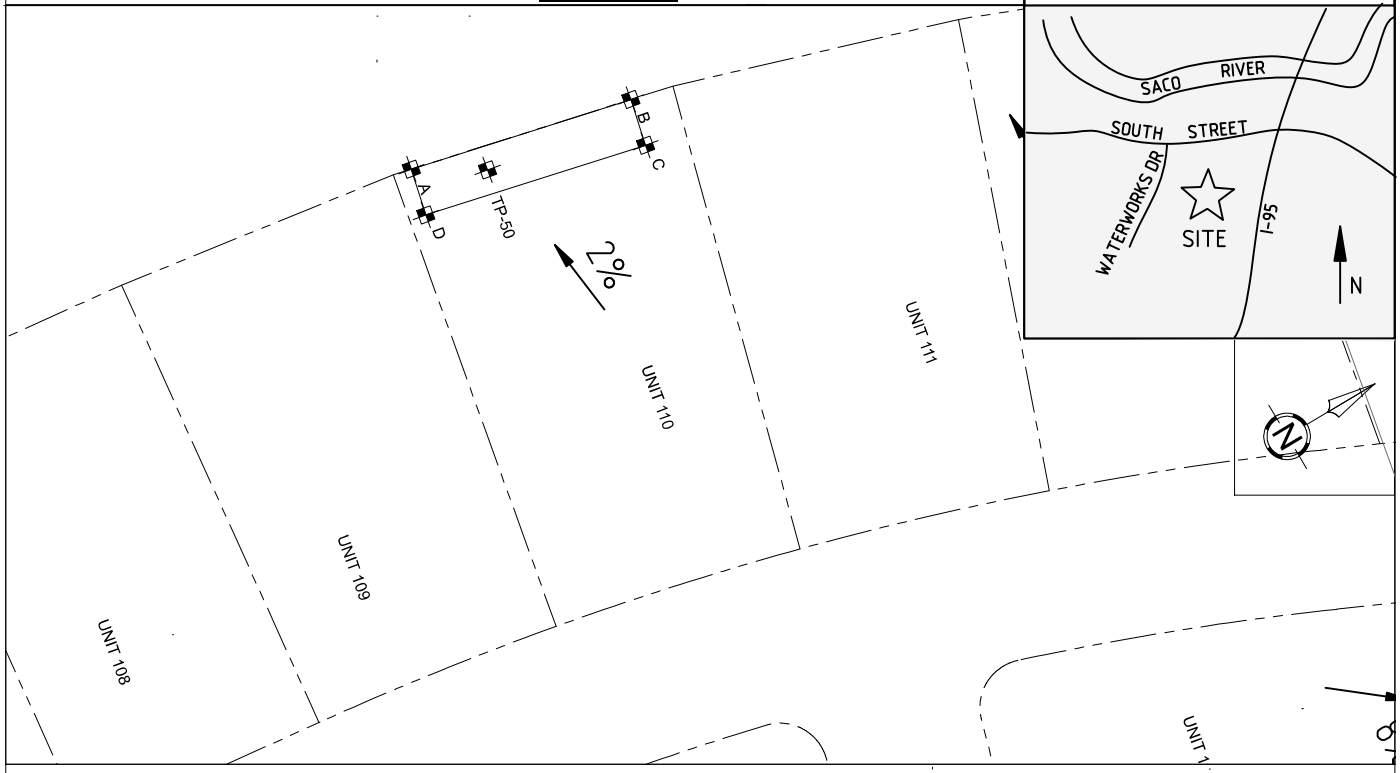
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

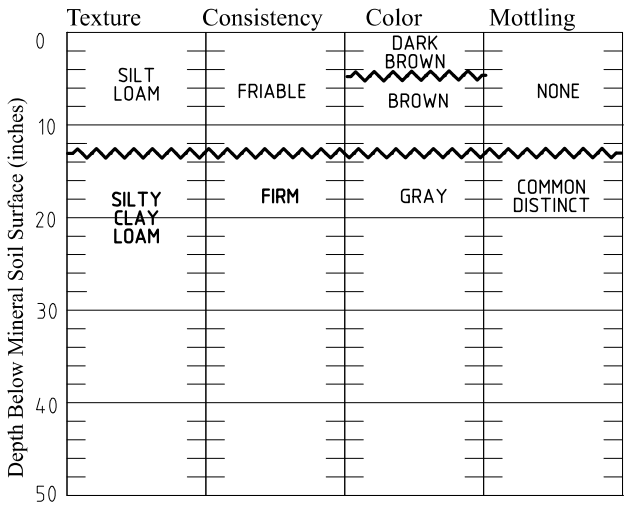


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-50 ☐ Test Pit ☒ Boring

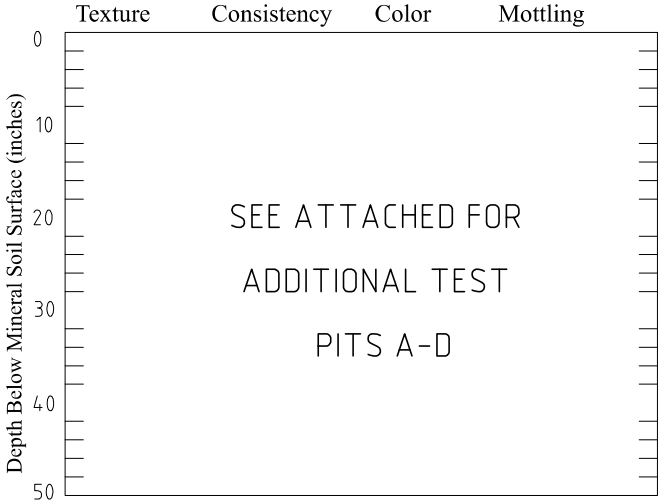
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: [signature]

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

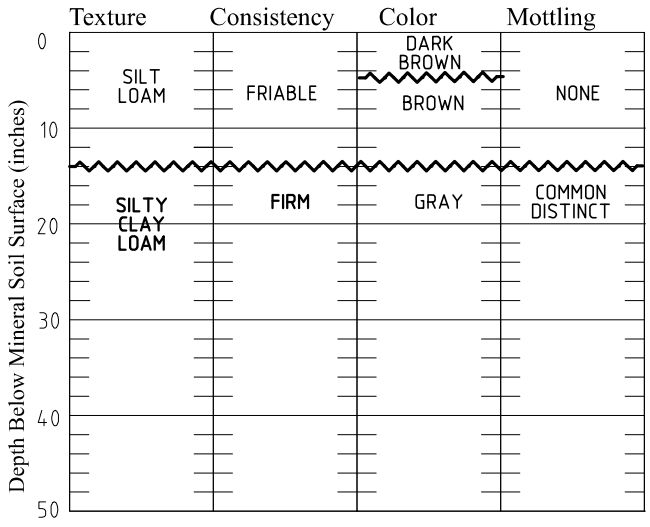
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-50 A ☐ Test Pit ☒ Boring

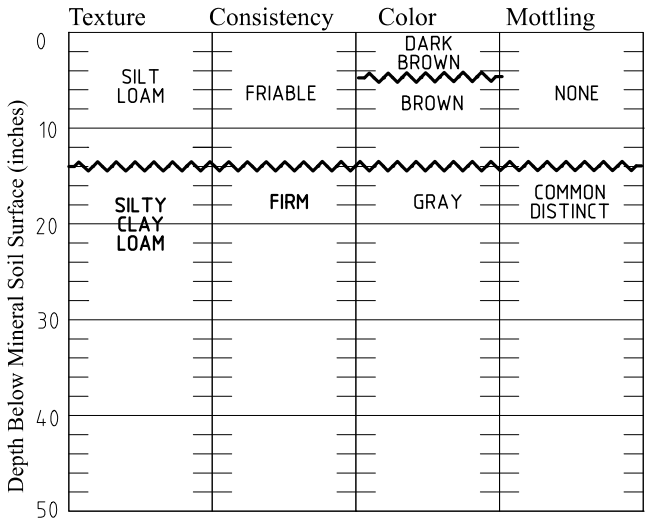
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-50 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

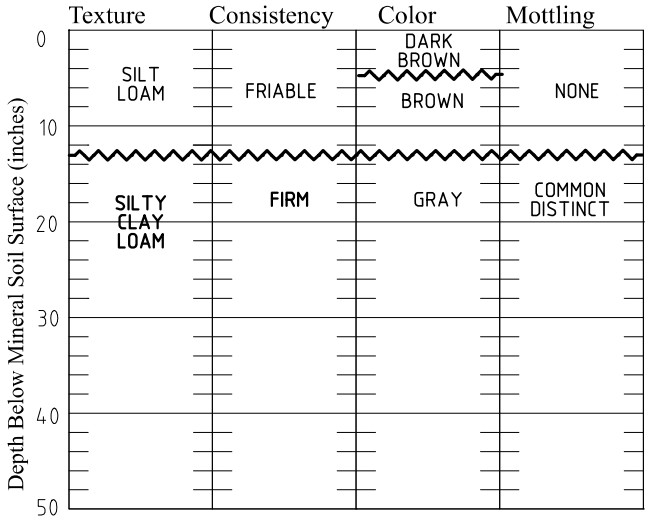


Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-50 C ☐ Test Pit ☒ Boring

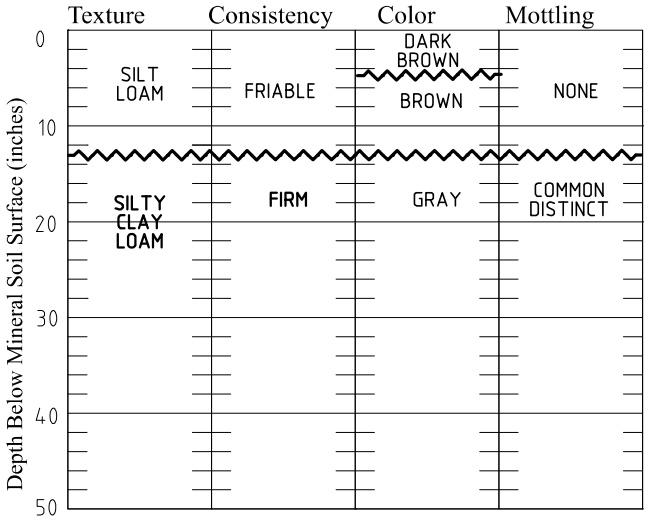
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	3 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-50 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	3 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Lem

SE #: 419

Date: 3/24/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

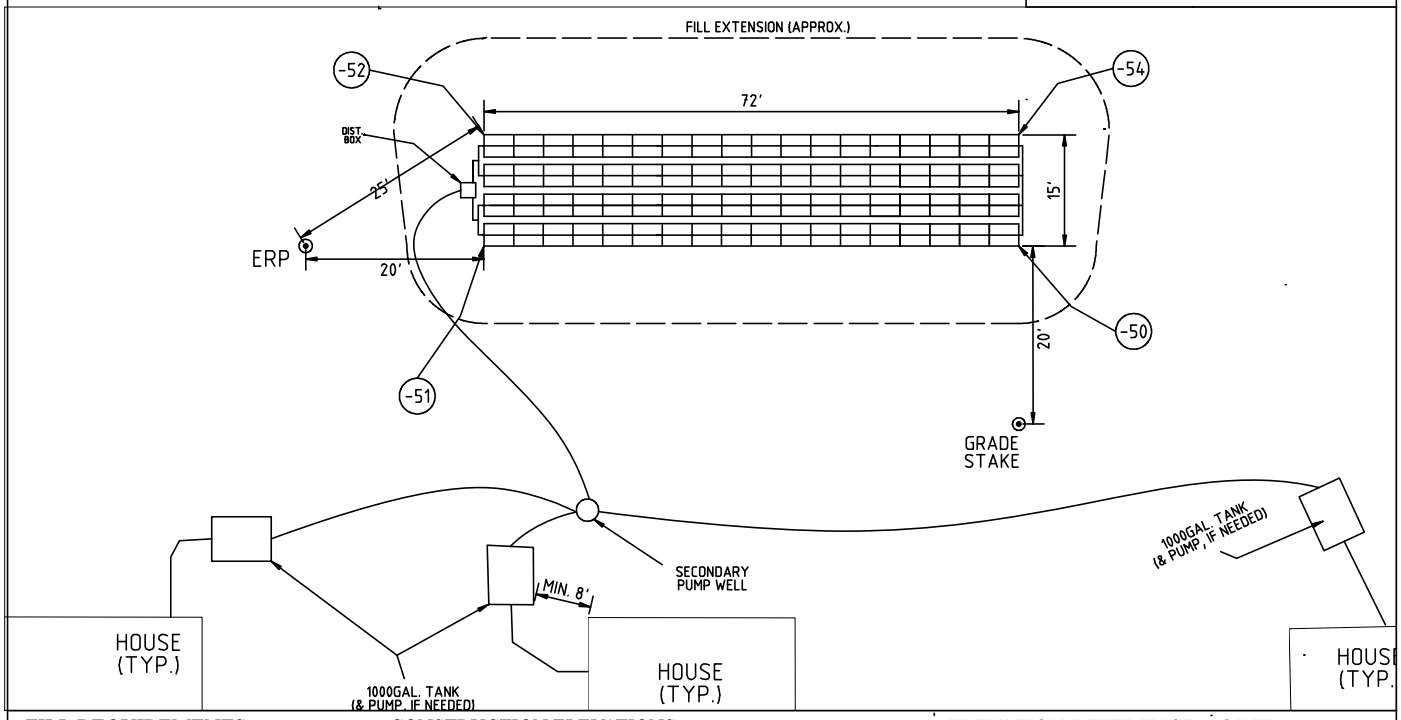
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

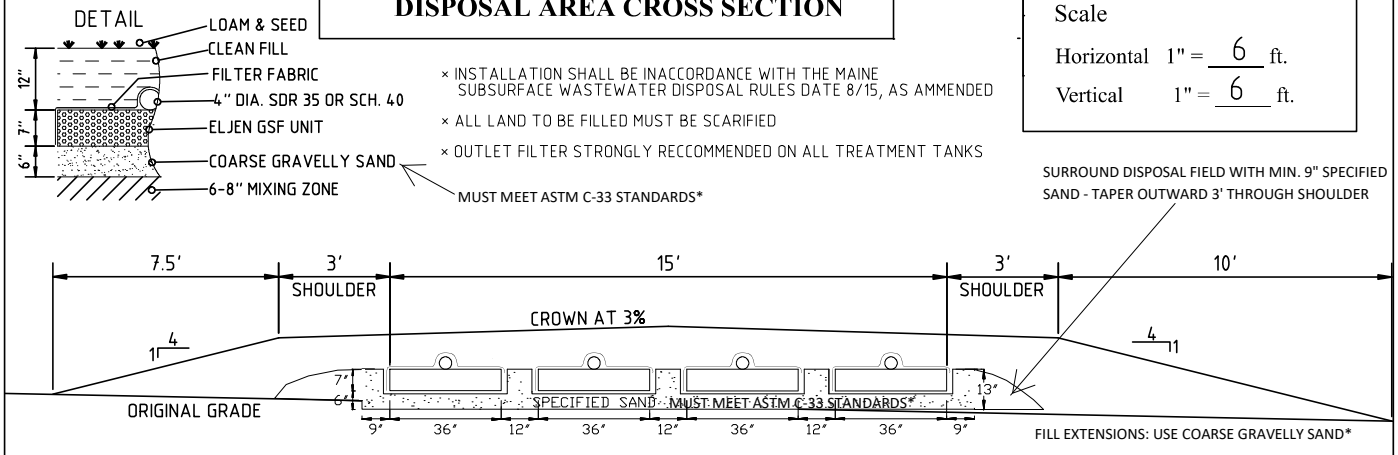
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
28	24	-45	-38	-26

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOT 112

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: _____
☐ 3. Other: _____ (specify)

Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 1107 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-58
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 34.04 s
Lon. 70 d 30 m 04.36 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature _____ SE # 419 Date 3/26/23

ERIK LEMA — Site Evaluator Name Printed
207-518-8442 — Telephone Number
erik@basswoodenv.com — E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

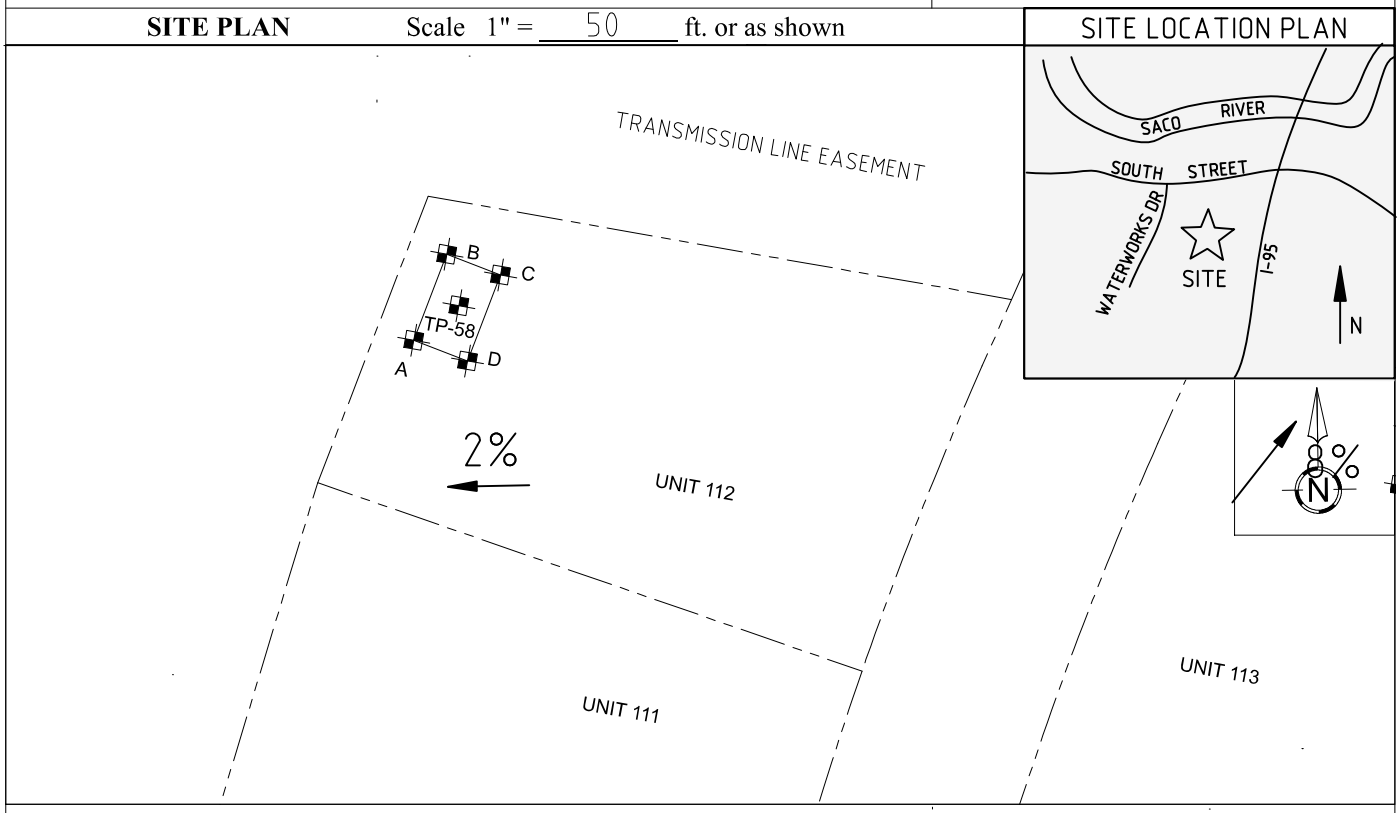
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-58 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–30				
30–40				
40–50				

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

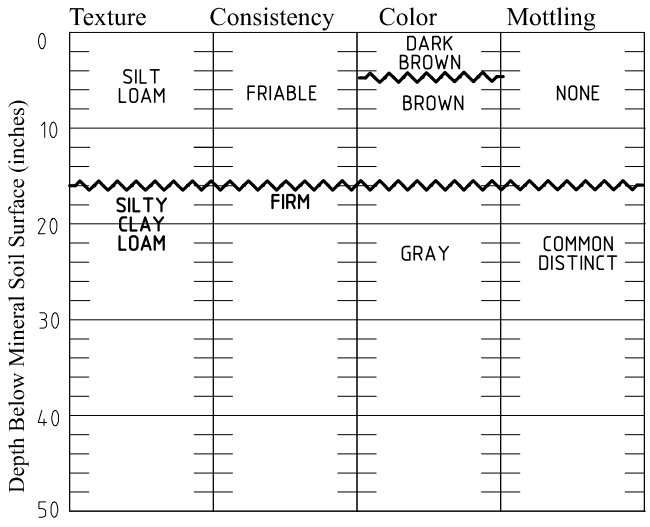
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-58 A ☐ Test Pit ☒ Boring

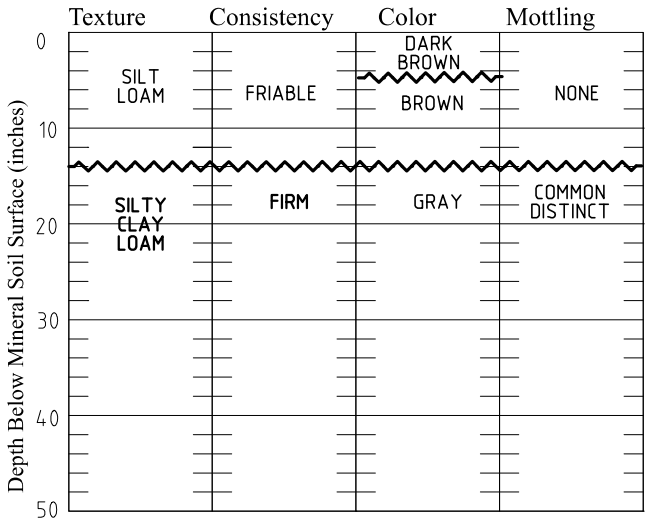
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-58 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

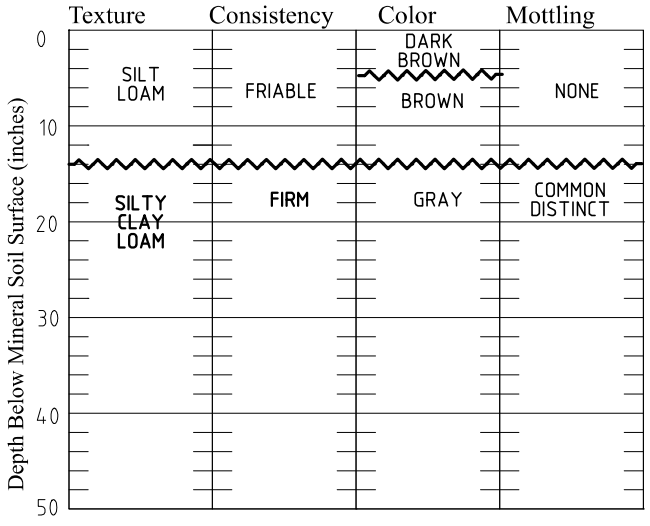


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-58 C ☐ Test Pit ☒ Boring

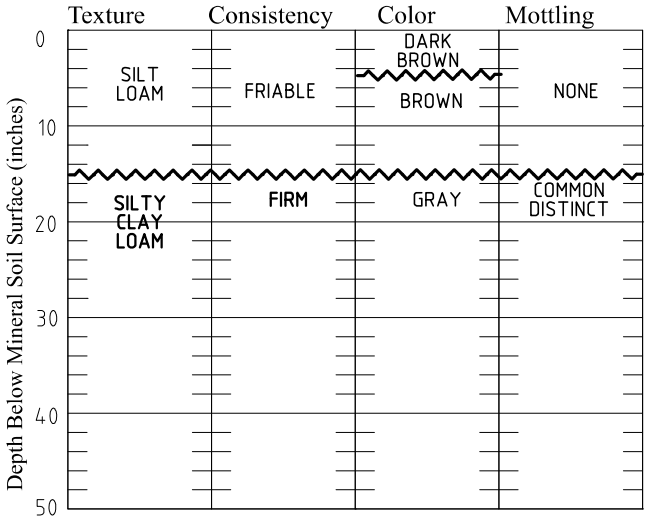
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-58 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

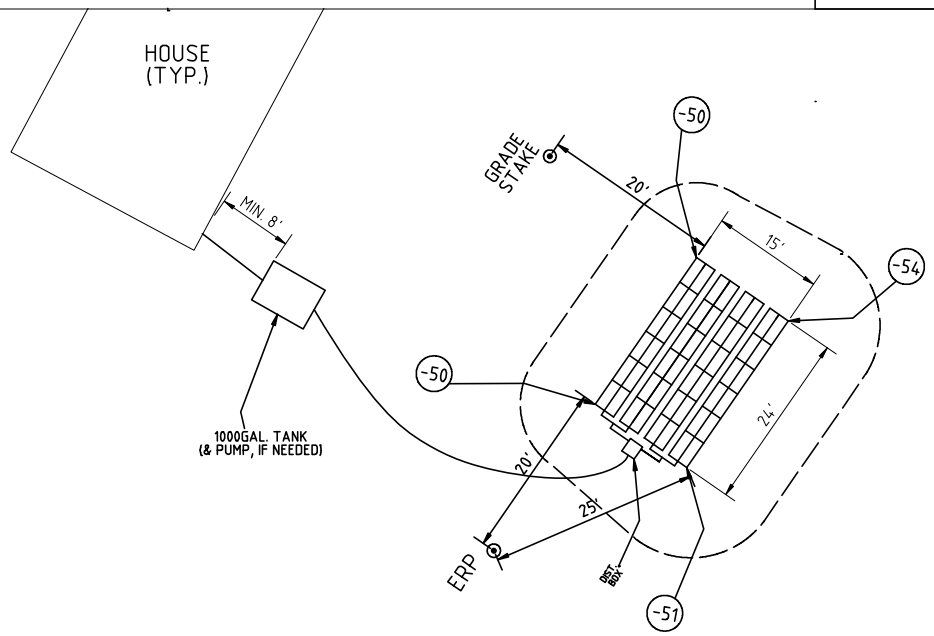
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

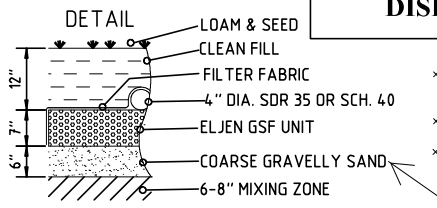
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



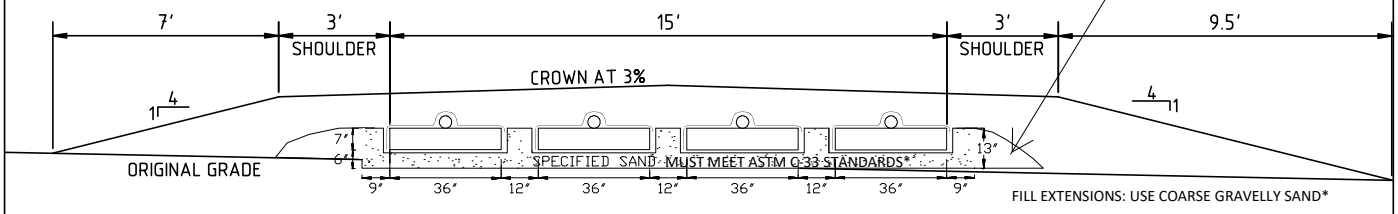
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-46	-39	-27

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 113-114

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-60
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 33.61 s
Lon. 70 d 30 m 0.66 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

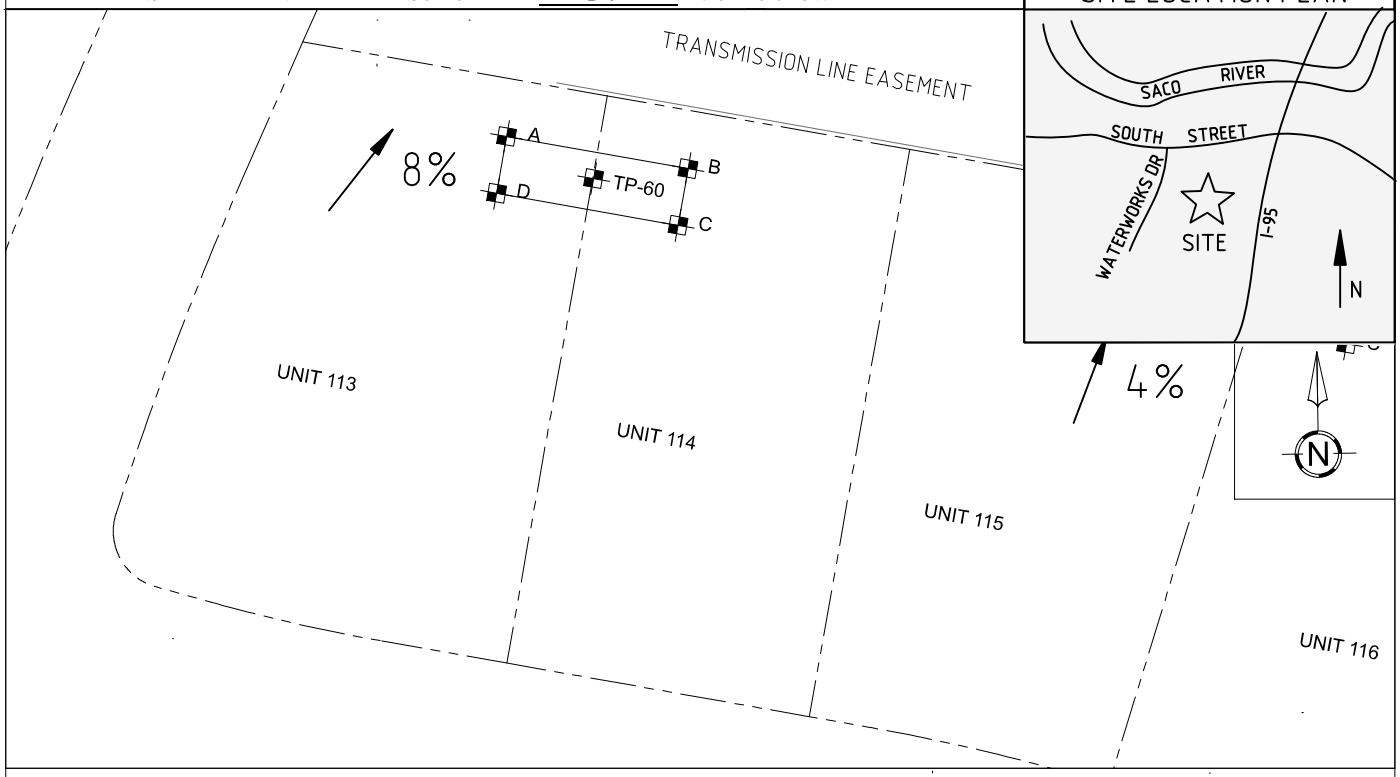
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-60 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

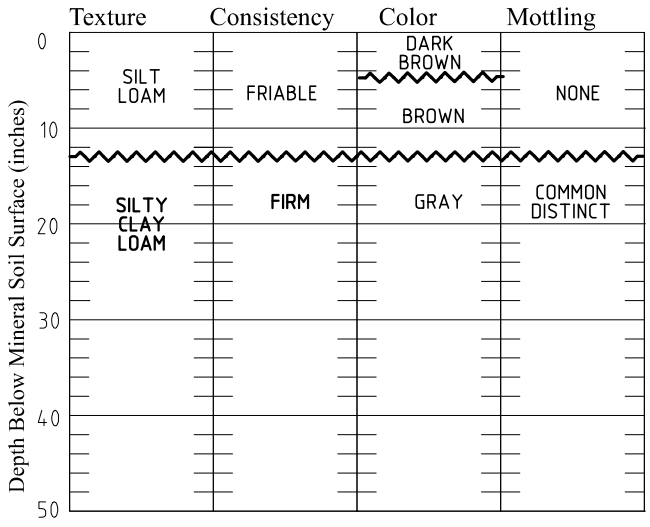
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-60 A ☐ Test Pit ☒ Boring

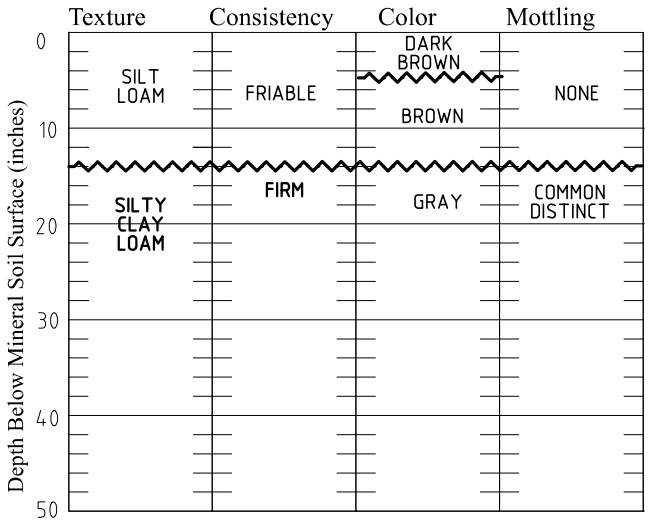
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-60 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

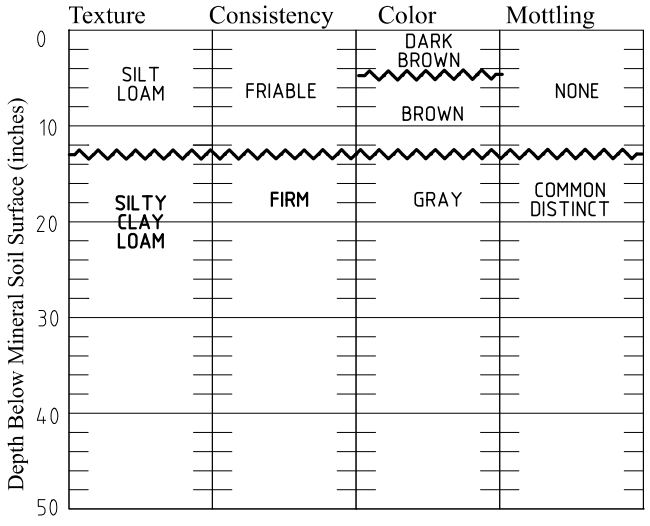


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-60 C ☐ Test Pit ☒ Boring

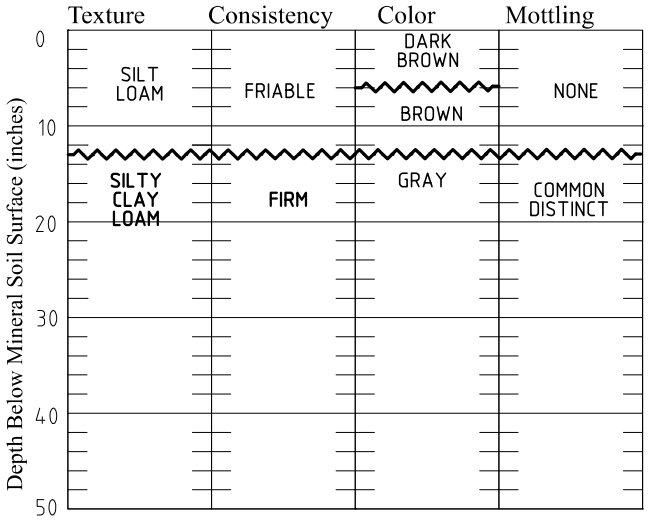
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-60 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	7 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

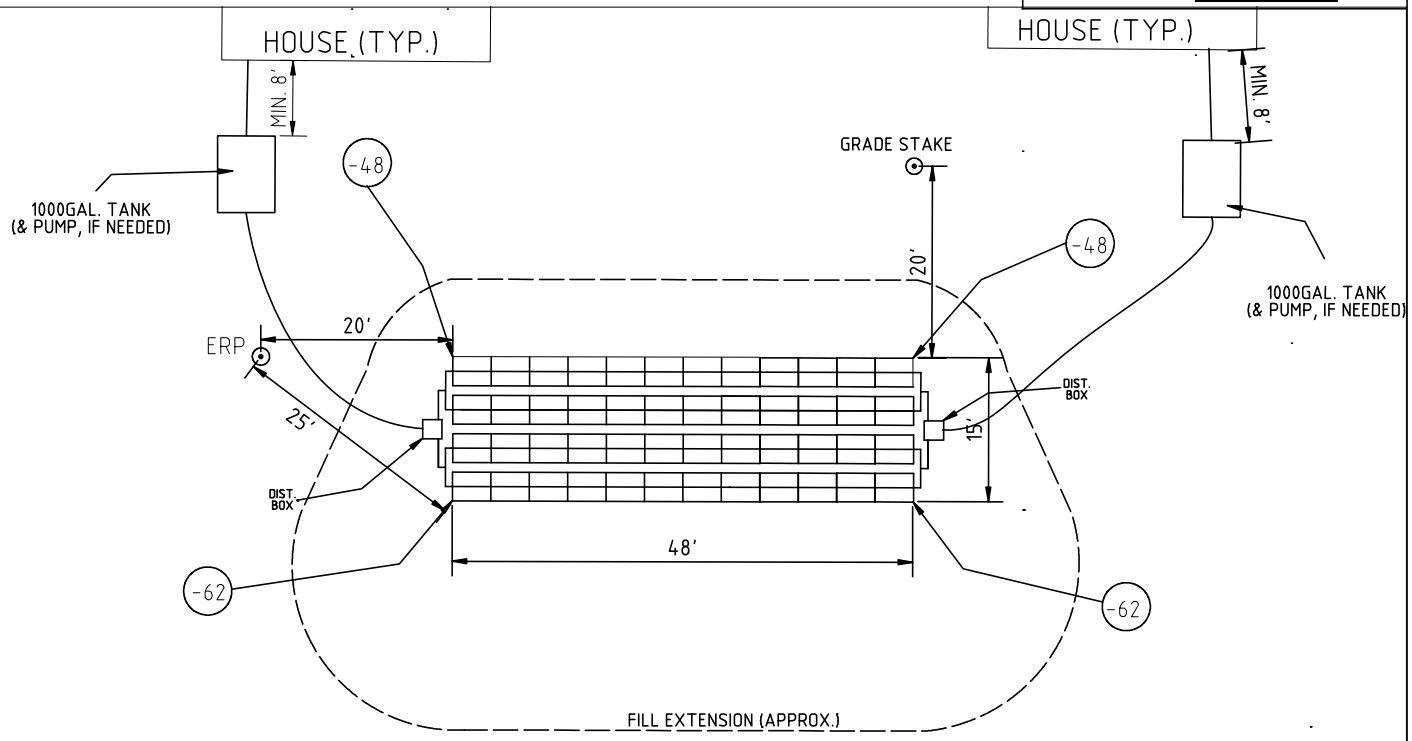
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

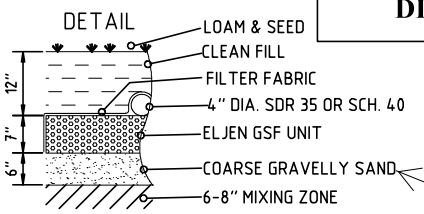
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

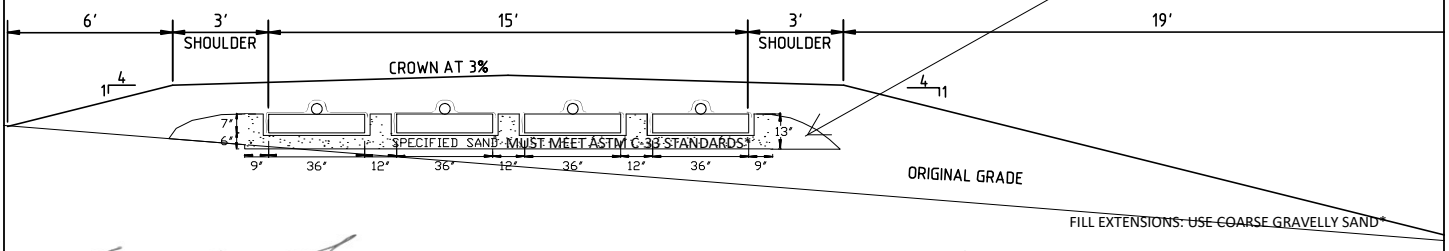
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
38	24	-43	-36	-24

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 115-116

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-61
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 33.3 s
Lon. 70 d 29 m 58.31 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

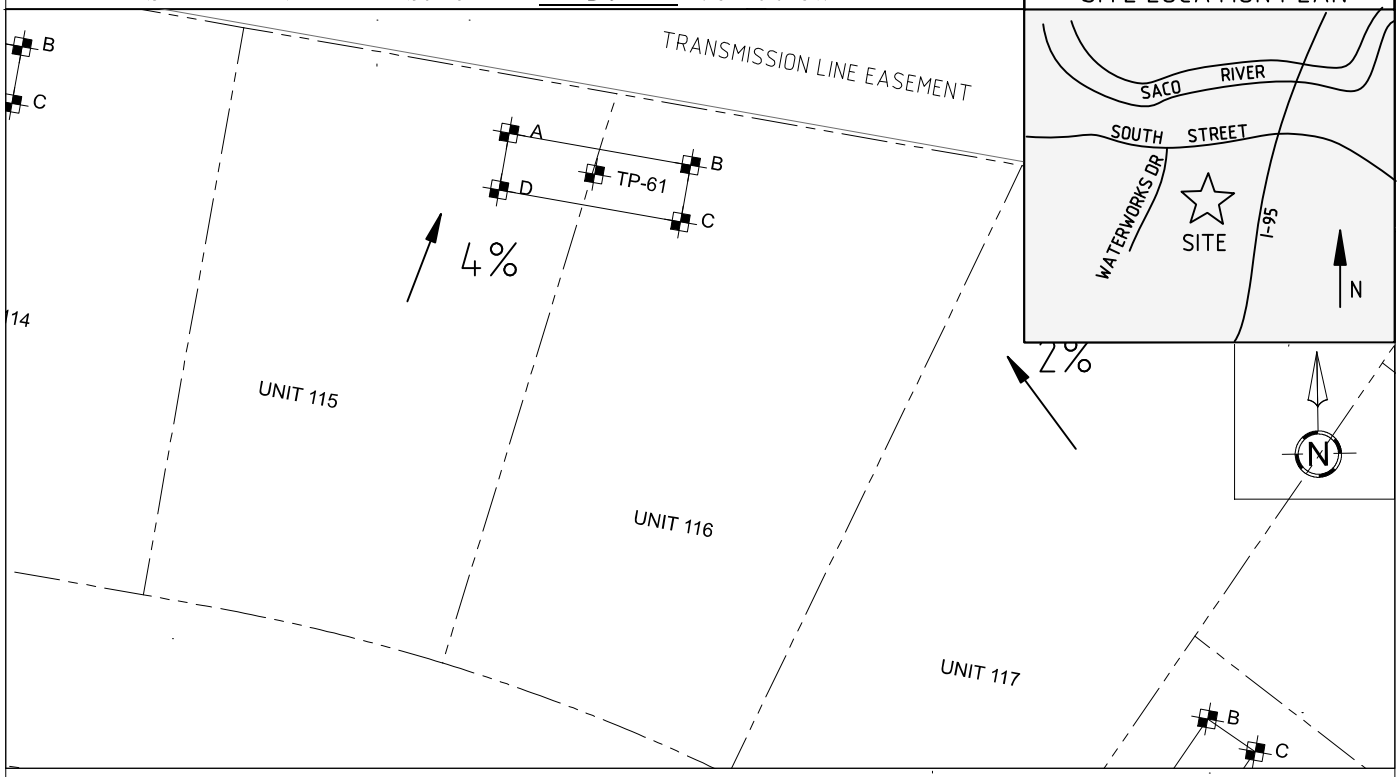
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-61 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

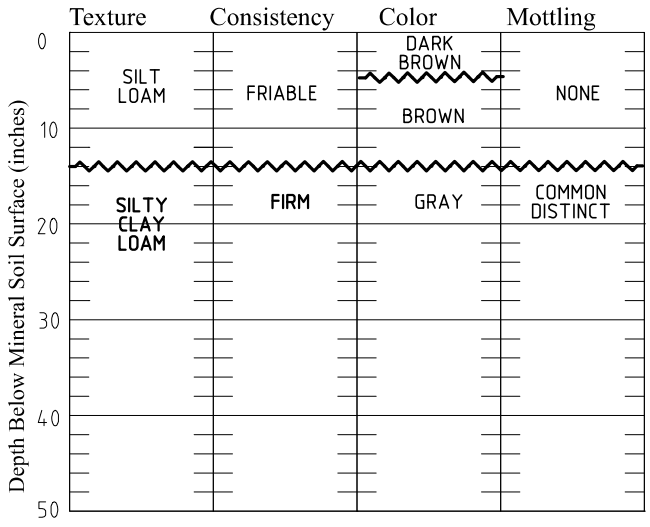
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-61 A ☐ Test Pit ☒ Boring

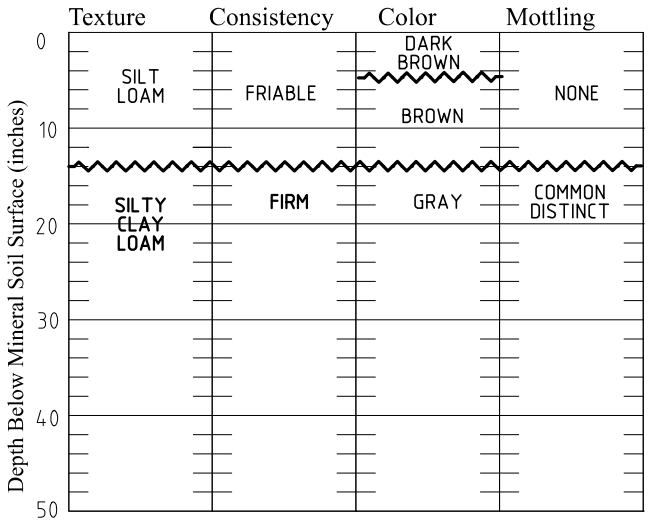
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-61 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

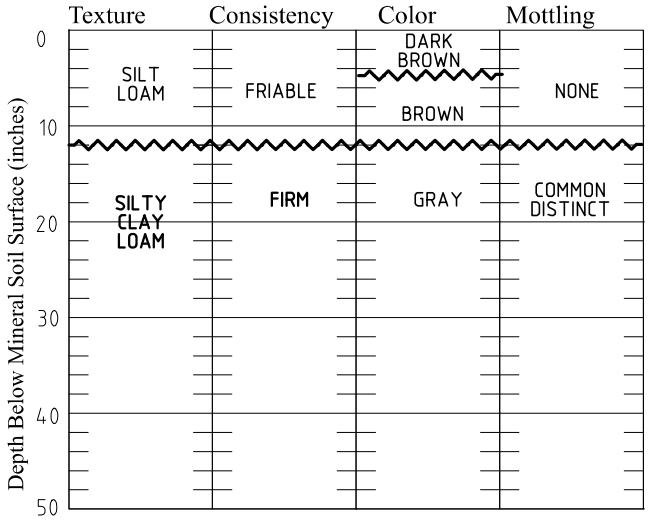


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-61 C ☐ Test Pit ☒ Boring

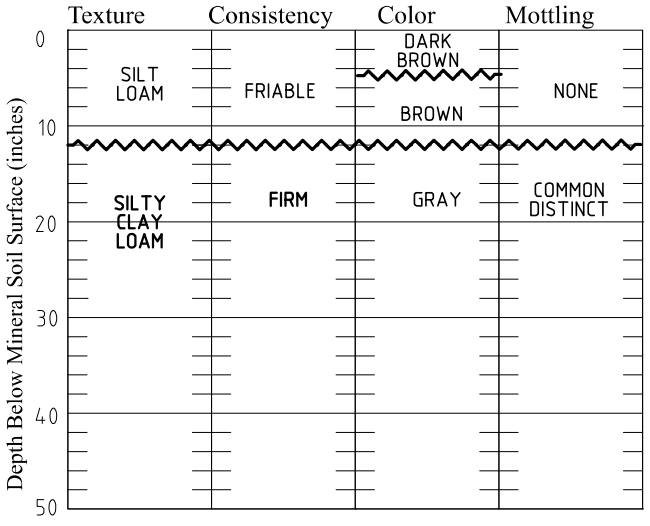
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-61 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

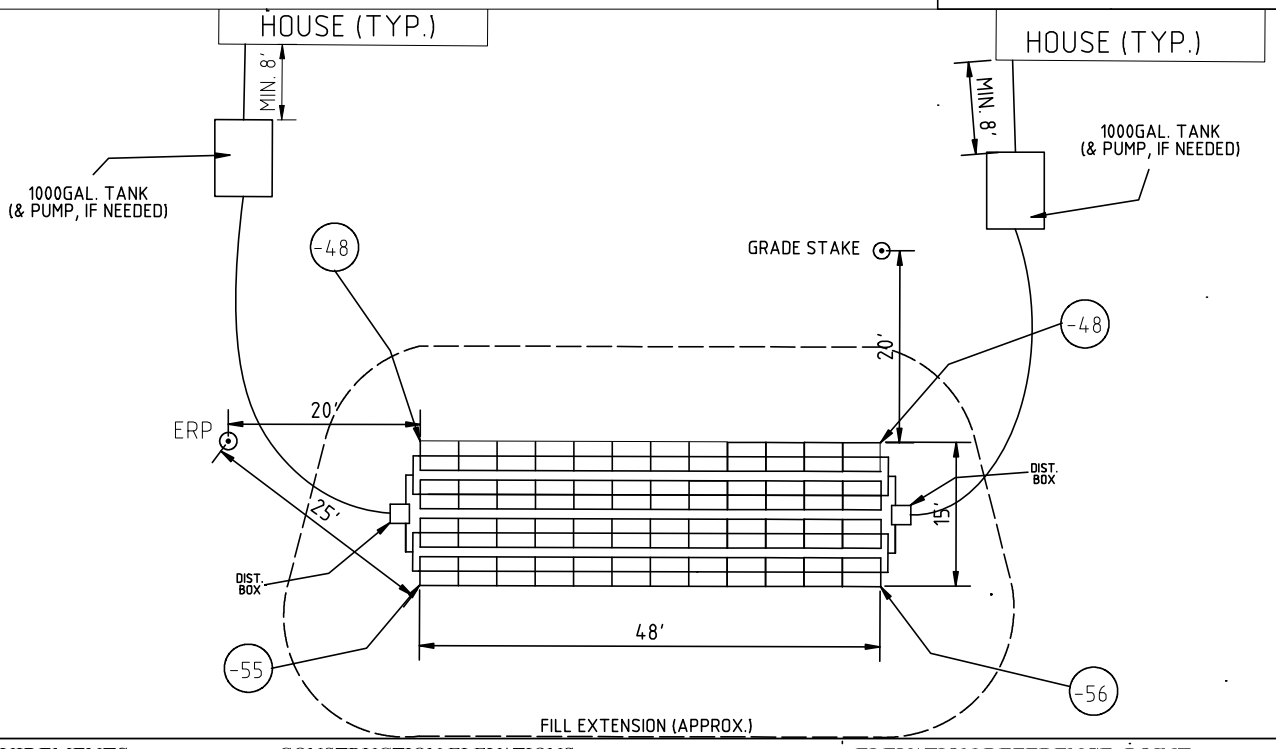
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

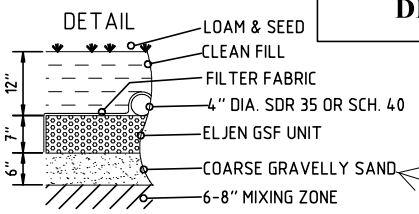
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

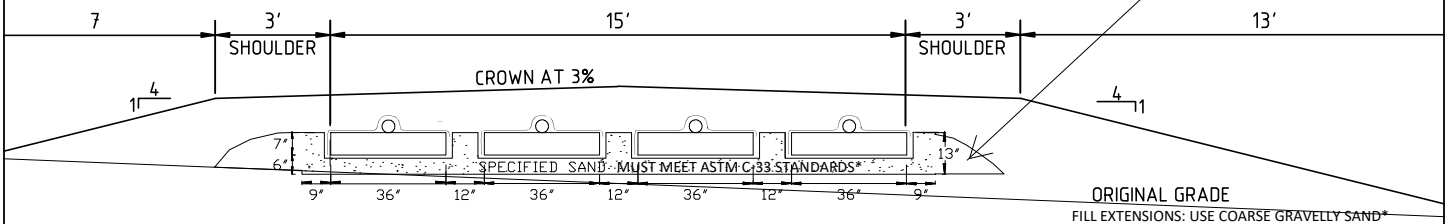
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
32	25	-42	-35	-23

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 117-118

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-62
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 33.04 s
Lon. 70 d 29 m 56.12 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

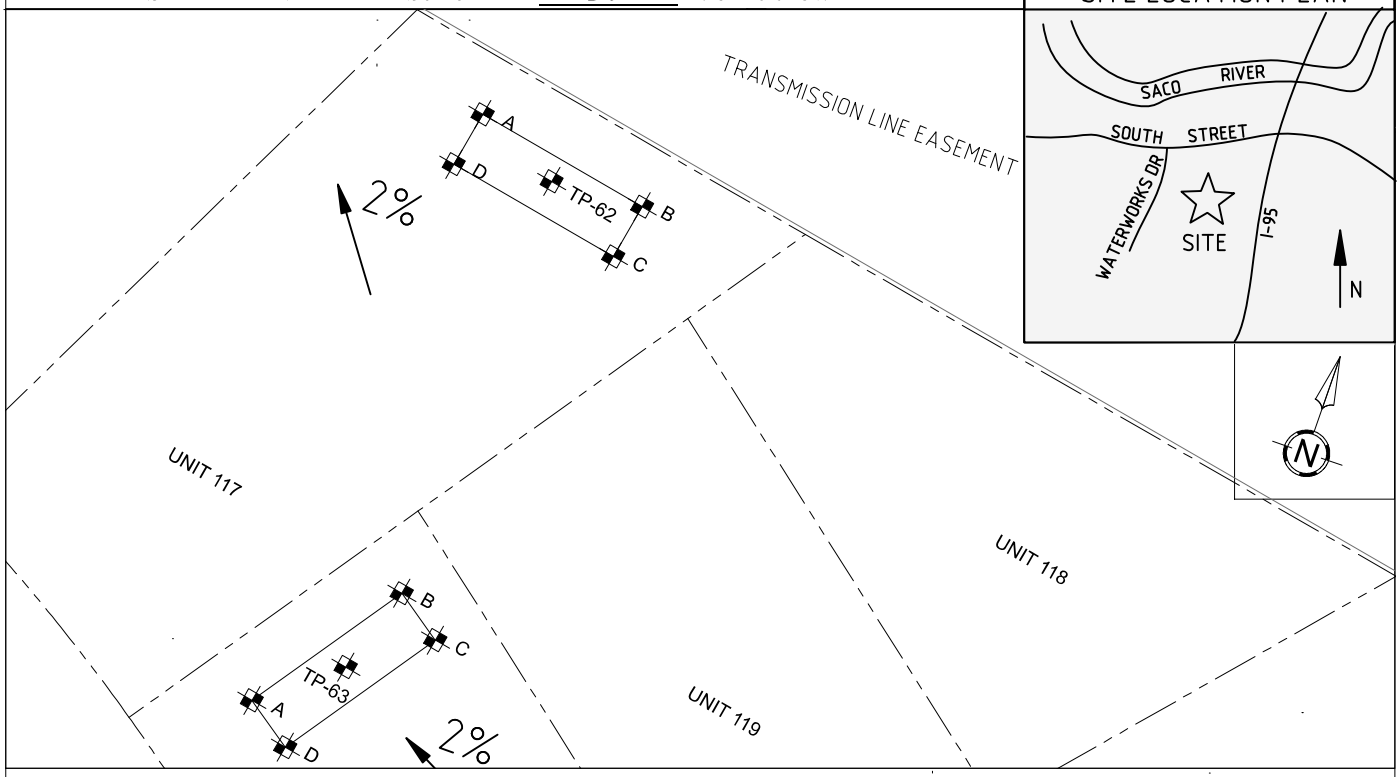
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

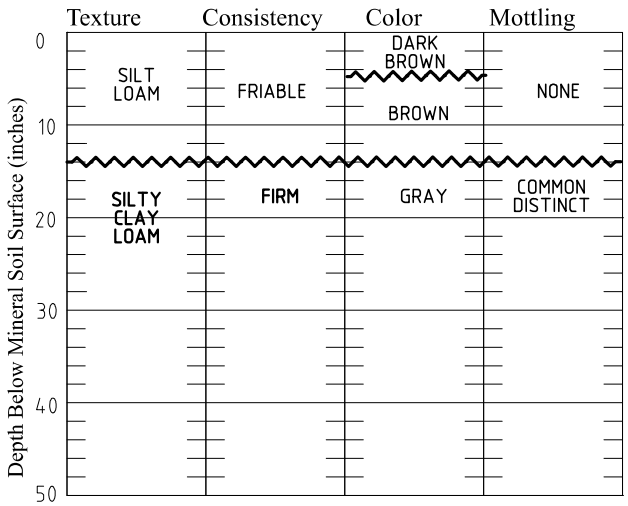


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-62 ☐ Test Pit ☒ Boring

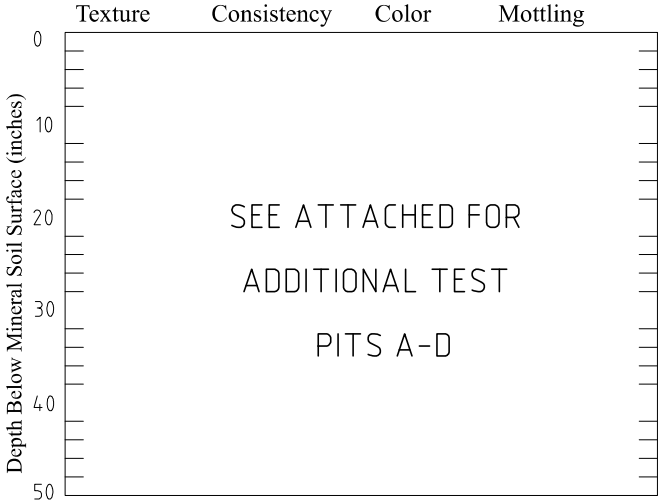
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: [signature] 419 (SE #) 3/21/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

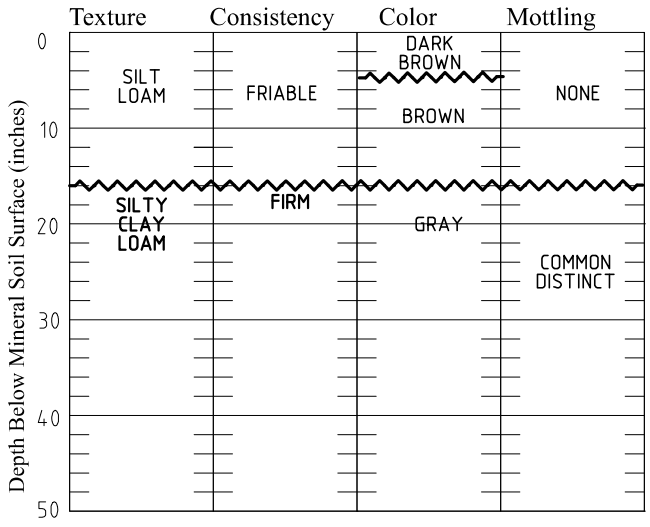
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-62 A ☐ Test Pit ☒ Boring

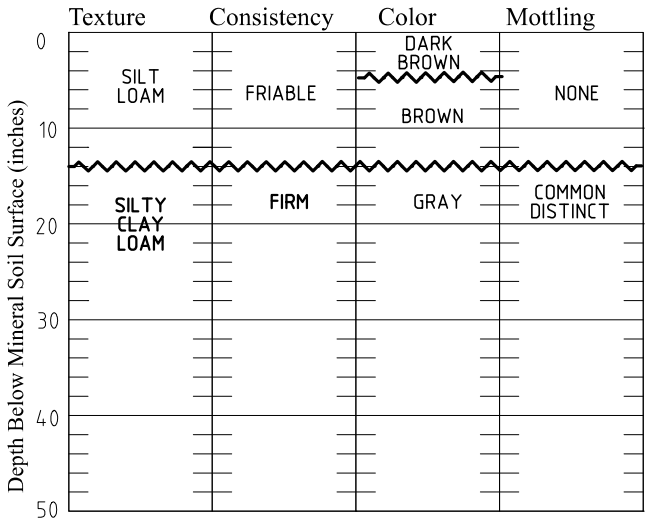
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-62 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

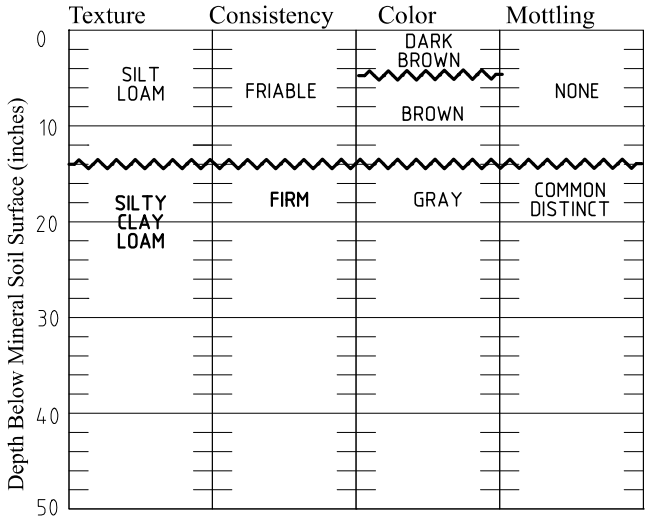


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-62 C ☐ Test Pit ☒ Boring

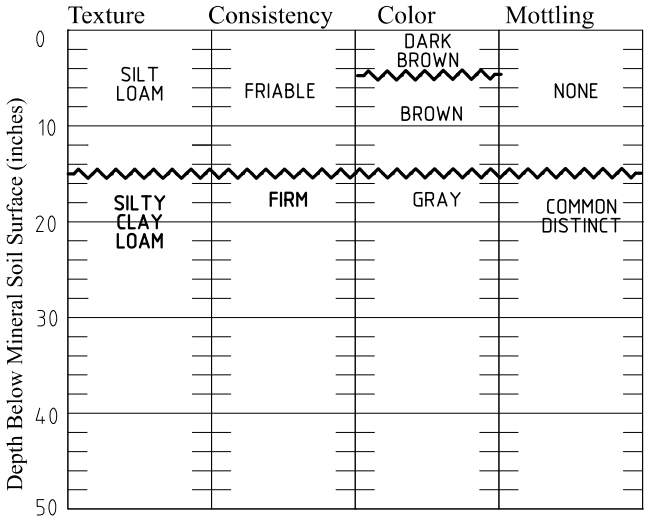
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-62 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

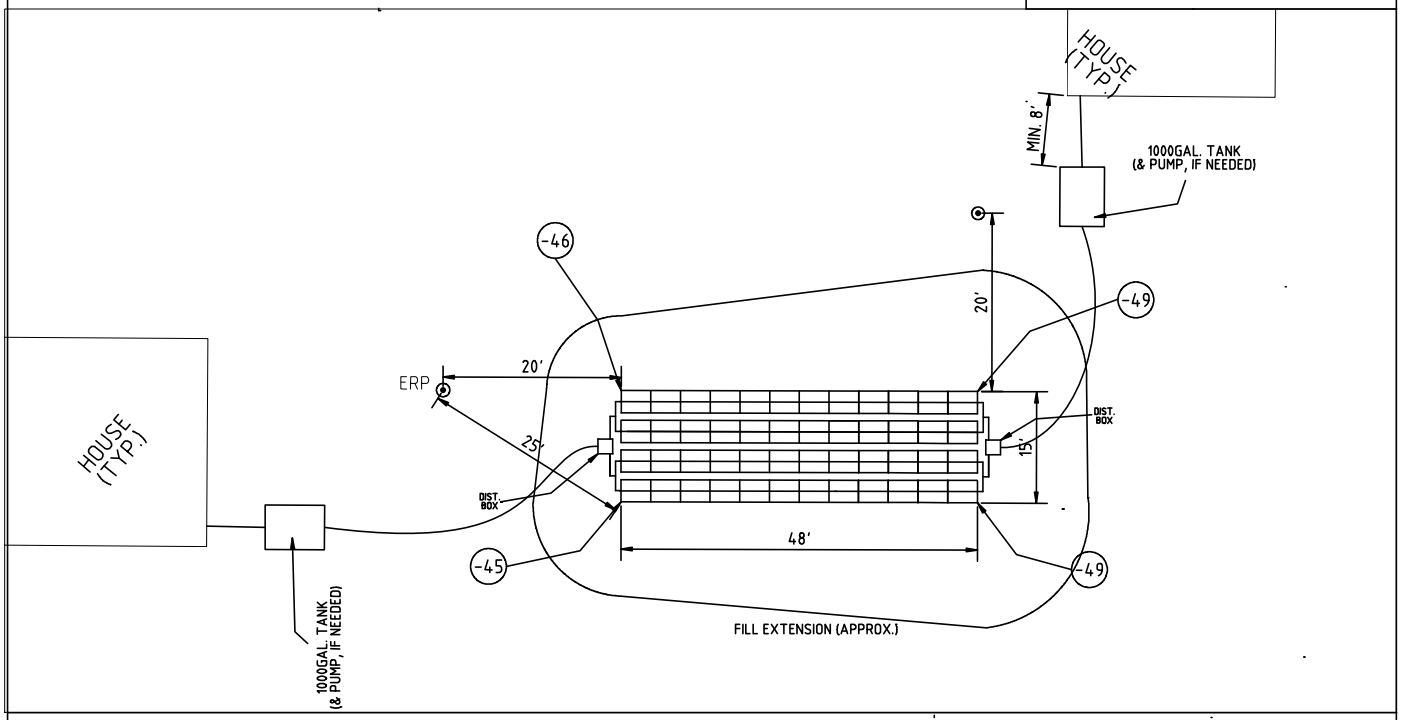
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

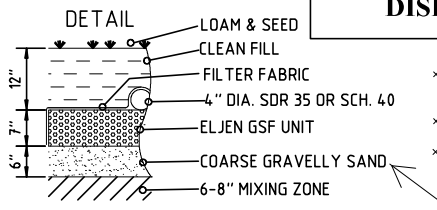
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



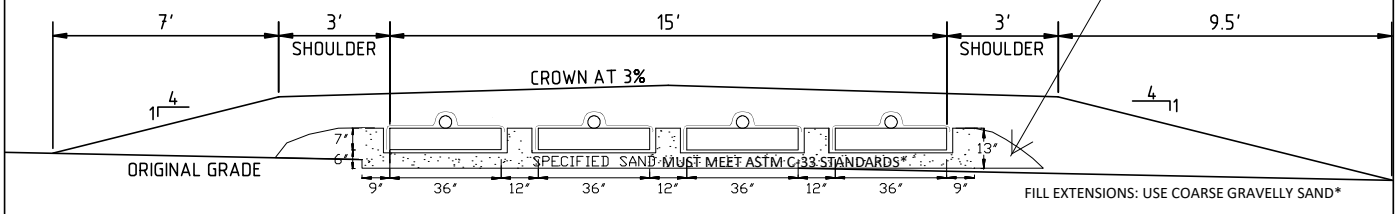
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-41	-34	-22

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 119-120

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-63
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 31.67 s
Lon. 70 d 29 m 56.19 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

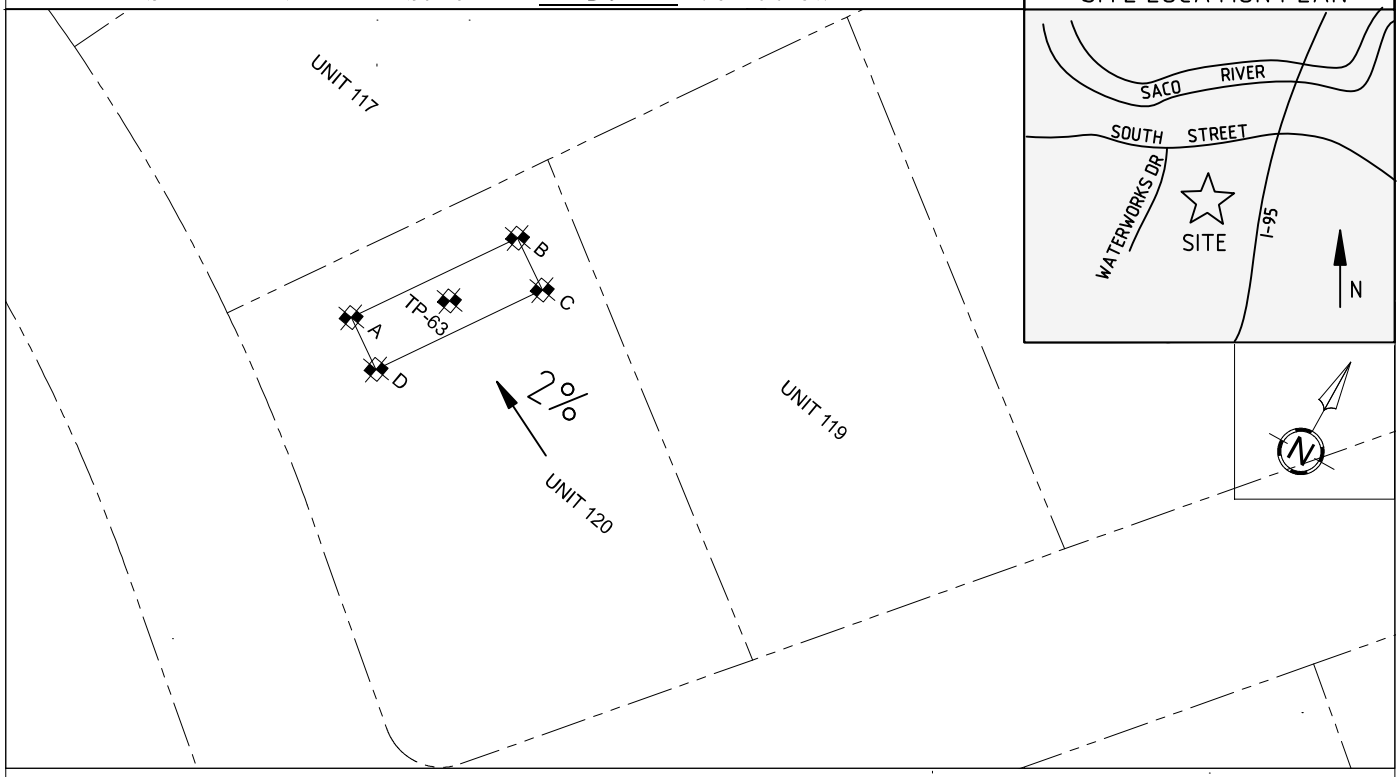
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-63 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile: _____ / Condition: _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: [signature] 419 (SE #) 3/21/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

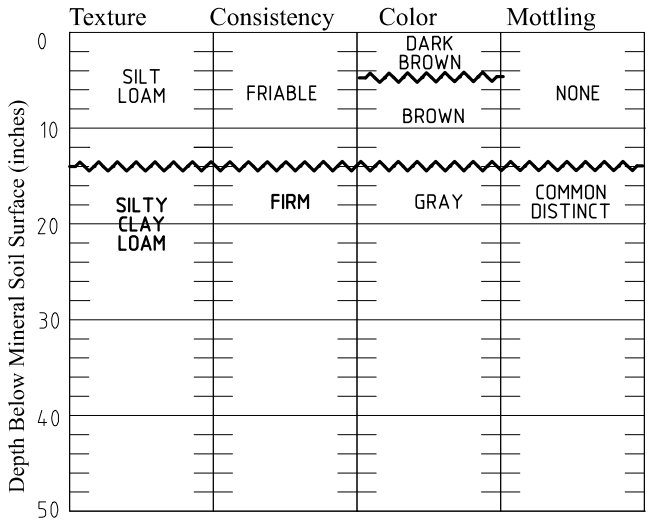
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-63 A ☐ Test Pit ☒ Boring

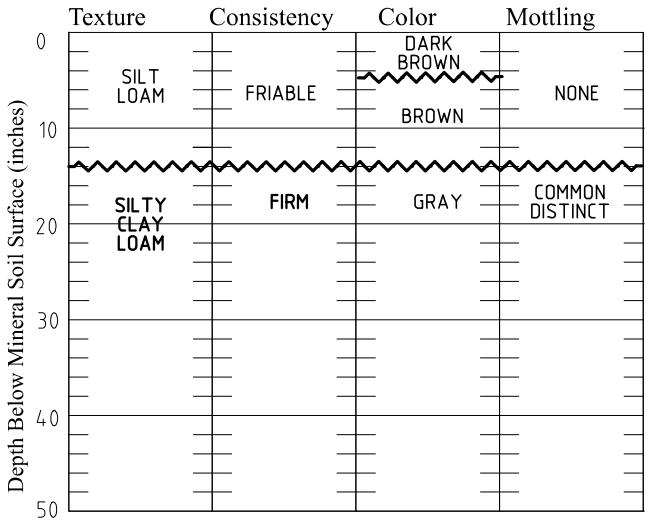
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-63 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

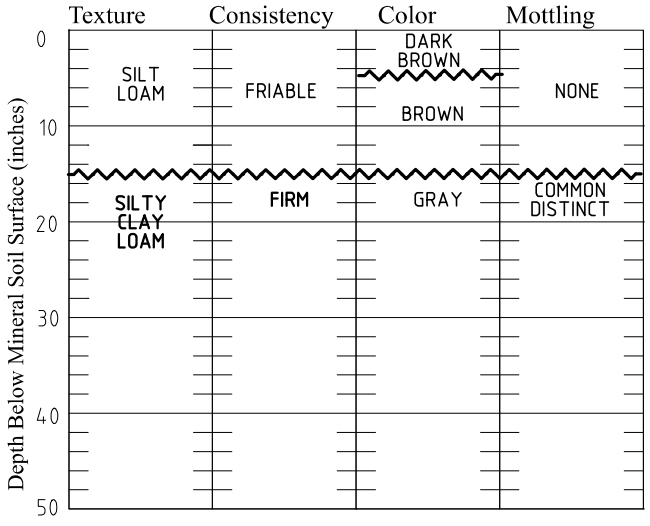


Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-63 C ☐ Test Pit ☒ Boring

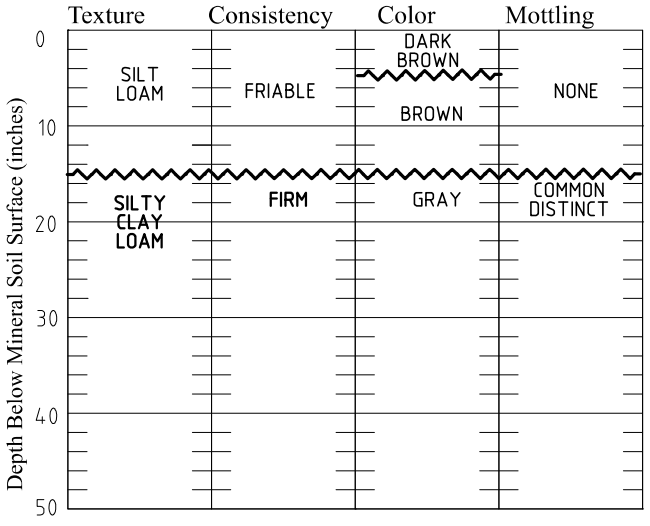
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-63 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 (SE #) | 3/25/23 (Date)

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

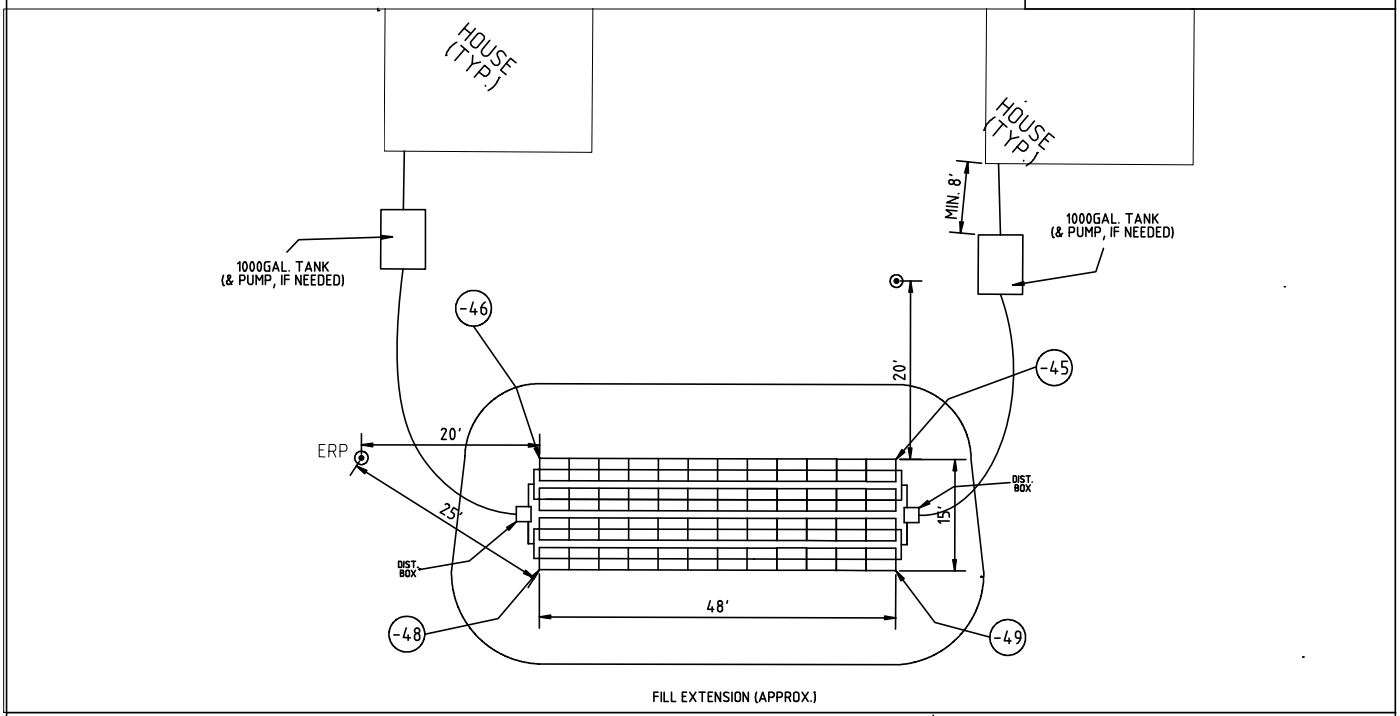
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

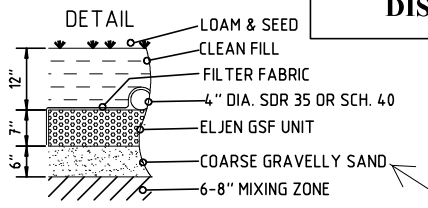
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



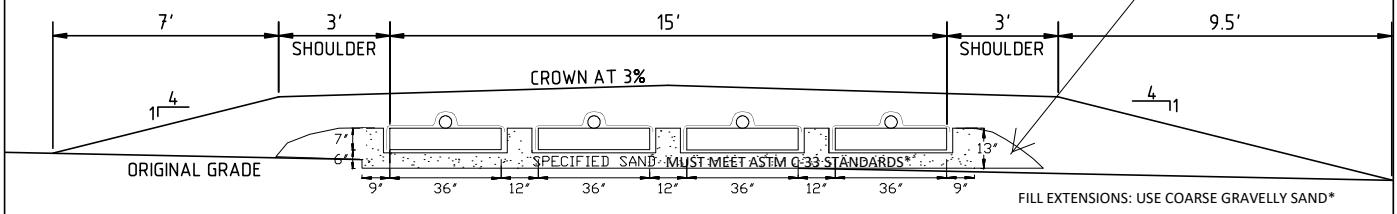
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-41	-34	-22

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 121-123

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-64
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 29.91 s
Lon. 70 d 29 m 58.34 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

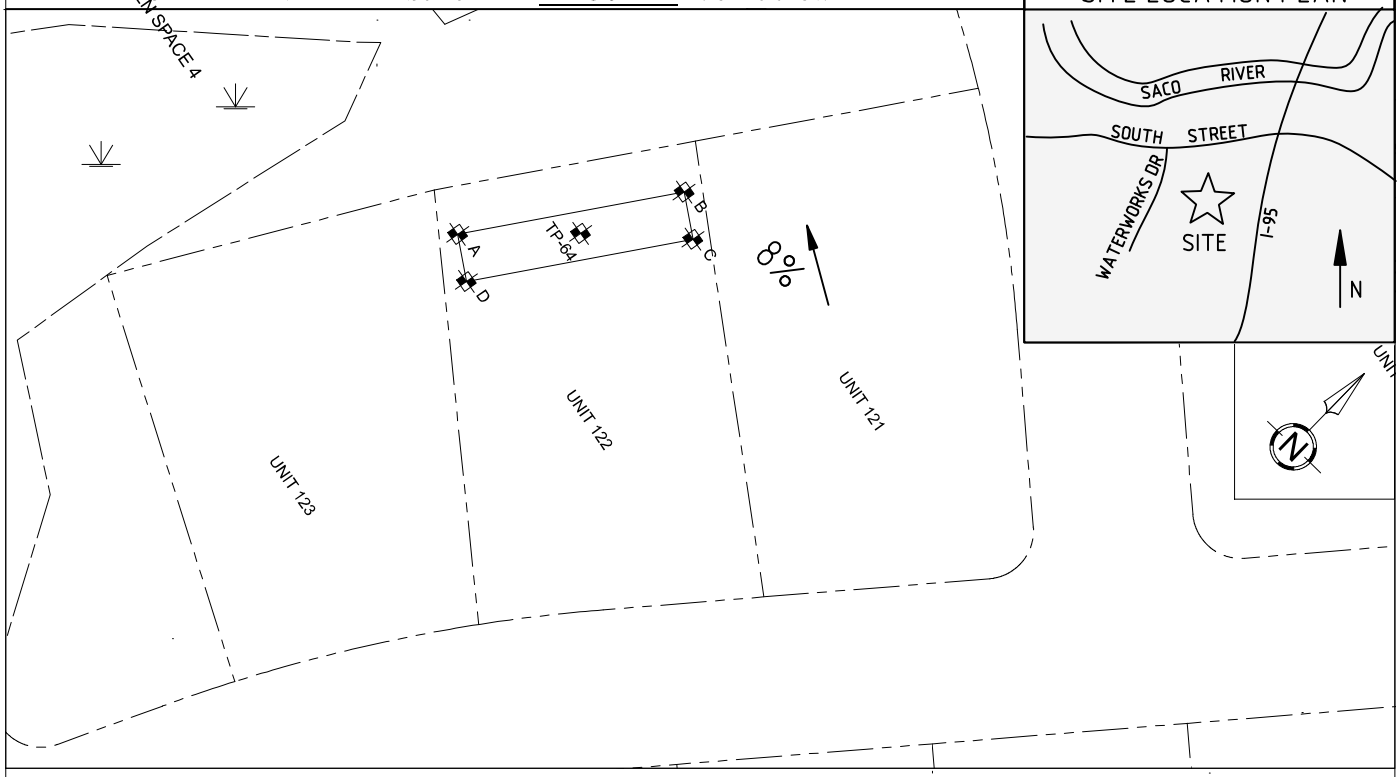
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-64 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK BROWN	NONE
10			BROWN	
20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	8 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			
10				
20				
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

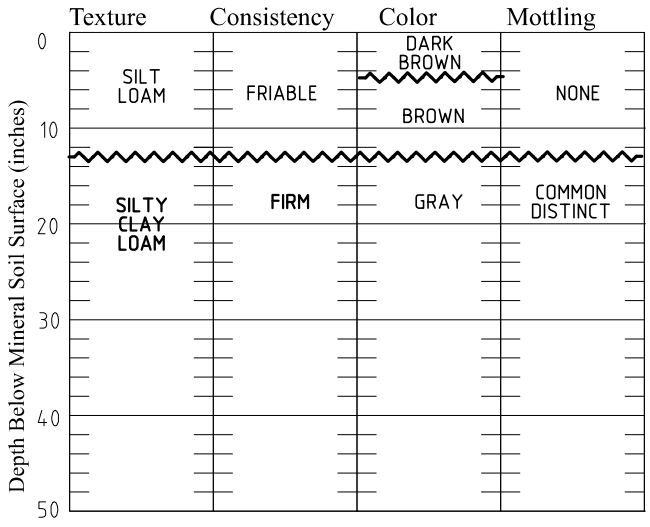
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-64 A ☐ Test Pit ☒ Boring

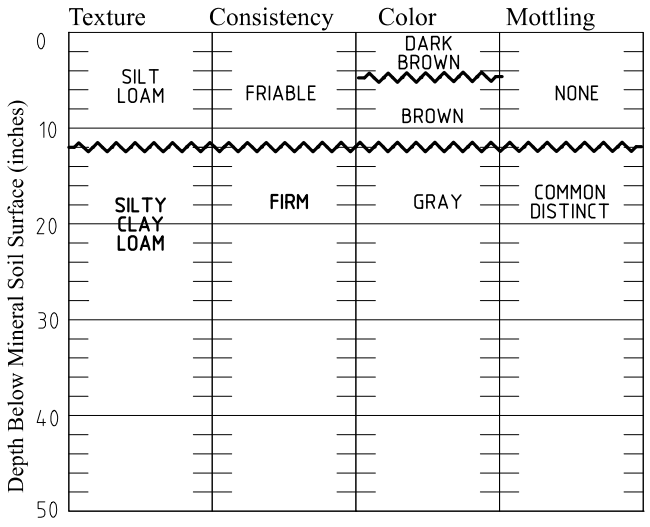
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-64 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

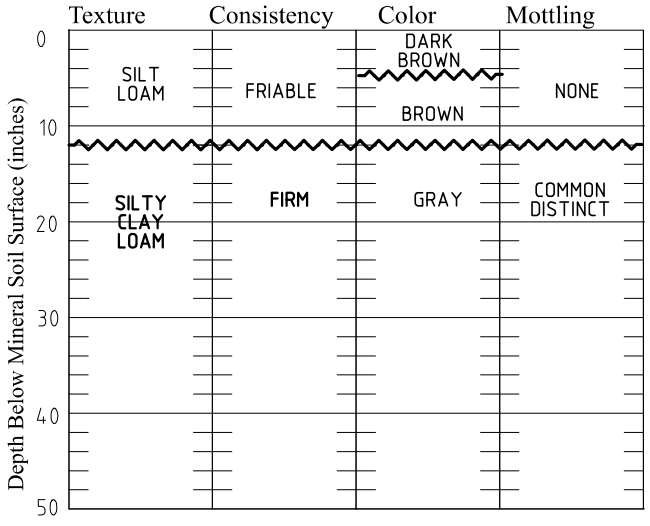


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-64 C ☐ Test Pit ☒ Boring

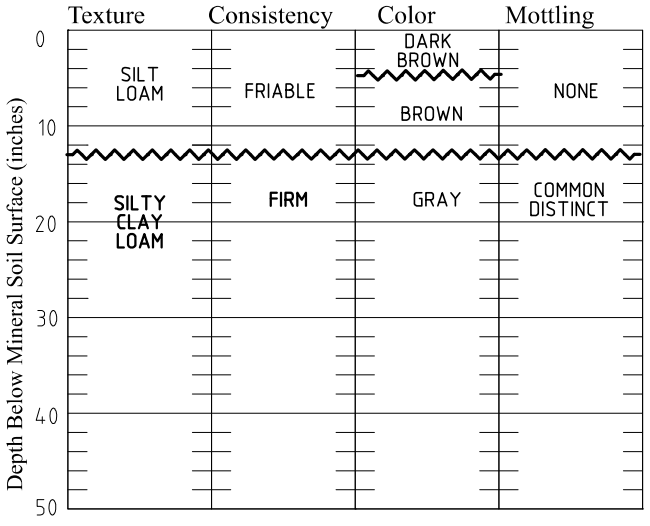
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-64 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

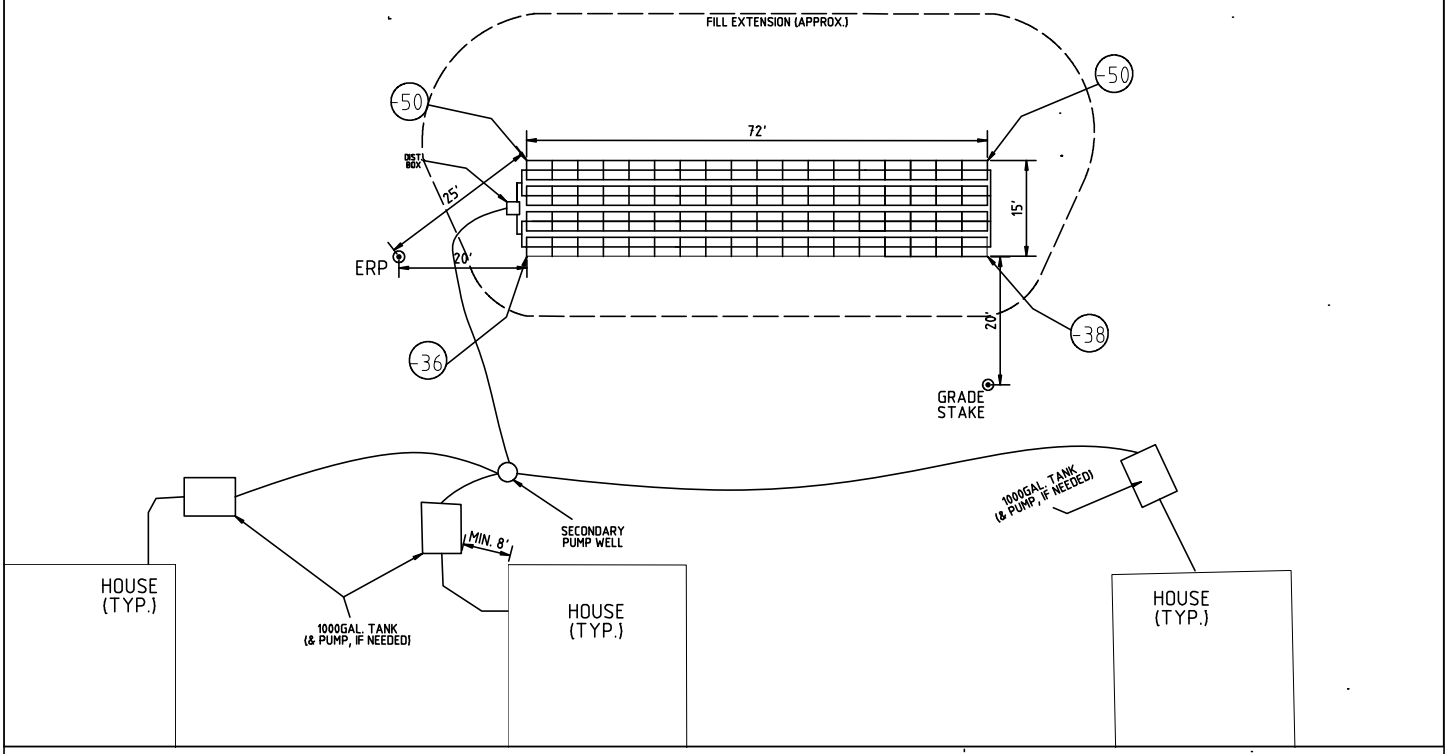
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

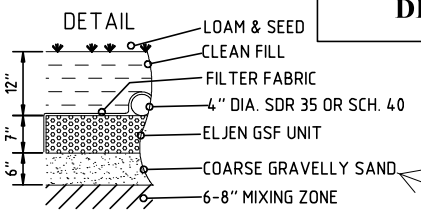
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

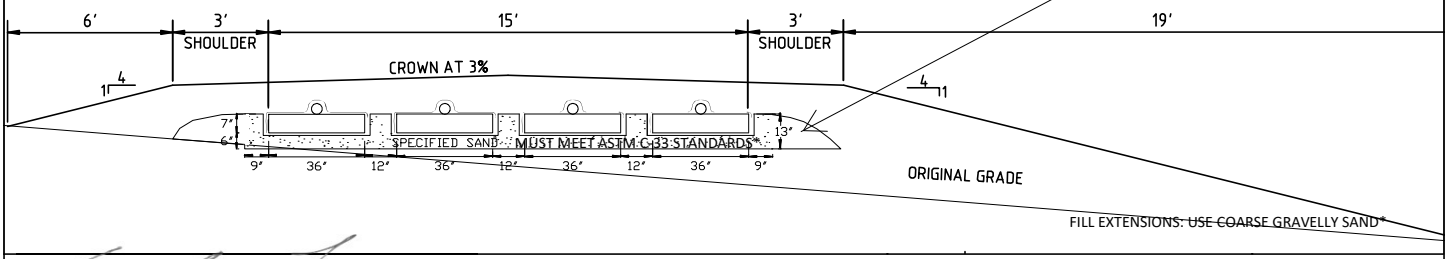
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
39	25	-30	-23	-11

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/17/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 124-125

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-65
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 30.33 s
Lon. 70 d 30 m 0.22 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

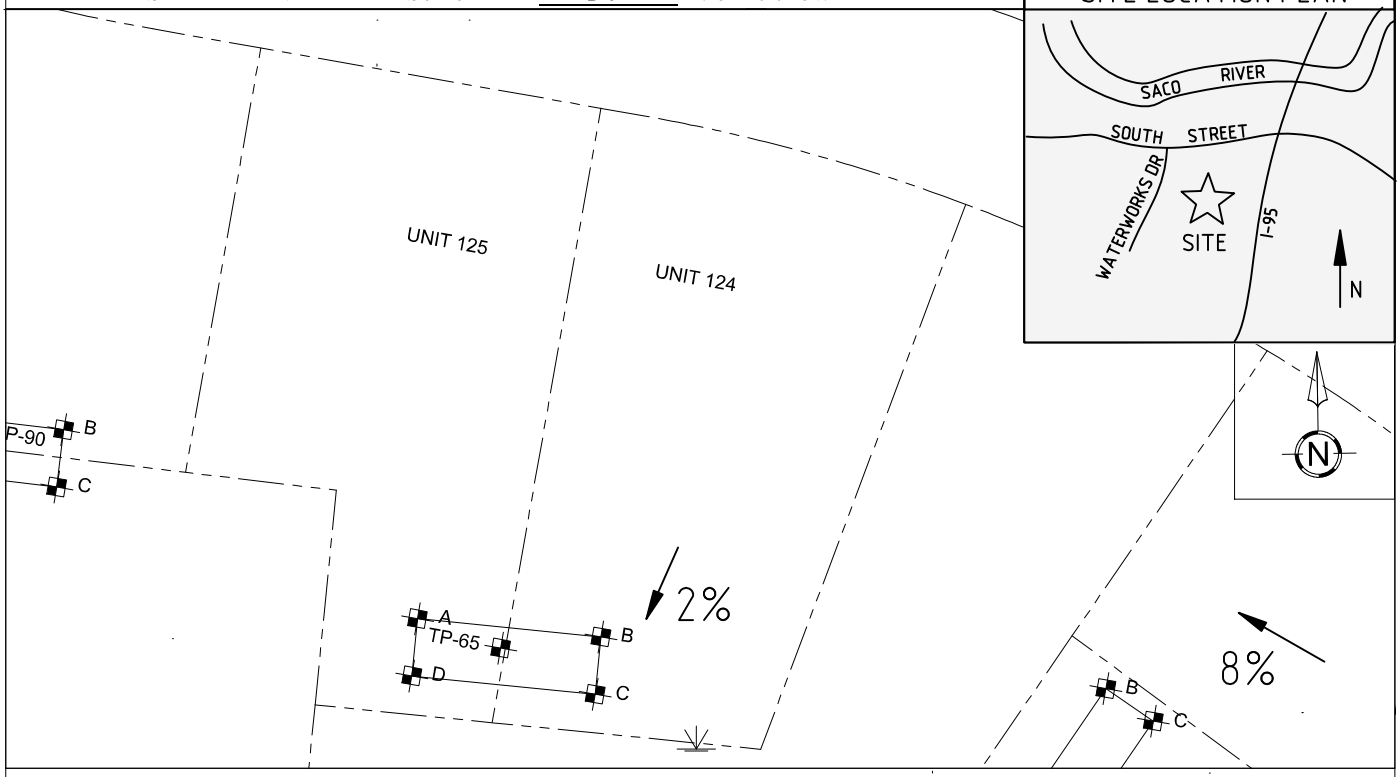
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

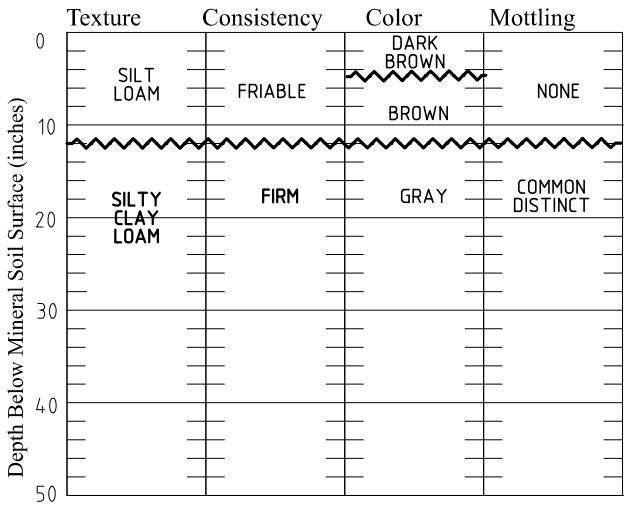


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-65 ☐ Test Pit ☒ Boring

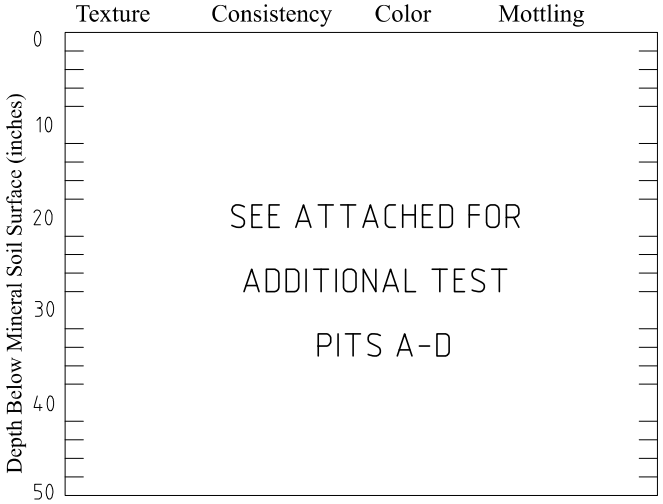
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

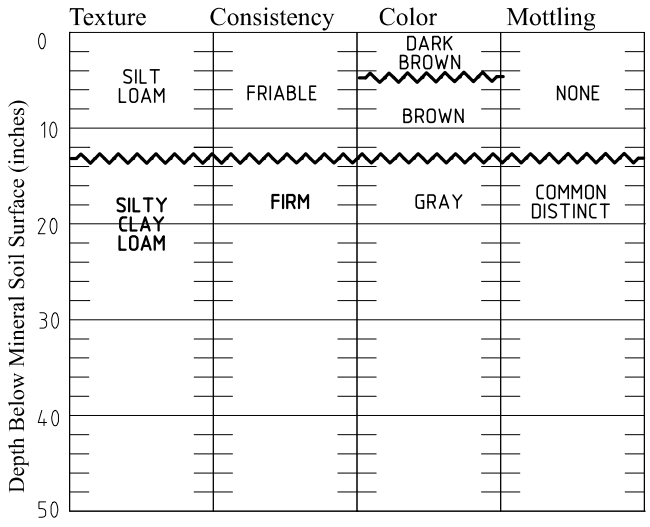
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-65 A ☐ Test Pit ☒ Boring

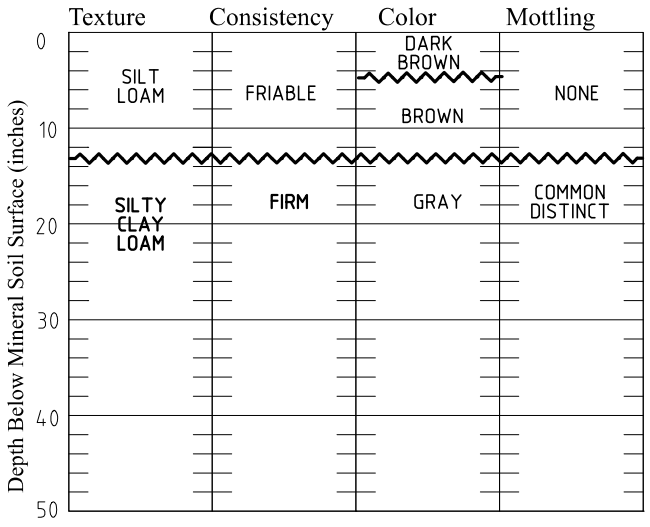
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-65 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

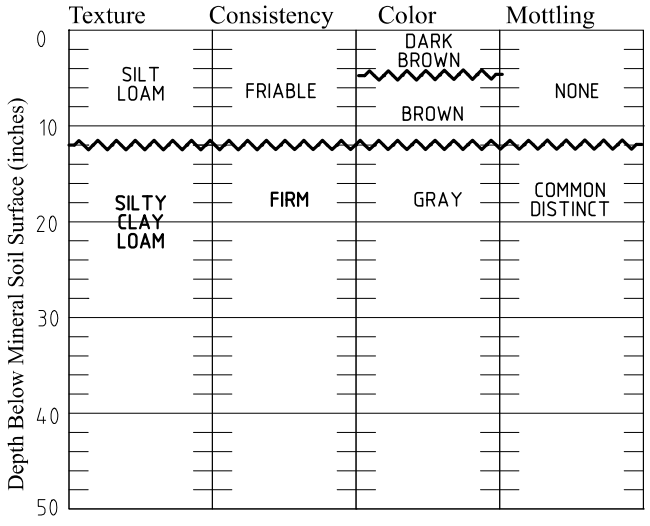


Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-65 C ☐ Test Pit ☒ Boring

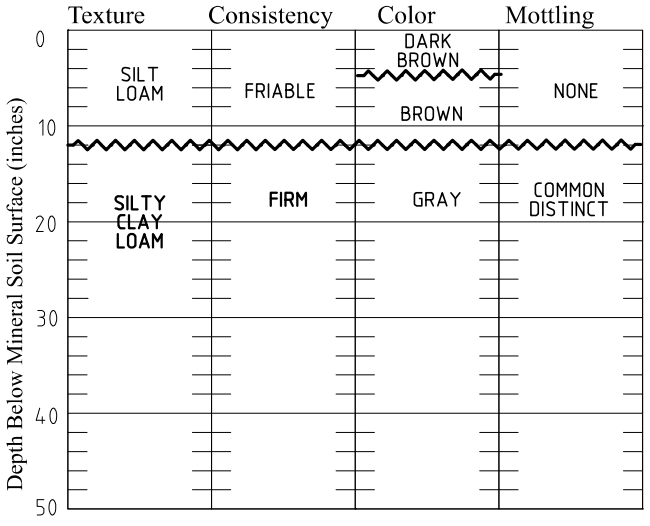
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-65 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 (SE #) | 3/25/23 (Date)

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

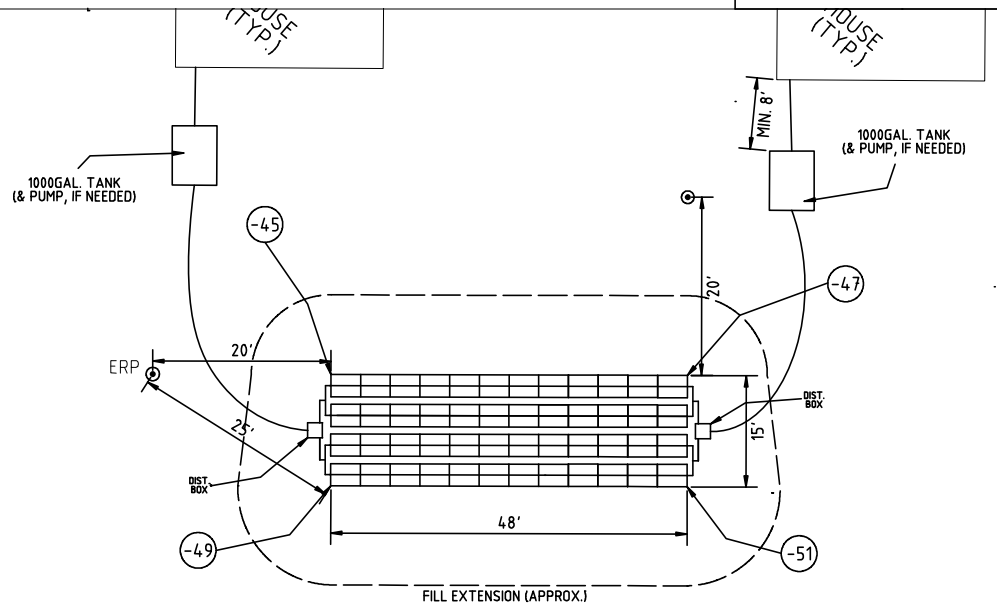
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

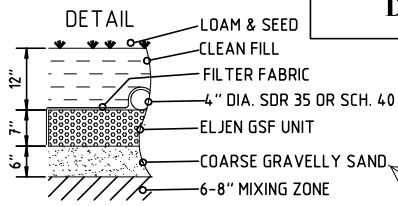
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



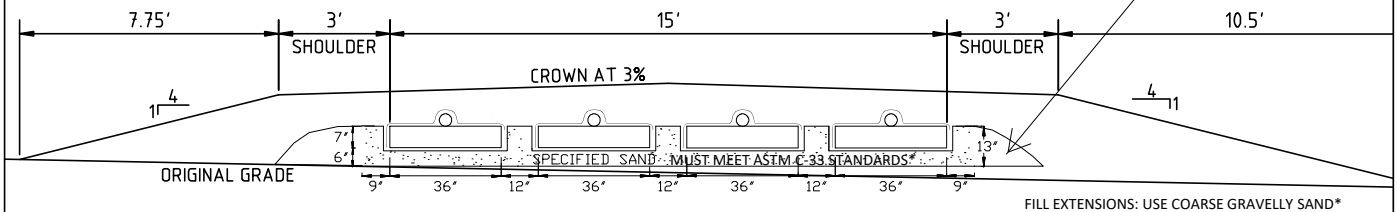
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
29	25	-39	-32	-20

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 126-127

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-90
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 30.83 s
Lon. 70 d 30 m 2.18 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

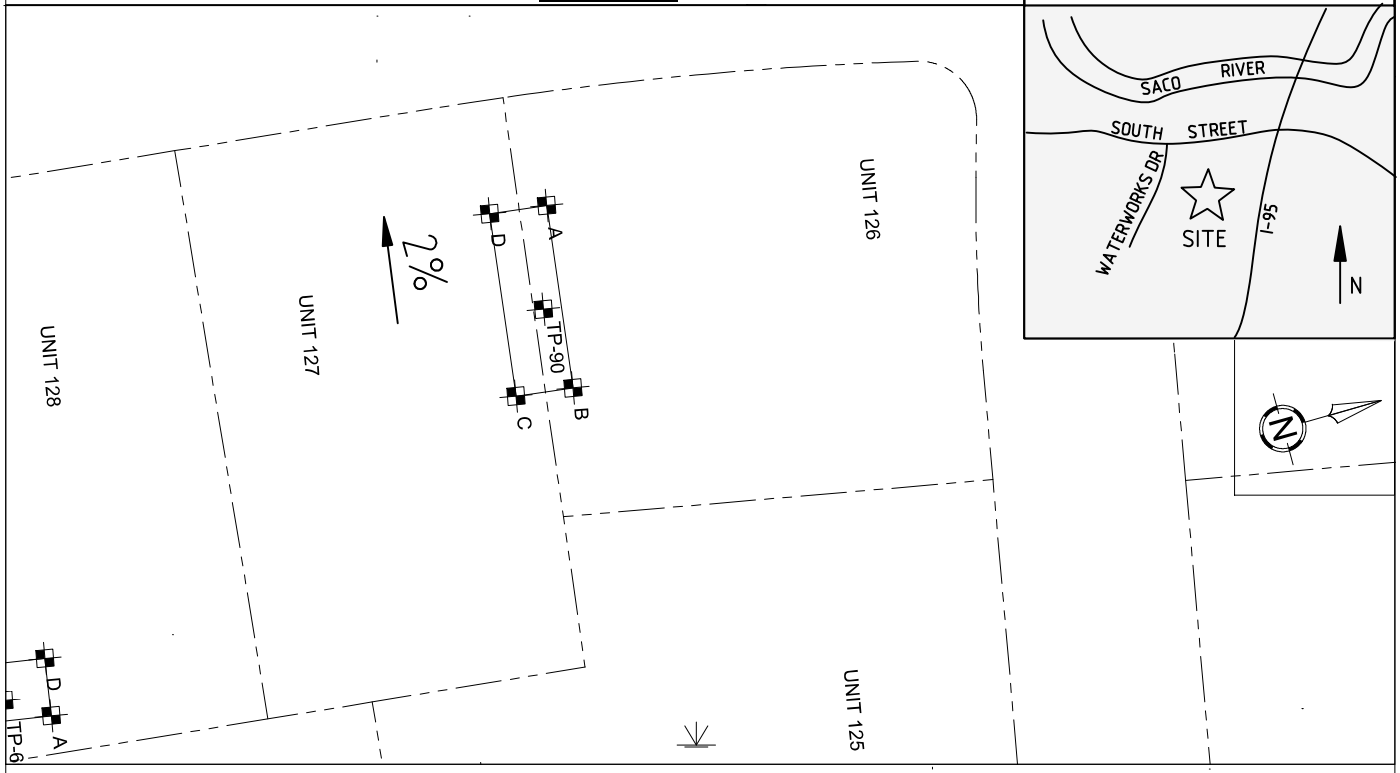
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-90 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / RED BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

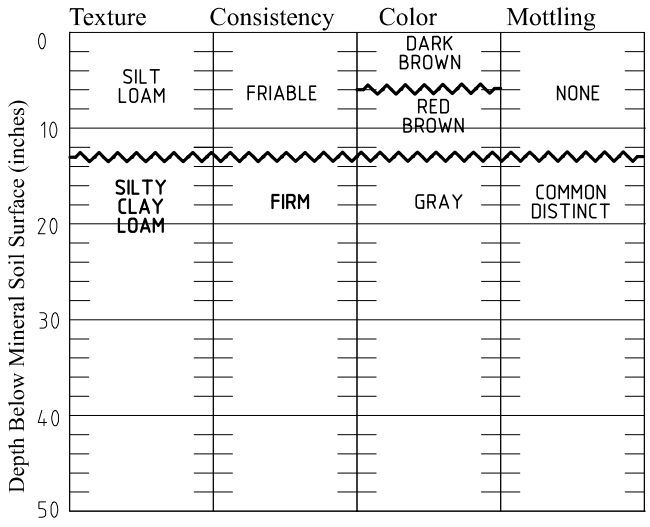
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-90 A ☐ Test Pit ☒ Boring

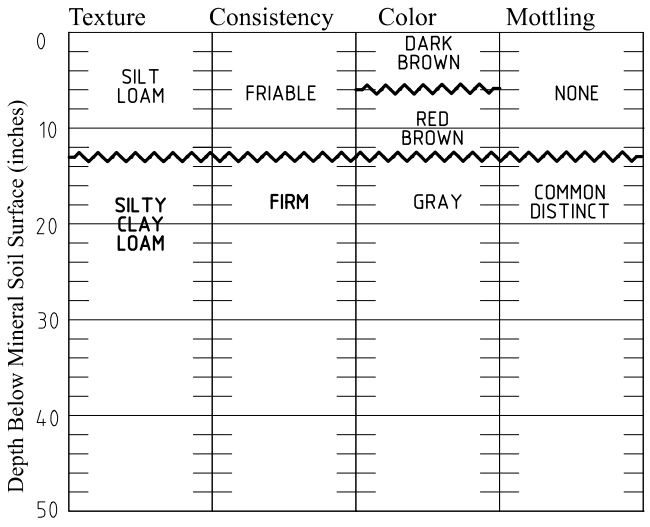
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-90 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

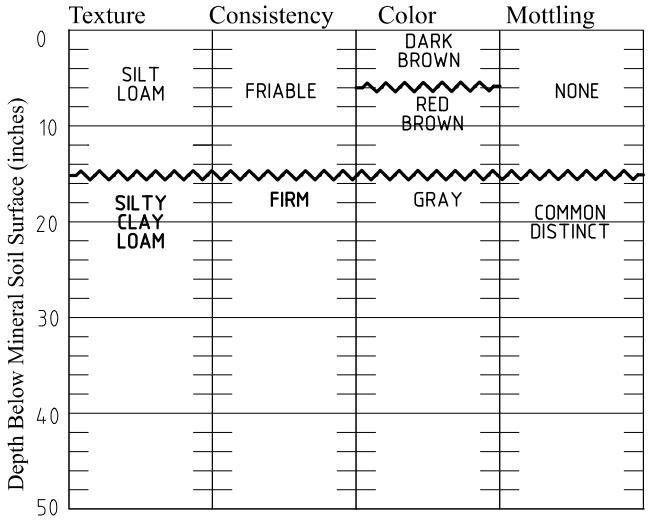


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-90 C ☐ Test Pit ☒ Boring

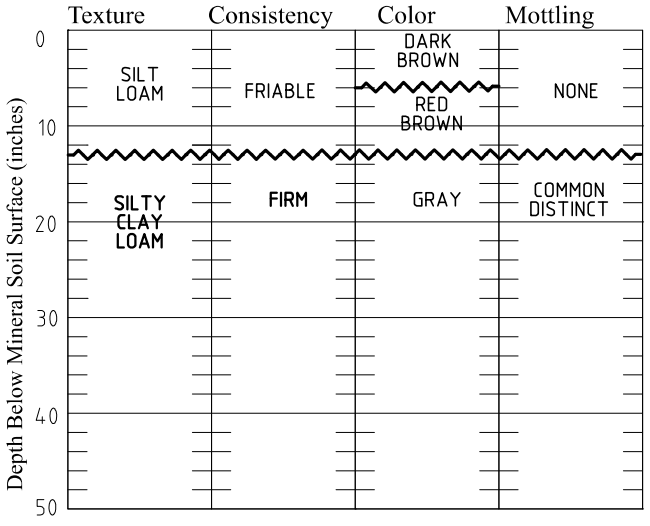
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-90 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

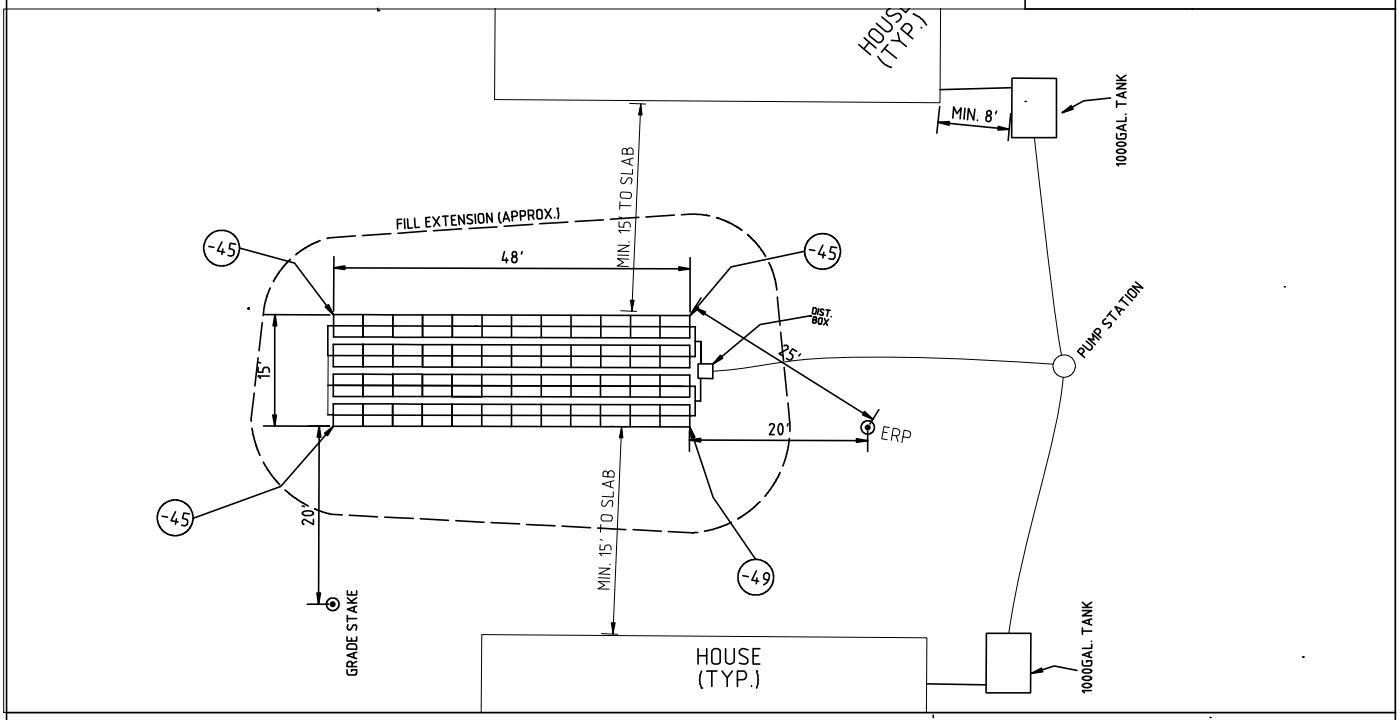
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 60' A.G.

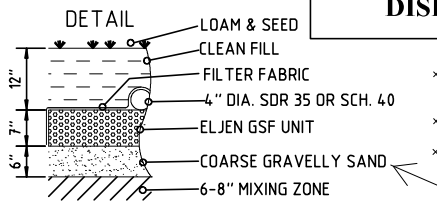
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



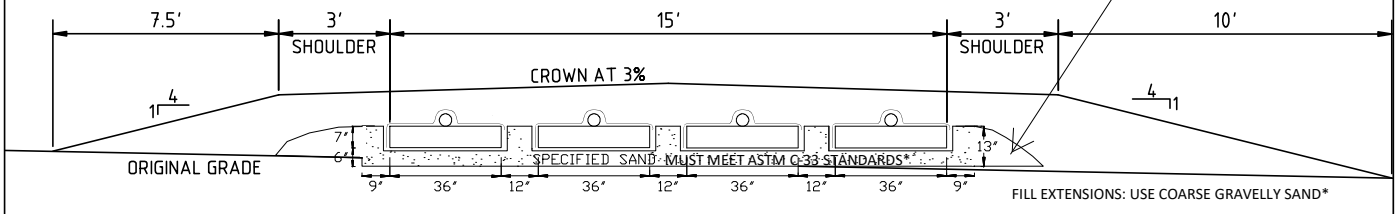
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
28	24	-40	-33	-21

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 128-129

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-66
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 29.20 s
Lon. 70 d 30 m 1.31 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

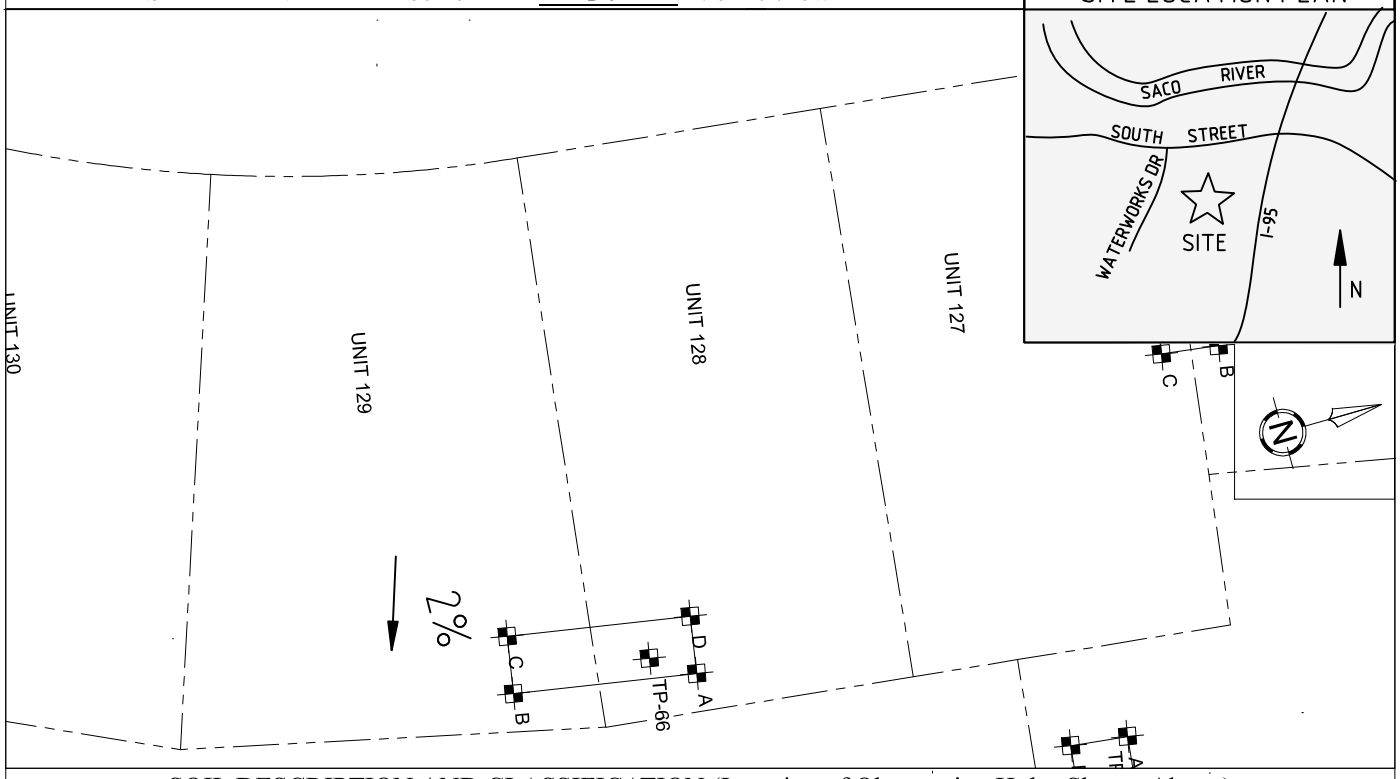
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

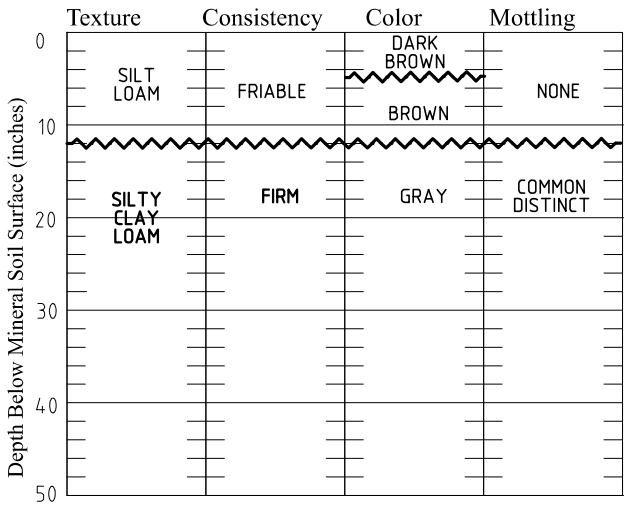


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-66 ☐ Test Pit ☒ Boring

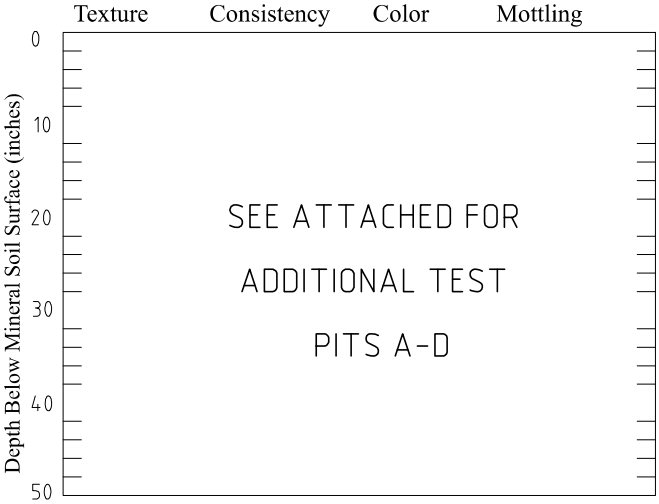
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

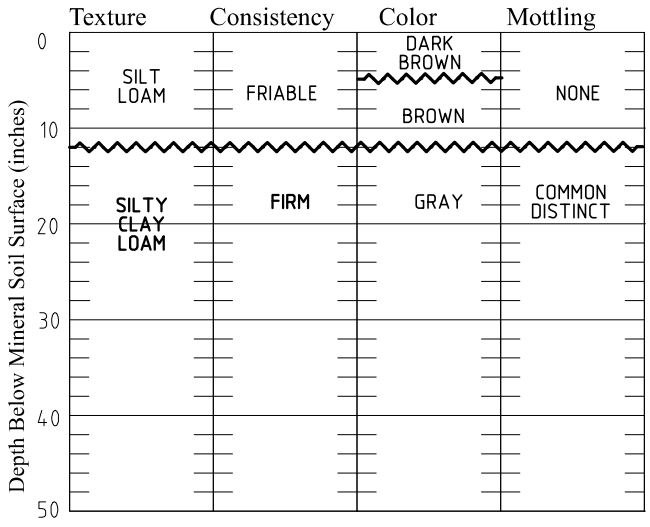
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-66 A ☐ Test Pit ☒ Boring

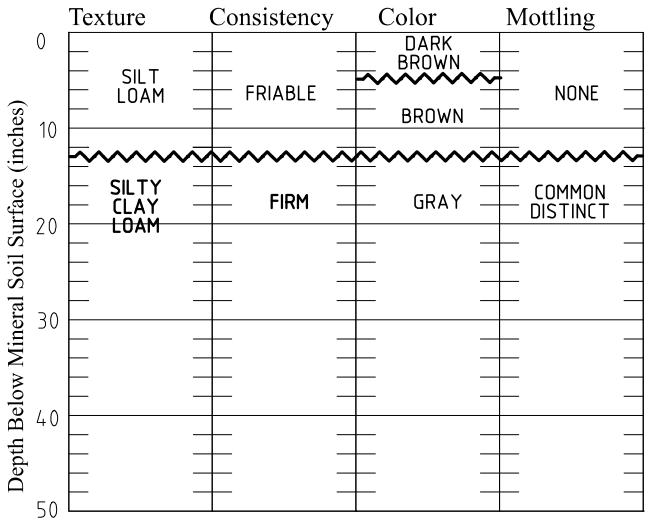
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-66 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

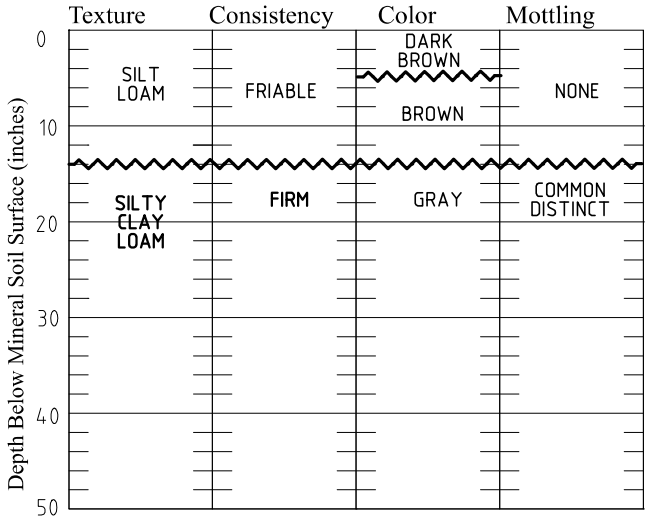


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-66 C ☐ Test Pit ☒ Boring

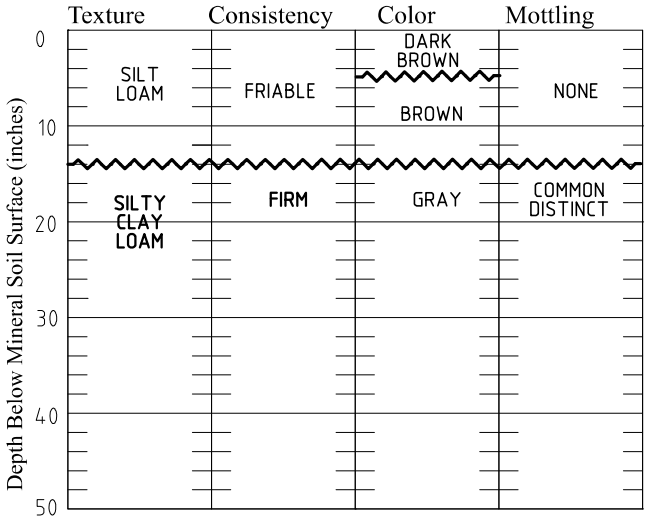
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-66 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

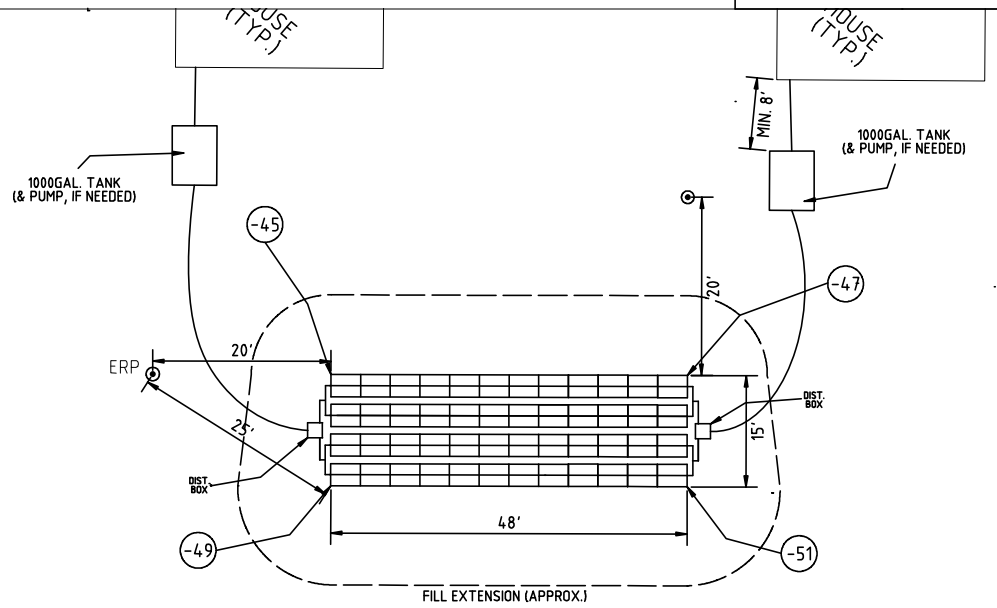
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

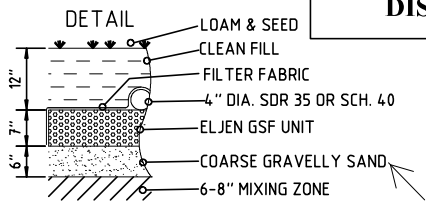
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



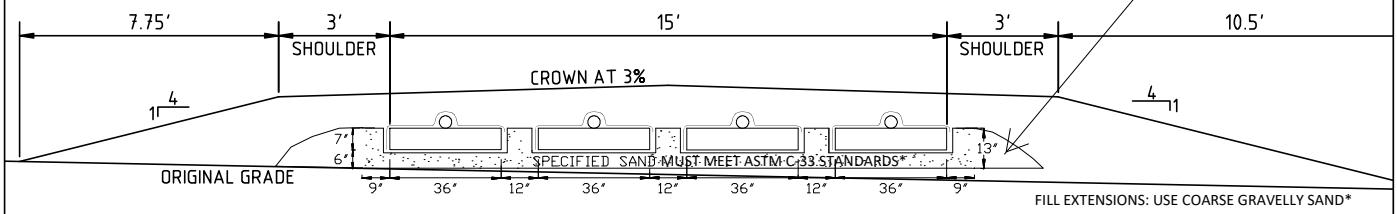
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
29	25	-39	-32	-20

Site Evaluator Signature | SE # 419 | Date 3/14/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 130-131

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-67
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 27.34 s
Lon. 70 d 30 m 2.06 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

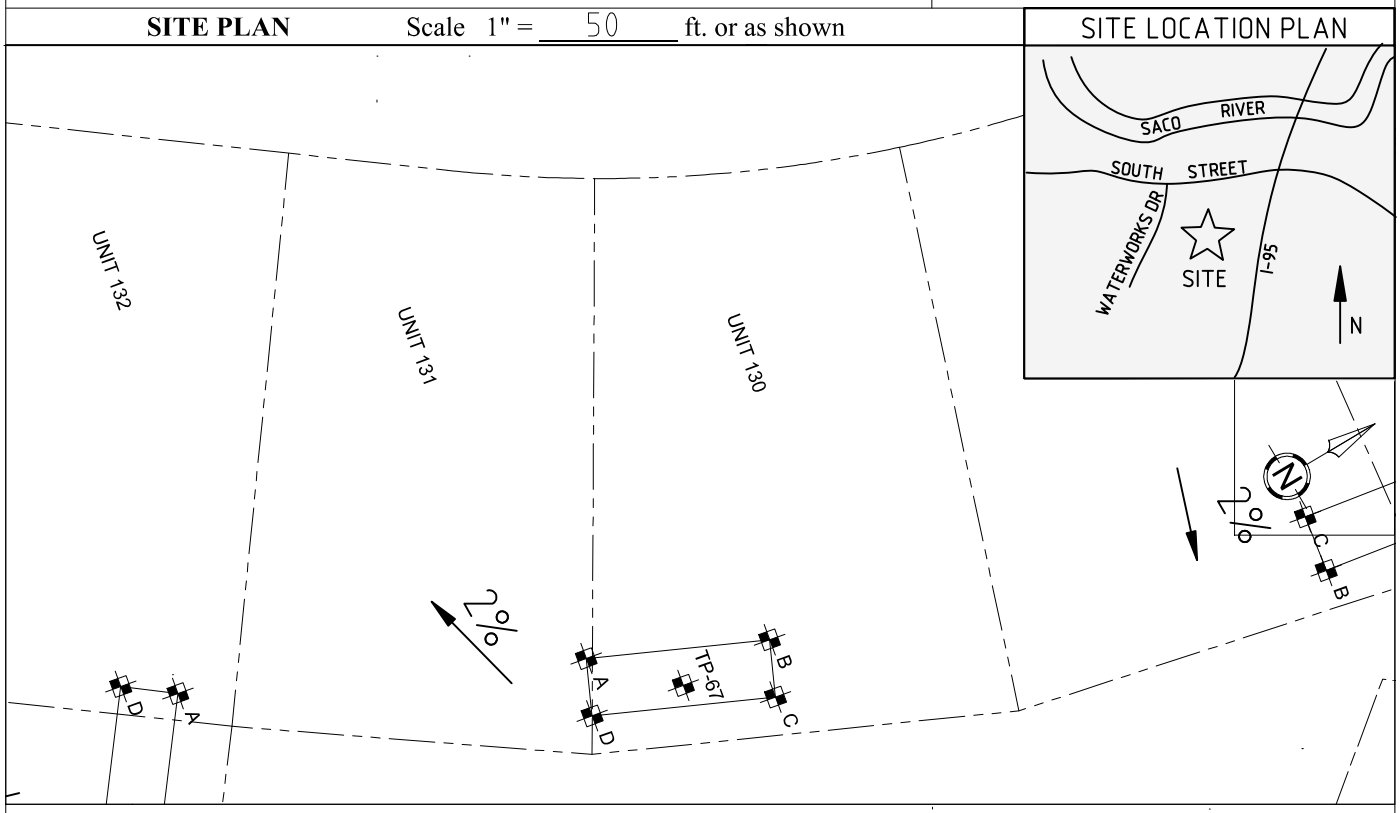
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-67 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

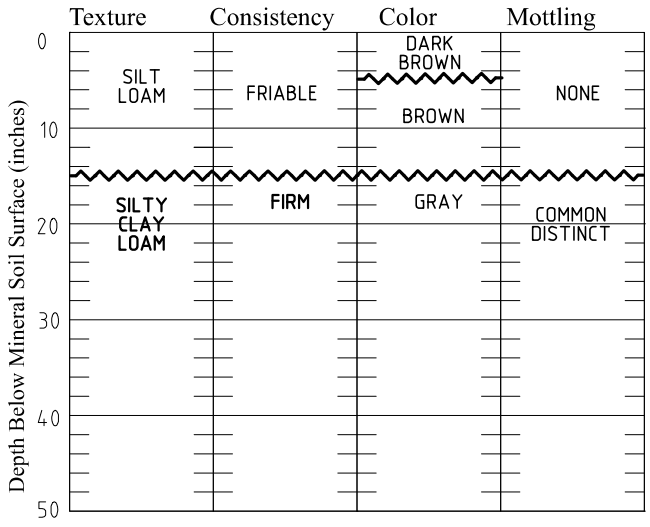
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-67 A ☐ Test Pit ☒ Boring

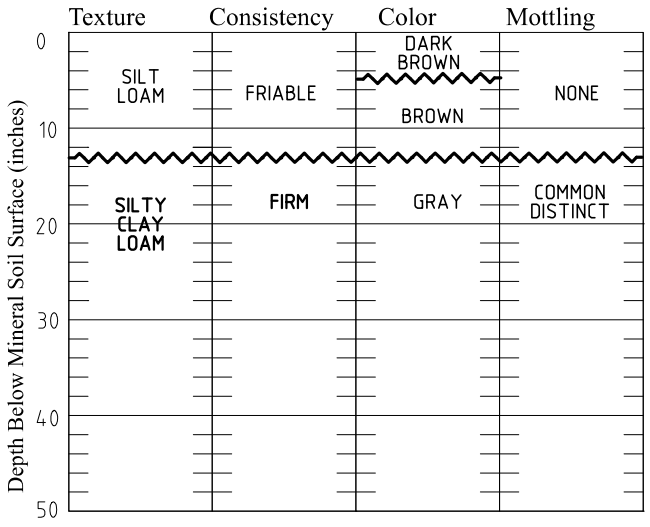
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-67 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

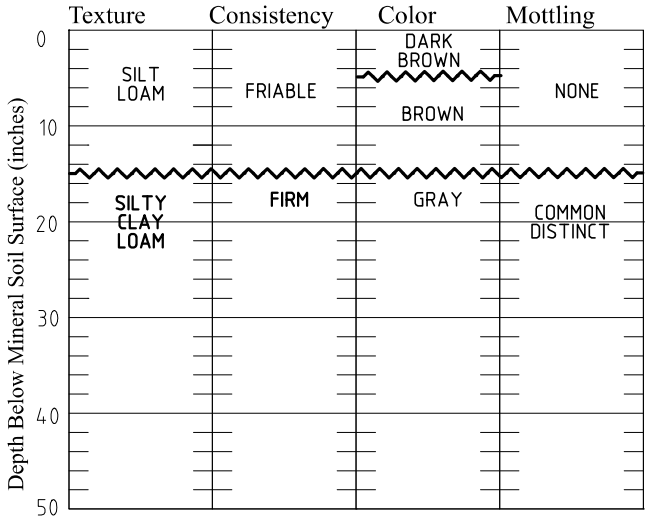


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-67 C ☐ Test Pit ☒ Boring

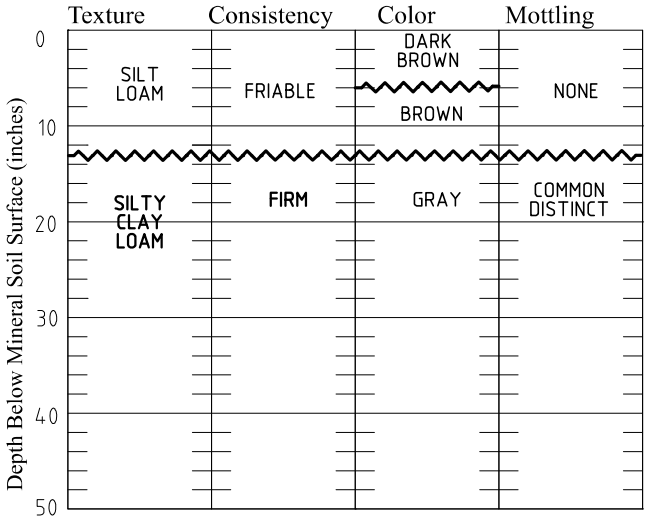
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-67 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

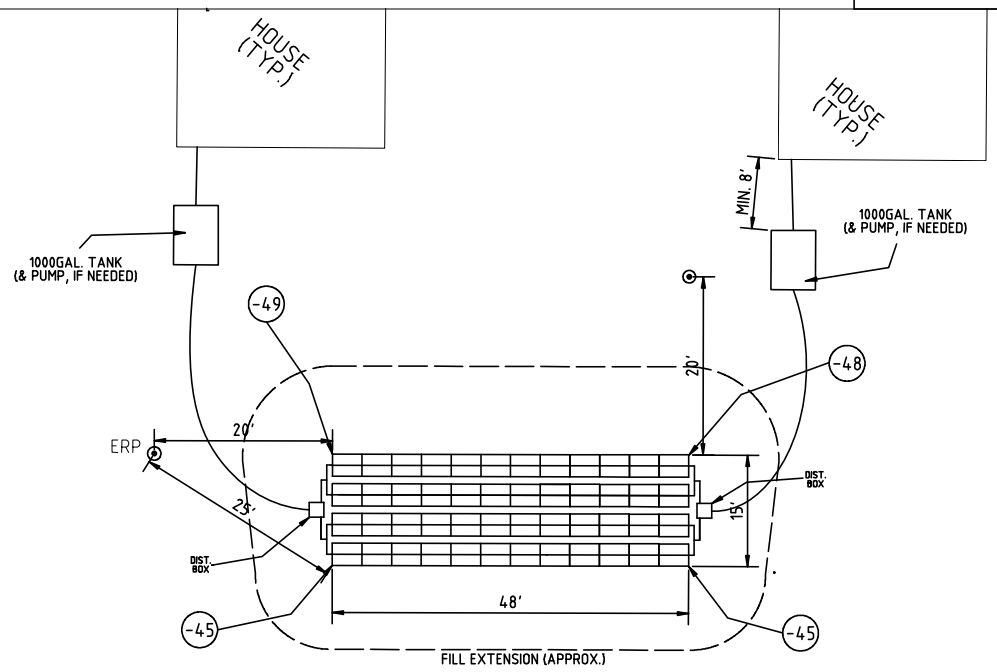
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 60' A.G.

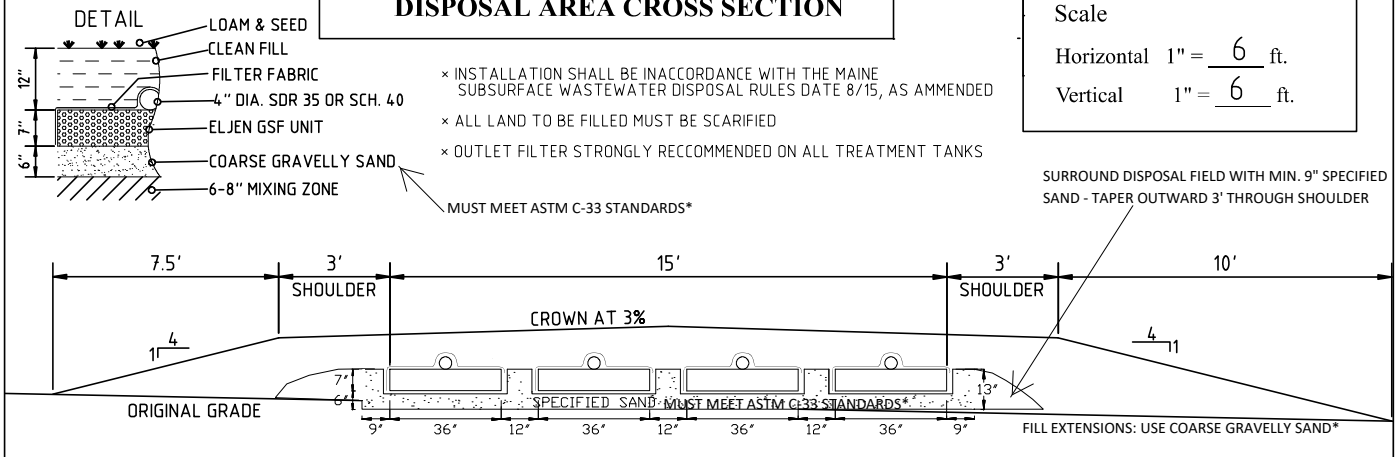
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
28	24	-40	-33	-21

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 132-134

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-51
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 25.93 s
Lon. 70 d 30 m 2.54 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-51 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK BROWN	NONE
10			BROWN	
20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
Profile: 8 Condition: D	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			
10				
20				
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
Profile: _____ Condition: _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: [signature] SE #: 419 Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

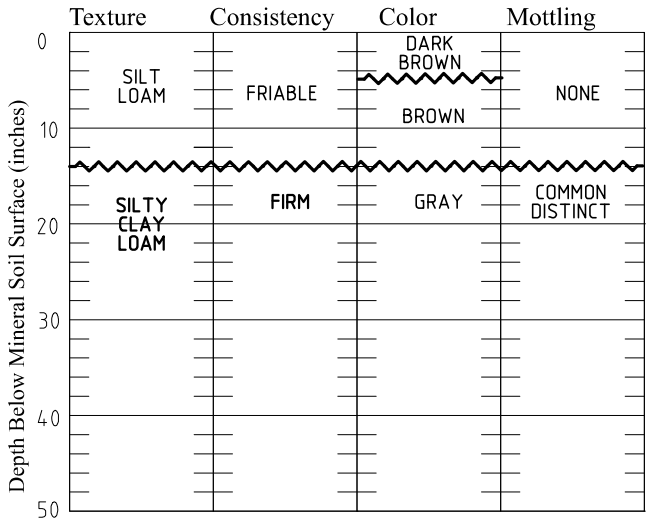
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-51 A ☐ Test Pit ☒ Boring

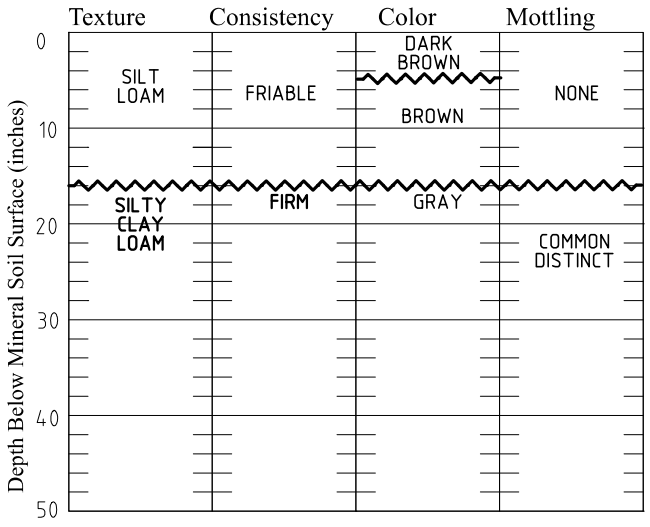
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-51 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

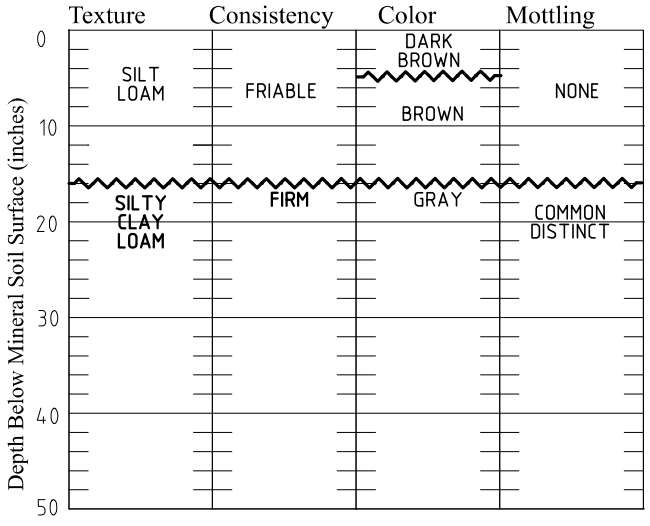


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-51 C ☐ Test Pit ☒ Boring

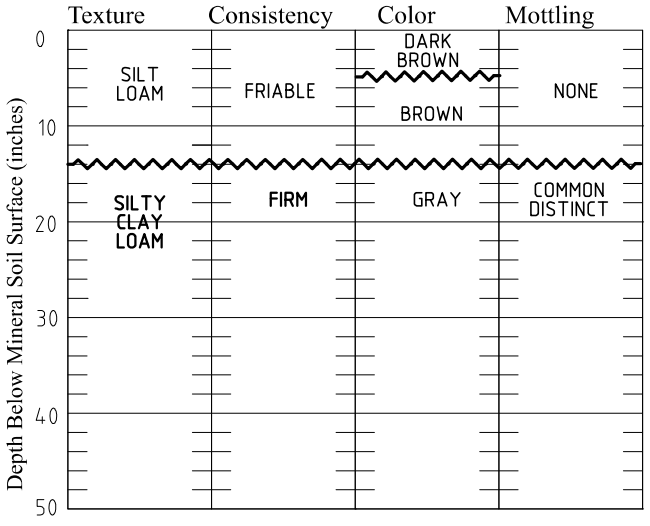
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-51 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

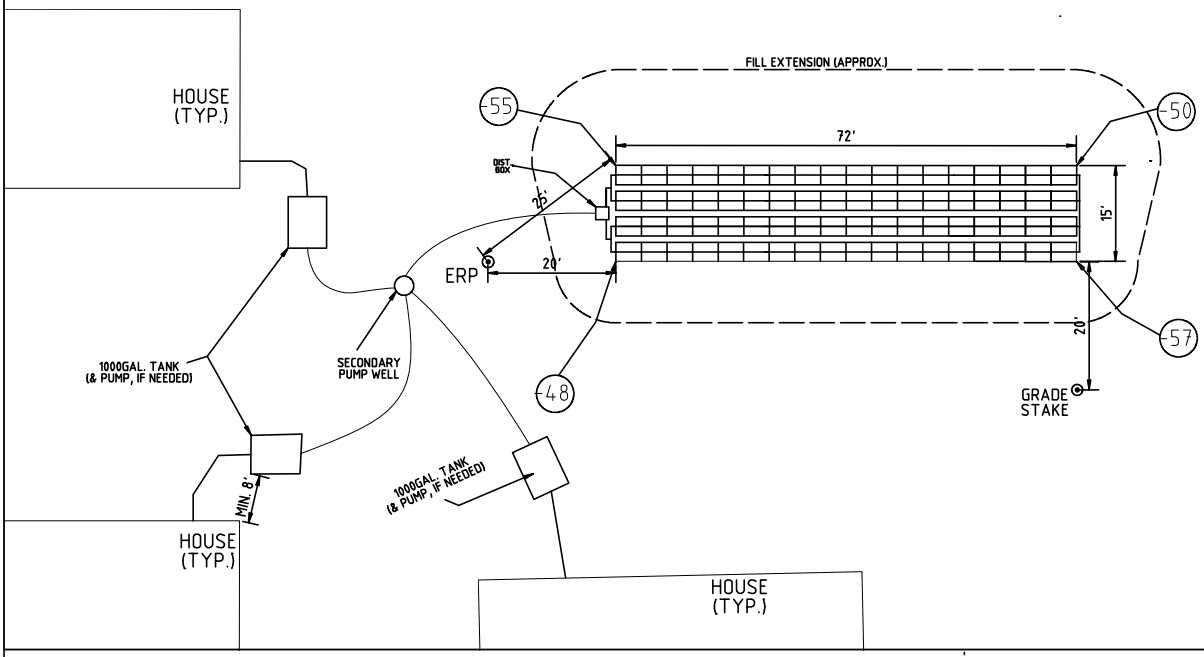
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

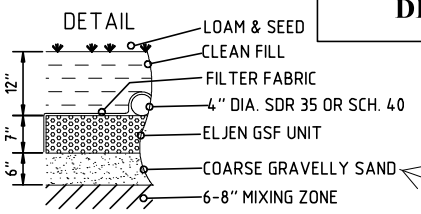
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

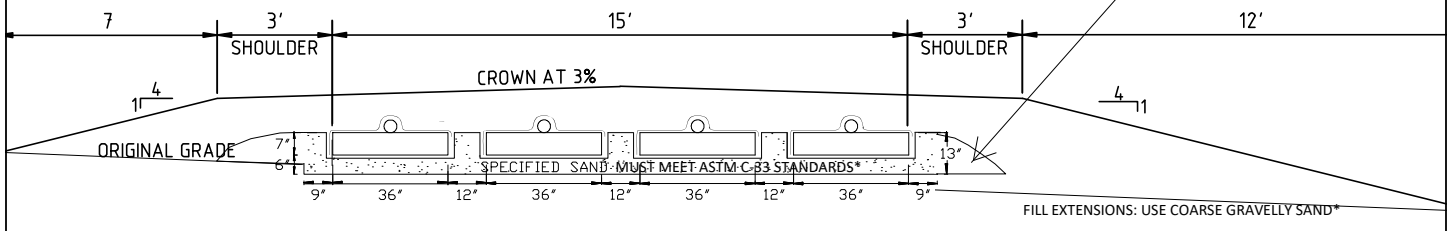
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-44	-37	-25

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 135-137

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-55
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 21.13 s
Lon. 70 d 30 m 0.86 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

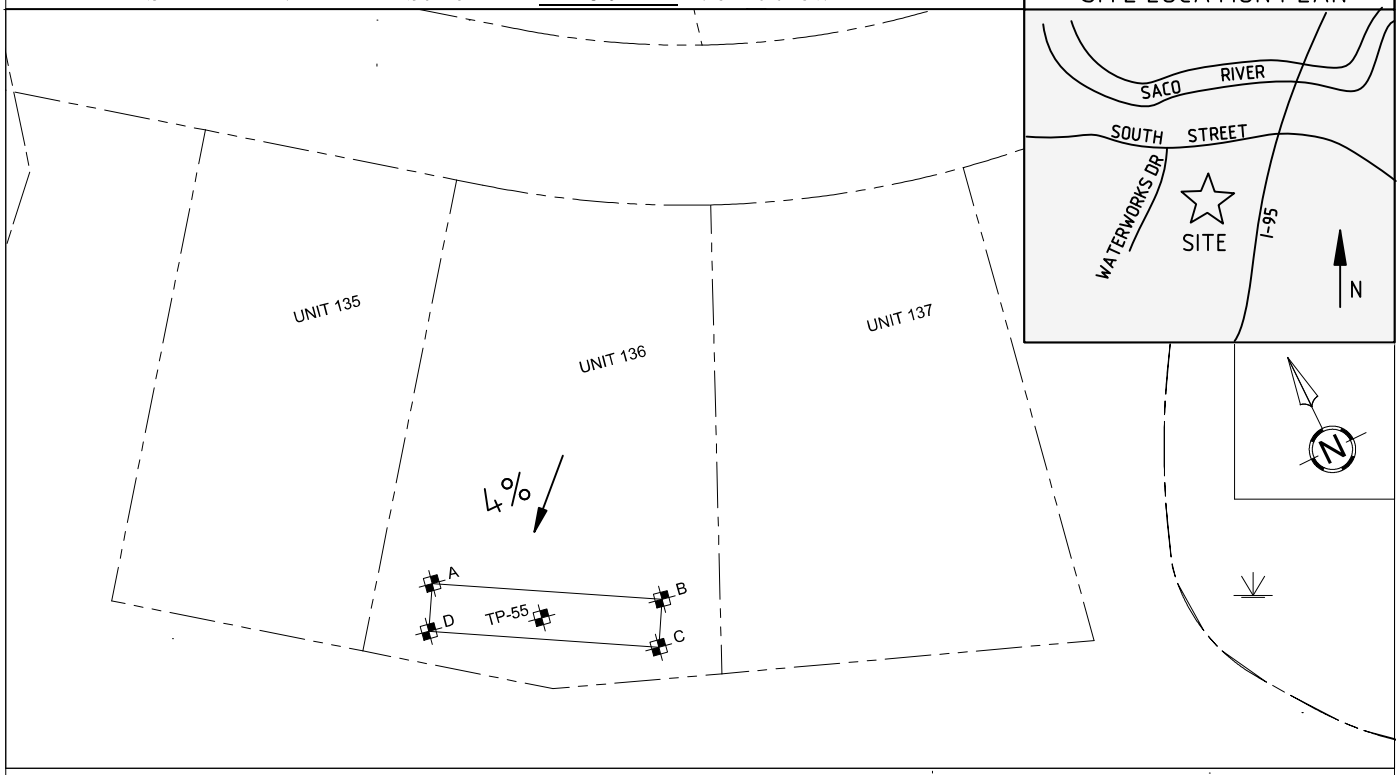
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

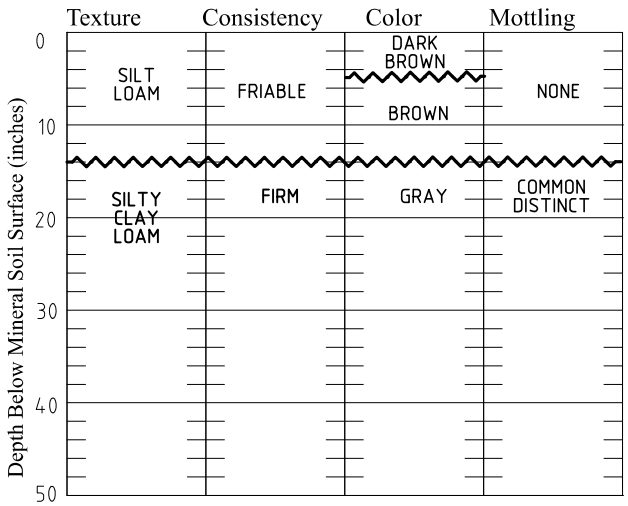


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-55 ☐ Test Pit ☒ Boring

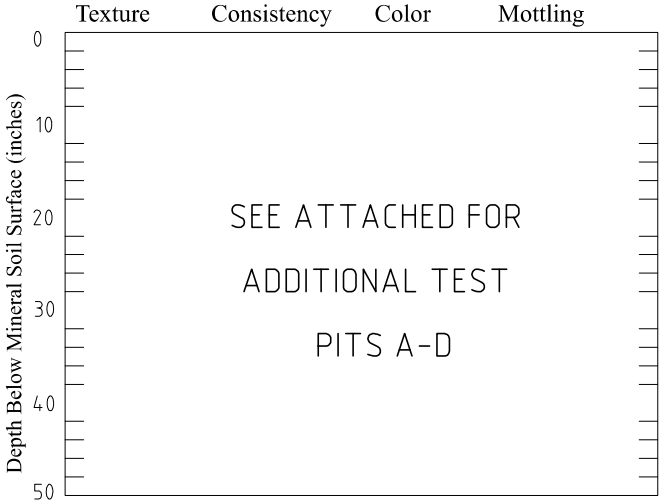
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

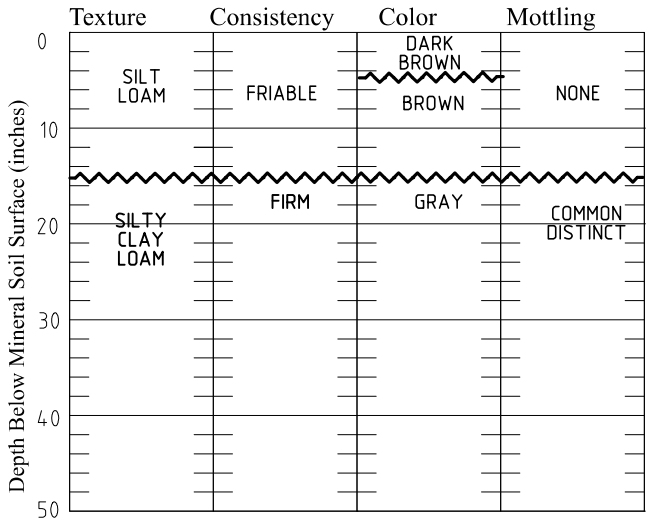
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-55 A ☐ Test Pit ☒ Boring

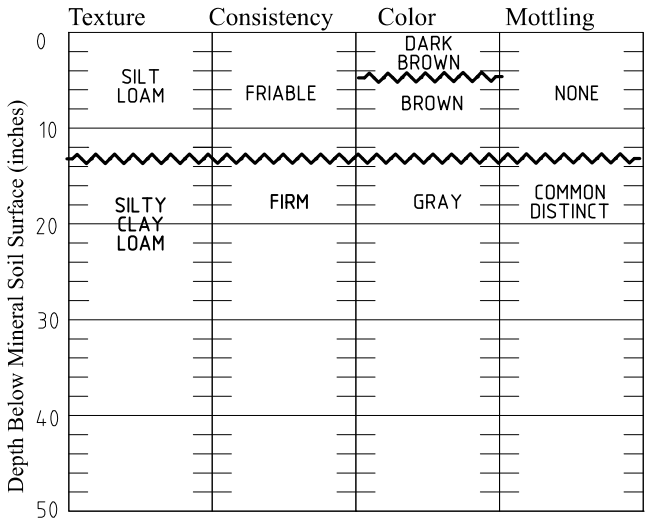
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-55 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

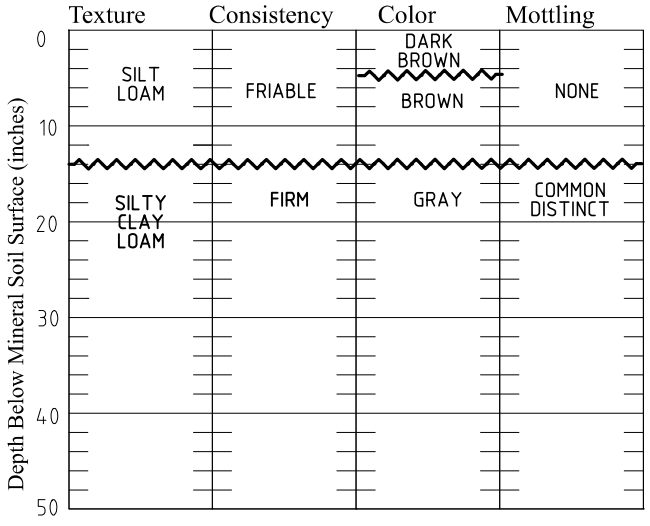


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-55 C ☐ Test Pit ☒ Boring

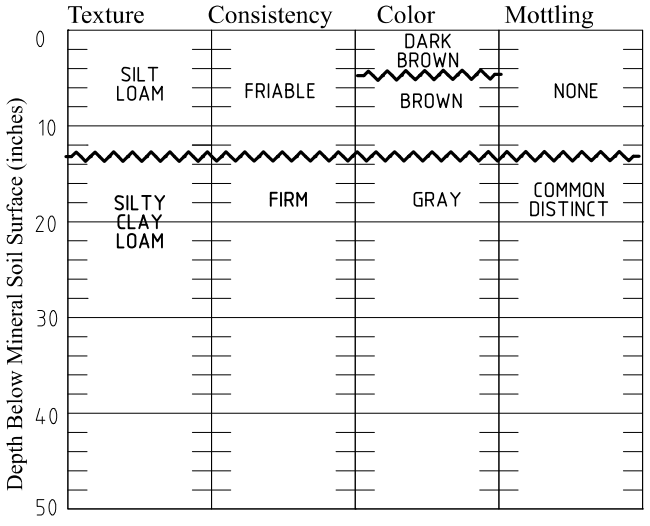
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-55 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

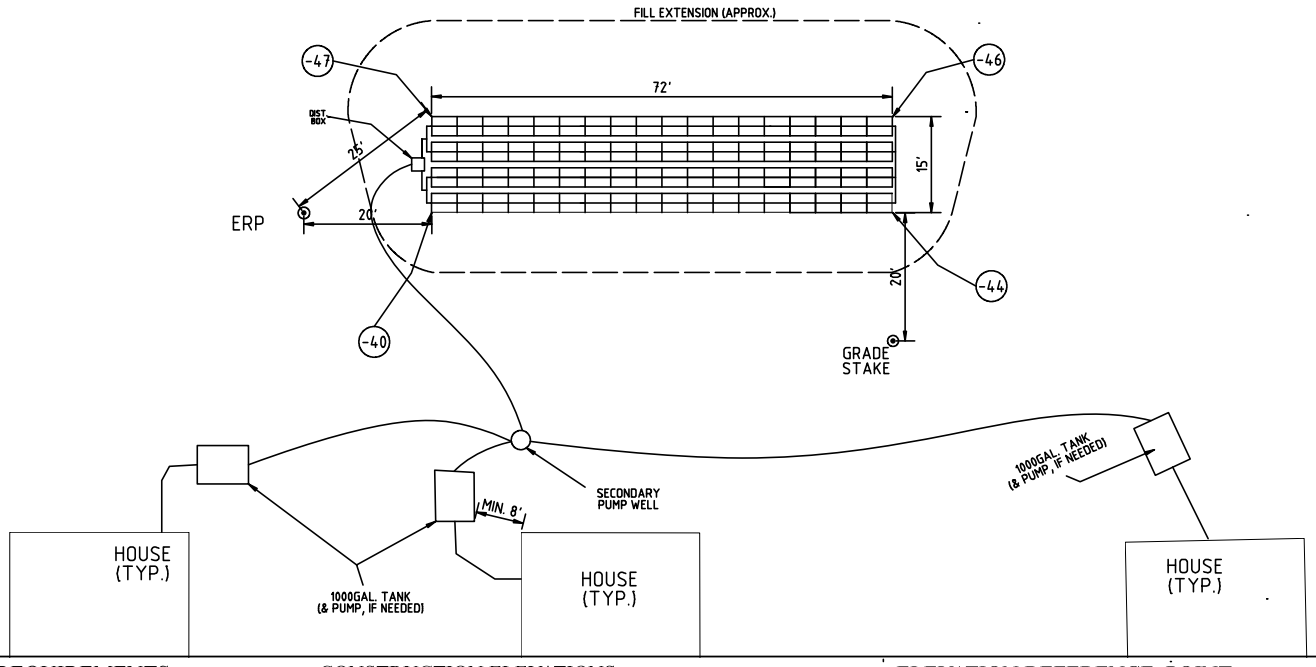
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

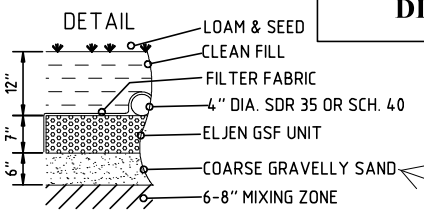
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

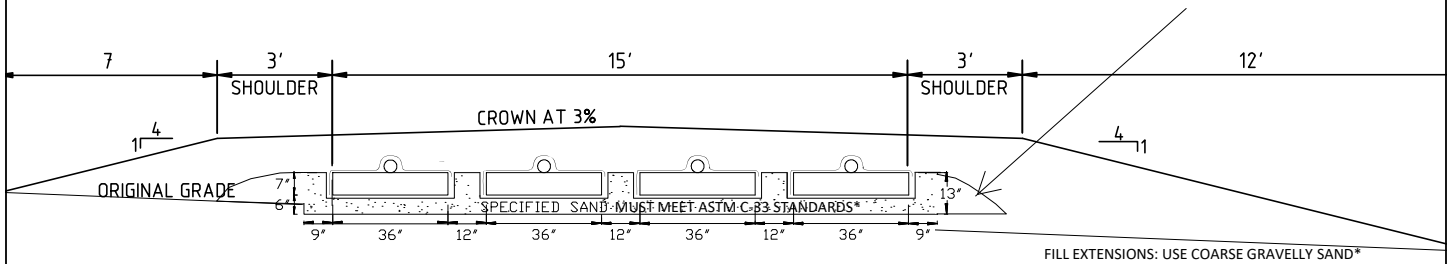
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-36	-29	-17

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 138-139

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / AIII
at Observation Hole # TP-56
Depth 15 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

SIZED LARGE PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 23.76 s
Lon. 70 d 29 m 58.08 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature ____ SE # 419 Date 3/26/23

ERIK LEMA
Site Evaluator Name Printed

207-518-8442
Telephone Number

erik@basswoodenv.com
E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

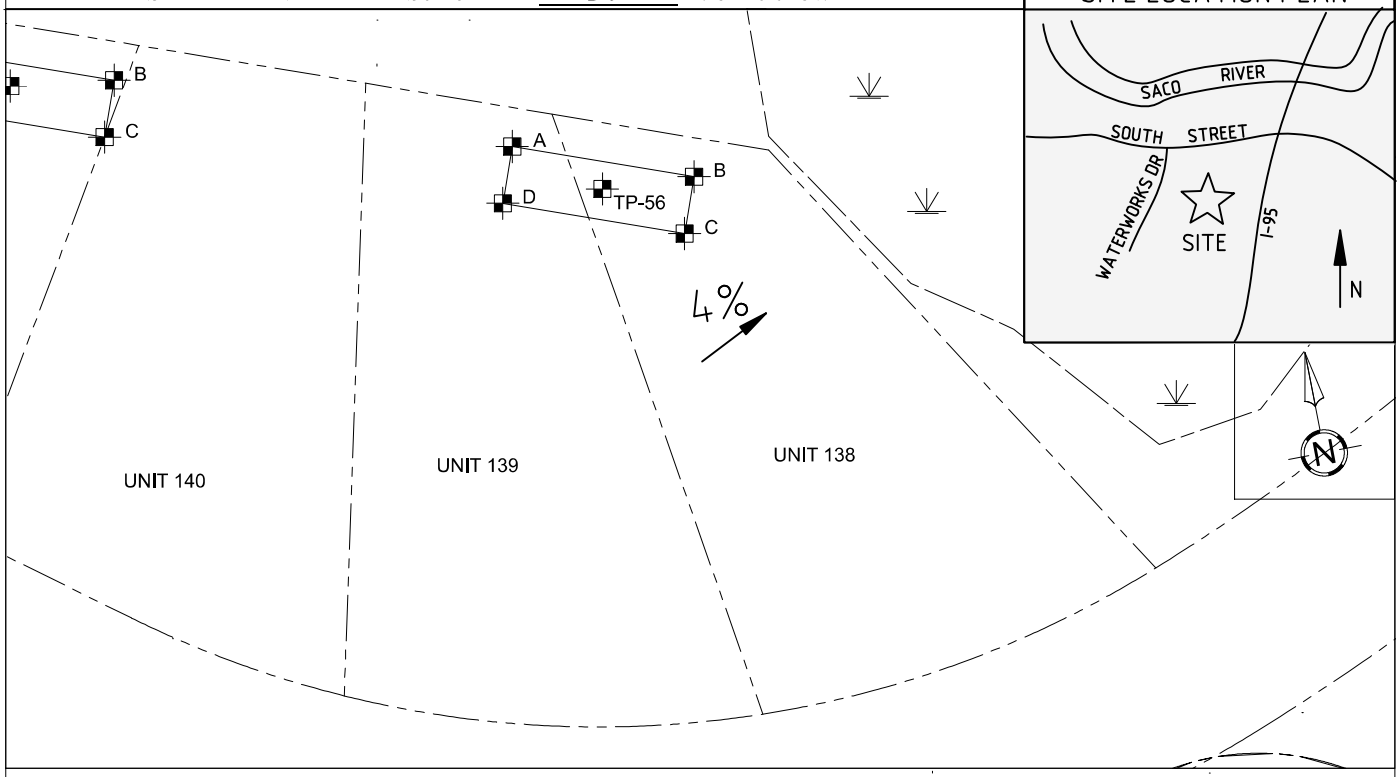
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

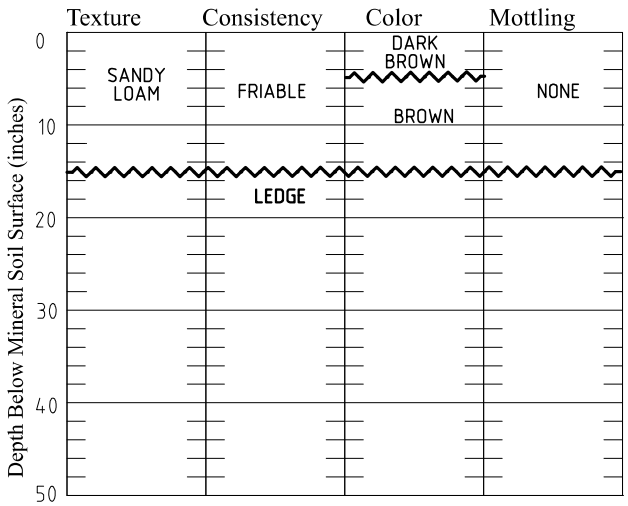


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-56 ☐ Test Pit ☒ Boring

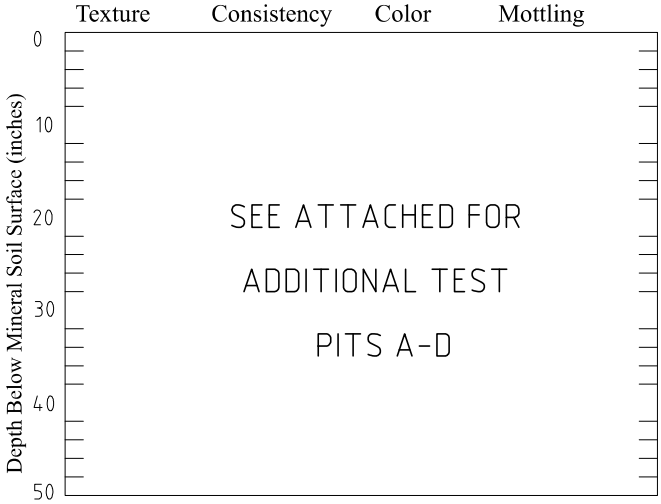
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 (Profile) AIII (Condition)	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

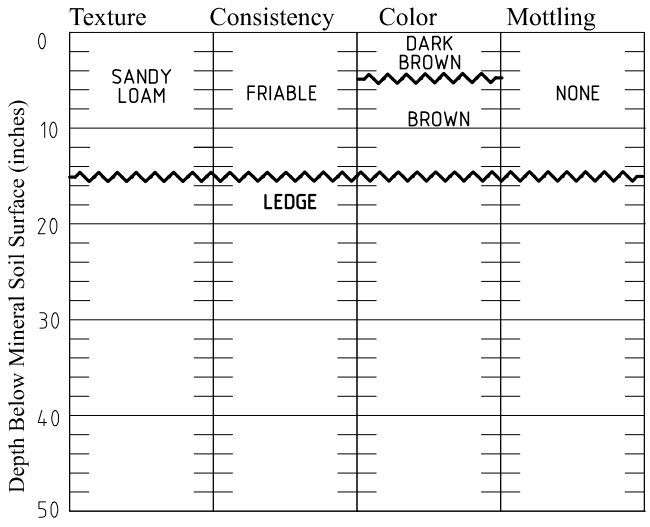
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-56 A ☐ Test Pit ☒ Boring

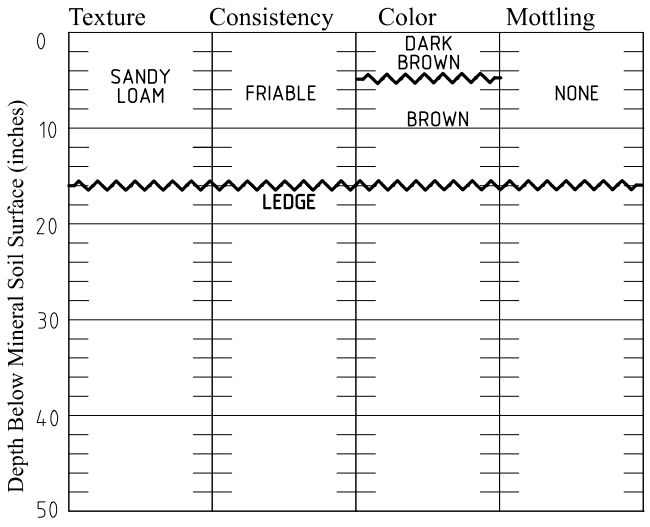
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-56 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

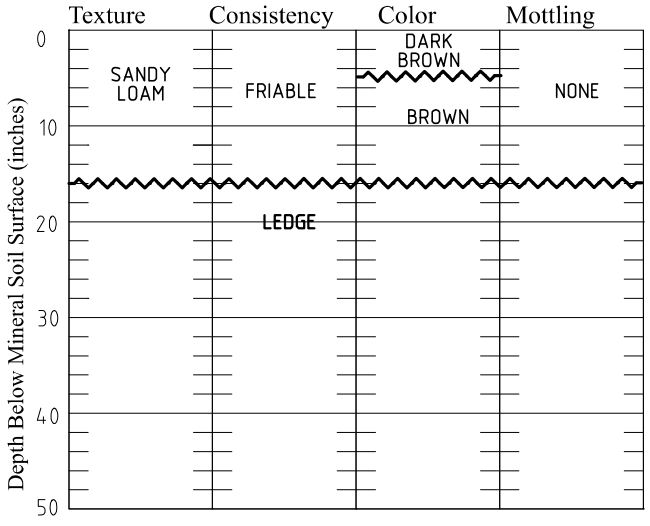


Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-56 C ☐ Test Pit ☒ Boring

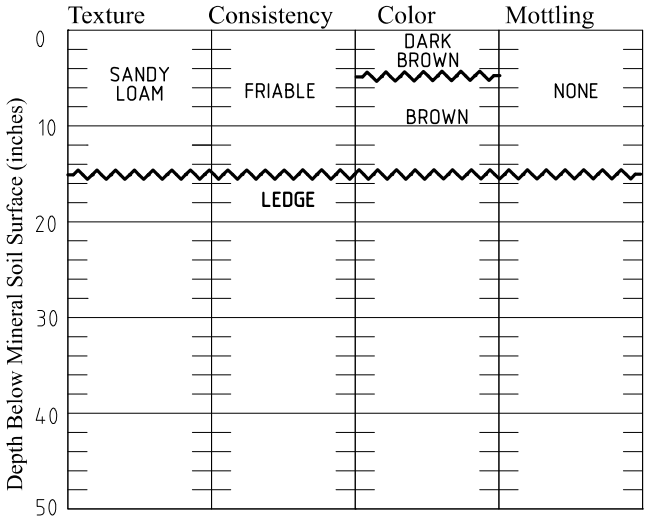
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	2 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-56 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

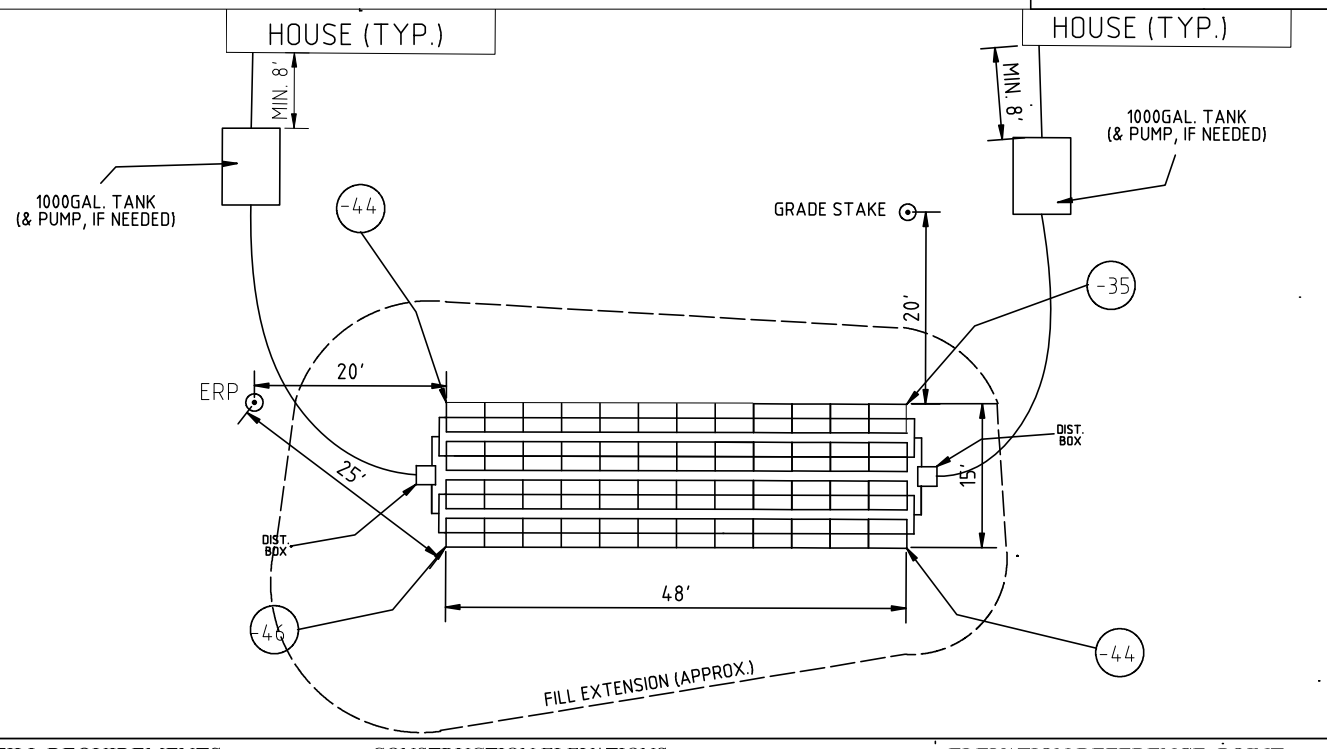
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

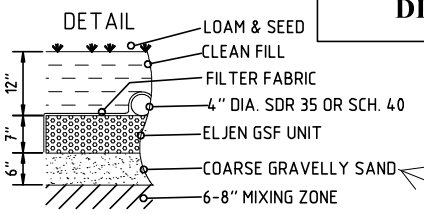
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 58" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

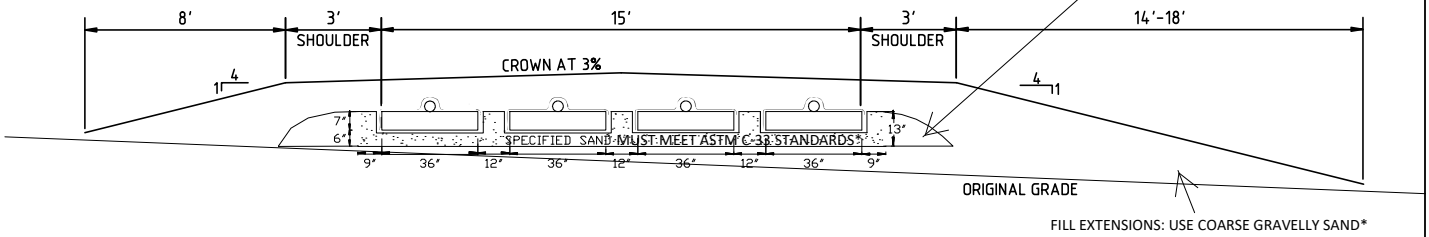
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
35	28	-19	-12	0

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 140-141

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / All
at Observation Hole # TP-54
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

SIZED LARGE PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.23 s
Lon. 70 d 29 m 59.98 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

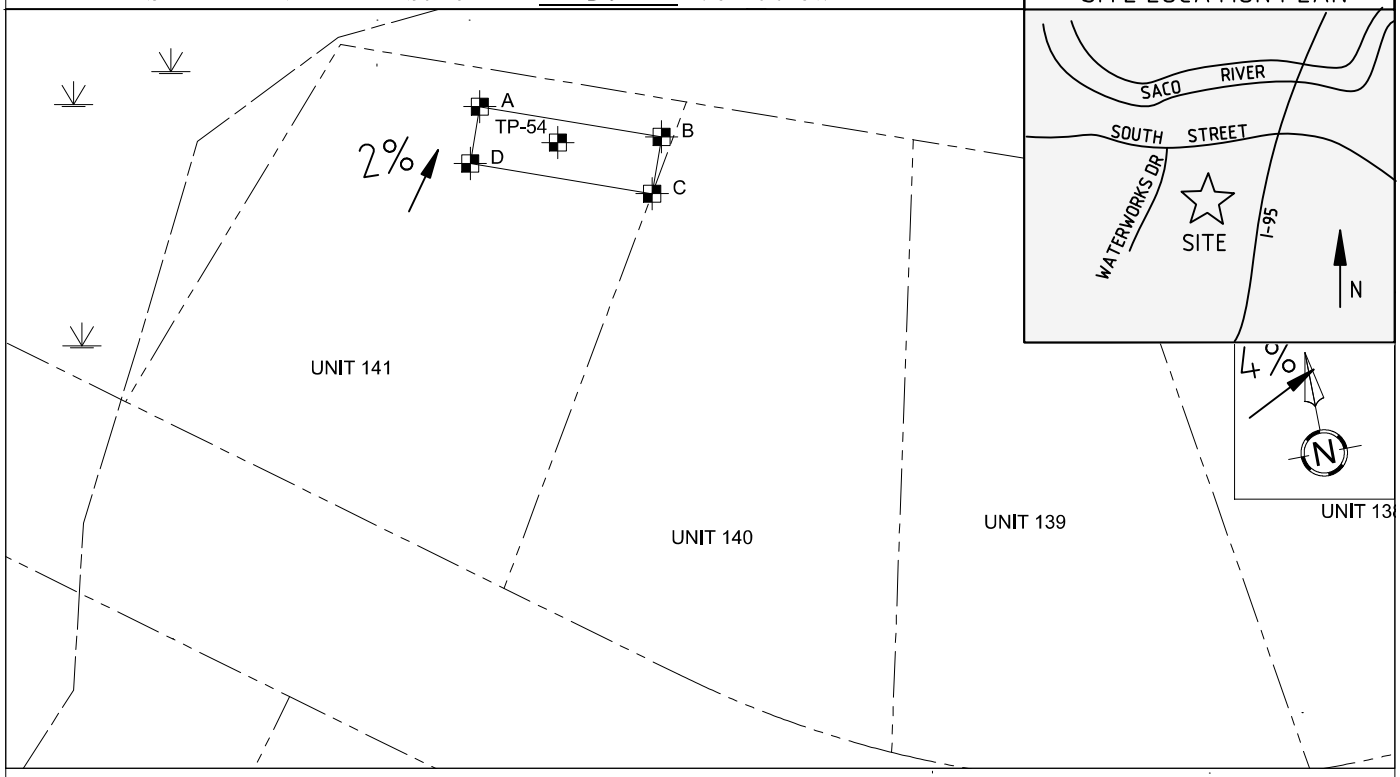
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

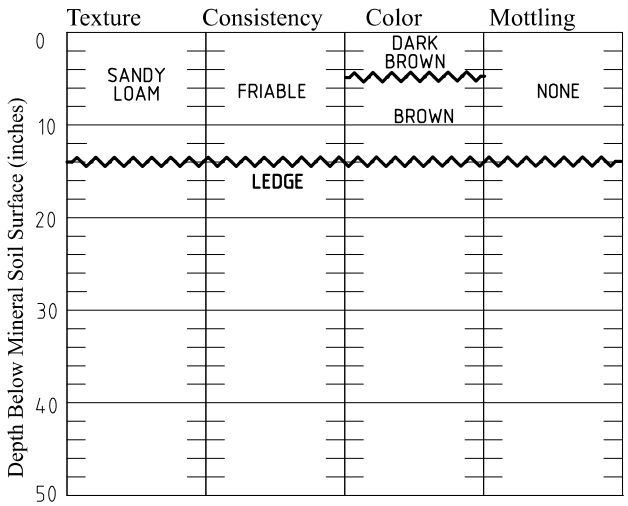


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-54 ☐ Test Pit ☒ Boring

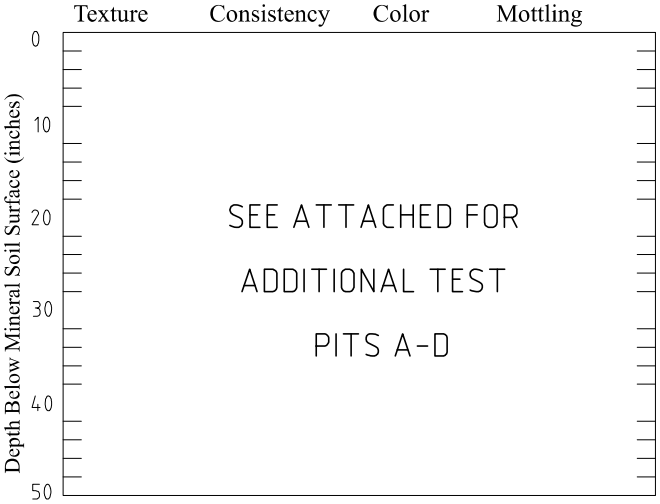
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
2	All	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

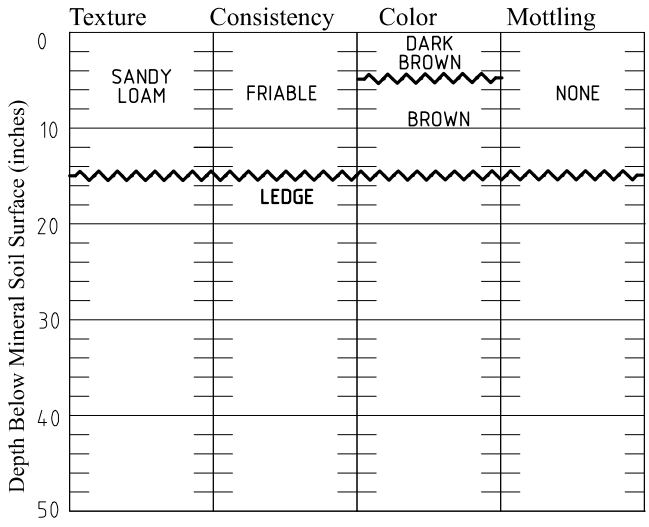
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-54 A ☐ Test Pit ☒ Boring

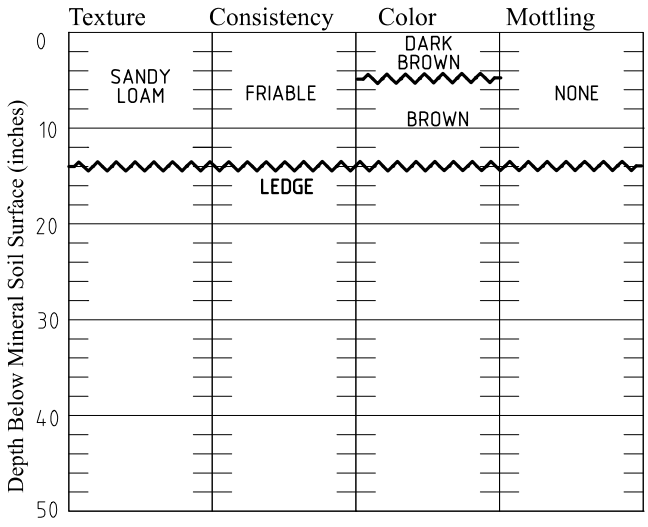
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	3 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-54 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

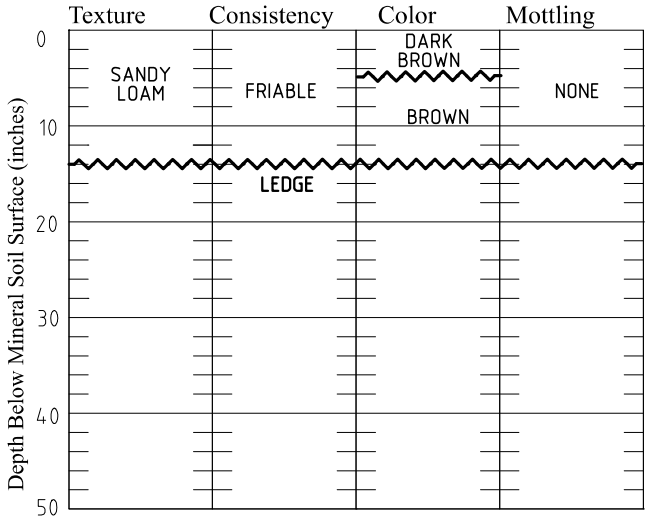


Soil Classification	Slope	Limiting Factor	
2 Profile / AII Condition	3 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-54 C ☐ Test Pit ☒ Boring

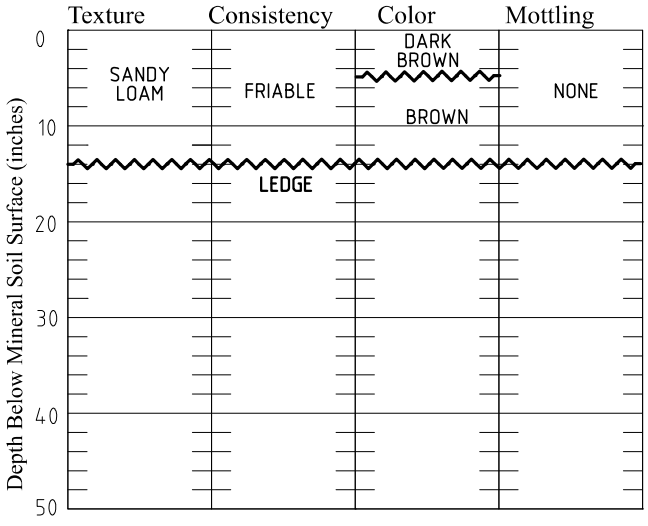
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AII Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-54 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AII Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/24/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

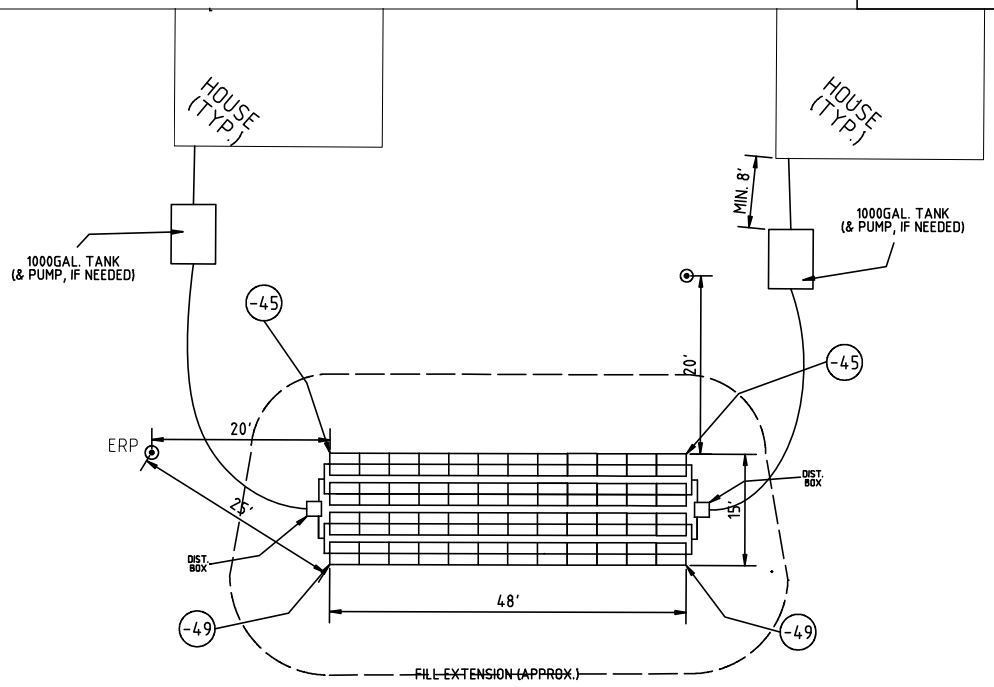
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

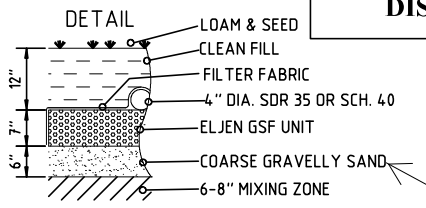
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



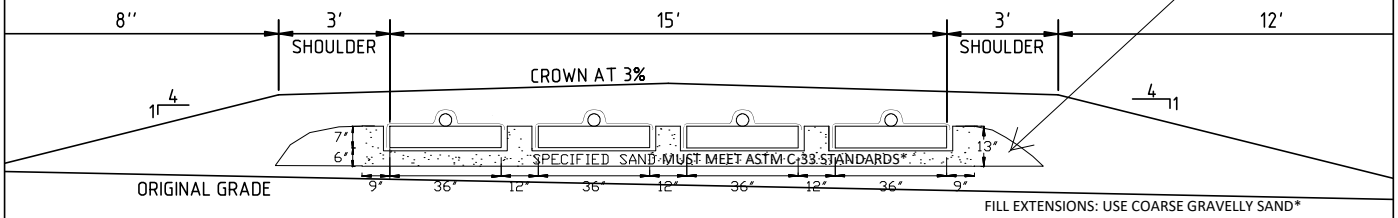
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
33	29	-35	-28	-16

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

Page 3 of 3
HHE-200 Rev. 8/01

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 142-144

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-68
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 26.31 s
Lon. 70 d 29 m 56.94 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

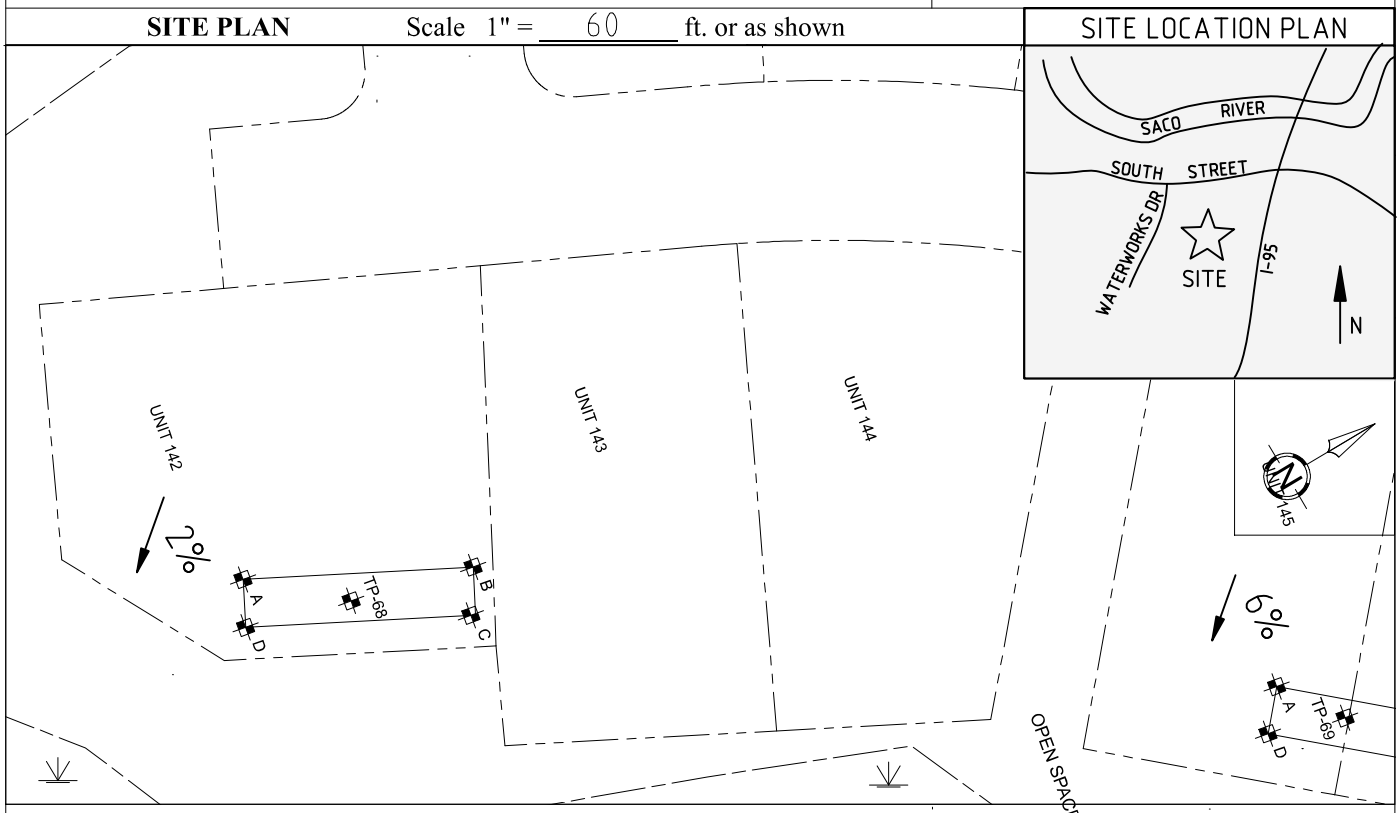
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-68 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK BROWN	NONE
10			BROWN	
20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
8	D	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			
10				
20				
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

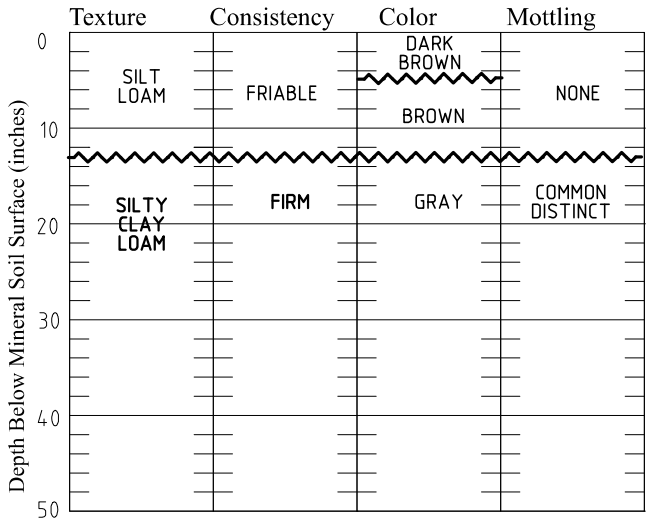
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-68 A ☐ Test Pit ☒ Boring

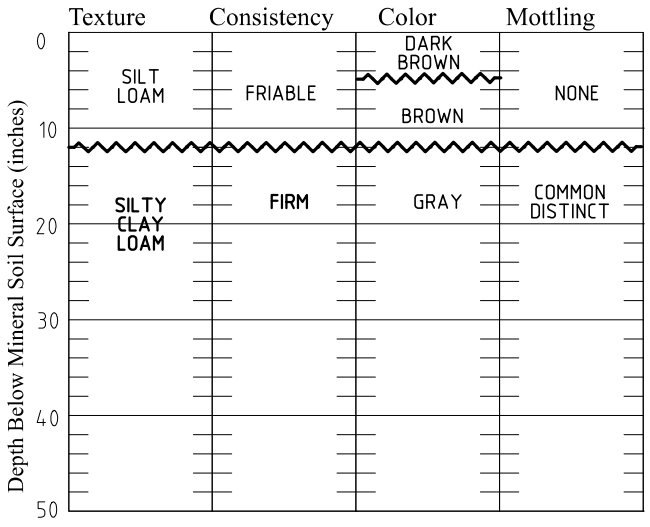
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-68 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

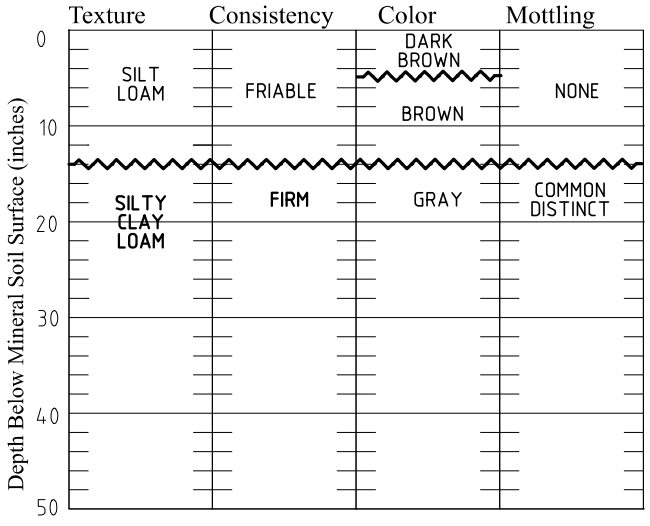


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-68 C ☐ Test Pit ☒ Boring

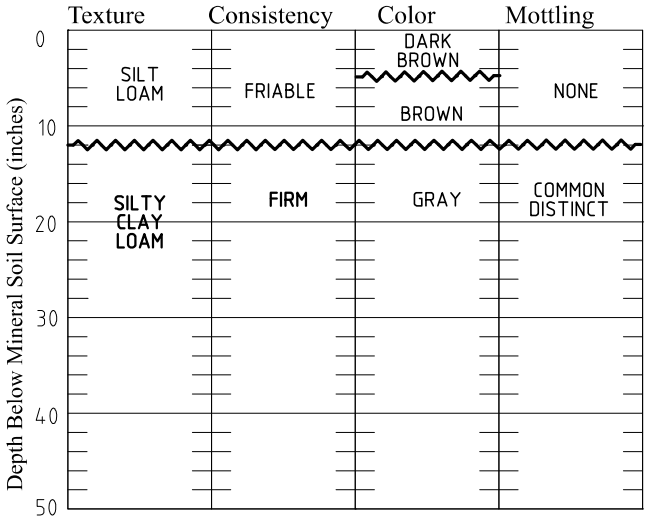
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-68 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

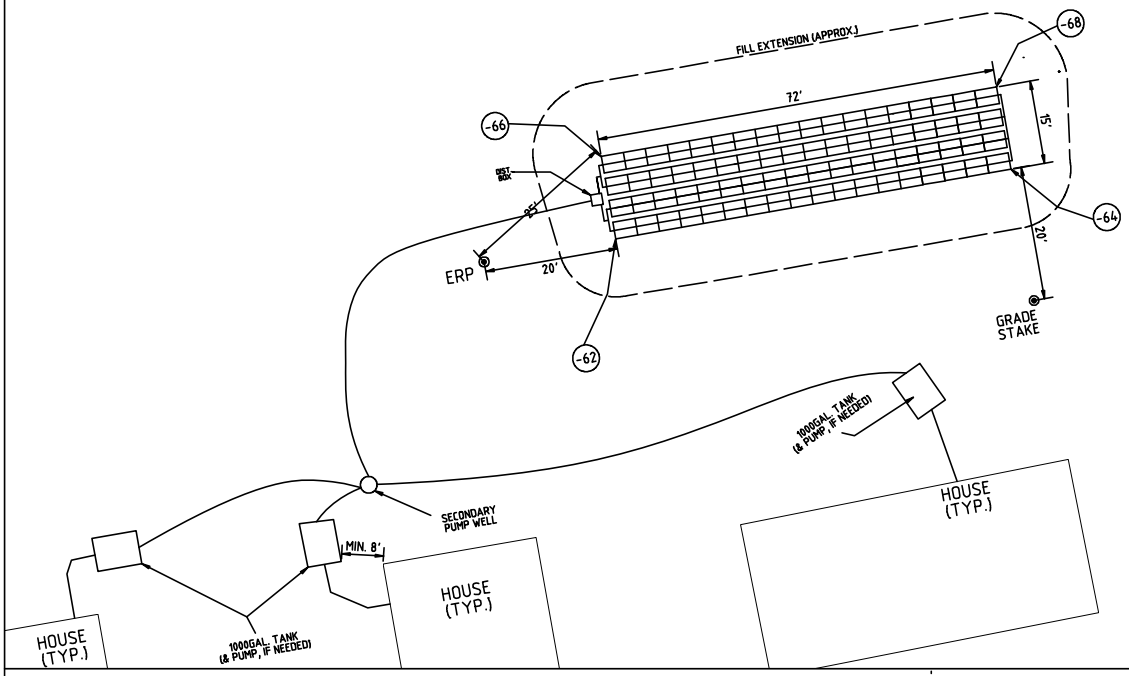
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 40 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

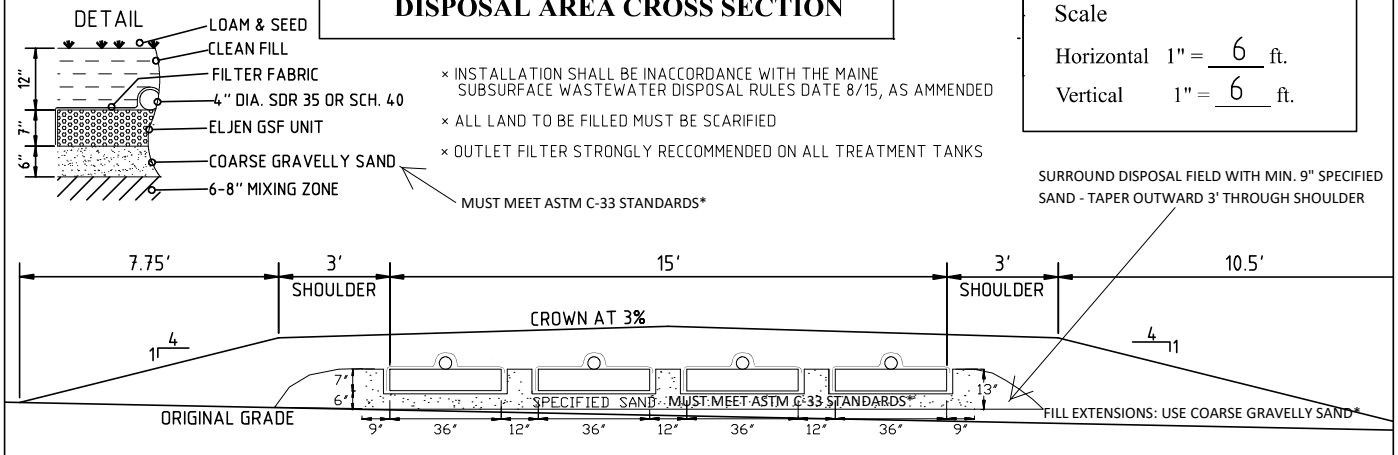
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
29	25	-56	-49	-37

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 145-146

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-69
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 28.79 s
Lon. 70 d 29 m 54.39 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature _____ SE # 419 Date 3/26/23

ERIK LEMA — Site Evaluator Name Printed
207-518-8442 — Telephone Number
erik@basswoodenv.com — E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

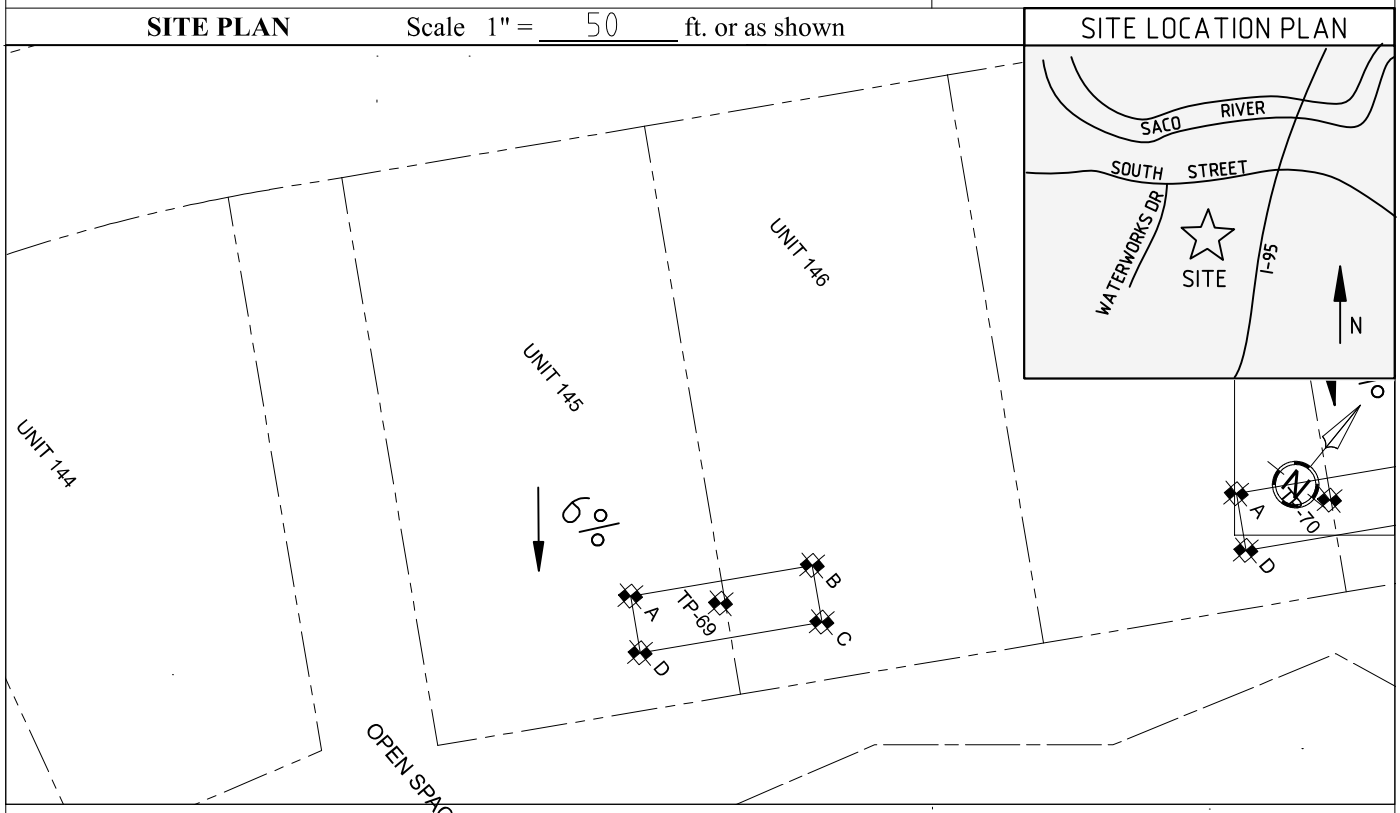
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

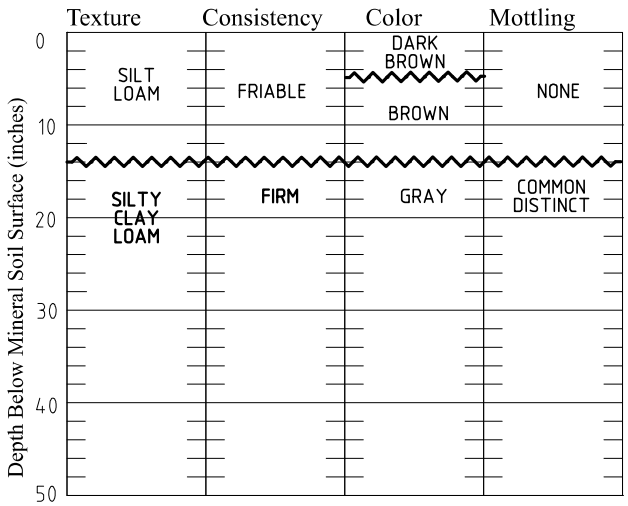
SITE PLAN Scale 1" = 50 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-69 ☐ Test Pit ☒ Boring

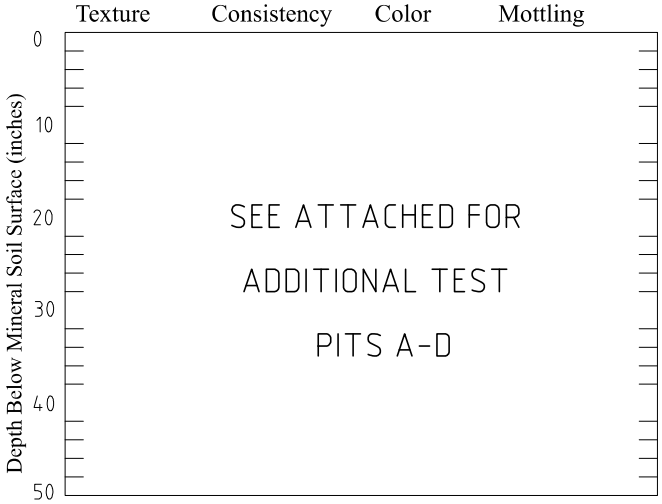
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

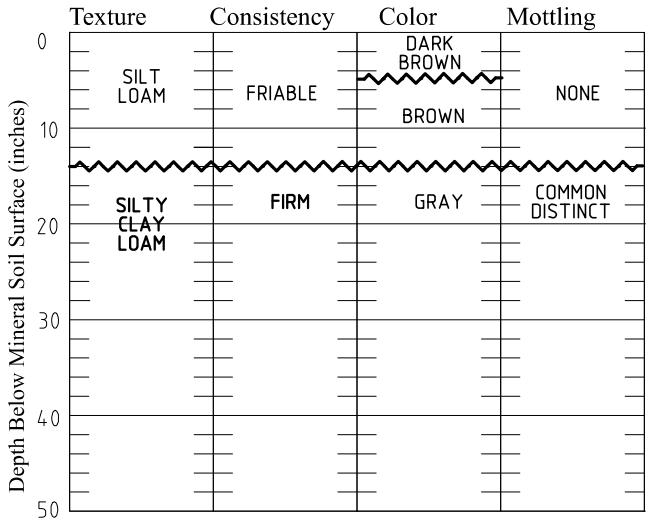
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-69 A ☐ Test Pit ☒ Boring

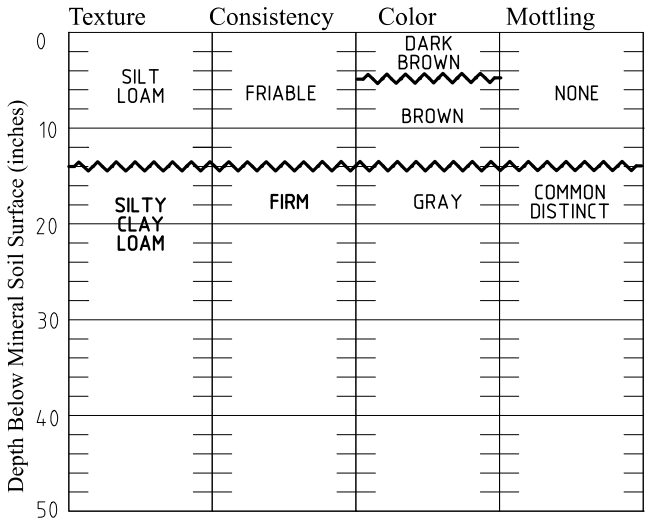
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-69 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

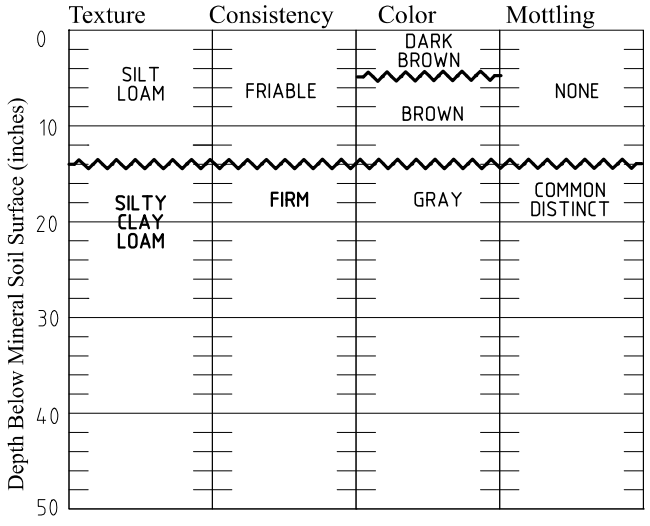


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-69 C ☐ Test Pit ☒ Boring

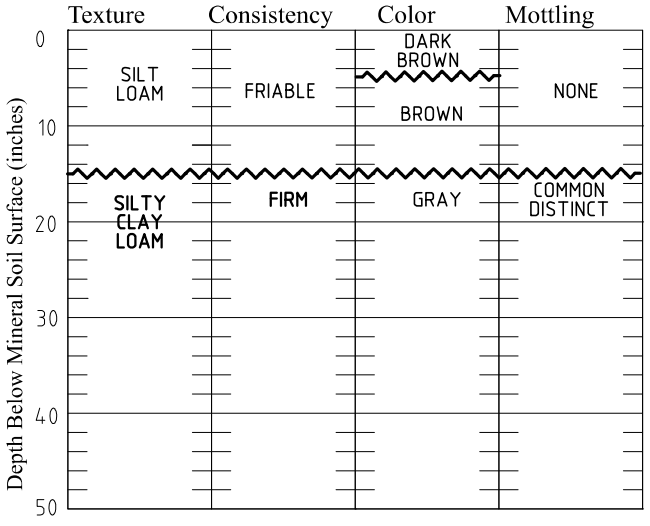
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-69 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	5 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

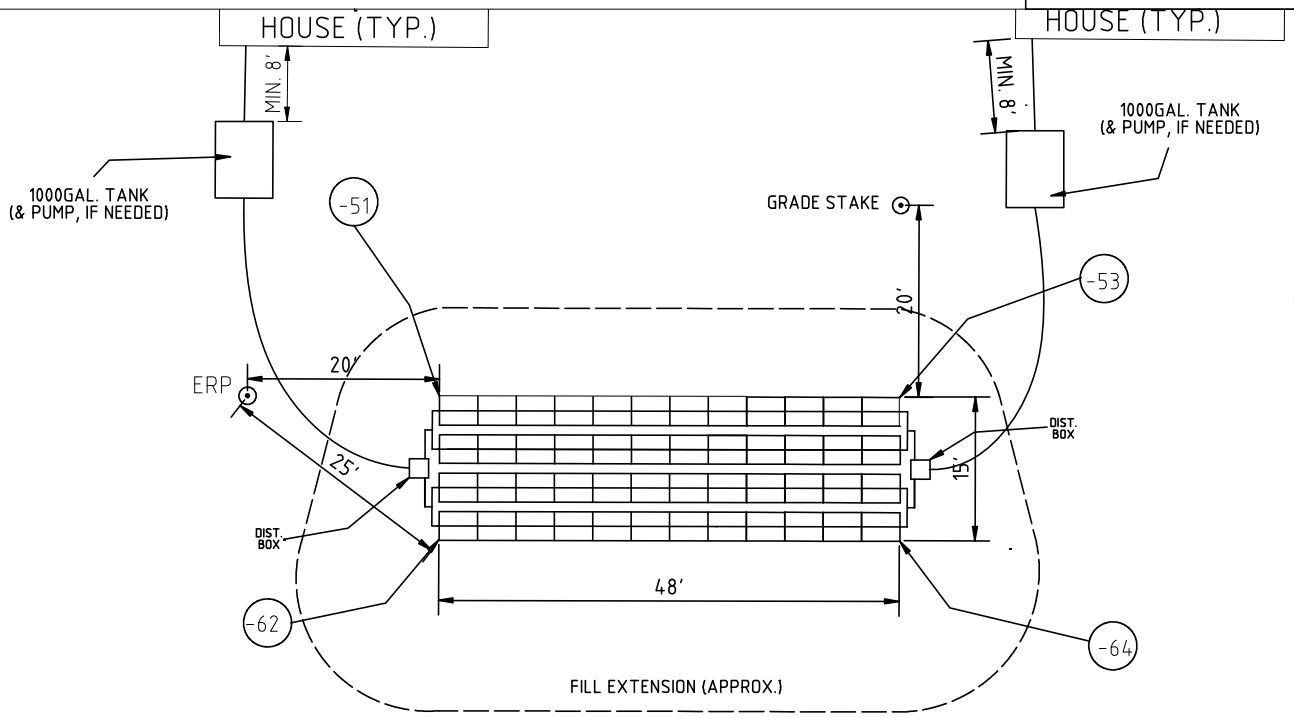
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

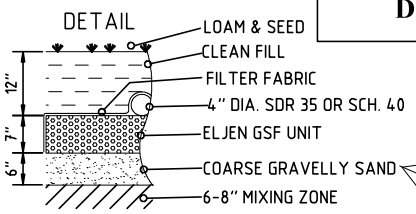
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

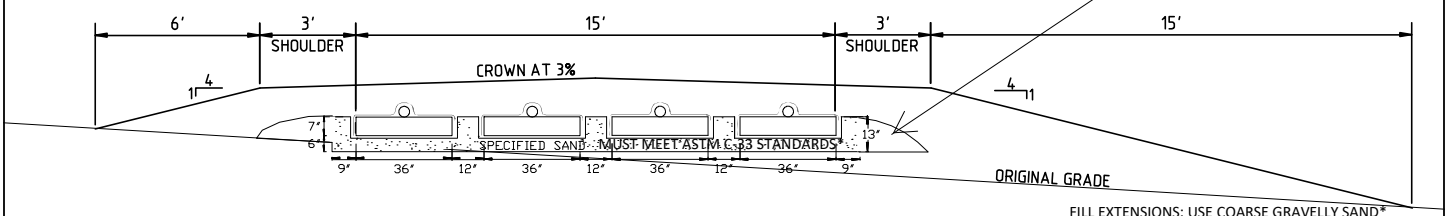
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	23	-47	-40	-28

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 147-148

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-70
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 30.01 s
Lon. 70 d 29 m 53.04 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-70 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

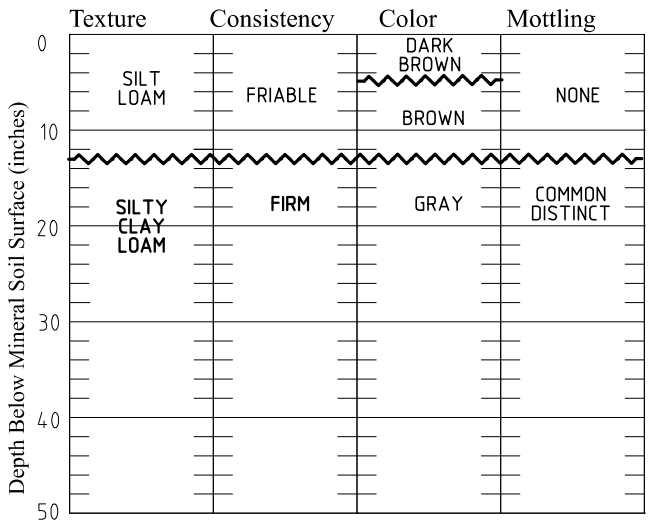
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-70 A ☐ Test Pit ☒ Boring

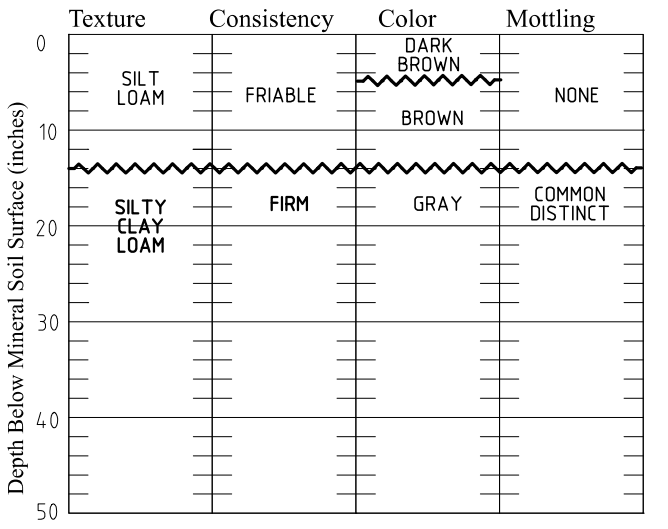
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-70 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

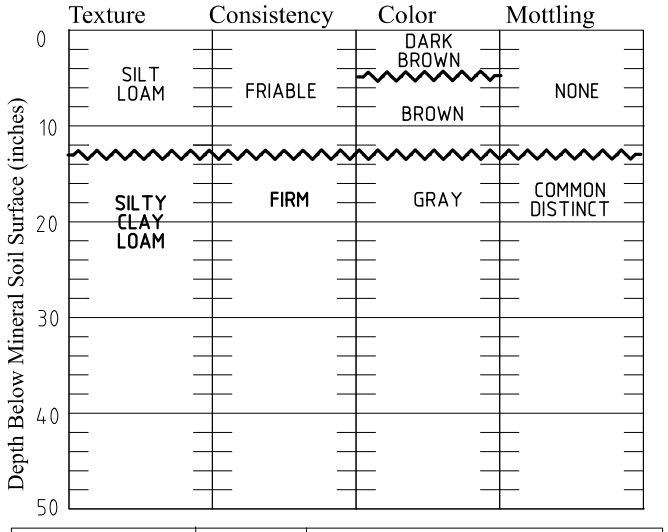


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-70 C ☐ Test Pit ☒ Boring

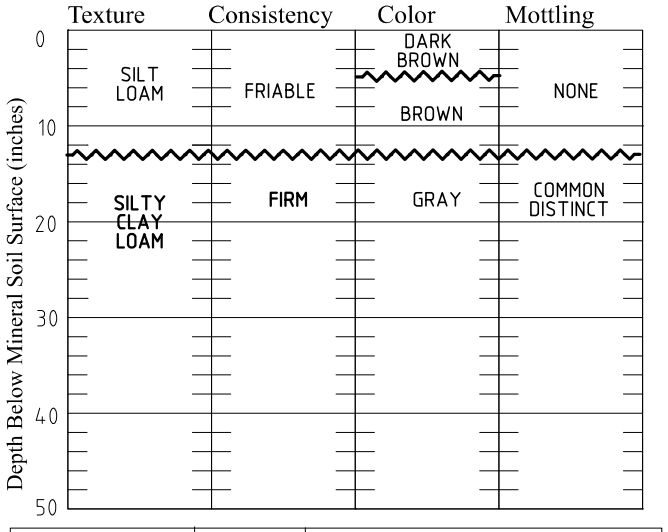
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-70 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

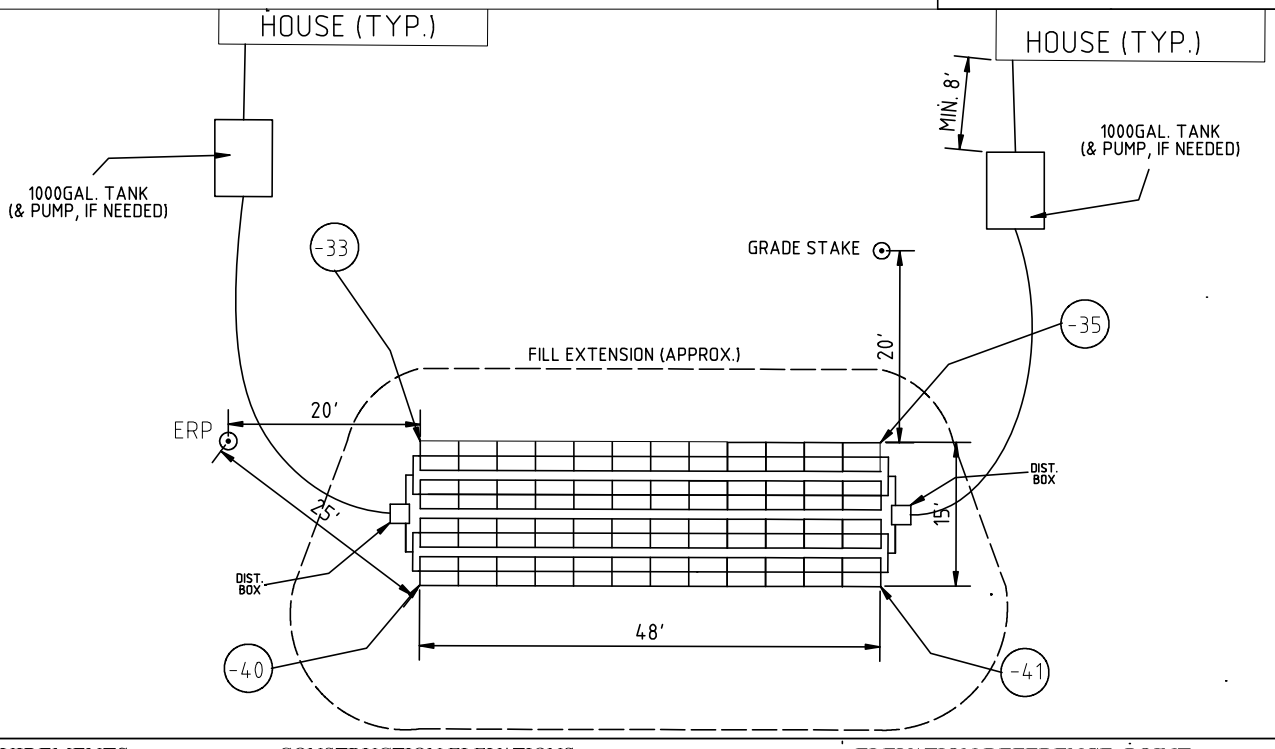
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

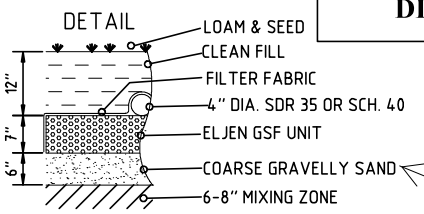
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

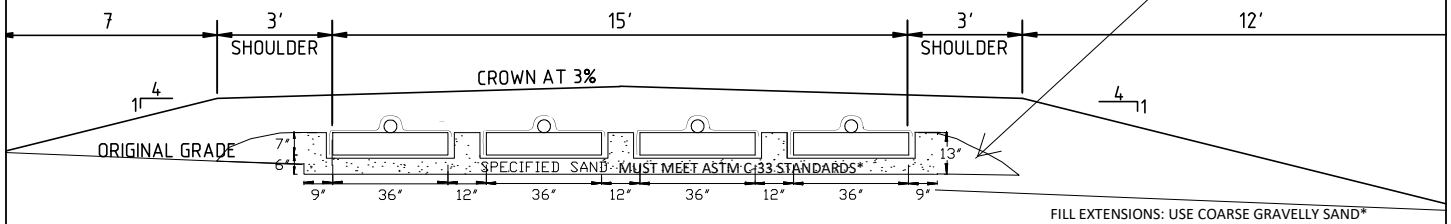
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	24	-28	-21	-9

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 149-150

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-71
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 31.19 s
Lon. 70 d 29 m 51.6 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-71 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

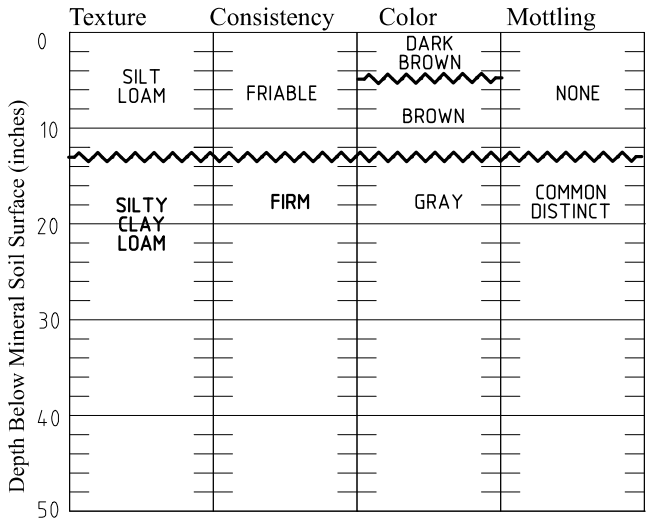
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-71 A ☐ Test Pit ☒ Boring

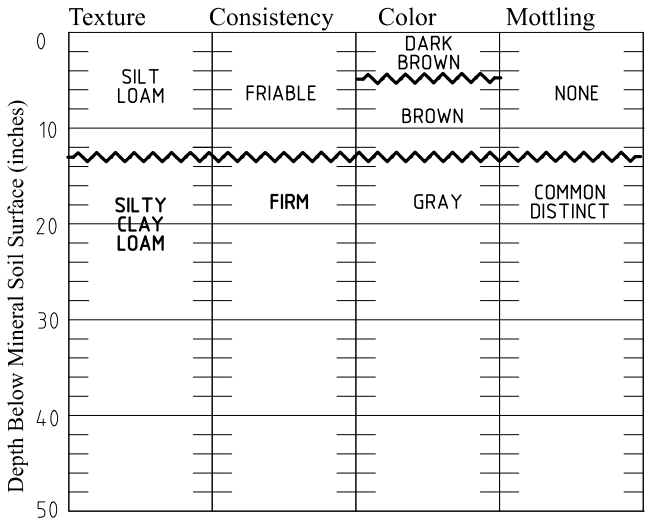
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-71 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

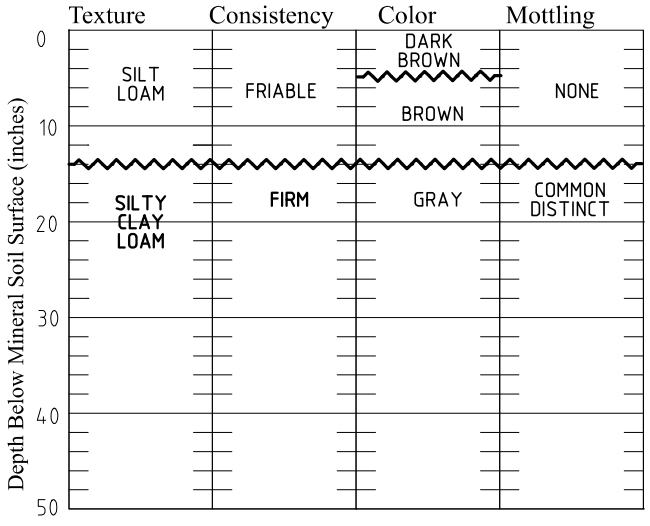


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	5 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-71 C ☐ Test Pit ☒ Boring

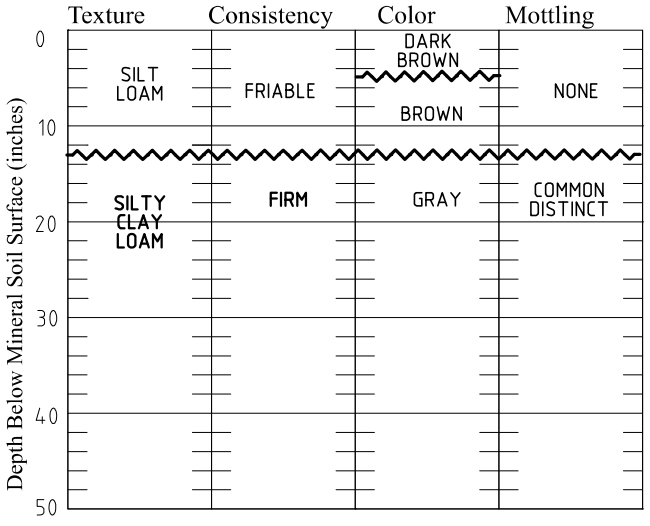
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-71 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

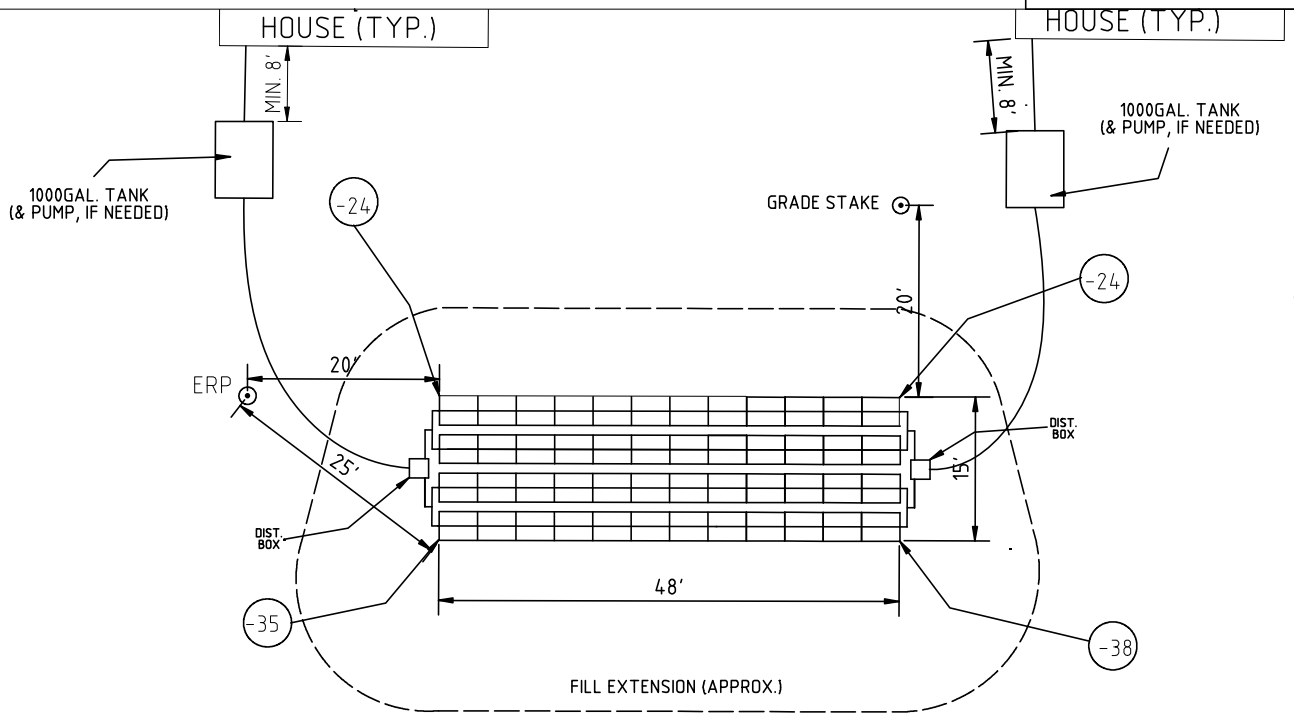
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

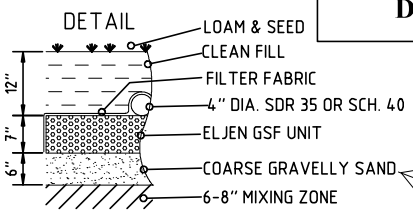
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

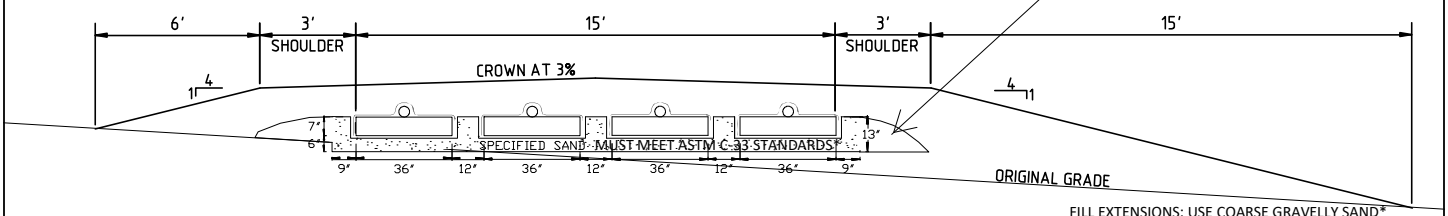
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
35	24	-19	-12	0

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 151-152

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-57
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.66 s
Lon. 70 d 29 m 55.05 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature ____ SE # 419 Date 3/26/23

ERIK LEMA (Site Evaluator Name Printed) 207-518-8442 (Telephone Number) erik@basswoodenv.com (E-mail Address)

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

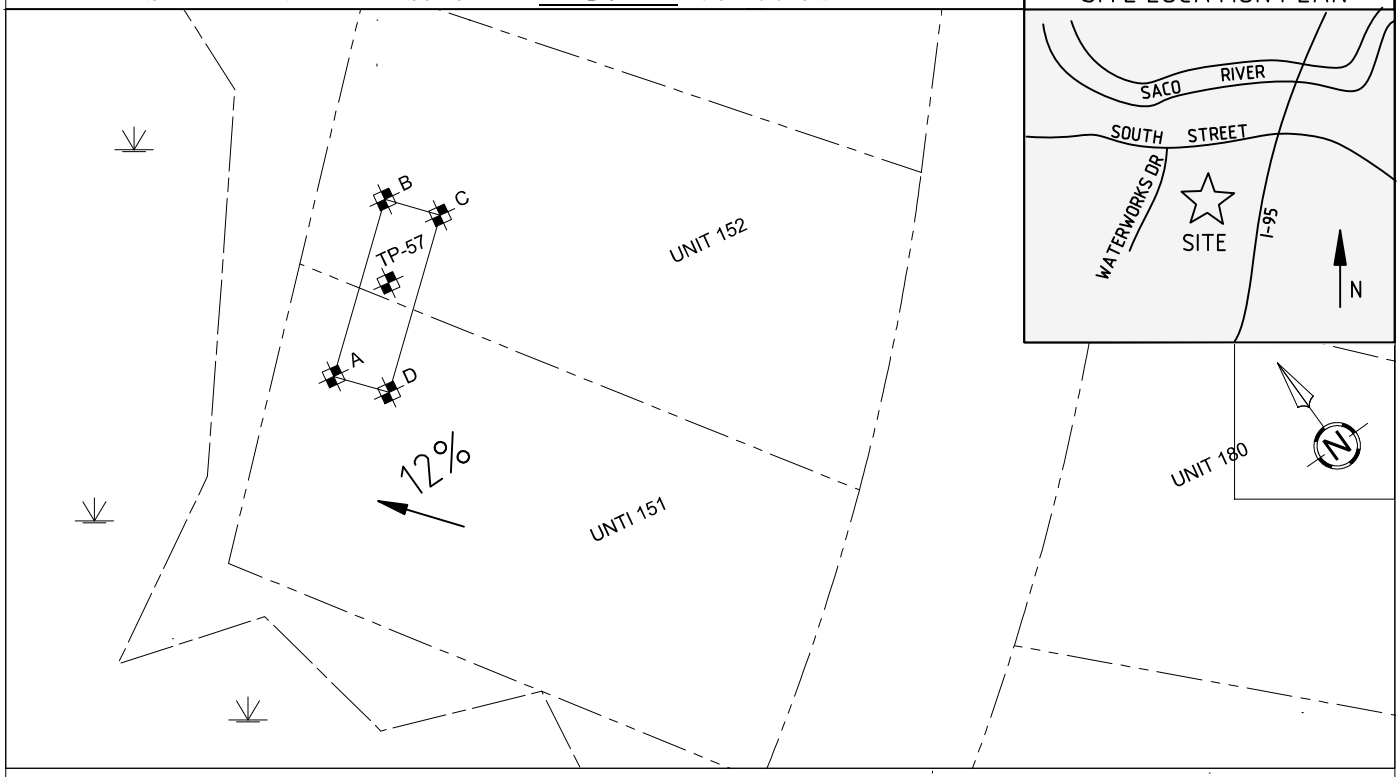
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

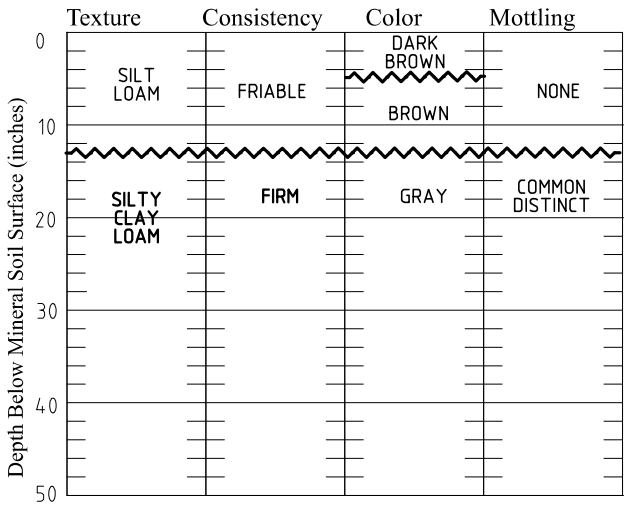


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-57 ☐ Test Pit ☒ Boring

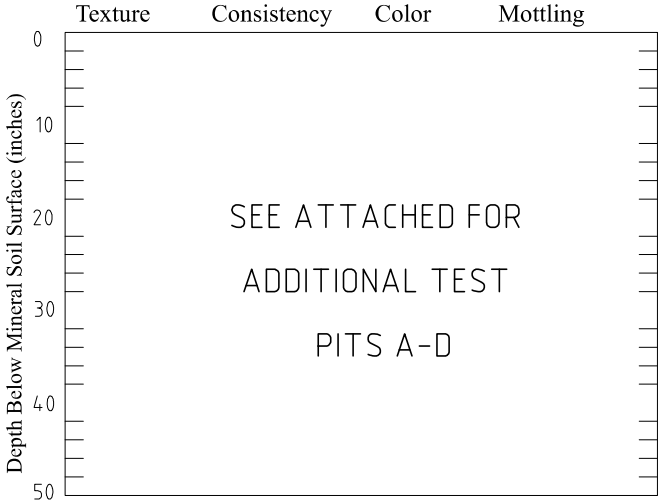
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

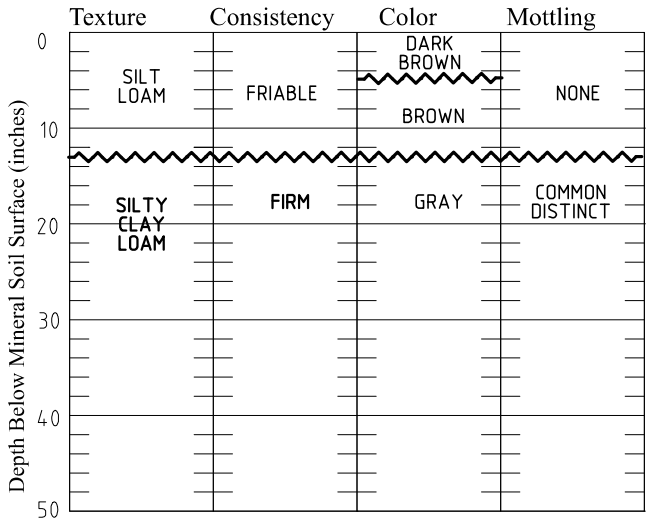
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-57 A ☐ Test Pit ☒ Boring

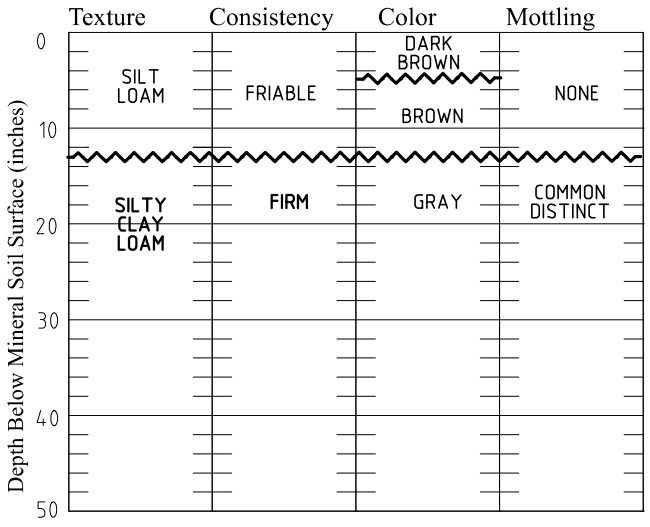
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-57 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

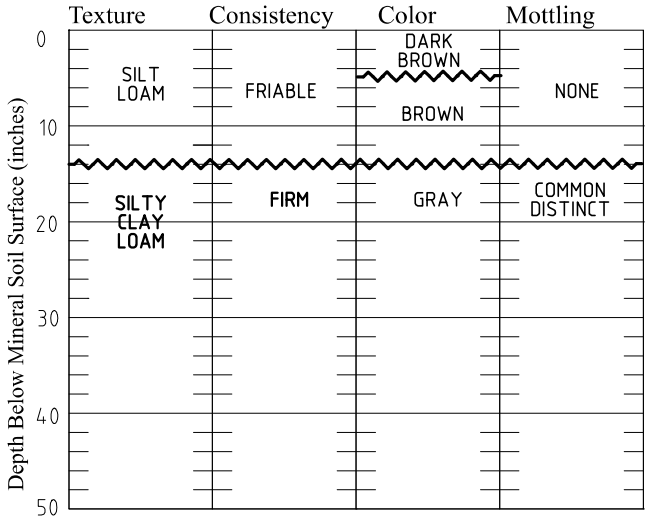


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-57 C ☐ Test Pit ☒ Boring

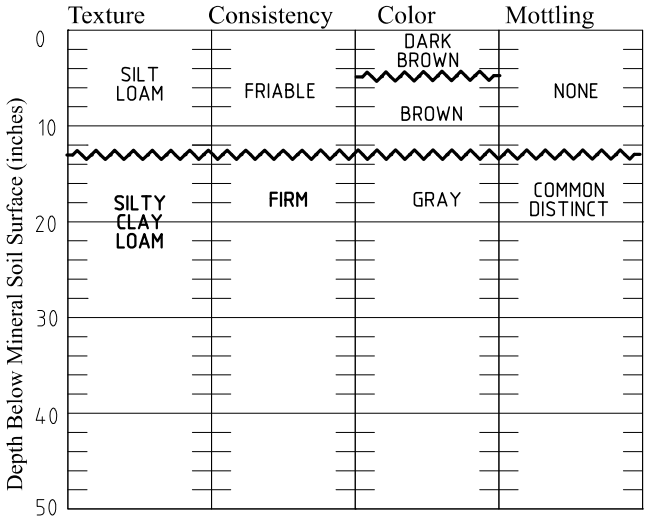
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-57 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	12 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

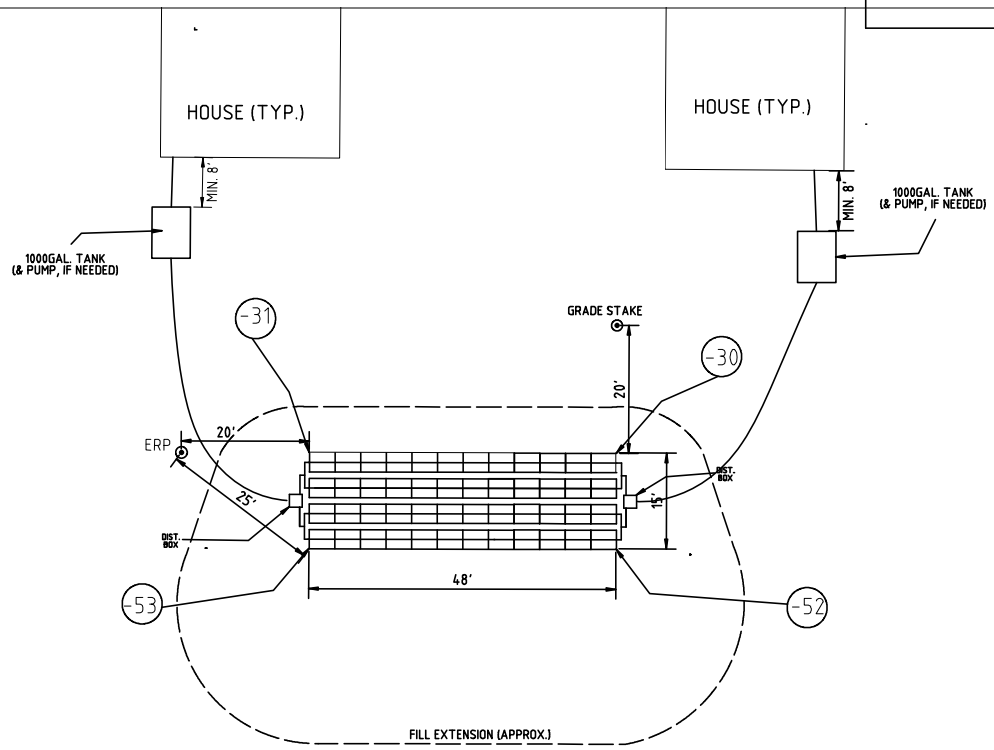
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

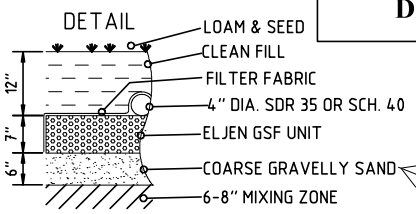
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 48" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

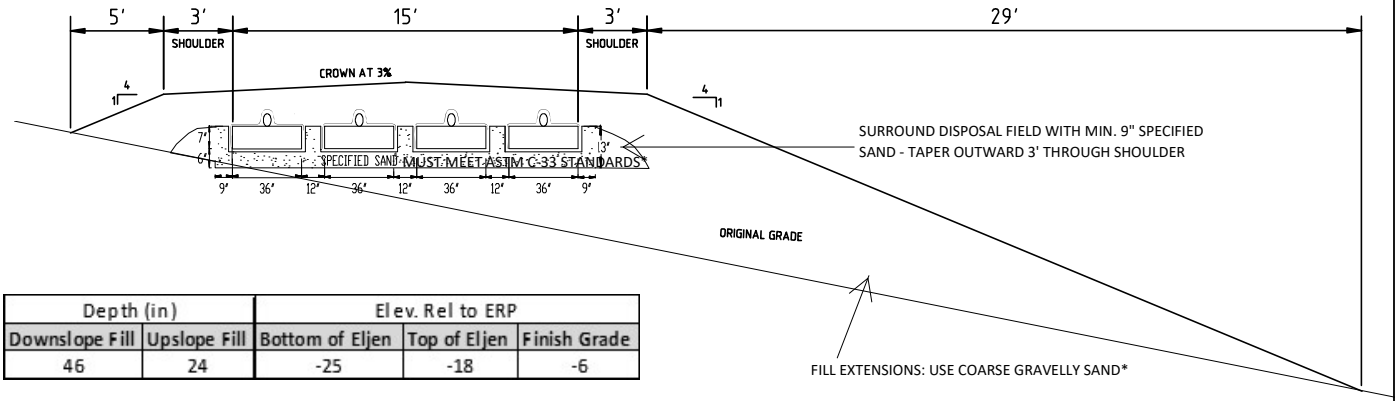
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
46	24	-25	-18	-6

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 153-154

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-78
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 25.83 s
Lon. 70 d 29 m 53.57 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

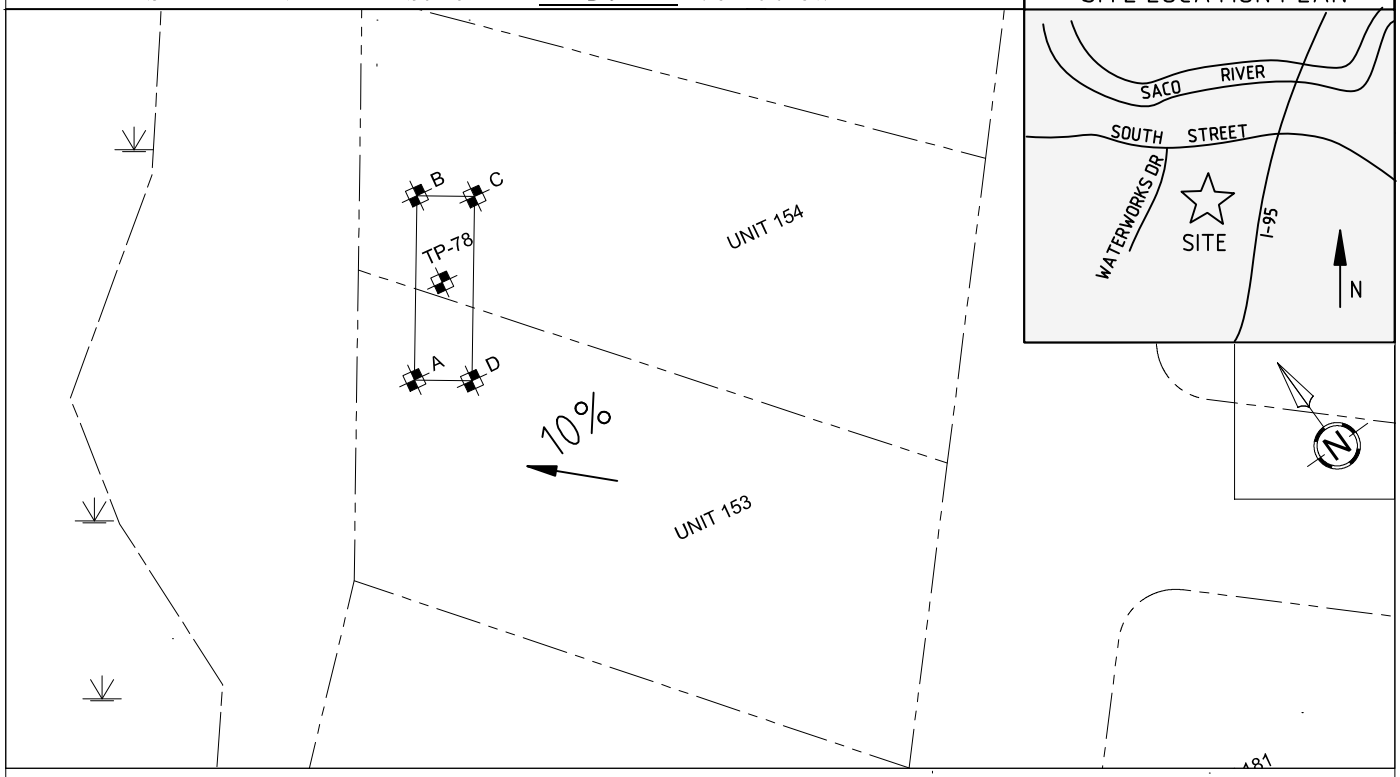
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

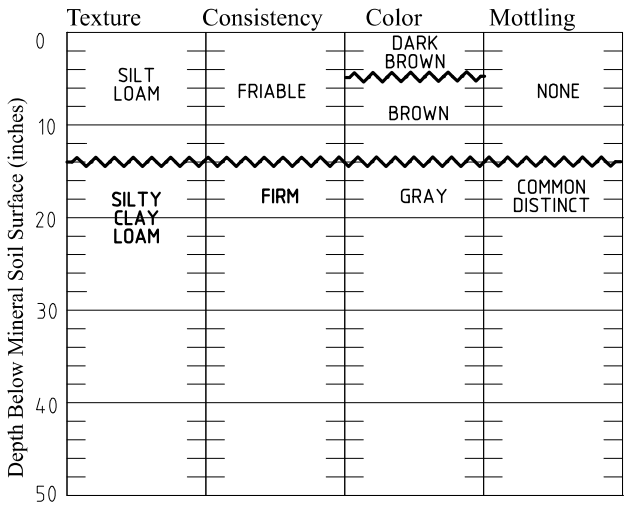


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-78 ☐ Test Pit ☒ Boring

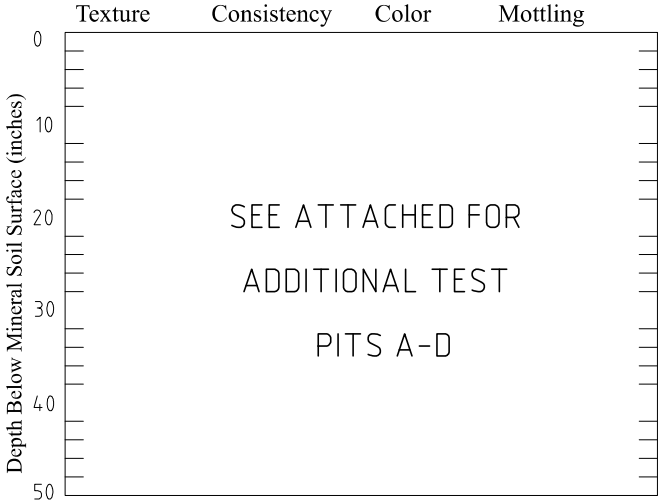
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

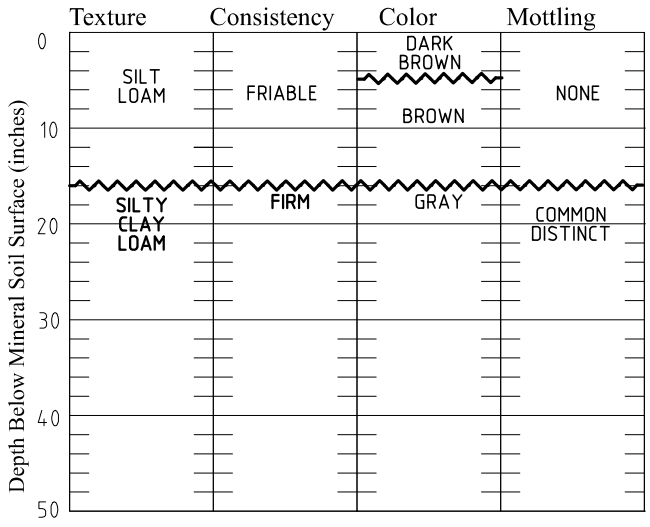
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-78 A ☐ Test Pit ☒ Boring

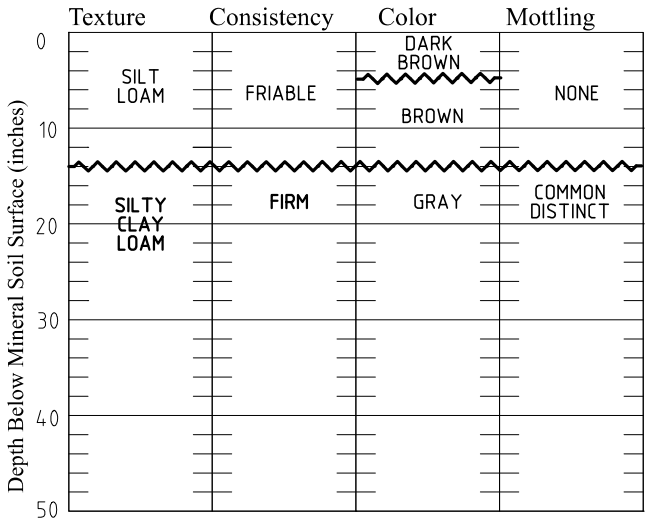
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	10 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-78 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

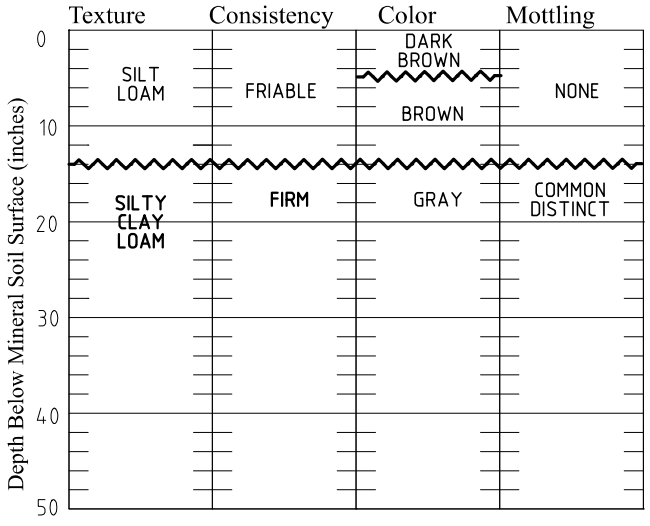


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-78 C ☐ Test Pit ☒ Boring

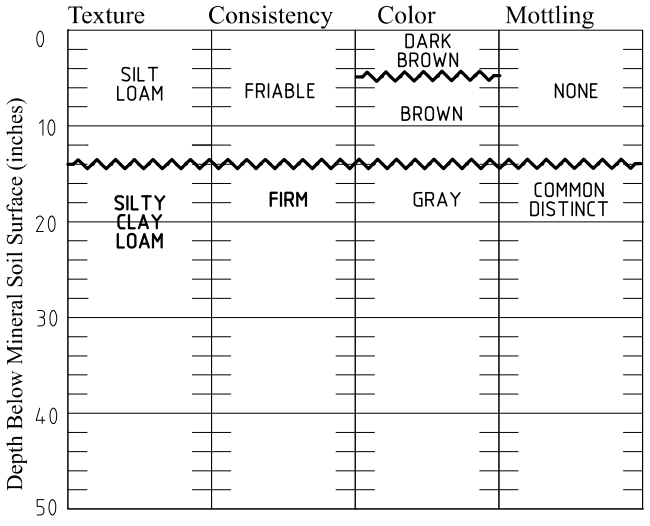
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-78 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	8 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

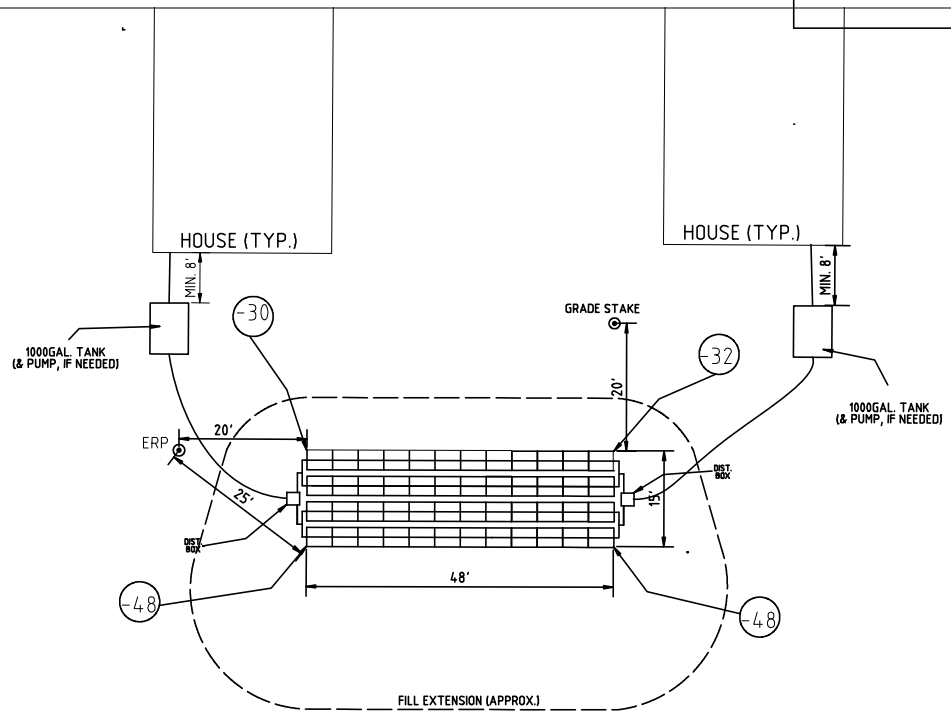
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

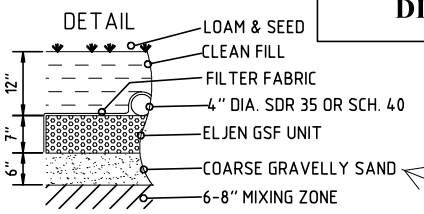
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 52" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

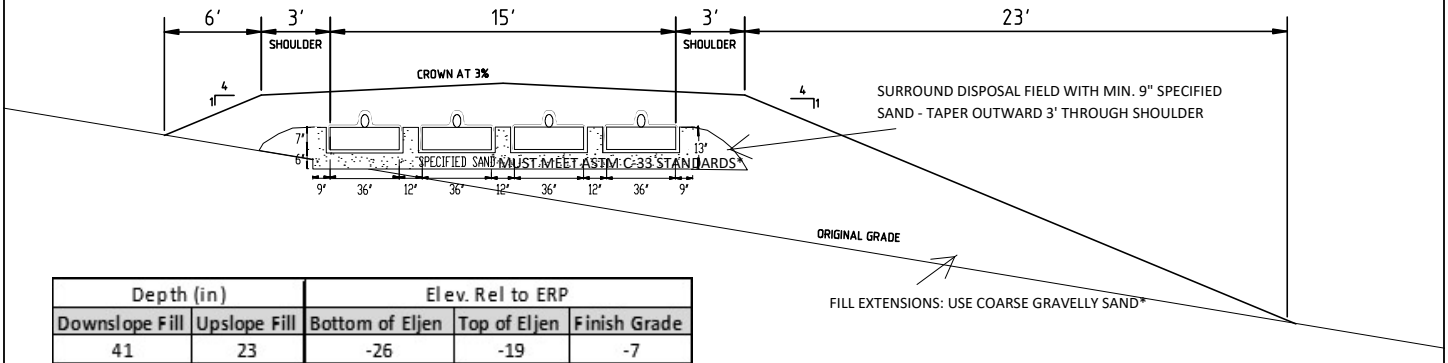
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
41	23	-26	-19	-7

Site Evaluator Signature

419 — SE #

3/18/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 155-156

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE 8 CONDITION D
at Observation Hole # TP-79
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 26.95 s
Lon. 70 d 29 m 52.29 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | SE # 419 | Date 3/26/23

ERIK LEMA | 207-518-8442 | erik@basswoodenv.com

Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

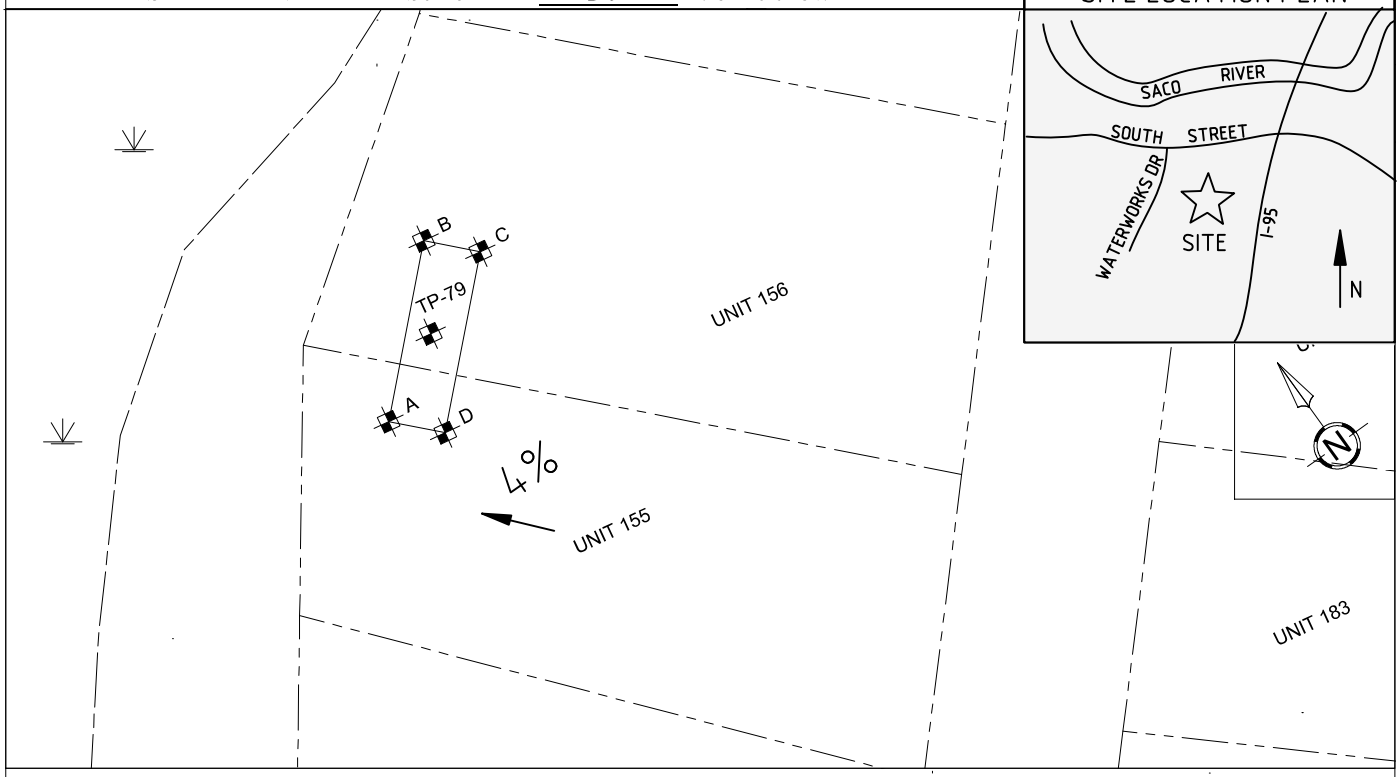
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

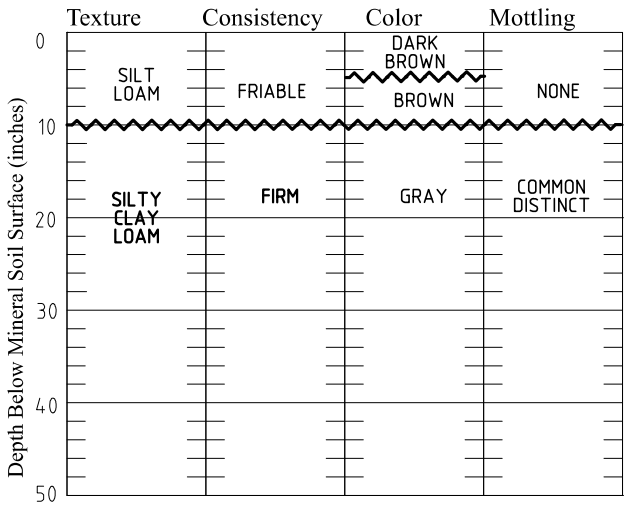


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-79 ☐ Test Pit ☒ Boring

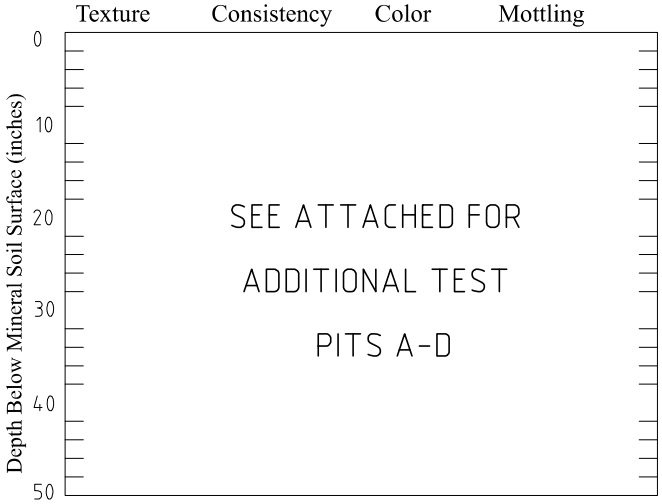
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

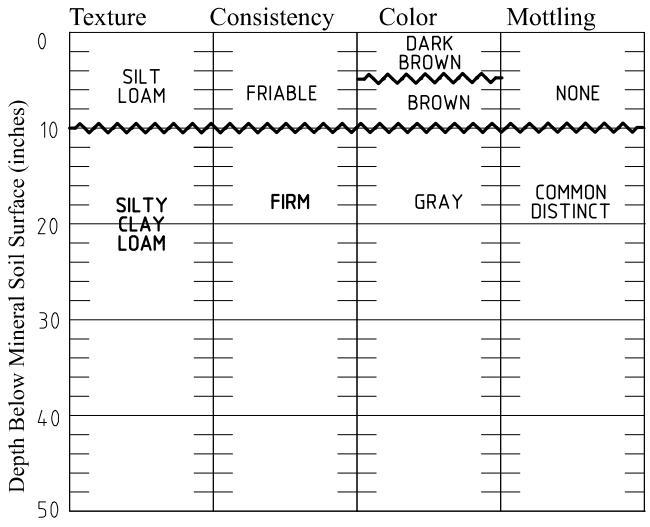
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-79 A ☐ Test Pit ☒ Boring

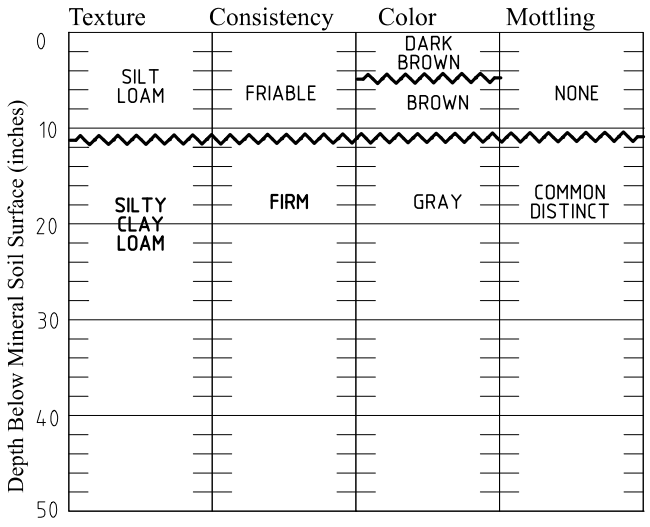
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-79 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

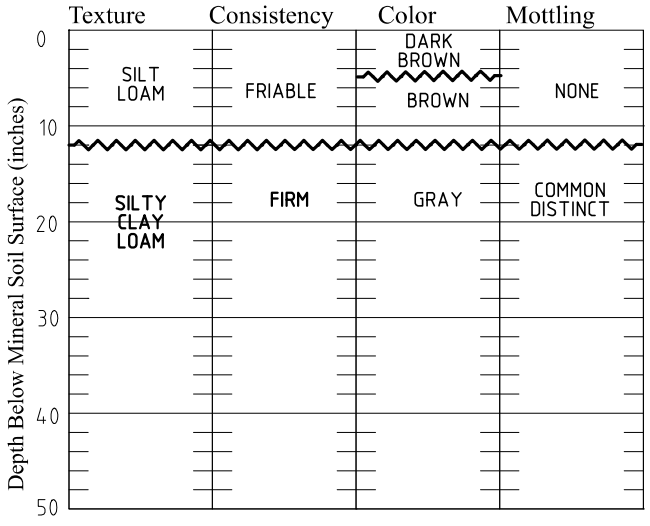


Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	11 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-79 C ☐ Test Pit ☒ Boring

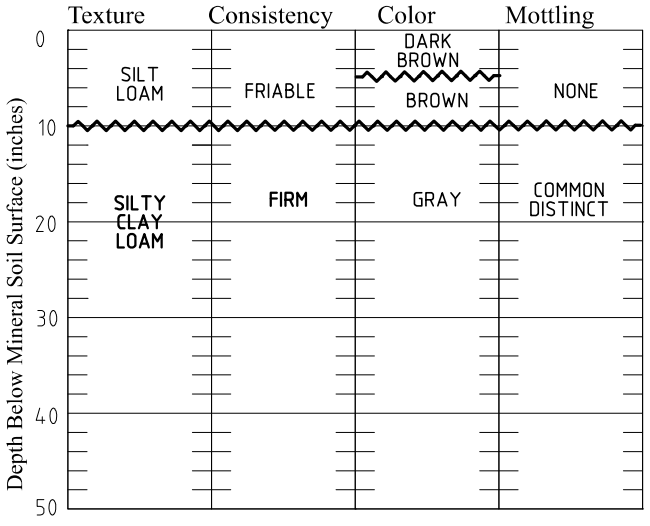
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-79 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 (SE #) | 3/25/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

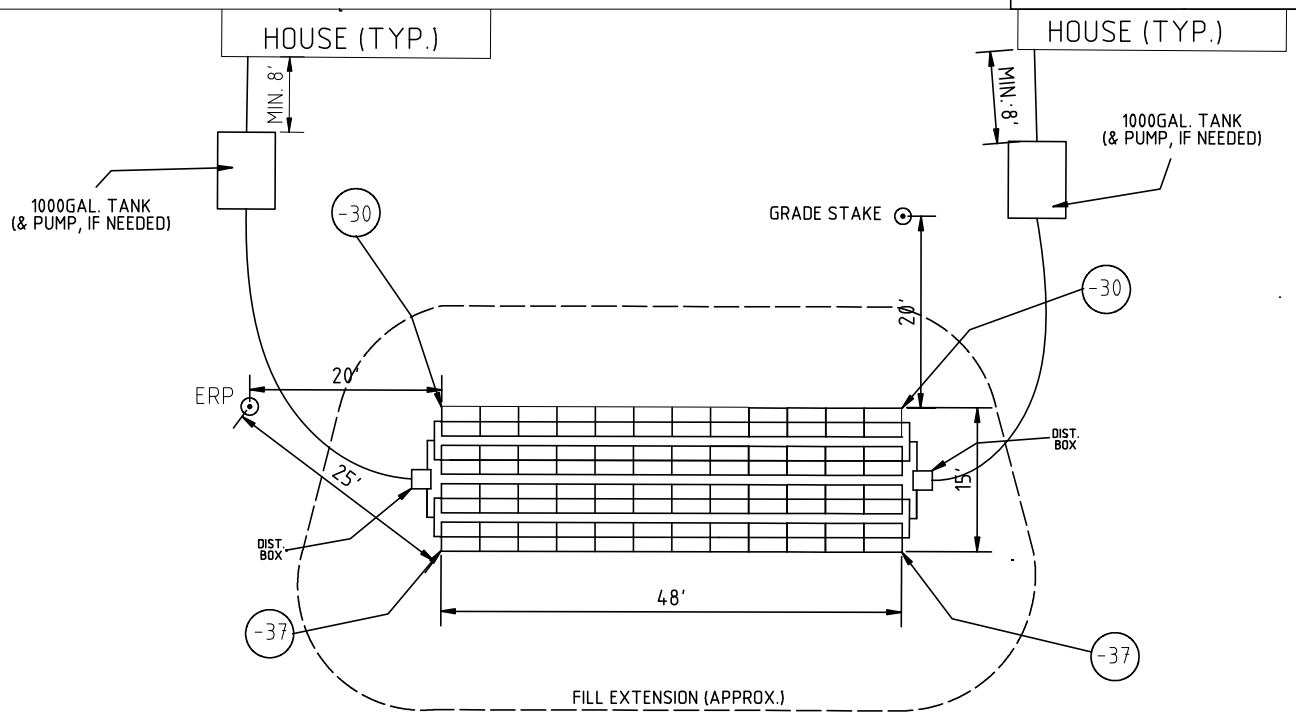
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

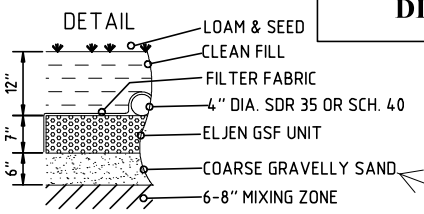
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

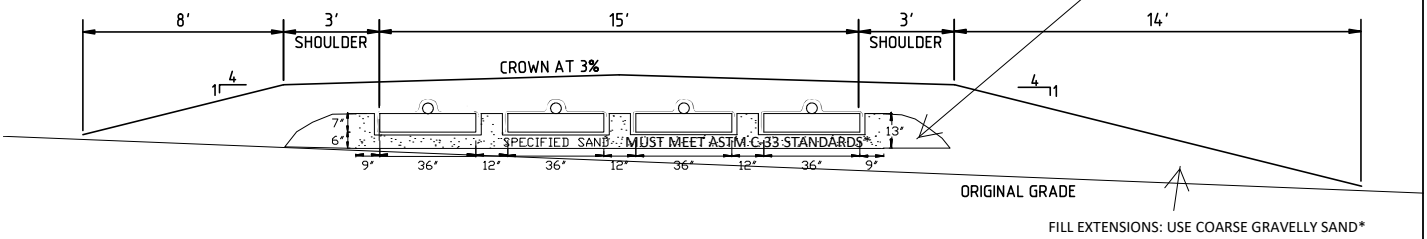
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	27	-22	-15	-3

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 157-158

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-80
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 28.35 s
Lon. 70 d 29 m 49.94 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

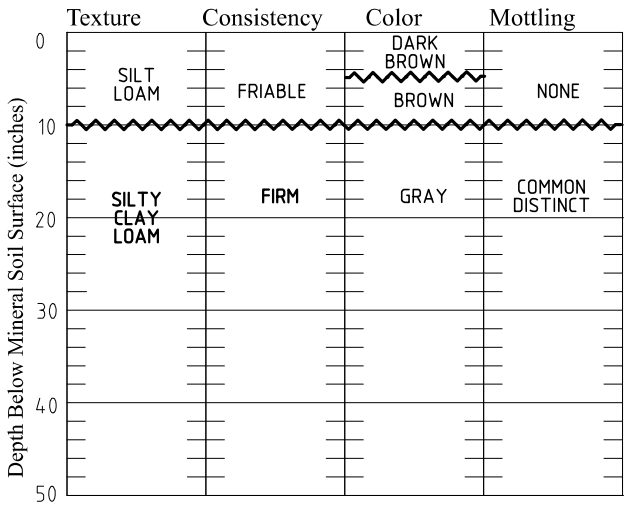


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-80 ☐ Test Pit ☒ Boring

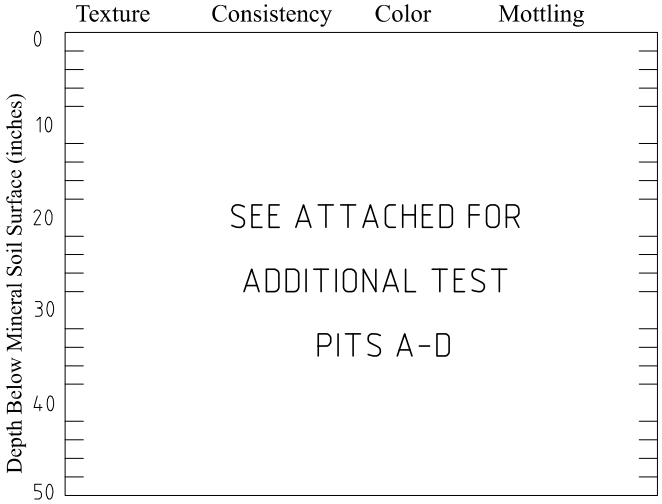
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

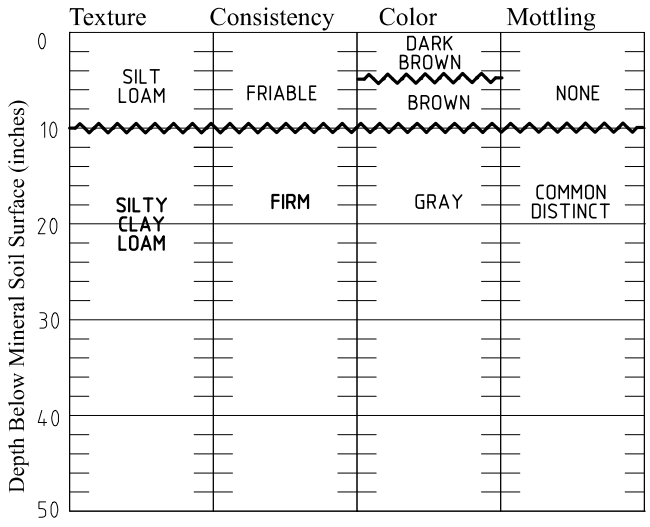
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-80 A ☐ Test Pit ☒ Boring

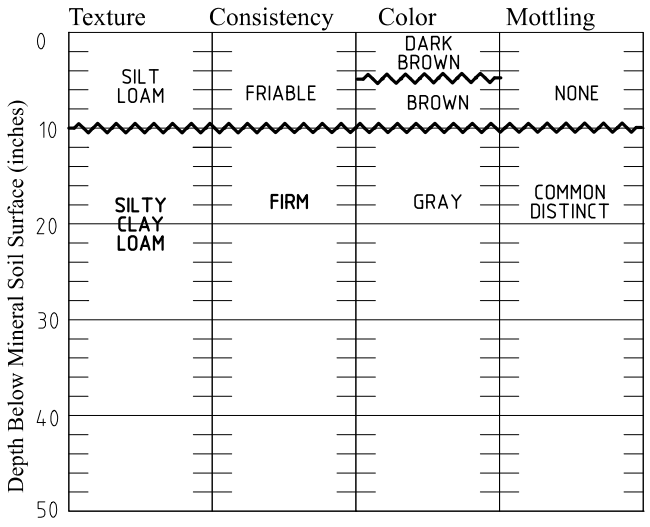
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-80 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

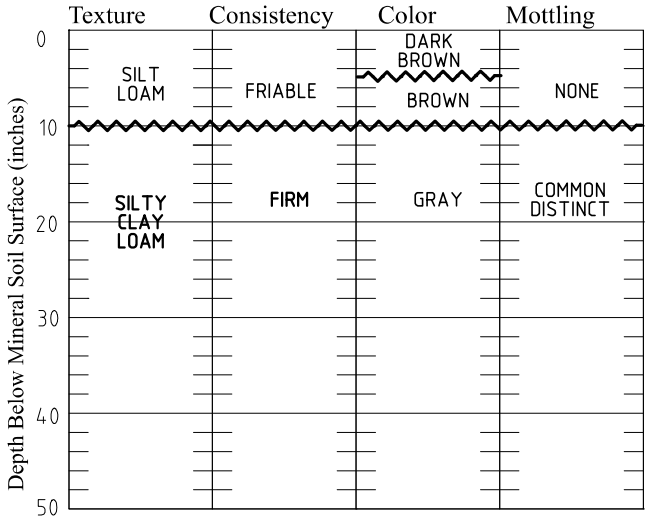


Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-80 C ☐ Test Pit ☒ Boring

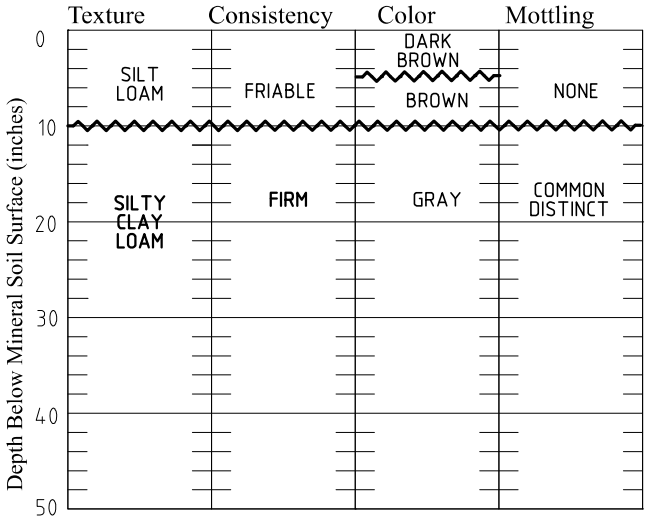
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-80 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 (SE #) | 3/25/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

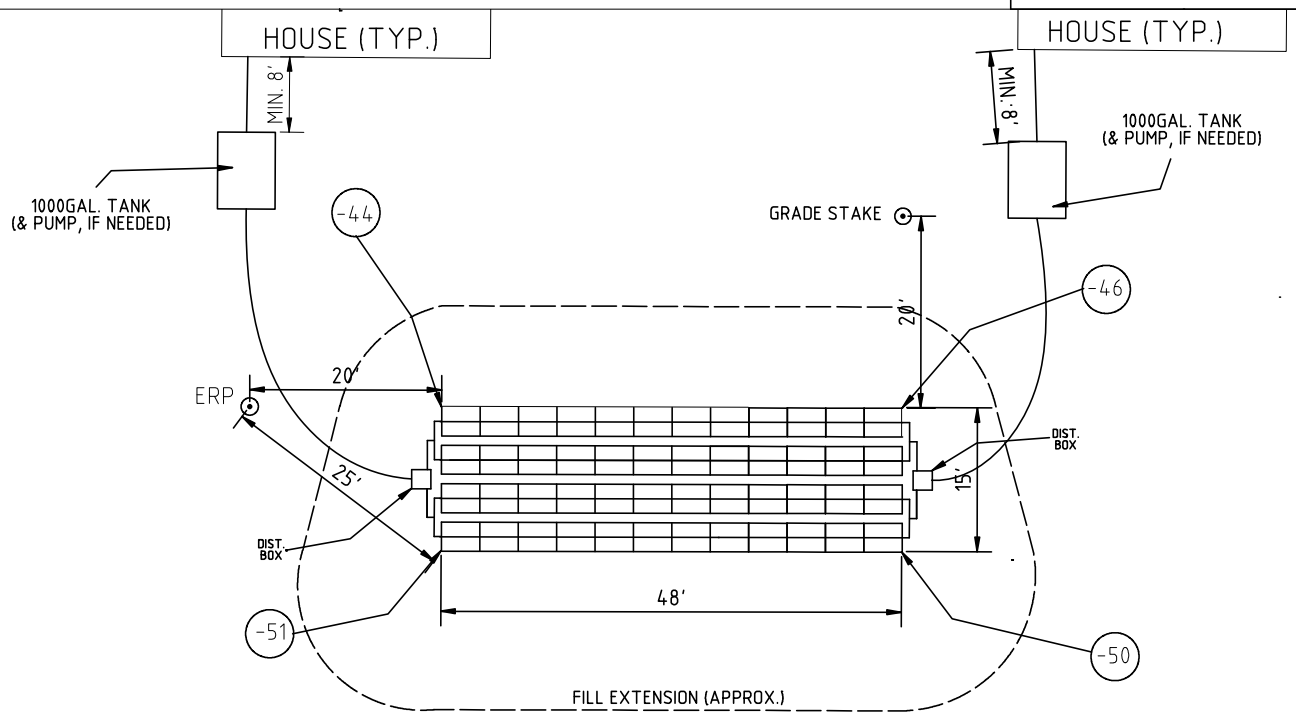
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

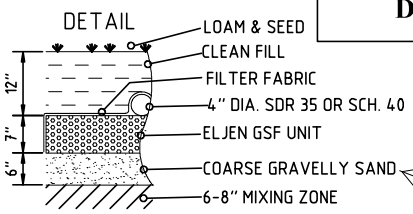
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

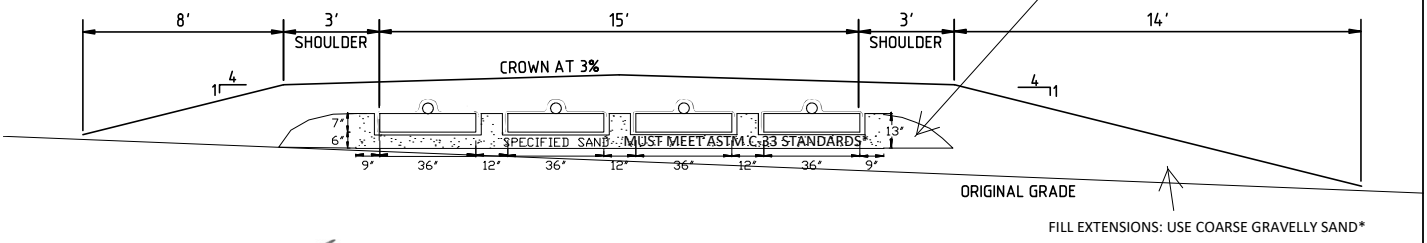
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	27	-36	-29	-17

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 159-160

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-72
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 29.27 s
Lon. 70 d 29 m 47.65 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

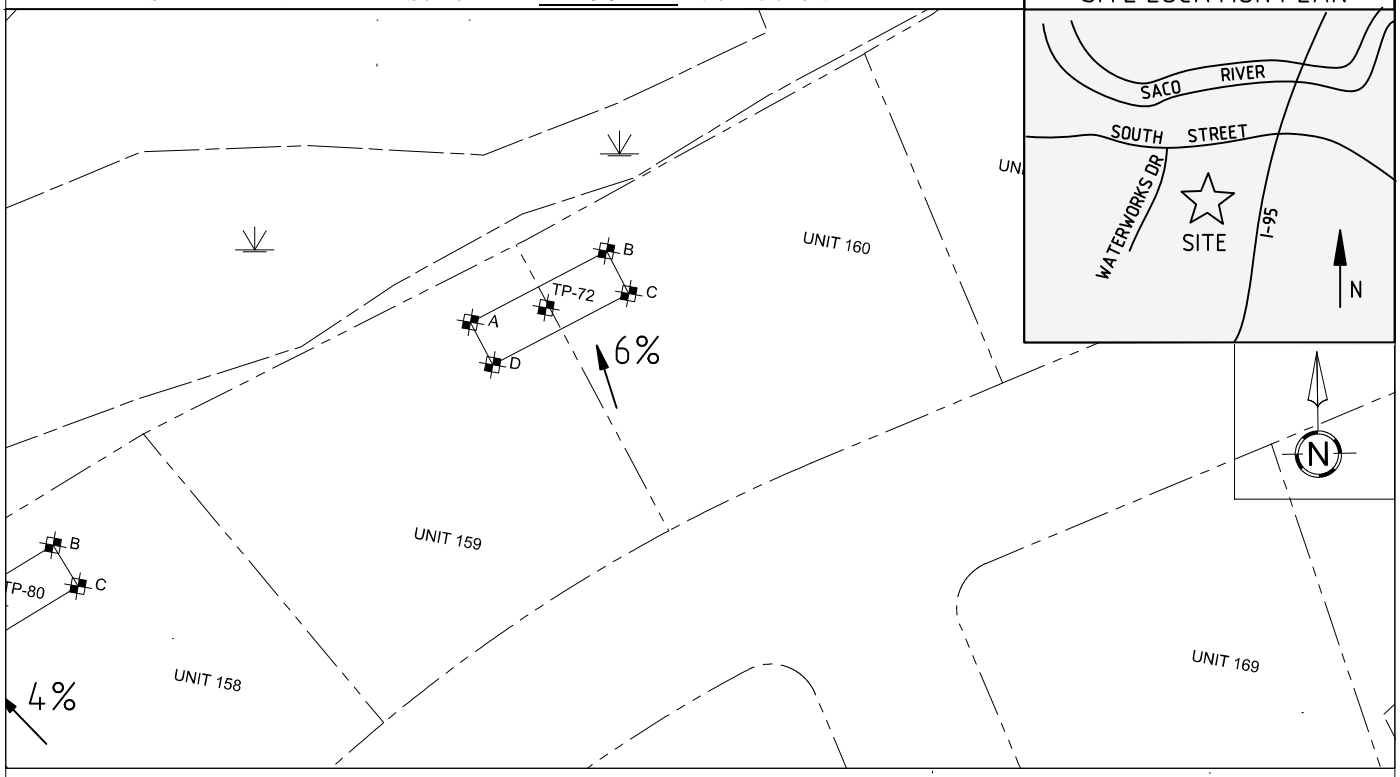
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-72 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

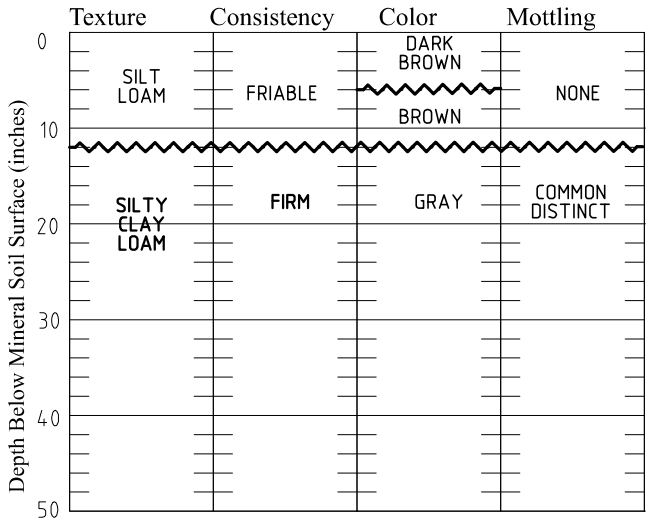
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-72 A ☐ Test Pit ☒ Boring

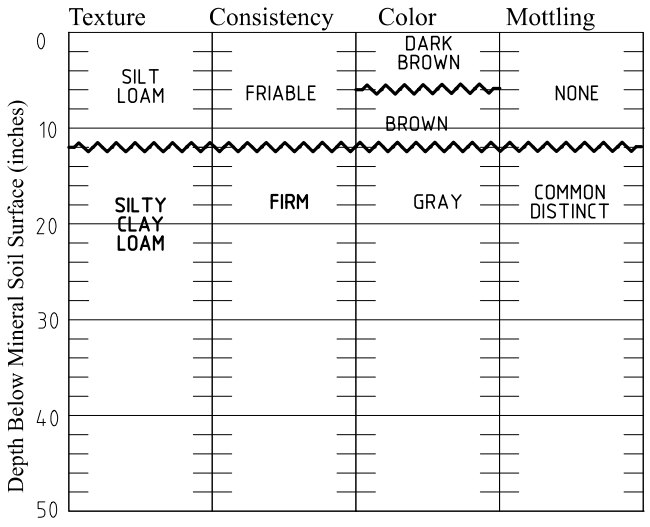
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-72 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

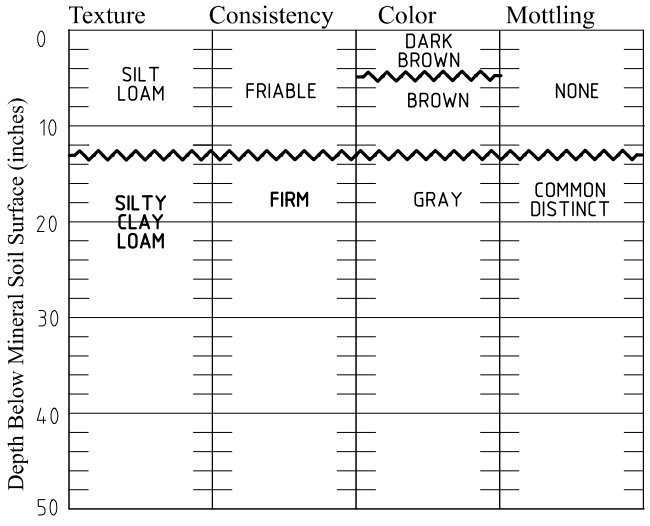


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-72 C ☐ Test Pit ☒ Boring

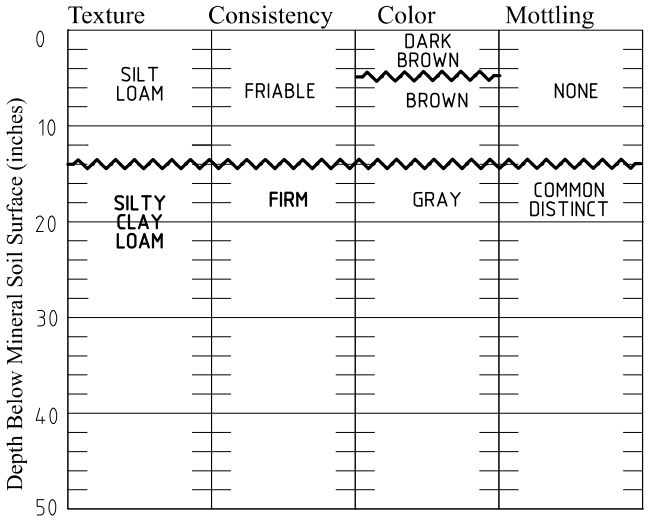
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-72 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/25/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

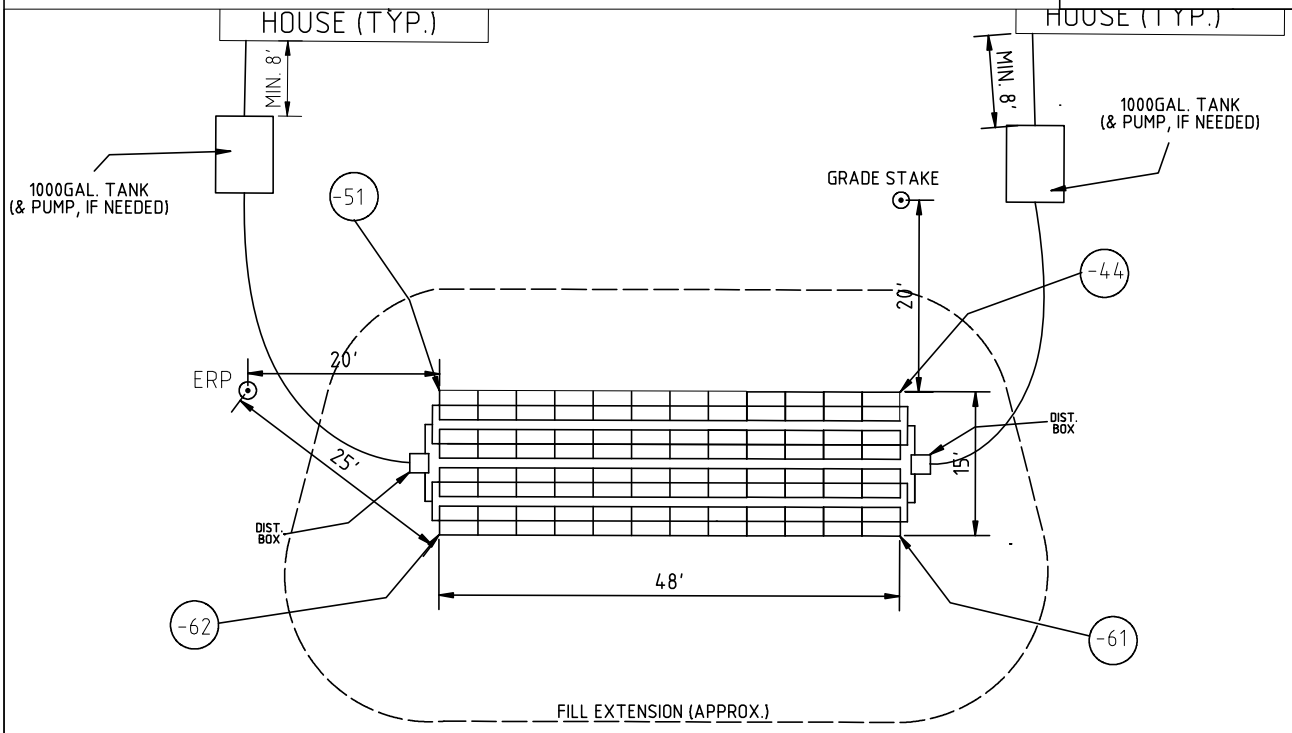
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

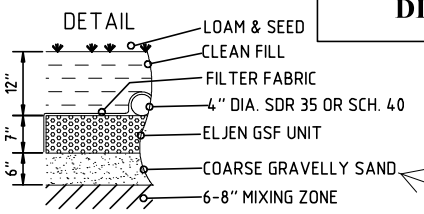
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

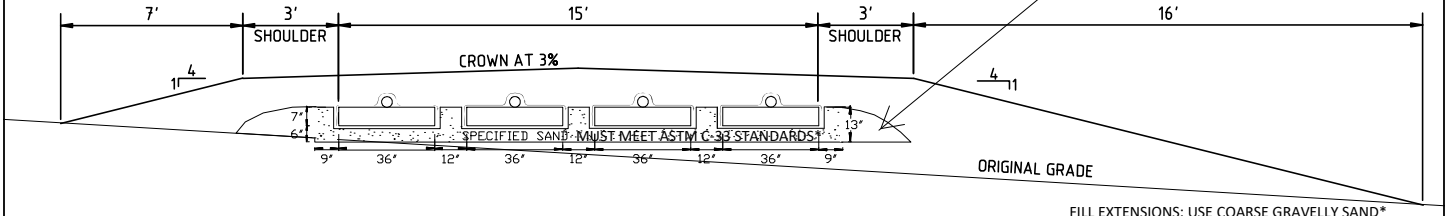
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
36	25	-45	-38	-26

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 161-162

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-73
Depth 10 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 30.37 s
Lon. 70 d 29 m 45.05 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

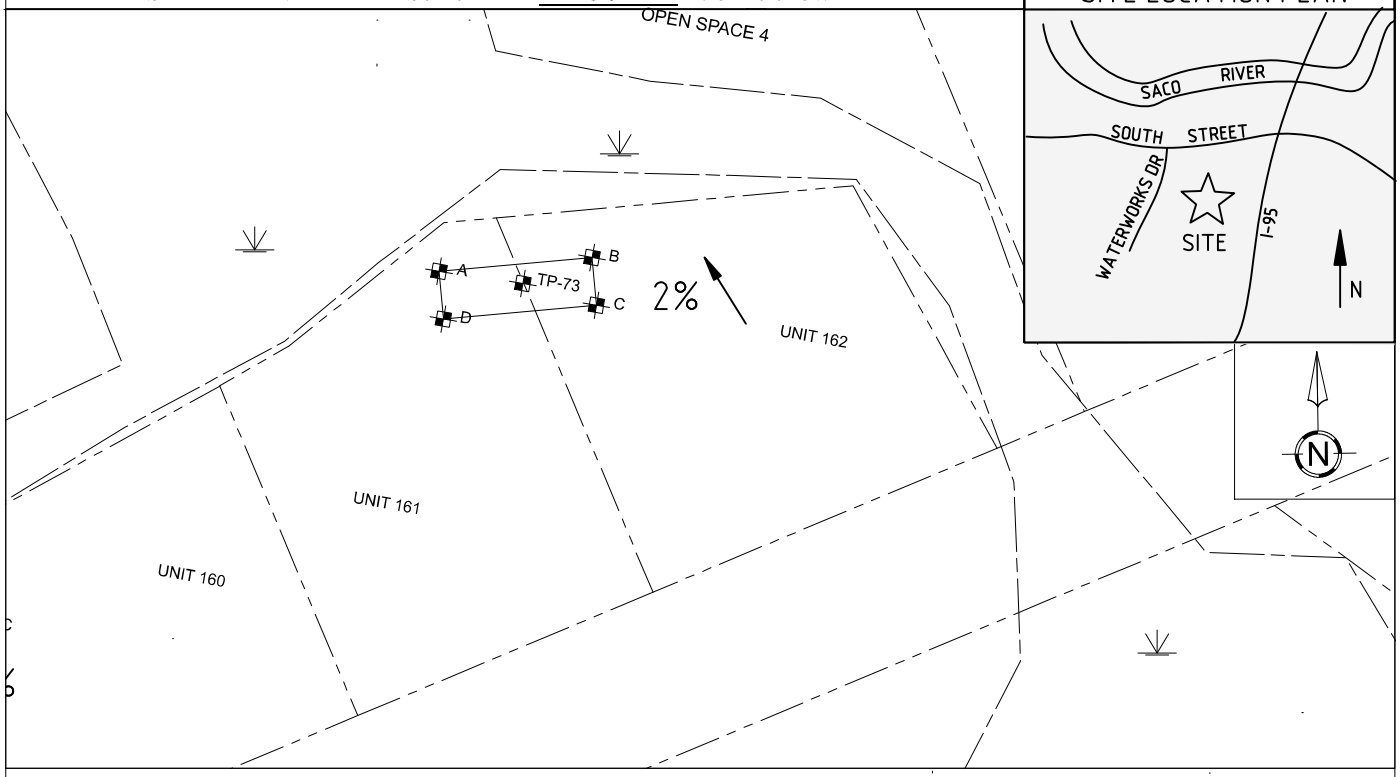
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-73 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

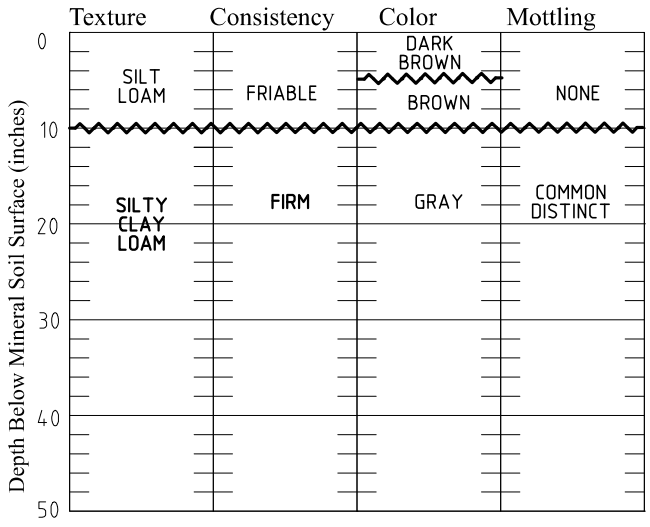
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-73 A ☐ Test Pit ☒ Boring

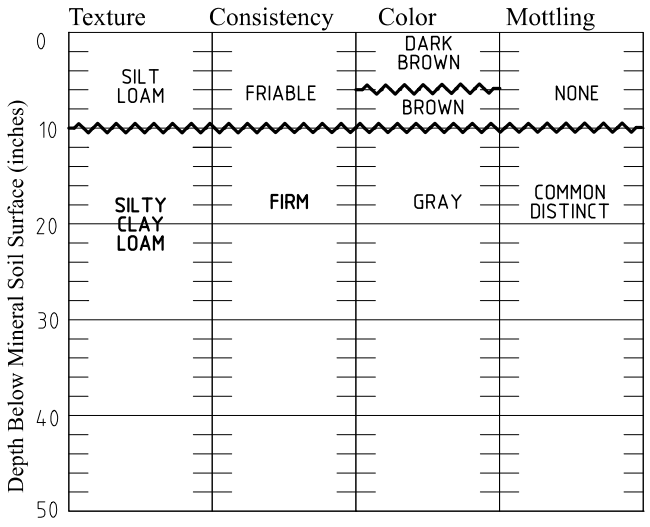
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-73 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

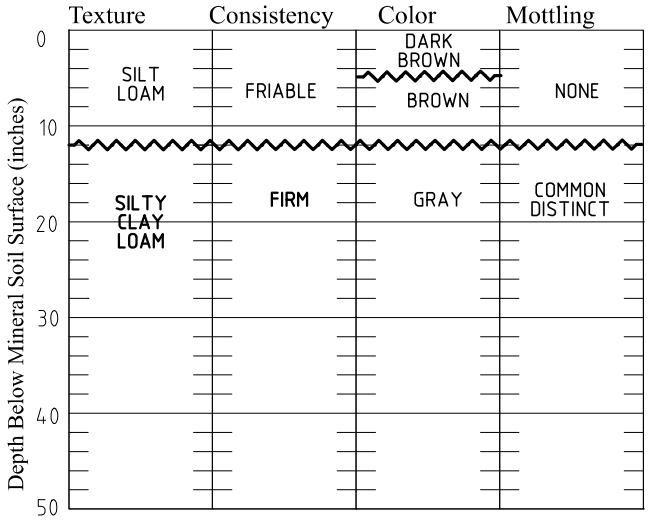


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-73 C ☐ Test Pit ☒ Boring

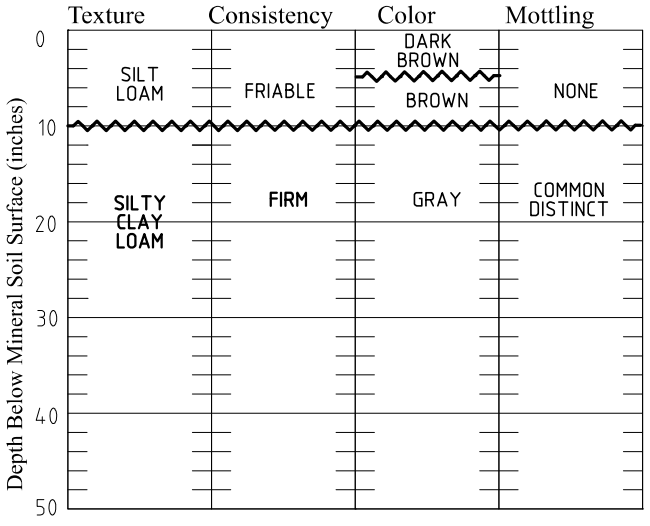
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-73 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	10 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/25/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

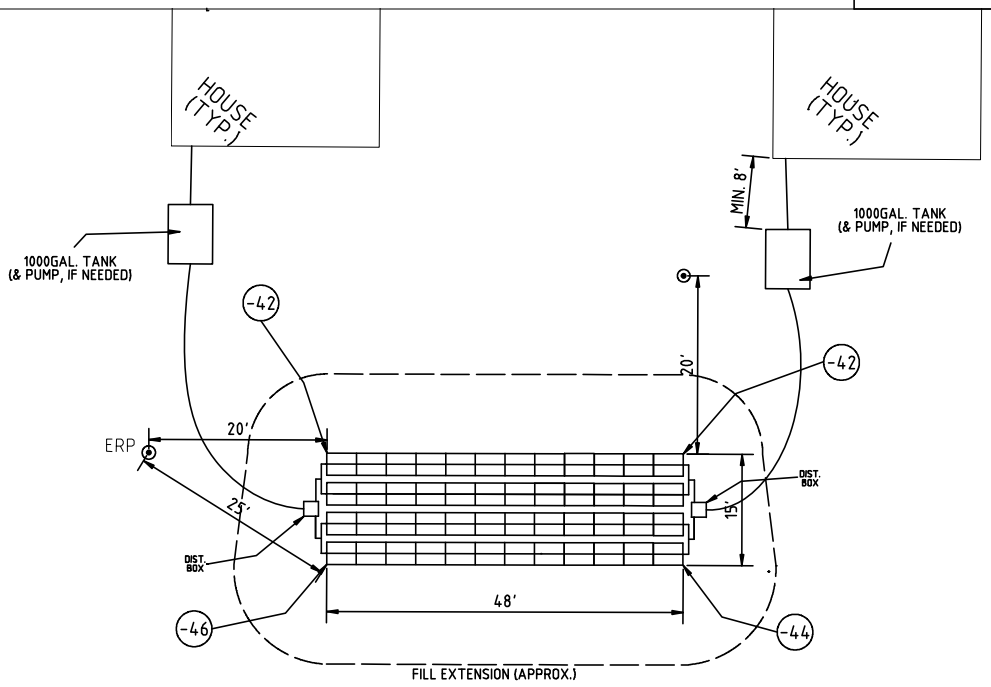
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

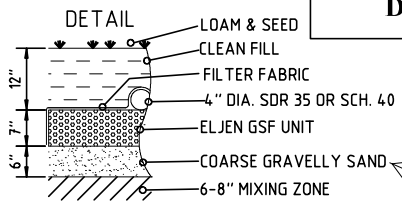
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

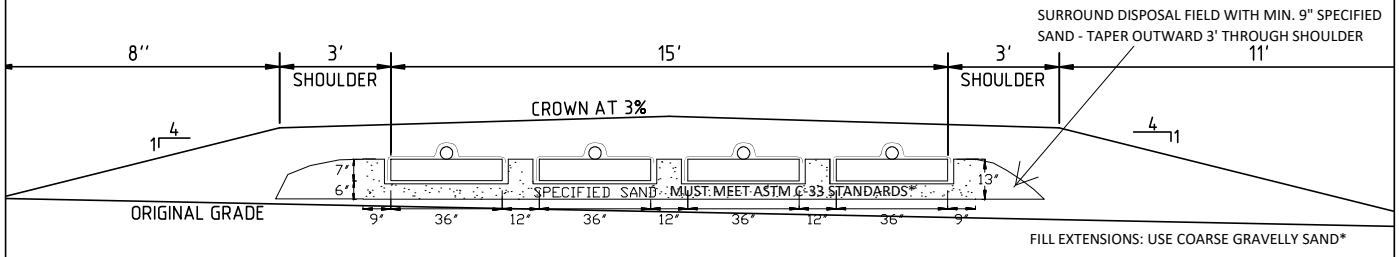
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
31	27	-34	-27	-15

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 163-164

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-74
Depth 13 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 31.42 s
Lon. 70 d 29 m 42.8 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

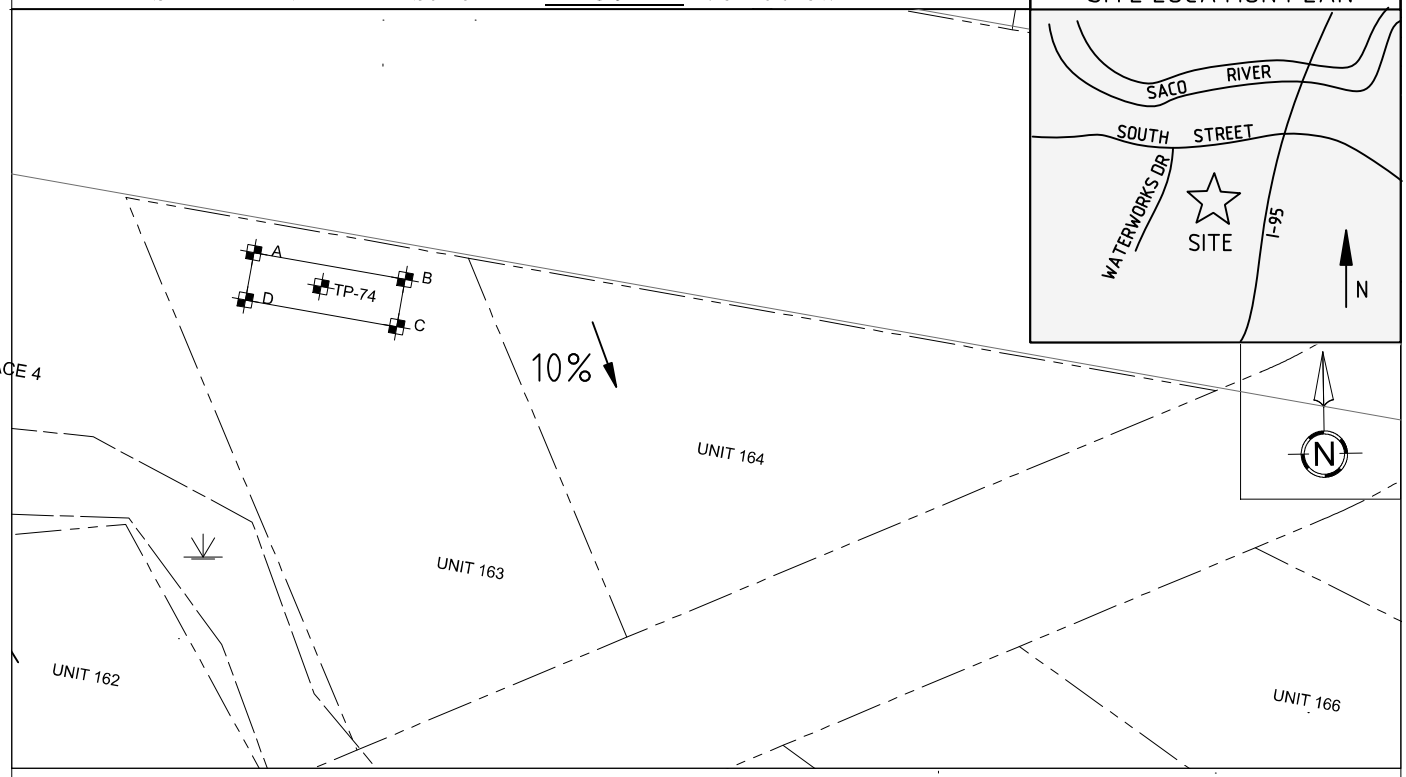
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-74 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

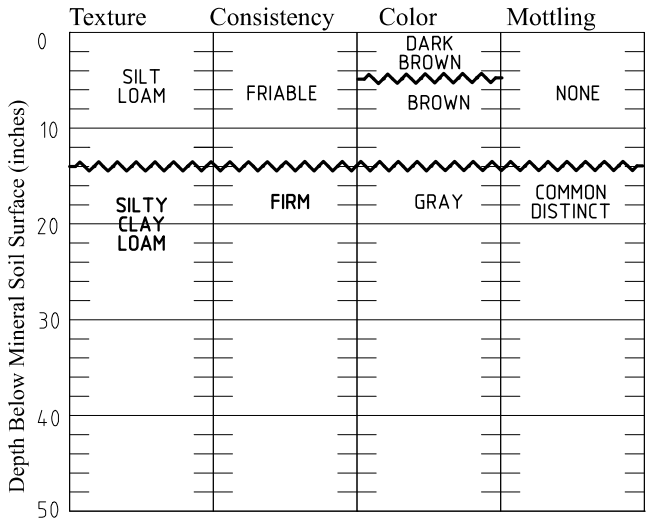
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-74 A ☐ Test Pit ☒ Boring

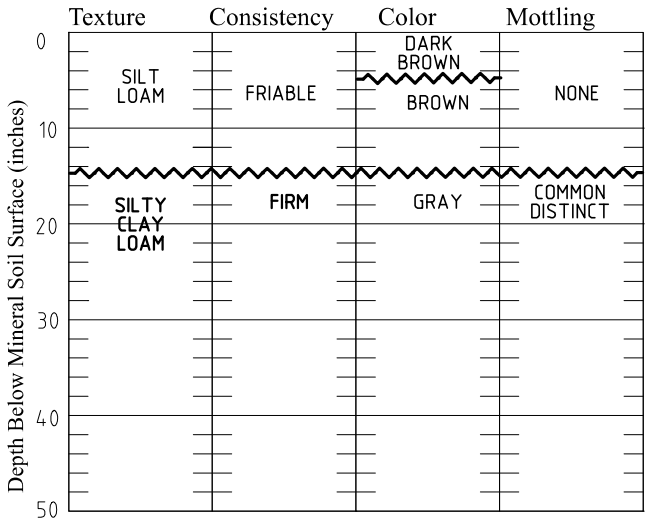
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-74 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

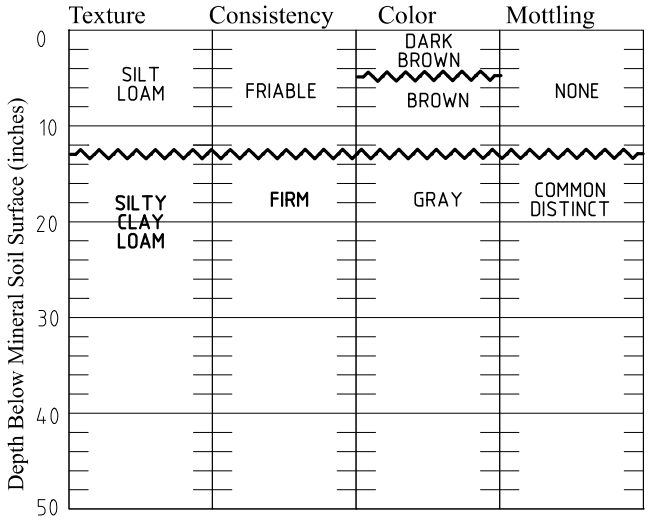


Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	10 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-74 C ☐ Test Pit ☒ Boring

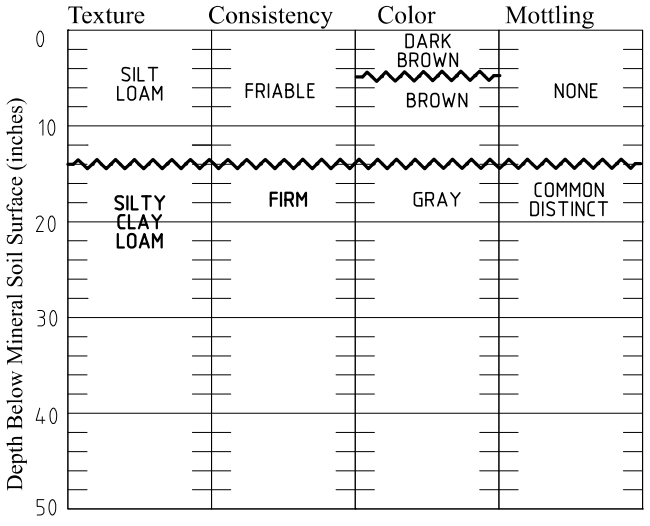
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-74 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	10 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 (SE #) | 3/25/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

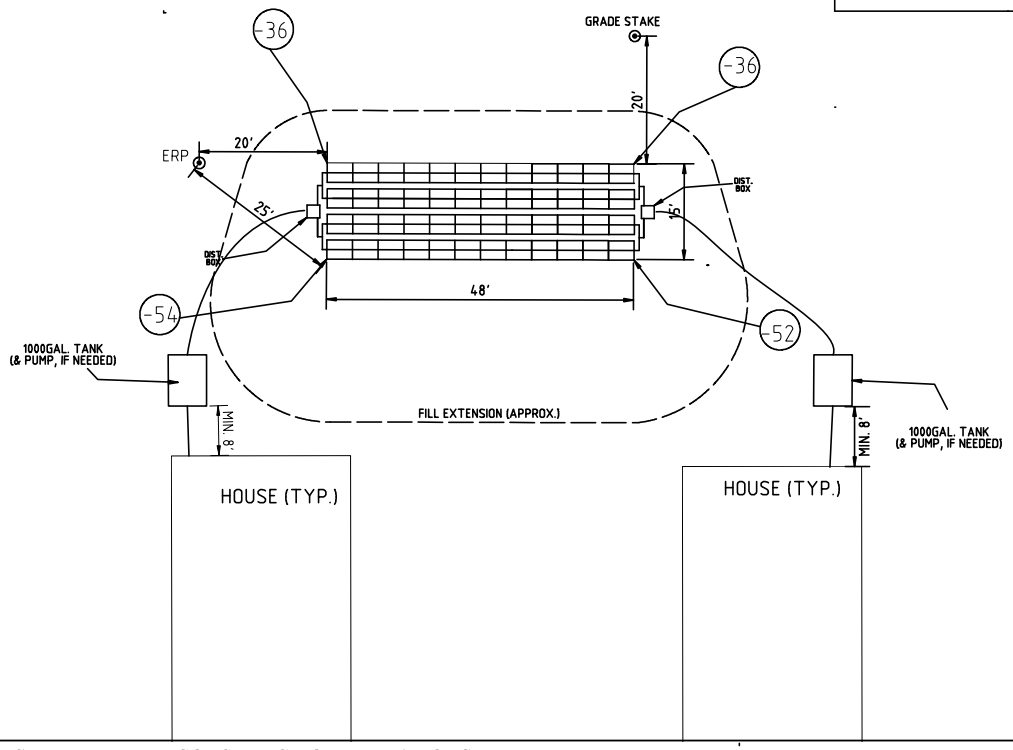
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

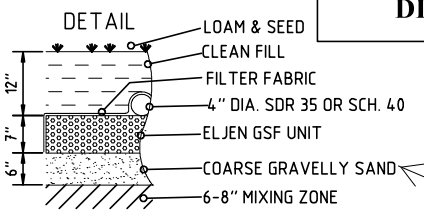
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 48" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

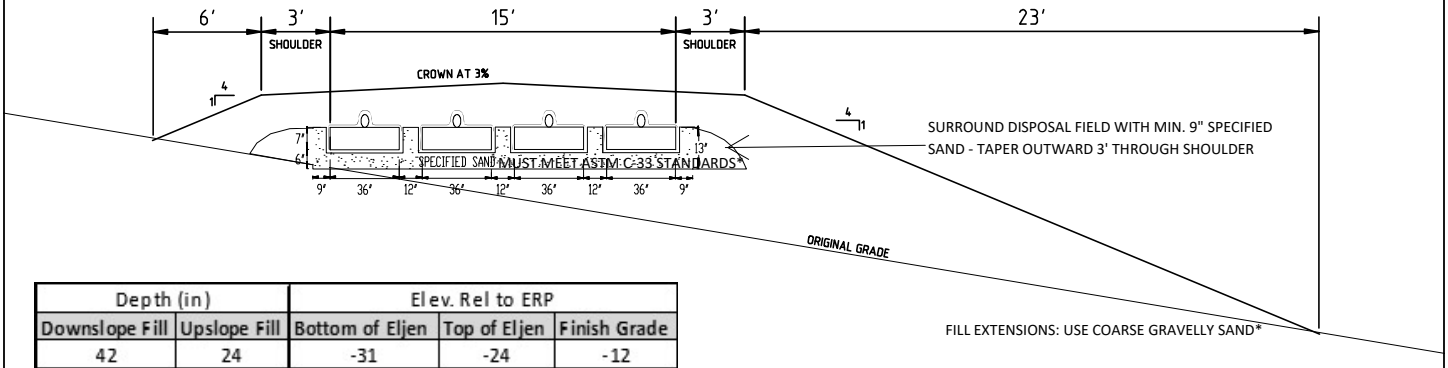
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
42	24	-31	-24	-12

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 165-166

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-76
Depth 16 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 30.08 s
Lon. 70 d 29 m 37.3 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Erik Lema — Site Evaluator Signature
419 — SE #
3/26/23 — Date
ERIK LEMA — Site Evaluator Name Printed
207-518-8442 — Telephone Number
erik@basswoodenv.com — E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

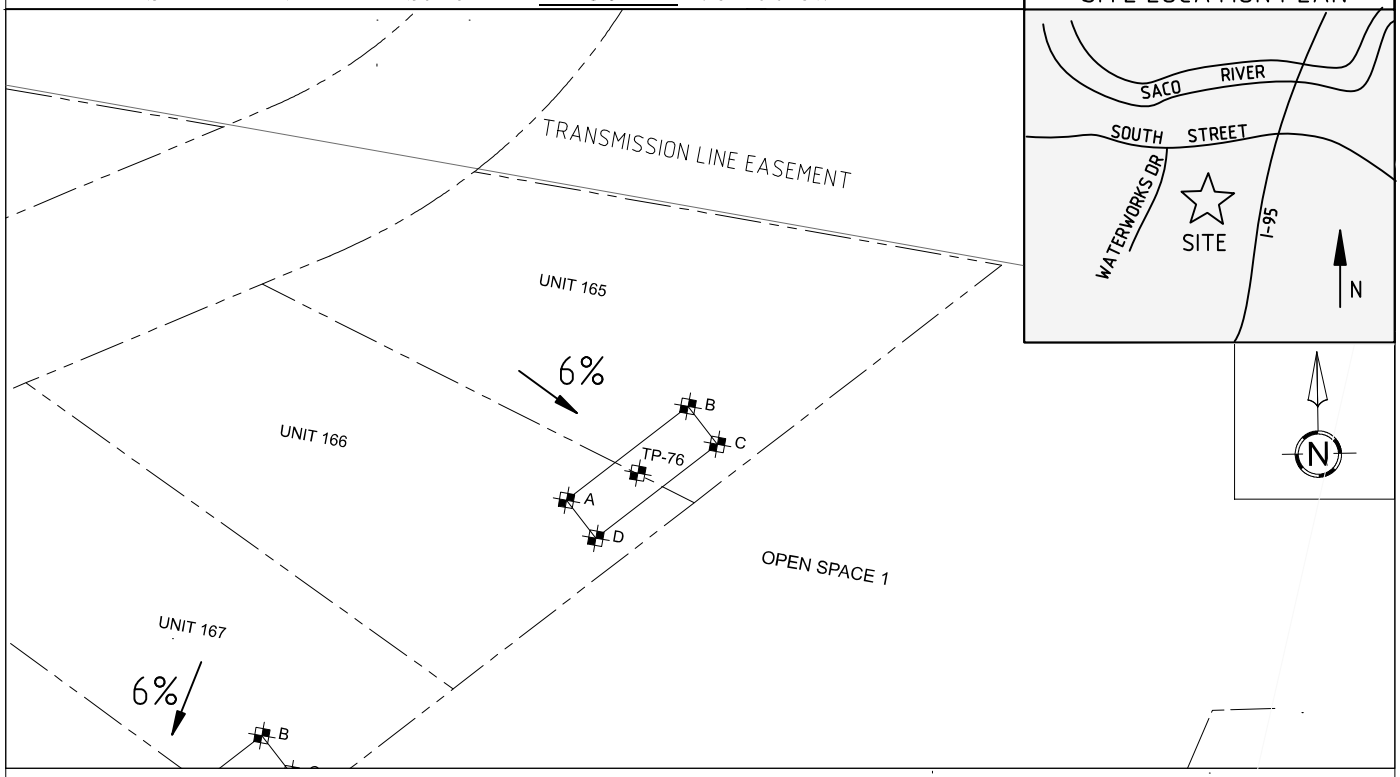
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-76 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

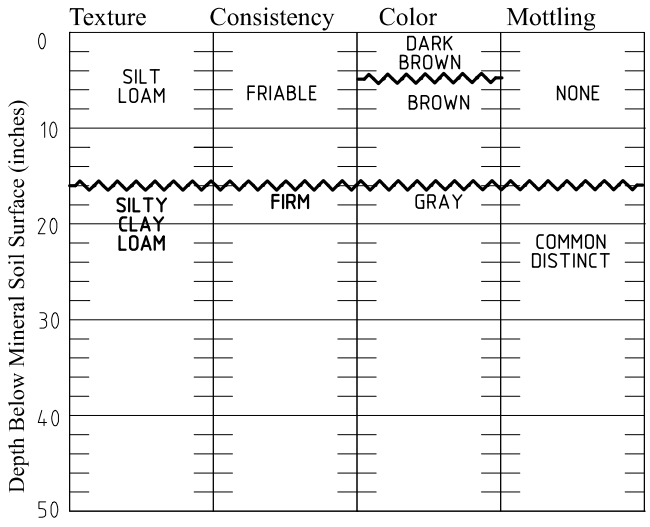
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-76 A ☐ Test Pit ☒ Boring

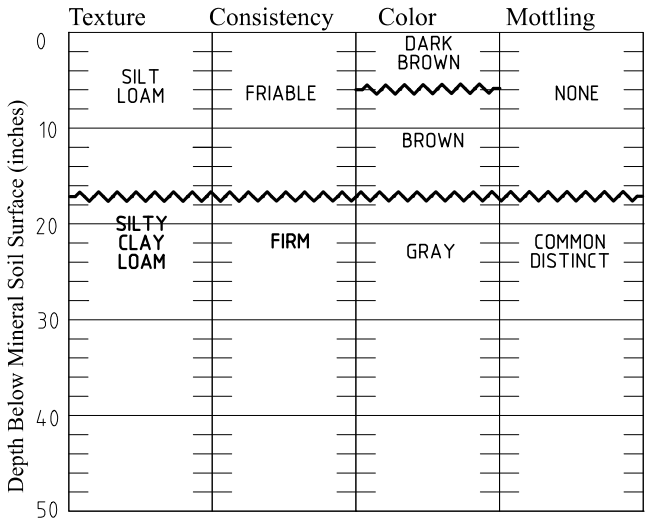
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-76 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

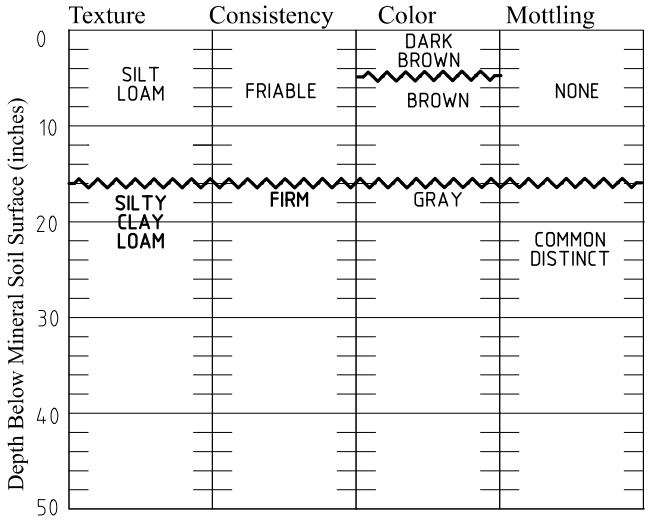


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-76 C ☐ Test Pit ☒ Boring

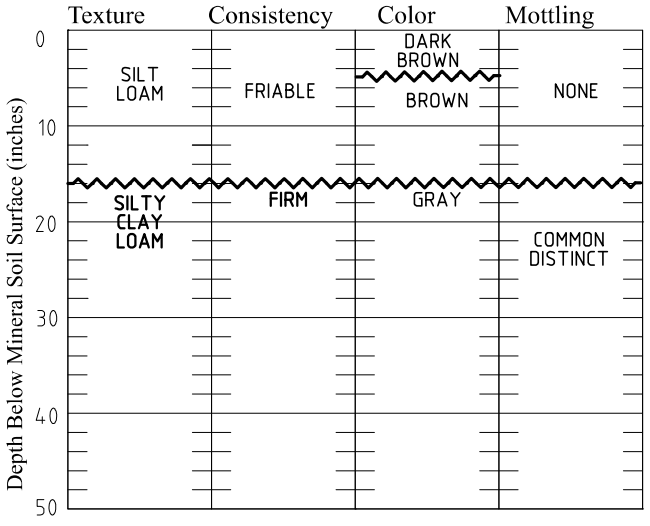
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-76 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/26/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

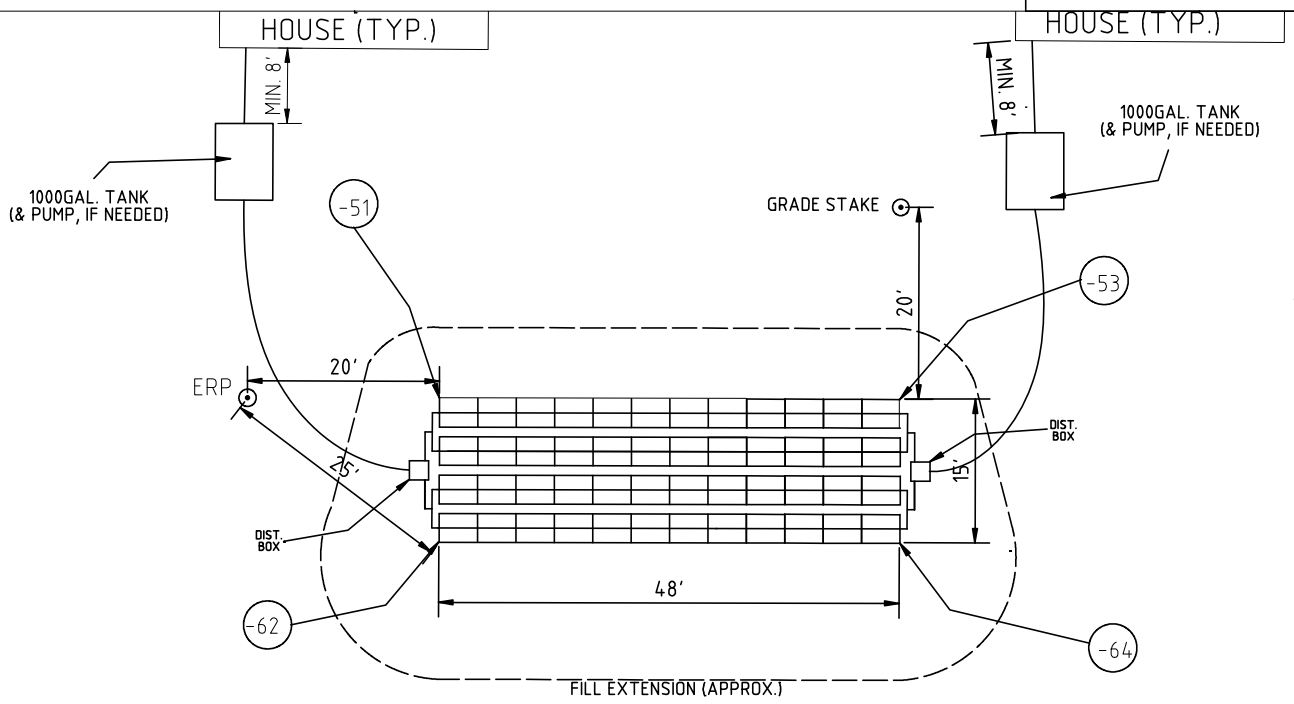
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 58" A.G.

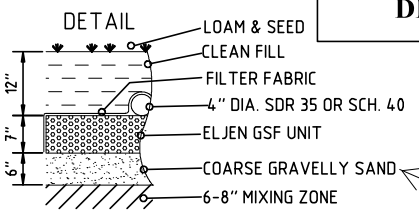
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

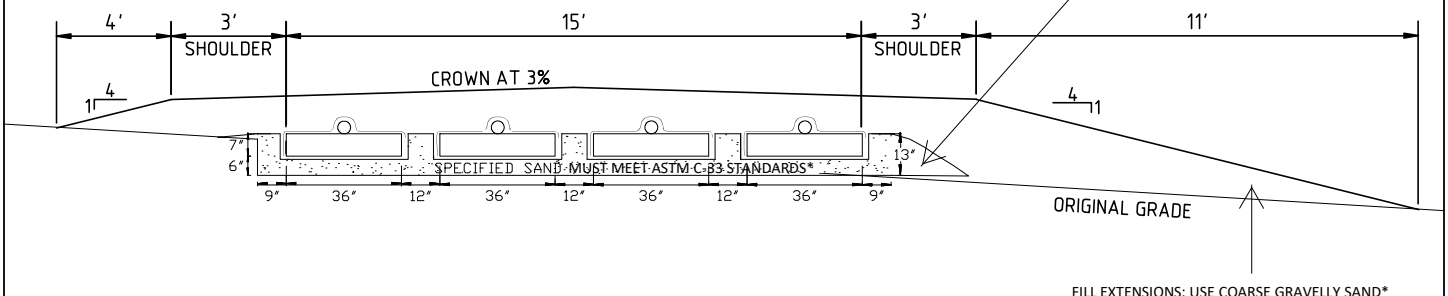
× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
26	15	-55	-48	-36

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 167-168

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-75
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 29.05 s
Lon. 70 d 29 m 39.08 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

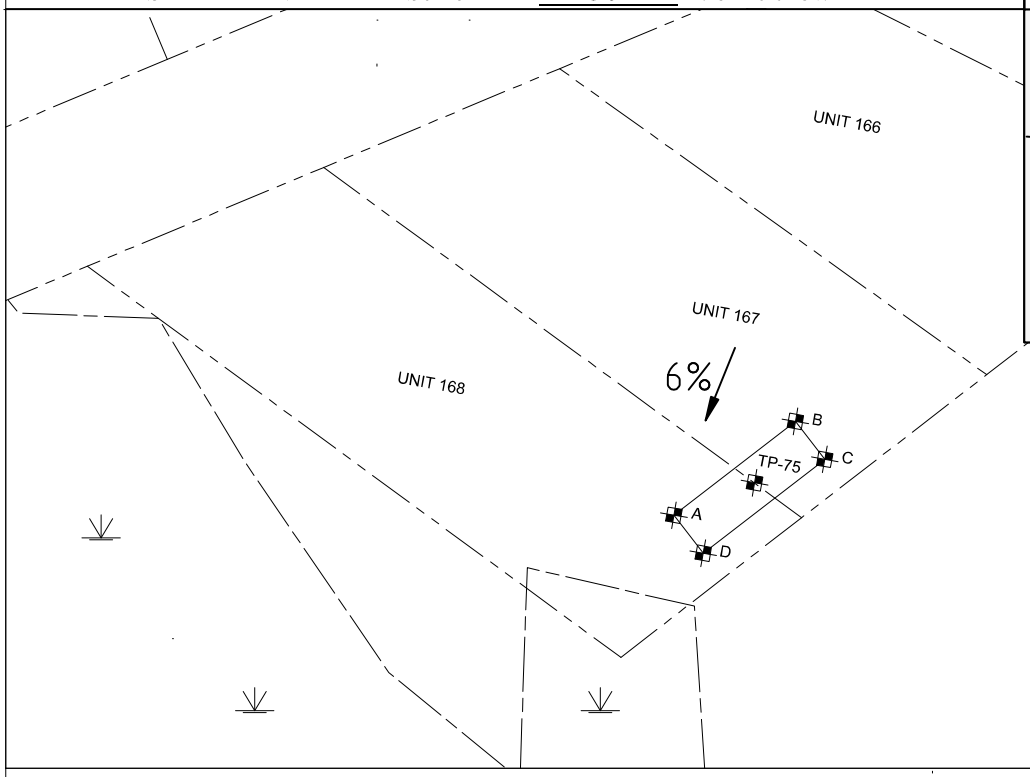
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

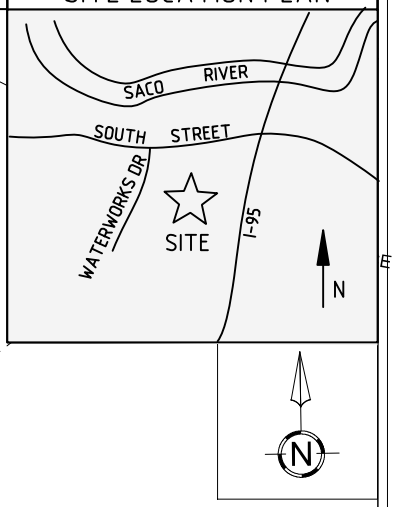
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-75 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification		Slope	Limiting Factor	
Profile: 8	Condition: D	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification		Slope	Limiting Factor	
Profile:	Condition:	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

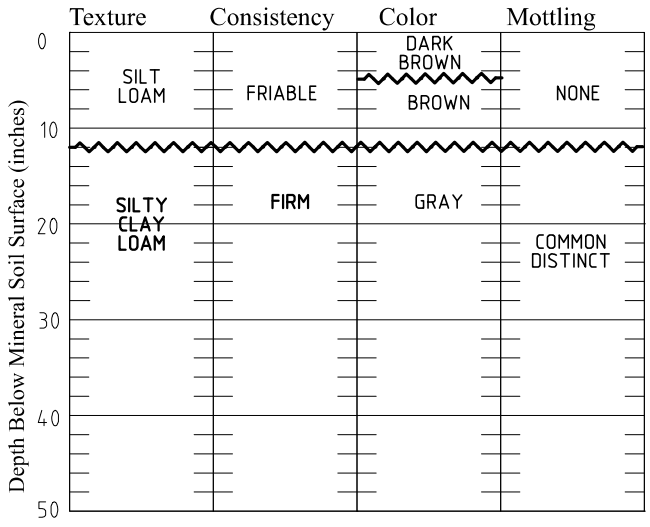
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-75 A ☐ Test Pit ☒ Boring

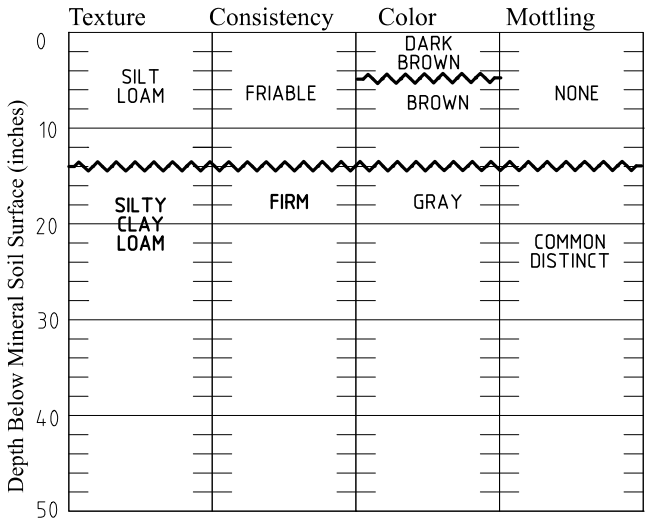
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-75 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

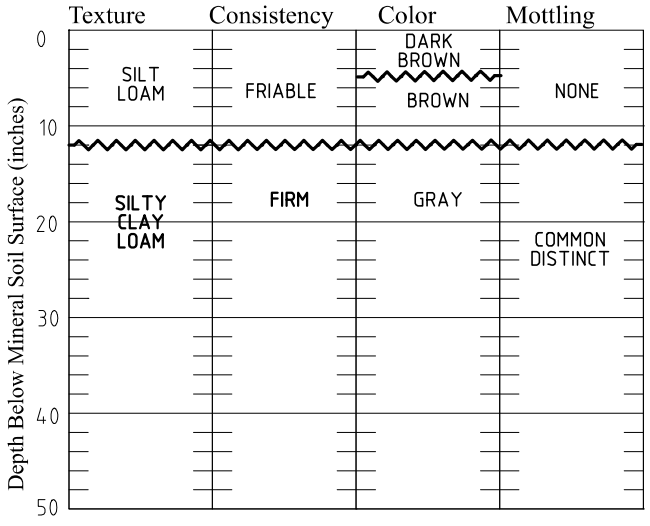


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-75 C ☐ Test Pit ☒ Boring

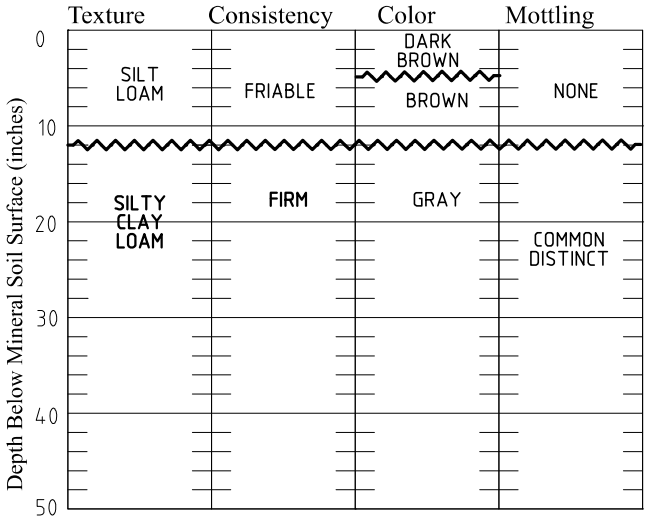
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-75 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/26/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

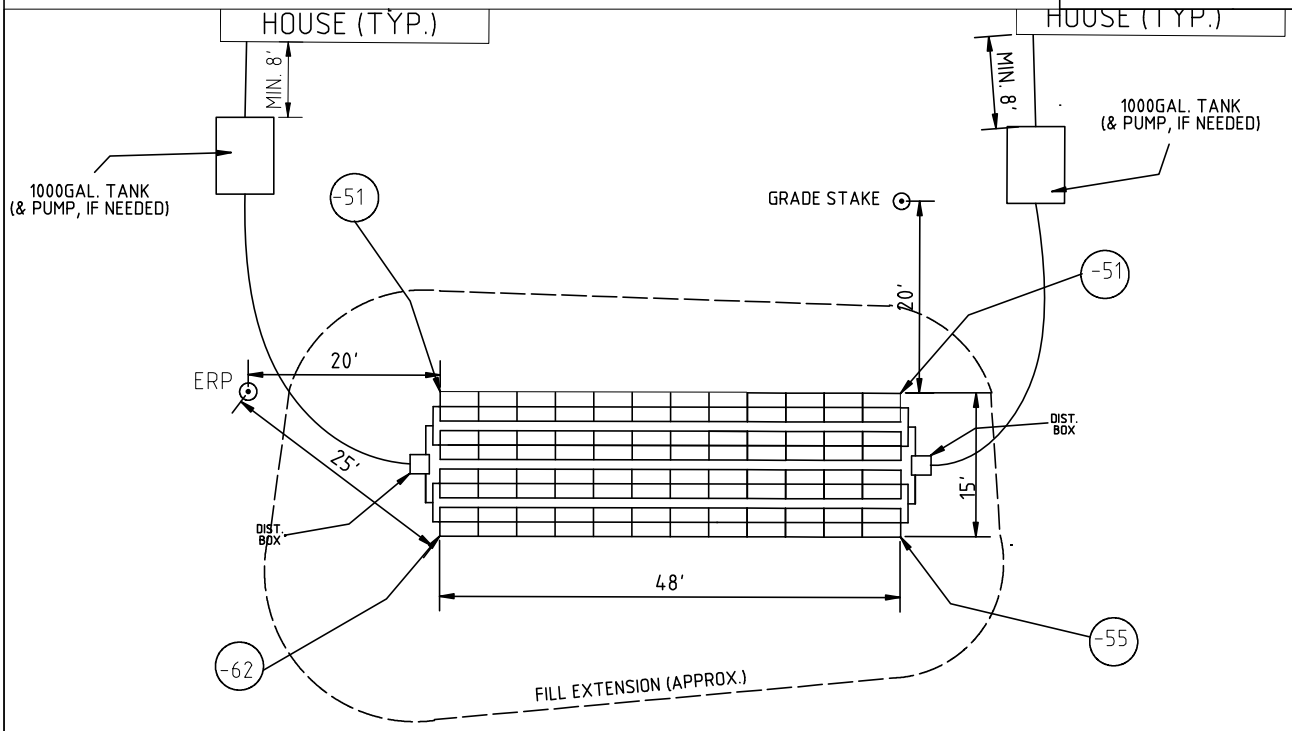
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

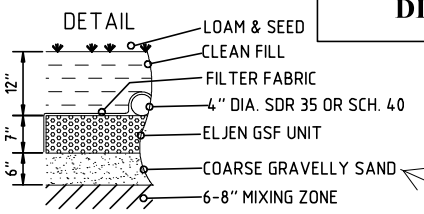
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50'' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

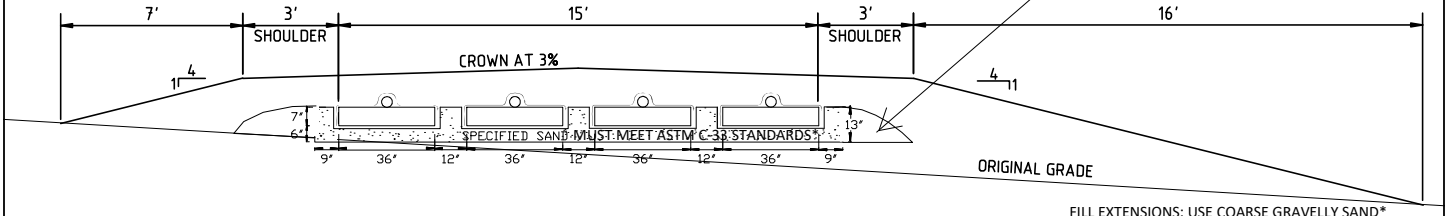
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
36	25	-45	-38	-26

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Site Evaluator Signature

419 — SE #

3/15/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 169-171

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-85
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 26.51 s
Lon. 70 d 29 m 42.42 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

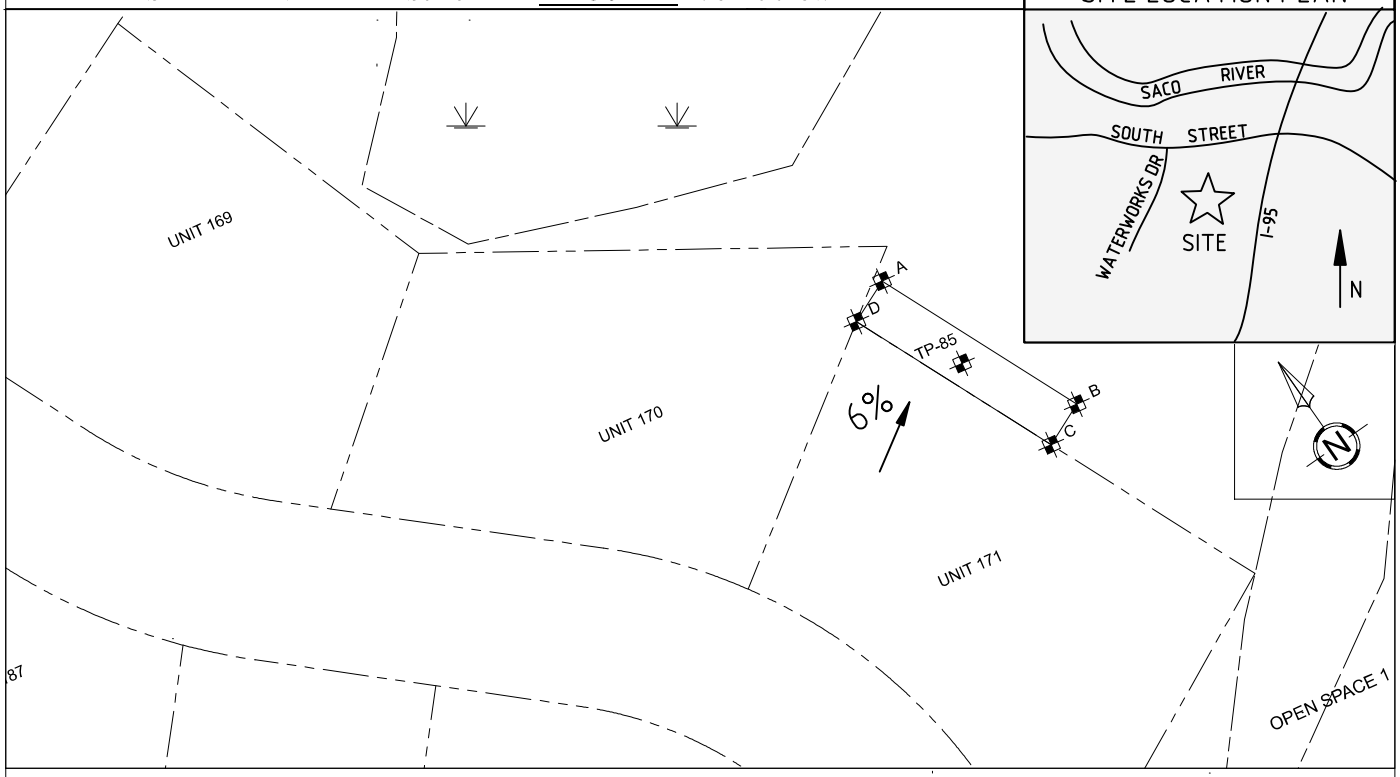
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-85 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK BROWN	NONE
10			BROWN	
20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			
10				
20				
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

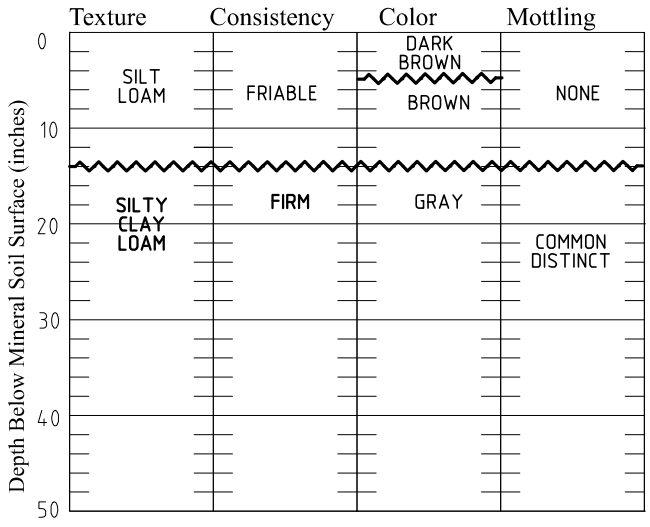
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-85 A ☐ Test Pit ☒ Boring

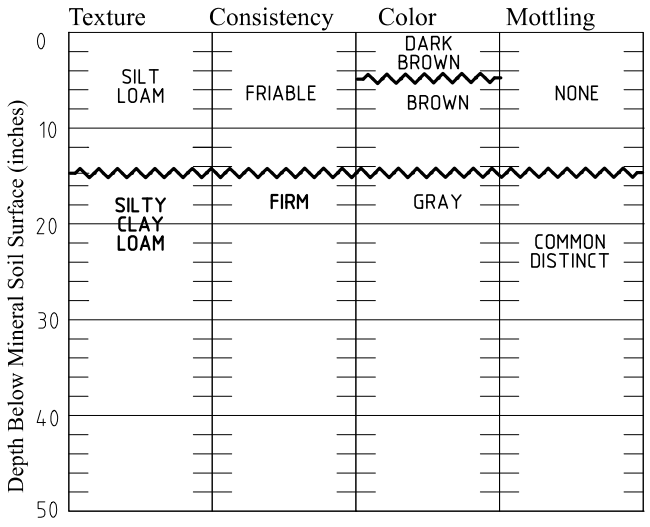
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-85 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

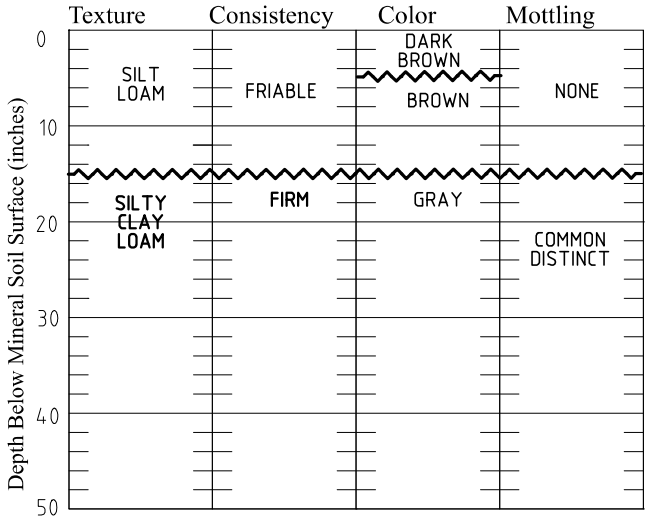


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-85 C ☐ Test Pit ☒ Boring

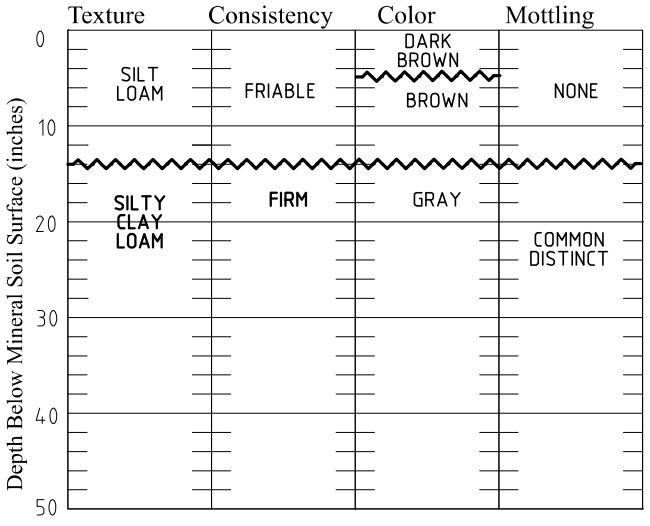
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-85 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/26/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

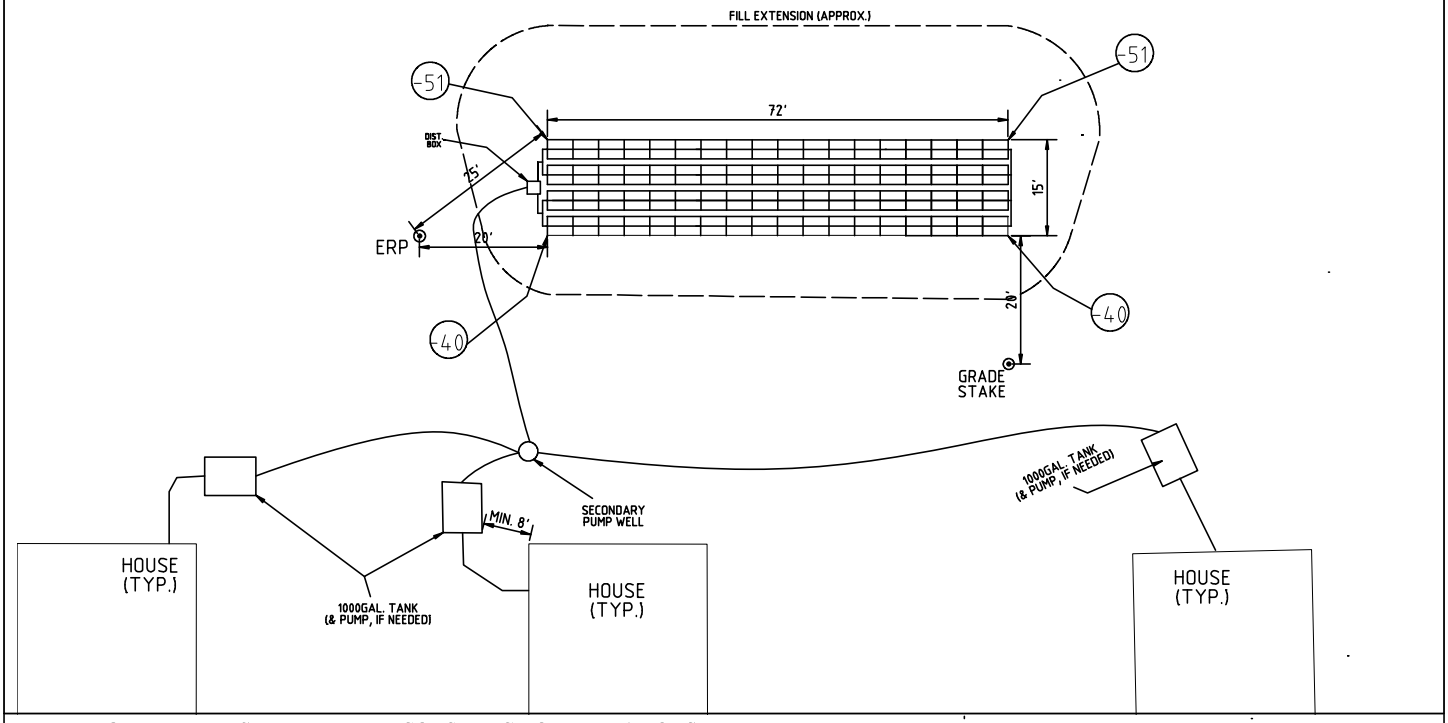
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

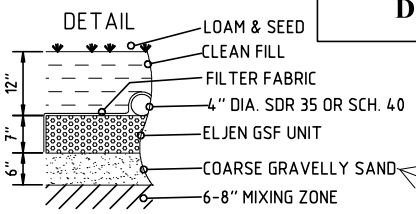
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50'' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

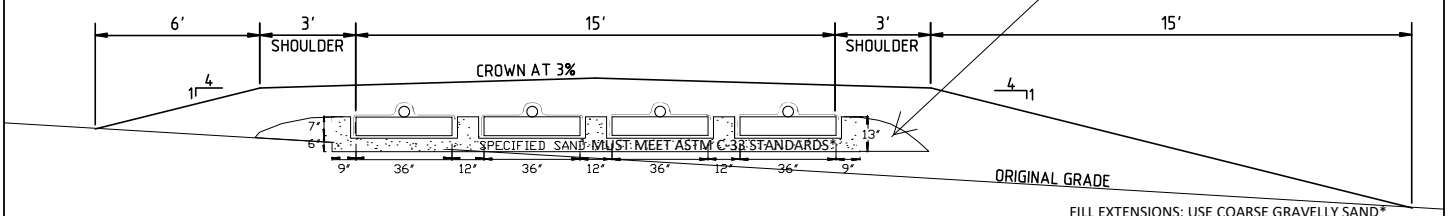
Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	23	-36	-29	-17

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 172-174

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-84
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 23.09 s
Lon. 70 d 29 m 42.7 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

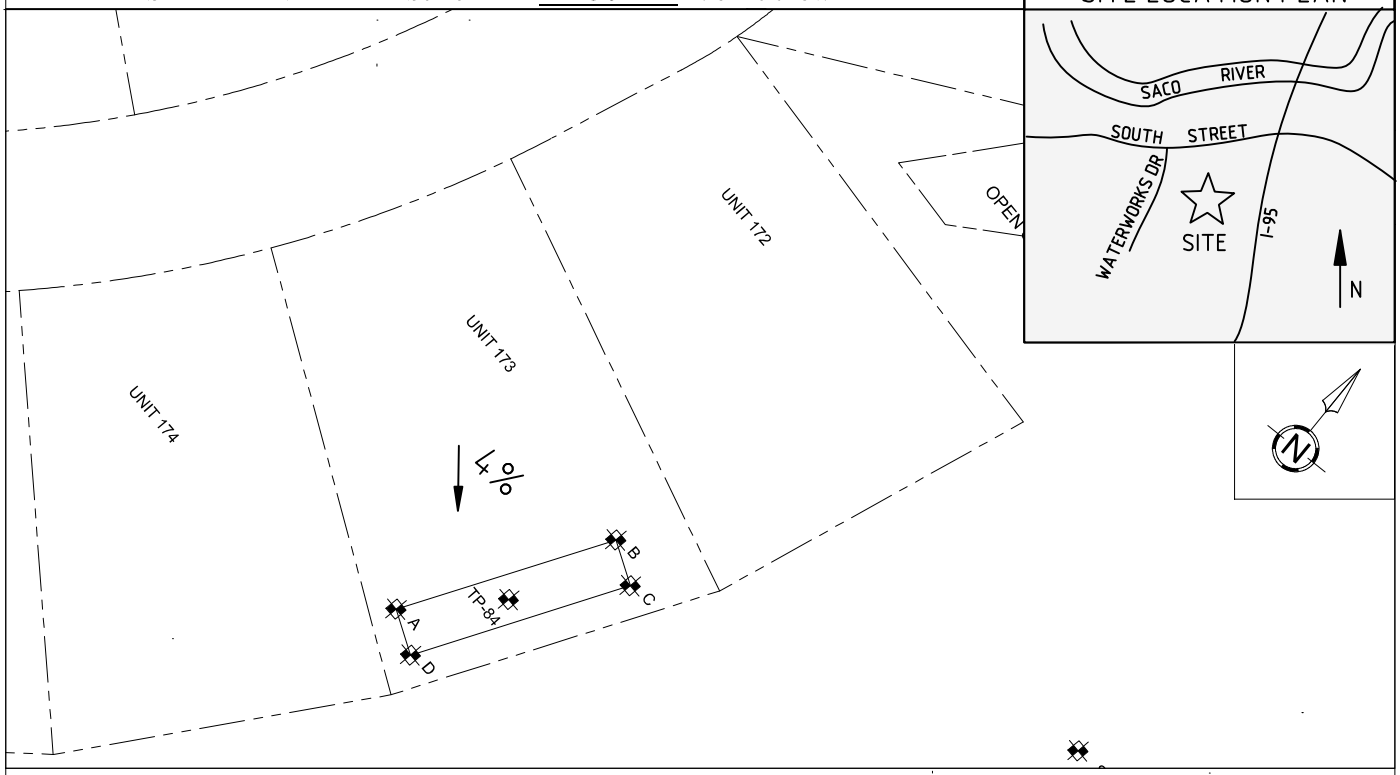
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-84 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK BROWN	NONE
10			BROWN	
20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
8	D	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			
10				
20				
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: [signature] 419 SE # 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

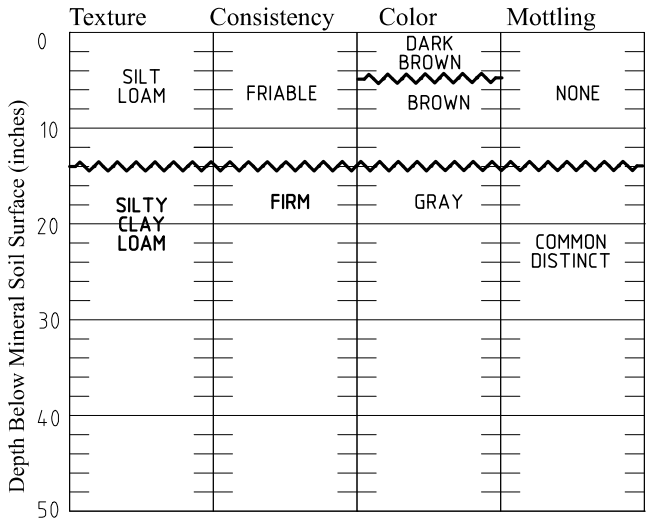
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-84 A ☐ Test Pit ☒ Boring

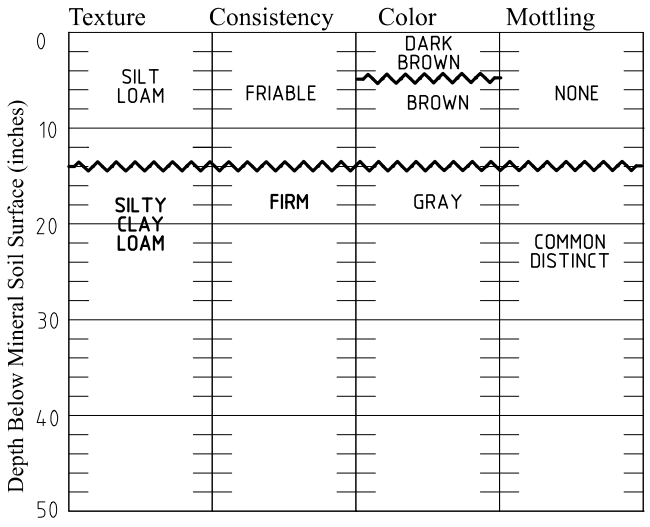
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-84 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

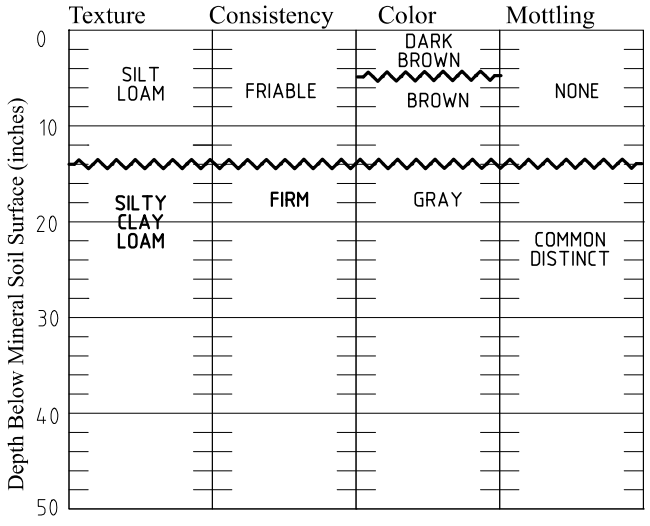


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-84 C ☐ Test Pit ☒ Boring

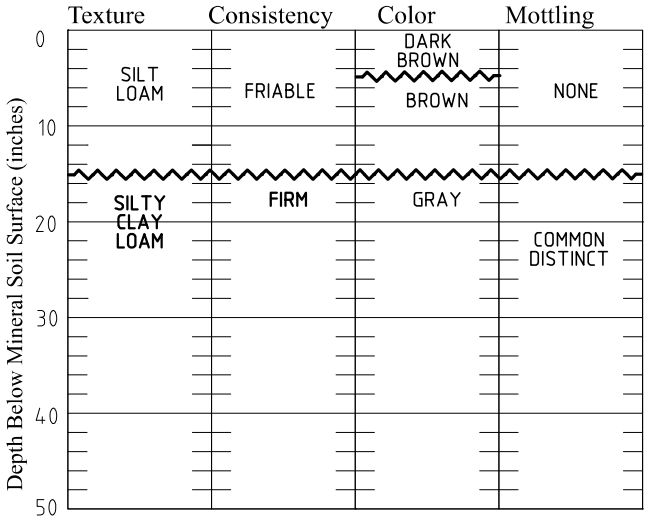
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-84 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/20/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

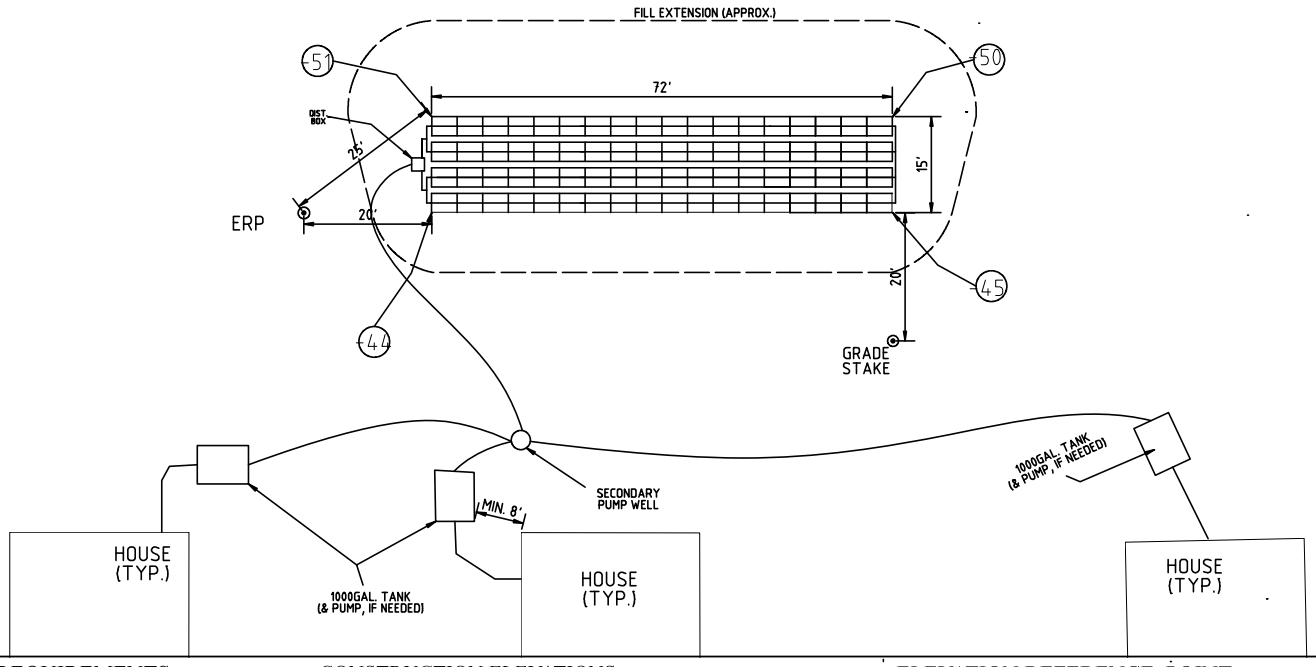
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

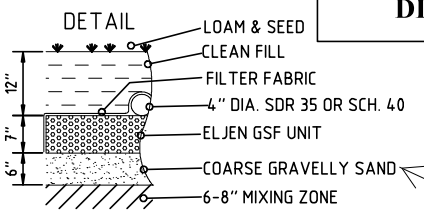
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

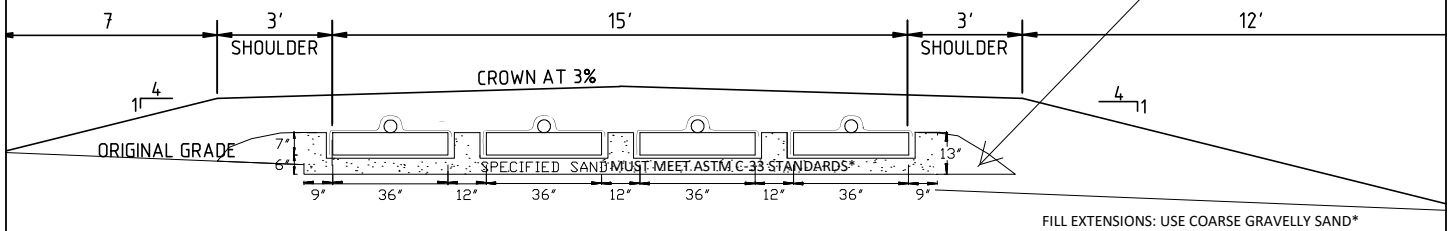
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
30	23	-40	-33	-21

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 175-176

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / AIII
at Observation Hole # TP-83
Depth 16 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

SIZED LARGE PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 21.11 s
Lon. 70 d 29 m 45.47 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

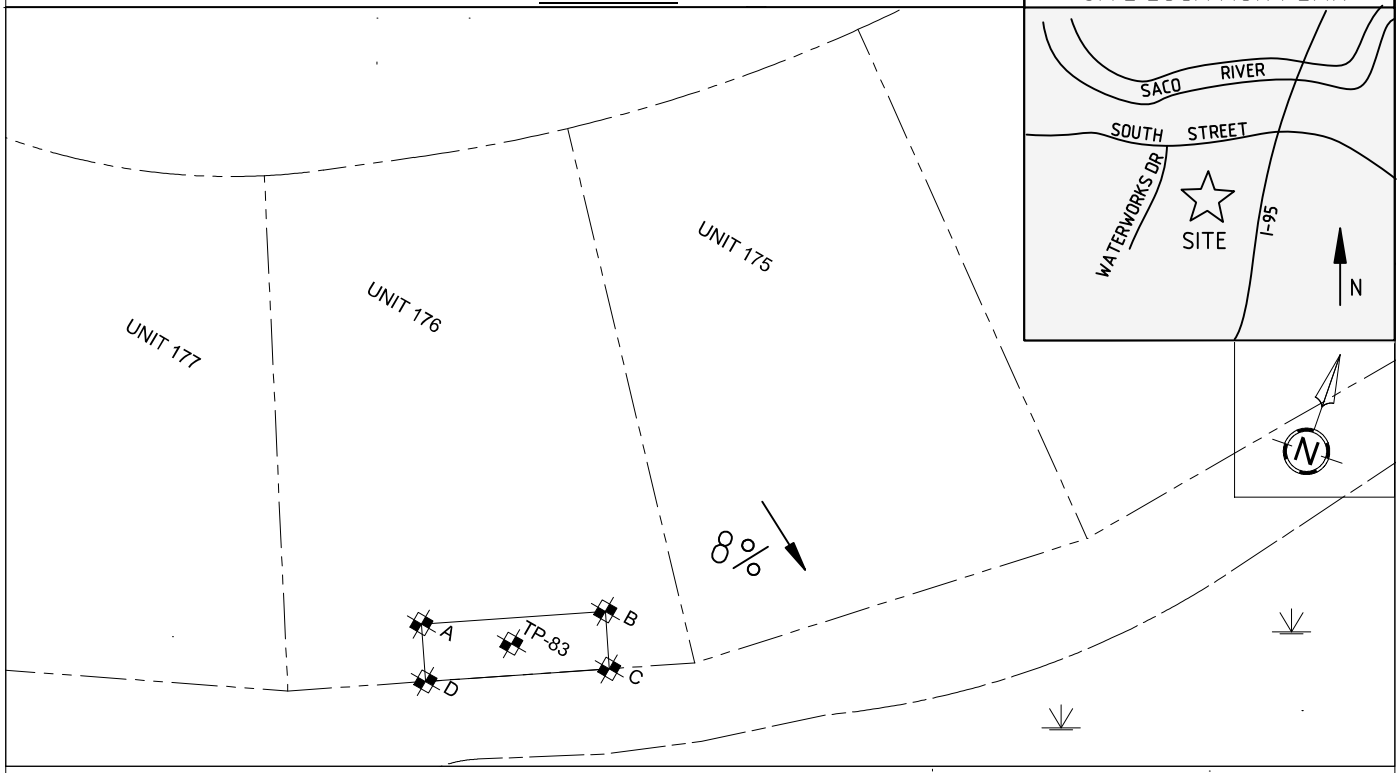
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

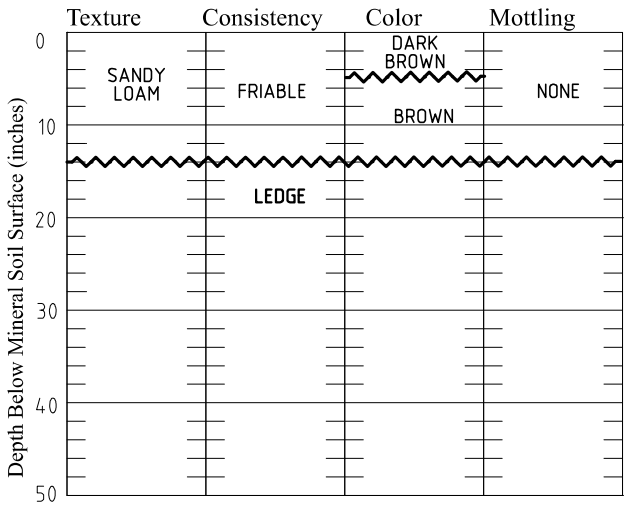


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-83 ☐ Test Pit ☒ Boring

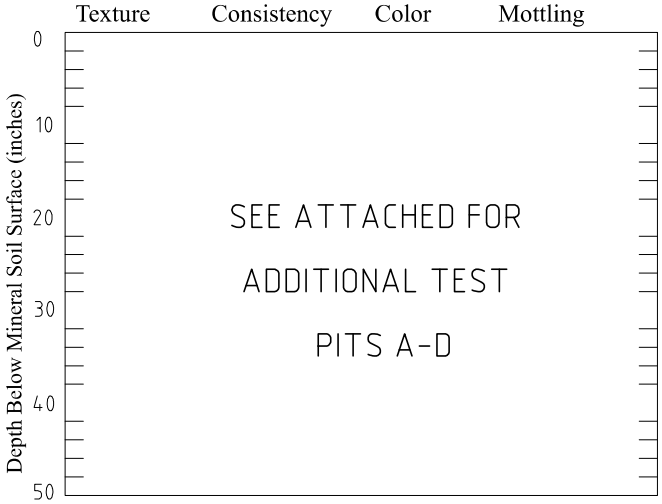
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
2	AIII	8 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

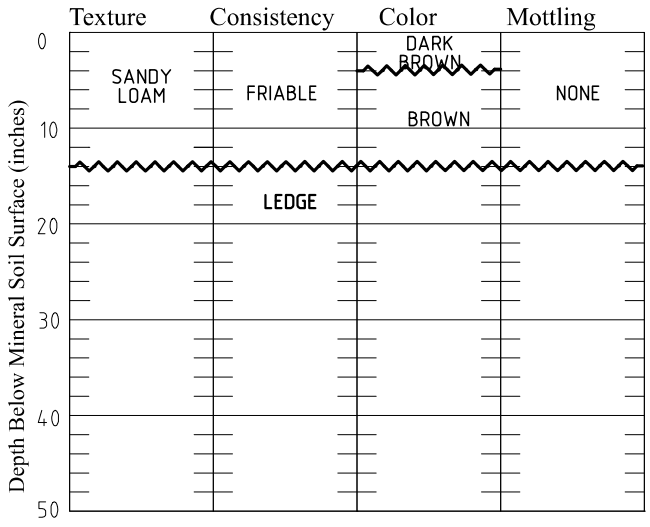
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-83 A ☐ Test Pit ☒ Boring

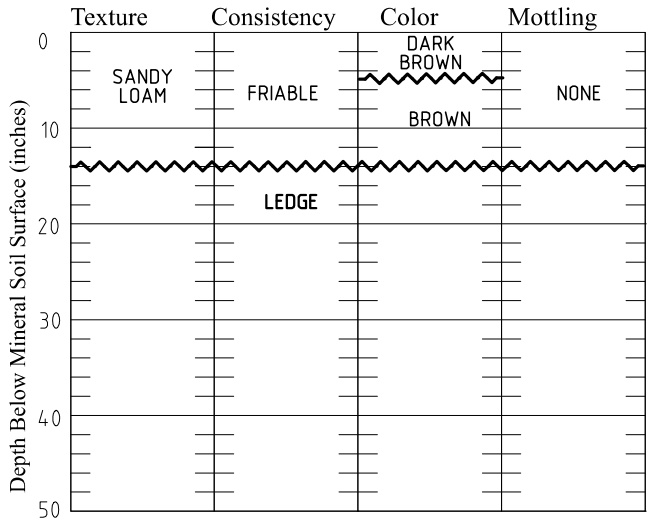
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	8 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-83 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

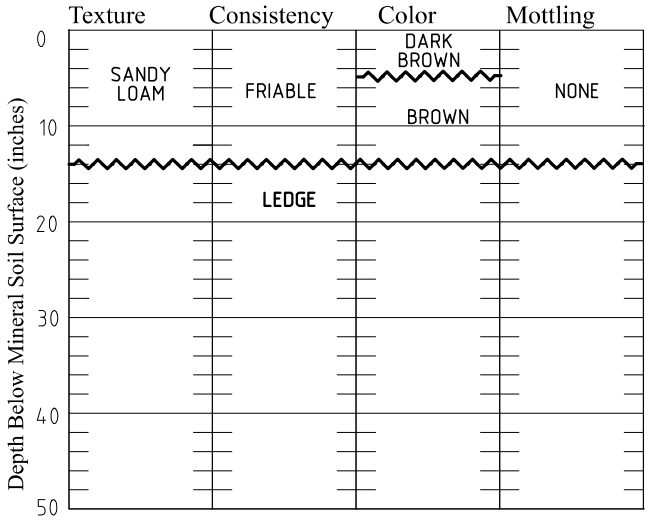


Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	8 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-83 C ☐ Test Pit ☒ Boring

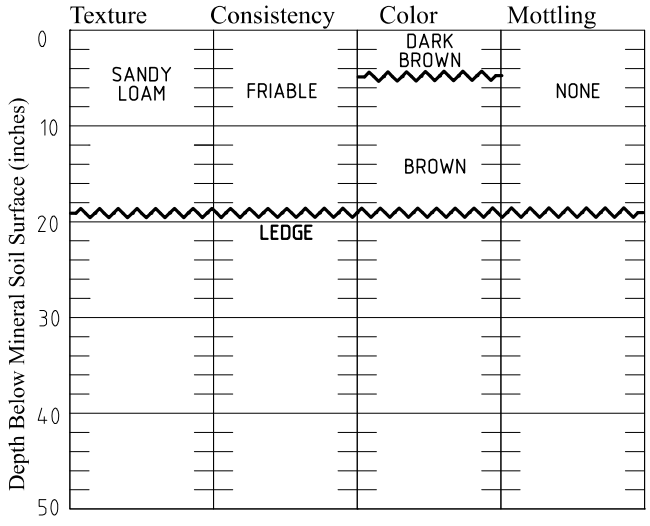
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	8 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-83 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	8 %	19 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/26/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

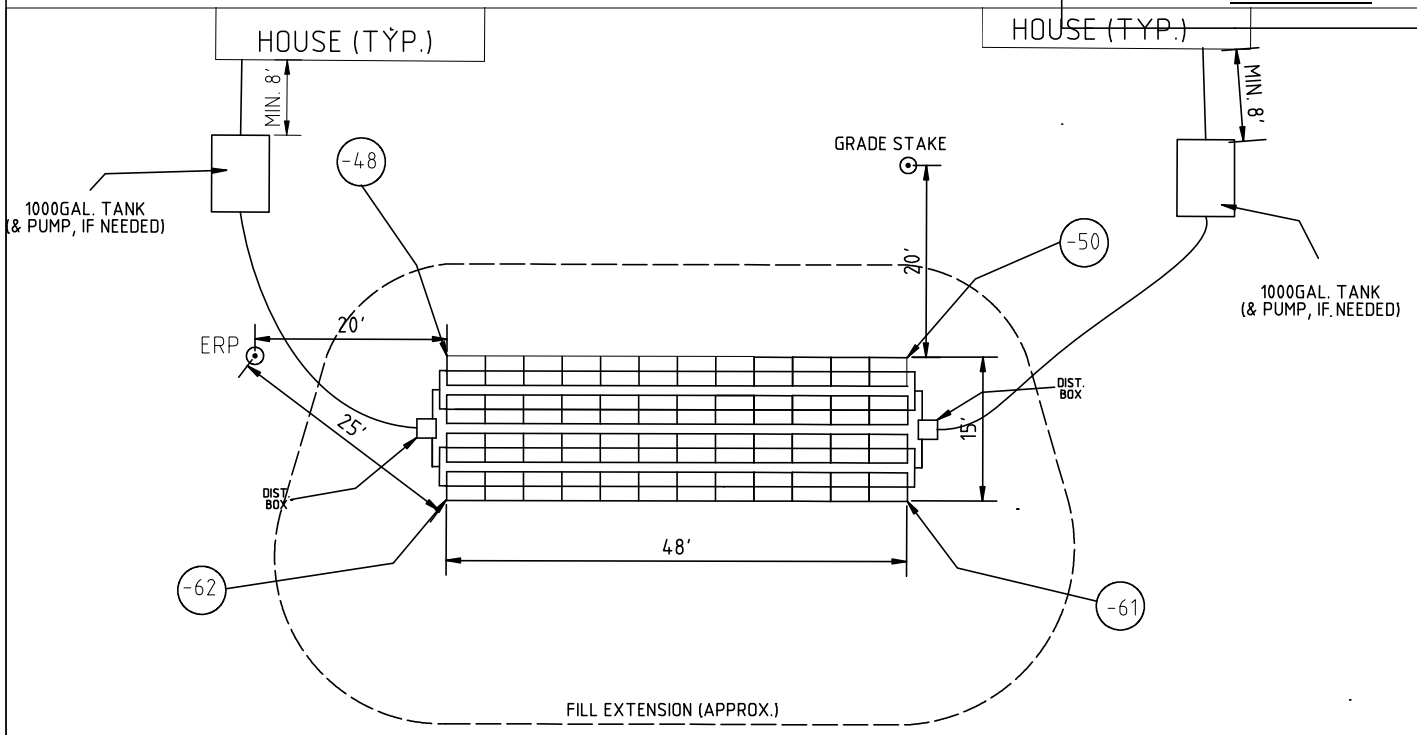
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

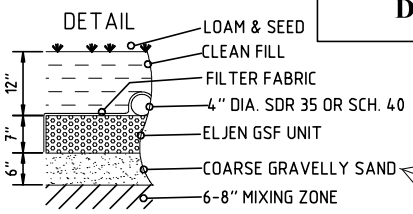
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 56" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

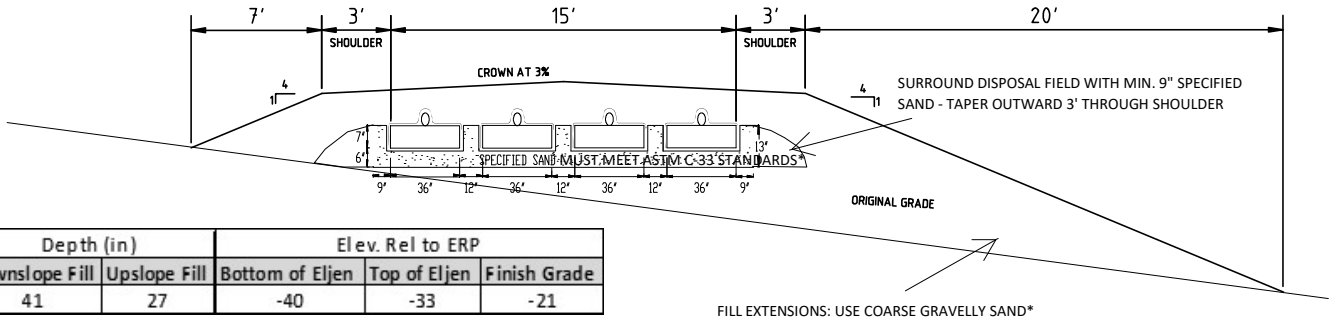
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
41	27	-40	-33	-21

Site Evaluator Signature

419
SE #

3/15/2023
Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 177-178

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____ (2nd) date approved

Local Plumbing Inspector Signature

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / AIII
at Observation Hole # TP-82
Depth 17 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

SIZED LARGE PER REQUEST
☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 20.76 s
Lon. 70 d 29 m 48.62 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/15/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

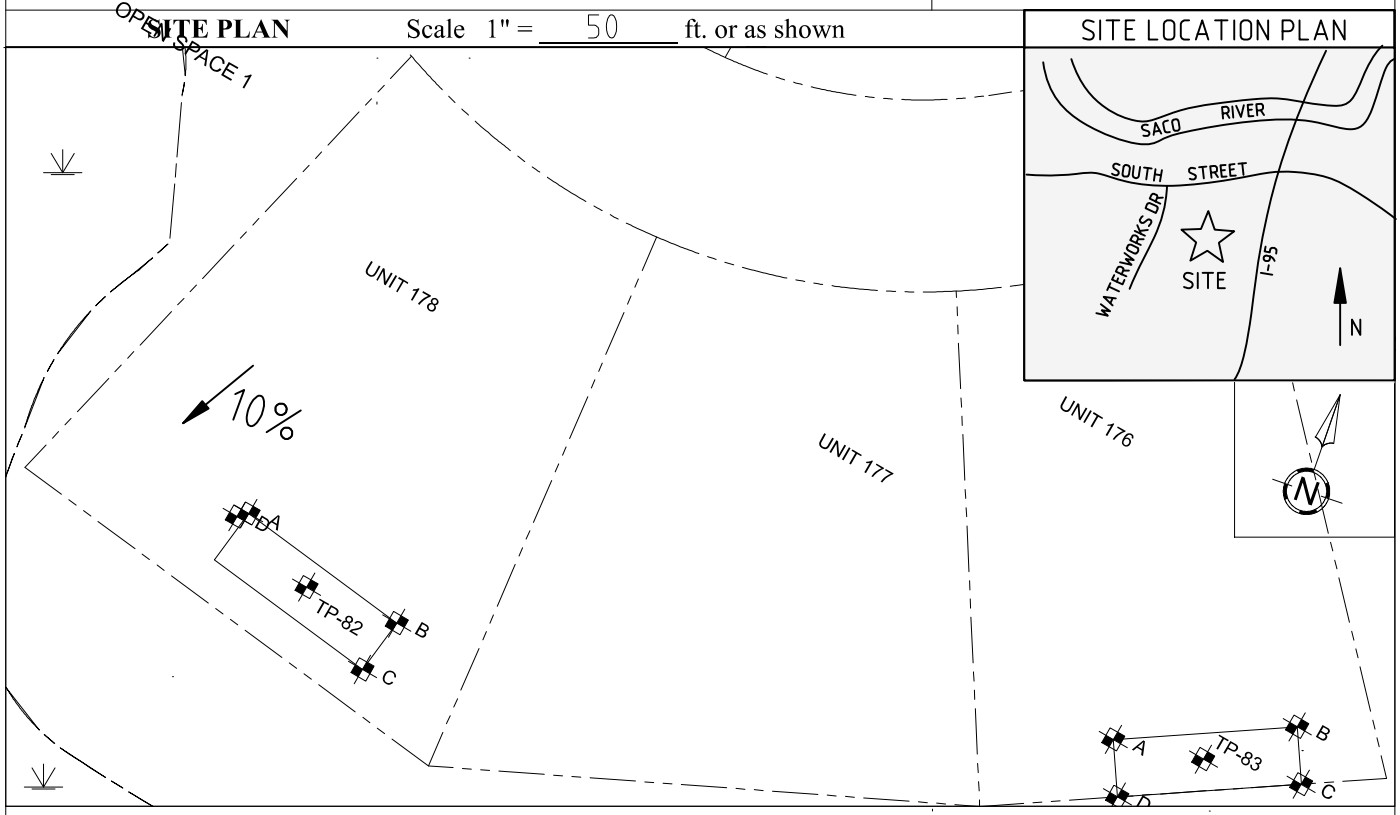
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

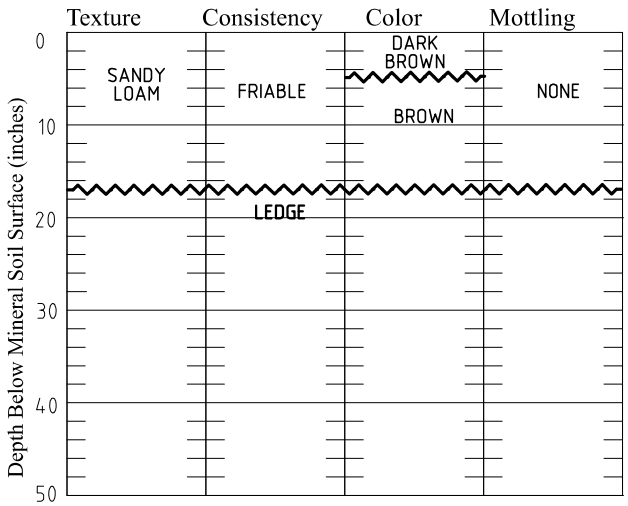
SITE PLAN Scale 1" = 50 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-82 ☐ Test Pit ☒ Boring

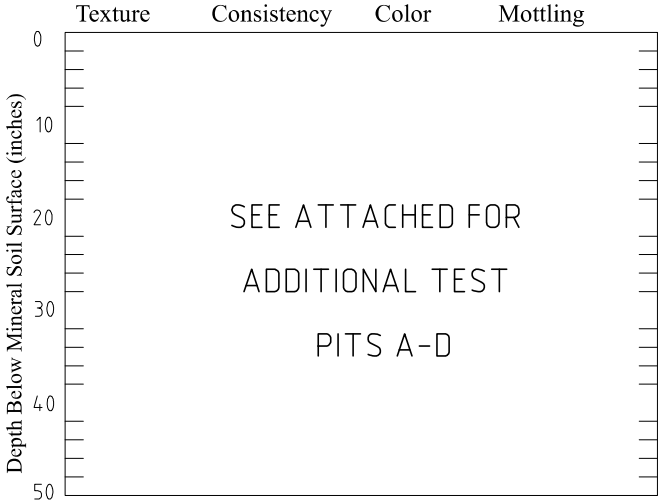
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
2	AIII	10 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

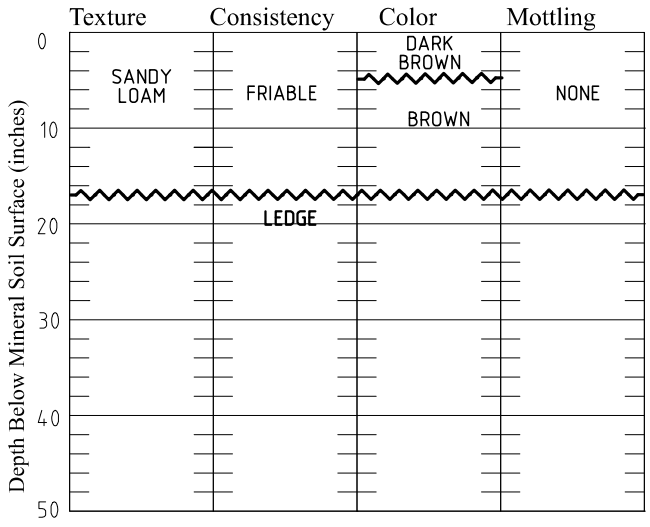
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-82 A ☐ Test Pit ☒ Boring

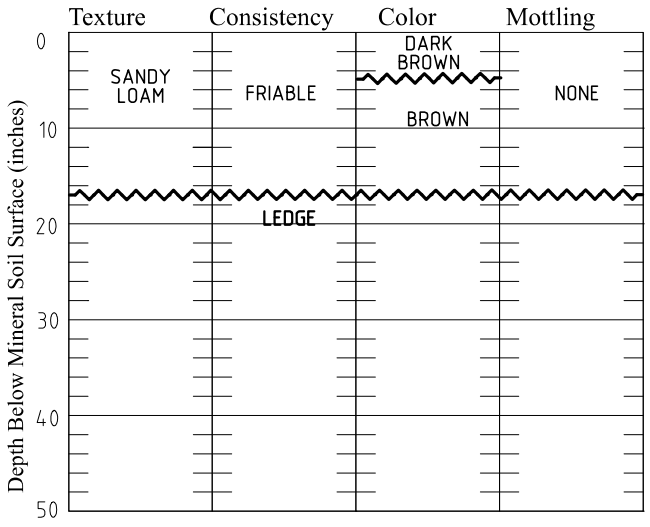
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	10 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-82 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

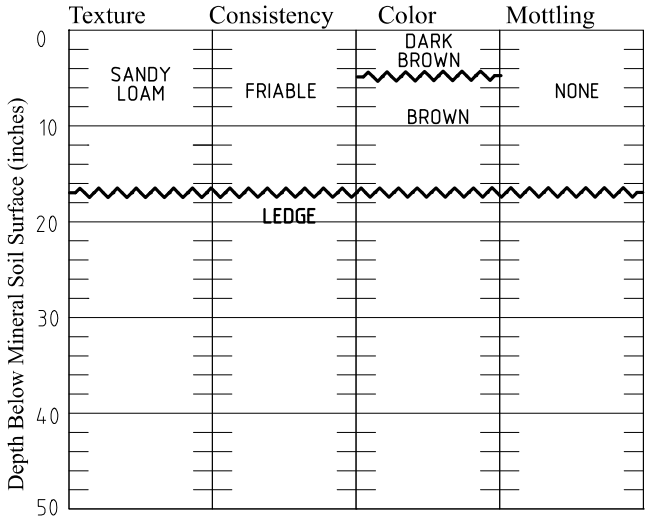


Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	10 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-82 C ☐ Test Pit ☒ Boring

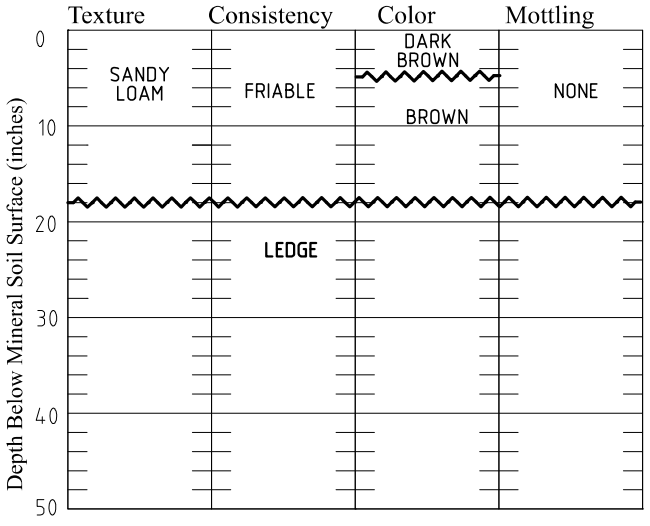
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	10 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-82 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
2 Profile / AIII Condition	12 %	18 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/26/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

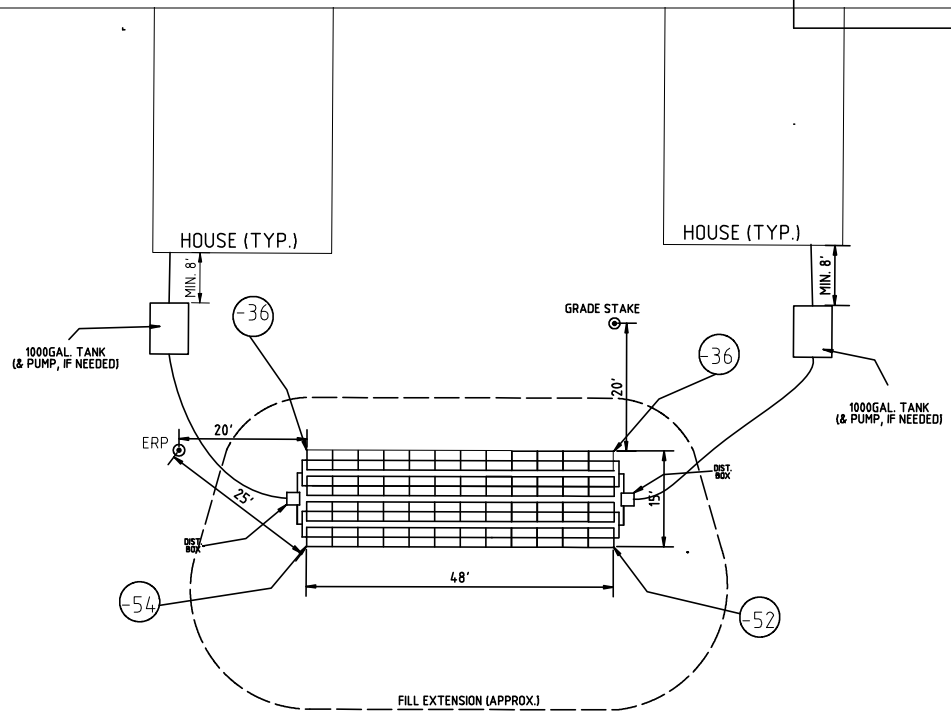
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

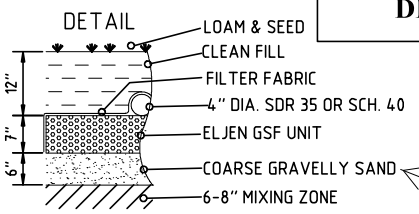
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 48" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

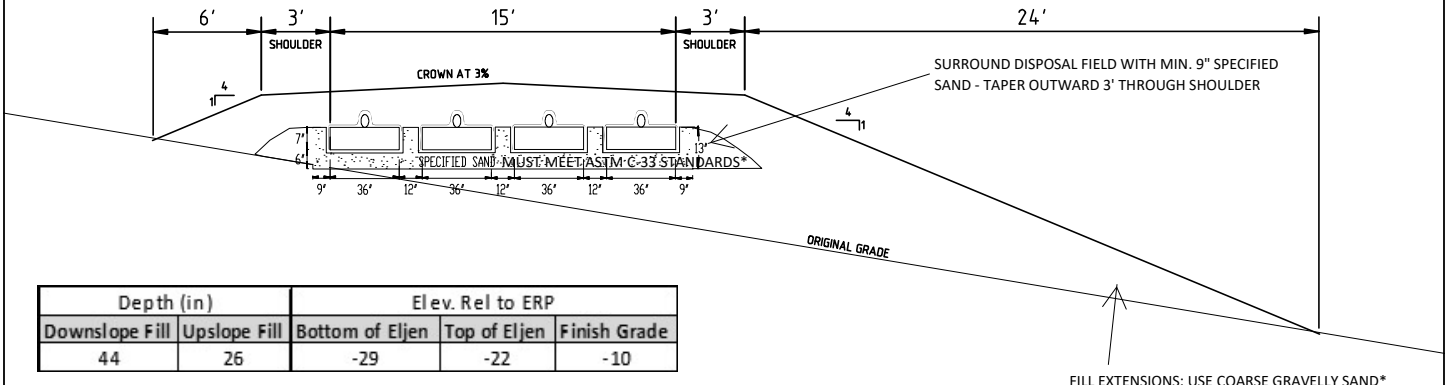
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 8 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
44	26	-29	-22	-10

Site Evaluator Signature

SE # 419

Date 3/18/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 179-181

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-81
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 22.77 s
Lon. 70 d 29 m 51.45 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

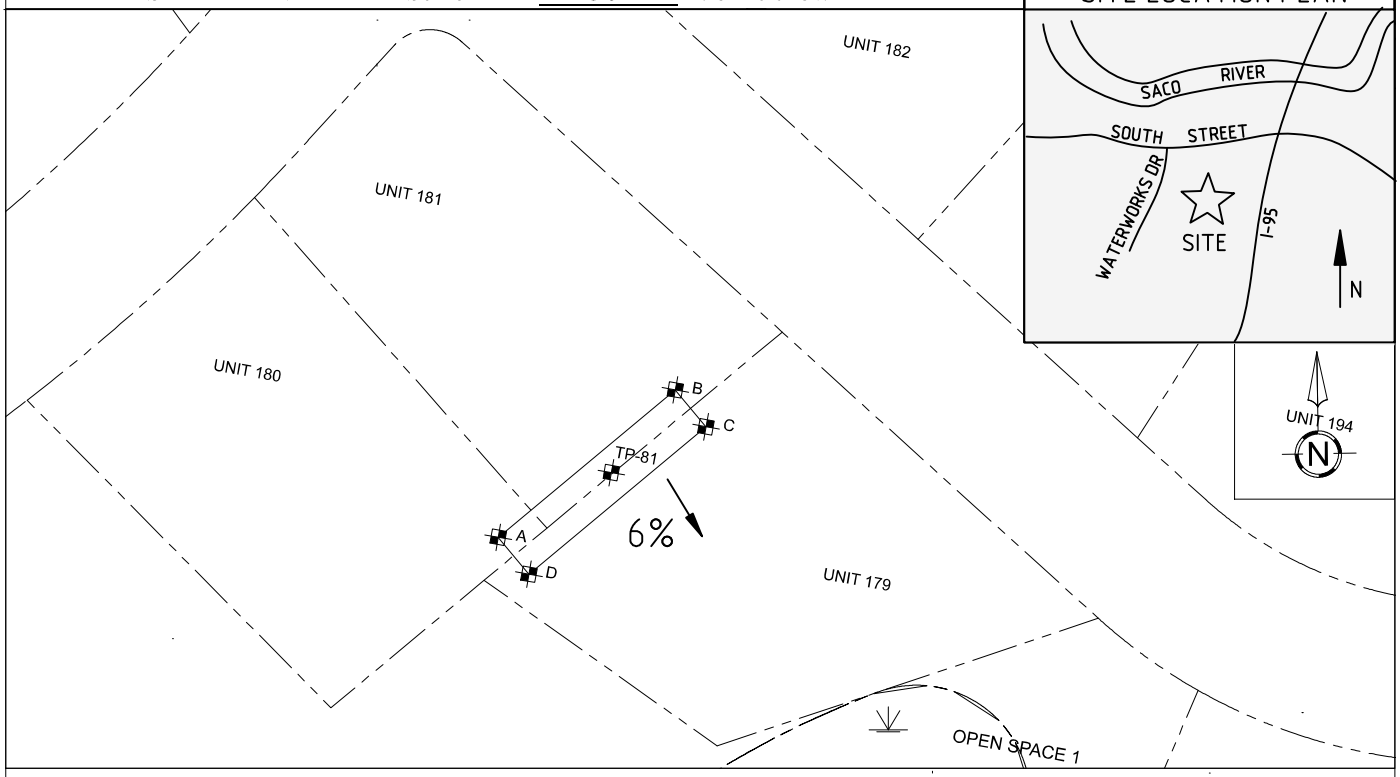
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

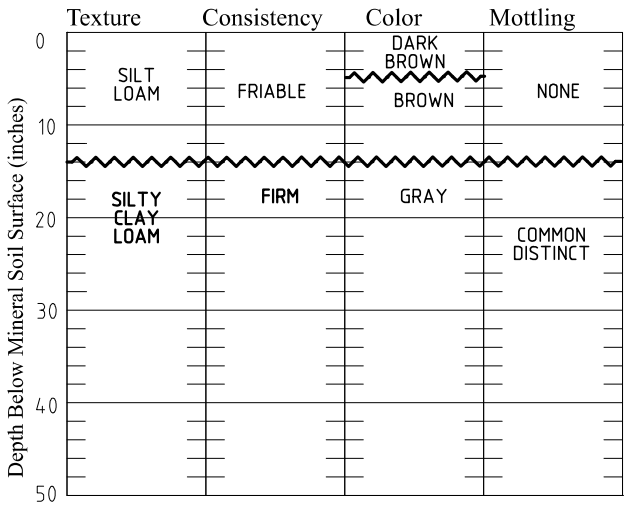
SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-81 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Texture Consistency Color Mottling

Depth Below Mineral Soil Surface (inches): 0, 10, 20, 30, 40, 50

SEE ATTACHED FOR ADDITIONAL TEST PITS A-D

Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature

419
SE #

3/21/23
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

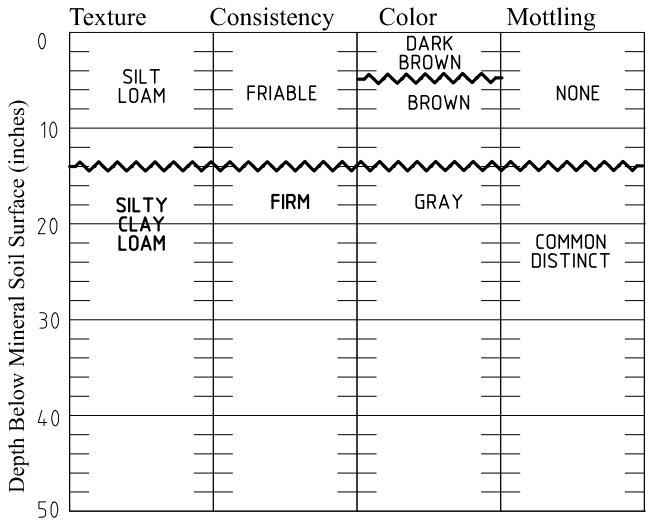
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-81 A ☐ Test Pit ☒ Boring

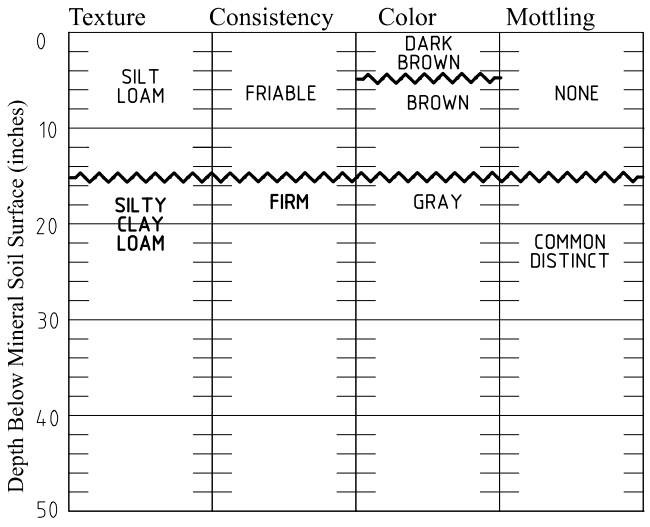
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-81 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

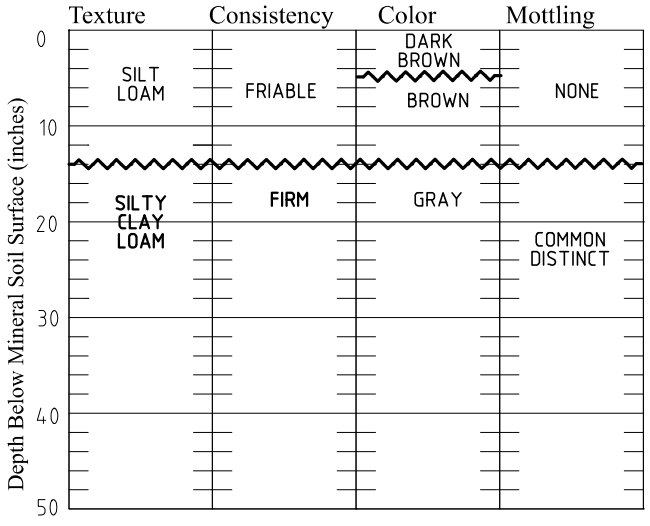


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-81 C ☐ Test Pit ☒ Boring

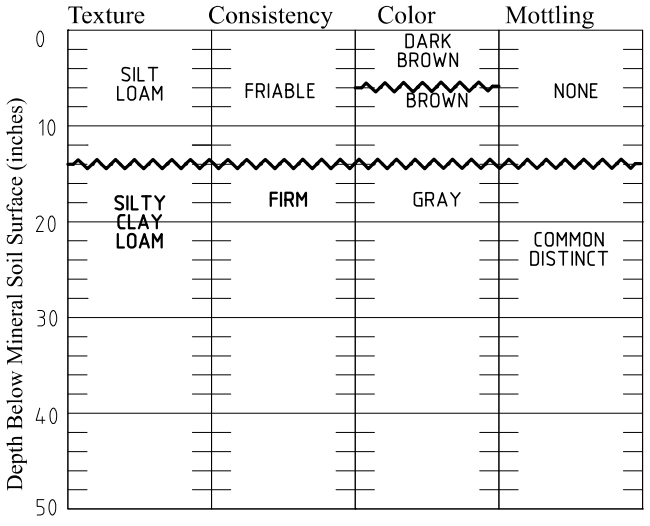
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-81 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/26/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

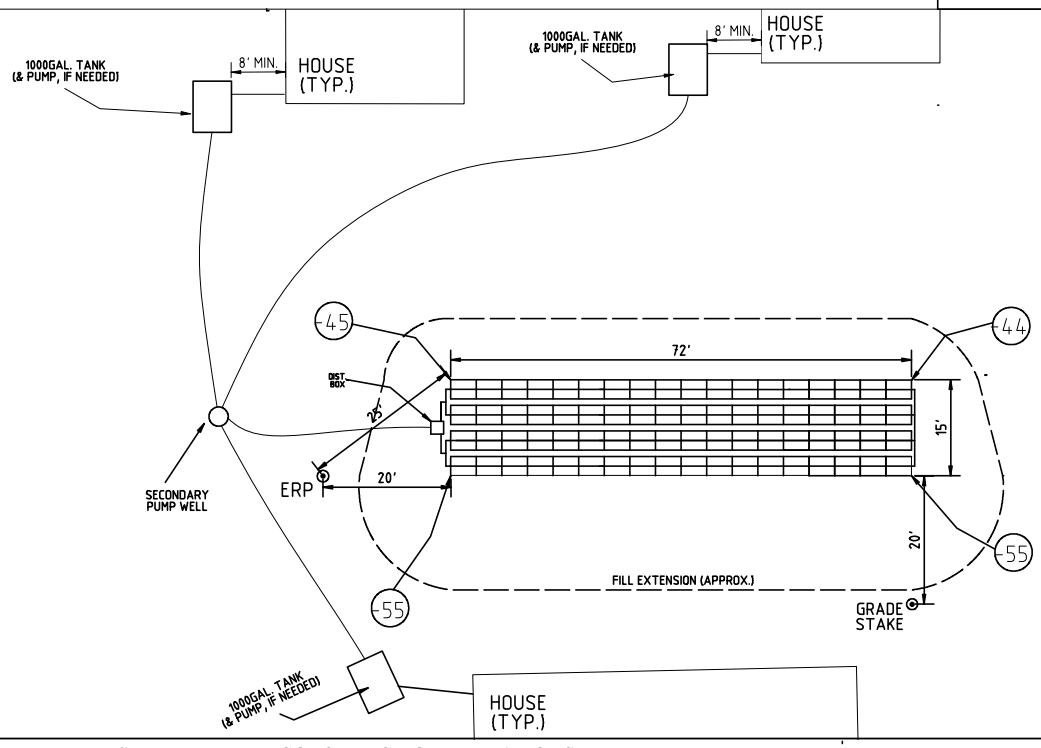
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

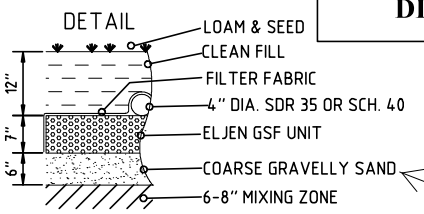
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

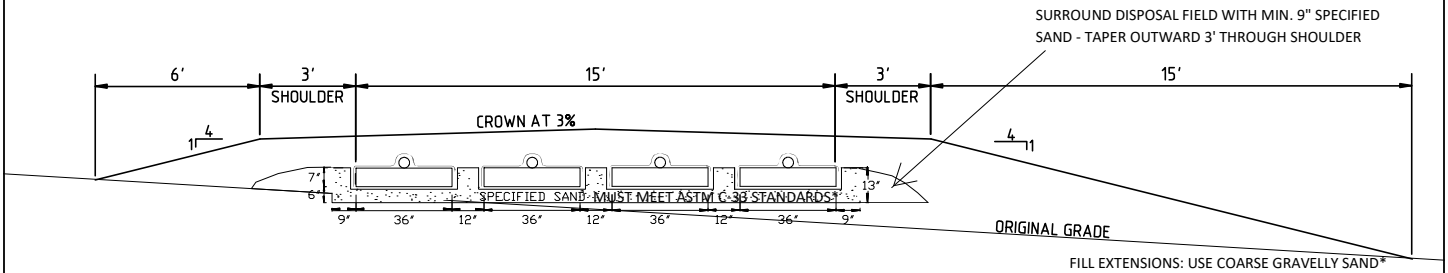
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	23	-40	-33	-21



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 182-184

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-89
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.57 s
Lon. 70 d 29 m 49.18 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

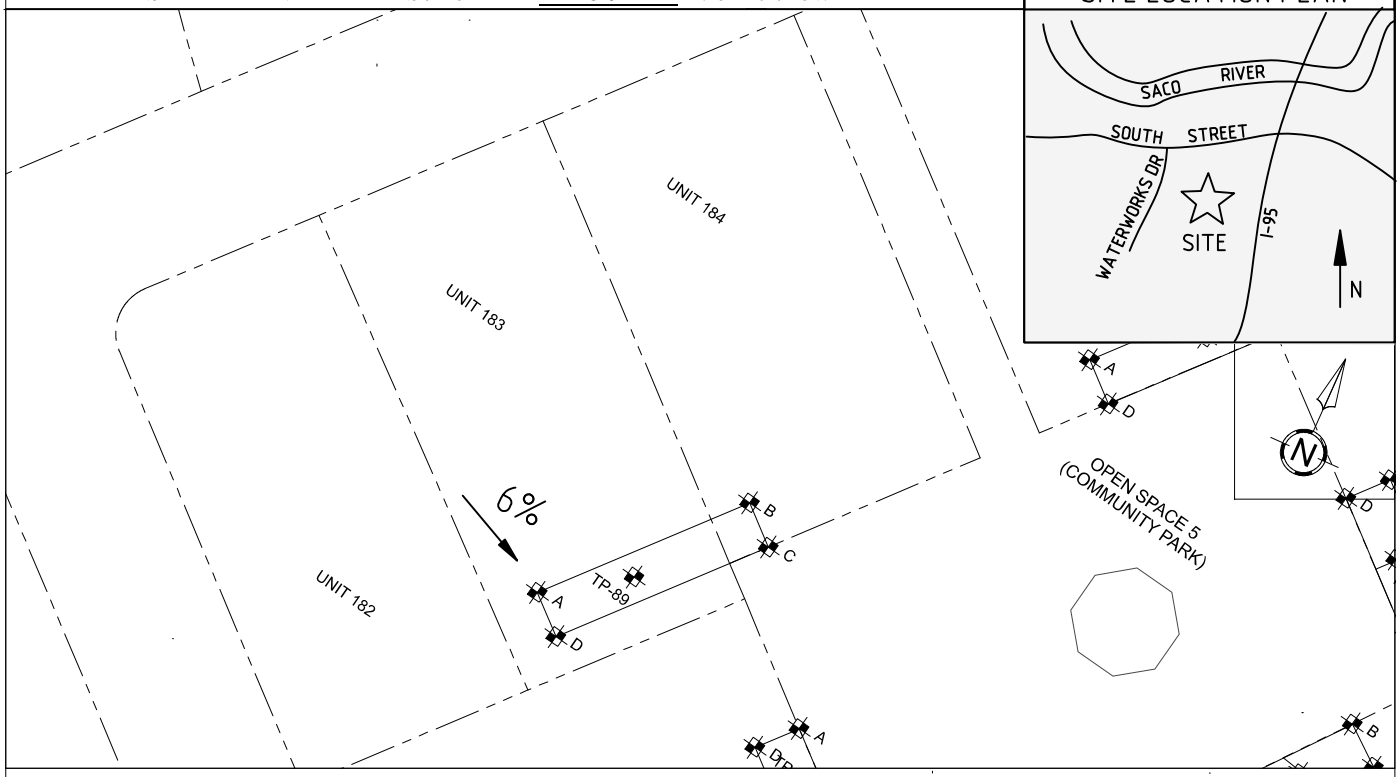
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-89 ☐ Test Pit ☒ Boring
0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / RED BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 / D (Profile / Condition)	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring
_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

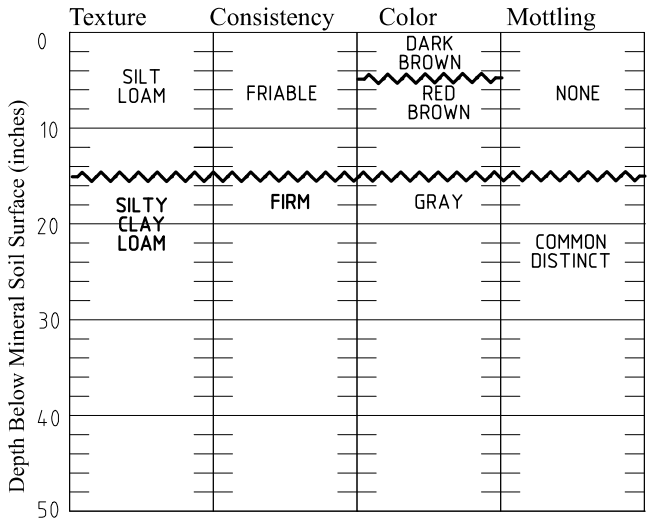
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-89 A ☐ Test Pit ☒ Boring

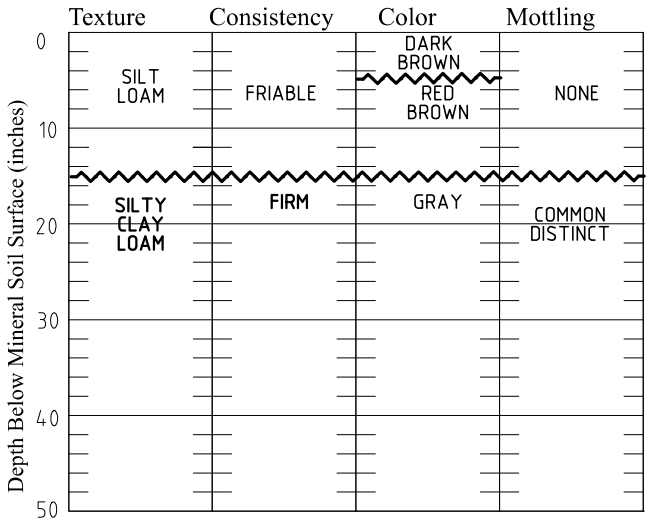
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-89 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

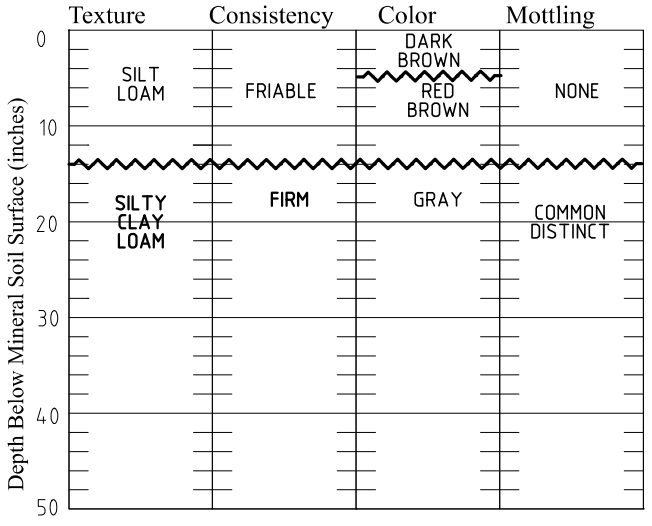


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	6 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-89 C ☐ Test Pit ☒ Boring

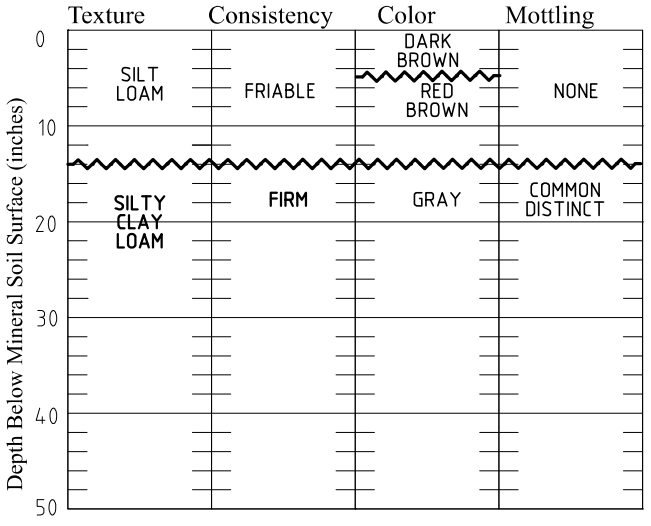
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-89 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	6 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature: Erik Jens | SE #: 419 | Date: 3/26/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

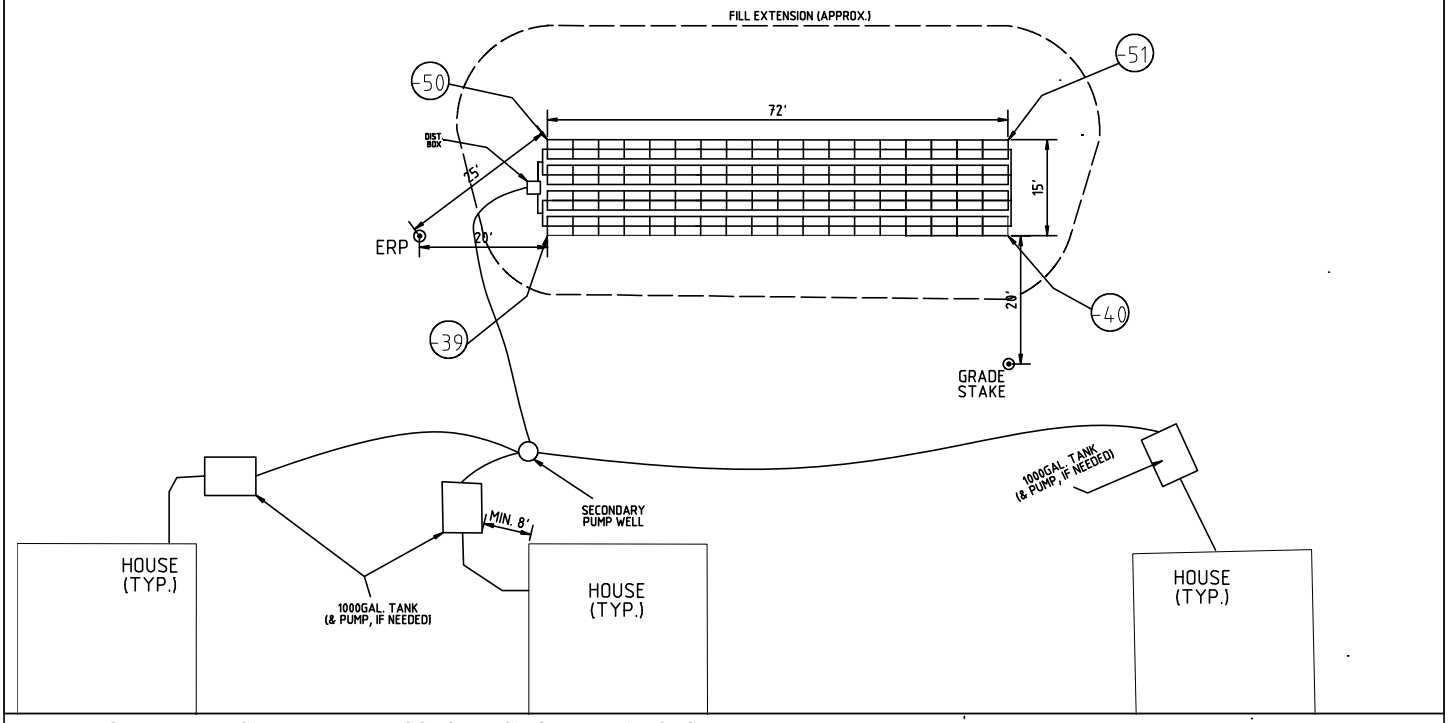
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

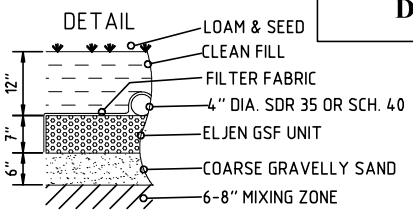
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 50'' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



- × INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED
- × ALL LAND TO BE FILLED MUST BE SCARIFIED
- × OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

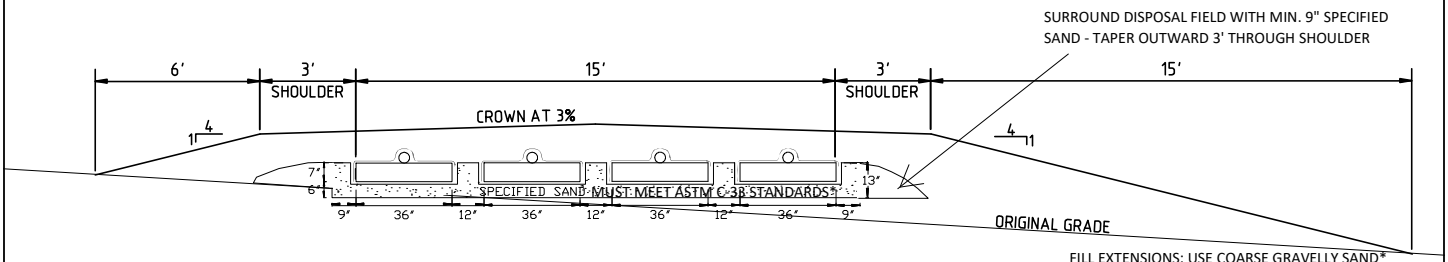
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
34	23	-35	-28	-16



Site Evaluator Signature

SE # 419

Date 3/15/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 185-187

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # ____

Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]

Local Plumbing Inspector Signature L.P.I. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: ____
Year installed: ____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: ____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, ____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: ____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: 3 3BR UNITS (9BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: ____
SIZE: 3321 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

810 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE 8 CONDITION D
at Observation Hole # TP-77
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 25.96 s
Lon. 70 d 29 m 47.44 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/16/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

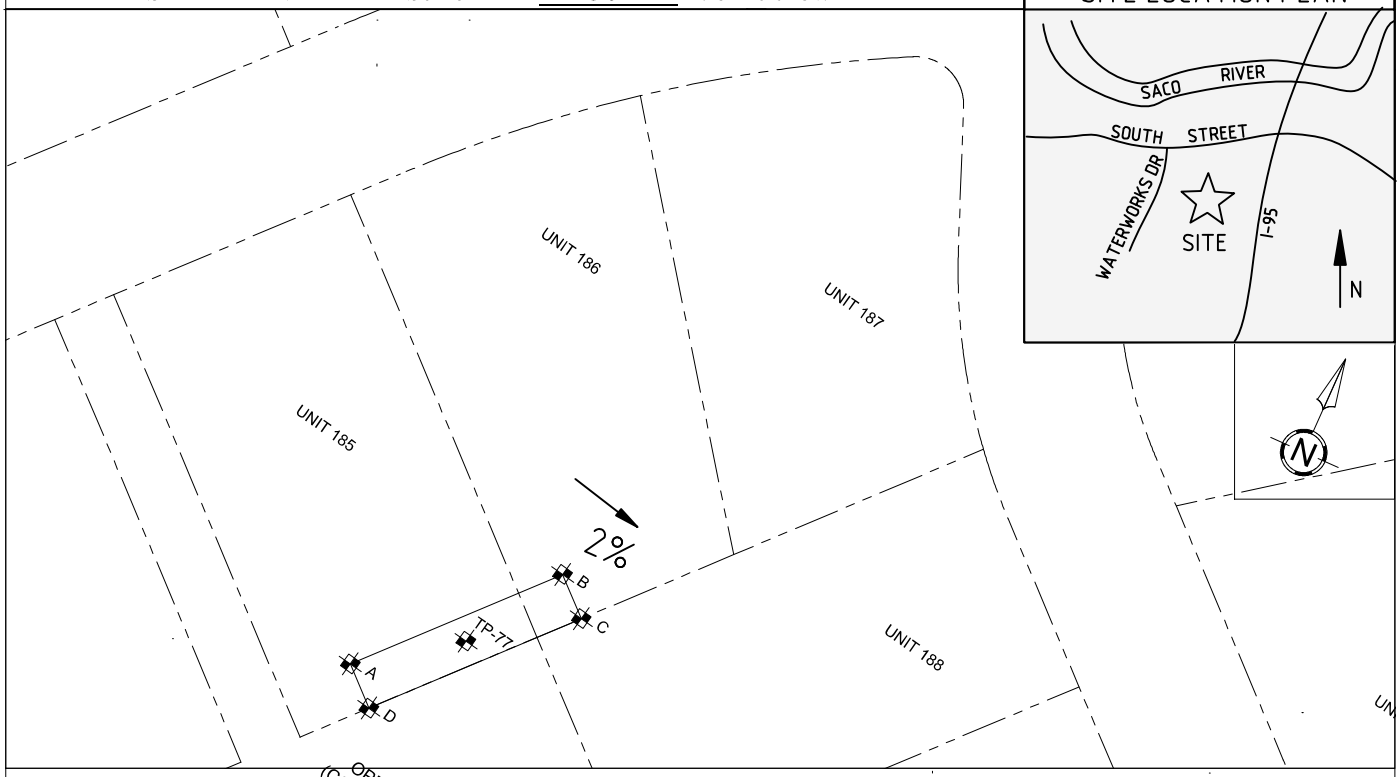
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown

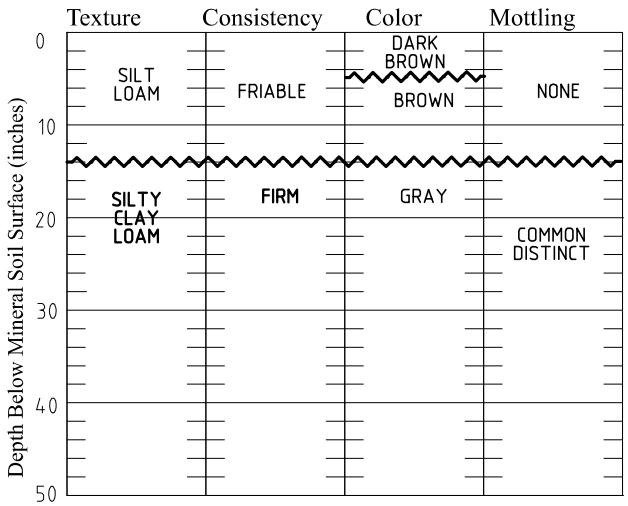


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-77 ☐ Test Pit ☒ Boring

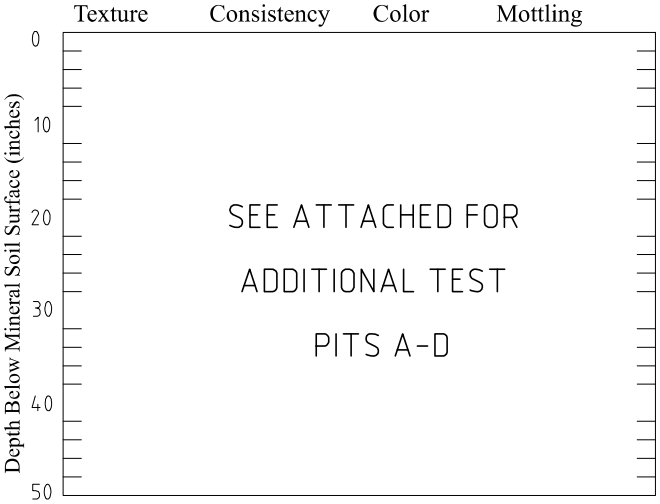
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: [signature] 419 (SE #) 3/21/23 (Date)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

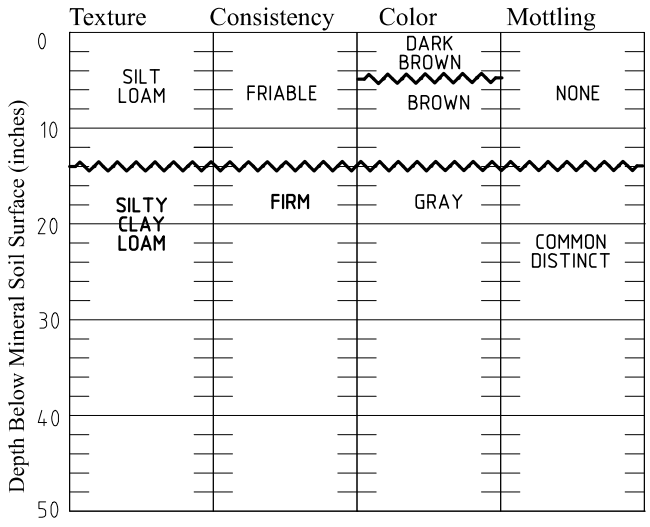
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-77 A ☐ Test Pit ☒ Boring

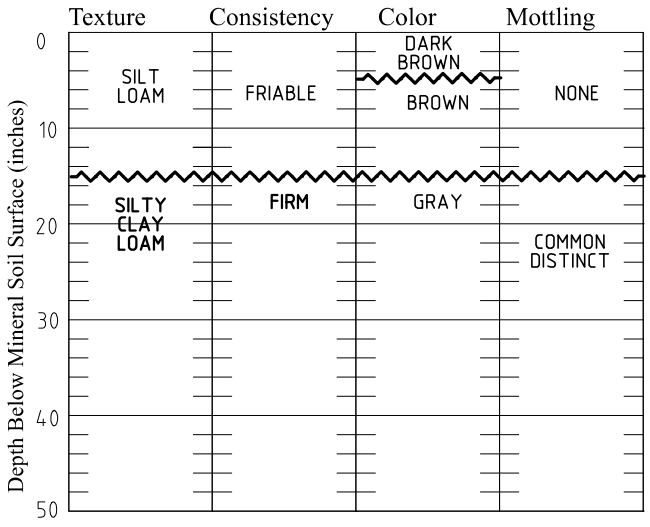
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-77 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

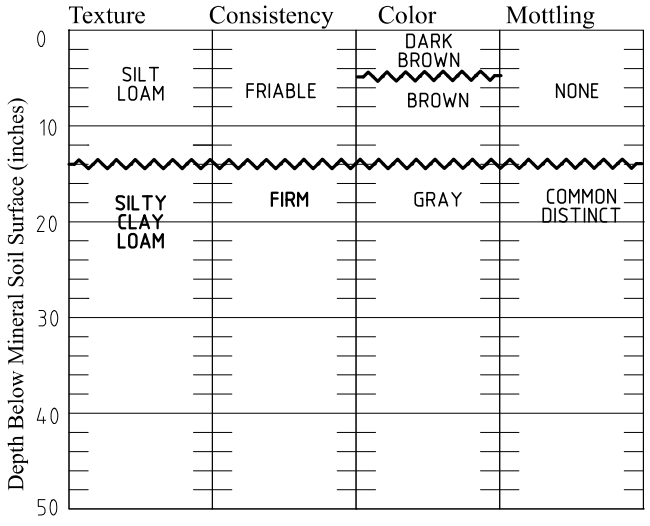


Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-77 C ☐ Test Pit ☒ Boring

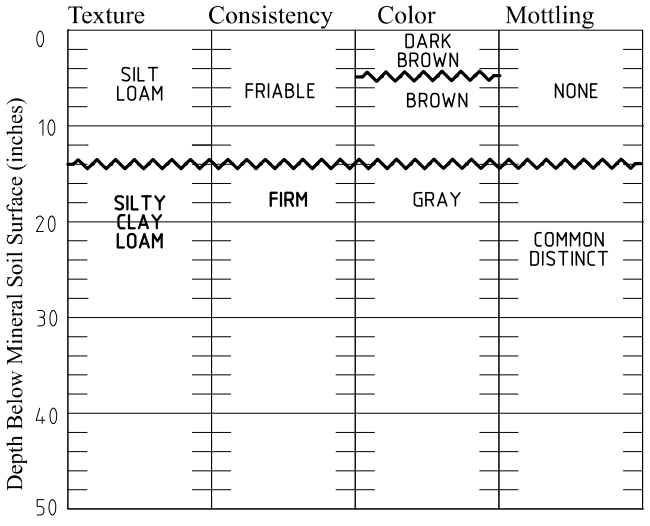
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-77 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) D (Condition)	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/26/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

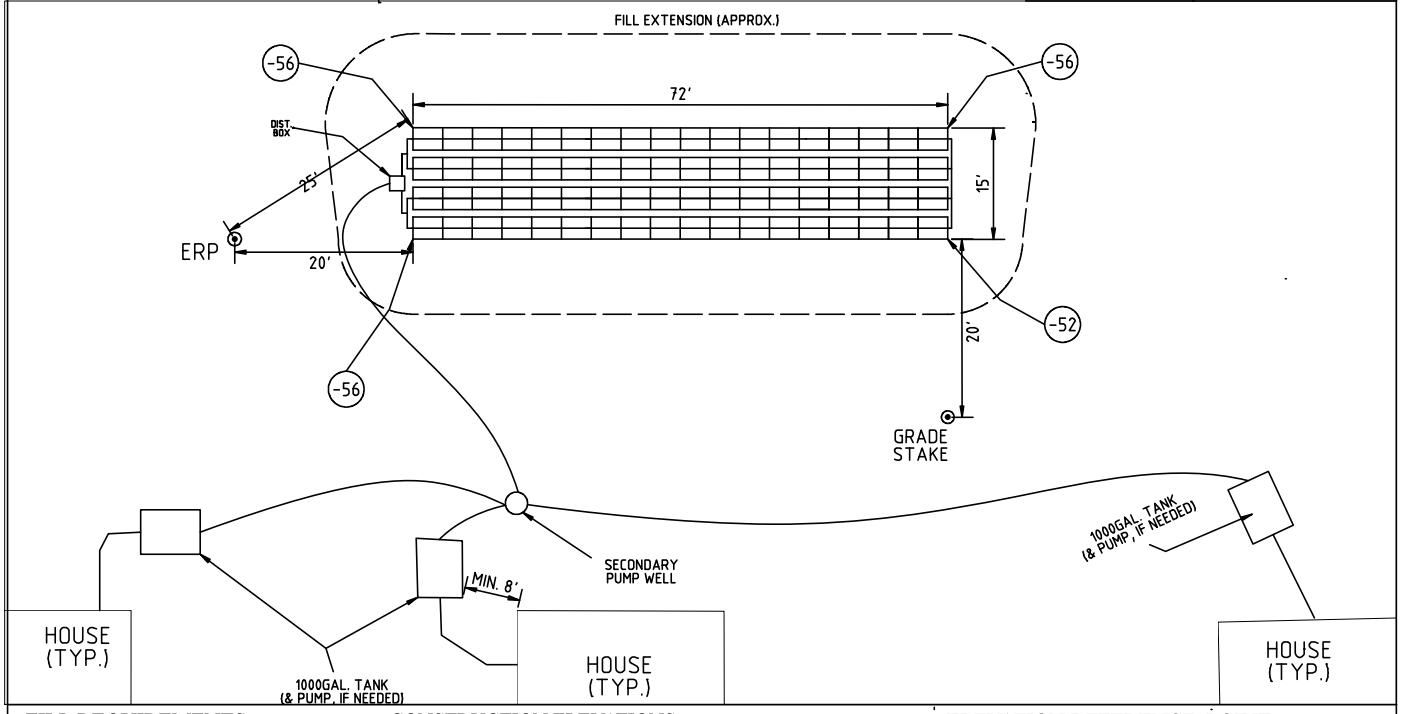
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

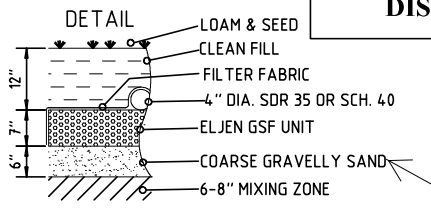
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



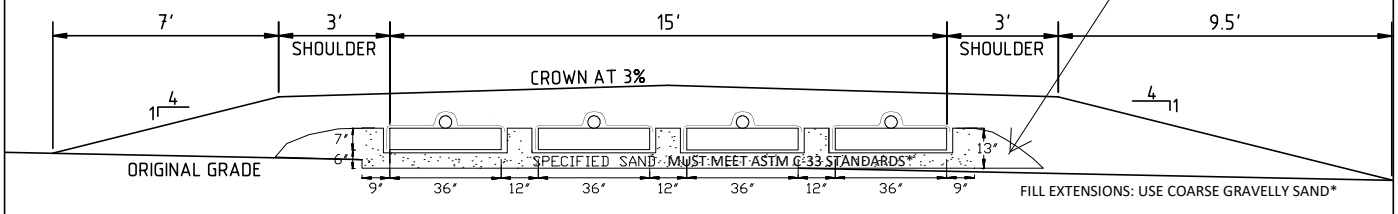
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-48	-41	-29

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 188-189

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 Lot # 8

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-86
Depth 12 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 25.57 s
Lon. 70 d 29 m 46.31 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/13/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	SE #	Date
	419	3/26/23

Site Evaluator Name Printed	Telephone Number	E-mail Address
ERIK LEMA	207-518-8442	erik@basswoodenv.com

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

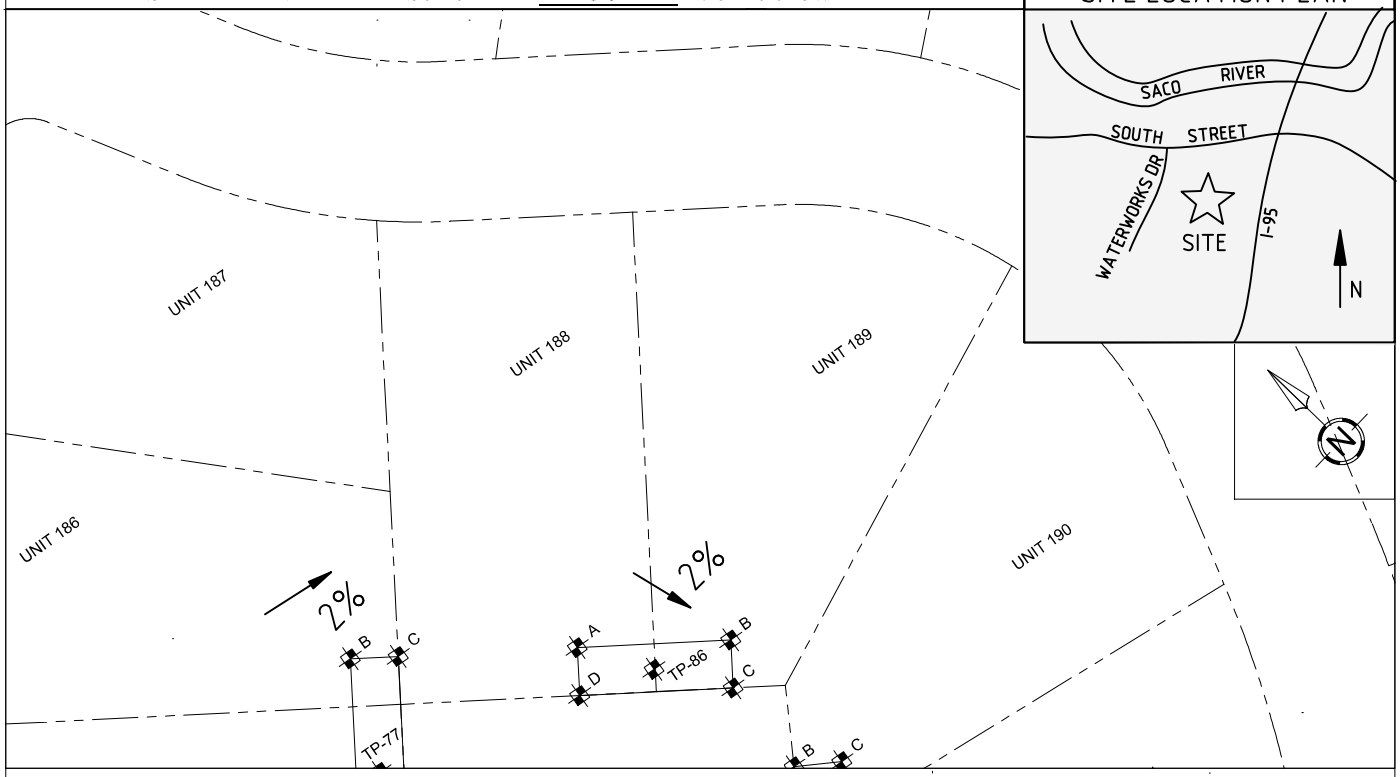
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 60 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-86 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification		Slope	Limiting Factor	
8	D	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature: Erik Jensen

SE #: 419

Date: 3/21/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

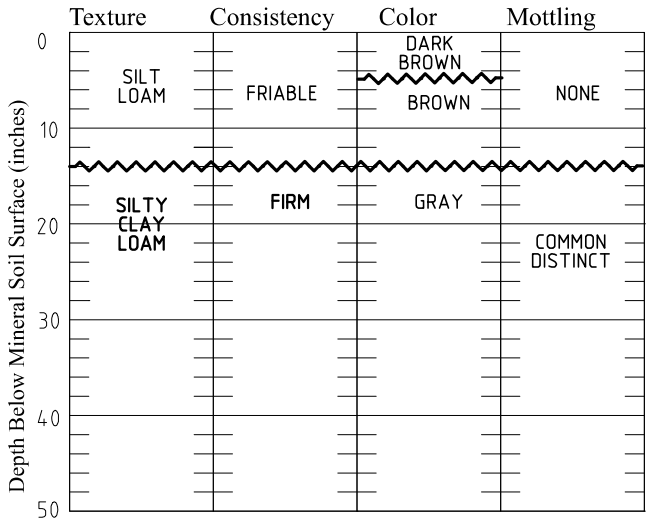
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-86 A ☐ Test Pit ☒ Boring

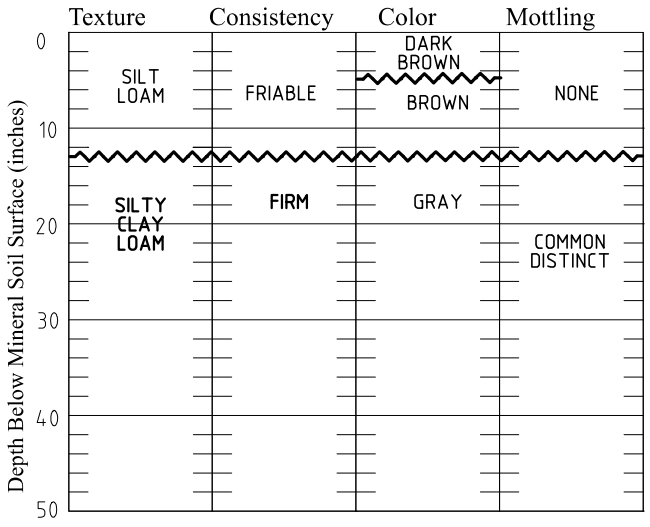
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-86 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

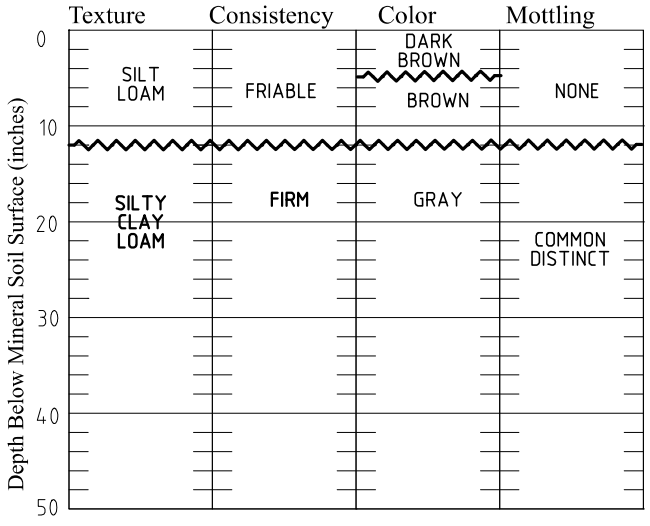


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	13 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-86 C ☐ Test Pit ☒ Boring

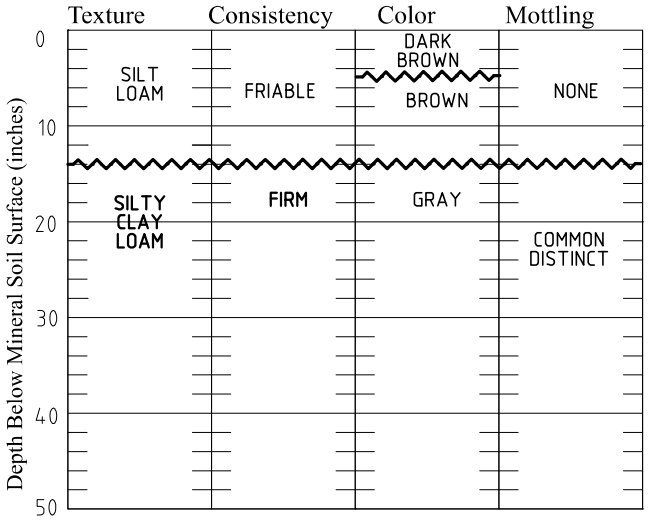
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	12 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-86 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/20/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

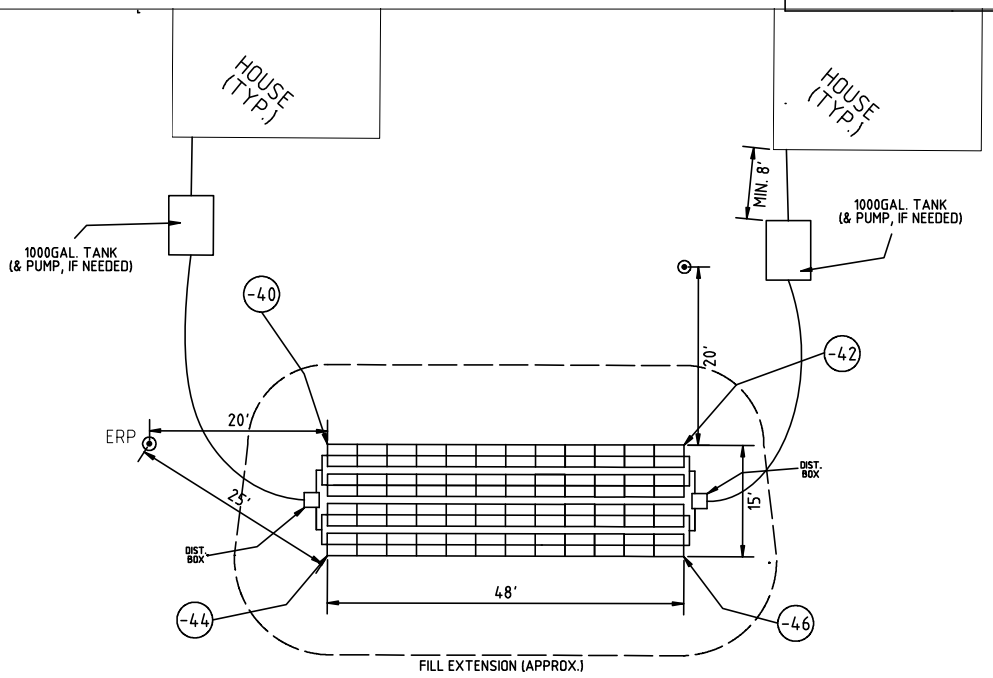
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

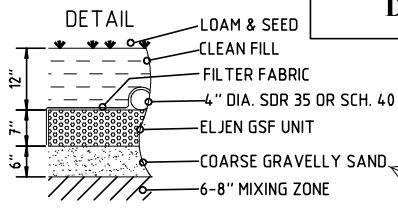
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54" A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

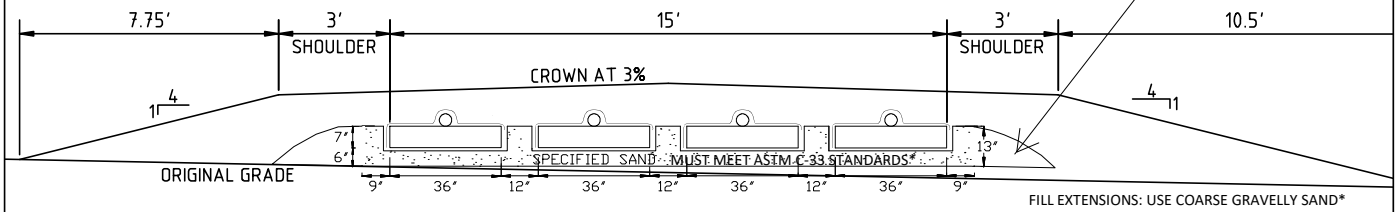
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



FILL EXTENSIONS: USE COARSE GRAVELLY SAND*

Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
29	25	-34	-27	-15

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 190-191

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-87
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.79 s
Lon. 70 d 29 m 46.38 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

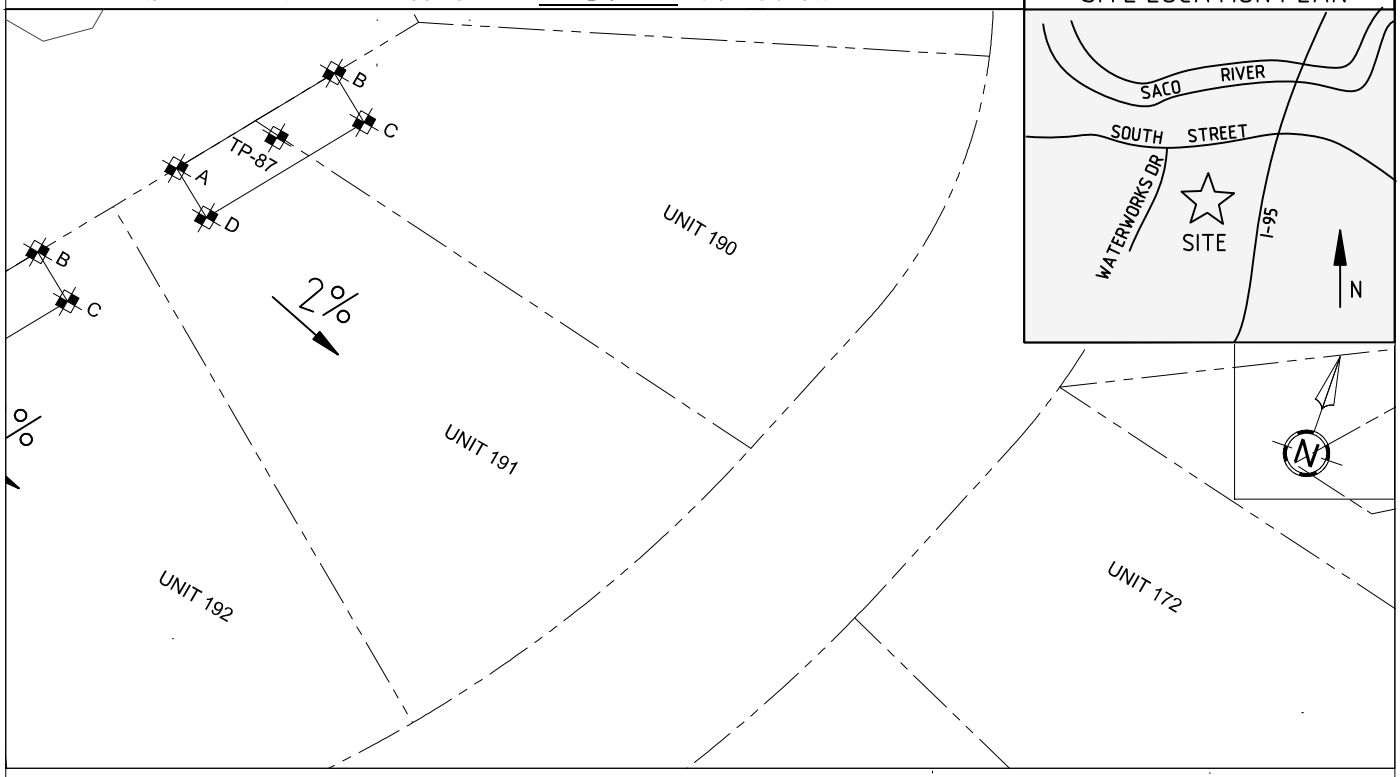
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown

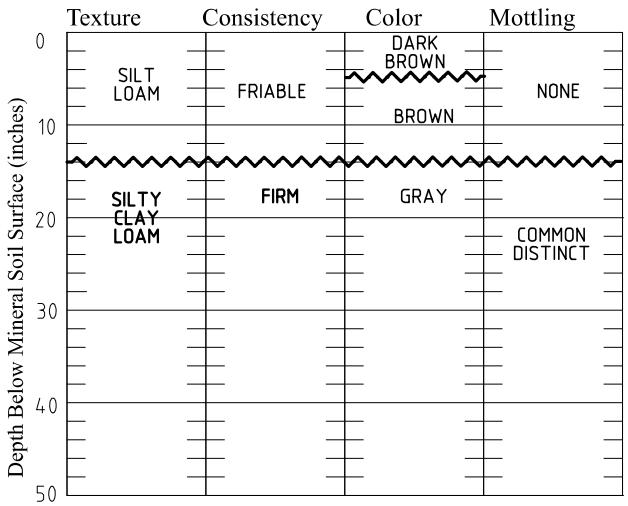


SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-87 ☐ Test Pit ☒ Boring

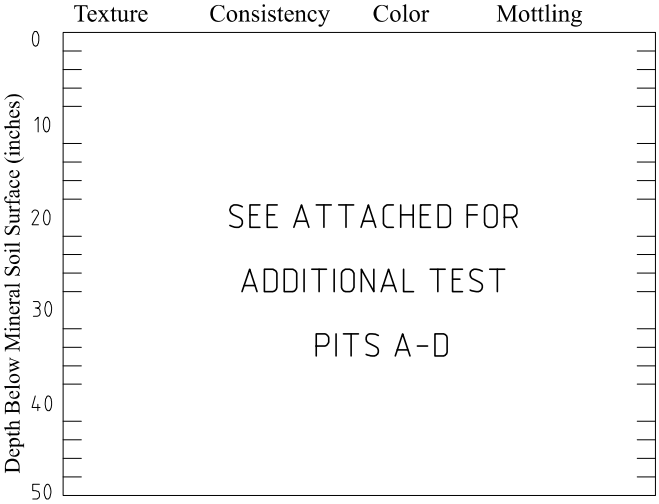
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
8	D	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
		%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth
Profile	Condition			

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

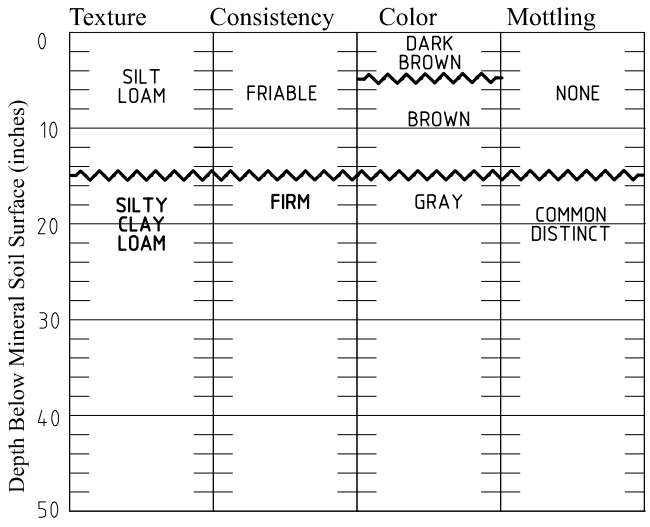
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-87 A ☐ Test Pit ☒ Boring

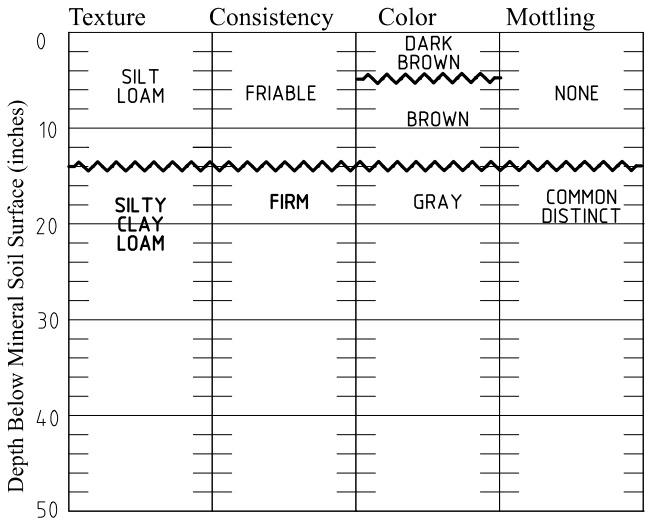
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	2 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-87 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

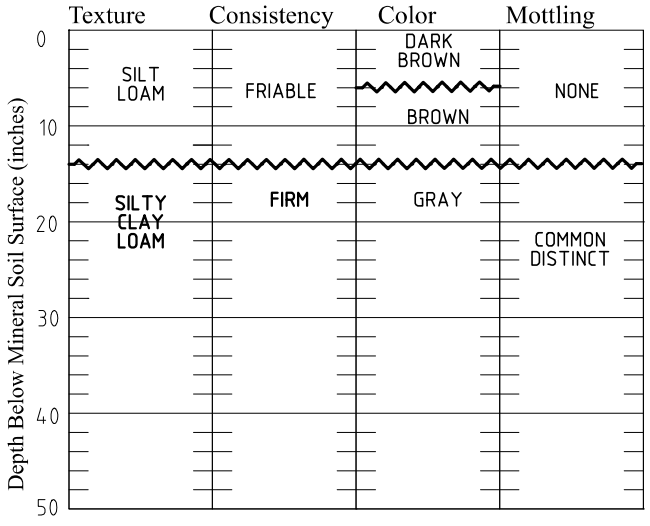


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-87 C ☐ Test Pit ☒ Boring

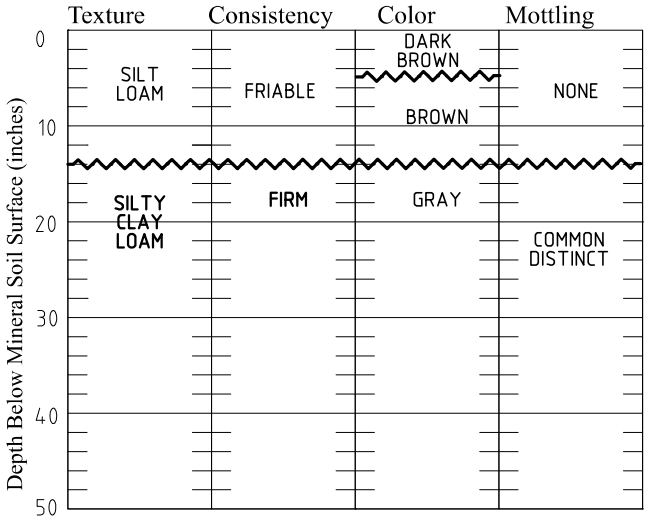
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-87 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/26/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

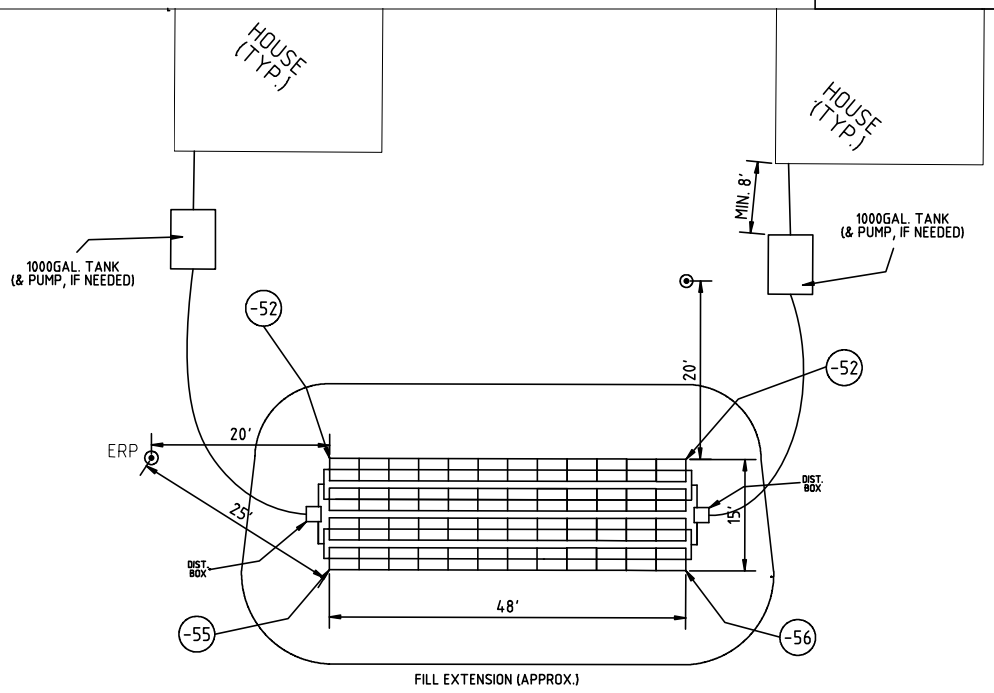
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

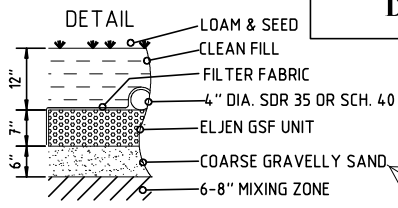
Reference Elevation: 0

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.



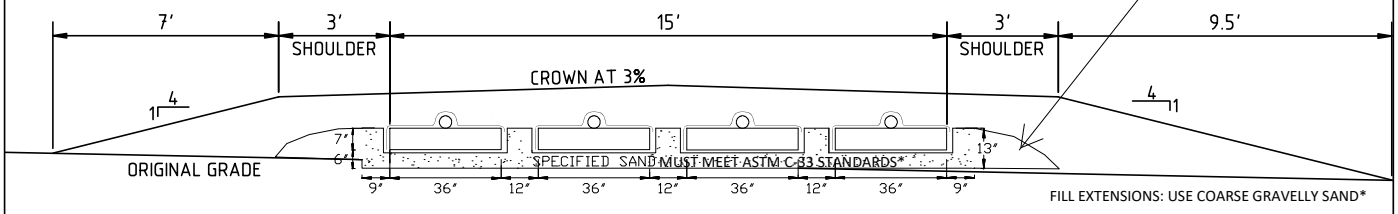
× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-48	-41	-29

Site Evaluator Signature

SE # 419

Date 3/14/2023

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 192-193

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / D
at Observation Hole # TP-59
Depth 14 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.13 s
Lon. 70 d 29 m 47.1 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

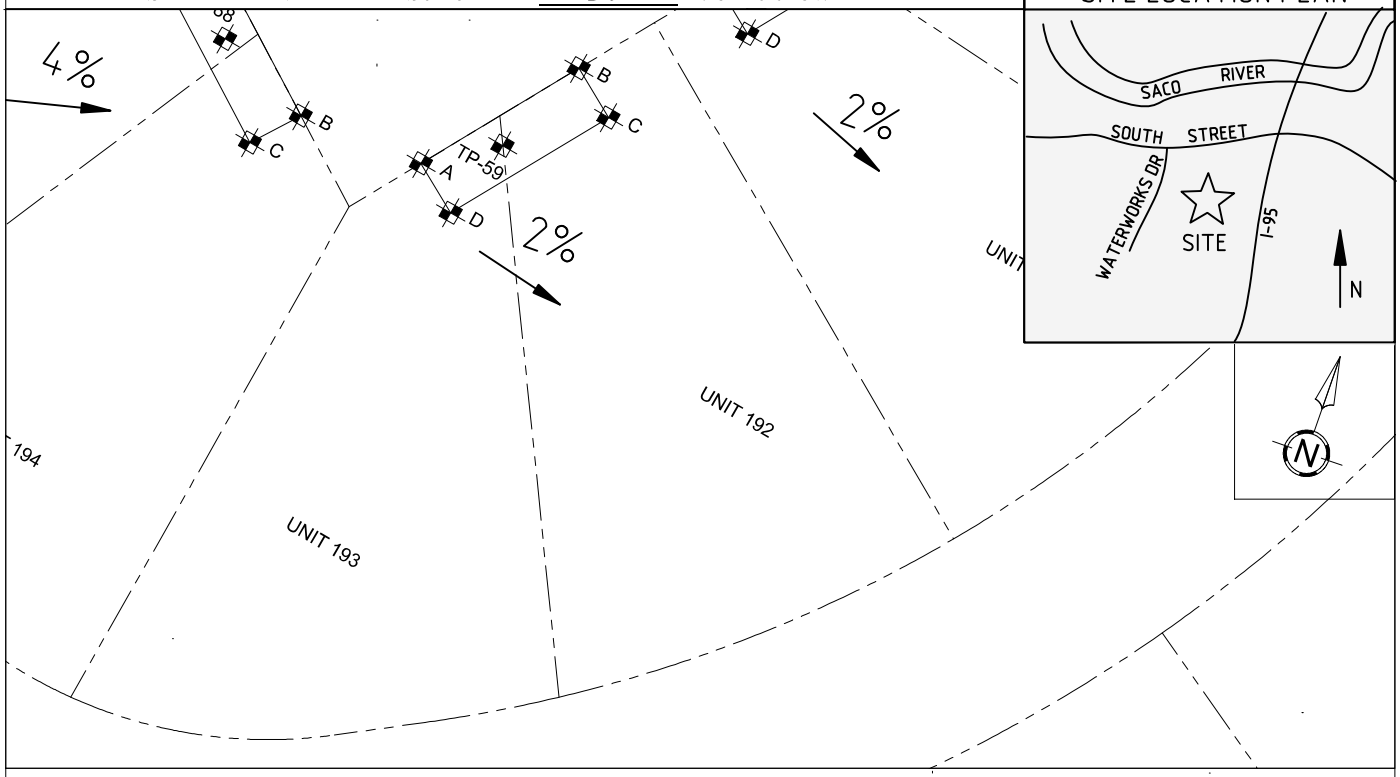
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-59 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–50	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT

Soil Classification	Slope	Limiting Factor	
Profile: 8 / Condition: D	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–50	SEE ATTACHED FOR ADDITIONAL TEST PITS A-D			

Soil Classification	Slope	Limiting Factor	
Profile / Condition	%	"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/21/23 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

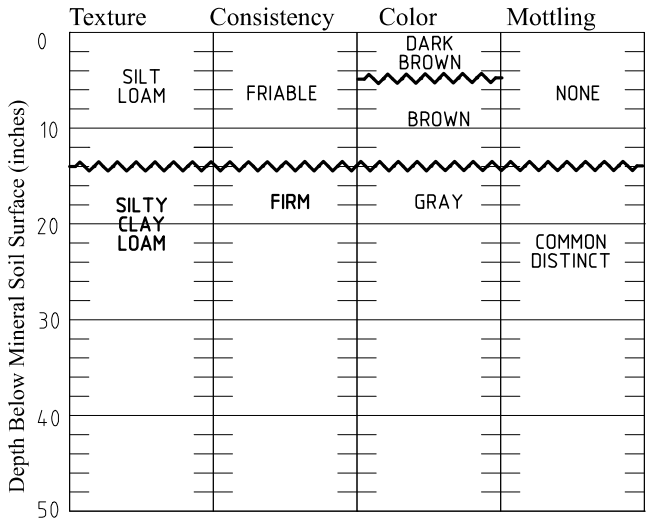
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-59 A ☐ Test Pit ☒ Boring

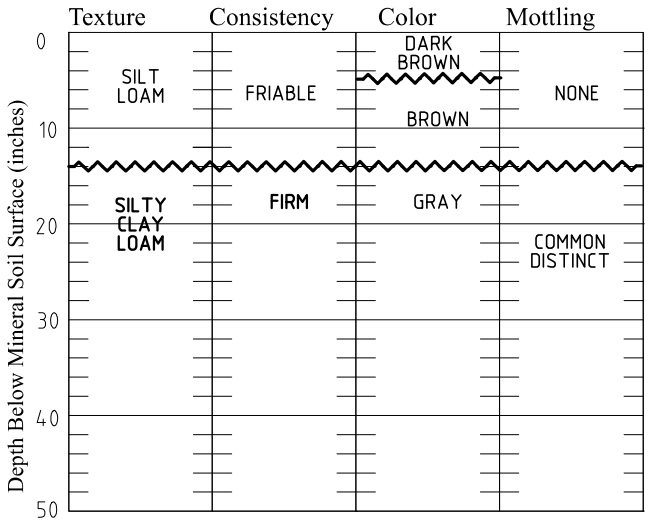
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-59 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

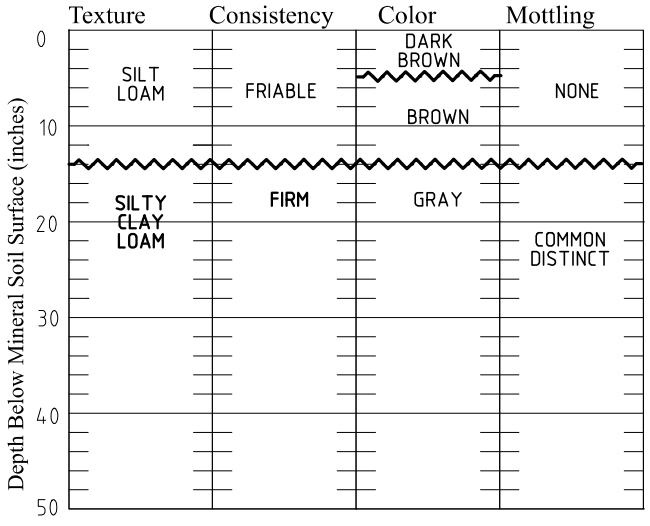


Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-59 C ☐ Test Pit ☒ Boring

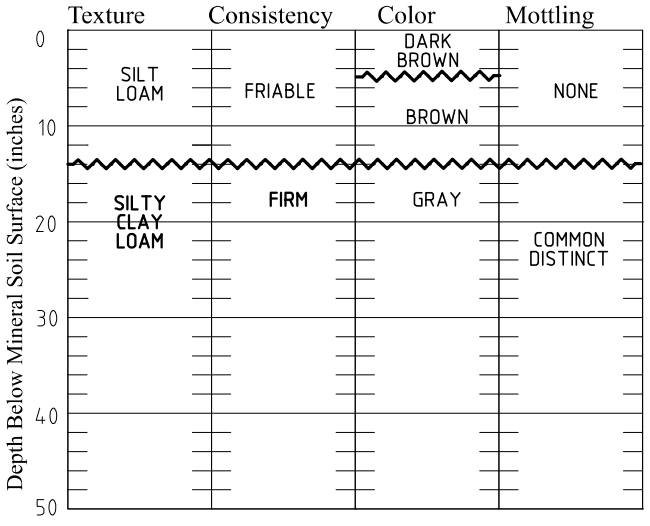
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	4 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-59 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / D Condition	2 %	14 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | SE # 419 | Date 3/26/23

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation: BIDDEFORD

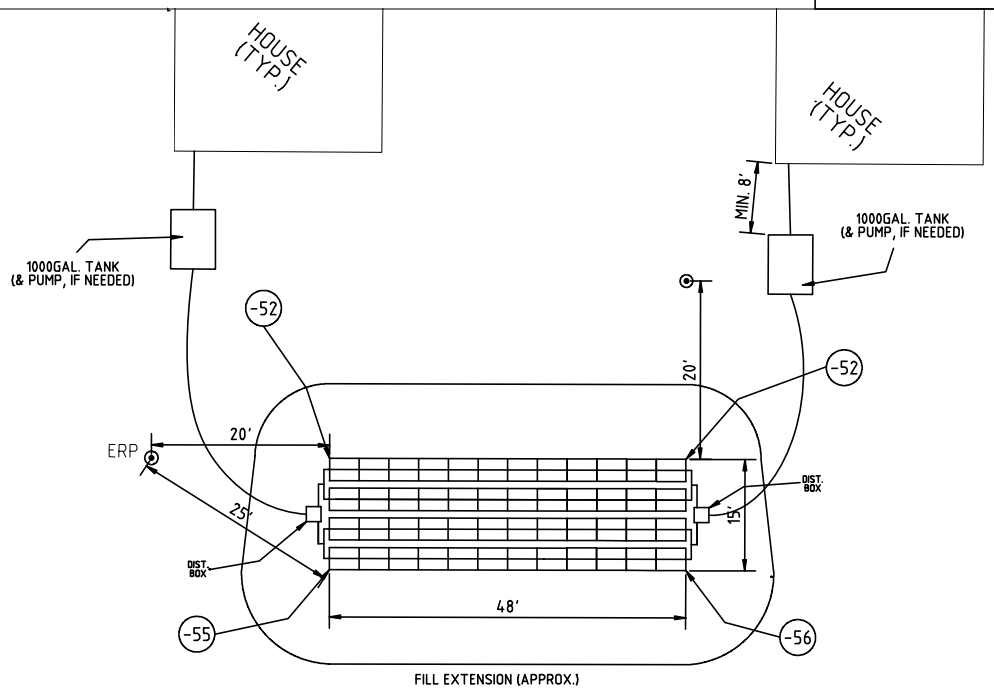
Street, Road, Subdivision: SOUTH STREET VILLAGE

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 30 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

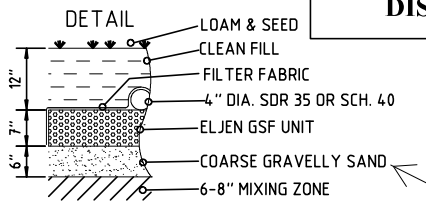
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

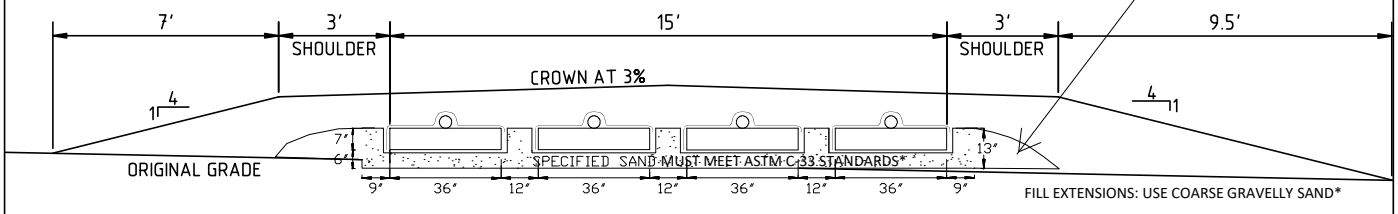
MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 6 ft.

Vertical 1" = 6 ft.

SURROUND DISPOSAL FIELD WITH MIN. 9" SPECIFIED SAND - TAPER OUTWARD 3' THROUGH SHOULDER



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
27	23	-48	-41	-29

Site Evaluator Signature

419 — SE #

3/14/2023 — Date

*REVISIONS 4/6/23

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-2070 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	BIDDEFORD
Street or Road	413 SOUTH STREET
Subdivision, Lot #	HIDDEN HILLS SUB, LOTS 194-195

OWNER/APPLICANT INFORMATION

Name (last, first, MI): SOUTH STREET VILLAGE, LLC — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	762 MAIN STREET
	SOUTH PORTLAND, ME 04106
Daytime Tel. #	207-450-7653

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City BIDDEFORD Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 7 _____ Lot # 8 _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

312 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: _____
☑ 3. Other: 2 3BR UNITS (6BR TOTAL) (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete Separate tank
☑ a. Regular for each unit
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device Eljen In-drain
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 2214 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

540 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
Units are 3br each @ 90gal./br
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
8 / C
at Observation Hole # TP-88
Depth 15 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☐ 2. Medium---Large 3.3 sq. f.t / gpd
☑ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ . Not Required
☑ . May Be Required
☐ . Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 29 m 24.11 s
Lon. 70 d 29 m 48.19 s
if g.p.s, state margin of error: +/- 10'

SITE EVALUATOR STATEMENT

I certify that on 3/14/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature | 419 SE # | 3/26/23 Date

ERIK LEMA | 207-518-8442 Telephone Number | erik@basswoodenv.com E-mail Address

Site Evaluator Name Printed

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

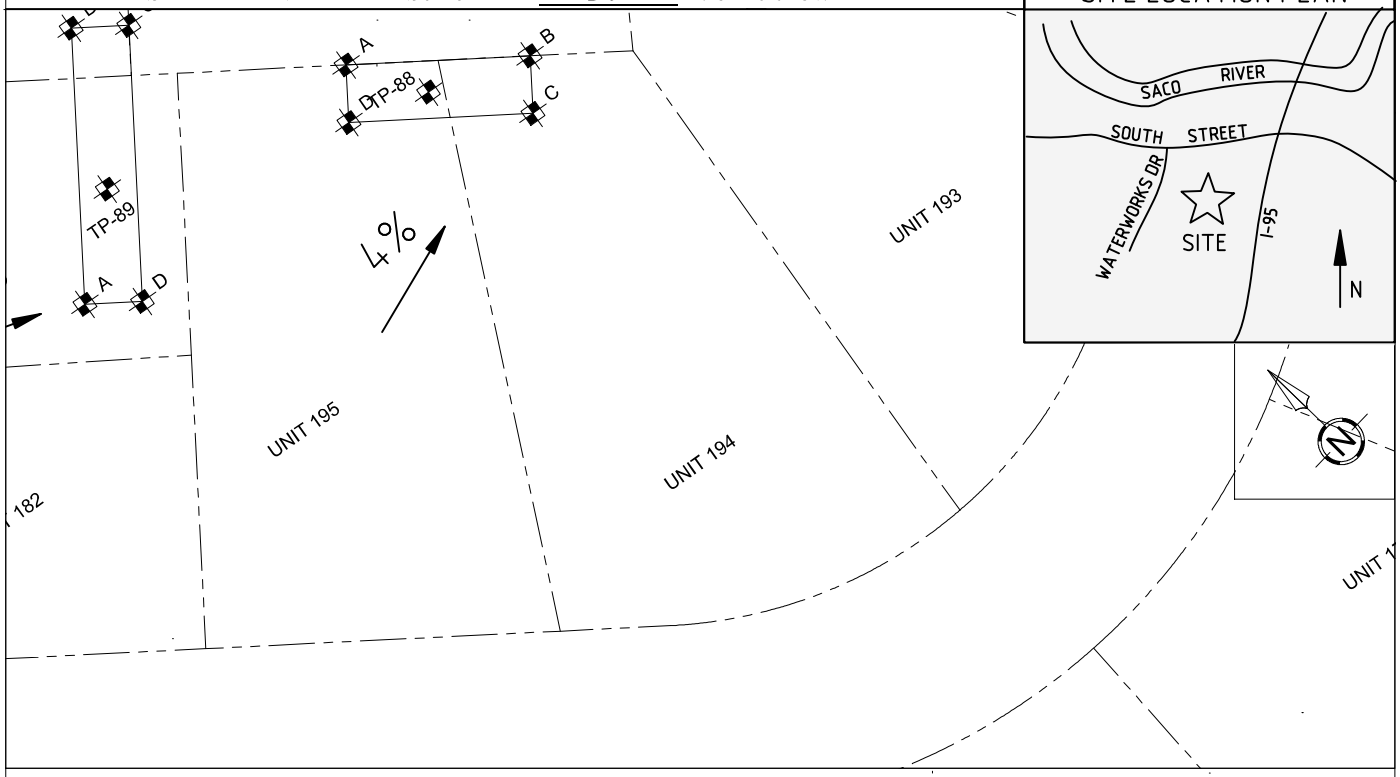
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SITE PLAN Scale 1" = 50 ft. or as shown



SITE LOCATION PLAN

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP-88 ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	SILT LOAM	FRIABLE	DARK BROWN / BROWN	NONE
10–20	SILTY CLAY LOAM	FIRM	GRAY	COMMON DISTINCT
20–50				

Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Texture Consistency Color Mottling

Depth Below Mineral Soil Surface (inches): 0, 10, 20, 30, 40, 50

SEE ATTACHED FOR ADDITIONAL TEST PITS A-D

Soil Classification	Slope	Limiting Factor	
Profile _____ Condition _____	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature

419
SE #

3/21/23
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: BIDDEFORD

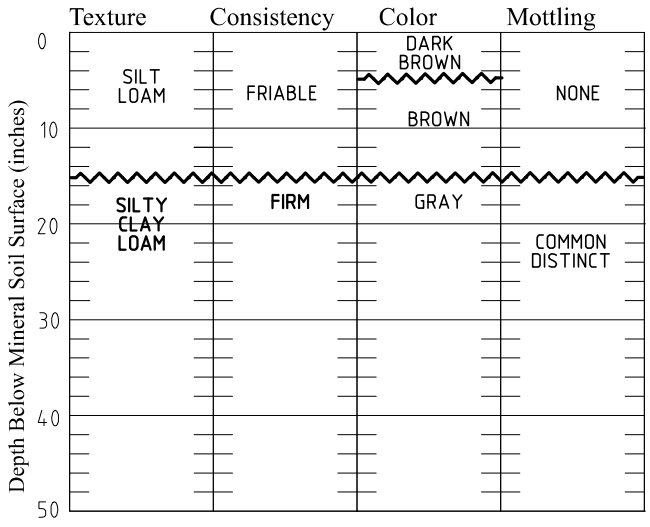
Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-88 A ☐ Test Pit ☒ Boring

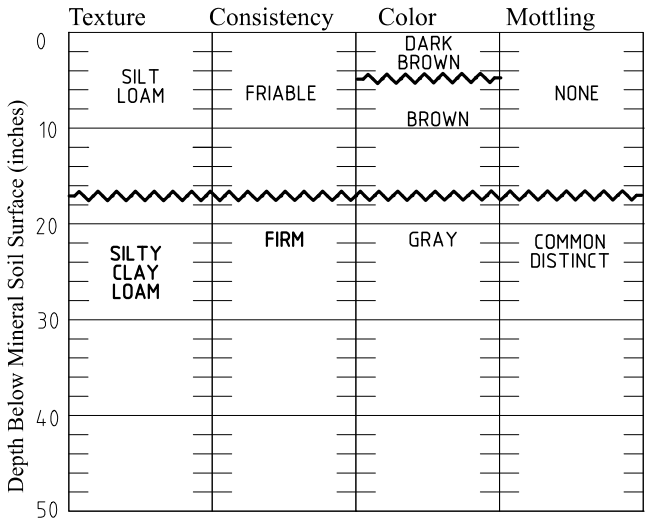
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-88 B ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil

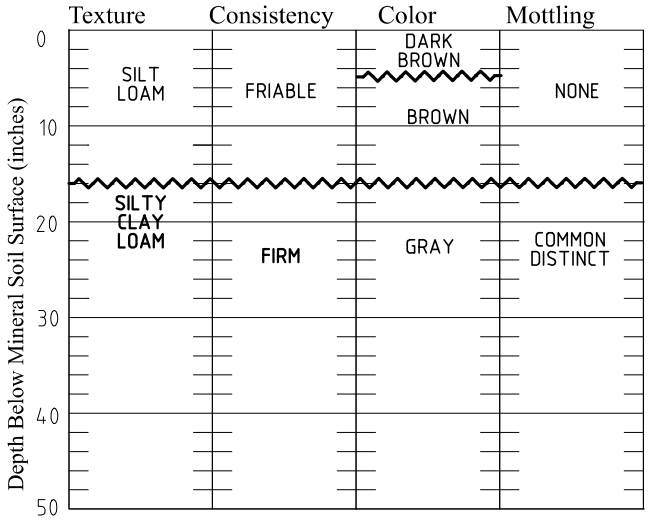


Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	17 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown on P2)

Observation Hole TP-88 C ☐ Test Pit ☒ Boring

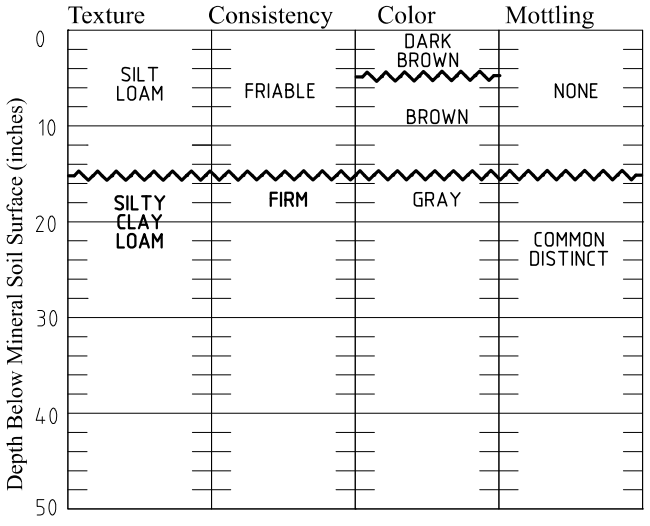
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	16 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole TP-88 D ☐ Test Pit ☒ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	4 %	15 "	[X] Ground Water [X] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Site Evaluator Signature | 419 SE # | 3/26/23 Date

Page __ of __
HHE-200 Rev. 05/08

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

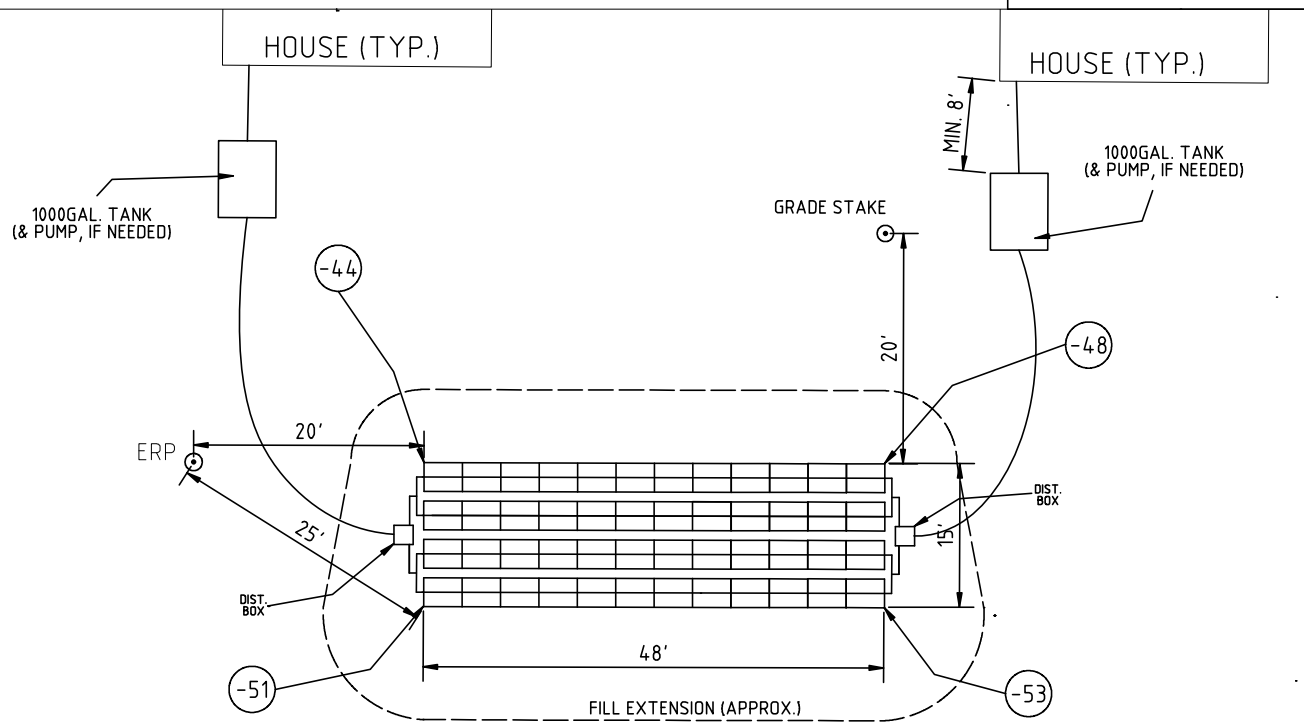
Town, City, Plantation: BIDDEFORD

Street, Road, Subdivision: SOUTH STREET VILLAGE

Owner's Name: SOUTH STREET VILLAGE LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope): SEE

Depth of Fill (Downslope): BELOW

CONSTRUCTION ELEVATIONS

Finished Grade Elevation: SEE

Top of ~~Distribution Pipe or~~ Proprietary Device

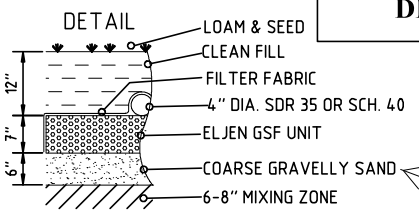
Bottom of Disposal Area: BELOW

ELEVATION REFERENCE POINT

Location & Description: TOP OF GRADE STAKE 54' A.G.

Reference Elevation: 0

DISPOSAL AREA CROSS SECTION



× INSTALLATION SHALL BE INACCORDANCE WITH THE MAINE SUBSURFACE WASTEWATER DISPOSAL RULES DATE 8/15, AS AMMENDED

× ALL LAND TO BE FILLED MUST BE SCARIFIED

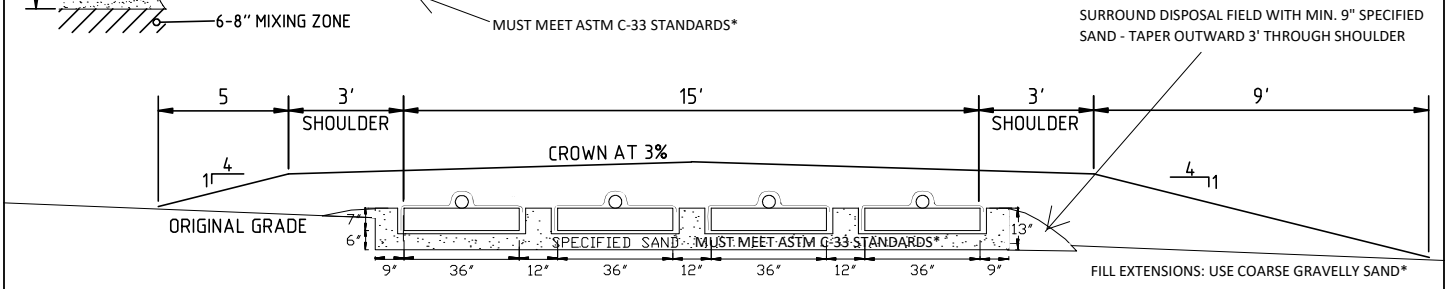
× OUTLET FILTER STRONGLY RECCOMMENDED ON ALL TREATMENT TANKS

MUST MEET ASTM C-33 STANDARDS*

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.



Depth (in)		Elev. Rel to ERP		
Downslope Fill	Upslope Fill	Bottom of Eljen	Top of Eljen	Finish Grade
23	16	-47	-40	-28

Site Evaluator Signature

419
SE #

3/14/2023
Date

*REVISIONS 4/6/23

Attachment 7

Updated Phasing Plan

PHASING TABLE

PHASE	COLOR	LOTS
PHASE 1		1 - 20
PHASE 2		105 - 117, 120, 121, 124 - 132
PHASE 3		80 - 99, 103, 104, 133
PHASE 4		100 - 102, 134 - 141, 151 - 154, 180 - 182
PHASE 5		155 - 179, 183 - 195
PHASE 6		46, 51 - 65, 118, 119, 122, 123, 142 - 150
PHASE 7		21 - 45, 47 - 50
PHASE 8		66 - 79

GRID NORTH

SOUTH STREET
WATERWORKS DRIVE
RAISED WALKWAY
4' WIDE SUPERHUMUS WALKWAY
DOG PARK
OPEN SPACE 1
REMI DRIVE
OPEN SPACE 1
GRAVEL WETLAND #1
OPEN SPACE 3
COMMUNITY CENTER
BAXTER BLVD.
COMMON WAY
CHAMBER LANE
INTERSTATE 95
MAINTENANCE AREA
OPEN SPACE 2
FURR DRIVE
OPEN SPACE 4
OPEN SPACE 4
CHAMBER LANE
OPEN SPACE 1
GRAVEL WETLAND #2
COMMUNITY PARK
OPEN SPACE 5
VIEW POINT LOOP
OPEN SPACE 2
OPEN SPACE 1
REMI DRIVE
COMMON WAY
CHAMBER LANE

GRAPHIC SCALE
120 0 60 120 240 480
(IN FEET)
1 inch = 120 ft.

STATE OF MAINE
JEFFREY D. AMOS
10167
LICENSED PROFESSIONAL ENGINEER

DATE: 01-05-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
A	04-13-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	01-05-2024	FINAL PLAN SUBMISSION TO CITY	JDA

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE, SUITE 305, NEW GLOUCESTER, ME 04260
565 CONGRESS STREET, SUITE 201, PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE: SITE PHASING PLAN

CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	PH-01

C:\DD\Terradyn Consultants\Project Folders - Documents\2021 Jobs\21-13 South Street MHP\CAD\Permitting\21-13 SITE.dwg

Attachment 8

Standards Compliance Narrative

TERRADYN CONSULTANTS, LLC

Pineland
Cumberland Hall
41 Campus Drive, Suite 301
New Gloucester, ME 04260

Portland
565 Congress Street, Suite 201
Portland, ME 04101

January 2024 Project# 21-13

COMPLIANCE WITH THE CITY OF BIDDEFORD ZONING AND LAND-USE CODE

Hidden Hills, Biddeford, Maine

The following information describes how the proposed project, located at 413 South Street in Biddeford, Maine, complies with the Subdivision Review Criteria and the Manufactured housing/mobile home park standards of the City of Zoning Ordinance.

Subdivision Review Criteria

1. *The project will not result in undue water or air pollution. In making this determination, the board shall consider:*
    a. *The elevation of land, and its relation to floodplains;*
    b. *The nature of the soils and subsoils;*
    c. *The ability to adequately support waste disposal;*
    d. *The slope of the land and its affects on effluents;*
    e. *The ability of streams for the disposal of effluents;*
    f. *The applicable state and local health and water resources regulations*

    The proposed project will not result in any undue water or air pollution. A host of environmental studies were undertaken to ensure the protection of the surrounding enviornment including:

    - A septic design for each septic system. HHE-200 forms can be found in Attachment 6.
    - A Class B High Intensity Soil survey can be found in Attachment 9.
    - A Stormwater Management Plan can be found in Attachment 10.
    - A Hydrogeologic Study can be found in Attachment 11.
    - An erosion & sediement control plan can be found on the construction plans.
    - A portion of the property is located within the FEMA floodplain; however, this section is not located within the proposed development area.

2. *The project has sufficient water available for the reasonably foreseeable needs of the subdivision.*

The project will connect to the public water supply. Maine Water indicated that they had capacity to serve the project and subsequently reviewed and approved the plans. Their approval letter can be found in Attachment 5.

3. *Will not cause an unreasonable burden on the existing water supply, if one is to be utilized;*
   The proposed project will not cause an unreasonable burden on the existing water supply. The project will connect to the public water supply. Maine Water indicated that they had capacity to serve the project and subsequently reviewed and approved the plans. Their approval letter can be found in Attachment 5.

4. *Will not cause unreasonable soil erosion or reduction in capacity of the land to hold water so that a dangerous or unhealthy condition may result;*
   The proposed project will not cause unreasonable soil erosion or a reduction in the of the land to hold water. Erosion and sediment controls are shown on the attached plans and a stormwater management report has been prepared demonstrating that post-development runoff will not exceed predevelopment conditions. The Maine Department of Environmental Protection reviewed and approved a Site Location of Development Permit Application for the project that focused largely on stormwater management and Sediment & Erosion Control. Their approval letter can be found in Attachment 5.

5. *Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed;*
   The project will not cause unreasonable highway or public congestion or unsafe conditions; Barton & Loguidice has prepared a Traffic study for the proposed development that can be found in Attachment 12.

6. *Will provide for adequate sewage waste disposal;*
   The proposed development will be serviced by shared septic systems; the location of these systems is shown on the attached plan set. The septic system designs can be found in Attachment 6.

7. *Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized*
   The Applicant will contract with a private waste hauler to dispose of solid waste at a licensed facility. The hauler will provide curbside pickup for future residents.

8. *Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas, or public rights for physical or visual access to the shoreline;*

   The proposed development will not have an adverse effect on the scenic or natural beauty of the area. The proposed development is located adjacent to Interstate 95 and the water treatment plant. There are no historic sites or irreplaceable natural areas in the location of the proposed development. A landscape plan has additionally been prepared for the proposed project. Furthermore, a visual assessment of the buffering along South Street is provided in Attachment 17. The development is several hundred feet back from South Street and located mostly behind a dense area of trees.

9. *In conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, In making this determination the board is authorized to interpret these ordinances and plans;*

   The proposed development has been designed in conformance with all applicable regulations.

10. *The subdivider has adequate financial and technical capacity to meet the above state standards;*

    Please see the attached funds requests for the applicants demonstrating the financial capacity to construct the project in Attachment 4.

    The Applicant has assembled a highly qualified team of professionals to plan, permit and develop construction documents for the project. The team services will be provided by the following companies:

    CONSULTANT TEAM

Civil Engineer	Jeffery Amos, P.E. Terradyn Consultants, LLC 41 Campus Drive, Suite 301 New Gloucester, ME 04260 (207) 926-5111
Surveyor	Jim Courbron, P.L.S. Terradyn Consultants, LLC 41 Campus Drive, Suite 301 New Gloucester, ME 04260 (207) 926-5111
Landscape Architect	Barry J. Hosmer P.L.A., A.S.L.A.

	196 Whitney Avenue Portland, ME 04102 (207) 874-0248
Wetland Scientist and Soil Scientist	Mark Hampton C.S.S., L.S.E. Mark Hampton Associates, Inc P.O. Box 1931 Portland, ME 04104
Septic System Design	Erik Lema, S.E. # 419 Basswood Environmental, LLC 32 Brentwood Road Cape Elizabeth, ME 04107
Traffic Study	William Bray, P.E. Barton & Loguidice, LLC 383 US Route 1, Suite 2A Scarborough, ME 04074

The team of consultants retained by the Developer has expertise and experience in the design of similar projects. Resumes of key personnel for the development team can be provided upon request.

11. *Whenever situated, in whole or in part, within 250 feet of any lake, pond, river, or tidal waters, the project will not adversely affect the quality of that body of water, or unreasonably affect the shoreline of that body of water; as indicated on the City of Biddeford's Official Zoning Map and referenced in the City's Comprehensive Plan;*

The proposed development is not located within 250 feet of a lake, pond, river or tidal waters.

12. *The project will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;*

The proposed project will not adversely affect the quality or quantity of groundwater. The proposed lots will be serviced by public water; septic systems will be designed in accordance with all State of Maine Subsurface regulations. Erosion and sediment controls are shown on the attached plans, and a stormwater management report has been prepared to demonstrate that post-development runoff will not exceed predevelopment conditions. MDEP reviewed the project stormwater management plan, nitrate analysis & soil survey. Their approval can be found in Attachment 5.

13. *The subdivider will provide information, based on FEMA flood boundary, floodway, and flood insurance maps, whether or not the project is in a flood-prone area :*

    The proposed property is partially located within a FEMA flood boundary; however, no portion of the project site is located within the FEMA flood boundary. Figures showing the location of the FEMA flood boundaries are within the Stormwater Management Report within Attachment 10.

14. *The project will not unreasonably obstruct abutting properties or structures access to direct sunlight;*

    The proposed project will not unreasonably obstruct abutting properties or structures access to direct sunlight. The proposed development is surrounded by a vegetated buffer which helps to separate the project from abutting properties.

Mobile Home Park Design Requirements:

1. *Lot area and lot width requirements.*

   The proposed lots have been designed in accordance with the requirements for lots served by a central wastewater disposal system approved by Maine Department of Health and Human Services. Each lot has a minimum lot area of 12,000 sf and a minimum width of 75 feet. Please refer to the attached plan set for further detail.

2. Unit Setback Requirements:
   a. On lots 10,000 square feet in area or larger, structures shall not be located less than 15 feet from any boundary line of any individual lot.

   The proposed lots have a minimum setback of 15 feet.

3. *Buffering. If a park is proposed with a residential density at least twice the density of adjacent develop in existence, or at least twice the density permitted in the zoning district in which the park is located if the neighboring land is undeveloped, the park shall be designed with a continuous landscaped area not less that 50 feet in width which shall contain no structures, driveways, utilities or streets. The first 25 feet of the buffer strip, as measured from the exterior boundaries of the park shall contain evergreen shrubs, trees, fences, walls or any combination which forms and effective visual barrier to be located on all exterior lot lines of the park, except that driveways shall be kept open to provide visibility for vehicles entering and leaving the park.*

A minimum 50’ wide perimeter buffer has been provided along the exterior of the proposed development. In most cases, the buffer exceeds the 50’ minimum, particularly adjacent to South Street.

4. *Open space reservation: An area no less than 10% of the total area of those lots with a lot area of 10,000 square feet or less shall be reserved as open space. The area reserved as open space shall be suitable to be used for recreational purposes or use by the residents of the park for storage. Generally, the reserved open space shall have slopes less than 5% shall not be located on poorly or very poorly drained soils, and shall be accessible directly from roads within the park. The Planning Board may waive the requirement for open space when the park is located within ½ mile of a publicly owned recreation area.*

   The proposed plan features more than 88 acres of common open space; nearly 50% of the mobile home park overlay zone will be preserved as open space.

5. *Road Design, circulation and traffic impacts.*

   The proposed roads are to remain private. A 50 right-of-way has been proposed with 20’ wide roads. The proposed development gains access from the existing private road that serves the adjacent water company. The project roads will connect to the existing private way in two locations. The internal road system will create a large loop through the site with additional internal road will cross through the site. Two dead-end sections are proposed with adequate turning for emergency vehicles.

   All of the proposed lots will be accessed via the new proposed roadways and will not have any driveways connecting to exiting streets. The project will not cause unreasonable highway or public congestion or unsafe conditions, Barton & Loguidice has prepared a Traffic study for the proposed development, see Attachment 12.

6. *Groundwater Impacts.*

   The proposed project will not result in any undue water pollution. A host of environmental studies were undertaken to ensure the protection of the surrounding enviornment including:

   - A septic design for each septic system. HHE-200 forms can be found in Attachment 6.
   - A Class B High Intensity Soil survey can be found in Attachment 9.

- A Stormwater Management Plan can be found in Attachment 10.
- A Hydrogeologic Study can be found in Attachment 11.
- An erosion & sediement control plan can be found on the construction plans.

Attachment 9

Waterworks Drive Proposed Deeds & Right of Way Exhibit

DRAFT 032324

RELEASE DEED

THE MAINE WATER COMPANY, a corporation organized and existing under the laws of the State of Maine, with a mailing address of 93 Industrial Park Road, Saco Maine 04072-1804 (the "Grantor"), for consideration paid, RELEASES to the CITY OF BIDDEFORD, a Maine municipal corporation, with a mailing address of 205 Main Street, Biddeford, Maine, for highway purposes and without claim for damages, all of its right, title and interest in and to that portion of the street known as Waterworks Drive more particularly described in Exhibit A attached hereto and made a part hereof, reference being made to a plan entitled _____ dated _____, and recorded in the York County Registry of Deeds in Plan Book _____, Page _____ (the "Plan"), on which Plan Waterworks Drive is shown.

TOGETHER WITH an easement fifteen (15) feet in width as depicted on the Plan for all purposes relating to the installation and maintenance of drainage ways and related structures. This easement shall include the right of entry by persons and machines provided that the entity exercising the right to construct or maintain such easement areas or drainage ways shall suitably re-grade, repair, and/or re-seed any areas disturbed by such construction or maintenance and restore them to their condition existing prior to such entry. Subject to the rights of the Grantor to use such areas for all purposes not inconsistent with the easement conveyed herein.

SUBJECT TO the Grantor's right to maintain, repair and replace and above above-ground and underground utility and communication lines including, but not limited to, water lines, sewer lines, power lines, telephone and internet communication lines, and gas lines, serving the Grantor's remaining property, or any portion thereof, that may be located within the premises conveyed herein.

Reference is made to a Warranty Deed to the Grantor from Medrick S. Payette, Jr. and Cecile F. Payette dated March 29, 2019, and recorded in the York County Registry of Deeds in Book 17919, Page 909, and Book 17920, Page 831, for the Grantor's source of title to the premises conveyed herein.

IN WITNESS WHEREOF, THE MAINE WATER COMPANY has caused this instrument to be executed by Mark A. Vannoy, its President, thereunto duly authorized, this _____ day of_____, 2024.

WITNESS:

_____

THE MAINE WATER COMPANY

By:_____
Mark A. Vannoy
Its President

STATE OF MAINE
COUNTY OF YORK, ss. _____, 2024

Then personally appeared the above-named Mark A. Vannoy, President of THE MAINE WATER COMPANY, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of THE MAINE WATER COMPANY.

Before me,

_____
Notary Public/Maine Attorney at Law

_____
Print Name

_____
My commission expires

MORTGAGEE'S JOINDER

U.S. BANK NATIONAL ASSOCIATION, not individually but solely in its capacity as successor Trustee under an Indenture from Biddeford & Saco Water Company, predecessor to The Maine Water Company, to Union Safe Deposit and Trust Company, as initial Trustee, dated as of August 1, 1923, and recorded in the York County Registry of Deeds in Book 727, Page 2, as amended and supplemented to date (collectively, the "Indenture"), hereby joins in the Deed to which this Mortgagee's Joinder is attached for the sole and limited purpose of releasing the premises described in said Deed, and no other, from the Indenture. This Mortgagee's Joinder shall in no way affect or impair the right of U.S. BANK NATIONAL ASSOCIATION to hold under the Indenture, as security for the sums remaining due thereon, all the remainder of the mortgaged premises therein conveyed or described and not hereby released.

IN WITNESS WHEREOF, U.S. BANK NATIONAL ASSOCIATION, as Trustee as aforesaid, has caused this Mortgagee's Joinder to be executed by _____, its _____, thereunto duly authorized, as of the _____ day of_____, 2024.

WITNESS:

_____

U.S. BANK NATIONAL ASSOCIATION, as Trustee as aforesaid

By:_____

Its _____

_____
Print name

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF SUFFOLK, ss. _____, 2024

Then personally appeared the above-named _____, _____ of U.S. BANK NATIONAL ASSOCIATION, and acknowledged the foregoing instrument to be his/her free act and deed in his/her said capacity and the free act and deed of said U.S. BANK NATIONAL ASSOCIATION, as Trustee as aforesaid.

Before me,

_____
Notary Public

_____
Print name

My commission expires _____

EXHIBIT A

[Description of property to be inserted]

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS, THAT SOUTH STREET VILLAGE LLC, a Maine corporation with offices in South Portland, in the County of Cumberland and State of Maine, for good and valuable consideration, grants to the CITY OF BIDDEFORD, a municipal corporation with a mailing address of 205 Main Street, Biddeford, Maine, with Warranty Covenants, for highway purposes and without claim for damages, all of its right, title and interest in and to the street known as Waterworks Drive described in Exhibit A annexed hereto and made a part hereof and as depicted on the subdivision plan entitled "Hidden Hills Housing Park" dated February 9, 2022, and recorded in the York County Registry of Deeds in Plan Book ____, Page _____, to which plan reference may be made for a more particular description of the premises hereby conveyed; together with all of the rights appurtenant thereto.

TOGETHER WITH a perpetual easement over a strip of land on the easterly sideline of Waterworks Drive for all purposes relating to the installation and maintenance of drainage ways and structures, said easement being fifteen (15) feet in width and extending thirty (30) feet beyond each end of the culvert to be installed underneath Chamberlain Lane as showed on the Hidden Hills Housing Park plan. This easement shall include the right of entry by persons and machines provided that the entity exercising the right to construct or maintain such easement areas or drainage ways shall suitably re-grade, repair, and/or re-seed any areas disturbed by such construction or maintenance, and restore them to their condition existing prior to such entry. Subject to the rights of the Grantor to use such areas for all purposes not inconsistent with the easement conveyed herein.

SUBJECT TO the rights of Grantor and The Maine Water Company, their successors and assigns, to connect with, maintain, repair and replace any above above-ground and underground utility and communication lines including, but not limited to, water lines, sewer lines, power lines, telephone and internet communication lines, and gas lines, serving The Maine Water Company's adjoining property, or any portion thereof, that have been located within the premises conveyed herein by The Maine Water Company pursuant to that certain Easement Deed from the Grantor to The Maine Water Company dated June 23, 2020, and recorded in the York County Registry of Deeds in Book 18290, Page 241.

IN WITNESS WHEREOF, the Grantor has caused this instrument to be signed and sealed by Matthew Chamberlain, its Member thereunto duly authorized this ___ day of _____, 2024.

Signed, sealed and delivered
In the presence of

SOUTH STREET VILLAGE LLC

_____
WITNESS

_____
By: Matthew Chamberlain
Its: Member

STATE OF MAINE
COUNTY OF YORK _____, 2024

Personally appeared the above-named Matthew Chamberlain, in his capacity as Member of South Street Village LLC and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of South Street Village LLC.

Before me,

_____
Notary Public / Attorney at Law
Name:
Commission expires:

EXHIBIT A

A parcel of land, situated on the southerly sideline of South Street, in the City of Biddeford, County of York, State of Maine, and being more particularly described as follows:

Beginning on the southerly sideline of South Street and being at the northeast corner of land now or formerly of Maine Water Co. as described in a deed dated March 29, 2019 and recorded in the York County Registry of deeds in Book 17919, Page 909;

Thence, northeasterly along the southerly sideline of South Street, on a curve to the left, having a radius of four hundred fifty and 00/100 feet (450.00') with an arc length of twenty-eight and 45/100 feet (28.45'), said curve also having a chord bearing of N 86° 08' 47" E with a chord length of twenty-eight and 44/100 feet (28.44');

Thence, along remaining land of South Street Village LLC, on a curve to the right, having a radius of three hundred and 00/100 feet (300.00') with an arc length of one hundred ninety and 10/100 feet (190.10'), said curve also having a chord bearing of S 18° 05' 13" W with a chord length of one hundred eighty-six and 94/100 feet (186.94')

Thence, S 36° 14' 26" W, along remaining land of South Street Village LLC, a distance of one hundred twelve and 28/100 feet (112.28');

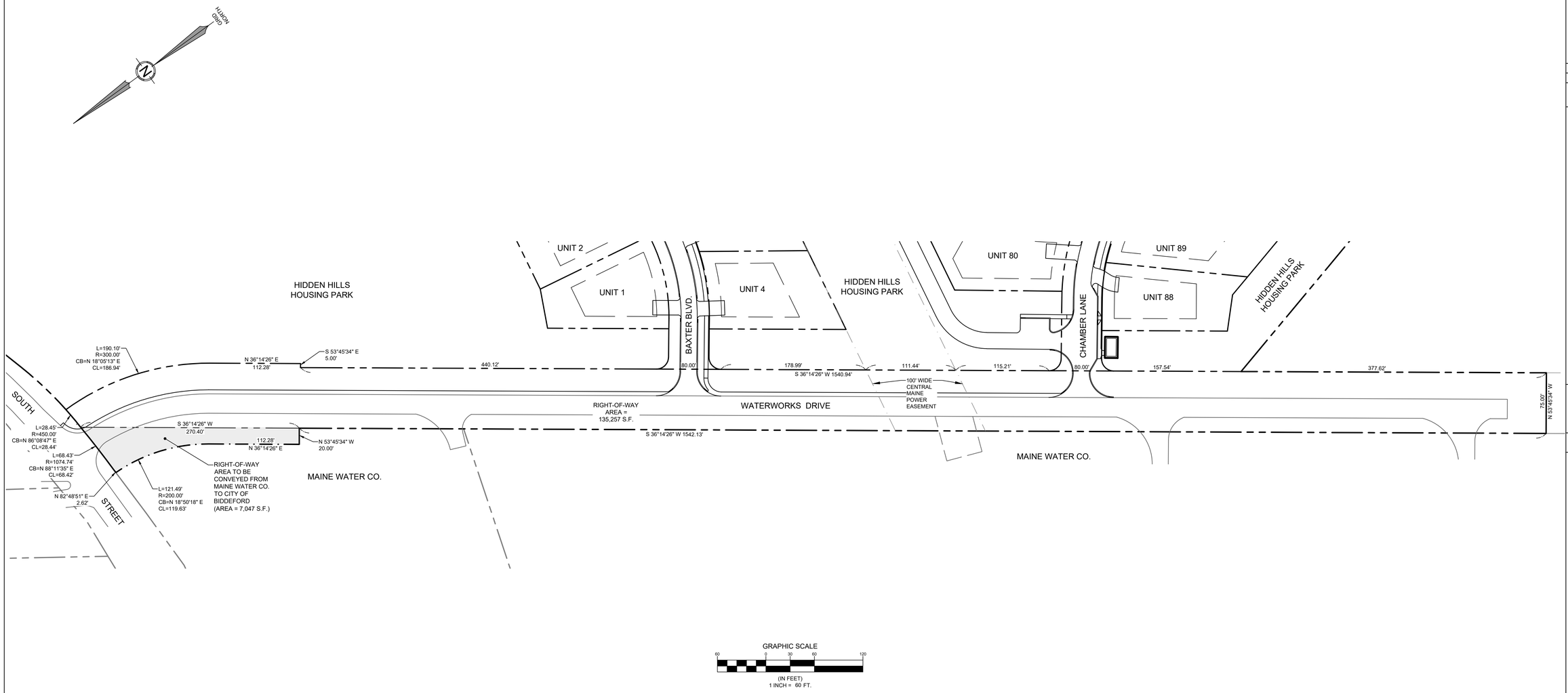
Thence, N 53° 45' 34" W, along remaining land of South Street Village LLC, a distance of five feet and 00/100 feet (5.00');

Thence, S 36° 14' 26" W, along remaining land of South Street Village LLC and land now or formerly of Spang 3, LLC a distance of one thousand five hundred forty and 94/100 feet (1,540.94');

Thence, N 53° 45' 34" W a distance of seventy-five and 00/100 feet (75.00') to the southeasterly sideline of land now or formerly of Biddeford & Saco Water Company as described in a deed dated April 13, 1981 and recorded in the York County Registry of Deeds in Book 2775, Page 9;

Thence, N 36° 14' 26" E along the southeasterly sideline of said Biddeford & Saco Water Company and the southeasterly sideline of other land of said Maine Water Co. described in deed recorded in the York County Registry of Deeds in Book 17919, Page 909 a distance of one thousand eight hundred twelve and 53/100 feet (1,812.53') to the point of beginning.

Reference is made to a plan entitled "Existing Conditions Survey of Land of South Street Village, LLC" dated June 23, 2022 prepared by NORSE Northern Survey Engineering. The above-described premises contains 135,257 square feet more or less. The bearings referred to above are referenced to Grid North, Maine State Plane Coordinate System, West Zone 1802-NAD83. Being a portion of the premises as described in a deed dated August 15, 2017 and recorded at the York County Registry of Deeds in Book 17541, Page 869.



GRAPHIC SCALE

60 0 30 60 120

(IN FEET)
1 INCH = 60 FT.

NO.	DATE	REVISIONS	APP'D BY
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-13-2022	PRELIMINARY SUBMISSION	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

STATE OF MAINE · JEFFREY D. AMOS · 10167 · REGISTERED PROFESSIONAL ENGINEER

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE
SUITE 201
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
RIGHT-OF-WAY EXHIBIT (WATERWORKS DRIVE)

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 60'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	EX-1.0

C:\OD\Terradyn Consultants\Project Folders - Documents\2021 Jobs\21-13 South Street MHP\CAD\Permitting\21-13 B-Water Works Def.dwg

Attachment 10

Stormwater Report

TERRADYN CONSULTANTS, LLC

Pineland
Cumberland Hall
41 Campus Drive, Suite 301
New Gloucester, ME 04260

Portland
565 Congress Street, Suite 201
Portland, ME 04101

Revised 5/31/2023

STORMWATER MANAGEMENT PLAN

Hidden Hills Manufactured Housing Park – An Age Restricted Community
Biddeford, Maine

The following Stormwater Management Plan has been prepared for the Hidden Hills Manufactured Housing Park to evaluate stormwater runoff and erosion control for the proposed 195 lot subdivision located at 413 South Street in Biddeford, Maine.

Site Calculations

Total Property Area	164.25 Ac (+/-)
Total Project Impervious Area	21.6 Ac
Total Developed Area	68.6 Ac

Existing Conditions

The development parcel is located on the southerly side of South Street, just west of the Maine Turnpike at 413 South Street. The property also has access to a private road along the northwestern edge of the property that serves the water district property. The parcel is shown as lot 8 on the City of Biddeford Tax Map 7. The 164.25-acre property is located within both the Suburban Residential (SR1) District and the Rural Farm (RF) District and also contains a Mobile Home Park (MHP) Overlay Zone. The allowable density for any park served by any subsurface wastewater disposal system is 1 unit per 20,000 SF. The net residential area calculation shows that the property can support approximately 348 manufactured homes within the MHP.

The property drains to five major study points:

Study Point 1 is located near the northeast property corner and represents the point where the unnamed stream that flows parallel to South Street crosses beneath the road. The stream flows to the north for a little less than 1,000' where it enters the Saco River.

Study Point 2 handles the runoff from the portion of the development that drains to the south as well as all of the undeveloped remaining land. This area flows to Thatcher Brook. Thatcher Brook is an urban impaired stream. The study point represents the point where the brook leaves the property on the eastern property border.

Study Points 3 & 4 are located near the midpoint of the development on the eastern property line. These area drain to a small field/wetland system that flows to the adjacent Maine Turnpike ditch that eventually outfalls to the Saco River.

Study Point 5 is a small area in the undeveloped portion of the property that is located along the eastern property boundary does not drain directly to Thatcher Brook while on the subject property.

Flooding

The development area is not located within an area of flood hazard according to the Federal Insurance Rate Maps 230145003B and 230145008B. See attached map. Portions of the overall property are located within a Zone-A flood plain however, these locations are outside of the development area of the project.

Modeling Assumptions

The onsite stormwater facilities were sized utilizing the USDA Soil Conservation Service (SCS) TR-20 Runoff Simulation Model, as contained in the HydroCAD computer software program (Version 9.0). Runoff curve numbers were determined for each direct watershed by measuring the area of each hydrologic soil group within each type of land cover. Weighted curve numbers were then calculated using curve numbers for various cover types and hydrologic soil groups, assuming "good" conditions as defined in U.S Soil Conservation Service (SCS) publications. Times of concentration and travel times were determined from site topographic maps in accordance with SCS procedures. A maximum length of 150 feet was used for sheet flow.

All of the watersheds' peak runoff rates were analyzed for the 2, 10, and 25-year frequency, 24-hour duration storm events. A Type III rainfall distribution was applied to these storms. The rainfall amounts for York County are as follows:

Storm Frequency Precipitation (in./24 hr)	
2-year	3.3
10-year	4.9
25-year	6.2

Onsite Soils

The soils were delineated by Mark Hampton of Mark Hampton Associates. His Class B High Intensity Soil Survey is attached to this submission. Offsite soils were determined from the NRCS Web Soil Mapper. See attached NRCS Soils Map.

Water Quantity (Flooding Standard)

The following table summarizes the results of stormwater calculations for the design storm events for the project areas. Calculations and computer modeling sheets are provided with this report.

Table 1 - Stormwater Runoff Summary Table
Pre-Development vs. Post-Development

Study Point #	2Yr/24Hr (cfs)		10Yr/24Hr (cfs)		25Yr/24Hr (cfs)	
	Pre	Post	Pre	Post	Pre	Post
1	30.5	28.4	70.6	69.0	107.8	105.1
2	67.6	65.8	144.5	139.6	212.9	205.3
3	13.4	10.3	29.9	27.6	44.7	43.6
4	2.6	2.5	5.7	5.4	8.5	7.9
5	4.1	4.1	2.7	2.7	4.1	4.1

As the above result table shows, the post-development flow rates for the 2, 10, 25 and 50-year/24 hour design storm events do not exceed the pre-development conditions.

Basic Standards

A site-specific Erosion & Sedimentation Control Plan has been developed for the project. Means and methods to control erosion and sedimentation during and after construction are detailed in the erosion control plan narrative and construction details, which are included directly on the project drawings for ease of reference during construction.

Requirements for inspection and maintenance of the stormwater management system are provided in the stormwater management system inspection and maintenance plan see attached.

Housekeeping requirements are included in the Erosion & Sediment Control Narrative located on the project drawings as well as in Attachment 6. Draft buffer deed restrictions are attached.

General Standards

The General Standard requires that a project's stormwater management system includes measures that will provide pollutant removal from runoff and mitigate for the increased frequency of channels erosive flows due to runoff from smaller storms and potential temperature impacts.

Best Management Practices (BMPs) will be implemented to reduce the impacts of site development on downstream water quality. BMP sizing calculations are attached to this report.

Water Quality (BMP Standard)

The water quality requirements will be met by a combination of gravel wetlands, roof drain filter strips and level spreader/forest & meadow buffers to treat the development.

Linear:

New Linear Impervious Area: The project will result in the creation of approximately 325,428 SF of linear impervious area. The proposed BMPs will result in the treatment of approximately 76.8% of the new impervious area.

Percentage of Treatment of the Impervious Area =76.8% (75% req'd)

Linear Project Developed Area: The project will result in the creation of approximately 602,700 SF of linear developed area. The proposed BMPs will result in the treatment of approximately 76.8% of the area.

Percentage of Treatment of the Developed Area = 76.8% (50% required)

Non-Linear:

New Linear Impervious Area: The project will result in the creation of approximately 616,900 SF of non-linear impervious area. The proposed BMPs will result in the treatment of approximately 95.46% of the new impervious area.

Percentage of Treatment of the Impervious Area =95.62% (95% req'd)

Non-Linear Project Developed Area: The project will result in the creation of approximately 2,238,400 SF of linear developed area. The proposed BMPs will result in the treatment of approximately 86.7% of the area.

Percentage of Treatment of the Developed Area = 86.71% (80% required)

Housekeeping and Maintenance & Inspection guidelines are attached to this report.

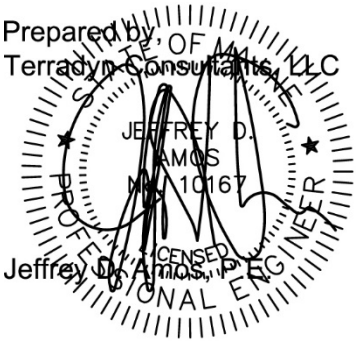
Urban Impaired Stream

Thatcher Brook is classified as an urban impaired stream. The portion of the project within the Thatcher Brook watershed will result in approximately 1.74 acres of roof, 1.92 acres of non-roof impervious area and 9.09 acres of landscaped area. According to our calculations, the applicant will be need to pay a compensation fee of $55,505.62. See attachment 4 for more information.

Summary

Based on the results of this evaluation, the proposed stormwater design is not expected to cause flooding, erosion or other significant adverse effects downstream of the site.

Prepared by,
Terradyn Consultants, LLC



Jeffrey D. Amos, P.E.

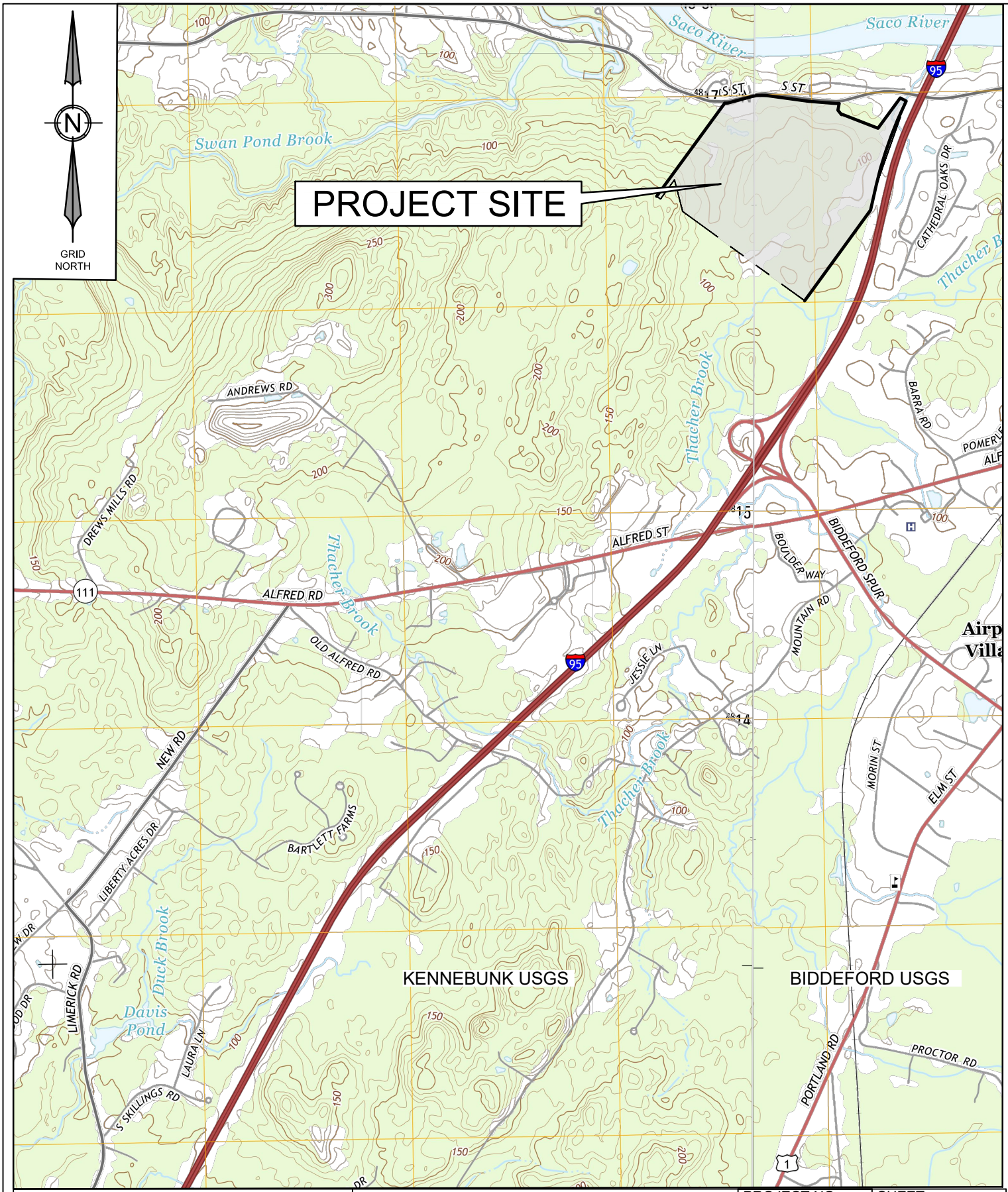
Attachments:

Attachment 1- Site Figures:
- USGS Quadrangle Map
- Aerial Photo
- Medium Intensity Soil Map
- FEMA Floodmap

Attachment 2 – Water Quality Calculations
Attachment 3 – BMP Sizing Calculations
Attachment 4 – Urban Impaired Stream Compensation Fee Calculations
Attachment 5 - Pre Development Hydrocad Calculations
Attachment 6 - Post Development Hydrocad Calculations
Attachment 7 - Pond Spillway Checks – 25 & 100 Year
Attachment 8 - Maintenance & Inspection of Stormwater Facilities
Attachment 9 - Housekeeping Plan
Attachment 10 – Sample Buffer Restriction Language
Attachment 11 – Pond Test Pits
Attachment 12 – Pre & Post Development Watershed Maps

Attachment 1

Site Figures



USGS 7.5-MINUTE QUADRANGLE
BIDDEFORD & KENNEBUNK

PROJECT:
HIDDEN HILLS MANUFACTURED HOUSING PARK
413 SOUTH STREET, BIDDEFORD MAINE 04005

PREPARED FOR:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

TERRADYN CONSULTANTS, LLC

PINELAND
41 CAMPUS DRIVE, SUITE 301
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PORTLAND
565 CONGRESS STREET, SUITE 201
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PROJECT NO.	SHEET
21-13	1
DATE	OF
4/12/2022	5
SCALE	
1" = 2000'	



AERIAL MAP

PROJECT:
HIDDEN HILLS MANUFACTURED HOUSING PARK
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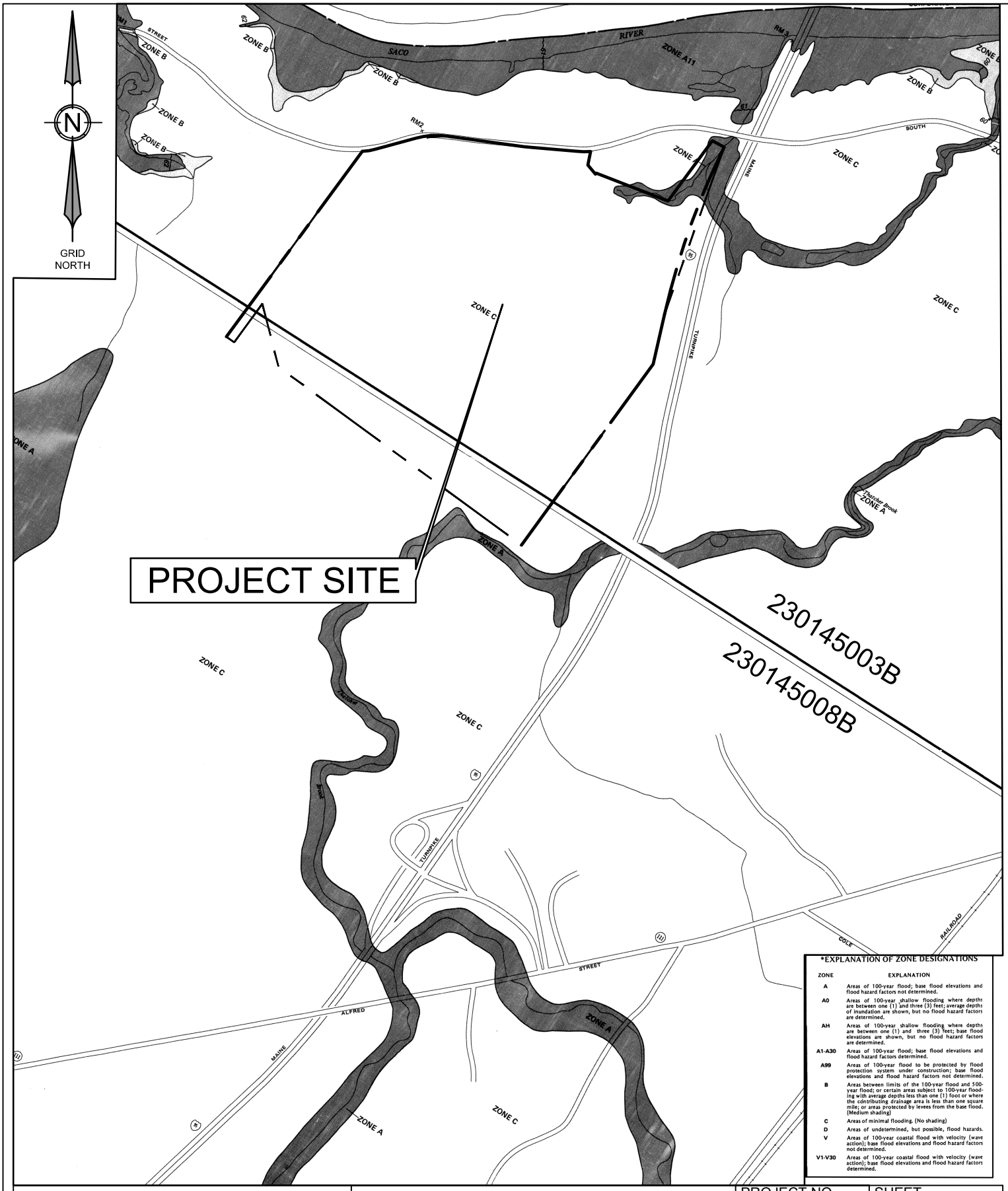
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PROJECT NO.	SHEET
21-13	2
DATE	OF
4/12/2022	5
SCALE	
1" = 2000'	



FLOOD INSURANCE RATE MAP

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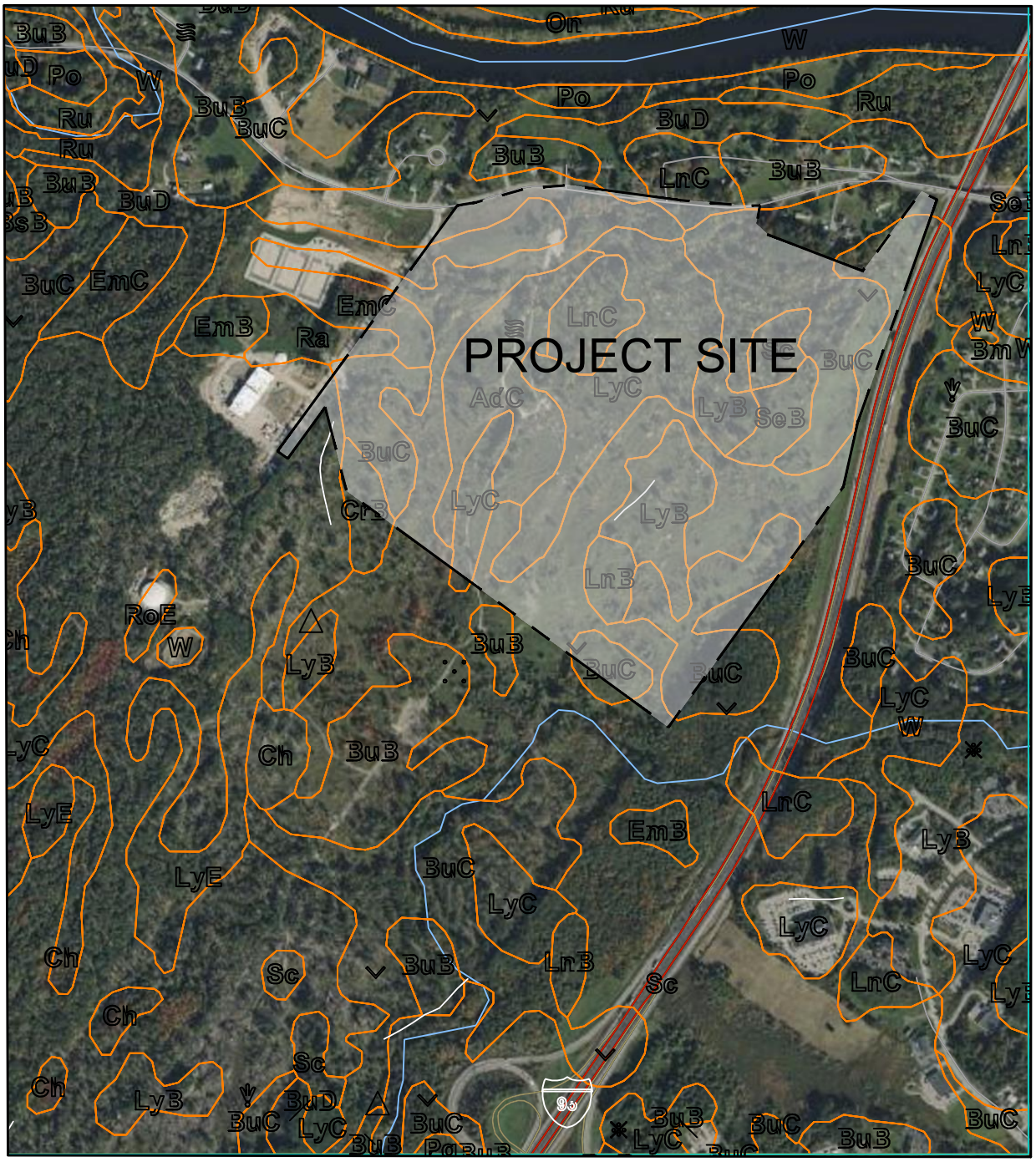
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PROJECT NO.	SHEET
21-13	3
DATE	OF
4/12/2022	5
SCALE	
1" = 1000'	



SOIL SURVEY MAP

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PROJECT NO.	SHEET
21-13	4
DATE	OF
4/12/2022	5
SCALE	
1" = 1,000'	

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AdC	Adams loamy sand, 8 to 15 percent slopes	A	15.5	2.3%
Bm	Biddeford mucky peat, 0 to 3 percent slopes	D	4.2	0.6%
BuB	Buxton silt loam, 3 to 8 percent slopes	D	38.7	5.9%
BuC	Buxton silt loam, 8 to 15 percent slopes	C	119.6	18.1%
BuD	Buxton silt loam, 15 to 25 percent slopes	C	17.5	2.7%
Ch	Chocorua peat	A/D	4.1	0.6%
CrB	Croghan loamy fine sand, 0 to 8 percent slopes, wooded	A	3.7	0.6%
EmB	Elmwood fine sandy loam, 0 to 8 percent slopes	B	6.2	0.9%
EmC	Elmwood fine sandy loam, 8 to 15 percent slopes	B	19.0	2.9%
LnB	Lyman loam, 3 to 8 percent slopes, rocky	D	7.3	1.1%
LnC	Lyman loam, 8 to 15 percent slopes, rocky	D	18.3	2.8%
LyB	Lyman-Rock outcrop complex, 3 to 8 percent slopes	D	38.8	5.9%
LyC	Lyman-Rock outcrop complex, 8 to 15 percent slopes	D	129.0	19.5%
LyE	Lyman-Rock outcrop complex, 15 to 80 percent slopes	D	14.7	2.2%
Po	Podunk and Winooski soils	B	2.9	0.4%
Ra	Raynham silt loam	C/D	4.8	0.7%
RoE	Rock outcrop-Lyman complex, 15 to 80 percent slopes		1.2	0.2%
Ru	Rumney fine sandy loam, 0 to 3 percent slopes, frequently flooded	B/D	10.1	1.5%
Sc	Scantic silt loam, 0 to 3 percent slopes	D	194.2	29.4%
SeB	Scio silt loam, 3 to 8 percent slopes	C	8.2	1.2%
W	Water bodies		2.8	0.4%
Totals for Area of Interest			660.9	100.0%

HYDROGRAPHIC SOIL GROUP

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PROJECT NO. 21-13
DATE 4/12/2022
SCALE 1" = 1,000'
SHEET 5
OF 5

Attachment 2

Water Quality Calculations

Width of Road Impervious	27
Width of Road Grass	23

Linear New Impervious Area (SF) =	325458
Linear New Landscaped Area (SF)=	277242
Linear Developed Area (SF) =	602700

Watershed	Beginning Station	End Station	Road Length (FT)	Impervious Area (SF)	Landscaped Area (SF)	Total Developed Area(SF)	Incremental Treatment % (Impervious)	Incremental Treatment % (Developed)	BMP	Urban Impaired Stream
Chamber Lane	0	0	0	0	0	0	0.00%	0.00%	LS-1	
Chamber Lane	0	600	600	16200	13800	30000	0.00%	0.00%	LS-2 (None)	
Chamber Lane	600	795	195	5265	4485	9750	1.62%	1.62%	LS-3	
Chamber Lane	795	1420	625	16875	14375	31250	0.00%	0.00%	None	
Chamber Lane	1420	1612	192	5184	4416	9600	0.00%	0.00%	None	
Chamber Lane	1612	2225	613	16551	14099	30650	5.09%	5.09%	LS-4	x
Chamber Lane	2225	2700	475	12825	10925	23750	0.00%	0.00%	LS-5	x
Chamber Lane	2700	2960	260	7020	5980	13000	2.16%	2.16%	GW-2	
Chamber Lane	2960	3112	152	4104	3496	7600	1.26%	1.26%	LS-6	
Chamber Lane	3112	3750	638	17226	14674	31900	5.29%	5.29%	LS-7	
Chamber Lane	3750	4160	410	11070	9430	20500	3.40%	3.40%	GW1	
Chamber Lane	0	0	0	0	0	0	0.00%	0.00%		
Baxter BLVD	0	225	225	6075	5175	11250	1.87%	1.87%	LS-13	
Baxter BLVD	225	380	155	4185	3565	7750	1.29%	1.29%	LS-12	
Baxter BLVD	380	550	170	4590	3910	8500	0.00%	0.00%	None	
Baxter BLVD	550	845	295	7965	6785	14750	2.45%	2.45%	LS-11	
Baxter BLVD	0	0	0	0	0	0	0.00%	0.00%		
Remi Dr.	0	270	270	7290	6210	13500	0.00%	0.00%	None	
Remi Dr.	270	570	300	8100	6900	15000	2.49%	2.49%	LS-8	
Remi Dr.	570	700	130	3510	2990	6500	1.08%	1.08%	LS-9	
Remi Dr.	700	940	240	6480	5520	12000	1.99%	1.99%	LS-10	
Remi Dr.	940	1165	225	6075	5175	11250	1.87%	1.87%	LS-11	
Remi Dr.	1165	1340	175	4725	4025	8750	1.45%	1.45%	LS-14	
Remi Dr.	1340	1590	250	6750	5750	12500	2.07%	2.07%	LS-15	
Remi Dr.	1590	1850	260	7020	5980	13000	0.00%	0.00%	None	
Remi Dr.	1850	2265	415	11205	9545	20750	3.44%	3.44%	LS-16	
Remi Dr.	2265	3180	915	24705	21045	45750	7.59%	7.59%	GW-1	
Remi Dr.	0	0	0	0	0	0	0.00%	0.00%		
Common Way	10	790	780	21060	17940	39000	6.47%	6.47%	GW-1	
Common Way	790	1300	510	13770	11730	25500	4.23%	4.23%	GW-1	
Common Way	1300	1630	330	8910	7590	16500	2.74%	2.74%	LS-17	
Common Way	1630	1828	198	5346	4554	9900	1.64%	1.64%	LS-18	x
Common Way	1828	2032	204	5508	4692	10200	0.00%	0.00%	None	x
Common Way	0	0	0	0	0	0	0.00%	0.00%		
Furr Dr.	10	345	335	4522.5	3852.5	8375	1.39%	1.39%	LS-9	
Furr Dr.	10	345	335	4522.5	3852.5	8375	1.39%	1.39%	LS-10	
Furr Dr.	345	590	245	6615	5635	12250	2.03%	2.03%	LS-19	x
Furr Dr.	0	0	0	0	0	0	0.00%	0.00%		
View Point Loop	10	1277	1267	34209	29141	63350	10.51%	10.51%	GW-2	
	0	0	0	0	0	0	0.00%	0.00%		
	0	0	0	0	0	0	0.00%	0.00%		
	0	0	0	0	0	0	0.00%	0.00%		
	0	0	0	0	0	0	0.00%	0.00%		
	0	0	0	0	0	0	0.00%	0.00%		
	0	0	0	0	0	0	0.00%	0.00%		
	0	0	0	0	0	0	0.00%	0.00%		
	Subtotal			325458	277242	602700	76.80%	76.80%		

Non Linear New Impervious Area (SF) =	616900
Non Linear New Landscaped Area (SF)=	1767500
Non Linear Developed Area (SF) =	2384400

Watershed	Area/Lot #	Total Impervious Area (SF)	Total Landscaped Area (SF)	Total Developed Area (SF)	Incremental Treatment % (Impervious)	Incremental Treatment % (Developed)	BMP	Urban Impaired Stream
	Lot 1	3000	9000	12000	0.49%	0.50%	LS-13	
	Lot 2	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 3	1500	4500	6000	0.24%	0.25%	Lot Buffer	
	Lot 3B	1500	4500	6000	0.24%	0.25%	LS-12	
	Lot 4	3000	9000	12000	0.49%	0.50%	LS-13	
	Lot 5	3000	9000	12000	0.49%	0.50%	LS-13	
	Lot 6	1000	5000	6000	0.16%	0.25%	Lot Buffer	
	Lot 6B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 6C	0	4000	4000	0.00%	0.17%	LS-12	
	Lot 7	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 8	1000	4000	5000	0.16%	0.21%	LS-11	
	Lot 8 B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 8C	0	5000	5000	0.00%	0.00%	None	
	Lot 9	1000	4000	5000	0.16%	0.21%	LS-11	
	Lot 9 B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 9C	0	5000	5000	0.00%	0.00%	None	
	Lot 10	3000	9000	12000	0.49%	0.50%	LS-11	
	Lot 11	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 12	3000	9000	12000	0.49%	0.50%	LS-14	
	Lot 13	3000	9000	12000	0.49%	0.50%	LS-11	
	Lot 14	3000	9000	12000	0.49%	0.50%	LS-14	
	Lot 15	3000	9000	12000	0.49%	0.50%	LS-14	
	Lot 16	3000	9000	12000	0.49%	0.50%	LS-15	
	Lot 17	1000	4000	5000	0.16%	0.21%	LS-15	
	Lot 17B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 17C	0	5000	5000	0.00%	0.00%	None	
	Lot 18	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 19	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 20	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 21	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 22	1000	9000	10000	0.00%	0.00%	None	

	Lot 22B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 23	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 23B	1000	4000	5000	0.16%	0.21%	LS-16	
	Lot 23C	0	5000	5000	0.00%	0.00%	None	
	Lot 24	1000	9000	10000	0.16%	0.42%	Lot Buffer	
	Lot 24B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 25	2000	5000	7000	0.32%	0.29%	LS-16	
	Lot 25B	1000	4000	5000	0.16%	0.21%	Roof Drain	
	Lot 25C	0	4000	4000	0.00%	0.00%	None	
	Lot 26	1000	5000	6000	0.16%	0.25%	LS-16	
	Lot 26B	0	4000	4000	0.00%	0.00%	None	
	Lot 26C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 27	3000	9000	12000	0.49%	0.50%	LS-16	
	Lot 28	3000	9000	12000	0.49%	0.50%	LS-16	
	Lot 29	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 30	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 31	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 32	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 32B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 32C	0	8000	8000	0.00%	0.34%	Lot Buffer	
	Lot 33	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 33B	0	8000	8000	0.00%	0.34%	Lot Buffer	
	Lot 33C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 34	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 34B	0	8000	8000	0.00%	0.34%	None	
	Lot 34C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 35	1000	1000	2000	0.16%	0.08%	Lot Buffer	
	Lot 35B	0	8000	8000	0.00%	0.34%	None	
	Lot 35C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 36	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 36B	0	8000	8000	0.00%	0.34%	None	
	Lot 36C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 37	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 37B	0	8000	8000	0.00%	0.34%	None	
	Lot 37C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 38	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 38B	2000	8000	10000	0.32%	0.42%	Lot Buffer 17	
	Lot 39	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 39B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 40	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 40B	2000	8000	10000	0.32%	0.42%	Lot Buffer	

	Lot 41	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 41B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 42	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 42B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 43	2000	4000	6000	0.32%	0.25%	GW-1	
	Lot 43B	1000	5000	6000	0.16%	0.25%	Lot Buffer	
	Lot 44	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 45	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 46	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 47	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 48	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 49	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 50	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 51	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 52	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 53	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 54	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 55	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 56	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 57	2000	4000	6000	0.32%	0.25%	GW-1	
	Lot 57B	1000	5000	6000	0.16%	0.25%	Lot Buffer	
	Lot 58	1000	4000	5000	0.16%	0.21%	GW-1	
	Lot 58B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 58C	0	5000	5000	0.00%	0.00%	None	
	Lot 59	2000	4000	6000	0.32%	0.25%	GW-1	
	Lot 59B	1000	5000	6000	0.16%	0.25%	Lot Buffer	
	Lot 60	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 61	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 62	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 63	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 64	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 65	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 66	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 67	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 68	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 69	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 70	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 71	3000	9000	12000	0.49%	0.50%	GW-1	
	Lot 72	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 73	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 73B	2000	8000	10000	0.32%	0.42%	Lot Buffer	

	Lot 74	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 74B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 75	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 75B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 76	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 76B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 77	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 77B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 78	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 78B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 79	1000	1000	2000	0.16%	0.08%	GW-1	
	Lot 79B	2000	8000	10000	0.32%	0.42%	Lot Buffer	
	Lot 80	3000	9000	12000	0.49%	0.50%	LS-1	
	Lot 81	3000	9000	12000	0.49%	0.50%	LS-1	
	Lot 82	3000	9000	12000	0.49%	0.50%	LS-1	
	Lot 83	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 84	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 85	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 86	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 87	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 88	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 88B	1000	9000	10000	0.00%	0.00%	LS-2 (none)	
	Lot 89	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 89B	1000	9000	10000	0.16%	0.42%	LS-2 (none)	
	Lot 90	1000	9000	10000	0.00%	0.00%	LS-2 (none)	
	Lot 90B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 91	1000	9000	10000	0.00%	0.00%	LS-2 (none)	
	Lot 91B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 92	1000	9000	10000	0.00%	0.00%	LS-2 (none)	
	Lot 92B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 93	1000	9000	10000	0.00%	0.00%	LS-2 (none)	
	Lot 93B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 94	3000	9000	12000	0.49%	0.50%	LS-3	
	Lot 95	1000	4000	5000	0.16%	0.21%	LS-3	
	Lot 95B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 95C	0	5000	5000	0.00%	0.00%	None	
	Lot 96	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 96B	0	5000	5000	0.00%	0.21%	Lot Buffer	
	Lot 96C	1000	4000	5000	0.00%	0.00%	None	
	Lot 97	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 97B	0	5000	5000	0.00%	0.21%	Lot Buffer	
	Lot 97C	1000	4000	5000	0.00%	0.00%	None	

	Lot 98	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 98B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 98C	1000	4000	5000	0.00%	0.00%	None	
	Lot 99	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 99B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 99C	1000	4000	5000	0.00%	0.00%	None	
	Lot 100	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 100B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 100C	1000	4000	5000	0.00%	0.00%	None	
	Lot 101	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 101B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 101C	1000	4000	5000	0.00%	0.00%	None	
	Lot 102	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 103	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 103B	0	5000	5000	0.00%	0.21%	Lot Buffer	
	Lot 103C	1000	4000	5000	0.00%	0.00%	None	
	Lot 104	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 104B	1000	9000	10000	0.00%	0.00%	None	
	Lot 105	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 106	3000	9000	12000	0.49%	0.50%	LS-8	
	Lot 107	1500	4500	6000	0.24%	0.25%	LS-8	
	Lot 107B	1500	4500	6000	0.24%	0.25%	Lot Buffer	
	Lot 108	1500	4500	6000	0.24%	0.25%	Lot Buffer	
	Lot 108B	1500	4500	6000	0.24%	0.25%	LS-9	
	Lot 109	3000	9000	12000	0.49%	0.50%	LS-9	
	Lot 109B	1500	4500	6000	0.24%	0.25%	Lot Buffer	
	Lot 110	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 111	3000	9000	12000	0.49%	0.50%	LS-10	
	Lot 112	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 113	3000	9000	12000	0.49%	0.50%	LS-10	
	Lot 114	3000	9000	12000	0.49%	0.50%	LS-10	
	Lot 115	1000	4000	5000	0.16%	0.21%	LS-10	
	Lot 115B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 115C	0	5000	5000	0.00%	0.00%	None	
	Lot 116	0	5000	5000	0.00%	0.00%	None	
	Lot 116B	1000	4000	5000	0.16%	0.21%	LS-10	
	Lot 116C	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 117	1000	4000	5000	0.00%	0.00%	LS-19	x
	Lot 117B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 117C	0	5000	5000	0.00%	0.00%	None	
	Lot 118	2000	0	2000	0.32%	0.08%	Roof Drain	

	Lot 118B	1000	9000	10000	0.00%	0.00%	None	
	Lot 119	3000	9000	12000	0.49%	0.50%	LS-17	
	Lot 120	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 120B	1000	4000	5000	0.16%	0.21%	LS-19	x
	Lot 120C	0	5000	5000	0.00%	0.00%	None	x
	Lot 121	3000	9000	12000	0.49%	0.50%	LS-19	x
	Lot 122	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 123	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 124	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 125	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 126	3000	9000	12000	0.49%	0.50%	LS-9	
	Lot 127	3000	9000	12000	0.49%	0.50%	LS-8	
	Lot 128	3000	4000	7000	0.49%	0.29%	LS-8	
	Lot 128B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 129	3000	4000	7000	0.49%	0.29%	LS-8	
	Lot 129B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 130	3000	4000	7000	0.49%	0.29%	LS-8	
	Lot 130B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 131	1000	4000	5000	0.00%	0.00%	None	
	Lot 131B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 131C	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 132	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 132B	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 132C	1000	4000	5000	0.00%	0.00%	None	
	Lot 133	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 133B	1000	9000	10000	0.00%	0.00%	None	
	Lot 134	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 134B	1000	9000	10000	0.00%	0.00%	None	x
	Lot 135	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 136	2000	4000	6000	0.32%	0.25%	LS-4	x
	Lot 136B	1000	5000	6000	0.16%	0.25%	Lot Buffer	x
	Lot 137	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 138	1000	4000	5000	0.16%	0.21%	LS-4	x
	Lot 138B	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 138C	0	5000	5000	0.00%	0.00%	None	x
	Lot 139	3000	9000	12000	0.49%	0.50%	LS-4	x
	Lot 140	3000	9000	12000	0.49%	0.50%	LS-4	x
	Lot 141	0	4000	4000	0.00%	0.17%	LS-4	x
	Lot 141B	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 141C	1000	5000	6000	0.00%	0.00%	None	x
	Lot 142	3000	9000	12000	0.49%	0.50%	Lot Buffer	x

	Lot 143	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 144	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 145	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 146	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 147	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 148	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 149	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 150	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 151	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 151B	1000	9000	10000	0.00%	0.00%	None	x
	Lot 152	1000	4000	5000	0.16%	0.21%	LS-5	x
	Lot 152B	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 152C	0	5000	5000	0.00%	0.00%	None	x
	Lot 153	1000	4000	5000	0.16%	0.21%	LS-5	x
	Lot 153B	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 153C	0	5000	5000	0.00%	0.21%	Lot Buffer	x
	Lot 154	2000	4000	6000	0.32%	0.25%	LS-5	x
	Lot 154B	1000	5000	6000	0.16%	0.25%	Lot Buffer	x
	Lot 155	2000	4000	6000	0.32%	0.25%	LS-5	x
	Lot 155B	1000	5000	6000	0.16%	0.25%	Lot Buffer	x
	Lot 156	2000	4000	6000	0.32%	0.25%	LS-5	x
	Lot 156B	1000	5000	6000	0.16%	0.25%	Lot Buffer	x
	Lot 157	1000	4000	5000	0.16%	0.21%	GW-2	
	Lot 157B	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 157C	0	5000	5000	0.00%	0.00%	None	x
	Lot 158	1000	4000	5000	0.16%	0.21%	GW-2	
	Lot 158B	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 158C	0	5000	5000	0.00%	0.00%	None	x
	Lot 159	1000	4000	5000	0.16%	0.21%	GW-2	
	Lot 159B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 159C	0	5000	5000	0.00%	0.00%	None	
	Lot 160	1000	4000	5000	0.16%	0.21%	LS-6	
	Lot 160B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 160C	0	5000	5000	0.00%	0.00%	None	
	Lot 161	1000	4000	5000	0.16%	0.21%	LS-7	
	Lot 161B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 161C	0	5000	5000	0.00%	0.00%	None	
	Lot 162	1000	4000	5000	0.16%	0.21%	LS-7	
	Lot 162B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 162C	0	5000	5000	0.00%	0.00%	None	
	Lot 163	1000	4000	5000	0.16%	0.21%	LS-7	

	Lot 163B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 163C	0	5000	5000	0.00%	0.00%	none	
	Lot 164	3000	9000	12000	0.49%	0.50%	LS-7	
	Lot 165	2000	4000	6000	0.32%	0.25%	LS-7	
	Lot 165B	1000	5000	6000	0.16%	0.25%	Lot Buffer	
	Lot 166	1000	4000	5000	0.16%	0.21%	LS-7	
	Lot 166B	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 166C	0	3000	3000	0.00%	0.13%	Lot Buffer	
	Lot 166D	0	2000	2000	0.00%	0.00%	None	
	Lot 167	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 167B	0	4000	4000	0.00%	0.17%	Lot Buffer	
	Lot 167B	1000	5000	6000	0.00%	0.00%	None	
	Lot 168	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 168B	1000	9000	10000	0.00%	0.00%	None	
	Lot 169	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 169B	1000	9000	10000	0.00%	0.00%	None	
	Lot 170	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 171	3000	9000	12000	0.49%	0.50%	Lot Buffer	
	Lot 172	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 173	1000	0	1000	0.16%	0.04%	GW-2	
	Lot 173B	2000	9000	11000	0.32%	0.46%	Lot Buffer	
	Lot 174	1000	0	1000	0.16%	0.04%	GW-2	
	Lot 174B	2000	9000	11000	0.32%	0.46%	Lot Buffer	
	Lot 175	1000	0	1000	0.16%	0.04%	GW-2	
	Lot 175B	2000	9000	11000	0.32%	0.46%	Lot Buffer	
	Lot 176	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 176B	1000	0	1000	0.16%	0.04%	GW-2	
	Lot 176C	0	9000	9000	0.00%	0.38%	None	
	Lot 177	1000	0	1000	0.16%	0.04%	GW-2	
	Lot 177B	2000	9000	11000	0.32%	0.46%	Lot Buffer	
	Lot 178	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 179	2000	0	2000	0.32%	0.08%	Roof Drain	x
	Lot 179B	1000	9000	10000	0.00%	0.00%	None	x
	Lot 180	3000	9000	12000	0.49%	0.50%	Lot Buffer	x
	Lot 181	2000	0	2000	0.32%	0.08%	Roof Drain	
	Lot 181B	1000	9000	10000	0.00%	0.00%	None	
	Lot 182	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 183	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 184	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 185	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 186	3000	9000	12000	0.49%	0.50%	GW-2	

	Lot 187	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 188	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 189	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 190	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 191	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 192	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 193	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 194	3000	9000	12000	0.49%	0.50%	GW-2	
	Lot 195	3000	9000	12000	0.49%	0.50%	GW-2	
Club House	Building	1500	0	1500	0.24%	0.06%	Roof Drain	
	Parking & Access	12400	2000	14400	2.01%	0.60%	LS-11	
	BB Court	2500	0	2500	0.41%	0.10%	Lot Buffer	
Maintenance	Building	2000	0	2000	0.32%	0.08%	Roof Drain	
	Parking & Access	12000	2000	14000	1.95%	0.59%	LS-1	
	Subtotal	616900	1767500	2384400	95.62%	86.71%		

Attachment 3

BMP Sizing Calculations

STAGE STORAGE CALCULATIONS

GRAVEL WETLAND #1

WATERSHED IMPERVIOUS AREA=	175605	SF	1"
WATERSHED LANDSCAPED AREA=	336175	SF	0.4"
REQUIRED WQV=	25840	CF	
PROVIDED WQV=	26175	CF	
REQUIRED SA=	15504.0		
PROVIDED SA=	15700		

Forebay

STAGE (FT)	AREA (SF)	STORAGE (CF)
84.5	1100	0
85	1267	592
86	1600	2025

Cell #1

STAGE (FT)	AREA (SF)	STORAGE (CF)
83	7300	0
84	8300	7800
84.5	8800	12075

Cell #2

STAGE (FT)	AREA (SF)	STORAGE (CF)
83	7300	0
84	8300	7800
84.5	8800	12075

Total Pond

STAGE (FT)	AREA (SF)	STORAGE (CF)
83	14600	0
84	16600	16192
84.5	17600	26175
84.51	18000	26175
86	19500	54112
87	22500	74842

STAGE STORAGE CALCULATIONS

GRAVEL WETLAND #2

WATERSHED IMPERVIOUS AREA=	94229 SF	1"
WATERSHED LANDSCAPED AREA=	182121 SF	0.4"
REQUIRED WQV=	13923 CF	
PROVIDED WQV=	14401 CF	
REQUIRED SA=	8330	
PROVIDED SA=	8336	

Forebay

STAGE (FT)	AREA (SF)	STORAGE (CF)
86	120	0
87	334	227
87.5	463	426

Cell #1

STAGE (FT)	AREA (SF)	STORAGE (CF)
86	4108	0
87	4837	4473
87.5	5223	6988

Cell #2

STAGE (FT)	AREA (SF)	STORAGE (CF)
86	4108	0
87	4837	4473
87.5	5223	6988

Total Pond

STAGE (FT)	AREA (SF)	STORAGE (CF)
86	8336	0
87	10008	9172
87.5	10909	14401
87.51	10909	14401
88	12781	20205
89	14329	33509

LB-1
Single Family Residential Lot Buffer

Buffer Characteristics:

Soil Type:	C
Cover:	Forest
Slope:	8.00%
Length:	> 50 ft flowpath

Lots Treated:
Lot 78
Lot 79

LS-1
Vegetated Buffer & Level Lip Spreader
Road 1- Sta. 2+50 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	2.00
Length:	95

Tributary Area:	(sf)	(acre)	
Total:	56,000	1.29	
Impervious:	21,000	0.48	
Lawn:	35,000	0.80	6000 swale

Berm Length Calculations:
Required Lengths:

105	ft length / acre impervious
31	ft length / acre lawn
76	**ft - Required Berm Length**
80	**ft - Berm Length Provided**

LS-2
Vegetated Buffer & Level Lip Spreader
Road 1- Sta. 4+00 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.00
Length:	70

Tributary Area:	(sf)	(acre)
Total:	63,275	1.45
Impervious:	20,775	0.48
Lawn:	42,500	0.98

Berm Length Calculations:
Required Lengths:

131	ft length / acre impervious
36	ft length / acre lawn

98 ft - Required Berm Length

VOID ft - Berm Length Provided

LS-3

Vegetated Buffer & Level Lip Spreader

Road 1- Sta. 8+00 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.00%
Length:	75

Tributary Area:	(sf)	(acre)
Total:	30,265	0.69
Impervious:	9,265	0.21
Lawn:	21,000	0.48

Berm Length Calculations:

Required Lengths:

125	ft length / acre impervious
35	ft length / acre lawn
43	**ft - Required Berm Length**
45	**ft - Berm Length Provided**

LS-4

Vegetated Buffer & Level Lip Spreader

Road 5- Sta. 9+75 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Meadow
Slope:	5.00
Length:	150

Tributary Area:	(sf)	(acre)
Total:	49,650	1.14
Impervious:	23,551	0.54
Lawn:	26,099	0.60

Berm Length Calculations:

Required Lengths:

101	ft length / acre impervious
30	ft length / acre lawn
73	**ft - Required Berm Length**
80	**ft - Berm Length Provided**

LS-5

Vegetated Buffer & Level Lip Spreader

Road 2- Sta. 22+20 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Meadow
Slope:	6.00
Length:	100

Tributary Area:	(sf)	(acre)
Total:	51,750	1.19
Impervious:	20,825	0.48
Lawn:	30,925	0.71

Berm Length Calculations:

Required Lengths:

125	ft length / acre impervious
35	ft length / acre lawn
85	**ft - Required Berm Length**
90	**ft - Berm Length Provided**

LS-6

Vegetated Buffer & Level Lip Spreader

Road 2- Sta. 33+50 R

Buffer Characteristics:

Soil Type:	C1
Cover:	meadow
Slope:	6.50
Length:	50

Tributary Area:	(sf)	(acre)
Total:	14,742	0.34
Impervious:	5,104	0.12
Lawn:	9,638	0.22

Berm Length Calculations:

Required Lengths:

183 ft length / acre impervious

60 ft length / acre lawn

35 ft - Required Berm Length

35 ft - Berm Length Provided

LS-7

Vegetated Buffer & Level Lip Spreader

Road 2- Sta. 33+50 R

Buffer Characteristics:

Soil Type:	C1
Cover:	forest
Slope:	7.00
Length:	150

Tributary Area:	(sf)	(acre)
Total:	69,900	1.60
Impervious:	26,226	0.60
Lawn:	43,674	1.00

Berm Length Calculations:

Required Lengths:

76 ft length / acre impervious

24 ft length / acre lawn

70 ft - Required Berm Length

70 ft - Berm Length Provided

LS-8

Vegetated Buffer & Level Lip Spreader

Road 3- Sta. 1+90 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.00
Length:	85

Tributary Area:	(sf)	(acre)
Total:	63,000	1.45
Impervious:	21,600	0.50
Lawn:	41,400	0.95

Berm Length Calculations:

Required Lengths:

114	ft length / acre impervious
33	ft length / acre lawn
88	**ft - Required Berm Length**
90	**ft - Berm Length Provided**

LS-9

Vegetated Buffer & Level Lip Spreader

Road 3- Sta. 5+50 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.50
Length:	100

Tributary Area:	(sf)	(acre)
Total:	56,874	1.31
Impervious:	18,532	0.43
Lawn:	38,342	0.88

Berm Length Calculations:

Required Lengths:

100	ft length / acre impervious
30	ft length / acre lawn
69	**ft - Required Berm Length**
70	**ft - Berm Length Provided**

LS-10

Vegetated Buffer & Level Lip Spreader

Road 3- Sta. 8+00 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	10.00
Length:	120

Tributary Area:	(sf)	(acre)
Total:	66,374	1.52
Impervious:	22,002	0.51
Lawn:	44,372	1.02

Berm Length Calculations:

Required Lengths:

103	ft length / acre impervious
33	ft length / acre lawn
86	**ft - Required Berm Length**
90	**ft - Berm Length Provided**

LS-11

Vegetated Buffer & Level Lip Spreader

Road 1- Sta. 5+50 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	6.00
Length:	150

Tributary Area:	(sf)	(acre)
Total:	74,400	1.71
Impervious:	34,440	0.79
Lawn:	39,960	0.92

Berm Length Calculations:

Required Lengths:

76 ft length / acre impervious

24 ft length / acre lawn

82 ft - Required Berm Length

82 ft - Berm Length Provided

LS-12

Vegetated Buffer & Level Lip Spreader

Road 1- Sta. 3+75 L

Buffer Characteristics:

Soil Type:	C1
Cover:	FOREST
Slope:	2.00
Length:	130

Tributary Area:	(sf)	(acre)
Total:	17,750	0.41
Impervious:	5,685	0.13
Lawn:	12,065	0.28

Berm Length Calculations:

Required Lengths:

82 ft length / acre impervious

26 ft length / acre lawn

18 ft - Required Berm Length

30 ft - Berm Length Provided

LS-13

Vegetated Buffer & Level Lip Spreader

Road 1- Sta. 10+50 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	1.00
Length:	150

Tributary Area:	(sf)	(acre)
Total:	47,250	1.08
Impervious:	15,075	0.35
Lawn:	32,175	0.74

Berm Length Calculations:

Required Lengths:

76 ft length / acre impervious

24 ft length / acre lawn

44 ft - Required Berm Length

45 ft - Berm Length Provided

LS-14

Vegetated Buffer & Level Lip Spreader

Road 3- Sta. 13+30 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	4.00
Length:	100

Tributary Area:	(sf)	(acre)
Total:	49,725	1.14
Impervious:	13,725	0.32
Lawn:	36,000	0.83

Berm Length Calculations:

Required Lengths:

100	ft length / acre impervious
30	ft length / acre lawn
56	**ft - Required Berm Length**
56	**ft - Berm Length Provided**

LS-15

Vegetated Buffer & Level Lip Spreader

Road 3- Sta. 15+90 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	4.00
Length:	100

Tributary Area:	(sf)	(acre)
Total:	34,750	0.80
Impervious:	10,750	0.25
Lawn:	24,000	0.55

Berm Length Calculations:

Required Lengths:

100	ft length / acre impervious
30	ft length / acre lawn
41	**ft - Required Berm Length**
42	**ft - Berm Length Provided**

LS-16

Vegetated Buffer & Level Lip Spreader

Road 3- Sta. 17+65 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.00
Length:	120

Tributary Area:	(sf)	(acre)
Total:	57,750	1.33
Impervious:	20,205	0.46
Lawn:	37,545	0.86

Berm Length Calculations:

Required Lengths:

86 ft length / acre impervious

27 ft length / acre lawn

63 ft - Required Berm Length

64 ft - Berm Length Provided

LS-17

Vegetated Buffer & Level Lip Spreader

Road 4- Sta. 12+90 L

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.50
Length:	90

Tributary Area:	(sf)	(acre)
Total:	16,500	0.38
Impervious:	8,910	0.20
Lawn:	7,590	0.17

Berm Length Calculations:

Required Lengths:

109	ft length / acre impervious
32	ft length / acre lawn
28	**ft - Required Berm Length**
30	**ft - Berm Length Provided**

LS-18

Vegetated Buffer & Level Lip Spreader

Road 5- Sta. 8+50 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	7.00
Length:	115

Tributary Area:	(sf)	(acre)
Total:	9,900	0.23
Impervious:	5,346	0.12
Lawn:	4,554	0.10

Berm Length Calculations:

Required Lengths:

89 ft length / acre impervious

27 ft length / acre lawn

14 ft - Required Berm Length

20 ft - Berm Length Provided

LS-19

Vegetated Buffer & Level Lip Spreader

Road 6- Sta. 3+30 R

Buffer Characteristics:

Soil Type:	C1
Cover:	Forest
Slope:	3.00
Length:	80

Tributary Area:	(sf)	(acre)
Total:	34,250	0.79
Impervious:	11,615	0.27
Lawn:	22,635	0.52

Berm Length Calculations:

Required Lengths:

120	ft length / acre impervious
34	ft length / acre lawn
50	**ft - Required Berm Length**
50	**ft - Berm Length Provided**

Attachment 4

Urban Impaired Stream Calculations

Watershed	Area/Lot #	Roof Impervious Area (SF)	Non-Roof Impervious Area (SF)	Landscaped Area (SF)
	Lot 98	2000	0	0
	Lot 98B	0	0	5000
	Lot 99	2000	0	0
	Lot 99B	0	0	5000
	Lot 100	2000	0	0
	Lot 100B	0	0	5000
	Lot 101	2000	0	0
	Lot 101B	0	0	5000
	Lot 102	2000	1000	9000
	Lot 117	0	1000	4000
	Lot 120B	0	1000	4000
	Lot 120C	0	0	5000
	Lot 121	2000	1000	9000
	Lot 122	2000	1000	9000
	Lot 123	2000	1000	9000
	Lot 124	2000	1000	9000
	Lot 125	2000	1000	9000
	Lot 128B	0	1000	5000
	Lot 129B	0	1000	5000
	Lot 130B	0	1000	5000
	Lot 131C	0	0	5000
	Lot 132B	0	0	5000
	Lot 134	2000	0	0
	Lot 134B	0	1000	9000
	Lot 135	2000	1000	9000
	Lot 136	2000	0	4000
	Lot 136B	0	1000	5000
	Lot 137	2000	1000	9000
	Lot 138	0	1000	4000
	Lot 138B	2000	0	0
	Lot 138C	0	0	5000
	Lot 139	2000	1000	9000
	Lot 140	0	1000	5000
	Lot 140B	2000	0	0
	Lot 140C	0	0	4000
	Lot 141	0	0	4000
	Lot 141B	2000	0	0
	Lot 141C	0	1000	5000
	Lot 142	2000	1000	9000
	Lot 143	2000	1000	9000
	Lot 144	2000	1000	9000
	Lot 145	2000	1000	9000
	Lot 146	2000	1000	9000
	Lot 147	2000	1000	9000
	Lot 148	2000	1000	9000
	Lot 149	2000	1000	9000
	Lot 150	2000	1000	9000
	Lot 151	2000	0	0
	Lot 151B	0	1000	9000
	Lot 152	0	1000	4000
	Lot 152B	2000	0	0
	Lot 152C	0	0	5000

	Lot 153	0	1000	4000
	Lot 153B	2000	0	0
	Lot 153C	0	0	5000
	Lot 154	2000	0	4000
	Lot 154B	0	1000	5000
	Lot 155	2000	0	4000
	Lot 155B	0	1000	5000
	Lot 156	2000	0	4000
	Lot 156B	0	1000	5000
	Lot 157B	2000	0	0
	Lot 157C	0	0	5000
	Lot 158B	2000	0	0
	Lot 158C	0	0	5000
	Lot 178	2000	1000	9000
	Lot 179	2000	0	0
	Lot 179B	0	1000	9000
	Lot 180	2000	1000	9000
	Subtotal	76000	37000	356000

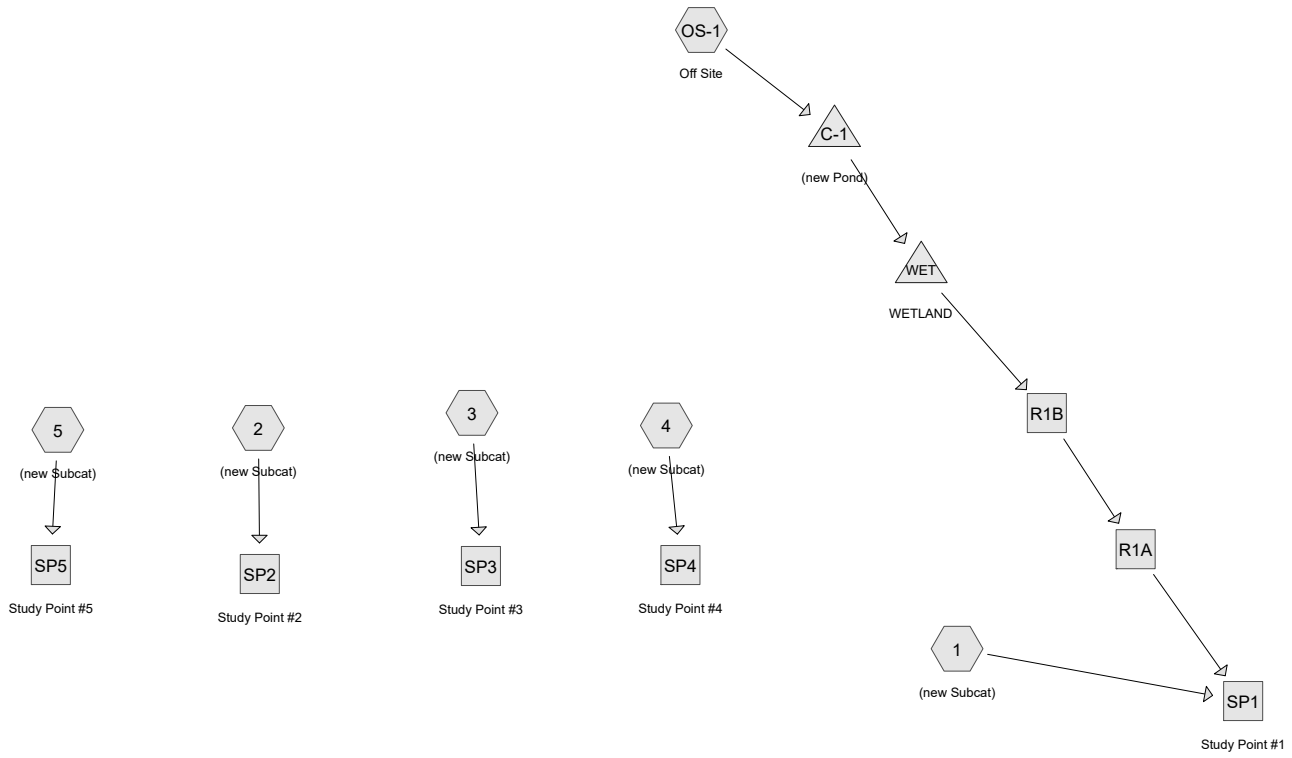
Road	Start Station	End Station	Non-Roof Impervious Area (SF)	Landscaped Area (SF)
Lozolite	1612	2225	16551	14099
Lozolite	2225	2700	12825	10925
Griffinite	1630	1828	5346	4554
Griffinite	1828	2032	5508	4692
Ruby	345	590	6615	5635
	Subtotal		46845	39905

	Roof Impervious Area (SF)	Non-Roof Impervious Area (SF)	Landscaped Area (SF)
Total (SF)	76000	83845	395905
Total (Acres)	1.74	1.92	9.09
Compensation Fee (per acre)	$5,000.00	$12,500.00	$2,500.00
	$8,723.60	$24,060.20	$22,721.82

Total Fee	$55,505.62

Attachment 5

Pre Development Hydrocad Calculations



Subcat Reach Pond Link

Routing Diagram for 21-13 PRE
Prepared by Terradyn Consultants, LLC, Printed 11/8/2022
HydroCAD® 10.00-26 s/n 10466 © 2020 HydroCAD Software Solutions LLC

Time span=5.00-20.00 hrs, dt=0.01 hrs, 1501 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: (new Subcat) Runoff Area=122.290 ac 2.81% Impervious Runoff Depth>0.84"
Flow Length=5,317' Tc=139.2 min CN=72 Runoff=29.10 cfs 8.521 af

Subcatchment 2: (new Subcat) Runoff Area=270.762 ac 0.00% Impervious Runoff Depth>0.97"
Flow Length=5,272' Tc=172.1 min CN=75 Runoff=67.59 cfs 21.784 af

Subcatchment 3: (new Subcat) Runoff Area=36.136 ac 2.89% Impervious Runoff Depth>0.92"
Flow Length=840' Tc=80.9 min CN=73 Runoff=13.39 cfs 2.768 af

Subcatchment 4: (new Subcat) Runoff Area=221,542 sf 0.00% Impervious Runoff Depth>0.93"
Flow Length=480' Tc=49.6 min CN=73 Runoff=2.58 cfs 0.396 af

Subcatchment 5: (new Subcat) Runoff Area=113,637 sf 0.00% Impervious Runoff Depth>0.79"
Flow Length=320' Slope=0.0300 '/' Tc=46.6 min CN=70 Runoff=1.11 cfs 0.171 af

Subcatchment OS-1: Off Site Runoff Area=583,385 sf 5.16% Impervious Runoff Depth>0.88"
Flow Length=1,097' Tc=61.7 min CN=72 Runoff=5.56 cfs 0.979 af

Reach R1A: Avg. Flow Depth=0.22' Max Vel=1.32 fps Inflow=1.53 cfs 0.698 af
n=0.030 L=860.0' S=0.0058 '/' Capacity=230.46 cfs Outflow=1.53 cfs 0.683 af

Reach R1B: Avg. Flow Depth=0.26' Max Vel=1.77 fps Inflow=1.53 cfs 0.719 af
n=0.030 L=1,640.0' S=0.0090 '/' Capacity=51.80 cfs Outflow=1.53 cfs 0.698 af

Reach SP1: Study Point #1 Inflow=30.52 cfs 9.204 af
Outflow=30.52 cfs 9.204 af

Reach SP2: Study Point #2 Inflow=67.59 cfs 21.784 af
Outflow=67.59 cfs 21.784 af

Reach SP3: Study Point #3 Inflow=13.39 cfs 2.768 af
Outflow=13.39 cfs 2.768 af

Reach SP4: Study Point #4 Inflow=2.58 cfs 0.396 af
Outflow=2.58 cfs 0.396 af

Reach SP5: Study Point #5 Inflow=1.11 cfs 0.171 af
Outflow=1.11 cfs 0.171 af

Pond C-1: (new Pond) Peak Elev=75.83' Storage=200 cf Inflow=5.56 cfs 0.979 af
Outflow=5.55 cfs 0.979 af

Pond WET: WETLAND Peak Elev=74.18' Storage=19,361 cf Inflow=5.55 cfs 0.979 af
Outflow=1.53 cfs 0.719 af

Total Runoff Area = 450.275 ac Runoff Volume = 34.620 af Average Runoff Depth = 0.92"
98.85% Pervious = 445.100 ac 1.15% Impervious = 5.175 ac

Time span=5.00-20.00 hrs, dt=0.01 hrs, 1501 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: (new Subcat) Runoff Area=122.290 ac 2.81% Impervious Runoff Depth>1.84"
Flow Length=5,317' Tc=139.2 min CN=72 Runoff=66.40 cfs 18.731 af

Subcatchment 2: (new Subcat) Runoff Area=270.762 ac 0.00% Impervious Runoff Depth>2.02"
Flow Length=5,272' Tc=172.1 min CN=75 Runoff=144.46 cfs 45.623 af

Subcatchment 3: (new Subcat) Runoff Area=36.136 ac 2.89% Impervious Runoff Depth>1.97"
Flow Length=840' Tc=80.9 min CN=73 Runoff=29.86 cfs 5.943 af

Subcatchment 4: (new Subcat) Runoff Area=221,542 sf 0.00% Impervious Runoff Depth>2.00"
Flow Length=480' Tc=49.6 min CN=73 Runoff=5.69 cfs 0.848 af

Subcatchment 5: (new Subcat) Runoff Area=113,637 sf 0.00% Impervious Runoff Depth>1.77"
Flow Length=320' Slope=0.0300 '/' Tc=46.6 min CN=70 Runoff=2.66 cfs 0.386 af

Subcatchment OS-1: Off Site Runoff Area=583,385 sf 5.16% Impervious Runoff Depth>1.91"
Flow Length=1,097' Tc=61.7 min CN=72 Runoff=12.66 cfs 2.135 af

Reach R1A: Avg. Flow Depth=0.41' Max Vel=1.92 fps Inflow=4.29 cfs 1.691 af
n=0.030 L=860.0' S=0.0058 '/' Capacity=230.46 cfs Outflow=4.29 cfs 1.669 af

Reach R1B: Avg. Flow Depth=0.49' Max Vel=2.51 fps Inflow=4.31 cfs 1.722 af
n=0.030 L=1,640.0' S=0.0090 '/' Capacity=51.80 cfs Outflow=4.29 cfs 1.691 af

Reach SP1: Study Point #1 Inflow=70.62 cfs 20.400 af
Outflow=70.62 cfs 20.400 af

Reach SP2: Study Point #2 Inflow=144.46 cfs 45.623 af
Outflow=144.46 cfs 45.623 af

Reach SP3: Study Point #3 Inflow=29.86 cfs 5.943 af
Outflow=29.86 cfs 5.943 af

Reach SP4: Study Point #4 Inflow=5.69 cfs 0.848 af
Outflow=5.69 cfs 0.848 af

Reach SP5: Study Point #5 Inflow=2.66 cfs 0.386 af
Outflow=2.66 cfs 0.386 af

Pond C-1: (new Pond) Peak Elev=76.44' Storage=1,813 cf Inflow=12.66 cfs 2.135 af
Outflow=12.26 cfs 2.135 af

Pond WET: WETLAND Peak Elev=74.49' Storage=40,849 cf Inflow=12.26 cfs 2.135 af
Outflow=4.31 cfs 1.722 af

Total Runoff Area = 450.275 ac Runoff Volume = 73.666 af Average Runoff Depth = 1.96"
98.85% Pervious = 445.100 ac 1.15% Impervious = 5.175 ac

Time span=5.00-20.00 hrs, dt=0.01 hrs, 1501 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: (new Subcat) Runoff Area=122.290 ac 2.81% Impervious Runoff Depth>2.77"
Flow Length=5,317' Tc=139.2 min CN=72 Runoff=100.71 cfs 28.219 af

Subcatchment 2: (new Subcat) Runoff Area=270.762 ac 0.00% Impervious Runoff Depth>2.98"
Flow Length=5,272' Tc=172.1 min CN=75 Runoff=212.91 cfs 67.320 af

Subcatchment 3: (new Subcat) Runoff Area=36.136 ac 2.89% Impervious Runoff Depth>2.94"
Flow Length=840' Tc=80.9 min CN=73 Runoff=44.74 cfs 8.862 af

Subcatchment 4: (new Subcat) Runoff Area=221,542 sf 0.00% Impervious Runoff Depth>2.98"
Flow Length=480' Tc=49.6 min CN=73 Runoff=8.50 cfs 1.263 af

Subcatchment 5: (new Subcat) Runoff Area=113,637 sf 0.00% Impervious Runoff Depth>2.70"
Flow Length=320' Slope=0.0300 '/' Tc=46.6 min CN=70 Runoff=4.09 cfs 0.588 af

Subcatchment OS-1: Off Site Runoff Area=583,385 sf 5.16% Impervious Runoff Depth>2.87"
Flow Length=1,097' Tc=61.7 min CN=72 Runoff=19.16 cfs 3.206 af

Reach R1A: Avg. Flow Depth=0.57' Max Vel=2.31 fps Inflow=7.31 cfs 2.653 af
n=0.030 L=860.0' S=0.0058 '/' Capacity=230.46 cfs Outflow=7.29 cfs 2.626 af

Reach R1B: Avg. Flow Depth=0.67' Max Vel=2.97 fps Inflow=7.36 cfs 2.690 af
n=0.030 L=1,640.0' S=0.0090 '/' Capacity=51.80 cfs Outflow=7.31 cfs 2.653 af

Reach SP1: Study Point #1 Inflow=107.80 cfs 30.845 af
Outflow=107.80 cfs 30.845 af

Reach SP2: Study Point #2 Inflow=212.91 cfs 67.320 af
Outflow=212.91 cfs 67.320 af

Reach SP3: Study Point #3 Inflow=44.74 cfs 8.862 af
Outflow=44.74 cfs 8.862 af

Reach SP4: Study Point #4 Inflow=8.50 cfs 1.263 af
Outflow=8.50 cfs 1.263 af

Reach SP5: Study Point #5 Inflow=4.09 cfs 0.588 af
Outflow=4.09 cfs 0.588 af

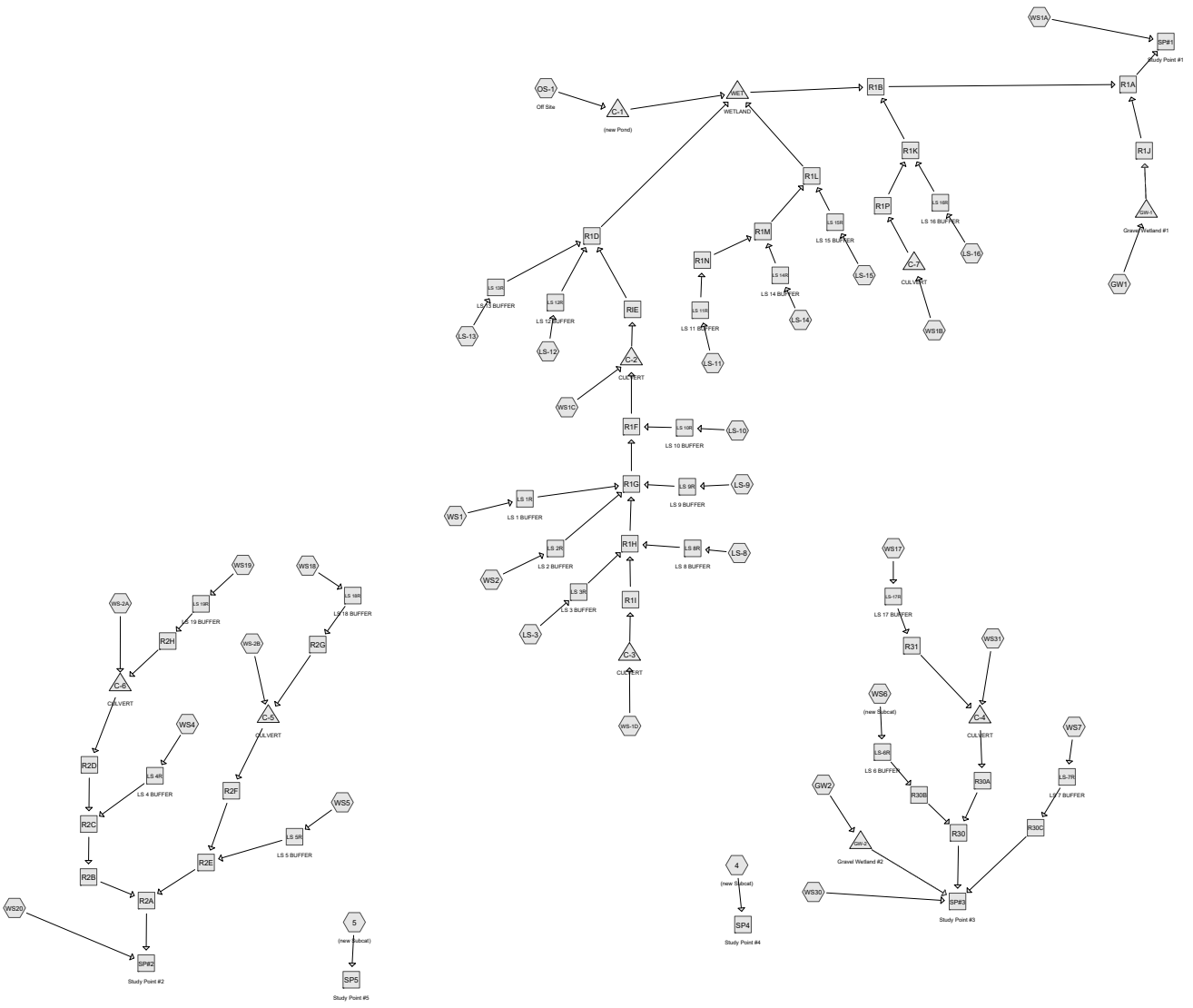
Pond C-1: (new Pond) Peak Elev=76.87' Storage=5,764 cf Inflow=19.16 cfs 3.206 af
Outflow=17.73 cfs 3.205 af

Pond WET: WETLAND Peak Elev=74.78' Storage=60,896 cf Inflow=17.73 cfs 3.205 af
Outflow=7.36 cfs 2.690 af

Total Runoff Area = 450.275 ac Runoff Volume = 109.458 af Average Runoff Depth = 2.92"
98.85% Pervious = 445.100 ac 1.15% Impervious = 5.175 ac

Attachment 6

Post Development Hydrocad



Routing Diagram for 21-13 POST
Prepared by Terradyn Consultants, LLC, Printed 11/8/2022
HydroCAD® 10.00-26 s/n 10466 © 2020 HydroCAD Software Solutions LLC

Time span=5.00-40.00 hrs, dt=0.01 hrs, 3501 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 4: (new Subcat) Runoff Area=192,646 sf 5.19% Impervious Runoff Depth=1.16"
Flow Length=480' Tc=49.6 min CN=75 Runoff=2.54 cfs 0.428 af

Subcatchment 5: (new Subcat) Runoff Area=113,637 sf 0.00% Impervious Runoff Depth=0.89"
Flow Length=320' Slope=0.0300 '/' Tc=46.6 min CN=70 Runoff=1.11 cfs 0.193 af

Subcatchment GW1: Runoff Area=552,670 sf 31.77% Impervious Runoff Depth=1.62"
Flow Length=1,090' Tc=42.0 min CN=82 Runoff=11.50 cfs 1.712 af

Subcatchment GW2: Runoff Area=317,270 sf 29.70% Impervious Runoff Depth=1.28"
Flow Length=560' Tc=11.7 min UI Adjusted CN=77 Runoff=8.83 cfs 0.779 af

Subcatchment LS-10: Runoff Area=81,466 sf 27.01% Impervious Runoff Depth=1.22"
Flow Length=440' Tc=8.9 min UI Adjusted CN=76 Runoff=2.35 cfs 0.190 af

Subcatchment LS-11: Runoff Area=90,223 sf 38.17% Impervious Runoff Depth=1.62"
Flow Length=700' Tc=32.2 min CN=82 Runoff=2.14 cfs 0.279 af

Subcatchment LS-12: Runoff Area=17,750 sf 32.03% Impervious Runoff Depth=1.62"
Flow Length=150' Slope=0.0800 '/' Tc=7.7 min CN=82 Runoff=0.73 cfs 0.055 af

Subcatchment LS-13: Runoff Area=69,679 sf 21.63% Impervious Runoff Depth=1.16"
Flow Length=650' Tc=46.2 min UI Adjusted CN=75 Runoff=0.95 cfs 0.155 af

Subcatchment LS-14: Runoff Area=49,725 sf 27.60% Impervious Runoff Depth=1.28"
Flow Length=370' Tc=7.5 min UI Adjusted CN=77 Runoff=1.59 cfs 0.122 af

Subcatchment LS-15: Runoff Area=34,750 sf 30.94% Impervious Runoff Depth=1.55"
Tc=7.5 min CN=81 Runoff=1.37 cfs 0.103 af

Subcatchment LS-16: Runoff Area=68,793 sf 29.37% Impervious Runoff Depth=1.28"
Flow Length=600' Tc=13.3 min UI Adjusted CN=77 Runoff=1.83 cfs 0.169 af

Subcatchment LS-3: Runoff Area=35,656 sf 25.98% Impervious Runoff Depth=1.22"
Flow Length=300' Tc=11.9 min UI Adjusted CN=76 Runoff=0.93 cfs 0.083 af

Subcatchment LS-8: Runoff Area=75,146 sf 28.74% Impervious Runoff Depth=1.28"
Flow Length=640' Tc=11.5 min UI Adjusted CN=77 Runoff=2.10 cfs 0.185 af

Subcatchment LS-9: Runoff Area=56,874 sf 32.58% Impervious Runoff Depth=1.62"
Flow Length=550' Tc=9.5 min CN=82 Runoff=2.19 cfs 0.176 af

Subcatchment OS-1: Off Site Runoff Area=583,385 sf 5.16% Impervious Runoff Depth=0.99"
Flow Length=1,097' Tc=61.7 min CN=72 Runoff=5.56 cfs 1.107 af

Subcatchment WS-1D: Runoff Area=638,889 sf 2.45% Impervious Runoff Depth=0.89"
Flow Length=1,500' Tc=74.2 min UI Adjusted CN=70 Runoff=4.69 cfs 1.084 af

Subcatchment WS-2A: Runoff Area=296,906 sf 6.09% Impervious Runoff Depth=1.10"
Flow Length=720' Tc=68.6 min UI Adjusted CN=74 Runoff=3.00 cfs 0.627 af

Subcatchment WS-2B: Runoff Area=8.619 ac 8.26% Impervious Runoff Depth=1.10"
Flow Length=1,000' Tc=113.5 min UI Adjusted CN=74 Runoff=2.70 cfs 0.793 af

Subcatchment WS1: Runoff Area=51,519 sf 4.08% Impervious Runoff Depth=1.05"
Flow Length=230' Tc=9.1 min UI Adjusted CN=73 Runoff=1.23 cfs 0.103 af

Subcatchment WS17: Runoff Area=26,816 sf 33.23% Impervious Runoff Depth=1.48"
Tc=6.0 min CN=80 Runoff=1.06 cfs 0.076 af

Subcatchment WS18: Runoff Area=9,900 sf 54.00% Impervious Runoff Depth=2.00"
Tc=6.0 min CN=87 Runoff=0.53 cfs 0.038 af

Subcatchment WS19: Runoff Area=34,250 sf 33.91% Impervious Runoff Depth=1.62"
Flow Length=180' Tc=9.3 min CN=82 Runoff=1.33 cfs 0.106 af

Subcatchment WS1A: Runoff Area=2,700,581 sf 3.76% Impervious Runoff Depth=0.94"
Flow Length=3,337' Tc=135.7 min CN=71 Runoff=14.04 cfs 4.850 af

Subcatchment WS1B: Runoff Area=356,623 sf 4.37% Impervious Runoff Depth=0.99"
Flow Length=770' Tc=67.4 min UI Adjusted CN=72 Runoff=3.22 cfs 0.677 af

Subcatchment WS1C: Runoff Area=16.775 ac 8.55% Impervious Runoff Depth=1.05"
Flow Length=870' Tc=78.0 min UI Adjusted CN=73 Runoff=6.42 cfs 1.464 af

Subcatchment WS2: Runoff Area=230,676 sf 9.01% Impervious Runoff Depth=0.99"
Flow Length=726' Tc=41.6 min UI Adjusted CN=72 Runoff=2.77 cfs 0.438 af

Subcatchment WS20: Runoff Area=245.185 ac 0.23% Impervious Runoff Depth=1.16"
Flow Length=5,272' Tc=172.1 min CN=75 Runoff=61.20 cfs 23.746 af

Subcatchment WS30: Runoff Area=569,331 sf 3.69% Impervious Runoff Depth=0.94"
Flow Length=650' Tc=51.6 min UI Adjusted CN=71 Runoff=5.65 cfs 1.023 af

Subcatchment WS31: Runoff Area=8.074 ac 1.71% Impervious Runoff Depth=0.99"
Flow Length=707' Tc=80.3 min UI Adjusted CN=72 Runoff=2.83 cfs 0.668 af

Subcatchment WS4: Runoff Area=49,650 sf 47.43% Impervious Runoff Depth=1.84"
Tc=7.5 min CN=85 Runoff=2.34 cfs 0.175 af

Subcatchment WS5: Runoff Area=51,750 sf 40.24% Impervious Runoff Depth=1.77"
Tc=7.5 min CN=84 Runoff=2.34 cfs 0.175 af

Subcatchment WS6: (new Subcat) Runoff Area=14,742 sf 34.62% Impervious Runoff Depth=1.62"
Tc=6.0 min CN=82 Runoff=0.64 cfs 0.046 af

Subcatchment WS7: Runoff Area=104,548 sf 25.09% Impervious Runoff Depth=1.16"
Flow Length=580' Tc=37.4 min UI Adjusted CN=75 Runoff=1.60 cfs 0.232 af

Reach LS 10R: LS 10 BUFFER Avg. Flow Depth=0.12' Max Vel=0.16 fps Inflow=2.35 cfs 0.190 af
n=0.800 L=100.0' S=0.1200 '/' Capacity=63.30 cfs Outflow=1.75 cfs 0.190 af

Reach LS 11R: LS 11 BUFFER Avg. Flow Depth=0.22' Max Vel=0.10 fps Inflow=2.14 cfs 0.279 af
n=0.800 L=84.0' S=0.0238 '/' Capacity=25.94 cfs Outflow=1.89 cfs 0.279 af

Reach LS 12R: LS 12 BUFFER Avg. Flow Depth=0.17' Max Vel=0.04 fps Inflow=0.73 cfs 0.055 af
n=0.800 L=150.0' S=0.0067 '/' Capacity=6.06 cfs Outflow=0.24 cfs 0.055 af

Reach LS 13R: LS 13 BUFFER Avg. Flow Depth=0.20' Max Vel=0.07 fps Inflow=0.95 cfs 0.155 af
n=0.800 L=150.0' S=0.0120 '/' Capacity=11.06 cfs Outflow=0.65 cfs 0.155 af

Reach LS 14R: LS 14 BUFFER Avg. Flow Depth=0.15' Max Vel=0.12 fps Inflow=1.59 cfs 0.122 af
n=0.800 L=110.0' S=0.0545 '/' Capacity=28.21 cfs Outflow=0.99 cfs 0.122 af

Reach LS 15R: LS 15 BUFFER Avg. Flow Depth=0.16' Max Vel=0.12 fps Inflow=1.37 cfs 0.103 af
n=0.800 L=110.0' S=0.0545 '/' Capacity=21.48 cfs Outflow=0.89 cfs 0.103 af

Reach LS 16R: LS 16 BUFFER Avg. Flow Depth=0.14' Max Vel=0.14 fps Inflow=1.83 cfs 0.169 af
n=0.800 L=150.0' S=0.0800 '/' Capacity=38.26 cfs Outflow=1.23 cfs 0.169 af

Reach LS 18R: LS 18 BUFFER Avg. Flow Depth=0.11' Max Vel=0.12 fps Inflow=0.53 cfs 0.038 af
n=0.800 L=150.0' S=0.0867 '/' Capacity=16.68 cfs Outflow=0.29 cfs 0.038 af

Reach LS 19R: LS 19 BUFFER Avg. Flow Depth=0.13' Max Vel=0.08 fps Inflow=1.33 cfs 0.106 af
n=0.800 L=150.0' S=0.0333 '/' Capacity=23.37 cfs Outflow=0.66 cfs 0.106 af

Reach LS 1R: LS 1 BUFFER Avg. Flow Depth=0.09' Max Vel=0.08 fps Inflow=1.23 cfs 0.103 af
n=0.800 L=150.0' S=0.0533 '/' Capacity=37.98 cfs Outflow=0.58 cfs 0.103 af

Reach LS 2R: LS 2 BUFFER Avg. Flow Depth=0.47' Max Vel=0.18 fps Inflow=2.77 cfs 0.438 af
n=0.800 L=135.0' S=0.0370 '/' Capacity=10.91 cfs Outflow=2.51 cfs 0.438 af

Reach LS 3R: LS 3 BUFFER Avg. Flow Depth=0.13' Max Vel=0.12 fps Inflow=0.93 cfs 0.083 af
n=0.800 L=90.0' S=0.0667 '/' Capacity=26.06 cfs Outflow=0.69 cfs 0.083 af

Reach LS 4R: LS 4 BUFFER Avg. Flow Depth=0.16' Max Vel=0.13 fps Inflow=2.34 cfs 0.175 af
n=0.800 L=80.0' S=0.0625 '/' Capacity=41.11 cfs Outflow=1.77 cfs 0.175 af

Reach LS 5R: LS 5 BUFFER Avg. Flow Depth=0.16' Max Vel=0.13 fps Inflow=2.34 cfs 0.175 af
n=0.800 L=80.0' S=0.0625 '/' Capacity=41.11 cfs Outflow=1.76 cfs 0.175 af

Reach LS 8R: LS 8 BUFFER Avg. Flow Depth=0.13' Max Vel=0.13 fps Inflow=2.10 cfs 0.185 af
n=0.800 L=95.0' S=0.0842 '/' Capacity=53.03 cfs Outflow=1.60 cfs 0.185 af

Reach LS 9R: LS 9 BUFFER Avg. Flow Depth=0.15' Max Vel=0.13 fps Inflow=2.19 cfs 0.176 af
n=0.800 L=130.0' S=0.0654 '/' Capacity=37.38 cfs Outflow=1.44 cfs 0.176 af

Reach LS-17R: LS 17 BUFFER Avg. Flow Depth=0.15' Max Vel=0.11 fps Inflow=1.06 cfs 0.076 af
n=0.800 L=150.0' S=0.0533 '/' Capacity=17.13 cfs Outflow=0.55 cfs 0.076 af

Reach LS-6R: LS 6 BUFFER Avg. Flow Depth=0.10' Max Vel=0.08 fps Inflow=0.64 cfs 0.046 af
n=0.800 L=150.0' S=0.0467 '/' Capacity=17.94 cfs Outflow=0.28 cfs 0.046 af

Reach LS-7R: LS 7 BUFFER Avg. Flow Depth=0.15' Max Vel=0.11 fps Inflow=1.60 cfs 0.232 af
n=0.800 L=150.0' S=0.0467 '/' Capacity=31.58 cfs Outflow=1.27 cfs 0.232 af

Reach R1A: Avg. Flow Depth=0.85' Max Vel=2.90 fps Inflow=14.41 cfs 7.541 af
n=0.030 L=860.0' S=0.0058 '/' Capacity=230.46 cfs Outflow=14.41 cfs 7.537 af

Reach R1B: Avg. Flow Depth=0.89' Max Vel=3.44 fps Inflow=11.88 cfs 6.349 af
n=0.030 L=1,640.0' S=0.0090 '/' Capacity=51.80 cfs Outflow=11.86 cfs 6.345 af

Reach R1D: Avg. Flow Depth=0.55' Max Vel=0.79 fps Inflow=15.36 cfs 3.916 af
n=0.100 L=260.0' S=0.0077 '/' Capacity=371.57 cfs Outflow=15.29 cfs 3.916 af

Reach R1F: Avg. Flow Depth=0.74' Max Vel=4.14 fps Inflow=8.38 cfs 2.260 af
n=0.030 L=280.0' S=0.0179 '/' Capacity=30.96 cfs Outflow=8.38 cfs 2.260 af

Reach R1G: Avg. Flow Depth=1.20' Max Vel=1.96 fps Inflow=7.95 cfs 2.069 af
n=0.070 L=220.0' S=0.0136 '/' Capacity=52.87 cfs Outflow=7.94 cfs 2.069 af

Reach R1H: Avg. Flow Depth=1.03' Max Vel=1.62 fps Inflow=5.19 cfs 1.352 af
n=0.070 L=180.0' S=0.0111 '/' Capacity=47.72 cfs Outflow=5.18 cfs 1.352 af

Reach R1I: Avg. Flow Depth=1.23' Max Vel=1.10 fps Inflow=4.68 cfs 1.084 af
n=0.070 L=240.0' S=0.0042 '/' Capacity=29.22 cfs Outflow=4.66 cfs 1.084 af

Reach R1J: Avg. Flow Depth=0.85' Max Vel=3.21 fps Inflow=7.08 cfs 1.197 af
n=0.070 L=300.0' S=0.0567 '/' Capacity=42.31 cfs Outflow=7.06 cfs 1.196 af

Reach R1K: Avg. Flow Depth=0.49' Max Vel=3.22 fps Inflow=3.70 cfs 0.846 af
n=0.070 L=110.0' S=0.1091 '/' Capacity=16.76 cfs Outflow=3.70 cfs 0.846 af

Reach R1L: Avg. Flow Depth=1.07' Max Vel=0.82 fps Inflow=2.87 cfs 0.504 af
n=0.070 L=370.0' S=0.0027 '/' Capacity=23.54 cfs Outflow=2.80 cfs 0.504 af

Reach R1M: Avg. Flow Depth=1.18' Max Vel=0.70 fps Inflow=2.47 cfs 0.402 af
n=0.070 L=270.0' S=0.0019 '/' Capacity=16.43 cfs Outflow=2.41 cfs 0.402 af

Reach R1N: Avg. Flow Depth=0.97' Max Vel=0.85 fps Inflow=1.89 cfs 0.279 af
n=0.070 L=140.0' S=0.0036 '/' Capacity=18.62 cfs Outflow=1.88 cfs 0.279 af

Reach R1P: Avg. Flow Depth=0.75' Max Vel=2.08 fps Inflow=3.22 cfs 0.677 af
n=0.070 L=420.0' S=0.0286 '/' Capacity=23.92 cfs Outflow=3.20 cfs 0.677 af

Reach R2A: Avg. Flow Depth=0.39' Max Vel=0.75 fps Inflow=6.23 cfs 1.914 af
n=0.030 L=600.0' S=0.0008 '/' Capacity=498.29 cfs Outflow=6.12 cfs 1.914 af

Reach R2B: Avg. Flow Depth=0.26' Max Vel=0.66 fps Inflow=3.49 cfs 0.908 af
n=0.030 L=360.0' S=0.0011 '/' Capacity=575.38 cfs Outflow=3.45 cfs 0.908 af

Reach R2C: Avg. Flow Depth=0.92' Max Vel=1.39 fps Inflow=3.51 cfs 0.908 af
n=0.100 L=440.0' S=0.0195 '/' Capacity=17.39 cfs Outflow=3.49 cfs 0.908 af

Reach R2D: Avg. Flow Depth=0.95' Max Vel=1.48 fps Inflow=3.30 cfs 0.733 af
n=0.100 L=770.0' S=0.0227 '/' Capacity=14.93 cfs Outflow=3.24 cfs 0.733 af

Reach R2E: Avg. Flow Depth=0.82' Max Vel=1.42 fps Inflow=2.97 cfs 1.006 af
n=0.100 L=550.0' S=0.0236 '/' Capacity=19.13 cfs Outflow=2.96 cfs 1.006 af

Reach R2F: Avg. Flow Depth=0.82' Max Vel=1.31 fps Inflow=2.76 cfs 0.831 af
n=0.100 L=200.0' S=0.0200 '/' Capacity=17.60 cfs Outflow=2.76 cfs 0.831 af

Reach R2G: Avg. Flow Depth=0.25' Max Vel=0.75 fps Inflow=0.29 cfs 0.038 af
n=0.100 L=550.0' S=0.0291 '/' Capacity=4.71 cfs Outflow=0.25 cfs 0.038 af

Reach R2H: Avg. Flow Depth=0.41' Max Vel=0.87 fps Inflow=0.66 cfs 0.106 af
n=0.100 L=570.0' S=0.0211 '/' Capacity=4.00 cfs Outflow=0.61 cfs 0.106 af

Reach R30: Avg. Flow Depth=0.81' Max Vel=1.53 fps Inflow=3.15 cfs 0.789 af
n=0.100 L=360.0' S=0.0278 '/' Capacity=20.74 cfs Outflow=3.13 cfs 0.789 af

Reach R30A: Avg. Flow Depth=0.84' Max Vel=1.40 fps Inflow=3.04 cfs 0.744 af
n=0.100 L=180.0' S=0.0222 '/' Capacity=18.55 cfs Outflow=3.03 cfs 0.744 af

Reach R30B: Avg. Flow Depth=0.25' Max Vel=0.87 fps Inflow=0.28 cfs 0.046 af
n=0.100 L=100.0' S=0.0400 '/' Capacity=5.52 cfs Outflow=0.28 cfs 0.046 af

Reach R30C: Avg. Flow Depth=0.11' Max Vel=0.52 fps Inflow=1.27 cfs 0.232 af
n=0.100 L=110.0' S=0.0273 '/' Capacity=74.87 cfs Outflow=1.26 cfs 0.232 af

Reach R31: Avg. Flow Depth=0.34' Max Vel=0.94 fps Inflow=0.55 cfs 0.076 af
n=0.100 L=540.0' S=0.0315 '/' Capacity=4.89 cfs Outflow=0.50 cfs 0.076 af

Reach RIE: Avg. Flow Depth=0.95' Max Vel=2.57 fps Inflow=14.59 cfs 3.706 af
n=0.030 L=370.0' S=0.0041 '/' Capacity=192.45 cfs Outflow=14.57 cfs 3.706 af

Reach SP#1: Study Point #1 Inflow=28.37 cfs 12.387 af
Outflow=28.37 cfs 12.387 af

Reach SP#2: Study Point #2 Inflow=65.79 cfs 25.660 af
Outflow=65.79 cfs 25.660 af

Reach SP#3: Study Point #3 Inflow=10.30 cfs 2.528 af
Outflow=10.30 cfs 2.528 af

Reach SP4: Study Point #4 Inflow=2.54 cfs 0.428 af
Outflow=2.54 cfs 0.428 af

Reach SP5: Study Point #5 Inflow=1.11 cfs 0.193 af
Outflow=1.11 cfs 0.193 af

Pond C-1: (new Pond) Peak Elev=75.83' Storage=200 cf Inflow=5.56 cfs 1.107 af
Outflow=5.55 cfs 1.107 af

Pond C-2: CULVERT Peak Elev=85.31' Storage=4,337 cf Inflow=14.67 cfs 3.724 af
Outflow=14.59 cfs 3.706 af

Pond C-3: CULVERT Peak Elev=96.63' Storage=502 cf Inflow=4.69 cfs 1.084 af
Outflow=4.68 cfs 1.084 af

Pond C-4: CULVERT Peak Elev=96.55' Storage=117 cf Inflow=3.04 cfs 0.744 af
Outflow=3.04 cfs 0.744 af

Pond C-5: CULVERT Peak Elev=96.52' Storage=59 cf Inflow=2.76 cfs 0.831 af
Outflow=2.76 cfs 0.831 af

Pond C-6: CULVERT Peak Elev=106.08' Storage=1,390 cf Inflow=3.41 cfs 0.733 af
Outflow=3.30 cfs 0.733 af

Pond C-7: CULVERT Peak Elev=93.57' Storage=37 cf Inflow=3.22 cfs 0.677 af
Outflow=3.22 cfs 0.677 af

Pond GW-1: Gravel Wetland #1 Peak Elev=84.76' Storage=28,910 cf Inflow=11.50 cfs 1.712 af
Primary=0.04 cfs 0.086 af Secondary=7.04 cfs 1.111 af Outflow=7.08 cfs 1.197 af

Pond GW-2: Gravel Wetland #2 Peak Elev=87.73' Storage=17,158 cf Inflow=8.83 cfs 0.779 af
Primary=1.09 cfs 0.484 af Secondary=0.00 cfs 0.000 af Outflow=1.09 cfs 0.484 af

Pond WET: WETLAND Peak Elev=75.05' Storage=81,350 cf Inflow=22.33 cfs 5.528 af
Outflow=10.38 cfs 5.503 af

Total Runoff Area = 450.275 ac Runoff Volume = 42.058 af Average Runoff Depth = 1.12"
95.41% Pervious = 429.588 ac 4.59% Impervious = 20.686 ac

Time span=5.00-40.00 hrs, dt=0.01 hrs, 3501 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 4: (new Subcat) Runoff Area=192,646 sf 5.19% Impervious Runoff Depth=2.37"
Flow Length=480' Tc=49.6 min CN=75 Runoff=5.35 cfs 0.873 af

Subcatchment 5: (new Subcat) Runoff Area=113,637 sf 0.00% Impervious Runoff Depth=1.96"
Flow Length=320' Slope=0.0300 '/' Tc=46.6 min CN=70 Runoff=2.66 cfs 0.427 af

Subcatchment GW1: Runoff Area=552,670 sf 31.77% Impervious Runoff Depth=2.99"
Flow Length=1,090' Tc=42.0 min CN=82 Runoff=21.36 cfs 3.161 af

Subcatchment GW2: Runoff Area=317,270 sf 29.70% Impervious Runoff Depth=2.54"
Flow Length=560' Tc=11.7 min UI Adjusted CN=77 Runoff=17.95 cfs 1.541 af

Subcatchment LS-10: Runoff Area=81,466 sf 27.01% Impervious Runoff Depth=2.45"
Flow Length=440' Tc=8.9 min UI Adjusted CN=76 Runoff=4.86 cfs 0.382 af

Subcatchment LS-11: Runoff Area=90,223 sf 38.17% Impervious Runoff Depth=2.99"
Flow Length=700' Tc=32.2 min CN=82 Runoff=3.97 cfs 0.516 af

Subcatchment LS-12: Runoff Area=17,750 sf 32.03% Impervious Runoff Depth=2.99"
Flow Length=150' Slope=0.0800 '/' Tc=7.7 min CN=82 Runoff=1.34 cfs 0.102 af

Subcatchment LS-13: Runoff Area=69,679 sf 21.63% Impervious Runoff Depth=2.37"
Flow Length=650' Tc=46.2 min UI Adjusted CN=75 Runoff=2.01 cfs 0.316 af

Subcatchment LS-14: Runoff Area=49,725 sf 27.60% Impervious Runoff Depth=2.54"
Flow Length=370' Tc=7.5 min UI Adjusted CN=77 Runoff=3.22 cfs 0.242 af

Subcatchment LS-15: Runoff Area=34,750 sf 30.94% Impervious Runoff Depth=2.90"
Tc=7.5 min CN=81 Runoff=2.57 cfs 0.193 af

Subcatchment LS-16: Runoff Area=68,793 sf 29.37% Impervious Runoff Depth=2.54"
Flow Length=600' Tc=13.3 min UI Adjusted CN=77 Runoff=3.72 cfs 0.334 af

Subcatchment LS-3: Runoff Area=35,656 sf 25.98% Impervious Runoff Depth=2.45"
Flow Length=300' Tc=11.9 min UI Adjusted CN=76 Runoff=1.93 cfs 0.167 af

Subcatchment LS-8: Runoff Area=75,146 sf 28.74% Impervious Runoff Depth=2.54"
Flow Length=640' Tc=11.5 min UI Adjusted CN=77 Runoff=4.28 cfs 0.365 af

Subcatchment LS-9: Runoff Area=56,874 sf 32.58% Impervious Runoff Depth=2.99"
Flow Length=550' Tc=9.5 min CN=82 Runoff=4.06 cfs 0.325 af

Subcatchment OS-1: Off Site Runoff Area=583,385 sf 5.16% Impervious Runoff Depth=2.12"
Flow Length=1,097' Tc=61.7 min CN=72 Runoff=12.66 cfs 2.367 af

Subcatchment WS-1D: Runoff Area=638,889 sf 2.45% Impervious Runoff Depth=1.96"
Flow Length=1,500' Tc=74.2 min UI Adjusted CN=70 Runoff=11.27 cfs 2.399 af

Subcatchment WS-2A: Runoff Area=296,906 sf 6.09% Impervious Runoff Depth=2.28"
Flow Length=720' Tc=68.6 min UI Adjusted CN=74 Runoff=6.53 cfs 1.298 af

Subcatchment WS-2B: Runoff Area=8.619 ac 8.26% Impervious Runoff Depth=2.28"
Flow Length=1,000' Tc=113.5 min UI Adjusted CN=74 Runoff=5.92 cfs 1.641 af

Subcatchment WS1: Runoff Area=51,519 sf 4.08% Impervious Runoff Depth=2.20"
Flow Length=230' Tc=9.1 min UI Adjusted CN=73 Runoff=2.72 cfs 0.217 af

Subcatchment WS17: Runoff Area=26,816 sf 33.23% Impervious Runoff Depth=2.81"
Tc=6.0 min CN=80 Runoff=2.03 cfs 0.144 af

Subcatchment WS18: Runoff Area=9,900 sf 54.00% Impervious Runoff Depth=3.47"
Tc=6.0 min CN=87 Runoff=0.91 cfs 0.066 af

Subcatchment WS19: Runoff Area=34,250 sf 33.91% Impervious Runoff Depth=2.99"
Flow Length=180' Tc=9.3 min CN=82 Runoff=2.46 cfs 0.196 af

Subcatchment WS1A: Runoff Area=2,700,581 sf 3.76% Impervious Runoff Depth=2.04"
Flow Length=3,337' Tc=135.7 min CN=71 Runoff=32.82 cfs 10.546 af

Subcatchment WS1B: Runoff Area=356,623 sf 4.37% Impervious Runoff Depth=2.12"
Flow Length=770' Tc=67.4 min UI Adjusted CN=72 Runoff=7.35 cfs 1.447 af

Subcatchment WS1C: Runoff Area=16.775 ac 8.55% Impervious Runoff Depth=2.20"
Flow Length=870' Tc=78.0 min UI Adjusted CN=73 Runoff=14.31 cfs 3.079 af

Subcatchment WS2: Runoff Area=230,676 sf 9.01% Impervious Runoff Depth=2.12"
Flow Length=726' Tc=41.6 min UI Adjusted CN=72 Runoff=6.26 cfs 0.936 af

Subcatchment WS20: Runoff Area=245.185 ac 0.23% Impervious Runoff Depth=2.37"
Flow Length=5,272' Tc=172.1 min CN=75 Runoff=130.81 cfs 48.392 af

Subcatchment WS30: Runoff Area=569,331 sf 3.69% Impervious Runoff Depth=2.04"
Flow Length=650' Tc=51.6 min UI Adjusted CN=71 Runoff=13.15 cfs 2.223 af

Subcatchment WS31: Runoff Area=8.074 ac 1.71% Impervious Runoff Depth=2.12"
Flow Length=707' Tc=80.3 min UI Adjusted CN=72 Runoff=6.48 cfs 1.427 af

Subcatchment WS4: Runoff Area=49,650 sf 47.43% Impervious Runoff Depth=3.28"
Tc=7.5 min CN=85 Runoff=4.12 cfs 0.311 af

Subcatchment WS5: Runoff Area=51,750 sf 40.24% Impervious Runoff Depth=3.18"
Tc=7.5 min CN=84 Runoff=4.18 cfs 0.315 af

Subcatchment WS6: (new Subcat) Runoff Area=14,742 sf 34.62% Impervious Runoff Depth=2.99"
Tc=6.0 min CN=82 Runoff=1.18 cfs 0.084 af

Subcatchment WS7: Runoff Area=104,548 sf 25.09% Impervious Runoff Depth=2.37"
Flow Length=580' Tc=37.4 min UI Adjusted CN=75 Runoff=3.38 cfs 0.474 af

Reach LS 10R: LS 10 BUFFER Avg. Flow Depth=0.20' Max Vel=0.21 fps Inflow=4.86 cfs 0.382 af
n=0.800 L=100.0' S=0.1200 '/' Capacity=63.30 cfs Outflow=4.00 cfs 0.382 af

Reach LS 11R: LS 11 BUFFER Avg. Flow Depth=0.32' Max Vel=0.13 fps Inflow=3.97 cfs 0.516 af
n=0.800 L=84.0' S=0.0238 '/' Capacity=25.94 cfs Outflow=3.66 cfs 0.516 af

Reach LS 12R: LS 12 BUFFER Avg. Flow Depth=0.26' Max Vel=0.06 fps Inflow=1.34 cfs 0.102 af
n=0.800 L=150.0' S=0.0067 '/' Capacity=6.06 cfs Outflow=0.53 cfs 0.101 af

Reach LS 13R: LS 13 BUFFER Avg. Flow Depth=0.34' Max Vel=0.09 fps Inflow=2.01 cfs 0.316 af
n=0.800 L=150.0' S=0.0120 '/' Capacity=11.06 cfs Outflow=1.58 cfs 0.316 af

Reach LS 14R: LS 14 BUFFER Avg. Flow Depth=0.24' Max Vel=0.16 fps Inflow=3.22 cfs 0.242 af
n=0.800 L=110.0' S=0.0545 '/' Capacity=28.21 cfs Outflow=2.31 cfs 0.242 af

Reach LS 15R: LS 15 BUFFER Avg. Flow Depth=0.25' Max Vel=0.16 fps Inflow=2.57 cfs 0.193 af
n=0.800 L=110.0' S=0.0545 '/' Capacity=21.48 cfs Outflow=1.86 cfs 0.193 af

Reach LS 16R: LS 16 BUFFER Avg. Flow Depth=0.22' Max Vel=0.18 fps Inflow=3.72 cfs 0.334 af
n=0.800 L=150.0' S=0.0800 '/' Capacity=38.26 cfs Outflow=2.81 cfs 0.334 af

Reach LS 18R: LS 18 BUFFER Avg. Flow Depth=0.16' Max Vel=0.15 fps Inflow=0.91 cfs 0.066 af
n=0.800 L=150.0' S=0.0867 '/' Capacity=16.68 cfs Outflow=0.55 cfs 0.066 af

Reach LS 19R: LS 19 BUFFER Avg. Flow Depth=0.20' Max Vel=0.11 fps Inflow=2.46 cfs 0.196 af
n=0.800 L=150.0' S=0.0333 '/' Capacity=23.37 cfs Outflow=1.43 cfs 0.196 af

Reach LS 1R: LS 1 BUFFER Avg. Flow Depth=0.16' Max Vel=0.12 fps Inflow=2.72 cfs 0.217 af
n=0.800 L=150.0' S=0.0533 '/' Capacity=37.98 cfs Outflow=1.61 cfs 0.217 af

Reach LS 2R: LS 2 BUFFER Avg. Flow Depth=0.74' Max Vel=0.23 fps Inflow=6.26 cfs 0.936 af
n=0.800 L=135.0' S=0.0370 '/' Capacity=10.91 cfs Outflow=5.90 cfs 0.936 af

Reach LS 3R: LS 3 BUFFER Avg. Flow Depth=0.20' Max Vel=0.16 fps Inflow=1.93 cfs 0.167 af
n=0.800 L=90.0' S=0.0667 '/' Capacity=26.06 cfs Outflow=1.58 cfs 0.167 af

Reach LS 4R: LS 4 BUFFER Avg. Flow Depth=0.23' Max Vel=0.17 fps Inflow=4.12 cfs 0.311 af
n=0.800 L=80.0' S=0.0625 '/' Capacity=41.11 cfs Outflow=3.34 cfs 0.311 af

Reach LS 5R: LS 5 BUFFER Avg. Flow Depth=0.23' Max Vel=0.17 fps Inflow=4.18 cfs 0.315 af
n=0.800 L=80.0' S=0.0625 '/' Capacity=41.11 cfs Outflow=3.39 cfs 0.315 af

Reach LS 8R: LS 8 BUFFER Avg. Flow Depth=0.21' Max Vel=0.18 fps Inflow=4.28 cfs 0.365 af
n=0.800 L=95.0' S=0.0842 '/' Capacity=53.03 cfs Outflow=3.56 cfs 0.365 af

Reach LS 9R: LS 9 BUFFER Avg. Flow Depth=0.23' Max Vel=0.17 fps Inflow=4.06 cfs 0.325 af
n=0.800 L=130.0' S=0.0654 '/' Capacity=37.38 cfs Outflow=2.96 cfs 0.325 af

Reach LS-17R: LS 17 BUFFER Avg. Flow Depth=0.23' Max Vel=0.15 fps Inflow=2.03 cfs 0.144 af
n=0.800 L=150.0' S=0.0533 '/' Capacity=17.13 cfs Outflow=1.21 cfs 0.144 af

Reach LS-6R: LS 6 BUFFER Avg. Flow Depth=0.15' Max Vel=0.11 fps Inflow=1.18 cfs 0.084 af
n=0.800 L=150.0' S=0.0467 '/' Capacity=17.94 cfs Outflow=0.62 cfs 0.084 af

Reach LS-7R: LS 7 BUFFER Avg. Flow Depth=0.25' Max Vel=0.15 fps Inflow=3.38 cfs 0.474 af
n=0.800 L=150.0' S=0.0467 '/' Capacity=31.58 cfs Outflow=2.95 cfs 0.474 af

Reach R1A: Avg. Flow Depth=1.46' Max Vel=3.87 fps Inflow=36.62 cfs 15.980 af
n=0.030 L=860.0' S=0.0058 '/' Capacity=230.46 cfs Outflow=36.61 cfs 15.975 af

Reach R1B: Avg. Flow Depth=1.52' Max Vel=4.52 fps Inflow=31.00 cfs 13.339 af
n=0.030 L=1,640.0' S=0.0090 '/' Capacity=51.80 cfs Outflow=30.94 cfs 13.334 af

Reach R1D: Avg. Flow Depth=0.86' Max Vel=1.03 fps Inflow=34.35 cfs 8.270 af
n=0.100 L=260.0' S=0.0077 '/' Capacity=371.57 cfs Outflow=34.26 cfs 8.270 af

Reach R1F: Avg. Flow Depth=1.16' Max Vel=5.19 fps Inflow=19.00 cfs 4.792 af
n=0.030 L=280.0' S=0.0179 '/' Capacity=30.96 cfs Outflow=19.00 cfs 4.792 af

Reach R1G: Avg. Flow Depth=1.78' Max Vel=2.48 fps Inflow=18.17 cfs 4.409 af
n=0.070 L=220.0' S=0.0136 '/' Capacity=52.87 cfs Outflow=18.16 cfs 4.409 af

Reach R1H: Avg. Flow Depth=1.54' Max Vel=2.06 fps Inflow=12.17 cfs 2.931 af
n=0.070 L=180.0' S=0.0111 '/' Capacity=47.72 cfs Outflow=12.16 cfs 2.931 af

Reach R1I: Avg. Flow Depth=1.88' Max Vel=1.41 fps Inflow=11.23 cfs 2.399 af
n=0.070 L=240.0' S=0.0042 '/' Capacity=29.22 cfs Outflow=11.21 cfs 2.399 af

Reach R1J: Avg. Flow Depth=1.40' Max Vel=4.32 fps Inflow=20.16 cfs 2.646 af
n=0.070 L=300.0' S=0.0567 '/' Capacity=42.31 cfs Outflow=20.14 cfs 2.645 af

Reach R1K: Avg. Flow Depth=0.71' Max Vel=4.08 fps Inflow=8.20 cfs 1.781 af
n=0.070 L=110.0' S=0.1091 '/' Capacity=16.76 cfs Outflow=8.20 cfs 1.781 af

Reach R1L: Avg. Flow Depth=1.50' Max Vel=1.00 fps Inflow=5.71 cfs 0.950 af
n=0.070 L=370.0' S=0.0027 '/' Capacity=23.54 cfs Outflow=5.63 cfs 0.950 af

Reach R1M: Avg. Flow Depth=1.63' Max Vel=0.85 fps Inflow=4.84 cfs 0.758 af
n=0.070 L=270.0' S=0.0019 '/' Capacity=16.43 cfs Outflow=4.76 cfs 0.758 af

Reach R1N: Avg. Flow Depth=1.34' Max Vel=1.02 fps Inflow=3.66 cfs 0.516 af
n=0.070 L=140.0' S=0.0036 '/' Capacity=18.62 cfs Outflow=3.64 cfs 0.516 af

Reach R1P: Avg. Flow Depth=1.12' Max Vel=2.61 fps Inflow=7.35 cfs 1.447 af
n=0.070 L=420.0' S=0.0286 '/' Capacity=23.92 cfs Outflow=7.32 cfs 1.447 af

Reach R2A: Avg. Flow Depth=0.62' Max Vel=0.99 fps Inflow=13.17 cfs 3.826 af
n=0.030 L=600.0' S=0.0008 '/' Capacity=498.29 cfs Outflow=13.02 cfs 3.826 af

Reach R2B: Avg. Flow Depth=0.40' Max Vel=0.87 fps Inflow=7.34 cfs 1.805 af
n=0.030 L=360.0' S=0.0011 '/' Capacity=575.38 cfs Outflow=7.28 cfs 1.805 af

Reach R2C: Avg. Flow Depth=1.32' Max Vel=1.72 fps Inflow=7.36 cfs 1.805 af
n=0.100 L=440.0' S=0.0195 '/' Capacity=17.39 cfs Outflow=7.34 cfs 1.805 af

Reach R2D: Avg. Flow Depth=1.37' Max Vel=1.83 fps Inflow=7.00 cfs 1.494 af
n=0.100 L=770.0' S=0.0227 '/' Capacity=14.93 cfs Outflow=6.92 cfs 1.494 af

Reach R2E: Avg. Flow Depth=1.17' Max Vel=1.76 fps Inflow=6.35 cfs 2.022 af
n=0.100 L=550.0' S=0.0236 '/' Capacity=19.13 cfs Outflow=6.33 cfs 2.022 af

Reach R2F: Avg. Flow Depth=1.19' Max Vel=1.64 fps Inflow=6.01 cfs 1.707 af
n=0.100 L=200.0' S=0.0200 '/' Capacity=17.60 cfs Outflow=6.00 cfs 1.707 af

Reach R2G: Avg. Flow Depth=0.34' Max Vel=0.91 fps Inflow=0.55 cfs 0.066 af
n=0.100 L=550.0' S=0.0291 '/' Capacity=4.71 cfs Outflow=0.48 cfs 0.066 af

Reach R2H: Avg. Flow Depth=0.59' Max Vel=1.09 fps Inflow=1.43 cfs 0.196 af
n=0.100 L=570.0' S=0.0211 '/' Capacity=4.00 cfs Outflow=1.32 cfs 0.196 af

Reach R30: Avg. Flow Depth=1.18' Max Vel=1.92 fps Inflow=6.99 cfs 1.655 af
n=0.100 L=360.0' S=0.0278 '/' Capacity=20.74 cfs Outflow=6.98 cfs 1.655 af

Reach R30A: Avg. Flow Depth=1.23' Max Vel=1.76 fps Inflow=6.81 cfs 1.571 af
n=0.100 L=180.0' S=0.0222 '/' Capacity=18.55 cfs Outflow=6.80 cfs 1.571 af

Reach R30B: Avg. Flow Depth=0.35' Max Vel=1.10 fps Inflow=0.62 cfs 0.084 af
n=0.100 L=100.0' S=0.0400 '/' Capacity=5.52 cfs Outflow=0.62 cfs 0.084 af

Reach R30C: Avg. Flow Depth=0.18' Max Vel=0.70 fps Inflow=2.95 cfs 0.474 af
n=0.100 L=110.0' S=0.0273 '/' Capacity=74.87 cfs Outflow=2.94 cfs 0.474 af

Reach R31: Avg. Flow Depth=0.49' Max Vel=1.19 fps Inflow=1.21 cfs 0.144 af
n=0.100 L=540.0' S=0.0315 '/' Capacity=4.89 cfs Outflow=1.10 cfs 0.144 af

Reach RIE: Avg. Flow Depth=1.52' Max Vel=3.29 fps Inflow=32.59 cfs 7.853 af
n=0.030 L=370.0' S=0.0041 '/' Capacity=192.45 cfs Outflow=32.57 cfs 7.853 af

Reach SP#1: Study Point #1 Inflow=68.97 cfs 26.521 af
Outflow=68.97 cfs 26.521 af

Reach SP#2: Study Point #2 Inflow=139.58 cfs 52.218 af
Outflow=139.58 cfs 52.218 af

Reach SP#3: Study Point #3 Inflow=27.60 cfs 5.597 af
Outflow=27.60 cfs 5.597 af

Reach SP4: Study Point #4 Inflow=5.35 cfs 0.873 af
Outflow=5.35 cfs 0.873 af

Reach SP5: Study Point #5 Inflow=2.66 cfs 0.427 af
Outflow=2.66 cfs 0.427 af

Pond C-1: (new Pond) Peak Elev=76.44' Storage=1,813 cf Inflow=12.66 cfs 2.367 af
Outflow=12.26 cfs 2.367 af

Pond C-2: CULVERT Peak Elev=86.25' Storage=9,056 cf Inflow=32.85 cfs 7.871 af
Outflow=32.59 cfs 7.853 af

Pond C-3: CULVERT Peak Elev=97.11' Storage=1,389 cf Inflow=11.27 cfs 2.399 af
Outflow=11.23 cfs 2.399 af

Pond C-4: CULVERT Peak Elev=96.94' Storage=225 cf Inflow=6.82 cfs 1.571 af
Outflow=6.81 cfs 1.571 af

Pond C-5: CULVERT Peak Elev=96.86' Storage=137 cf Inflow=6.02 cfs 1.707 af
Outflow=6.01 cfs 1.707 af

Pond C-6: CULVERT Peak Elev=106.46' Storage=3,297 cf Inflow=7.27 cfs 1.494 af
Outflow=7.00 cfs 1.494 af

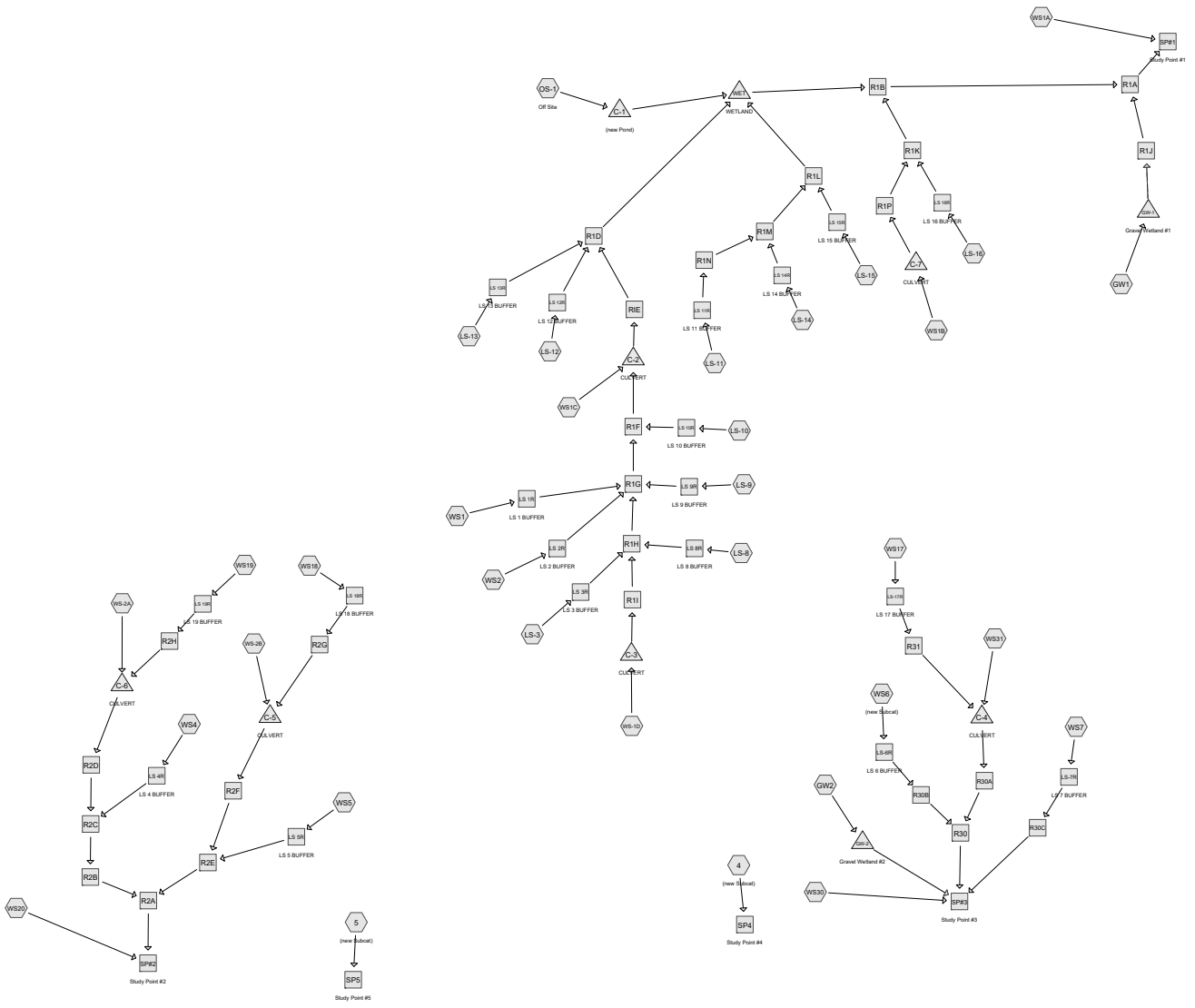
Pond C-7: CULVERT Peak Elev=93.99' Storage=74 cf Inflow=7.35 cfs 1.447 af
Outflow=7.35 cfs 1.447 af

Pond GW-1: Gravel Wetland #1 Peak Elev=85.02' Storage=33,655 cf Inflow=21.36 cfs 3.161 af
Primary=0.04 cfs 0.090 af Secondary=20.12 cfs 2.556 af Outflow=20.16 cfs 2.646 af

Pond GW-2: Gravel Wetland #2 Peak Elev=88.36' Storage=25,259 cf Inflow=17.95 cfs 1.541 af
Primary=7.87 cfs 1.245 af Secondary=0.00 cfs 0.000 af Outflow=7.87 cfs 1.245 af

Pond WET: WETLAND Peak Elev=76.09' Storage=165,059 cf Inflow=49.74 cfs 11.588 af
Outflow=27.12 cfs 11.557 af

Total Runoff Area = 450.275 ac Runoff Volume = 86.505 af Average Runoff Depth = 2.31"
95.41% Pervious = 429.588 ac 4.59% Impervious = 20.686 ac



Subcat Reach Pond Link

Routing Diagram for 21-13 POST
Prepared by Terradyn Consultants, LLC, Printed 11/8/2022
HydroCAD® 10.00-26 s/n 10466 © 2020 HydroCAD Software Solutions LLC

Time span=5.00-40.00 hrs, dt=0.01 hrs, 3501 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 4: (new Subcat) Runoff Area=192,646 sf 5.19% Impervious Runoff Depth=3.45"
Flow Length=480' Tc=49.6 min CN=75 Runoff=7.85 cfs 1.273 af

Subcatchment 5: (new Subcat) Runoff Area=113,637 sf 0.00% Impervious Runoff Depth=2.96"
Flow Length=320' Slope=0.0300 '/' Tc=46.6 min CN=70 Runoff=4.09 cfs 0.645 af

Subcatchment GW1: Runoff Area=552,670 sf 31.77% Impervious Runoff Depth=4.17"
Flow Length=1,090' Tc=42.0 min CN=82 Runoff=29.66 cfs 4.411 af

Subcatchment GW2: Runoff Area=317,270 sf 29.70% Impervious Runoff Depth=3.65"
Flow Length=560' Tc=11.7 min UI Adjusted CN=77 Runoff=25.87 cfs 2.218 af

Subcatchment LS-10: Runoff Area=81,466 sf 27.01% Impervious Runoff Depth=3.55"
Flow Length=440' Tc=8.9 min UI Adjusted CN=76 Runoff=7.05 cfs 0.554 af

Subcatchment LS-11: Runoff Area=90,223 sf 38.17% Impervious Runoff Depth=4.17"
Flow Length=700' Tc=32.2 min CN=82 Runoff=5.51 cfs 0.720 af

Subcatchment LS-12: Runoff Area=17,750 sf 32.03% Impervious Runoff Depth=4.17"
Flow Length=150' Slope=0.0800 '/' Tc=7.7 min CN=82 Runoff=1.86 cfs 0.142 af

Subcatchment LS-13: Runoff Area=69,679 sf 21.63% Impervious Runoff Depth=3.45"
Flow Length=650' Tc=46.2 min UI Adjusted CN=75 Runoff=2.95 cfs 0.460 af

Subcatchment LS-14: Runoff Area=49,725 sf 27.60% Impervious Runoff Depth=3.65"
Flow Length=370' Tc=7.5 min UI Adjusted CN=77 Runoff=4.64 cfs 0.348 af

Subcatchment LS-15: Runoff Area=34,750 sf 30.94% Impervious Runoff Depth=4.07"
Tc=7.5 min CN=81 Runoff=3.59 cfs 0.270 af

Subcatchment LS-16: Runoff Area=68,793 sf 29.37% Impervious Runoff Depth=3.65"
Flow Length=600' Tc=13.3 min UI Adjusted CN=77 Runoff=5.36 cfs 0.481 af

Subcatchment LS-3: Runoff Area=35,656 sf 25.98% Impervious Runoff Depth=3.55"
Flow Length=300' Tc=11.9 min UI Adjusted CN=76 Runoff=2.81 cfs 0.242 af

Subcatchment LS-8: Runoff Area=75,146 sf 28.74% Impervious Runoff Depth=3.65"
Flow Length=640' Tc=11.5 min UI Adjusted CN=77 Runoff=6.16 cfs 0.525 af

Subcatchment LS-9: Runoff Area=56,874 sf 32.58% Impervious Runoff Depth=4.17"
Flow Length=550' Tc=9.5 min CN=82 Runoff=5.62 cfs 0.454 af

Subcatchment OS-1: Off Site Runoff Area=583,385 sf 5.16% Impervious Runoff Depth=3.16"
Flow Length=1,097' Tc=61.7 min CN=72 Runoff=19.16 cfs 3.524 af

Subcatchment WS-1D: Runoff Area=638,889 sf 2.45% Impervious Runoff Depth=2.96"
Flow Length=1,500' Tc=74.2 min UI Adjusted CN=70 Runoff=17.37 cfs 3.624 af

Subcatchment WS-2A: Runoff Area=296,906 sf 6.09% Impervious Runoff Depth=3.35"
Flow Length=720' Tc=68.6 min UI Adjusted CN=74 Runoff=9.69 cfs 1.905 af

Subcatchment WS-2B: Runoff Area=8.619 ac 8.26% Impervious Runoff Depth=3.35"
Flow Length=1,000' Tc=113.5 min UI Adjusted CN=74 Runoff=8.80 cfs 2.409 af

Subcatchment WS1: Runoff Area=51,519 sf 4.08% Impervious Runoff Depth=3.26"
Flow Length=230' Tc=9.1 min UI Adjusted CN=73 Runoff=4.06 cfs 0.321 af

Subcatchment WS17: Runoff Area=26,816 sf 33.23% Impervious Runoff Depth=3.96"
Tc=6.0 min CN=80 Runoff=2.85 cfs 0.203 af

Subcatchment WS18: Runoff Area=9,900 sf 54.00% Impervious Runoff Depth>4.71"
Tc=6.0 min CN=87 Runoff=1.22 cfs 0.089 af

Subcatchment WS19: Runoff Area=34,250 sf 33.91% Impervious Runoff Depth=4.17"
Flow Length=180' Tc=9.3 min CN=82 Runoff=3.40 cfs 0.273 af

Subcatchment WS1A: Runoff Area=2,700,581 sf 3.76% Impervious Runoff Depth=3.06"
Flow Length=3,337' Tc=135.7 min CN=71 Runoff=50.21 cfs 15.813 af

Subcatchment WS1B: Runoff Area=356,623 sf 4.37% Impervious Runoff Depth=3.16"
Flow Length=770' Tc=67.4 min UI Adjusted CN=72 Runoff=11.07 cfs 2.154 af

Subcatchment WS1C: Runoff Area=16.775 ac 8.55% Impervious Runoff Depth=3.26"
Flow Length=870' Tc=78.0 min UI Adjusted CN=73 Runoff=21.40 cfs 4.551 af

Subcatchment WS2: Runoff Area=230,676 sf 9.01% Impervious Runoff Depth=3.16"
Flow Length=726' Tc=41.6 min UI Adjusted CN=72 Runoff=9.42 cfs 1.393 af

Subcatchment WS20: Runoff Area=245.185 ac 0.23% Impervious Runoff Depth=3.45"
Flow Length=5,272' Tc=172.1 min CN=75 Runoff=192.80 cfs 70.555 af

Subcatchment WS30: Runoff Area=569,331 sf 3.69% Impervious Runoff Depth=3.06"
Flow Length=650' Tc=51.6 min UI Adjusted CN=71 Runoff=20.02 cfs 3.334 af

Subcatchment WS31: Runoff Area=8.074 ac 1.71% Impervious Runoff Depth=3.16"
Flow Length=707' Tc=80.3 min UI Adjusted CN=72 Runoff=9.79 cfs 2.125 af

Subcatchment WS4: Runoff Area=49,650 sf 47.43% Impervious Runoff Depth=4.49"
Tc=7.5 min CN=85 Runoff=5.58 cfs 0.427 af

Subcatchment WS5: Runoff Area=51,750 sf 40.24% Impervious Runoff Depth=4.38"
Tc=7.5 min CN=84 Runoff=5.70 cfs 0.434 af

Subcatchment WS6: (new Subcat) Runoff Area=14,742 sf 34.62% Impervious Runoff Depth=4.17"
Tc=6.0 min CN=82 Runoff=1.64 cfs 0.118 af

Subcatchment WS7: Runoff Area=104,548 sf 25.09% Impervious Runoff Depth=3.45"
Flow Length=580' Tc=37.4 min UI Adjusted CN=75 Runoff=4.96 cfs 0.691 af

Reach LS 10R: LS 10 BUFFER Avg. Flow Depth=0.25' Max Vel=0.25 fps Inflow=7.05 cfs 0.554 af
n=0.800 L=100.0' S=0.1200 '/' Capacity=63.30 cfs Outflow=6.02 cfs 0.554 af

Reach LS 11R: LS 11 BUFFER Avg. Flow Depth=0.39' Max Vel=0.15 fps Inflow=5.51 cfs 0.720 af
n=0.800 L=84.0' S=0.0238 '/' Capacity=25.94 cfs Outflow=5.15 cfs 0.720 af

Reach LS 12R: LS 12 BUFFER Avg. Flow Depth=0.33' Max Vel=0.07 fps Inflow=1.86 cfs 0.142 af
n=0.800 L=150.0' S=0.0067 '/' Capacity=6.06 cfs Outflow=0.80 cfs 0.141 af

Reach LS 13R: LS 13 BUFFER Avg. Flow Depth=0.43' Max Vel=0.11 fps Inflow=2.95 cfs 0.460 af
n=0.800 L=150.0' S=0.0120 '/' Capacity=11.06 cfs Outflow=2.43 cfs 0.460 af

Reach LS 14R: LS 14 BUFFER Avg. Flow Depth=0.30' Max Vel=0.18 fps Inflow=4.64 cfs 0.348 af
n=0.800 L=110.0' S=0.0545 '/' Capacity=28.21 cfs Outflow=3.50 cfs 0.348 af

Reach LS 15R: LS 15 BUFFER Avg. Flow Depth=0.32' Max Vel=0.18 fps Inflow=3.59 cfs 0.270 af
n=0.800 L=110.0' S=0.0545 '/' Capacity=21.48 cfs Outflow=2.71 cfs 0.270 af

Reach LS 16R: LS 16 BUFFER Avg. Flow Depth=0.28' Max Vel=0.22 fps Inflow=5.36 cfs 0.481 af
n=0.800 L=150.0' S=0.0800 '/' Capacity=38.26 cfs Outflow=4.25 cfs 0.481 af

Reach LS 18R: LS 18 BUFFER Avg. Flow Depth=0.20' Max Vel=0.17 fps Inflow=1.22 cfs 0.089 af
n=0.800 L=150.0' S=0.0867 '/' Capacity=16.68 cfs Outflow=0.78 cfs 0.089 af

Reach LS 19R: LS 19 BUFFER Avg. Flow Depth=0.25' Max Vel=0.13 fps Inflow=3.40 cfs 0.273 af
n=0.800 L=150.0' S=0.0333 '/' Capacity=23.37 cfs Outflow=2.12 cfs 0.273 af

Reach LS 1R: LS 1 BUFFER Avg. Flow Depth=0.21' Max Vel=0.15 fps Inflow=4.06 cfs 0.321 af
n=0.800 L=150.0' S=0.0533 '/' Capacity=37.98 cfs Outflow=2.62 cfs 0.321 af

Reach LS 2R: LS 2 BUFFER Avg. Flow Depth=0.91' Max Vel=0.26 fps Inflow=9.42 cfs 1.393 af
n=0.800 L=135.0' S=0.0370 '/' Capacity=10.91 cfs Outflow=8.98 cfs 1.393 af

Reach LS 3R: LS 3 BUFFER Avg. Flow Depth=0.26' Max Vel=0.18 fps Inflow=2.81 cfs 0.242 af
n=0.800 L=90.0' S=0.0667 '/' Capacity=26.06 cfs Outflow=2.37 cfs 0.242 af

Reach LS 4R: LS 4 BUFFER Avg. Flow Depth=0.28' Max Vel=0.19 fps Inflow=5.58 cfs 0.427 af
n=0.800 L=80.0' S=0.0625 '/' Capacity=41.11 cfs Outflow=4.67 cfs 0.427 af

Reach LS 5R: LS 5 BUFFER Avg. Flow Depth=0.29' Max Vel=0.19 fps Inflow=5.70 cfs 0.434 af
n=0.800 L=80.0' S=0.0625 '/' Capacity=41.11 cfs Outflow=4.77 cfs 0.434 af

Reach LS 8R: LS 8 BUFFER Avg. Flow Depth=0.26' Max Vel=0.21 fps Inflow=6.16 cfs 0.525 af
n=0.800 L=95.0' S=0.0842 '/' Capacity=53.03 cfs Outflow=5.31 cfs 0.525 af

Reach LS 9R: LS 9 BUFFER Avg. Flow Depth=0.29' Max Vel=0.20 fps Inflow=5.62 cfs 0.454 af
n=0.800 L=130.0' S=0.0654 '/' Capacity=37.38 cfs Outflow=4.29 cfs 0.454 af

Reach LS-17R: LS 17 BUFFER Avg. Flow Depth=0.29' Max Vel=0.17 fps Inflow=2.85 cfs 0.203 af
n=0.800 L=150.0' S=0.0533 '/' Capacity=17.13 cfs Outflow=1.82 cfs 0.203 af

Reach LS-6R: LS 6 BUFFER Avg. Flow Depth=0.19' Max Vel=0.12 fps Inflow=1.64 cfs 0.118 af
n=0.800 L=150.0' S=0.0467 '/' Capacity=17.94 cfs Outflow=0.92 cfs 0.118 af

Reach LS-7R: LS 7 BUFFER Avg. Flow Depth=0.32' Max Vel=0.18 fps Inflow=4.96 cfs 0.691 af
n=0.800 L=150.0' S=0.0467 '/' Capacity=31.58 cfs Outflow=4.46 cfs 0.691 af

Reach R1A: Avg. Flow Depth=1.88' Max Vel=4.39 fps Inflow=56.55 cfs 23.602 af
n=0.030 L=860.0' S=0.0058 '/' Capacity=230.46 cfs Outflow=56.53 cfs 23.597 af

Reach R1B: Avg. Flow Depth=1.91' Max Vel=5.07 fps Inflow=47.62 cfs 19.712 af
n=0.030 L=1,640.0' S=0.0090 '/' Capacity=51.80 cfs Outflow=47.55 cfs 19.707 af

Reach R1D: Avg. Flow Depth=1.07' Max Vel=1.17 fps Inflow=50.89 cfs 12.248 af
n=0.100 L=260.0' S=0.0077 '/' Capacity=371.57 cfs Outflow=50.80 cfs 12.248 af

Reach R1F: Avg. Flow Depth=1.44' Max Vel=5.77 fps Inflow=28.53 cfs 7.113 af
n=0.030 L=280.0' S=0.0179 '/' Capacity=30.96 cfs Outflow=28.52 cfs 7.113 af

Reach R1G: Avg. Flow Depth=2.17' Max Vel=2.77 fps Inflow=27.36 cfs 6.559 af
n=0.070 L=220.0' S=0.0136 '/' Capacity=52.87 cfs Outflow=27.35 cfs 6.559 af

Reach R1H: Avg. Flow Depth=1.89' Max Vel=2.31 fps Inflow=18.55 cfs 4.391 af
n=0.070 L=180.0' S=0.0111 '/' Capacity=47.72 cfs Outflow=18.55 cfs 4.391 af

Reach R1I: Avg. Flow Depth=2.32' Max Vel=1.59 fps Inflow=17.27 cfs 3.624 af
n=0.070 L=240.0' S=0.0042 '/' Capacity=29.22 cfs Outflow=17.25 cfs 3.624 af

Reach R1J: Avg. Flow Depth=1.66' Max Vel=4.76 fps Inflow=28.75 cfs 3.895 af
n=0.070 L=300.0' S=0.0567 '/' Capacity=42.31 cfs Outflow=28.73 cfs 3.894 af

Reach R1K: Avg. Flow Depth=0.86' Max Vel=4.59 fps Inflow=12.25 cfs 2.635 af
n=0.070 L=110.0' S=0.1091 '/' Capacity=16.76 cfs Outflow=12.25 cfs 2.635 af

Reach R1L: Avg. Flow Depth=1.78' Max Vel=1.10 fps Inflow=8.13 cfs 1.338 af
n=0.070 L=370.0' S=0.0027 '/' Capacity=23.54 cfs Outflow=8.06 cfs 1.338 af

Reach R1M: Avg. Flow Depth=1.94' Max Vel=0.93 fps Inflow=6.85 cfs 1.068 af
n=0.070 L=270.0' S=0.0019 '/' Capacity=16.43 cfs Outflow=6.76 cfs 1.068 af

Reach R1N: Avg. Flow Depth=1.59' Max Vel=1.11 fps Inflow=5.15 cfs 0.720 af
n=0.070 L=140.0' S=0.0036 '/' Capacity=18.62 cfs Outflow=5.13 cfs 0.720 af

Reach R1P: Avg. Flow Depth=1.37' Max Vel=2.92 fps Inflow=11.07 cfs 2.154 af
n=0.070 L=420.0' S=0.0286 '/' Capacity=23.92 cfs Outflow=11.05 cfs 2.154 af

Reach R2A: Avg. Flow Depth=0.78' Max Vel=1.14 fps Inflow=19.31 cfs 5.537 af
n=0.030 L=600.0' S=0.0008 '/' Capacity=498.29 cfs Outflow=19.14 cfs 5.537 af

Reach R2B: Avg. Flow Depth=0.50' Max Vel=1.01 fps Inflow=10.69 cfs 2.605 af
n=0.030 L=360.0' S=0.0011 '/' Capacity=575.38 cfs Outflow=10.63 cfs 2.605 af

Reach R2C: Avg. Flow Depth=1.58' Max Vel=1.90 fps Inflow=10.72 cfs 2.605 af
n=0.100 L=440.0' S=0.0195 '/' Capacity=17.39 cfs Outflow=10.69 cfs 2.605 af

Reach R2D: Avg. Flow Depth=1.65' Max Vel=2.02 fps Inflow=10.23 cfs 2.178 af
n=0.100 L=770.0' S=0.0227 '/' Capacity=14.93 cfs Outflow=10.13 cfs 2.178 af

Reach R2E: Avg. Flow Depth=1.41' Max Vel=1.96 fps Inflow=9.37 cfs 2.932 af
n=0.100 L=550.0' S=0.0236 '/' Capacity=19.13 cfs Outflow=9.33 cfs 2.932 af

Reach R2F: Avg. Flow Depth=1.44' Max Vel=1.83 fps Inflow=8.92 cfs 2.498 af
n=0.100 L=200.0' S=0.0200 '/' Capacity=17.60 cfs Outflow=8.91 cfs 2.498 af

Reach R2G: Avg. Flow Depth=0.40' Max Vel=1.00 fps Inflow=0.78 cfs 0.089 af
n=0.100 L=550.0' S=0.0291 '/' Capacity=4.71 cfs Outflow=0.67 cfs 0.089 af

Reach R2H: Avg. Flow Depth=0.71' Max Vel=1.22 fps Inflow=2.12 cfs 0.273 af
n=0.100 L=570.0' S=0.0211 '/' Capacity=4.00 cfs Outflow=1.96 cfs 0.273 af

Reach R30: Avg. Flow Depth=1.43' Max Vel=2.15 fps Inflow=10.44 cfs 2.445 af
n=0.100 L=360.0' S=0.0278 '/' Capacity=20.74 cfs Outflow=10.43 cfs 2.445 af

Reach R30A: Avg. Flow Depth=1.50' Max Vel=1.97 fps Inflow=10.21 cfs 2.328 af
n=0.100 L=180.0' S=0.0222 '/' Capacity=18.55 cfs Outflow=10.21 cfs 2.328 af

Reach R30B: Avg. Flow Depth=0.43' Max Vel=1.23 fps Inflow=0.92 cfs 0.118 af
n=0.100 L=100.0' S=0.0400 '/' Capacity=5.52 cfs Outflow=0.92 cfs 0.118 af

Reach R30C: Avg. Flow Depth=0.22' Max Vel=0.81 fps Inflow=4.46 cfs 0.691 af
n=0.100 L=110.0' S=0.0273 '/' Capacity=74.87 cfs Outflow=4.44 cfs 0.691 af

Reach R31: Avg. Flow Depth=0.60' Max Vel=1.34 fps Inflow=1.82 cfs 0.203 af
n=0.100 L=540.0' S=0.0315 '/' Capacity=4.89 cfs Outflow=1.65 cfs 0.203 af

Reach RIE: Avg. Flow Depth=1.90' Max Vel=3.69 fps Inflow=48.34 cfs 11.647 af
n=0.030 L=370.0' S=0.0041 '/' Capacity=192.45 cfs Outflow=48.32 cfs 11.647 af

Reach SP#1: Study Point #1 Inflow=105.12 cfs 39.410 af
Outflow=105.12 cfs 39.410 af

Reach SP#2: Study Point #2 Inflow=205.10 cfs 76.092 af
Outflow=205.10 cfs 76.092 af

Reach SP#3: Study Point #3 Inflow=43.58 cfs 8.391 af
Outflow=43.58 cfs 8.391 af

Reach SP4: Study Point #4 Inflow=7.85 cfs 1.273 af
Outflow=7.85 cfs 1.273 af

Reach SP5: Study Point #5 Inflow=4.09 cfs 0.645 af
Outflow=4.09 cfs 0.645 af

Pond C-1: (new Pond) Peak Elev=76.95' Storage=6,799 cf Inflow=19.16 cfs 3.524 af
Outflow=16.77 cfs 3.524 af

Pond C-2: CULVERT Peak Elev=87.04' Storage=15,041 cf Inflow=49.15 cfs 11.664 af
Outflow=48.34 cfs 11.647 af

Pond C-3: CULVERT Peak Elev=97.48' Storage=2,389 cf Inflow=17.37 cfs 3.624 af
Outflow=17.27 cfs 3.624 af

Pond C-4: CULVERT Peak Elev=97.24' Storage=322 cf Inflow=10.22 cfs 2.328 af
Outflow=10.21 cfs 2.328 af

Pond C-5: CULVERT Peak Elev=97.13' Storage=215 cf Inflow=8.93 cfs 2.498 af
Outflow=8.92 cfs 2.498 af

Pond C-6: CULVERT Peak Elev=106.74' Storage=5,095 cf Inflow=10.67 cfs 2.178 af
Outflow=10.23 cfs 2.178 af

Pond C-7: CULVERT Peak Elev=94.31' Storage=115 cf Inflow=11.07 cfs 2.154 af
Outflow=11.07 cfs 2.154 af

Pond GW-1: Gravel Wetland #1 Peak Elev=85.16' Storage=36,206 cf Inflow=29.66 cfs 4.411 af
Primary=0.04 cfs 0.093 af Secondary=28.71 cfs 3.802 af Outflow=28.75 cfs 3.895 af

Pond GW-2: Gravel Wetland #2 Peak Elev=88.87' Storage=32,206 cf Inflow=25.87 cfs 2.218 af
Primary=13.31 cfs 1.921 af Secondary=0.00 cfs 0.000 af Outflow=13.31 cfs 1.921 af

Pond WET: WETLAND Peak Elev=76.79' Storage=237,521 cf Inflow=71.48 cfs 17.110 af
Outflow=41.69 cfs 17.077 af

Total Runoff Area = 450.275 ac Runoff Volume = 126.683 af Average Runoff Depth = 3.38"
95.41% Pervious = 429.588 ac 4.59% Impervious = 20.686 ac

Attachment 7

Pond Spillway Checks – 25 & 100 Year

Summary for Subcatchment GW1:

Runoff = 29.66 cfs @ 12.56 hrs, Volume= 4.411 af, Depth= 4.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	175,605	98	Unconnected pavement, HSG C
	336,145	74	>75% Grass cover, Good, HSG C
	12,920	70	Woods, Good, HSG C
*	28,000	74	Stormwater Pond
	552,670	82	Weighted Average
	377,065		68.23% Pervious Area
	175,605		31.77% Impervious Area
	175,605		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.5	150	0.0530	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.30"
3.9	140	0.0140	0.59		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
3.6	800	0.0050	3.72	4.57	**Pipe Channel, D-E** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
42.0	1,090	Total			

Summary for Subcatchment GW2:

Runoff = 25.87 cfs @ 12.16 hrs, Volume= 2.218 af, Depth= 3.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Adj	Description
	94,229	98		Unconnected pavement, HSG C
	182,121	74		>75% Grass cover, Good, HSG C
	12,920	70		Woods, Good, HSG C
*	28,000	74		Stormwater Pond
	317,270	81	77	Weighted Average, UI Adjusted
	223,041			70.30% Pervious Area
	94,229			29.70% Impervious Area
	94,229			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.0460	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"
0.9	135	0.0270	2.46		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
1.2	275	0.0050	3.72	4.57	**Pipe Channel, D-E** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
11.7	560	Total			

Summary for Pond GW-1: Gravel Wetland #1

Inflow Area = 12.688 ac, 31.77% Impervious, Inflow Depth = 4.17" for 25-yr event
Inflow = 29.66 cfs @ 12.56 hrs, Volume= 4.411 af
Outflow = 28.75 cfs @ 12.66 hrs, Volume= 3.856 af, Atten= 3%, Lag= 5.9 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Secondary = 28.75 cfs @ 12.66 hrs, Volume= 3.856 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 85.16' @ 12.66 hrs Surf.Area= 18,653 sf Storage= 36,219 cf

Plug-Flow detention time= 96.9 min calculated for 3.855 af (87% of inflow)
Center-of-Mass det. time= 39.9 min (880.9 - 841.0)

Volume	Invert	Avail.Storage	Storage Description
#1	83.00'	73,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
83.00	14,600	0	0
84.00	16,600	15,600	15,600
84.50	17,600	8,550	24,150
84.51	18,000	178	24,328
86.00	19,500	27,937	52,266
87.00	22,500	21,000	73,266

Device	Routing	Invert	Outlet Devices
#1	Primary	82.67'	**12.0" Round Culvert X 0.00** L= 50.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 82.67' / 79.50' S= 0.0634 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	80.00'	**1.0" Vert. Orifice/Grate** C= 0.600
#3	Device 2	80.75'	**4.0" Round Culvert** L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 80.75' / 80.00' S= 0.0469 '/' Cc= 0.900 n= 0.012, Flow Area= 0.09 sf
#4	Device 3	83.00'	**2.400 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 82.67'
#5	Secondary	84.50'	**20.0' long x 13.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60

Coef. (English) 2.60 2.64 2.70 2.66 2.65 2.66 2.65 2.63

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=83.00' TW=76.00' (Dynamic Tailwater)
└─**1=Culvert** (Controls 0.00 cfs)
└─**2=Orifice/Grate** (Passes 0.00 cfs of 0.02 cfs potential flow)
└─**3=Culvert** (Passes 0.00 cfs of 0.19 cfs potential flow)
└─**4=Exfiltration** (Passes 0.00 cfs of 0.81 cfs potential flow)

Secondary OutFlow Max=28.75 cfs @ 12.66 hrs HW=85.16' TW=77.66' (Dynamic Tailwater)
└─**5=Broad-Crested Rectangular Weir** (Weir Controls 28.75 cfs @ 2.18 fps)

Summary for Pond GW-2: Gravel Wetland #2

Inflow Area = 7.284 ac, 29.70% Impervious, Inflow Depth = 3.65" for 25-yr event
Inflow = 25.87 cfs @ 12.16 hrs, Volume= 2.218 af
Outflow = 14.15 cfs @ 12.38 hrs, Volume= 1.435 af, Atten= 45%, Lag= 13.4 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Secondary = 14.15 cfs @ 12.38 hrs, Volume= 1.435 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 89.36' @ 12.38 hrs Surf.Area= 15,116 sf Storage= 39,406 cf

Plug-Flow detention time= 183.0 min calculated for 1.434 af (65% of inflow)
Center-of-Mass det. time= 81.0 min (906.4 - 825.5)

Volume	Invert	Avail.Storage	Storage Description
#1	86.00'	56,332 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
86.00	8,336	0	0
87.00	10,008	9,172	9,172
88.00	12,781	11,395	20,567
89.00	14,329	13,555	34,122
90.40	17,400	22,210	56,332

Device	Routing	Invert	Outlet Devices
#1	Primary	85.67'	**18.0" Round Culvert X 0.00** L= 50.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 85.67' / 82.50' S= 0.0634 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	87.50'	**3.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#3	Device 2	86.50'	**24.0" Round Culvert** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 86.50' / 86.30' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#4	Device 1	83.00'	**1.0" Vert. Orifice/Grate** C= 0.600
#5	Device 4	83.75'	**4.0" Round Culvert** L= 80.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 83.75' / 83.00' S= 0.0094 '/' Cc= 0.900 n= 0.012, Flow Area= 0.09 sf

#6	Device 5	86.00'	**2.400 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 85.67'
#7	Secondary	89.00'	**25.0' long x 13.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.60 2.64 2.70 2.66 2.65 2.66 2.65 2.63

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=86.00' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Controls 0.00 cfs)
  - **2=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)
    - **3=Culvert** (Controls 0.00 cfs)
  - **4=Orifice/Grate** (Passes 0.00 cfs of 0.02 cfs potential flow)
    - **5=Culvert** (Passes 0.00 cfs of 0.12 cfs potential flow)
      - **6=Exfiltration** (Passes 0.00 cfs of 0.46 cfs potential flow)

Secondary OutFlow Max=14.14 cfs @ 12.38 hrs HW=89.36' TW=0.00' (Dynamic Tailwater)
- **7=Broad-Crested Rectangular Weir** (Weir Controls 14.14 cfs @ 1.58 fps)

Summary for Subcatchment GW1:

Runoff = 45.78 cfs @ 12.55 hrs, Volume= 6.901 af, Depth> 6.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
	175,605	98	Unconnected pavement, HSG C
	336,145	74	>75% Grass cover, Good, HSG C
	12,920	70	Woods, Good, HSG C
*	28,000	74	Stormwater Pond
	552,670	82	Weighted Average
	377,065		68.23% Pervious Area
	175,605		31.77% Impervious Area
	175,605		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.5	150	0.0530	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.30"
3.9	140	0.0140	0.59		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
3.6	800	0.0050	3.72	4.57	**Pipe Channel, D-E** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
42.0	1,090	Total			

Summary for Subcatchment GW2:

Runoff = 41.55 cfs @ 12.16 hrs, Volume= 3.593 af, Depth= 5.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Adj	Description
	94,229	98		Unconnected pavement, HSG C
	182,121	74		>75% Grass cover, Good, HSG C
	12,920	70		Woods, Good, HSG C
*	28,000	74		Stormwater Pond
	317,270	81	77	Weighted Average, UI Adjusted
	223,041			70.30% Pervious Area
	94,229			29.70% Impervious Area
	94,229			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.0460	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"
0.9	135	0.0270	2.46		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
1.2	275	0.0050	3.72	4.57	**Pipe Channel, D-E** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
11.7	560	Total			

Summary for Pond GW-1: Gravel Wetland #1

Inflow Area = 12.688 ac, 31.77% Impervious, Inflow Depth > 6.53" for 100-yr event
Inflow = 45.78 cfs @ 12.55 hrs, Volume= 6.901 af
Outflow = 44.64 cfs @ 12.64 hrs, Volume= 6.385 af, Atten= 2%, Lag= 4.9 min
Primary = 0.04 cfs @ 12.64 hrs, Volume= 0.097 af
Secondary = 44.60 cfs @ 12.64 hrs, Volume= 6.287 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 85.39' @ 12.64 hrs Surf.Area= 18,886 sf Storage= 40,559 cf

Plug-Flow detention time= 78.5 min calculated for 6.385 af (93% of inflow)
Center-of-Mass det. time= 39.4 min (867.9 - 828.5)

Volume	Invert	Avail.Storage	Storage Description
#1	83.00'	73,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
83.00	14,600	0	0
84.00	16,600	15,600	15,600
84.50	17,600	8,550	24,150
84.51	18,000	178	24,328
86.00	19,500	27,937	52,266
87.00	22,500	21,000	73,266

Device	Routing	Invert	Outlet Devices
#1	Primary	82.67'	**12.0" Round Culvert** L= 50.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 82.67' / 79.50' S= 0.0634 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	80.00'	**1.0" Vert. Orifice/Grate** C= 0.600
#3	Device 2	80.75'	**4.0" Round Culvert** L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 80.75' / 80.00' S= 0.0469 '/' Cc= 0.900 n= 0.012, Flow Area= 0.09 sf
#4	Device 3	83.00'	**2.400 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 82.67'
#5	Secondary	84.50'	**20.0' long x 13.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60

Coef. (English) 2.60 2.64 2.70 2.66 2.65 2.66 2.65 2.63

Primary OutFlow Max=0.04 cfs @ 12.64 hrs HW=85.39' TW=78.05' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.04 cfs of 5.63 cfs potential flow)
└─**2=Orifice/Grate** (Orifice Controls 0.04 cfs @ 7.94 fps)
└─**3=Culvert** (Passes 0.04 cfs of 0.55 cfs potential flow)
└─**4=Exfiltration** (Passes 0.04 cfs of 7.28 cfs potential flow)

Secondary OutFlow Max=44.59 cfs @ 12.64 hrs HW=85.39' TW=78.05' (Dynamic Tailwater)
└─**5=Broad-Crested Rectangular Weir** (Weir Controls 44.59 cfs @ 2.51 fps)

Summary for Pond GW-2: Gravel Wetland #2

Inflow Area = 7.284 ac, 29.70% Impervious, Inflow Depth = 5.92" for 100-yr event
Inflow = 41.55 cfs @ 12.16 hrs, Volume= 3.593 af
Outflow = 34.37 cfs @ 12.24 hrs, Volume= 3.296 af, Atten= 17%, Lag= 5.0 min
Primary = 14.56 cfs @ 12.24 hrs, Volume= 2.844 af
Secondary = 19.82 cfs @ 12.24 hrs, Volume= 0.452 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-40.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 89.35' @ 12.24 hrs Surf.Area= 15,042 sf Storage= 39,214 cf

Plug-Flow detention time= 102.3 min calculated for 3.296 af (92% of inflow)
Center-of-Mass det. time= 60.2 min (872.0 - 811.8)

Volume	Invert	Avail.Storage	Storage Description
#1	86.00'	54,485 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
86.00	8,336	0	0
87.00	10,008	9,172	9,172
88.00	12,781	11,395	20,567
89.00	14,329	13,555	34,122
90.30	17,000	20,364	54,485

Device	Routing	Invert	Outlet Devices
#1	Primary	85.67'	**18.0" Round Culvert** L= 50.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 85.67' / 82.50' S= 0.0634 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	87.50'	**3.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)
#3	Device 2	86.50'	**24.0" Round Culvert** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 86.50' / 86.30' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#4	Device 1	83.00'	**1.0" Vert. Orifice/Grate** C= 0.600
#5	Device 4	83.75'	**4.0" Round Culvert** L= 80.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 83.75' / 83.00' S= 0.0094 '/' Cc= 0.900 n= 0.012, Flow Area= 0.09 sf

#6	Device 5	86.00'	**2.400 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 85.67'
#7	Secondary	88.90'	**25.0' long x 13.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.60 2.64 2.70 2.66 2.65 2.66 2.65 2.63

Primary OutFlow Max=14.56 cfs @ 12.24 hrs HW=89.35' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 14.56 cfs @ 8.24 fps)
  - **2=Sharp-Crested Vee/Trap Weir** (Passes < 24.65 cfs potential flow)
    - **3=Culvert** (Passes < 16.23 cfs potential flow)
  - **4=Orifice/Grate** (Passes < 0.05 cfs potential flow)
    - **5=Culvert** (Passes < 0.40 cfs potential flow)
      - **6=Exfiltration** (Passes < 6.09 cfs potential flow)

Secondary OutFlow Max=19.80 cfs @ 12.24 hrs HW=89.35' TW=0.00' (Dynamic Tailwater)
- **7=Broad-Crested Rectangular Weir** (Weir Controls 19.80 cfs @ 1.77 fps)

Attachment 8

Maintenance & Inspection of Stormwater Facilities

TERRADYN
CONSULTANTS, LLC

Pineland
Cumberland Hall
41 Campus Drive, Suite 101
New Gloucester, ME 04260

Portland
565 Congress Street, Suite 201
Portland, ME 04101

HIDDEN HILLS MHP
BIDDEFORD, MAINE
STORMWATER MANAGEMENT SYSTEM
INSEPCTION & MAINTENANCE PLAN

Project Owner/Developer: South Street Village, LLC
762 Main Street
South Portland, ME 04106

Responsible Party: Homeowners Association or General Contractor
TBD

Prepared By: Jeffery Amos, P.E.
Terradyn Consultants, LLC
41 Campus Drive, Suite 101
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(207) 926-5111

INTRODUCTION:

Regular inspection and maintenance of the entire stormwater management system is crucial to the long-term effectiveness of the system. The responsible party must provide regular inspection and maintenance of all permanent erosion control measures and stormwater management structures, establish any contract services required to implement the program, and keep records and a maintenance log book of inspection and maintenance activities. At a minimum, the inspection and maintenance activities outlined herein should be performed at the recommended intervals.

All measures must be maintained in effective operating condition. A person with knowledge of erosion and sedimentation practices, stormwater management, and the standards and conditions of all local, state and federal permits for the project shall conduct the inspections. The following areas, facilities, and measures must be inspected and identified deficiencies must be corrected.

INSPECTION TASKS

1. Inspect **vegetated areas**, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

2. Inspect **ditches, swales and other open stormwater channels** in the spring, in late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, to control vegetated growth that could obstruct flow, and to repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or sideslopes.

3. Inspect **culverts** in the spring, in late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert’s inlet and outlet.

4. Inspect **Roof Drain Filter Strip** semi-annually and following major storm events. Debris and sediment buildup shall be removed as needed. Area should be weeded as necessary.

5. Inspect **grassed underdrained soil filter** semi-annually and following major storm events. Debris and sediment buildup shall be removed from the forebay and basin as needed. Mowing of grassed basin can occur semi-annually to a height of no less than 6-inches. Any bare area or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. Maintaining good grass cover will minimize clogging with fine sediments and if ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil’s filtration capacity.

6. Inspect and clean out **catch basins**. Clean-out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).

7. Inspect **resource and treatment buffers** once a year for evidence of erosion, concentrating flow, and encroachment by development. If flows are concentrating within a buffer, site grading, level spreaders, or ditch turn-outs must be used to ensure a more even distribution of flow into a buffer. Check down slope of all spreaders and turn-outs for erosion. If erosion is present, adjust or modify the spreader or turnout lip to ensure a better distribution of flow into a buffer. Clean-out any accumulation of sediment within the spreader bays or turn-out pools.

Recertification requirement:

Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the Department.

(a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

(b) All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.

(c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.

(d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.

(e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.

Conveyance & Distribution Systems: (Stormwater Channels & Culverts, etc.)

1. Inspection schedule:

a. Inspect ditches, swales and other open stormwater channels in the spring, in late fall, and after heavy rains (one inch of rain in 24 hours) to remove any obstructions to flow, remove accumulated sediments and debris, to control vegetated growth that could obstruct flow, and to repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side-slopes.

b. Inspect culverts in the spring, in late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.

c. Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

2. Mowing: Grass should not be trimmed extremely short, as this will reduce the filtering effect of the swale (MPCA, 1989). The cut vegetation should be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale. The mowed height of the grass should be 2-4 inches taller than the maximum flow depth of the design water quality storm. A minimum mow height of 6 inches is generally recommended (Galli, 1993).

3. Erosion: It is important to install erosion and sediment control measures to stabilize this area as soon as possible and to retain any organic matter in the bottom of the trench.

4. Fertilization: Routine fertilization and/or use of pesticides is strongly discouraged. If complete re-seeding is necessary, half the original recommended rate of fertilizer should be applied with a full rate of seed.

5. Sediment Removal: The level of sediment deposition in the channel should be monitored regularly, and removed from grassed channels before permanent damage is done to the grassed vegetation, or if infiltration times are longer than 12 hours. Sediment should be removed from riprap channels when it reduces the capacity of the channel.

Roadway Surfaces:

Paved surfaces shall be swept or vacuumed at least once annually in the Spring to remove all Winter sand, and periodically during the year on an as-needed basis to minimize transportation of sediment during rainfall events.

Catch Basin Systems:

Catch basins are designed with a deep sump to trap larger sediment. Catch basins shall be inspected for sediment depth in the spring and fall, and accumulated sediment shall be removed and disposed of lawfully when it reaches 50% of the design capacity of the sump.

Vegetated Swales:

Mowing: Grass should not be trimmed extremely short, as this will reduce the filtering effect of the swale (MPCA, 1989). The cut vegetation should be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale. The mowed height of the grass should be 2-4 inches taller than the maximum flow depth of the design water quality storm. A minimum mow height of 6 inches is generally recommended (Galli, 1993).

Routine Maintenance and Inspection: The area should be inspected for failures following heavy rainfall (one inch of rain in 24 hours) and repaired as necessary for newly formed channels or gullies, reseeding/sodding of bare spots, removal of trash, leaves and/or accumulated sediments, the control of woody or other undesirable vegetation and to check the condition and integrity of the check dams.

Aeration: The buffer strip may require periodic mechanical aeration to restore infiltration capacity. This aeration must be done during a time when the area can be reseeded and mulched prior to any significant rainfall.

Erosion: It is important to install erosion and sediment control measures to stabilize this area as soon as possible and to retain any organic matter in the bottom of the trench.

Fertilization: Routine fertilization and/or use of pesticides is strongly discouraged. If complete re-seeding is necessary, half the original recommended rate of fertilizer should be applied with a full rate of seed.

Sediment Removal: The level of sediment deposition in the channel should be monitored regularly, and removed from grassed channels before permanent damage is done to the grassed vegetation, or if infiltration times are longer than 12 hours. Sediment should be removed from riprap channels when it reduces the capacity of the channel.

Level Lip Spreader:

Long term maintenance of the level spreader is essential to ensure its effectiveness. Spreaders constructed of wood, asphalt, stone or concrete curbing also require inspection and maintenance.

1. **Inspections:** At least once a year and following major storms (one inch of rain in 24 hours), the level spreader pools should be inspected for sand accumulation and debris that may reduce its capacity.
2. **Sediment Removal:** Sediment build-up should be removed when it has accumulated to approximately 25% of design volume or channel capacity. Dispose of the sediments appropriately.
3. **Debris:** Remove debris such as leaf litter, branches and tree growth.
4. **Mowing:** Vegetated spreaders may require mowing.
5. **Snow Storage:** Do not store snow within the area of the level spreaders.
6. **Level Spreader Replacement:** The reconstruction of the level spreader may be necessary when sheet flow from the spreader channelize into the buffer.

Vegetated Buffers:

1. **Mowing:** Meadow buffers may be mown no more than twice per year. They may not be maintained as a lawn.

2. **Inspection Frequency:** Buffers should be inspected annually for evidence of erosion or concentrated flows through or around the buffer. All eroded areas should be repaired, seeded

and mulched. A shallow stone trench should be installed and maintained as a level spreader to distribute flows evenly in any area showing concentrated flows.

3. **Access and Use:** Buffers should not be traversed by all-terrain vehicles or other vehicles. Activities within buffers should be conducted so as not to damage vegetation, disturb any organic duff layer, and expose soil.

4. **Snow Storage:** Do not store snow within the buffer area.

5. **Model Maintenance Plan:** The following techniques should be followed to maintain the integrity of buffers from initial planning through post-construction (Schueler, 1994):

a. Planning Stage:
i. Require buffer limits to be present on all clearing/grading and erosion control plans

ii. Record all buffer boundaries on official maps and site plans.

iii. Clearly establish acceptable and unacceptable uses for the buffer, and include in deed restrictions and conservation easements.

iv. Establish clear vegetation targets and management rules for the buffer.

v. Provide incentives for owners protect buffers through perpetual conservation easements rather than deed restrictions.

b. Construction Stage:
i. Pre-construction stakeout of buffers to define the Limit of Disturbance (LOD). ii. Set LOD based on drip-line of the forested buffer.

iii. Conduct pre-construction meeting to familiarize contractors and foremen with LOD and buffer limit.

iv. Mark the LOD with silt fence barrier, signs or other methods to exclude construction equipment.

c. Post-Development Stage:
i. Mark buffer boundaries with permanent signs (or fences) describing allowable uses.

ii. Educate property owners/homeowner associations on the purpose, limits and allowable uses of the buffer.

iii. Conduct periodic "buffer walks" to inspect the condition of the buffer network (using volunteers, where possible).

iv. Replant unused meadow buffers with trees and shrubs, if possible.

6. **Tree Removal**: Any removal of trees or other vegetation within the Restricted Buffer Area must be limited to the following:

   (i) No purposefully cleared openings may be created and an evenly distributed stand of trees and other vegetation must be maintained. An "evenly distributed stand of trees" is defined as maintaining a minimum rating score of 24 points in any 25-foot by 50-foot rectangle (1,250 square feet) area, as determined by the rating scheme in Table 11:

Table 11.

Point System for Determining an Evenly

Distributed Stand of Trees

Diameter of tree at 4½ feet above ground level	**Points**
2 - 4 inches	1
4 - 8 inches	2
8 - 12 inches	4
>12 inches	8

Where existing trees and other vegetation result in a rating score less than 24 points, no trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;

   (ii) No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;

DOCUMENTATION

Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. The log must be made accessible to Department of Environmental Protection staff and a copy provided to the Department upon request. The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.

The log attached at the end of this plan is from the *Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual for Designers and Engineers (May 2016)*. The log may be used or adapted for this project.

ATTACHMENTS:
Stormwater Management Facilities Inspection & Maintenance Log

Stormwater Management Facilities
Inspection & Maintenance Log
Hidden Hills MHP

General Information:		
Inspected by:	Date:	Weather:
Reason for Inspection: (Regular Inspection) (Major Rain Event)		

BMP	Conditions Observed	Repairs Needed?
1. Vegetated Areas		
2. Ditches, Swales, Open Channels		
3. Culverts		
4. Roof Drain Filter Strip		
5. Gravel Wetland		
6. Catch Basin		
7. Vegetated Buffers		
8. Level Lip Spreader		

Detailed Repair Notes:

BMP Type	Date	Description of Repairs & Sediment Disposal

Notes:
If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. A copy of this log shall be retained for a period of at least five years from the completion of permanent stabilization. The log must be made accessible to Department of Environmental Protection staff and a copy provided to the Department upon request.

Attachment 9

Housekeeping Plan

HIDDEN HILLS MHP
BIDDEFORD, MAINE
HOUSEKEEPING PLAN

Project Owner/Developer: South Street Village, LLC
762 Main Street
South Portland, ME 04106

Responsible Party: Homeowners Association or General Contractor
TBD

Prepared By: Jeffery Amos, P.E.
Terradyn Consultants, LLC
41 Campus Drive, Suite 101
New Gloucester, Maine 04260
(207) 926-5111

Introduction:
The contractor shall be responsible for maintaining proper housekeeping standards throughout the construction phase of the project. After the construction phase has been completed, the owner or operator of the project will be responsible.

Standards:
In accordance with the housekeeping performance standards required by MDEP chapter 500 stormwater regulations, the following standards shall be met:

1. **Spill prevention.** Controls must be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

2. **Groundwater protection.** During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

3. **Fugitive sediment and dust.** Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

Operations during wet months that experience tracking of mud off the site onto public roads should provide for sweeping of road areas at least once a week and prior to significant storm events. Where chronic mud tracking occurs, a stabilized construction entrance should be provided. Operations during dry months, that experience fugitive dust problems, should wet down the access roads once a week or more frequently as needed.

4. **Debris and other materials.** Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

   To prevent these materials from becoming a source of pollutants, construction and post-construction activities related to a project may be required to comply with applicable provision of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine hazardous waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.

5. **Trench or foundation de-watering.** Trench de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the department.

6. **Authorized Non-stormwater discharges.** Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:

(a) Discharges from firefighting activity;

(b) Fire hydrant flushings;

(c) Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);

(d) Dust control runoff in accordance with permit conditions and Appendix (C)(3);

(e) Routine external building washdown, not including surface paint removal, that does not involve detergents;

(f) Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;

(g) Uncontaminated air conditioning or compressor condensate;

(h) Uncontaminated groundwater or spring water;

(i) Foundation or footer drain-water where flows are not contaminated;

(j) Uncontaminated excavation dewatering (see requirements in Appendix C(5));

(k) Potable water sources including waterline flushings; and

(l) Landscape irrigation.

7. **Unauthorized non-stormwater discharges .** The Department's approval under this Chapter does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Appendix C (6). Specifically, the Department's approval does not authorize discharges of the following:

(a) Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;

(b) Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;

(c) Soaps, solvents, or detergents used in vehicle and equipment washing; and

(d) Toxic or hazardous substances from a spill or other release.

Attachment 10

Sample Buffer Restriction Language

Forms H1-3 SUGGESTED TEMPLATES FOR STORMWATER BUFFER DEED RESTRICTIONS. With some minor revisions the H-1 (Forested buffer, no disturbance) template may be used to protect undisturbed stream buffers.

Forested buffer, No disturbance FORM H-1 04/06

DECLARATION OF RESTRICTIONS (Forested Buffer, No Disturbance)

THIS DECLARATION OF RESTRICTIONS is made this _____day of _____ , 20___, by _____, _____ ,
(Name) (Street Address)

_____, _____County, Maine, _____ , (herein referred to as the
(City or Town) (County) (Zip Code)

"Declarant", pursuant to a permit received from the Maine Department of Environmental Protection under the Site Location of Development Act, to preserve a buffer area on a parcel of land near _____, _____ .
(Road Name) (Known Feature and/or Town)

WHEREAS, the Declarant holds title to certain real property situated in _____, Maine
(Town)

described in a deed from _____to _____, dated
(Name) (Name of Declarant)

_____, 20____, and recorded in Book ____ Page ____ at the _____County Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain restrictions, under the terms and conditions herein, over a portion of said real property (hereinafter referred to as the "Restricted Buffer") described as follows: (Note: Insert description of restricted buffer location here)

WHEREAS, pursuant to the Site Location of Development Act, 38 M.R.S.A. §§ 481-490, and Department Rules for stormwater management, Chapter 500, promulgated by the Maine Board of Environmental Protection, Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall forever be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties

having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. Restrictions on Restricted Buffer Area. Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Site Location of Development Act and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material will be placed, stored or dumped on the Restricted Buffer Area, nor shall the topography of the area be altered or manipulated in any way;

b. No trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;

c. No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;

d. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole or fence;

e. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area;

f. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. Enforcement. The MDEP may enforce any of the Restrictions set forth in Section 1 above.

3. Binding Effect. The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.

4. Amendment. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.

5. Effective Provisions of Declaration. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.

6. Severability. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.

7. Governing Law. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

_____

(Name)

STATE OF MAINE, _____County, dated _____, 20__.
(County)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

_____
Notary Public

1. Forested buffer, limited disturbance

DECLARATION OF RESTRICTIONS (Forested Buffer, Limited Disturbance)

THIS DECLARATION OF RESTRICTIONS is made this _____day of _____, 20___, by _____ , _____,
(Name) (Street Address)

_____, _____County, Maine, _____, (herein referred to as the
(City or Town) (County) (Zip Code)

"Declarant"), pursuant to a permit received from the Maine Department of Environmental Protection under the Site Location of Development Act to preserve a buffer area on a parcel of land near _____,_____ .
(Road Name) (Known Feature and/or Town)

WHEREAS, the Declarant holds title to certain real property situated in _____, Maine
(Town)

described in a deed from_____ to _____dated
(Name) (Name of Declarant)

_____, 20____, and recorded in Book ____ Page ____ at the _____County Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain restrictions, under the terms and conditions herein, over a portion of said real property (hereinafter referred to as the "Restricted Buffer") described as follows: (Note: Insert description of restricted buffer area location here)

WHEREAS, pursuant to the Site Location of Development Act, 38 M.R.S.A. §§ 481-490, and Department Rules for stormwater management, Chapter 500, promulgated by the Maine Board of Environmental Protection, Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall forever be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. Restrictions on Restricted Buffer Area. Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and

absorb stormwater, and to maintain compliance with the Site Location of Development Act and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material may be placed, stored or dumped on the Restricted Buffer Area, nor may the topography of the area be altered or manipulated in any way;

b. Any removal of trees or other vegetation within the Restricted Buffer Area must be limited to the following:

(i) No purposefully cleared openings may be created and an evenly distributed stand of trees and other vegetation must be maintained. An "evenly distributed stand of trees " is defined as maintaining a minimum rating score of 24 points in any 25 foot by 50 foot square (2500 square feet) area, as determined by the following rating scheme:

Diameter of tree at 4½ feet above ground level	Points
2 - 4 inches	1
4 - 8 inches	2
8 - 12 inches	4
>12 inches	8

Where existing trees and other vegetation result in a rating score less than 24 points, no trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;

(ii) No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;

c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole or fence;

d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area;

e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. Enforcement. The MDEP may enforce any of the Restrictions set forth in Section 1 above.

3. Binding Effect. The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.

4. Amendment. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.

5. Effective Provisions of Declaration. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.

6. Severability. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.

7. Governing Law. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

(Name)

_____

STATE OF MAINE

_____ County, _____, 20__.
(County) (Date)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

_____

Notary Public

_____

DECLARATION OF RESTRICTIONS (Non-Wooded Meadow Buffer)

THIS DECLARATION OF RESTRICTIONS is made this _____day of _____, 20___, by _____ (Name), _____ (Street Address) _____ (City or Town), _____ (County) County, Maine, _____ (Zip Code), (herein referred to as the "Declarant"), pursuant to a permit received from the Maine Department of Environmental Protection under the Site Location of Development Act, to preserve a buffer area on a parcel of land near _____ (Road Name), _____ (known feature and/or town) .

WHEREAS, the Declarant holds title to certain real property situated in _____ (Town), Maine described in a deed from_____ (Name) to _____ (Name of Declarant), dated _____, 20____, and recorded in Book ____ Page ____ at the _____County Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain restrictions, under the terms and conditions herein, over a portion of said real property (hereinafter referred to as the "Restricted Buffer") described as follows: (Note: Insert description of restricted buffer location here)

WHEREAS, pursuant to the Site Location of Development Act, 38 M.R.S.A. §§ 481-490 and Department Rules for stormwater management (Chapter 500) promulgated by the Maine Board of Environmental Protection, Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall forever be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. Restrictions on Restricted Buffer Area. Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Site Location of Development Act and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material will be placed, stored or dumped on the Restricted Buffer Area, nor may the topography or the natural mineral soil of the area be altered or manipulated in any way;

b. A dense cover of grassy vegetation must be maintained over the Restricted Buffer Area, except that shrubs, trees and other woody vegetation may also be planted or allowed to grow in the area. The Restricted Buffer Area may not be maintained as a lawn or used as a pasture. If vegetation in the Restricted Buffer Area is mowed, it may be mown no more than two times per year.

c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole or fence;

d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area, except for vehicles used in mowing;

e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. Enforcement. The MDEP may enforce any of the Restrictions set forth in Section 1 above.

3. Binding Effect. The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.

4. Amendment. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.

5. Effective Provisions of Declaration. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.

6. Severability. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.

7. Governing Law. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

_____
(NAME)

STATE OF MAINE, _____, County, dated _____, 20__ .
(County)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

_____

Notary Public

_____

Attachment 11

Pond Test Pits

MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

5365

July 21, 2022

Mr. Mark Lazoraitis
Terradyn Consultants, LLC
41 Campus Drive Suite 301
New Gloucester, ME 04260

Re: Soil Test Pit Evaluation, Stormwater Management, South Street Village Biddeford , ME

Dear Mark,

I have completed the evaluation of two hand dug test pits for the proposed stormwater treatment program for the South Street Village Project located on South Street Biddeford, ME. The soil evaluation was conducted in accordance with Section 7.D.4 of the Stormwater Management Rules. Both test pits were dug in the proposed stormwater treatment areas.

The soils evaluated were well drained glacial till over ledge. The limiting factor was 39 inches and 42 inches respectively. The soil test pit log descriptions are attached. The hydrological soil group for all the test pits is noted on the log descriptions. No groundwater was observed in either of the test pits.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton L.S.E., C.S.S.
Licensed Site Evaluator #263
Certified Soil Scientist #216

Enc.

P.O. BOX 1931 • PORTLAND, ME 04104-1931 • 207-756-2900 • mhampto1@maine.rr.com

Quality services that meet your deadline

5365

PAGE ____ OF ____

FORM F (SS1) Rev. 7/21

SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Villages	South Street Villages LLC	Biddeford

Exploration Symbol # STW-1 ☒ Test Pit ☐ Boring ☐ Probe

0 " Organic horizon thickness Ground surface elev. ____

____ " Depth: ☒ of exploration, or ☐ to refusal

Depth below mineral soil horizon (inches)

Horizon	Color	Texture	Structure	Consistence	Redox
AE	Dark Brown	Sandy Loam	Fine Grand	Very Friable	
Bhs	Dusky Red	Sandy Loam	Fine Grand	Friable	
Bs1	Brown	Sandy Loam	Fine Grand	Friable	None Noted
R		LEDGE			

Soil Details

Soil Series/Phase Name: Lyman-Tunbridge

Limiting Factor: 39 " Depth ☐ Groundwater ☐ Restrictive Layer ☒ Bedrock

Drainage Class: ☐ ED ☐ SED ☒ WD ☐ MWD ☐ SPD ☐ PD ☐ VPD

Slope: 10 Percent

Hydric Soil: ☒ No ☐ Yes

Hydrologic Soil Group: C

Exploration Symbol # STW-2 ☒ Test Pit ☐ Boring ☐ Probe

____ " Organic horizon thickness Ground surface elev. ____

____ " Depth: ☒ of exploration, or ☐ to refusal

Depth below mineral soil horizon (inches)

Horizon	Color	Texture	Structure	Consistence	Redox
AE	Dark Brown	Sandy Loam	Fine Grand	Very Friable	
Bhs	Dusky Red	Sandy Loam	Grand	Friable	
Bs1	Tan	Sandy Loam	Fine Grand	Friable	None Noted
R		LEDGE			

Soil Details

Soil Series/Phase Name: Lyman-Tunbridge

Limiting Factor: 42 " Depth ☐ Groundwater ☐ Restrictive Layer ☒ Bedrock

Drainage Class: ☐ ED ☐ SED ☒ WD ☐ MWD ☐ SPD ☐ PD ☐ VPD

Slope: 8 Percent

Hydric Soil: ☒ No ☐ Yes

Hydrologic Soil Group: C

Exploration Symbol # STW-1C ☒ Test Pit ☐ Boring ☐ Probe

____ " Organic horizon thickness Ground surface elev. ____

____ " Depth: ☒ of exploration, or ☐ to refusal

Depth below mineral soil horizon (inches)

Horizon	Color	Texture	Structure	Consistence	Redox

Soil Details

Soil Series/Phase Name:

Limiting Factor: " Depth ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Drainage Class: ☐ ED ☐ SED ☐ WD ☐ MWD ☐ SPD ☐ PD ☐ VPD

Slope: Percent

Hydric Soil: ☐ No ☐ Yes

Hydrologic Soil Group:

Exploration Symbol # ____ ☐ Test Pit ☐ Boring ☐ Probe

____ " Organic horizon thickness Ground surface elev. ____

____ " Depth: ☐ of exploration, or ☐ to refusal

Depth below mineral soil horizon (inches)

Horizon	Color	Texture	Structure	Consistence	Redox

Soil Details

Soil Series/Phase Name:

Limiting Factor: ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Drainage Class: ☐ ED ☐ SED ☐ WD ☐ MWD ☐ SPD ☐ PD ☐ VPD

Slope: Percent

Hydric Soil: ☐ No ☐ Yes

Hydrologic Soil Group:

SOIL SCIENTIST INFORMATION AND SIGNATURE

Signature

Mark J. Hampton

Name Printed

7/21/2022

Date

216

SS License No.

STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

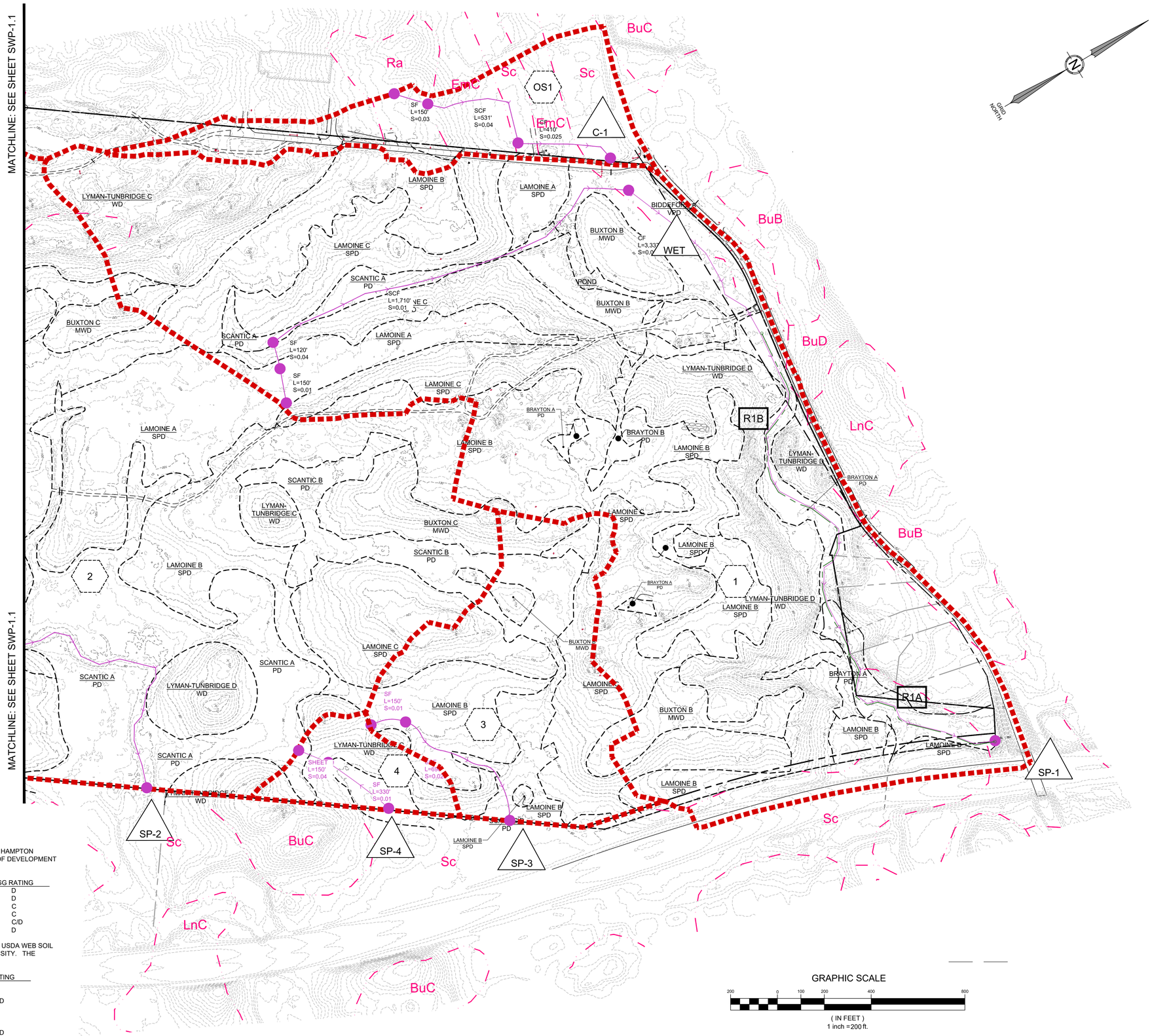
affix professional seal

Attachment 12

Pre & Post Development Watershed Maps

LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- PRE — WATERSHED LABEL
- 1 — REACH
- CB — CATCH BASIN/POND
- Na — MEDIUM INTENSITY SOIL NAME
- ADAMS — HIGH INTENSITY SOIL NAME
- MEDIUM INTENSITY SOIL BOUNDARY
- HIGH INTENSITY SOIL BOUNDARY
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- 124 — MINOR CONTOURS
- 124 — MAJOR CONTOURS
- 124 — PROPOSED CONTOURS
- WETLAND BOUNDARY



SOILS NOTES:

1. ONSITE SOILS OBTAINED FROM CLASS B HIGH INTENSITY SOIL SURVEY CONDUCTED BY MARK HAMPTON ASSOCIATES, DATED 5/6/2021. THE REPORT CAN BE FOUND IN SECTION 11 OF THE SITE LOCATION OF DEVELOPMENT PERMIT APPLICATION. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT NAME	SLOPE DESIGNATION	DRAINAGE CLASS	HSG RATING
BIDDEFORD	A	VPD	D
BRAYTON	A & B	PD	D
BUXTON	A,B,C & E	MWD	C
LAMOINE	A,B & C	SPD	C
LYMAN-TUNBRIDGE	C & D	WD	C/D
SCANTIC	A & B	PD	D

2. OFFSITE SOILS OBTAINED FROM THE CUMBERLAND COUNTY SOIL SURVEY AS SHOWN ON THE USDA WEB SOIL SURVEY. THE FULL OUTPUT CAN BE FOUND IN SECTION 12. THE SOIL SURVEY IS OF MEDIUM INTENSITY. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT SYMBOL	MAP UNIT NAME	HSG RATING
BuB	BUXTON SILT LOAM	D
BuC, BuD	BUXTON SILT LOAM	C
Ch	CHOCORUA PEAT	A/D
EmC	ELMWOOD FINE SAND	B
LnB, LnC, LnD	LYMAN LOAM	D
LyB, LyC, LyE	LYMAN ROCK OUTCROP	D
Ra	RAYNHAM SILT LOAM	C/D
Sn	SCANTIC SILT LOAM	D

GRAPHIC SCALE
200 0 100 200 400 800
(IN FEET)
1 inch = 200 ft.

STATE OF MAINE — JEFFREY D. AMOS — 10167 — LICENSED PROFESSIONAL ENGINEER

DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	
A	04-13-2022	PRELIMINARY SUBMISSION	

565 CONGRESS STREET
SUITE 301
PORTLAND, ME 04102

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE: PRE-DEVELOPMENT WATERSHED MAP

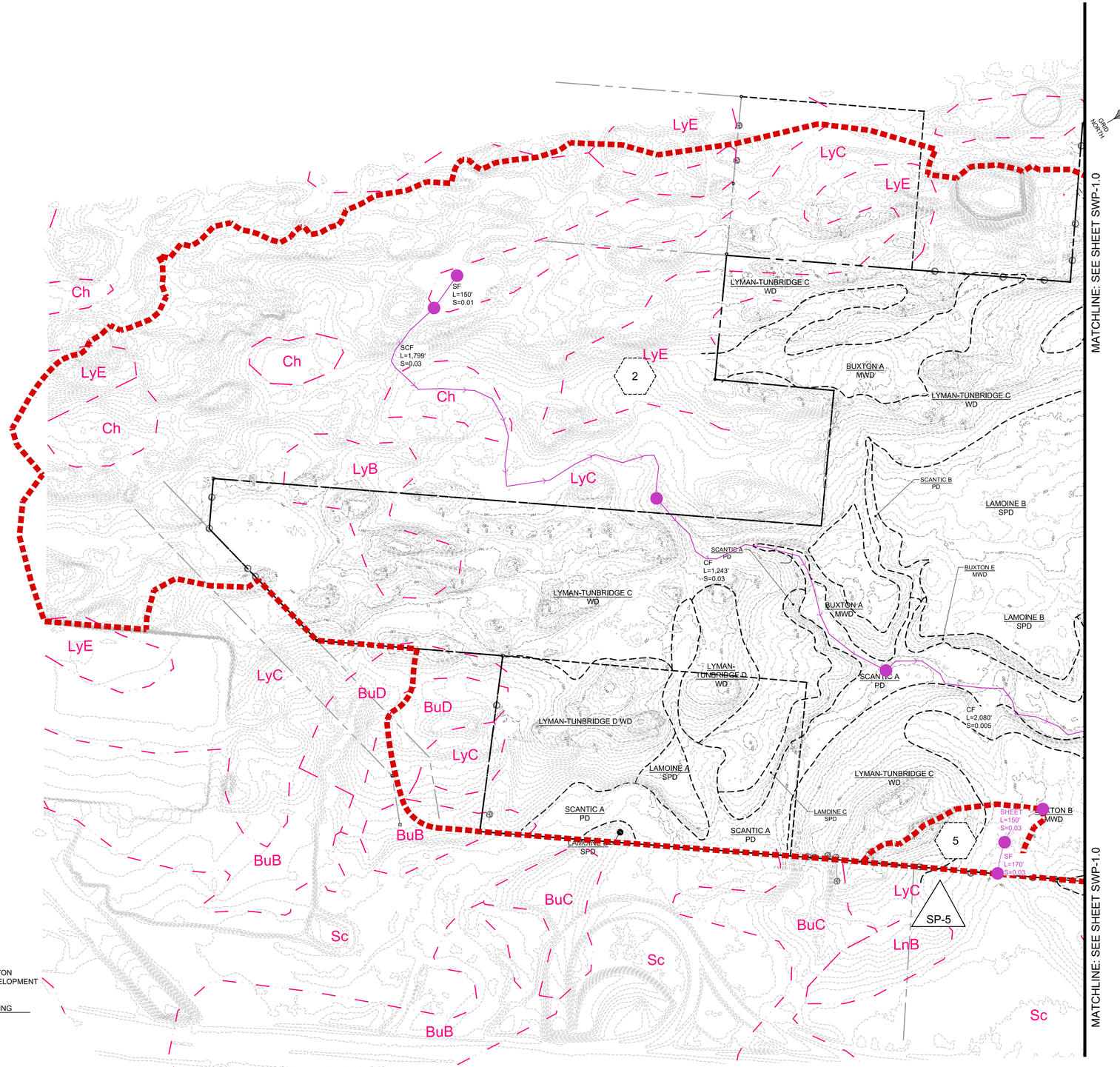
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 200'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	SWP-1.0

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LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- PRE — WATERSHED LABEL
- 1 — REACH
- CB — CATCH BASIN/POND
- Na — MEDIUM INTENSITY SOIL NAME
- ADAMS — HIGH INTENSITY SOIL NAME
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- HIGH INTENSITY SOIL BOUNDARY
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- 124 — MINOR CONTOURS
- 124 — MAJOR CONTOURS
- 124 — PROPOSED CONTOURS
- WETLAND BOUNDARY



SOILS NOTES:

1. ONSITE SOILS OBTAINED FROM CLASS B HIGH INTENSITY SOIL SURVEY CONDUCTED BY MARK HAMPTON ASSOCIATES, DATED 5/6/2021. THE REPORT CAN BE FOUND IN SECTION 11 OF THE SITE LOCATION OF DEVELOPMENT PERMIT APPLICATION. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT NAME	SLOPE DESIGNATION	DRAINAGE CLASS	HSG RATING
BIDDEFORD	A	VPD	D
BRAYTON	A & B	PD	D
BUXTON	A,B,C & E	MWD	C
LAMOINE	A,B & C	SPD	C
LYMAN-TUNBRIDGE	C & D	WD	C/D
SCANTIC	A & B	PD	D

2. OFFSITE SOILS OBTAINED FROM THE CUMBERLAND COUNTY SOIL SURVEY AS SHOWN ON THE USDA WEB SOIL SURVEY. THE FULL OUTPUT CAN BE FOUND IN SECTION 12. THE SOIL SURVEY IS OF MEDIUM INTENSITY. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT SYMBOL	MAP UNIT NAME	HSG RATING
BuB	BUXTON SILT LOAM	D
BuC, BuD	BUXTON SILT LOAM	C
Ch	CHOCORUA PEAT	A/D
EmC	ELMWOOD FINE SAND	B
LnB, LnC, LnD	LYMAN LOAM	D
LyB, LyC, LyE	LYMAN ROCK OUTCROP	D
Ra	RAYNHAM SILT LOAM	C/D
Sn	SCANTIC SILT LOAM	D

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

STATE OF MAINE — JEFFREY D. AMOS 10167 — LICENSED PROFESSIONAL ENGINEER

DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	
A	04-13-2022	PRELIMINARY SUBMISSION	

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE, SUITE 201, NEW GLOUCESTER, ME 04260
565 CONGRESS STREET, SUITE 201, PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET, TITLE: PRE-DEVELOPMENT WATERSHED MAP

CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 200'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	SWP-1.1

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LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- PRE — WATERSHED LABEL
- 1 — REACH
- CB — CATCH BASIN/POND
- Na — MEDIUM INTENSITY SOIL NAME
- ADAMS — HIGH INTENSITY SOIL NAME
- MEDIUM INTENSITY SOIL BOUNDARY
- HIGH INTENSITY SOIL BOUNDARY
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- 124 — MINOR CONTOURS
- 124 — MAJOR CONTOURS
- 124 — PROPOSED CONTOURS
- WETLAND BOUNDARY
- PROPOSED FORESTED BUFFER

SOILS NOTES:

1. ONSITE SOILS OBTAINED FROM CLASS B HIGH INTENSITY SOIL SURVEY CONDUCTED BY MARK HAMPTON ASSOCIATES, DATED 5/6/2021. THE REPORT CAN BE FOUND IN SECTION 11 OF THE SITE LOCATION OF DEVELOPMENT PERMIT APPLICATION. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT NAME	SLOPE DESIGNATION	DRAINAGE CLASS	HSG RATING
BIDDEFORD	A	VPD	D
BRAYTON	A & B	PD	D
BUXTON	A,B,C & E	MWD	C
LAMOINE	A,B & C	SPD	C
LYMAN-TUNBRIDGE	C & D	WD	C/D
SCANTIC	A & B	PD	D

2. OFFSITE SOILS OBTAINED FROM THE CUMBERLAND COUNTY SOIL SURVEY AS SHOWN ON THE USDA WEB SOIL SURVEY. THE FULL OUTPUT CAN BE FOUND IN SECTION 12. THE SOIL SURVEY IS OF MEDIUM INTENSITY. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT SYMBOL	MAP UNIT NAME	HSG RATING
BuB	BUXTON SILT LOAM	D
BuC, BuD	BUXTON SILT LOAM	C
Ch	CHOCORUA PEAT	A/D
EmC	ELMWOOD FINE SAND	B
LnB, LnC, LnD	LYMAN LOAM	D
LyB, LyC, LyE	LYMAN ROCK OUTCROP	D
Ra	RAYNHAM SILT LOAM	C/D
Sn	SCANTIC SILT LOAM	D

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch =80 ft.

MATCHLINE: SEE SHEET SWP-2.1

MATCHLINE: SEE SHEET SWP-2.1

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 11/16/2022
P.E.: Jeffrey D. Amos, # 10167

NO.	DATE	REVISIONS
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS

565 CONGRESS STREET
SUITE 301
PORTLAND, ME 04102

41 CAMPUS DRIVE
SUITE 103
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
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TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
POST-DEVELOPMENT WATERSHED MAP

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1"=80'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	SWP-2.0

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MATCHLINE: SEE SHEET SWP-2.0

MATCHLINE: SEE SHEET SWP-2.0

LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- PRE — WATERSHED LABEL
- 1 — REACH
- CB — CATCH BASIN/POND
- Na — MEDIUM INTENSITY SOIL NAME
- ADAMS — HIGH INTENSITY SOIL NAME
- MEDIUM INTENSITY SOIL BOUNDARY
- HIGH INTENSITY SOIL BOUNDARY
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- MINOR CONTOURS
- MAJOR CONTOURS
- PROPOSED CONTOURS
- WETLAND BOUNDARY
- PROPOSED FORESTED BUFFER

SOILS NOTES:

1. ONSITE SOILS OBTAINED FROM CLASS B HIGH INTENSITY SOIL SURVEY CONDUCTED BY MARK HAMPTON ASSOCIATES, DATED 5/6/2021. THE REPORT CAN BE FOUND IN SECTION 11 OF THE SITE LOCATION OF DEVELOPMENT PERMIT APPLICATION. THE SOILS ARE SUMMARIZED BELOW:

MAP UNIT NAME	SLOPE DESIGNATION	DRAINAGE CLASS	HSG RATING
BIDDEFORD	A	VPD	D
BRAYTON	A & B	PD	D
BUXTON	A,B,C & E	MWD	C
LAMOINE	A,B & C	SPD	C
LYMAN-TUNBRIDGE	C & D	WD	C/D
SCANTIC	A & B	PD	D

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EmC	ELMWOOD FINE SAND	B
LnB, LnC, LnD	LYMAN LOAM	D
LyB, LyC, LyE	LYMAN ROCK OUTCROP	D
Ra	RAYNHAM SILT LOAM	C/D
Sn	SCANTIC SILT LOAM	D

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 8/17/2022

P.E.: JEFFREY D. AMOS, 10167

NO.	DATE	REVISION	BY
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA

REVISIONS

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565 CONGRESS STREET
PORTLAND, ME 04102

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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
POST-DEVELOPMENT WATERSHED MAP

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1"=80'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	SWP-2.1

C:\DOT\Terradyn Consultants\Project Folders - Documents\2021_Jobs\21-13 South Street Mill\PC\ACAD\Plotting\21-13 SWP PC01.dwg

LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- PRE — WATERSHED LABEL
- 1 — REACH
- CB — CATCH BASIN
- HIGH INTENSITY SOIL BOUNDARY
- Dixfield C — HIGH INTENSITY SOIL NAME
- MEDIUM INTENSITY SOIL BOUNDARY
- DyB — MEDIUM INTENSITY SOIL NAME
- LEVEL SPREADER 1 AREA
- LEVEL SPREADER 2 AREA
- LEVEL SPREADER 3 AREA
- LEVEL SPREADER 4 AREA
- LEVEL SPREADER 5 AREA
- LEVEL SPREADER 6 AREA
- LEVEL SPREADER 7 AREA
- LEVEL SPREADER 8 AREA
- LEVEL SPREADER 9 AREA
- LEVEL SPREADER 10 AREA
- LEVEL SPREADER 11 AREA
- LEVEL SPREADER 12 AREA
- LEVEL SPREADER 13 AREA
- LEVEL SPREADER 14 AREA
- LEVEL SPREADER 15 AREA
- LEVEL SPREADER 16 AREA
- LEVEL SPREADER 17 AREA
- LEVEL SPREADER 18 AREA
- LEVEL SPREADER 19 AREA
- GRAVEL WETLAND #1 AREA
- GRAVEL WETLAND #2 AREA
- FORESTED BUFFER AREA
- ROOF DRAIN FILTER STRIP DRAINAGE AREA

SOILS NOTES:

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LyB, LyC, LyE	LYMAN ROCK OUTCROP	D
Ra	RAYNHAM SILT LOAM	C/D
Sn	SCANTIC SILT LOAM	D

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 11/16/2022
P.E.: Jeffrey D. Amos, # 10167

NO	DATE	REVISION	BY
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA

REVISIONS

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565 CONGRESS STREET, SUITE 304, PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
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PERMIT DRAWING
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DEVELOPMENT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
TREATMENT MAP

CLIENT:
SOUTH STREET VILLAGE, LLC
782 MAIN STREET
SOUTH PORTLAND, MAINE, 04106

DATE:	02-09-2022
SCALE:	1"=100'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	SWP-3.0

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Attachment 11

Hydrogeologic Assessment

Mark Cenci
Geologic, Inc.

CERTIFIED GEOLOGIST/LICENSED SITE EVALUATOR

93 Mill Road • North Yarmouth, Maine 04097
Cell: 207.329.3524 • mark@markcenci.com
www.markcenci.com

Hydrogeological Assessment of the Hidden Hills Housing Park South Street, Biddeford

Date: August 9, 2022

Summary of the Assessment:

The proposed project meets the ground water quality requirements of the Site Location of Development Act.

Purpose of Assessment:

The purpose of the assessment is to predict the locations and extents of wastewater plumes on the property in order to meet the requirements of the Site Location of Development Act (the *SLODA*).

Project Summary:

The project is a residential subdivision of 195 two-bedroom mobile home units. Water will be provided by the public drinking water supply system. Wastewater will be disposed on site by 91 wastewater disposal systems. There are combined disposal areas for two and three residences. There are also disposal systems for the maintenance garage and the community center.

Information used in the assessment:

Information used includes soil descriptions, a high-intensity soil map and a wetlands delineation by Mark Hampton, LSS, LSE, a plan of the project with topographic contours by Terradyn Consultants, LLC, and a search of published geologic and hydrogeologic information,

Location of the project:

The site is located on a low knoll, or 'shelf", easterly of a northeasterly trending ridge, between Saco River and Thacher Brook (see Figure 1). Ground surface slopes are mostly gentle, on the order of 1 to 3% in the development area. There are some moderately steep slopes on the northerly portion of the property above a drainage swale. Drainage is to the Saco River, by way of flow through linear wetland troughs. Drainage is somewhat radial. There is a watershed divide on the property. Flow is northerly to an unnamed stream and southerly to Thacher Brook. Both features flow to the Saco.

Surficial and bedrock geology of the area:

The area is mapped (see Figure 2) as an association of thin glacial till over shallow bedrock and fine grained glacio-marine sediments of the Presumpscot Formation by Carol Hildreth on the *Surficial Geology of the Biddeford Quadrangle, York County Maine* (ME Geol. Surv, Open-File Report 99-109). The high-intensity soil survey by Hampton agrees with this generalized mapping. Hampton describes an association of Lyman-Tunbridge, Lamoine, Buxton, Brayton and Scantic soils. The Brayton and Scantic areas are most likely coincident with wetlands on the property. The Brayton being a low-lying, tilly soil and the Scantic being the low lying silty/clay soil.

Bedrock beneath the site is mapped by Arthur Hussey, *et al,* (see Figure 3) as granites of the Biddeford Pluton on the *Bedrock Geology of the Kittery 1:100,000 Quadrangle, Maine and New Hampshire* (ME Geol. Surv. Open-File Map 08-78). Depth to bedrock is shallow in portions of the property, as per Hampton. The Water Well Database of the Maine Geological Survey shows no water wells in the vicinity of the parcel (see Figure 4).

Nearly all the wastewater disposal systems will be located on soils classified by Hampton as Lamoine. Lamoine is a soil formed in glacio-marine sediments that are fine grained, with silts and clays in the substratum. They tend to be coarser in the upper soil horizons, but the textures do not become predominately sand.

Hydrogeology of the site:

The source of groundwater on this site is precipitation. Precipitation falling on the site seeps into the soil and descends until restrictive soil layers or the water table is encountered. Thereupon the flow of groundwater is down gradient towards wetlands and points of discharge into streams. The property is not mapped as a Significant Sand and Gravel Aquifer by the Maine Geological Survey

Slopes are gentle and soil textures are fine grained. Recharge is average to below average on this site. According to the recharge estimates in Part II, Section 17. of the *SLODA*, soil recharge should be no more than 20% of annual precipitation.

The hydraulic conductivity of the soil is estimated to be 4 feet per day. The hydraulic gradient is estimated to be 2%. The effective porosity is estimated to be 25%. Dispersivity should be higher than average, because of the tendency to have seasonally varying vertical flow in the soils. In times of soil saturation, ground water flow will take place faster in the upper soil horizons, but under seasonally dry conditions, flow will largely be within the unsaturated substrata. These flow variations cause the suspended nutrients to be dispersed in three dimensions.

The groundwater flow directions can be discerned from topography. Analysis of flow patterns reveals a highly variable flow regime, from the small knolls and side slopes to linear troughs, occupied by wetlands.

Impact on groundwater quality:

Nitrate-nitrogen (NO3-N) is the chemical to assess for impact on groundwater. NO3-N is generated by subsurface wastewater disposal systems. It is a conservative contaminant, meaning it does not readily degrade in groundwater, nor does it attenuate, or attach itself to soil particles. Nitrate-nitrogen is limited to 10 mg/liter in public drinking water supplies by the Primary Drinking Water Standard. The *SLODA* requires NO3-N to be at concentrations below 10 mg/liter at the project property line in order to safeguard the groundwater on abutting properties.

The analysis of NO3-N impacts was calculated by SOLUTRANS, a 32-bit Windows program for modeling three-dimensional solute transport written by Dr. Charles R. Fitts of Fitts Geosolutions and the University of Southern Maine. The program is based on the analytical solutions of Liej *et al* (1991, 1993). The solutions in SOLUTRANS assume a uniform, one-dimensional flow field, and allows three-dimensional dispersion, retardation and first-order decay. The model is not a dilution/mass balance model, so the requirement that drought conditions be assumed is met.

Variables entered into the calculations that are site specific include an estimated seepage velocity of 0.3 feet per day, a hydraulic gradient of 2% (0.02), an effective porosity of 25% (0.25), an initial nitrogen concentration of 40 mg/liter, retardation of 1, a decay constant of zero, longitudinal, lateral and vertical dispersivities of 15, 5 and 0.5 feet respectively. A depth corrector to simulate three-dimensional effects, based on hydraulic factors and the gallons per day disposed was also entered.

Calculations were performed and the results indicate the 10 mg/liter NO3-N plumes will be approximately 75 feet in length, measured from the disposal areas. The curve of the results is attached. Using the inferred groundwater flow directions at each disposal site, the plumes were

drawn by Mark Cenci Geologic at a length of 80 feet and provided to Terradyn Consultants to be included on a plan. The plumes were evaluated with respect to the project property lines. No plumes exist the project at concentrations in excess of 10 mg/liter. All plumes, but the systems arrayed adjacent to the Maine Turnpike, move to wetlands where bio-chemical processes will effectively remove nitrogen from groundwater.

The cleansing capacity of wetlands is well known and used as a primary, secondary and tertiary treatment in constructed wetlands. Wetlands are particularly effective for septic systems, where treatment in tanks, disposal areas and downgradient soils nitrify ammonia to nitrite and nitrate. The stripping of the oxygen in the carbon-rich and anoxic wetlands and release of nitrogen gases to the atmosphere, as well as plant uptake of nutrients, is effective.

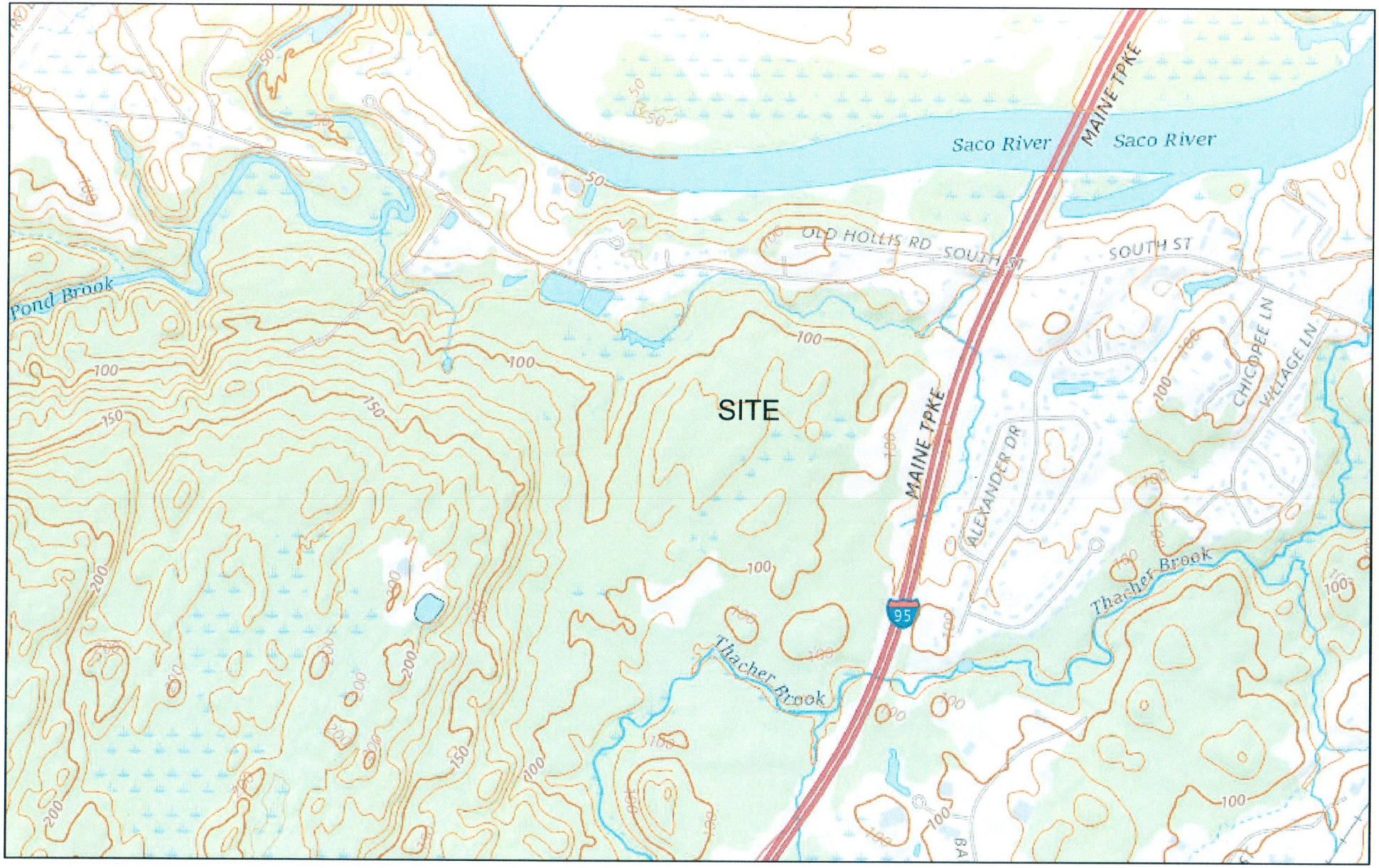
Conclusions:

The array of wastewater disposal areas presented on the plan of the project meets the requirements of the *SLODA* that NO3-N in groundwater remain at concentrations below 10 mg/liter at the project property lines.

Favorable factors on this site include the spatial array of the systems, the size of the parcel and the distances to property lines, the presence of wetland areas below nearly all the systems and the available supply of public water for potable use.

Mark Cenci, LG # 467

FIGURE 1



8/5/2022, 1:35:17 PM

Normal Intermediate Contours

Normal Index Contours

1:18,056

0 0.1 0.2 0.4 mi

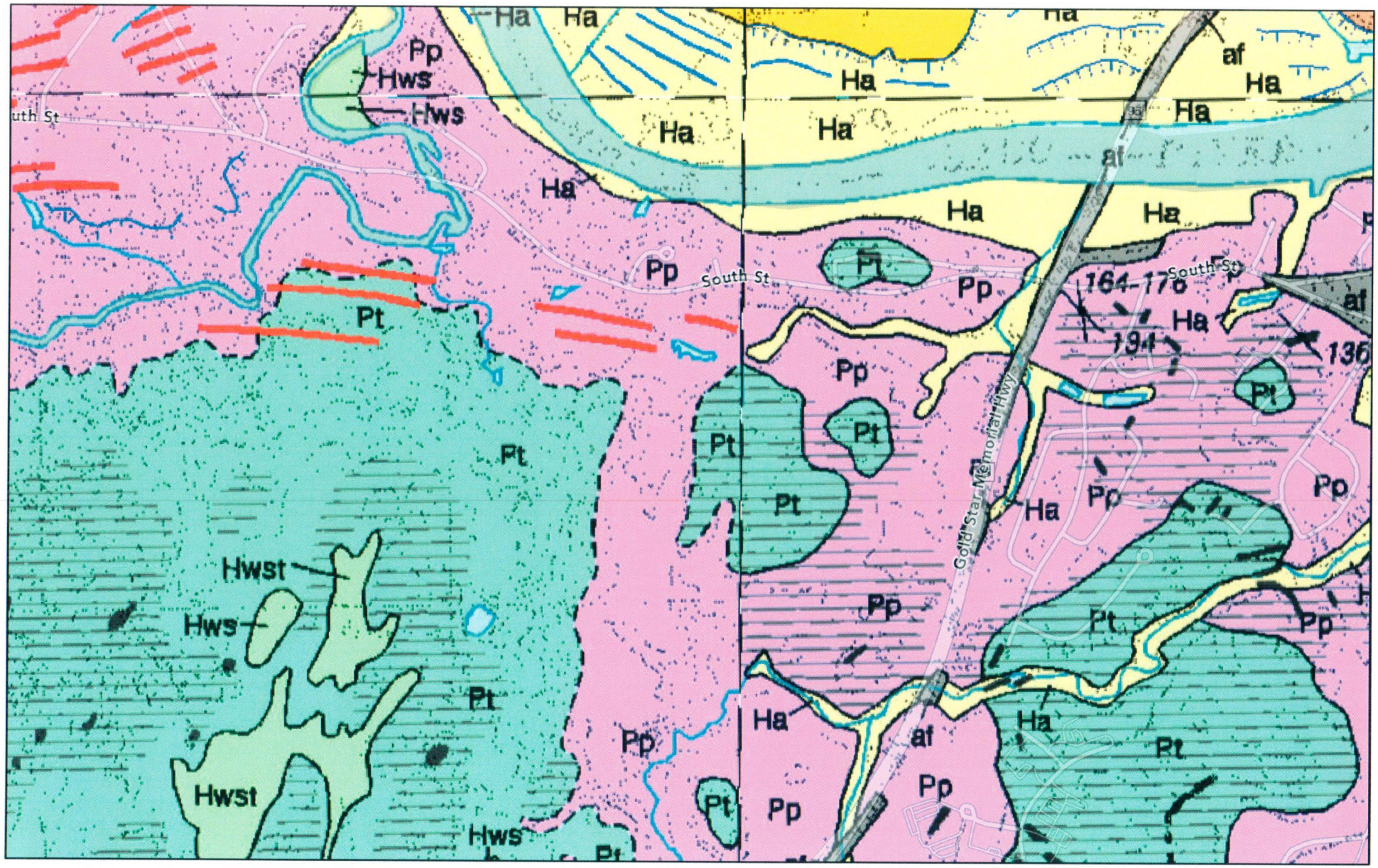
0 0.17 0.35 0.7 km

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography

USGS

2021 USGS

FIGURE 2. Surficial Geology 1:24,000



8/5/2022, 1:40:36 PM

Image

Red: Band_1

Green: Band_2

Blue: Band_3

1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Esri Community Maps Contributors, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

Maine Geological Survey

Maine Geological Survey | Esri Community Maps Contributors, City of Biddeford, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA | Esri Community Maps Contributors,

FIGURE 3. Bedrock Geology 100K

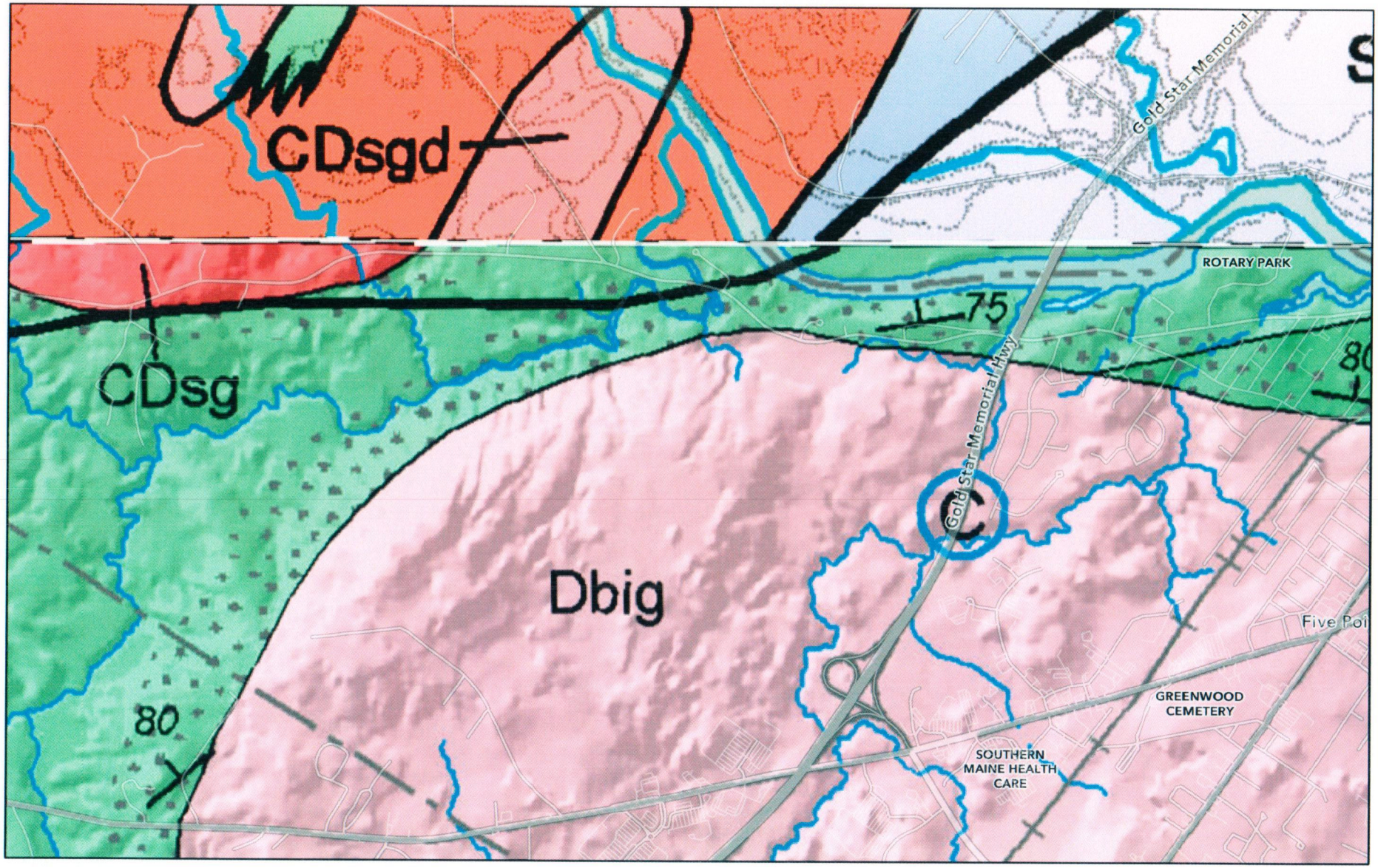


FIGURE 4. Maine Well Database



8/5/2022, 2:36:20 PM

Well Depth (ft)

- 50.1 - 100
- 100.1 - 150
- 200.1 - 250
- 250.1 - 300
- 300.1 - 400
- 400.1 - 500

Well Yield (gpm)

- 1.1 - 2
- 4.1 - 6
- 6.1 - 8
- 15.1 - 20
- 25.1 - 50

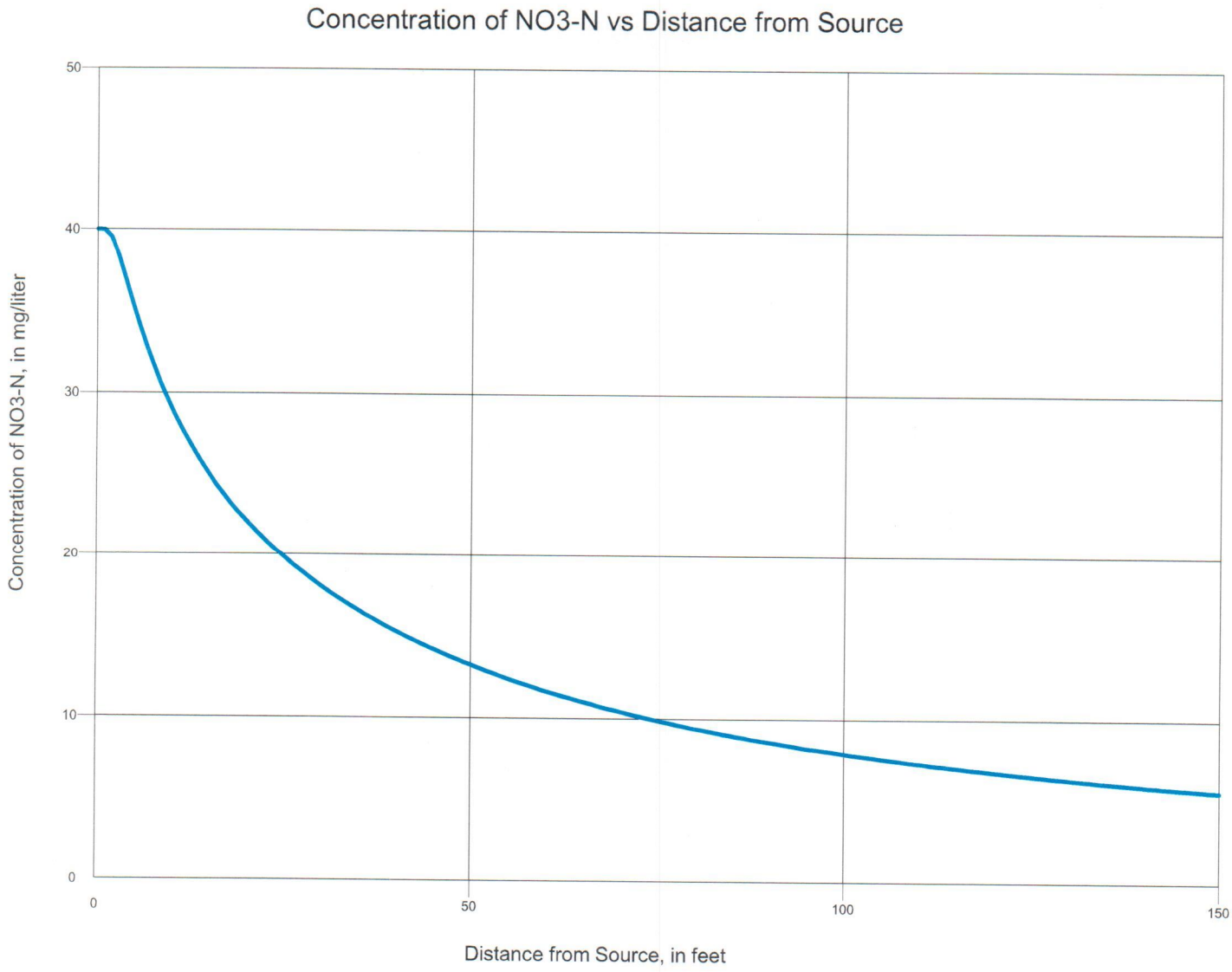
1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Esri, HERE, Garmin, GeoTechnologies, Inc., NGA, USGS

Maine Geological Survey
2015


Concentration of NO3-N vs Distance from Source
Concentration of NO3-N, in mg/liter
50
40
30
20
10
0
0
50
100
150
Distance from Source, in feet

Attachment 12

Traffic Impact Study

Barton & Loguidice

TRAFFIC IMPACT STUDY

FOR PROPOSED

HIDDEN HILLS HOUSING PARK

WATERWORKS DRIVE, BIDDEFORD, MAINE

Prepared For: South Street Village, LLC

Prepared By: William Bray, P.E., Senior Managing Engineer
Jacob Sirois, Engineer 1

August 12,2022

Introduction

South Street Village, LLC, is proposing development of Hidden Hills Housing Park, an age restricted senior adult housing development, located on Waterworks Drive in the City of Biddeford (refer to Image 1 for location of the proposed project). The proposed site is located in the southeast quadrant of the intersection of South Street and Waterworks Drive. The site is 312.1 acres with frontage on South Street. The proposed development will provide 195-units of senior adult housing on individual lots. The site will be served by two proposed 20-foot-wide entrances located on the eastern side of Waterworks Drive named Topaz Drive and Lozolite Lane, located 750-feet and 1,230-feet; respectively, away from the existing intersection of South Street and Waterworks Drive. Access to the site will be provided from South Street via Waterworks drive.

The proposed site features 195 individual lots which are provided access by internal roadways which circulate throughout the site, a Maintenance Garage, and a Community Center with outdoor facilities for the residents. The internal roadways which circulate throughout the site are identified as Topaz Drive, Lozolite Lane, Garnet Drive, Ruby Road, Griffinite Way, and Onyx Circle. The internal access roadways are bi-directional and 20-feet wide with a 5-foot-wide sidewalk provided throughout the site.

The purpose of this traffic impact study is to examine existing traffic conditions in the general vicinity of the proposed project, estimate the total number of site trips generated by the project, and make a determination as to whether the existing transportation system can safely accommodate the added traffic demand generated by the project.

Image 1 Proposed Development Site



Existing Traffic Conditions

Manual turning movement traffic counts were conducted at the intersection of River Road and South Street, located approximately 0.72 miles west of the site intersection at Waterworks Drive to establish existing "*peak*" travel conditions at the intersection of Waterworks Drive and South Street. The morning and evening traffic data was collected on October 12th, 2021. All vehicular traffic entering the intersection was recorded in 15-minute intervals between the hours of 7:00 and 9:00 AM and, again,

between 3:00 and 6:00 PM. From a summary of the data, peak hour times were established for both "*peak*" commuter travel periods. The morning peak hour occurs between 7:15 and 8:15 AM, and the evening peak hour falls between 3:15 and 4:15 PM. Copies of the peak hour summary reports for the intersection at River Road and South Street are attached for reference.

Traffic data collected during the month of September requires an adjustment to reflect "*peak*" travel conditions found during the summer months of July and August. MaineDOT provides weekly mean factors for adjusting traffic data collected during other periods of time. MaineDOT utilizes highway classifications of I, II, or III for all State and Local roadways. MaineDOT's 2019 Count Book classifies South Street in the vicinity of the project as a Group I roadway which is defined as: "*urban roadways or those roads that typically see commuter traffic and experience little fluctuation from week to week throughout the year*". Given the Group I classification, minimal seasonal variation occurs throughout a typical year. Utilizing MaineDOT's Weekly Group Mean Factors we receive a seasonal adjustment factor of 1.047 which will be applied to the through volumes at the study intersection.

Given that the traffic counts have been projected from the intersection at River Road and South Street to the intersection of Waterworks drive and South Street, we have estimated the peak hour traffic turning onto and out of Waterworks Drive to be 5 vehicles in both directions, based on observed field conditions.

Figure 1, located in the Appendix, depicts the estimated 2021 design hour traffic conditions at the site intersection.

Future Traffic Growth

This traffic study has been prepared based upon a projected build-out year of 2024. MaineDOT's historical traffic data at the intersection of Main Street and South Street, east of the site, shows a negative annual growth of approximately 0.5% per year has occurred each year between 2016 and 2019.

To conservatively estimate future travel conditions at the study intersection, we have applied an annual growth rate of 1% per year to the 2021 design hour traffic to estimate 2024 design hour traffic conditions. Figure 2 attached in the Appendix of this report depicts the estimated 2024 Design Hour Traffic.

Site Trip Generation

Site Trip Generation: Trip generation for the proposed Hidden Hills Housing Park development was estimated based upon the latest edition (11th) of the Institute of Transportation Engineer's (ITE) Trip Generation Manual (TGM). The expected trip generation for the proposed development was estimated using the relevant land use code from the TGM, **LUC #251 – Senior Adult Housing – Single-Family**, which is described in the ITE TGM as: *a development with a specific age restriction for its residents, typically a minimum of 55 years of age for at least one resident of the household. The dwelling units can be either detached or attached.*

Site Trip Distribution: Vehicle Trips generated by the proposed site were assigned to/from Waterworks Drive based upon the directional splits presented in the ITE TGM for LUC #251.

Table 1 summarizes the trip generation calculations and travel distributions.

Table 1 ITE Trip Generation Calculations						
Land Use	Senior Adult Housing-Single Family - LUC 251					
Time Period	Dwelling Units	Trip Generation Rate Trips/Dwelling Units	Trips Generated	Distribution Entering / Exiting	Enter	Exit
Weekday	195	4.31	840	50% / 50%	420	420
AM Weekday Peak Hour (Street)	195	0.24	47	33% / 67%	16	31
PM Weekday Peak Hour (Street)	195	0.30	59	61% / 39%	36	23
AM Weekday Peak Hour (Generator)	195	0.34	66	43% / 57%	28	38
PM Weekday Peak Hour (Generator)	195	0.39	76	56% / 44%	43	33

The proposed project is projected to generate 47 trips during the AM peak hour of the (street) and 59 trips in the evening peak hour of the street. Peak hour trip generation values forecast for the peak hour of the site (generator) are slightly higher at 66 trips in the AM peak hour and 76 trips in the PM peak hour.

Site Trip Assignment

Peak hour site trips generated by the proposed Waterworks Drive senior adult housing development during both the morning and evening peak hours were assigned through the intersection of Waterworks Drive and South Street based upon existing directional distribution patterns collected at the intersection of River Road and South Street on October 12th, 2021. Copies of the peak hour summary sheets are attached for reference.

Figure 3 in the Appendix depicts the site generated trips following the existing travel patterns.

2024 Pre-Development Traffic

Other Development Traffic: Traffic generated by projects that have been approved by the planning board and/or the Maine Department of Transportation, yet are not opened, must be included in the estimate of pre-development traffic. The City of Biddeford was consulted to identify any and all development projects whose peak hour trips potentially impact the study area. Based on discussions with the City Planners office there are no other projects being reviewed or approved that will impact this intersection.

2024 Pre-Development Traffic: Given that there are no additional trips produced by other developments in the vicinity of the project, the pre-development trips don't vary from the 2024 design hour traffic shown in Figure 2.

2024 Post-Development Traffic

2024 Post-Development Traffic: 2024 post-development traffic estimates were prepared for the study intersection by combining the 2024 design hour traffic (2024 pre-development traffic), shown in Figure

2, with the site generated trips, shown in Figure 3. Figure 4 presents the 2024 post-development traffic forecast for the study intersection.

Left-Turn Lane Warrant Analysis

The National Cooperative Highway Research Program (NCHRP) report 457 provides a process to determine if projected traffic conditions at an intersection warrant a dedicated left-turn lane from the major street to the lower volume roadway. The NCHRP process uses four traffic inputs in determining if a dedicated left-turn lane is warranted: 1) posted speed limit; 2) advancing volume of traffic (both left-turn and through volumes); 3) opposing volume of through traffic and 4) percent of left-turns in the advancing volume.

The NCHRP report stipulates that where applicable the traffic volumes used for the analysis represent "*average*" travel conditions. The 2024 pre-development through traffic volumes were adjusted accordingly applying MaineDOT seasonal adjustment factors. The entry left-turn volumes from the east approach of South Street, used in the analysis, represent 2024 post-development conditions; without adjustment, as depicted on Figure 4. The following table, Table 2, summarizes the inputs and outputs of the analysis.

Table 2
NCHRP Report 457 Analysis: South Street WB at Waterworks Drive

Time Period	Advancing Volume (Va)	Opposing Volume (Vo)	Percent Left-Turns	Warrant Met (Yes/No)
Weekday AM Peak Hour	115	296	11%	No
Weekday PM Peak Hour	242	161	7%	No

As highlighted in the preceding table, a left-turn lane is not warranted at the intersection of South Street and Waterworks Drive. The graph produced by the NCHRP tool, attached at the end of the study, shows that the projected post-development average condition volumes are significantly lower than the minimum volumes which would warrant a left-turn lane.

Capacity Analysis

Capacity analyses of both 2024 Pre- and Post-development traffic conditions were performed for the study intersection at South Street and Waterworks Drive utilizing the Synchro and SimTraffic computer traffic models.

Levels of Service rankings are similar to the academic grading system, where an "A" is very good with little delay and "F" represents very poor conditions.

The following table present the relationship between delay and Level of Service for unsignalized intersections:

Level of Service Criteria for Unsignalized Intersections

Level of Service	Total Control Delay (sec/veh)
A	Up to 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

Table 3 summarizes the results of the capacity analysis completed for the intersection at South Street and Waterworks Drive. The chart compares the results determined for both peak hour time periods based upon 2024 pre- and post-development travel conditions.

Table 3
Level of Service Summary
2024 Pre- and Post-Development Conditions

	2024 Pre-Development				2024 Post-Development			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection/Approach	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
South Street @ Waterworks Drive								
- South Street EB - Through	0.4	A	0.2	A	0.5	A	0.6	A
- South Street EB - Right	1.2	A	1.3	A	1.1	A	1.3	A
- South Street WB - left	0	A	1.7	A	3.3	A	2.3	A
- South Street WB - Through	0.1	A	0.3	A	0.3	A	0.5	A
- Waterworks Drive - Left	2.5	A	5.5	A	7.0	A	6.7	A
- Waterworks Drive - Right	3.3	A	3.4	A	3.5	A	3.4	A
- **Overall Intersection**	**0.4**	**A**	**0.3**	**A**	**0.9**	**A**	**0.9**	**A**

As shown in the preceding table, the intersection capacity analysis of both 2024 pre- and post-development traffic conditions clearly demonstrates the proposed 195-unit development project has no measurable impact on traffic operations at the intersection of South Street and Waterworks Drive. Each approach of the intersection operates with minimal vehicle delay during both peak hours, representative of Level of Service A conditions; defined as the "best" operating condition. A similar operating condition is predicted for the 2024 post-development conditions, where the Level of Service remains at an A.

Vehicle Sight Distance

The Maine Department of Transportation's Highway Entrance and Driveway Rules require the following sight distances for a non-mobility roadway:

Sight Distance Standards

Speed Limit	Sight Distance
25 mph	**200 feet**
30 mph	250 feet
35 mph	**305 feet**
40 mph	360 feet
45 mph	425 feet
50 mph	495 feet

MaineDOT's Rules and Regulations require sight distance to be measured in accordance with the following procedures: *"Sight distance is measured to and from the point on the centerline of the proposed access that is located 10-feet from the edge of traveled way. The height of the hypothetical person's view is considered to be 3½ feet above the pavement and the height of the object being viewed is considered to be 4¼ feet above the pavement."*

Vehicle sight distance measurements were field determined for the Waterworks Drive approach at South Street, and the proposed site driveway entrances located on Waterworks Drive. The measured distances are listed as follows:

Waterworks Drive @ South Street
Looking Left =375'+
Looking Right = 375'+

Topaz Drive (Northern Site Entrance) @ Waterworks Drive
Looking Left = 700'+
Looking Right = 750' – Can see through intersection with South Street

Lozolite Lane (Southern Site Entrance) @ Waterworks Drive
Looking Left = 500'+
Looking Right = 1,235' – Can see through intersection with South Street

The official speed limit on South Street at Waterworks Drive is 35mph. The Standard Sight Distance required for a speed limit of 35mph is 305-feet. Based upon our field investigation acceptable sight distance is provided in both directions of travel on South Street well in excess of the minimum standard for a posted speed limit of 35mph.

The speed limit on Waterworks Drive at the two site entrances is presently unposted and assumed to be 25mph which requires an unobstructed sight distance of 200-feet. The existing sight distance at both site driveway entrances looking left and right exceeds this requirement.

Existing Road Safety Conditions

Existing site conditions at both proposed driveway locations on Waterworks Drive presently exceed MaineDOT's driveway grade standards of a maximum grade of 10% for a length of 150-feet. The grade of the proposed entrances must meet MaineDOT's driveway standards upon construction

The Maine Department of Transportation's (MaineDOT) Accident Records Section provided the latest three-year (2019 through 2021) crash data for the section of South Street between and including River Road, easterly to the intersection at Main Street for a distance of approximately 1.70 miles. Their report is presented as follows.

2019 - 2021 Crash Summary
South Street between River Road & Main Street

Location	Number of Accidents	Critical Rate Factor
1. South Street @ Hollis Road	1	0.47
2. South Street @ Cathedral Oaks Drive	1	0.40
3. South Street @ Main Street	3	1.16
4. South Street @ Glenview Drive	1	0.55
5. South Street @ River Road	1	0.53
6. South Street btw. Main Street and Cathedral Oaks Drive	2	0.39
7. South Street from Cathedral Oaks Drive, west for 0.12 miles	1	0.35
8. South Street from Old Hollis Road, west for 0.18 miles	1	0.26
9. South Street from Glenview Drive, east for 0.28 miles	2	0.63
10. South Street btw. River Road and Fox Hollow Drive	**9**	**1.06**

The MDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- ***8 or more accidents and,***
- ***A Critical Rate Factor greater than 1.00***

As the data presented in the chart shows, there is one location within the defined study area that meets both of MaineDOT's criteria as a high crash location, located on South Street between River Road and Fox Hollow Drive.

MaineDOT's Safety office prepared a detailed vehicle collision diagram for the high crash location, illustrating the cause and location of each crash. The collision diagram shows that eight (8) out of the nine crashes were single vehicle accidents, with four (4) crashes caused by "reckless driving", and the other four were caused by speed, sleep, oversteering, and a deer in the road.

Summary

1. The proposed Hidden Hills Housing Park, a 195-Unit Development, is expected to produce approximately 47 trips during the morning peak hour, and an additional 59 trips during the evening peak hour.

2. A left-turn lane analysis was completed on the westbound approach of South Street. Separate analyses were completed for both peak hour time periods. The analysis was conducted using the national Cooperative Highway Research program (NCHRP) report 457 and shows a dedicated left-turn lane is not warranted on the westbound approach of South Street at the intersection with Waterworks Drive.

3. A capacity analysis was performed for the study intersection of South Street and Waterworks Drive. The analysis shows the proposed 195-unit development project has no measurable impact on traffic operations at the intersection of South Street and Waterworks Drive. Each approach of the intersection presently operates with minimal vehicle delay during the peak hours, representative of Level of Service A conditions; defined as the "best" operating condition. A similar operating condition is predicted for the 2024 post-development condition, where the Level of Service remains at an A.

4. South Street at the intersection of Waterworks Drive is presently 35mph which requires an unobstructed sight distance of 305-feet. Field measurements indicate sight distance looking left and right from the Waterworks Drive approach exceed 375-feet, well in excess of the minimum standard for a posted speed limit of 35mph.

5. Sight distance measurements looking left and right from the proposed site entrances at Waterworks Drive were measured to be in excess of the requirements for an assumed speed limit of 25mph, with sight distance measurements exceeding 500-feet directionally at both proposed driveway entrances.

William J. Bray, P.E. Date: 08/09/2022

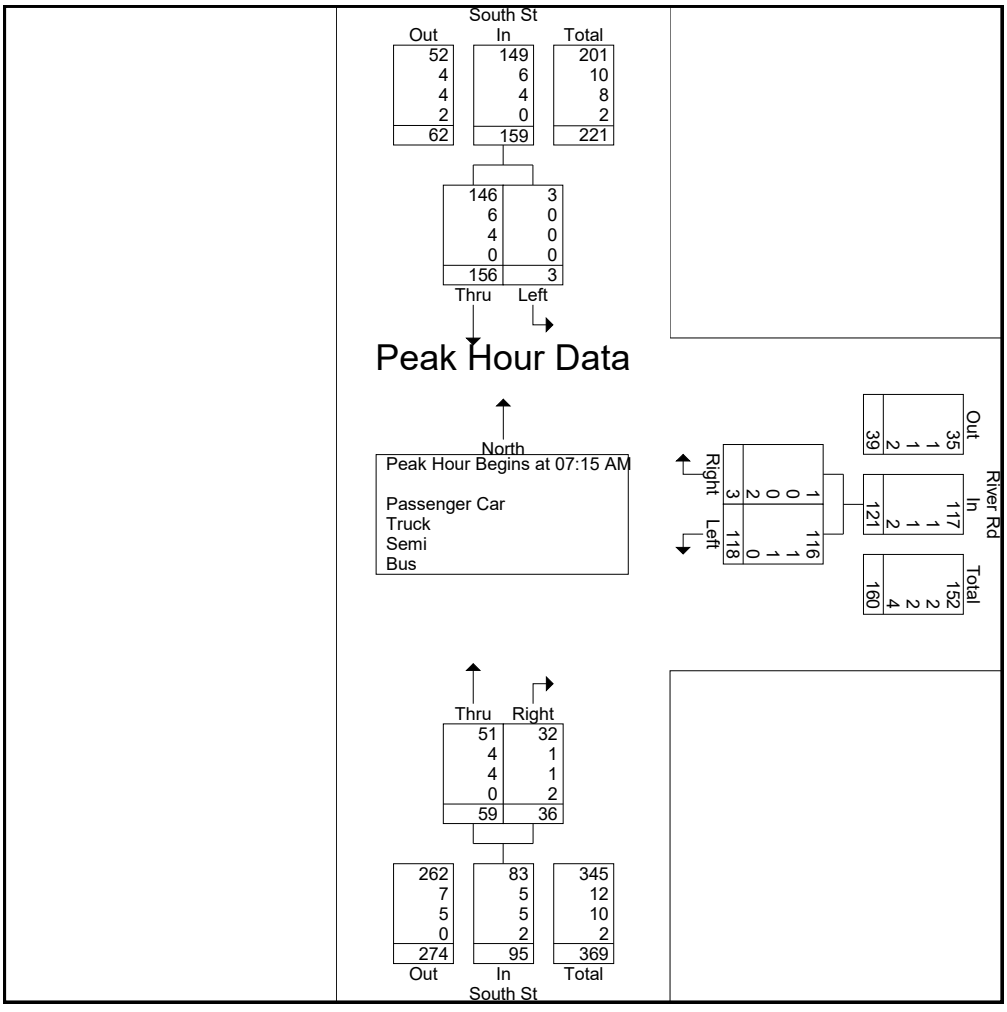


APPENDIX

Traffic Solutions
17 Mount View Dr
Gorham, ME 04038

File Name : Biddeford South St & River Rd 10-12-21 AM
Site Code : 01012211
Start Date : 10/12/2021
Page No : 4

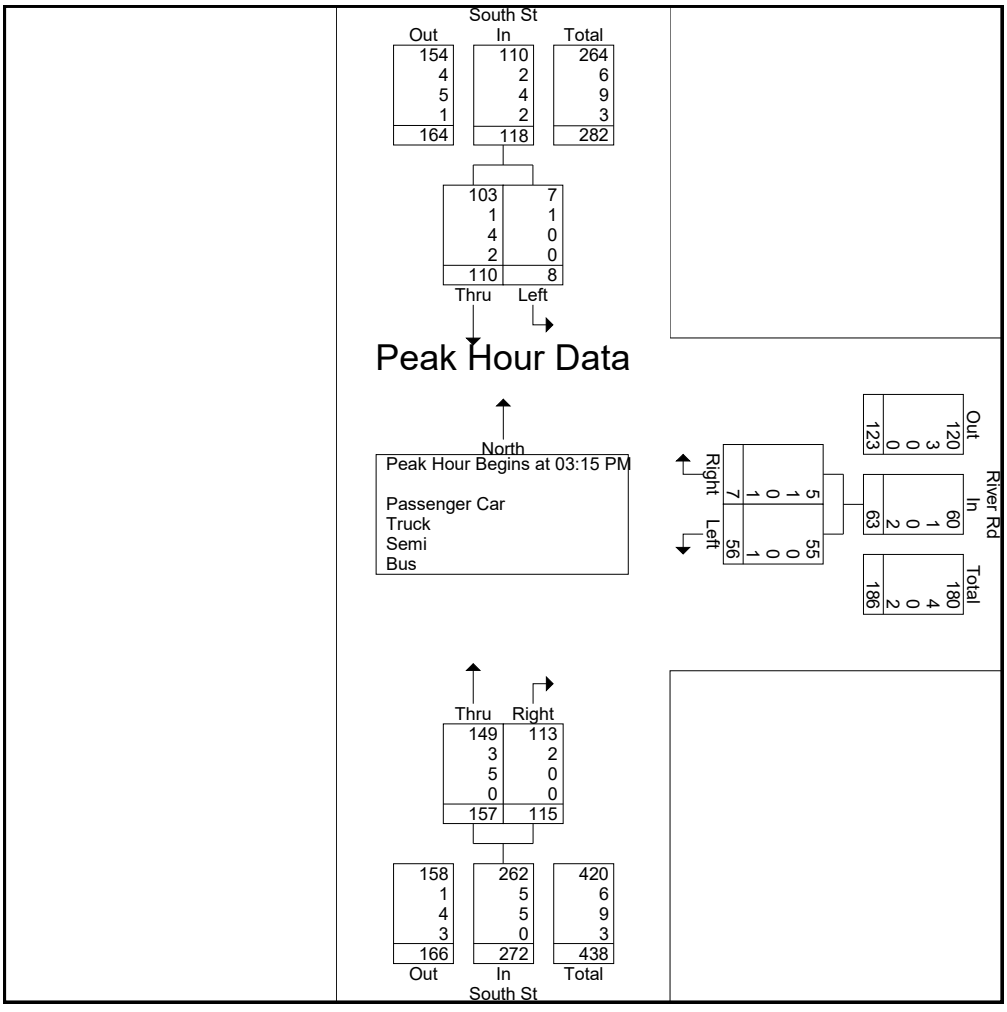
	South St From North			River Rd From East			South St From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	33	0	33	0	25	25	10	**17**	**27**	85
07:30 AM	**48**	**1**	**49**	0	28	28	4	16	20	97
07:45 AM	37	1	38	1	28	29	**13**	12	25	92
08:00 AM	38	1	39	**2**	**37**	**39**	9	14	23	**101**
Total Volume	156	3	159	3	118	121	36	59	95	375
% App. Total	98.1	1.9		2.5	97.5		37.9	62.1		
PHF	.813	.750	.811	.375	.797	.776	.692	.868	.880	.928
Passenger Car	146	3	149	1	116	117	32	51	83	349
% Passenger Car	93.6	100	93.7	33.3	98.3	96.7	88.9	86.4	87.4	93.1
Truck	6	0	6	0	1	1	1	4	5	12
% Truck	3.8	0	3.8	0	0.8	0.8	2.8	6.8	5.3	3.2
Semi	4	0	4	0	1	1	1	4	5	10
% Semi	2.6	0	2.5	0	0.8	0.8	2.8	6.8	5.3	2.7
Bus	0	0	0	2	0	2	2	0	2	4
% Bus	0	0	0	66.7	0	1.7	5.6	0	2.1	1.1

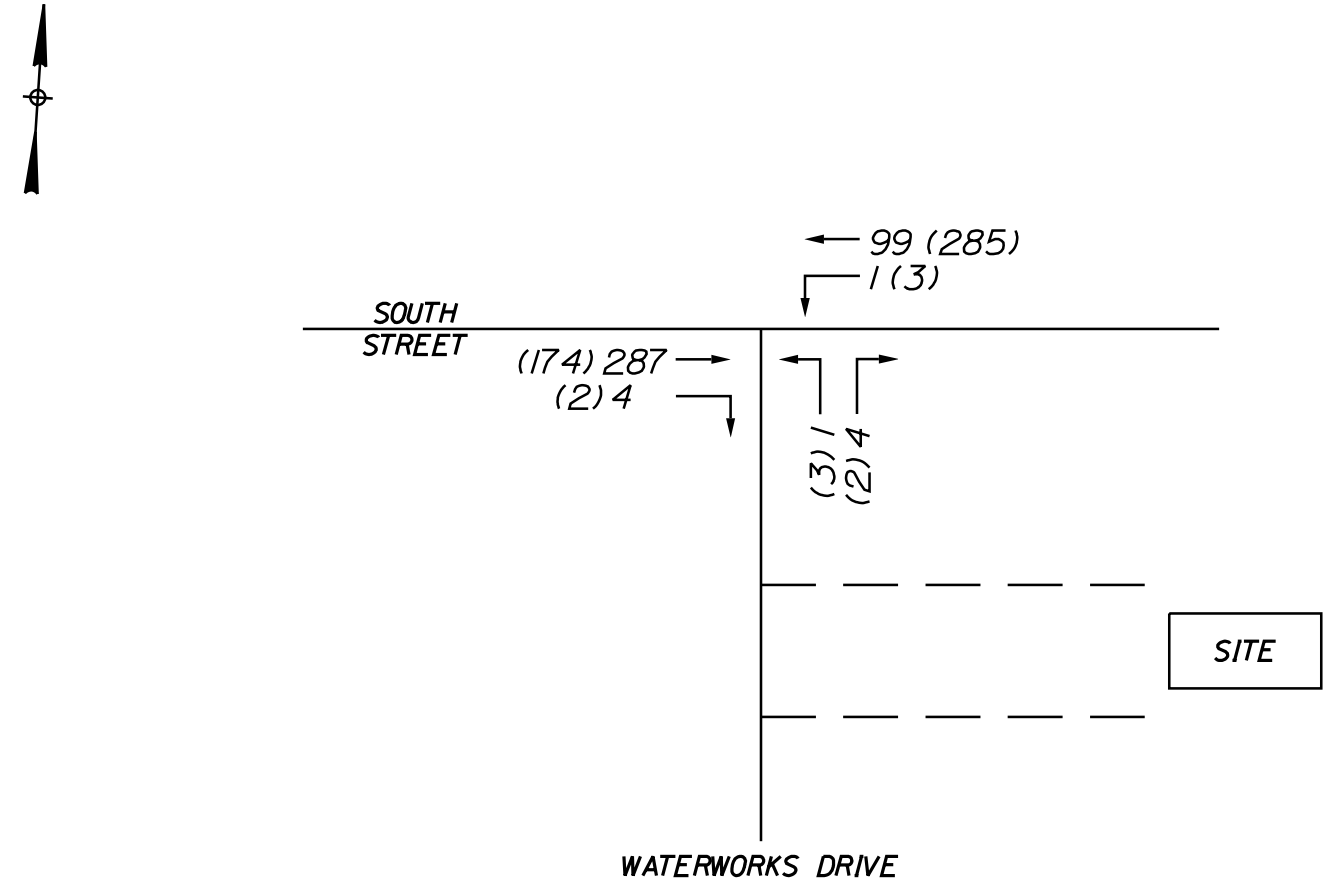


Traffic Solutions
17 Mount View Dr
Gorham, ME 04038

File Name : Biddeford South St & River Rd 10-12-21 PM
Site Code : 01012212
Start Date : 10/12/2021
Page No : 4

	South St From North			River Rd From East			South St From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:15 PM										
03:15 PM	26	1	27	**4**	14	18	27	41	68	113
03:30 PM	28	1	29	0	12	12	26	30	56	97
03:45 PM	26	**4**	30	0	13	13	**34**	41	**75**	118
04:00 PM	**30**	2	**32**	3	**17**	**20**	28	**45**	73	**125**
Total Volume	110	8	118	7	56	63	115	157	272	453
% App. Total	93.2	6.8		11.1	88.9		42.3	57.7		
PHF	.917	.500	.922	.438	.824	.788	.846	.872	.907	.906
Passenger Car	103	7	110	5	55	60	113	149	262	432
% Passenger Car	93.6	87.5	93.2	71.4	98.2	95.2	98.3	94.9	96.3	95.4
Truck	1	1	2	1	0	1	2	3	5	8
% Truck	0.9	12.5	1.7	14.3	0	1.6	1.7	1.9	1.8	1.8
Semi	4	0	4	0	0	0	0	5	5	9
% Semi	3.6	0	3.4	0	0	0	0	3.2	1.8	2.0
Bus	2	0	2	1	1	2	0	0	0	4
% Bus	1.8	0	1.7	14.3	1.8	3.2	0	0	0	0.9



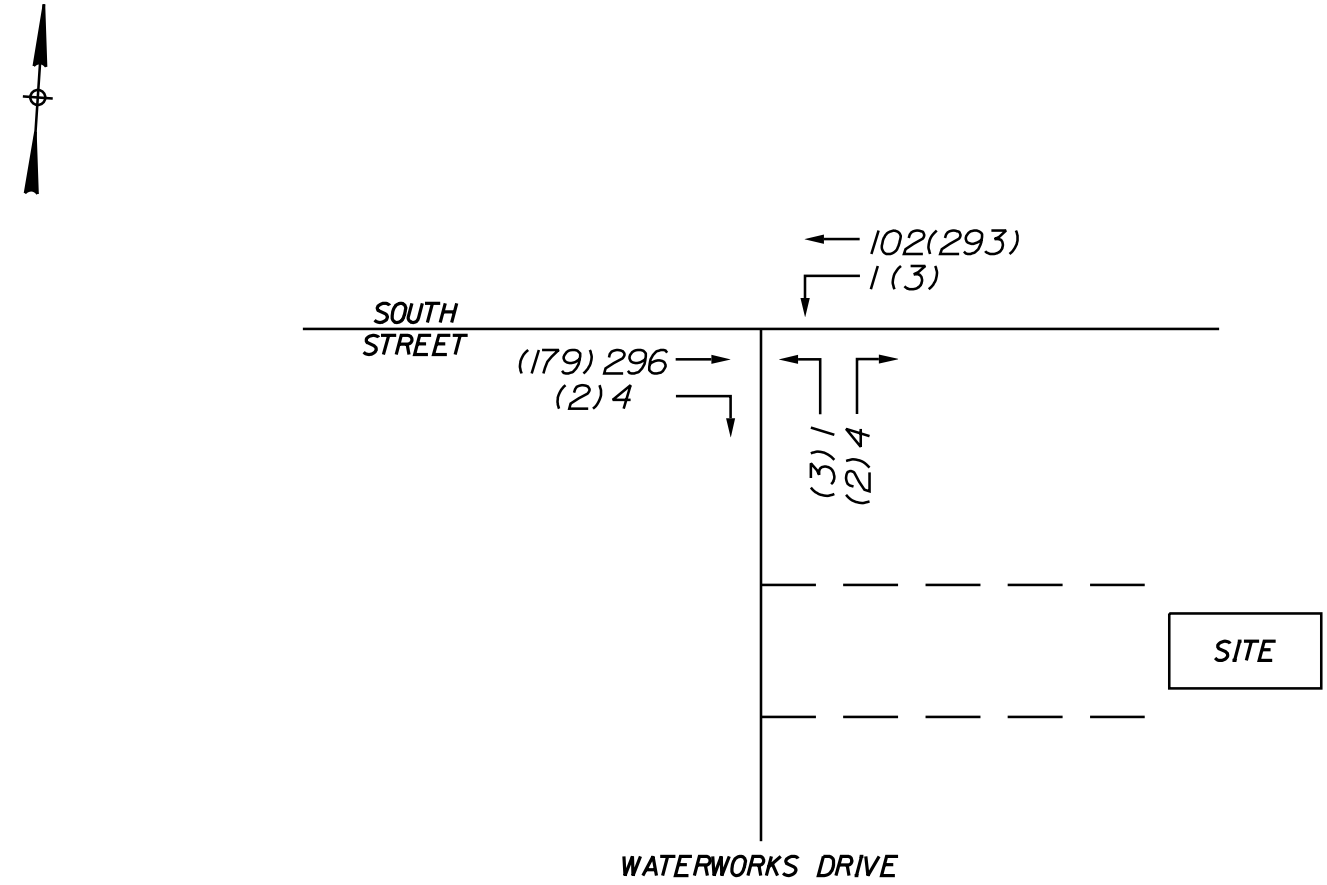


LEGEND
XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

2021 DESIGN HOUR TRAFFIC
WEEKDAY AM & PM PEAK HOUR
FIGURE 1

HIDDEN HILLS
HOUSING PARK
BIDDEFORD, MAINE
DATE: JULY, 2022

Barton & Loguidice

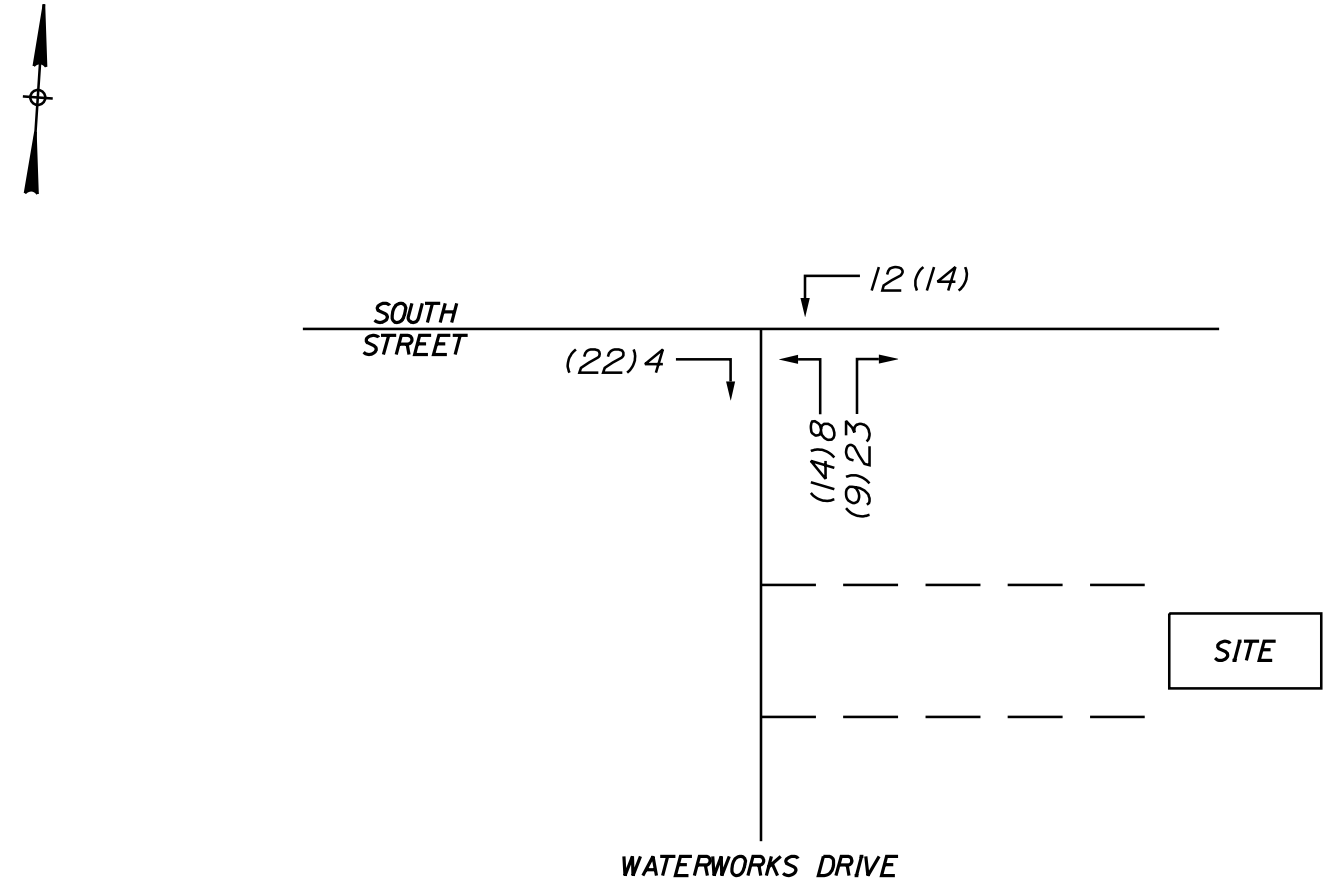


LEGEND
XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

2024 DESIGN HOUR TRAFFIC
WEEKDAY AM & PM PEAK HOURS
FIGURE 2

HIDDEN HILLS
HOUSING PARK
BIDDEFORD, MAINE
DATE: JULY, 2022

Barton & Loguidice

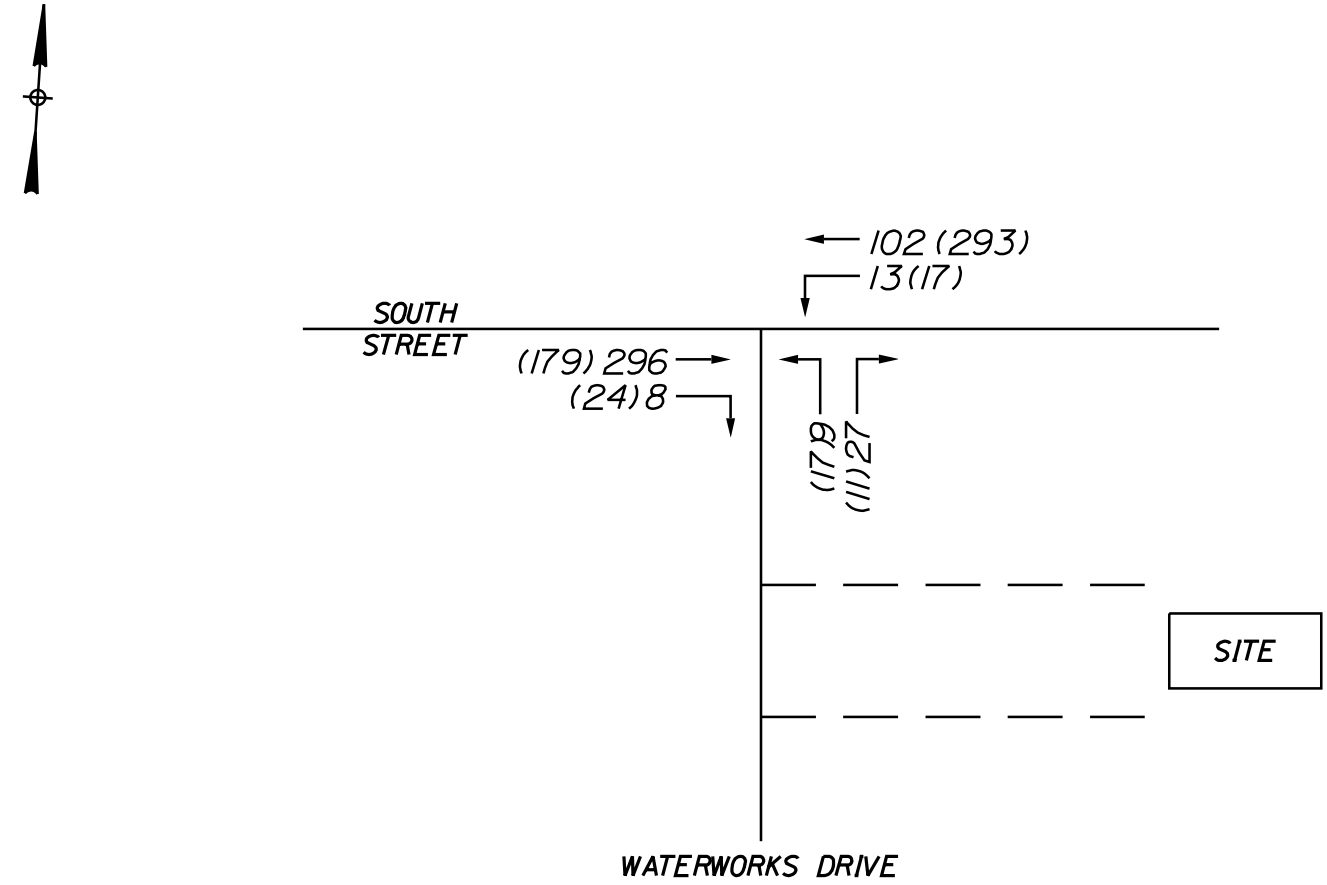


LEGEND
XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

SITE TRIP ASSIGNMENT
WEEKDAY AM & PM PEAK HOURS
FIGURE 3

HIDDEN HILLS
HOUSING PARK
BIDDEFORD, MAINE
DATE: JULY, 2022

Barton & Loguidice



LEGEND
XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

2024 POST-DEVELOPMENT
WEEKDAY AM & PM PEAK HOURS
FIGURE 4

HIDDEN HILLS
HOUSING PARK
BIDDEFORD, MAINE
DATE: JULY, 2022

Barton & Loguidice

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

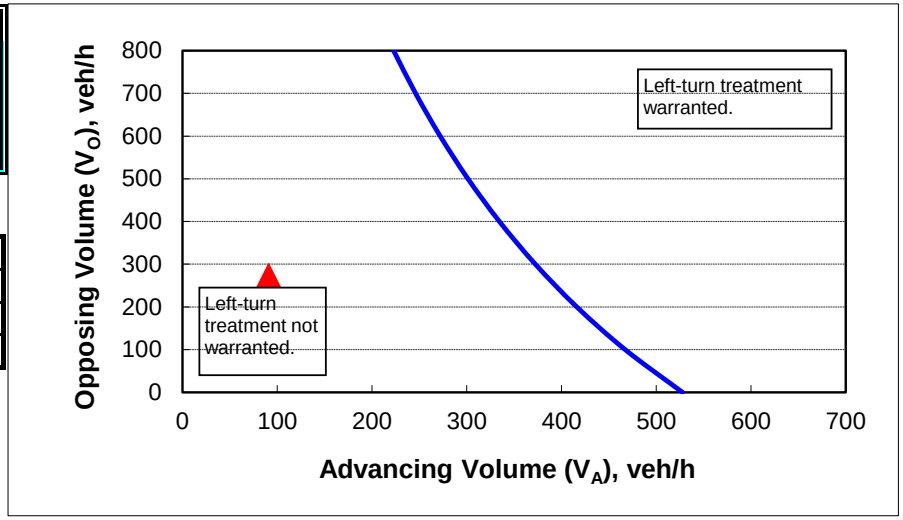
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	14%
Advancing volume (V_A), veh/h:	91
Opposing volume (V_O), veh/h:	274

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	383
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

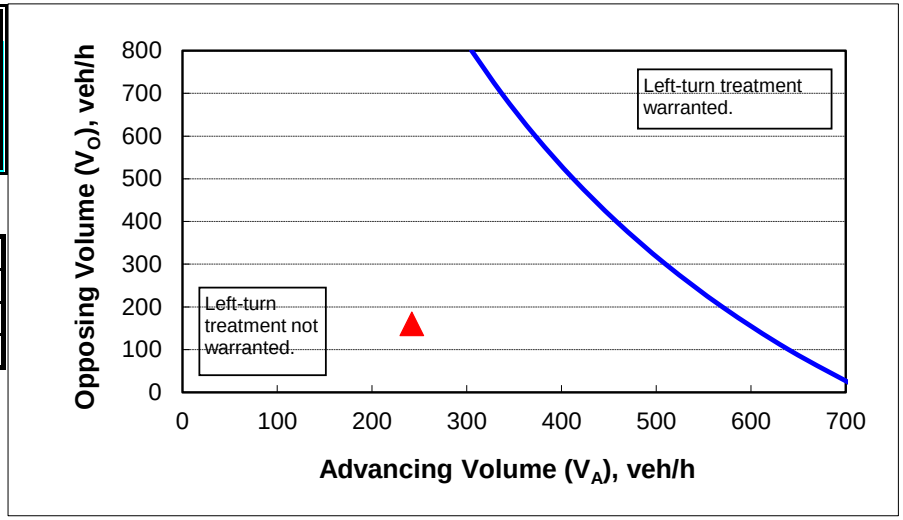
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	7%
Advancing volume (V_A), veh/h:	242
Opposing volume (V_O), veh/h:	161

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	596
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	399	448	408	393	380	406
Vehs Exited	400	445	409	389	382	405
Starting Vehs	4	1	4	1	4	3
Ending Vehs	3	4	3	5	2	3
Travel Distance (mi)	107	120	110	105	103	109
Travel Time (hr)	3.7	4.2	3.8	3.7	3.6	3.8
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	12	3	6	3	4	6
Fuel Used (gal)	3.2	3.5	3.2	3.1	3.0	3.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	399	448	408	393	380	406
Vehs Exited	400	445	409	389	382	405
Starting Vehs	4	1	4	1	4	3
Ending Vehs	3	4	3	5	2	3
Travel Distance (mi)	107	120	110	105	103	109
Travel Time (hr)	3.7	4.2	3.8	3.7	3.6	3.8
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	12	3	6	3	4	6
Fuel Used (gal)	3.2	3.5	3.2	3.1	3.0	3.2

2: Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.2		0.2	0.1	0.1	0.2
Total Del/Veh (s)	0.4	1.2		0.1	2.5	3.3	0.4

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	0.7

Intersection: 2:

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	6	31
Average Queue (ft)	0	5
95th Queue (ft)	4	24
Link Distance (ft)	677	430
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:12	3:12	3:12	3:12	3:12	3:12
End Time	4:15	4:15	4:15	4:15	4:15	4:15
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	488	516	511	494	435	490
Vehs Exited	490	512	506	493	437	488
Starting Vehs	8	3	1	3	5	3
Ending Vehs	6	7	6	4	3	5
Travel Distance (mi)	132	139	137	133	117	131
Travel Time (hr)	4.6	4.8	4.8	4.6	4.1	4.6
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	5	7	7	2	4	5
Fuel Used (gal)	3.8	4.1	4.0	3.9	3.4	3.8

Interval #0 Information Seeding

Start Time	3:12
End Time	3:15
Total Time (min)	3

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	3:15
End Time	4:15
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	488	516	511	494	435	490
Vehs Exited	490	512	506	493	437	488
Starting Vehs	8	3	1	3	5	3
Ending Vehs	6	7	6	4	3	5
Travel Distance (mi)	132	139	137	133	117	131
Travel Time (hr)	4.6	4.8	4.8	4.6	4.1	4.6
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	5	7	7	2	4	5
Fuel Used (gal)	3.8	4.1	4.0	3.9	3.4	3.8

2: Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.2	0.1	0.1	0.2
Total Del/Veh (s)	0.2	1.3	1.7	0.3	5.5	3.4	0.3

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	0.7

Intersection: 2:

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	6	32
Average Queue (ft)	0	5
95th Queue (ft)	4	22
Link Distance (ft)	677	430
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	442	454	474	450	423	449
Vehs Exited	441	452	474	444	423	447
Starting Vehs	2	3	5	1	4	2
Ending Vehs	3	5	5	7	4	5
Travel Distance (mi)	117	119	126	118	111	118
Travel Time (hr)	4.2	4.3	4.4	4.3	4.0	4.2
Total Delay (hr)	0.2	0.2	0.2	0.2	0.2	0.2
Total Stops	35	49	34	48	42	42
Fuel Used (gal)	3.6	3.6	3.8	3.6	3.4	3.6

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	442	454	474	450	423	449
Vehs Exited	441	452	474	444	423	447
Starting Vehs	2	3	5	1	4	2
Ending Vehs	3	5	5	7	4	5
Travel Distance (mi)	117	119	126	118	111	118
Travel Time (hr)	4.2	4.3	4.4	4.3	4.0	4.2
Total Delay (hr)	0.2	0.2	0.2	0.2	0.2	0.2
Total Stops	35	49	34	48	42	42
Fuel Used (gal)	3.6	3.6	3.8	3.6	3.4	3.6

2: Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.3	0.2	0.2	0.1	0.1	0.2
Total Del/Veh (s)	0.5	1.1	3.3	0.3	7.0	3.5	0.9

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1.3

Intersection: 2:

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	45	53
Average Queue (ft)	4	24
95th Queue (ft)	27	50
Link Distance (ft)	677	430
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:12	3:12	3:12	3:12	3:12	3:12
End Time	4:15	4:15	4:15	4:15	4:15	4:15
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	552	587	561	542	495	548
Vehs Exited	551	584	559	540	498	547
Starting Vehs	6	4	4	3	5	3
Ending Vehs	7	7	6	5	2	6
Travel Distance (mi)	145	154	147	143	131	144
Travel Time (hr)	5.2	5.5	5.4	5.1	4.7	5.2
Total Delay (hr)	0.3	0.3	0.3	0.2	0.2	0.2
Total Stops	37	45	30	31	28	34
Fuel Used (gal)	4.5	4.7	4.6	4.4	4.0	4.4

Interval #0 Information Seeding

Start Time	3:12
End Time	3:15
Total Time (min)	3

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	3:15
End Time	4:15
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	552	587	561	542	495	548
Vehs Exited	551	584	559	540	498	547
Starting Vehs	6	4	4	3	5	3
Ending Vehs	7	7	6	5	2	6
Travel Distance (mi)	145	154	147	143	131	144
Travel Time (hr)	5.2	5.5	5.4	5.1	4.7	5.2
Total Delay (hr)	0.3	0.3	0.3	0.2	0.2	0.2
Total Stops	37	45	30	31	28	34
Fuel Used (gal)	4.5	4.7	4.6	4.4	4.0	4.4

2: Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.2	0.3	0.3	0.1	0.1	0.2
Total Del/Veh (s)	0.6	1.3	2.3	0.5	6.7	3.4	0.9

Total Network Performance

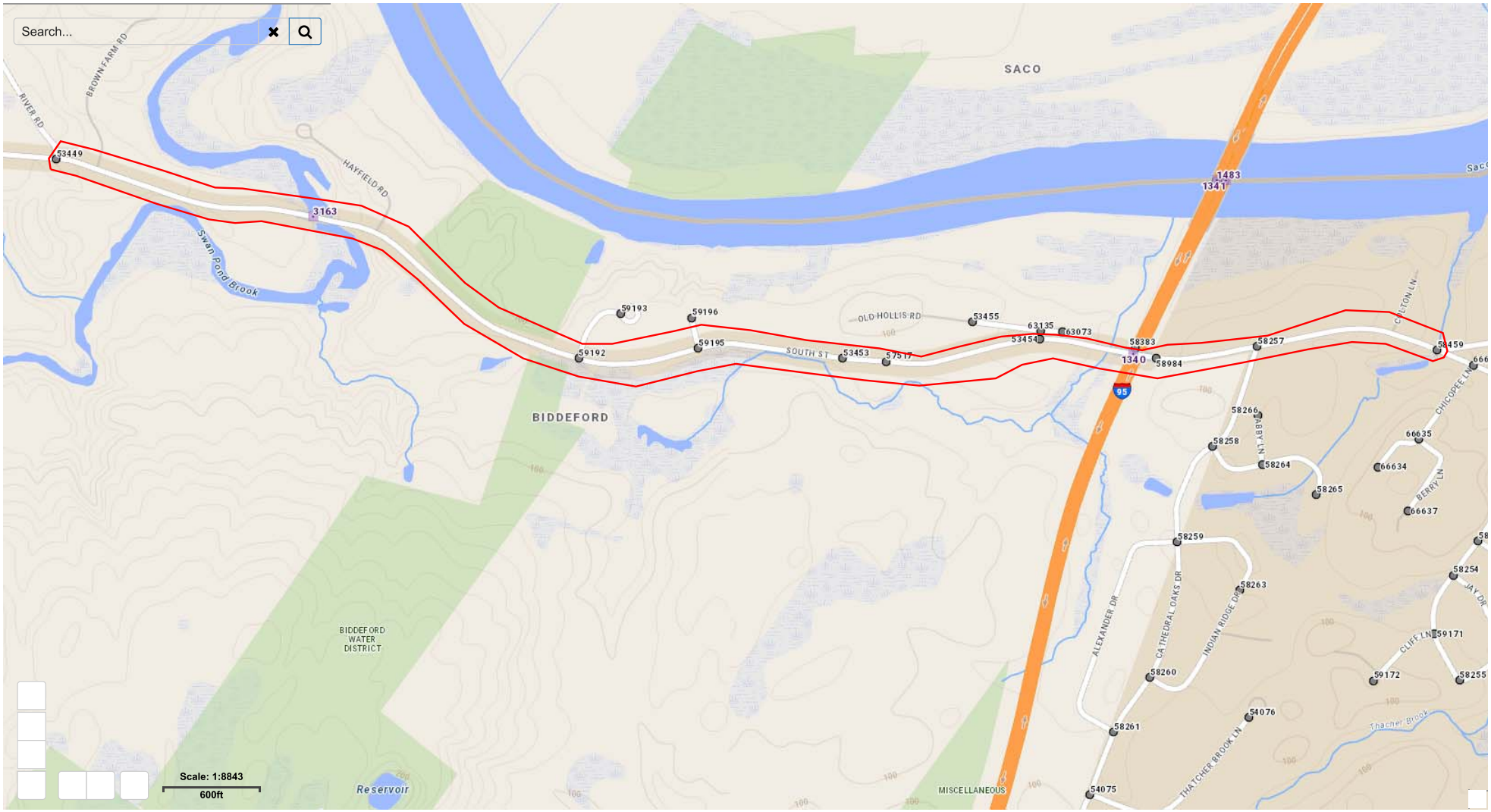
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1.4

Intersection: 2:

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	39	41
Average Queue (ft)	3	20
95th Queue (ft)	21	45
Link Distance (ft)	677	430
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0


Search...
SACO
BIDDEFORD
BIDDEFORD WATER DISTRICT
Reservoir
MISCELLANEOUS
RIVER RD
BROWN FARM RD
HAYFIELD RD
Swan Pond Brook
OLD HOLLIS RD
SOUTH ST
ALEXANDER DR
CATHEDRAL OAKS DR
INDIAN RIDGE DR
ABBY LN
BERRY LN
CHICOPEE LN
CLIFF LN
JAY DR
THATCHER BROOK LN
Thacher Brook
53449
3163
59193
59196
59195
59192
53455
63135
63073
53454
53453
57517
58383
58984
58257
53459
1483
1341
1340
95
58266
58258
58264
58265
66635
66634
66637
58259
58263
58254
59171
59172
58255
58260
58261
54076
54075
Scale: 1:8843
600ft

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ **Crash Summary I** ☐ **Section Detail** ☑ **Crash Summary II** ☐ **1320 Public** ☐ **1320 Private** ☐ **1320 Summary**

REPORT DESCRIPTION

Biddeford
South St. from Main St. to River Rd.

REPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: **3110151**	Start Node: **58459**	Start Offset: **0**	☐ **Exclude First Node**
	End Node: **57517**	End Offset: **0**	☐ **Exclude Last Node**
Route: **3110891**	Start Node: **57517**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **53449**	End Offset: **0**	☐ **Exclude Last Node**

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
53454	3110151 - 1.91	Int of OLD HOLLIS RD SOUTH ST	2	1	0	0	0	1	0	100.0	1.592	0.21	0.45	0.00
												Statewide Crash Rate:	0.13	
58257	3110151 - 1.65	Int of CATHEDRAL OAKS DR SOUTH ST	2	1	0	0	0	0	1	0.0	1.930	0.17	0.43	0.00
												Statewide Crash Rate:	0.13	
57517	3110151 - 2.09	Non Int SOUTH ST	2	0	0	0	0	0	0	0.0	1.499	0.00	0.46	0.00
												Statewide Crash Rate:	0.13	
58459	3110151 - 1.43	Int of MAIN ST SOUTH ST	2	3	0	1	0	0	2	33.3	2.038	0.49	0.42	1.16
												Statewide Crash Rate:	0.13	
58984	3110151 - 1.77	Non Int SOUTH ST	2	0	0	0	0	0	0	0.0	1.591	0.00	0.45	0.00
												Statewide Crash Rate:	0.13	
53453	3110891 - 0.05	Non-Int SOUTH ST	2	0	0	0	0	0	0	0.0	1.356	0.00	0.47	0.00
												Statewide Crash Rate:	0.13	
59195	3110891 - 0.22	Int of GLENNVIEW DR SOUTH ST	2	1	0	0	0	0	1	0.0	1.286	0.26	0.47	0.00
												Statewide Crash Rate:	0.13	
59192	3110891 - 0.36	Int of FOX HOLLOW DR SOUTH ST	2	0	0	0	0	0	0	0.0	1.266	0.00	0.47	0.00
												Statewide Crash Rate:	0.13	
53449	3110891 - 1.02	Int of RIVER RD SOUTH ST	2	1	0	0	1	0	0	100.0	1.310	0.25	0.47	0.00
												Statewide Crash Rate:	0.13	
Study Years:	3.00	**NODE TOTALS:**		7	0	1	1	1	4	42.9	13.868	0.17	0.26	0.64

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
58257	58459	3939981	0 - 0.22	3110151 - 1.43	0.22	2	2	0	0	0	0	2	0.0	0.00418	159.35	410.50	0.00
Int of CATHEDRAL OAKS DR SOUTH ST				RD INV 31 10151											Statewide Crash Rate: 159.73		
58257	58984	3122829	0 - 0.12	3110151 - 1.65	0.12	2	1	0	0	0	0	1	0.0	0.00191	174.59	502.61	0.00
Int of CATHEDRAL OAKS DR SOUTH ST				RD INV 31 10151											Statewide Crash Rate: 159.73		
53454	58984	3119837	0 - 0.14	3110151 - 1.77	0.14	2	0	0	0	0	0	0	0.0	0.00223	0.00	483.17	0.00
Int of OLD HOLLIS RD SOUTH ST				RD INV 31 10151											Statewide Crash Rate: 159.73		
53454	57517	3139364	0 - 0.18	3110151 - 1.91	0.18	2	1	0	0	1	0	0	100.0	0.00283	117.63	454.02	0.00
Int of OLD HOLLIS RD SOUTH ST				RD INV 31 10151											Statewide Crash Rate: 159.73		
53453	57517	241543	0 - 0.05	3110891 - 0	0.05	2	0	0	0	0	0	0	0.0	0.00071	0.00	630.09	0.00
Non-Int SOUTH ST				RD INV 31 10891											Statewide Crash Rate: 159.73		
59195	53453	1951279	0 - 0.17	3110891 - 0.05	0.17	2	2	0	0	0	0	2	0.0	0.00219	304.45	485.30	0.00
Int of GLENNVIEW DR SOUTH ST				RD INV 31 10891											Statewide Crash Rate: 159.73		
59192	59195	3139365	0 - 0.14	3110891 - 0.22	0.14	2	0	0	0	0	0	0	0.0	0.00179	0.00	510.78	0.00
Int of FOX HOLLOW DR SOUTH ST				RD INV 31 10891											Statewide Crash Rate: 159.73		
53449	59192	5076691	0 - 0.66	3110891 - 0.36	0.66	2	9	0	1	2	0	6	33.3	0.00817	367.03	347.25	1.06
Int of RIVER RD SOUTH ST				RD INV 31 10891											Statewide Crash Rate: 159.73		
Study Years: 3.00				**Section Totals:**	1.68		15	0	1	3	0	11	26.7	0.02402	208.15	274.07	0.76
				Grand Totals:	1.68		22	0	2	4	1	15	31.8	0.02402	305.29	371.74	0.82

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
58257	58459	3939981	0 - 0.22	3110151 - 1.43	2	0	0	0	0	2	2019-42502	02/17/2019	1.55	PD
											2021-5408	02/27/2021	1.64	PD
58257	58984	3122829	0 - 0.12	3110151 - 1.65	1	0	0	0	0	1	2019-2179	01/08/2019	1.73	PD
53454	58984	3119837	0 - 0.14	3110151 - 1.77	0	0	0	0	0	0				
53454	57517	3139364	0 - 0.18	3110151 - 1.91	1	0	0	1	0	0	2019-64943	09/16/2019	2.08	B
53453	57517	241543	0 - 0.05	3110891 - 0	0	0	0	0	0	0				
59195	53453	1951279	0 - 0.17	3110891 - 0.05	2	0	0	0	0	2	2021-20850	08/08/2021	0.08	PD
											2021-16251	06/24/2021	0.16	PD
59192	59195	3139365	0 - 0.14	3110891 - 0.22	0	0	0	0	0	0				
53449	59192	5076691	0 - 0.66	3110891 - 0.36	9	0	1	2	0	6	2019-75573	12/05/2019	0.53	PD
											2019-75639	10/23/2019	0.59	A
											2019-55369	06/11/2019	0.63	PD
											2021-34866	12/08/2021	0.81	PD
											2020-16988	07/18/2020	0.82	PD
											2019-62328	08/20/2019	0.94	PD
											2021-8073	03/31/2021	0.94	PD
											2021-34872	12/04/2021	0.98	B
											2020-20539	08/28/2020	1.01	B
				Totals:	15	0	1	3	0	11				

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM												Hour of Day PM													
Day Of Week	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Un**	**Tot**
SUNDAY	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	3
MONDAY	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
TUESDAY	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	4
WEDNESDAY	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	4
THURSDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
FRIDAY	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	1	0	0	0	0	4
Totals	1	0	0	0	0	0	2	0	1	1	0	0	2	2	1	1	4	2	0	2	2	0	1	0	0	**22**

Vehicle Counts by Type

Unit Type	Total
1-Passenger Car	18
2-(Sport) Utility Vehicle	3
3-Passenger Van	0
4-Cargo Van (10K lbs or Less)	0
5-Pickup	8
6-Motor Home	0
7-School Bus	0
8-Transit Bus	0
9-Motor Coach	0
10-Other Bus	0
11-Motorcycle	1
12-Moped	0
13-Low Speed Vehicle	0
14-Autocycle	0
15-Experimental	0
16-Other Light Trucks (10,000 lbs or Less)	0
17-Medium/Heavy Trucks (More than 10,000 lbs)	0
18-ATV - (4 wheel)	0
20-ATV - (2 wheel)	0
21-Snowmobile	0
22-Pedestrian	0
23-Bicyclist	1
24-Witness	3
25-Other	0
26-Construction	0
27-Farm Vehicle	0
Total	**34**

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	3	6	1	0	0	0	10
Ran Off Roadway	3	0	0	0	0	0	3
Failed to Yield Right-of-Way	1	0	0	0	0	0	1
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	1	0	0	0	0	0	1
Drove Too Fast For Conditions	4	0	0	0	0	0	4
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	2	0	0	0	0	0	2
Failed to Keep in Proper Lane	1	0	0	0	0	0	1
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	6	0	0	0	0	0	6
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	1	0	0	0	0	0	1
Unknown	0	0	0	0	0	0	0
Total	**22**	**6**	**1**	**0**	**0**	**0**	**29**

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	19	6	1	0	0	0	26
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	1	0	0	0	0	0	1
Under the Influence of Medications/Drugs/Alcohol	1	1	0	0	0	0	2
Other	1	0	0	0	0	0	1
Total	**22**	**7**	**1**	**0**	**0**	**0**	**30**

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	4	0	0	0	0	4
20-24	6	0	0	0	0	6
25-29	4	0	0	0	0	4
30-39	8	0	0	0	0	8
40-49	2	0	0	0	0	2
50-59	3	0	0	0	0	3
60-69	2	0	0	0	0	2
70-79	0	0	0	0	0	0
80-Over	0	0	0	0	0	0
Unknown	1	1	0	0	0	2
Total	**30**	**1**	**0**	**0**	**0**	**31**

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	2	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	**Total**	**30**
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	1		
9-Pedestrian	0		
10-Pedalcycle	1		
11-Railway Vehicle - Train, Engine	0		
12-Animal	1		
13-Motor Vehicle in Transport	13		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	1		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	2		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	1		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	1		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	3		
32-Utility Pole / Light Support	2		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	1		
36-Mailbox	1		
37-Other Post, Pole, or Support	0		

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	0
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	0
5-Stop Signs - Other	9
6-Yield Sign	0
7-Curve Warning Sign	2
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	11
14-Other	0
Total	**22**

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	2	2
B	4	4
C	1	4
PD	15	0
Total	**22**	**10**

Road Character

Road Grade	Total
1-Level	12
2-On Grade	9
3-Top of Hill	1
4-Bottom of Hill	0
5-Other	0
Total	**22**

Light

Light Condition	Total
1-Daylight	14
2-Dawn	1
3-Dusk	0
4-Dark - Lighted	5
5-Dark - Not Lighted	2
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	**22**

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2019	2020	2021	Total
JANUARY	1	1	0	2
FEBRUARY	1	0	1	2
MARCH	0	0	1	1
APRIL	0	1	0	1
MAY	0	0	0	0
JUNE	1	2	1	4
JULY	0	1	0	1
AUGUST	1	1	1	3
SEPTEMBER	1	1	0	2
OCTOBER	1	0	0	1
NOVEMBER	0	1	0	1
DECEMBER	1	1	2	4
Total	**7**	**9**	**6**	**22**

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
Head-on - Sideswipe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Intersection Movement	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	5	6	2	0	0	0	0	0	0	0	0	0	0	0	13
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**6**	**9**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**

700

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	3	1	0	0	0	0	0	0	0	0	0	4
Dark - Not Lighted	1	0	0	0	0	0	0	0	0	0	1	2
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	12	1	0	0	0	0	0	0	0	0	1	14
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	1	0	0	0	0	0	0	0	0	0	0	1
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	1	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**17**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**22**

H. C. L.
CRASH COLLISION DIAGRAM
DATA PACKAGE

COUNTY: **YORK** TOWN: **BIDDEFORD**

LOW NODE: **53449** HIGH NODE: **59192** REGION: **1** U/R: **URBAN**

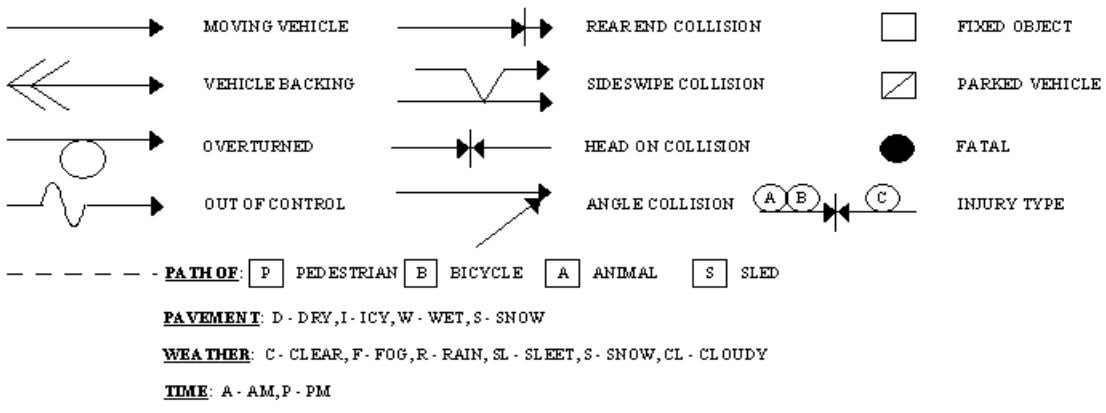
DESCRIPTION: **South St from River Rd to Fox Hollow Dr**

RTE # / RD #: **3100891** DATE DRAWN: **6/27/2022** DRAWN BY: **Michelle**

STUDY FROM: **1/1/2019** STUDY TO: **12/31/2021**

CRASH RATE: **367.03** CRF: **1.6** % INJURY: **33.3** TOTAL CRASHES: **9**

LEGEND



Biddeford

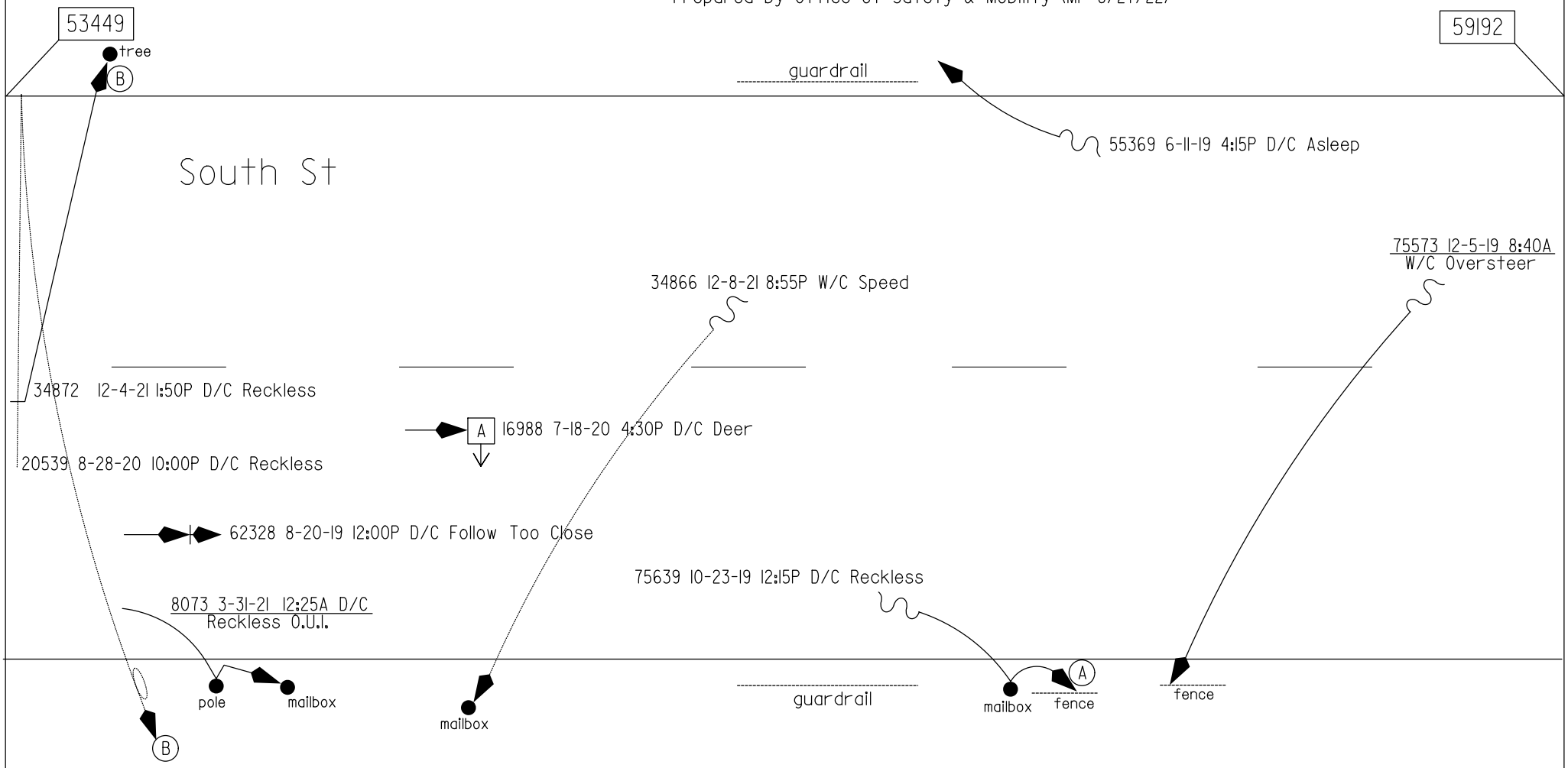
Link: 53449-59192

Element: 5076691

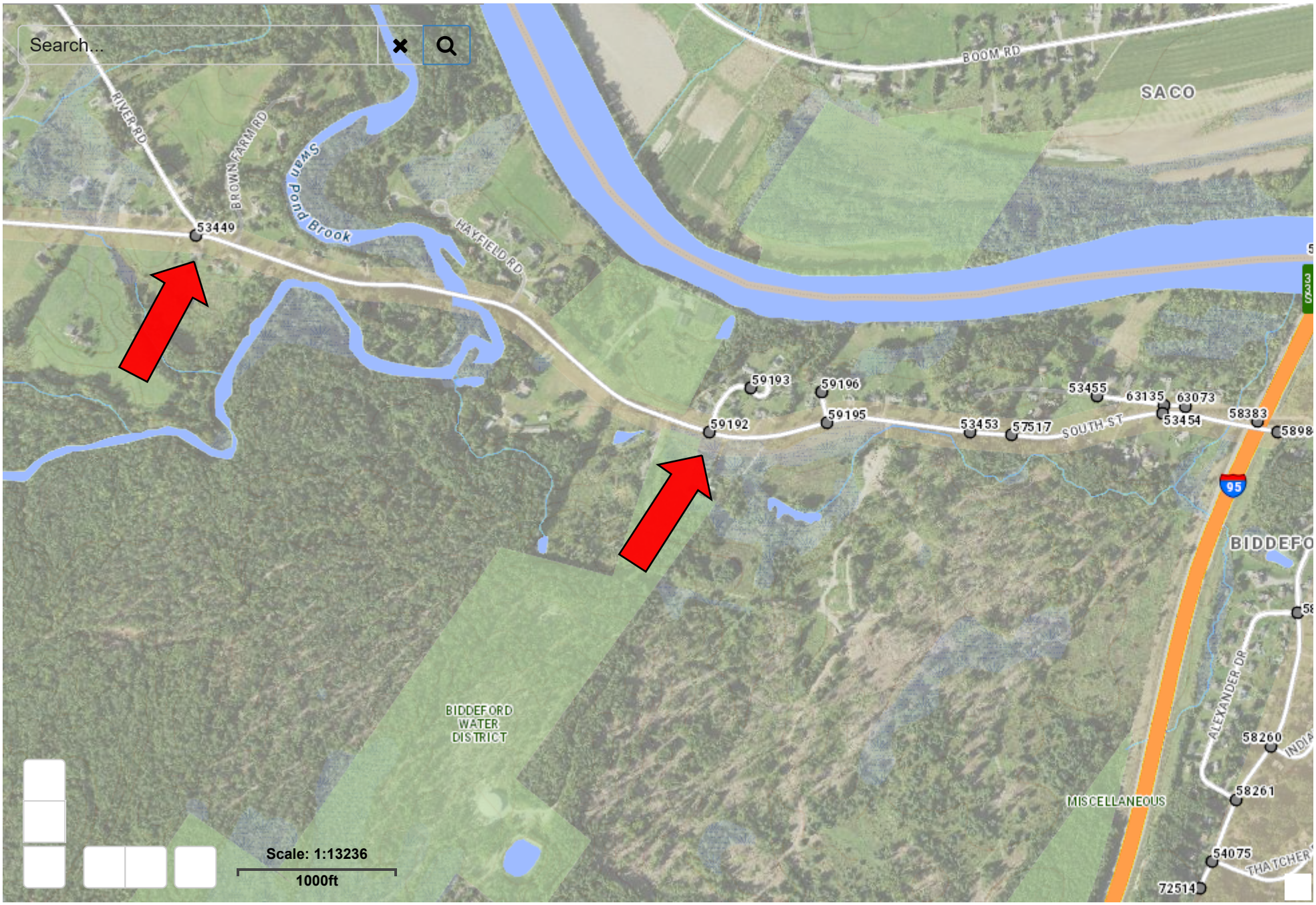
Study Period: 2019-2021

# of Crashes: 9 / CRF: 1.06

Prepared by Office of Safety & Mobility (MP 6/27/22)



705


Search...
BOOM RD
SACO
RIVER RD
BROWN FARM RD
Swan Pond Brook
HAYFIELD RD
53449
59193
59196
59195
59192
53455
63135
63073
53454
58383
53453
57517
SOUTH ST
95
BIDDEFO
BIDDEFORD WATER DISTRICT
ALEXANDER DR
58260
58261
MISCELLANEOUS
54075
72514
Scale: 1:13236
1000ft

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ Crash Summary I - Single Element	☐ Section Detail	☑ Crash Summary II	☐ 1320 Public	☐ 1320 Private	☐ 1320 Summary

REPORT DESCRIPTION

Biddeford
South St from River Rd to Fox Hollow Drive

REPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: 3110891	Start Node: 59192	Start Offset: 0	☑ Exclude First Node
	End Node: 53449	End Offset: 0	☑ Exclude Last Node

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
53449	59192	5076691	0 - 0.66	3110891 - 0.36	0.66	2	9	0	1	2	0	6	33.3	0.00817	367.03	347.25	1.06
Int of RIVER RD	SOUTH ST			RD INV 31 10891											Statewide Crash Rate: 159.73		
Study Years: 3.00				Section Totals:	0.66		9	0	1	2	0	6	33.3	0.00817	367.03	347.25	1.06

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
53449	59192	5076691	0 - 0.66	3110891 - 0.36	9	0	1	2	0	6	2019-75573	12/05/2019	0.53	PD
											2019-75639	10/23/2019	0.59	A
											2019-55369	06/11/2019	0.63	PD
											2021-34866	12/08/2021	0.81	PD
											2020-16988	07/18/2020	0.82	PD
											2019-62328	08/20/2019	0.94	PD
											2021-8073	03/31/2021	0.94	PD
											2021-34872	12/04/2021	0.98	B
											2020-20539	08/28/2020	1.01	B
				Totals:	9	0	1	2	0	6				

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM												PM												
	Hour of Day																								
Day Of Week	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	Un	Tot
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUESDAY	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
WEDNESDAY	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	3
THURSDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
Totals	1	0	0	0	0	0	0	0	1	0	0	0	2	1	0	0	2	0	0	0	1	0	1	0	0	9

Vehicle Counts by Type

Unit Type	Total
1-Passenger Car	6
2-(Sport) Utility Vehicle	1
3-Passenger Van	0
4-Cargo Van (10K lbs or Less)	0
5-Pickup	3
6-Motor Home	0
7-School Bus	0
8-Transit Bus	0
9-Motor Coach	0
10-Other Bus	0
11-Motorcycle	0
12-Moped	0
13-Low Speed Vehicle	0
14-Autocycle	0
15-Experimental	0
16-Other Light Trucks (10,000 lbs or Less)	0
17-Medium/Heavy Trucks (More than 10,000 lbs)	0
18-ATV - (4 wheel)	0
20-ATV - (2 wheel)	0
21-Snowmobile	0
22-Pedestrian	0

Unit Type	Total
23-Bicyclist	0
24-Witness	1
25-Other	0
26-Construction	0
27-Farm Vehicle	0
Total	11

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	1	1	0	0	0	0	2
Ran Off Roadway	1	0	0	0	0	0	1
Failed to Yield Right-of-Way	0	0	0	0	0	0	0
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	1	0	0	0	0	0	1
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	1	0	0	0	0	0	1
Failed to Keep in Proper Lane	0	0	0	0	0	0	0
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	5	0	0	0	0	0	5
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0
Total	9	1	0	0	0	0	10

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	6	1	0	0	0	0	7
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	1	0	0	0	0	0	1
Under the Influence of Medications/Drugs/Alcohol	1	0	0	0	0	0	1
Other	1	0	0	0	0	0	1
Total	9	1	0	0	0	0	10

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	2	0	0	0	0	2
20-24	3	0	0	0	0	3
25-29	2	0	0	0	0	2
30-39	1	0	0	0	0	1
40-49	1	0	0	0	0	1
50-59	0	0	0	0	0	0
60-69	1	0	0	0	0	1
70-79	0	0	0	0	0	0
80-Over	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Total	10	0	0	0	0	10

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	1	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	Total	10
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	1		
13-Motor Vehicle in Transport	2		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	1		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	2		
32-Utility Pole / Light Support	1		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	1		
36-Mailbox	1		
37-Other Post, Pole, or Support	0		

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	0
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	0
5-Stop Signs - Other	2
6-Yield Sign	0
7-Curve Warning Sign	2
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	5
14-Other	0
Total	9

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	1	1
B	2	2
C	0	0
PD	6	0
Total	9	3

Road Character

Road Grade	Total
1-Level	4
2-On Grade	4
3-Top of Hill	1
4-Bottom of Hill	0
5-Other	0
Total	9

Light

Light Condition	Total
1-Daylight	6
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	1
5-Dark - Not Lighted	2
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	9

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2019	2020	2021	Total
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	0	0	1	1
APRIL	0	0	0	0
MAY	0	0	0	0
JUNE	1	0	0	1
JULY	0	1	0	1
AUGUST	1	1	0	2
SEPTEMBER	0	0	0	0
OCTOBER	1	0	0	1
NOVEMBER	0	0	0	0
DECEMBER	1	0	2	3
Total	4	2	3	9

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	2	5	0	0	0	0	0	0	0	0	0	0	0	0	7
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	7	0	0	0	0	0	0	0	0	0	0	0	0	9

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	1	0	0	0	0	0	0	0	0	0	1	2
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	5	0	0	0	0	0	0	0	0	0	1	6
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	0	0	0	0	0	0	0	0	0	2	9

Attachment 13

Habitat Assessment

BASSWOOD ENVIRONMENTAL

January 9, 2022

Mr. Jeff Amos, P.E.
Terradyn Consultants, LLC
41 Campus Drive, Suite 101
New Gloucester, ME 04260

Re: South Street Village, Biddeford: Rare Plant Habitat Assessment

Mr. Amos,

An experienced botanist with Basswood Environmental LLC (Basswood) visited the parcel identified on Biddeford Tax Maps as Lot 8 on Map 7, located on the south side of South Street, west of I-95. The purpose of the site visit was to assess the area for potential habitat for endangered plant species with an emphasis on those identified by the Maine Natural Areas program (MNAP) in their review dated November 10, 2021.

Review and Background

The approximately 160-acre site is located in Biddeford, Maine, which overlaps the northern extent of the range for many plant species considered rare by MNAP. This site is also in close proximity to a large red maple swamp that is considered by MNAP to be an exemplary natural community and contains a high potential for rare plant species. The MNAP review identified 44 occurrences of 31 total species considered rare, threatened or endangered, as well as 8 rare or exemplary natural communities that have been located by past surveys within 4 miles of the parcel. It should be noted that this proximity includes some well-known habitats for rare species that are not relevant to this survey, such as the Saco Heath (raised level bog ecosystem, Atlantic white cedar bog, pitch pine bog), the Saco River (freshwater tidal marsh), and The Kennebunk Plains (sand barren habitat, pitch pine woodland).

A 2007 survey was performed by the Biddeford Conservation Commission of the lands to the west of the site that are associated with the exemplary red maple swamp identified on the MNAP review. This survey also included a portion of the current project area (identified as the Claire Property). The reviewer indicates that much of the site is in an early-successional state and lacks the diversity of the lands to the west, but may provide good habitat for wildlife species. The extent to which the surveyor explored all areas of the site in question is unclear from this report, however it does appear that at least some evaluation was performed across much of the parcel.

Site Description

The site possesses an interspersion of upland and wetland habitats throughout the area surveyed. Broad wetland swales are present in the areas between often dramatic local relief consisting of large bedrock outcrops and hills scattered throughout the site. The majority of the site has been disturbed at some point, with the southern portions having been recently cleared for timber harvesting. Exceptions to this are areas around small streams and drainages, and stands of small diameter trees, often hemlock (*Tsuga canadensis*) that were not cut. Other small pockets of intact forest are present surrounding Thacher Brook, which passes through the eastern portion of the site.

The northern half of the site has received more disturbance and has been maintained as a patchwork of cleared fields and unmaintained roads. This portion of the site exhibits old and ongoing excavations, an old farm pond/impoundment, a development site, and a small transmission line. Having been subject to greater disturbance over a longer period of time, these areas also exhibit greater infestation from invasive plant species such as Asian bittersweet (*Celastrus orbiculatus*) and multiflora rose (*Rosa multiflora*) than recently cleared areas in the south.

The wetlands on site are typically dominated by herbaceous vegetation consisting of disturbance tolerant species such as woolly bulrush (*Scirpus cyperinus*), fringed sedge (*Carex crinita*), loosened soft rush (*Juncus effusus* ssp. *solutus*), creeping bentgrass (*Agrostis stolonifera*), and sensitive fern (*Onoclea sensibilis*). Permanently saturated areas also commonly supported broad-leaved cattail (*Typha latifolia*), blue vervain (*Verbena hastata*), and marsh fern (*Thelypteris palustris* var. *pubescens*). Some scrub-shrub wetlands are present, most notable in the floodplain area around Thacher Brook. These are dominated by a mixture of speckled alder (*Alnus incana* ssp. *rugosa*), silky dogwood (*Cornus amomum* var. *amomum*), smooth arrowwood (*Viburnum dentatum* var. *lucidum*), and meadowsweet (*Spiraea alba* var. *latifolia*). Red maple (*Acer rubrum*) saplings are common throughout both upland and wetland portions of the site in association with the recently cleared areas as well.

Uplands in the recently cleared areas are dominated by typical pioneer species such as common blackberry (*Rubus allegheniensis*), sapling red maple, quaking aspen (*Populus tremuloides*), and intermittent stands of small diameter hemlock. Intact upland forested areas, such as those surrounding some portions of Thacher Brook and other small streams on site, consist of a mixed canopy of hemlock, white pine (*Pinus strobus*), red maple, red oak (*Quercus rubra*), and balsam fir (*Abies balsamea*). Upland forests in the northern portion of the site do not appear to have been subject to a recent harvest, however the species composition is that of pioneer and secondary species such as red maple and quaking aspen, indicating that much of this area is currently in an early-successional phase. Blue Ridge sedge (*Carex lucorum*) and New England sedge (*Carex novae-angliae*) are well represented throughout the uplands on site, as well as lowbush blueberry (*Vaccinium angustifolium*) and bristly blackberry (*Rubus hispidus*).

Maintained fields are composed of typical field species including an array of goldenrods (*Solidago* spp.), asters (*Symphyotricum* and *Doellingeria* spp., in part) and grasses such as lace lovegrass (*Eragrostis capillaris*), field meadow-foxtail (*Alopecurus pratensis*), common Timothy (*Phleum pratense*), and orchard grass (*Dactylis glomerata*). Wet swales within the fields exhibit similar marsh vegetation found elsewhere on site

RTE Plant Habitat Survey Results

Of the 8 natural communities identified by MNAP as rare or exemplary, none were located during the course of the site walk. An area of mapped Adams loamy sand in the northwestern interior portion of the site was investigated for sand barren habitat but none was located. Additionally, no peatland systems were located during the course of the site walk despite the large amount of wetland areas present. Some of the wetland areas that have been subject to tree clearing may have been dominated by a red maple overstory, however these do not exhibit any discernible direct connection to the exemplary red maple swamp to the west of the site, and no other indicators of rare or exemplary habitat were found within them. Of the 31 species thus identified by MNAP as occurring in the vicinity of the project area, 19 are associated with habitat that is not present on site. The remaining 12 species documented from the area cannot be ruled out due to either the presence of their typical habitat within the project area (e.g. old fields), or because they are a generalist species at the northern edge of their natural range, such as clothed sedge (*Carex vestita*), which is found in disturbed, open areas in southern Maine. Table 1 summarizes the species that would require a formal field survey during the appropriate time to locate on site. Note that several species, including button sedge, Long's bulrush, and sweet pepper-bush are included on this list, although it is in the author's opinion that the likelihood of these species being on this site are very low due to a lack of ideal habitat.

Table 1: Species Identified by MNAP with Suitable Habitat On-site

Scientific Name	Common Name	Optimal Survey Window	Comments
Carex bullata	Button sedge	June-October	Open wetlands, acidic bogs, unlikely to occur but possible
Carex vestita	Clothed sedge	May-July	Disturbed areas, ATV trails, transmission corridors
Selaginella apoda	Creeping spike moss	May-October	Open wetlands, roadsides, disturbed wet areas
Scirpus georgianus	Georgia bulrush	June-August	Open wetlands
Scirpus longii	Long's bulrush	May-October	Unlikely - associated with fen habitat
Kalmia latifolia*	Mountain laurel	Year-round	Rocky woodland species
Platanthera flava var. herbiola	Pale green orchis	July	Wetlands throughout site may support species
Scirpus pendulus	Pendulous bulrush	July-August	Open wetlands, found associated with disturbance
Quercus coccinea	Scarlet oak	May-October	Potentially found in intact woodlands

Calamagrostis cinnoides	Small reed grass	August-October	Wetlands in old fields may provide habitat
Ilex laevigata*	Smooth winterberry holly	May-October	Suitable habitat along Thacher Brook
Clethra alnifolia	Sweet pepper-bush	July-September	Associated with calcareous soils - unlikely to occur on site

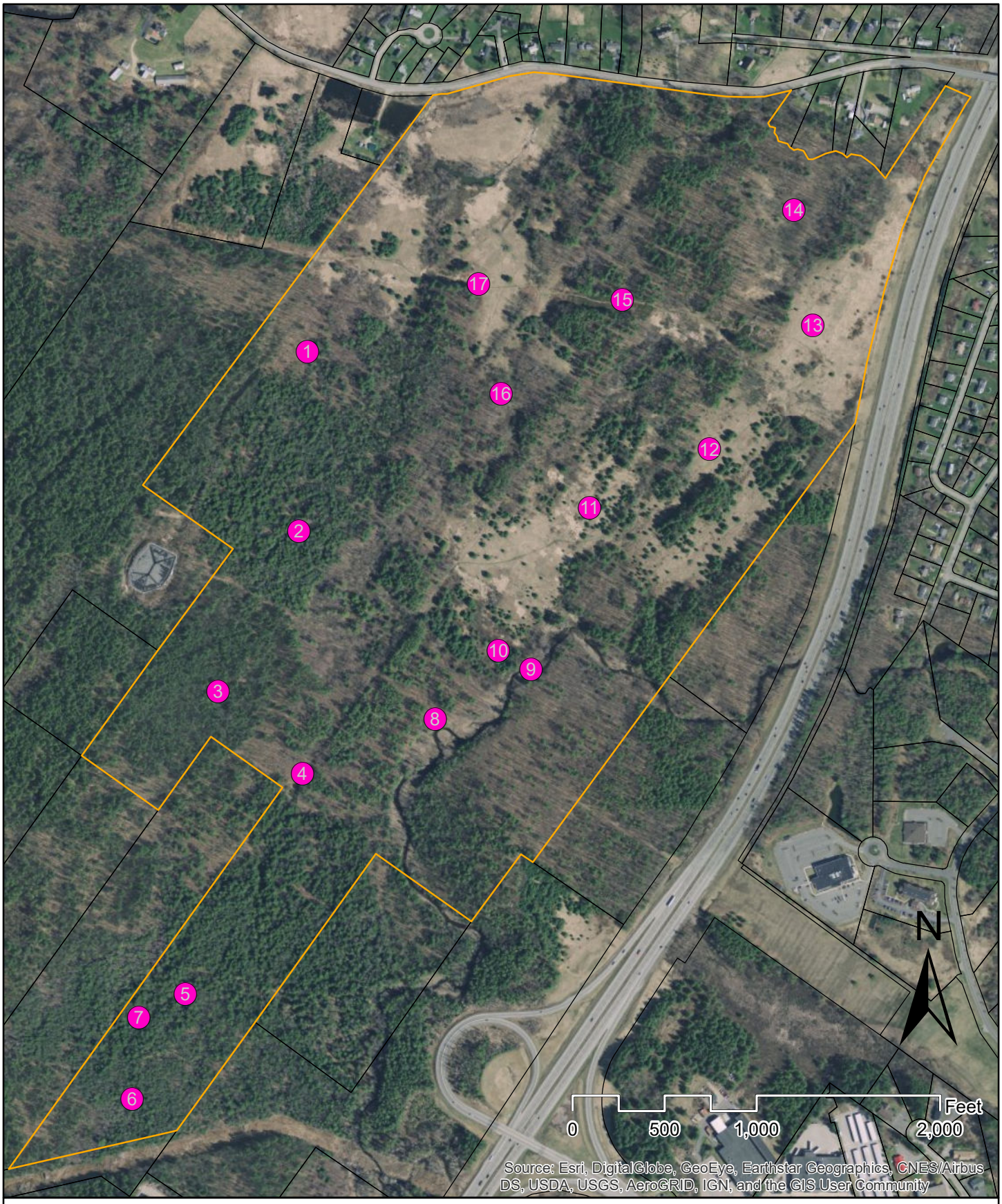
**Kalmia latifolia* is an evergreen shrub that is identifiable year-round, but was not observed during the initial site walk.
***It is possible to identify *Ilex laevigata* as long as fruit are present (through early January), although none were located during the site walk. Survey during the growing season is preferred for better possible detection.

If there is additional detail or clarity that Basswood can provide regarding the summary report, please do not hesitate to contact Erik Lema at erik@basswoodenv.com.

Best regards,

Erik Lema NHCWS#286, Owner/Principal
Basswood Environmental LLC

Attachments:
1: Index Map and Photolog
2: MNAP Review.



Proposed South Street Village

Rare Plant Species Habitat Survey

Parcel Boundary (MEGIS)

Photo Locations

Note: Aerial image taken circa 2019, prior to extensive tree clearing

BASSWOOD ENVIRONMENTAL



Photo 1: Recently logged area, early successional shrub and forb vegetation.



Photo 2: Typical wet swale area in the recently harvested portion of the property. Highly disturbed. Many of these areas were likely not wetlands prior to harvest and disturbance.



Photo 3: Inundated portion of harvested area, potential vernal pool.



Photo 4: Former seldom used ATV trail according to the 2007 Biddeford Conservation Commission report, now approximately 25-foot-wide logging road.



Photo 5: Potential vernal pool, low quality, likely too shallow.



Photo 6: Naturally occurring wetland at far southern end of property, some sphagnum/peat development.



Photo 7: Wetland impounded by adjacent logging road, some amphibian habitat.



Photo 8: Thacher Brook from intact buffer area. Note scrub-shrub floodplain around brook.



Photo 9: View of harvested area across Thacher Brook at crossing point. Inaccessible by foot at time of survey.



Photo 10: Logged area in foreground leading to Thacher Brook, extensive alder swamp in rear of photo around the brook itself.



Photo 11: Maintained field in northern portion of the site, view south.



Photo 12: View northeast toward I-95 across maintained field.



Photo 13: Extensive field adjacent to the transmission line.



Photo 14: Early-mid successional forest in the northeast portion of the site.



Photo 15: Wetland along transmission line, structurally diverse.

	Photo 16: Disturbed area with past excavations, facing south into the recently harvested areas.

	Photo 17: Old road adjacent to the transmission line. This area is highly disturbed and is under current use in conjunction with the maintained area along South Street in the northwest corner of the site.

Attachment 14

MDIF & Unusual Natural Areas Correspondence

JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
353 WATER STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

JUDITH CAMUSO
COMMISSIONER

December 16, 2021

Craig Sweet
Terradyn
565 Congress Street, Suite 201
Portland, ME 04101

RE: Information Request – Hidden Hills Manufactured Housing Park Project, Biddeford

Dear Craig:

Per your request received on November 08, 2021, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and inland fisheries habitat concerns within the vicinity of the *Hidden Hills Manufactured Housing Park* project in Biddeford. Please note that as project details are lacking our comments should be considered preliminary. Per your letter, no Significant Vernal Pools were found on site; note that all survey forms should be submitted to our Agency for review well before the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

Our Department has not mapped any Essential Habitats that would be directly affected by your project.

Endangered, Threatened, and Special Concern Species

Bat Species – Of the eight species of bats that occur in Maine, the three *Myotis* species are protected under Maine's Endangered Species Act (MESA) and are afforded special protection under 12 M.R.S §12801 - §12810. The three *Myotis* species include little brown bat (State Endangered), northern long-eared bat (State Endangered), and eastern small-footed bat (State Threatened). The five remaining bat species are listed as Special Concern: big brown bat, red bat, hoary bat, silver-haired bat, and tri-colored bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during migration and/or the breeding season. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

Blanding's Turtle - Multiple occurrences of Blanding's turtles, a State Endangered species, have been documented in the immediate vicinity and within the proposed project area. In Maine, Blanding's turtles are found most frequently in complexes of small, vernal pools, acidic wetlands and larger marsh complexes in large blocks of forested habitat. Development activity that compromises riparian integrity or migration permeability among seasonally critical wetlands can lead to degradation of habitat quality and potential loss of local populations. Additionally, development projects that lead to significant increases in local traffic volume will likely lead to increased roadkill and possible extirpation of the local population. If these habitats are present in the project area, we recommend that they be avoided and adequately buffered with a 250-foot undisturbed, intact vegetative cover. MDIFW is willing to work closely with the applicant to design a project that attempts to limit potential impacts to this listed species.

Significant Wildlife Habitat

Deer Wintering Areas (DWAs) – The project search area intersects with a DWA. DWAs contain habitat cover components that provide conditions where deer find protection from deep snow and cold wind, which is important for overwinter survival. MDIFW recommends that development projects be designed to avoid losses or impacts to the continued availability of coniferous winter shelter. Any removal of vegetation should be conducted in such a way that improves the quality and vigor of the coniferous species providing this winter shelter.

Fisheries Habitat

We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams that support coldwater fisheries is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e. natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fisheries and aquatic habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional consultation with the municipality, and other state resource agencies including the Maine Natural Areas Program, Maine Department of Marine Resources, and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,



Becca Settele
Wildlife Biologist

BEGINNING WITH HABITAT

Legend

- City/Township
- 1
- 2
- Watershed Divide (HUC 12)
- Watershed Divide (HUC 10)
- Watershed Divide (HUC 8)
- Watershed Divide (HUC 6)
- Wetlands
- Great Ponds
- Streams_Buffers_75ft
- Shellfish Beds
- Public Water Supply Wells
- Source Protection
- Aquifers
- ETSC Animal Habitat Buffers
- Rare Plants and Natural Communities
- Natural Communities
- Wild Brook Trout Habitat
- Atlantic Salmon Rearing Habitat
- Atlantic Salmon Spawning Habitat
- Roseate Tern, Piping Plover or Least Tern Nesting Areas
- Deer Wintering
- Inland Wading Bird and Waterfowl Habitat
- Wildlife Wetlands
- Seabird Nesting Island
- Shorebird Habitat
- Tidal Wading Bird and Waterfowl Habitat
- Significant Vernal Pools
- Less than 2000 Vehicles/Day
- More than 2000 Vehicles/Day
- Less than 2000 Vehicles/Day
- More than 2000 Vehicles/Day
- Undeveloped Habitat Blocks
- Highway Bridge Connectors
- Maine Conserved Lands
- Federal
- Municipal
- Water Dist., etc.
- Private
- State
- Conserved Lands Easements
- Focus

State of Maine

The Nature Conservancy
Protecting nature. Preserving life.

Maine Audubon

Maine Coast Heritage Trust
A Statewide Land Conservation Organization

SWOAM

MaineDOT

0 1,300 2,600 5,200 7,800 ft

N W E S

Supported in part by Maine Outdoor Heritage Fund lottery ticket sales

Map Prepared by Maine Department of Inland Fisheries & Wildlife
October 2021

Supported in part by Loon Conservation Plate funds

TERRADYN
CONSULTANTS, LLC

Pineland
Cumberland Hall
41 Campus Drive, Suite 301
New Gloucester, ME 04260

Portland
565 Congress Street, Suite 201
Portland, ME 04101

October 20, 2021 2113

Lisa St. Hilaire, Information Manager
Maine Natural Areas Program
Department of Agriculture, Conservation and Forestry
93 State House Station
Augusta, ME 04333

REQUEST FOR PROJECT REVIEW
HIDDEN HILLS MANUFACTURED HOUSING PARK
413 SOUTH STREET, BIDDEFORD, MAINE

Dear Lisa:

Terradyn Consultants, LLC has been retained by South Street Village, LLC to prepare civil-site plans and permit applications for a proposed manufactured housing park on a portion of their property in Biddeford, Maine located on the south side of South Street, just west of the Maine Turnpike. The applicant's property is approximately 312 acres and is shown as Lot 8 on the City of Biddeford Tax Map 7, but the project is limited to approximately 160 acres that is located within a manufactured housing park overlay zone. The project will include the development of approximately 190 manufactured housing lots as well as the associated road network, utilities, stormwater facilities & amenities.

Freshwater wetlands and streams as well as a vernal pool assessment were identified on the project site by Mark Hampton Associates, Inc. There were no significant vernal pools found on the project site. Thatcher Brook is located on the back portion of the property but is not located within the development area.

We are requesting an environmental site review to determine if the project will have an impact on resources or habitat in the vicinity of the proposed project. Attached is an excerpt of the USGS topographic map with the project site identified.

Please contact me at jeff@terradynconsultants.com or (207) 272-7571 if you have any questions or if you need additional information to complete your review.

Sincerely,
TERRADYN CONSULTANTS, LLC

Jeff Amos, P.E.

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

November 10, 2021

Jeff Amos
Terradyn Consultants
565 Congress Street, Suite 201
Portland, ME04101

Via email: jeff@terradynconsultants.com

Re: Rare and exemplary botanical features in proximity to: Hidden Hills Manufactured Housing Park, 413 South Street, Biddeford, Maine

Dear Mr. Amos:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received October 20, 2021 for information on the presence of rare or unique botanical features documented from the vicinity of the property in Biddeford, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, the property is in close proximity to a mapped Red Maple Swamp. Activities within 250-feet of wetlands associated with this Red Maple Swamp can adversely impact this exemplary wetland. MNAP recommends avoiding development activity within 250-feet of the Red Maple Swamp and its associated mapped wetlands. Please see the table below, attached map, and attached factsheet for more information.

Feature	State Status	State Rank	Global Rank	Occurrence Rank	Site
Red Maple Swamp (*Red Maple – Sensitive Fern Swamp*)	N/A	S5	G3G5	A Excellent	West Biddeford Black Gum Swamp

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
90 BLOSSOM LANE, DEERING BUILDING

PHONE: (207) 287-8044
WWW.MAINE.GOV/DACF/MNAP

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

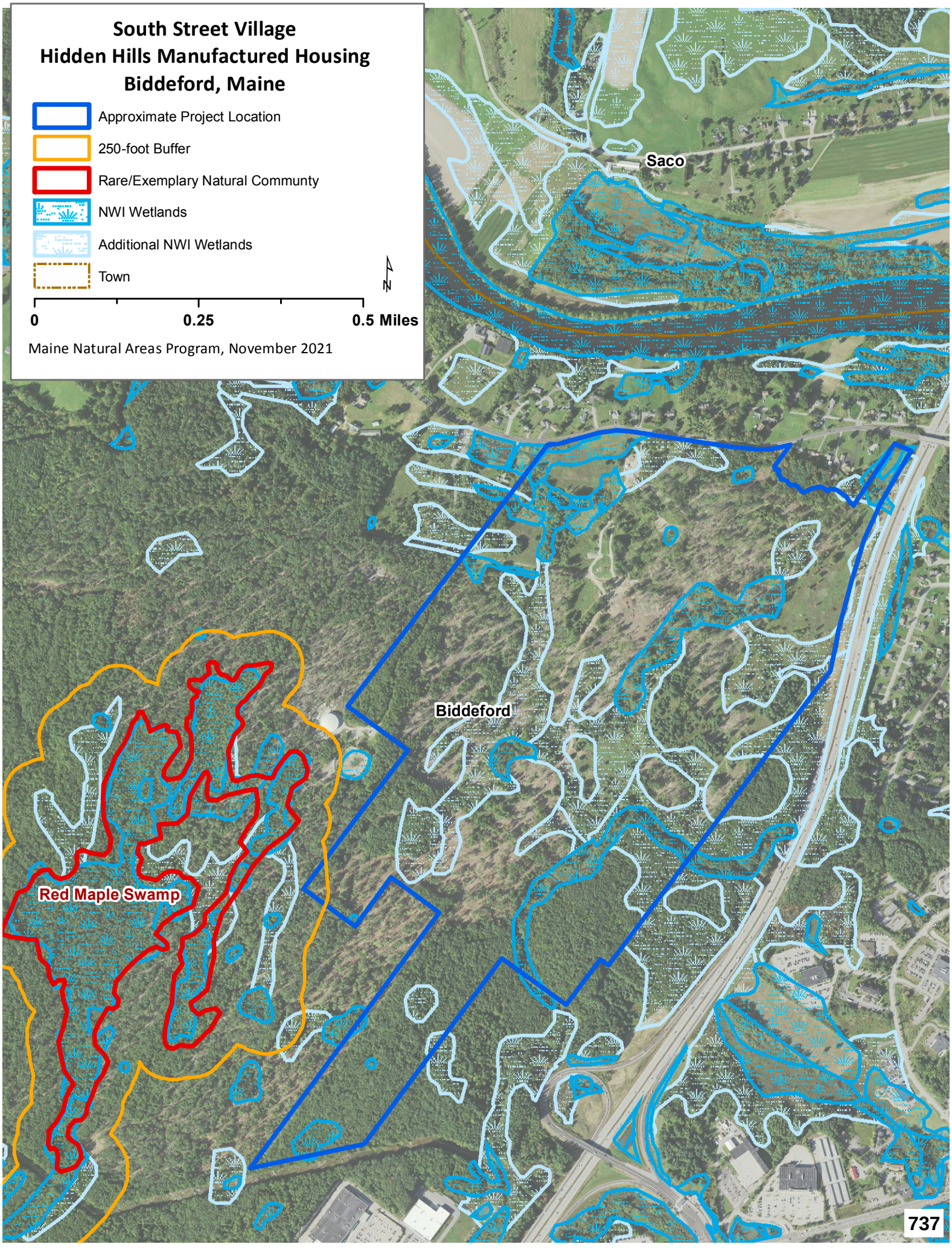
The Maine Natural Areas Program has instituted a fee structure of $75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for $225.00 for three hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Kristen Puryear | Ecologist | Maine Natural Areas Program
207-287-8043 | kristen.puryear@maine.gov


South Street Village
Hidden Hills Manufactured Housing
Biddeford, Maine
Approximate Project Location
250-foot Buffer
Rare/Exemplary Natural Community
NWI Wetlands
Additional NWI Wetlands
Town
N
0
0.25
0.5 Miles
Maine Natural Areas Program, November 2021
Saco
Biddeford
Red Maple Swamp
737



Red Maple Swamp

State Rank S5

Community Description

Red maple dominates the somewhat open to nearly closed canopy (20-90% closure), sometimes with a relatively large component (up to 40% cover) of balsam fir, red spruce, or northern white cedar. Green ash and yellow birch are common, but rarely abundant, associates. The maples may be widely spaced with multiple trunks and arching crowns. The shrub layer is patchy; winterberry is common and various other shrubs may be locally abundant. The herb layer is well developed and dominated by herbs, with dwarf shrubs <20% of herb cover. Bluejoint and sensitive fern are characteristic herbs. The bryoid layer is usually <35% cover; peat mosses are typical but do not form extensive, deep carpets as they do in peatlands.

Soil and Site Characteristics

Sites occupy mineral soils or well decomposed organic material over mineral soil on flats or gentle slopes in small basins, often on floodplains of streams to small rivers. Soils are typically 30-60 cm deep, loamy to silty in texture, sometimes with well decomposed muck over the mineral fraction, and pH 4.8-5.4.

Diagnostics

These are mineral soil wetlands in which red maple dominates the canopy or is co-dominant with conifers other than black spruce or larch. The seasonally flooded soils usually remain saturated through the growing season.

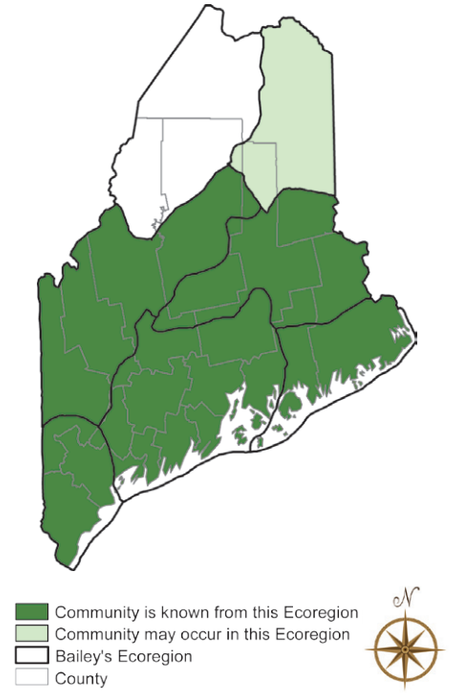


Red Maple Flowers

Similar Types

Red Maple Wooded Fens are similar, but either occur in association with large peatlands or occupy small somewhat peaty basins; they do not occur on mineral soils. Some small Northern White Cedar Swamps and Spruce - Fir - Cinnamon Fern Forests, particularly along the coast, include a fair amount of red maple but have cedar or spruce/fir, respectively, as the most abundant canopy species. Silver Maple Floodplain Forests are dominated by silver maple and generally occur along larger rivers, but the two types can intergrade on some floodplains.

Location Map





Red Maple Swamp

Conservation, Wildlife, and Management Considerations

Maintaining the hydrologic integrity of these stream drainages with upland buffers is key. These swamps typically have had few conflicting uses, although some have been recently harvested. ATV use has been observed at some sites.

Red maple swamps often provide habitat in which spotted turtles hibernate. If wet Sphagnum hummocks are present, four-toed salamanders may breed in this community. Examples that occur on floodplains of streams and small rivers may contain wood turtles, which overwinter in the stream channel and forage in the floodplain. The silver-haired bat often roosts in riparian habitats in trees with loose bark. The northern waterthrush is a common associate of this community type. In the southern part of the state, the Louisiana waterthrush and yellow-throated vireo may be associates if the canopy is closed or nearly so.

Distribution

Statewide, but most common in the southern half of state. Extends southward and southwestward from Maine; eastward distribution unknown.

Landscape Pattern: Large Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Canopy
Balsam fir
Gray birch
Northern white cedar
Red maple*
Red spruce

Sapling/shrub
Arrowwood*
Balsam fir
Gray birch*
Red spruce
Speckled alder*
Winterberry*

Herb
Bluejoint*
Flat-topped white aster*
Interrupted fern
Tussock sedge
Royal fern*
Sensitive fern*

Bryoid
Sphagnum mosses*

Associated Rare Plants

Smooth winterberry holly
Spicebush
Swamp saxifrage
Swamp white oak
Sweet pepper-bush

Associated Rare Animals

Spotted turtle
Wood turtle

Examples on Conservation Lands You Can Visit

- Kennebunk Plains Preserve – York Co.
- Mt Agamenticus – York Co.
- Steep Falls Wildlife Management Area – Cumberland Co.
- Waterboro Barrens Preserve – York Co.

Rare and Exemplary Botanical Features within 4 miles of

Project: South Street Village LLC, Hidden Hills Manufactured Housing Park, 413 South Street, Biddeford, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Atlantic White Cedar						
	SC	S2	G4	2017-07-26	3	Forested wetland
Atlantic White Cedar Bog						
	<null>	S1	G3G4	2017-07-26	3	Forested wetland
Beach Plum						
	E	S1	G4	1932-09	12	Rocky coastal (non-forested, upland)
	E	S1	G4	1933-06-21	9	Rocky coastal (non-forested, upland)
Brackish Tidal Marsh						
	<null>	S3	GNR	2009-07-29	1	Tidal wetland (non-forested, wetland)
Button Sedge						
	SC	S2	G5	1880-09-06	2	<null>
	SC	S2	G5	2017-07-26	5	<null>
	SC	S2	G5	2000-08-15	3	<null>
Clothed Sedge						
	E	S1	G5	2006-06-07	7	Dry barrens (partly forested, upland)
	E	S1	G5	2006-06-16	8	Dry barrens (partly forested, upland)
Creeping Spike-moss						
	E	S2	G5	1920-07-30	6	Open wetland, not coastal nor rivershore (non-forested, wetland),Old field/roadside (non-forested, wetland or upland)
Estuary Bur-marigold						
	SC	S3	G4	2009-07-30	35	Tidal wetland (non-forested, wetland)
Freshwater Tidal Marsh						
	<null>	S2	G4?	2009-07-30	1	Tidal wetland (non-forested, wetland)

Rare and Exemplary Botanical Features within 4 miles of
Project: South Street Village LLC, Hidden Hills Manufactured Housing Park, 413 South Street, Biddeford, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Georgia bulrush						
	SC	SU	G5	2007-08-22	4	<null>
Horned Pondweed						
	SC	S2	G5	1907-08-18	10	Tidal wetland (non-forested, wetland)
	SC	S2	G5	2000-08-28	15	Tidal wetland (non-forested, wetland)
Lilaeopsis						
	SC	S2	G5	2012-10-21	10	Tidal wetland (non-forested, wetland)
Long's Bulrush						
	T	S2	G3	2017-07-26	10	Open wetland, not coastal nor rivershore (non-forested, wetland)
Long-spined Sandbur						
	PE	SH	G5	1984	1	Rocky coastal (non-forested, upland)
Mountain-laurel						
	SC	S2	G5	1991-09-28	11	Conifer forest (forest, upland),Hardwood to mixed forest (forest, upland)
Mudwort						
	SC	S3	G5	2009-07-30	35	Tidal wetland (non-forested, wetland)
Northern Blazing Star						
	T	S1	G5?T3	1916-08-10	3	Dry barrens (partly forested, upland)
Pale Green Orchis						
	SC	S2	G4?T4Q	2008-06-27	52	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
	SC	S2	G4?T4Q	2008-06-27	53	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
	SC	S2	G4?T4Q	2008-06-27	54	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
Parker's Pipewort						

Rare and Exemplary Botanical Features within 4 miles of
Project: South Street Village LLC, Hidden Hills Manufactured Housing Park, 413 South Street, Biddeford, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
	SC	S3	G3	2017-08-31	33	Tidal wetland (non-forested, wetland)
Pendulous Bulrush						
	SC	S2	G5	2008-06-28	8	Open wetland, not coastal nor rivershore (non-forested, wetland),Old field/roadside (non-forested, wetland or upland)
Pitch Pine Bog						
	<null>	S2	G3G5	2017-07-26	4	Forested wetland,Coastal non-tidal wetland (non-forested, wetland)
	<null>	S2	G3G5	2015-09-29	20	Forested wetland,Coastal non-tidal wetland (non-forested, wetland)
Pitch Pine Woodland						
	<null>	S3	G2	2016-08-09	30	Rocky summits and outcrops (non-forested, upland)
Pocket Swamp						
	<null>	S2	G5	2004	18	Forested wetland,Hardwood to mixed forest (forest, upland)
Pygmyweed						
	SC	S2S3	G5	2009-07-29	25	Open water (non-forested, wetland)
Raised Level Bog Ecosystem						
	<null>	S4	GNR	2017-07-26	3	Forested wetland,Open wetland, not coastal nor rivershore (non-forested, wetland)
Red Maple Swamp						
	<null>	S5	G3G5	2007-06-05	17	Forested wetland
Saltmarsh False-foxglove						
	SC	S3	G5	1982	8	Tidal wetland (non-forested, wetland)
	SC	S3	G5	1982	12	Tidal wetland (non-forested, wetland)
	SC	S3	G5	1982	9	Tidal wetland (non-forested, wetland)
Scarlet Oak						
	E	S1	G5	1916-08	4	Hardwood to mixed forest (forest, upland)

Rare and Exemplary Botanical Features within 4 miles of
Project: South Street Village LLC, Hidden Hills Manufactured Housing Park, 413 South Street, Biddeford, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Schreber's Wood-aster						
	PE	SX	G4	1894-09	1	Rocky coastal (non-forested, upland)
Slender Blue Flag						
	T	S2	G4G5	1879-08	4	Tidal wetland (non-forested, wetland)
Small Reed Grass						
	SC	S3	G5	1998-01-01	9	Old field/roadside (non-forested, wetland or upland)
	SC	S3	G5	2000-08-15	12	Old field/roadside (non-forested, wetland or upland)
Smooth Winterberry Holly						
	SC	S3	G5	1916-08-10	10	Forested wetland
	SC	S3	G5	2018-09-15	24	Forested wetland
	SC	S3	G5	2009-07-05	39	Forested wetland
	SC	S3	G5	2004	36	Forested wetland
Southern Slender Ladies'-tresses						
	PE	SH	G5T4T5	1918-08-27	1	Dry barrens (partly forested, upland)
Spongy-leaved Arrowhead						
	SC	S3	G5T4	2012-10-21	42	Tidal wetland (non-forested, wetland)
Stiff Arrowhead						
	SC	S2	G5	2006-06-16	15	Tidal wetland (non-forested, wetland)
Sweet Pepper-bush						
	SC	S2	G5	1917-09	9	Hardwood to mixed forest (forest, upland),Forested wetland
Water Pimpernel						
	SC	S3	G5T5	2012-10-21	26	Tidal wetland (non-forested, wetland)

Rare and Exemplary Botanical Features within 4 miles of

Project: South Street Village LLC, Hidden Hills Manufactured Housing Park, 413 South Street, Biddeford, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
White-topped Aster						
	E	S1	G5	1916-08-10	4	Dry barrens (partly forested, upland)
Yellow Wild Indigo						
	PE	SH	G5	1960-06-21	2	Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)

Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of 1 to 5. Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 **G1**	**Critically Imperiled** – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 **G2**	**Imperiled** – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 **G3**	**Vulnerable** – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 **G4**	**Apparently Secure** – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 **G5**	**Secure** – At very low risk or extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX **GX**	**Presumed Extinct** – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH **GH**	**Possibly Extinct** – Known from only historical occurrences but still some hope of rediscovery.
S#S# **G#G#**	**Range Rank** – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU **GU**	**Unrankable** – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR **SNR**	**Unranked** – Global or subnational conservation status not yet assessed.
SNA **GNA**	**Not Applicable** – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems.
Qualifier	**Definition**
S#? **G#?**	**Inexact Numeric Rank** – Denotes inexact numeric rank.
Q	**Questionable taxonomy that may reduce conservation priority** – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The "Q" modifier is only used at a global level.
T#	**Infraspecific Taxon (trinomial)** – The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	**Endangered** – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	**Threatened** – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	**Special Concern** – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	**Potentially Extirpated** – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	**Excellent** – Excellent estimated viability/ecological integrity.
B	**Good** – Good estimated viability/ecological integrity.
C	**Fair** – Fair estimated viability/ecological integrity.
D	**Poor** – Poor estimated viability/ecological integrity.
E	**Extant** – Verified extant, but viability/ecological integrity not assessed.
H	**Historical** – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	**Extirpated** – Documented loss of population/destruction of habitat.
U	**Unrankable** – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	**Not Ranked** – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information
http://www.maine.gov/dacf/mnap

Attachment 15

Vernal Pool Report & Wetland Delineation

MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

5365
May 18, 2020

Mr. Matthew Chamberlain
South Street Village LLC
762 Main Street
South Portland, ME 04106

Re: Vernal Pool Assessment, 175 acre portion of parcel on South Street Biddeford, ME

Dear Matthew,

I have completed a vernal pool assessment on a 175+/- acre portion of a parcel located off South Street Biddeford, ME. The vernal pool assessment was conducted in accordance with Chapter 335 Significant Wildlife Habitat, Section 9 Significant Vernal Pools for the Maine Department of Environmental Protection. This section outlines the definition of a vernal pool as well as the requirements of a vernal pool to meet the definition of significance as related to the number of amphibian egg masses counted during the breeding season.

Two site visits were made to the property over the course of six weeks beginning the first week in April. There were no vernal pools found on the property.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton C.S.S., L.S.E.
Certified Soil Scientist #216
Licensed Site Evaluator #263

P.O. BOX 1931 • PORTLAND, ME 04104-1931 • 207-756-2900 • mhampto1@maine.rr.com

Quality services that meet your deadline

5365 MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

November 11, 2022

Mr. Matthew Chamberlain
South Street Village LLC
762 Main Street
South Portland, ME 04106

Re: Review of "Rapid Reconnaissance Survey, September 2022"

Dear Matthew,

At your request, I have reviewed the document you forwarded to me entitled, "Rapid Reconnaissance Survey of Two Parcels in Western Biddeford, 2022", prepared by Mr. Mark Ward and prepared for the Biddeford Conservation Commission. Based upon the comments made in the report, the consultant, at the request of the Biddeford Conservation Commission, made two cursory, 1-day walkovers of two parcels totaling more than 300 acres once in 2007 and then 15 years later, in August of this year. It is clear that the consultant did not have any documents related to the project under consideration for development of the property, which were of public record at the time of the field review and which should have been the focus of his reconnaissance.

Consequently, all the comments made in this document have to be taken as a broad brush assessment, and not detailed in anyway to make any judgment of the work I completed for you. I spent more than 21 days on the northern half of the property, the location of the proposed housing development, completing a full range of natural resource assessments. All of the issues raised by the consultant noted in photos and waypoint locations shown in figures in his report are located in the southern half of the total parcel.

In my professional opinion, this document should not be any negative impact on the local and state review of your project. It is very clear that the consultant had few if any issues with the northern half of the overall parcel, which is exactly where your proposed project is located.

Sincerely,

Mark J. Hampton, C.S.S., L.S.E.
Certified Soil Scientist, #216
Licensed Site Evaluator #263

P.O. BOX 1931 • PORTLAND, ME 04104-1931 • 207-756-2900 • mhampto1@maine.rr.com

Quality services that meet your deadline

SACO RIVER

SOUTH STREET

OLD HOLLIS ROAD

MAINE TURNPIKE

THREAD OF
THATCHER BROOK

DRAWING LEGEND

- PARCEL PROPERTY LINE
- ABUTTER PROPERTY LINE
- WETLANDS
- 100 INDEX CONTOUR
- 101 INTERMEDIATE CONTOUR

GRAPHIC SCALE

200 0 100 200 400 800

1 inch = 200 ft.

DATE: MAY 6, 2021

MARK HAMPTON ASSOCIATES, INC.
P.O. BOX 1931
PORTLAND, MAINE 04104

SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE

WETLAND DELINEATION

SOUTH STREET, BIDDEFORD, MAINE

Attachment 16

Open Space Management Plan

Open Space Management Plan:

The applicants intend to outline the open space management plan within the final Park Management Plan. The following is their preliminary language for your review:

The open space for the park includes all areas within the borders of the park that is not located on one of the designated lots, maintenance areas, recreational area, or in any street right of way. It shall be managed as follows:

The open space in the park shall be for the recreational use of park residents and guests only.

It shall be maintained in its natural state unless it creates a fire hazard, at which time it will be addressed accordingly.

Walking trails are permitted to be constructed with permission from the owner. Trails to be constructed only of bark mulch or other similar low-impact materials. No trails allowed within designated forested buffer areas.

No wetland alterations are permitted and no crossing of wetland in the form of a trail system will be permitted

Every other year Hidden Hill will hire an arborist to walk the open space to determine the existence of an invasive species and deal with appropriately, as well as identify any dead or dying trees that should be removed.

All leach field beds will be inspected every 5 years for concerns of possible failure/leakage.

Street drains will be inspected/cleaned every other year to maintain and confirm proper functioning.

Every year inspect retaining pond to maintain and or repair as needed

Once a year pick up and remove fallen limbs and branches from the cemetery and mow grass as needed.

Attachment 16

Park Management Plan

Hidden Hills Housing Park

Biddeford Maine

Hidden Hills Housing Park
COMMUNITY RULES

Effective: _____

Table of Contents **Pg**

INTRODUCTION **3**

A. RIGHTS & RESPONSIBILITIES **3**

1. Age-Restricted Community 3
2. Management Rights 3
3. Services Provided by Management 3
4. Tenant Complaints and Concerns 4
5. Safeguards and Alterations, Installations, or Construction 4
6. Liability and Indemnity 4
7. Insurance Coverage 4

B. ENFORCEMENT OF RULES **4**

1. In General 4
2. Violations 4
3. Costs and Fees for Non-compliance 5
4. Termination of Tenancy 5

C. COMMUNITY TENANCY; ENTRANCE FEE; SUBLETTING **5**

1. Application for Tenancy 5
2. Entrance Fee 5
3. Subletting Prohibited 5

D. RENT & OTHER CHARGES; PAYMENT **6**

1. Rent 6
2. Returned Checks 6
3. Failure to Pay 6
4. Taxes 6

E. OCCUPANCY **6**

1. Owner Occupancy; Number of Occupants 6
2. Additional Occupants 6
3. Visitors 6
4. Restrictions on Visitors and Occupants 6

F. CONDUCT & COMPLIANCE WITH RULES **7**

1. Prohibitions. 7
2. Quiet Hours 7
3. Dealing with Neighbors 7
4. Vacant Lots. 7
5. Property Damage 7

G. CHILDREN **8**

1. Responsibility 8
2. Supervision and Conduct of Children 8

H. PETS & OTHER ANIMALS **8**

1. Responsibility 8
2. Types and Registration of Animals 8
3. Care of Pets 9
4. Removal of Animals 9

I. HOME OCCUPATIONS & BUSINESSES PROHIBITED **9**
1. Prohibition 9
2. Yard Sales 9
J. CONDITION OF HOMES IN THE COMMUNITY **9**
1. In General 9
2. Standards 9
3. Appearance 9
4. Utility Access 10
5. Pests 10
6. Numbering 10
7. Porches, Decks, Other Additions and Improvements 10
8. Fire Prevention 11
9. General Aesthetic Standards and Compliance 11
10. Homes Damaged by Fire 11
K. CARE OF GROUNDS **11**
1. General Lot Maintenance 11
2. Protection of Stormwater Facilities 12
3. Lawns 12
4. Gardens, Shrubs, and Trees 12
5. Trash Removal 12
6. Snow Removal 12
7. Clotheslines 12
8. Playground Equipment; Temporary Enclosures 13
9. Swimming Pools 13
10. Signs Restrictions 13
11. Firewood 13
L. UTILITIES **13**
1. Water and Sewer Service 13
2. Prevention of Water Line Freezing 13
3. Septic System 13
4. Electrical Service 13
5. Fuel Tanks 14
6. Tampering with or Disconnection of Utilities 14
M. MOTOR VEHICLES **14**
1. Registration 14
2. Maintenance of Vehicles 14
3. Speed Limit and Safe Driving 14
4. Commercial and Recreational Vehicles 14
5. Parking 14
N. REPLACEMENT HOMES **15**
1. Replacing a Home Already in the Community 15
O. TRANSFER OF HOMES **15**
2. Requirement of Full Payment 15
3. Sale of Manufactured Housing/Requirements for Sale 15
P. SEVERABILITY **15**
Q. OPEN SPACE **16**

APPENDED: COMMUNITY FEE SCHEDULE

ANY VIOLATION OF THESE RULES MAY BE A CAUSE FOR TERMINATION OF OCCUPANCY (EVICTION). PLEASE READ ALL RULES CAREFULLY.

RULES INTRODUCTION

South Street Village, LLC, the owner of Hidden Hills Manufactured Home Community (referred to herein as the "Community"), intends to maintain and operate Hidden Hills as a quality residential community. The purpose and intent of these Rules is to promote the character of the Community as a peaceful, attractive and enjoyable setting for all residents; promote order, safety, and harmony in the Community; and, set forth the terms of lot tenancy. The Community's Management ("Management") strives to render prompt and efficient service and to provide all tenants with an enjoyable lifestyle in quality surroundings.

Homeowners renting a lot in the Community are referred to as the "tenant" in these Rules. The term "resident" includes the tenant and any household members.

The term "household members" includes in all instances any tenant's spouse, or any other cohabiters or individuals, authorized to reside in the tenant's home.

These Rules apply equally to tenants, their household members, and to any guests or visitors. These individuals are considered to be under the control of the tenant and the tenant is responsible for any Rule violations by any of these individuals.

A. RIGHTS & RESPONSIBILITIES. (Housing for Older Persons Act 1995)

1. Age-Restricted Community. H i d d e n H i l l s is a 55 and older community. One occupant must be at least 55 years old and every other occupant must be at least 40 years old.

2. Management Rights. Management has all of the rights set forth in the Maine Mobile Home Park Law (10 MRS Chapter 953, Regulation of Mobile Home Parks, Landlord Tenant Relations), as well as all rights set forth in these Rules, and all other rights and abilities vested by law that are reasonably necessary to carry out Management's responsibilities, or that are reasonably necessary to enforce these Rules or to promote the peace and safety of the residents of the Community. Without limitation of the foregoing, Management reserves the right to inspect any lot, or the exterior of any home, in the Community at all reasonable hours.

3. Services Provided by Management.

a. Regular Services.

- Weekly curbside household trash and recyclables removal.
- Central inside mail and parcel delivery pick up.
- Year-round grounds maintenance of common areas, which includes; cutting of lawns throughout the growing season; Spring and Fall clean up; and, fresh mulching of planting beds. (*See Sections K3 and K4*)
- Roads plowed and sanded as necessary, subject to weather conditions, or other matters outside the reasonable control of Management.

b. Additional services offered.

- Mowing, weeding, trimming, and fertilization, of lawns. Walkway, step, and deck, shoveling.
- Raking of roof edges, if necessary.
- Interior and exterior routine checks for those who live in the community on a seasonal basis, or if you are out of town and want your home monitored.

4. Tenant Complaints and Concerns. Any and all complaints or concerns should be submitted in writing, signed, and addressed to the Community Manager and deposited in Hidden Hills on-site mailbox, emailed, or call _____.

5. Safeguards and Alterations, Installations, or Construction. Management reserves the right to require the addition of safeguards and/or alteration of improvements to personal property if necessary to comply with the safety requirements of the Community's insurance carrier, or reasonable safety measures in general. Any alterations, installations, additions, or construction, on lots must be approved in advance by Management, in writing, and conform to all applicable building codes.

6. Liability and Indemnity. Neither Management, nor the Community owner, is responsible for fire, theft, or damage, in any manner to any home, vehicle, or other property, of any resident, guest, or visitor, in the Community; nor for any injuries to, or death of, any person, arising from, among other things, storm damage, flooding, snow or ice, on any lot or other Community property. It is fully understood that each tenant, household member, visitor, or guest, uses and occupies all Community property at their own risk. This provision may not be interpreted or construed so as to absolve the Community Owner, or its agents, from liability for its own willful acts or gross negligence.

Each tenant shall hold the Community Owner and Management harmless from any and all claims, expenses, damages, liabilities, judgments, rights and causes of action of whatever kind or nature, caused in whole or in part by, arising out of, or attributable to, any matter for which the tenant, household members, visitors, or guests is responsible under these Rules.

Neither the Community Owner, nor its Management, may be held responsible for any interruption of services, or damages resulting therefrom, caused in whole or in part by conditions beyond its control.

7. Insurance Coverage. The Community carries standard property insurance which does not cover loss or damage to the property of the Community's residents; nor injury or death to any persons, in situations where the damage results from a tenant's own negligence, failure to adhere to the Rules; or any condition that is within the control of the tenant. The foregoing is not intended to be an exclusive list of the items which are not covered by the Community's insurance, and additional losses, damages, or claims, may not be covered for any variety of reasons. The failure to specify herein any type of loss, damage, or claim, is not an admission of insurance coverage or of any liability for any such loss, damage or claim. Tenants are required to purchase their own insurance coverage for their home and other possessions for liability purposes. Policy data is to be provided at move-in.

B. ENFORCEMENT OF RULES.

1. In General. Any failure of a tenant, their household members, guests, or visitors, to observe and comply with any of these Rules is considered unacceptable behavior, which may subject the tenant to eviction from the Community after written notice and an opportunity to comply.

2. Violations. Any tenant, their household members, guests, or visitors, who commits, or is responsible for, any violation of these Rules will receive at least one written violation notice with an opportunity to correct the violation within a time frame specified in the notice. Any tenant continuing violation of a provision of these Rules is subject to an eviction notice, with an opportunity to correct the violation within a timeframe specified in the notice. Tenants receiving three (3) violation notices (which includes non-payment of rent) within a 12-month period may be subject to an eviction from the Community pursuant to 10 MRS, §9097-B, Forcible Entry and Detainer.

3. Costs and Fees for Non-Compliance. Tenants may be subject to payment of certain fees for failure to comply with Community Rules as defined in the Community Fee Schedule. Costs and reasonable attorney fees may be charged to a tenant who fails to pay rent or otherwise violates Community Rules whether or not a legal action is filed against the tenant.

4. Termination of Tenancy. Tenancy in the Community is at will and governed by these Rules. Any tenancy in the Community may be terminated for any of the reasons set forth in 10 MRS §9097(1), as it may be amended, or set forth in any successor provision as governed by 14 MRS §6002. A Notice of Termination (which may also be called an Eviction Notice, or other words of similar meaning) must be delivered by Management to the tenant. Without limiting the right to terminate tenancies for any of those reasons, each tenant's attention is specifically directed to the following reasons, anyone or more of which may result in eviction:

(a) Non-payment of rent, or other amounts, when due;

(b) Failure to correct in a timely fashion any continuing violation of these Rules after notice;

(c) Receipt of any three (3) Rules violation or non-payment notices in any 12-month period, even if timely corrected; and

(d) Repeated conduct that disturbs the peace and quiet, or safety, of other tenants.

Management prefers to avoid evictions whenever reasonably possible. However, Management also intends to maintain the Community as a safe, attractive and healthy environment for all tenants, and will evict tenants when necessary.

All tenants are encouraged to pay their rent and other charges on time, and to be sure to observe all Community Rules, and to make sure that those for whom they are responsible (household members (including children), guests, visitors, etc.) also observe all of these Rules.

Tenants are subject to eviction not only for their own actions and behavior, but also for the actions and behavior of others for whom they are responsible under these Rules and/or state law.

Once an eviction has been served for non-payment of rent, the tenant will not only have to pay all amounts then owed to the Community, but will also have to pay an administrative fee of five percent (5%) of the then outstanding rent, in order to reinstate the tenancy.

C. COMMUNITY TENANCY; ENTRANCE FEE; SUBLETTING.

1. Application for Tenancy. All prospective tenants of the Community and their household members are required to complete an Application for Tenancy. Management review will include a credit report and criminal background check. Management approval must be received prior to any property transfer or entrance into the Community. This includes any heirs or devisees of a deceased tenant who wish to reside within the Community or others who acquire an interest in a home by operation of law.

2. Entrance Fee. A fee for new tenancy (akin to an association fee) is required for tenancy as defined in the Community Fee Schedule.

3. Subletting Prohibited. Homes must be owner occupied and tenants are not permitted to sub-rent or sub-lease the rented lot, or any part thereof, or all or any part of any home on the lot. Tenancies are not transferable, and no home in the Community may be occupied by others, unless the new occupant is approved for entrance into the Community as a resident in accordance with all requirements of these Rules.

D. RENT & OTHER CHARGES; PAYMENT.

1. Rent. The monthly lot rental amount for each lot in the Community is listed in the Community Fee Schedule which may be revised or updated from time to time at the Community owner's discretion and with at least thirty (30) days written notice to the tenant. All rent payments are due in advance, on the first day of each month.

Tenants are not permitted to deduct, or set off, any amounts that they may claim are owed to them by the Community from their monthly rent payments. The date when Management actually receives the payment will determine when it was received for purposes of these Rules; neither the postmark on the envelope or the date on the check will be taken into consideration as to whether or not the payment is made on time.

Post-dated checks are deemed received on the later of the date of actual receipt, or the date of the check, and not before.

2. Returned Checks. Any checks returned for nonsufficient funds (NSF), or otherwise, will result in a service charge to the tenant in the amount set forth in the Community Fee Schedule. Any more than two (2) returned checks will require future payments being made by cashier's check or money order.

3. Failure to Pay. If rent or any other charges due are not received by the end of the day on the fifteenth day of the month, the tenant is subject to a late fee as indicated in the Community Fee Schedule on balances of $100.00 or greater, and to receiving an Eviction Notice.

4. Taxes. Tenants are responsible for paying all municipal and other taxes on their homes and personal property on a timely basis.

E. OCCUPANCY.

1. Owner Occupancy; Number of Occupants. All homes must be occupied by an owner aged 55 or older. No other permanent residents under the age of 40 are permitted. No more than one (1) persons per bedroom are permitted to occupy any home in the Community. Any individual not approved for residency is considered a visitor in the Community.

2. Additional Occupants. Any additional occupants to the household must be approved by Management, by completion of application process prior to moving into the Community.

3. Visitors. Overnight visitors are permitted on a temporary basis, except visitors may not remain as overnight guests in any home for a period in excess of thirty (30) days within a sixty (60) day period, without applying for Community entrance through the application process.

4. Restrictions on Visitors and Occupants. No tenant may have as an overnight visitor, or as a permanent resident in any home, any person who has been:

a) evicted from the Community based on any violation(s) of these Rules other than non-payment; or

b) convicted of any crime that occurred on Community property, or that occurred while the individual was a resident of the Community, or the victim of the crime was a Community resident, or

c) a perpetrator of an incident, or threat, of domestic violence, sexual assault, or stalking, or

d) convicted of a sex crime (including, but not limited to, rape, statutory rape and unlawful sexual contact), or any felony conviction unless Management specifically waives this restriction in writing with respect to a particular circumstance and a particular individual, which Management has no obligation to do.

F. CONDUCT & COMPLIANCE WITH RULES.

1. Prohibitions: The following are prohibited at all times in the Community:

a) Loud parties; loud musical instruments, music, radios; other offensive noise or commotion.

b) Shouting, fighting, or other forms of disorderly behavior.

c) The public consumption of alcoholic beverages or illegal drugs, or intoxicated behavior in public.

d) Open fires of any kind. UL-approved chimineas, charcoal grills, gas grills, hibachis, and management approved fire pits, may be used if they are operated properly and are in good working order.

e) Absolutely no firearms, BB guns, paintball guns, or fireworks, may be fired or discharged in the Community under any circumstances.

f) Trampolines, swimming pools , playground equipment, and/or basketball hoops on rented lots (freestanding, mounted or otherwise).

g) Assault, or the threat of assault, harassment, intimidation, or other interference with Management or other employees, or damage or threat of damage, to any Community property.

h) Peddling or soliciting of any kind. This is not intended to prevent sales "parties" (e. g. Avon parties) held by a resident of the Community, involving only previously invited guests.

i) Storage of any materials or substances that pose a fire hazard, are toxic or hazardous, or that are likely to attract insects or rodents.

j) Interference with any other tenants' quiet enjoyment of their home and lot.

k) Feeding, or other care, of stray cats, dogs, or feral creatures.

I) Storage of materials or equipment for any commercial enterprise.

2. Quiet Hours. Noise that can be heard outside of the home is to be kept to a minimum between the hours of 9:00 p.m. and 7:00 a.m. No unnecessary noise may be audible outside of the home during those hours.

3. Dealing with Neighbors. Complaints of Rules violations should be reported in a signed letter to Management. In the event of afterhours disturbances or in case of an emergency, tenants are requested to contact the police department for corrective action, and advise Management in writing of the incident and the circumstances surrounding the complaint on the next working day, so that Management can follow-up and help correct the problem.

4. Vacant Lots. Vacant lots are Community property and are not to be disturbed, entered, or used for any purpose whatsoever.

5. Property Damage. Any damage caused to any property or equipment in the Community by any tenant, their household members, visitors, guests, or invitees, is the financial responsibility of the tenant to correct, regardless of whether such damage was caused negligently, intentionally, inadvertently, or otherwise. The damages will be measured by the restoration or replacement cost to correct the same, in Management's discretion. Such damages are deemed additional rent and are due and payable thirty (30) days after Management has provided written demand for payment.

G. CHILDREN.

1. Responsibility. Tenants are held responsible for any property damage or injuries caused in whole or in part by visiting children, and for any violations of these Rules by them. Tenants may be evicted for violations of these Rules committed by their visiting children, after notice and an opportunity to comply, as though the violations had been committed by the tenant themselves.

2. Supervision and Conduct of Children. Each tenant is responsible to provide adequate supervision of their visiting children at all times while they are in the Community. Tenants must not permit their children to enter any Community buildings or enter any other areas designated by Management as prohibited, whether for safety reasons or otherwise. No one is permitted to play or loiter on empty lots, in the streets or to trespass on other tenant's lots. Furthermore:

a) For their safety, children must never play with riding toys in parking lots or common areas.

b) Bicycles, tricycles, and toys, must never be left in any those areas; nor in any street; and must be stored at the end of each day.

c) Throwing rocks, digging on lots, destruction of trees or other Community property is not permitted.

d) Children may not operate any vehicle in the Community except in compliance with the State's driver's license regulations.

H. PETS & OTHER ANIMALS.

1. Responsibility. No pets are permitted without the prior consent of Management. Tenants are responsible for all actions of their pets, and are financially liable for any damage caused to property of the Community, or that of any other tenant, and for any personal injuries, including death, caused by their pets. Pets are not permitted to disturb the rights, comfort, safety, or convenience, of the other residents or their visitors. Undue noise, aggressive behavior toward people or other pets, digging or other unruly behavior, or other violation of these Rules by any pet may be cause for removal of the animal from the Community.

2. Types and Registration of Animals. No more than 2 (two) pets per home are allowed. One dog with a weight of 50 lbs. or less, plus one indoor cat will be permitted.

No wild or exotic animals, farm animals, or venomous or otherwise dangerous animals, are permitted to be kept in the Community, whether as pets or otherwise. A reasonable number of fish, birds, and/or constantly caged small (under 4 pounds) indoor animals, such as hamsters, gerbils, or guinea pigs, are permitted without registering with Management.

Approval of any dog or cat is contingent on completion of a "Pet Information" sheet; presentation of proof that the animal is properly licensed pursuant to municipal requirements; and, submission of a certificate from a licensed veterinarian stating the animal has received all required and advisable immunizations and has been spayed or neutered. This information must be updated and kept current with the Community office on an annual basis.

Due to insurance requirements and the safety of other residents, the Community prohibits potentially aggressive breeds and cross-breeds including, but not limited to, all Pit Bulls (American Staffordshire Terriers), Doberman Pinschers, Chow-Chows, Rottweilers, Wolf or Wolf Hybrids, German Shepherds, Siberian Huskies, Malamutes, Akitas, Great Danes, Perro de Presa Canarios, Bull Mastiff or Mastiffs, Dalmatians, or any other dog that has any of the above breeds in their lineage.

3. Care of Pets. Dogs and cats may not be left outside unattended at any time, day or night. Doghouses, outdoor cages, ropes, chains, and other outdoor enclosures, intended to house or contain any pet or other animal are strictly prohibited. Whenever pets are outside the home, they must be kept on a leash or within an invisible fence. Any pet or other animal found loose in the Community is subject to being picked up by the Animal Control Officer.

Animal waste deposited anywhere in the Community must be removed immediately by the person responsible for the animal, and pets are not permitted to trespass on other tenant's lots.

4. Removal of Animals. Tenants with registered pets in violation of these Rules will be given written notice of the violation and an opportunity to comply. If the violation continues or recurs, the Community may require removal of the pet from the Community.

The Community reserves the right to require immediate removal of any unregistered pet or any pet with a history of aggressive behavior and/or prior or current dog bite history; or otherwise injures a person or other pet; or is deemed in the sole discretion of Management to be a threat to the health or safety of other residents.

I. HOME OCCUPATIONS & BUSINESSES PROHIBITED.

1. No home occupation, business, or commercial activity (including Day Care / Babysitting), may be conducted in the Community at any time. Usage of lots is strictly residential.

2. Individual yard sales are not permitted. Two Community-sponsored yard sales will be held each year.

J. CONDITION OF HOMES IN THE COMMUNITY.

1. In General. The following Rules set standards for homes in the Community and are applicable at all times with respect to all homes. Management will conduct an inspection of the exterior of all homes, accessory structures, and lots, to confirm compliance with these Rules. Tenants who own homes that fail to meet the standards contained herein will be given written notice and a reasonable opportunity to correct any deficiencies in order to meet these standards. If the home is not brought up to these standards, Management may elect to complete work at the tenant's expense or may pursue eviction to have the home removed from the Community.

2. Standards. The original, or replacement components, of all homes or structures must be in a safe and secure condition, without holes, rust, substantial dents, scrapes, patching, or fading. All components of homes must remain compliant with all applicable Federal, state, and local, building codes, including but not limited to the exterior siding, roof, windows and doors, steps and handrails, plumbing, heating and electrical systems, anchoring system, skirting, or electrically wired smoke detectors. All plumbing and heating systems must be operable at all times and compliant with all HUD and local codes. All electrical service and wiring must be in accordance with the specifications of the edition of the National Electrical Code or HUD Standards in effect on the date of the manufacture of the home.

3. Appearance. All homes entering the Community or any replacement siding installed must be of vinyl, Hardie board, or residential finish siding, in a clapboard style. To the extent that is reasonably feasible all replacement roofs must be of a 5/12 pitched cottage style. Skirting must fully enclose the area between the home and the ground and be of vinyl or comparable good quality material. Skirting must be replaced when deteriorating or damaged, and installed in accordance with the management's installation instructions.

4. Utility Access. Opening(s) not less than eighteen (18") in any dimension, fully covered with an access door panel, not less than three (3) square feet in area must be provided and located so that any water supply and sewer drain connection located under the home is accessible for inspection and repairs. Access panels and doors may not be fastened with locks, or in a manner requiring the use of a special tool to remove or open them.

5. Pests. The ridding and/or removal of the infestation of pests; including, but not limited to: insects, rodents, skunks, raccoons, or possums, is the responsibility of the tenant.

6. Numbering. E911 street numbers must be visible from the street on the outside of thehome.

7. Porches, Decks, Other Additions and Improvements.

a. Improvements. Tenants may not make additions or improvements on their home or lot, without first obtaining Management's written consent. Any additions or improvements approved by Management must be made solely at the expense of the tenant and in strict compliance with Management's approval with no rights to improvements being made at the Community Owner's expense.

b. Additions. An "Addition" to a home is defined to include any and all steps, porches, awnings, decks, windbreaks, and other improvements and installations, as well as all alterations to existing construction and exterior improvements and installations. "Additions" also include any separate Accessory Structures, which are defined to include all storage sheds, utility buildings, patio rooms, add-a-rooms, and all other structures not integral to a home.

1) Prior to construction of any Addition to any home or lot, the tenant must submit a scaled drawing of the design, color (paint, stain, or finish, to match the home), size, materials, and construction location.

2) Any Addition constructed without written approval of, or not in accordance with the approval of the Management, may be required to be removed immediately by the tenant at their expense. If not removed timely, Management has the right to enter the lot and remove all such unapproved Additions at the tenant's expense.

3) Additions must be harmonious with the rest of the home in style, form, exterior materials, and general appearance. Accessory Structures must be of wood or any other material that is designed to withstand exposure to the elements without deterioration or damage, and is designed to have and retain an attractive appearance.

4) Additions must be properly constructed in a workmanlike manner, using good quality materials, in accordance with the approval granted by Management and all applicable building codes, and completed within 30 days of the beginning of the construction, unless an extension is granted by Management. Building permits must be posted during construction.

5) Additions must be kept in good, safe, attractive and not deteriorated condition at all times.

c. Accessory Structures.

1) One shed per lot is permitted and must not exceed the maximum of one hundred ninety-six (196) square feet. Sheds, must be of wood construction, with a cottage style shingle roof and sided with clapboard, vinyl, or Hardie board, material to match the color of the home. No shed additions of any type are allowed. The height of any Accessory Structure, such as garage or shed, must be equal to or lower than the roof peak of the home.

2) No fences or fence structure, which includes any temporary lawn fence, are permitted in the Community.

3) Management reserves the right to approve fencing around an approved hot tub, garden fencing, and invisible pet fencing.

4) Hot tubs are permitted at the rear of the home, but for insurance and safety purposes must be fenced and covered by a locked, commercial cover. Fencing around a hot tub must be limited to the area immediately surrounding the hot tub.

5) Satellite dishes over 18" in diameter, and antennas (of any kind) outside the home, are not permitted.

6) Carports on property are not permitted

8. Fire Prevention. No liquid petroleum, propane or similar gas tanks may be stored inside or under any home or structure. Fuel tanks (oil or propane) must be properly installed by an authorized installer and must be placed at the rear of the home. No flammable materials, including but not limited to gasoline and kerosene, may be stored under or within the home. Tenants are encouraged to keep fire extinguishers at their homes in working condition and to properly maintain adequate smoke and carbon dioxide detectors.

9. General Aesthetic Standards and Compliance. In addition to standards set forth above, tenants must keep their manufactured home exteriors, siding, porches, awnings, decks, stairs, skirting, and any other exterior or Accessory Structures clean, neat, and in good condition and repair, including painting or pressure washing as needed. Any existing porch, awning, deck, stairs, skirting, roof siding, or any other exterior structure which, in the opinion of Management, is unsightly, unsafe, unsanitary, or in poor repair, must be replaced, repaired, or removed, by the tenant upon written notice from Management. This repair, replacement, or removal, must be done in a good and workmanlike manner. Tenants must complete the repair, replacement, or removal, within the timeframe given by the written notice, unless a written extension is obtained from Management.

10. Homes Damaged by Fire. Any homes damaged by fire, so that it becomes uninhabitable, or so that its exterior walls are burnt, paint peeled, windows broken, or smoke damaged, so that it appears unsightly, must be removed from the Community at the tenant's expense within forty-five (45) days after written notice from Management, regardless of insurance company representations regarding settlement.

If the home can be repaired on-site so that no danger to others exists, and so that it is no longer unsightly or a nuisance, the tenant may be afforded a reasonable time to make repairs, not to exceed ninety (90) days regardless of the availability of insurance funds. Management shall determine whether the repairs are sufficient to bring the home into compliance. Pending removal of the home from the Community or repair of the home, the tenant must close up the home and completely cover any unsightly or dangerous parts of the home and any debris to minimize the risk that it poses to others within the Community. If the tenant has worked in good faith to repair the property and appears will exceed the 90 (ninety day) time period, an extension may be granted by Management.

K. CARE OF GROUNDS.

1. General Lot Maintenance. Except as otherwise specifically set forth in these Rules, it is the responsibility of tenants to maintain their entire lot in a good and attractive condition and in good repair at all times, at the tenant's expense. Grounds must be kept clean, neat, and uncluttered. No discarded or abandoned materials, unnecessary items, building materials, trash, junk, debris, or excessive lawn decorations, that create a cluttered appearance may be kept, stored, left or abandoned, outside the home or an accessory structure. All Christmas decorations must be removed by Jan 15th of the current year. Screen rooms may not be used as a storage area. Toys, bicycles, etc., must be put away (not left outside) at the end of each day.

All flowers, shrubs, manufactured housing exteriors, additions, skirting and other visible items and areas must be kept neat and attractive at all times. All tools, wheelbarrows, or other equipment, are to be stored out of sight in sheds when not actually in use. Items not considered lawn furniture, lawn ornaments, or grills, must be stored out of sight in the home or shed. No unsightly storage of any items is permitted at any time, and all storage arranged so as to permit easy access to the underneath of the home at all times.

Management may issue a notice of violation to any tenant whose lot is not properly maintained, or whose lot is or contains an eyesore, and to require that the lot be cleaned and restored to an attractive condition within thirty (30) days or a shorter time frame that is reasonable under the circumstances. If any lot is not properly maintained after written notice, Management reserves the right to take all necessary steps to clean and maintain the lot.

All costs of lot maintenance and cleaning by Management are charged to the tenant in accordance with the Community Fee Schedule.

2. Protection of Stormwater Facilities. No action may be taken by tenants that will increase the risk of discharge of pollutants to groundwater from the infiltration basins. No exterior petroleum tanks are permitted within the Community. Vehicle washing with non-biodegradable detergents, is prohibited on Community grounds. Unsecured storage of waste materials (oil, lubricants, etc.) in areas draining to infiltration basins is prohibited. Alteration of lot grading is not permitted.

3. Lawns. All lawns must be kept neat, well groomed, fertilized and reseeded as needed. It is the responsibility of the tenant to rake and remove leaves and any other yard debris on an as needed basis, other than during the provide Spring and Fall cleanup. If leaves or other debris are not removed, Management reserves the right to rake the lawn, and charge the tenant the applicable maintenance service fee as described in the Community Fee Schedule.

4. Gardens, Shrubs, and Trees. Shrubs, trees, and reasonably sized gardens are allowed, but require prior written approval of Management. Tenants may not nail or in any way attach hardware to any trees within the Community. Tenants may not trim or remove trees without permission from Management. Tenants wishing to remove trees from their lot must first have the trees inspected and approved for removal by the Management. A permission form must be obtained from the office, which will be valid for 30 days from the date issued and the person doing the work must carry adequate liability insurance. Within 7 days from the date the tree was cut down, tenants are required to remove from the lot; all parts of the tree, including branches, trunk, and stump. Management is not responsible for any damage to plantings due to snow plowing, road treatment, the need to access underground systems, or other causes.

5. Trash Removal. All trash containers must be kept in a storage shed or toward the rear of the home. No trash is to be stored outside at any time unless kept in a durable trash container with a secure lid. Trash containers are to be brought out to the street on collection days and removed the same day of collection. The tenant must clean up any scattered trash or garbage as soon as possible, or the Community will clean it at the tenant's expense.

6. Snow Removal. Management is not responsible for plowing of driveways at the end of the snowstorm. Tenants are responsible for all snow and ice removal of driveways, walkways, steps, and decks and must at all times maintain a clear path to all doors. Tenants are responsible for any damage caused by plowing done by another party at their request. All obstacles such as rocks must be at least eight
(8) feet from the roadway edges during the winter. All tenants must park in their allocated driveway only and must not park on the street at any time during the snow removal process.

7. Clotheslines. Only retractable clotheslines are permitted and no clothes are permitted to be left hanging out overnight.

8. Playground Equipment/Temporary Enclosures. Volleyball or badminton nets may be utilized at the rear of the home, but must be neatly stored when not in use. Swing sets or playground equipment are not permitted. Screen rooms and tents may be installed on a temporary seasonal basis and must be maintained and kept in good condition. Management may require their removal should their condition deteriorate or the duration of use be excessive. Management can also limit the size or the area of the lot where a screen room or tent can be located. Screen rooms and tents may not be used for storage purposes. Free standing temporary canopy type car covers of vinyl or other material may not be used.

9. Swimming Pools. No swimming pools, of any kind, are allowed on rented property.

10. Sign Restrictions. Signs are not permitted on lots, homes, or elsewhere on Community property, at any time except Realtor or "For Sale" signs which are not to exceed 2' X 3'.

11. Firewood. Management reserves the right to approve the location of stacked firewood. Any tenant with a wood stove or fireplace may store wood, neatly stacked, so as to not be visible facing the road; in a location to the rear of the home. Cutting firewood with chain saws is permitted with consideration of neighbors due to the noise and must be in accordance with noise ordinance of the Community. All wood stove connections must be properly installed in accordance with manufacturer's specifications and all local and state fire codes, and it is the tenant's responsibility to ensure proper installation.

L. UTILITIES.

1. Water and Sewer Service. Each tenant is responsible to keep in good condition and repair at their own expense, all water and sewer lines and fixtures in and under the home, up to the point where the service lines penetrate the ground or slab.

2. Prevention of Freezing Water Lines. Water lines, from the point of surfacing in the ground well to the home connection point, must be protected against freezing by the use of adequate heat tapes and pipe insulation, maintained at the tenant's expense. Tenants must not leave water running to prevent freeze ups. Any damage to the common utilities or other damage to the water meter or plumbing for that lot or the Community, resulting from any tenant's failure to comply with this provision, will be repaired at the tenant's expense and be charged as additional rent.

3. Sewer System. Use of garbage disposals, and the flushing of garbage, sanitary napkins, paper towels, disposable diapers or wipes, prophylactics, cigarettes, cigars, grease, powdered laundry detergent, or any other non-soluble item or substance, in toilets and drains is strictly prohibited. Doing so may cause a backup in the septic systems and lead to unsafe conditions. Any cost of correcting clogged drains or other sewerage problems that are due to any improper actions of the tenant, or of others for whose actions the tenant is responsible, are charged to the tenant.

4. Electrical Service. The Community is responsible for the maintenance and repair of all underground wiring and electrical equipment from the outside disconnect located near the meter to the circuit breaker box in the home. The tenant is responsible for the circuit breaker within the home and all wiring in the home. Written management approval is required for any additional service originating at the home including but not limited to sheds or outside lighting. Such wiring must be installed and maintained as necessary by the tenant at their expense, in accordance with all applicable state and local codes.

Tenants must contact Management immediately in the event of any electrical problem. Tenants are prohibited from attaching any objects in any manner to electric utility poles or exterior breaker boxes. Damages occurring due to an unauthorized increase are the tenant's responsibility.

5. Fuel Tanks. O n l y propane/LP will be permitted and must be installed and maintained in accordance with all applicable federal, state, county, and local codes, laws and regulations governing the same. Tanks should be installed so as not to be visible facing the road. In the event that proper installation of the fuel tank causes it to be visible from the roadway, Management reserves the right to approve the location, and the tenant must provide a Management-approved enclosure around the tank that is compatible with the appearance of the home in color and design. All leaks must be repaired, and tanks must be painted and leveled when necessary. In the event of any spillage of any type of liquid fuel, the area of the spill must be cleaned in strict compliance with all federal and state environmental standards at the tenant's expense. Any spillage of hazardous substance must be reported to Management immediately.

6. Tampering with or Disconnection of Utilities. Interfering with, tapping into, or otherwise tampering with, any utilities or utility installations in the Community, including but not limited to Community utility connections, meters, or other installations, is extremely dangerous and strictly prohibited. Water meters are owned by Maine Water Company and may only be disconnected by them. Any costs to repair or replace water meters damaged due to a tenant's conduct or negligence are at the tenant's expense.

M. MOTOR VEHICLES.

1. Registration. All vehicles kept in the Community must be currently licensed, registered and inspected at all times. Temporary plates on vehicles must be replaced by permanent plates within the time frame required by law. No unregistered, un-inspected, or inoperable, motor vehicles of any size or type are permitted in the Community, and any tenant with such a vehicle in the Community is in violation of these Rules. Any such vehicles are subject to being towed away by Management, at the owner's expense and risk.

2. Maintenance of Vehicles. Tenants are permitted to perform only minor maintenance of short duration on vehicles within the Community. Damage to paved parking areas or driveways caused by leaking gas, oil, or other automotive fluids, must be repaired by the tenant at the tenant's expense. No tenant will be allowed to keep any vehicle at their lot that is unsightly, including various parts being different colors, excessive rust, flat tires, etc. No tenant is to use their lot for extended mechanical repairs.

3. Speed Limit and Safe Driving. The Speed limit within the Community is 15 MPH. There must be no squealing of tires, joy riding, or reckless driving. All vehicles are subject to reasonable noise levels. Speeding, driving under the influence of drugs or alcohol, or other unsafe behavior by any tenant or by the tenant's household members, guests, or invitees will not be tolerated. Violation of this Rule will result in a violation notice, and failure to comply after notice of the violation may result in eviction.

4. Commercial and Recreational Vehicles. Tenants may not keep any commercial truck over ¾--ton on their lot. No campers, RVs, boats, utility trailers, or recreational vehicles, including but not limited to; motorized bikes of any kind, snowmobiles, ATVs or motorized go-carts may be parked on the lot or in the driveway. Recreational vehicles, including but not limited to; motorized bikes of any kind, snowmobiles, ATV s or motorized go-carts, may not be driven on Community property. Driveway parking of campers and/or RVs is permitted for a maximum period of 48 hours while loading or unloading, after which time the vehicle must be removed from the lot.

5. Parking. The maximum number of vehicles kept in the Community is two (2) vehicles per home with no allowance for parking on the lot at any time. All tenant vehicles must be stored in garage at night time. Management approval must be obtained for driveway parking of additional vehicles.

No vehicle may be parked within ten (10) feet of any fire hydrant. On-street parking is not permitted. Any vehicle parked overnight in an unauthorized place is subject to being towed at the owner's risk and expense without prior notice. Vehicles may not be parked on the grass. Any vehicle parked on a street during snow removal actions is subject to towing without prior notice at the owner's expense. Guest parking is not permitted except in the driveway of the home, or visitor parking area, unless for short periods of time, e.g. dropping off or picking up persons or items.

N. REPLACEMENT OF HOMES.

1. Replacing a Home Already in the Community. Tenants who wish to remove their existing home in order to buy a new manufactured home to be placed on the same lot must provide Management with thirty (30) days written notice of their intent to replace the home. Existing homes may only be replaced with new manufactured homes which meet all HUD standards and are installed in accordance with Federal, state, and local regulations or ordinances, the manufacturer standards, and these Rules.

O. TRANSFER OF HOMES.

1. Requirement of Full Payment. Before any home may be removed from the Community, sold, or occupied by a new tenant owner, all rental payments and all other charges and fees due must be paid to Management in full, with written verification that all real estate and personal property taxes have been paid to the local municipality.

2. Sale of Manufactured Housing/Requirements for Sale. Tenants have the right to sell their home to whomever they choose. Homes to remain in the Community must be safe, sanitary, and in compliance with applicable aesthetic standards. Buyers of homes to remain in the Community must be approved for residency through the application process prior to the conveyance.

A thirty (30) day notice to Management is required prior to the proposed date of sale or removal of a home. Homes remaining in the Community are subject to a pre-sale inspection of the exterior of the home, additions, and lot, by Management within three (3) days of receipt of intent to sell for compliance with these Rules.

Management will provide a written notice of any repairs, improvements, or lot maintenance, required prior to an in-Community sale. Removal of non-conforming structures may be required. Management will re-inspect the home and lot for compliance prior to the sale.

P. SEVERABILITY.

If any terms or provisions of these Rules are determined to be invalid or unenforceable under any applicable law, ordinance or regulation, or as to any particular individual or situation only, such invalidity or unenforceability does not affect the validity or enforceability of these Rules with respect to any other individuals or situations, and does not, in any event, affect the remainder of these. Rules, which remain in full force and effect as though the invalid or unenforceable provisions were not included herein. The partial invalidity of any Rule does not affect the enforceability of the remainder of that Rule.

Q. OPEN SPACE.

The open space for the park includes all areas within the borders of the park that are not located on one of the designated lots, maintenance areas, recreational areas, or in any street right of way. It shall be managed as follows:

1. The open space in the park shall be for the recreational use of park residents and guests only.

2. It shall be maintained in its natural state unless it creates a fire hazard, at which time it will be addressed accordingly.

3. Walking trails are permitted to be constructed with permission from the owner. Trails to be constructed only of bark mulch or other similar low-impact materials. No trails allowed within designated forested buffer areas.

4. No wetland alterations are permitted and no crossing of wetland in the form of a trail system will be permitted

5. Every other year Hidden Hills will hire an arborist to walk the open space to determine the existence of an invasive species and deal with appropriately, as well as identify any dead or dying trees that should be removed.

6. All leach field beds will be inspected every 5 years for concerns of possible failure/leakage.

7. Street drains will be inspected/cleaned every other year to maintain and confirm proper functioning.

8. The stormwater facilities will be inspected per the approved MDEP Site Location Permit schedule.

9. Once a year pick up and remove fallen limbs and branches from the cemetery and mow grass as needed.

COMMUNITY FEE SCHEDULE

Effective: 00/00/0000

Item:	**Charge**:
Entrance Fee (Non-Refundable)	
Purchase of an Existing Home (2 x lot rent)	$ 1,050.00
Monthly Lot Rent	$ 525.00*****

****** adjusted annually according to the Consumer Price Index as published by the US Department of Labor, Bureau of Labor Statistics*

Late Fee (4% of monthly rent)	$ 21.00

(Payable if rent is not paid by the 15th day of the month)

Eviction/Default Service Administration Fee	5% of then outstanding rent

(Payable as of date notice is served)

NSF (Returned check) Fee	$ 35.00
Maintenance Service Fee	$ 45.00/hour ($30.00 minimum)
Water Service	Maine Water Company
Sewer Service	No Charge
Rules Violation Fees	$ 15.00 (first notice) $ 50.00 (second notice) $ 100.00 (third notice)

All payments should be delivered to the Community's on-site representative or mailed to:

NOTE: *Management reserves the right to change fees upon a 30- day notice in accordance with 10 MRS, Part 11, Chapter 953, §9093.*

Attachment 17

South Street Buffering Exhibit



OVERALL PLAN VIEW OF SOUTH STREET FRONTAGE

SCALE: 1"=200'

41 Campus Drive, Suite 301
New Gloucester, ME 04260

565 Congress Street, Suite 310
Portland, ME 04101

(207) 926-5111
www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC

Civil Engineering - Land Planning - Stormwater Design - Environmental Per

772

SHEET DESCRIPTION
HIDDEN HILLS HOUSING PARK
VIEW SHED PLAN

PREPARED FOR
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

JOB NO.
21-13

DATE
9/13/2022

SCALE
NTS

SHEET
1

OF
4



PLAN OF VIEWS 1 & 2
SCALE: 1"=200'



VIEW 1 - TOWARDS VIEW 2



VIEW 2 - PANORAMIC VIEW TOWARDS VIEW 1



CROSS SECTION FROM VIEW 2

41 Campus Drive, Suite 301
New Gloucester, ME 04260
565 Congress Street, Suite 310
Portland, ME 04101
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CONSULTANTS, LLC
Civil Engineering - Land Planning - Stormwater Design - Environmental Per

773

SHEET DESCRIPTION
HIDDEN HILLS HOUSING PARK
VIEW SHED PLAN

PREPARED FOR
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

JOB NO.
21-13

DATE
9/13/2022

SCALE
NTS

SHEET
2

OF
4



PLAN OF VIEWS 3 & 4
SCALE: 1"=200'



VIEW 3 - PANORAMIC VIEW TOWARDS VIEW 4



VIEW 4 - PANORAMIC VIEW TOWARDS VIEW 3



CROSS SECTION FROM VIEW 3

41 Campus Drive, Suite 301
New Gloucester, ME 04260
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Portland, ME 04101
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Civil Engineering - Land Planning - Stormwater Design - Environmental Per

774

SHEET DESCRIPTION
HIDDEN HILLS HOUSING PARK
VIEW SHED PLAN

PREPARED FOR
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

JOB NO.
21-13

DATE
9/13/2022

SCALE
NTS

SHEET
3

OF
4



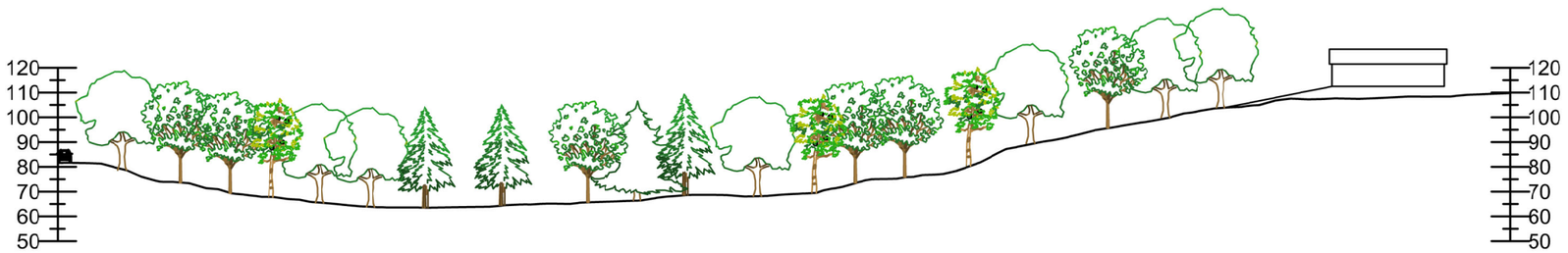
PLAN OF VIEWS 5 & 6
SCALE: 1"=200'



VIEW 5 - PANORAMIC VIEW TOWARDS VIEW 6



VIEW 6 - PANORAMIC VIEW TOWARDS VIEW 5



CROSS SECTION FROM VIEW 5

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New Gloucester, ME 04260
565 Congress Street, Suite 310
Portland, ME 04101
(207) 926-5111
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TERRADYN
CONSULTANTS, LLC
Civil Engineering - Land Planning - Stormwater Design - Environmental Per

775

SHEET DESCRIPTION
HIDDEN HILLS HOUSING PARK
VIEW SHED PLAN

PREPARED FOR
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

JOB NO.
21-13

DATE
9/13/2022

SCALE
NTS

SHEET
4

OF
4

Attachment 18

Example Houses

406

FOR SALE

641


425


317






305

Attachment 19

Abutter List

MBLU	Location	Owner Name	Co-Owner Name	Address 1	Address 2	City, State, Zip
2/ 15/ 1/ /	30 ANDREWS RD	CENTRAL MAINE POWER CO	C/O AVANGRID MANAGEMENT CO - LOCAL TAX	ONE CITY CENTER 5TH FLOOR		PORTLAND, ME 04101
2/ 17/ / /	ANDREWS RD (OFF OF)	BOYLE, JAMES P, CONSERVATOR OF ESTATE	BOYLE, JARED P & LINDSAY P	25 DUNDEE RD		GORHAM, ME 04038
2/ 17/ 2/ /	437 SOUTH ST	THE MAINE WATER COMPANY		93 INDUSTRIAL PARK RD		SACO, ME 04072
2/ 18/ / /	475 SOUTH ST	THE MAINE WATER COMPANY		93 INDUSTRIAL PARK RD		SACO, ME 04072
2/ 19/ / /	439 SOUTH ST	THE MAINE WATER COMPANY		93 INDUSTRIAL PARK RD		SACO, ME 04072
2/ 21/ / /	ALFRED ST (OFF OF)	SPANG, DANIEL L		8 CRANBERRY LN		KENNEBUNKPORT, ME 04046
2/ 22/ / /	ALFRED ST (OFF OF)	SPANG 3 LLC		PO BOX 7543		PORTLAND, ME 04112
2/ 37/ / /	50 BIDDEFORD GATEWAY PLAZA	HD DEVELOPMENT OF MARYLAND INC	C/O HOME DEPOT USA PROP TAX DEPT 2405	PO BOX 105842		ATLANTA, GA 30348-5842
2/ 37/ 1/ /	ALFRED ST (OFF OF)	STATE OF MAINE	STATE HOUSE	STATION #16 D.E.P.		AUGUSTA , ME 04330
2/ 38/ / /	475 SOUTH ST	SOUTH STREET VILLAGE, LLC		762 MAIN ST		SOUTH PORTLAND, ME 04106
2/ 39/ / /	ALFRED ST (OFF OF)	CITY OF BIDDEFORD		PO BOX 586		BIDDEFORD, ME 04005-0586
2/ 39/ 1/ /	ALFRED ST (OFF OF)	STATE OF MAINE	STATE HOUSE	STATION #16 D.E.P.		AUGUSTA , ME 04330
2/ 41/ 6/ /	11 FOX HOLLOW DR	PHILLIPS, RICHARD E & WENDY J		2 GLENVIEW DR		BIDDEFORD, ME 04005
2/ 41/ 7/ /	436 SOUTH ST	DUCHESNE, ROGER P		436 SOUTH ST		BIDDEFORD, ME 04005-9314
2/ 41/ 8/ /	438 SOUTH ST	LAKEMPER, THOMAS J & TAMMY		2418 CASONA LN #7201		MELBOURNE, FL 32940
2/ 41/ 9/ /	440 SOUTH ST	ROSS, ZACHARY D	ROBERTSON, TIA R	440 SOUTH ST		BIDDEFORD, ME 04005
7/ 1/ / /	1 GLENVIEW DR	PARSONS, RITA C		1 GLENVIEW DR		BIDDEFORD, ME 04005
7/ 2/ / /	2 GLENVIEW DR	PHILLIPS, RICHARD E & WENDY J		2 GLENVIEW DR		BIDDEFORD, ME 04005-3113
7/ 3/ / /	428 SOUTH ST	SAUCIER, ALLEN H		426 SOUTH ST		BIDDEFORD, ME 04005-9313
7/ 4/ / /	426 SOUTH ST	SAUCIER, ALLEN H & MARGARET A		426 SOUTH ST		BIDDEFORD, ME 04005-9313
7/ 5/ / /	424 SOUTH ST	MARTINOLICH, BONNIE L		424 SOUTH ST		BIDDEFORD, ME 04005
7/ 6/ / /	422 SOUTH ST	THIBODEAU, ROBERT SCOTT		422 SOUTH ST		BIDDEFORD, ME 04005
7/ 7/ / /	420 SOUTH ST	NEVERS, JOEL E	BROWN, LINDA S	420 SOUTH ST		BIDDEFORD, ME 04005
7/ 7/ 1/ /	398 SOUTH ST	HAZEN, MARK	HAZEN, SANDY L	398 SOUTH ST		BIDDEFORD, ME 04005
7/ 7/ 2/ /	5 OLD HOLLIS RD	LEVESQUE, CLAUDETTE		5 OLD HOLLIS RD		BIDDEFORD, ME 04005-9318
7/ 8/ / /	413 SOUTH ST	SOUTH STREET VILLAGE, LLC		37 A ST		SOUTH PORTLAND, ME 04106
7/ 9/ / /	387 SOUTH ST	BRODEUR, ROBERT J	BRODEUR, ELIZABETH S	387 SOUTH ST		BIDDEFORD, ME 04005
7/ 10/ / /	385 SOUTH ST	WHITE, ERIN C & EVAN-CHRISTIAAN D		385 SOUTH ST		BIDDEFORD, ME 04005
7/ 11/ / /	383 SOUTH ST	LARIVIERE, RALPH P & CELINE L		383 SOUTH ST		BIDDEFORD, ME 04005-9345
7/ 11/ 1/ /	381 SOUTH ST	MCVICAR, CLAIRE A &	CUSTEAU, DONALD P	381 SOUTH ST		BIDDEFORD, ME 04005-9345
7/ 11/ 2/ /	379 SOUTH ST	HOULE, STEVEN C & DEBRA A		379 SOUTH ST		BIDDEFORD, ME 04005
7/ 12/ / /	377 SOUTH ST	PAQUETTE, GUY R & SUZANNE C		377 SOUTH ST		BIDDEFORD, ME 04005
31/ 5/ / /	2-4 OLD HOLLIS RD	DORNEY, CATHERINE		4 OLD HOLLIS RD		BIDDEFORD, ME 04005-9318
31/ 5/ 1/ /	6 OLD HOLLIS RD	GRAY, STEPHEN		6 OLD HOLLIS RD		BIDDEFORD, ME 04005
7/ 7/ 8/ /	SOUTH ST	BROWN, LINDA S		420 SOUTH ST		BIDDEFORD, ME 04005
7/ 7/ 3/ /	26 OLD HOLLIS RD	DARGIE, NICHOLAS STEVEN	CROSSMAN, RORI J.	978 KING ST		OXFORD, ME 04270
7/ 8/ 2/ /	SOUTH ST	MAINE TURNPIKE AUTHORITY		2360 CONGRESS ST		PORTLAND, ME 04102

Attachment 20

Fire Hydrant Spacing Exhibit

EXISTING FIRE HYDRANT

EXISTING FIRE HYDRANT

PROPOSED FIRE HYDRANT, TYP.

GRID NORTH

GRAPHIC SCALE

120 0 60 120 240 480

(IN FEET)
1 inch = 120 ft.

STATE OF MAINE
JEFFREY D. AMOS
10167
LICENSED PROFESSIONAL ENGINEER

DATE: 04-13-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
A.	04-13-2022	PRELIMINARY SUBMISSION	JDA

TERRADYN CONSULTANTS, LLC

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
WATER SERVICE PLAN

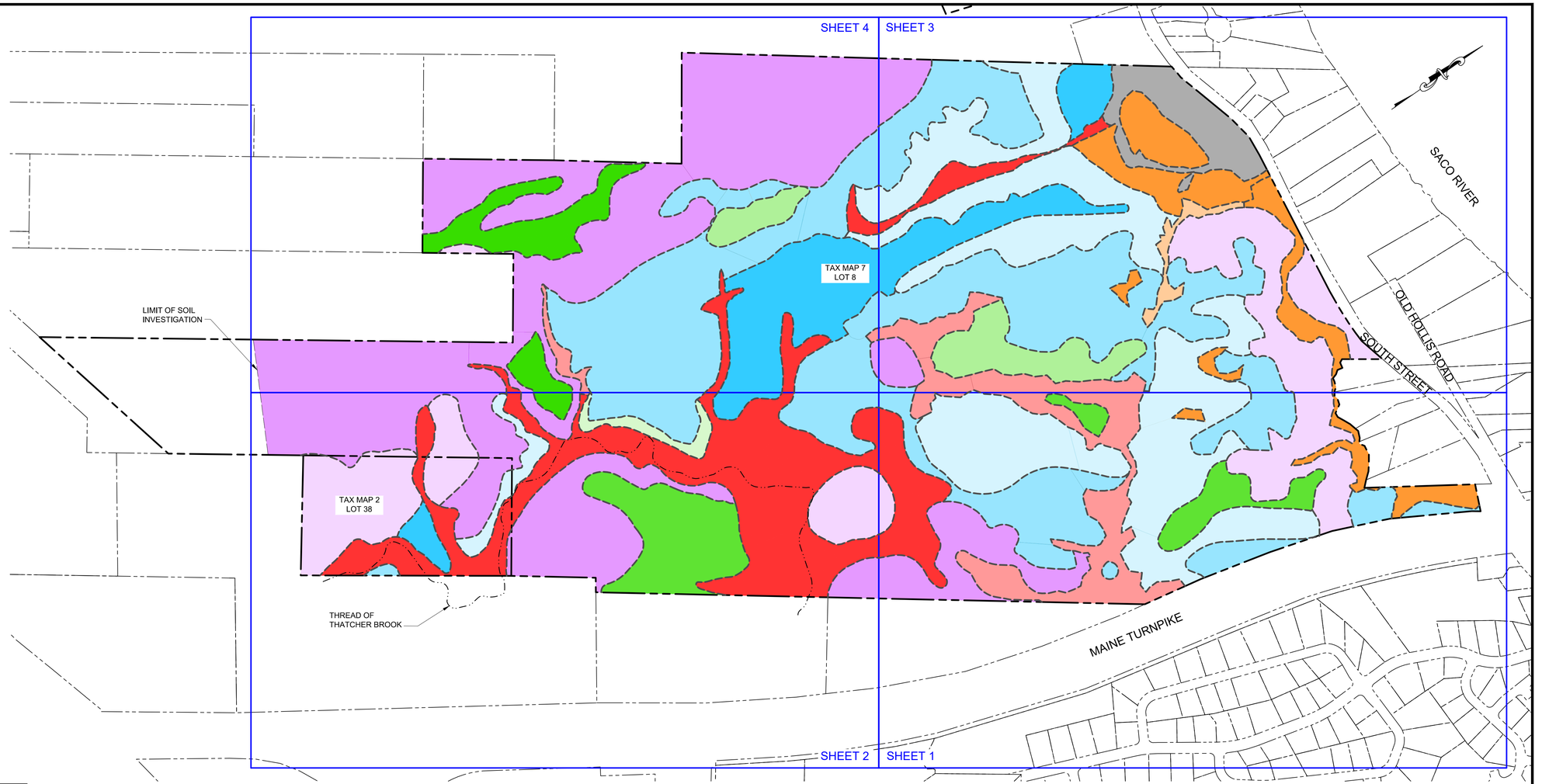
CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.0

C:\OD\Terradyn Consultants\Project Folders - Documents\2021 Jobs\21-13 South Street MH\PCIAD\Permitting\21-13 Water For Fire Dept.dwg

Attachment 21

High Intensity Soil Survey



SOIL COVERAGE

Soil Survey Area		Sq. Ft.	Acres	
		13,739,304	315.41	
SOIL TYPE	SLOPE	Sq. Ft.	Acres	%
Biddeford	A	239,951	5.51	1.7%
Biddeford Total				1.7%
Brayton	A	514,330	11.81	3.7%
	B	50,560	1.16	0.4%
Brayton Total				4.1%
Buxton	A	300,962	6.91	2.2%
	B	519,850	11.93	3.8%
	C	312,926	7.18	2.3%
	E	56,888	1.31	0.4%
Buxton Total				8.7%
Lamoine	A	812,025	18.64	5.9%
	B	2,775,443	63.72	20.2%
	C	1,858,372	42.66	13.5%
Lamoine Total				39.6%
Lyman-Tunbridge	C	3,077,843	70.66	22.4%
	D	1,240,765	28.48	9.0%
L-T Total				31.4%
Scantic	A	1,396,260	32.05	10.2%
	B	583,129	13.39	4.2%
Scantic Total				14.4%

SOIL CLASSIFICATION LEGEND

- BIDDEFORD A
- BRAYTON A
- BRAYTON B
- BUXTON A
- BUXTON B
- BUXTON C
- BUXTON E
- LAMOINE A
- LAMOINE B
- LAMOINE C
- LYMAN–TUNBRIDGE C
- LYMAN–TUNBRIDGE D
- SCANTIC A
- SCANTIC B

SOIL SURVEY GENERAL NOTES

1. SEE ACCOMPANYING SOIL SURVEY REPORT TITLED "CLASS B HIGH INTENSITY SOIL SURVEY REPORT, SOUTH STREET VILLAGE DATED JANUARY 20, 2021.
2. THE SOILS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS AND THE MAINE BOARD OF CERTIFICATION OF GEOLOGISTS AND SOIL SCIENTISTS.
3. THE SURVEY IS CLASS B–HIGH INTENSITY SOIL SURVEY.

SOIL LEGEND

SCANTIC B
PD

DRAINAGE CLASS		SLOPE DESIGNATION	
EXCESSIVELY WELL DRAINED	EWD	0–3%	A
WELL DRAINED	WD	3–8%	B
MODERATELY WELL DRAINED	MWD	8–15%	C
SOMEWHAT POORLY DRAINED	SPD	15–25%	D
POORLY DRAINED	PD	> 25%	E
VERY POORLY DRAINED	VPD		

DRAWING LEGEND

- PARCEL PROPERTY LINE
- ABUTTER PROPERTY LINE
- SOILS BOUNDARY
- SCANTIC B / PD — SOILS DESIGNATION
- 100 — INDEX CONTOUR
- 101 — INTERMEDIATE CONTOUR
- THREAD OF BROOK

PARCEL PLAN

GRAPHIC SCALE

300 0 150 300 600 1200

1 inch = 300 ft.

DATE: MAY 6, 2021

MARK HAMPTON ASSOCIATES, INC.
P.O. BOX 1931
PORTLAND, MAINE 04104

SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE

CLASS B HIGH INTENSITY SOILS SURVEY

SOUTH STREET, BIDDEFORD, MAINE



MARK HAMPTON ASSOCIATES, INC.
P.O. BOX 1931
PORTLAND, MAINE 04104

GRAPHIC SCALE

100 0 50 100 200 400

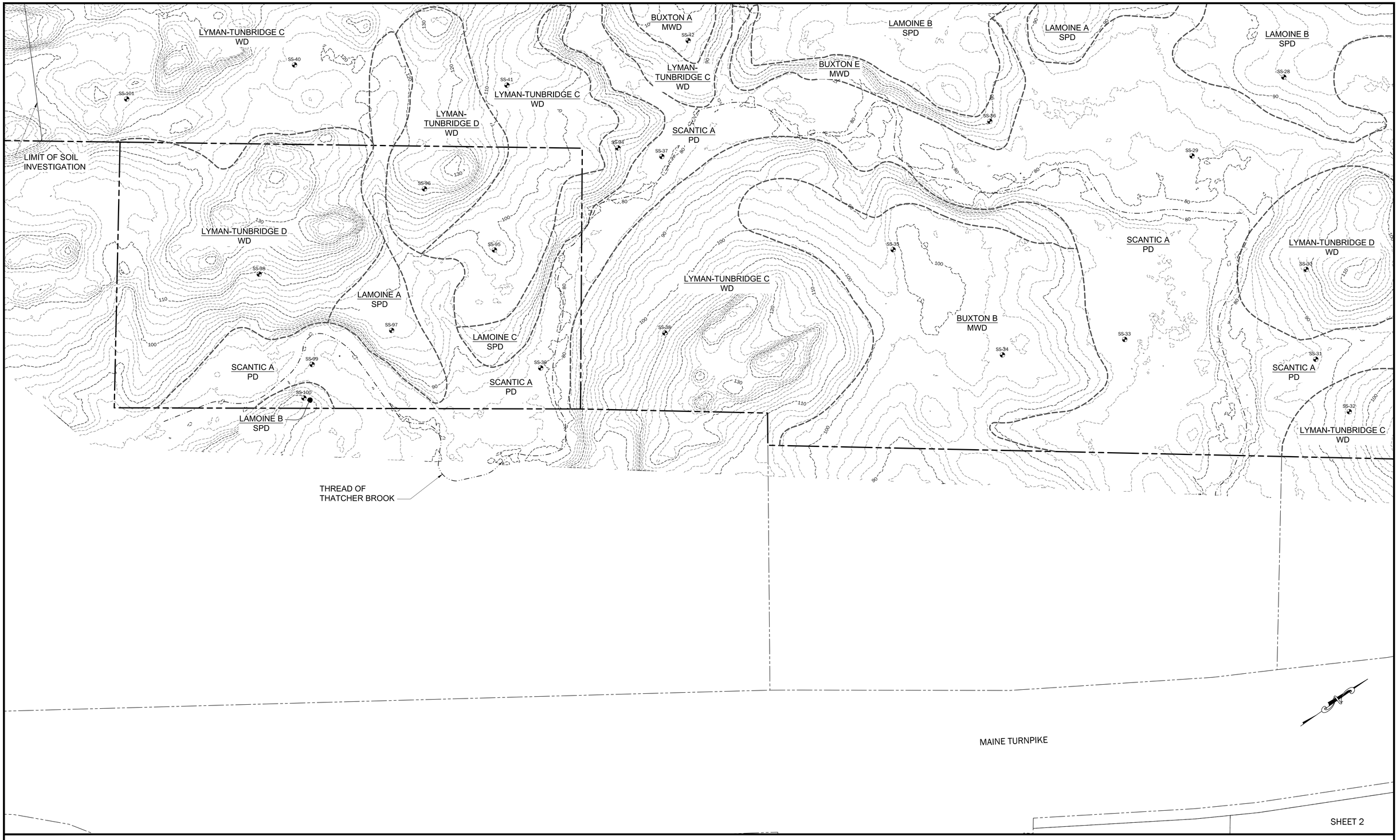
1 inch = 100 ft.

DATE: MAY 6, 2021

SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE

CLASS B HIGH INTENSITY SOILS SURVEY

SOUTH STREET, BIDDEFORD, MAINE



MARK HAMPTON ASSOCIATES, INC.
P.O. BOX 1931
PORTLAND, MAINE 04104

GRAPHIC SCALE

100 0 50 100 200 400

1 inch = 100 ft.

DATE: MAY 6, 2021

SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE

CLASS B HIGH INTENSITY SOILS SURVEY

SOUTH STREET, BIDDEFORD, MAINE

LYMAN-TUNBRIDGE C
WD

LAMOINE B
SPD

LAMOINE A
SPD

BIDDEFORD A
VPD

BUXTON B
MWD

LAMOINE C
SPD

POND

SCANTIC A
PD

BUXTON B
MWD

LAMOINE C
SPD

LAMOINE A
SPD

LYMAN-TUNBRIDGE D
WD

BRAYTON A
PD

BRAYTON B
PD

LAMOINE B
SPD

LAMOINE B
SPD

LYMAN-
TUNBRIDGE D
WD

BRAYTON A
PD

SCANTIC B
PD

LAMOINE C
SPD

LYMAN-
TUNBRIDGE C
WD

BUXTON C
MWD

BRAYTON A
PD

LAMOINE B
SPD

SCANTIC B
PD

SACO RIVER

SOUTH STREET

SS-60 SS-61 SS-91 SS-92 SS-93 SS-62 SS-90 SS-63 SS-89 SS-87 SS-88 SS-65 SS-64 SS-66 SS-69 SS-68 SS-71 SS-70 SS-86 SS-79 SS-78 SS-72 SS-73 SS-84 SS-83 SS-74 SS-82 SS-80 SS-81 SS-75 SS-77 SS-76

SHEET 3

GRAPHIC SCALE

100 0 50 100 200 400

1 inch = 100 ft.

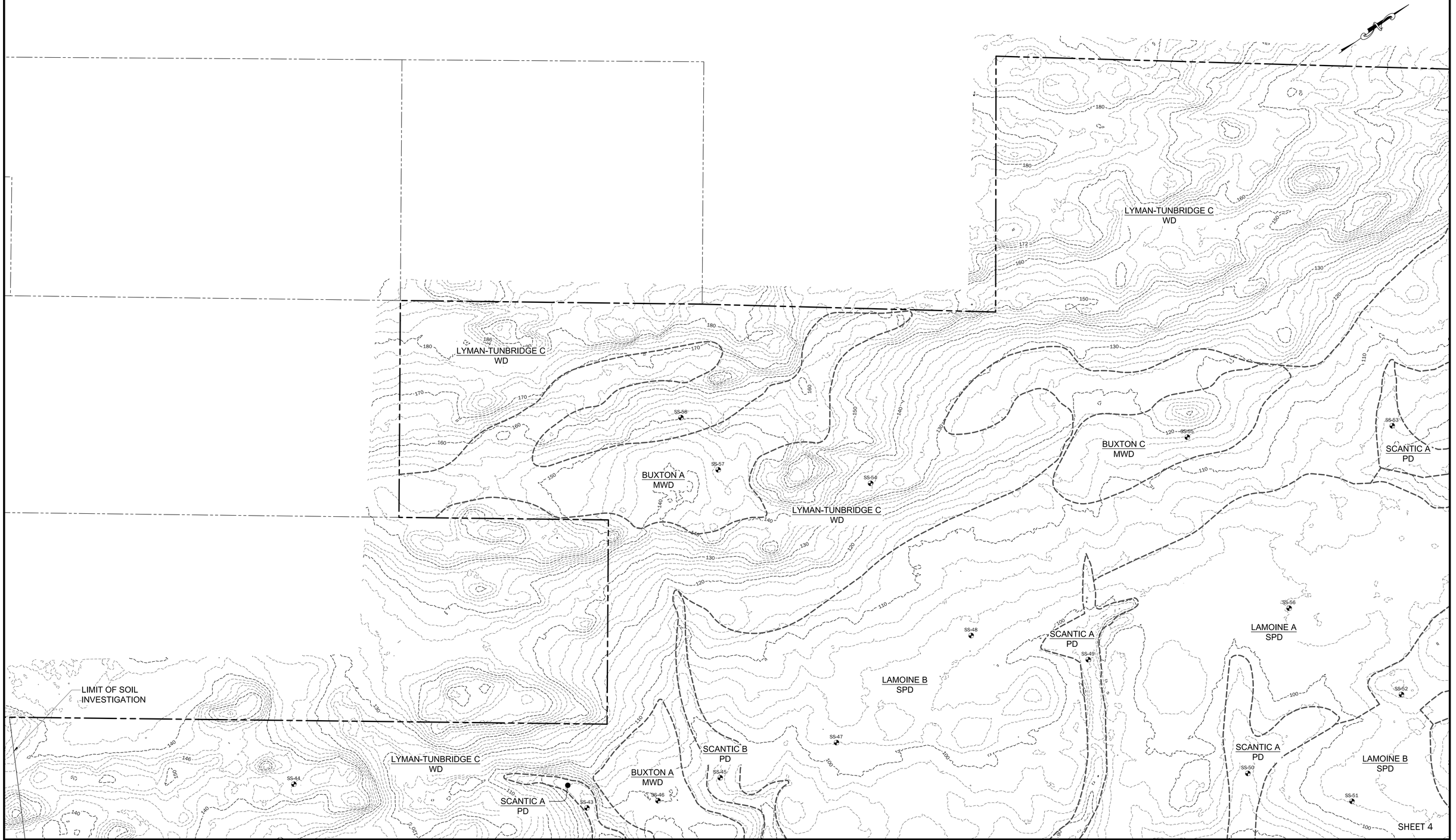
MARK HAMPTON ASSOCIATES, INC.
P.O. BOX 1931
PORTLAND, MAINE 04104

DATE: MAY 6, 2021

SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE

CLASS B HIGH INTENSITY SOILS SURVEY

SOUTH STREET, BIDDEFORD, MAINE



GRAPHIC SCALE

100 0 50 100 200 400

1 inch = 100 ft.

DATE: MAY 6, 2021

MARK HAMPTON ASSOCIATES, INC.
P.O. BOX 1931
PORTLAND, MAINE 04104

SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE

CLASS B HIGH INTENSITY SOILS SURVEY

SOUTH STREET, BIDDEFORD, MAINE

5365
FORM F Rev. 11/09

SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-1 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Gray	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	0	4"	☒	☒	☐

Soil series/phase name: Brayton PD ☒ Hydric ☐ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-2 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	6	12"	☒	☒	☐

Soil series/phase name: Lamoine SPD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-3 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	4	11"	☒	☒	☐

Soil series/phase name: Lamoine SPD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-4 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	0	5"	☒	☒	☐

Soil series/phase name: Brayton PD ☒ Hydric ☐ Non-hydric Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-5 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	16	16"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-6 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	8	24"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-7 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	4	20"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-8 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	12	12"	☒	☒	☐

Soil series/phase name: Lamoine SPD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. # 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-9 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*: 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Gray	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	6	10"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # SS-10 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*: 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	12	13"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # SS-11 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*: 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	15	11"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # SS-12 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*: 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	0	6"	☒	☒	☐

Soil series/phase name: Brayton PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group: _____

STATE OF MAINE MARK HAMPTON #216 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name: South Street Village
Applicant Name: South Street Village LLC
Project Location (municipality): Biddeford

Exploration Symbol # SS-13 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____
_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	5	6 "	☒	☒	☐

Soil series/phase name: Scantic PD
Hydric: ☒ Hydric ☐ Non-hydric
Hydrologic Soil Group:

Exploration Symbol # SS-14 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____
_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
ledge	Ledge	ledge	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	14	12 "	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD
Hydric: ☐ Hydric ☒ Non-hydric
Hydrologic Soil Group:

Exploration Symbol # SS-15 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____
_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	8	14 "	☒	☒	☐

Soil series/phase name: Lamoine SPD
Hydric: ☐ Hydric ☒ Non-hydric
Hydrologic Soil Group:

Exploration Symbol # SS-16 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____
_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	2	11 "	☒	☒	☐

Soil series/phase name: Lamoine SPD
Hydric: ☐ Hydric ☒ Non-hydric
Hydrologic Soil Group:

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Mark T. Hampton
Date: 1/21/21
Name Printed/typed: Mark Hampton
Cert/Lic/Reg. #: 263/216
Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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FORM F Rev. 11/09

SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-17 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6 "	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-18 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	15	14 "	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-19 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	4	12 "	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-20 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6 "	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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FORM F Rev. 11/09

SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-21 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
0 Fine Sandy Loam	Friable	Dark Gray	
6 Fine Sandy Loam	Friable	Brown	
18 Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification		Slope	Limiting Factor	
8 Profile	C Condition	4 Percent	16 " Depth	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group

Exploration Symbol # SS-22 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
0 Fine Sandy Loam	Friable	Dark Brown	
6 Fine Sandy Loam	Friable	Brown	
18 Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification		Slope	Limiting Factor	
8 Profile	C Condition	6 Percent	16 " Depth	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group

Exploration Symbol # SS-23 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
0 Fine Sandy Loam	Friable	Dark Brown	
6 Fine Sandy Loam	Friable	Brown	
12 Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification		Slope	Limiting Factor	
8 Profile	C Condition	10 Percent	20 " Depth	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group

Exploration Symbol # SS-24 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
0 Fine Sandy Loam	Friable	Dark Brown	
6 Fine Sandy Loam	Friable	Brown	
12 Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification		Slope	Limiting Factor	
8 Profile	D Condition	4 Percent	10 " Depth	☒ Groundwater ☒ Restrictive Layer ☐ Bedrock

Soil series/phase name: Lamoine SPD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark J. Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-25 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD — ☒ Hydric ☐ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-26 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
^^^	Ledge	^^^	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	12	16"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-27 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	3	14"	☒	☒	☐

Soil series/phase name: Lamoine SPD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-28 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	3	14"	☒	☒	☐

Soil series/phase name: Lamoine SPD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

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INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name: South Street Village

Applicant Name: South Street Village LLC

Project Location (municipality): Biddeford

Exploration Symbol # SS-29 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches): 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6 "	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-30 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches): 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	16	16 "	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-31 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches): 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	2	6 "	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-32 ☒ Test Pit ☐ Boring

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches): 0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	10	18 "	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Mark Hampton

Date: 1/21/21

Name Printed/typed: Mark Hampton

Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-33 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Dark Brown	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-34 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	3	16"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-35 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	6	18"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-36 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	26	16"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-37 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	2	6 "	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-38 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	18	16 "	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-39 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	2	6 "	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-40 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	4	24 "	☐	☐	☒

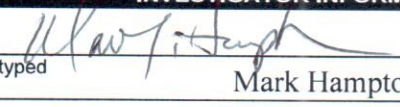
Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-41 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
Ledge	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	8	20"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD Hydric ☐ Non-hydric ☒ Hydrologic Soil Group: _____

Exploration Symbol # SS-42 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	2	20"	☒	☒	☐

Soil series/phase name: Buxton MWD Hydric ☐ Non-hydric ☒ Hydrologic Soil Group: _____

Exploration Symbol # SS-43 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD Hydric ☒ Non-hydric ☐ Hydrologic Soil Group: _____

Exploration Symbol # SS-44 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
Ledge	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	10	16"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD Hydric ☐ Non-hydric ☒ Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-45 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD — ☒ Hydric ☐ Non-hydric — Hydrologic Soil Group

Exploration Symbol # SS-46 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	2	20"	☒	☒	☐

Soil series/phase name: Buxton MWD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group

Exploration Symbol # SS-47 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	4	18"	☒	☒	☐

Soil series/phase name: Buxton MWD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group

Exploration Symbol # SS-48 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	4	16"	☒	☒	☐

Soil series/phase name: Buxton MWD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group

STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-49 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Dark Brown	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # SS-50 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # SS-51 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	6	14"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # SS-52 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	6	16"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group: _____

STATE OF MAINE MARK J. HAMPTON 1216 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-53 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD — ☒ Hydric ☐ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-54 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
ledge	Ledge	ledge	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	2	12"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-55 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	14	16"	☒	☒	☐

Soil series/phase name: Buxton MWD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-56 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	0	12"	☒	☒	☐

Soil series/phase name: Lamoine SPD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

STATE OF MAINE MARK HAMPTON #216 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-57 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	2	20"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-58 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	16	18"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-59 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	16	20"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-60 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	10	22"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

STATE OF MAINE MARK HAMPTON ON #216 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-61 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Gray	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	4	16"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-62 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	6	18"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-63 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	10	14"	☒	☒	☐

Soil series/phase name: Lamoine SPD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-64 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	14	10"	☒	☒	☐

Soil series/phase name: Lamoine SPD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

STATE OF MAINE MARK HAMPTON 263 CERTIFIED SOIL SCIENTIST

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-65 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD — ☒ Hydric ☐ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-66 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	8	18"	☒	☒	☐

Soil series/phase name: Buxton MWD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-67 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	12	16"	☒	☒	☐

Soil series/phase name: Buxton MWD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-68 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	0	13"	☒	☒	☐

Soil series/phase name: Lamoine SPD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-69 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	4	10"	☒	☒	☐

Soil series/phase name: Lamoine SPD

☐ Hydric ☒ Non-hydric

Hydrologic Soil Group

Exploration Symbol # SS-70 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	12	16"	☒	☒	☐

Soil series/phase name: Buxton MWD

☐ Hydric ☒ Non-hydric

Hydrologic Soil Group

Exploration Symbol # SS-71 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	14	16"	☒	☒	☐

Soil series/phase name: Buxton MWD

☐ Hydric ☒ Non-hydric

Hydrologic Soil Group

Exploration Symbol # SS-72 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	6	18"	☒	☒	☐

Soil series/phase name: Buxton MWD

☐ Hydric ☒ Non-hydric

Hydrologic Soil Group

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-73 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	6	20"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-74 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD ☒ Hydric ☐ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-75 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	14	14"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-76 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD ☒ Hydric ☐ Non-hydric Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-77 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Gray	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	16	16"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Non-hydric: ☒

Hydrologic Soil Group: _____

Exploration Symbol # SS-78 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	2	6"	☒	☒	☐

Soil series/phase name: Brayton PD

Hydric: ☒ Non-hydric: ☐

Hydrologic Soil Group: _____

Exploration Symbol # SS-79 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	2	6"	☒	☒	☐

Soil series/phase name: Brayton PD

Hydric: ☒ Non-hydric: ☐

Hydrologic Soil Group: _____

Exploration Symbol # SS-80 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	8	10"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Non-hydric: ☒

Hydrologic Soil Group: _____

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INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark J. Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-81 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	0	6"	☒	☒	☐

Soil series/phase name: Brayton PD — ☒ Hydric ☐ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-82 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	22	12"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-83 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	E	0	6"	☒	☒	☐

Soil series/phase name: Brayton PD — ☒ Hydric ☐ Non-hydric — Hydrologic Soil Group: _____

Exploration Symbol # SS-84 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	16	12"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD — ☐ Hydric ☒ Non-hydric — Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-85 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	18	10"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-86 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Gray	Common and Distinct
Sandy Loam	Firm	Olive	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
3	D	4	6"	☒	☒	☐

Soil series/phase name: Brayton PD ☒ Hydric ☐ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-87 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Firm	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	20	10"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

Exploration Symbol # SS-88 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	4	16"	☒	☒	☐

Soil series/phase name: Buxton MWD ☐ Hydric ☒ Non-hydric Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-89 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Gray	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	4	18"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-90 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	C	2	18"	☒	☒	☐

Soil series/phase name: Buxton MWD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-91 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	8	12"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-92 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	2	10"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

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INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark J. Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

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SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-93 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	2	6"	☒	☒	☐

Soil series/phase name: Biddeford PD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-94 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	10	12"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-95 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	12	15"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Hydric ☒ Non-hydric

Hydrologic Soil Group:

Exploration Symbol # SS-96 ☐ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AII	20	14"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☒ Hydric ☐ Non-hydric

Hydrologic Soil Group:

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
Mark Hampton	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

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5365
FORM F Rev. 11/09

SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-97 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	2	14"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Non-hydric: ☒

Hydrologic Soil Group:

Exploration Symbol # SS-98 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Sandy Loam	Friable	Dark Brown	
Sandy Loam	Friable	Brown	
	Ledge		

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
2	AIII	18	16"	☐	☐	☒

Soil series/phase name: Lyman-Tunbridge WD

Hydric: ☐ Non-hydric: ☒

Hydrologic Soil Group:

Exploration Symbol # SS-99 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to Bedrock refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Silt Loam	Friable	Black	
Silty Clay	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
9	E	0	6"	☒	☒	☐

Soil series/phase name: Scantic PD

Hydric: ☒ Non-hydric: ☐

Hydrologic Soil Group:

Exploration Symbol # SS-100 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface (inches)

Texture	Consistency	Color	Mottling
Fine Sandy Loam	Friable	Dark Brown	
Fine Sandy Loam	Friable	Brown	
Silty Clay Loam	Firm	Gray	Common and Distinct

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification: Profile	Condition	Slope: Percent	Limiting Factor: Depth	Groundwater	Restrictive Layer	Bedrock
8	D	3	14"	☒	☒	☐

Soil series/phase name: Lamoine SPD

Hydric: ☐ Non-hydric: ☒

Hydrologic Soil Group:

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

affix professional seal

5365
FORM F Rev. 11/09

SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name:	Applicant Name:	Project Location (municipality):
South Street Village	South Street Village LLC	Biddeford

Exploration Symbol # SS-101 ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*

Depth	Texture	Consistency	Color	Mottling
0–6	Sandy Loam	Friable	Dark Brown	
6–12	Sandy Loam	Friable	Brown	
18	~~~	Ledge	~~~	

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification	Slope	Limiting Factor	
Profile: 2 / Condition: AIII	Percent: 8	Depth: 16"	☐ Groundwater ☐ Restrictive Layer ☒ Bedrock

Soil series/phase name: Lyman-Tunbridge WD

☐ Hydric ☒ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # _____ ☒ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*

Texture	Consistency	Color	Mottling

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification	Slope	Limiting Factor	
Profile / Condition	Percent	Depth"	☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil series/phase name:

☐ Hydric ☐ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # _____ ☐ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*

Texture	Consistency	Color	Mottling

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification	Slope	Limiting Factor	
Profile / Condition	Percent	Depth"	☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil series/phase name:

☐ Hydric ☐ Non-hydric

Hydrologic Soil Group: _____

Exploration Symbol # _____ ☐ Test Pit ☐ Boring

_____" Organic horizon thickness Ground surface elev. _____

_____" Depth of exploration or to refusal

Depth below mineral soil surface *(inches)*

Texture	Consistency	Color	Mottling

Soil Details by S.E. ▸▸ S.S. ▸▸

Soil Classification	Slope	Limiting Factor	
Profile / Condition	Percent	Depth"	☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil series/phase name:

☐ Hydric ☐ Non-hydric

Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature	Date
	1/21/21
Name Printed/typed: Mark Hampton	Cert/Lic/Reg. #: 263/216

Title: ☒ Licensed Site Evaluator ☒ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

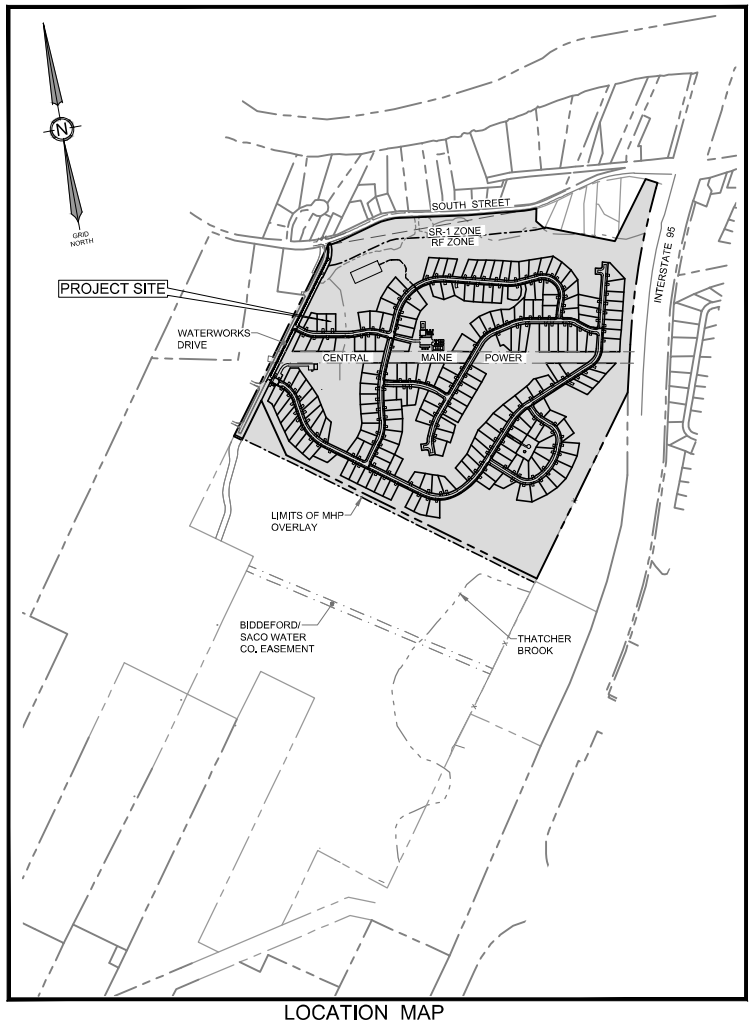
STATE OF MAINE MARK J. HAMPTON #216 CERTIFIED SOIL SCIENTIST

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HIDDEN HILLS HOUSING PARK

AN AGE RESTRICTED COMMUNITY
SOUTH STREET, BIDDEFORD, MAINE

SHEET INDEX	
SHT. NO.	SHEET TITLE
C-0.0	COVER SHEET & LOCATION MAP
C-1.0	OVERALL SUBDIVISION PLAN
C-1.1	SUBDIVISION PLAN - 1
C-1.2	SUBDIVISION PLAN - 2
C-1.3	SUBDIVISION PLAN - 3
C-1.4	SUBDIVISION PLAN - 4
C-2.0	OVERALL SITE PLAN
C-2.1	SITE PLAN - 1
C-2.2	SITE PLAN - 2
C-2.3	SITE PLAN - 3
C-2.4	SITE PLAN - 4
C-2.5	SITE PLAN - 5
C-2.6	SITE PLAN - 6
C-2.7	SITE PLAN - 7
C-2.8	SITE PLAN - 8
C-3.0	OVERALL GRADING & DRAINAGE PLAN
C-3.1	GRADING AND DRAINAGE PLAN - 1
C-3.2	GRADING AND DRAINAGE PLAN - 2
C-3.3	GRADING AND DRAINAGE PLAN - 3
C-3.4	GRADING AND DRAINAGE PLAN - 4
C-3.5	GRADING AND DRAINAGE PLAN - 5
C-3.6	GRADING AND DRAINAGE PLAN - 6
C-3.7	GRADING AND DRAINAGE PLAN - 7
C-3.8	GRADING AND DRAINAGE PLAN - 8
C-3.9	GRAVEL WETLAND - 1 PLAN
C-3.10	GRAVEL WETLAND - 2 PLAN
C-3.11	WATERWORKS DRIVE SIDEWALK GRADING
C-4.0	OVERALL UTILITY PLAN
C-4.1	UTILITY PLAN - 1
C-4.2	UTILITY PLAN - 2
C-4.3	UTILITY PLAN - 3
C-4.4	UTILITY PLAN - 4
C-4.5	UTILITY PLAN - 5
C-4.6	UTILITY PLAN - 6
C-4.7	UTILITY PLAN - 7
C-4.8	UTILITY PLAN - 8
C-5.1	PROFILE - BAXTER BOULEVARD
C-5.2	PROFILE - CHAMBER LANE
C-5.3	PROFILE - CHAMBER LANE
C-5.4	PROFILE - CHAMBER LANE
C-5.5	PROFILE - CHAMBER LANE
C-5.6	PROFILE - REMI DRIVE
C-5.7	PROFILE - REMI DRIVE
C-5.8	PROFILE - REMI DRIVE
C-5.9	PROFILE - COMMON WAY
C-5.10	PROFILE - COMMON WAY
C-5.11	PROFILE - VIEW POINT LOOP
C-5.12	PROFILE - VIEW POINT LOOP
C-5.13	PROFILE - FURR DRIVE
C-6.1	SITE DETAILS - 1
C-6.2	SITE DETAILS - 2
C-6.3	SITE DETAILS - 3
C-6.4	SITE DETAILS - 4
C-6.5	SITE DETAILS - 5
C-6.6	WATERWORKS DRIVE DETAILS
L-7.0	OVERALL LANDSCAPE PLAN
L-7.1	LANDSCAPE PLAN - 1
L-7.2	LANDCSAPE PLAN - 2
L-7.3	LANDSCAPE PLAN - 3
L-7.4	LANDSCAPE PLAN - 4
L-7.5	LANDSCAPE PLAN - 5
L-7.6	LANDSCAPE PLAN - 6
L-7.7	LANDSCAPE PLAN - 7
L-7.8	LANDSCAPE PLAN - 8
P-1.0	OVERALL PHOTOMETRIC PLAN
P-1.1	PHOTOMETRIC PLAN - 1
P-1.2	PHOTOMETRIC PLAN - 2
P-1.3	PHOTOMETRIC PLAN - 3
P-1.4	PHOTOMETRIC PLAN - 4
P-1.5	PHOTOMETRIC PLAN - 5
P-1.6	PHOTOMETRIC PLAN - 6
P-1.7	PHOTOMETRIC PLAN - 7
P-1.8	PHOTOMETRIC PLAN - 8



LOCATION MAP
SCALE: 1" = 500'

EXISTING USE DESCRIPTION	VACANT / UNDEVELOPED
PROPOSED USE DESCRIPTION	MANUFACTURED HOUSING PARK
REQUIRED WAIVER / VARIANCES	YES (WAIVER FROM 66-76(b) THAT REQUIRES ALL MATURE TREES OF 24" CALIPER TO BE SHOWN ON PLAN)
NAME OF DRAINAGE WATERSHED	SACO RIVER AND THATCHER BROOK
WITHIN THE MS4 URBANIZED AREA	NO
NATURAL RESOURCES LOCATED ON-SITE OR ADJACENT TO THE PROPERTY	YES
WITHIN THE 100-YR. FLOOD ZONE	YES, BUT NO DEVELOPMENT IS LOCATED WITHIN THE AREA
PUBLIC ROAD PROPOSED	NO
PRIVATE ROAD PROPOSED	YES
PUBLIC SEWER CONNECTION	NO
PUBLIC STORM DRAIN CONNECTION	NO
LIMITS OF DISTURBANCE	68.6 ACRES (INCLUDING LOT DEVELOPMENT)
PERVIOUS LAND COVERAGE (EXISTING AND PROPOSED)	0 ACRES EXISTING, 47 ACRES PROPOSED
IMPERVIOUS LAND COVERAGE, PAVEMENT / GRAVEL (EXISTING AND PROPOSED)	0 ACRES EXISTING, 14 ACRES PROPOSED
BUILDING ROOF (EXISTING AND PROPOSED)	4,000 S.F. CLUBHOUSE 1,200 S.F. MAINTENANCE BUILDING ASSUMED 1,680 S.F. PER UNIT TOTAL = 332,800 S.F. (7.64 ACRES)
ASSIGNED PLANNING BOARD NUMBER	2104.42
ESTIMATED CUT / FILL EARTHWORK VOLUME	18,600 CUBIC YARDS TOTAL (APPROX.) 1,950 CUBIC YARDS PHASE ONE

APPLICANT/OWNER:
SOUTH STREET VILLAGE LLC.
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

PROJECT PARCEL SITE
CITY OF BIDDEFORD TAX ASSESSOR'S MAP & LOT NUMBERS
MAP 2 LOT 7-8

PREPARED BY:

CIVIL ENGINEER:
TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE, SUITE 301
NEW GLOUCESTER, MAINE 04260
(207) 926-5111

SURVEYOR:
NORSE
NORTHERN SURVEY ENGINEERING
41 CHURCH ROAD
BRUNSWICK, MAINE 04011
MAIN: (207) 481-7080
DIRECT: (207) 481-7068
MOBILE: (978) 729-7110

WETLAND DELINEATION:
MARK HAMPTON ASSOCIATES
P.O. BOX 1931
PORTLAND, ME 04104-1931
(207) 756-2900

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- EXISTING SETBACK LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- ROAD CENTERLINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED CONTOUR
- EXISTING STORMDRAIN
- PROPOSED STORMDRAIN
- EXISTING WATER LINE
- PROPOSED WATER LINE
- PROPOSED UNDERDRAIN
- EXISTING OVERHEAD ELECTRIC & TELEPHONE
- PROPOSED OVERHEAD ELECTRIC & TELEPHONE
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- PROPOSED EDGE OF GRAVEL
- EXISTING CURB
- PROPOSED CURB
- EDGE OF WATER
- EXISTING TREE LINE
- PROPOSED TREE LINE
- EXISTING GUARDRAIL
- PROPOSED GUARDRAIL
- EROSION CONTROL MULCH BERM
- TEST PIT
- EXISTING VALVE
- PROPOSED VALVE
- EXISTING HYDRANT
- PROPOSED HYDRANT
- EXISTING TRANSFORMER
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE MANHOLE
- EXISTING SEWER MANHOLE
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING BUILDING
- PROPOSED BUILDING
- WETLAND AREA
- PROPOSED PAVEMENT
- RIPRAP
- PROPOSED BUFFER
- PROPOSED WETLAND ALTERATION

APPROVED: CITY OF BIDDEFORD
PLANNING BOARD

DATE

NO.	DATE	REVISIONS	APP'D BY
G	05-21-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	04-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-04-22	PRELIMINARY SUBMISSION	JDA

PERMIT DRAWING
NOT FOR CONSTRUCTION

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

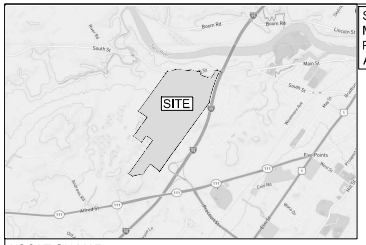
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
COVER SHEET & LOCATION MAP

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-0.0

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SEE SHEETS C-1.1 THRU C-1.4 FOR MORE INFORMATION, INCLUDING PARCEL SIZES AND DEFINITIONS, AND ROADWAY DEFINITIONS.

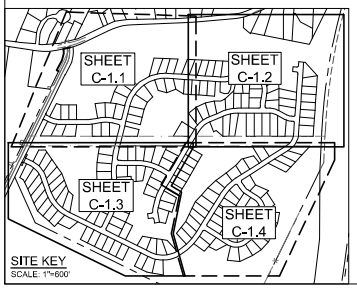
LOCATION MAP

NOT TO SCALE

GENERAL NOTES

1. RECORD OWNER OF THE PARCEL IS SOUTH STREET VILLAGE, LLC BY DEED DATED AUGUST 15, 2017 AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS (YCRD) IN BOOK 17541, PAGE 606, AND IS SHOWN AS LOT 8 ON THE CITY OF BIDDEFORD TAX MAP 7, AND LOT 38 ON MAP 2.
2. THE PROPERTY IS LOCATED IN THE RURAL FARM (RF) DISTRICT AND PARTIALLY SHOWN WITHIN THE SUBURBAN RESIDENTIAL 1 (SR1) MOBILE HOME PARK (MHP), AND SHORELAND OVERLAY ZONES AS SHOWN. LAND USE REGULATIONS FOR THE MHP OVERLAY ARE AS FOLLOWS:
   MIN. LOT SIZE: 12,000 S.F.
   MIN. LOT WIDTH: 75 FT. (SHARED SEPTIC)
   MIN. FRONT SETBACK: 15 FT.
   MIN. SIDE SETBACK: 15 FT.
   MIN. REAR SETBACK: 15 FT.
   MAX. BUILDING HEIGHT: 3 STORIES OR 35 FT.
   MIN. OPEN SPACE: 10% OF PROPERTY AREA
3. TOTAL AREA OF PARCEL = 164.25 ACRES.
   AREA OF MHP = 160.56 ACRES.
   AREA OF OPEN SPACE PROVIDED = 92.74 ACRES (57.75 % OF MHP AREA).
   TOTAL ALLOWABLE UNITS = 1 UNIT/20,000 S.F. = MHP AREA (6,994,865 S.F.)/ 20,000 S.F. PER UNIT = 349.7 UNITS.
   TOTAL NUMBER OF PROPOSED UNITS = 195.
4. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON AN EXISTING CONDITIONS SURVEY BY NORTHERN SURVEY ENGINEERING, LLC (NORSE), DATED DECEMBER 21, 2021. FIELD MEASUREMENTS WERE OBSERVED IN NOVEMBER, 2021, AND A RECORDS SEARCH WAS COMPLETED AS PART OF THE SURVEY TO DEFINE ANY RECORD ENCUMBERANCES OR CONVEYANCES, AND ALL FINDINGS ARE SHOWN HEREON.
5. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UP THE PLAN REFERENCED IN NOTE 4 AND IS DERIVED FROM DATA COLLECTED IN NOVEMBER, 2021 USING AN UNMANNED AERIAL VEHICLE (UAV)SURVEY-GRADE LIDAR SENSOR. THE RESULTING SURFACE WAS GROUND-TRUTHED AND VERIFIED TO MEET THE NATIONAL MAP ACCURACY STANDARDS FOR 1-FT. CONTOURS.
6. THE WETLANDS SHOWN WERE DELINEATED BY MARK HAMPTON ASSOCIATES, INC., PORTLAND, MAINE, COMPLETED IN MAY, 2021.
7. TOTAL PROJECT WETLAND ALTERATION AREA = 14,280 S.F., NO ADDITIONAL WETLAND ALTERNATION IS PERMISSIBLE WITHOUT FURTHER WETLAND PERMITTING. THE PROJECT RECEIVED THE FOLLOWING PERMITS:
   a. NRPA TIER 1 PERMIT: L-30087-TC-D-N
   b. ACOA WETLAND FILL PERMIT: NAE-2023-01152
8. THIS PROJECT IS BOUND BY A SITE LOCATION OF DEVELOPMENT ACT PERMIT FROM THE MAINE DEP SITE LOCATION, PERMIT: L-30087-4-N.
9. PROJECT STORMWATER NOTES:
   a. THE OWNER SHALL BE REQUIRED TO INSPECT AND MAINTAIN THE STORMWATER MANAGEMENT SYSTEM, PER THE GUIDELINES AS OUTLINED IN SECTION 12 OF THE APPROVED SLODA PERMIT.
   b. THE FOLLOWING UNITS SHALL CONTAIN A FILTER STRIP TO CATCH ROOF RUNOFF WITHIN REASON: 6, 8, 9, 17, 22-24, 58, 88-93, 95–101, 103, 104, 115–118, 120, 131, 133–134, 138, 140, 141, 151–153, 157–163, 166–169, 176, 179, 181. THE MAINTENANCE BUILDING, AND THE CLUBHOUSE.
   c. BUFFER CORNERS SHALL BE MARKED WITH SURVEY IRON PIN THAT READS "BUFFER," WHERE THE BUFFER DIRECTLY ABUTS A LOT AREA. THE BUFFER AREA SHALL BE MARKED AT A MAXIMUM INTERVAL OF 50-FT. IN ADDITION TO THE BUFFER CORNERS.
10. THE CITY OF BIDDEFORD WILL NOT BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR OR PLOWING OF THE PRIVATE ROADS, AND THAT FURTHER LOT DIVISIONS UTILIZING THE PRIVATE ROADS ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE BOARD.
11. THE DEVELOPER AGREES TO INSTALL A DOMESTIC BOOSTER PUMP FOR ALL DWELLING UNITS THAT DO NOT HAVE 35-psi OF WATER PRESSURE AT ALL TIMES, THAT IS EXPECTED TO BE UNITS 9, 12–17, 23, 25–42, 47–49, 51–64, 80–86, 88–95, 106–135, 140–150, 152–160, AND 181–187.
12. THE WATER LINE WILL BE LOOPED DURING THE SECOND PHASE OF THE PROPERTY.
13. PRIVATE ROADS WITHIN THIS DEVELOPMENT WILL NOT BE SUBMITTED IN THE FUTURE FOR PUBLIC ACCEPTANCE.





ABUTTER LIST

NO.	OWNER	BOOK	PAGE	MAP	LOT
1	MAINE WATER CO.	2775	0	2	10
2	MAINE WATER CO.	17910	909	2	17-2
3	THOMAS J. & TAMMY LAKEMPER	10506	313	2	41-8
4	ROGER P. DUCHESNE	6367	256	2	41-7
5	RITA C. PARSONS	15377	932	7	1
6	RICHARD E. & WENDY J. PHILLIPS	9614	283	7	2
7	ALLEN N. SAUCIER	9375	65	7	3
8	ALLEN N. & MARGARET A. SAUCIER	9375	67	7	4
9	LOUIS A. DITOMASSO	18975	311	7	5
10	ROBERT SCOTT THIBODEAU	16937	510	7	6
11	JOEL E. NEVERS	16793	376	7	7-7
12	LINDA S. BROWN	15497	404	7	7-8
13	NICHOLAS STEVEN DARGIE	17846	721	7	7-9
14	NICHOLAS STEVEN DARGIE	17846	721	7	7-10
15	NICHOLAS STEVEN DARGIE	17846	721	7	7-11
16	CLAUDETTE LEVESQUE	2079	283	7	7-2
17	SOUTH STREET VILLAGE, LLC	17541	589	7	8
18	ROBERT J. BRODEUR	18978	400	7	9
19	ERIN C. & EVAN CHRISTIAAN WHITE	17632	327	7	10
20	RALPH P. & CELINE L. LARRIVIERE	1869	666	7	11
21	CLAIRE A. CUSTEAU McVICAR	6993	286	7	11-1
22	STEVEN C. & DEBRA A. HOULE	16464	317	7	11-2
23	GUY R. & SUZANNE C. PAQUETTE	16934	84	7	12
24	MAINE TURNPIKE AUTHORITY	17911	448	7	5-2
25	STATE OF MAINE	2452	308	2	39-1

GRAPHIC SCALE
(IN FEET)
1 INCH = 150FT.

APPROVAL - CITY OF BIDDEFORD PLANNING BOARD

DATE

CHAIRPERSON

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____, 20__
AT ___h ___m ___M. AND RECORDED IN PLAN BOOK _____ PAGE _____.
ATTEST _____ REGISTER

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
G	05-13-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	04-16-2024	SUBMITTED FOR FINAL APPROVAL	JDA
E	01-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	05-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-12-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-20-2022	PRELIMINARY SUBMISSION	JDA

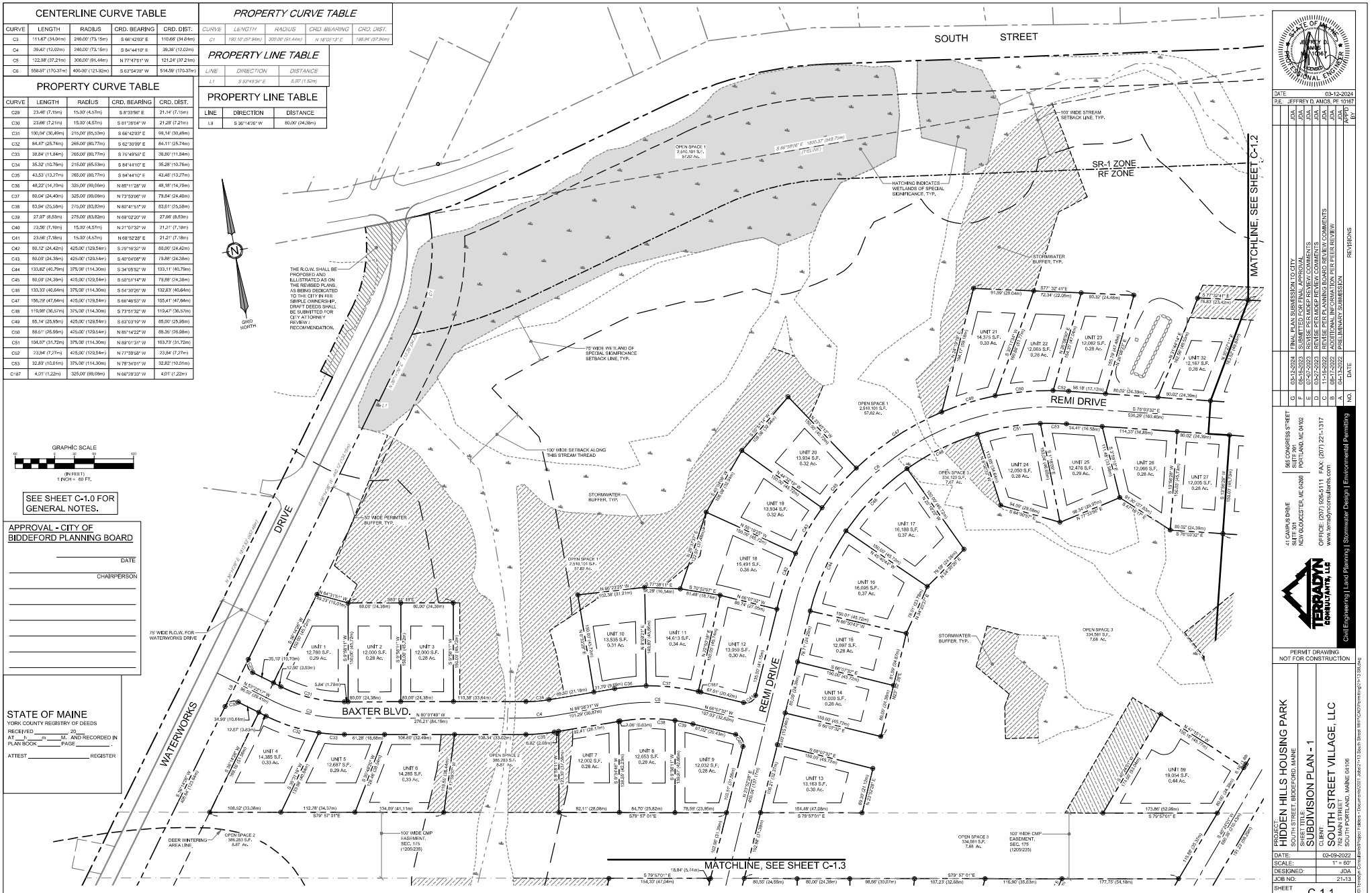
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
386 CONGRESS STREET PORTLAND, ME 04102
4 CAMPUS DRIVE NORTH GLOUCESTER, ME 04260
OFFICE: (207) 925-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
OVERALL SUBDIVISION PLAN
CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 150'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-1.0

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SEE SHEET C-1.0 FOR GENERAL NOTES.

APPROVAL - CITY OF BIDDEFORD PLANNING BOARD

DATE

CHAIRPERSON

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____, 20__
AT ___h ___m ___M. AND RECORDED IN PLAN BOOK _____ PAGE _____.
ATTEST _____ REGISTER

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C3	111.67' (34.04m)	240.00' (73.15m)	S 66°42'03" E	110.68' (34.04m)
C4	39.47' (12.02m)	240.00' (73.15m)	S 84°44'10" E	39.38' (12.02m)
C5	122.08' (37.21m)	300.00' (91.44m)	N 77°47'01" W	121.24' (37.21m)
C6	558.97' (170.37m)	400.00' (121.92m)	S 63°54'28" W	514.59' (170.37m)

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C29	23.46' (7.15m)	15.00' (4.57m)	S 8°33'56" E	21.14' (7.15m)
C30	23.66' (7.21m)	15.00' (4.57m)	S 81°26'04" W	21.28' (7.21m)
C31	100.04' (30.49m)	215.00' (65.53m)	S 66°42'03" E	99.14' (30.49m)
C32	84.47' (25.74m)	265.00' (80.77m)	S 62°30'09" E	84.11' (25.74m)
C33	38.84' (11.84m)	265.00' (80.77m)	S 75°49'55" E	38.80' (11.84m)
C34	35.32' (10.76m)	215.00' (65.53m)	S 84°44'10" E	35.28' (10.76m)
C35	43.53' (13.27m)	265.00' (80.77m)	S 84°44'10" E	43.48' (13.27m)
C36	48.22' (14.70m)	325.00' (99.06m)	N 85°11'28" W	48.18' (14.70m)
C37	80.04' (24.40m)	325.00' (99.06m)	N 73°53'06" W	79.84' (24.40m)
C38	83.94' (25.58m)	275.00' (83.82m)	N 80°41'51" W	83.61' (25.58m)
C39	27.97' (8.53m)	275.00' (83.82m)	N 69°02'20" W	27.96' (8.53m)
C40	23.56' (7.18m)	15.00' (4.57m)	N 21°07'32" W	21.21' (7.18m)
C41	23.56' (7.18m)	15.00' (4.57m)	N 68°52'28" E	21.21' (7.18m)
C42	80.12' (24.42m)	425.00' (129.54m)	S 29°16'32" W	80.00' (24.42m)
C43	80.00' (24.39m)	425.00' (129.54m)	S 40°04'08" W	79.88' (24.38m)
C44	133.82' (40.79m)	375.00' (114.30m)	S 34°05'52" W	133.11' (40.79m)
C45	80.00' (24.39m)	425.00' (129.54m)	S 50°51'14" W	79.88' (24.38m)
C46	133.33' (40.64m)	375.00' (114.30m)	S 54°30'26" W	132.63' (40.64m)
C47	156.29' (47.64m)	425.00' (129.54m)	S 66°46'53" W	155.41' (47.64m)
C48	119.98' (36.57m)	375.00' (114.30m)	S 73°51'32" W	119.47' (36.57m)
C49	85.14' (25.95m)	425.00' (129.54m)	S 83°03'19" W	85.00' (25.95m)
C50	88.51' (26.98m)	425.00' (129.54m)	N 85°14'22" W	88.35' (26.92m)
C51	104.07' (31.72m)	375.00' (114.30m)	N 89°01'31" W	103.73' (31.72m)
C52	23.84' (7.27m)	425.00' (129.54m)	N 77°39'58" W	23.84' (7.27m)
C53	32.83' (10.01m)	375.00' (114.30m)	N 78°34'01" W	32.82' (10.01m)
C187	4.01' (1.22m)	325.00' (99.06m)	N 66°28'33" W	4.01' (1.22m)

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C1	190.10' (57.94m)	300.00' (91.44m)	N 18°02'13" E	186.94' (57.01m)

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L1	S 83°45'34" E	5.07' (1.52m)

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L9	S 36°14'26" W	80.00' (24.38m)

NO.	DATE	REVISIONS	BY	APP'D
A	04-12-2024	PRE-MIHPAY SUBMISSION	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

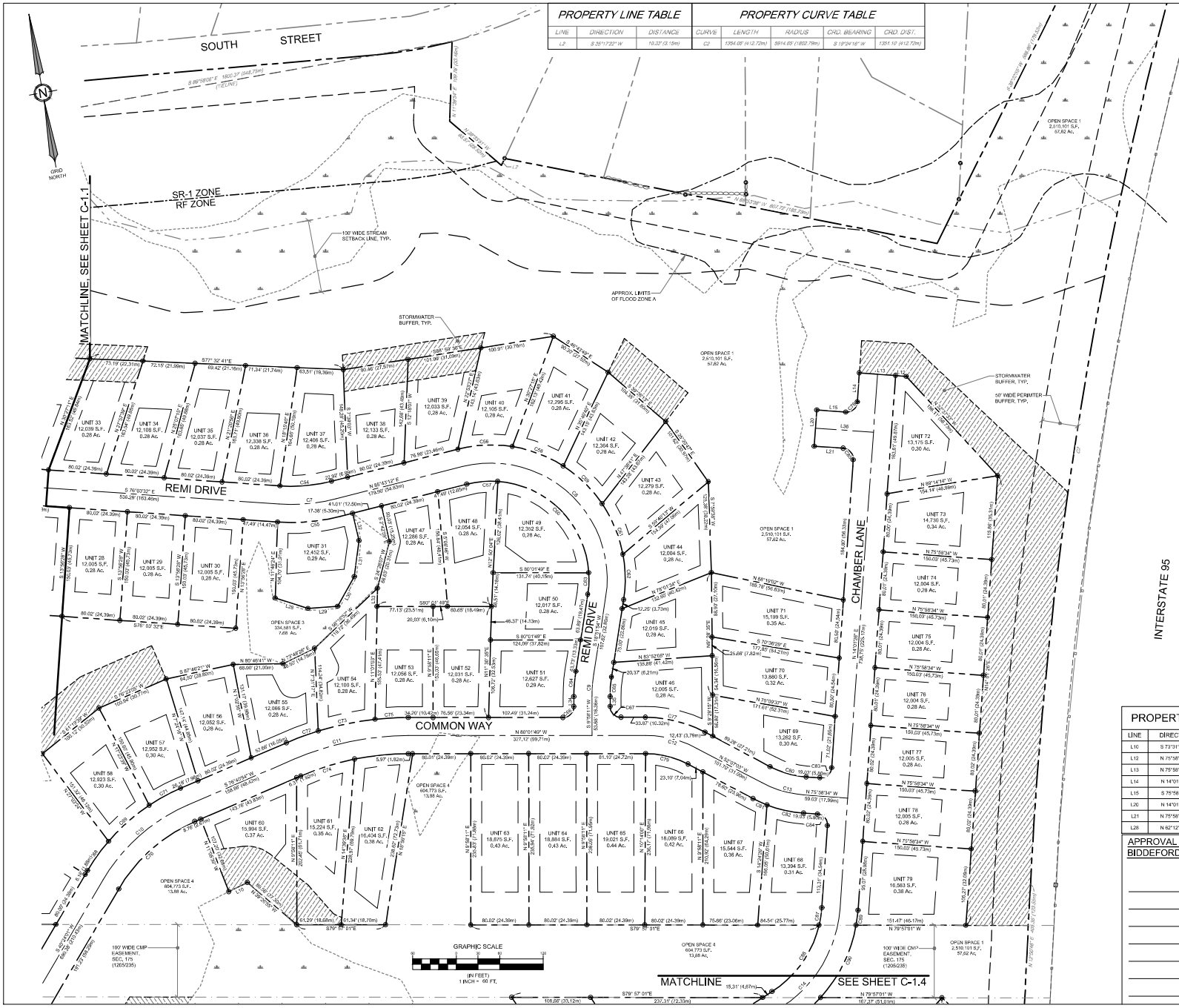
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
KENNEBUNK, MAINE 04043
566 CONGRESS STREET
PORTLAND, ME 04102
OFFICE: (207) 956-5111 FAX: (207) 221-1317
www.terradynconsultants.com

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PROJECT:
HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE
SHEET TITLE:
SUBDIVISION PLAN - 1
CLIENT:
SOUTH STREET VILLAGE, LLC
SOUTH STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 60'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-1.1

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PROPERTY LINE TABLE		
LINE	DIRECTION	DISTANCE
L2	S 35°17'22" W	10.37' (3.16m)

PROPERTY CURVE TABLE				
CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C2	1354.08' (412.72m)	5914.65' (1802.79m)	S 19°24'16" W	1351.10' (412.72m)

CENTERLINE TABLE		
LINE	DIRECTION	DISTANCE
L36	S 75°58'34" E	80.00' (24.38)m

CENTERLINE CURVE TABLE				
CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C7	79.90' (24.23m)	250.00' (76.20m)	S 85°10'10" E	79.17' (24.23m)
C8	315.96' (96.30m)	160.00' (48.77m)	N 37°42'27" W	267.07' (96.30m)
C9	31.05' (9.46m)	200.00' (60.96m)	S 14°25'02" W	31.02' (9.46m)
C10	158.31' (48.25m)	250.00' (76.20m)	S 58°32'28" W	155.68' (48.25m)
C11	162.58' (49.55m)	400.00' (121.92m)	S 86°19'33" W	161.46' (49.55m)
C12	73.08' (22.27m)	150.00' (45.72m)	N 66°04'28" W	72.36' (22.27m)
C13	62.46' (19.04m)	150.00' (45.72m)	S 64°02'48" E	62.01' (19.04m)
C14	162.71' (49.60m)	175.00' (53.34m)	N 40°39'58" E	156.92' (49.60m)

PROPERTY CURVE TABLE				
CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C54	71.55' (21.81m)	225.00' (68.58m)	S 85° 10'10" E	71.25' (21.81m)
C55	87.46' (26.66m)	275.00' (83.82m)	S 85° 10'10" E	87.09' (26.66m)
C56	75.50' (23.01m)	185.00' (56.39m)	N 82°35'21" W	74.97' (23.01m)
C57	42.88' (13.06m)	135.00' (41.15m)	N 85°11'08" W	42.68' (13.06m)
C58	75.54' (23.02m)	185.00' (56.39m)	N 59°12'03" W	75.02' (23.02m)
C59	75.54' (23.03m)	185.00' (56.39m)	N 35°48'19" W	75.02' (23.03m)
C60	193.96' (59.12m)	135.00' (41.15m)	N 34°55'56" W	177.79' (59.12m)
C61	75.54' (23.03m)	185.00' (56.39m)	N 12°24'33" W	75.02' (23.03m)
C62	63.21' (19.27m)	185.00' (56.39m)	N 5°04'37" E	62.90' (19.27m)
C63	29.78' (9.08m)	135.00' (41.15m)	N 12°32'44" E	29.72' (9.06m)
C64	34.93' (10.65m)	225.00' (68.58m)	S 14°25'02" W	34.90' (10.65m)
C65	27.17' (8.28m)	175.00' (53.34m)	S 14°25'02" W	27.14' (8.28m)
C66	23.56' (7.18m)	15.00' (4.57m)	N 54°58'11" E	21.21' (7.18m)
C67	23.56' (7.18m)	15.00' (4.57m)	S 35°01'49" E	21.21' (7.18m)
C68	49.73' (15.16m)	275.00' (83.82m)	S 45°34'52" W	49.66' (15.16m)
C69	75.23' (22.94m)	275.00' (83.82m)	S 58°36'04" W	75.01' (22.94m)
C70	142.48' (43.43m)	225.30' (68.58m)	S 58°32'28" W	140.11' (43.43m)
C71	49.16' (14.98m)	275.30' (83.82m)	S 71°33'39" W	49.09' (14.98m)
C72	46.74' (14.25m)	425.00' (129.54m)	S 79°49'56" W	46.72' (14.25m)
C73	80.13' (24.42m)	425.00' (129.54m)	S 88°23'05" W	80.02' (24.42m)
C74	77.89' (23.74m)	375.00' (114.30m)	S 82°37'55" W	77.75' (23.74m)
C75	45.80' (13.96m)	425.00' (129.54m)	N 83°07'19" W	45.80' (13.96m)
C76	74.53' (22.72m)	375.00' (114.30m)	N 85°43'27" W	74.41' (22.72m)
C77	85.25' (25.99m)	175.00' (53.34m)	N 66°04'28" W	84.41' (25.99m)
C78	23.56' (7.18m)	15.00' (4.57m)	N 59°01'28" E	21.21' (7.18m)
C79	60.90' (18.56m)	125.00' (38.10m)	N 66°04'24" W	60.30' (18.56m)
C80	52.05' (15.87m)	125.00' (38.10m)	S 64°02'48" E	51.68' (15.87m)
C81	20.95' (6.38m)	175.00' (53.34m)	S 55°32'46" E	20.93' (6.38m)
C82	51.93' (15.83m)	175.00' (53.34m)	S 67°28'32" E	51.74' (15.83m)
C83	23.56' (7.18m)	15.00' (4.57m)	N 59°01'28" E	21.21' (7.18m)
C84	23.56' (7.18m)	15.00' (4.57m)	N 30°58'34" W	21.21' (7.18m)
C85	23.56' (7.18m)	15.00' (4.57m)	N 30°58'34" W	21.21' (7.18m)
C87	24.34' (7.42m)	150.00' (45.72m)	N 18°40'20" E	24.31' (7.42m)
C88	115.13' (35.09m)	150.00' (45.72m)	N 45°18'31" E	112.33' (35.09m)
C89	20.73' (6.32m)	200.00' (60.96m)	N 16°59'37" E	20.72' (6.32m)
C90	112.82' (34.39m)	200.00' (60.96m)	N 36°07'25" E	111.33' (34.39m)

PROPERTY LINE TABLE		
LINE	DIRECTION	DISTANCE
L16	S 73°31'13" W	28.51' (8.69m)
L12	N 75°58'34" W	14.70' (4.48m)
L13	N 75°58'34" W	50.26' (15.24m)
L14	N 14°01'26" E	40.00' (12.19m)
L15	S 75°58'34" E	40.00' (12.19m)
L20	N 14°01'26" E	50.26' (15.24m)
L21	N 75°58'34" W	40.00' (12.19m)
L28	N 62°12'34" W	47.50' (14.48m)

PROPERTY LINE TABLE		
LINE	DIRECTION	DISTANCE
L29	N 84°23'03" W	41.05' (12.51m)
L30	S 39°10'44" W	46.53' (14.19m)
L31	S 17°25'17" W	50.26' (15.32m)
L32	S 2°42'56" E	38.65' (11.78m)
L33	N 11°01'03" E	25.26' (7.70m)
L34	S 9°58'11" W	13.66' (4.17m)
L35	N 9°58'11" E	13.66' (4.17m)

APPROVAL - CITY OF BIDDEFORD PLANNING BOARD

DATE

CHAIRPERSON

SEE SHEET C-1.0 FOR GENERAL NOTES.

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____, 20__
AT ____h ____m ____M, AND RECORDED IN PLAN BOOK _____ PAGE _____.
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DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

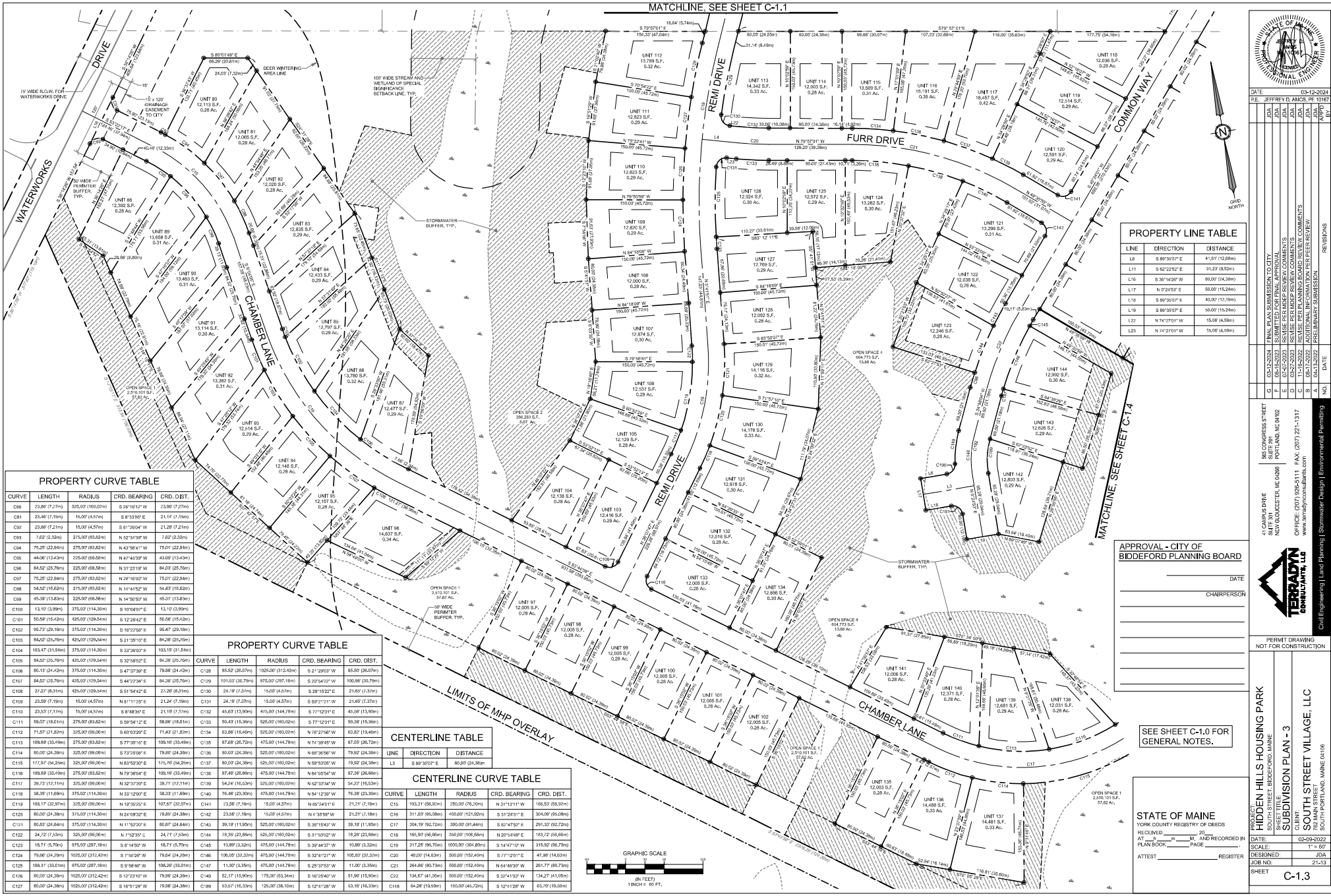
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NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
MEDA STREET, BIDDEFORD, MAINE
SHEET TITLE:
SUBDIVISION PLAN - 2
CLIENT:
SOUTH STREET VILLAGE, LLC
30 MUNJOY STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 60'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-1.2

C:\Dropbox\Terradyn Consultants\Projects\Active\2021 Jobs\21-13 South Street Mixed Use\Civil\Permitting\21-13 Site.dwg



PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L6	S 89°35'07" E	41.81' (12.68m)
L11	S 62°22'52" E	31.23' (9.52m)
L16	S 36°14'26" W	80.00' (24.38m)
L17	N 0°24'53" E	50.00' (15.24m)
L18	S 89°35'07" E	40.00' (12.19m)
L19	S 89°35'07" E	50.00' (15.24m)
L22	N 74°27'01" W	15.06' (4.59m)
L23	N 74°27'01" W	15.06' (4.59m)

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C66	23.86' (7.27m)	325.00' (100.02m)	S 26°16'12" W	23.86' (7.27m)
C91	23.46' (7.15m)	15.00' (4.57m)	S 8°33'56" E	21.14' (7.19m)
C92	23.66' (7.21m)	15.00' (4.57m)	S 81°26'04" W	21.28' (7.21m)
C93	7.82' (2.32m)	275.00' (83.82m)	N 52°34'39" W	7.82' (2.32m)
C94	75.25' (22.94m)	275.00' (83.82m)	N 43°56'41" W	75.01' (22.84m)
C95	44.06' (13.43m)	225.00' (68.58m)	N 47°46'39" W	43.99' (13.41m)
C96	84.52' (25.76m)	225.00' (68.58m)	N 31°23'19" W	84.03' (25.76m)
C97	75.25' (22.94m)	275.00' (83.82m)	N 28°16'07" W	75.01' (22.84m)
C98	54.52' (16.62m)	275.00' (83.82m)	N 14°45'52" W	54.43' (16.62m)
C99	45.39' (13.83m)	225.00' (68.58m)	N 14°50'52" W	45.31' (13.83m)
C100	13.10' (3.99m)	375.00' (114.30m)	S 10°04'07" E	13.10' (3.99m)
C101	50.59' (15.42m)	425.00' (129.54m)	S 12°28'42" E	50.56' (15.42m)
C102	95.73' (29.18m)	375.00' (114.30m)	S 18°22'58" E	95.47' (29.18m)
C103	84.50' (25.76m)	425.00' (129.54m)	S 21°35'10" E	84.38' (25.76m)
C104	103.47' (31.54m)	375.00' (114.30m)	S 33°39'03" E	103.15' (31.54m)
C105	84.52' (25.76m)	425.00' (129.54m)	S 32°56'52" E	84.38' (25.76m)
C106	80.13' (24.42m)	375.00' (114.30m)	S 47°37'39" E	79.98' (24.42m)
C107	84.52' (25.76m)	425.00' (129.54m)	S 44°22'34" E	84.38' (25.76m)
C108	27.28' (8.31m)	425.00' (129.54m)	S 51°54'42" E	27.28' (8.31m)
C109	23.59' (7.19m)	15.00' (4.57m)	N 61°11'25" E	21.24' (7.19m)
C110	23.53' (7.17m)	15.00' (4.57m)	S 8°48'35" E	21.19' (7.17m)
C111	59.07' (18.01m)	275.00' (83.82m)	S 59°54'12" E	58.96' (18.01m)
C112	71.57' (21.82m)	325.00' (99.06m)	S 60°03'29" E	71.43' (21.82m)
C113	109.89' (33.49m)	275.00' (83.82m)	S 77°30'16" E	109.16' (33.49m)
C114	80.00' (24.38m)	325.00' (99.06m)	S 73°25'08" E	79.80' (24.38m)
C115	177.97' (54.25m)	325.00' (99.06m)	N 83°53'30" E	175.76' (54.25m)
C116	109.89' (33.49m)	275.00' (83.82m)	N 79°36'04" E	109.16' (33.49m)
C117	39.73' (12.11m)	325.00' (99.06m)	N 32°37'29" E	39.71' (12.11m)
C118	38.35' (11.69m)	375.00' (114.30m)	N 33°12'00" E	38.33' (11.68m)
C119	108.17' (32.97m)	325.00' (99.06m)	N 19°35'25" E	107.67' (32.97m)
C120	80.00' (24.38m)	375.00' (114.30m)	N 24°09'32" E	79.85' (24.38m)
C121	80.83' (24.64m)	375.00' (114.30m)	N 11°52'20" E	80.67' (24.64m)
C122	24.72' (7.53m)	325.00' (99.06m)	N 7°52'35" E	24.71' (7.53m)
C123	18.71' (5.70m)	975.00' (297.18m)	S 8°14'50" W	18.71' (5.70m)
C124	79.86' (24.29m)	1025.00' (312.42m)	S 7°55'28" W	79.64' (24.28m)
C125	108.31' (33.01m)	975.00' (297.18m)	S 9°58'46" W	108.26' (33.01m)
C126	80.00' (24.38m)	1025.00' (312.42m)	S 12°23'10" W	79.98' (24.39m)
C127	80.00' (24.38m)	1025.00' (312.42m)	S 16°51'29" W	79.98' (24.38m)
C128	85.52' (26.07m)	1025.00' (312.42m)	S 21°29'03" W	85.50' (26.07m)
C129	101.03' (30.79m)	975.00' (297.18m)	S 20°54'22" W	100.98' (30.79m)
C130	24.19' (7.37m)	15.00' (4.57m)	S 28°19'22" E	21.69' (7.37m)
C131	24.19' (7.37m)	15.00' (4.57m)	S 59°21'21" W	21.65' (7.37m)
C132	45.03' (13.90m)	475.00' (144.78m)	S 77°12'01" E	45.01' (13.90m)
C133	50.40' (15.36m)	525.00' (160.02m)	S 77°12'01" E	50.38' (15.36m)
C134	63.86' (19.46m)	525.00' (160.02m)	N 76°27'56" W	63.82' (19.46m)
C135	87.88' (26.72m)	475.00' (144.78m)	N 74°39'45" W	87.75' (26.72m)
C136	80.00' (24.38m)	525.00' (160.02m)	N 68°36'56" W	79.92' (24.38m)
C137	80.00' (24.38m)	525.00' (160.02m)	N 59°53'05" W	79.92' (24.38m)
C138	87.48' (26.66m)	475.00' (144.78m)	N 64°05'54" W	87.36' (26.66m)
C139	54.24' (16.53m)	525.00' (160.02m)	N 52°33'54" W	54.22' (16.53m)
C140	76.46' (23.30m)	475.00' (144.78m)	N 54°12'39" W	76.38' (23.30m)
C141	23.56' (7.18m)	15.00' (4.57m)	N 85°24'01" E	21.21' (7.18m)
C142	23.56' (7.18m)	15.00' (4.57m)	N 4°35'59" W	21.21' (7.18m)
C143	39.19' (11.95m)	525.00' (160.02m)	S 38°15'43" W	39.18' (11.95m)
C144	78.35' (23.89m)	525.00' (160.02m)	S 31°30'52" W	78.28' (23.86m)
C145	10.89' (3.32m)	475.00' (144.78m)	S 39°44'37" W	10.89' (3.32m)
C146	106.05' (32.32m)	475.00' (144.78m)	S 32°41'27" W	105.83' (32.32m)
C147	11.30' (3.35m)	475.00' (144.78m)	S 25°37'53" W	11.00' (3.35m)
C148	52.17' (15.90m)	175.00' (53.34m)	S 16°29'40" W	51.98' (15.90m)
C149	53.57' (16.33m)	125.00' (38.10m)	S 12°41'28" W	53.16' (16.33m)

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C128	85.52' (26.07m)	1025.00' (312.42m)	S 21°29'03" W	85.50' (26.07m)
C129	101.03' (30.79m)	975.00' (297.18m)	S 20°54'22" W	100.98' (30.79m)
C130	24.19' (7.37m)	15.00' (4.57m)	S 28°19'22" E	21.69' (7.37m)
C131	24.19' (7.37m)	15.00' (4.57m)	S 59°21'21" W	21.65' (7.37m)
C132	45.03' (13.90m)	475.00' (144.78m)	S 77°12'01" E	45.01' (13.90m)
C133	50.40' (15.36m)	525.00' (160.02m)	S 77°12'01" E	50.38' (15.36m)
C134	63.86' (19.46m)	525.00' (160.02m)	N 76°27'56" W	63.82' (19.46m)
C135	87.88' (26.72m)	475.00' (144.78m)	N 74°39'45" W	87.75' (26.72m)
C136	80.00' (24.38m)	525.00' (160.02m)	N 68°36'56" W	79.92' (24.38m)
C137	80.00' (24.38m)	525.00' (160.02m)	N 59°53'05" W	79.92' (24.38m)
C138	87.48' (26.66m)	475.00' (144.78m)	N 64°05'54" W	87.36' (26.66m)
C139	54.24' (16.53m)	525.00' (160.02m)	N 52°33'54" W	54.22' (16.53m)
C140	76.46' (23.30m)	475.00' (144.78m)	N 54°12'39" W	76.38' (23.30m)
C141	23.56' (7.18m)	15.00' (4.57m)	N 85°24'01" E	21.21' (7.18m)
C142	23.56' (7.18m)	15.00' (4.57m)	N 4°35'59" W	21.21' (7.18m)
C143	39.19' (11.95m)	525.00' (160.02m)	S 38°15'43" W	39.18' (11.95m)
C144	78.35' (23.89m)	525.00' (160.02m)	S 31°30'52" W	78.28' (23.86m)
C145	10.89' (3.32m)	475.00' (144.78m)	S 39°44'37" W	10.89' (3.32m)
C146	106.05' (32.32m)	475.00' (144.78m)	S 32°41'27" W	105.83' (32.32m)
C147	11.30' (3.35m)	475.00' (144.78m)	S 25°37'53" W	11.00' (3.35m)
C148	52.17' (15.90m)	175.00' (53.34m)	S 16°29'40" W	51.98' (15.90m)
C149	53.57' (16.33m)	125.00' (38.10m)	S 12°41'28" W	53.16' (16.33m)

CENTERLINE TABLE

LINE	DIRECTION	DISTANCE
L3	S 89°35'07" E	80.00' (24.38m)

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C15	193.31' (58.90m)	250.00' (76.20m)	N 31°13'11" W	188.53' (58.92m)
C16	311.83' (95.08m)	400.00' (121.92m)	S 31°24'31" E	304.06' (95.08m)
C17	304.19' (92.72m)	300.00' (91.44m)	S 82°47'52" E	291.33' (92.72m)
C18	185.90' (56.66m)	350.00' (106.68m)	N 20°54'49" E	183.72' (56.66m)
C19	317.25' (96.70m)	1000.00' (304.80m)	S 14°47'10" W	315.92' (96.79m)
C20	48.07' (14.63m)	500.00' (152.40m)	S 7°71'201" E	47.98' (14.63m)
C21	264.86' (80.73m)	500.00' (152.40m)	N 64°46'30" W	261.77' (80.73m)
C22	134.67' (41.05m)	500.00' (152.40m)	S 32°41'03" W	134.27' (41.05m)
C148	64.28' (19.59m)	150.00' (45.72m)	S 12°41'28" W	63.79' (19.59m)

APPROVAL - CITY OF BIDDEFORD PLANNING BOARD

DATE

CHAIRPERSON

SEE SHEET C-1.0 FOR GENERAL NOTES.

STATE OF MAINE

YORK COUNTY REGISTRY OF DEEDS

RECEIVED _____, 20__,
AT __h ___m ___M, AND RECORDED IN
PLAN BOOK _____ PAGE _____.

ATTEST _____ REGISTER

NO.	DATE	REVISIONS
A	04-19-2024	PRELIMINARY SUBMISSION
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY

DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

BY	APPD
JDA	
JDA	
JDA	
JDA	
JDA	
JDA	
JDA	

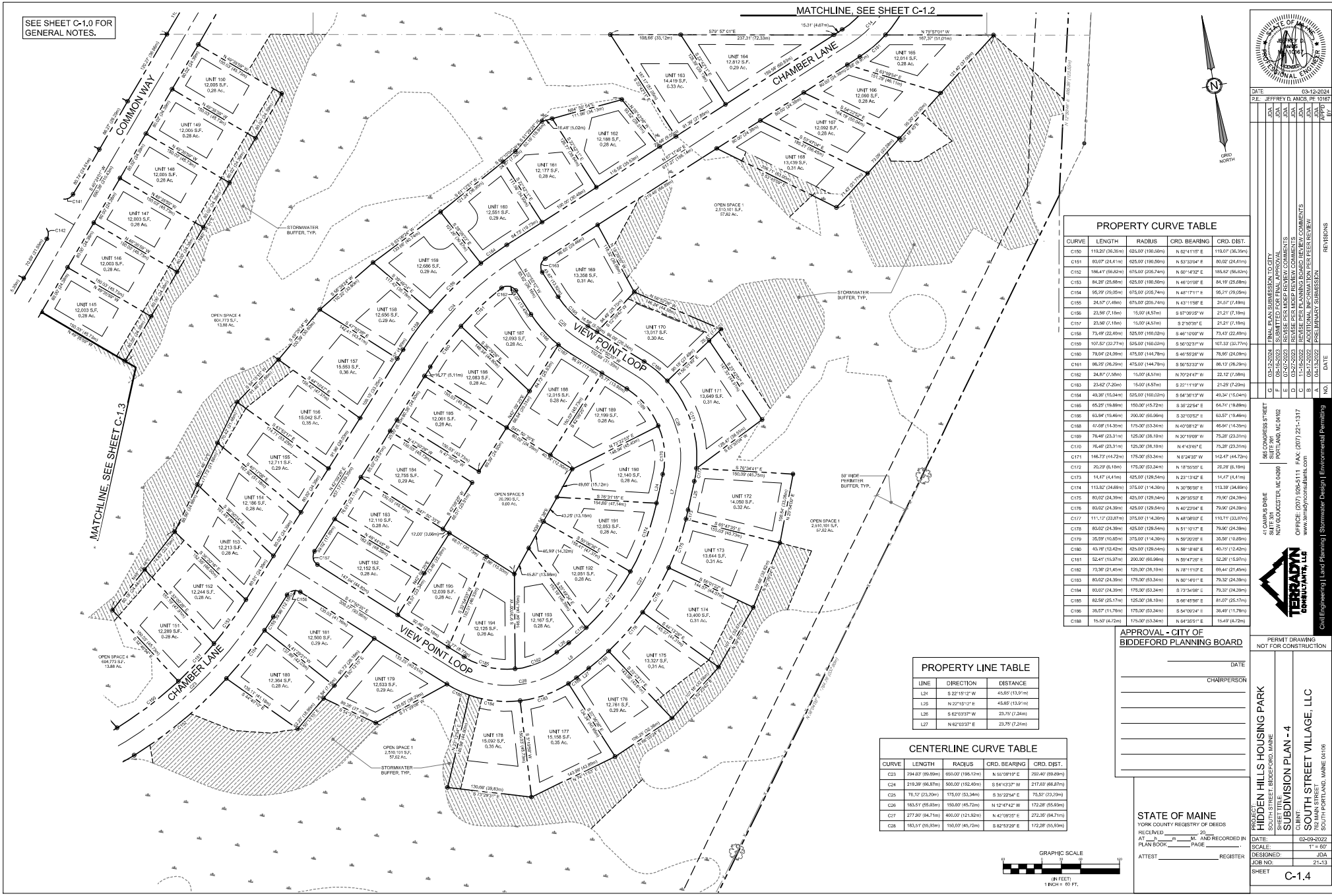
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
KENNEBUNK, ME 04043
OFFICE: (207) 956-5111 FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
PORTLAND, ME 04102

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
MAINE STREET, BIDDEFORD, MAINE
SHEET TITLE:
SUBDIVISION PLAN - 3
CLIENT:
SOUTH STREET VILLAGE, LLC
565 CONGRESS STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 80'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-1.3

C:\DOCUments\Consultant\Projects\Active\Documents\2021 Jobs\21-13 South Street MHP\CAD\Drawings\C-1.3 SB.dwg



PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C150	119.25' (36.35m)	625.00' (190.50m)	N 62°41'15" E	119.07' (36.35m)
C151	80.07' (24.41m)	625.00' (190.50m)	N 53°33'04" E	80.02' (24.41m)
C152	186.41' (56.82m)	675.00' (205.74m)	N 60°14'32" E	185.82' (56.62m)
C153	84.26' (25.68m)	625.00' (190.50m)	N 46°01'05" E	84.19' (25.68m)
C154	95.79' (29.05m)	675.00' (205.74m)	N 48°17'11" E	95.71' (29.05m)
C155	24.57' (7.49m)	675.00' (205.74m)	N 43°11'58" E	24.57' (7.49m)
C156	23.56' (7.18m)	15.00' (4.57m)	S 87°09'25" W	21.21' (7.18m)
C157	23.56' (7.18m)	15.00' (4.57m)	S 2°50'35" E	21.21' (7.18m)
C158	73.49' (22.40m)	525.00' (160.02m)	S 46°10'00" W	73.43' (22.40m)
C159	107.53' (32.77m)	525.00' (160.02m)	S 56°02'37" W	107.33' (32.77m)
C160	78.04' (24.09m)	475.00' (144.78m)	S 46°58'26" W	78.00' (24.09m)
C161	86.25' (26.29m)	475.00' (144.78m)	S 56°53'33" W	86.13' (26.29m)
C162	24.81' (7.56m)	15.00' (4.57m)	N 70°24'47" W	22.12' (7.56m)
C163	23.62' (7.20m)	15.00' (4.57m)	S 22°11'19" W	21.25' (7.20m)
C164	49.38' (15.04m)	525.00' (160.02m)	S 64°36'13" W	49.34' (15.04m)
C165	65.25' (19.89m)	150.00' (45.72m)	S 35°22'54" E	64.74' (19.89m)
C166	63.94' (19.49m)	200.00' (60.96m)	S 32°03'57" E	63.67' (19.46m)
C168	61.08' (14.35m)	175.00' (53.34m)	N 40°08'12" W	46.94' (14.35m)
C169	76.48' (23.31m)	125.00' (38.10m)	N 30°19'09" W	75.28' (23.31m)
C170	76.48' (23.31m)	125.00' (38.10m)	N 4°43'45" E	75.28' (23.31m)
C171	146.73' (44.72m)	175.00' (53.34m)	N 8°24'35" W	142.47' (44.72m)
C172	20.29' (6.18m)	175.00' (53.34m)	N 18°59'55" E	20.28' (6.18m)
C173	14.47' (4.41m)	425.00' (129.54m)	N 23°13'42" E	14.47' (4.41m)
C174	113.82' (34.69m)	375.00' (114.30m)	N 30°56'56" E	113.39' (34.69m)
C175	80.02' (24.39m)	425.00' (129.54m)	N 29°35'50" E	79.90' (24.39m)
C176	80.02' (24.39m)	425.00' (129.54m)	N 40°23'04" E	79.90' (24.39m)
C177	111.12' (33.87m)	375.00' (114.30m)	N 48°08'00" E	110.71' (33.87m)
C178	80.02' (24.39m)	425.00' (129.54m)	N 51°10'17" E	79.90' (24.39m)
C179	35.59' (10.85m)	375.00' (114.30m)	N 59°20'25" E	35.58' (10.85m)
C180	40.76' (12.42m)	425.00' (129.54m)	N 59°18'48" E	40.75' (12.42m)
C181	52.41' (15.97m)	200.00' (60.96m)	N 59°47'25" E	52.26' (15.97m)
C182	70.36' (21.45m)	125.00' (38.10m)	N 78°11'10" E	69.44' (21.45m)
C183	80.02' (24.39m)	175.00' (53.34m)	N 80°14'01" E	79.32' (24.39m)
C184	80.02' (24.39m)	175.00' (53.34m)	S 73°34'08" E	79.32' (24.39m)
C185	82.56' (25.17m)	125.00' (38.10m)	S 66°48'56" E	81.07' (25.17m)
C186	39.57' (11.76m)	175.00' (53.34m)	S 54°09'24" E	39.49' (11.78m)
C188	15.50' (4.72m)	175.00' (53.34m)	N 64°35'51" E	15.49' (4.72m)

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L24	S 22°15'12" W	45.65' (13.91m)
L25	N 22°15'12" E	45.65' (13.91m)
L26	S 62°03'37" W	23.75' (7.24m)
L27	N 62°03'37" E	23.75' (7.24m)

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C23	294.93' (89.89m)	650.00' (198.12m)	N 55°09'19" E	292.40' (89.89m)
C24	219.39' (66.87m)	500.00' (152.40m)	S 54°43'37" W	217.63' (66.87m)
C25	76.12' (23.20m)	175.00' (53.34m)	S 35°22'54" E	75.52' (23.20m)
C26	163.51' (55.93m)	150.00' (45.72m)	N 12°47'42" W	172.28' (55.93m)
C27	277.90' (84.71m)	400.00' (121.92m)	N 42°09'25" E	272.35' (84.71m)
C28	163.51' (55.93m)	150.00' (45.72m)	S 82°53'29" E	172.28' (55.93m)

GRAPHIC SCALE
0 15 30 60 120
(IN FEET)
1 INCH = 60 FT.

APPROVAL - CITY OF BIDDEFORD PLANNING BOARD

DATE

CHAIRPERSON

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____, 20__
AT ___h ___m ___M., AND RECORDED IN
PLAN BOOK _____ PAGE _____.
ATTEST _____ REGISTER

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
A	04-19-2024	PRELIMINARY SUBMISSION	JDA
B	08-11-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

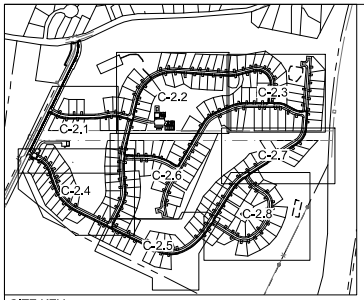
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
565 CONGRESS STREET, SUITE 304, PORTLAND, ME 04102
41 CAMPUS DRIVE, SUITE 201, NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION.

PROJECT: HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE
SHEET TITLE: SUBDIVISION PLAN - 4
CLIENT: SOUTH STREET VILLAGE, LLC
100 MAIN STREET
SOUTH PORTLAND, MAINE 04106

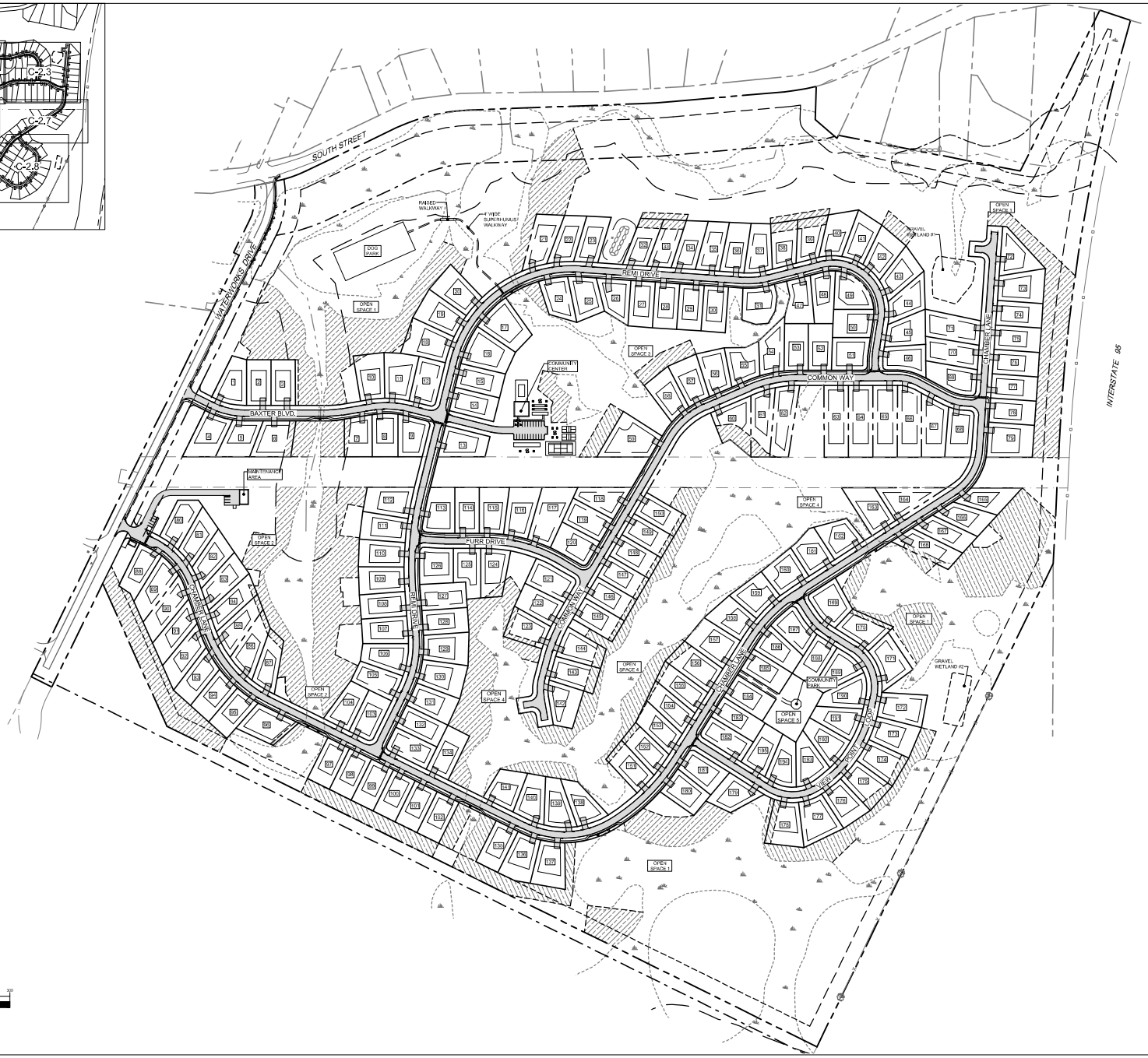
DATE:	02-09-2022
SCALE:	1" = 60'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-1.4

C:\Dropbox\Terradyn Consultants\Projects\Active\2021 Jobs\21-13 South Street Mill\CAD\Plan\dwg\C-1.4 SUB.dwg



SITE KEY
SCALE: 1"=600'





GRAPHIC SCALE
0 75 150 300
(IN FEET)
1 INCH = 150 FT.

STATE OF MAINE
JEFFREY D. AMOS
3467
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APP'D BY
A	04-14-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	05-21-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
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NEW GLOUCESTER, ME 04260
565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102
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www.terradynconsultants.com

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
OVERALL SITE PLAN
CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 150'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.0

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J:\terradyn consultants\Projects\Active Projects\Documents\2021 Jobs\21-13 South Street MAPC+ACA\Permitting\21-13 SP-01.dwg

CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.

2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.

4. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

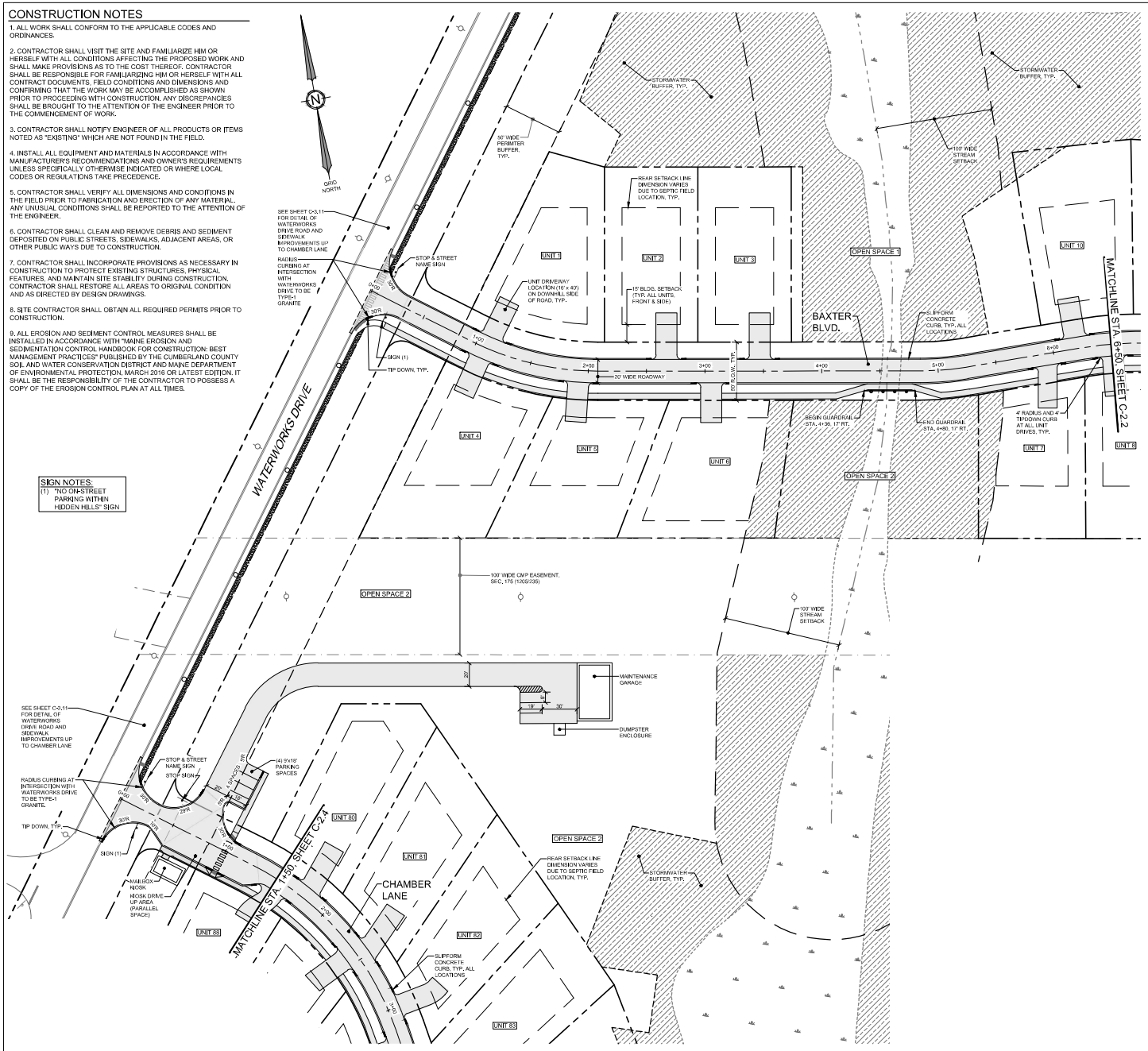
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.

6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.

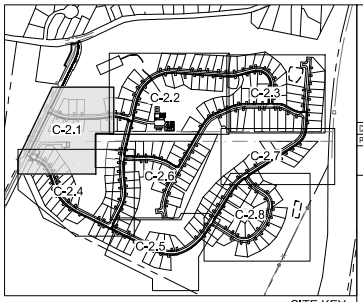
7. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.

8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.

9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.



SIGN NOTES:
(1) "NO ON-STREET PARKING WITHIN HIDDEN HILLS" SIGN



SITE KEY
SCALE: 1"=600'

CONSTRUCTION NOTES

10. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.

11. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.

12. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.

13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.

14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT. ALL JOINTS SHALL BE BUTT JOINTS.

15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.

16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.

17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.

18. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS. THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.

19. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.

21. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.

22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.

23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.

24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.

25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.

26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION. CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

27. THE CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN THE RIGHT-OF-WAYS WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.

GRAPHIC SCALE
0 20 40 80
(IN FEET)
1 INCH = 40 FT.

NO.	DATE	REVISIONS	APP'D BY
A	04-17-2024	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

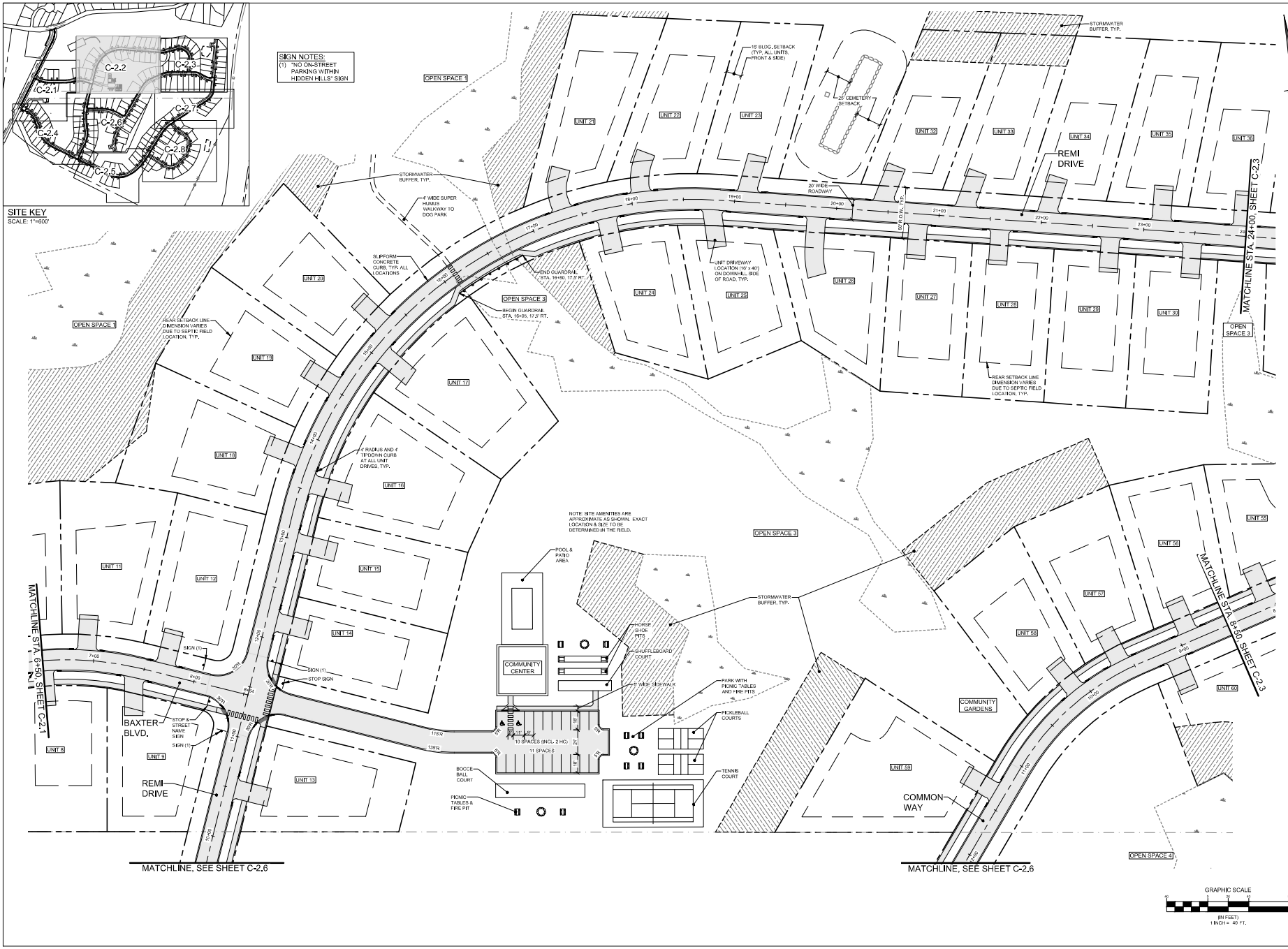
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
SUITE 2
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
56 CONGRESS STREET
SUITE 2
PORTLAND, ME 04102

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BRIDGTON, MAINE
SHEET TITLE:
SITE PLAN - 1
CLIENT:
SOUTH STREET VILLAGE, LLC
58 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.1

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NO.	DATE	REVISIONS
A	04-17-2022	PRELIMINARY SUBMISSION
B	06-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL
G	05-13-2024	FINAL PLANS SUBMISSION TO CITY

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

	BY:
	JDA
	JDA
	JDA
	JDA
	JDA
	JDA
	JDA
	JDA
	JDA
	APP'D BY:

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE PLAN - 2

CLIENT:
SOUTH STREET VILLAGE, LLC
52 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.2

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NO.	DATE	REVISIONS	BY
A	04-12-2024	PRELIMINARY SUBMISSION	JDA
B	05-17-2024	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	05-13-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

41 CAMPUS DRIVE
SUITE 201A
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
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PORTLAND, ME 04102

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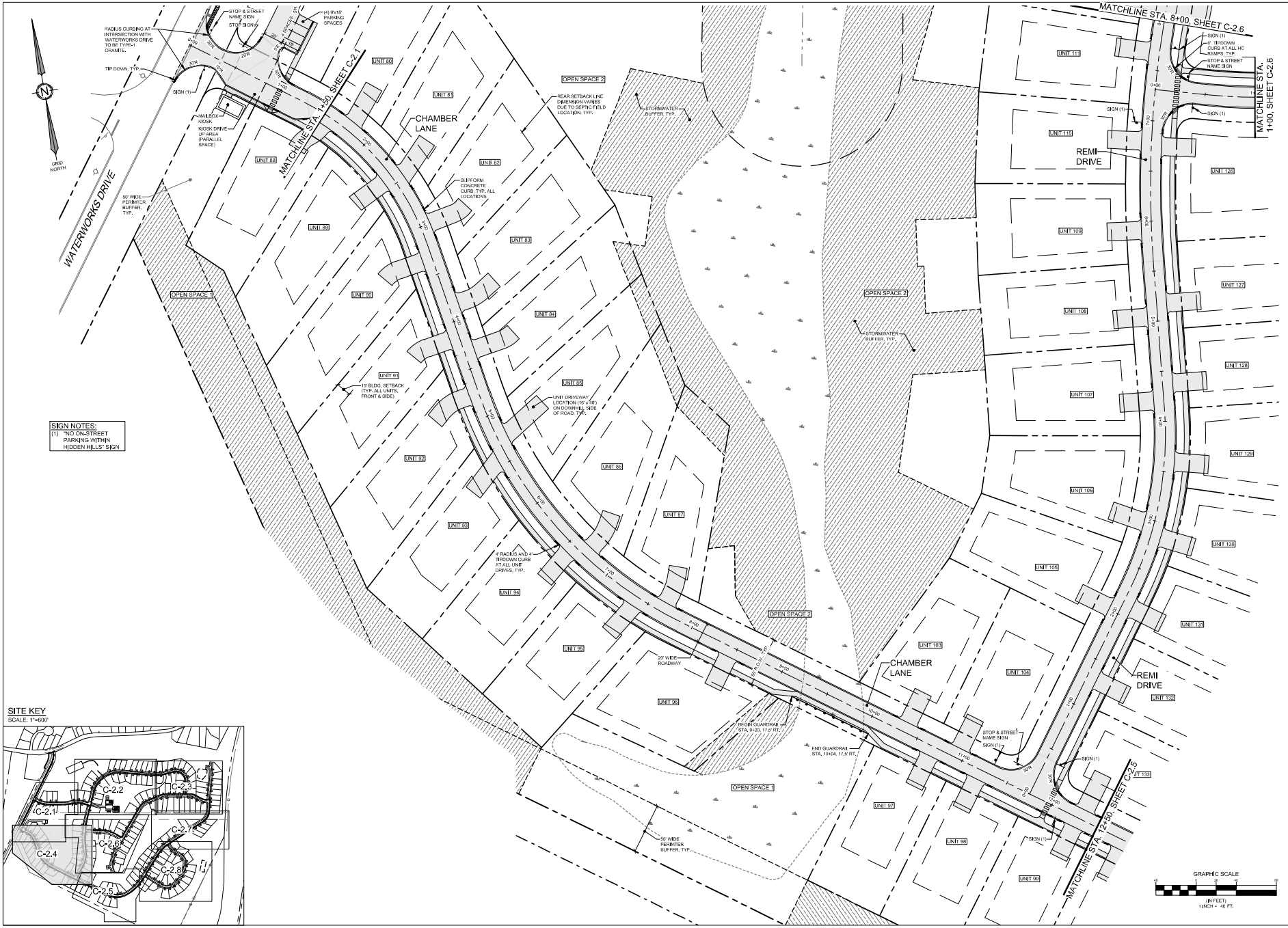
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE PLAN - 3

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.3

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NO.	DATE	REVISIONS	BY
A	12-20-2022	PRELIMINARY SUBMISSION	JDA
B	01-17-2023	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

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565 CONGRESS STREET
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PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
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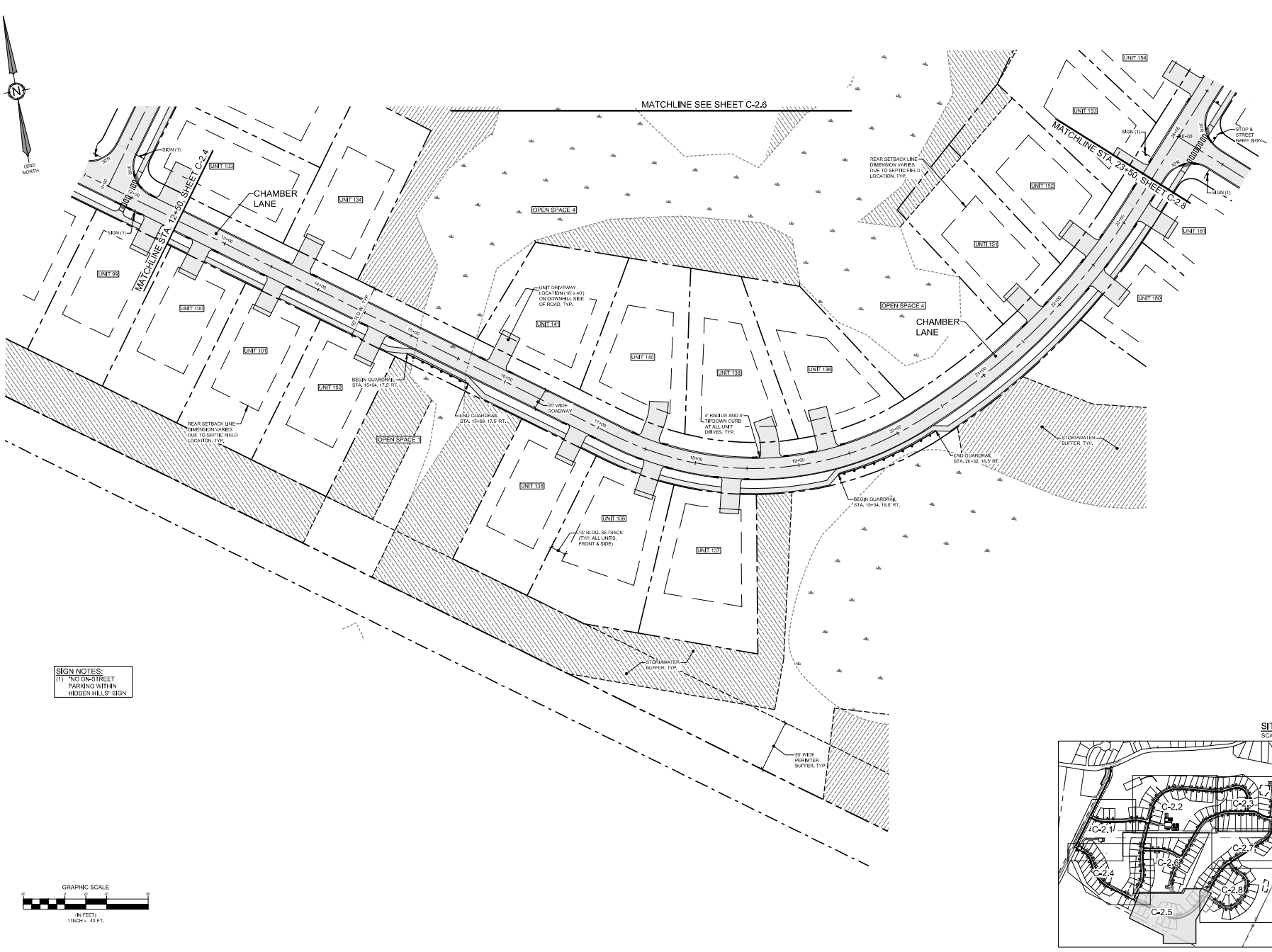
PREPARED FOR:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BRIDGEFORD, MAINE

SHEET TITLE:
SITE PLAN - 4

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.4

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SIGN NOTES:
(1) "NO ON-STREET PARKING WITHIN HIDDEN HILLS" SIGN

SITE KEY
SCALE: 1"=600'

STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	09-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-27-2022	PRELIMINARY SUBMISSION	JDA

41 CAMPUS DRIVE
SUITE 201A
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
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PORTLAND, ME 04101

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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE PLAN - 5

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.5

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SIGN NOTES:
(1) "NO ON-STREET PARKING WITHIN HIDDEN HILLS" SIGN

SITE KEY
SCALE: 1"=600'

NO.	DATE	REVISIONS	BY	APP'D
A	04-14-2022	PRELIMINARY SUBMISSION	JDA	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

41 CAMPUS DRIVE
SUITE 201A
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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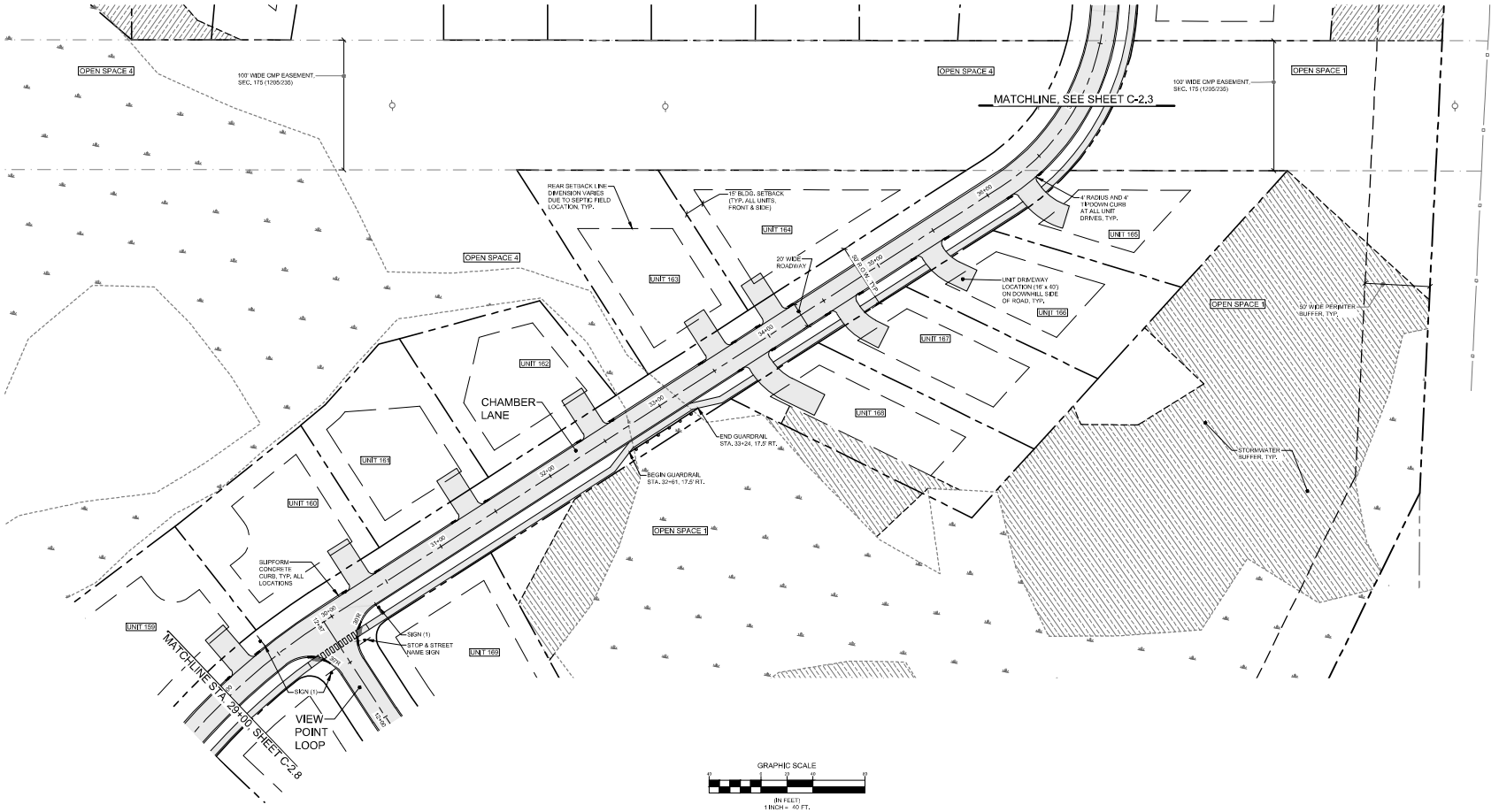
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

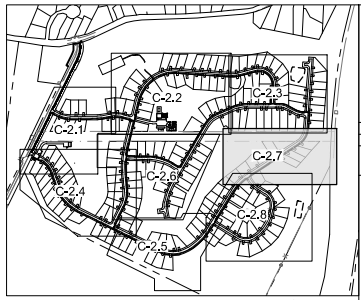
SHEET TITLE:
SITE PLAN - 6

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.6

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SITE KEY
SCALE: 1"=600'

NO.	DATE	REVISIONS	APP'D BY
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-12-2022	PRELIMINARY SUBMISSION	JDA

STATE OF MAINE
JEFFREY D. AMOS
PE 10167
PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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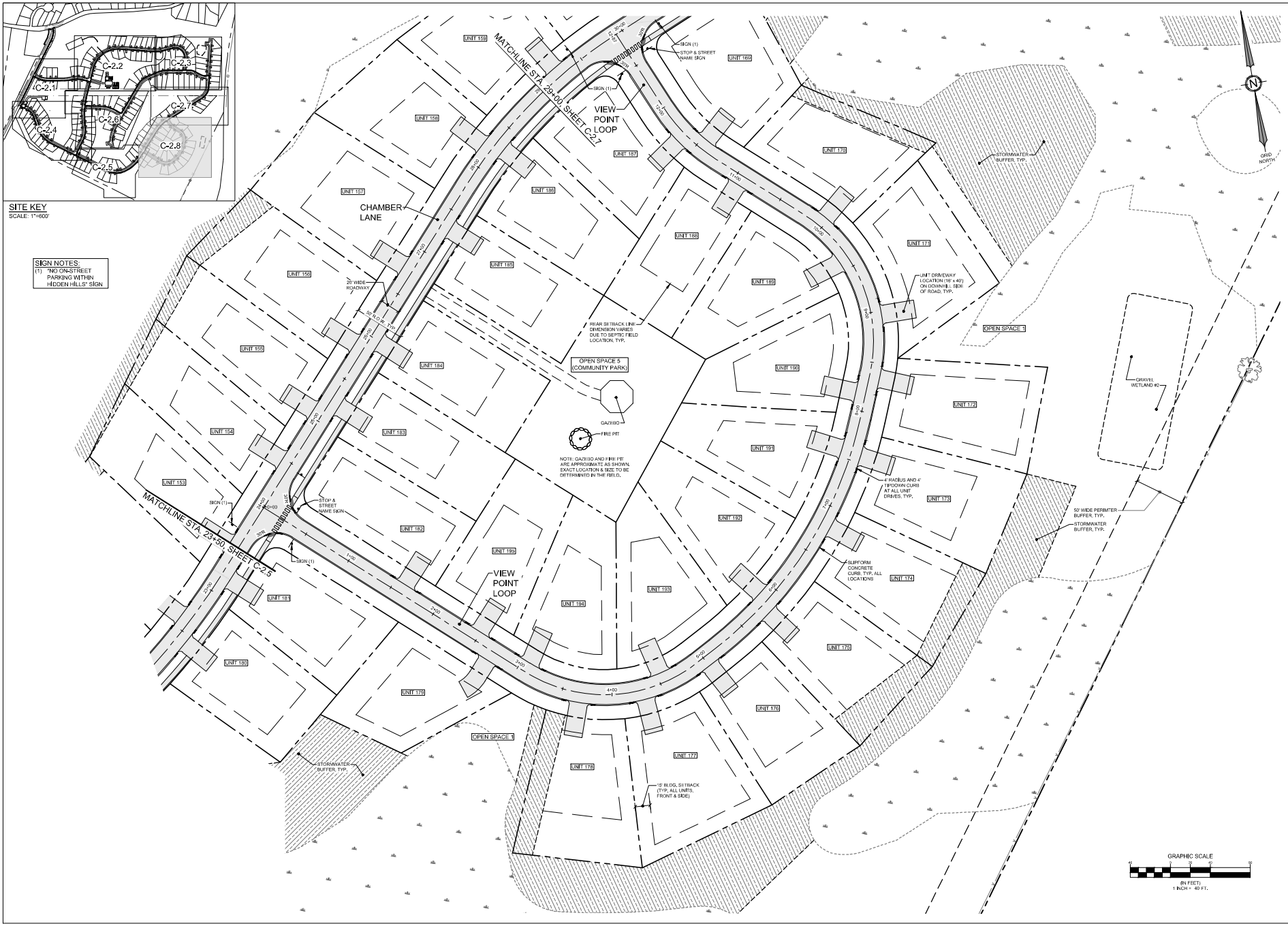
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, MIDDLE ROAD, MAINE

SHEET TITLE:
SITE PLAN - 7

CLIENT:
SOUTH STREET VILLAGE, LLC
58 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.7

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NO.	DATE	REVISIONS	APP'D BY
A	04-04-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

STATE OF MAINE
JEFFREY D. AMOS
3967
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE
SUITE 2
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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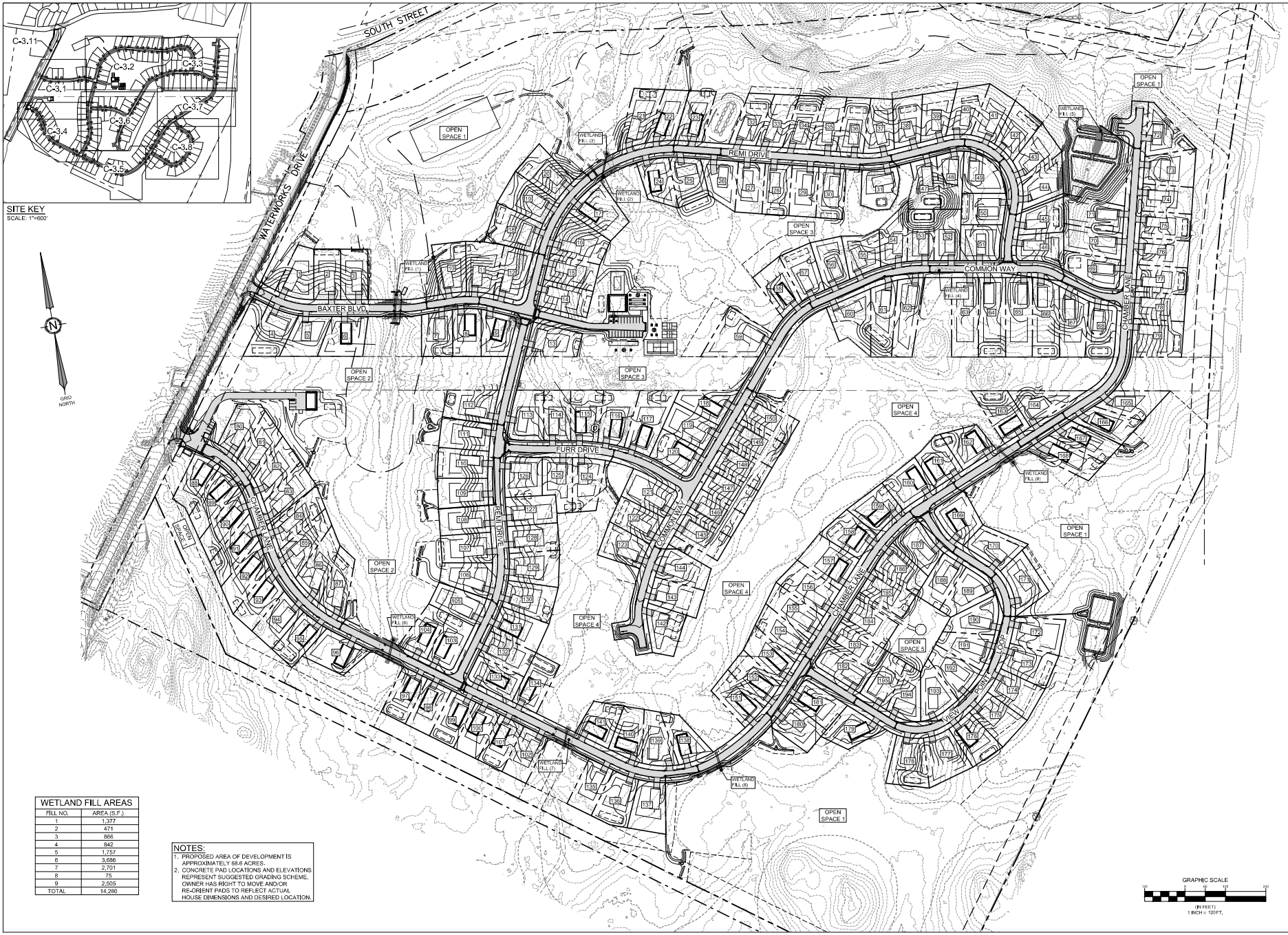
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE PLAN - 8

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-2.8

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SITE KEY
SCALE: 1"=600'

WETLAND FILL AREAS	
FILL NO.	AREA (S.F.)
1	1,377
2	471
3	866
4	842
5	1,757
6	3,686
7	2,701
8	75
9	2,505
TOTAL	14,280

NOTES:
1. PROPOSED AREA OF DEVELOPMENT IS APPROXIMATELY 88.6 ACRES.
2. CONCRETE PAD LOCATIONS AND ELEVATIONS REPRESENT SUGGESTED GRADING SCHEME. OWNER HAS RIGHT TO MOVE AND/OR RE-ORIENT PADS TO REFLECT ACTUAL HOUSE DIMENSIONS AND DESIRED LOCATION.

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PEER REVIEW	JDA
A	04-26-2022	PRELIMINARY SUBMISSION	JDA

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41 CAMPUS DRIVE
KENNEBUNK, ME 04043
566 CONGRESS STREET
SUITE 2
PORTLAND, ME 04102
OFFICE: (207) 929-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
OVERALL GRADING & DRAINAGE PLAN

CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.0

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HOUSEKEEPING NOTES

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

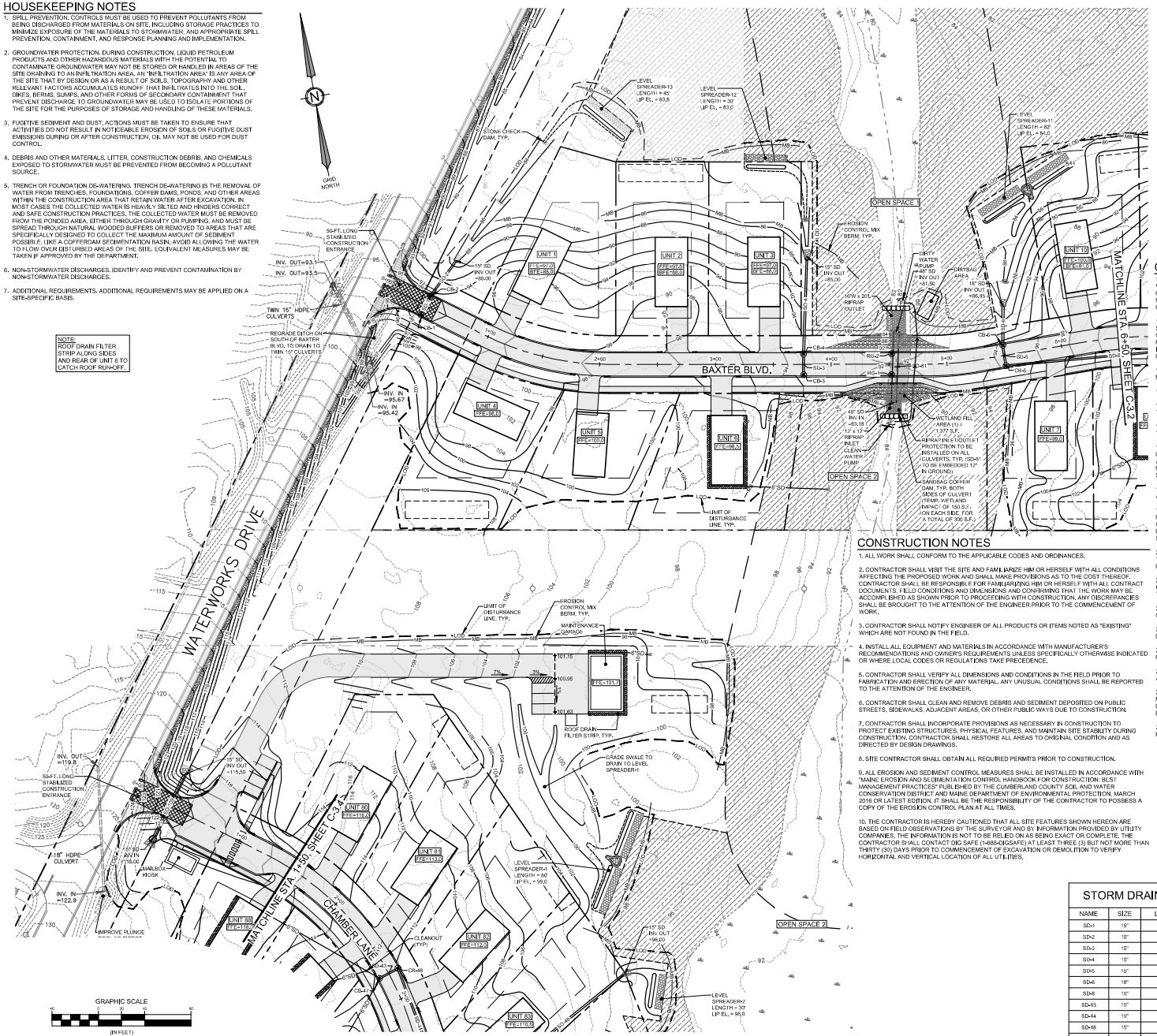
3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

4. DEBRIS AND OTHER MATERIALS. LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

6. NON-STORMWATER DISCHARGES, IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.

7. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.



CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.

2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS. FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" THAT ARE NOT FOUND IN THE FIELD.

4. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.

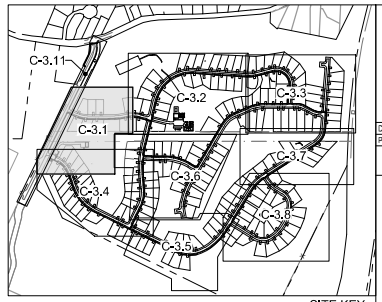
6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.

7. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.

8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.

9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

10. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.



SITE KEY
SCALE: 1"=600'

CONSTRUCTION NOTES

11. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.

12. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.

13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.

14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.

15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.

16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.O.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.

17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.

18. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.

19. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.

21. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.

22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.

23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.

24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.

25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.

26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

27. THE CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN THE RIGHT-OF-WAYS WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-1	15"	14'	12.04%
SD-2	15"	36'	2.27%
SD-3	15"	14'	12.02%
SD-4	15"	82'	3.54%
SD-5	15"	14'	-10.33%
SD-6	18"	32'	4.60%
SD-8	15"	150'	8.34%
SD-43	15"	14'	11.71%
SD-44	15"	129'	1.46%
SD-48	15"	180'	4.20%
SD-81	48"	61'	2.74%
SD-109	15"	60'	4.15%

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-1	94.97		90.57 (SD-1)	48"
CB-2	94.97	88.86 (SD-1)	88.82 (SD-2)	48"
CB-3	93.18		89.68 (SD-3)	48"
CB-4	93.18	87.97 (SD-3)	87.90 (SD-4)	48"
CB-5	94.09	89.02 (SD-5)	87.02 (SD-6)	48"
CB-6	94.19	88.48 (SD-5)	88.43 (SD-8)	48"
CB-47	111.31		105.10 (SD-43)	48"
CB-48	111.31	105.86 (SD-43)	105.86 (SD-44)	48"
RG-1	91.72			48"
RG-2	91.72			48"

NO.	DATE	REVISIONS	APP'D BY
A	04-17-2024	PRELIMINARY SUBMISSION	JDA
B	04-17-2024	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-18-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	01-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

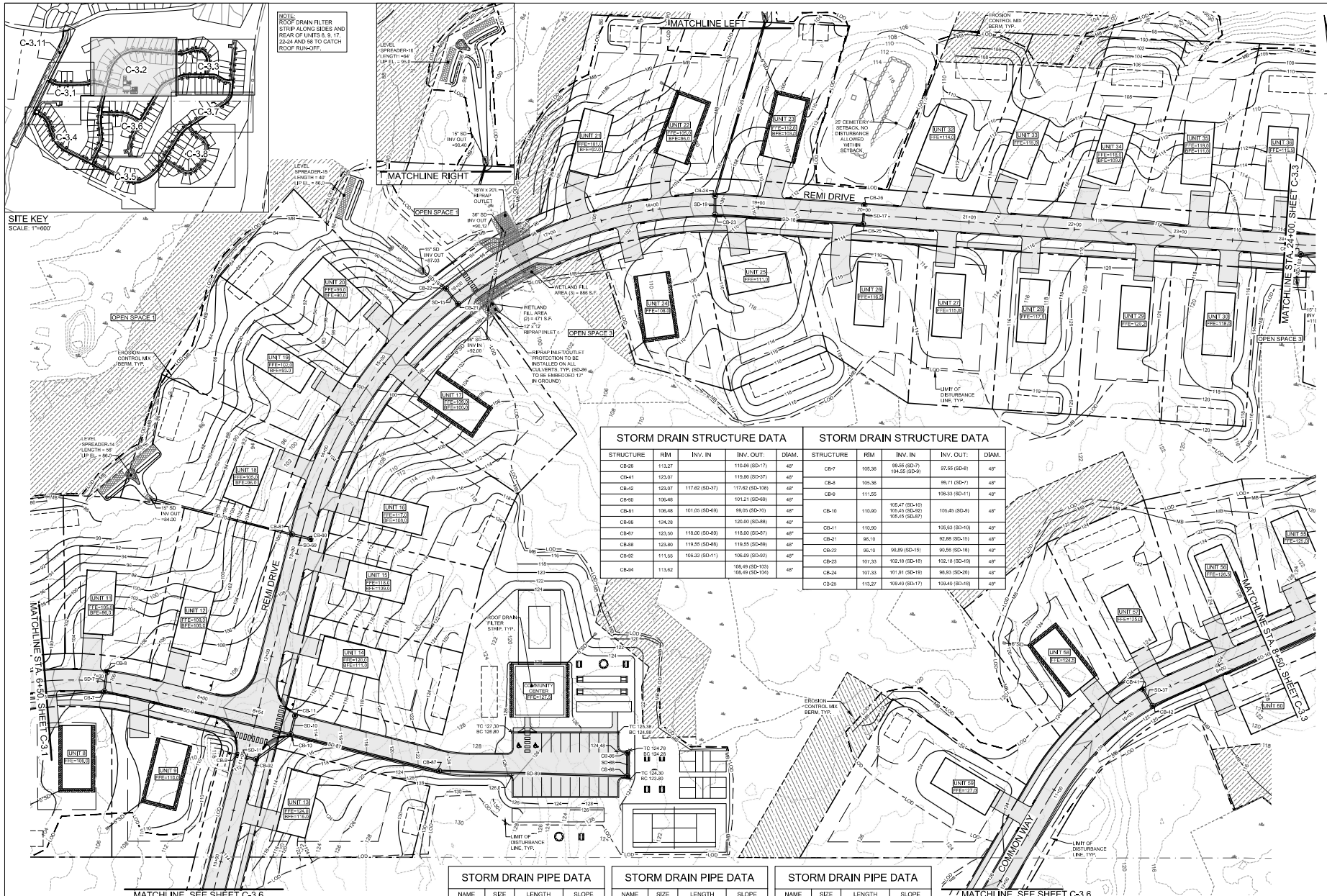
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
56E CONGRESS STREET PORTLAND, ME 04102
41 CAMPUS DRIVE NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, MIDDLE ROAD, MAINE
SHEET TITLE:
GRADING AND DRAINAGE PLAN - 1
CLIENT:
SOUTH STREET VILLAGE, LLC
SOUTH STREET
SOUTH PORTLAND, MAINE 04106

DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13
SHEET C-3.1

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STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-26	113.27		110.06 (SD-17)	48"
CB-41	123.07		119.86 (SD-37)	48"
CB-42	123.07	117.62 (SD-37)	117.62 (SD-108)	48"
CB-80	106.48		101.21 (SD-69)	48"
CB-81	106.48	101.26 (SD-69)	99.05 (SD-70)	48"
CB-86	124.28		120.00 (SD-88)	48"
CB-87	123.50	119.00 (SD-89)	119.00 (SD-87)	48"
CB-88	123.80	119.55 (SD-89)	119.55 (SD-89)	48"
CB-92	111.55	106.33 (SD-11)	106.09 (SD-92)	48"
CB-94	113.62		108.49 (SD-103) 108.49 (SD-104)	48"

STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-7	105.36	99.55 (SD-7) 104.55 (SD-9)	97.55 (SD-8)	48"
CB-8	105.36		99.71 (SD-7)	48"
CB-9	111.55		106.33 (SD-11)	48"
CB-10	110.90	105.47 (SD-10) 105.45 (SD-92) 105.45 (SD-97)	105.45 (SD-9)	48"
CB-11	110.90		105.63 (SD-10)	48"
CB-21	96.10		92.88 (SD-15)	48"
CB-22	96.10	90.89 (SD-15)	90.56 (SD-16)	48"
CB-23	107.33	102.18 (SD-18)	102.18 (SD-19)	48"
CB-24	107.33	101.91 (SD-19)	98.93 (SD-20)	48"
CB-25	113.27	109.40 (SD-17)	109.40 (SD-18)	48"

STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-7	15"	14'	1.11%
SD-8	15"	150'	8.34%
SD-9	15"	178'	0.51%
SD-10	15"	14'	1.11%
SD-11	15"	14'	14.05%
SD-15	15"	14'	13.98%
SD-16	15"	28'	14.29%

STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-17	15"	14'	4.68%
SD-18	15"	136'	5.29%
SD-19	15"	14'	1.93%
SD-20	15"	173'	4.84%
SD-37	15"	14'	15.71%
SD-69	15"	14'	1.11%
SD-70	15"	136'	11.09%

STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-86	36"	73'	2.59%
SD-87	15"	141'	8.01%
SD-88	15"	18'	2.50%
SD-89	15"	174'	0.86%
SD-92	15"	36'	1.75%
SD-103	15"	22'	9.04%

NO.	DATE	REVISIONS	APP'D BY
A	04-12-2024	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
56E CONGRESS STREET
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
GRADING AND DRAINAGE PLAN - 2
CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13
SHEET C-3.2

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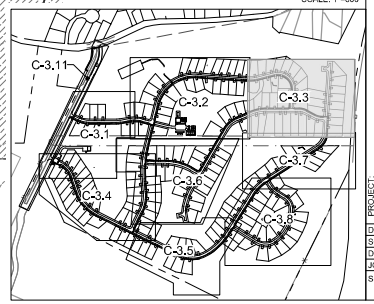
STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT	DIAM.
CB-27	111.97	108.10 (SD-21) 108.02 (SD-104) 108.02 (SD-105)	108.02 (SD-22)	48"
CB-28	111.97		108.75 (SD-21)	48"
CB-29	111.22	106.93 (SD-22) 107.35 (SD-23)	106.93 (SD-24)	48"
CB-30	111.22		108.00 (SD-23)	48"
CB-31	107.63	103.74 (SD-24) 103.76 (SD-25)	103.74 (SD-26)	48"
CB-32	107.63		104.41 (SD-25)	48"
CB-33	104.68	99.49 (SD-26)	99.49 (SD-27)	48"
CB-34	104.68	99.04 (SD-27)	99.13 (SD-30)	48"
CB-35	99.13	91.92 (SD-32) 93.80 (SD-58)	91.92 (SD-33)	48"
CB-36	99.13	93.33 (SD-33)	93.33 (SD-34)	48"
CB-37	109.18	103.23 (SD-31) 102.99 (SD-36)	102.66 (SD-32)	48"
CB-38	109.18		105.56 (SD-31)	48"
CB-39	118.92	113.42 (SD-35) 113.34 (SD-107)	113.34 (SD-36)	48"
CB-40	118.92		115.70 (SD-35)	48"
CB-71	102.18	95.05 (SD-58) 95.00 (SD-96)	95.00 (SD-66)	48"
CB-72	101.00	95.79 (SD-57)	95.79 (SD-58)	48"
CB-73	101.00		97.78 (SD-57)	48"
CB-89	102.18		95.20 (SD-99)	48"
CB-94	113.62		108.49 (SD-103) 108.49 (SD-104)	48"
CB-96	95.06		91.68 (SD-46)	48"
CB-97	95.06	88.77 (SD-46)	88.67 (SD-47)	48"
DMH-5	124.58	115.24 (SD-108)	115.24 (SD-107)	48"

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-21	15"	14'	4.65%
SD-22	15"	215'	0.50%
SD-23	15"	14'	4.67%
SD-24	15"	110'	2.89%
SD-25	15"	14'	4.64%
SD-26	15"	151'	2.82%
SD-27	18"	14'	3.20%
SD-31	15"	14'	19.12%
SD-32	15"	190'	5.66%
SD-33	18"	14'	-4.92%
SD-34	18"	50'	0.65%
SD-35	15"	14'	16.00%
SD-36	15"	198'	5.28%
SD-46	15"	14'	20.38%
SD-47	15"	117'	10.80%
SD-66	15"	194'	0.56%
SD-67	15"	14'	14.01%
SD-68	15"	98'	0.75%
SD-90	18"	189'	7.76%
SD-99	15"	14'	1.43%
SD-103	15"	22'	9.04%
SD-104	15"	92'	0.51%
SD-105	15"	27'	15.76%
SD-107	15"	131'	1.45%
SD-108	15"	228'	1.04%

SITE KEY
SCALE: 1"=600'



STATE OF MAINE
JEFFREY D. AMOS
3067
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY	APP'D
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
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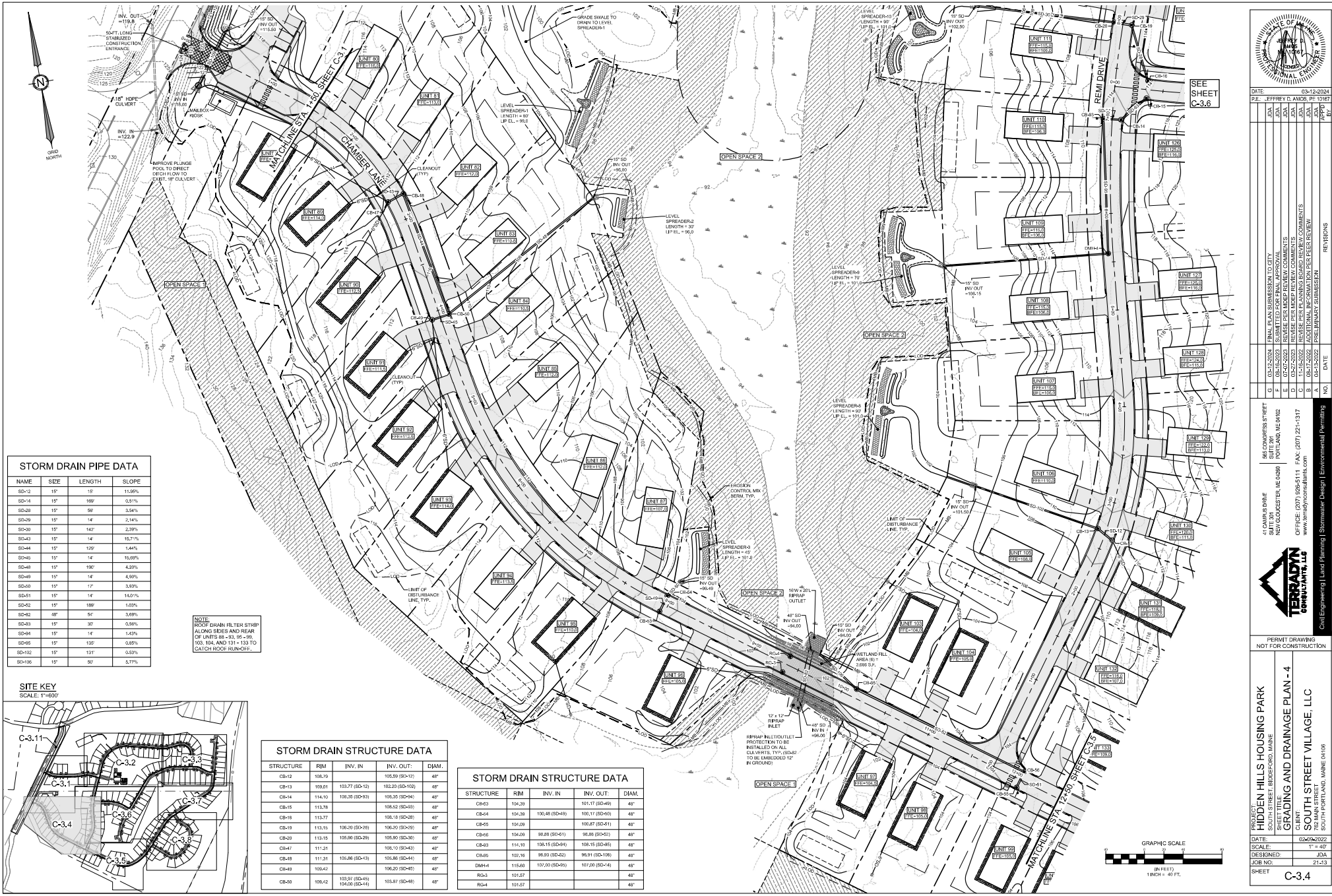
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
GRADING AND DRAINAGE PLAN - 3

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.3

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STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-12	15"	15'	11.06%
SD-14	15"	169'	0.31%
SD-28	15"	99'	3.54%
SD-29	15"	14'	2.14%
SD-30	15"	142'	2.39%
SD-43	15"	14'	15.71%
SD-44	15"	129'	1.44%
SD-46	15"	14'	15.69%
SD-48	15"	190'	4.20%
SD-49	15"	14'	4.90%
SD-50	15"	17'	3.93%
SD-51	15"	14'	14.01%
SD-52	15"	189'	1.03%
SD-82	48"	54'	3.69%
SD-93	15"	30'	0.56%
SD-94	15"	14'	1.43%
SD-95	15"	130'	0.85%
SD-102	15"	131'	0.53%
SD-106	15"	90'	5.77%

SITE KEY
SCALE: 1"=600'

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-12	108.79		105.59 (SD-12)	48"
CB-13	109.01	103.77 (SD-12)	102.20 (SD-102)	48"
CB-14	114.10	108.35 (SD-93)	108.35 (SD-94)	48"
CB-15	113.78		108.52 (SD-93)	48"
CB-16	113.77		108.18 (SD-28)	48"
CB-19	113.15	106.20 (SD-28)	106.20 (SD-29)	48"
CB-20	113.15	105.90 (SD-29)	105.90 (SD-30)	48"
CB-47	111.21		108.10 (SD-43)	48"
CB-48	111.31	105.86 (SD-43)	105.86 (SD-44)	48"
CB-49	109.42		106.20 (SD-46)	48"
CB-50	108.42	103.97 (SD-46) 104.00 (SD-44)	103.97 (SD-48)	48"

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-53	104.39		101.17 (SD-49)	48"
CB-54	104.39	100.48 (SD-49)	100.17 (SD-50)	48"
CB-55	104.09		100.87 (SD-51)	48"
CB-56	104.09	99.88 (SD-51)	98.88 (SD-52)	48"
CB-93	114.10	108.15 (SD-94)	108.15 (SD-95)	48"
CB-95	102.16	96.93 (SD-52)	96.91 (SD-106)	48"
DMH-4	115.60	107.00 (SD-95)	107.00 (SD-14)	48"
RG-3	101.57			48"
RG-4	101.57			48"

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
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Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

NO.	DATE	REVISIONS	APP'D BY
G	05-31-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	05-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PEER REVIEW	JDA
A	04-18-2022	PRELIMINARY SUBMISSION	JDA

PERMIT DRAWING
NOT FOR CONSTRUCTION

PREPARED FOR:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, MIDDLE ROAD, MAINE

SHEET TITLE:
GRADING AND DRAINAGE PLAN - 4

CLIENT:
SOUTH STREET VILLAGE, LLC
SAMUIS STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.4

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SITE KEY
SCALE: 1"=800'

GRAPHIC SCALE
0 20 40 80
(IN FEET)
1 INCH = 40 FT.

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-53	15"	14'	7.59%
SD-54	15"	97'	0.50%
SD-55	15"	14'	1.62%
SD-56	15"	42'	1.70%
SD-57	15"	14'	15.70%
SD-58	15"	202'	5.70%
SD-83	36"	48'	2.07%
SD-84	36"	52'	3.88%
SD-100	15"	178'	0.51%

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-57	99.69		96.47 (SD-53)	48"
CB-58	99.69	96.40 (SD-53)	95.40 (SD-54)	48"
CB-59	103.75		100.53 (SD-55)	48"
CB-60	103.75	100.32 (SD-55) 100.30 (SD-58)	100.10 (SD-56)	48"
CB-61	117.27		114.05 (SD-57)	48"
CB-62	117.27	111.82 (SD-57)	111.62 (SD-58)	48"
DMH-3	102.00	94.91 (SD-54)	94.90 (SD-100)	48"
RC-5	109.01			48"
RC-6	109.01			48"

STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY	APP'D
A	04-17-2024	PRELIMINARY SUBMISSION	JDA	
B	04-17-2024	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	01-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyncons.com

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NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
GRADING AND DRAINAGE PLAN - 5
CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.5

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STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-12	15"	15'	11.95%
SD-14	15"	169'	0.51%
SD-28	15"	56'	3.54%
SD-29	15"	14'	2.14%
SD-30	15"	142'	2.39%
SD-39	15"	14'	7.08%
SD-40	15"	23'	16.30%
SD-41	15"	14'	2.64%
SD-42	15"	35'	0.86%
SD-91	15"	14'	1.43%

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-12	108.79		105.59 (SD-12)	48"
CB-13	109.01	103.77 (SD-12)	102.20 (SD-102)	48"
CB-14	114.10	108.35 (SD-50)	108.25 (SD-94)	48"
CB-15	113.78		108.52 (SD-93)	48"
CB-16	113.77		108.18 (SD-28)	48"
CB-19	113.15	106.29 (SD-28)	106.20 (SD-29)	48"
CB-20	113.15	105.90 (SD-29)	105.80 (SD-30)	48"
CB-43	128.42		125.20 (SD-39)	48"
CB-44	128.42	124.20 (SD-39)	123.02 (SD-40)	48"
CB-45	125.39		122.17 (SD-41)	48"
CB-46	125.38	121.80 (SD-41)	121.80 (SD-42)	48"
CB-90	128.76	124.81 (SD-91)	124.81 (SD-101)	48"
CB-91	128.76		125.01 (SD-91)	48"
CB-93	114.10	108.15 (SD-94)	108.15 (SD-95)	48"
DMH-4	115.60	107.00 (SD-95)	107.00 (SD-14)	48"

NO.	DATE	REVISIONS	APP'D BY
G	05-21-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	05-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-14-2022	PRELIMINARY SUBMISSION	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
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www.terradynconsultants.com
565 CONGRESS STREET
PORTLAND, ME 04102

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PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: GRADING AND DRAINAGE PLAN - 6
CLIENT: SOUTH STREET VILLAGE, LLC
SOUTH STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.6

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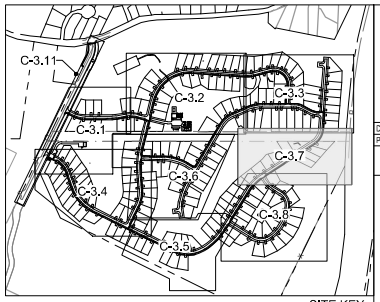
STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-63	112,92		109,60 (SD-59)	48"
CB-64	112,92	107,70 (SD-59)	107,00 (SD-60)	48"
CB-65	104,67		101,45 (SD-60)	48"
CB-66	104,66	101,22 (SD-60)	100,78 (SD-61)	48"
CB-67	101,59		98,37 (SD-62)	48"
CB-68	101,59	97,82 (SD-62)	97,62 (SD-65)	48"
CB-69	103,08		99,86 (SD-64)	48"
CB-70	103,08	97,28 (SD-64) 96,98 (SD-65)	96,98 (SD-63)	48"

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-59	15"	14'	13,36%
SD-60	15"	14'	1,61%
SD-61	15"	30'	6,67%
SD-62	15"	14'	3,91%
SD-63	15"	192'	0,51%
SD-64	15"	14'	18,04%
SD-65	15"	154'	0,55%
SD-66	15"	154'	5,45%
SD-85	36"	47'	0,52%

NOTE:
ROOF DRAIN FILTER STRIP ALONG SIDES AND REAR OF UNITS 159 - 163 AND 166 - 169 TO CATCH ROOF RUN-OFF.



SITE KEY
SCALE: 1"=600'

GRID NORTH

MATCHLINE SHEET C-3.3

MATCHLINE STA. 29+00 SHEET C-3.8

BLOCK RETAINING WALL TO BE INSTALLED APPROXIMATELY AS SHOWN. CONTRACTOR TO PROVIDE ENGINEER WITH PROPOSED WALL SPECIFICATIONS & DESIGN FOR APPROVAL PRIOR TO INSTALLATION.

CONTRACTOR TO GRADE ALL YARDS TO DRAIN AWAY OR AROUND UNITS (TYP)

LIMIT OF DISTURBANCE LINE, TYP.

OPEN SPACE 1

OPEN SPACE 4

VIEW POINT

UNIT 160 FFE=111.0
UNIT 161 FFE=108.0
UNIT 162 FFE=105.0
UNIT 163 FFE=102.0
UNIT 164 FFE=104.0
UNIT 165 FFE=105.0
UNIT 166 FFE=105.0
UNIT 167 BFE=98.0
UNIT 168 FFE=104.0 BFE=95.0
UNIT 169 FFE=107.0

WETLAND FILL AREA (9) = 2,565 S.F.

12" x 12" RIPRAP INLET

30" SD INV IN =96.20

30" SD INV OUT =95.96

RIPRAP INLET/OUTLET PROTECTION TO BE INSTALLED ON ALL CULVERTS, TYP. (SD-85 TO BE EMBEDDED 12" IN GROUND)

16'W x 20'L RIPRAP OUTLET

15" SD INV OUT =96.00

15" SD INV OUT =96.70

LEVEL SPREADER-6 LENGTH = 32' LIP EL = 101.0

LEVEL SPREADER-7 LENGTH = 92' LIP EL = 70.0

GRAPHIC SCALE
0 20 40 80
(IN FEET)
1 INCH = 40 FT.

NO.	DATE	REVISIONS	APP'D BY*
A	04-12-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
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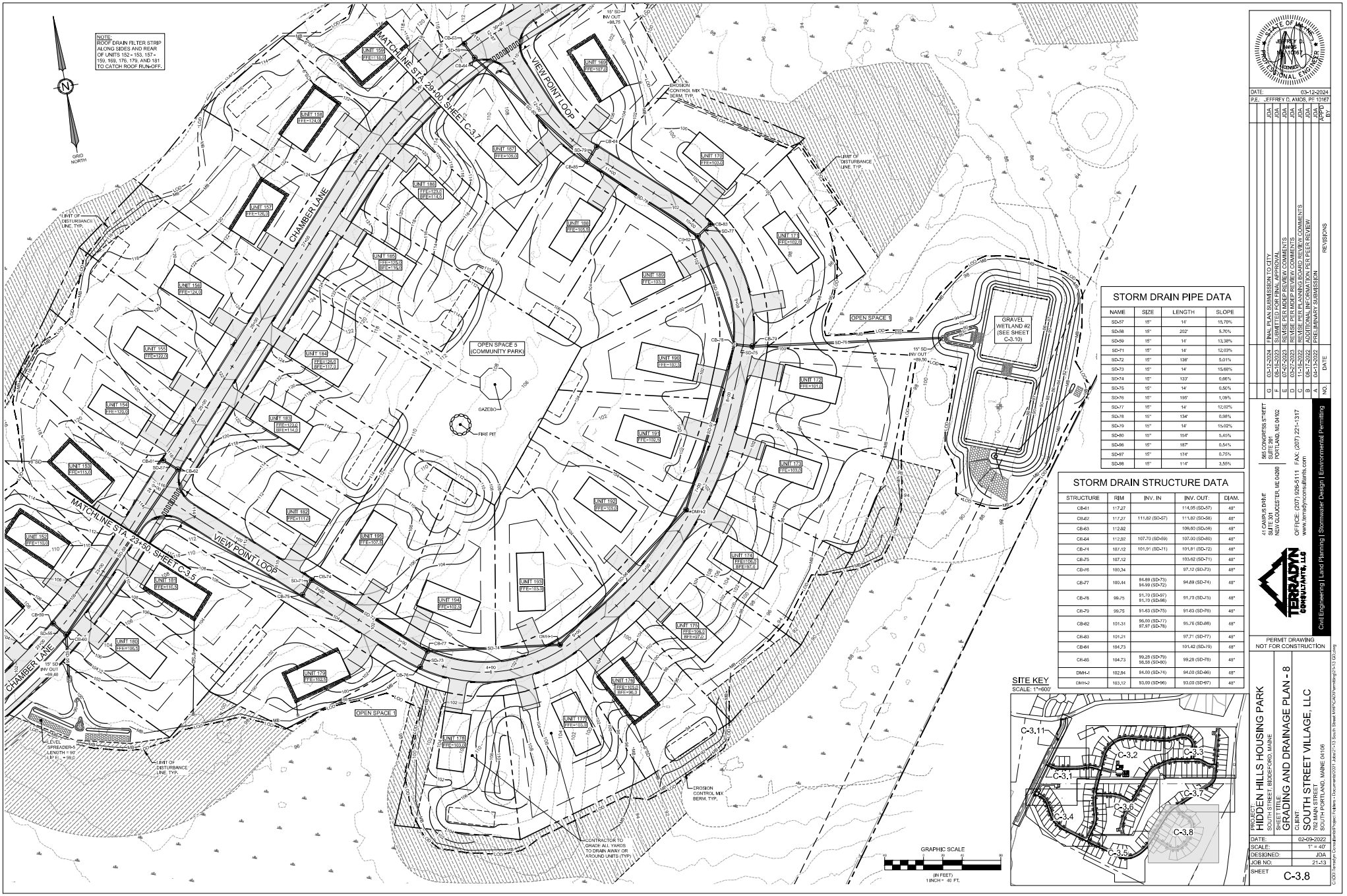
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
GRADING AND DRAINAGE PLAN - 7

CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.7

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STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-57	15"	14'	15.70%
SD-58	15"	202'	5.70%
SD-59	15"	14'	13.38%
SD-71	15"	14'	12.03%
SD-72	15"	139'	5.01%
SD-73	15"	14'	15.66%
SD-74	15"	133'	0.66%
SD-75	15"	14'	0.50%
SD-76	15"	195'	1.09%
SD-77	15"	14'	12.02%
SD-78	15"	134'	0.98%
SD-79	15"	14'	15.02%
SD-80	15"	164'	5.45%
SD-96	15"	187'	0.54%
SD-97	15"	174'	0.75%
SD-98	15"	114'	3.55%

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT	DIAM.
CB-81	117.27		114.05 (SD-57)	48"
CB-82	117.27	111.82 (SD-57)	111.82 (SD-58)	48"
CB-83	112.82		106.60 (SD-58)	48"
CB-84	112.82	107.70 (SD-59)	107.00 (SD-80)	48"
CB-74	107.12	101.91 (SD-71)	101.81 (SD-72)	48"
CB-75	107.12		103.62 (SD-71)	48"
CB-76	100.24		97.12 (SD-73)	48"
CB-77	100.44	94.89 (SD-73) 94.99 (SD-72)	94.89 (SD-74)	48"
CB-78	99.75	91.70 (SD-97) 91.70 (SD-98)	91.70 (SD-75)	48"
CB-79	99.75	91.63 (SD-75)	91.63 (SD-76)	48"
CB-82	101.31	96.00 (SD-77) 97.97 (SD-78)	95.76 (SD-98)	48"
CB-83	101.21		97.71 (SD-77)	48"
CB-84	104.73		101.42 (SD-79)	48"
CB-85	104.73	99.28 (SD-79) 99.39 (SD-80)	99.28 (SD-78)	48"
DMH-1	102.84	94.00 (SD-74)	94.00 (SD-96)	48"
DMH-2	103.12	93.00 (SD-96)	93.00 (SD-97)	48"

SITE KEY
SCALE: 1"=600'

C-3.1 C-3.2 C-3.3 C-3.4 C-3.5 C-3.6 C-3.7 C-3.8 C-3.11

STATE OF MAINE
JEFFREY D. AMOS
3167
PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

G	05-21-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	05-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-27-2022	PRELIMINARY SUBMISSION	JDA
NO.	DATE	REVISIONS	APP'D BY

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NEW GLOUCESTER, ME 04260
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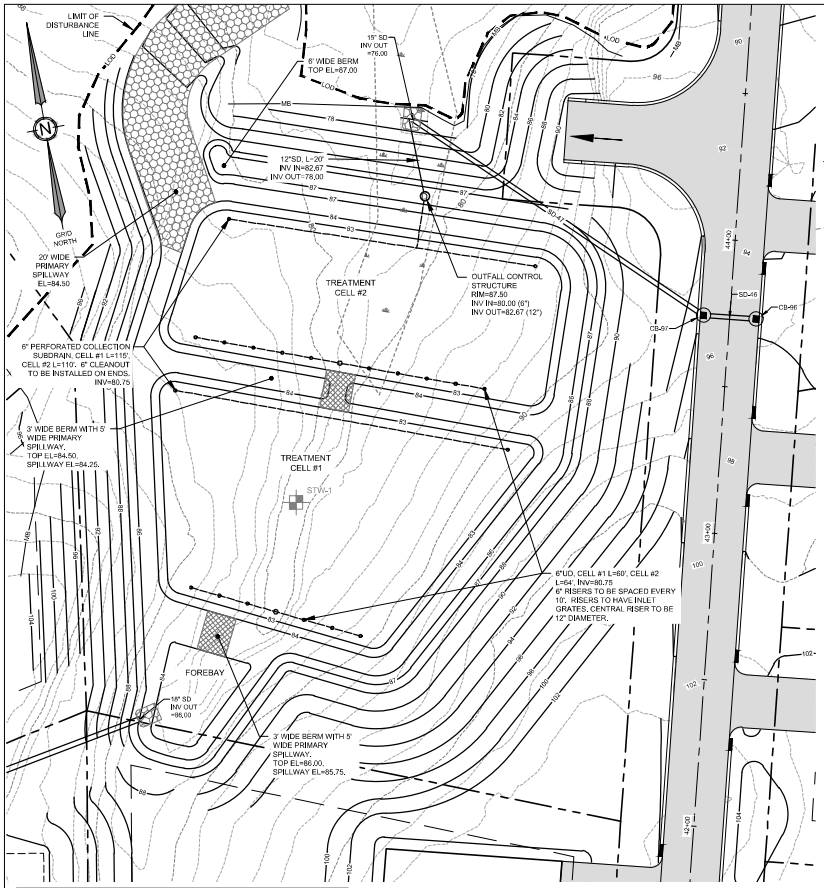
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
GRADING AND DRAINAGE PLAN - 8

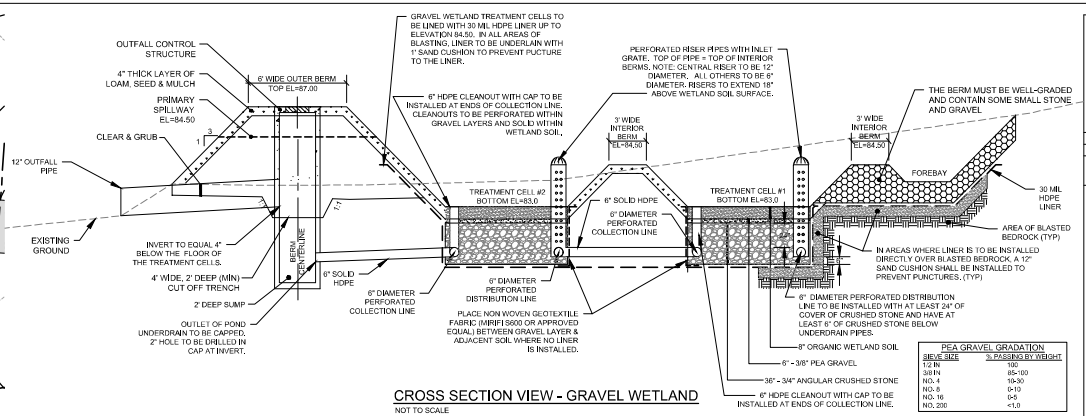
CLIENT:
SOUTH STREET VILLAGE, LLC
565 CONGRESS STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.8

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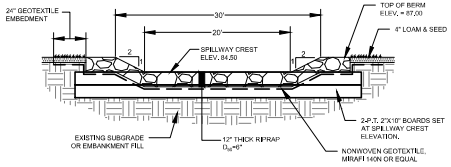
GRAPHIC SCALE
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(IN FEET)
1 INCH = 20 FT.



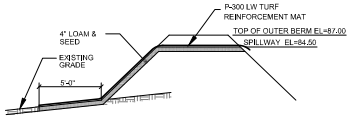
CROSS SECTION VIEW - GRAVEL WETLAND
NOT TO SCALE

PEA GRAVEL GRADATION

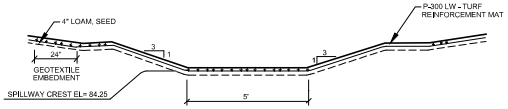
SIEVE SIZE	% PASSING BY WEIGHT
1/2 IN	100
3/8 IN	85-100
NO. 4	10-30
NO. 8	0-10
NO. 16	0-5
NO. 200	<1.0



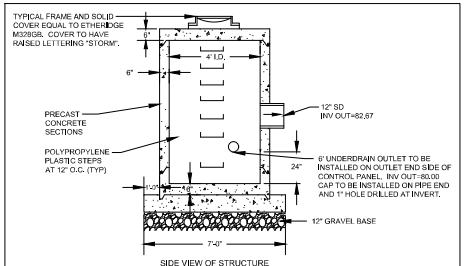
PRIMARY SPILLWAY CROSS SECTION
NOT TO SCALE



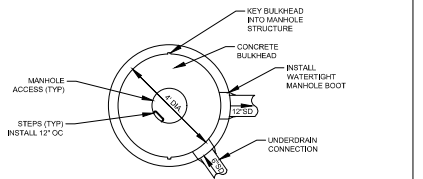
SPILLWAY EMBANKMENT SECTION
NOT TO SCALE



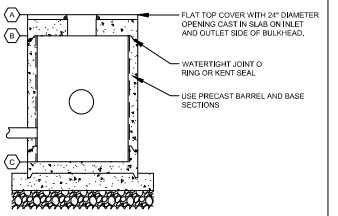
INTERNAL BERM SPILLWAY CROSS-SECTIONS
NOT TO SCALE



SIDE VIEW OF STRUCTURE



TOP VIEW OF STRUCTURE



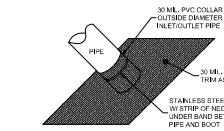
SIDE VIEW

NOTES:
1. SUBMIT SHOP DRAWINGS FOR OWNER/ ENGINEER APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING.
3. CASTINGS SHALL PROVIDE FOR A 24" CLEAR OPENING.

SCHEDULE A
OUTLET CONTROL STRUCTURE

ITEM DESCRIPTION		DIMENSION / ELEVATION
A.	TOP OF STRUCTURE	87.50
B.	UNDERSIDE OF SLAB	87.00
C.	BOTTOM OF STRUCTURE	78.00

OUTLET CONTROL STRUCTURE (OCS)
NOT TO SCALE



END VIEW OF PIPE/LINER CONNECTION

PVC BOOT
NOT TO SCALE

GRAVEL WETLAND INSTALLATION NOTES:

1. THE MINIMUM SPACING BETWEEN THE SUBSURFACE PERFORATED DISTRIBUTION LINE AND THE SUBSURFACE PERFORATED COLLECTION DRAIN AT EITHER END OF THE GRAVEL IN EACH TREATMENT CELL IS 15 FT.

2. THERE SHOULD BE A MINIMUM HORIZONTAL TRAVEL DISTANCE OF 15 FT WITHIN THE GRAVEL LAYER IN EACH CELL.

3. VERTICAL PERFORATED OR SLOTTED RISER PIPES DELIVER WATER FROM THE SURFACE DOWN TO THE SUBSURFACE. PERFORATED OR SLOTTED DISTRIBUTION LINES. THESE RISERS SHALL HAVE A MAXIMUM SPACING OF 10 FEET.

4. SLOTTED VERTICAL RISERS SHALL HAVE A MINIMUM DIAMETER OF 12" FOR THE CENTRAL RISER AND 6" FOR END RISERS. THE VERTICAL RISERS SHALL NOT BE CAPPED, BUT RATHER COVERED WITH AN INLET GRATE.

5. VERTICAL CLEANOUTS CONNECTED TO THE DISTRIBUTION AND COLLECTION SUBDRAINS, AT EACH END, SHALL BE PERFORATED OR SLOTTED ONLY WITHIN THE GRAVEL LAYER, AND SOLID WITHIN THE WETLAND SOIL AND STORAGE AREA ABOVE.

6. TREATMENT CELL FLOOR TO BE GRADED FLAT.

7. BERMS AND WEIRS SEPARATING THE FOREBAY AND TREATMENT CELLS SHOULD BE CONSTRUCTED WITH CLAY, OR NON-CONDUCTIVE SOILS, AND/OR A FINE GEOTEXTILE, OR SOME COMBINATION THEREOF, TO AVOID WATER SEEPAGE AND SOIL PIPING THROUGH THESE EARTHEN DIVIDERS.

8. THE SYSTEM SHOULD BE PLANTED TO ACHIEVE A RIGOROUS ROOT MAT WITH GRASSES, FORBS, AND SHRUBS WITH OBLIGATE AND FACULTATIVE WETLAND SPECIES.

9. THE SUBAREA DRAINING TO A CREATED WETLAND MUST BE COMPLETELY STABLE BEFORE RUNOFF IS DIRECTED TO THE BASIN TO PREVENT SEDIMENTATION OF THE DRAINAGE LAYER. OR ALL RUNOFF SHOULD BE RE-DIRECTED UNTIL CONSTRUCTION IS FINALIZED. THE VEGETATION WITHIN THE STRUCTURE IS EQUALLY IMPORTANT AND MUST BE WELL ESTABLISHED BEFORE IT CAN ACCEPT ANY RUNOFF.

10. GRAVEL WETLAND STORMWATER AREA TO BE SEEDED WITH "NEW ENGLAND WETMIX" AS DISTRIBUTED BY NEW ENGLAND WETLAND PLANTS, INC., 820 WEST STREET, AMHERST, MA 01002, PHONE 413-548-8000, EMAIL INFO@NEWP.COM, OR APPROVED EQUIVALENT. APPLY AT A RATE OF 1 LB/2,500 SF.

11. THE SEEDS WILL NOT GERMINATE UNDER INUNDATED CONDITIONS. IF PLANTED DURING THE FALL MONTHS THE SEED MIX WILL GERMINATE THE FOLLOWING SPRING, DURING THE FIRST SEASON OF GROWTH SEVERAL SPECIES WILL PRODUCE SEEDS WHILE OTHER SPECIES WILL PRODUCE SEEDS AFTER THE SECOND GROWING SEASON. NOT ALL SPECIES WILL GROW IN ALL WETLAND SITUATIONS. THIS MIX IS COMPRISED OF THE WETLAND SPECIES MOST LIKELY TO GROW IN CREATED/RESTORED WETLANDS AND SHOULD PRODUCE MORE THAN 75% GROUND COVER IN TWO FULL GROWING SEASONS.

12. THE WETLAND SEEDS IN THIS MIX CAN BE SOWN BY HAND, WITH A HAND-HELD SPREADER, OR HYDRO-SEEDED ON LARGE OR HARD TO REACH SITES. LIGHTLY RAKE TO ENSURE GOOD SEED-TO-SOIL CONTACT. SEEDING CAN TAKE PLACE ON FROZEN SOIL AS THE FREEZING AND THAWING WEATHER OF LATE FALL AND LATE WINTER WILL WORK THE SEED INTO THE SOIL. IF SPRING CONDITIONS ARE DRIER THAN USUAL, WATERING MAY BE REQUIRED. IF SOWING DURING THE SUMMER MONTHS, SUPPLEMENTAL WATERING WILL LIKELY BE REQUIRED UNTIL GERMINATION. A LIGHT MULCH OF CLEAN, WEED FREE STRAW IS RECOMMENDED.

13. THE POND CONSTRUCTION SHOULD BE ONLY CONSTRUCTED UNDER THE SUPERVISION OF THE DESIGN ENGINEER.

POND CONSTRUCTION NOTES:
1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM EMBANKMENT AND POND CONSTRUCTION AREA.
2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. CONSTRUCTION MATERIAL SHALL MEET M.D.O.T. SPEC 703.18
4. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY.
5. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED.
6. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN & NOTES.

CONSTRUCTION INSPECTION NOTES:
INSPECTION BY A PROFESSIONAL ENGINEER WILL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE INSTALLATION OF EACH POND'S EMBANKMENT CONSTRUCTION, STORMWATER INLET, UNDERDRAINS, FILTER MATERIAL MAKEUP AND PLACEMENT, OUTLET CONTROL STRUCTURE, CLAY LINER (IF APPLICABLE), AND EMERGENCY SPILLWAY CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE POND. AN INSPECTION OF THE UNDERDRAINED GRAVEL OUTLET SHALL ALSO BE PERFORMED ONE YEAR AFTER THE FINAL STABILIZATION OF THE POND.

ORGANIC WETLAND SOIL MIXTURE:
THE WETLAND SOIL SHOULD HAVE A LOW HYDRAULIC CONDUCTIVITY (0.1–0.01 FT/DAY). THIS SOIL CAN BE MANUFACTURED USING COMPOST, SAND AND FINE SOILS INTO A BLEND WITH MORE THAN 15% ORGANIC MATTER. IT SHOULD CONTAIN MORE THAN 15% SILT (PASSING THE #200 SIEVE); BUT WITH A CLAY SIZE PORTION THAT IS LESS THAN 15%. DO NOT USE GEOTEXTILES BETWEEN THE HORIZONTAL LAYERS OF THIS SYSTEM AS THEY WILL CLOG DUE TO FINES AND MAY RESTRICT ROOT GROWTH.

WETLAND SOIL GRADATION

SIEVE SIDE	% PASSING BY WEIGHT
1/2 IN	100
NO. 10	75-90
NO. 100	40-50
NO. 200	25-50

EMBANKMENT CONSTRUCTION:
1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION 703.
2. PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY	APP'D
A	04-17-2023	PRELIMINARY SUBMISSION	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

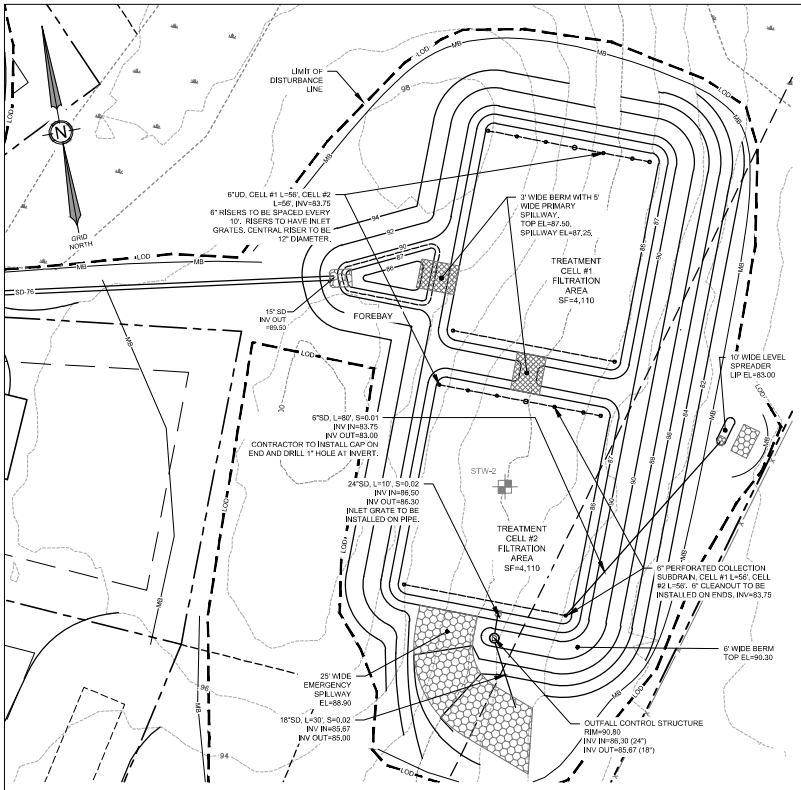
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
KENNEBUNK, ME 04043
96E CONGRESS STREET
PORTLAND, ME 04102
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OFFICE: (207) 926-5111 FAX: (207) 221-1317
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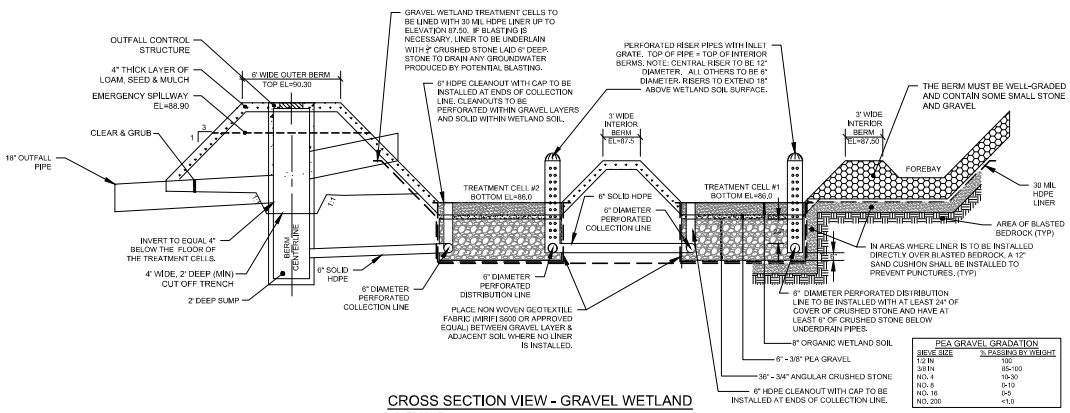
PERMIT DRAWING
NOT FOR CONSTRUCTION

PREPARED FOR: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: GRAVEL WETLAND - PLAN 1
CLIENT: SOUTH STREET VILLAGE, LLC
53 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE: 02-09-2022
SCALE: AS SHOWN
DESIGNED: JDA
JOB NO: 21-13
SHEET C-3.9

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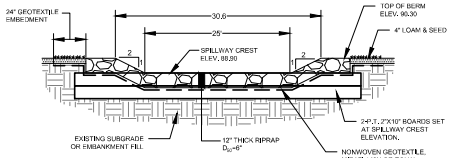


CROSS SECTION VIEW - GRAVEL WETLAND

NOT TO SCALE

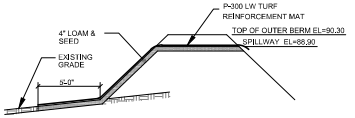
PEA GRAVEL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
1/2 IN	100
3/8 IN	85-100
NO. 4	10-30
NO. 8	0-10
NO. 16	0-5
NO. 200	<1.0



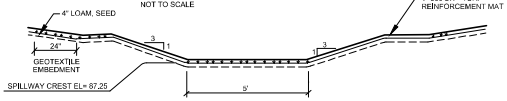
EMERGENCY SPILLWAY CROSS SECTION

NOT TO SCALE



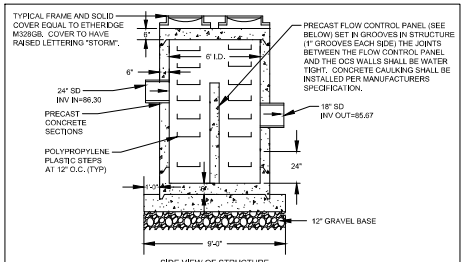
SPILLWAY EMBANKMENT SECTION

NOT TO SCALE

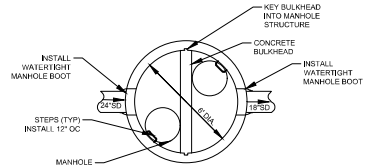


INTERNAL BERM SPILLWAY CROSS-SECTIONS

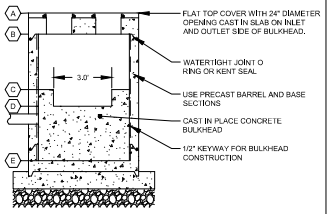
NOT TO SCALE



SIDE VIEW OF STRUCTURE



TOP VIEW OF STRUCTURE



SIDE VIEW & WEIR WALL

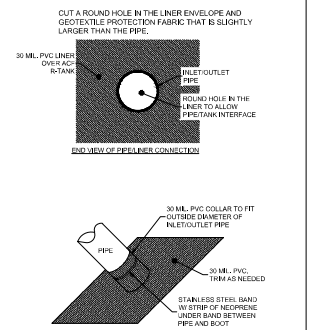
NOTES:
1. SUBMIT SHOP DRAWINGS FOR OWNER/ ENGINEER APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING.
3. CASTINGS SHALL PROVIDE FOR A 24" CLEAR OPENING.

SCHEDULE A
OUTLET CONTROL STRUCTURE

ITEM	DESCRIPTION	DIMENSION / ELEVATION
A.	TOP OF STRUCTURE	90.80
B.	UNDERSIDE OF SLAB	90.30
C.	TOP OF CONCRETE BULKHEAD	88.90
D.	BOTTOM OF WEIR SLOT	87.50
E.	BOTTOM OF STRUCTURE	83.67

OUTLET CONTROL STRUCTURE (OCS)

NOT TO SCALE



PVC BOOT

NOT TO SCALE

GRAVEL WETLAND INSTALLATION NOTES:

1. THE MINIMUM SPACING BETWEEN THE SUBSURFACE PERFORATED DISTRIBUTION LINE AND THE SUBSURFACE PERFORATED COLLECTION DRAIN AT EITHER END OF THE GRAVEL IN EACH TREATMENT CELL IS 15 FT.
2. THERE SHOULD BE A MINIMUM HORIZONTAL TRAVEL DISTANCE OF 15 FT WITHIN THE GRAVEL LAYER IN EACH CELL.
3. VERTICAL PERFORATED OR SLOTTED RISER PIPES DELIVER WATER FROM THE SURFACE DOWN TO THE SUBSURFACE, PERFORATED OR SLOTTED DISTRIBUTION LINES. THESE RISERS SHALL HAVE A MAXIMUM SPACING OF 10 FEET.
4. SLOTTED VERTICAL RISERS SHALL HAVE A MINIMUM DIAMETER OF 12" FOR THE CENTRAL RISER AND 6" FOR END RISERS. THE VERTICAL RISERS SHALL NOT BE CAPPED, BUT RATHER COVERED WITH AN INLET GRATE.
5. VERTICAL CLEANOUTS CONNECTED TO THE DISTRIBUTION AND COLLECTION SUBDRAINS, AT EACH END, SHALL BE PERFORATED OR SLOTTED ONLY WITHIN THE GRAVEL LAYER, AND SOLID WITHIN THE WETLAND SOIL AND STORAGE AREA ABOVE.
6. TREATMENT CELL FLOOR TO BE GRADED FLAT.
7. BERMS AND WEIRS SEPARATING THE FOREBAY AND TREATMENT CELLS SHOULD BE CONSTRUCTED WITH CLAY, OR NON-CONDUCTIVE SOILS, AND/OR A FINE GEOTEXTILE, OR SOME COMBINATION THEREOF, TO AVOID WATER SEEPAGE AND SOIL PIPING THROUGH THESE EARTHEN DIVIDERS.
8. THE SYSTEM SHOULD BE PLANTED TO ACHIEVE A RIGOROUS ROOT MAT WITH GRASSES, FORBS, AND SHRUBS WITH OBLIGATE AND FACULTATIVE WETLAND SPECIES.
9. THE SUBAREA DRAWING TO A CREATED WETLAND MUST BE COMPLETELY STABLE BEFORE RUNOFF IS DIRECTED TO THE BASIN TO PREVENT SEDIMENTATION OF THE DRAINAGE LAYER; OR ALL RUNOFF SHOULD BE RE-DIRECTED UNTIL CONSTRUCTION IS FINALIZED. THE VEGETATION WITHIN THE STRUCTURE IS EQUALLY IMPORTANT AND MUST BE WELL ESTABLISHED BEFORE IT CAN ACCEPT ANY RUNOFF.
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13. THE POND CONSTRUCTION SHOULD BE ONLY CONSTRUCTED UNDER THE SUPERVISION OF THE DESIGN ENGINEER.

POND CONSTRUCTION NOTES:
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2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. CONSTRUCTION MATERIAL SHALL MEET M.D.O.T. SPEC 703.19
4. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY.
5. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED.
6. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN & NOTES.

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INSPECTION BY A PROFESSIONAL ENGINEER WILL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE INSTALLATION OF EACH POND'S EMBANKMENT CONSTRUCTION, STORMWATER INLET, UNDERDRAINS, FILTER MATERIAL MAKEUP AND PLACEMENT, OUTLET CONTROL STRUCTURE, CLAY LINER (IF APPLICABLE), AND EMERGENCY SPILLWAY CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE POND. AN INSPECTION OF THE UNDERDRAINED GRAVEL OUTLET SHALL ALSO BE PERFORMED ONE YEAR AFTER THE FINAL STABILIZATION OF THE POND.

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WETLAND SOIL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
1/2 IN	100
NO. 10	75-90
NO. 100	45-50
NO. 200	25-50

EMBANKMENT CONSTRUCTION:
1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION 703.
2. PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

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OFFICE: (207) 926-5111, FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
PORTLAND, ME 04102

NO.	DATE	REVISIONS	APP'D BY
A	04-12-2024	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

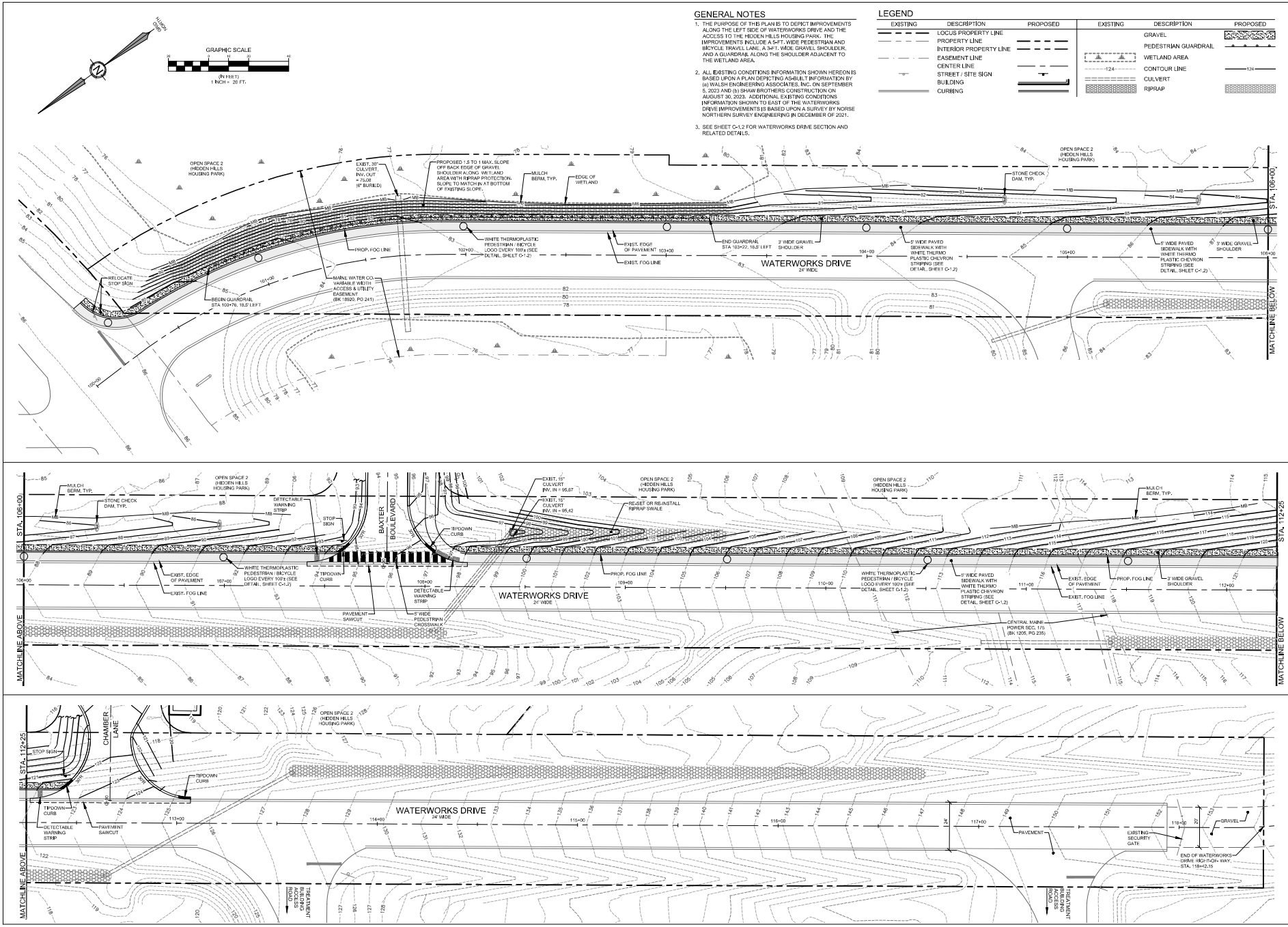
DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

PERMIT DRAWING
NOT FOR CONSTRUCTION

PREPARED FOR: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: GRAVEL WETLAND - PLAN 2
CLIENT: SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.10

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DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 15167

NO.	DATE	REVISIONS	BY	APP'D
A	04-04-2022	PRELIMINARY SUBMISSION	JDA	
B	04-11-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

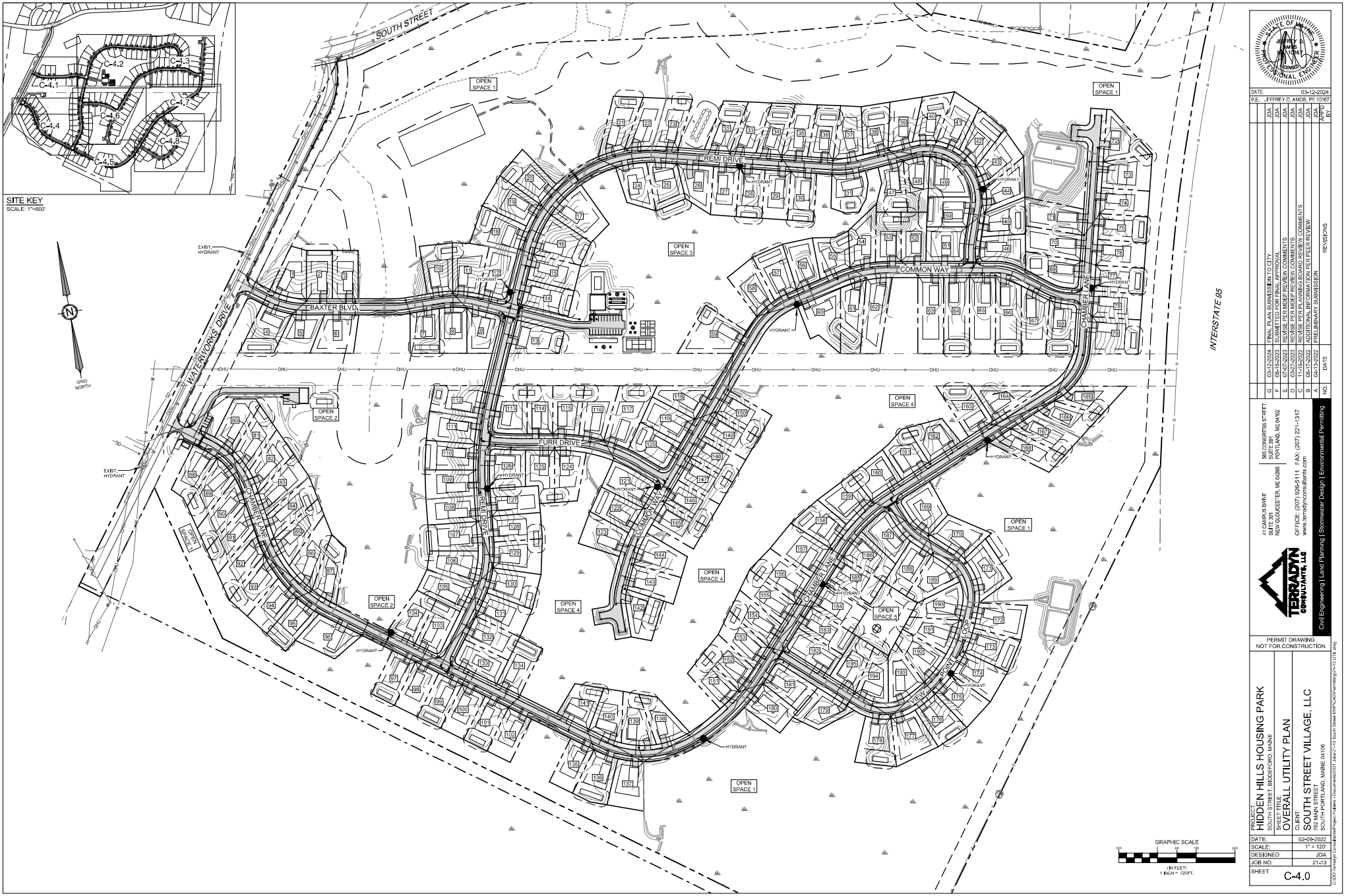
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NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BRIDGTON, MAINE
SHEET TITLE:
WATERWORKS DRIVE SIDEWALK GRADING
CLIENT:
SOUTH STREET VILLAGE, LLC
SAM SMITH
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 20'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-3.11

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STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
G	05-21-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	04-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-12-2022	PRELIMINARY SUBMISSION	JDA

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
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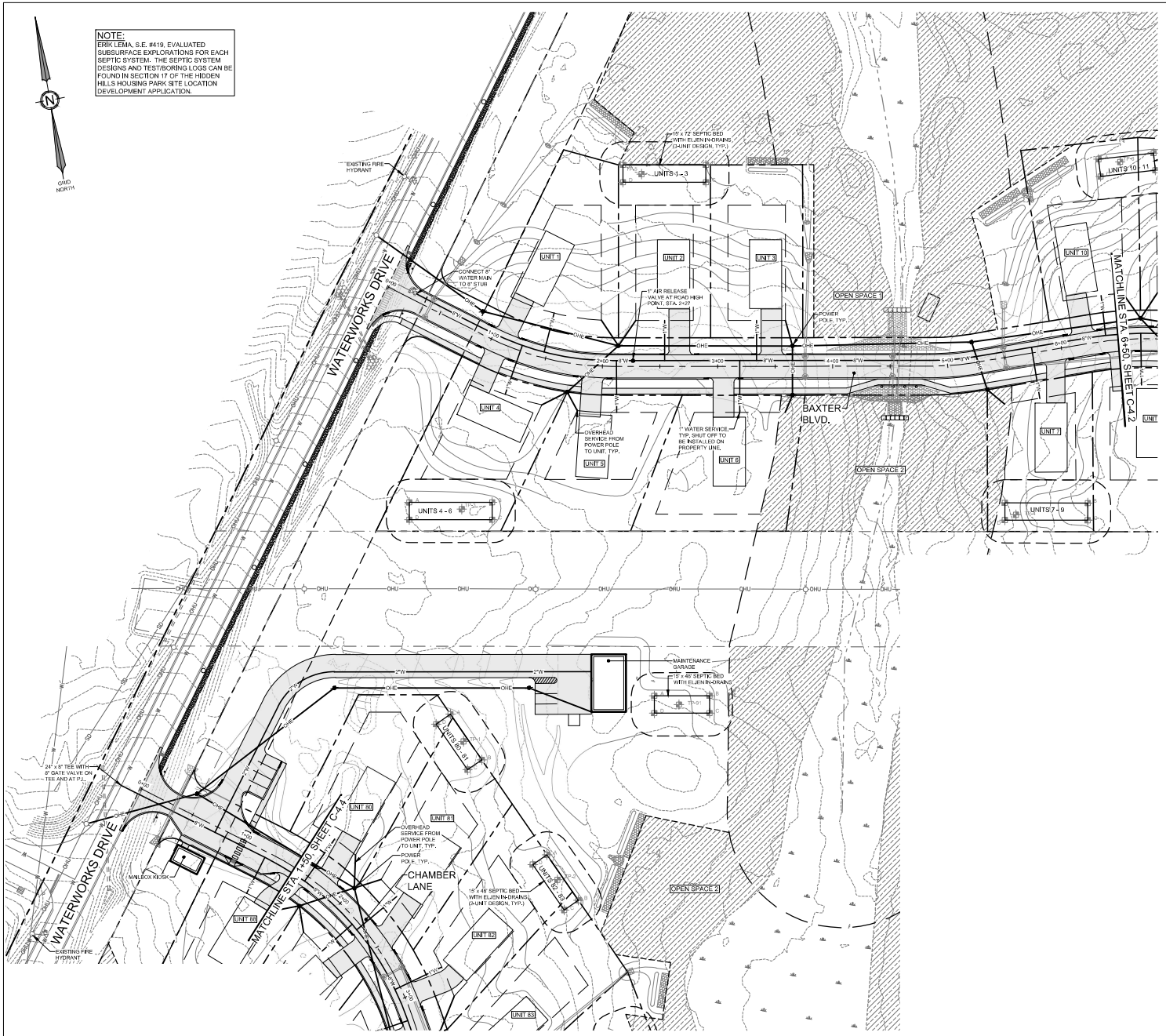
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, MIDDLE ROAD, MAINE

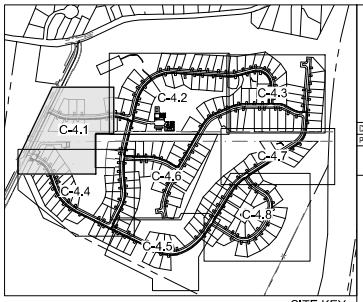
SHEET TITLE:
OVERALL UTILITY PLAN

CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.0

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SITE KEY
SCALE: 1"=600'

WATER MAIN CONSTRUCTION NOTES:

1. 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
2. MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS. INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
3. INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
4. CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
5. 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
6. TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 INCH = 40 FT.

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	APP'D BY
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PEER REVIEW	JDA
A	04-12-2022	PRELIMINARY SUBMISSION	JDA

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
56E CONGRESS STREET
SUITE 204
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyncons ltants.com
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, MIDDLEBORO, MAINE
SHEET TITLE:
UTILITY PLAN - 1
CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.1

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NO.	DATE	REVISIONS	BY	APPD
A	04-19-2022	PRELIMINARY SUBMISSION	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

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565 CONGRESS STREET
PORTLAND, ME 04102

PERMIT DRAWING
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PROJECT:
HIDDEN HILLS HOUSING PARK
MAIDA DEVELOPMENT
BIDDEFORD, MAINE

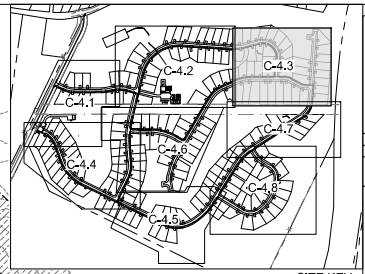
SHEET TITLE:
UTILITY PLAN - 2

CLIENT:
SOUTH STREET VILLAGE, LLC
565 CONGRESS STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.2

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SITE KEY
SCALE: 1"=600'

WATER MAIN CONSTRUCTION NOTES:

1. 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
2. MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS. INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
3. INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
4. CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
5. 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
6. TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.

NOTE:
ERIK LEMA, S.E. #419, EVALUATED SUBSURFACE EXPLORATIONS FOR EACH SEPTIC SYSTEM. THE SEPTIC SYSTEM DESIGNS AND TEST/BORING LOGS CAN BE FOUND IN SECTION 17 OF THE HIDDEN HILLS HOUSING PARK SITE LOCATION DEVELOPMENT APPLICATION.

GRAPHIC SCALE
(IN FEET)
1 INCH = 40 FT.

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY	APP'D
A	04-17-2024	PRELIMINARY SUBMISSION	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

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www.terradynconsultants.com
565 CONGRESS STREET
SUITE 304
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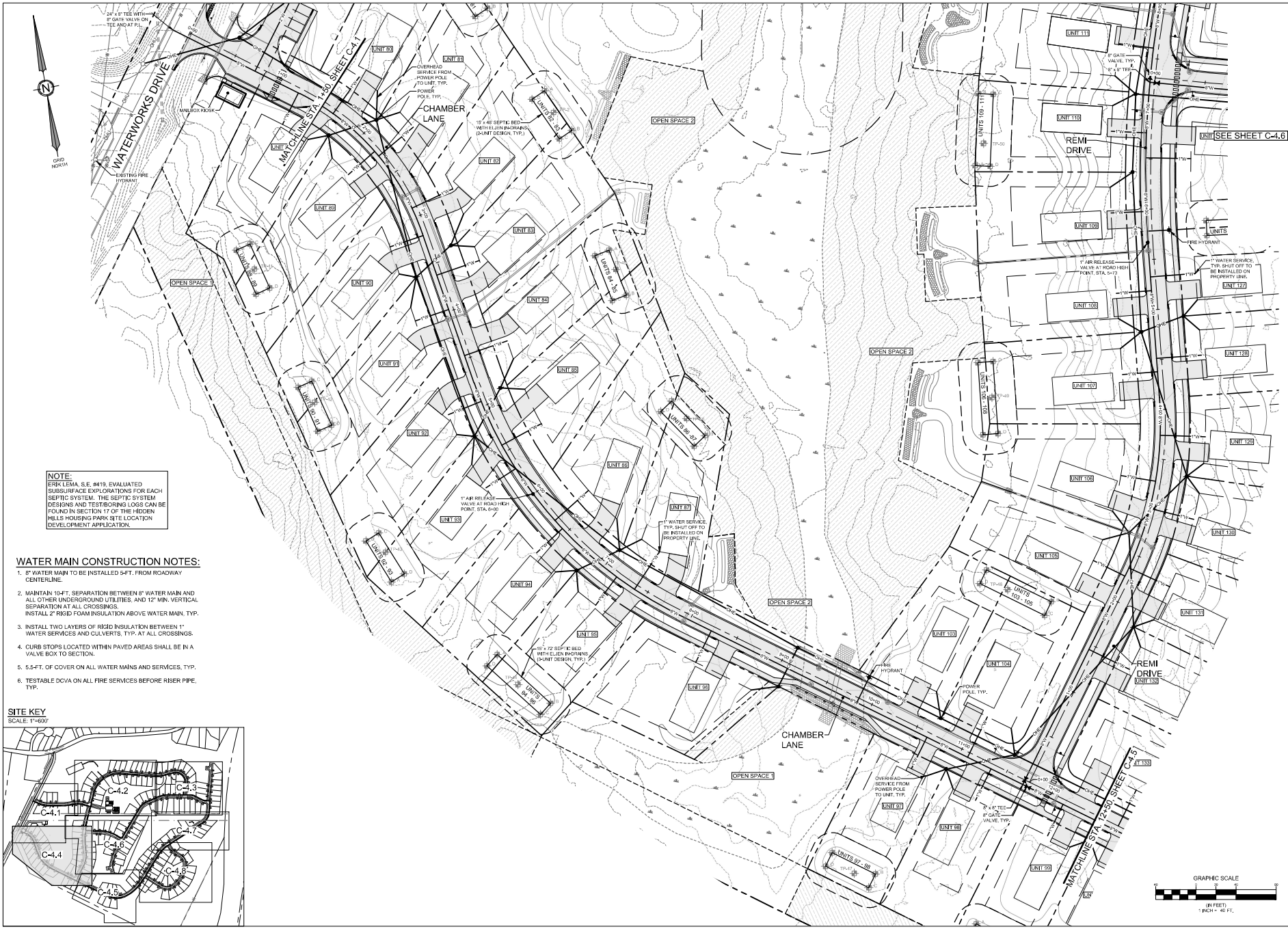
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BRIDGTON, MAINE

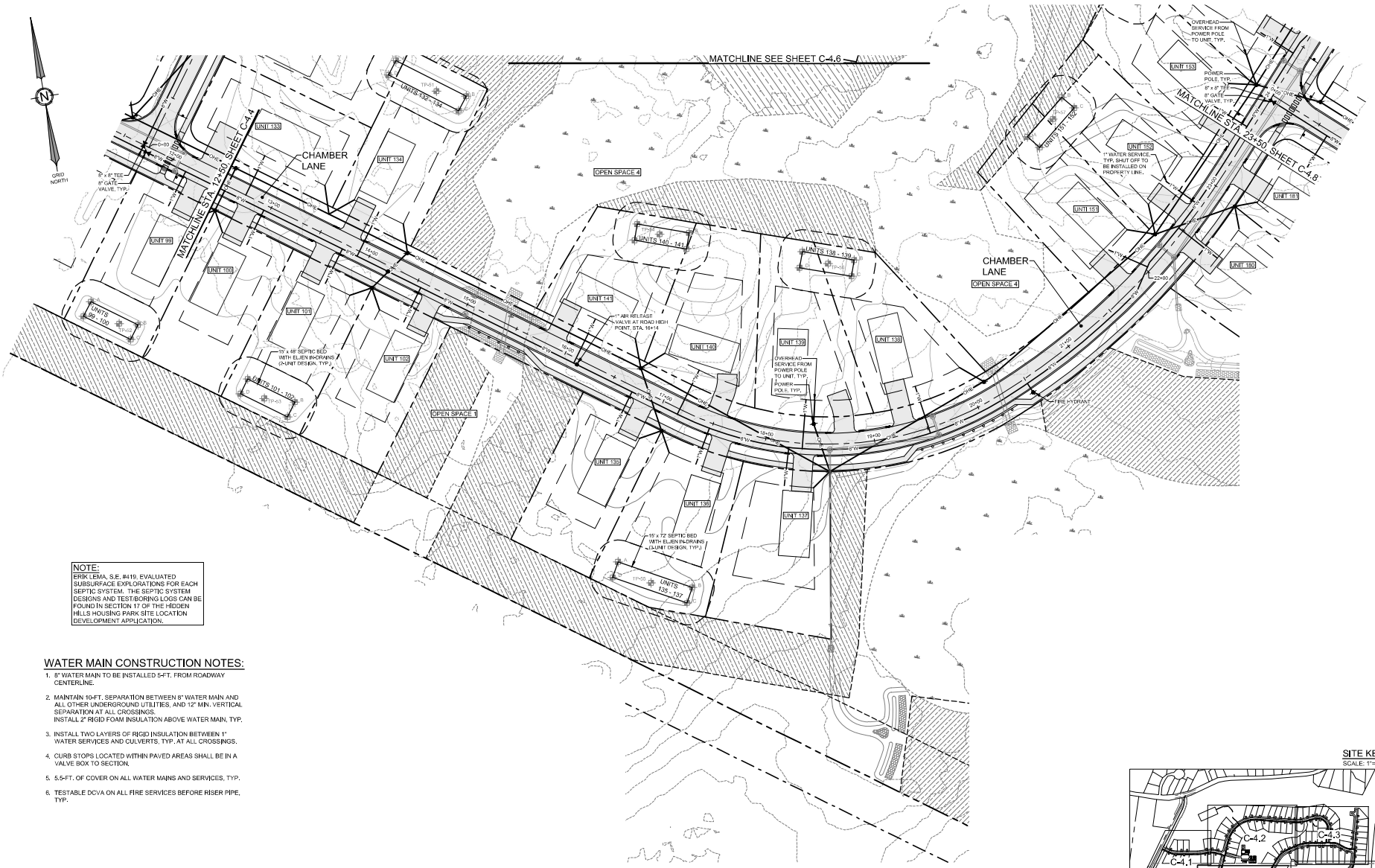
SHEET TITLE:
UTILITY PLAN - 3

CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.3

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WATERWORKS DRIVE
CHAMBER LANE
REMI DRIVE
SOUTH STREET
MATCHLINE STA 1+50, SHEET C-4.1
MATCHLINE STA 12+50, SHEET C-4.5
SEE SHEET C-4.6
OPEN SPACE 1
OPEN SPACE 2
MAILBOX KIOSK
EXISTING FIRE HYDRANT
GRID NORTH
24" x 8" TEE WITH 8" GATE VALVE ON TEE AND AT P.I.
OVERHEAD SERVICE FROM POWER POLE TO UNIT, TYP.
POWER POLE, TYP.
15' x 40' SEPTIC BED WITH ELJEN IN-DRAINS (3-UNIT DESIGN, TYP.)
15' x 72' SEPTIC BED WITH ELJEN IN-DRAINS (3-UNIT DESIGN, TYP.)
1" AIR RELEASE VALVE AT ROAD HIGH POINT, STA. 6+00
1" AIR RELEASE VALVE AT ROAD HIGH POINT, STA. 5+77
1" WATER SERVICE, TYP. SHUT OFF TO BE INSTALLED ON PROPERTY LINE.
8" GATE VALVE, TYP.
8" x 8" TEE
FIRE HYDRANT
UNITS 1-4
UNITS 5-8
UNITS 9-12
UNITS 13-16
UNITS 17-20
UNITS 21-24
UNITS 25-28
UNITS 29-32
UNITS 33-36
UNITS 37-38
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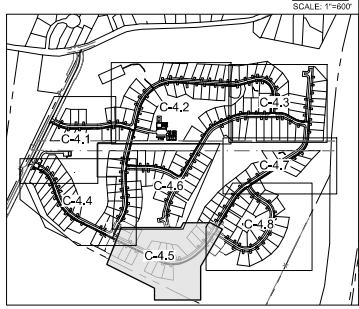
NOTE:
ERIK LEMA, S.E. #419, EVALUATED SUBSURFACE EXPLORATIONS FOR EACH SEPTIC SYSTEM. THE SEPTIC SYSTEM DESIGNS AND TEST/BORING LOGS CAN BE FOUND IN SECTION 17 OF THE HIDDEN HILLS HOUSING PARK SITE LOCATION DEVELOPMENT APPLICATION.

WATER MAIN CONSTRUCTION NOTES:

1. 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
2. MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS. INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
3. INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
4. CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
5. 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
6. TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.

GRAPHIC SCALE
(IN FEET)
1 INCH = 40 FT.

SITE KEY
SCALE: 1"=600'



STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
A	04-12-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

TERRADYN CONSULTANTS, LLC
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565 CONGRESS STREET
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PORTLAND, ME 04102
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www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
UTILITY PLAN - 5

CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
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JOB NO:	21-13
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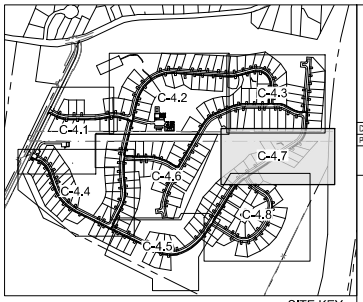
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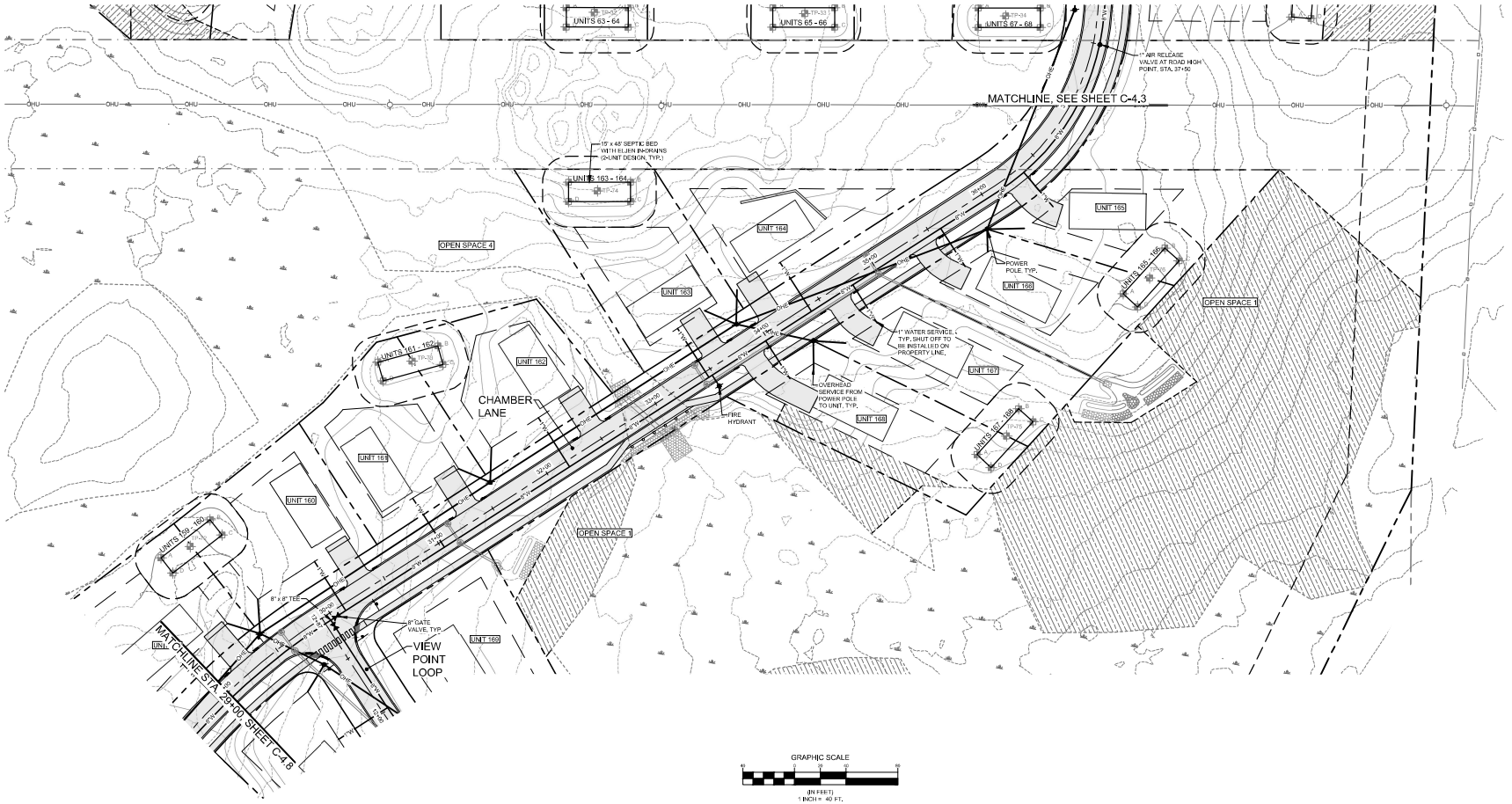
NOTE:
ERIK LEMA, S.E. #419, EVALUATED SUBSURFACE EXPLORATIONS FOR EACH SEPTIC SYSTEM. THE SEPTIC SYSTEM DESIGNS AND TEST/BORING LOGS CAN BE FOUND IN SECTION 17 OF THE HIDDEN HILLS HOUSING PARK SITE LOCATION DEVELOPMENT APPLICATION.

WATER MAIN CONSTRUCTION NOTES:

1. 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
2. MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS. INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
3. INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
4. CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
5. 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
6. TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.



SITE KEY
SCALE: 1"=600'



NO.	DATE	REVISIONS	BY	APP'D
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
A	04-27-2022	PRELIMINARY SUBMISSION	JDA	

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

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NEW GLOUCESTER, ME 04260
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SUITE 304
PORTLAND, ME 04102
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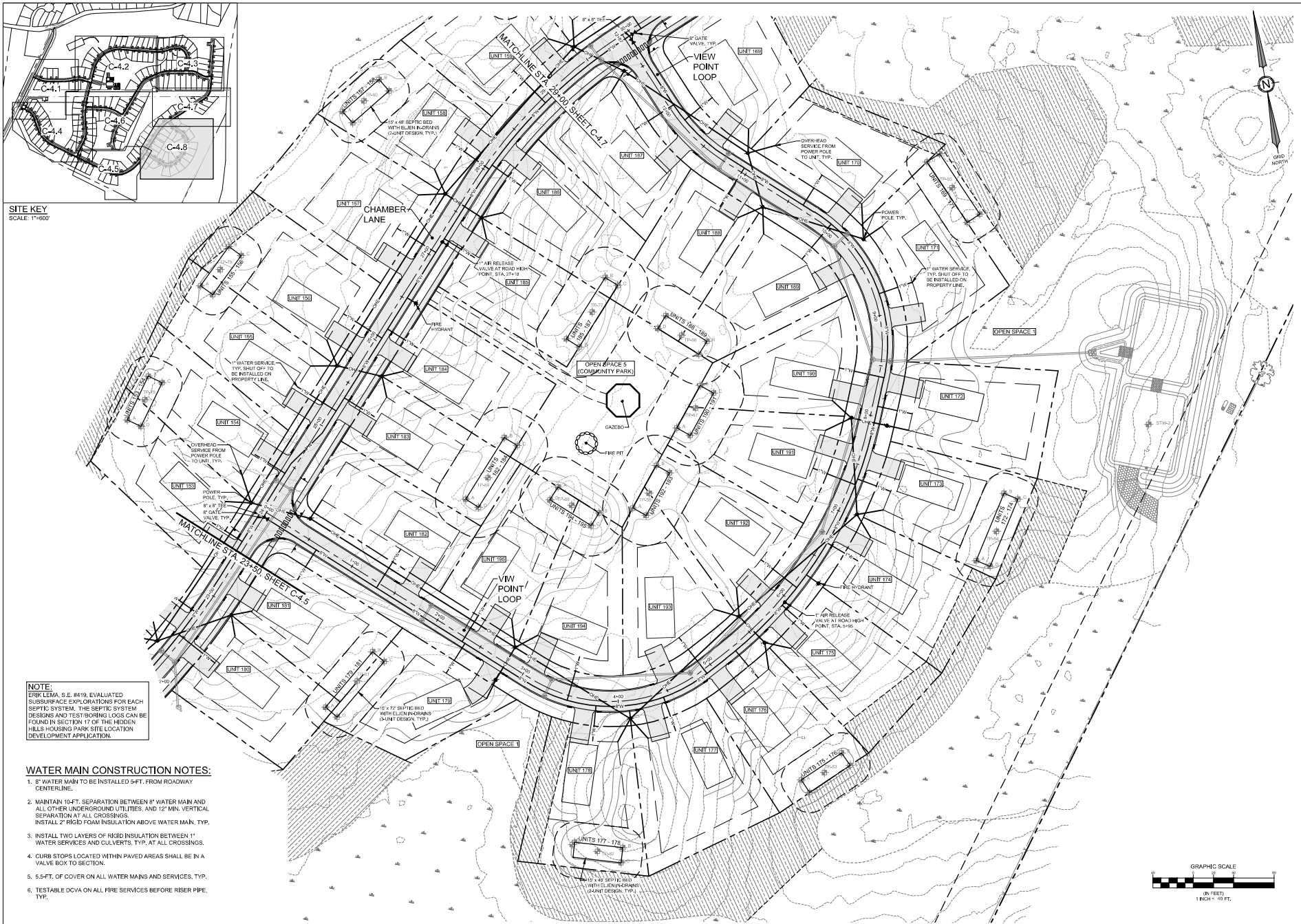
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
UTILITY PLAN - 7

CLIENT:
SOUTH STREET VILLAGE, LLC
30 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.7

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NOTE:
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4. CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
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6. TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

				APP'D BY
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY		JDA
F	06-16-2023	SUBMITTED FOR FINAL APPROVAL		JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS		JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS		JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS		JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW		JDA
A	04-12-2022	PRELIMINARY SUBMISSION		JDA
NO.	DATE	REVISIONS		

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41 CAMPUS DRIVE
KENNEBUNK, ME 04043
565 CONGRESS STREET
SUITE 204
PORTLAND, ME 04102
OFFICE: (207) 929-5111 FAX: (207) 221-1317
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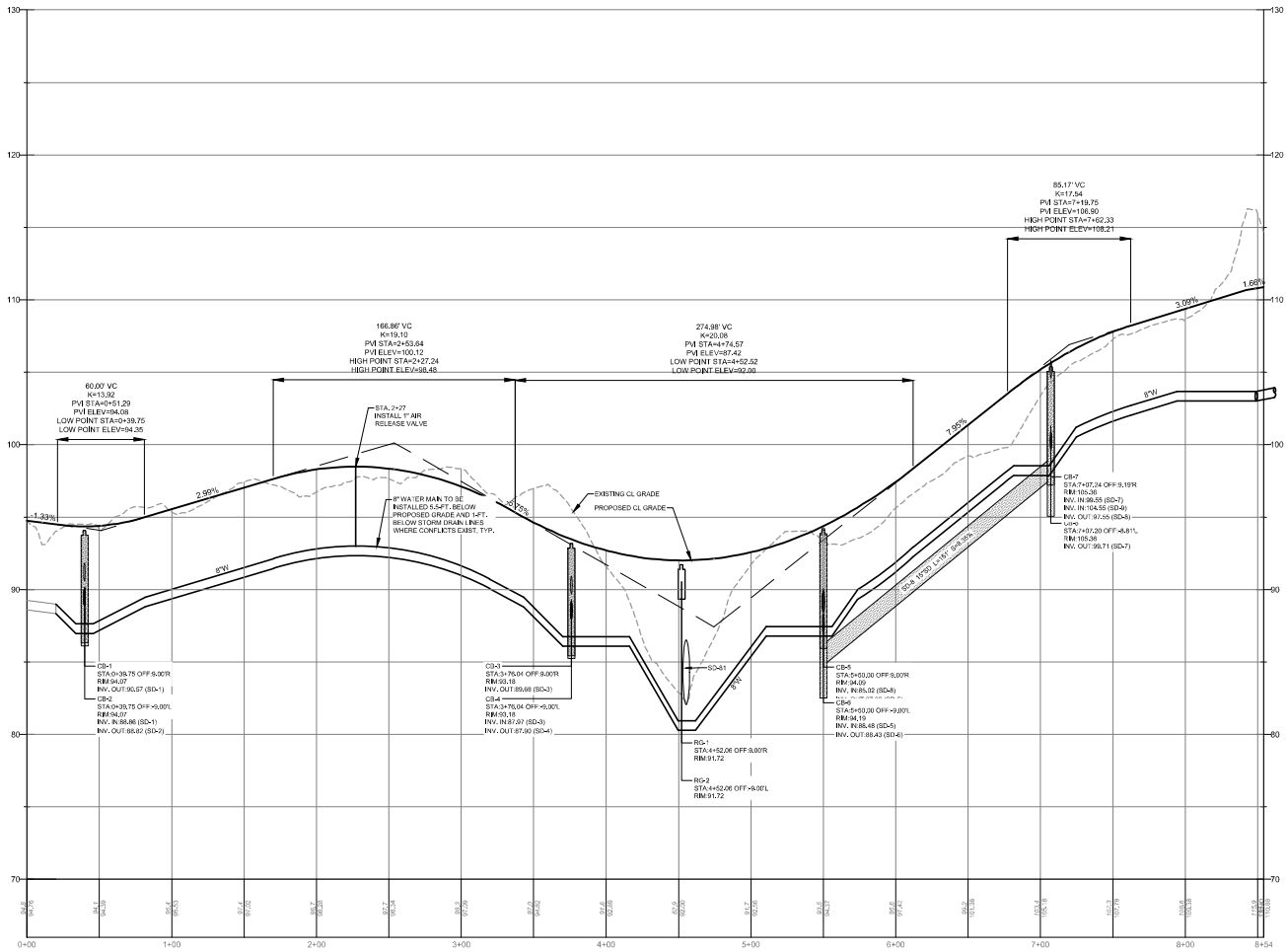
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
UTILITY PLAN - 8

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-4.8

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BAXTER BLVD.
STA. 0+00 TO STA. 8+26
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

STATE OF MAINE
JEFFREY D. AMOS
3/10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	09-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A	04-14-2022	PRELIMINARY SUBMISSION	JDA
			APP'D

41 CAMPUS DRIVE
KITTERY, ME 03904
NEW GLOUCESTER, ME 04260

566 CONGRESS STREET
PORTLAND, ME 04102

OFFICE: (207) 956-5111 FAX: (207) 221-1317
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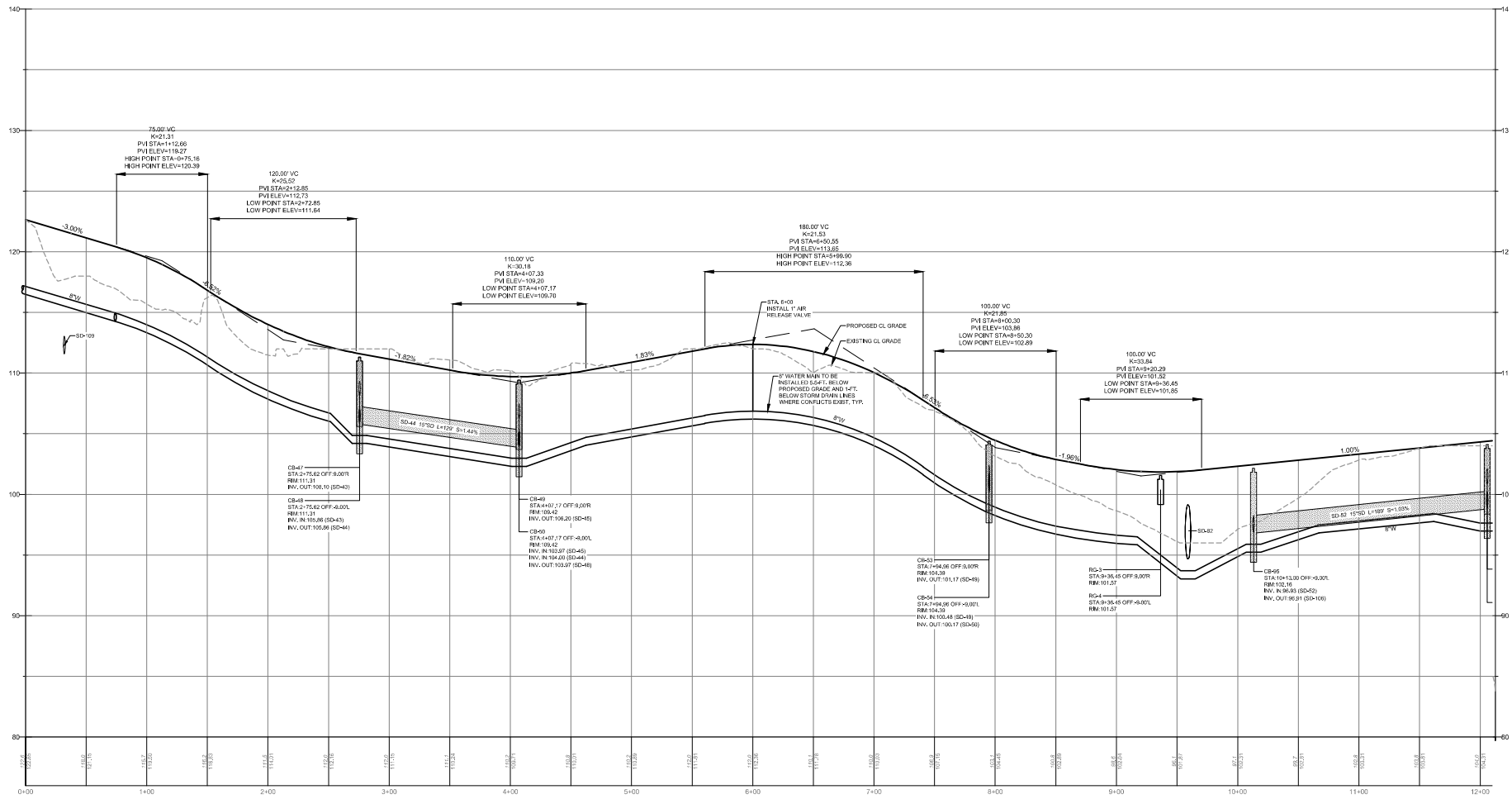
PROJECT:
HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - BAXTER BLVD.

CLIENT:
SOUTH STREET VILLAGE, LLC
700 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.1

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CHAMBER LANE
STA. 0+00 TO STA. 12+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
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D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
A	04-14-2022	PRELIMINARY SUBMISSION	JDA	

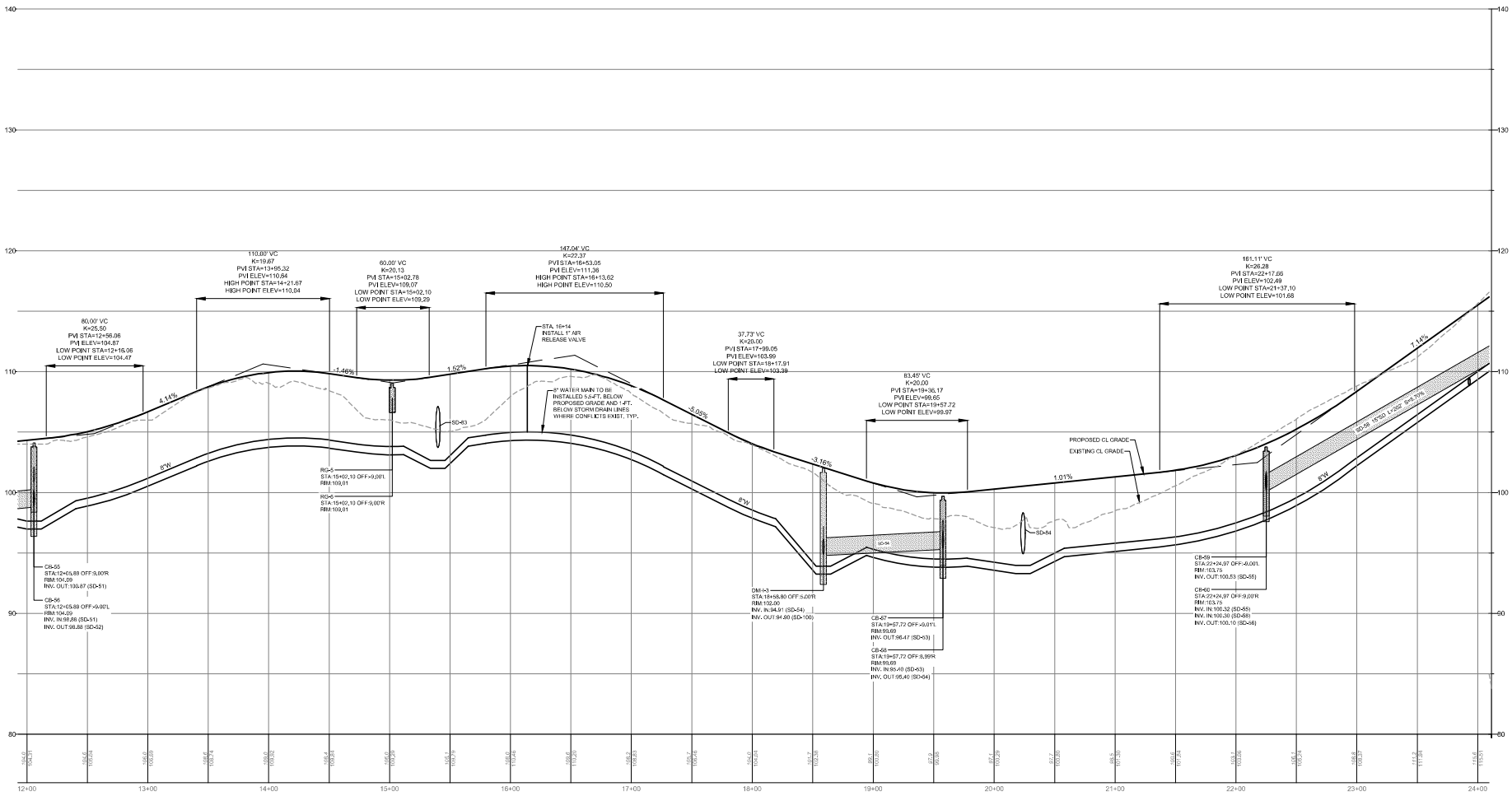
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
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565 CONGRESS STREET
PORTLAND, ME 04102
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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
PROFILE - CHAMBER LANE
CLIENT:
SOUTH STREET VILLAGE, LLC
ONE MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.2

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CHAMBER LANE

STA. 12+00 TO STA. 24+00

SCALE: 1" = 40' HORIZ.
1" = 4' VERT

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
A	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
B	01-17-2024	PRELIMINARY SUBMISSION	JDA
C	11-15-2023	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
F	06-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA

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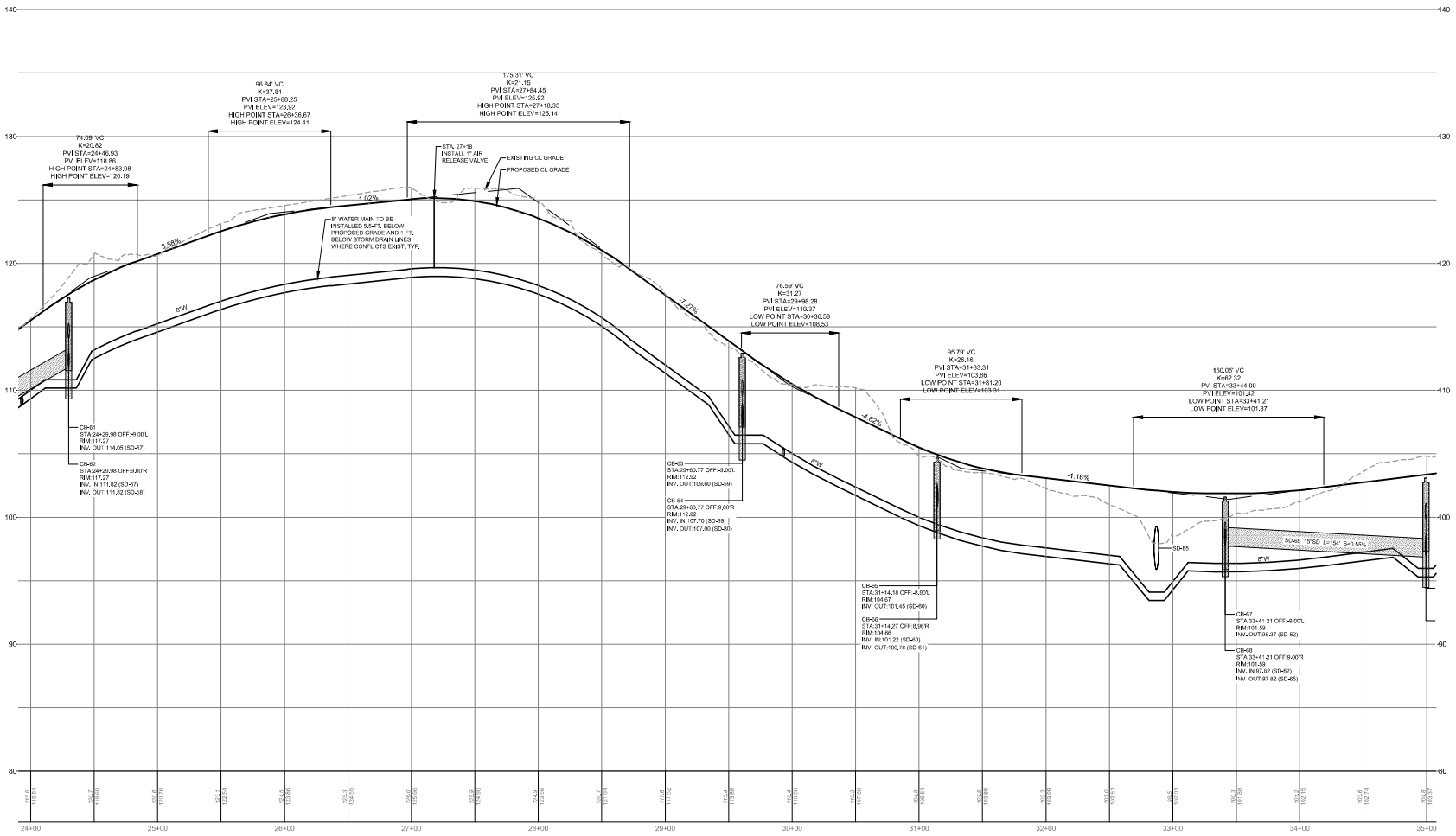
PROJECT:
HIDDEN HILLS HOUSING PARK
HIDDEN STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - CHAMBER LANE

CLIENT:
SOUTH STREET VILLAGE, LLC
SOUTH STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.3

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CHAMBER LANE

STA. 24+00 TO STA. 35+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
G.	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F.	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E.	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D.	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C.	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B.	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A.	04-14-2022	PRELIMINARY SUBMISSION	JDA

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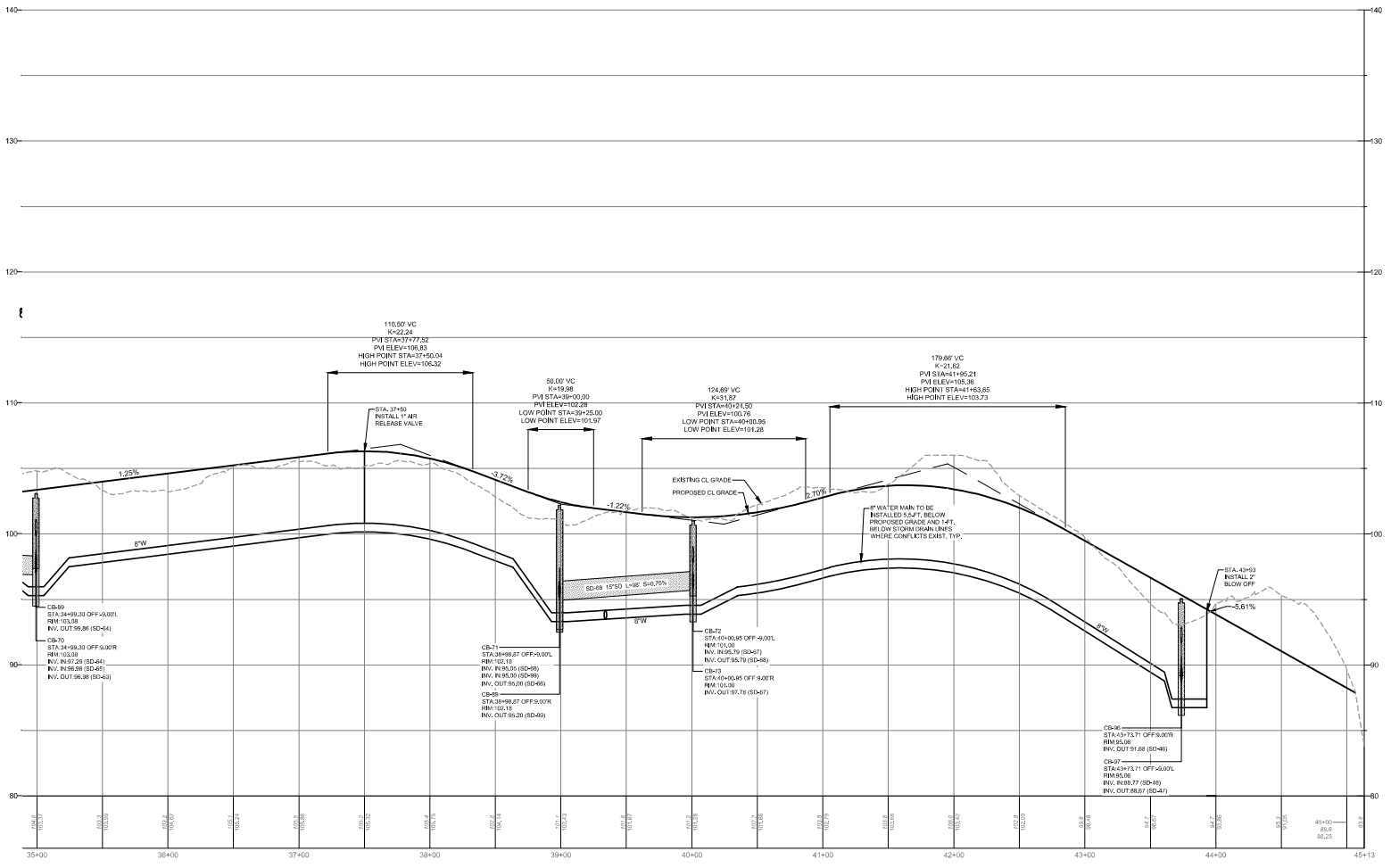
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - CHAMBER LANE

CLIENT:
SOUTH STREET VILLAGE, LLC
ROMAN MYERS
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.4

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CHAMBER LANE
STA. 35+00 TO STA. 45+08
SCALE: 1" = 40' HORIZ
1" = 4' VERT

41 CAMPUS DRIVE
KENNEBUNK, MAINE 04043
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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TERRADYN CONSULTANTS, LLC
Civil | Engineering | Land Planning | Stormwater Design | Environmental Permitting

NO.	DATE	REVISIONS	BY	APP'D
G.	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA	
F.	09-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
E.	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
D.	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
C.	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
B.	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
A.	04-14-2022	PRELIMINARY SUBMISSION	JDA	

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

PERMIT DRAWING
NOT FOR CONSTRUCTION

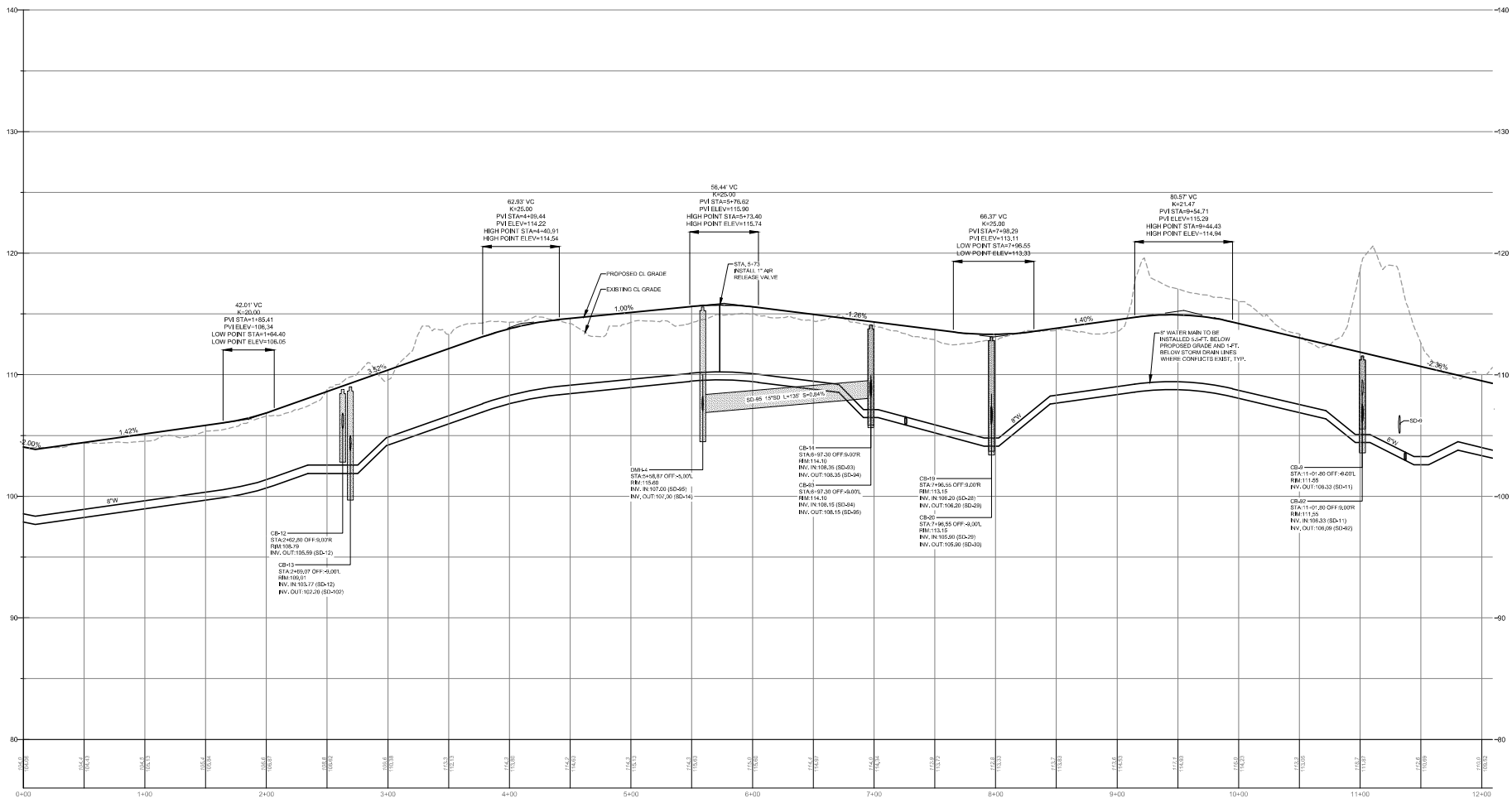
PROJECT:
HIDDEN HILLS HOUSING PARK
MAINE STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - CHAMBER LANE

CLIENT:
SOUTH STREET VILLAGE, LLC
788 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.5

C:\Dell Terradyn Consultants\Projects\Active - Documents\2021 Jobs\21-13 South Street Mill\CAD\Plotting\C-5.5.dwg



REMI DRIVE

STA. 0+00 TO STA. 12+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

NO.	DATE	REVISIONS	BY
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	09-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B	08-17-2022	ADDITIONAL INFORMATION PEER REVIEW	JDA
A	04-14-2022	PRELIMINARY SUBMISSION	JDA

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
565 CONGRESS STREET
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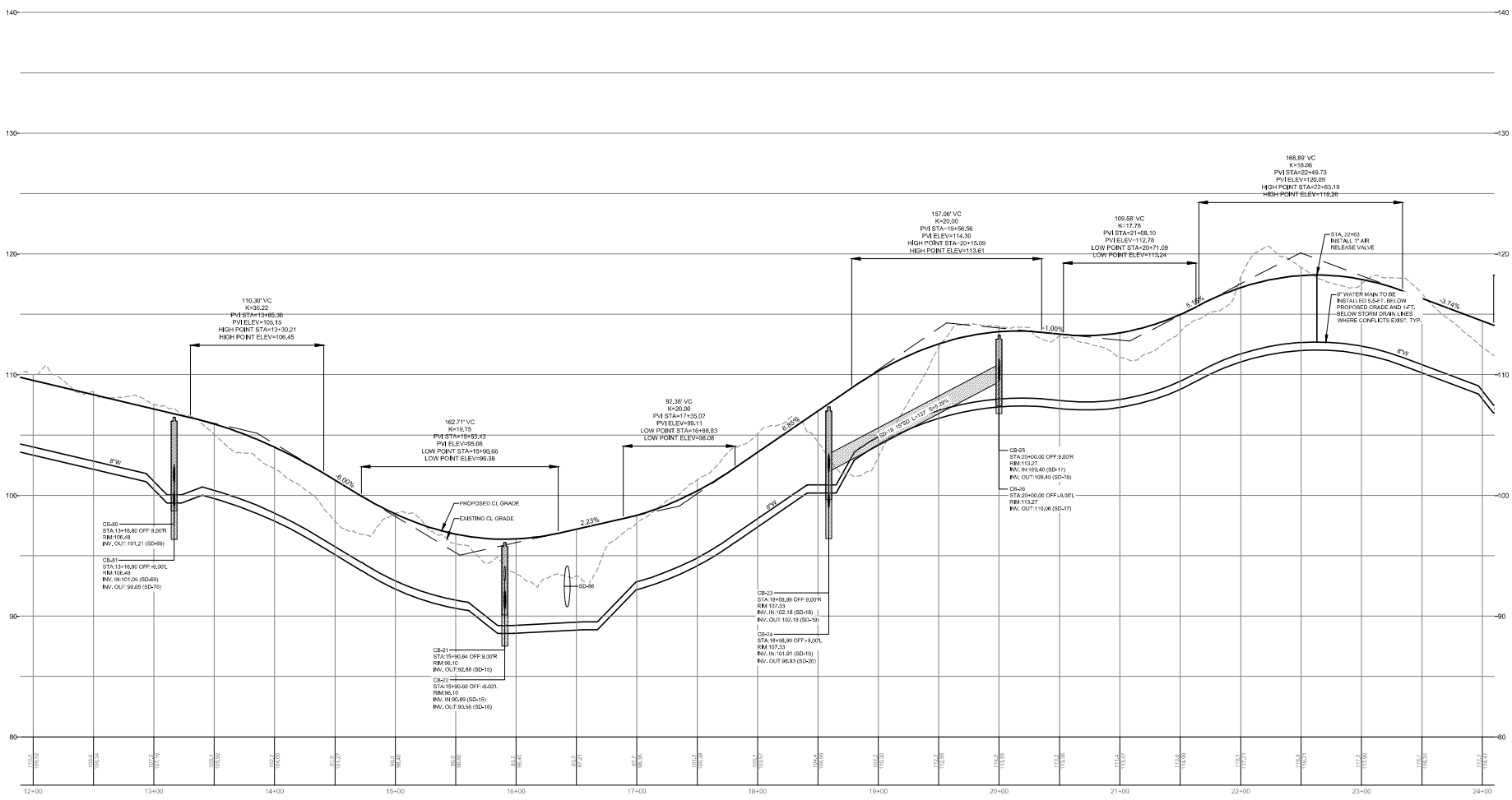
PROJECT:
HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - REMI DRIVE

CLIENT:
SOUTH STREET VILLAGE, LLC
ROMAN ISRAEL
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.6

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REMI DRIVE

STA. 12+00 TO STA. 24+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

NO.	DATE	REVISIONS	BY
G.	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F.	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E.	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D.	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
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A.	04-14-2022	PRELIMINARY SUBMISSION	JDA
		APP'D	BY

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

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566 CONGRESS STREET
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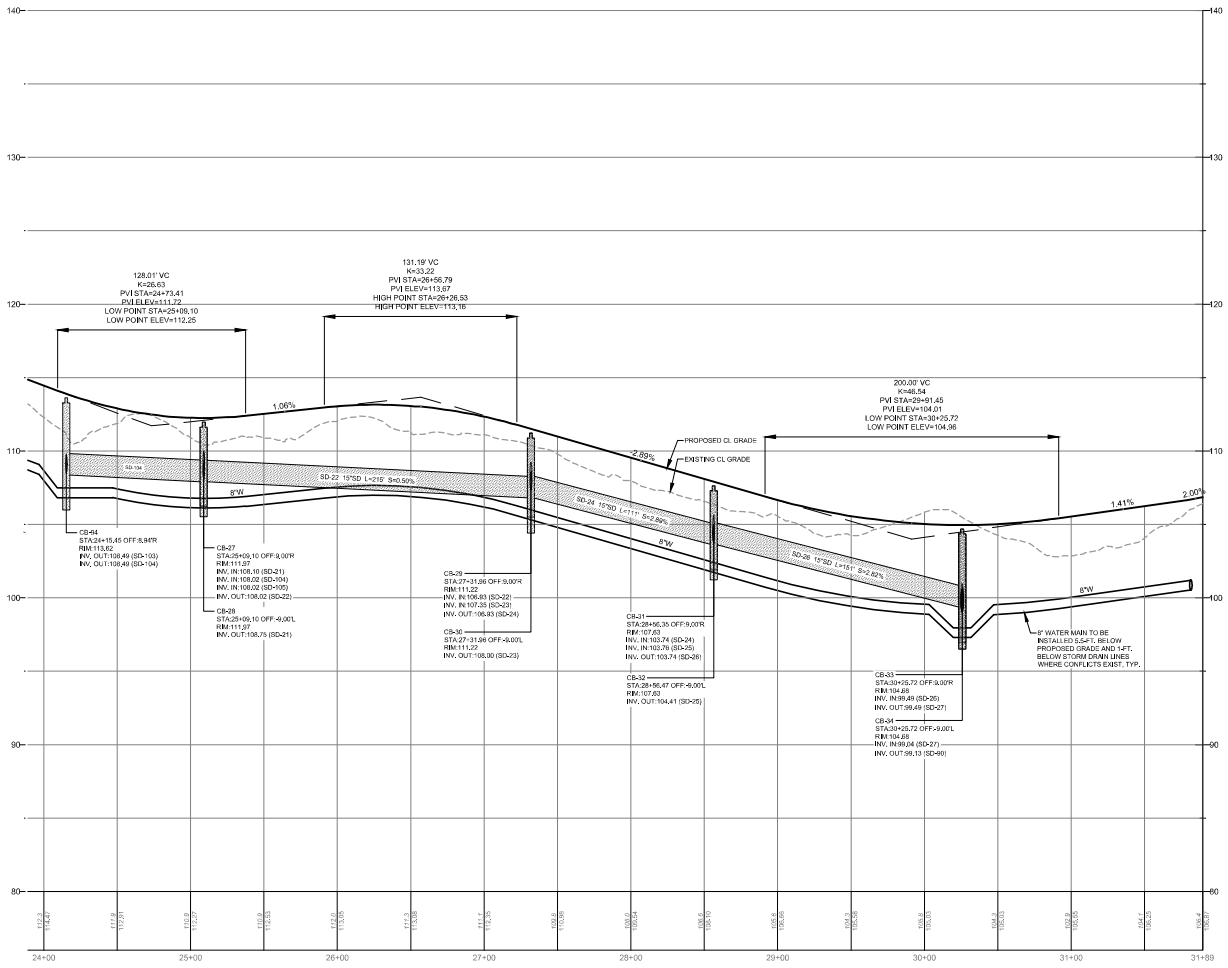
PROJECT:
HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - REMI DRIVE

CLIENT:
SOUTH STREET VILLAGE, LLC
ROMAN WAY
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.7

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REMI DRIVE
STA. 24+00 TO STA. 31+89
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

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41 CAMPUS DRIVE
SUITE 3
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 204
PORTLAND, ME 04102

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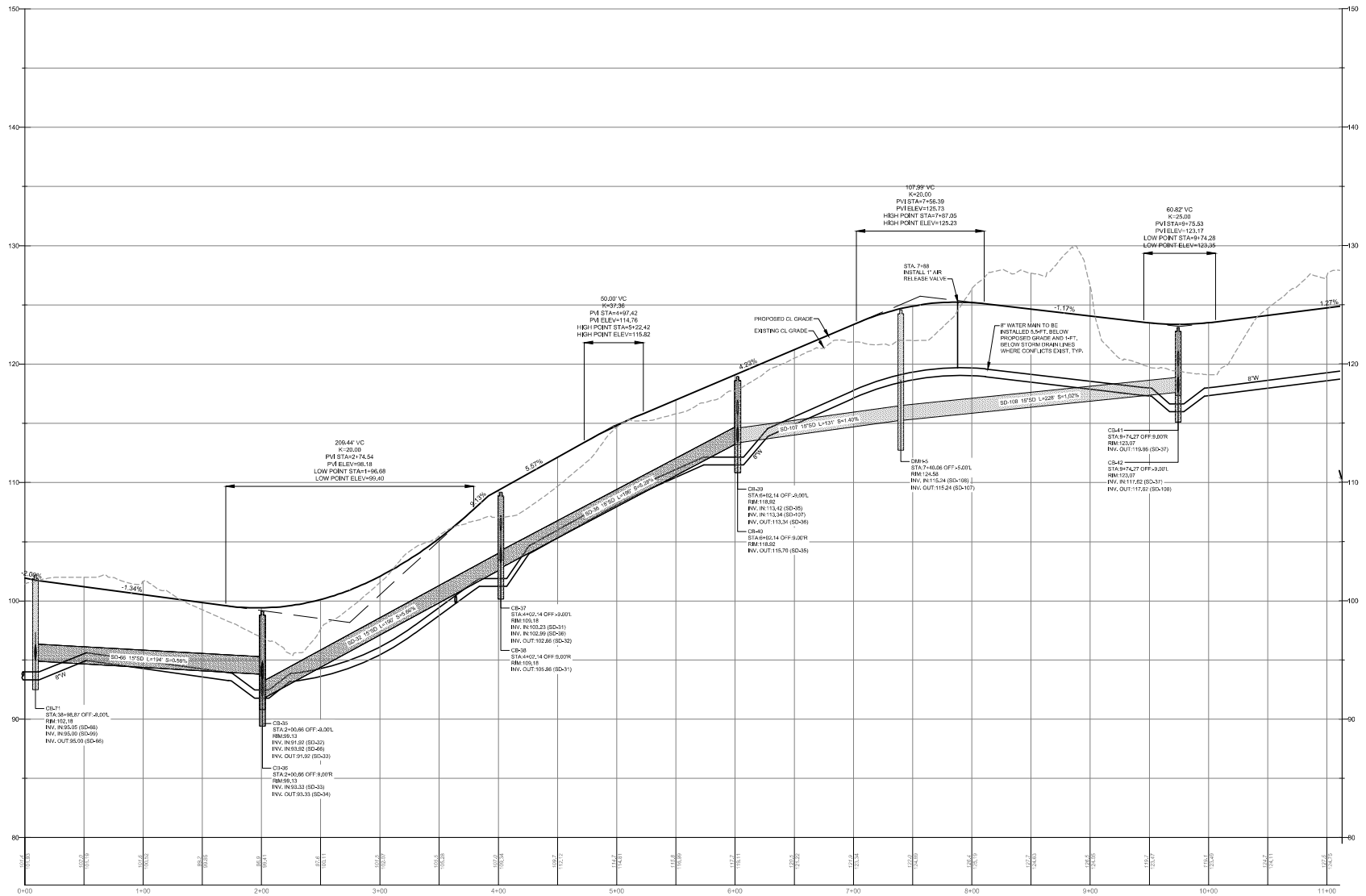
PROJECT:
HIDDEN HILLS HOUSING PARK
MIDDLE STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - REMI DRIVE

CLIENT:
SOUTH STREET VILLAGE, LLC
700 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.8

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COMMON WAY
STA. 0+00 TO STA. 11+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

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SUITE 304
PORTLAND, ME 04102

NO.	DATE	REVISIONS	BY
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
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DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

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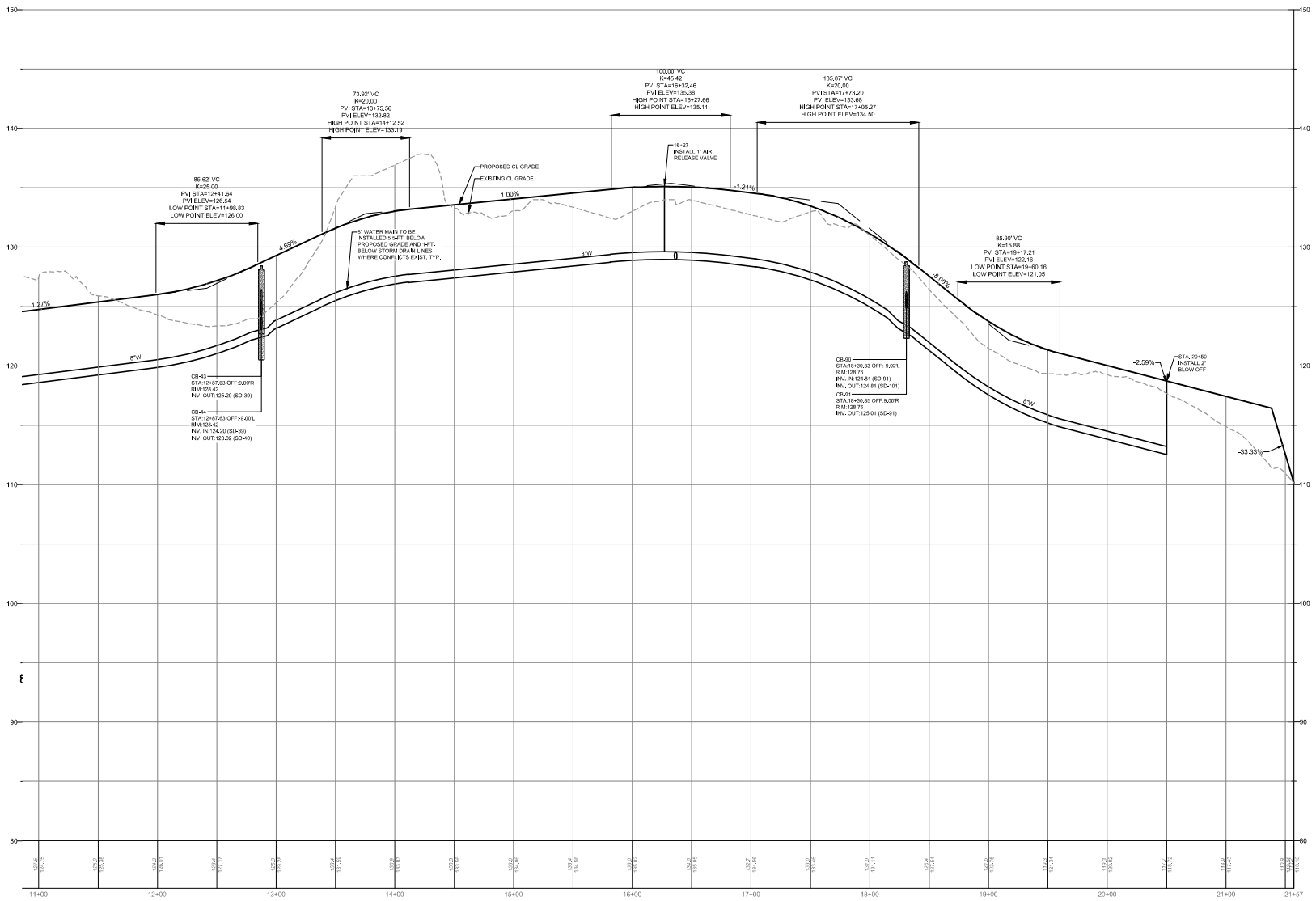
PROJECT:
HIDDEN HILLS HOUSING PARK
MAINE STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - COMMON WAY

CLIENT:
SOUTH STREET VILLAGE, LLC
ROMAN NOSE
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.9

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COMMON WAY

STA.11+00 TO STA. 20+78
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

NO.	DATE	REVISIONS	BY
A	04-26-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
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G.	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

41 CAMPUS DRIVE
SUITE 201A
NEW GLOUCESTER, ME 04260

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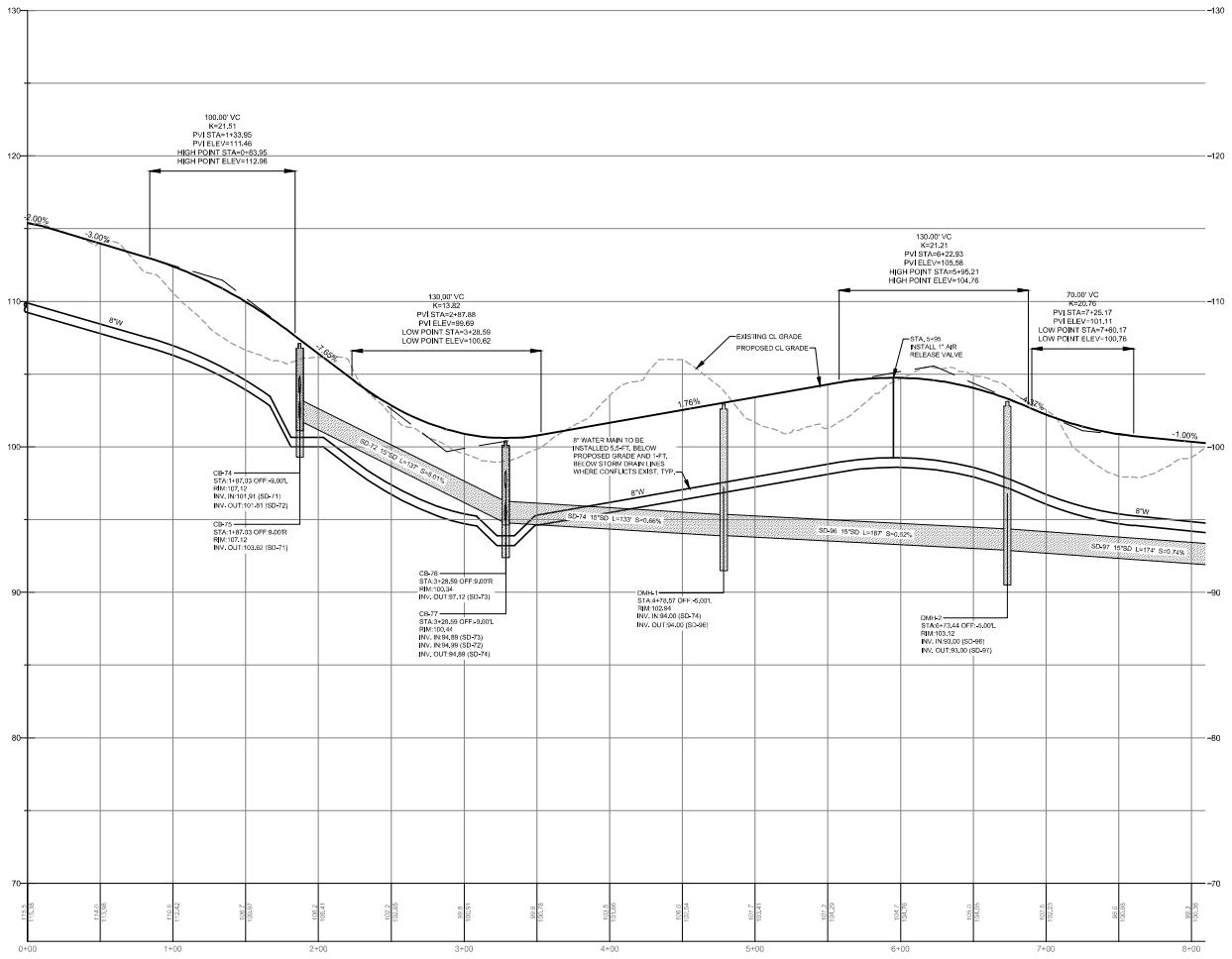
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - COMMON WAY

CLIENT:
SOUTH STREET VILLAGE, LLC
ZOLMAN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.10

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VIEW POINT LOOP

STA. 0+00 TO STA. 8+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

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A.	04-14-2022	PRELIMINARY SUBMISSION	JDA

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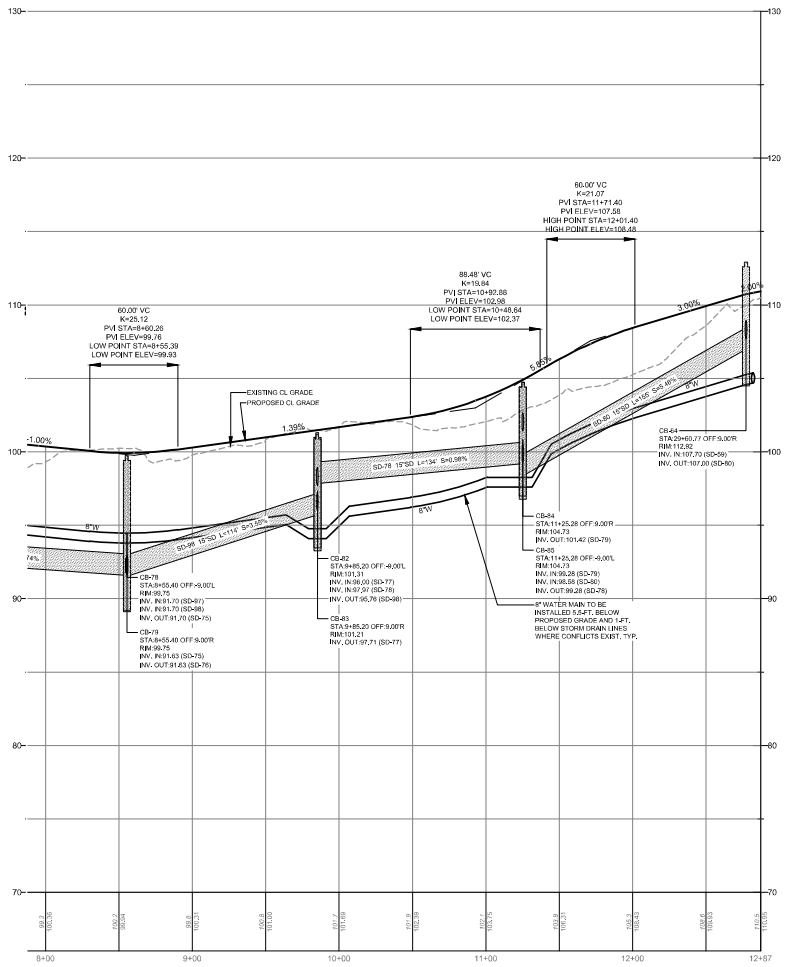
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - VIEW POINT LOOP

CLIENT:
SOUTH STREET VILLAGE, LLC
100 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.11

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VIEW POINT LOOP

STA. 8+00 TO STA. 12+87
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
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A.	04-14-2022	PRELIMINARY SUBMISSION	JDA

41 CAMPUS DRIVE
SUITE 204
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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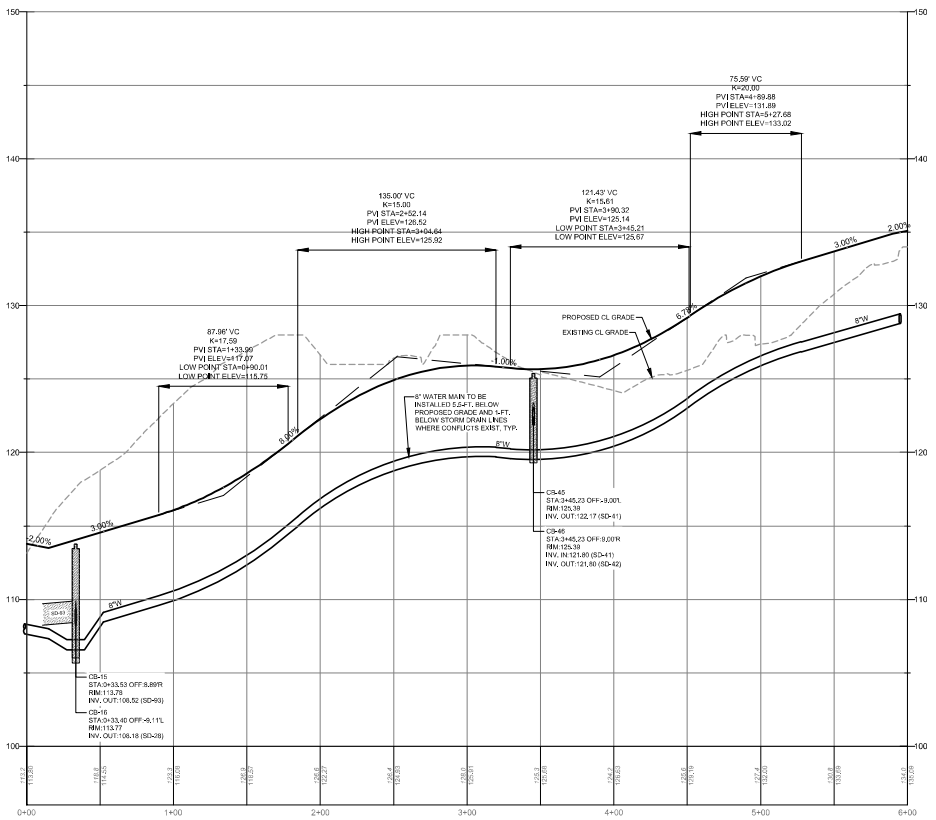
PROJECT:
HIDDEN HILLS HOUSING PARK
MAINE STREET, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - VIEW POINT LOOP

CLIENT:
SOUTH STREET VILLAGE, LLC
765 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.12

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FURR DRIVE
STA. 0+00 TO STA. 6+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
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41 CAMPUS DRIVE
KITTERY, ME 03904
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
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PROJECT:
HIDDEN HILLS HOUSING PARK
MEETINGHOUSE ROAD, BIDDEFORD, MAINE

SHEET TITLE:
PROFILE - FURR DRIVE

CLIENT:
SOUTH STREET VILLAGE, LLC
700 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-5.13

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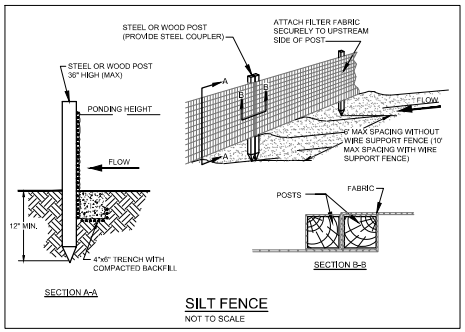
STORMWATER MANAGEMENT SYSTEM, INSPECTION, MAINTENANCE & HOUSEKEEPING - CONSTRUCTION PHASE

1. **INSPECTION:** FOR THE DURATION OF CONSTRUCTION ACTIVITY, IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE INSPECTION AND MAINTENANCE PROCEDURES OUTLINED IN THIS SECTION. THESE RESPONSIBILITIES INCLUDE INSPECTING DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. THESE AREAS SHALL BE INSPECTED AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN ANY APPLICABLE PERMITS, SHALL CONDUCT THE INSPECTIONS.
2. **MAINTENANCE:** ALL MEASURES SHALL BE MAINTAINED IN AN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE MAINTAINED OR MODIFIED, ADDITIONAL BMPS ARE NECESSARY, OR OTHER CORRECTIVE ACTION IS NEEDED, IMPLEMENTATION MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL).
3. **DOCUMENTATION:** A LOG SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN MUST BE MAINTAINED ON-SITE. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE SITE. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATIONS WHERE ADDITIONAL BMPS ARE NEEDED, FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.
THE LOG MUST BE MADE ACCESSIBLE TO THE APPROPRIATE REGULATORY AGENCY UPON REQUEST, THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
4. **SPECIFIC INSPECTION AND MAINTENANCE TASKS:** THE FOLLOWING IS A LIST OF EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES AND THE SPECIFIC INSPECTION AND MAINTENANCE TASKS TO BE PERFORMED DURING CONSTRUCTION.
A. SEDIMENT BARRIERS:
   - HAY BALE BARRIERS, SILT FENCES, AND FILTER BERMS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   - IF THE FABRIC ON A SILT FENCE OR FILTER BARRIER SHOULD DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, IT SHALL BE REPLACED.
   - SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT, THEY MUST BE REMOVED BEFORE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
   - FILTER BERMS SHALL BE RESHAPED AS NEEDED.
   - ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, AND SEEDED.
B. RIPRAP WATERFALLS:
   - ONCE A RIPRAP INSTALLATION HAS BEEN COMPLETED, IT SHOULD REQUIRE VERY LITTLE MAINTENANCE. IT SHOULD, HOWEVER, BE INSPECTED PERIODICALLY TO DETERMINE IF HIGH FLOWS HAVE CAUSED SCOUR BENEATH THE RIPRAP OR DISLODGED ANY OF THE STONE.
   - ANNUALLY INSPECT RIPRAP AND REMOVE WOODY VEGETATION WHEN DISCOVERED.
C. EROSION CONTROL BLANKETS:
   - INSPECT THESE REINFORCED AREAS SEMI-ANNUALLY AND AFTER SIGNIFICANT RAINFALL EVENTS FOR SLUMPING, SLIDING, SEEPAGE, AND SCOUR. PAY CLOSE ATTENTION TO UNREINFORCED AREAS ADJACENT TO THE EROSION CONTROL BLANKETS, WHICH MAY EXPERIENCE ACCELERATED EROSION.
   - REVIEW ALL APPROPRIATE MAINTENANCE PROCEDURES RECOMMENDED BY THE SPECIFIC BLANKET MANUFACTURER. THESE TASKS SHALL BE INCLUDED IN ADDITION TO THIS PLAN.
D. TEMPORARY STORM DRAIN INLET PROTECTION:
   - THE INLET PROTECTION STRUCTURE SHALL BE INSPECTED BEFORE EACH RAIN EVENT AND REPAIRED AS NECESSARY.
   - SEDIMENT SHALL BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO HALF OF THE DESIGN DEPTH OF THE TRAP.
   - STRUCTURES SHALL BE REMOVED UPON PERMANENT STABILIZATION OF THE TRIBUTARY AREA.
   - UPON REMOVAL OF THE STRUCTURE, ALL ACCUMULATED SEDIMENTS DOWNSTREAM OF THE STRUCTURE SHALL BE CLEANED FROM THE STORM DRAIN SYSTEM.
   - THE PERMANENT STORM DRAINAGE SYSTEM SHALL BE FLUSHED AND CLEANED ONCE THE SITE IS STABILIZED AND PRIOR TO DEMOBILIZATION FROM THE SITE.
E. STABILIZED CONSTRUCTION ENTRANCES/EXITS:
   - THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY.
   - WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED, ALONG WITH THE COLLECTED SOIL MATERIAL, THE ENTRANCE SHOULD THEN BE RECONSTRUCTED.
   - AREAS THAT HAVE RECEIVED MUD-TRACKING OR SEDIMENT DEPOSITS SHALL BE SWEPT OR WASHED. WASHING SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE (NOT INTO STORM DRAINS, DITCHES, OR WATERWAYS).
F. TEMPORARY SEED AND MULCH:
   - MULCHED AREAS SHOULD BE INSPECTED AFTER RAIN EVENTS TO CHECK FOR RILL EROSION.
   - IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE APPLIED IN BARE AREAS.
   - IN APPLICATIONS WHERE SEEDING AND MULCH HAVE BEEN APPLIED IN CONJUNCTION WITH EROSION CONTROL BLANKETS, THE BLANKETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR UNDERCUTTING.
   - MULCH SHALL CONTINUE TO BE REAPPLIED UNTIL 95% OF THE SOIL SURFACE HAS ESTABLISHED TEMPORARY VEGETATIVE COVER.
G. STABILIZED DRAINAGE SWALES:
   - CONSTRUCT AND STABILIZE THE WATERWAY IN ADVANCE OF ANY OTHER CHANNELS OR STRUCTURE THAT WILL DISCHARGE INTO IT. DIVERT ALL FLOW FROM THE WATERWAY DURING THE ESTABLISHMET OF VEGETATION.
   - SEDIMENT ACCUMULATION IN THE SWALE SHALL BE REMOVED ONCE THE CROSS SECTION OF THE SWALE IS REDUCED BY 25%.
   - THE SWALES SHALL BE INSPECTED AFTER RAINFALL EVENTS. ANY EVIDENCE OF SLOUGHING OF THE SIDE SLOPES OR CHANNEL EROSION SHALL BE REPAIRED AND CORRECTIVE ACTION SHOULD BE TAKEN TO PREVENT RECCURRENCE OF THE PROBLEM.
   - IN ADDITION TO THE STABILIZED LINING OF THE CHANNEL (I.E. EROSION CONTROL BLANKETS), STONE CHECK DAMS MAY BE NEEDED TO FURTHER REDUCE CHANNEL VELOCITY.
H. DEWATERING
   - THE SITE CONTRACTOR SHALL ESTABLISH AN ON-SITE CONTAINMENT AREA WHICH SHALL INCLUDE SEDIMENT BARRIER TO MITIGATE THE TRANSPORT OF THE SEDIMENT TO THE ENVIRONMENT FROM DEWATERING ACTIVITY.
   - THE CONTAINMENT AREA SHALL BE LOCATED A MINIMUM OF 25 FEET FROM ANY STORM DRAIN STRUCTURE OR CULVERT AND A MINIMUM OF 25 FEET FROM ANY SLOPE GREATER THAN 4:1.
   - THE CONTAINMENT AREA SHALL INCLUDE A DIRT BAG OR SIMILAR SEDIMENT TRAP FOR TREATMENT OF THE COLLECTED WATER.
   - THE CONTAINMENT AREA SHALL BE INSPECTED AFTER EACH USE TO ENSURE THAT NO DOWNGRADIENT EROSION OR SEDIMENTATION OFFSITE IS OCCURRING.
5. **HOUSEKEEPING:** THE FOLLOWING GENERAL PERFORMANCE STANDARDS APPLY TO THE PROPOSED PROJECT.
A. SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON-SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
B. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN 'INFILTRATION AREA' IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOIL TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
C. FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO INSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
D. DEBRIS AND OTHER MATERIALS: LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
E. TRENCH OR FOUNDATION DEWATERING: TRENCH DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFERDAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES, THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED.

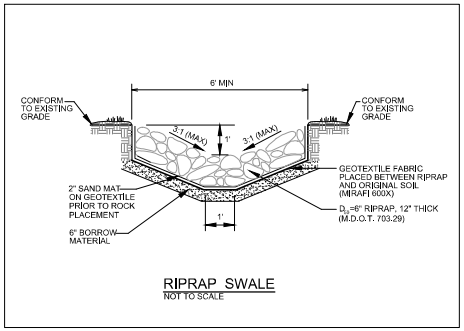
EROSION AND SEDIMENT CONTROL PLAN

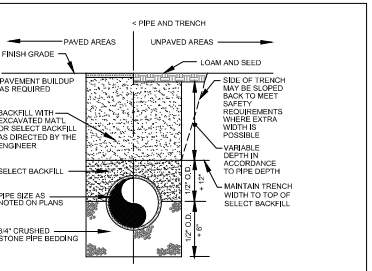
PRE-CONSTRUCTION PHASE
A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 MRSA § 480-B, EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS. MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED. ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES MUST BE TAKEN. THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE.
BMP CONSTRUCTION PHASE
A. SEDIMENT BARRIERS. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE PROPOSED DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
B. CONSTRUCTION ENTRANCE: PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.
C. RIPRAP: SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH, CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OF RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE. WHERE RIPRAP IS USED FOR OUTLET PROTECTION, THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL SO THAT IT IS IN PLACE WHEN THE PIPE OR CHANNEL BEGINS TO OPERATE. MAINTAIN TEMPORARY RIPRAP, SUCH AS TEMPORARY CHECK DAMS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
D. TEMPORARY STABILIZATION. STABILIZE WITH TEMPORARY SEEDING, MULCH, OR OTHER NON-ERODABLE COVER ANY EXPOSED SOILS THAT WILL REMAIN UNWORKED FOR MORE THAN 14 DAYS EXCEPT. STABILIZE AREAS WITHIN 100 FEET OF A WETLAND OR WATERBODY WITHIN 7 DAYS OR PRIOR TO A PREDICTED STORM EVENT, WHICHEVER COMES FIRST. IF HAY OR STRAW MULCH IS USED, THE APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SF OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. HAY MULCH MUST BE KEPT MOIST OR ANCHORED TO PREVENT WIND BLOWING. AN EROSION CONTROL BLANKET OR MAT SHALL BE USED AT THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (10% OR GREATER) AND ON ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS. GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING. ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE OF FINAL GRADING AND SEEDING BEFORE STARTING THE SECOND PHASE, AND SO ON.
E. VEGETATED WATERWAYS. UPON FINAL GRADING, THE DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED TO PERMANENT VEGETATION AND MULCHED AND WILL NOT BE USED AS OUTLETS UNTIL A DENSE, VIGOROUS VEGETATIVE COVER HAS BEEN OBTAINED. ONCE SOIL IS EXPOSED FOR WATERWAY CONSTRUCTION, IT SHOULD BE IMMEDIATELY SHAPED, GRADED AND STABILIZED. VEGETATED WATERWAYS NEED TO BE STABILIZED EARLY DURING THE GROWING SEASON (PRIOR TO SEPTEMBER 15, IF FINAL SEEDING OF WATERWAYS IS DELAYED PAST SEPTEMBER 15, EMERGENCY PROVISIONS SUCH AS SOD OR RIPRAP MAY BE REQUIRED TO STABILIZE THE CHANNEL. WATERWAYS SHOULD BE FULLY STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
PERMANENT STABILIZATION ON BARE
A. SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
B. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
C. PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
D. RIPRAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES ESTED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY, IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
E. AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
F. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
G. DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNELS IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH AND/OR NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE CHANNEL.
GENERAL CONSTRUCTION PHASE
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT.
A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY DESIGNATION OF THE OWNER AND INSPECTING ENGINEER.
B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND OTHER AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.
C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.
D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.
E. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
F. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS.
G. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES BEFORE PLACEMENT OF TOPSOIL.
H. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
I. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.
J. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.
K. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS.
L. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.
M. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY.
N. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
O. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.
PERMANENT VEGETATION
PERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE ENVIRONMENT.
SEEDBED PREPARATION
A. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE PERFORMED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE SPEED IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P2O5-K2O) OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 100% CALCIUM CARBONATE) AT 1 TON PER ACRE.
C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
E. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND PREPARED AGAIN.
F. PERMANENT SEEDING SHOULD BE MADE 45 DAYS PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING WITH MULCH AFTER THE FIRST KILLING FROST AND BEFORE SNOWFALL. WHEN CROWN VETCH IS SEEDED IN LATER SUMMER, AT LEAST 35% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES ACCORDING TO THE TEMPORARY MULCHING BMP AND OVERWINTER STABILIZATION AND CONSTRUCTION TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
G. FOLLOWING SEED BED PREPARTATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS/1,000 S.F., WITH A MIXTURE OF 35% CREEPING RED FESCUE, 6% RED TOP, 24% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.
I. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING.
J. AREAS WHICH CANNOT BE SEEDED WITHIN THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION AND THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE GROWING SEASON.

WINTER CONSTRUCTION PHASE
IF AN AREA IS NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES BY NOVEMBER 15, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES:
A. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.
B. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.
C. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS., PER 1,000 SF), THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.
D. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR ALL SLOPES GREATER THAN 8 % OR OTHER AREAS EXPOSED TO DIRECT WIND.
E. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGEWAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3 %.
F. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.
G. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SO THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
H. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.
I. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.
J. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THAT SAME DAY.
K. IF SNOWFALL IS GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.
L. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.
M. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.
MAINTENANCE AND INSPECTION PHASE
A. MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED, HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF SILT FENCE AND EROSION MIX BERM SHALL BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE B. A LOG (REPORT) MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED TO BE MAINTAINED; LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION; AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.
DEWATERING
A DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE THE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSION AND OFFSITE SEDIMENTATION OR WITHIN A RESOURCE.



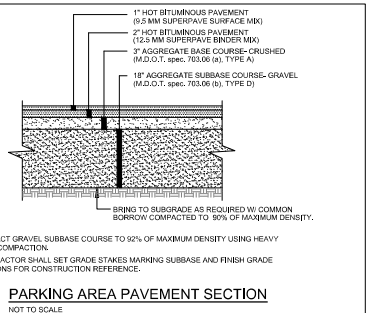
SILT FENCE
NOT TO SCALE


6" MIN
CONFORM
TO EXISTING
GRADE
3:1 (MAX)
1'
CONFORM
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TYPICAL TRENCH SECTION

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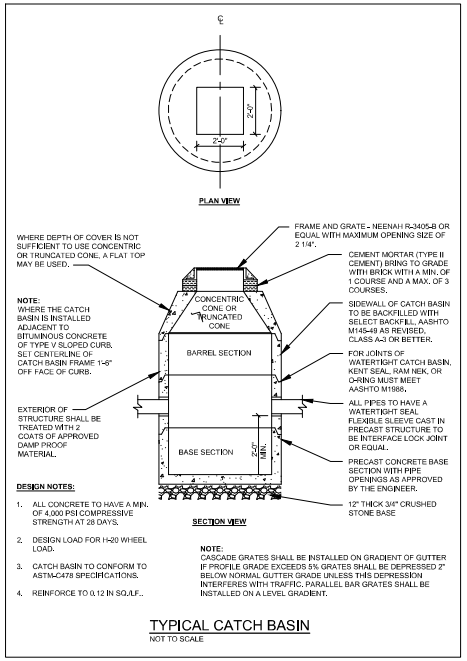


NOTES:

1. COMPACT GRAVEL SUBBASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

PARKING AREA PAVEMENT SECTION

NOT TO SCALE



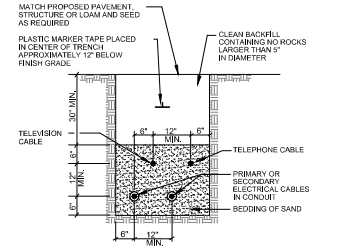
DESIGN NOTES:

1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..

NOTE:
CASCADE GRATES SHALL BE INSTALLED ON GRADIENT OF GUTTER IF PROFILE GRADE EXCEEDS 5% GRATES SHALL BE DEPRESSED 2" BELOW NORMAL GUTTER GRADE UNLESS THIS DEPRESSION INTERFERES WITH TRAFFIC. PARALLEL BAR GRATES SHALL BE INSTALLED ON A LEVEL GRADIENT.

TYPICAL CATCH BASIN

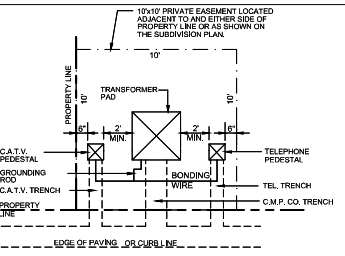
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CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS.

TYPICAL UNDERGROUND CABLE INSTALLATION

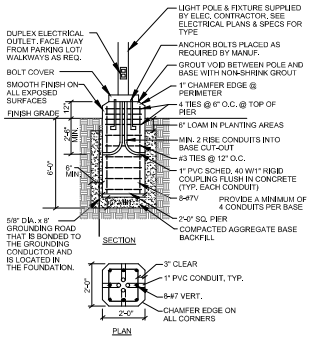
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NOTE:
TRANSFORMER PAD AND COVER TO BE FIBERGLASS MEETING CENTRAL MAINE POWER SPECIFICATIONS.

TRANSFORMER DETAIL

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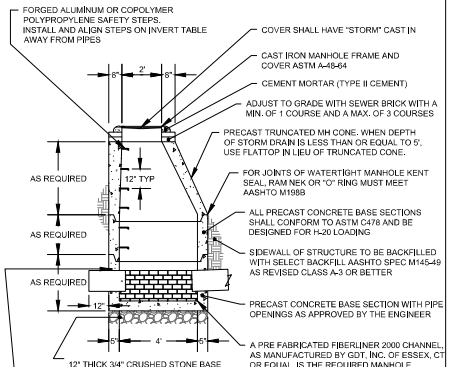


NOTES:

1. CONCRETE f'c=4000 psi.
2. REINF. STEEL GRADE 60 NEW BARS.
3. CONCRETE 3/4" AGG., 6 +/- 1% ENTRAINED AIR.
4. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
5. INSTALL BASE 3'-0" ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE IN PARKING LOT PAVEMENT.
6. BID ALT.- CONTRACTOR MAY SUBSTITUTE PRECAST CONCRETE LIGHT POLE BASE EQUAL TO ABOVE SPEC.

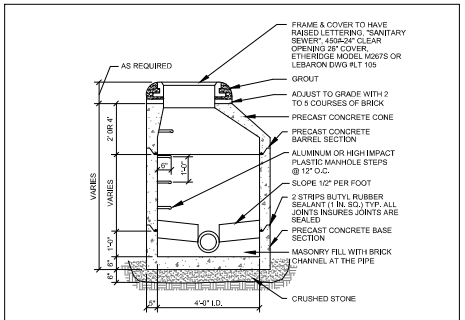
LIGHT POLE BASE

NOT TO SCALE



4' DIAMETER PRECAST STORM DRAIN MANHOLE

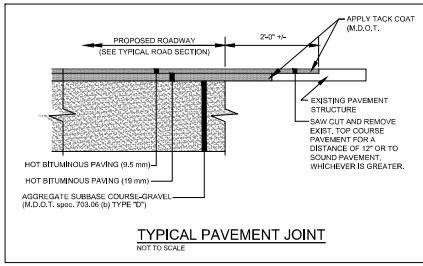
NOT TO SCALE



NOTE: PIPE CONNECTIONS SHALL BE WATERTIGHT FLEXIBLE BOOT CONNECTORS PROVIDES LEAKPROOF CONNECTION

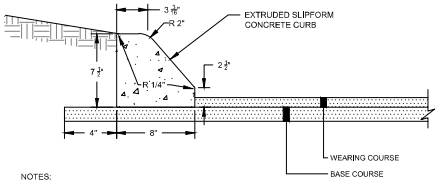
PRECAST SEWER MANHOLE

NOT TO SCALE



TYPICAL PAVEMENT JOINT

NOT TO SCALE

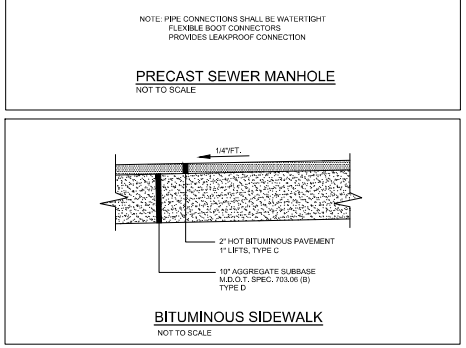


NOTES:

1. APPLY EPOXY BETWEEN BINDER PAVEMENT AND CURB
2. 1" TO 2" SLUMP
3. 5% TO 7% AIR ENTRAINMENT
4. 4,000 PSI CONCRETE WITH FIBER REINFORCEMENT

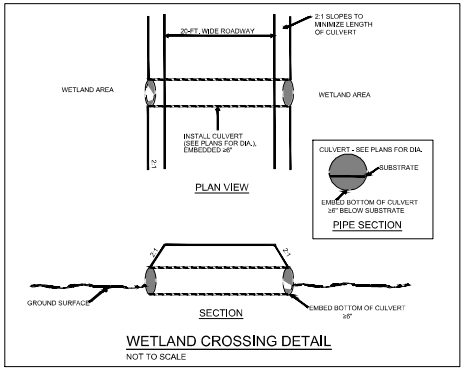
SLOPED SLIPFORM CONCRETE CURB DETAIL

NOT TO SCALE



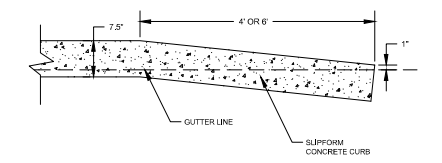
BITUMINOUS SIDEWALK

NOT TO SCALE



WETLAND CROSSING DETAIL

NOT TO SCALE



SLIPFORM CURB TIPDOWN DETAIL

NOT TO SCALE

SEBAGO TECHNICS, INC.
41 CAMPUS DRIVE
KENNEBUNK, ME 04043
OFFICE: (207) 985-6911 FAX: (207) 985-1815
www.sebagotechnics.com

565 CONGRESS STREET
PORTLAND, ME 04102
OFFICE: (207) 956-5111 FAX: (207) 221-1317
www.terradyncons.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

NO.	DATE	REVISIONS	BY	APP'D
A	04-19-2022	PRELIMINARY SUBMISSION	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	01-25-2024	FINAL PLANS SUBMISSION TO CITY	JDA	

DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

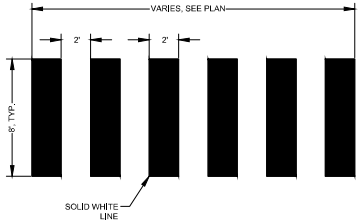
PREPARED FOR:
HIDDEN HILLS HOUSING PARK
HIDDEN HILLS STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE DETAILS - 2

CLIENT:
SOUTH STREET VILLAGE, LLC
100 MAIN STREET
SOUTH PORTLAND, MAINE 04106

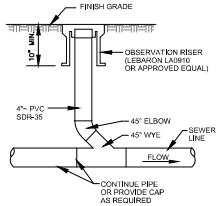
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-6.2

C:\Users\JAMOS\Documents\Projects\Local Files\acad\Hidden Hills_1901\R21-13 Dwg



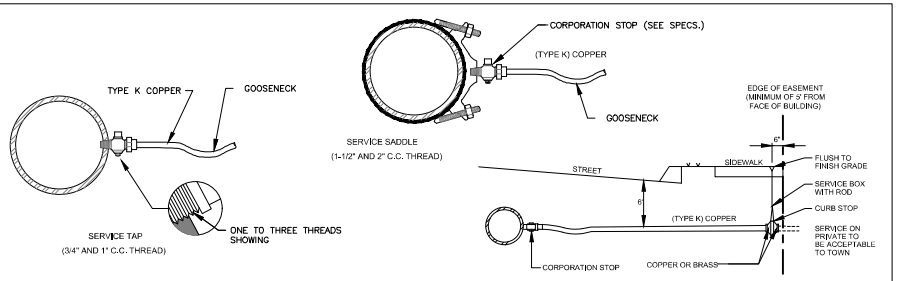
CROSSWALK STRIPING DETAIL

NOT TO SCALE



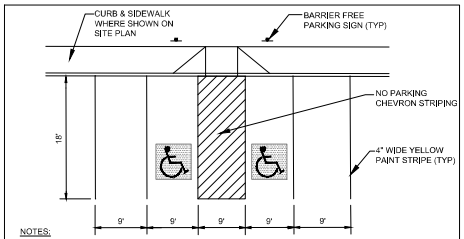
SEWER CLEANOUT

NOT TO SCALE



TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE

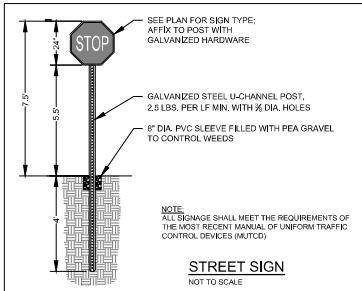


NOTES:

1. SEE SITE PLAN FOR NUMBER AND LOCATION OF BARRIER FREE PARKING SPACES.
2. BARRIER FREE GRAPHIC SYMBOL (PAINTED WHITE) TO BE CENTERED IN PARKING STALL. SYMBOL TO BE PAINTED ON BLUE NON-SKID BACKGROUND.

TYPICAL PARKING STALL DIMENSIONS

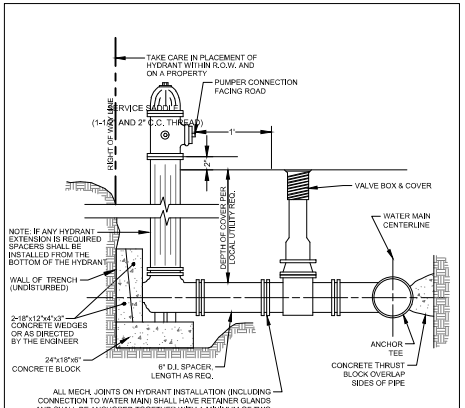
NOT TO SCALE



NOTE:
ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF THE MOST RECENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

STREET SIGN

NOT TO SCALE

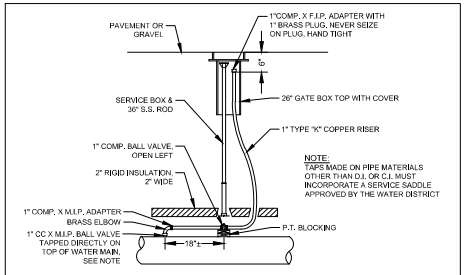


NOTES:

1. ALL MATERIALS SHALL CONFORM TO THE KENNEBUNK, KENNEBUNKPORT & WELLS WATER DISTRICT REQUIREMENTS
2. HYDRANT SHALL BE OPEN RIGHT
3. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE

TYP. HYDRANT INSTALLATION

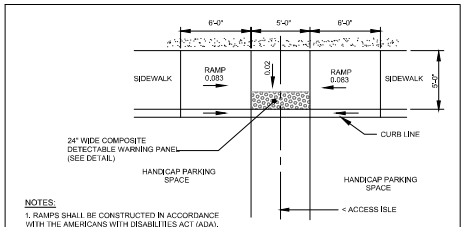
NOT TO SCALE



NOTE:
TAPS MADE ON PIPE MATERIALS OTHER THAN D.I. OR C.I. MUST INCORPORATE A SERVICE SADDLE APPROVED BY THE WATER DISTRICT

AIR RELEASE DETAIL

NOT TO SCALE

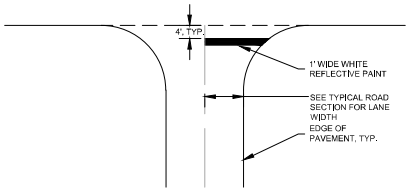


NOTES:

1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL RAMPS SHALL HAVE DETECTABLE WARNINGS THE FULL DEPTH AND WIDTH OF THE RAMP PER SECTION 4.29 OF THE ADA.
3. A TACTILE WARNING STRIP IS REQUIRED WHERE RAMP ABUTS AN AREA USED BY VEHICLES.

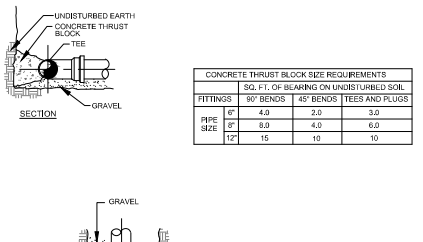
HANDICAP RAMP

NOT TO SCALE

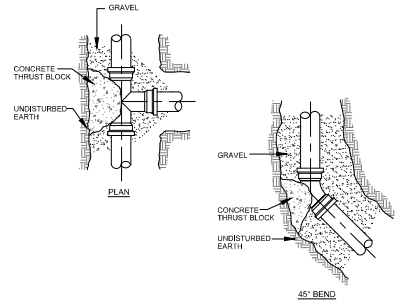


STOP BAR DETAIL

NOT TO SCALE

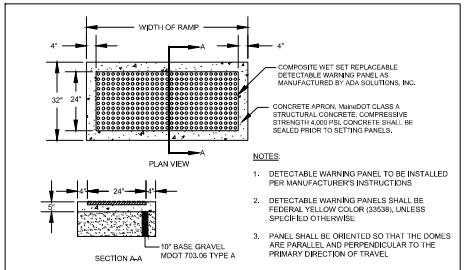


CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
FITTINGS		90° BENDS	45° BENDS	TEES AND PLUGS
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	10	10



TEE & BEND DETAIL

NOT TO SCALE

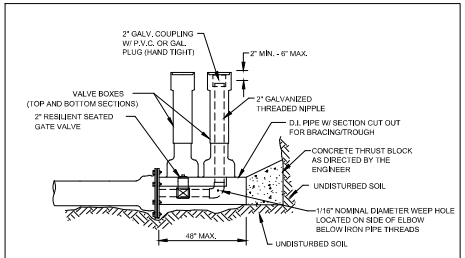


NOTES:

1. DETECTABLE WARNING PANEL TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS
2. DETECTABLE WARNING PANELS SHALL BE FEDERAL YELLOW COLOR (33538), UNLESS SPECIFIED OTHERWISE.
3. PANEL SHALL BE ORIENTED SO THAT THE DOMES ARE PARALLEL AND PERPENDICULAR TO THE PRIMARY DIRECTION OF TRAVEL

COMPOSITE DETECTABLE WARNING PANEL DETAIL

NOT TO SCALE



STANDARD 2" BLOW OFF

NOT TO SCALE

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APP'D BY
A	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
B	01-17-2024	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2023	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
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DATE: 01-25-2024
P.E. JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
565 CONGRESS STREET, PORTLAND, ME 04102
41 CAMPUS DRIVE, SUITE 2, KENNEBUNK, ME 04043
OFFICE: (207) 956-5111 FAX: (207) 221-1317
www.terradynconsultants.com

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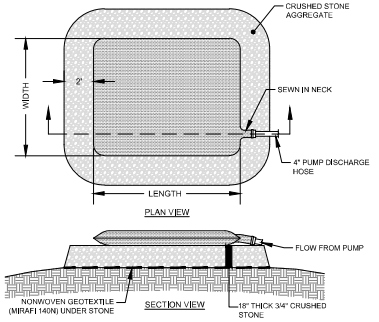
PROJECT:
HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE DETAILS - 3

CLIENT:
SOUTH STREET VILLAGE, LLC
565 CONGRESS STREET
SOUTH PORTLAND, MAINE 04106

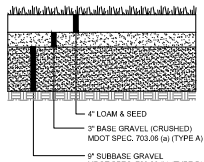
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-6.3

C:\Users\JAMOS\Documents\Projects\Hidden Hills\21-13 Hidden Hills_revit_central_JAMOS.rvt

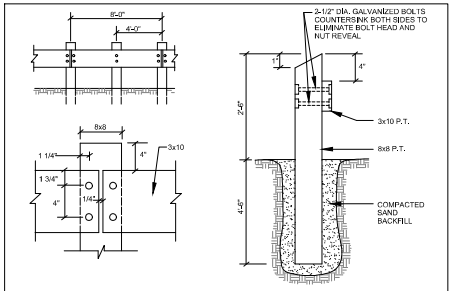


NOTES:
1. DIRTBAG BY ACF ENVIRONMENTAL
2. SEAMS MUST BE HIGH STRENGTH DOUBLE STITCHED "J" SEAMS.
3. CONSTRUCTION DEWATERING OF TURBID WATER SHALL BE PUMPED THROUGH A DIRTBAG AND RELEASED THROUGH A VEGETATED BUFFER AT LEAST 50' UPSTREAM OF WETLAND AREAS.
4. THE LOCATION OF THE DIRTBAG SHALL BE DETERMINED BY THE CONTRACTOR, BUT SHALL IT SHALL NOT BE SITED IN CRITICAL AREAS, SUCH AS WETLANDS.

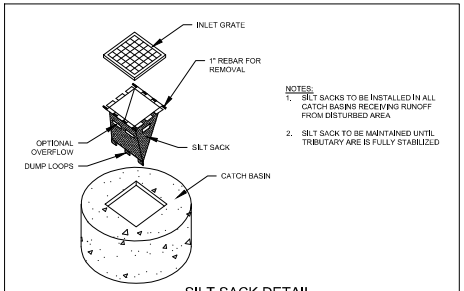
DIRTBAG DETAIL
NOT TO SCALE



TYPICAL STORMWATER CONTROL AREA ACCESS CROSS-SECTION
NOT TO SCALE

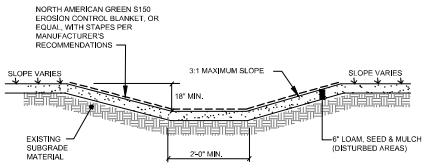


PRESSURE TREATED WOODEN GUARDRAIL
NOT TO SCALE



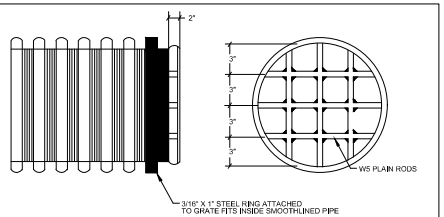
NOTES:
1. SILT SACKS TO BE INSTALLED IN ALL CATCH BASINS RECEIVING RUNOFF FROM DISTURBED AREA
2. SILT SACK TO BE MAINTAINED UNTIL TRIBUTARY ARE IS FULLY STABILIZED

SILT SACK DETAIL
NOT TO SCALE



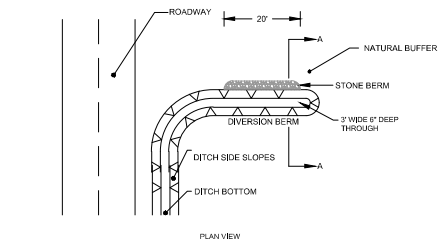
NOTE: REFER TO GRADING PLAN FOR DITCH WIDTH AND SIDE SLOPES

GRASSED SWALE
NOT TO SCALE

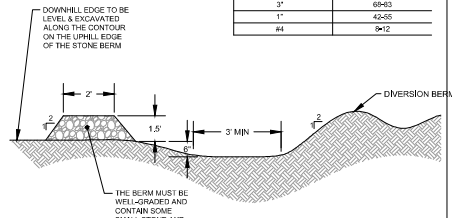


NOTES:
1. RODS CONFORM TO SECTION 709.1
2. GRATE TO HAVE ONE SHOP COAT OF ALUMINUM PAINT.
3. 3/8" GRADE 304 STAINLESS STEEL BOLT AND NUT (4 EA.)

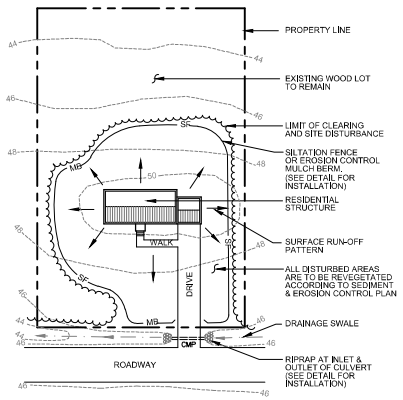
INLET GRATE DETAIL
NOT TO SCALE



BERM STONE SIZE	
SIEVE DESIGNATION	% BY WEIGHT PASSING SQUARE MESH SIEVES
12"	100
6"	84-100
3"	69-83
1"	42-55
#4	8-12



TYPICAL LEVEL LIP SPREADER
NOT TO SCALE



Inspection Notes for Lot Grading and Driveway Location
Inspections by a professional engineer shall consist of a visit to the site prior to construction to consult with the earthwork contractor and a post construction meeting to confirm grading on lots and for all driveways to ensure runoff is directed according to plans and to oversee the re-stabilization of the lot into a vegetated cover.

TYPICAL EROSION CONTROL MEASURES FOR DWELLING UNITS
NOT TO SCALE

CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.

2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.

4. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.

6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.

7. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.

8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.

9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

10. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.

11. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES IT'S "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES. AS WELL AS USG PUBLIC WORKS SYSTEMS.

12. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.

13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.

14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.

15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.

16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.

17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.

18. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.

19. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.

21. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.

22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.

23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.

24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.

25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.

26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

NO.	DATE	REVISIONS	BY	APPD
A	04-19-2024	PRELIMINARY SUBMISSION	JDA	
B	08-17-2023	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
C	11-16-2023	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA	

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
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OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
PORTLAND, ME 04102

PERMIT DRAWING
NOT FOR CONSTRUCTION

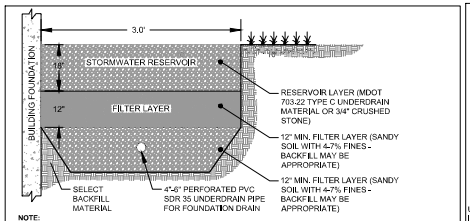
PROJECT:
HIDDEN HILLS HOUSING PARK
HIDDEN STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE DETAILS - 4

CLIENT:
SOUTH STREET VILLAGE, LLC
565 CONGRESS STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-6.4

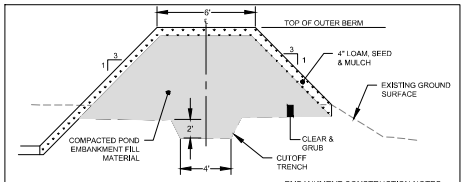
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NOTE:
FILTER BED TO BE INSTALLED WITH A LOW POINT THAT ALLOWS OVERFLOW RUNOFF TO LEAVE FILTER BED VIA SHEET FLOW. LOWEST TOP ELEVATION TO BE HELD CONSTANT FOR AT LEAST 5' SO IT MAY FUNCTION SIMILARLY TO A LEVEL SPREADER.

CONSTRUCTION INSPECTION NOTES:
INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT EACH THE ROOF DRIP EDGE FILTER'S UNDERDRAIN CONSTRUCTION, FILTER MATERIAL PLACEMENT, AND OVERFLOW FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE FILTER.

ROOF DRIPLINE FILTER BED
NOT TO SCALE



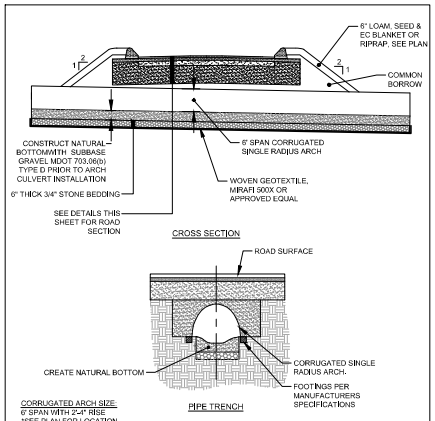
EMBANKMENT FILL MATERIAL:
FILL MUST BE FREE OF FROZEN SOIL, ROCKS OVER SIX INCHES, AND SOD, BRUSH, STUMPS, TREE ROOTS, WOOD, OR OTHER PERISHABLE MATERIALS. EMBANKMENT FILLS LESS THAN 10 FEET IN FILL HEIGHT MUST BE COMPACTED USING COMPACTION METHODS THAT WOULD GUARANTEE A FILL DENSITY OF 90% OF THE MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM-698). ALL EMBANKMENT FILLS MORE THAN 10 FEET IN FILL HEIGHT MUST BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AND MUST HAVE THEIR DENSITY VERIFIED BY FIELD DENSITY TESTING.

EMBANKMENT CONSTRUCTION NOTES:
1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM EMBANKMENT AND POND CONSTRUCTION AREA.
2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY.
4. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED.
5. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN & NOTES.

POND EMBANKMENT DETAIL
NOT TO SCALE

ORGANIC WETLAND SOIL MIXTURE:
1. THE WETLAND SOIL SHOULD HAVE A LOW HYDRAULIC CONDUCTIVITY (6.1-0.01 FT/DAY). THIS SOIL CAN BE MANUFACTURED USING COMPOST, SAND AND FINE SOILS, INTO A BLEND WITH MORE THAN 15% ORGANIC MATTER, IT SHOULD CONTAIN MORE THAN 15% SILT (PASSING THE #200 SIEVE) BUT WITH A CLAY SIZE PORTION THAT IS LESS THAN 2%. DO NOT USE GEOTEXTILES BETWEEN THE HORIZONTAL LAYERS OF THIS SYSTEM AS THEY WILL CLOG DUE TO FINES AND MAY RESTRICT ROOT GROWTH.

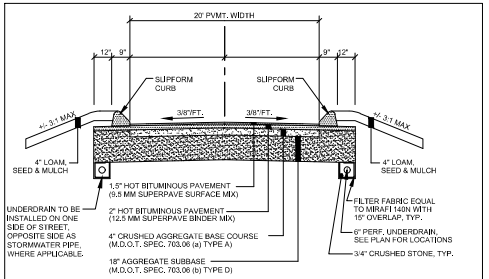
POND DEWATERING NOTES:
1. DEWATERING OF THE FOREBAY AND TREATMENT CELLS OF THE POND SHALL BE CONDUCTED SUCH THAT THE POND WILL NOT FILL WITH WATER UNTIL THE FOREBAY & TREATMENT CELL FLOORS ARE COMPLETED.
2. DEWATERING PROCEDURES SHALL BE CONDUCTED USING MDEP APPROVED TECHNIQUES AND SHALL INCLUDE THE USE OF A DIRT BAG SYSTEM. THE DIRT BAG SHALL BE USED ACCORDING TO MANUFACTURER INSTRUCTIONS.



CORRUGATED ARCH SIZE:
6' SPAN WITH 2'-4" RISE
*SEE PLAN FOR LOCATION

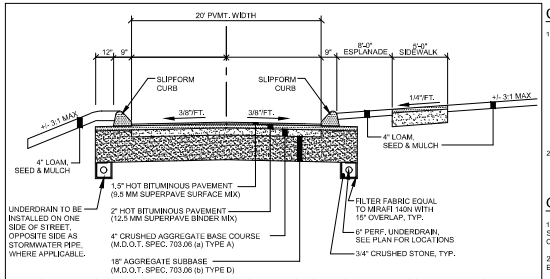
NOTES:
1. SEE TYPICAL TRENCH DETAIL FOR BACKFILL REQUIREMENTS

STREAM CROSSING DETAIL
NOT TO SCALE



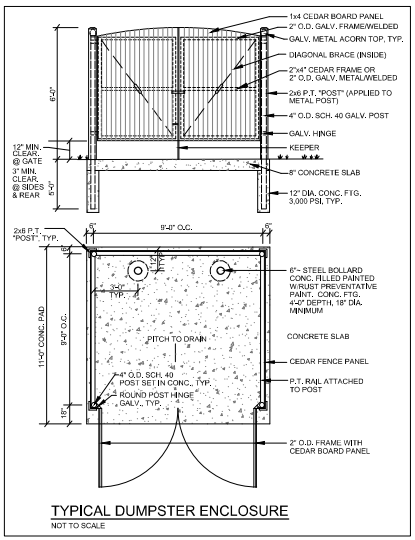
NOTE: FILL AREAS BENEATH DRIVING SURFACE SHALL BE GRANULAR BORROW. ALL OTHER FILL AREAS SHALL BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL., PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUB-GRADE CONSTRUCTION. EXCAVATED ONSITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. GRANULAR BORROW AND COMMON BORROW SHALL ADHERE TO MDOT SPECIFICATIONS 703.19 AND 703.18 RESPECTIVELY.

TYPICAL MINOR LOCAL STREET SECTION
(VIEW POINT LOOP)
NOT TO SCALE

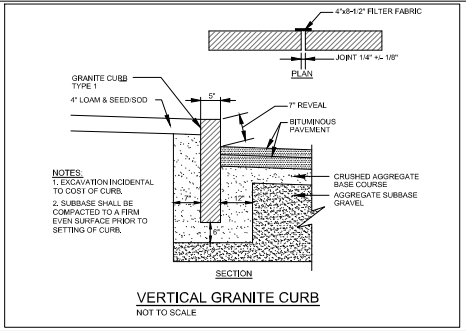


NOTE: FILL AREAS BENEATH DRIVING SURFACE SHALL BE GRANULAR BORROW. ALL OTHER FILL AREAS SHALL BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUB-GRADE CONSTRUCTION. EXCAVATED ONSITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. GRANULAR BORROW AND COMMON BORROW SHALL ADHERE TO MDOT SPECIFICATIONS 703.19 AND 703.18 RESPECTIVELY.

TYPICAL MINOR LOCAL STREET SECTION
(ALL ROADS EXCEPT VIEW POINT LOOP)
NOT TO SCALE

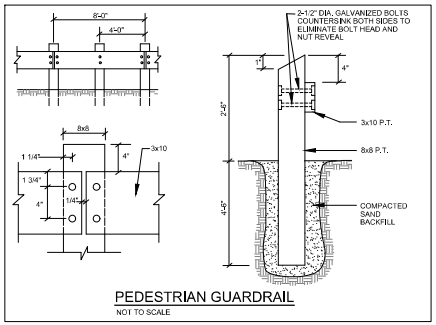


TYPICAL DUMPSTER ENCLOSURE
NOT TO SCALE

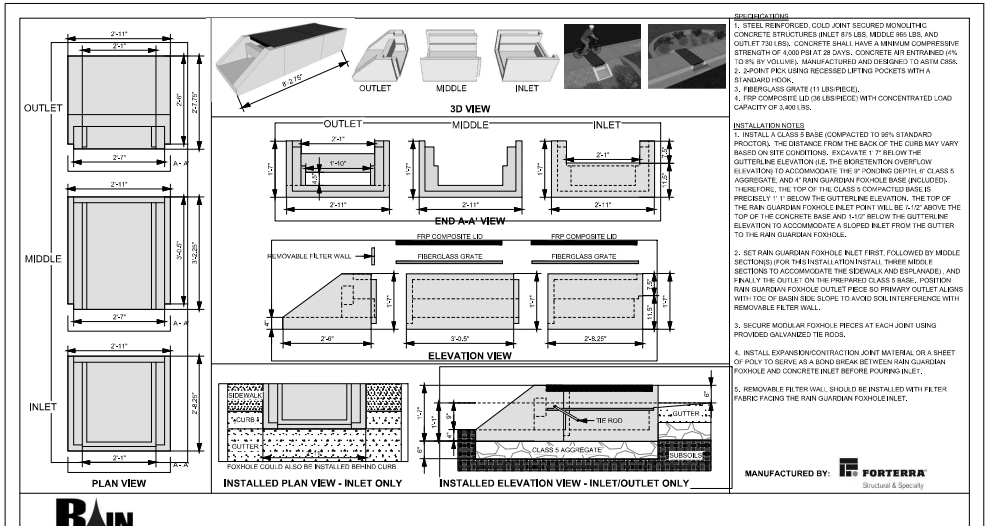


NOTES:
1. EXCAVATION INCIDENTAL TO COST OF CURB.
2. SUBBASE SHALL BE COMPACTED TO A FIRM EVEN SURFACE PRIOR TO SETTING OF CURB.

VERTICAL GRANITE CURB
NOT TO SCALE



PEDESTRIAN GUARDRAIL
NOT TO SCALE



SPECIFICATIONS
1. STEEL REINFORCED, COLD JOINT SECURED MONOLITHIC CONCRETE STRUCTURES INLET 875 LBS, MIDDLE 965 LBS, AND OUTLET 730 LBS). CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. CONCRETE AIR ENTRAINED (4% TO 8% BY VOLUME), MANUFACTURED AND DESIGNED TO ASTM C858.
2. 2-POINT PICK USING RECESSED LIFTING POCKETS WITH A STANDARD HOOK.
3. FIBERGLASS GRATE (11 LBS/PIECE).
4. FRP COMPOSITE LID (36 LBS/PIECE) WITH CONCENTRATED LOAD CAPACITY OF 3,900 LBS).

INSTALLATION NOTES
1. INSTALL A CLASS B BASE (COMPACTED TO 95% STANDARD PROCTOR). THE DISTANCE FROM THE BACK OF THE CURB MAY VARY BASED ON SITE CONDITIONS. ENSURE A 1" 1" BELOW THE GUTTERLINE ELEVATION (I.E. THE BIORETENTION OVERFLOW ELEVATION) TO ACCOMMODATE THE 6" PONDING DEPTH. 6" CLASS 5 AGGREGATE, AND 4" RAIN GUARDIAN FOXHOLE BASE (INCLUDED). THEREFORE, THE TOP OF THE CLASS 5 COMPACTED BASE IS PRECISELY 1" 1" BELOW THE GUTTERLINE ELEVATION. THE TOP OF THE RAIN GUARDIAN FOXHOLE INLET POINT WILL BE 1-1/2" ABOVE THE TOP OF THE CONCRETE BASE AND 1-1/2" BELOW THE GUTTERLINE ELEVATION TO ACCOMMODATE A SLOPED INLET FROM THE GUTTER TO THE RAIN GUARDIAN FOXHOLE.
2. SET RAIN GUARDIAN FOXHOLE INLET FIRST, FOLLOWED BY MIDDLE SECTION(S) (FOR THIS INSTALLATION INSTALL THREE MIDDLE SECTIONS TO ACCOMMODATE THE SIDEWALK AND ESPLANADE) , AND FINALLY THE OUTLET ON THE PREPARED CLASS 5 BASE. POSITION RAIN GUARDIAN FOXHOLE OUTLET PIECE SO PRIMARY OUTLET ALIGNS WITH TOC OF BASIN SIDE SLOPE TO AVOID SOIL INTERFERENCE WITH REMOVABLE FILTER WALL.
3. SECURE MODULAR FOXHOLE PIECES AT EACH JOINT USING PROVIDED GALVANIZED TIE RODS.
4. INSTALL EXPANSION/CONTRACTION JOINT MATERIAL OR A SHEET OF POLY TO SERVE AS A BOND BREAK BETWEEN RAIN GUARDIAN FOXHOLE AND CONCRETE INLET BEFORE POURING INLET.
5. REMOVABLE FILTER WALL SHOULD BE INSTALLED WITH FILTER FABRIC FACING THE RAIN GUARDIAN FOXHOLE INLET.

MANUFACTURED BY: FORTERRA Structural & Specialty

RAIN GUARDIAN
PRETREATMENT FOR BIORETENTION
Rain Gardens • Swales • Filtration Basins • Infiltration Basins

RAIN GUARDIAN FOXHOLE
NOT TO SCALE

CONSTRUCTION INSPECTION NOTES:
1. THE DESIGN ENGINEER SHALL INSPECT THE CONSTRUCTION AND STABILIZATION OF THE GRAVEL WETLAND. INSPECTIONS SHALL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE CONSTRUCTION (FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE POND) OF THE POND'S EMBANKMENT, STORMWATER INLET, GRAVEL AND FILTER MATERIAL MAKEUP AND PLACEMENT, OUTLET CONTROL STRUCTURE, LINER INSTALLATION, AND EMERGENCY SPILLWAY. IF NECESSARY, THE INSPECTING ENGINEER SHALL INTERPRET THE PONDS CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE THE POND IS CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE CITY WITHIN 14 DAYS TO STATE THE POND HAS BEEN COMPLETED, ACCOMPANYING THE ENGINEER'S NOTIFICATION SHALL BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA OR SIEVE ANALYSIS DATA OF THE MATERIALS USED. AN INSPECTION OF THE UNDERDRAINED GRAVEL OUTLET SHALL ALSO BE PERFORMED BY A PROFESSIONAL ENGINEER ONE YEAR AFTER THE FINAL STABILIZATION OF THE POND. THE ENGINEER SHALL NOTIFY THE CITY AS TO THE OUTLET'S EFFECTIVENESS AND DETERMINE ANY MAINTENANCE ITEMS THAT ARE NEEDED.
2. THE APPLICANT SHALL BE REQUIRED TO PERFORM ROUTINE INSPECTION AND MAINTENANCE OF THE STORMWATER FACILITIES AS OUTLINED IN THE OPERATIONS AND MAINTENANCE MANUAL DEVELOPMENT SPECIFICALLY FOR THE SITE, A COPY OF THE ANNUAL INSPECTION AND MAINTENANCE REPORT INCLUDING INSPECTION LOG(S) SHALL BE SUBMITTED ANNUALLY (BY JULY 15TH OF EACH YEAR) TO THE CITY PUBLIC WORKS DEPARTMENT.

GRAVEL WETLAND INSTALLATION NOTES:
1. THE MINIMUM SPACING BETWEEN THE SUBSURFACE PERFORATED DISTRIBUTION LINE AND THE SUBSURFACE PERFORATED COLLECTION DRAIN AT EITHER END OF THE GRAVEL IN EACH TREATMENT CELL IS 15 FT.
2. THERE SHOULD BE A MINIMUM HORIZONTAL TRAVEL DISTANCE OF 15 FT WITHIN THE GRAVEL LAYER IN EACH CELL.
3. VERTICAL PERFORATED OR SLOTTED RISER PIPES DELIVER WATER FROM THE SURFACE DOWN TO THE SUBSURFACE, PERFORATED OR SLOTTED DISTRIBUTION LINES. THESE RISERS SHALL HAVE A MAXIMUM SPACING OF 10 FEET.
4. SLOTTED VERTICAL RISERS SHALL HAVE A MINIMUM DIAMETER OF 12" FOR THE CENTRAL RISER AND 6" FOR END RISERS. THE VERTICAL RISERS SHALL NOT BE CAPPED, BUT RATHER COVERED WITH AN INLET GRATE.
5. VERTICAL CLEANOUTS CONNECTED TO THE DISTRIBUTION AND COLLECTION SUBDRAINS, AT EACH END, SHALL BE PERFORATED OR SLOTTED ONLY WITHIN THE GRAVEL LAYER, AND SOLID WITHIN THE WETLAND SOIL AND STORAGE AREA ABOVE.
6. TREATMENT CELL FLOOR TO BE GRADED FLAT.
7. BERMS AND WEIRS SEPARATING THE FOREBAY AND TREATMENT CELLS SHOULD BE CONSTRUCTED WITH CLAY, OR NON-CONDUCTIVE SOILS, AND/OR A FINE GEOTEXTILE, OR SOME COMBINATION THEREOF, TO AVOID GROUNDWATER SEEPAGE AND SOIL PIPING THROUGH THESE EARTHEN DIVIDERS.
8. THE SYSTEM SHOULD BE PLANTED TO ACHIEVE A RIGOROUS ROOT MAT WITH GRASSES, FORBS, AND SHRUBS WITH OBLIGATE AND FACULTATIVE WETLAND SPECIES.
9. THE SUBAREA DRAINING TO A CREATED WETLAND MUST BE COMPLETELY STABLE BEFORE RUNOFF IS DIRECTED TO THE BASIN TO PREVENT SEDIMENTATION OF THE DRAINAGE LAYER; OR ALL RUNOFF SHOULD BE INTERCEPTED UNTIL CONSTRUCTION IS FINALIZED, THE VEGETATION WITHIN THE STRUCTURE IS EQUALLY IMPORTANT AND MUST BE WELL ESTABLISHED BEFORE IT CAN ACCEPT ANY RUNOFF.
10. GRAVEL WETLAND STORMWATER AREA TO BE SEEDED WITH "NEW ENGLAND WETMIX" AS DISTRIBUTED BY NEW ENGLAND WETLAND PLANTS, INC., 820 WEST STREET, AMHERST, MA 01002, PHONE 413-548-8000, EMAIL INFO@NEWP.COM, OR APPROVED EQUIVALENT. APPLY AT A RATE OF 1 LB/2,500 SF.
11. THE SEEDS WILL NOT GERMINATE UNDER INUNDATED CONDITIONS. IF PLANTED DURING THE FALL MONTHS THE SEED MIX WILL GERMINATE THE FOLLOWING SPRING. DURING THE FIRST SEASON OF GROWTH SEVERAL SPECIES WILL PRODUCE SEEDS WHILE OTHER SPECIES WILL PRODUCE SEEDS AFTER THE SECOND GROWING SEASON. NOT ALL SPECIES WILL GROW IN ALL WETLAND SITUATIONS. THIS MIX IS COMPRISED OF THE WETLAND SPECIES MOST LIKELY TO GROW IN CREATED/RESTORED WETLANDS AND SHOULD PRODUCE MORE THAN 75% GROUND COVER IN TWO FULL GROWING SEASONS.
12. THE WETLAND SEEDS IN THIS MIX CAN BE SOWN BY HAND, WITH A HAND-HELD SPREADER, OR HYDRO-SEEDED ON LARGE OR HARD TO REACH SITES. LIGHTLY RAKE TO ENSURE GOOD SEED-TO-SOIL CONTACT. SEEDING CAN TAKE PLACE ON FROZEN SOIL AS THE FREEZING AND THAWING WEATHER OF LATE FALL AND LATE WINTER WILL WORK THE SEED INTO THE SOIL. IF SPRING CONDITIONS ARE DRIER THAN USUAL, WATERING MAY BE REQUIRED. IF SOWING DURING THE SUMMER MONTHS, SUPPLEMENTAL WATERING WILL LIKELY BE REQUIRED UNTIL GERMINATION. A LIGHT MULCH OF CLEAN, WEED FREE STRAW IS RECOMMENDED.
13. THE POND CONSTRUCTION SHOULD BE ONLY CONSTRUCTED UNDER THE SUPERVISION OF THE DESIGN ENGINEER.

DATE: 01-25-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
A	12-01-2022	PRELIMINARY SUBMISSION	JDA
B	01-17-2023	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
56 CONGRESS STREET
PORTLAND, ME 04102
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
SITE DETAILS - 5
CLIENT:
SOUTH STREET VILLAGE, LLC
53 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	C-6.5

C:\Users\JAMOS\Documents\Projects\21-13 Hidden Hills Housing Park_SOUTH STREET\21-13 Drawing



DATE: DATE:
P.E.: P.E.

NO.	DATE	REVISIONS	BY	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	JDA

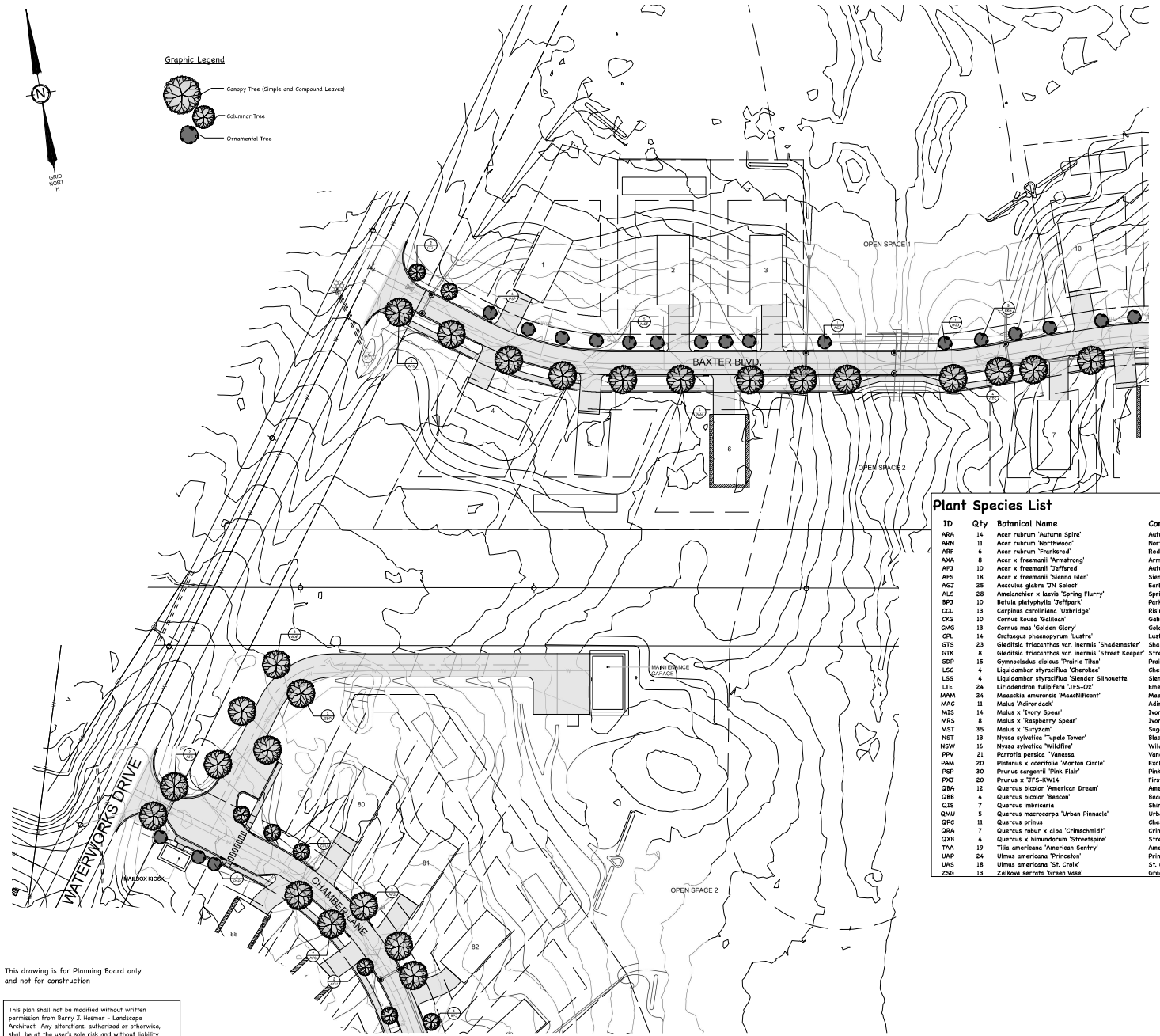
TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04260
565 CONGRESS STREET SUITE 201 PORTLAND, ME 04102
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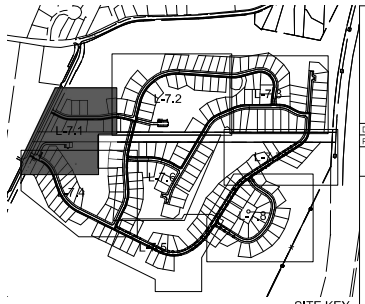
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: OVERALL LANDSCAPE PLAN
CLIENT: SOUTH STREET VILLAGE, LLC
752 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.0

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
194 Whitney Avenue
Portland, Maine 04102
207-874-0248





SITE KEY
SCALE: 1"=600'

Plant Species List

ID	Qty	Botanical Name	Common Name	Scheduled Size	Remarks
ARA	14	Acer rubrum 'Autumn Spire'	Autumn Spire Red Maple	2" - 2.5" cal.	B&B
ARN	11	Acer rubrum 'Northwood'	Northwood Red Maple	2" - 2.5" cal.	B&B
ARF	6	Acer rubrum 'Frankred'	Red Sunset Maple	2" - 2.5" cal.	B&B
AXA	8	Acer x freemanii 'Armstrong'	Armstrong Maple	2" - 2.5" cal.	B&B
AFJ	10	Acer x freemanii 'Jeffsred'	Autumn Blaze Maple	2" - 2.5" cal.	B&B
AFS	18	Acer x freemanii 'Sienna Glen'	Sienna Glen Maple	2" - 2.5" cal.	B&B
AGJ	25	Aesculus glabra 'JN Select'	Early Glow Ohio Buckeye	2" - 2.5" cal.	B&B
ALS	28	Amelanchier x laevis 'Spring Flurry'	Spring Flurry Serviceberry	2" - 2.5" cal.	B&B
BPJ	10	Betula platyphylla 'Jeffpark'	Parkland Pillar Birch	2" - 2.5" cal.	B&B
CCU	13	Carpinus caroliniana 'Uxbridge'	Rising Fire American Hornbeam	2" - 2.5" cal.	B&B
CKG	10	Cornus kousa 'Galilean'	Galilean Japanese Dogwood	2" - 2.5" cal.	B&B
CMG	13	Cornus mas 'Golden Glory'	Golden Glory Cornelian Cherry	2" - 2.5" cal.	B&B
CPL	14	Crataegus phaenopyrum 'Lustre'	Lustre Washington Hawthorn	2" - 2.5" cal.	B&B
GTS	23	Gleditsia triacanthos var. inermis 'Shademaster'	Shademaster Honeylocust	2" - 2.5" cal.	B&B
GTK	8	Gleditsia triacanthos var. inermis 'Street Keeper'	Street Keeper Honeylocust	2" - 2.5" cal.	B&B
GDP	15	Gymnocladus dioicus 'Prairie Titan'	Prairie Titan Kentucky Coffeetree	2" - 2.5" cal.	B&B
LSC	4	Liquidambar styraciflua 'Cherokee'	Cherokee Sweetgum	2" - 2.5" cal.	B&B
LSS	4	Liquidambar styraciflua 'Slender Silhouette'	Slender Silhouette Sweetgum	2" - 2.5" cal.	B&B
LTE	24	Liriodendron tulipifera 'JFS-Oz'	Emerald City Tuliptree	2" - 2.5" cal.	B&B
MAM	24	Maackia amurensis 'MaacNificent'	MaacNificent Amur Maackia	2" - 2.5" cal.	B&B
MAC	11	Malus 'Adirondack'	Adirondack Crabapple	2" - 2.5" cal.	B&B, Own Root
MIS	14	Malus x 'Ivory Spear'	Ivory Spear Crabapple	2" - 2.5" cal.	B&B, Own Root
MRS	8	Malus x 'Raspberry Spear'	Ivory Spear Crabapple	2" - 2.5" cal.	B&B, Own Root
MST	35	Malus x 'Sutyzam'	Sugar Tyme Crabapple	2" - 2.5" cal.	B&B, Own Root
NST	13	Nyssa sylvatica 'Tupelo Tower'	Black Gum	2" - 2.5" cal.	B&B
NSW	16	Nyssa sylvatica 'Wildfire'	Wildfire Black Gum	2" - 2.5" cal.	B&B
PPV	21	Parrotia persica "Vanessa'	Vanessa Persian Ironwood	2" - 2.5" cal.	B&B
PAM	20	Platanus x acerifolia 'Morton Circle'	Exclamation London Plane Tree	2" - 2.5" cal.	B&B
PSP	30	Prunus sargentii 'Pink Flair'	Pink Flair Cherry	2" - 2.5" cal.	B&B
PXJ	20	Prunus x 'JFS-KW14'	First Blush Cherry	2" - 2.5" cal.	B&B
QBA	12	Quercus bicolor 'American Dream'	American Dream Oak	2" - 2.5" cal.	B&B
QBB	4	Quercus bicolor 'Beacon'	Beacon Oak	2" - 2.5" cal.	B&B
QIS	7	Quercus imbricaria	Shingle Oak	2" - 2.5" cal.	B&B
QMU	5	Quercus macrocarpa 'Urban Pinnacle'	Urban Pinnacle Oak	2" - 2.5" cal.	B&B
QPC	11	Quercus prinus	Chestnut Oak	2" - 2.5" cal.	B&B
QRA	7	Quercus robur x alba 'Crimschmidt'	Crimson Spire Oak	2" - 2.5" cal.	B&B
QXS	4	Quercus x bimundorum 'Streetspire'	Streetspire Oak	2" - 2.5" cal.	B&B
TAA	19	Tilia americana 'American Sentry'	American Sentry American Linden	2" - 2.5" cal.	B&B
UAP	24	Ulmus americana 'Princeton'	Princeton Elm	2" - 2.5" cal.	B&B
UAS	18	Ulmus americana 'St. Croix'	St. Croix Elm	2" - 2.5" cal.	B&B
ZSG	13	Zelkova serrata 'Green Vase'	Green Vase Zelkova	2" - 2.5" cal.	B&B

This drawing is for Planning Board only and not for construction

This plan shall not be modified without written permission from Barry J. Hosmer - Landscape Architect. Any alterations, authorized or otherwise, shall be at the user's sole risk and without liability to Barry J. Hosmer - Landscape Architect.
File Name: Hidden Hills 10/16/23.vwx

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

NO.	DATE	REVISIONS	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

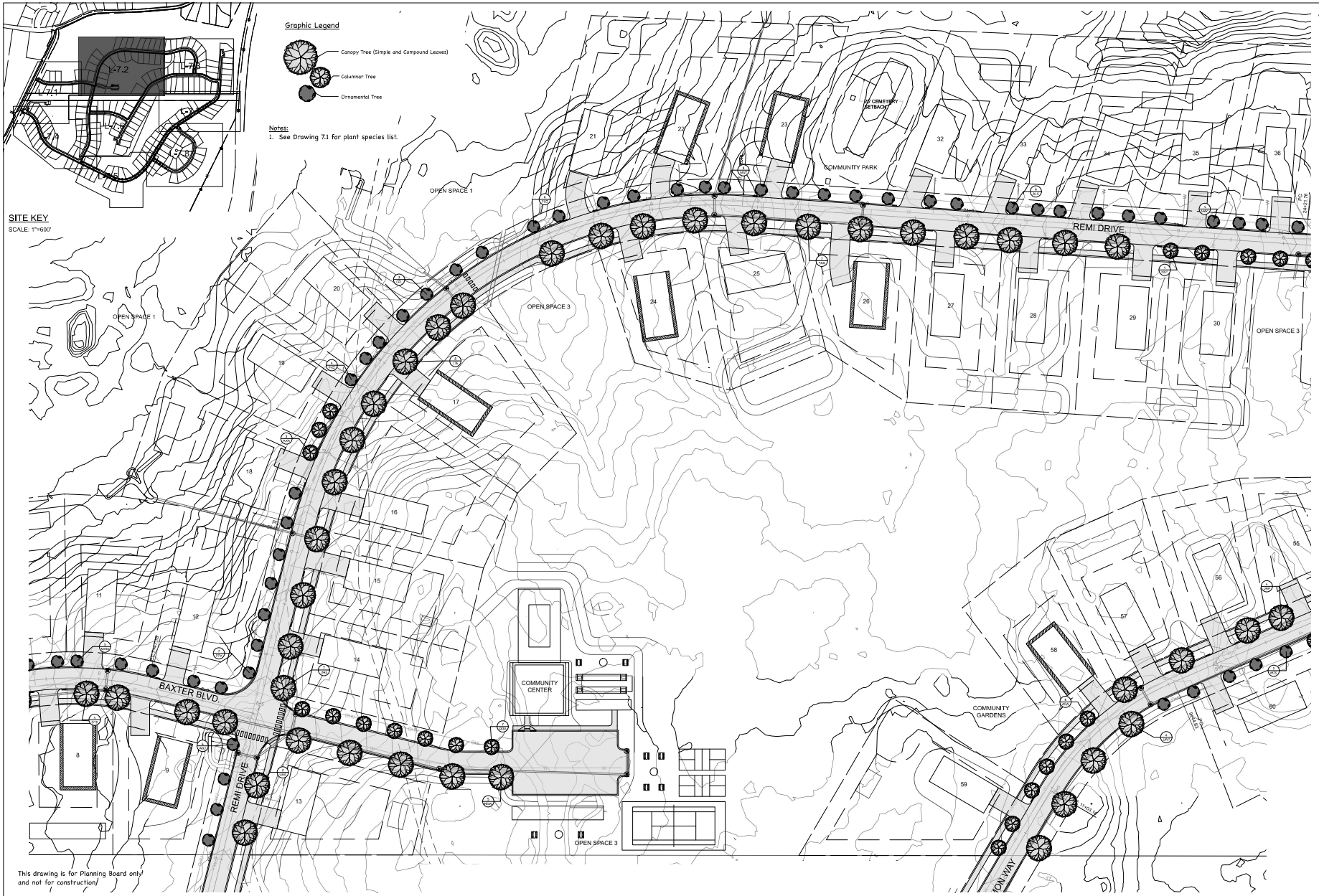
DATE: DATE:
P.E. P.E.

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260
595 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
TERRADYN CONSULTANTS, LLC

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
LANDSCAPE PLAN - 1
CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.1



This drawing is for Planning Board only and not for construction

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File Name: Hidden Hills 10/16/23.vwx

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

NO.	DATE	REVISIONS	BY
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-01-2023	SUBMITTED FOR TPAA APPROVAL	JDA

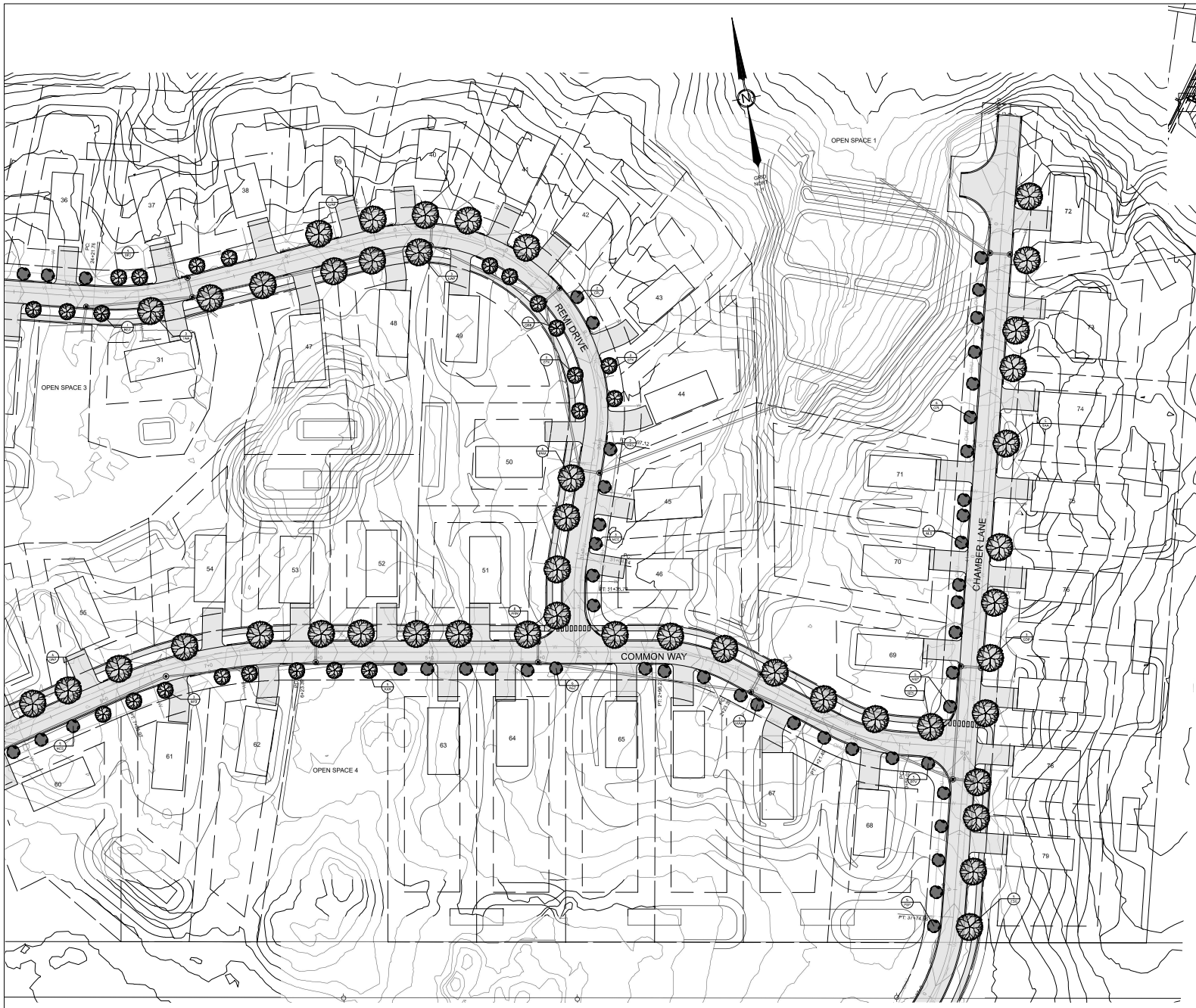
DATE:
P.E.:

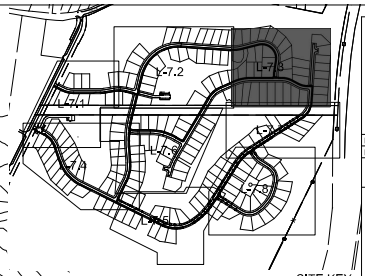
TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE
SUITE 210
NEW GLOUCESTER, ME 04260
565 CONGRESS STREET
SUITE 410
PORTLAND, ME 04101
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyncons ultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
MAIDA STREET, BIDDEFORD, MAINE
SHEET TITLE:
LANDSCAPE PLAN - 2
CLIENT:
SOUTH STREET VILLAGE, LLC
100 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.2





SITE KEY
SCALE: 1"=600'

Graphic Legend

Canopy Tree (Simple and Compound Leaves)
Columnar Tree
Ornamental Tree

Notes:
1. See Drawing 7.1 for plant species list.

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File Name: Hidden Hills 10/16/23.vwx

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

NO.	DATE	REVISIONS	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

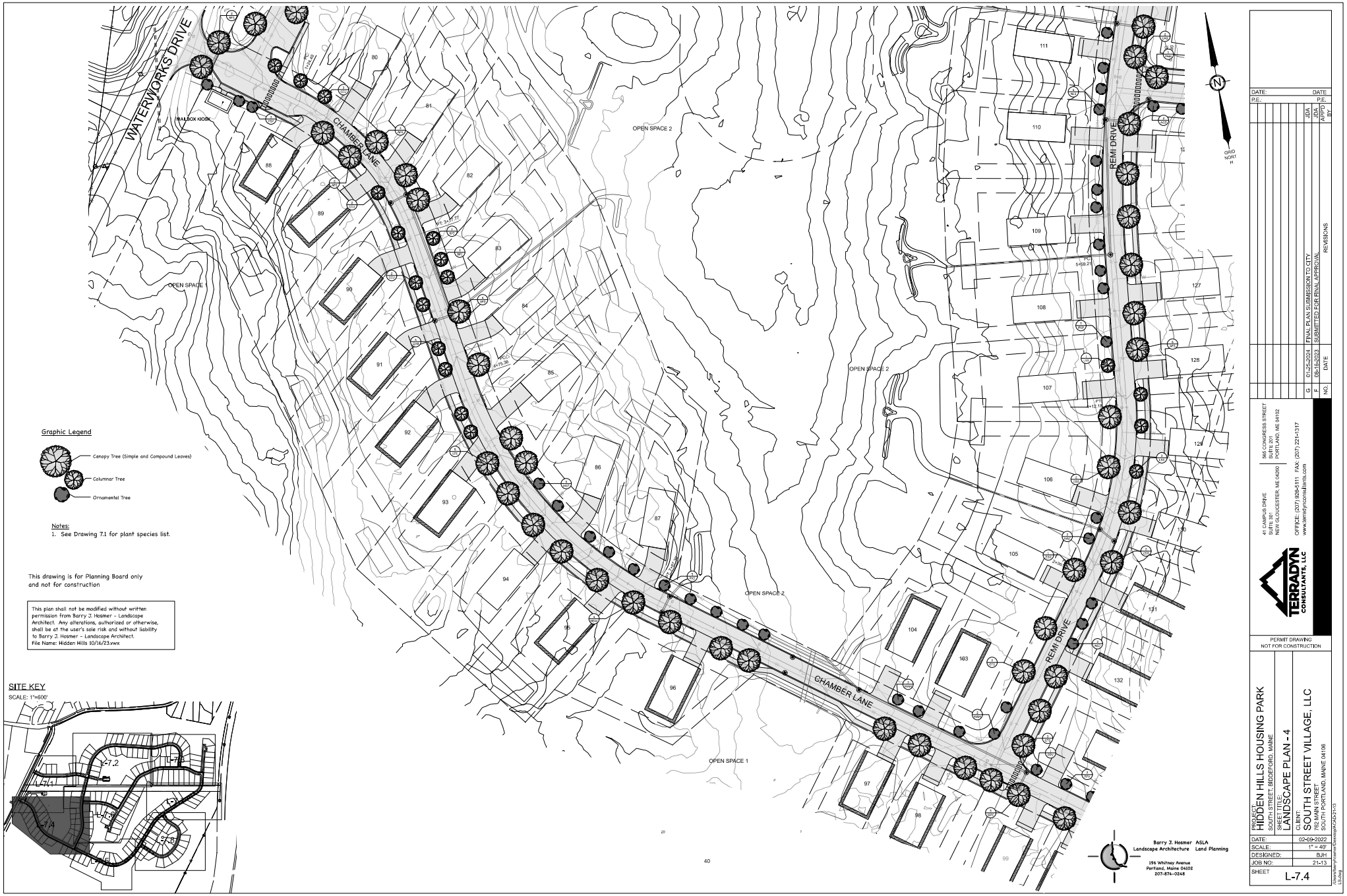
DATE: DATE:
P.E. P.E.

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
595 CONGRESS STREET SUITE 201 PORTLAND, ME 04102

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: LANDSCAPE PLAN - 3
CLIENT: SOUTH STREET VILLAGE, LLC
702 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.3



Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

NO.	DATE	REVISIONS	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

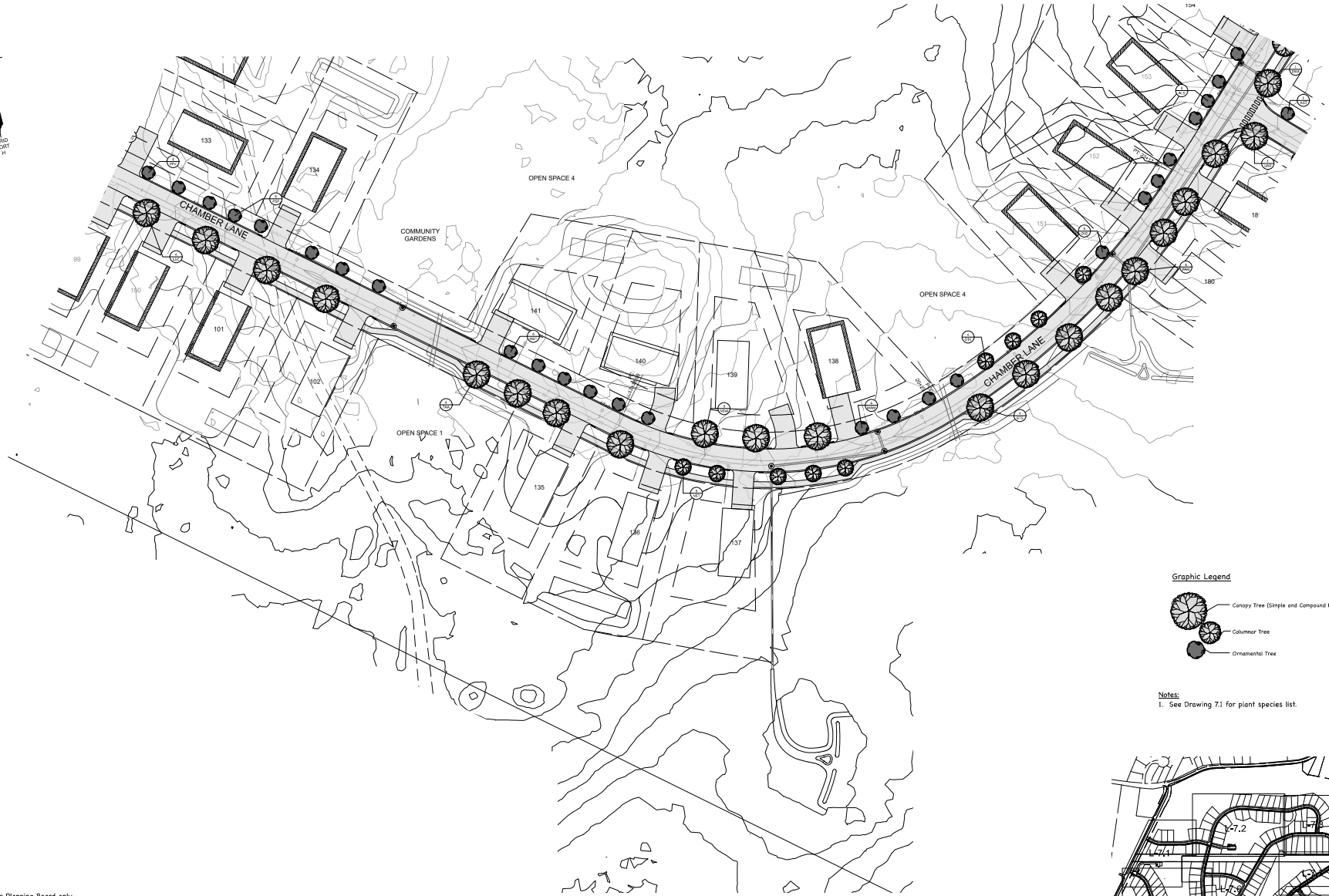
DATE: DATE:
P.E. P.E.

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04260
595 CONGRESS STREET SUITE 201 PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: LANDSCAPE PLAN - 4
CLIENT: SOUTH STREET VILLAGE, LLC
752 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.4

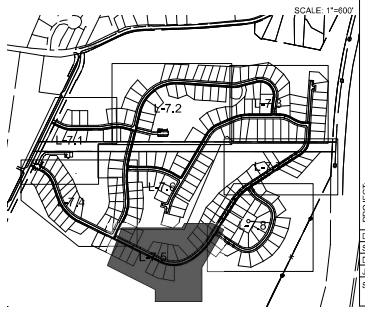


Graphic Legend

- Canopy Tree (Simple and Compound Leaves)
- Columnar Tree
- Ornamental Tree

Notes:
1. See Drawing 7.1 for plant species list.

SITE KEY
SCALE: 1"=600'



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File Name: Hidden Hills 10/16/23.vwx

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

NO.	DATE	REVISIONS	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

DATE: DATE:
P.E. P.E.

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
595 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

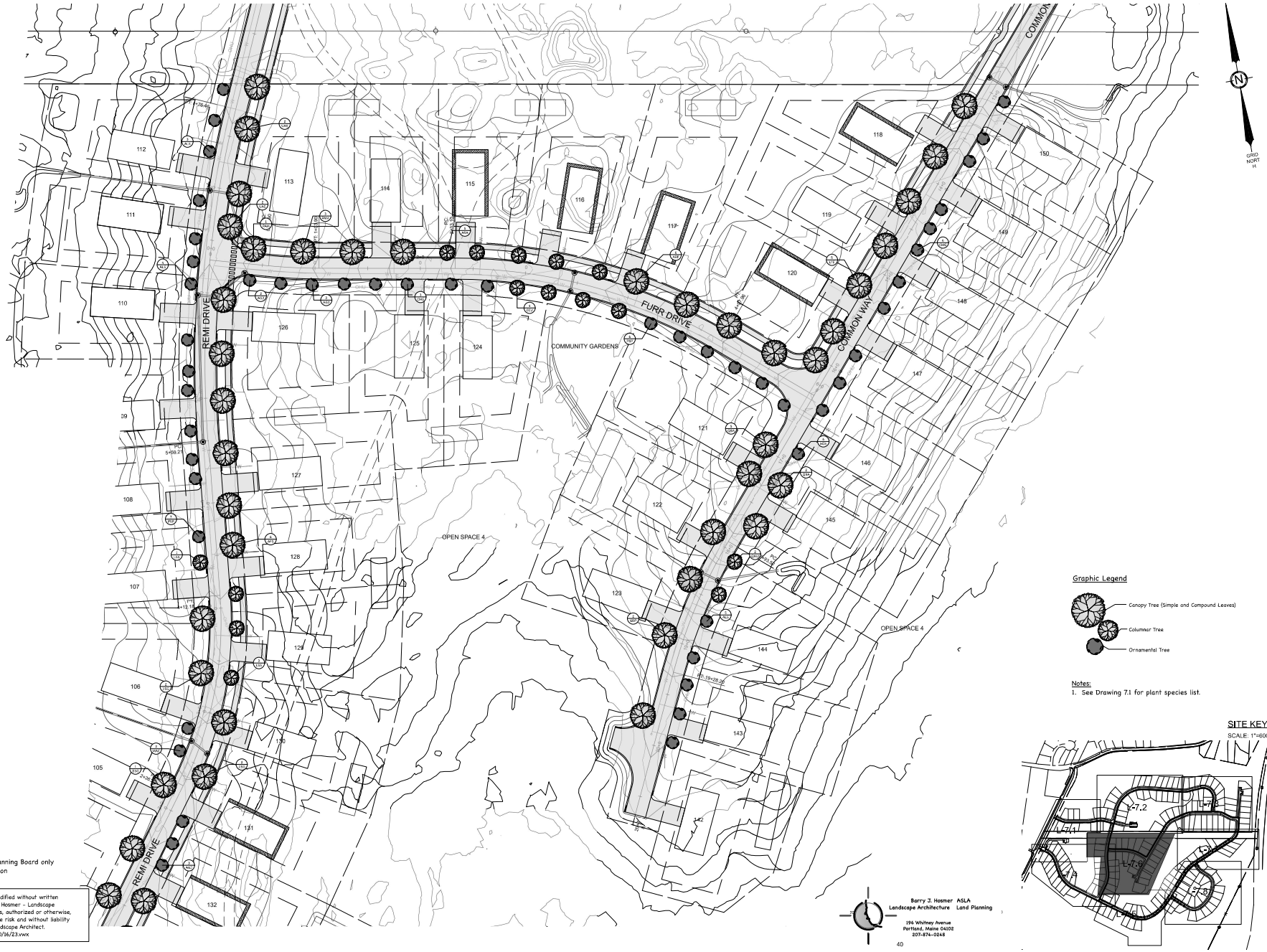
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
LANDSCAPE PLAN - 5

CLIENT:
SOUTH STREET VILLAGE, LLC
752 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.5



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File Name: Hidden Hills 10/16/23.vwx

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
194 Whitney Avenue
Portland, Maine 04102
207-874-0248

40

NO.	DATE	REVISIONS	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

DATE: DATE:
P.E. P.E.

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
595 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

TERRADYN CONSULTANTS, LLC

PERMIT DRAWING
NOT FOR CONSTRUCTION

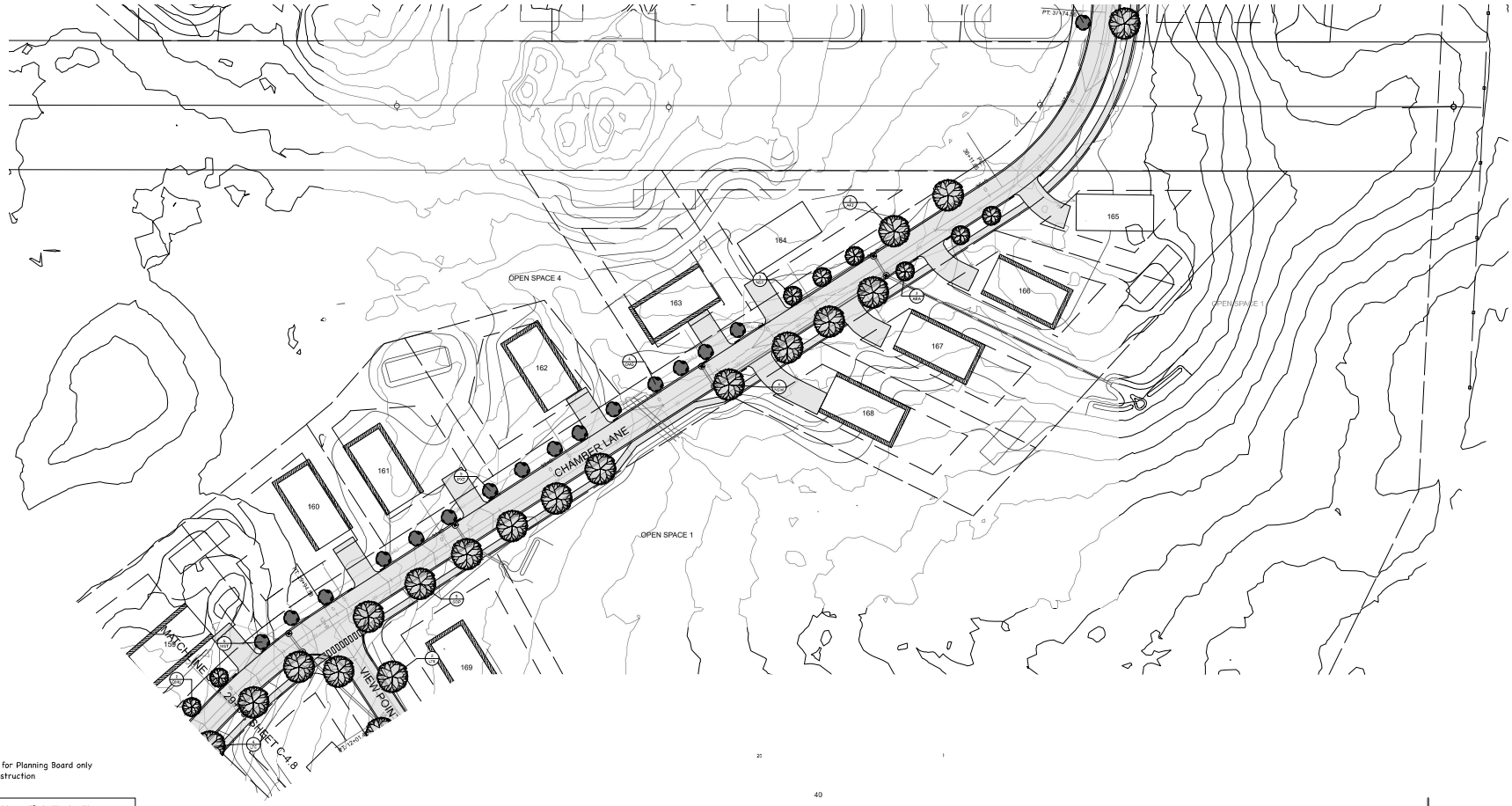
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
LANDSCAPE PLAN - 6

CLIENT:
SOUTH STREET VILLAGE, LLC
752 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.6

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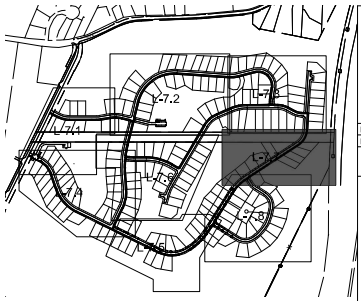
Graphic Legend

Canopy Tree (Simple and Compound Leaves)

Columnar Tree

Ornamental Tree

Notes:
1. See Drawing 7.1 for plant species list.



SITE KEY
SCALE: 1"=600'

GRID NORTH

This drawing is for Planning Board only and not for construction

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File Name: Hidden Hills 10/16/23.vwx

NO.	DATE	REVISIONS	APP'D
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

DATE: P.E.

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC

PERMIT DRAWING
NOT FOR CONSTRUCTION

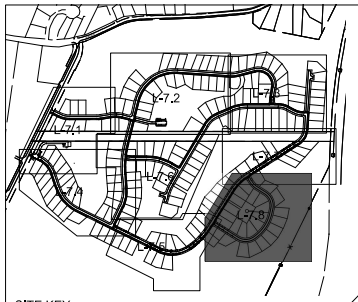
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
LANDSCAPE PLAN - 7

CLIENT:
SOUTH STREET VILLAGE, LLC
752 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.7

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248



SITE KEY

SCALE: 1"=600'

Graphic Legend

Notes:

1. See Drawing 7.1 for plant species list.

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File Name: Hidden Hills 10/16/23.vwx

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

NO.	DATE	REVISIONS	
G	01-25-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F	08-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA

DATE: DATE:
P.E. P.E.
APP'D JDA

TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com
595 CONGRESS STREET SUITE 201 PORTLAND, ME 04102

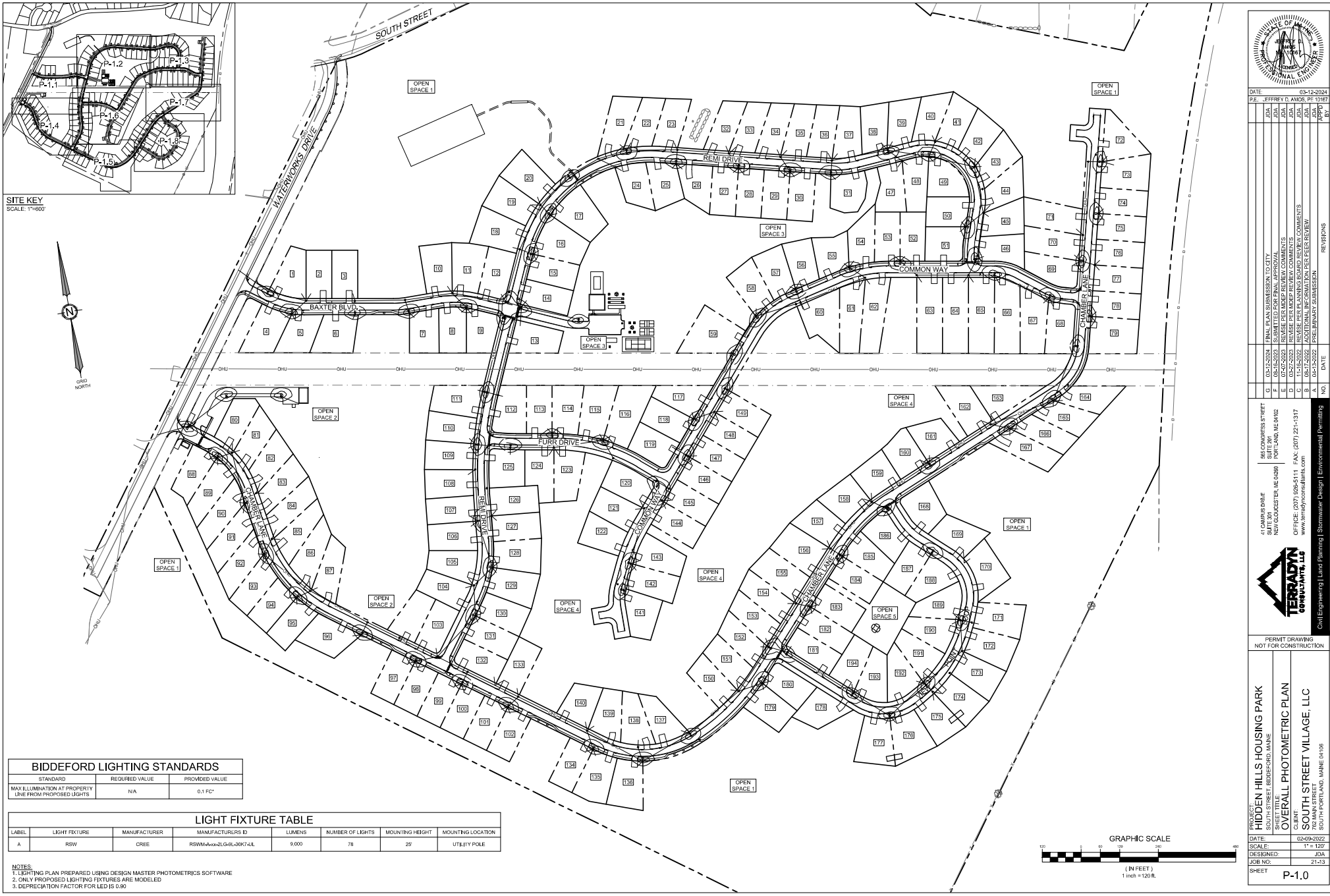
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
LANDSCAPE PLAN - 8

CLIENT:
SOUTH STREET VILLAGE, LLC
702 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	L-7.8



SITE KEY
SCALE: 1"=600'

GRAPHIC SCALE
120 0 60 120 240 480
(IN FEET)
1 inch = 120 ft.

BIDDEFORD LIGHTING STANDARDS		
STANDARD	REQUIRED VALUE	PROVIDED VALUE
MAX ILLUMINATION AT PROPERTY LINE FROM PROPOSED LIGHTS	N/A	0.1 FC*

LIGHT FIXTURE TABLE							
LABEL	LIGHT FIXTURE	MANUFACTURER	MANUFACTURERS ID	LUMENS	NUMBER OF LIGHTS	MOUNTING HEIGHT	MOUNTING LOCATION
A	RSW	CREE	RSW/M-A-xx-2LG-9L-30K7-UL	9,000	78	25'	UTILITY POLE

NOTES:
1. LIGHTING PLAN PREPARED USING DESIGN MASTER PHOTOMETRICS SOFTWARE
2. ONLY PROPOSED LIGHTING FIXTURES ARE MODELED
3. DEPRECIATION FACTOR FOR LED IS 0.90

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY	APP'D
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA	
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA	
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA	
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA	
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA	
A	04-12-2022	PRELIMINARY SUBMISSION	JDA	

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE, SUITE 1, NEW GLOUCESTER, ME 04260
565 CONGRESS STREET, SUITE 304, PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

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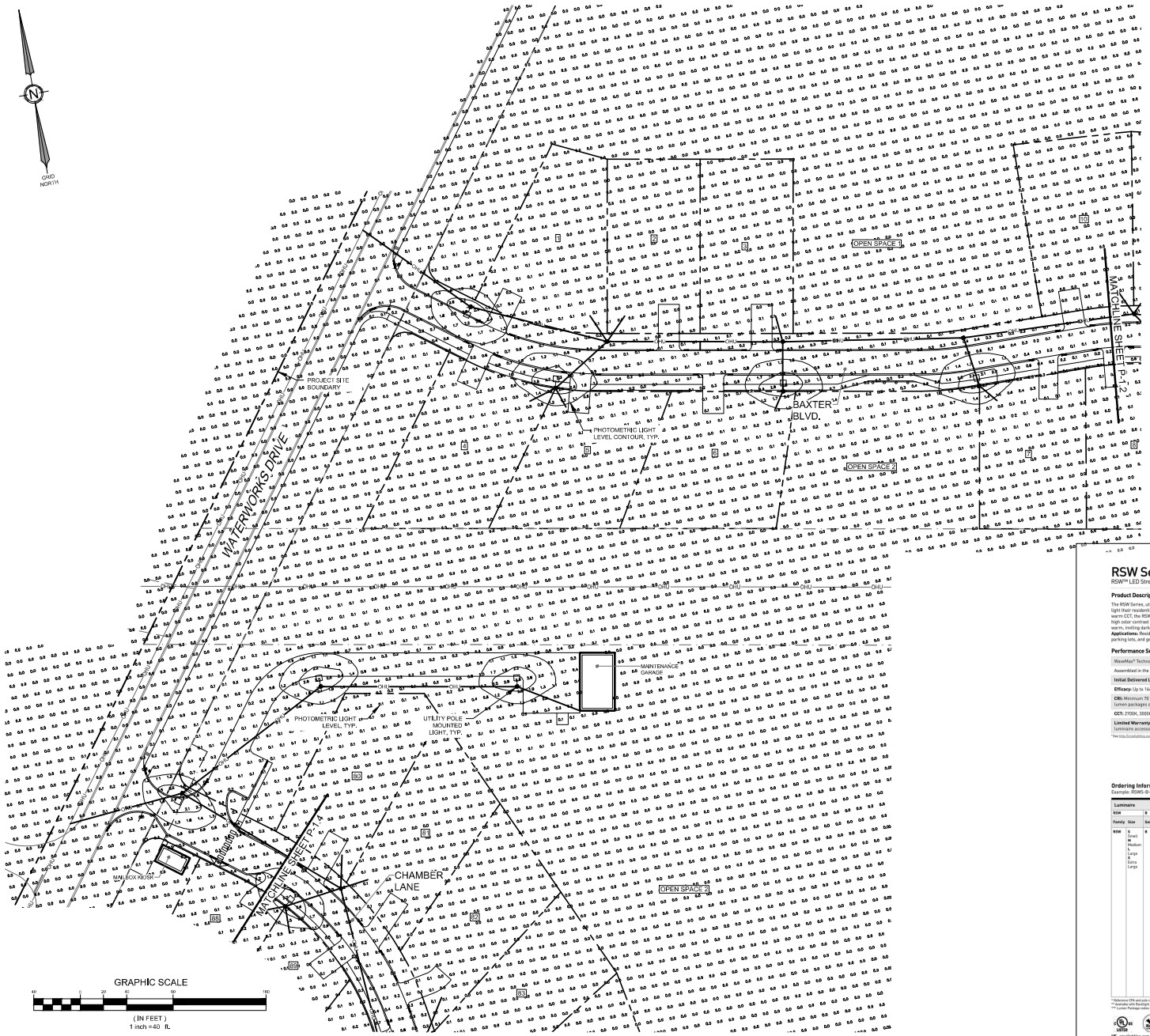
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

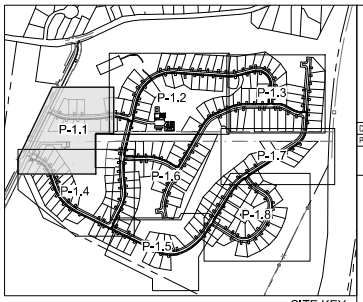
SHEET TITLE:
OVERALL PHOTOMETRIC PLAN

CLIENT:
SOUTH STREET VILLAGE, LLC
75 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE: 02-09-2022
SCALE: 1" = 120'
DESIGNED: JDA
JOB NO: 21-13
SHEET P-1.0

C:\Users\Jda\AppData\Local\Temp\AcPublish_2064\21-13 Hid O Dwg





SITE KEY
SCALE: 1"=600'

RSW Series

RSW™ LED Street Luminaire – Small, Medium, Large & Extra Large

Rev. Date: V51/180201

Product Description

The RSW Series, utilizing WaveMax® Technology, will transform the way utilities and municipalities light their residential streets, interchanges, and expressways. With the first viable LED streetlight at warm CCT, the RSW Series delivers up to 144 LPW, enhanced visual comfort with reduced glare and high color contrast leading to improved overall illumination using less energy. The RSW Series provides warm, inviting dark sky friendly lighting that makes good economic sense.

Applications: Residential roads, collector roads, multi-lane freeways, express ways, major roads, parking lots, and general area spaces

Performance Summary

WaveMax® Technology

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: 3,000 - 32,000

Efficacy: Up to 144 LPW

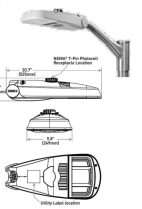
CRI: Minimum 70 CRI (3000K, 4000K & 5000K); 80 CRI (2700K, 3000K, 4000K & 5000K; 3L/5L/7L lumen packages only)

CCT: 2700K, 3000K, 4000K, 5000K

Limited Warranty*: 10 years on luminaire; up to 5 years for Synapse® accessories; 1 year on luminaire accessories

* See http://creelighting.com/warranty for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

RSW5



Luminaire	Weight*
RSW5	9.4 lbs. (4.3kg)

* RSW-3S, RSW-5S, or RSW-7LSS Accessories: add 0.4 lbs. (0.2kg)

RSW5/RSW6/RSW8 Luminaire – See page 14 for photos & dimensions

Ordering Information

Example: RSW5-B-HT-3ME-3L-27K8-UL-BY-N

Luminaire										
RSW		B	HT						H	
Family	Size	Series	Mounting*	Optic	Lumen Package***	CCT/CRI	Voltage	Color Options	Utility Label/Receptacle	Options
RSW	S Small M Medium L Large X Extra Large	B	HT Horizontal Tenon	2LO** Type II Low 2ME** Type II Medium 3ME** Type III Medium	Small 3L 3,000 Lumens 5L 5,000 Lumens 7L 7,000 Lumens Medium 9L 9,000 Lumens Large 12L 12,000 Lumens Extra Large 20L 20,000 Lumens 32L 32,000 Lumens	27K8 2700K, 80 CRI - Available only with 3L, 5L, 7L lumen packages 30K7 3000K, 70 CRI - Available only with 3L, 5L, 7L lumen packages 30K8 3000K, 80 CRI - Available only with 3L, 5L, 7L lumen packages 40K7 4000K, 70CRI 40K8 4000K, 80 CRI - Available only with 3L, 5L, 7L lumen packages 50K8 5000K, 80CRI - Available only with 3L, 5L, 7L lumen packages	UL Universal 120-277V HV Universal 347-480V - Available only with medium, large & extra large lumen packages	BK Black BZ Bronze GY Grey	N Utility Label and NEMA® 7-Pin Photocell Receptacle - Additional wattage label, per ANSI C136.15 - 7-pin receptacle per ANSI C136.41 - Photocell ordered D-10V dim leads - Requires photocell or shorting cap by others	GBLT Four Bolt Mounting - Mounts to 1.25" (32mm) IP, 1.66" (42mm) O.D. or 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon - Available only with large or extra large lumen packages SPD20KV 20kV Surge Protection - Requires standard 10kV surge protection DLL DALI Compatible - Available with 3L, 5L, 7L, 14L and 20L lumen packages - Available with 2700K, 4000K and 5000K CCT/CRI - Available with UL voltage - Not available with 5 or 9 options PP Pallet Packaging - Multiple luminaires ship small and medium luminaires - Multiple luminaires ship in 3s maximum per pallet for small; up to 22 maximum per pallet for medium OY1/OY2/OY3/OA/OB/OL/OS/OU/OY Field Adjustable Lumen Output - Must select QA, QS, QZ, or QY for small lumen package - Must select QA, QB, QL, QS, QU, QZ, QD, or QY for medium lumen package - Must select QY, QB, QT, QA, QS, QL, QU, QD, or QI for large or extra large lumen packages - Offers full range lumen adjustability - Luminaire may also be dimmed through 7-Pin receptacle with use of dimming control by others SS Stainless Steel Bolts SLL Stainless Steel Bolts Locked Lumen Output - Must select X2, X3, or X7 for small lumen package - Must select X7, X6, X5, X4, X3, X2, or X1 for medium lumen package - Must select X8, X7, X6, X5, X4, X3, X2, or X1 for large or extra large lumen packages - Lumen output is permanently locked to the setting selected - Includes wattage label for setting selected - Refer to pages 7-13 for power and lumen values - Dimming is only available through 7-Pin receptacle with use of dimming control by others

* Reference CPA and pole configuration suitability data on page 3.
** Not available with 5 or 9 options. Refer to Initial Delivered Lumen tables for accessory loss table on page 21.
*** Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values.

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

NO.	DATE	REVISIONS	APP'D BY
A	04-17-2024	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-15-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	01-12-2024	FINAL PLANS SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyncons-tants.com

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Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

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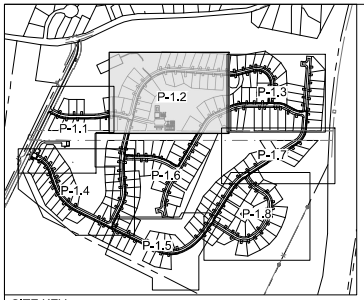
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, MIDDLE ROAD, MAINE

SHEET TITLE:
PHOTOMETRIC PLAN - 1

CLIENT:
SOUTH STREET VILLAGE, LLC
57 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.1

C:\Users\JAMOS\Documents\Projects\21-13 Hidden Hills\Civil\Plans\Photometrics\21-13 Photometric Plan - 1.dwg



SITE KEY
SCALE: 1"=600'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch =40 ft.

GRID NORTH

STATE OF MAINE
JEFFREY D. AMOS
3967
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

	NO.	DATE	REVISIONS	APP'D BY
G	03-12-2024	FINAL PLANS SUBMISSION TO CITY		JDA
F	08-16-2023	SUBMITTED FOR FINAL APPROVAL		JDA
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D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS		JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS		JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW		JDA
A	04-07-2022	PRELIMINARY SUBMISSION		JDA

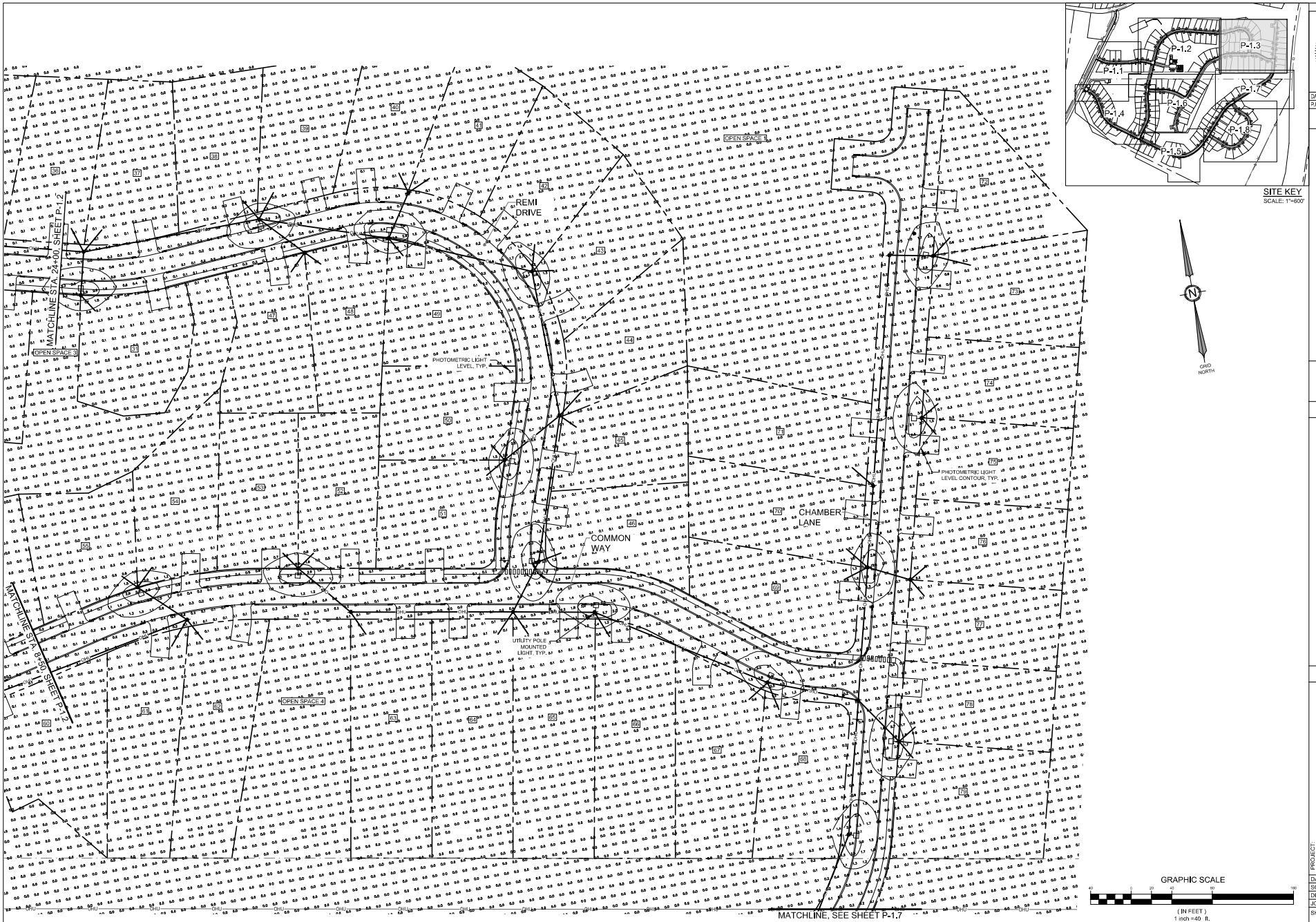
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
566 CONGRESS STREET
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

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PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
PHOTOMETRIC PLAN - 2
CLIENT:
SOUTH STREET VILLAGE, LLC
92 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.2

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SITE KEY
SCALE: 1"=600'

NO.	DATE	REVISIONS	APP'D BY
A	04-19-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
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DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

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41 CAMPUS DRIVE
KITTERY, MAINE 03904
OFFICE: (207) 956-5111 FAX: (207) 221-1317
www.terradynconsultants.com
565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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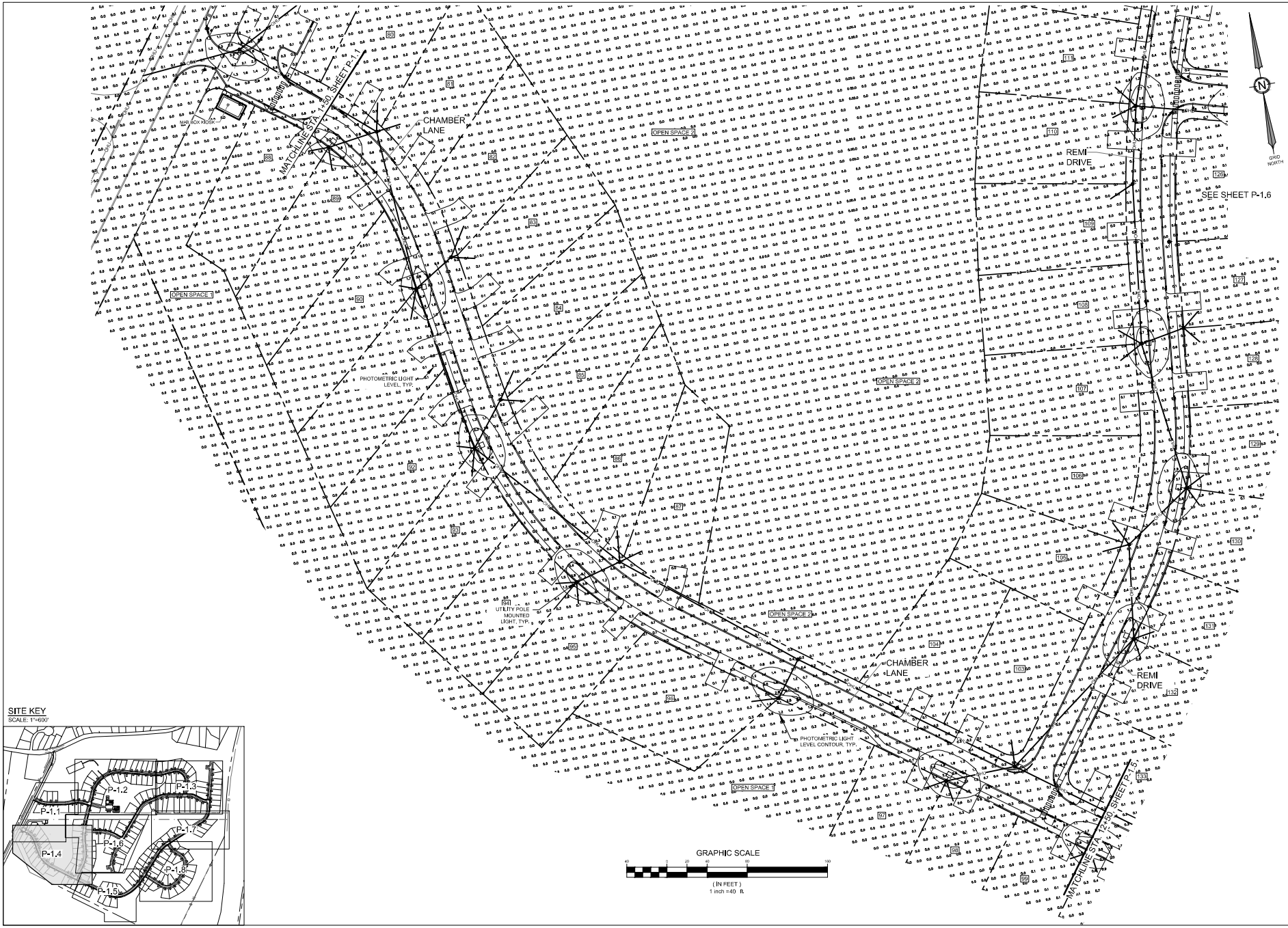
PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
PHOTOMETRIC PLAN - 3

CLIENT:
SOUTH STREET VILLAGE, LLC
100 MIDDLE STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.3

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SITE KEY
SCALE: 1"=600'

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NO.	DATE	REVISIONS	BY
A	04-19-22	PRELIMINARY SUBMISSION	APPD
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
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E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

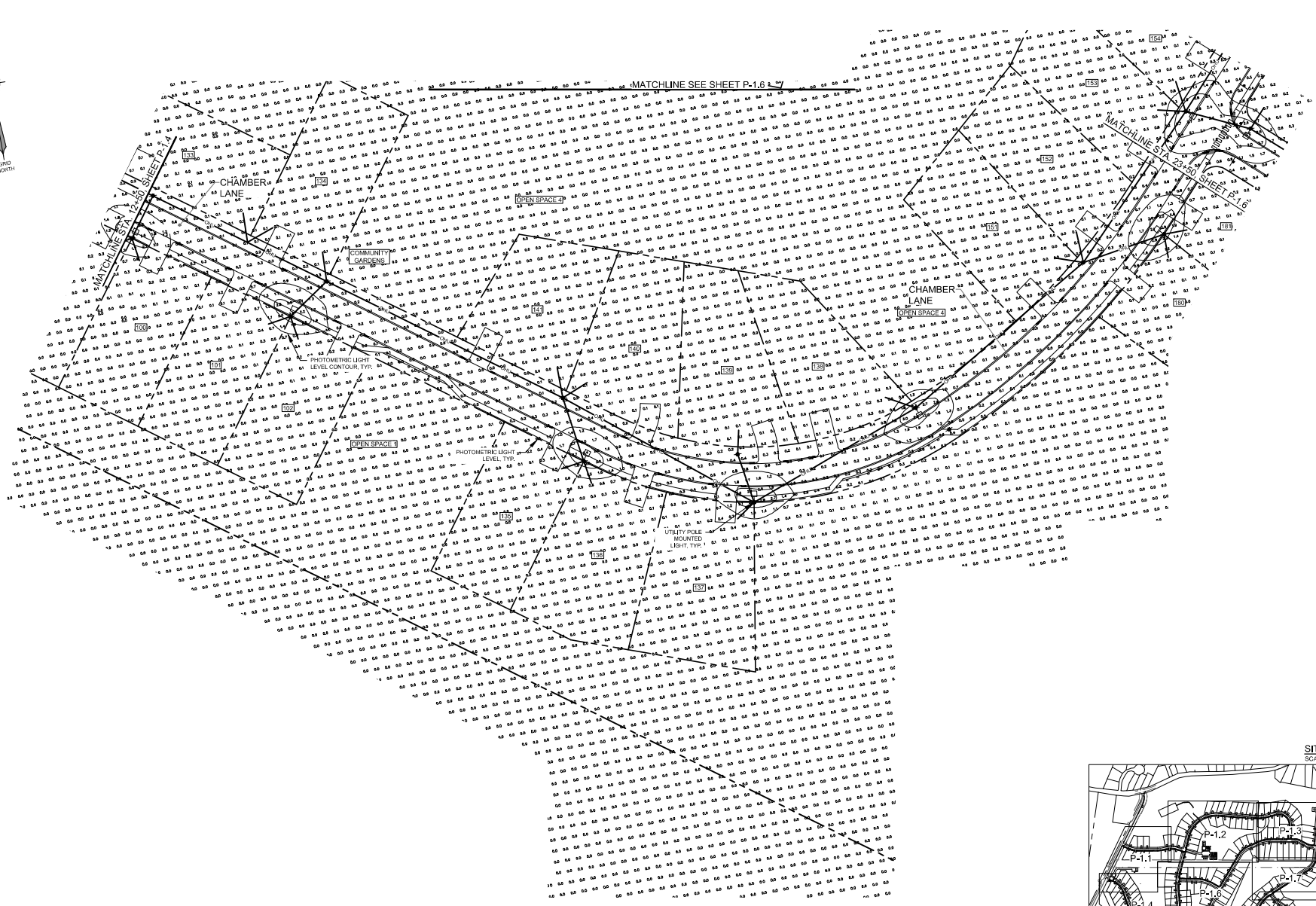
41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260
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www.terradyncons-tlants.com
565 CONGRESS STREET
PORTLAND, ME 04101

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PROJECT:
HIDDEN HILLS HOUSING PARK
YOUNG STREET, BIDDEFORD, MAINE
SHEET TITLE:
PHOTOMETRIC PLAN - 4
CLIENT:
SOUTH STREET VILLAGE, LLC
565 CONGRESS STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.4

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SITE KEY
SCALE: 1"=600'

STATE OF MAINE
JEFFREY D. AMOS
10167
REGISTERED PROFESSIONAL ENGINEER

DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY/ APP'D
G.	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F.	09-16-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E.	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D.	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C.	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B.	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A.	04-19-2022	PRELIMINARY SUBMISSION	JDA

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www.terradynconsultants.com
566 CONGRESS STREET
PORTLAND, ME 04102

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PROJECT:
HIDDEN HILLS HOUSING PARK
MAIN STREET, BIDDEFORD, MAINE

SHEET TITLE:
PHOTOMETRIC PLAN - 5

CLIENT:
SOUTH STREET VILLAGE, LLC
100 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.5

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SITE KEY
SCALE: 1"=600'

NO.	DATE	REVISIONS	BY
A	04-19-2022	PRELIMINARY SUBMISSION	JDA
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
D	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
E	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
F	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
G	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA

DATE: 03-12-2024
P.E. JEFFREY D. AMOS, PE 10167

41 CAMPUS DRIVE
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 304
PORTLAND, ME 04102

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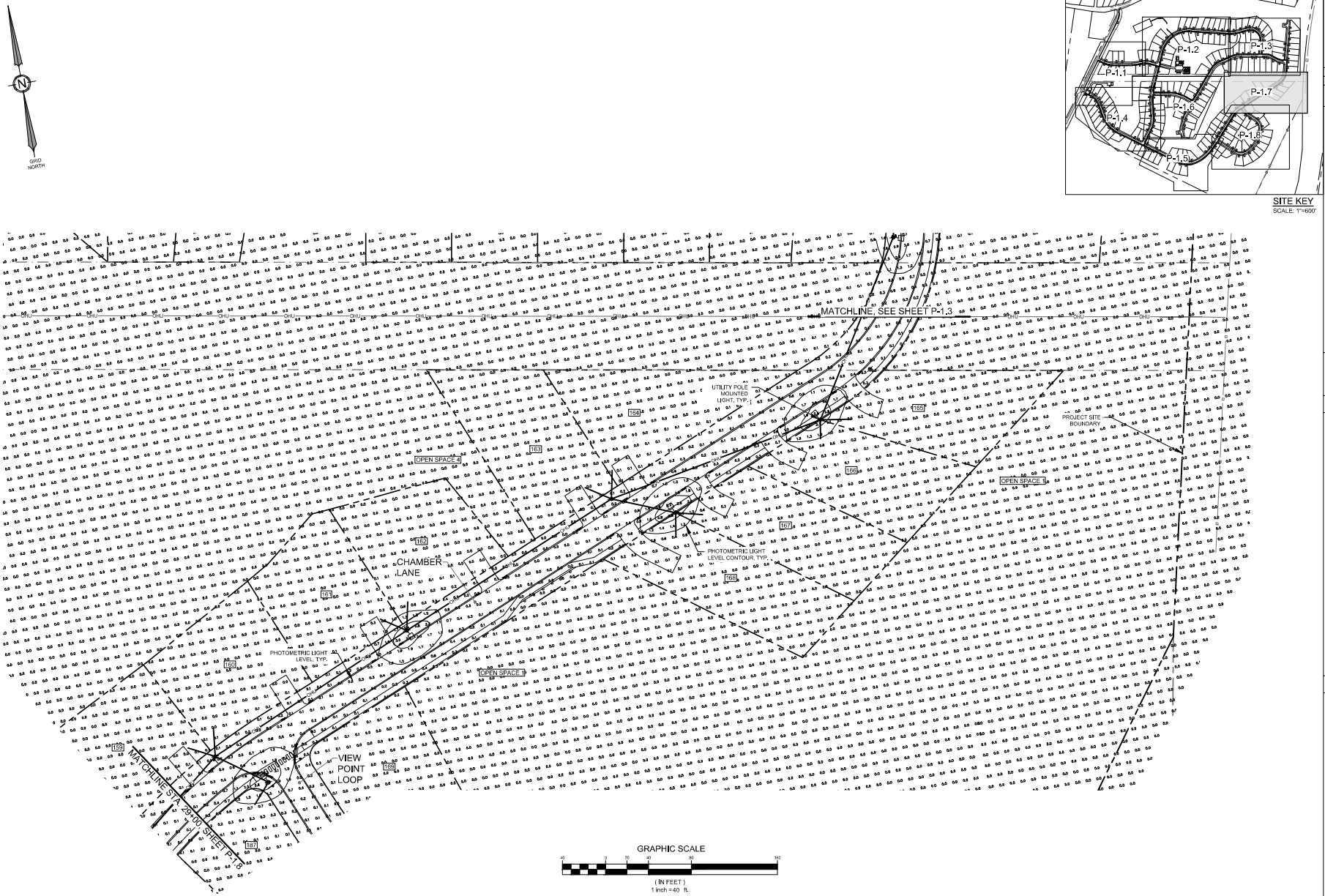
PROJECT:
HIDDEN HILLS HOUSING PARK
HILL STREET, BIDDEFORD, MAINE

SHEET TITLE:
PHOTOMETRIC PLAN - 6

CLIENT:
SOUTH STREET VILLAGE, LLC
50 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.6

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NO.	DATE	REVISIONS	BY
G.	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F.	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E.	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D.	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
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B.	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A.	04-19-2022	PRELIMINARY SUBMISSION	JDA

DATE: 03-12-2024

P.E. JEFFREY D. AMOS, PE 10167

STATE OF MAINE — JEFFREY D. AMOS — 10167 — REGISTERED PROFESSIONAL ENGINEER

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE, SUITE 3, NEW GLOUCESTER, ME 04260
565 CONGRESS STREET, PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
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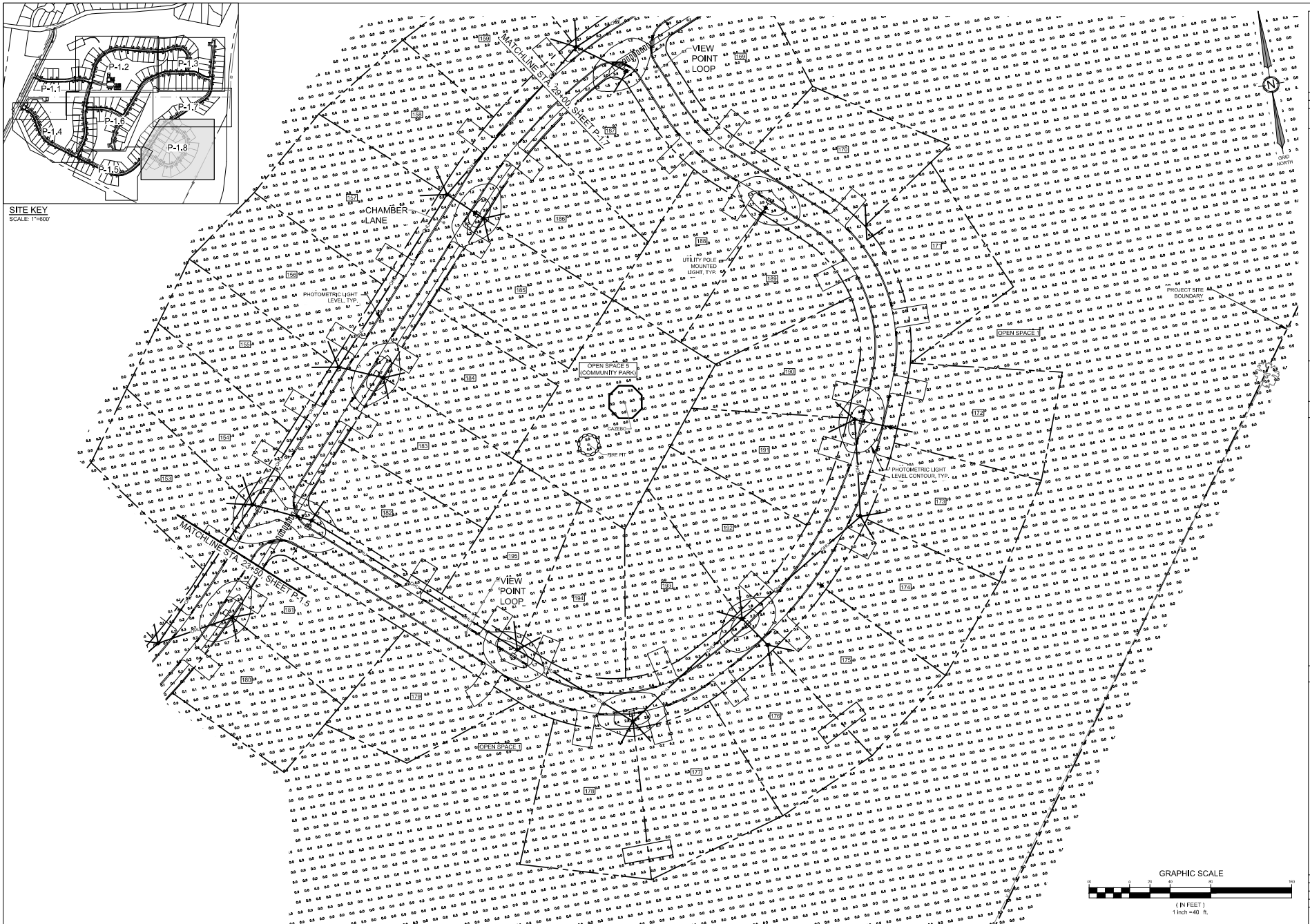
PROJECT:
HIDDEN HILLS HOUSING PARK
HIGH STREET, BIDDEFORD, MAINE

SHEET TITLE:
PHOTOMETRIC PLAN - 7

CLIENT:
SOUTH STREET VILLAGE, LLC
70 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.7

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NO.	DATE	REVISIONS	APP'D BY
G.	03-12-2024	FINAL PLAN SUBMISSION TO CITY	JDA
F.	09-15-2023	SUBMITTED FOR FINAL APPROVAL	JDA
E.	07-07-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
D.	03-27-2023	REVISE PER MDEP REVIEW COMMENTS	JDA
C.	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
B.	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
A.	04-19-2022	PRELIMINARY SUBMISSION	JDA

DATE: 03-12-2024
P.E.: JEFFREY D. AMOS, PE 10167

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TERRADYN CONSULTANTS, LLC
Civil | Engineering | Land Planning | Stormwater Design | Environmental Permitting
41 CAMPUS DRIVE
KITTERY, MAINE 03904
866 CONGRESS STREET
PORTLAND, ME 04102
OFFICE: (207) 956-5111 FAX: (207) 221-1317
www.terradynconsultants.com

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE:
PHOTOMETRIC PLAN - 8
CLIENT:
SOUTH STREET VILLAGE, LLC
782 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	P-1.8

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Whitten, Nan

From: Charles Drapeau
Sent: Friday, February 23, 2024 1:56 PM
To: Planning Board
Cc: LaFountain, Liam; Grohman, Martin
Subject: South Street

Hello,
My name is CharlieDrapeau , and I live on Cherryfield Ave. I've been watching the progress or lack of on the modular home subdivision. As an outsider, it appears that the process to approve is very slow. The last time that I checked with your secretary, Chamberlain was supposed to be on this month's meeting for approval. According to your secretary, that got missed because you're waiting for third party review. What's the point of a planning board , city engineer, and planner if you must go outside for review. I do not know Mr Chamberlain, but I am interested in this project.
I feel that if a developer of the mills were doing this, construction would be well underway. I would be very frustrated if I were trying to get this project through. I know several folks who are interested in type of community. I hope that Mr Chamberlain does not get fed up and drop the whole thing. This is over 55 years, and has no impact to our schools.

Perhaps if this raised on Channel 13 " On your side" this would get moving.

Charles Drapeau

Get Outlook for iOS

Whitten, Nan

From: joel nevers <joel_nevers@hotmail.com>
Sent: Thursday, April 25, 2024 4:20 PM
To: Whitten, Nan
Subject: Hidden Hills

EXTERNAL: This email originated from outside of the City of Biddeford email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sent from my iPhone
I live at 420 South Street.
From the turnpike overpass west toward the proposed Hidden Hills development on South Street, has anyone taken into consideration the large volume of traffic already existing on South Street?
The speed limit is 35mph but rarely is that speed limit obeyed. Vehicles from cars to heavy dump trucks generally speed at 40 to 50 mph, sometimes faster than that! For pedestrians walking on South Street that has only a very narrow shoulder is a seriously dangerous activity.
Biking on South Street is even more dangerous.
To increase traffic on South Street to the extent proposed can only further make a dangerous street more hazardous for pedestrians, bikers, and vehicles.
Is the City unaware the jeopardy already existing traveling on South Street for citizens?

CITY OF BIDDEFORD

Planning and Development Department

David Galbraith
City Planner & Deputy Director of Planning & Development
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
David.galbraith@biddefordmaine.org

FINDINGS OF FACT AND CONCLUSIONS OF LAW
Beachwood Development LLC
Longboard View Subdivision & Site Plan Approval
781 Pool Street (Tax Map 8, Lot 17-2)
May 1, 2024

RE: 2023.33 – Beachwood Development Final Subdivision & Site Plan Approval for an 8 Lot Residential Subdivision at 781 Pool Street

Pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has considered the application of Based on its review, including supportive data, public hearing testimony and related materials contained in the record, the Planning Board makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT:

	SUBJECT	***DATA/INFORMATION***
1.	Applicant:	Beachwood Development LLC 92 York Street geoff@bowleybuilders.com
2.	Owner of Property:	Same as Applicant
3.	Agent:	Michael Tadema-Wielandt, P.E. Terradyn Consultants 565 Congress Street, Suite 201 Portland, ME 04101
4.	Engineer/Surveyor:	Same as Agent
5.	Project Location:	781 Pool Street
6.	Project Tax Map #/Lot #:	Tax Map 8, Lot 17-2
7.	Existing Zoning:	CR-Coastal Residential
8.	Overlay Zoning:	Stream Protection, Limited Residential
9.	Existing Use:	Vacant Land
10.	Proposed Use:	8 Lot Residential Subdivision
11.	Approvals Required:	
12.	Uses in the Vicinity:	Residential
13.	Parcel Size:	25.45 acres
14.	Limits of Disturbance:	4.84 acres
15.	Drainage Watershed:	Etherington Pond

16.	Water Supply:	Kennebunk, Kennebunkport & Wells Water District
17.	Sewerage Disposal:	Individual Subsurface Wastewater
18.	Solid Waste Disposal:	Private Hauler
19.	Fire Protection:	City of Biddeford
20.	Other Non-City Permits Required:	
21.	LDR Attachment A: Fess Paid:	All Fees Paid

CONCLUSIONS OF LAW:

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;

2. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;

3. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;

4. The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;

5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;

6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;

7. The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;

8. The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;

9. The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;

10. The proposed use would be in compliance with Biddeford's Comprehensive Plan;

11. The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;

12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;

13. Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;

14. Adequate provision has been made to control erosion or sedimentation;

15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;

16. The proposed water supply would meet the demands of the proposed use for fire protection purposes;

17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;

18. The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;

19. When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.

APPROVAL GRANTED:

Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the proposed project summarized within the attached Staff report and pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has approved the application of Final Subdivision & Site Plan review for a proposed 8 Lot Residential Subdivision at 781 Pool Street (Tax Map 5, Lot 17-2) for the Beachwood Development LLC the recommended Findings of Fact (FOF) with the following Conditions of Approval (COA):

1. Standard Conditions of Approval apply.

2. There shall be no tree cutting / removal on any of the lots beyond the maximum lawn area as specified on the Overall Development Plan, Sheet C-3.4. There shall be NO tree clearing within any of the required setbacks with the exception of a single driveway, no wider than 15', to provide access to the proposed private street. Violations to this Condition of Approval shall be required to replace all removed trees at a 3 to 1 ratio in relation to the number of trees removed and / or caliper inches removed, as measured four (4) feet from grade. Fines may also be imposed as determined by the Director of Code Enforcement and the City Planner.

3. Prior to the scheduling of the required Pre-construction meeting the Applicant shall make any required changes to the project Civil Plans for the review and approval of the Public Works Director.

4. Bonding and Inspection Fees: Bonding and inspection fees shall be established prior to scheduling of the required Pre-construction meeting.

5. Modifications to Approved Development Plans: The project shall be constructed in accordance with the approved development plans. If any changes to the approved development plans are needed, the developer shall submit a letter requesting a "minor modification" to the approved development plans. The letter shall include plans showing the approved plans and proposed modifications which shall be approved, in writing, prior to the construction of any deviation from the approved development plans. Changes beyond the authority of the City Planner shall be reviewed and approved by the Planning Board.

6. Once stamped As-Built drawings are submitted to the Planning Department (clearly identifying what approved deviations and variances were installed based on the approved permit drawings), the City Engineering Department will conduct an inspection. The "as Built Checklist" shall be submitted for review and approval, for any performance guarantee release.

7. As-Built Drawings and CAD Files need to be submitted to the Planning & Engineering Departments **prior to a 'Site Punch list Inspection' and any bond release.**

8. York County Recorded Drawings: Applicant must submit copies of York County Registry of Deed drawings to Planning & Engineering Department **prior to Building Permit Issuance.**

9. Required Inspections:

    i. Erosion & Sediment Control Inspections
        1. Needs to be completed by a City-approved 3rd Party Inspector and paid by the Applicant via the inspection fee escrow being held by the City.
        2. Initial, monthly, and final inspections

3. The City's Engineering Department, at minimum, shall be notified for an initial E&S inspection prior to breaking ground.

ii. Copies of all inspection reports need to be submitted to the Engineering Department.

iii. Private right-of-way inspections: Private right-of-way / road and utility inspections shall be completed by the design engineer who shall certify that they have been constructed as approved, prior to the full or partial release of established bonding.

iv. Stormwater BMP Installation Inspections
1. Needs to be completed by the design engineer
2. Confirming stormwater facilities installed correctly per design
3. Inspection reports need to be submitted to the Engineering Department

v. Post-construction BMP Maintenance Annual Inspections
1. Needs to be completed annually by the design engineer or 3rd party inspector
2. Needs to assess the current condition of each BMP, what repairs are needed, and confirm on-going maintenance has occurred
3. Annual inspection reports need to be submitted to the Kristie Rabasca & Engineering Department.

_____
Larry Patoine Planning Board Chair

_____
Date

CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director/City Planner

DATE: April 24, 2024

RE: 2023.33 Site Plan and Subdivision Review of the Longboard View an eight (8) lot Subdivision by Beachwood Development LLC at 781 Pool Street (Tax Map 5, Lot 17-2) in the Coastal Residential and partially within the Limited Residential Coastal Overlay District.

MEETING DATE: May 1, 2024 at 6:00 PM

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1. INTRODUCTION



Case 2023.33: Longboard Subdivision - 781 Pool Street-8 lot subdivision with a private road (Tax Map 5, Lot 17-2) in the Coastal Residential and Limited Residential Coastal Overlay District.

Planning Board Hearing date: May 1, 2024.

The Beachwood Development LLC proposes to create an 8-lot single family residential subdivision at 781 Pool Street in the vicinity of Maddox Pond Rd. and Peter Pond Ln. This project would include a private street connected to Pool Street. The net residential area of the parcel is 8.93 acres. This application involves proposed development of property at 781 Pool Street (Tax Map 5, Lot 17-2), located within Coastal Residential zone and partially within the Limited Residential Coastal Overlay District. Additionally, this parcel abuts a stream protection overlay although the overlay does not extend to the parcel itself. The development triggers Maine Site Law Review, for which the City of Biddeford has Municipal Capacity Authority. The project will be served by a proposed waterline extension down Pool Street to the site, and each lot has a designed septic system. This project received Preliminary Subdivision Approval on September 20, 2023. The Applicant is before the Board requesting Final Subdivision approval.

2. PROJECT DATA/INFORMATION

1.	Applicant:	Beachwood Development LLC 92 York Street
2.	Owner of Property:	Same as Applicant
3.	Agent:	Terradyn Consultants, LLC Michael Tadema-Wielandt, P.E. 565 Congress Street, Suite 201 Portland, ME 04101
4.	Surveyor:	Same as Agent
5.	Project Location:	781 Pool Street
6.	Project Tax Map #/Lot #:	Tax Map 5, Lot 17-2
7.	Lot Size:	25 Acres
8.	Base Zoning:	Coastal Residential
9.	Overlay Zoning:	Limited Residential Coastal Overlay District
10.	Existing Use:	Vacant Land
11.	Proposed Use:	Residential Single Family Housing
12.	Approvals Required:	
13.	Uses in the Vicinity:	Residential
14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	Maine DEP Stormwater
23.	LDR Attachment A: Fees Paid:	Yes
25.	Planning Board Review History: Sketch Plan Review – June 15, 2023; Preliminary Review September 12, 2023; Final Plan Review May 1, 2024.	

3. REVIEW PROCESS

Per City ordinance, this application is subject to Subdivision review and approval (Code of Ordinances, Chapter 66). Subdivision applications generally follow a three-tier approval process beginning with a Sketch Plan review, and followed by a preliminary plan review and approval and a final plan approval. The project received Preliminary Subdivision Plan approval on September 20, 2023 and their Final Subdivision application was submitted prior to the 6 month expiration of their Preliminary Plan. At this time the Applicant is seeking Final Subdivision approval.

4. STAFF REVIEW

- **APPLICATION COMPLETENESS:** The applicant has submitted a complete application, featuring all required elements for a Site Plan and Subdivision Amendment.

- **ZONING:** The proposed residential single-family subdivision are permitted uses within the Coastal Residential, and the Limited Residential Coastal Overlay District.

- **REVIEW STANDARDS:**

  Staff finds the application to satisfy City subdivision and site plan requirements. The major site details such as roadways, building envelopes, tree clearing areas, parking, landscaping, designs and locations have been finalized so the plan being reviewed the Board are what will be constructed on the face of the earth.

  - Maine DEP Stormwater Permit: The project requires a Maine DEP Stormwater Permit, which the Applicant has provided the City a copy for our records.

- **WAIVERS:** The applicant is not seeking any waivers at this time.

6. STAFF RECOMMENDATION

Staff recommends the Board approve the Final Subdivision Plans. Should the Board wish to formally make a motion sample motions are provided below:

SAMPLE MOTIONS

A. Motion to Approve: I motion to APPROVE Case # 2023.33 Site Plan and Subdivision Review for Beachwood Development LLC at 781 Pool Street (Tax Map 5, Lot 17-2) in the Coastal Residential and partially within the Limited

Residential Coastal Overlay District, with the adoption of the attached Findings of Fact (FOF) and recommended Conditions of Approval (COA) as written.

B. *Motion to Deny I motion to DENY Case* # 2023.33 Site Plan and Subdivision Review for Beachwood Development LLC at 781 Pool Street (Tax Map 5, Lot 17-2) in the Coastal Residential District and partially within the Limited Residential Coastal Overlay District*, for the following reasons:*

1) _____.
2) _____.
3) _____.

A. *Motion to Table: I motion to TABLE Case* # 2023.33 Site Plan and Subdivision Review for Beachwood Development LLC at 781 Pool Street (Tax Map 5, Lot 17-2) in the Coastal Residential and partially within the Limited Residential Coastal Overlay District*, for the following reasons:*

1) _____.
2) _____.
3) _____.

TERRADYN CONSULTANTS, LLC

207.926.5111
info@terradynconsultants.com
www.terradynconsultants.com

January 23, 2024 Project #23-023

David Galbraith, City Planner; Director of Planning & Development
City of Biddeford
205 Main Street
Biddeford, ME 04005

SUBJECT: FINAL SUBDIVISION PLAN SUBMISSION - UPDATE
LONGBOARD RIDGE SUBDIVISION
CASE #2023.33

Dear David:

On behalf of Beachwood Development Fund LP, attached are Final Subdivision Plans for a proposed Longboard Ridge Subdivision, an 8-lot single-family residential subdivision located at 781 Pool Street in Biddeford. The Planning Board granted Preliminary Approval for the project on September 20, 2023.

Below are brief summaries of the existing site characteristics and the proposed project, including a description of new information that has been prepared since the Board granted preliminary approval.

EXISTING PROJECT SITE

The project site is approximately 25.45 acres in size and is identified as Lot 17-2 on Biddeford Tax Map 5. The site is located in the Coastal Residential District with small areas in the Stream Protection and Limited Residential Overlay Zones.

The parcel is mostly undeveloped woodland with pockets of freshwater wetlands. Peter Pond Lane, a private road, is located on the site, following the southern property boundary. It is used to access abutting residential properties south of the site. An unnamed stream enters the site from the north side of Pool Street and flows south along the site's western boundary before crossing under Peter Pond Lane towards Etherington Pond.

Longview Partners delineated freshwater wetlands on the project site in April of 2022. A copy of the Wetland Summary Report is provided in Attachment 1.

PROPOSED PROJECT

The applicant is proposing to develop an eight-lot single-family residential subdivision on the site. The proposed lots and infrastructure will be located in the eastern part of the site, away from the forested wetlands and stream located to the west. Proposed lots range in size from 1.11 acres

(Lot 2) to 2.16 acres (Lot 8), and 12.37 acres will be preserved as open space. The proposed lots will be accessed off Pool Street, via a new 934 linear-foot road named Longboard Lane, designed to meet the town's minor nonurban street standard, with 10' paved lanes and 2' gravel shoulders. Lots will feature individual subsurface wastewater disposal fields. Designs for each wastewater disposal system have been completed by Longview Partners, and are provided in Attachment 2. The location of all soil test pits and proposed septic field locations are shown on the Final Subdivision Plan. Water will be provided by an extension of the Kennebunk, Kennebunkport, and Wells Water District's (KKWWD) water main in Pool Street. Electric and telecommunications services will be installed underground from Pool Street.

The project was designed to meet the stormwater performance standards of the City of Biddeford Subdivision Regulations. Stormwater runoff from the new roadway will be collected in a vegetated roadside ditch and directed to an underdrained soil filter located west of the proposed road. The soil filter will treat pollutants from the runoff prior to discharging it to the western part of the site, where it will flow to the existing stream and Etherington Pond. The design reduces the total area draining towards the eastern part of the site, where neighboring property owners expressed concerns about flooding. Peak rates of stormwater runoff from the site will be limited to pre-development levels. More information on stormwater runoff is provided in the Stormwater Management Report located in Attachment 6.

The applicant will construct the road and common utility and stormwater management infrastructure and will sell undeveloped lots. Lot development will be undertaken by lot buyers and will be limited to 5,000 S.F. of impervious area and 20,000 S.F. of lawn area in accordance with the assumptions made in the stormwater management report. This requirement is noted on the Subdivision Plan (General Note 16), and conceptual lot development including driveways, houses, and clearing limits is shown on the Overall Development Plan (Sheet C-3.2).

The proposed open space, road, and common infrastructure will be owned and maintained by the Longboard Ridge Owners Association. A draft Declaration of Covenants, Conditions, Restrictions, and Easements is provided in Attachment 3.

We received peer review comments from Tom Saucier related to the preliminary subdivision application materials. A response letter addressing each comment is provided in Attachment 4.

STATE & FEDERAL APPROVALS

In addition to subdivision approval, the project has received the following state and federal land use permits and approvals:

- Stormwater Permit-By-Rule from the Maine Department of Environmental Protection (MDEP)
  Submitted: October 26, 2023
  Accepted: November 14, 2023

- Section 404 Wetland Impact Permit from the U.S. Army Corps of Engineers
  Approval for 660 square feet of wetland impact on Lot 3
  Permit #: NAE-2023-02478
  Approved: January 3, 2024

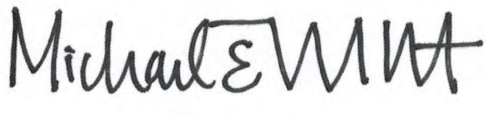
- Entrance Permit from Maine Department of Transportation
  Permit #: 38786
  Approved: December 14, 2023

Copies of all permits are provided in Attachment 5.

CLOSURE

In addition to the information and materials described above, enclosed is a check for $825 for the Final Subdivision Application Fee. We request to be added to the Planning Board's next available meeting agenda to present this information to the Board and seek final approval. If you have any questions or require additional information, please contact me at 207-632-9010 or mtw@terradynconsultants.com.

Sincerely,
TERRADYN CONSULTANTS, LLC



Michael Tadema-Wielandt, P.E.
Vice President

cc. Geoff Bowley, Beachwood Development Fund LP

Attachments:
1 – Application Drawing Checklist
2 – Wetland Delineation Report
3 – Septic System Designs (HHE-200 Forms)
4 – Draft Homeowners Association Documents
5 – Salt Management Plan
6 – Cost Estimate Worksheet
7 – Peer Review Comment Response Letter
8 – Copies of State & Federal Permits
9 – Stormwater Management Report
10 – Ability to Serve

Attachment 1

Application Drawing Checklist

CITY OF BIDDEFORD - SITE PLAN APPLICATION DRAWING CHECKLIST *LAST REVISED: 01/23/24*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant for any Site Plan submittal to the Planning Department.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing submittal information with non-acceptable reasoning will be rejected.
4. Items in **BLACK** are required for 'Preliminary Site Plan' approval & 'Final Site Plan' approval.
5. Items in **BLUE** are only required for 'Final Site Plan' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	Longboard Ridge Subdivision
Planning Board # (if available):	2023.33
Applicant Name/Info:	Terradyn Consultants
Submittal #/Type (Prelim/Final):	Final
Submittal Date:	1/23/2024

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE		CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**				
A	Drawing specific legends (linetypes, hatches, etc.)	YES			
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	YES			
C	North arrows, standard engineering scale viewports, dated revision blocks	YES			
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	YES			
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	YES			
2	**COVER SHEET**				
A	Project Name & Property Address	YES			
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	YES			
C	Site Location Map	YES			
D	Sheet Set List of Drawings	YES			
E	Tax Map and Lot ID	YES			
F	Zoning & Shoreland Zone Information	YES			
G	Existing Use Description	YES			
H	Proposed Use Description	YES			
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	NO	NO WAIVERS REQUESTED		
J	Name of Drainage Watershed	YES			
K	Within the MS4 Urbanized Area (Yes/No)	NO	NOT IN MS4 URBANIZED AREA		
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	YES			
M	Within the 100-year Flood Zone (Yes/No)	YES	PROPERTY WITHIN 100-YEAR FLOOD ZONE - PROPOSED PROJECT WILL HAVE NO IMPACT		
N	Public Road Proposed (Yes/No)	NO	NO PROPOSED PUBLIC ROAD		
O	Private Road Proposed (Yes/No)	YES			
P	Public Sewer Connection (Yes/No); if yes, need to include a proposed sewer flow calculation per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	NO	PRIVATE SEPTIC PROPOSED ON SITE		
Q	Public Storm Drain Connection (Yes/No)	NO	NO PROPOSED PUBLIC STROM DRAIN CONNECTION		
R	Limits of Disturbance in acres	YES			
S	Pervious Land Cover square footage, existing and proposed	YES			
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	YES			
U	Building Roof square footage, existing and proposed	NO	NO EXISTING OR PROPOSED BUILDINGS ON PROJECT SITE		
V	Assigned Planning Board Number	YES			
W	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)	YES			
3	**EXISTING CONDITIONS PLAN**	**NO**	**ALL INFORMATION BELOW PROVIDED IN SURVEY UNLESS INDICATED OTHERWISE**		
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	YES			
B	Survey Benchmark Locations (with XYZ Coordinates annotated)	YES			
C	Property & Right-of-Way Lines	YES			
D	Boundary line information (bearings, distances, etc.)	YES			
E	Property pin and monumentation locations	YES			
F	Existing easements with proper ownership identified	YES			
G	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	YES			
H	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES			
I	100-year Flood Zone Limits & Elevation	YES			
J	USDA-NRCS Soil Boundaries and Labels	NO	INFORMATION PROVIDED IN STORMWATER REPORT AND WATERSHED MAP		
K	Existing contours with adequate contour labelling; minimum 1' contour interval	YES			
L	Existing building FFEs annotated	NO	NO EXISTING BUILDINGS ARE LOCATED IN THE PROJECT AREA		
M	Spot elevations for existing building corners, door entrances, accessible parking/walkways, road centerlines, and bottom/top of curbs	NO	NO EXISTING BUILDINGS, OR CURB ARE LOCATED IN THE PROJECT AREA		
N	Existing buildings & structures	YES			
O	Existing pavement areas & number of parking spaces	NO	NO EXISTING BUILDINGS OR PARKING AREAS ARE LOCATED IN THE PROJECT AREA		
P	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	NO	NO ADA INFRASTRUCTURE PRESENT		
Q	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	YES			
R	Existing signage and striping	YES			
S	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	YES			
T	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES			

	U	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	YES			
	V	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	YES			
	W	Location of any borings, drinking wells, and monitoring wells	YES			
4		**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**	**NO**	**ALL INFORMATION SHOWN ON PLAN AND PROFILE UNLESS OTHERWISE NOTED**		
	A	Limits-of-disturbance outlined and acreage annotated	YES			
	B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	INFORMATION PROVIDED IN SUBDIVISION PLAN		
	C	100-year Flood Zone Limits	YES			
	D	Callout existing site features to be demolished/removed/replaced	NO	NO EXIISTING SITE FEATURES TO BE DEMOLISHED/REMOVED OR ABANDONED-IN-PLACE		
	E	Callout existing utilities to be demolished/removed/abandoned-in-place	NO	NO EXIISTING SITE FEATURES TO BE DEMOLISHED/REMOVED OR ABANDONED-IN-PLACE		
	F	Hatch existing buildings and pavement to be removed	NO	NO EXISTING BUILDINGS LOCATED WIHTIN PROJECT AREA		
	G	Construction Entrance location(s)	YES			
	H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	YES			
	I	Stockpile and staging area(s) identified (with proper perimeter control)	NO	NO STOCKPILE STAGING AREAS REQUIRED		
	J	Inlet protection location(s)	YES			
	K	Note requiring contractor to implement dust control measures throughout construction	YES	INFORMATION PROVIDED IN DETAILS		
	L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	YES			
	M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping	NO	NO GROUNDWATER EXPECTED		
	N	If large development is proposed with an extensive underground stormwater conveyance network, show sediment trap/basin location(s) needed for constructability/phasing; provide sizing calculations	NO	NO EXTENSIVE UNDERGROUND STORMWATER CONVEYANCE NETWORK EXPECTED		
5		**SITE PLAN/SUBDIVISION PLAN**				
	A	Partial Site Plans needed for any viewport scale greater than 1"=20'	NO	APPROPRIATE INFORMATION PROVIDED ON PROPOSED SUBDIVISION PLAN		
	B	Existing property and right-of-way lines	YES			
	C	Proposed subdivision lot lines and labels	YES			
	D	Required Zoning Setbacks shown with dimensions and annotation	YES			
	E	Bulk requirement summary table (zoning/parking calculations)	YES			
	F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES			
	G	100-year Flood Zone Limits	YES			
	H	Proposed building outlines, door entrances and loading docks	NO	NO NEW BUILDINGS PROPOED		
	I	Proposed building labels	NO	NO NEW BUILDINGS PROPOED		
	J	Proposed road extents; provide clear annotation if roads will be public or private	YES			
	K	Proposed parking and accessible parking locations; annotate parking space counts	NO	NO PARKING PROPOSED		
	L	Proposed signage, parking striping, and traffic striping	YES			
	M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	NO	NO ADA INFRASTRUCTURE PROPOSED		
	N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	YES			
	O	Separate hatching for buildings, sidewalks, pavement, landscaping	YES			
	P	Proposed landscaping; detailed landscaping design should be on separate plans	NO	NO LANDSCAPING PROPOSED		
	Q	Designated snow storage areas	NO	NO DESIGNATED SNOW STORAGE PROPOSED		
	R	Proposed dumpster locations and trash removal access	NO	NO DUMPSTER LOCATION PROPOSED		
	S	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	NO	NO DRIVING ASILES PARKING, SIDEWALKS AND LOADING DOCKS PROPOSED		
	T	Radial dimensions for all curbs, landscaped islands, sidewalks	NO	NO CURB, LANDSCAPED AREAS OR SIDEWALKS PROPOSED		
	U	Road centerline stationing shown, labelled every 0+50' with curve data	YES			
	V	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	YES			
	W	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	YES			
	X	Planning Board signature block for final recording	YES			
6		**GRADING PLAN**				
	A	Partial Grading Plans needed for any viewport greater than 1"=20'	YES	UTILITY AND GRADING DETAIL VIEWPORTS ADDED IN SHEET C-3.2		
	B	Limits-of-disturbance outlined and acreage annotated	YES	LIMITS OF DISTURBANCE OUTLINES BY SILT FENCE		
	C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	NO	NO PROPOSED BUILDINGS		
	D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	YES			
	E	Proposed contours with adequate contour labelling; minimum 1' contour interval	YES			
	F	Detailed grading for all ditches, swales, outfalls, and riprap	YES			
	G	All proposed contours tie-into existing contours at limits-of-disturbance outline	YES			
	H	Existing spot elevations for all asphalt and curb tie-in locations	YES			
	I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES			
	J	100-year Flood Zone Limits	YES			
	K	Proposed spot elevations for all important roadway geometric points and/or on a 50' maximum interval: low/high points, PC/PT, road centerline, edge-of-asphalt	YES			
	L	Proposed spot elevations for all curblines (bottom/top-of-curb) and sidewalks	NO	NO PROPOSED CURB LINE		
	M	Proposed spot elevations for all parking and drive aisle geometry points	NO	NO PROPOSED PARKING OR DRIVE AISLES		
	N	Proposed spot elevations for all building corners and door-entry locations	NO	NO PROPOSED BUILDINGS		
	O	Proposed retaining wall/loading dock elevations (bottom/top of wall)	NO	NOT PROPOSED RETAINING WALL OR LOADING DOCK		
	P	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	NO	NOT PROPOSED ADA INFRASTRUCTURE		
	Q	Proposed % slope arrows for all ADA parking spaces and sidewalks	NO	NOT PROPOSED ADA INFRASTRUCTURE		
	R	Proposed longitudinal % slope arrows for drainage ditch centerlines	YES			

	S	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	YES			
	T	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)	YES			
7		**ROAD PROFILES (if public/private road proposed)**				
	A	Existing surface; dashed and screened	YES			
	B	Proposed surface; continuous and bold	YES			
	C	Corresponding centerline stationing and curve data annotation	YES			
	D	Road cross-section including proposed surface cross slopes; include multiple sections for various road cross slope conditions proposed (crowned, superelevated)	NO	PROVIDED IN TYPICAL CROSS SECTION DETAIL SHEET		
	E	Horizontal and vertical scale bars	YES			
	F	Clear annotation if proposed road will be public or private	YES			
	G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	NO	PROVIDED IN SUBDIVISION PLAN		
	H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	NO	PROVIDED IN SUBDIVISION PLAN		
8		**UTILITY PLAN**	**NO**	**ALL INFORMATION BELOW PROVIDED IN PLAN/PROFILE UNLESS INDICATED OTHERWISE**		
	A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	YES			
	B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	YES			
	C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	YES			
	D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	YES			
	E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES			
	F	Proposed storm culverts, outfalls, and riprap locations and sizes	YES			
	G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	NO	NO STORMWATER INFRASTRUCTURE PROPOSED		
	H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	YES			
	I	Flow directional arrows for storm & sewer pipes	YES			
	J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	YES			
	K	All storm drains must be sized to convey the 25-year storm	YES			
	L	Sewer force main sizes and invert elevations	NO	PRIVATE SEPTIC PROPOSED ON SITE		
	M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W)	NO	PRIVATE SEPTIC PROPOSED ON SITE		
	N	Grease trap & oil-water separator locations, sizes, elevations	NO	NO GREASE TRAP AND & OIL-WATER SEPARATOR PROPOSED		
	O	Water, gas, electric, and telecom sizes labelled	YES	CMP TO PROVIDE SIZE OF ELEC DURING CONSTRUCTION PHASE		
9		**UTILITY PROFILES**				
	A	Utility profiles for **all** gravity storm drains and sewer pipes, including all laterals, catch basins, culverts, and outfalls; profiles preferred to be aligned on the pipe centerline (not superimposed on the road centerline)	YES			
	B	Existing surface; dashed and screened	YES			
	C	Proposed surface; continuous and bold	YES			
	D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	NO	NO STRUCTURES PROPOSED		
	E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	YES	TABLE PROVIDED		
	F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated	YES			
	G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated	YES			
	H	Known ledge or groundwater elevations	NO	NOT ENOUGH INFORMATION		
	I	For all storm drains, 25-year HGL must be shown on profiles with starting tailwater condition identified	NO	NO STORM DRAINS		
	J	For storm outfalls, include riprap sizing and grading extents	YES			
	K	Horizontal and vertical scale bars	YES			
10		**DETAILS**				
	A	Road section detail, including pavement & gravel depths	YES			
	B	Sidewalk, paver, crosswalk, and any other pavement section details	YES			
	C	Pavement sawcut detail	YES			
	D	Utility trench/backfill detail	YES			
	E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	YES			
	F	Signage, striping, and ADA details	YES			
	G	E&S notes and details; only show applicable/proposed measures	YES			
	H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	YES			
	I	Storm outfall & riprap details	YES			
	J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	YES			
	K	Pump station, grease trap, and oil-water separator details	NO	NO GREASE TRAP AND & OIL-WATER SEPARATOR PROPOSED		
	L	Conduit section details	YES			
	M	Miscellaneous details (as needed)	YES			
11		**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**				

A	As required by ordinance; at a minimum: locations, counts, and species/models must be identified	NO	NO LIGHTING OR LANDSCAPING PROPOSED		
B	Landscaping & lighting details	NO	NO LIGHTING OR LANDSCAPING PROPOSED		
12	**DOCUMENTS/REPORTS/CALCULATIONS**				
A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction v. Site Punchlist/As-Built Inspections post-construction	YES			
B	Predevelopment & Post-development Drainage Area Maps, including: i. Subdrainage areas delineated and labeled ii. Points of Interest/Analysis shown and labeled iii. Hatching for different land cover areas (impervious, pervious, gravel) iv. Time of concentration (Tc) paths & durations v. Four City-standardized stormwater summary tables	YES			
C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	YES			
D	A Performance Guarantee Cost Estimate utilizing Planning's template	YES			
E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	NO	NO SLODA SUBMITTAL REQUIRED		
F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches) via the rational method; starting tailwater conditions/documentation must be clearly identified	YES			
G	If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies	YES			
H	Sizing calculations for any SWM water quality BMP or detention facility	YES			
I	A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: i. Annual maintenance requirements ii. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed iii. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	YES			
J	Salt Management Plan	YES			
K	Sewer pump station sizing calculations	NO	NO SEWER PUMP STATION PROPOSED		
L	Sewer pump station maintenance plan	NO	NO SEWER PUMP STATION PROPOSED		
M	Grease trap sizing calculations	NO	NO GREASE TRAP PROPOSED		
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	YES			
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	YES			

Attachment 2

Wetland Delineation Report

LONGVIEW PARTNERS, LLC

ENVIRONMENTAL PERMITTING SPECIALISTS

Wetland Summary Report

Prepared for

Terradyn Consultants, LLC

(N/F Beachwood Development Fund)

781 Pool Street

Biddeford, Maine

November 2023

6 Second Street
Buxton, Maine
207-807-1739

WETLAND SUMMARY
prepared for
Terradyn Consultants, LLC
781 Pool Street
Biddeford, Maine

Longview Partners, LLC was contracted by the previous property owner in March of 2022 to conduct wetland delineation on 25.30+/- acres located along Pool Street and Peter Pond Road in Biddeford. Longview Partners soil and wetland scientists conducted the identification, delineation, and submeter GPS location of wetland boundaries on April 13 and 20, 2022 utilizing project limits as identified by Terradyn Consultants.

Scope of Work , Study Limits and Field Methodology

Wetland delineation took place on 25.30+/- acres along Pool Street and Peter Pond Road. Longview Partners, LLC field staff consisted of a Licensed Soil Scientist and a Professional Wetland Scientist. Wetlands on-site were delineated in accordance with the US Army Corps of Engineers *Wetlands Delineation Manual* (version 1987) *with Regional Supplements* and wetland boundaries (as well as other site features) were located using submeter GPS.

Wetland Types Identified within Study Limits

The US Army Corps of Engineers *Wetlands Delineation Manual* (version 1987) *with Regional Supplements* outlines a three-parameter approach to the identification of wetlands.

Wetlands have the following general diagnostic environmental characteristics per the above-referenced *Manual:*

(1) Hydrophytic Vegetation: Hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic conditions

(2) Hydric Soil: Soils are present and have been classified as hydric, or they possess characteristics that are associated with reducing soil conditions

(3) Hydrology: The area is inundated either permanently or periodically at mean water depths less than 6.6 ft, or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation

All three parameters must be evident for land to be classified as wetland. Maine has a broad range of types of wetland that can be identified and classified. Freshwater wetlands are classified as the following: forested wetland, scrub-shrub wetland, wet meadows, and emergent wetland. Within the study area just one wetland type was identified.

Forested Wetland

The majority of the wetlands within the study area consist of forested, freshwater wetland. These wetlands generally occur in gently-sloping to nearly level portions of the topography. These wetlands are not located within a floodplain of a stream or a pond. Seven areas of "naturally occurring" vernal pool habitat were identified during the delineation. Each pool (identified as Pool A, Pool B, Pool C, Pool D, Pool E, Pool F, and Pool G) was visited three times throughout the official counting period of April and May of 2022. While amphibian indicator species egg masses were observed in Pool E, Pool

F, and Pool G, none of the pools contained enough egg masses for inclusion as a *Significant* vernal pool per Maine Department of Environmental Protection *Natural Resources Protection Act* definitions.



Forested Wetland with Non-*significant* Vernal Pool Habitat

Predominant plant species identified were Interupted Fern (*Osmunda claytoniana*), Sensitive Fern (*Onoclea sensibilis*), Cinnamon Fern (*Osmundastrum cinnamomeum*), Ostrich Fern (*Matteuchia struthiopteris*), and several varieties of sedge in the herbaceous layer. Sphagnum moss is also dominant in the wettest locations. In the sapling layer the predominant plant species identified were Highbush Blueberry (*Vaccinium corymbosum*), Striped Maple (*Acer pensylvanicum*), and Speckled Alder (*Alnus incana*). The predominant tree species found along the wetland boundary were Red Maple (*Acer rubrum*), and White Pine (*Pinus strobus*), The White Pine has morphologically adapted to living in a wet area through buttressing of roots.



Typical Forested Wetland Area of Site

Soils observed in wetland areas have a seasonal high groundwater table found less than 7 inches from the mineral surface of the soil. The shallowness of the seasonal high groundwater table is most likely due to the shallow depth to bedrock or hardpan layer in the soils in the study area. The USDA Natural Resources Conservation Service classifies soils in wetland areas of the site as *Lyman-Rock Outcrop Complex*.

Evident wetland hydrology in these forested areas consisted of areas of surface water runoff, water-stained leaves, and saturation. Areas of standing water are evident within tree-throw locations which is common on sites with shallow-to-bedrock soils.

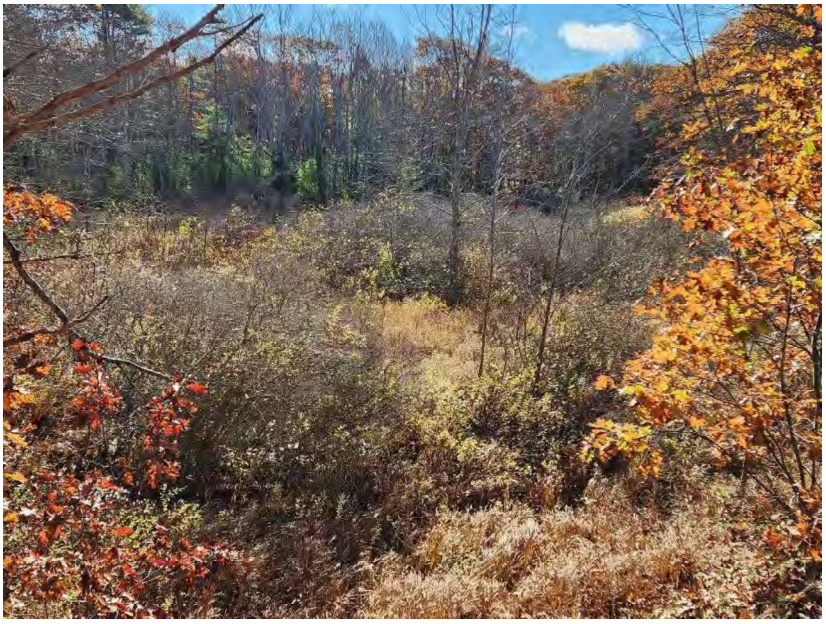
One area where the *emergent* wetland transitions to forested wetland (located at the southerly-most portion of the study area) met the criteria for inclusion as a MDEP jurisdictional stream segment. This stream segment requires a 75' setback for construction/soil disturbance per MDEP *NRPA* standards.



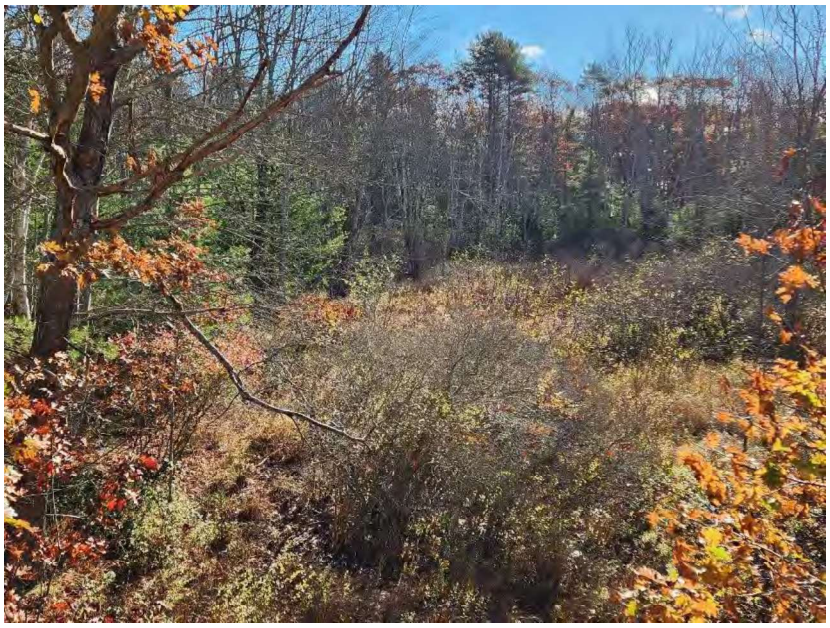
Stream channel within forested wetland, flowing to culvert in Peter Pond Road

<u>Emergent & Shrub-Shrub Wetlands</u>

The westernmost portion of the property contains a wetland that includes a small area of emergent wetland but that is predominantly scrub-shrub wetland. This area of wetland also has a portion of the above-mentioned MDEP jurisdictional stream channel that begins at the large culvert located under Pool Street. There are no trees in the emergent wetland.



Scrub-shrub Portion of Wetlands On-Site



Scrub-shrub and Emergent Wetlands On-Site

Sapling vegetation in emergent sections of this wetland is dominated by Broad-Leaved Cat-Tail (*typha latifolia*). A saturated ground surface is present in these locations.

In scrub-shrub portions of this wetland, Redosier Dogwood (*Cornus sericea*) and Speckled Alder (*Alnus incana*) dominate.

The herbaceous layer (where the ground is not saturated) is dominated by Sensitive Fern (*Onoclea sensibilis*). Water-stained leaves and occasional surface water hydrology are evident portions of this wetland.

Rare Plants and Rare, Threatened, and Endangered Animal Species

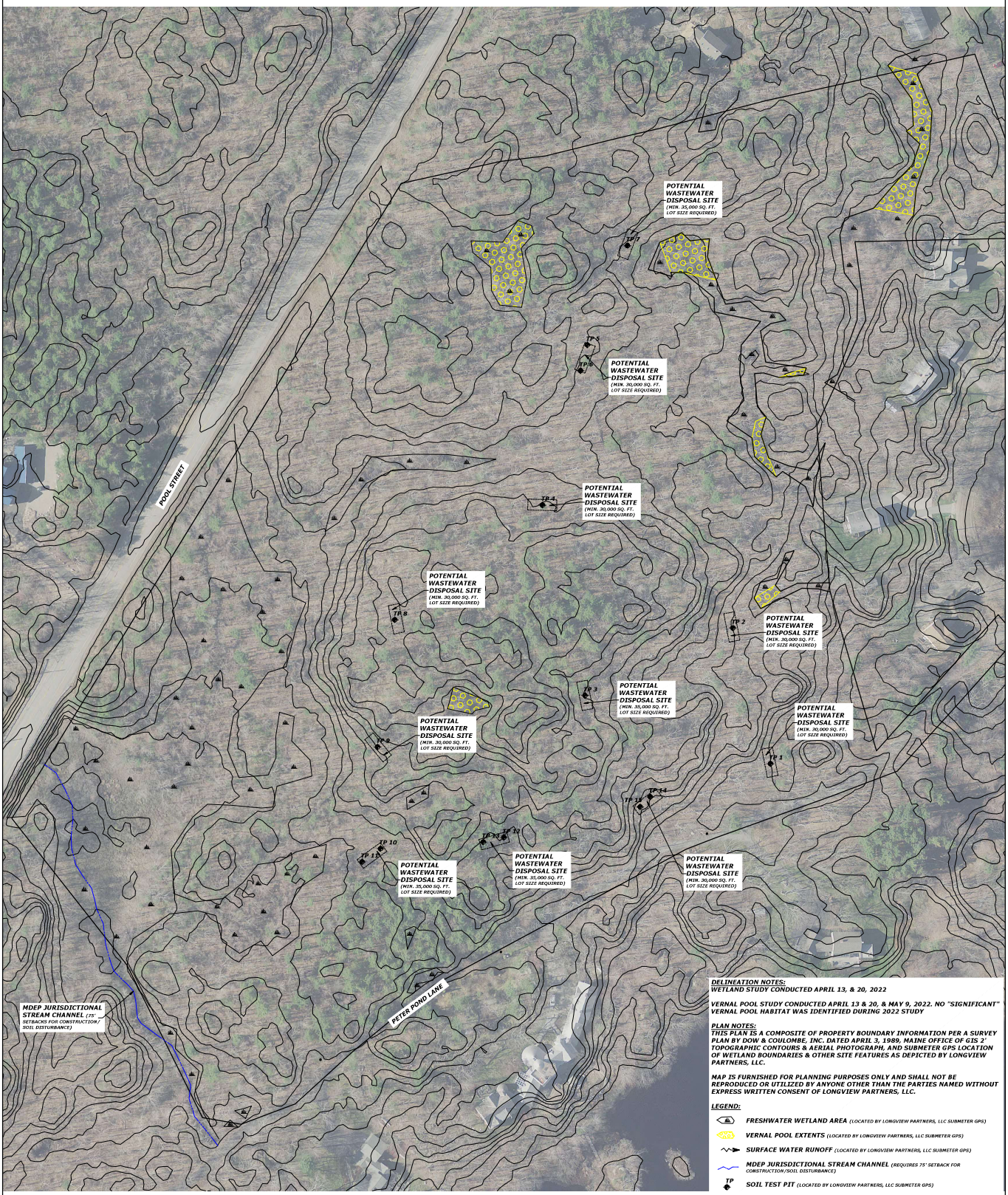
The study area was not reviewed by Longview Partners for rare plants or the presence of RTE animal species (other than those included in the vernal pool assessment).



Typical Forested Wetland



Typical Upland Found within Study Limits



DELINEATION NOTES:
WETLAND STUDY CONDUCTED APRIL 13, & 20, 2022

VERNAL POOL STUDY CONDUCTED APRIL 13 & 20, & MAY 9, 2022. NO "SIGNIFICANT" VERNAL POOL HABITAT WAS IDENTIFIED DURING 2022 STUDY

PLAN NOTES:
THIS PLAN IS A COMPOSITE OF PROPERTY BOUNDARY INFORMATION PER A SURVEY PLAN BY DOW & COULOMBE, INC. DATED APRIL 3, 1989, MAINE OFFICE OF GIS 2' TOPOGRAPHIC CONTOURS & AERIAL PHOTOGRAPH, AND SUBMETER GPS LOCATION OF WETLAND BOUNDARIES & OTHER SITE FEATURES AS DEPICTED BY LONGVIEW PARTNERS, LLC.

MAP IS FURNISHED FOR PLANNING PURPOSES ONLY AND SHALL NOT BE REPRODUCED OR UTILIZED BY ANYONE OTHER THAN THE PARTIES NAMED WITHOUT EXPRESS WRITTEN CONSENT OF LONGVIEW PARTNERS, LLC.

LEGEND:
- FRESHWATER WETLAND AREA (LOCATED BY LONGVIEW PARTNERS, LLC SUBMETER GPS)
- VERNAL POOL EXTENTS (LOCATED BY LONGVIEW PARTNERS, LLC SUBMETER GPS)
- SURFACE WATER RUNOFF (LOCATED BY LONGVIEW PARTNERS, LLC SUBMETER GPS)
- MDEP JURISDICTIONAL STREAM CHANNEL (REQUIRES 75' SETBACK FOR CONSTRUCTION/SOIL DISTURBANCE)
- TP — SOIL TEST PIT (LOCATED BY LONGVIEW PARTNERS, LLC SUBMETER GPS)
- POTENTIAL WASTEWATER DISPOSAL SITE

GRAPHIC SCALE
60 0 30 60 120
(IN FEET)
1 inch = 60 ft.

NOTE:
MINIMUM LOT SIZES AS SHOWN ARE FOR LOTS SERVED BY PUBLIC WATER. LOTS MUST BE 80,000 SQ. FT. MINIMUM IF SERVED BY PRIVATE WATER SUPPLIES. (SEE BIDDEFORD ORDINANCE)

WETLAND DELINEATION & POTENTIAL WASTEWATER DISPOSAL PLAN

PREPARED FOR
ANNETTE GOSNELL
781 POOL STREET
(MAP 5, LOT 17-2)
BIDDEFORD, MAINE

LONGVIEW PARTNERS, LLC
ENVIRONMENTAL PERMITTING SPECIALISTS

DRAFT:	SCALE:	CHECKED:	PLAN DATE:
BO	1" = 60'	JL	6/13/22

Attachment 3

Septic System Designs (HHE-200 Forms)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 1**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **BEACHWOOD DEVELOPMENT FUND** ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged ☐

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐1. First Time System
☐2. Replacement System
Type replaced: ____
Year installed: ____
☐3. Expanded System
☐a. <25% Expansion
☐b. >25% Expansion
☐4. Experimental System
☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

☐1. No Rule Variance
☐2. First Time System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐3. Replacement System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐4. Minimum Lot Size Variance
☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☐1. Complete Non-engineered System
☐2. Primitive System (graywater & alt. toilet)
☐3. Alternative Toilet, specify: ____
☐4. Non-engineered Treatment Tank (only)
☐5. Holding Tank, ____ gallons
☐6. Non-engineered Disposal Field (only)
☐7. Separated Laundry System
☐8. Complete Engineered System (2000 gpd or more)
☐9. Engineered Treatment Tank (only)
☐10. Engineered Disposal Field (only)
☐11. Pre-treatment, specify: ____
☐12. Miscellaneous Components

SIZE OF PROPERTY

1.60+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
☐2. Multiple Family Dwelling, No. of Units: ____
☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private
☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☐1. Concrete
☐a. Regular
☐b. Low Profile
☐2. Plastic
☐3. Other: ____
CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

☐1. Stone Bed ☐2. Stone Trench
☐3. Proprietary Device
☐a. cluster array ☐c. Linear
☐b. regular load ☐d. H-20 load
☐4. Other: ____
SIZE: **1536** ☐sq. ft. ☐lin. ft.
32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe
If Yes or Maybe, specify one below:
☐a. multi-compartment tank
☐b. ___ tanks in series
☐c. increase in tank capacity
☐d. Filter on Tank Outlet
REQUIRED

DESIGN FLOW

360 gallons per day
BASED ON:
☐1. Table 4A (dwelling unit(s))
☐2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
-SINGLE FAMILY DWELLING-
4 BEDROOMS @ 90 GPD EACH

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / **AII**
at Observation Hole # **TP 25**
Depth **13** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐1. Medium---2.6 sq. ft. / gpd
☐2. Medium---Large 3.3 sq. f.t / gpd
☐3. Large---4.1 sq. ft. / gpd
☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐1. Not Required
☐2. May Be Required ***SEE NOTE PAGE 3***
☐3. Required
Specify only for engineered systems:
DOSE: ____ gallons

☐3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **25** m **53** s
Lon. **70** d **22** m **47** s
if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan — **237** — **12/7/23**
Site Evaluator Signature — SE # — Date

JAMES LOGAN — **207-693-8799** — **longviewpartners213@gmail.com**
Site Evaluator Name Printed — Telephone Number — E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

924

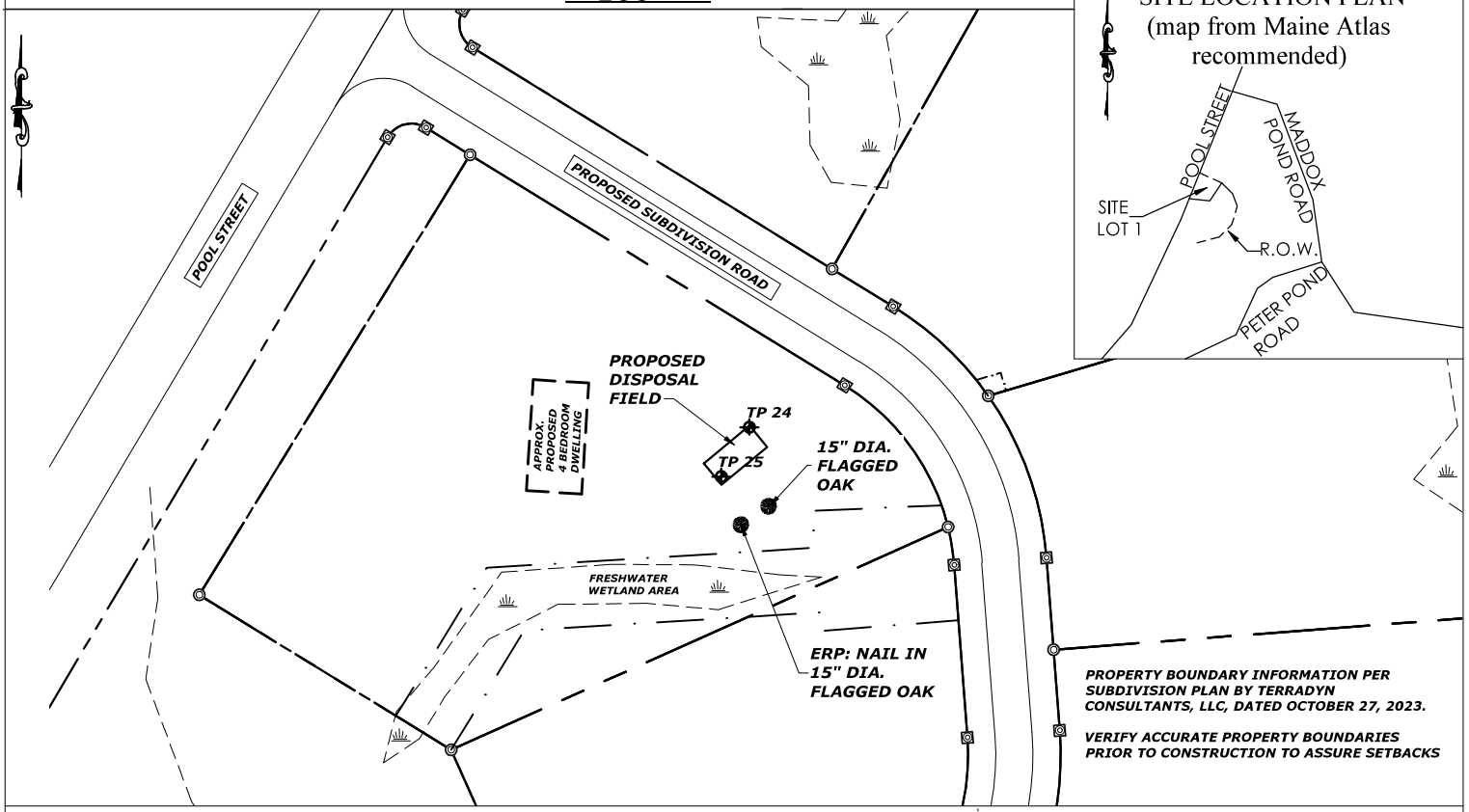
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	**R.O.W. off POOL STREET, LOT 1**	**BEACHWOOD DEVELOPMENT FUND**

SITE PLAN

Scale 1" = **100** ft. or as shown



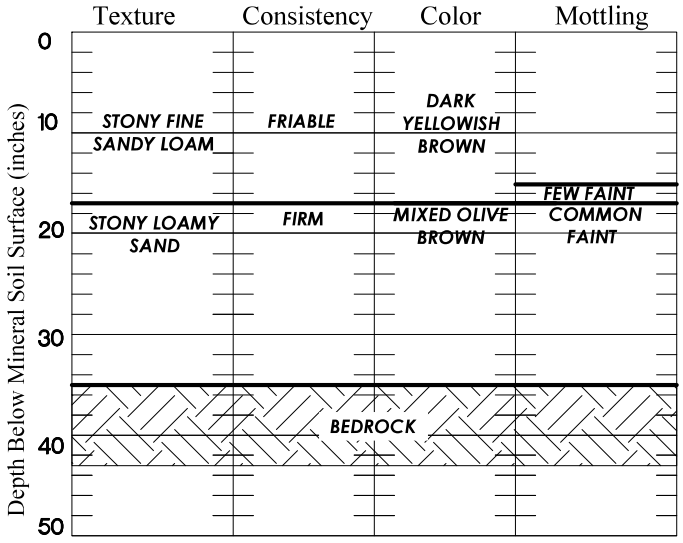
SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole **TP 24** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

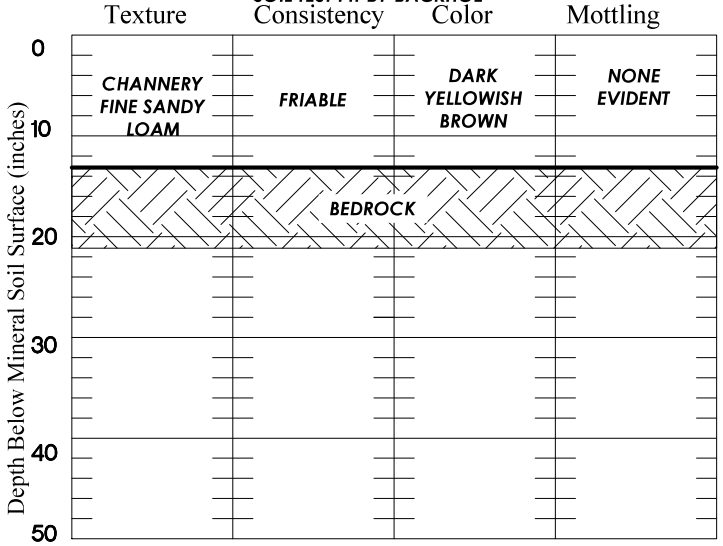


Soil Classification	Slope	Limiting Factor	
3 Profile / AIII/C Condition	4-8 %	15 "	[X] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole **TP 25** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE



Soil Classification	Slope	Limiting Factor	
2 Profile / All Condition	4-8 %	13 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

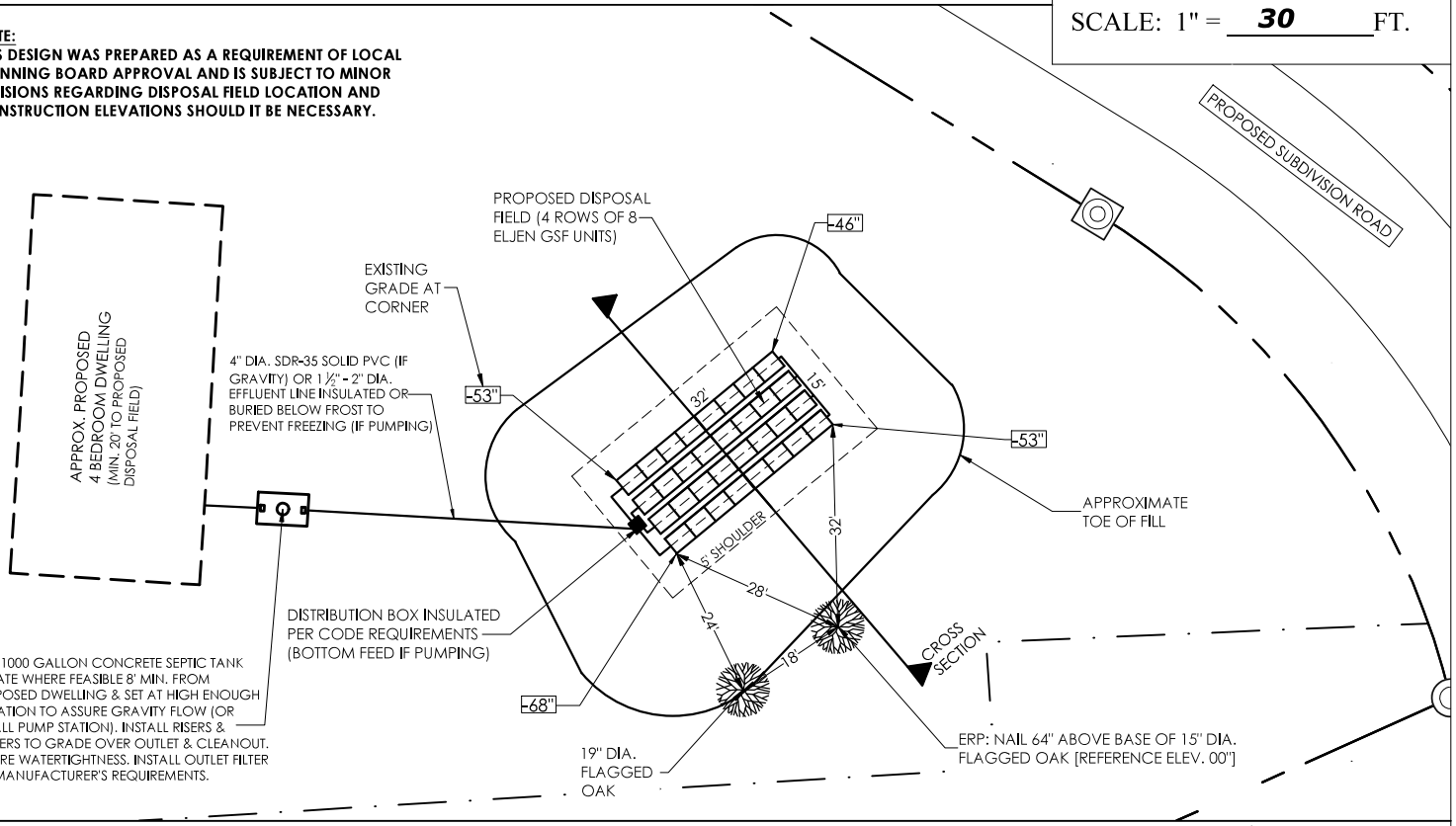
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 1***	***BEACHWOOD DEVELOPMENT FUND***

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

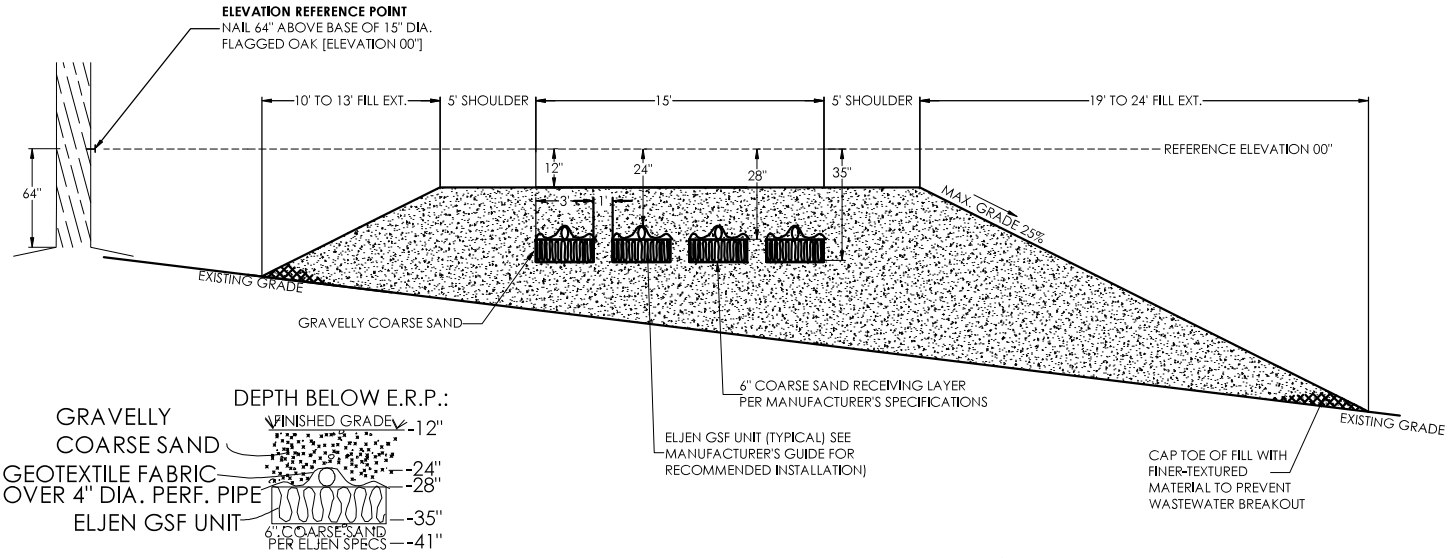
NOTE:
THIS DESIGN WAS PREPARED AS A REQUIREMENT OF LOCAL PLANNING BOARD APPROVAL AND IS SUBJECT TO MINOR REVISIONS REGARDING DISPOSAL FIELD LOCATION AND CONSTRUCTION ELEVATIONS SHOULD IT BE NECESSARY.



FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***34"- 41"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 64" ABOVE BASE OF 15" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	Reference Elevation: ***00"***
Depth of Fill (Downslope)	***41"- 56"***	Bottom of Disposal Area	***BELOW***	

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
James Logan	***237***	***12/7/23***

DISPOSAL SYSTEM INSTALLATION NOTES

1. The State of Maine *Subsurface Wastewater Disposal Rules (10-144 Chapter 241* the *Rules*) are incorporated by reference and made a part of this application. These shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system installer shall contact Longview Partners, LLC (207-693-8799) if there are any questions concerning materials, procedures or the design. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the *Rules* and with all State and municipal laws and ordinances pertaining to the permitting, construction, and inspection of subsurface wastewater disposal systems.

2. This application is intended to represent facts pertinent to the *Rules* only. It shall be the responsibility of the owner/applicant, system installer and/or building contractor to determine compliance with and to obtain other permits under all applicable local, State and/or Federal laws and regulations before installing the system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations, should wet areas exist. Prior to commencement of construction/installation, the Local Plumbing Inspector or Code Enforcement Officer shall inform the owner/applicant and Longview Partners, LLC or any local ordinances which are more restrictive than the *Rules* in order that the design may be amended. All designs are subject to review by local, State and/or Federal authorities. Longview Partners, LLC's liability shall be limited to revisions required by regulatory agencies and based on laws or regulations in effect at the time of preparation of this application.

3. All information shown on this application relating to property lines, well locations, subsurface structures, and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Longview Partners, LLC in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties not readily visible above-grade (such as well points) should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4. Installation of a garbage (grinder) disposal is **not recommended**. If one is installed, an additional 1,000 gallon septic tank shall be connected in series to the proposed septic tank or a septic tank outlet filter shall be installed in the tank outlet. Risers and covers should be installed over the septic tank cleanout and outlet per the *Rules* for easy maintenance of the filter.

5. The septic tank should be pumped within 2 years of installation and subsequently as recommended by the pump service. **In no event should the septic tank be pumped less often than every 3 years**. The system use shall avoid introducing kitchen grease or fats into the system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life or performance.

6. All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

Longview Partners, LLC
Longviewpartners213@gmail.com

DISPOSAL SYSTEM INSTALLATION NOTES

7. The daily wastewater flow, number of bedrooms, or use of structure shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed.

8. The general minimum setbacks between a well (public or private) and septic system serving a single family residence are 100-300 feet, unless the local municipality has a more stringent requirement or a liner seal is installed in the well. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9. When a gravity flow is anticipated, **before construction/installation begins**, the system installer or building contractor shall review the elevation of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pipe pitch requirements.

10. When an effluent pump is required, pump stations should be sized per manufacturer's specifications to meet lift requirements and friction/head loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and cover at or above grade. An alarm device warning of a pump failure shall be installed. Bottom-feed distribution box is specified to prevent freezing. Insulate distribution boxes per the *Rules*.

11. On all systems, remove the vegetation, organic duff and roots, and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on the plan may be necessary to replace organic matter and/or stumps. On sites where the proposed disposal area is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal field and fill extension are to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or different settling). Do not use wheeled equipment on the scarified soil are until after 12 inches of fill is in place. Keep equipment off of proprietary leaching devices. Divert surface water away from the disposal area by ditching or shallow landscape swales.

12. Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process. Refer to the *Rules* for more specific information regarding fill and stone.

13. Seed all filled and disturbed surfaces with perennial grass seed, with 4 inches minimum soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover the system. Woody trees or shrubs are not permitted on the disposal field or fill extensions.

14. If an advanced wastewater treatment unit is part of this design, the system shall be operated and maintained per manufacturer's specifications.

15. Effluent (backwash) from water treatment units **SHALL NOT** be disposed of within this disposal system and **MUST** be redirected away from the disposal field

Longview Partners, LLC
Longviewpartners213@gmail.com

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 2**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **BEACHWOOD DEVELOPMENT FUND** ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐1. First Time System
☐2. Replacement System
Type replaced: ____
Year installed: ____
☐3. Expanded System
☐a. <25% Expansion
☐b. >25% Expansion
☐4. Experimental System
☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

☐1. No Rule Variance
☐2. First Time System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐3. Replacement System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐4. Minimum Lot Size Variance
☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☐1. Complete Non-engineered System
☐2. Primitive System (graywater & alt. toilet)
☐3. Alternative Toilet, specify: ____
☐4. Non-engineered Treatment Tank (only)
☐5. Holding Tank, ____ gallons
☐6. Non-engineered Disposal Field (only)
☐7. Separated Laundry System
☐8. Complete Engineered System (2000 gpd or more)
☐9. Engineered Treatment Tank (only)
☐10. Engineered Disposal Field (only)
☐11. Pre-treatment, specify: ____
☐12. Miscellaneous Components

SIZE OF PROPERTY

1.11+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
☐2. Multiple Family Dwelling, No. of Units: ____
☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private
☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☐1. Concrete
☐a. Regular
☐b. Low Profile
☐2. Plastic
☐3. Other: ____
CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

☐1. Stone Bed ☐2. Stone Trench
☐3. Proprietary Device
☐a. cluster array ☐c. Linear
☐b. regular load ☐d. H-20 load
☐4. Other: ____
SIZE: **1536** ☐sq. ft. ☐lin. ft.
32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe
If Yes or Maybe, specify one below:
☐a. multi-compartment tank
☐b. ___ tanks in series
☐c. increase in tank capacity
☐d. Filter on Tank Outlet
REQUIRED

DESIGN FLOW

360 gallons per day
BASED ON:
☐1. Table 4A (dwelling unit(s))
☐2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
-SINGLE FAMILY DWELLING-
4 BEDROOMS @ 90 GPD EACH

SOIL DATA & DESIGN CLASS

PROFILE / CONDITION
2 / **AIII**
at Observation Hole # **TP 27**
Depth **22** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐1. Medium---2.6 sq. ft. / gpd
☐2. Medium---Large 3.3 sq. f.t / gpd
☐3. Large---4.1 sq. ft. / gpd
☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐1. Not Required
☐2. May Be Required ***SEE NOTE PAGE 3***
☐3. Required
Specify only for engineered systems:
DOSE: ____ gallons

☐3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **25** m **52** s
Lon. **70** d **22** m **47** s
if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan — **237** — **12/7/23**
Site Evaluator Signature — SE # — Date

JAMES LOGAN — **207-693-8799** — **longviewpartners213@gmail.com**
Site Evaluator Name Printed — Telephone Number — E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

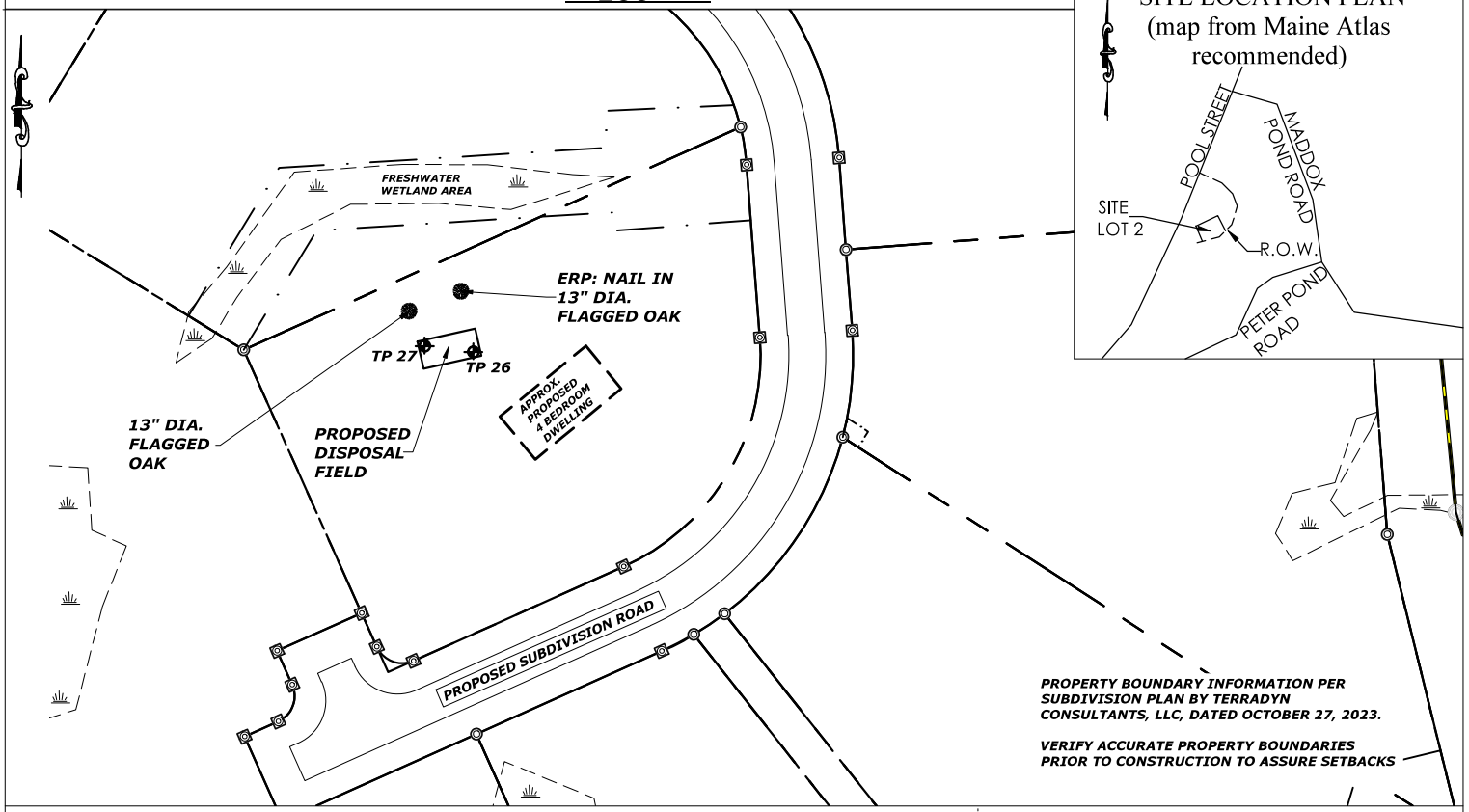
929

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 2***	***BEACHWOOD DEVELOPMENT FUND***

SITE PLAN Scale 1" = ***100*** ft. or as shown



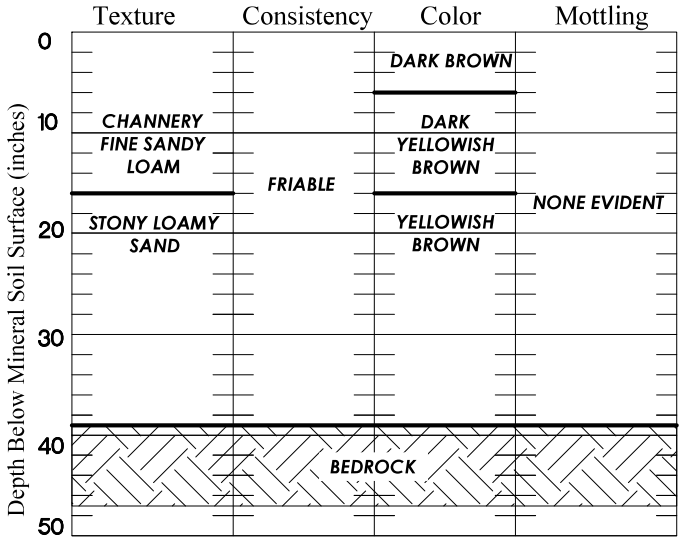
SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole ***TP 26*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

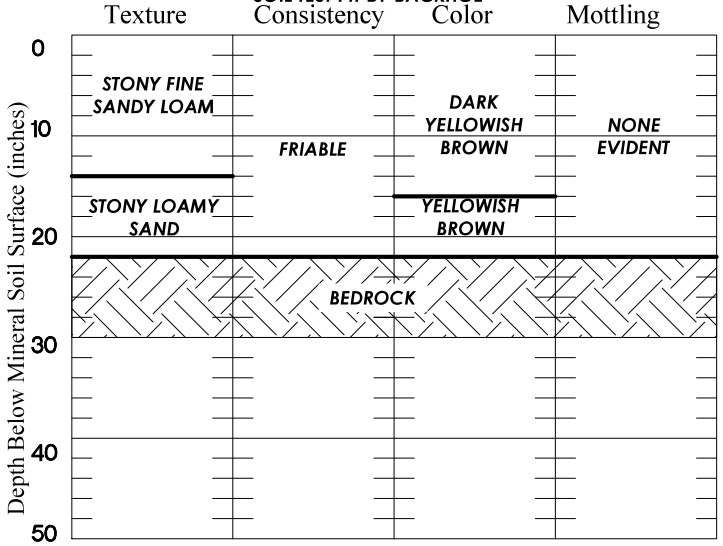


Soil Classification	Slope	Limiting Factor	
2 (Profile) AIII (Condition)	4-5 %	39 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole ***TP 27*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE



Soil Classification	Slope	Limiting Factor	
2 (Profile) AIII (Condition)	4-5 %	22 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

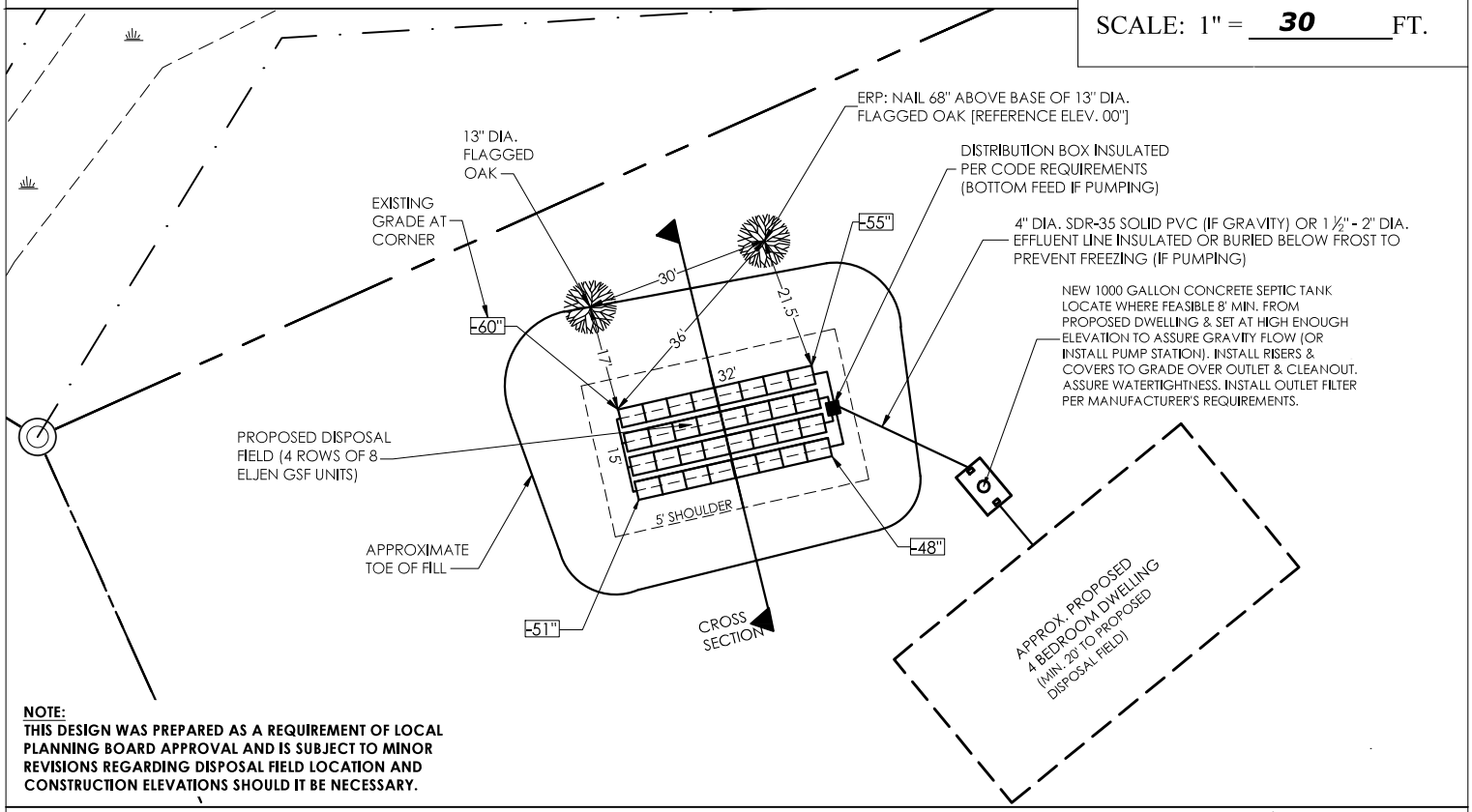
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 2***	***BEACHWOOD DEVELOPMENT FUND***

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

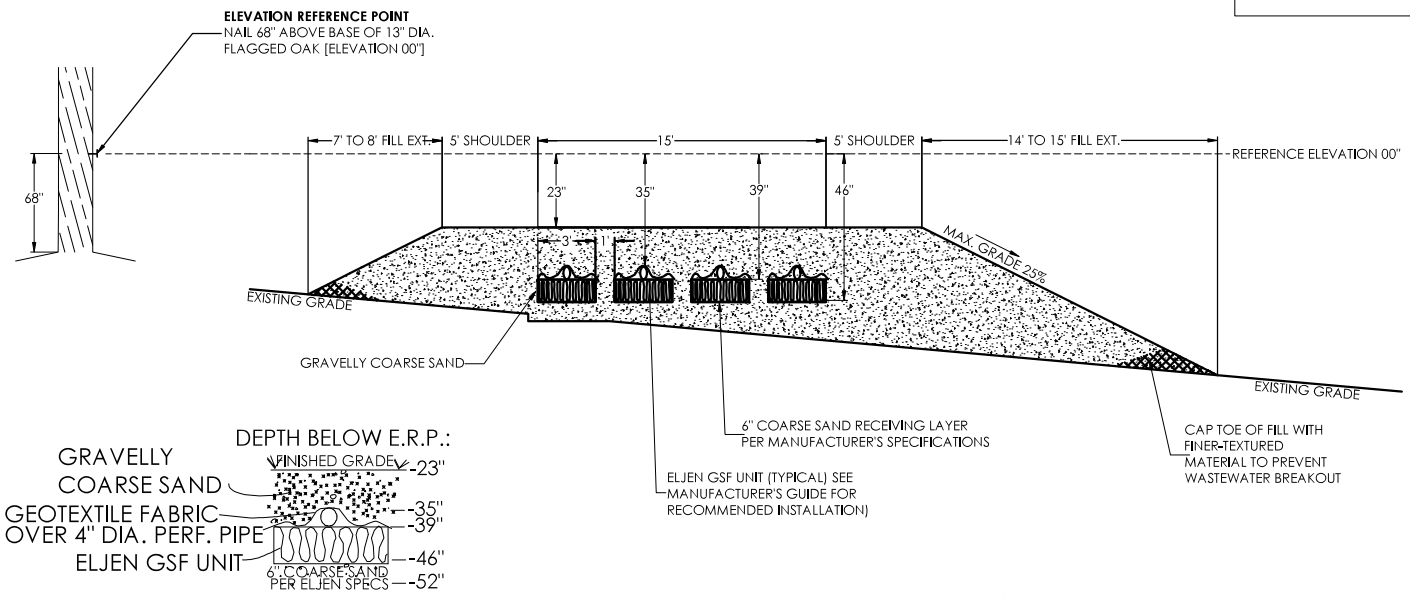


NOTE:
THIS DESIGN WAS PREPARED AS A REQUIREMENT OF LOCAL PLANNING BOARD APPROVAL AND IS SUBJECT TO MINOR REVISIONS REGARDING DISPOSAL FIELD LOCATION AND CONSTRUCTION ELEVATIONS SHOULD IT BE NECESSARY.

FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***25"- 28"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 68" ABOVE BASE OF 13" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	Reference Elevation: ***00"***
Depth of Fill (Downslope)	***32"- 37"***	Bottom of Disposal Area	***BELOW***	

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
James Logan	***237***	***12/7/23***

DISPOSAL SYSTEM INSTALLATION NOTES

1. The State of Maine *Subsurface Wastewater Disposal Rules (10-144 Chapter 241* the *Rules*) are incorporated by reference and made a part of this application. These shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system installer shall contact Longview Partners, LLC (207-693-8799) if there are any questions concerning materials, procedures or the design. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the *Rules* and with all State and municipal laws and ordinances pertaining to the permitting, construction, and inspection of subsurface wastewater disposal systems.

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Longview Partners, LLC
Longviewpartners213@gmail.com

DISPOSAL SYSTEM INSTALLATION NOTES

7. The daily wastewater flow, number of bedrooms, or use of structure shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed.

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12. Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process. Refer to the *Rules* for more specific information regarding fill and stone.

13. Seed all filled and disturbed surfaces with perennial grass seed, with 4 inches minimum soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover the system. Woody trees or shrubs are not permitted on the disposal field or fill extensions.

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15. Effluent (backwash) from water treatment units **SHALL NOT** be disposed of within this disposal system and **MUST** be redirected away from the disposal field

Longview Partners, LLC
Longviewpartners213@gmail.com

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 3**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) ☐Owner ☐Applicant
BEACHWOOD DEVELOPMENT FUND

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____

Date Permit Issued ____/____/____ Fee: $_____ Double Fee Charged

Local Plumbing Inspector Signature

LPI. # _____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED
I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐1. First Time System
☐2. Replacement System
Type replaced: _____
Year installed: _____
☐3. Expanded System
☐a. <25% Expansion
☐b. >25% Expansion
☐4. Experimental System
☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

☐1. No Rule Variance
☐2. First Time System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐3. Replacement System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐4. Minimum Lot Size Variance
☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☐1. Complete Non-engineered System
☐2. Primitive System (graywater & alt. toilet)
☐3. Alternative Toilet, specify: _____
☐4. Non-engineered Treatment Tank (only)
☐5. Holding Tank, _____ gallons
☐6. Non-engineered Disposal Field (only)
☐7. Separated Laundry System
☐8. Complete Engineered System (2000 gpd or more)
☐9. Engineered Treatment Tank (only)
☐10. Engineered Disposal Field (only)
☐11. Pre-treatment, specify: _____
☐12. Miscellaneous Components

SIZE OF PROPERTY

1.68+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
☐2. Multiple Family Dwelling, No. of Units: _____
☐3. Other: _____ (specify)
Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private
☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☐1. Concrete
☐a. Regular
☐b. Low Profile
☐2. Plastic
☐3. Other: _____
CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

☐1. Stone Bed ☐2. Stone Trench
☐3. Proprietary Device
☐a. cluster array ☐c. Linear
☐b. regular load ☐d. H-20 load
☐4. Other: _____
SIZE: **1536** ☐sq. ft. ☐lin. ft.
32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe
If Yes or Maybe, specify one below:
☐a. multi-compartment tank
☐b. ___ tanks in series
☐c. increase in tank capacity
☐d. Filter on Tank Outlet
REQUIRED

DESIGN FLOW

360 gallons per day
BASED ON:
☐1. Table 4A (dwelling unit(s))
☐2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
-SINGLE FAMILY DWELLING-
4 BEDROOMS @ 90 GPD EACH

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
2 / **AII**
at Observation Hole # **TP 10**
Depth **13** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐1. Medium---2.6 sq. ft. / gpd
☐2. Medium---Large 3.3 sq. f.t / gpd
☐3. Large---4.1 sq. ft. / gpd
☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐1. Not Required
☐2. May Be Required ***SEE NOTE PAGE 3***
☐3. Required
Specify only for engineered systems:
DOSE: _____ gallons

☐3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **25** m **47** s
Lon. **70** d **22** m **48** s
if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan
Site Evaluator Signature

237 SE #

12/7/23 Date

JAMES LOGAN Site Evaluator Name Printed

207-693-8799 Telephone Number

longviewpartners213@gmail.com E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

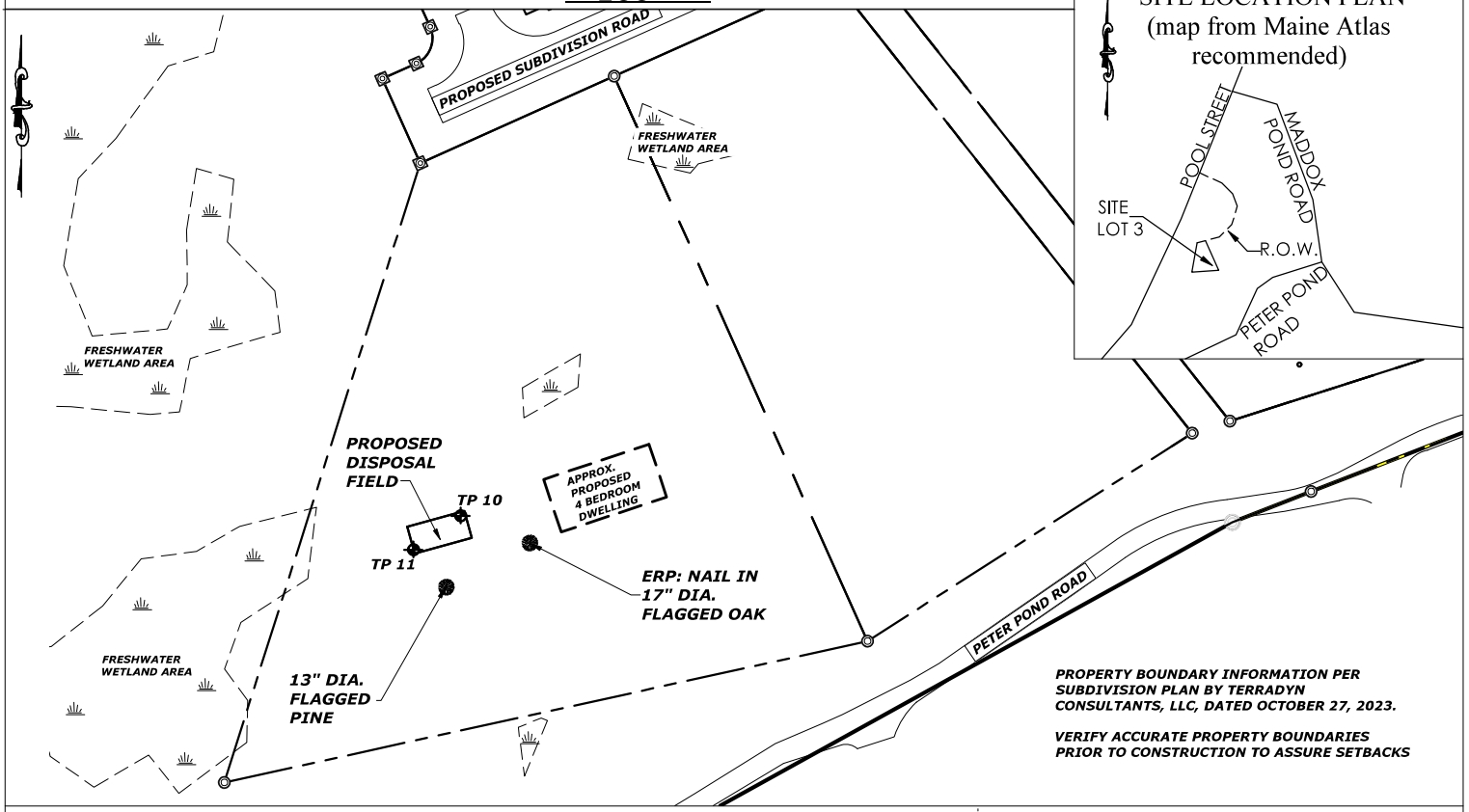
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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 3***	***BEACHWOOD DEVELOPMENT FUND***

SITE PLAN Scale 1" = ***100*** ft. or as shown



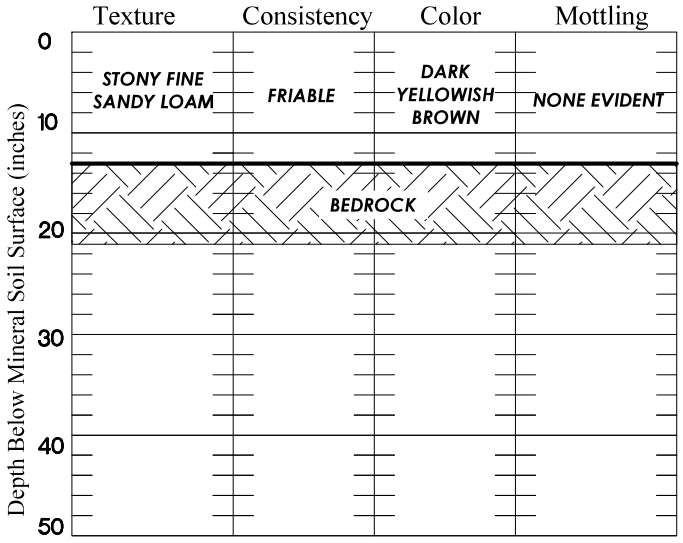
SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole ***TP 10*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

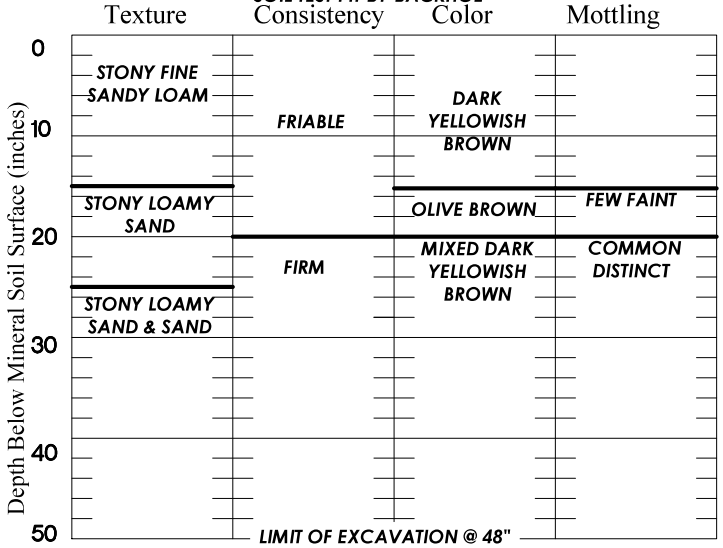


Soil Classification		Slope	Limiting Factor	
2 Profile	***All*** Condition	***0-1*** %	***13*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole ***TP 11*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE



Soil Classification		Slope	Limiting Factor	
3 Profile	***C*** Condition	***0-1*** %	***15*** "	[X] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

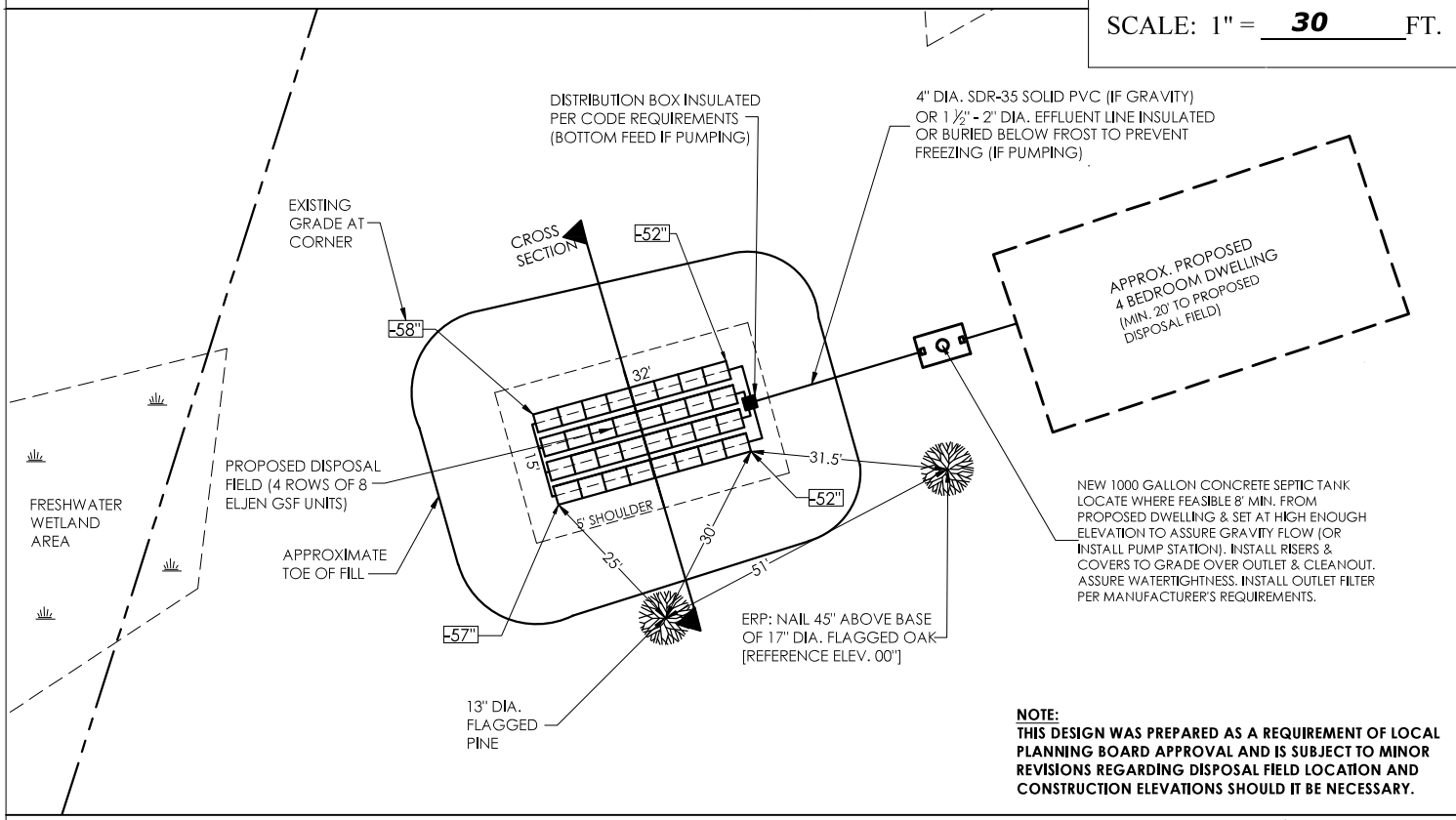
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SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

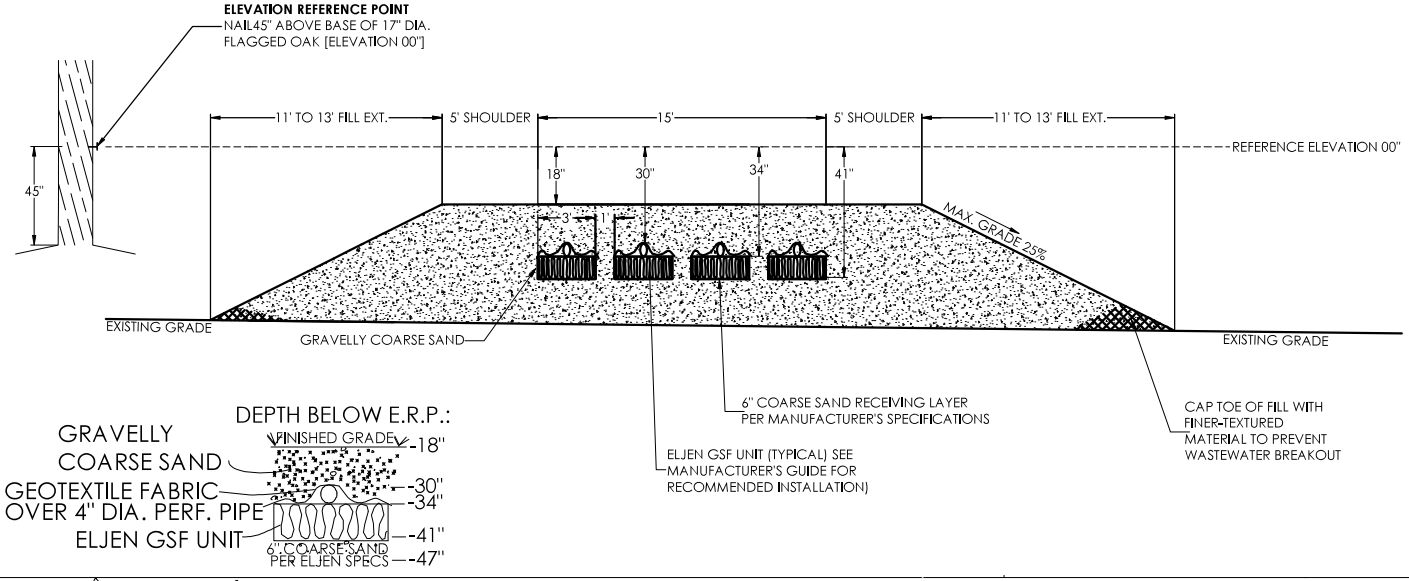


NOTE:
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FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***34"- 39"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 45" ABOVE BASE OF 17" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	Reference Elevation: ***00"***
Depth of Fill (Downslope)	***34"- 40"***	Bottom of Disposal Area	***BELOW***	

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
	237	***12/7/23***

DISPOSAL SYSTEM INSTALLATION NOTES

1. The State of Maine *Subsurface Wastewater Disposal Rules (10-144 Chapter 241* the *Rules*) are incorporated by reference and made a part of this application. These shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system installer shall contact Longview Partners, LLC (207-693-8799) if there are any questions concerning materials, procedures or the design. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the *Rules* and with all State and municipal laws and ordinances pertaining to the permitting, construction, and inspection of subsurface wastewater disposal systems.

2. This application is intended to represent facts pertinent to the *Rules* only. It shall be the responsibility of the owner/applicant, system installer and/or building contractor to determine compliance with and to obtain other permits under all applicable local, State and/or Federal laws and regulations before installing the system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations, should wet areas exist. Prior to commencement of construction/installation, the Local Plumbing Inspector or Code Enforcement Officer shall inform the owner/applicant and Longview Partners, LLC or any local ordinances which are more restrictive than the *Rules* in order that the design may be amended. All designs are subject to review by local, State and/or Federal authorities. Longview Partners, LLC's liability shall be limited to revisions required by regulatory agencies and based on laws or regulations in effect at the time of preparation of this application.

3. All information shown on this application relating to property lines, well locations, subsurface structures, and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Longview Partners, LLC in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties not readily visible above-grade (such as well points) should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4. Installation of a garbage (grinder) disposal is **not recommended**. If one is installed, an additional 1,000 gallon septic tank shall be connected in series to the proposed septic tank or a septic tank outlet filter shall be installed in the tank outlet. Risers and covers should be installed over the septic tank cleanout and outlet per the *Rules* for easy maintenance of the filter.

5. The septic tank should be pumped within 2 years of installation and subsequently as recommended by the pump service. **In no event should the septic tank be pumped less often than every 3 years**. The system use shall avoid introducing kitchen grease or fats into the system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life or performance.

6. All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

Longview Partners, LLC
Longviewpartners213@gmail.com

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8. The general minimum setbacks between a well (public or private) and septic system serving a single family residence are 100-300 feet, unless the local municipality has a more stringent requirement or a liner seal is installed in the well. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9. When a gravity flow is anticipated, **before construction/installation begins**, the system installer or building contractor shall review the elevation of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pipe pitch requirements.

10. When an effluent pump is required, pump stations should be sized per manufacturer's specifications to meet lift requirements and friction/head loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and cover at or above grade. An alarm device warning of a pump failure shall be installed. Bottom-feed distribution box is specified to prevent freezing. Insulate distribution boxes per the *Rules*.

11. On all systems, remove the vegetation, organic duff and roots, and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on the plan may be necessary to replace organic matter and/or stumps. On sites where the proposed disposal area is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal field and fill extension are to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or different settling). Do not use wheeled equipment on the scarified soil are until after 12 inches of fill is in place. Keep equipment off of proprietary leaching devices. Divert surface water away from the disposal area by ditching or shallow landscape swales.

12. Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process. Refer to the *Rules* for more specific information regarding fill and stone.

13. Seed all filled and disturbed surfaces with perennial grass seed, with 4 inches minimum soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover the system. Woody trees or shrubs are not permitted on the disposal field or fill extensions.

14. If an advanced wastewater treatment unit is part of this design, the system shall be operated and maintained per manufacturer's specifications.

15. Effluent (backwash) from water treatment units **SHALL NOT** be disposed of within this disposal system and **MUST** be redirected away from the disposal field

Longview Partners, LLC
Longviewpartners213@gmail.com

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 4**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **BEACHWOOD DEVELOPMENT FUND** ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

- 1. First Time System
- ☐2. Replacement System
  - Type replaced: ____
  - Year installed: ____
- ☐3. Expanded System
  - ☐a. <25% Expansion
  - ☐b. >25% Expansion
- ☐4. Experimental System
- ☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

- ☐1. No Rule Variance
- ☐2. First Time System Variance
  - ☐a. Local Plumbing Inspector Approval
  - ☐b. State & Local Plumbing Inspector Approval
- ☐3. Replacement System Variance
  - ☐a. Local Plumbing Inspector Approval
  - ☐b. State & Local Plumbing Inspector Approval
- ☐4. Minimum Lot Size Variance
- ☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

- ☐1. Complete Non-engineered System
- ☐2. Primitive System (graywater & alt. toilet)
- ☐3. Alternative Toilet, specify: ____
- ☐4. Non-engineered Treatment Tank (only)
- ☐5. Holding Tank, ____ gallons
- ☐6. Non-engineered Disposal Field (only)
- ☐7. Separated Laundry System
- ☐8. Complete Engineered System (2000 gpd or more)
- ☐9. Engineered Treatment Tank (only)
- ☐10. Engineered Disposal Field (only)
- ☐11. Pre-treatment, specify: ____
- ☐12. Miscellaneous Components

SIZE OF PROPERTY

1.24+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

- ☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
- ☐2. Multiple Family Dwelling, No. of Units: ____
- ☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private

☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

- ☐1. Concrete
  - ☐a. Regular
  - ☐b. Low Profile
- ☐2. Plastic
- ☐3. Other: ____

CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

- ☐1. Stone Bed ☐2. Stone Trench
- ☐3. Proprietary Device
  - ☐a. cluster array ☐c. Linear
  - ☐b. regular load ☐d. H-20 load
- ☐4. Other: ____

SIZE: **1536** ☐sq. ft. ☐lin. ft.

32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe

If Yes or Maybe, specify one below:

- ☐a. multi-compartment tank
- ☐b. ___ tanks in series
- ☐c. increase in tank capacity
- ☐d. Filter on Tank Outlet

REQUIRED

DESIGN FLOW

360 gallons per day

BASED ON:

- ☐1. Table 4A (dwelling unit(s))
- ☐2. Table 4C(other facilities)

SHOW CALCULATIONS for other facilites

-SINGLE FAMILY DWELLING-

4 BEDROOMS @ 90 GPD EACH

- ☐3. Section 4G (meter readings)

ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE / CONDITION

2 / **AIII**

at Observation Hole # **TP 29**

Depth **18** "

of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

- ☐1. Medium---2.6 sq. ft. / gpd
- ☐2. Medium---Large 3.3 sq. f.t / gpd
- ☐3. Large---4.1 sq. ft. / gpd
- ☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

- ☐1. Not Required
- ☐2. May Be Required
- ☐3. Required

SEE NOTE PAGE 3

Specify only for engineered systems:

DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area

Lat. **43** d **25** m **48** s

Lon. **70** d **22** m **44** s

if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan

Site Evaluator Signature ____ **237** SE # ____ **12/7/23** Date

JAMES LOGAN Site Evaluator Name Printed ____ **207-693-8799** Telephone Number ____ **longviewpartners213@gmail.com** E-mail Address

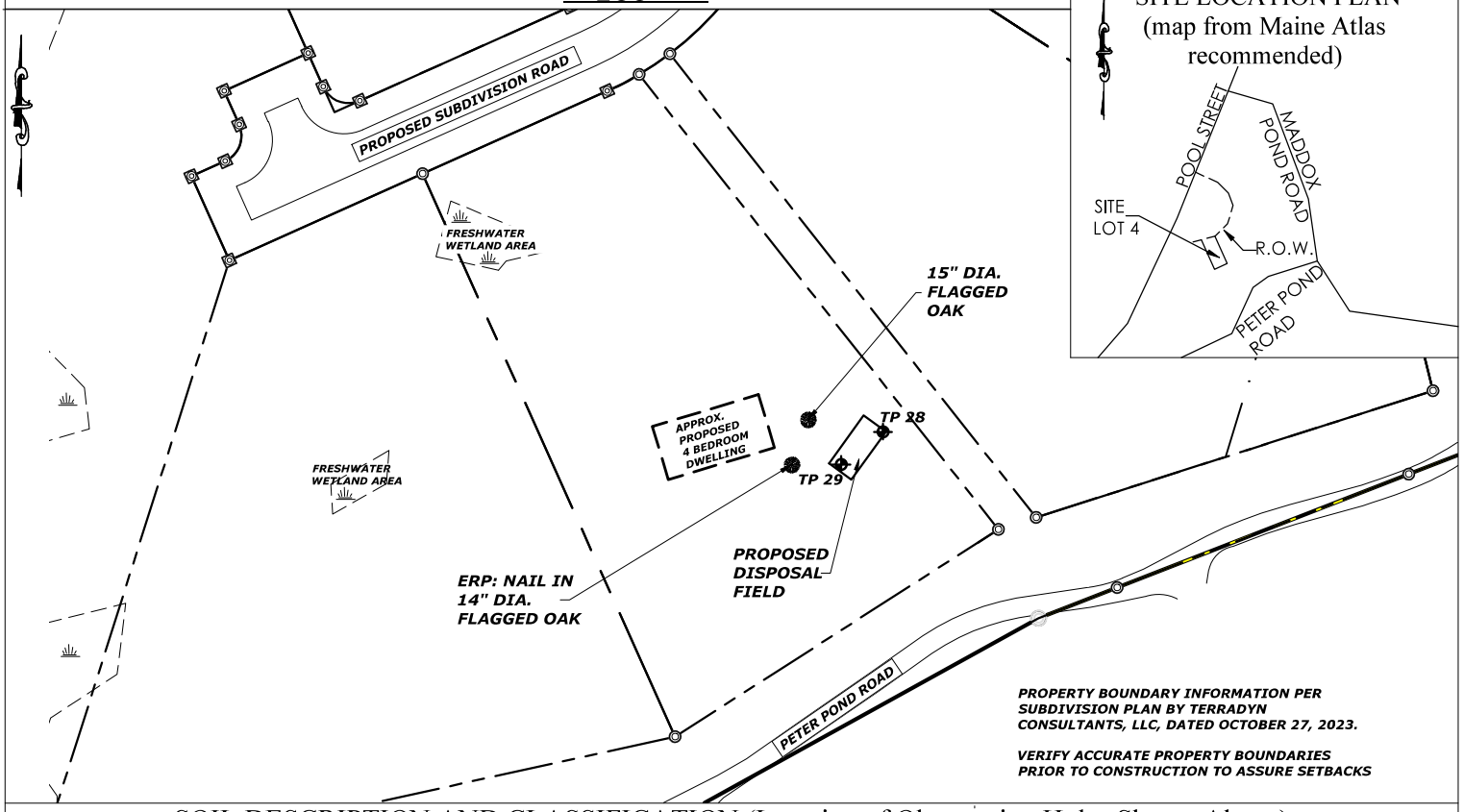
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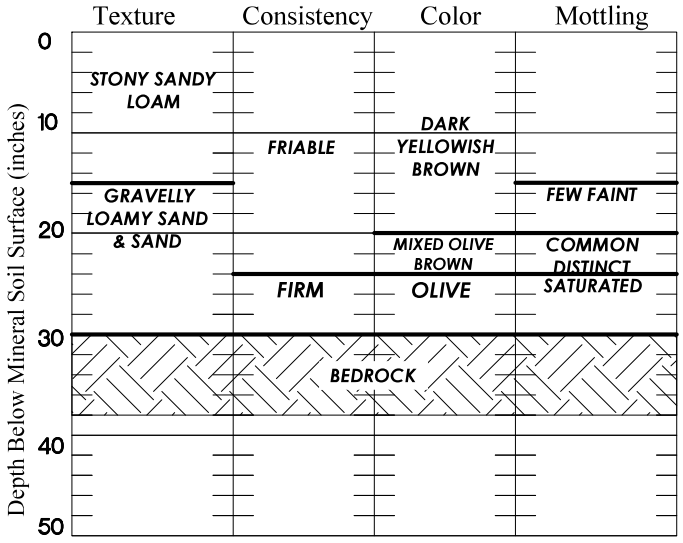
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(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

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_____ " Depth of Organic Horizon Above Mineral Soil

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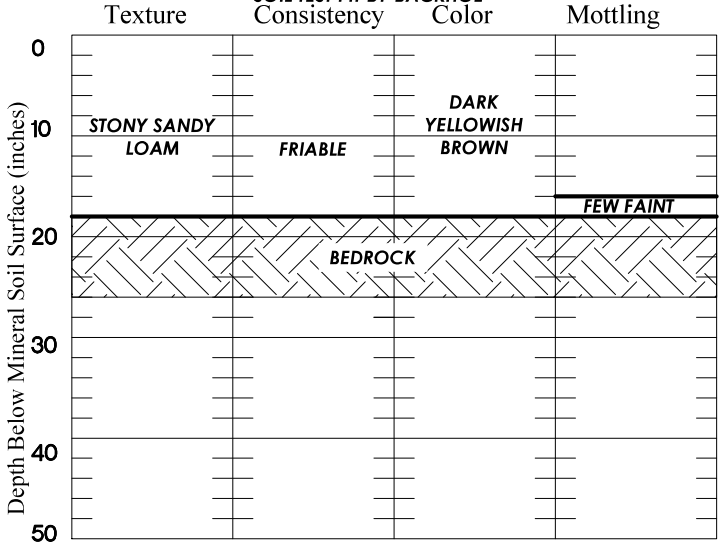


Soil Classification	Slope	Limiting Factor	
3 Profile / AIII/C Condition	4-6 %	15 "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole ***TP 29*** ■ Test Pit □ Boring

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James Logan
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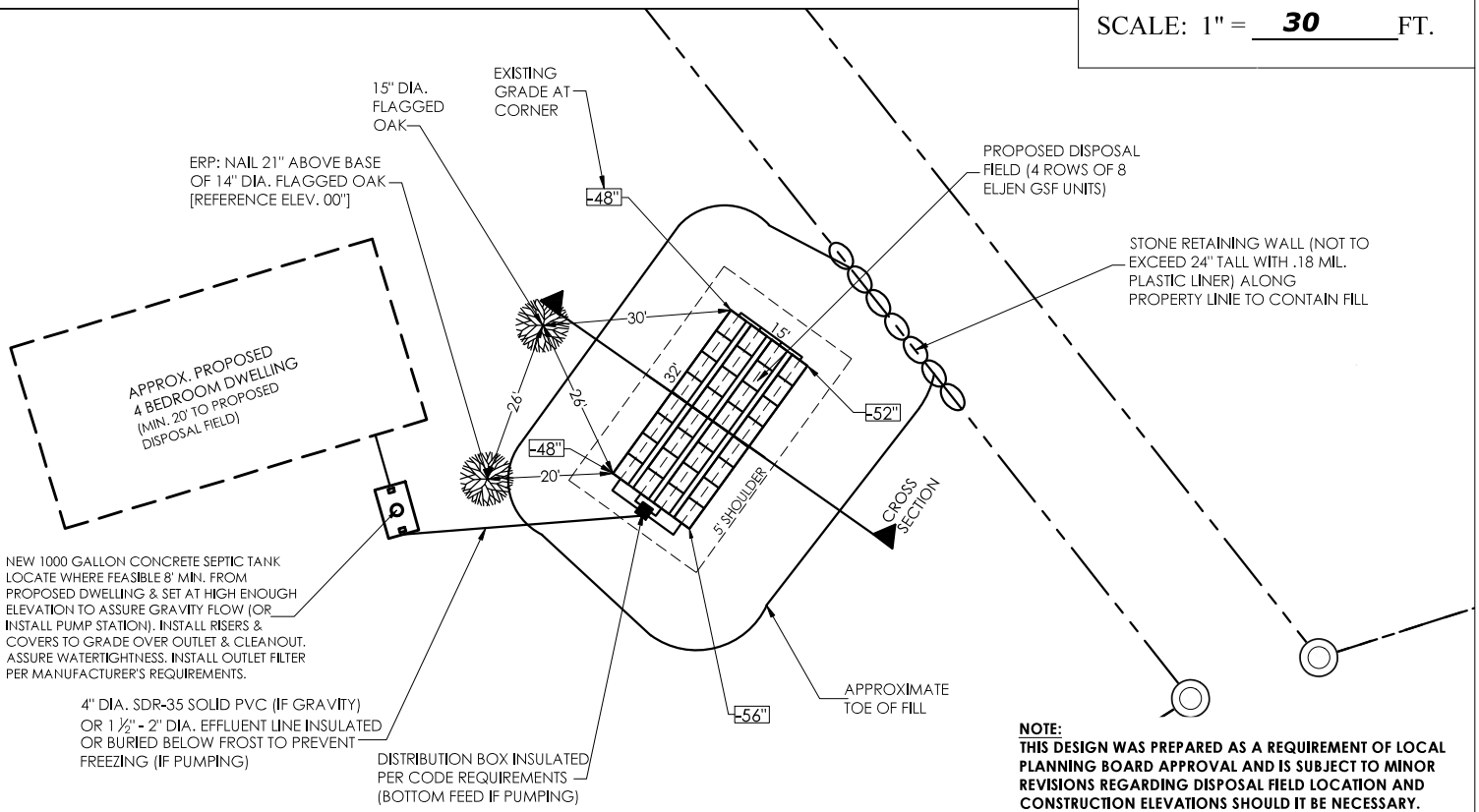
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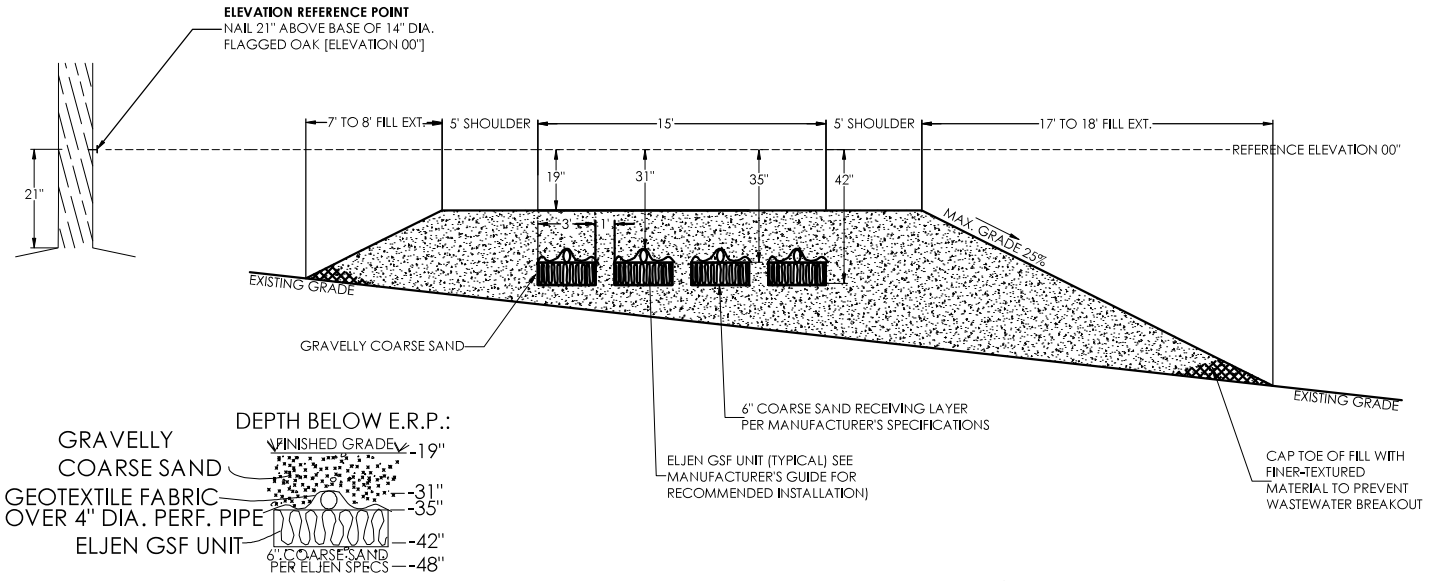


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		Top of Distribution Pipe or Proprietary Device	***DETAIL***	Reference Elevation: ***00"***
Depth of Fill (Downslope)	***37"- 40"***	Bottom of Disposal Area	***BELOW***	

DISPOSAL AREA CROSS SECTION

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OWNER/APPLICANT INFORMATION

Name (last, first, MI) BEACHWOOD DEVELOPMENT FUND ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: P.O. BOX 261, KENNEBUNK, ME 04043

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged ☐

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 5 Lot # P/O 17-2

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐1. First Time System
☐2. Replacement System
Type replaced: ____
Year installed: ____
☐3. Expanded System
☐a. <25% Expansion
☐b. >25% Expansion
☐4. Experimental System
☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

☐1. No Rule Variance
☐2. First Time System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐3. Replacement System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐4. Minimum Lot Size Variance
☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☐1. Complete Non-engineered System
☐2. Primitive System (graywater & alt. toilet)
☐3. Alternative Toilet, specify: ____
☐4. Non-engineered Treatment Tank (only)
☐5. Holding Tank, ____ gallons
☐6. Non-engineered Disposal Field (only)
☐7. Separated Laundry System
☐8. Complete Engineered System (2000 gpd or more)
☐9. Engineered Treatment Tank (only)
☐10. Engineered Disposal Field (only)
☐11. Pre-treatment, specify: ____
☐12. Miscellaneous Components

SIZE OF PROPERTY

1.54+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

☐1. Single Family Dwelling Unit, No. of Bedrooms: 4
☐2. Multiple Family Dwelling, No. of Units: ____
☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private
☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☐1. Concrete
☐a. Regular
☐b. Low Profile
☐2. Plastic
☐3. Other: ____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE

☐1. Stone Bed ☐2. Stone Trench
☐3. Proprietary Device
☐a. cluster array ☐c. Linear
☐b. regular load ☐d. H-20 load
☐4. Other: ____
SIZE: 1536 ☐sq. ft. ☐lin. ft.
32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe
If Yes or Maybe, specify one below:
☐a. multi-compartment tank
☐b. ___ tanks in series
☐c. increase in tank capacity
☐d. Filter on Tank Outlet
REQUIRED

DESIGN FLOW

360 gallons per day
BASED ON:
☐1. Table 4A (dwelling unit(s))
☐2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
-SINGLE FAMILY DWELLING-
4 BEDROOMS @ 90 GPD EACH

SOIL DATA & DESIGN CLASS

PROFILE 2 / CONDITION AIII
at Observation Hole # TP 16
Depth 24 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐1. Medium---2.6 sq. ft. / gpd
☐2. Medium---Large 3.3 sq. f.t / gpd
☐3. Large---4.1 sq. ft. / gpd
☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐1. Not Required
☐2. May Be Required SEE NOTE PAGE 3
☐3. Required
Specify only for engineered systems:
DOSE: ____ gallons

☐3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 25 m 49 s
Lon. 70 d 22 m 42 s
if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on 11/7/23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan — 237 — 12/7/23
Site Evaluator Signature | SE # | Date

JAMES LOGAN — 207-693-8799 — longviewpartners213@gmail.com
Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

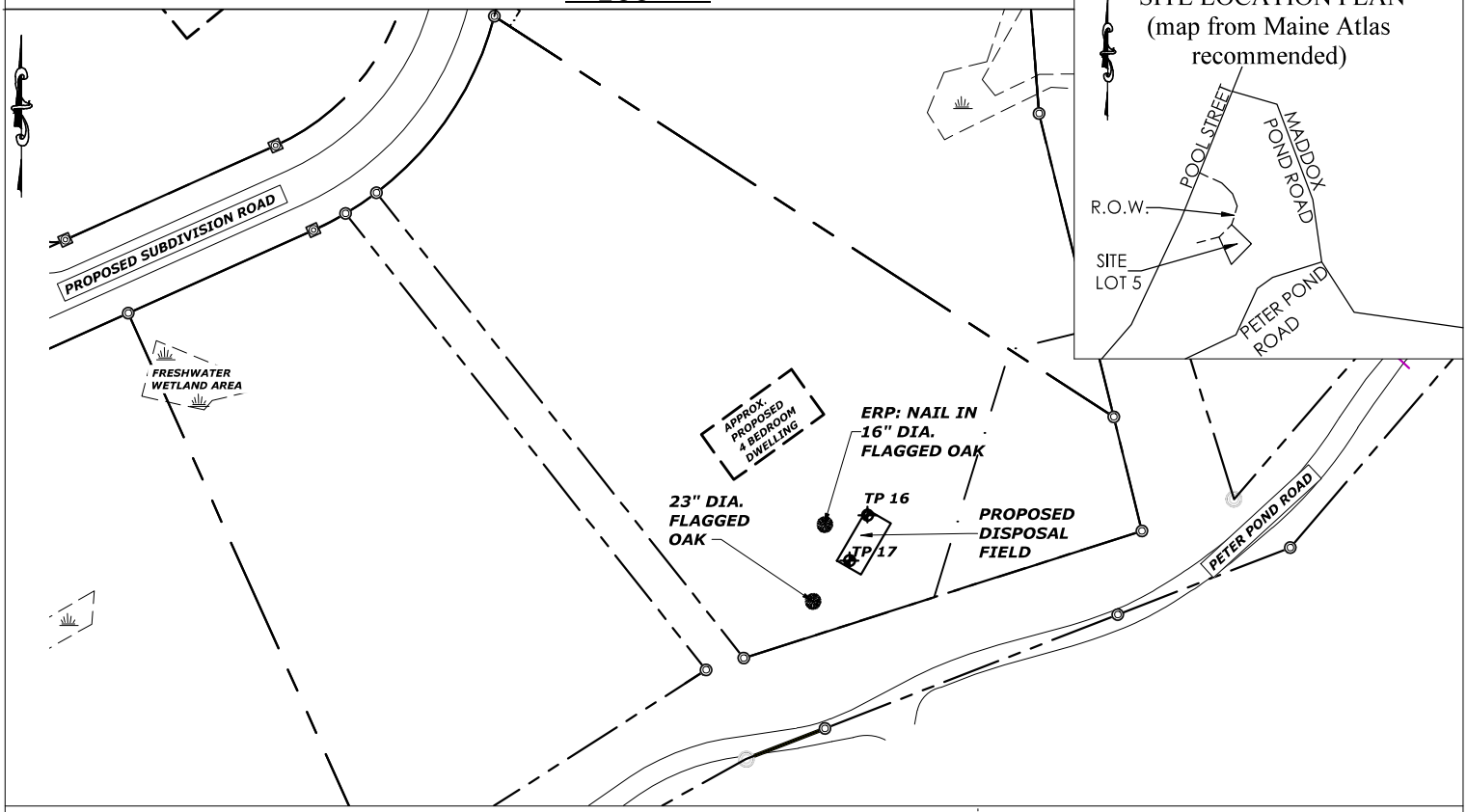
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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 5***	***BEACHWOOD DEVELOPMENT FUND***

SITE PLAN Scale 1" = ***100*** ft. or as shown



SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole ***TP 16*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	CHANNERY FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	NONE EVIDENT
10–20				
20–30	BEDROCK			
30–40				
40–50				

Soil Classification	Slope	Limiting Factor	
2 Profile ***AIII*** Condition	***2-5*** %	***24*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole ***TP 17*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	STONY FINE SANDY LOAM	FRIABLE	DARK BROWN DARK YELLOWISH BROWN	
10–20			YELLOWISH BROWN	
20–30	STONY SANDY LOAM & LOAMY SAND	FIRM	OLIVE BROWN	COMMON FAINT
30–40				
40–50				

Soil Classification	Slope	Limiting Factor	
3 Profile ***C*** Condition	***2-5*** %	***22*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

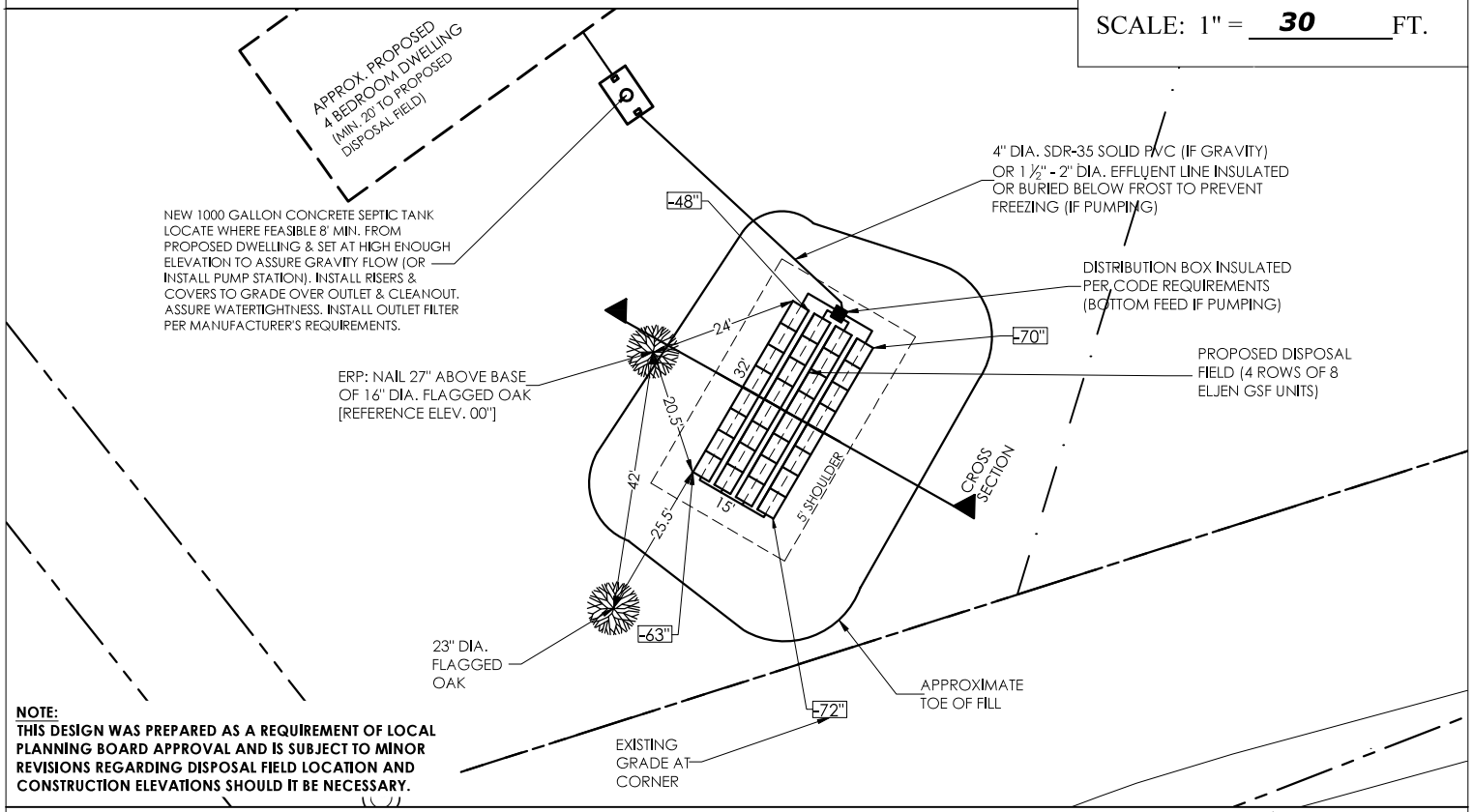
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 5***	***BEACHWOOD DEVELOPMENT FUND***

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

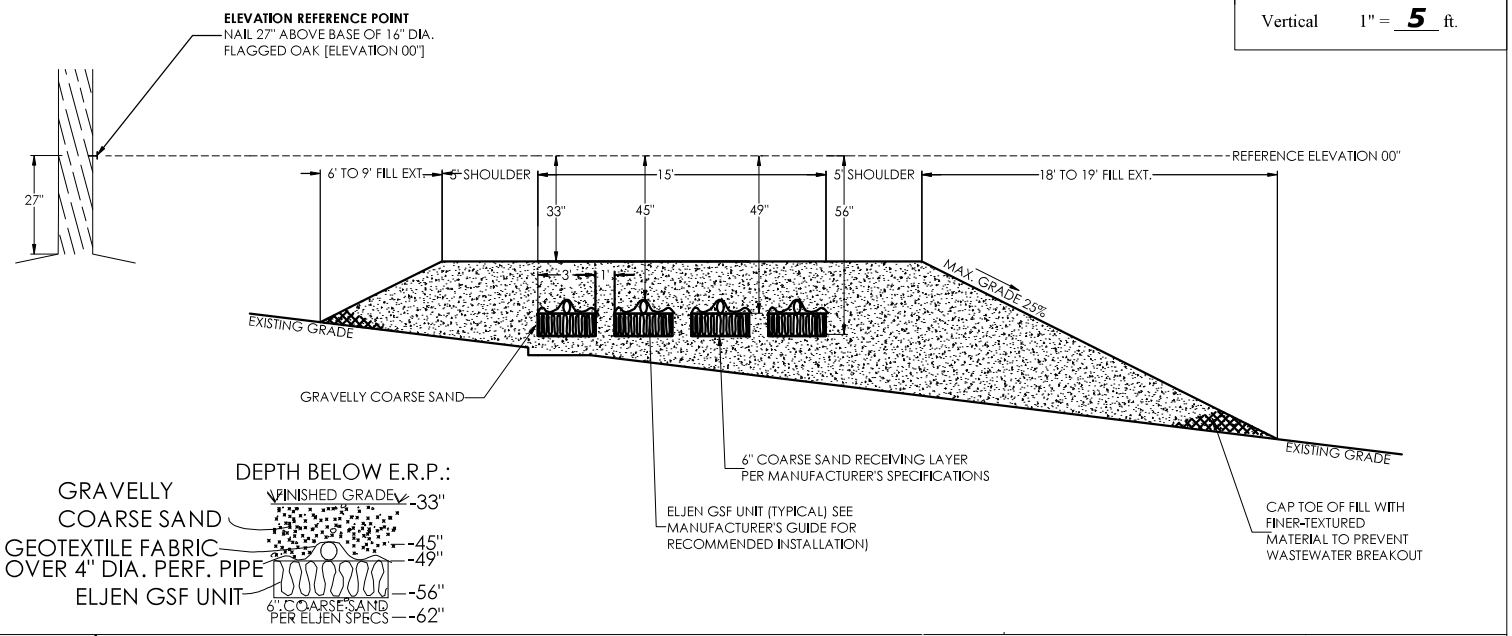


NOTE:
THIS DESIGN WAS PREPARED AS A REQUIREMENT OF LOCAL PLANNING BOARD APPROVAL AND IS SUBJECT TO MINOR REVISIONS REGARDING DISPOSAL FIELD LOCATION AND CONSTRUCTION ELEVATIONS SHOULD IT BE NECESSARY.

FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***23"- 30"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 27" ABOVE BASE OF 16" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	Reference Elevation: ***00"***
Depth of Fill (Downslope)	***37"- 39"***	Bottom of Disposal Area	***BELOW***	

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
	237	***12/7/23***

DISPOSAL SYSTEM INSTALLATION NOTES

1. The State of Maine *Subsurface Wastewater Disposal Rules (10-144 Chapter 241* the *Rules*) are incorporated by reference and made a part of this application. These shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system installer shall contact Longview Partners, LLC (207-693-8799) if there are any questions concerning materials, procedures or the design. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the *Rules* and with all State and municipal laws and ordinances pertaining to the permitting, construction, and inspection of subsurface wastewater disposal systems.

2. This application is intended to represent facts pertinent to the *Rules* only. It shall be the responsibility of the owner/applicant, system installer and/or building contractor to determine compliance with and to obtain other permits under all applicable local, State and/or Federal laws and regulations before installing the system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations, should wet areas exist. Prior to commencement of construction/installation, the Local Plumbing Inspector or Code Enforcement Officer shall inform the owner/applicant and Longview Partners, LLC or any local ordinances which are more restrictive than the *Rules* in order that the design may be amended. All designs are subject to review by local, State and/or Federal authorities. Longview Partners, LLC's liability shall be limited to revisions required by regulatory agencies and based on laws or regulations in effect at the time of preparation of this application.

3. All information shown on this application relating to property lines, well locations, subsurface structures, and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Longview Partners, LLC in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties not readily visible above-grade (such as well points) should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4. Installation of a garbage (grinder) disposal is **not recommended**. If one is installed, an additional 1,000 gallon septic tank shall be connected in series to the proposed septic tank or a septic tank outlet filter shall be installed in the tank outlet. Risers and covers should be installed over the septic tank cleanout and outlet per the *Rules* for easy maintenance of the filter.

5. The septic tank should be pumped within 2 years of installation and subsequently as recommended by the pump service. **In no event should the septic tank be pumped less often than every 3 years**. The system use shall avoid introducing kitchen grease or fats into the system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life or performance.

6. All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

Longview Partners, LLC
Longviewpartners213@gmail.com

DISPOSAL SYSTEM INSTALLATION NOTES

7. The daily wastewater flow, number of bedrooms, or use of structure shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed.

8. The general minimum setbacks between a well (public or private) and septic system serving a single family residence are 100-300 feet, unless the local municipality has a more stringent requirement or a liner seal is installed in the well. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9. When a gravity flow is anticipated, **before construction/installation begins**, the system installer or building contractor shall review the elevation of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pipe pitch requirements.

10. When an effluent pump is required, pump stations should be sized per manufacturer's specifications to meet lift requirements and friction/head loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and cover at or above grade. An alarm device warning of a pump failure shall be installed. Bottom-feed distribution box is specified to prevent freezing. Insulate distribution boxes per the *Rules*.

11. On all systems, remove the vegetation, organic duff and roots, and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on the plan may be necessary to replace organic matter and/or stumps. On sites where the proposed disposal area is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal field and fill extension are to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or different settling). Do not use wheeled equipment on the scarified soil are until after 12 inches of fill is in place. Keep equipment off of proprietary leaching devices. Divert surface water away from the disposal area by ditching or shallow landscape swales.

12. Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process. Refer to the *Rules* for more specific information regarding fill and stone.

13. Seed all filled and disturbed surfaces with perennial grass seed, with 4 inches minimum soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover the system. Woody trees or shrubs are not permitted on the disposal field or fill extensions.

14. If an advanced wastewater treatment unit is part of this design, the system shall be operated and maintained per manufacturer's specifications.

15. Effluent (backwash) from water treatment units **SHALL NOT** be disposed of within this disposal system and **MUST** be redirected away from the disposal field

Longview Partners, LLC
Longviewpartners213@gmail.com

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 6**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **BEACHWOOD DEVELOPMENT FUND** ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐1. First Time System
☐2. Replacement System
Type replaced: ____
Year installed: ____
☐3. Expanded System
☐a. <25% Expansion
☐b. >25% Expansion
☐4. Experimental System
☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

☐1. No Rule Variance
☐2. First Time System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐3. Replacement System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐4. Minimum Lot Size Variance
☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☐1. Complete Non-engineered System
☐2. Primitive System (graywater & alt. toilet)
☐3. Alternative Toilet, specify: ____
☐4. Non-engineered Treatment Tank (only)
☐5. Holding Tank, ____ gallons
☐6. Non-engineered Disposal Field (only)
☐7. Separated Laundry System
☐8. Complete Engineered System (2000 gpd or more)
☐9. Engineered Treatment Tank (only)
☐10. Engineered Disposal Field (only)
☐11. Pre-treatment, specify: ____
☐12. Miscellaneous Components

SIZE OF PROPERTY

1.43+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
☐2. Multiple Family Dwelling, No. of Units: ____
☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private
☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☐1. Concrete
☐a. Regular
☐b. Low Profile
☐2. Plastic
☐3. Other: ____
CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

☐1. Stone Bed ☐2. Stone Trench
☐3. Proprietary Device
☐a. cluster array ☐c. Linear
☐b. regular load ☐d. H-20 load
☐4. Other: ____
SIZE: **1536** ☐sq. ft. ☐lin. ft.
32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe
If Yes or Maybe, specify one below:
☐a. multi-compartment tank
☐b. ___ tanks in series
☐c. increase in tank capacity
☐d. Filter on Tank Outlet
REQUIRED

DESIGN FLOW

360 gallons per day
BASED ON:
☐1. Table 4A (dwelling unit(s))
☐2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
-SINGLE FAMILY DWELLING-
4 BEDROOMS @ 90 GPD EACH

SOIL DATA & DESIGN CLASS

PROFILE / CONDITION
2 / **AIII**
at Observation Hole # **TP 18**
Depth **22** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐1. Medium---2.6 sq. ft. / gpd
☐2. Medium---Large 3.3 sq. f.t / gpd
☐3. Large---4.1 sq. ft. / gpd
☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐1. Not Required
☐2. May Be Required ***SEE NOTE PAGE 3***
☐3. Required
Specify only for engineered systems:
DOSE: ____ gallons

☐3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **25** m **51** s
Lon. **70** d **22** m **42** s
if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan
Site Evaluator Signature ____ **237** SE # ____ **12/7/23** Date

JAMES LOGAN Site Evaluator Name Printed ____ **207-693-8799** Telephone Number ____ **longviewpartners213@gmail.com** E-mail Address

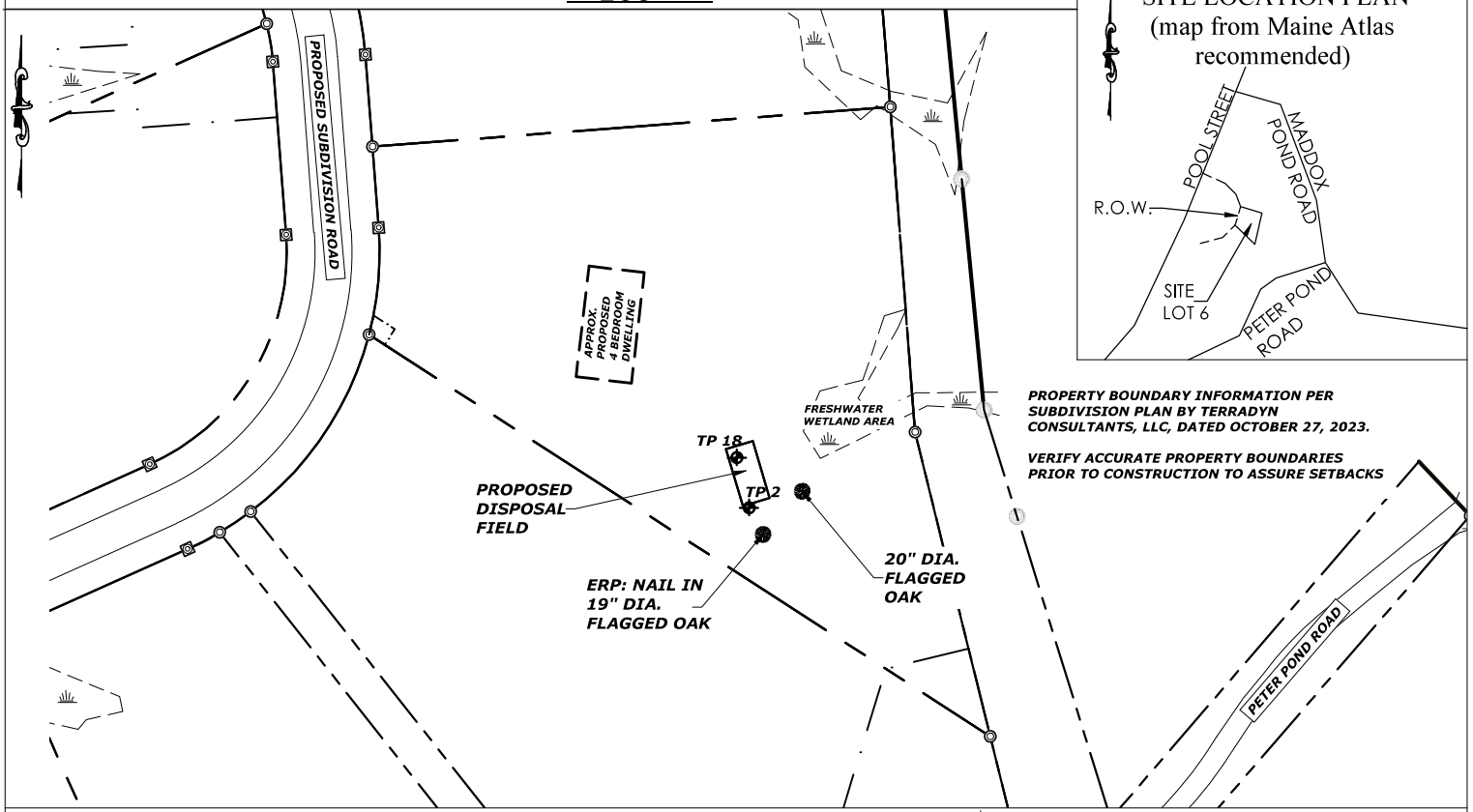
Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 6***	***BEACHWOOD DEVELOPMENT FUND***

SITE PLAN Scale 1" = ***100*** ft. or as shown



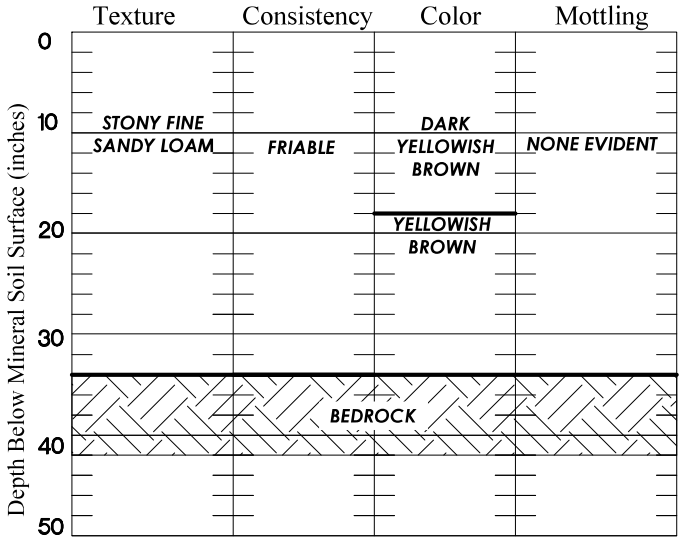
SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole ***TP 2*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

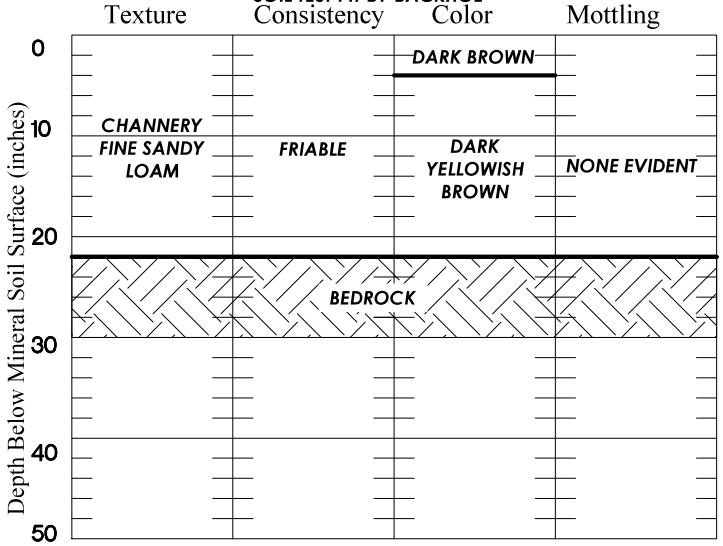


Soil Classification		Slope	Limiting Factor	
2 Profile	***AIII*** Condition	***6-11*** %	***34*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole ***TP 18*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE



Soil Classification		Slope	Limiting Factor	
2 Profile	***AIII*** Condition	***6-11*** %	***22*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

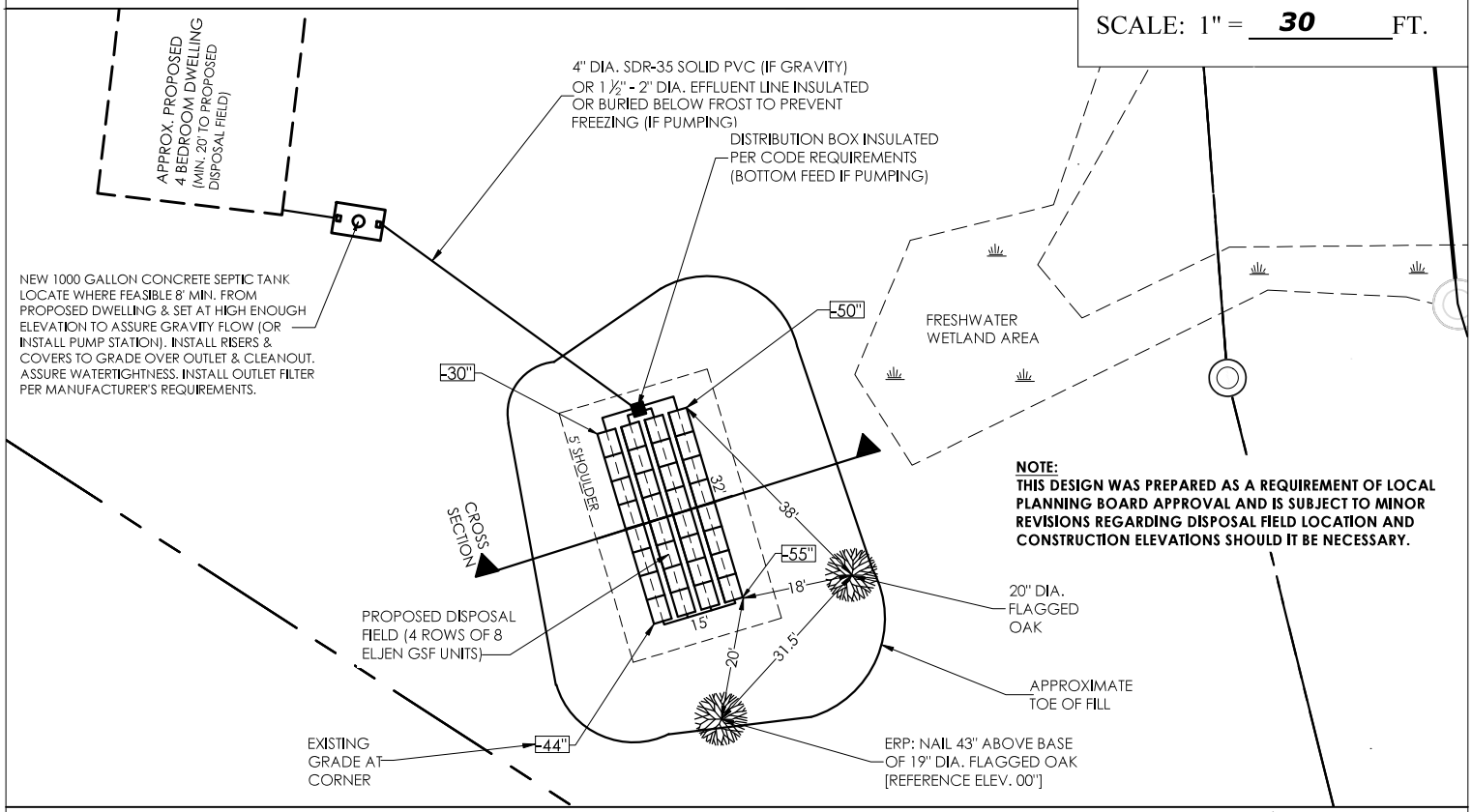
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 6***	***BEACHWOOD DEVELOPMENT FUND***

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

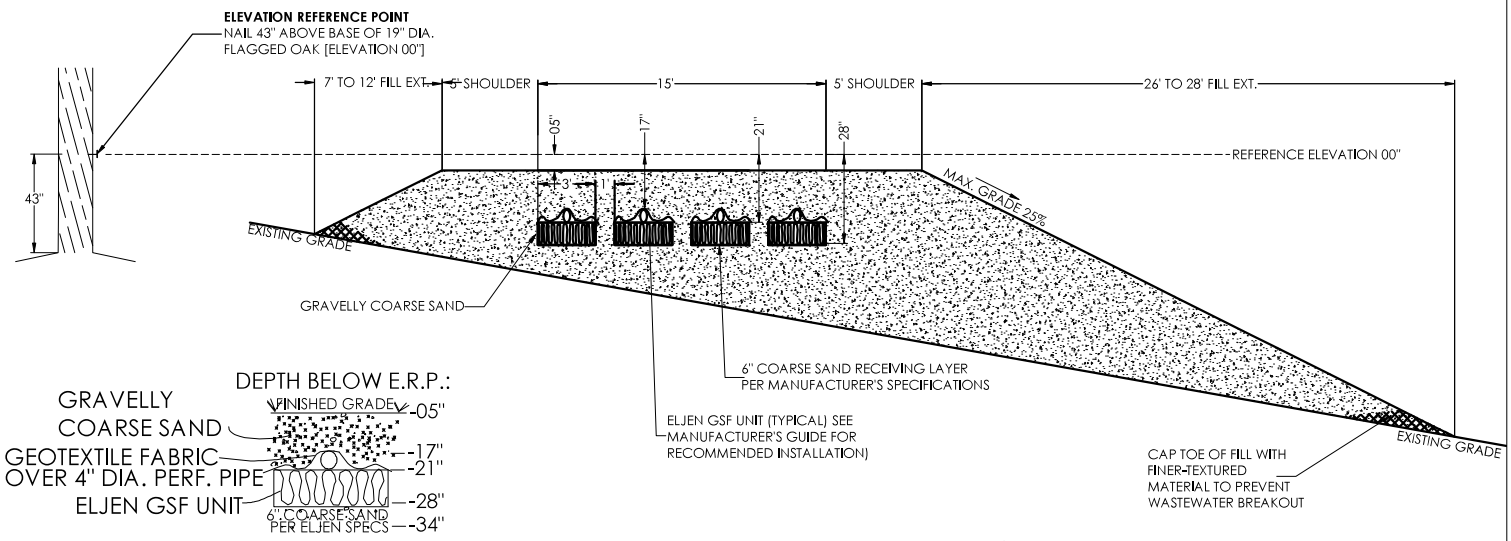


NOTE:
THIS DESIGN WAS PREPARED AS A REQUIREMENT OF LOCAL PLANNING BOARD APPROVAL AND IS SUBJECT TO MINOR REVISIONS REGARDING DISPOSAL FIELD LOCATION AND CONSTRUCTION ELEVATIONS SHOULD IT BE NECESSARY.

FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***25"- 39"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 43" ABOVE BASE OF 19" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	
Depth of Fill (Downslope)	***45"- 50"***	Bottom of Disposal Area	***BELOW***	Reference Elevation: ***00"***

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
James Logan	***237***	***12/7/23***

DISPOSAL SYSTEM INSTALLATION NOTES

1. The State of Maine *Subsurface Wastewater Disposal Rules (10-144 Chapter 241* the *Rules*) are incorporated by reference and made a part of this application. These shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system installer shall contact Longview Partners, LLC (207-693-8799) if there are any questions concerning materials, procedures or the design. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the *Rules* and with all State and municipal laws and ordinances pertaining to the permitting, construction, and inspection of subsurface wastewater disposal systems.

2. This application is intended to represent facts pertinent to the *Rules* only. It shall be the responsibility of the owner/applicant, system installer and/or building contractor to determine compliance with and to obtain other permits under all applicable local, State and/or Federal laws and regulations before installing the system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations, should wet areas exist. Prior to commencement of construction/installation, the Local Plumbing Inspector or Code Enforcement Officer shall inform the owner/applicant and Longview Partners, LLC or any local ordinances which are more restrictive than the *Rules* in order that the design may be amended. All designs are subject to review by local, State and/or Federal authorities. Longview Partners, LLC's liability shall be limited to revisions required by regulatory agencies and based on laws or regulations in effect at the time of preparation of this application.

3. All information shown on this application relating to property lines, well locations, subsurface structures, and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Longview Partners, LLC in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties not readily visible above-grade (such as well points) should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4. Installation of a garbage (grinder) disposal is **not recommended**. If one is installed, an additional 1,000 gallon septic tank shall be connected in series to the proposed septic tank or a septic tank outlet filter shall be installed in the tank outlet. Risers and covers should be installed over the septic tank cleanout and outlet per the *Rules* for easy maintenance of the filter.

5. The septic tank should be pumped within 2 years of installation and subsequently as recommended by the pump service. **In no event should the septic tank be pumped less often than every 3 years**. The system use shall avoid introducing kitchen grease or fats into the system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life or performance.

6. All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

Longview Partners, LLC
Longviewpartners213@gmail.com

DISPOSAL SYSTEM INSTALLATION NOTES

7. The daily wastewater flow, number of bedrooms, or use of structure shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed.

8. The general minimum setbacks between a well (public or private) and septic system serving a single family residence are 100-300 feet, unless the local municipality has a more stringent requirement or a liner seal is installed in the well. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9. When a gravity flow is anticipated, **before construction/installation begins**, the system installer or building contractor shall review the elevation of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pipe pitch requirements.

10. When an effluent pump is required, pump stations should be sized per manufacturer's specifications to meet lift requirements and friction/head loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and cover at or above grade. An alarm device warning of a pump failure shall be installed. Bottom-feed distribution box is specified to prevent freezing. Insulate distribution boxes per the *Rules*.

11. On all systems, remove the vegetation, organic duff and roots, and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on the plan may be necessary to replace organic matter and/or stumps. On sites where the proposed disposal area is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal field and fill extension are to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or different settling). Do not use wheeled equipment on the scarified soil are until after 12 inches of fill is in place. Keep equipment off of proprietary leaching devices. Divert surface water away from the disposal area by ditching or shallow landscape swales.

12. Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process. Refer to the *Rules* for more specific information regarding fill and stone.

13. Seed all filled and disturbed surfaces with perennial grass seed, with 4 inches minimum soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover the system. Woody trees or shrubs are not permitted on the disposal field or fill extensions.

14. If an advanced wastewater treatment unit is part of this design, the system shall be operated and maintained per manufacturer's specifications.

15. Effluent (backwash) from water treatment units **SHALL NOT** be disposed of within this disposal system and **MUST** be redirected away from the disposal field

Longview Partners, LLC
Longviewpartners213@gmail.com

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 7**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **BEACHWOOD DEVELOPMENT FUND** ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged ☐

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved ____

PERMIT INFORMATION

TYPE OF APPLICATION

- 1. First Time System
- ☐2. Replacement System
  - Type replaced: ____
  - Year installed: ____
- ☐3. Expanded System
  - ☐a. <25% Expansion
  - ☐b. >25% Expansion
- ☐4. Experimental System
- ☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

- ☐1. No Rule Variance
- ☐2. First Time System Variance
  - ☐a. Local Plumbing Inspector Approval
  - ☐b. State & Local Plumbing Inspector Approval
- ☐3. Replacement System Variance
  - ☐a. Local Plumbing Inspector Approval
  - ☐b. State & Local Plumbing Inspector Approval
- ☐4. Minimum Lot Size Variance
- ☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

- ☐1. Complete Non-engineered System
- ☐2. Primitive System (graywater & alt. toilet)
- ☐3. Alternative Toilet, specify: ____
- ☐4. Non-engineered Treatment Tank (only)
- ☐5. Holding Tank, ____ gallons
- ☐6. Non-engineered Disposal Field (only)
- ☐7. Separated Laundry System
- ☐8. Complete Engineered System (2000 gpd or more)
- ☐9. Engineered Treatment Tank (only)
- ☐10. Engineered Disposal Field (only)
- ☐11. Pre-treatment, specify: ____
- ☐12. Miscellaneous Components

SIZE OF PROPERTY

1.19+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

- ☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
- ☐2. Multiple Family Dwelling, No. of Units: ____
- ☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private

☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

- ☐1. Concrete
  - ☐a. Regular
  - ☐b. Low Profile
- ☐2. Plastic
- ☐3. Other: ____

CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

- ☐1. Stone Bed ☐2. Stone Trench
- ☐3. Proprietary Device
  - ☐a. cluster array ☐c. Linear
  - ☐b. regular load ☐d. H-20 load
- ☐4. Other: ____

SIZE: **1536** ☐sq. ft. ☐lin. ft.

32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe

If Yes or Maybe, specify one below:

- ☐a. multi-compartment tank
- ☐b. ___ tanks in series
- ☐c. increase in tank capacity
- ☐d. Filter on Tank Outlet

REQUIRED

DESIGN FLOW

360 gallons per day

BASED ON:

- ☐1. Table 4A (dwelling unit(s))
- ☐2. Table 4C(other facilities)

SHOW CALCULATIONS for other facilites

-SINGLE FAMILY DWELLING-

4 BEDROOMS @ 90 GPD EACH

- ☐3. Section 4G (meter readings)

ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE / CONDITION

2 / **AII**

at Observation Hole # **TP 21**

Depth **9** "

of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

- ☐1. Medium---2.6 sq. ft. / gpd
- ☐2. Medium---Large 3.3 sq. f.t / gpd
- ☐3. Large---4.1 sq. ft. / gpd
- ☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

- ☐1. Not Required
- ☐2. May Be Required — ***SEE NOTE PAGE 3***
- ☐3. Required

Specify only for engineered systems:

DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area

Lat. **43** d **25** m **53** s

Lon. **70** d **22** m **43** s

if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan

Site Evaluator Signature ____ **237** SE # ____ **12/7/23** Date

JAMES LOGAN Site Evaluator Name Printed ____ **207-693-8799** Telephone Number ____ ***longviewpartners213@gmail.com*** E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

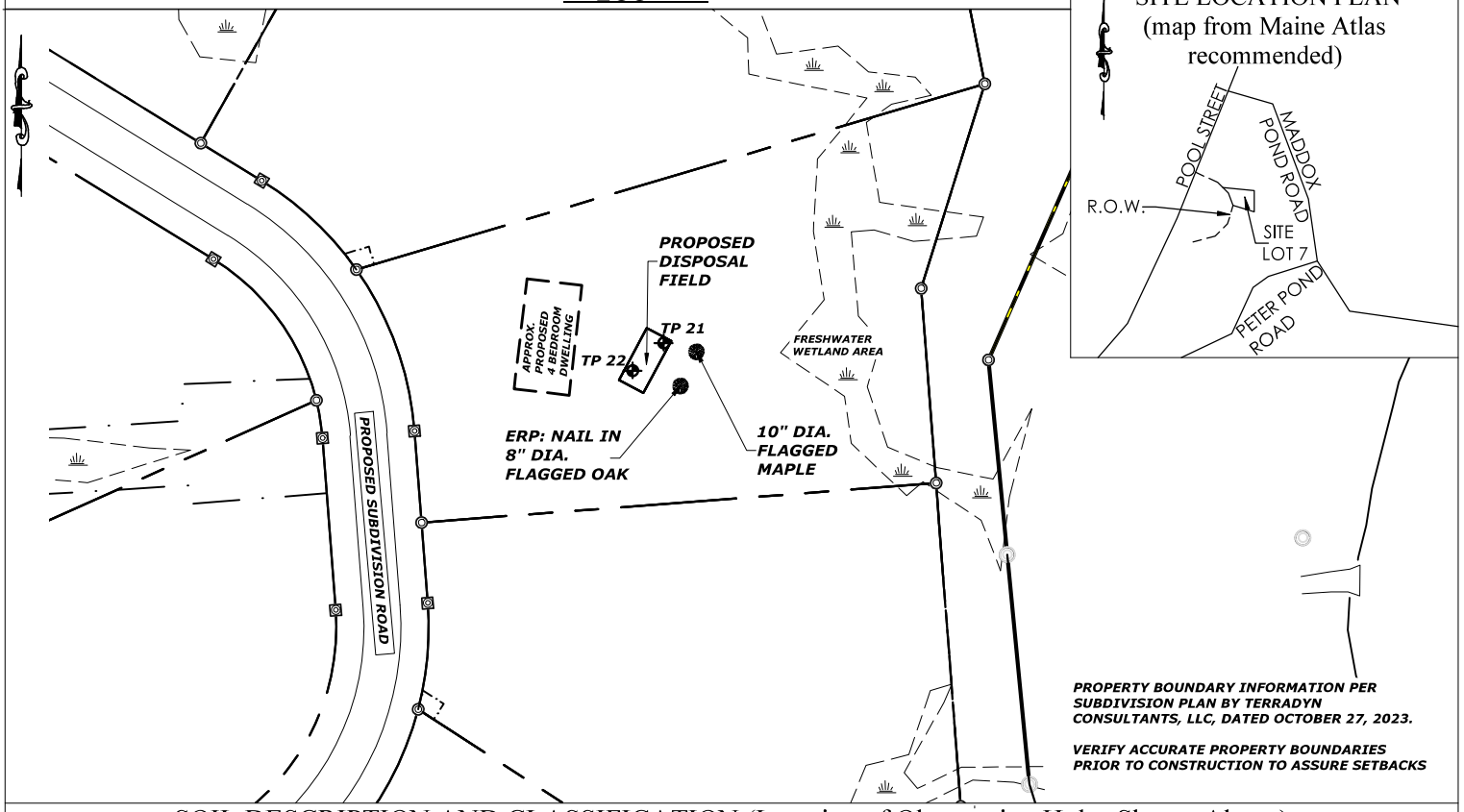
954

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 7***	***BEACHWOOD DEVELOPMENT FUND***

SITE PLAN Scale 1" = ***100*** ft. or as shown



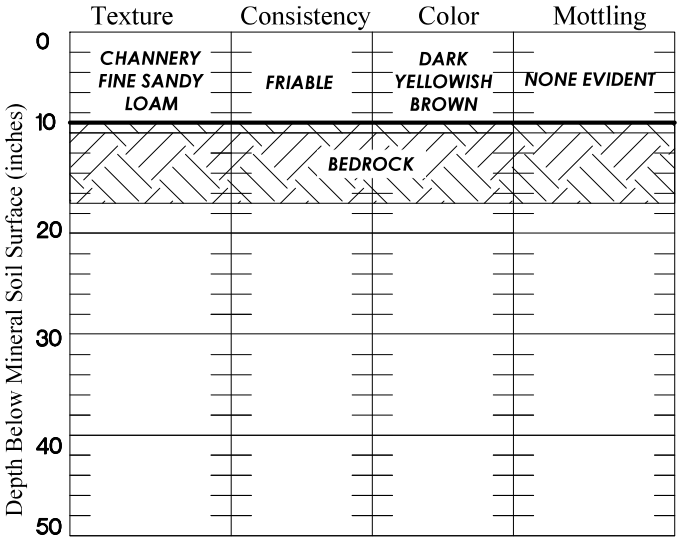
SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole ***TP 21*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

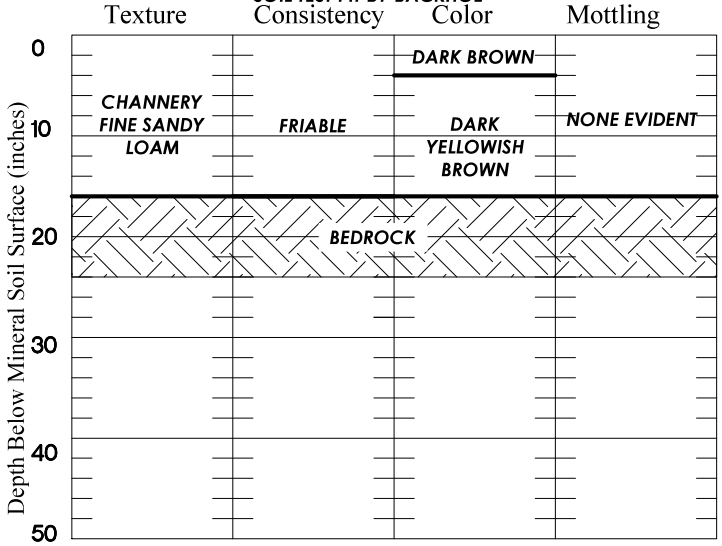


Soil Classification	Slope	Limiting Factor	
2 Profile / ***All*** Condition	***0-1*** %	***9*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

Observation Hole ***TP 22*** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE



Soil Classification	Slope	Limiting Factor	
2 Profile / ***AIII*** Condition	***0-1*** %	***16*** "	[ ] Ground Water [ ] Restrictive Layer [X] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

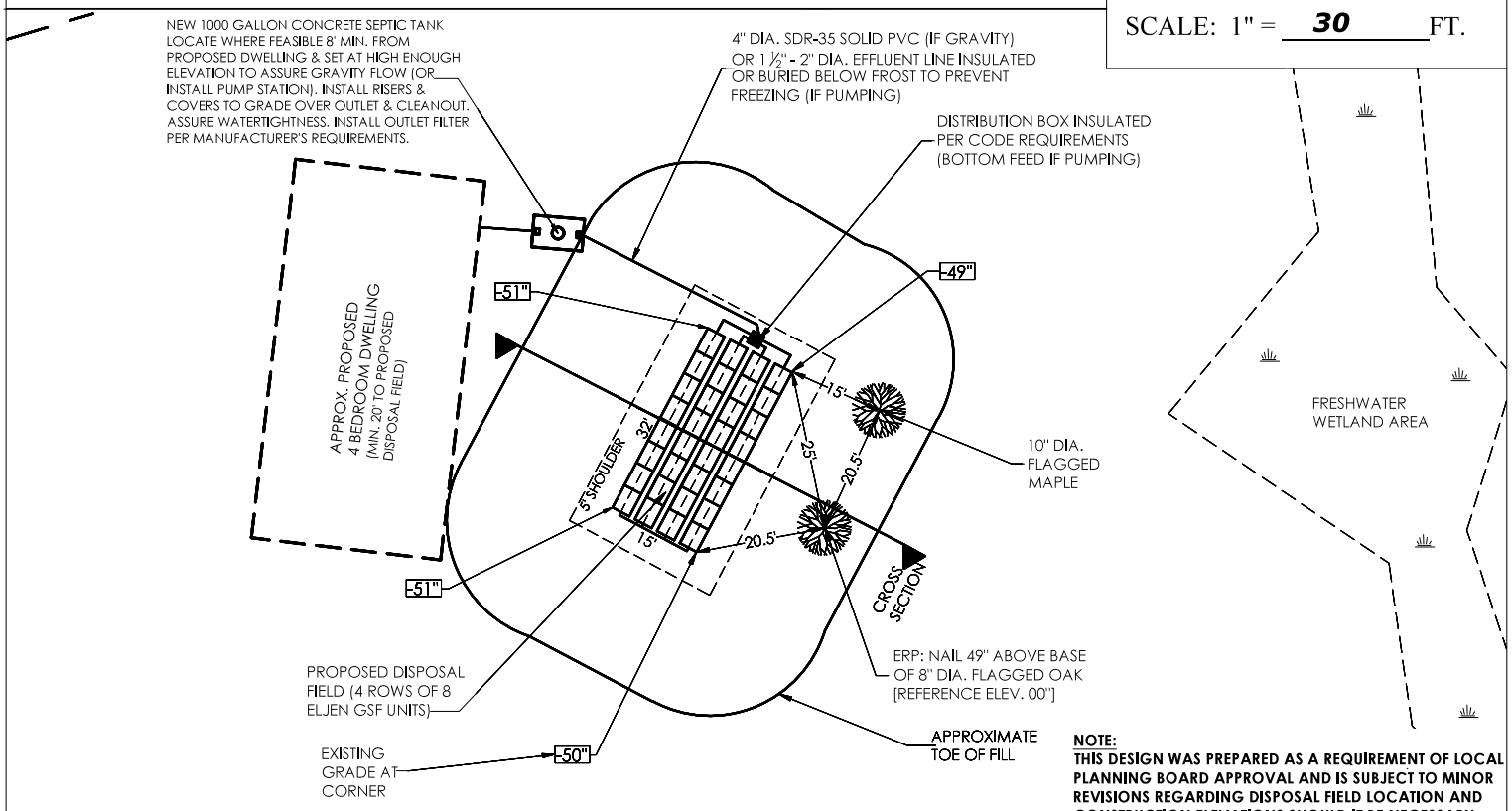
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 7***	***BEACHWOOD DEVELOPMENT FUND***

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

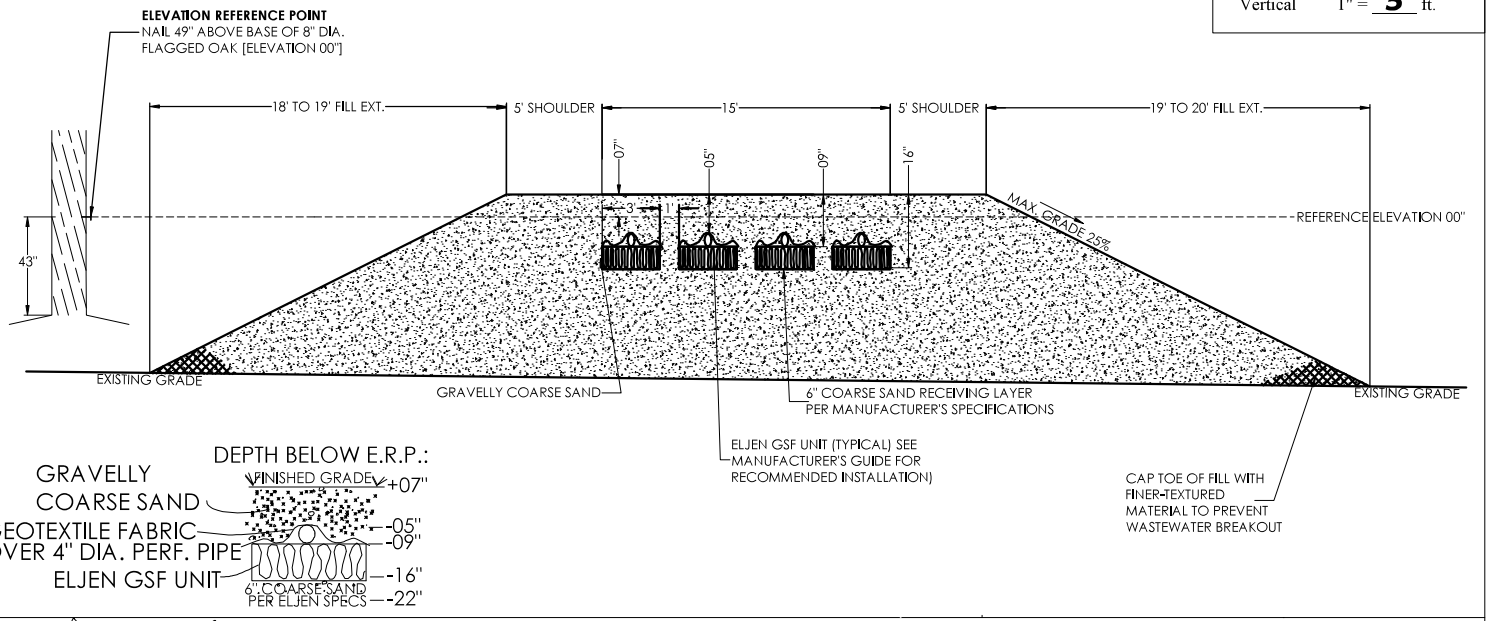


NOTE:
THIS DESIGN WAS PREPARED AS A REQUIREMENT OF LOCAL PLANNING BOARD APPROVAL AND IS SUBJECT TO MINOR REVISIONS REGARDING DISPOSAL FIELD LOCATION AND CONSTRUCTION ELEVATIONS SHOULD IT BE NECESSARY.

FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***56"- 57"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 49" ABOVE BASE OF 8" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	
Depth of Fill (Downslope)	***58"***	Bottom of Disposal Area	***BELOW***	Reference Elevation: ***00"***

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
James Logan	***237***	***12/7/23***

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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	**BIDDEFORD**
Street or Road	**R.O.W. off POOL STREET**
Subdivision, Lot #	**LOT 8**

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **BEACHWOOD DEVELOPMENT FUND** ☐Owner ☐Applicant

Mailing Address of Owner/Applicant: **P.O. BOX 261**, **KENNEBUNK, ME 04043**

Daytime Tel. #

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____

Date Permit Issued ____/____/____ Fee: $____ Double Fee Charged

Local Plumbing Inspector Signature ____ LPI. # ____

☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **5** Lot # **P/O 17-2**

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐1. First Time System
☐2. Replacement System
Type replaced: ____
Year installed: ____
☐3. Expanded System
☐a. <25% Expansion
☐b. >25% Expansion
☐4. Experimental System
☐5. Seasonal Conversion

THIS APPLICATION REQUIRES

☐1. No Rule Variance
☐2. First Time System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐3. Replacement System Variance
☐a. Local Plumbing Inspector Approval
☐b. State & Local Plumbing Inspector Approval
☐4. Minimum Lot Size Variance
☐5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☐1. Complete Non-engineered System
☐2. Primitive System (graywater & alt. toilet)
☐3. Alternative Toilet, specify: ____
☐4. Non-engineered Treatment Tank (only)
☐5. Holding Tank, ____ gallons
☐6. Non-engineered Disposal Field (only)
☐7. Separated Laundry System
☐8. Complete Engineered System (2000 gpd or more)
☐9. Engineered Treatment Tank (only)
☐10. Engineered Disposal Field (only)
☐11. Pre-treatment, specify: ____
☐12. Miscellaneous Components

SIZE OF PROPERTY

2.14+/- ☐SQ. FT. ☐ACRES

SHORELAND ZONING

☐Yes ☐No

DISPOSAL SYSTEM TO SERVE

☐1. Single Family Dwelling Unit, No. of Bedrooms: **4**
☐2. Multiple Family Dwelling, No. of Units: ____
☐3. Other: ____ (specify)

Current Use ☐Seasonal ☐Year Round ☐Undeveloped

TYPE OF WATER SUPPLY

☐1. Drilled Well ☐2. Dug Well ☐3. Private
☐4. Public ☐5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☐1. Concrete
☐a. Regular
☐b. Low Profile
☐2. Plastic
☐3. Other: ____
CAPACITY: **1000** GAL.

DISPOSAL FIELD TYPE & SIZE

☐1. Stone Bed ☐2. Stone Trench
☐3. Proprietary Device
☐a. cluster array ☐c. Linear
☐b. regular load ☐d. H-20 load
☐4. Other: ____
SIZE: **1536** ☐sq. ft. ☐lin. ft.
32 ELJEN GSF UNITS

GARBAGE DISPOSAL UNIT

☐1. No ☐2. Yes ☐3. Maybe
If Yes or Maybe, specify one below:
☐a. multi-compartment tank
☐b. ___ tanks in series
☐c. increase in tank capacity
☐d. Filter on Tank Outlet
REQUIRED

DESIGN FLOW

360 gallons per day
BASED ON:
☐1. Table 4A (dwelling unit(s))
☐2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
-SINGLE FAMILY DWELLING-
4 BEDROOMS @ 90 GPD EACH

SOIL DATA & DESIGN CLASS

PROFILE **3** CONDITION **C**
at Observation Hole # **TP 7**
Depth **17** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐1. Medium---2.6 sq. ft. / gpd
☐2. Medium---Large 3.3 sq. f.t / gpd
☐3. Large---4.1 sq. ft. / gpd
☐4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐1. Not Required
☐2. May Be Required ***SEE NOTE PAGE 3***
☐3. Required
Specify only for engineered systems:
DOSE: ____ gallons

☐3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **25** m **56** s
Lon. **70** d **22** m **44** s
if g.p.s, state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on **11/7/23** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

James Logan — **237** — **12/7/23**
Site Evaluator Signature | SE # | Date

JAMES LOGAN — **207-693-8799** — **longviewpartners213@gmail.com**
Site Evaluator Name Printed | Telephone Number | E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

959

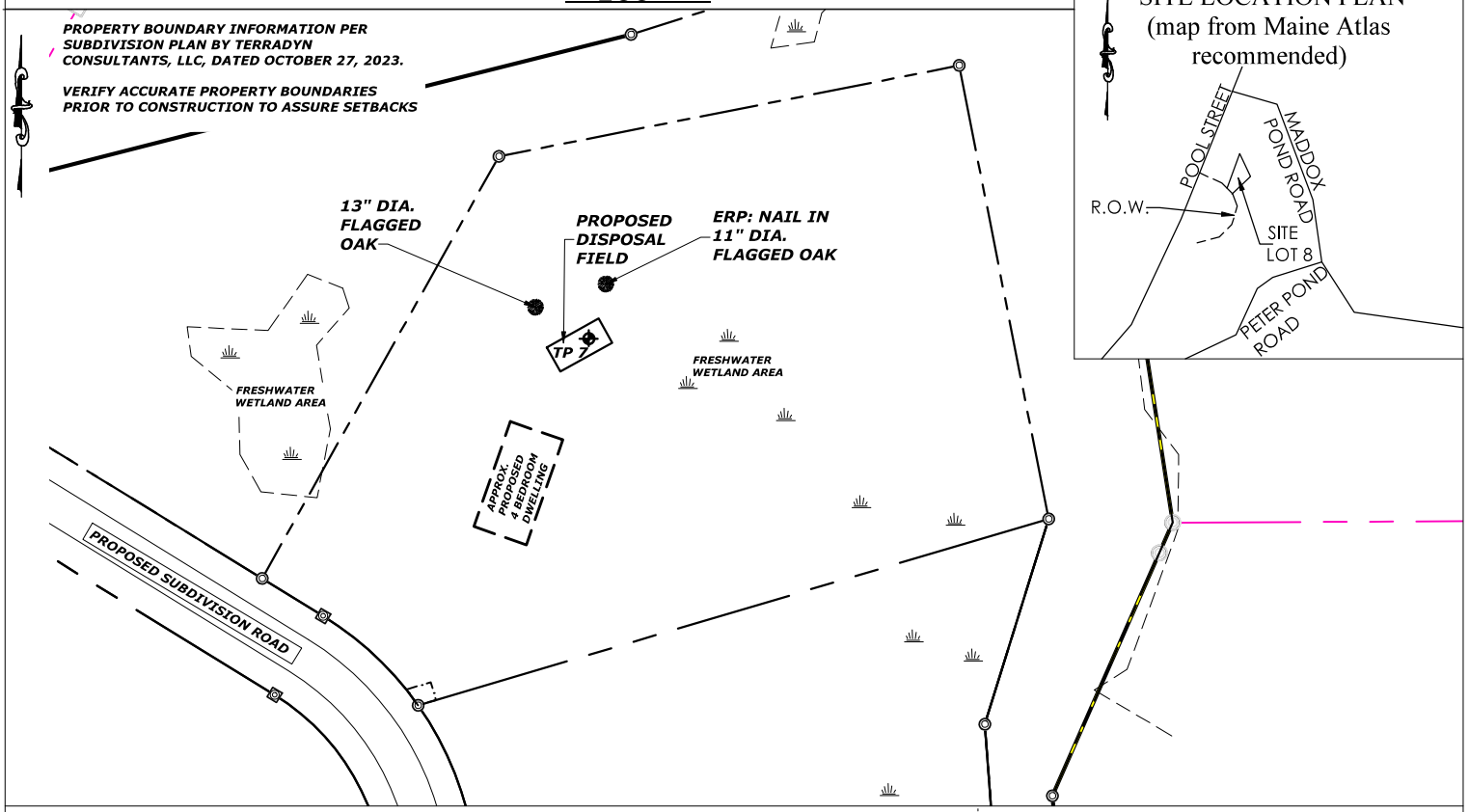
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	**R.O.W. off POOL STREET, LOT 8**	**BEACHWOOD DEVELOPMENT FUND**

SITE PLAN

Scale 1" = **100** ft. or as shown



SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole **TP 7** ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	STONY FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	
10–20	STONY SANDY LOAM & LOAMY SAND	FIRM	OLIVE BROWN	FEW FAINT COMMON DISTINCT

LIMIT OF EXCAVATION @ 46"

Soil Classification	Slope	Limiting Factor	
3 Profile / C Condition	_____ %	17 "	[X] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ■ Test Pit □ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0				
10				
20				
30				
40				
50				

Soil Classification	Slope	Limiting Factor	
_____ Profile / _____ Condition	_____ %	_____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

James Logan
Site Evaluator Signature

237
SE #

12/7/23
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

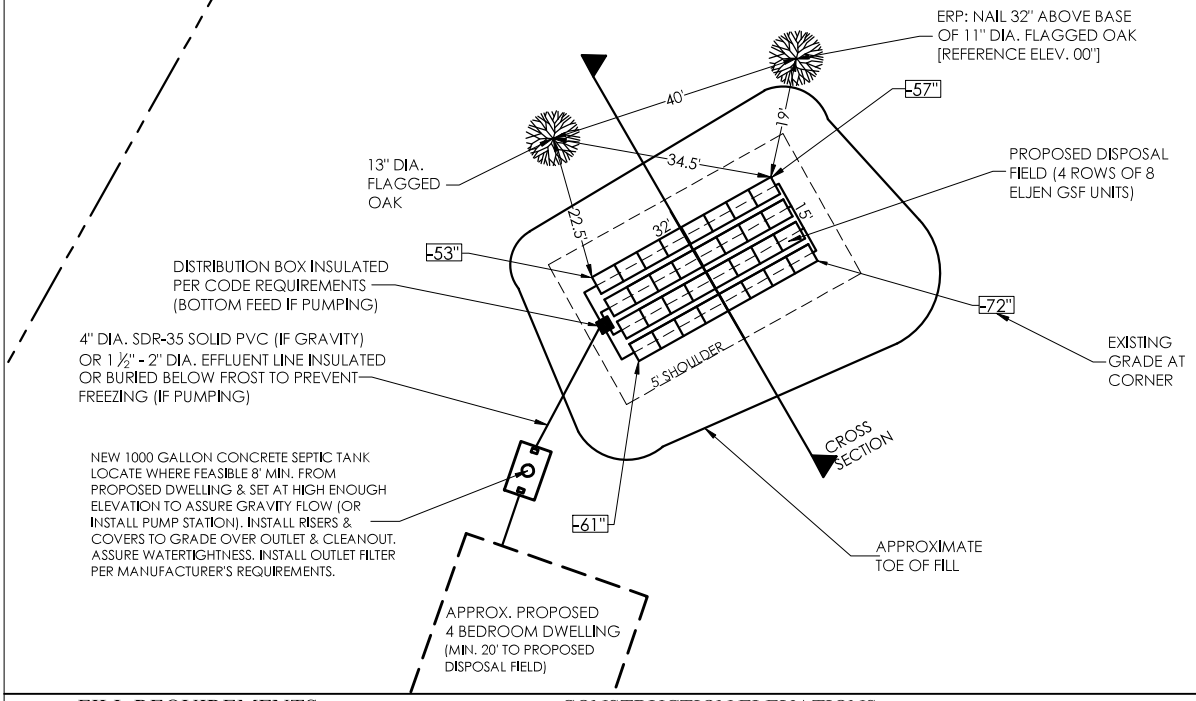
Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
BIDDEFORD	***R.O.W. off POOL STREET, LOT 8***	***BEACHWOOD DEVELOPMENT FUND***

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = ***30*** FT.

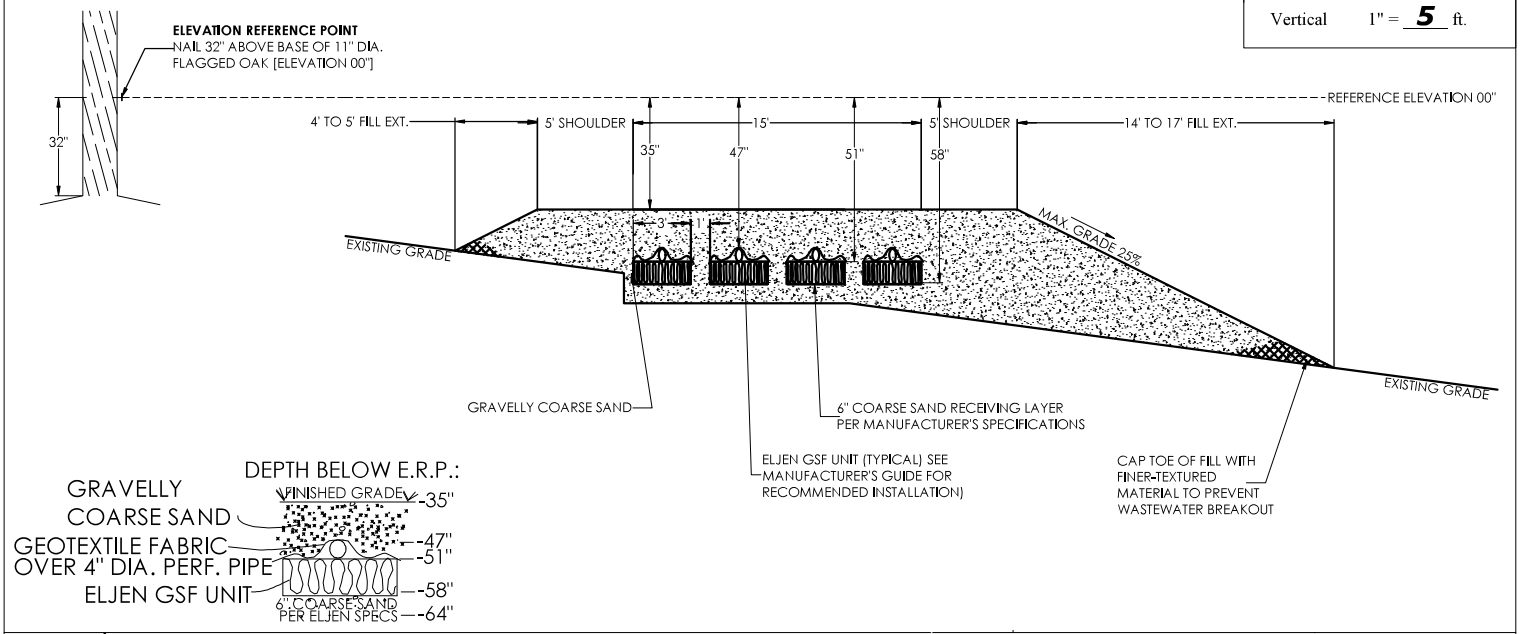
NOTE:
THIS DESIGN WAS PREPARED AS A REQUIREMENT OF LOCAL PLANNING BOARD APPROVAL AND IS SUBJECT TO MINOR REVISIONS REGARDING DISPOSAL FIELD LOCATION AND CONSTRUCTION ELEVATIONS SHOULD IT BE NECESSARY.



FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT
Depth of Fill (Upslope)	***18"- 22"***	Finished Grade Elevation	***SEE***	Location & Description: ***NAIL 32" ABOVE BASE OF 11" DIA. FLAGGED OAK***
		Top of Distribution Pipe or Proprietary Device	***DETAIL***	Reference Elevation: ***00"***
Depth of Fill (Downslope)	***26"- 37"***	Bottom of Disposal Area	***BELOW***	

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = ***10*** ft.
Vertical 1" = ***5*** ft.



Site Evaluator Signature	SE #	Date
James Logan	***237***	***12/7/23***

DISPOSAL SYSTEM INSTALLATION NOTES

1. The State of Maine *Subsurface Wastewater Disposal Rules (10-144 Chapter 241* the *Rules*) are incorporated by reference and made a part of this application. These shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system installer shall contact Longview Partners, LLC (207-693-8799) if there are any questions concerning materials, procedures or the design. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the *Rules* and with all State and municipal laws and ordinances pertaining to the permitting, construction, and inspection of subsurface wastewater disposal systems.

2. This application is intended to represent facts pertinent to the *Rules* only. It shall be the responsibility of the owner/applicant, system installer and/or building contractor to determine compliance with and to obtain other permits under all applicable local, State and/or Federal laws and regulations before installing the system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations, should wet areas exist. Prior to commencement of construction/installation, the Local Plumbing Inspector or Code Enforcement Officer shall inform the owner/applicant and Longview Partners, LLC or any local ordinances which are more restrictive than the *Rules* in order that the design may be amended. All designs are subject to review by local, State and/or Federal authorities. Longview Partners, LLC's liability shall be limited to revisions required by regulatory agencies and based on laws or regulations in effect at the time of preparation of this application.

3. All information shown on this application relating to property lines, well locations, subsurface structures, and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Longview Partners, LLC in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties not readily visible above-grade (such as well points) should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4. Installation of a garbage (grinder) disposal is **not recommended**. If one is installed, an additional 1,000 gallon septic tank shall be connected in series to the proposed septic tank or a septic tank outlet filter shall be installed in the tank outlet. Risers and covers should be installed over the septic tank cleanout and outlet per the *Rules* for easy maintenance of the filter.

5. The septic tank should be pumped within 2 years of installation and subsequently as recommended by the pump service. **In no event should the septic tank be pumped less often than every 3 years**. The system use shall avoid introducing kitchen grease or fats into the system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life or performance.

6. All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

Longview Partners, LLC
Longviewpartners213@gmail.com

DISPOSAL SYSTEM INSTALLATION NOTES

7. The daily wastewater flow, number of bedrooms, or use of structure shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed.

8. The general minimum setbacks between a well (public or private) and septic system serving a single family residence are 100-300 feet, unless the local municipality has a more stringent requirement or a liner seal is installed in the well. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9. When a gravity flow is anticipated, **before construction/installation begins**, the system installer or building contractor shall review the elevation of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pipe pitch requirements.

10. When an effluent pump is required, pump stations should be sized per manufacturer's specifications to meet lift requirements and friction/head loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and cover at or above grade. An alarm device warning of a pump failure shall be installed. Bottom-feed distribution box is specified to prevent freezing. Insulate distribution boxes per the *Rules*.

11. On all systems, remove the vegetation, organic duff and roots, and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on the plan may be necessary to replace organic matter and/or stumps. On sites where the proposed disposal area is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal field and fill extension are to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or different settling). Do not use wheeled equipment on the scarified soil are until after 12 inches of fill is in place. Keep equipment off of proprietary leaching devices. Divert surface water away from the disposal area by ditching or shallow landscape swales.

12. Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process. Refer to the *Rules* for more specific information regarding fill and stone.

13. Seed all filled and disturbed surfaces with perennial grass seed, with 4 inches minimum soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover the system. Woody trees or shrubs are not permitted on the disposal field or fill extensions.

14. If an advanced wastewater treatment unit is part of this design, the system shall be operated and maintained per manufacturer's specifications.

15. Effluent (backwash) from water treatment units **SHALL NOT** be disposed of within this disposal system and **MUST** be redirected away from the disposal field

Longview Partners, LLC
Longviewpartners213@gmail.com

Attachment 4

Draft Homeowners Association Documents

Declaration of Covenants, Conditions, Restrictions,
And Easements

For

Longboard Ridge Subdivision

BIDDEFORD, MAINE

781 Pool Street, LLC
Declarant

January, 2024

DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, AND EASEMENTS FOR LONGBOARD RIDGE, BIDDEFORD, MAINE

This Declaration of Covenants, Conditions, Restrictions, and Easements for Longboard Ridge, Biddeford, Maine (the "Declaration") is made this xxth day of January 2024, by 781 Pool Street, LLC, a Maine limited liability company with an address of P.O. Box 261, Kennebunk, Maine 04043 (the "Declarant").

WITNESSETH:

WHEREAS, the Declarant is the owner of certain parcels of land located in Biddeford, Maine, being the same premises as conveyed to Declarant by Kingfisher Beach, LLC by deed dated April 24th, 2023, and recorded in the York County Registry of Deeds in Book xxxx, Page xxx; and as on plan entitled "Longboard Ridge Subdivision" drawn by Terradyn Consultants, LLC, dated xxx, 2024, revised through xxxxx x, 2024, and recorded in the York County Registry of Deeds in Plan Book xxx, ___ Page xx (the "Plan"), said parcels of land as shown on the Plan collectively referred to herein as the "Property"; and

WHEREAS, the Declarant is developing the parcels of land owned by it and shown on the Plan and has deemed it desirable to create a non-profit corporation to which should be delegated and assigned the authority to: (a) carry out certain responsibilities relating to the common facilities and amenities described herein and (b) administer and enforce the covenants, conditions, restrictions, easements, charges and liens set forth herein; and

NOW, THEREFORE, the Declarant declares that the Property is and shall be held, transferred, sold, conveyed and occupied subject to these covenants, conditions, restrictions, easements, charges and liens hereinafter set forth.

ARTICLE 1
DEFINITIONS

The following words, when used in this Declaration or any amendment thereto (unless the context shall prohibit) shall have the following meanings:

1.01. "Articles" shall mean and refer to the Articles of Incorporation which are or shall be filed in the Office of the Maine Secretary of State and which establish the Association.

1.02. "Assessment' shall mean a share of the funds required and which are to be assessed against an Owner and Lot for the payment of Common Expenses by the Association.

1.03. "Association" shall mean and refer to **Longboard Ridge Owners Association**, a non-profit corporation organized and existing under the laws of the State of Maine. During the Declarant Control Period, the term "Association" shall be interchangeable in this document with "Declarant."

1.04. "Board" shall mean and refer to the Board of Directors of the Association.

1.05. "By-Laws" shall mean and refer to the By-Laws of the Association and any amendments thereto.

1.06. "Common Expenses" shall mean the expenses for which each such owner is liable, which shall include, but not be limited to:

(a) expenses of maintaining, on a year-round basis, the subdivision road known as Longboard Lane (as long as it is a private road),

(b) expenses of removing refuse from the Property,

(c) expenses of maintaining and landscaping the Common Property

(d) expenses of maintaining and repairing the Stormwater Management Facilities, including any detention pond(s), storm drainage system or other drainage system either now or in the future, in accordance with all State and local approvals and in accordance with the Maintenance Plan of Stormwater Management Facilities, entitled "Inspection, Maintenance, and Housekeeping Plan," attached hereto as Exhibit A and incorporated herein by reference.

(e) any taxes assessed on property owned by the Association,

(f) insurance as taken out by the Association and

(g) incidental costs of administration and enforcement of the covenants, conditions, restrictions, easements, charges and liens described herein.

1.07. "Common Property" shall mean the certain real and personal property designated for ownership by the Association and dedicated to the common use of owners, including, but not limited to Washburn Lane (as long as it is a private road), common drainage facilities (if any), improvements installed by the Declarant pursuant to its reserved rights under Article 7, and common areas and open space owned by the Association.

1.08. "Declarant" shall mean and refer to 781 Pool Street, LLC, or its successors or assignees.

1.09. "Declarant Control Period" shall mean that period of time during which the Declarant owns any of the Property.

1.10. "Lot" shall mean and refer to the improved or unimproved residential numbered lots as shown on the Plan.

1.11. "Member" shall mean and refer to all Owners who shall be members of the Association in

accordance with the provisions of Article 6 hereof.

1.12. "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of the fee simple title to any Lot, but, notwithstanding any applicable theory of title, the term Owner shall not include any mortgagee of a Lot until the mortgagee has acquired fee simple title pursuant to foreclosure or any proceedings in lieu of foreclosure.

1.13. "Plan" shall mean "Longboard Ridge Subdivision" drawn by Terradyn Consultants LLC dated xxxxx , 2023 and recorded in the York County Registry of Deeds in Plan Book ___ Page .

1.14. "Property" shall mean those certain parcels of land owned by the Declarant and shown on the Plan.

ARTICLE 2
TERM OF DECLARATION

2.01. Term. This Declaration shall run with, apply to, and bind the Property in perpetuity and shall inure to the benefit of and be enforceable by the Declarant and Owners, as appropriate, and their respective legal representative, heirs, successors and assignees, except that the covenants and restrictions in Article 3 shall have an initial term of 20 years from the date this Declaration is recorded in the York County Registry of Deeds, at the end of which such covenants and restrictions shall be automatically extended for successive periods of 5 years, unless at least two-thirds of the Owners vote to terminate any or all of said covenants and restrictions at a duly noticed and held meeting in compliance with the provisions of the By-Laws of the Association.

2.02. Persons Bound. Unless otherwise indicated, all covenants, conditions restrictions, easements, charges and liens herein are imposed on, charged on, and run with the land and bind not only the original purchaser of the Lots in the Property, but also their assignees, guarantees, legal representative, heirs and mortgagees. Failure to specifically refer to and include or incorporate this Declaration in deeds to Lots in the Property shall not in any manner affect the validity and effectiveness of this Declaration upon any Lot made subject thereto.

ARTICLE 3
GENERAL COVENANTS AND RESTRICTIONS ON PROPERTY LOTS

3.01. No Lot shall be further subdivided, except that lot line revisions shall be permitted so long as they do not result in additional lots or dwelling units. Any such revision is required to be approved by the Declarant during the Declarant Control Period.

3.02. Each Lot shall contain only 1 single-family residential structure, which may include 1 dwelling and 1 garage building except that suitable garden structures (including greenhouses), utility sheds, swimming pools and such additional structures as shall from time to time be used in connection with single family houses situated in similar neighborhoods shall also be permitted. Attached or detached guest quarters may be permitted if in compliance with all state and local regulations, but subject to review pursuant to section 3.04. Tennis courts shall only be

allowed if located and constructed to minimize noise and must be approved by the Declarant or Association as the case may be pursuant to section 3.04. No building or structure of any kind except for the aforementioned residential structures shall be erected, used, maintained, or allowed to stand on a Lot. Each residence shall contain a minimum of **2,000** square feet of interior climate-controlled space excluding porches, garages and finished basement or attic. Any home builder approved for construction must carry a minimum of $1,000,000 in liability insurance.

3.03 a) Declarant reserves the right to require lot owners to use its preferred builder or builders to construct their dwellings on all lots in the subdivision. Prior to execution of any contract for construction of a dwelling, each lot owner shall provide Declarant with the construction plans and specifications for the lot owner's dwelling and shall entertain a bid from the preferred builder(s) for review and discussion and shall give the bid reasonable consideration before executing a contract for construction of a dwelling on their lot. In the event that a lot owner elects not to use the preferred builder(s), such lot owner shall pay the sum of $25,000.00 to Declarant in consideration for a waiver of Declarant's right hereunder. Declarant may waive the $25,000.00 payment in the event the preferred builder(s) determines that it cannot commence construction on the lot owner's dwelling within ninty (90) days.

b) In the event that the preferred builder(s) does not construct the dwelling on a particular lot, the owner of such lot shall deposit the sum of $10,000.00 in escrow with Declarant's listing broker or make some other arrangement agreeable to Declarant, to ensure completion of landscaping in accordance with said lot owner's approved landscaping plan. In the event the escrow is required, said monies may be released, in Declarant's discretion, to pay for landscaping, or may be held by Declarant until landscape is complete and then paid to said lot owner. The $10,000.00 shall be paid at or before the time said lot owner or its contractor obtains a building permit to begin construction of the dwelling. Said monies shall be deposited in a non-interest bearing account.

c) Any builder approved to construct a dwelling, including the preferred builder(s), shall carry liability insurance with minimum limits of $1,000,000.00 and will, prior to commencement of construction, provide to declarant a certificate of insurance evidencing such coverage.

3.04. No residence, garage or other structure shall be erected nor shall any portion of a Lot be cleared until plans have been submitted to and approved by the Declarant or (after turnover of control pursuant to section 6.08) the Association. Owners shall submit to the Declarant or Association (as the case may be) site development plans that show the location of new structures, driveways, and other paved areas, and, after initial construction, any exterior modification, addition or deletion of any such structure, and any new proposed structures. Within 10 business days of the submission of any plan(s), the Declarant/Association shall certify in recordable form that: (1) the plan(s) are approved; or (2) the plan(s) are not approved as submitted, in which case the Declarant/Association shall give the Owner written notice of suggestions for modification whereby such plan may be made acceptable.

Plan submittal will include a site plan, list of materials to be used, exterior colors, landscaping of land and exterior design of any structure with proposed changes to the exterior.

a) Removal of flora shall be in accordance with section 3.12 and shall be minimized to

protect the privacy of other Owners.

b) The exterior of any structure shall be finished in brick or stone masonry, wood clapboards or wood shingles only.
c) The use of artificial brick or stone composition, pressure treated wood, pre-cast steps, vinyl siding (excluding vinyl/pvc trim for windows, doors, soffits, fences and other miscellaneous uses), "texture 111" or their equivalents shall not be permitted.
d) All buildings, including accessory buildings, shall be set back 20 feet from the front lot line, 10 feet from the side lot lines, and 15 feet from the rear lot lines.
e) Fireplace boxes and exterior chimneys shall be composed of brick or real stone only, however, for roof top chimneys cultured stone will be allowed.
f) Above ground pools, portable or stationary basketball goals, satellite dishes greater than 24 inches in diameter and/or visible from the street and antennas are prohibited.
g) Lots shall be landscaped in reasonable conformity with other Lots in the Property.

Once construction is commenced, work must be prosecuted diligently and must be completed within a reasonable time, and in any event, within 2 years from commencement of said work. Any blasting or use of other explosives must be in accordance with City of Biddeford processes and notifications. In addition, all Owners must be notified prior to the use of any explosives. "Completion" shall include finished grading and loaming, if applicable to the work undertaken, including the original construction of any residence. Landscaping of a new or renovated residence must be completed within 120 days from the date of certificate of occupancy, weather permitting. These criteria shall be construed by the Declarant/Association to effectuate the intent of perpetuating a friendly and accommodating neighborhood.

3.05. Lot grades shall not be changed in such a way as to divert the natural flow of water onto adjoining Lots, roads and common drainage systems, with a resulting adverse effect thereon.

3.06. No building or structure shall be erected or used, and no lot shall be used, except in conformity with all land use requirements of the State of Maine and the City of Biddeford (including any conditions of approval imposed by the Biddeford Planning Board).

3.07. Tents for parties or similar events shall be allowed for no longer than three days; no other tents or similar shelter shall be erected or maintained on any Lot at any time. No temporary structures of any kind are permitted. No trash or garbage, bottled gas, or other fuel containers placed on any Lot shall be visible from the road. All items such as boats, snowmobiles and other personal property should be stored inside a permitted structure. The Association may waive any of the provisions of this paragraph for good cause shown.

3.08. All motor vehicles must be registered, and must be stored in a garage on a Lot; provided, however, that temporary parking of motor vehicles shall be permitted in driveways. Even if registered, no vehicle or any parts of vehicles which may be defined as scrap, junk, discarded, worn out, or not in operating condition shall be maintained or permitted upon the Property.

3.09. Any outside clothes line must be positioned at the rear of the house in such a way to minimize its visibility from the street or other Lots.

3.10. The keeping of animals, poultry, swine, horses or livestock is prohibited. Dogs must be leashed or under voice command at all times while on the Property, except while on their owner's property. It is the owner's responsibility to ensure the dog remains within the perimeter of the owner's Lot when not leashed. No dog shall be left on a tether at any time. Dog owners or caretakers are required to remove pet feces when their animals' foul common areas and private property of other Owners.

3.11. No trees larger than 5 inches in diameter measured at a height of 4 feet from the ground shall be cut, trimmed or altered if located within 15 feet of Longboard Lane or any Lot line, without prior written authorization of the Declarant or Association as the case may be. Consent shall be granted for removal of flora necessary for the construction or maintenance of any structure otherwise permitted hereunder.

3.12 Wetlands on any parcel will not be filled except as approved by the Biddeford Planning Board.

3.13. A Lot shall be used for private residential purposes only pursuant to the City of Biddeford zoning ordinance, and no commercial, manufacturing or industrial use shall be permitted at any time.

3.14. Nothing shall be done or permitted to be done on the Property which may be or become a nuisance to the other Owners.

3.15. Electric, telephone and cable television services shall be provided underground only.

3.16. In addition to any other remedies provided to the Association herein, upon the breach of any covenant contained in this Article 3 by any Owner, Guest, Tenant, or Invitee (for all of whose actions an Owner shall be liable as if committed directly by the Owner), the Board, on behalf of the Association, shall notify said Owner by certified mail of such breach, and include a reasonable description of the actions necessary to correct or cure such breach. If said Owner does not take such corrective action within 7 days from receipt of said notice, or within said time period object to the proposed action to be taken, the Board shall, without further notice, be entitled to take such action as set forth in the Notice and to surcharge as a special assessment said Owner for all necessary and incidental expenses, including attorney's fees, incurred in taking such corrective action. In addition, upon notice to an Owner and opportunity to be heard, the Board may impose reasonable per diem fines for any such breach, which shall be immediately due and payable as a special assessment upon the Lot affected.

3.17. In additional to its authority to fine Lot Owners as set forth in section 3.16, the Association may proceed at law or in equity against any persons violating or attempting to violate any covenants, either to restrain violation or to recover damages. If the Association successfully enforces any of these covenants through such an action, it shall be entitled to recover against the party violating such covenant(s) reasonable attorney's fees and costs incurred in such enforcement proceeding.

3.18. The Association recognizes that lawn and ornamental shrub care is a prominent and

important part of the home landscaping, and that the location of this subdivision requires special attention to the environment and surrounding wetlands. Accordingly, the following practices and guidelines shall be incorporated into any contract that the Declarant and/or Association may enter into regarding lawn, ornamental shrub and tree care:

(a) When establishing new lawns, select a top soil such that its depth, soil texture and percent organic matter are effective in absorbing fertilizers and pesticides. A soils test is suggested to determine lime and fertilizer requirements. All lawn establishments shall be in accordance with the State of Maine Department of Environmental Protection "Best Management Practices for the Application of Turf Pesticides and Fertilizers," as the same may be amended from time to time.

(b) Calibrate fertilizer and pesticide equipment in order to assure the desired application rate is being applied.

(c) Maintain soil conditions such as adequate drainage and aeration which favor microorganism activity since they are important for decomposing pesticides in the soil.

(d) Reduce the need of pesticides by following recommended horticultural practices such as proper mowing and watering which maintain a dense vigorous lawn.

(e) Use minimum dosage of pesticides to achieve adequate pest control. Read and follow the instruction on the label.

(f) Select pesticides and fertilizers that are resistant to leaching. When possible, use fertilizers that have a "slow release" or less soluble sources of nitrogen.

(g) To avoid runoff and leaching, do not apply pesticides just prior to heavy rainfall. Do not spray on windy days.

(h) When applicable, apply fertilizers and pesticides during periods of active turf growth for improved uptake by the plant.

(i) All fertilizers, pesticides, and herbicides used within the subdivision shall be certified organic.

3.19. A Lot Owner may not lease his/her house for a period of less than one (1) week, nor shall a Lot Owner lease less than his/her entire house. The rights of any occupant of a Lot shall be subject to, and each such occupant shall be bound by, the covenants, conditions and restrictions set forth in this Declaration, and in the By Laws and the Rules and Regulations, if any, of the Association. The Lot Owner shall provide any occupant with a copy of the Rules and Regulations of the Association. All leases or rentals of a Lot must be in writing, signed by Lot Owner and the tenant. A copy of the signed lease or rental agreement, including a signed copy of the Rules and Regulations, if any, shall be provided to the Secretary of the Association prior to occupancy by the tenant.

ARTICLE 4
COMMON PROPERTY AND EASEMENTS

4.01. Members' Easement of Enjoyment. Subject to the provisions of this Declaration, and the By-Laws and Rules and Regulations of the Association, every Owner shall have the rights set forth in this Article, which shall be appurtenant to and shall pass with the title to every Lot.

4.02. Title to Common Property. Declarant **shall grant** to the Association the fee in and to Longboard Lane as the same is presently constructed, subject to the terms and conditions set forth in this Declaration. Declarant reserves additional rights to convey additional land, property, rights, and easements to the Association as Common Property as set forth in Article 7. Open Space of the subdivision will also be conveyed to the Association.

4.03. Easements. The Common Property shall be subject to the following easements and rights:

(a) Every Owner shall have such rights in the Common Property as granted to the Association for their use, subject to the right of the Board to promulgate rules and regulations for the protection, use and enjoyment of the Common Property or to suspend the voting rights of any Owner for any period during which any Assessment remains unpaid.

(b) The Association shall have the right to dedicate or transfer any part of any common open space or natural buffer areas to the City of Biddeford or a conservation organization, or to dedicate or transfer ownership of Longboard Ridge Road after the fee interest therein is transferred to it from Declarant.

(c) During the Declarant Control Period, the Declarant reserves a non-exclusive, transferable easement, without limitation or restriction, to facilitate development of the Property. Such easement shall include the right to construct, connect to and use access ways and roadways, utilities, walkways, drainage swales and culverts and other portions of the Property in connection with the construction of improvements and for necessary or desirable access and utility service to and from adjacent and nearby properties, including the Common Property conveyed to the Association.

(d) During the Declarant Control Period, the Declarant reserves a blanket non-exclusive easement, in, upon, over, under, across, and through the Property for the purpose of installation, maintenance, repair and replacement of all utility lines and any other equipment and machinery necessary or incidental for the proper function of any utility systems serving the Property, which easements may be specifically conveyed by Declarant to a public utility or municipality supplying the service. The easements created by this section shall include, without limitation, rights of the Declarant or the appropriate utility or service company or governmental agency or authority to install, lay, maintain, repair, relocate and replace gas lines, pipes and conduits, water mains and pipes, sewer and drain lines, drainage ditches and pump stations, telephone wires and equipment, television equipment and facilities (cable or otherwise), electrical wires, conduits,

equipment, ducts and vents over, under, through, along and on the Lots and Common Property. Notwithstanding the foregoing, no such easement shall unreasonably interfere with the use or occupancy of any residence on a Lot.

(e) During the Declarant Control Period, the Declarant reserves a blanket and non-exclusive easement in, upon, over, under, through and across the Property as long as the Declarant, its successors and assignees shall be engaged in the construction, development and sale of Lots within the Property, for the purpose of construction, installation, maintenance and repair of existing and future building and related activities, including extension of and connection with Property roads and utility systems for such development.

4.04. Use and Maintenance of Longboard Lane; Common Expenses. Each Lot shall be benefited with a nonexclusive right and easement to use the private roadway known as "Longboard Lane" which provides access from Pool Street. The Common Expenses shall include each Owners' proportionate share of the costs of maintenance, repair and replacement of Longboard Ridge Road, the costs of maintenance, repair and replacement of other improvements and common areas as they may be added from time to time, and other costs set forth in section 1.06. Such proportionate share shall be allocated in accordance with the number of Lots in the Property, the liability for which shall commence for each Lot at the time the Declarant transfers ownership of a numbered lot shown on the Plan to a third party. Until the first numbered Lot shown on the Plan is transferred to a third party, the Declarant shall pay all of such costs.

4.05 Use of Open Spaces and Improvements. Each Lot shall be benefited with nonexclusive rights and licenses to (1) use the open space and natural buffer areas identified on the Plan and (2) use additional improvements, all as the Association may grant from time to time pursuant to transfers of ownership to it from the Declarant and in accordance with any Rules and Regulations adopted by the Association, but subject to the right of the Association to withdraw or modify the same due to requirements of the City of Biddeford Planning Board or the vote of the membership.

ARTICLE 5
ASSESSMENTS

5.01. General. The making and collecting of Assessments against Owners for Common Expenses shall be pursuant to the By-Laws of the Association.

5.02. Share of the Common Expenses. Each Lot shall be liable for an equal share of the Common Expenses, including special assessments, to commence as set forth in section 4.04. Each Owner shall be singly responsible for the payment of any fines or penalties levied with respect to such Lot, due as a special assessment immediately upon imposition thereof.

5.03. Annual Assessment. The annual Common Expenses incurred for operation, maintenance, improvement and repair of the Common Property shall be estimated in accordance with the By-

Laws of the Association. An annual Assessment will be payable in a once-yearly estimated installment based on the projected annual Common Expenses, adjusted for credits or additional payments as the Board determines from time to time, to reflect actual expenses. This annual Assessment shall be due in a single payment within 30 days of adoption of the estimated budget; additional assessments for adjusted expenses shall be due within 30 days of adoption thereof. The Board of Directors, or the members of the Association by majority vote, may change the yearly assessment to monthly or quarterly payments.

5.04. Non-Waiver. The liability for Assessments may not be avoided by waiver of the use or enjoyment of any Common Property or by the abandoning of a Lot for which an Assessment is made.

5.05. Interest; Application of Payment. Assessments and installments of such Assessments paid on or before 30 days after the date when due shall not bear interest, but all sums not paid on or before 30 days after the date when due shall bear interest at the rate of 18% per annum (or the maximum annual rate permissible under law) from the date when due until paid. All payments on accounts shall be first applied to costs of collection pursuant to 5.06 below, interest, and then to the Assessment first due.

5.06. Lien for Assessments. The Association shall have a lien on a Lot and all improvements thereon, for any unpaid Assessments levied by the Association, together with interest thereon and for attorneys' fees incurred by the Association, to the extent allowable by law, incident to the collection of such Assessments or the enforcement of such lien. The Board, on behalf of the Association, may bring an action at law against the Owner personally obligated to pay the same, or foreclose the lien against the property in the same manner and with the same priority as a condominium lien for assessments pursuant to 33 M.R.S. §1603-116. This lien shall be prior to any other lien against the property other than a first mortgage lien of record, and statutory liens for real estate taxes and sewer assessments, all as set forth in the aforementioned statute. No Owner may waive or otherwise escape liability for the Assessments provided for herein by non-use of the Common Property or abandonment of such Owner's Lot.

5.07. Certificate to be Issued. The Board shall upon demand furnish a certificate in recordable form setting forth whether the Assessments on a specified Lot have been paid. The Owner on behalf of whom the request was made shall be responsible for a reasonable fee for providing the certificate, as determine by the Board from time to time.

5.08. Collection and Foreclosures. The Board may take such action as they deem necessary to collect Assessments of the Association by personal action, or by enforcing the foreclosing interests of the Association.

ARTICLE 6
POOL STREET OWNERS ASSOCIATION

6.01. Association. In order to provide for the proficient and effective administration of the Property by the Owners, a non-profit corporation known and designated as **Longboard Ridge Home Owners Association** has been organized under the laws of the State of Maine, and said

corporation shall administer the operation and management of the Property and undertake and perform all actions and duties incident thereto and in accordance with the terms, provision and conditions of this Declaration and in accordance with the terms of the Articles of Incorporation of the Association, its By-Laws and Rules and Regulations promulgated by the Association from time to time.

6.02. Articles of Incorporation. The Articles of Incorporation of the Association shall be filed with the Maine Secretary of State.

6.03 Limitation Upon Liability of Association. Notwithstanding the duty of the Association to maintain or repair portions of the Property, the Association shall not be liable to any Owner for liability or damage, other than the costs of maintenance and repair, caused by any latent condition of the property to be maintained and repaired by the Association, or caused by the elements or other Owners or persons.

6.04. Restraint Upon Assignment of Shares and Assets. The share of a Member in the funds and assets of the Association cannot be assigned, hypothecated or transferred in any manner, except as an appurtenance to a Member's Lot.

6.05. Approval or Disapproval of Matters. Voting shall be done in accordance with the adopted By-Laws.

6.06. Membership. The Owners shall be Members of the Association and no other persons or entities, except for the Declarant, shall be entitled to membership. Membership in the Association shall be established by acquisition of ownership of a fee title interest in a Lot (or other interest in a Lot if approved by the Board), whether by conveyance, devise, judicial decree, foreclosure or otherwise, subject to the provision of this Declaration and by the recordation in the York County Registry of Deeds of the deed or other instrument establishing the acquisition and designating the Lot affected thereby and by the delivery to the Association of a true copy of such recorded deed or other instrument. The new Owner designated in such deed or other instrument shall thereupon become a Member of the Association and the membership of the prior Owner as to the Lot designated shall be irrevocably and automatically terminated. Notwithstanding the foregoing, the Declarant shall be a Member during the Declarant Control Period or until Declarant voluntarily relinquishes membership in the Association, whichever occurs first.

6.07. Voting. Except as otherwise set forth in this Declaration or By-Laws regarding Declarant's voting rights, on all matters to which the members shall be entitled to vote, there shall be only one vote for each Lot. When more than one Owner holds an interest in any Lot, the vote for such Lot shall be exercised as they among themselves determine by majority, but in no event shall more than one vote be cast with respect to any Lot. If the Owners disagree equally, one half vote shall be voted for the pending issue, and one half vote shall be voted against it.

6.08. Control by Declarant. Notwithstanding the foregoing or anything contained in this Declaration to the contrary, Declarant shall have the sole and exclusive right to appoint officers and directors to the Board during the Declarant Control Period or until Declarant voluntarily transfers control of the Association to the Members, whichever occurs first. During the period

of control as set forth herein, Members of the Association, otherwise qualified hereunder, shall have non-voting membership, unless the provisions of this sentence expressly are waived relative to a particular issue by a writing signed by the Declarant. Upon Declarant turning control of the Association over to the Members as provided herein, it shall file appropriate documents in the York County Registry of Deeds. Until any particular improvement is transferred by the Declarant to the Association, the Declarant shall be solely liable for costs associated with the same, and for injury or damage to persons and property arising from the construction and installation of the same.

6.09. Authority of the Board. The Board shall act for the Association in all matters except for:

1. the disposal of any real property,
2. the election of Board members,
3. the amending of this Declaration and
4. the adoption of By-Laws.

ARTICLE 7
RIGHTS RESERVED TO THE DECLARANT

7.01. Right to submit Property to Biddeford Planning Board. During the Declarant Control Period, the Declarant reserves the right to submit all or any portion of the Property to review by the Biddeford Planning Board and related governmental entities as a residential subdivision. The Declarant may make such submittals at any time, in any order, in stages or singly.

7.02. Right to make improvements and transfer to Association. During the Declarant Control Period, the Declarant reserves the right, whether or not required by the City of Biddeford pursuant to Planning Board review, to (1) make improvements to Longboard Lane, (2) install drainage swales, culverts, ponds and other drainage facilities, and (3) construct and install improvements to the Property, including but not limited to an entrance way, and upon completion of the same, transfer ownership and title to the Association, which shall accept the same for inclusion in its budget for maintenance and repair.

7.03. Right to add or subtract land as common area for various purposes. During the Declarant Control Period, the Declarant reserves the right to add, modify, relocate or subtract land (other than the right of way known as Longboard Ridge Road) as Common Property as Declarant deems desirable, whether or not required by the City of Biddeford Planning Board review, and to transfer ownership of any additional Common Property to the Association upon such terms, conditions and restrictions as Declarant may designate; following such transfer, the Association shall accept the same for inclusion in its budget for maintenance and repair. The Declarant also reserves the right during such time to transfer fee simple interest in Longboard Lane to the Association.

7.04. Right to cut additional flora. During the Declarant Control Period, the Declarant reserves the right to cut and/or trim such additional flora on the Property located within the

Subdivision Open Space as may be permitted by the City of Biddeford Land Use Ordinance and the Biddeford Planning Board approval. Declarant shall determine which flora shall be cut or trimmed during the Declarant Control Period; thereafter, the Association shall have the sole authority to determine which flora shall be cut and/or trimmed in said zone, in full compliance with applicable state and local law, and by these presents, Declarant hereby transfers such authority to the Association with respect to any portion of any Lot falling within said zone. Individual Owners shall not cut or trim such flora at any time. However, the cost of cutting within the Open Space shall be assessed solely to the Owners whose views are benefited thereby.

7.05. Right to dedicate or transfer Property to City of Biddeford or private conservation organization. During the Declarant Control Period, the Declarant reserves the right to dedicate or transfer any portion of the Property other than a conveyed Lot (including Longboard Ridge Road) to any governmental authority or private conservation organization, whether or not required by the City of Biddeford Planning Board. The Declarant reserves the right during such time to petition the City of Biddeford to accept Longboard Ridge Road as a public street.

7.06. Right to enter individual Lots. During the Declarant Control Period, the Declarant reserves the right to enter existing and conveyed Lots for the purpose of undertaking any work, and installing and constructing such improvements, pursuant to the exercise of Declarant's reserved rights under section 7.02, whether or not required by the City of Biddeford. Those existing Lots may be required by the Declarant to accede to revised terms and conditions of this Declaration that do not unreasonably interfere with the use and occupancy of such Lots, including but not limited to, the introduction of drainage swales or culverts or other improvements upon a Lot, and the right to require Owners to grant additional easements to the Association for drainage or other matters.

7.07. Right to expand size of certain Lots after sale. During the Declarant Control Period, the Declarant reserves the right to convey to any Lot such additional land or easement rights as may be necessary to create or maintain street frontage for said Lots in the event that the location or length of Longboard Lane is modified by requirements of the City of Biddeford or other applicable governmental entity in such a manner that previously conveyed Lots do not conform to standards under the Biddeford Land Use Ordinance.

7.08. Costs of Development. The cost of exercising any and all of the rights reserved by the Declarant shall be paid solely by the Declarant in its capacity as such, and not through its control of the Association. The Declarant shall not transfer any improvement to the Association until and unless it is substantially completed; the Association shall in no event be responsible for costs of completion of any improvement initiated by the Declarant.

7.09. Temporary Inconvenience to Lot Owners allowed. Installation of improvements to the Property or the exercise of other Declarant rights (including the paving of Longboard Ridge Road, if applicable) may cause temporary disruption to existing Owners regarding access and egress, utility services, or other services. The Declarant shall organize such work to minimize such disruption, but in no event shall Declarant be liable to any Owner for any such disruption arising out of exercise of any Declarant right set forth in this Declaration.

ARTICLE 8
NOTICES TO ASSOCIATION

8.01. Notice of Suit. An Owner shall give notice to the Association of every suit or other proceeding which may affect the title to such Owner's Lot. Such notice shall be given within 5 days after the Owner receives knowledge thereof.

8.02. Failure to Comply. Failure to comply with this Article 8 will not affect the validity of any judicial sale or foreclosure proceedings or deed in lieu of foreclosure.

ARTICLE 9
AMENDMENTS

9.01. Amendment by Declarant. During the Declarant Control Period, the Declarant may amend this Declaration at any time, whether or not required by any condition of the Biddeford Planning Board pursuant to its review authority, and without the consent of any Owner.

9.02. Other amendments. The Declaration may otherwise be amended from time to time, but only by a vote of not less than 67% of the Members entitled to vote in accordance with section 6.07. Upon passage, the passed amendment shall be accompanied by a certificate of the Secretary of the Association that such a vote was cast at a duly called and held meeting of the Members. However, during the Declarant Control Period, no amendment(s) to this Declaration shall be effective, unless joined by the Declarant. In order to be effective, any amendment to the Declaration must be recorded in the York County Registry of Deeds.

ARTICLE 10
GENERAL

10.01. Severability The invalidation in whole or in part of any section subsection, sentence, clause, phrase, word or other provision of this Declaration shall not affect the validity of the remaining portions which shall remain in full force and effect.

10.02. Rule Against Perpetuities. In the event any court shall hereafter determine that any provisions as originally drafted herein shall violate the rule against perpetuities, the period specified in this Declaration shall not thereby become invalid, but instead shall be reduced to the maximum period allowed under such rules of the law.

10.03. Arbitration. Any dispute or claim arising out of or relating to this Declaration shall be submitted to arbitration in accordance with the Maine Uniform Arbitration Act, 14 M.R.S §5927 *et seq*. Provided, however, that: (1) in addition to any award or relief thereby granted, the substantially prevailing party shall be entitled to payment of, and shall be paid, reasonable attorney's fees and costs and (2) the decision of the Arbitrator shall be final and binding upon all parties.

ARTICLE 11

RIGHTS AFFORDED UNIT OWNERS AND INSTITUTIONAL LENDERS

11.01. Availability of Documents. The Association shall be required to make available to Owners and to holders, insurers of guarantors of any first mortgage, current copies of the Declaration, Articles, By-Laws, or other rules concerning the Property and the books, records and financial statements of the Association. "Available" means available for inspection, upon request, during normal hours or under other reasonable circumstances.

11.02. Notice of Action. Upon written request to the Association identifying the name and address of the holder, insurer or guarantor and the unit number or address, any such eligible mortgage holder or eligible insurer or guarantor will be entitled to timely written notice of:

(a) Any condemnation loss or any casualty loss which affects a material portion of the project or any unit on which there is a first mortgage held, insured or guaranteed by such eligible mortgage holder or eligible insurer or guarantor, as applicable;

(b) Any delinquency in the payment of Assessments or charges owed by an Owner of a Lot subject to a first mortgage held, insured or guaranteed by such eligible holder or eligible insurer or guarantor, which remains uncured for a period of 60 days; or

(c) Any lapse, cancellation or material modification of any insurance policy or fidelity bond maintained by the Association.

IN WITNESS WHEREOF, the Declarant executes this instrument as of the day, month and year first above written.

WITNESS:

781 Pool Street, LLC

_____

By:_____
Geoffrey D. Bowley, Manager

STATE OF MAINE
COUNTY OF YORK, ss.

_____, 2023

Personally appeared Geoffrey D. Bowley, Manager of 781 Pool Street, LLC, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of 781 Pool Street, LLC.

Before me,

_____

xxxxxx / Attorney at Law
Bar #xxxx

EXHIBIT A

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

Longboard Ridge Subdivision
Pool Street.
Biddeford, Maine

Introduction

Upon completion of the proposed development, 781 Pool Street, LLC will be the responsible party for maintaining the stormwater management system until such a time a Homeowners Association is established. 781 Pool Street, LLC, the Homeowners Association, or other another responsible party shall schedule maintenance of all stormwater management structures, the establishment of any contract services required to implement the program, and the keeping of records and maintenance logbook.

Records of all inspections and maintenance work accomplished must be kept on file and retained for a minimum 5-year time span. The maintenance logbook will be made available to the City of Biddeford upon request. At a minimum, the appropriate and relevant activities for each of the stormwater management systems will be performed on the prescribed schedule.

The following plan outlines the anticipated inspection, maintenance, and housekeeping procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

The procedures outlined in the Inspection, Maintenance, and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional details on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the MDEP.

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven (7) calendar days and prior to any storm event (rainfall).

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

   The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three (3) years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

   A. Sediment Barriers:

   - Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
   - If the fabric on silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
   - Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
   - Filter berms shall be reshaped as needed.
   - Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

   B. Riprap Materials:

   - Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

   C. Erosion Control Blankets:

   - Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
   - Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to this plan.

D. Temporary Storm Drain Inlet Protection:

- The inlet protection structure shall be inspected before each rain event and repaired as necessary.
- Sediment shall be removed and the storm drain sediment barrier restored to its original dimensions when the sediment has accumulated to half of the design depth of the trap.
- Structures shall be removed upon permanent stabilization of the tributary area.
- Upon removal of the structure, all accumulated sediments downstream of the structure shall be cleaned from the storm drain system.

E. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

F. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

G. Stabilized Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

A. Spill Prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

B. Groundwater Protection: During construction, liquid petroleum products and other hazardous

materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

C. Fugitive Sediment and Dust: Actions must be taken to insure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

D. Debris and Other Materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

E. Trench or Foundation Dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

After Construction

1. **Inspection:** After construction, the owner or operator shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMPs, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

2. **Maintenance, and repair:** If a BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator shall take corrective actions to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective actions to the City of Biddeford upon request. The following is a list of permanent erosion control and stormwater management measures and the inspection, maintenance, and housekeeping tasks to be performed after construction.

A. Vegetated Areas:

- Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.
- Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. Ditches, Swales and Other Open Channels:

- Inspect ditches, swales, and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to the flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow and repair

any erosion of the ditch lining.

- Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
- Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
- Replace riprap in areas where any underlying filter fabric or underlying gravel is showing through the stone or where stones have dislodged.

C. Winter Sanding:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

D. Underdrained Soil Filter

- Remove debris and sediment buildup from the forebay as needed
- Mow grass semi-annually to a height of no less than 6-inches.
- Bare area or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched.
- If drain time exceeds 48-hours, the top of the filter bed shall be rototilled to reestablish the soil's filtration capacity.

E. Culverts and Stormdrains:

- Inspect culverts and stormdrains in the spring, in the late fall, and after heavy rains to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.
- Inspect embankment for erosion, settling, and structural failure.

3. **Annual Report:** The owner or operator or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, complete a stormwater and maintenance inspection form. Attachment 1 is provided as a sample to go by. The form shall identify the person that conducted the BMP inspection, and that the inspected BMPs are adequately maintained and functioning as intended by the approved post-construction stormwater management plan. If BMPs require maintenance or repair of deficiencies in order to function as intended, the inspector shall provide a record of the required maintenance or deficiency and corrective action(s) taken.

4. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system.

Attachments

Attachment 1 – Sample Stormwater Inspection and Maintenance Form

Sample Stormwater Inspection and Maintenance Form

Longboard Ridge Subdivision, Biddeford, Maine
Attachment 1

This log is intended to accompany the stormwater Inspection, Maintenance and Housekeeping Plan for Longboard Ridge subdivision. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review. Qualified personnel familiar with drainage systems and soils shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

	INSPECTOR NAME	DATE PERFORMED	SUGGESTED INTERVAL
Vegetated Areas			
Inspect all slopes and embankments			Annually
Replant bare areas or areas with sparse growth			Annually
Paved Surfaces			
Clear accumulated winter sand			Annually
Remove sediment along edges and in pockets			Annually
Ditches & Swales			
Remove any obstructions and accumulated sediments and debris			Annually
Repair any erosion of ditch lining			Annually
Mow vegetated ditches			Annually
Remove woody vegetation growing through riprap			Annually
Repair any slumping side slopes			Annually
Replace riprap where stones have dislodged			Annually
Underdrained Soil Filter			
Repair any erosion or bare areas with new filter media or sandy loam, seed, and mulch			Annually
Remove debris & sediment build up			Annually
Culverts			
Remove accumulated sediments and debris at the inlet, outlet, within conduit			Annually
Repair any erosion at inlet and outlet			Annually
Sump Depth			Annually

Attachment 5

Salt Management Plan

TERRADYN
CONSULTANTS, LLC

207.926.5111
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www.terradynconsultants.com

January 23, 2024 23-023

Salt Control Plan
Longboard Ridge – 8-Lot Subdivision

- No significant quantities of salt (sodium chloride or calcium chloride) will be stored on site.
- As warranted by anticipated winter-weather conditions, pretreatment of the road will be applied from work truck vehicle mounted applicators operated by the snow removal contractor.
- As warranted by anticipated post storm temperatures, reapplication of deicing salt may occur after snow removal activities have completed.

Attachment 6

Cost Estimate Worksheet

City of Biddeford, Maine

COST ESTIMATE WORKSHEET

OWNER/APPLICANT: Beachwood Development Fund, LL PB #: 2023.33

PROJECT NAME: Longboard Ridge Subdivision DATE: 1/23/2024

	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clearing and Grubbing	Acre	1.17	$1,000.00	$1,170.00
2	Erosion/Sediment Control	Lump Sum	1	$5,000.00	$5,000.00
3	Site Stabilization	Lump Sum	1	$5,000.00	$5,000.00
4	Ledge Removal	Cubic Yard			$0.00
5	Sanitary Sewer				
	Manholes	Each			$0.00
	Main	Linear Foot			$0.00
	House Services	Linear Foot			$0.00
6	Water Main				
	2" Water Line	Linear Foot	510	$75.00	$38,250.00
	8" Water Line	Linear Foot	429	$150.00	$64,350.00
	House Services	Linear Foot	250	$50.00	$12,500.00
	Hydrants	Each	2	$4,000.00	$8,000.00
7	Electric				
	Underground Utility Trench	Linear Foot	1060	$5.00	$5,300.00
	Conduit/Wiring	Linear Foot	1060	$5.00	$5,300.00
	Transformer Bases	Each	3	$2,000.00	$6,000.00
8	Storm Drainage				
	Pipe/Culvert	Linear Foot	90	$50.00	$4,500.00
	Catch Basin	Each			$0.00
	Other Treatment Devices	Each			$0.00
9	Stormwater Management				
	Outlet Control Structure	Each	1	$5,000.00	$5,000.00
	Stromwater Management Facilities	Each	1	$15,000.00	$15,000.00
	Underdrain Type B	Linear Foot	950	$20.00	$19,000.00
10	Excavate and Grade Subgrade	Cubic Yard	2900	$50.00	$145,000.00
11	Roadways				
	Subbase Gravel	Cubic Yard	1326.67	$75.00	$99,500.00
	Base/Finish Gravel	Cubic Yard	334.24	$50.00	$16,711.81
	Base Paving	Ton	246.30	$150.00	$36,944.44
	Finish Paving	Ton	153.94	$125.00	$19,241.90
	Geotextile Fabric	Ton			$0.00
12	Sidewalks				
	Subbase Gravel	Cubic Yard			$0.00
	Base/Finish Gravel	Cubic Yard			$0.00
	Base Paving	Ton			$0.00
	Concrete	Square Yard			$0.00
13	Parking Lots/Other Areas				
	Subbase Gravel	Cubic Yard			$0.00
	Base/Finish Gravel	Cubic Yard			$0.00
	Base Paving	Ton			$0.00
	Finish Paving	Ton			$0.00

City of Biddeford, Maine

COST ESTIMATE WORKSHEET

14	Curbing – Bituminous	Linear Foot			$0.00
15	Curbing - Concrete	Linear Foot			$0.00
15	Curbing – Granite	Linear Foot			$0.00
16	Pavement Striping	Linear Foot			$0.00
17	Guardrail	Linear Foot			$0.00
18	Fencing	Linear Foot			$0.00
19	Loam and Seed	1,000 Square Feet	27	$500.00	$13,500.00
20	Riprap	Cubic Yard	5	$500.00	$2,500.00
21	Landscaping	Lump Sum			$0.00
22	Street Lights	Each			$0.00
23	Site Lighting	Each			$0.00
24	Monuments/Iron Pipes	Lump Sum	1	$5,000.00	$5,000.00
25	Clean Up	Lump Sum	1	$2,000.00	$2,000.00
26	As Builts	Lump Sum	1	$1,500.00	$1,500.00
28	Other				$0.00
29	Other				$0.00
30	Other				$0.00
31	Other				$0.00

COST ESTIMATE TOTAL: **$536,268.15**
150% of TOTAL: **$804,402.22**

FOR OFFICE USE ONLY

EROSION CONTROL/SITE STABILIZATION BOND (IF APPLICABLE): _____

PERFORMANCE GUARANTEE REQUIRED: _____

Name: _____

Signature: _____

Date:

Attachment 7

Peer Review Comment Response Letter

TERRADYN CONSULTANTS, LLC

207.926.5111
info@terradynconsultants.com
www.terradynconsultants.com

01/17/2024 Project #23-023

David Galbraith, City Planner
City of Biddeford
205 Maine Street
Biddeford, Maine 04005

SUBJECT: LONGBOARD RIDGE SUBDIVISION
RESPONSE TO PEER REVIEW COMMENTS

Dear David:

Our office received review comments for the above referenced project from Tom Saucier, P.E., peer review engineer, dated September 13, 2023. We have reviewed the comments and have prepared the following responses. For clarity, each comment is repeated in italics, followed by our response.

Comments from Tom Saucier

Article A. General

Comment 1: *Who will own the open space?*

Response: The open space will be owned collectively by the lot owners through a homeowners association agreement. A draft of the owners association documents are provided with the final subdivision application.

Comment 2: *The application form indicates that the proposed land is to remain private. We reviewed the road design in that context.*

Response: No Response Necessary

Comment 3a: *The Stormwater Inspection and Maintenance Plan refers to a homeowners association as the responsible party for inspection and maintenance. Have proposed HOA documents been submitted?*

Response: Draft Homeowners association documents are provided in the final subdivision application.

Comment 3b: *Also, Article VI, Section 51.D.6. requires that a maintenance agreement be prepared and recorded at the registry. This should include the post construction inspection and maintenance plan.*

Response: A maintenance agreement will be prepared and recorded at the registry upon final approval.

Comment 4: *Per Article VI, Section 51.D.4. a note should be added to the subdivision plan regarding the private way status.*

Response: A note has been added to the subdivision plan regarding the private way status (Note 7).

Comment 5: *Documentation requirements, and inspection form for each BMP should be included in the inspection and maintenance plan.*

Response: Documentation requirements and an inspection form for all BMPs are provided in the stormwater inspection and maintenance manual, located in Appendix 3 of the Stormwater Report

Comment 6: *The narrative indicates that the topography shown on the drawings is a combination of on ground survey and LIDAR data. Which portions of the topography are based on the field survey data.*

Response: Field Survey data was collected at the parcel boundary along Pool Street, Peter Pond Road, and Maddox Pond Road. Figure 1 illustrates the survey data boundary. Most of the interior parcel survey is LIDAR data.

Comment 7: *The application refers to wetland and vernal pool, studies. Typically, the city requires copies of those to be submitted with the applications.*

Response: Copies of the studies are provided in the final subdivision application.

Comment 8: *The application materials state that the applicant is not responsible for development of individual lots. Therefore, the lot development is not included in the impervious area and developed area calculations for DEP permitting purposes. These areas were included for evaluating the stormwater runoff based on city code.*

Response: No Response Necessary

Article B. Drainage Plans and Calculations

Comment 1: *The drainage plans should be updated to include contour labels. It is difficult to review the plans and modelling without that information*

Response: Contour labels have been added to the watershed plans, which are included in the revised Stormwater Management Report.

Comment 2a: *The model utilizes times of concentration for subcatchments 10 and 30 higher than the times for subcatchments 1 and 3. Modeling should be based on the hydrologically most distant point in each watershed. Therefore, the times for subcatchments 10 and 30 should be utilized for subcatchments 1 and 3 in the model.*

Response: Subcatchment 10 and 30 times of concentration paths have been revised to represent the hydrologically most distance point. Subcatchment 10 utilizes the same path and time of concentration as Subcatchment 1. Subcatchment 30 is hydrologically different than subcatchment 3 due to the proposed road and lots and therefor will not have the same TC. However, Subcatchment 30 has been revised to reflect a lower TC than Subcatchment 3.

Comment 2b: *The post-development drainage plan delineates separate subcatchments for lots 1 and 2, which is inconsistent with the pre-development modeling.*

Response: The post development drainage plan has been modified to be consistent with predevelopment modeling.

Comment 2c: *The pre-development drainage plan indicates that the southerly portion of Lot 2 drains to the south, while the post-development drainage plan indicates that this area drains to the northwest, with no regrading shown.*

Response: The post development drainage plan has been modified to show proper grading to reflect accurate drainage patterns. Most of lot 2 continues to drain to the south but a portion of the lot will drain towards the proposed roadway ditch due to the proposed grading.

Comment 2d: *Similarly, the plans indicate that subcatchment 52 drains to the south across the topography, while this area is part of subcatchment 1 in the pre-development condition, which is supported by the topography.*

Response: Subcatchment 52 has been added back to subcatchment 10 which is consistent with the predevelopment model.

Comment 2e: *Why is subcatchment 51 routed through pond 50?*

Response: Subcatchment 51 has been eliminated in the updated analysis.

Comment 2f: Are the analysis points located at existing culverts under Peter Pond Lane and Maddox Pond Road??

Response: The analysis points are located at the inlet of the existing culverts under Peter Pond Lane and Maddox Pond Road.

Comment 2g: The time of concentration calculations used in the model use sheet flow components of 150 ft. Based on the topographic mapping, this does not appear to accurately reflect the conditions on site.

Response: Sheet flow components have been revisited and revised based on the topographic mapping.

Comment 2h: Times of concentration of 5 minutes were utilized for subcatchments 52 and 53, while this does not seem to be supported by the topography and cover types.

Response: Post development watershed maps have been revised based on updated roadway and stormwater designs. A minimum time of concentration of 5 minutes is utilized in subcatchment areas where appropriate.

Comment 3: The stormwater report assumes a maximum of 5,000 sf of new impervious surface and 20,000 sf of new landscaped area on each lot. Since this is the basis for any conclusions reached relative to stormwater impacts, we suggest these should be included on the subdivision plan as limits of development on each lot.

Response: Limits of development have been included in the Overall Development Plan (Sheet C-3.2) and a note has been added to the Subdivision Plan (Note 16 on Sheet C-2.0).

Comment 4: Calculations should be provided which support the sizing of each of the culverts under the proposed road.

Response: Calculation have been provided for each of the culverts under the proposed road and path in the revised stormwater report.

Article C. Drawings

Sheet C-2.0 – Subdivision Plan

Comment 1a: *Private street notes required under Article VI. Section 51.D.4. should be include on the plan.*

Response: Private Street notes have been added to Subdivision Plan (note 7).

Comment 1b: *No test pits are shown on lots 1, 2, and 7.*

Response: All test pits have been added to the subdivision plan.

Comment 1c: *The freshwater wetlands on the site extend into some building windows. Since no wetland permits are being sought, the wetlands should be shown as no disturbance areas.*

Response: A permit was issued by the U.S. Army Corps of Engineers for 660 square feet of wetland impact on Lot 3 to facilitate lot development. Note 19 has been added to the Subdivision Plan noting that any additional wetland impact will require approval from the Army Corps and the Maine Department of Environmental Protection, if applicable.

Comment 1d: *Transformer pad easements should be shown on the final plan.*

Response: Transformer easements have been added to the subdivision plan.

Comment 1e: *The plan shows iron rods to be set at the end of the road right of way, while the code requires granite monuments.*

Response: Granite monuments have been added to the end of the road right of way.

Comment 1f: *A note should be added to the plan which reinforces Article VI. Section 51.D.11, which prohibits driveways on either end of a turnaround.*

Response: A note has been added to the subdivision plan (note 20) to prohibit driveways in the hammerhead.

Sheet C-3.0 – Plan and Profile

Comment 2a: *A drainage easement should be provided across lots 1 and 2, below the 15" culvert, and should be shown on the subdivision plan.*

Response: A drainage easement has been added between lots 1 and 2 and is shown on all applicable plans.

Comment 2b: *The culvert inverts shown on the drawing conflict with those used in the modeling.*

Response: Inverts shown on the drawing have been revised to match modelling.

Comment 2c: *A sawcut and butt joint should be called for at Pool Street.*

Response: Sawcut and butt join callout and associated notes and details have been added to the plans.

Comment 2d: *Has the fire chief reviewed the hydrant location, located more than 500 ft from the end of the road?*

Response: The Assistant Fire Chief, Edward Dexter has reviewed the plans and provided comment for our proposed hydrant locations. The plan have been revised accordingly.

Comment 2e: *Spot grades should be provided on the ends of the turnaround.*

Response: Spot grades have been added to the end of the turnaround.

Comment 2f: *The grading does not reflect the ditch elevation shown in the typical section.*

Response: The typical section has been adjusted to reflect new grading conditions.

Comment 2g: *The turnaround should be dimensioned.*

Response: Dimensions have been added to the turnaround.

Comment 2h: *Note 2 should indicate smooth bore polyethylene storm drain.*

Response: Note 2 has been revised to indicate smooth bore polyethylene storm drain.

Comment 2i: *A note should be added specifying a minimum driveway culvert size of 15-inch diameter.*

Response: A note has been added specifying a minimum 15” diameter driveway culvert size.

Comment 2j: *A note should be added to the plan that the entire road right of way will be cleared and grubbed.*

Response: A note has been added indicating the entire road right of way will be cleared and grubbed

Sheet C-4.-0 – Site Details

Comment 3a: *a. The trail cross section note 1 suggests that standard trail building practices shall be used. These practices should be noted on the drawings.*

Response: A reference to trail building practices has been added to site detail sheets.

Comment 3b: *b. Note 1 on the typical trench detail references ASTM D2321 for pipe installation. Any applicable requirements should be shown on the drawing.*

Response: Note 1 has been removed. All applicable requirements are shown.

Comment 3c: *A culvert trench detail should be provided.*

Response: The Typical Trench Detail on sheet C-4.0 is valid for culverts.

Comment 3d: *The typical pavement joint detail should include a requirement to tack coat the binder prior to final paving.*

Response: The Typical Pavement Joint Detail includes the following note: “Clean & apply tack coat to surfaces where new bit. pavement is installed.”

Comment 3e: *Road typical cross section:*
- *The roadside ditch should be noted to be a minimum of 6” below the subgrade.*
- *Note 1 should reference the city of Biddeford.*
- *Variable depth grubbing should be specified below the subbase gravel.*
- *Fill material below the subbase gravel should be specified a either MDOT 703.19 or 703.20.*
- *In the interest of simplifying the construction, it may be preferable for the depth of the shoulder gravel to match the depth of the base gravel and pavement combined.*

Response: Site constraints make it not feasible to create a ditch to a depth below the subbase layer without raising the elevation of the proposed road. To provide positive drainage for the road subbase, an underdrain has been added on the downslope side of the road when the subbase is in a cut condition.

Note 1 has been changed to reference the City of Biddeford.

Grubbing has been specified below the subbase gravel.

A note has been added specifying fill material below the subgrade should be either 703.19 or 703.20.

Gravel shoulder depth has been changed to match roadway base gravel depth for simplification.

Sheet C.-4.1 – Erosion and Sediment Control details

Comment 4a: *The inspection and maintenance plan for during construction should be updated per chapter 500 and include wet weather inspection and documentation requirements.*

Response: The narrative on Sheet C-4.1 has been updated to reflect the most recent language in Chapter 500, Appendix B and specifies requirements for wet weather events.

We trust that the above responses and attached materials address the comments. Please contact me directly with additional questions or concerns.

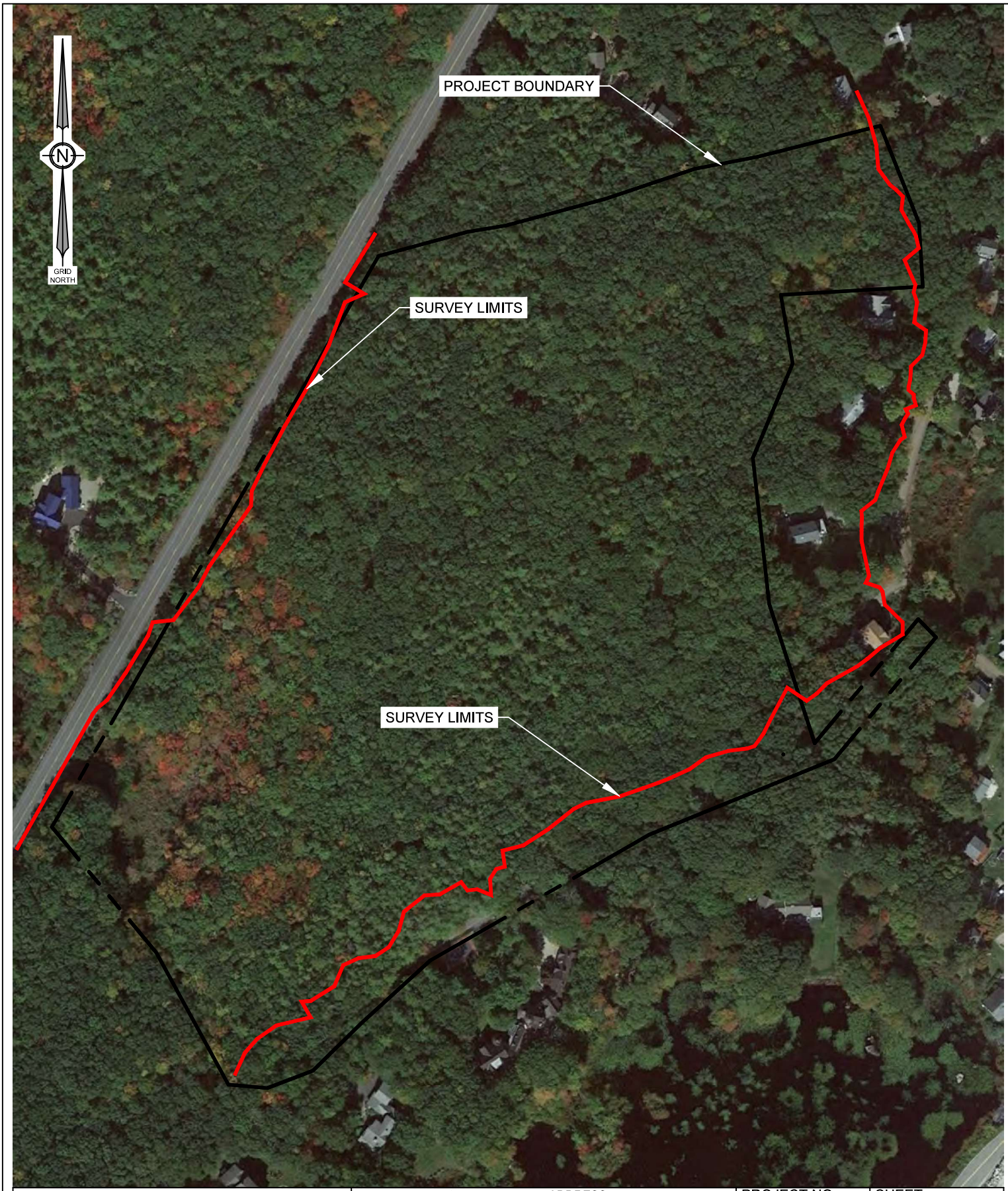
Sincerely,
TERRADYN CONSULTANTS LLC



Michael E. Tadema-Wielandt, P.E.
Vice President

Attachments:
Figure 1 – Survey Limits

cc. Geoff Bowley



SURVEY LIMITS

PROJECT:
POOL STREET SUBDIVISION
BIDDEFORD MAINE

PREPARED FOR:
BEACHWOOD DEVELOPMENT FUND
92 YORK STREET
KENNEBUNK, MAINE 04043

TERRADYN CONSULTANTS, LLC
ADDRESS:
41 CAMPUS DRIVE, SUITE 301
NEW GLOUCESTER, ME 04260
PHONE:
(207) 926-5111
WEB SITE:
www.terradynconsultants.com
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PROJECT NO.	SHEET
23-023	1
DATE	OF
5/16/2023	1
SCALE	
1" = 200'	

Attachment 8

Copies of State & Federal Permits

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Permit-by-Rule & Notice of Intent Review Form

Natural Resources Protection Act — **PBR #**
Stormwater Management Law — **PBR #** 78198
Maine Construction General Permit — **NOI #** 78199

Applicant: Beachwood Development Fund — **Town:** Biddeford
Project Address: Pool st, Route 9 — **Tax Map/Lot #:** 15 / 17-2

NRPA PBR Sections – Ch. 305

- ☐ Sec. 2 Act. Adj. to Prot. Natural Res.
- ☐ Sec. 3 Intake Pipes
- ☐ Sec. 4 Replacement of Structures
- ☐ Sec. 6 Movement of Rocks or Veg.
- ☐ Sec. 7 Outfall Pipes
- ☐ Sec. 8 Shoreline Stabilization
- ☐ Sec. 9 Utility Crossing
- ☐ Sec. 10 Stream Crossing
- ☐ Sec. 11 State Transport. Facilities
- ☐ Sec. 12 Restoration Natural Areas
- ☐ Sec. 13 F&W Creat./Water Quality
- ☐ Sec. 15 Public Boat Ramps
- ☐ Sec. 16 Coastal Sand Dune Project
- ☐ Sec. 17 Transfer/Permit Extension
- ☐ Sec. 18 Maintenance Dredging
- ☐ Sec. 19 Act. Near SVP Habitat
- ☐ Sec. 20 Act. Near Waterfowl/Bird Habitat

Notes:
Description: 8 lot subdivision with proposed ~937 ft road. 1.15 acres developed, .6 acres impervious.

Review: Required submissions supplied. Project qualifies for SWPBR and meets required Standards. Accepted as submitted.

Reviewer: — **Deficient Date:** ☐ NRPA ☐ SW ☐ NOI
Reviewer: Martha Harris — **Accepted Date:** 11/14/2023 ☐ NRPA ☑ SW ☑ NOI

Section VI: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

US Army Corps of Engineers®
New England District

At least two weeks before work commences, complete all fields (write "none" if applicable) below or use the fillable form found at www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/ The two-week lead time is not required for emergency situations. **Send this form, an Official Species List, and project plans to the following email address: cenae-r-me@usace.army.mil**

Maine Project Office
U.S. Army Corps of Engineers
442 Civic Center Drive, Suite 350
Augusta, Maine 04330

State Permit #: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: Beachwood Development Fund
Address, City, State, Zip: 88 York Street #3, Kennebunk, Maine, 04043
Email, Phone: geoff@bowleybuilders.com, 2070985-3646

Agent: Michael Tandema-Wielandt, P.E.
Address, City, State, Zip: Terradyn Consultants, LLC, 565 Congress Street, Suite 201, Portland, Maine, 0
Email, Phone: mtw@terradynconsultants.com (207) 926-5111

Contractor:
Address, City, State, Zip:
Email, Phone:

Project Name: Longboard Ridge Subdivision
Address, City, State, Zip: Pool Street, Biddeford, Maine, 04005
Lat °N, Long °W: 43.431049, -70.379489 Tax Map/Lot: Map 15, Lot 17-2
Waterway Name: Isolated Forested Wetland
Description of Work: The project includes a 8 lot subdivision with a proposed road approximately 937 ft in length ending in a hammerhead turnaround.
Proposed Starting Date: Spring 2024 Proposed Finish Date: Fall 2024

Area of wetland impact (SF): Permanent: 660 Temporary: 0
Area of waterway impact (SF): Permanent: 0 Temporary: 0

Work will be done under the following Section V General Permits (circle all that apply):

I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

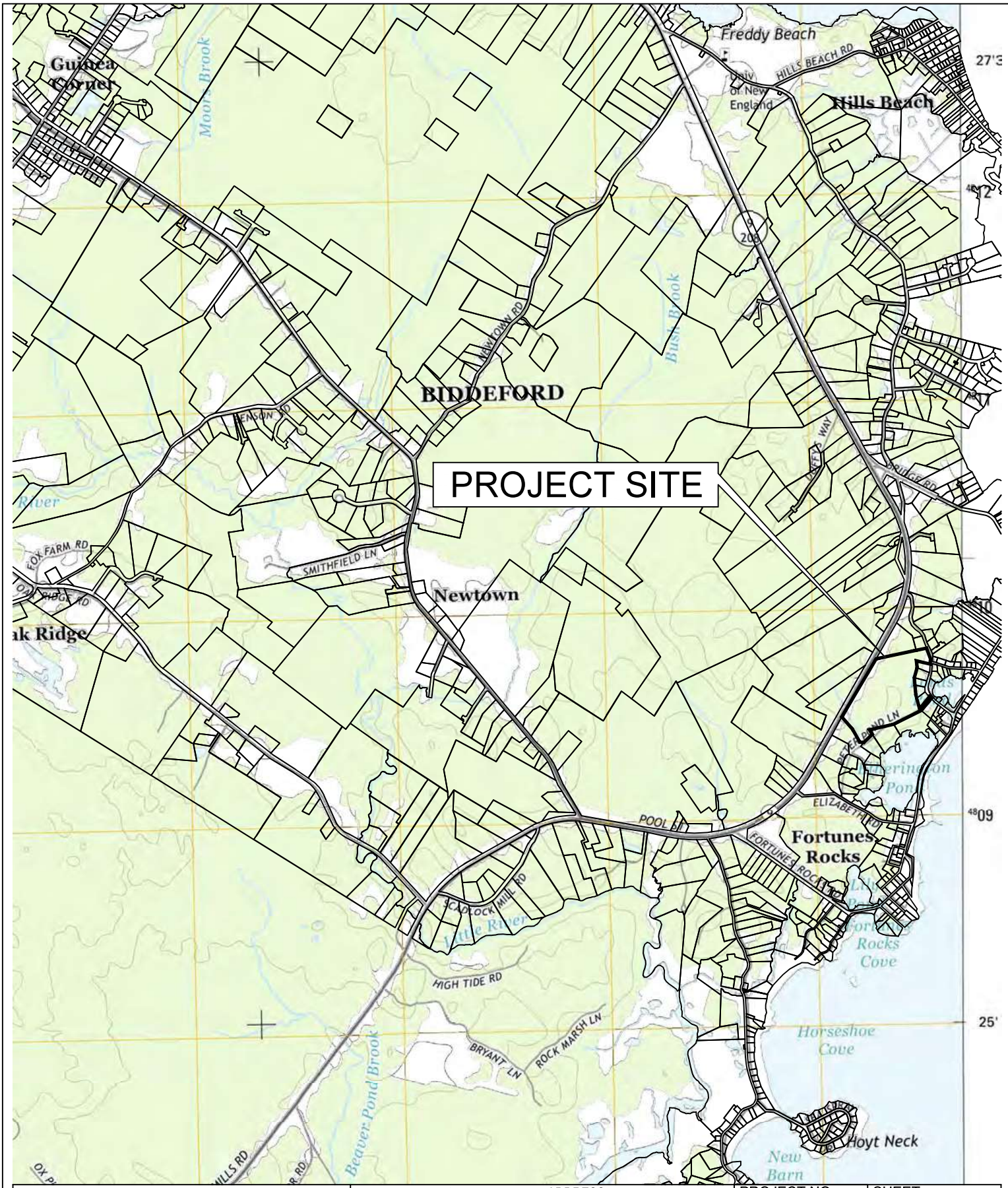
Have MHPC and all five federally-recognized tribes in Maine been notified of the proposed work? X Yes ____ No

Your signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions for Self-Verification under the Maine General Permit.

Permittee Signature: _____ Date: 11/5/23
GEOFFREY BOWLEY, BDF, LP

NAE-2023-02478

Jana Jacobson
Digitally signed by Jana Jacobson
Date: 2024.01.03 09:**1005**-05'00'

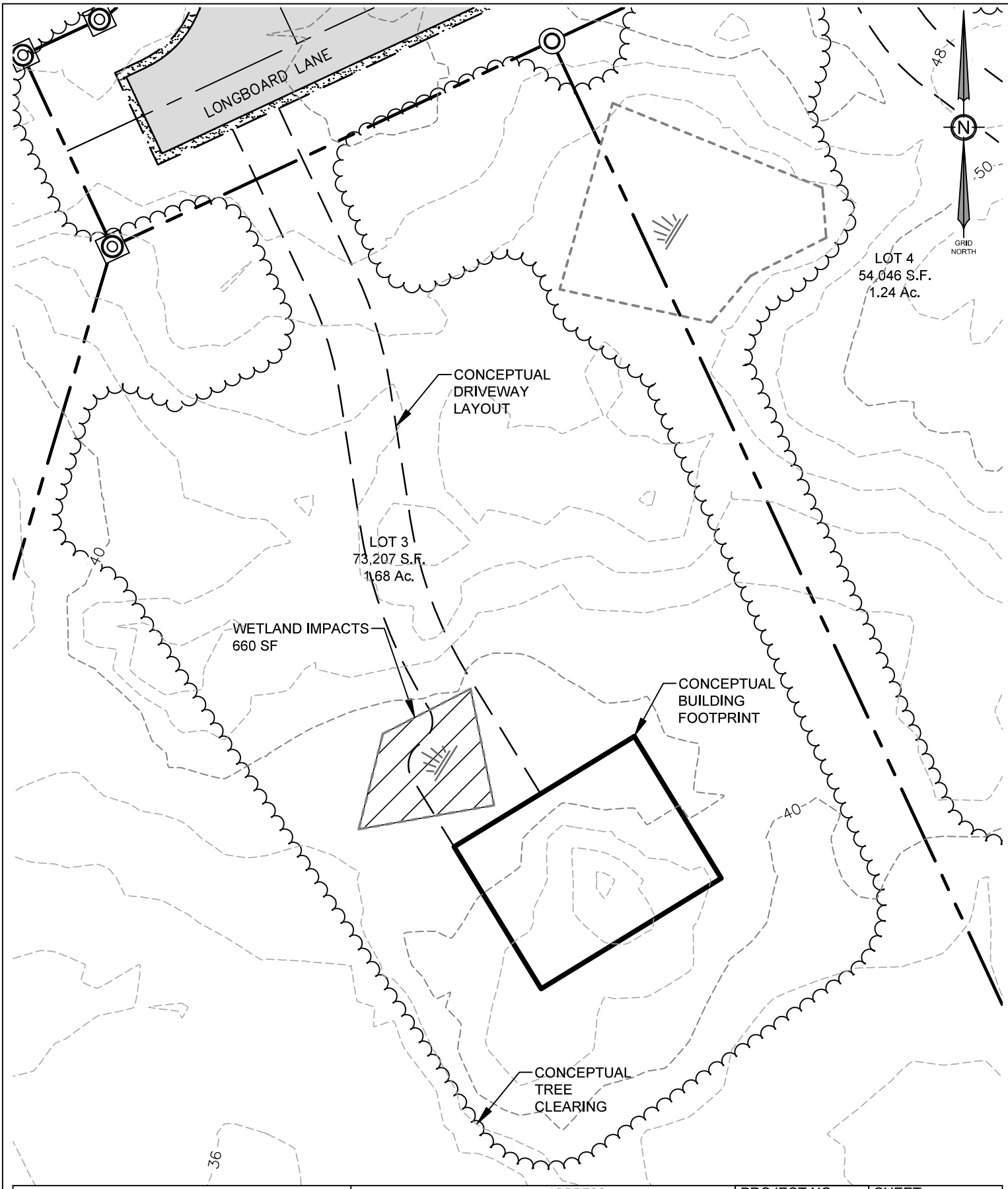


USGS BIDDEFORD QUADRANGLE MAP	TERRADYN CONSULTANTS, LLC Civil Engineering | Land Surveying | Geomatics Stormwater Design | Land Planning | Environmental Permitting	ADDRESS: 41 CAMPUS DRIVE, SUITE 301 NEW GLOUCESTER, ME 04260 PHONE: (207) 926-5111 WEB SITE: www.terradynconsultants.com	PROJECT NO. 22-023	SHEET 1
PROJECT: LONGBOARD RIDGE SUBDIVISION BIDDEFORD MAINE			DATE 5/16/2023	OF 2
PREPARED FOR: BEACHWOOD DEVELOPMENT FUND 92 YORK STREET KENNEBUNK, MAINE 04043			SCALE 1" = 2,000'	

1006

43.431049, -70.379489

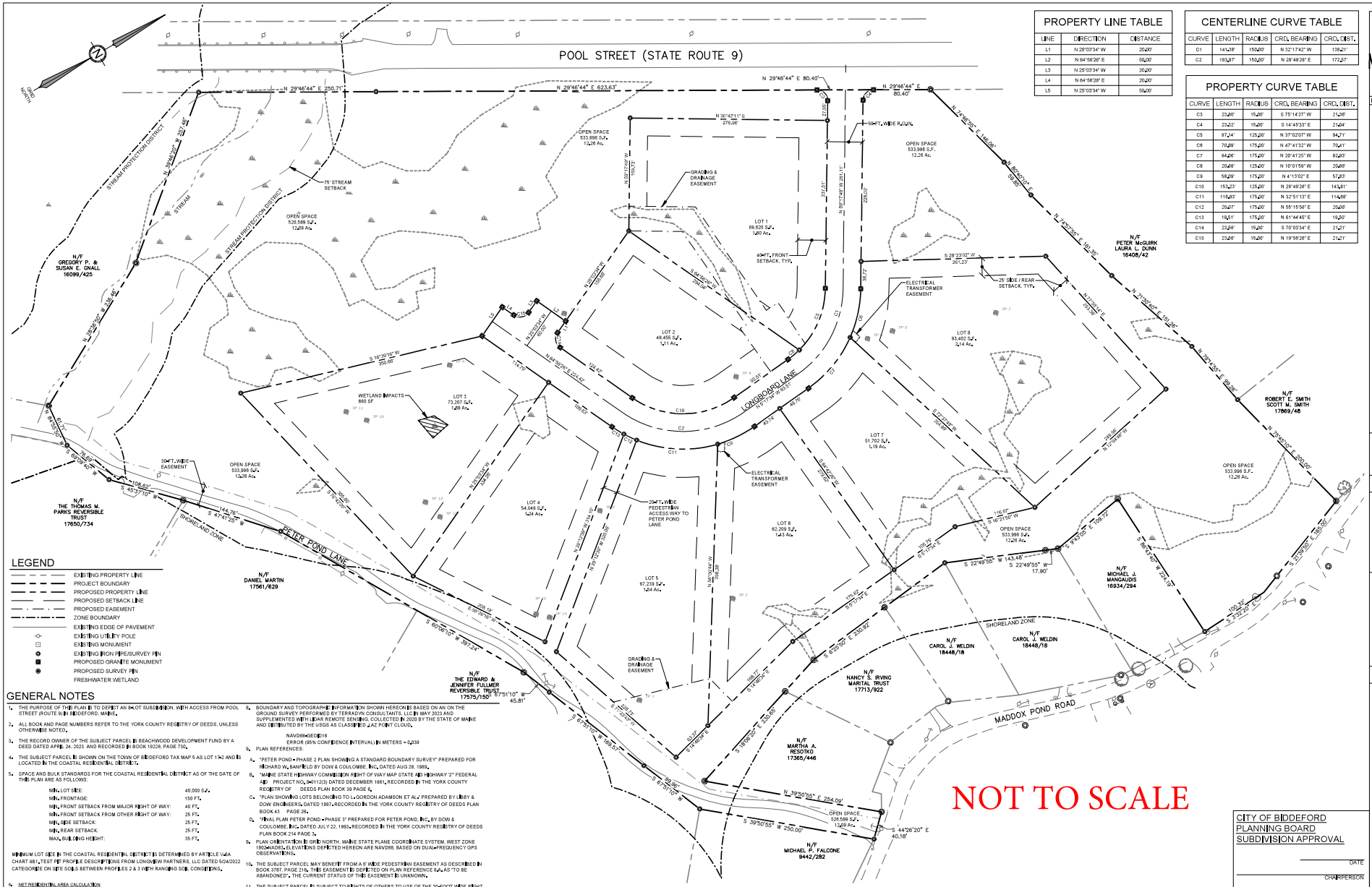
NAE-2023-02478



ACOE FIGURE	TERRADYN CONSULTANTS, LLC Civil Engineering | Land Surveying | Geomatics Stormwater Design | Land Planning | Environmental Permitting	ADDRESS: 41 CAMPUS DRIVE, SUITE 301 NEW GLOUCESTER, ME 04260 PHONE: (207) 926-5111 WEB SITE: www.terradynconsultants.com	PROJECT NO. 22-023	SHEET 2
PROJECT: LONGBOARD RIDGE SUBDIVISION BIDDEFORD MAINE			DATE 5/16/2023	OF 2
PREPARED FOR: BEACHWOOD DEVELOPMENT FUND 92 YORK STREET KENNEBUNK, MAINE 04043			SCALE 1" = 20'	

1007

NAE-2023-02478



LEGEND

- EXISTING PROPERTY LINE
- PROJECT BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT
- ZONE BOUNDARY
- EXISTING EDGE OF PAVEMENT
- EXISTING UTILITY POLE
- EXISTING MONUMENT
- EXISTING IRON PIPE/SURVEY PIN
- PROPOSED GRANITE MONUMENT
- PROPOSED SURVEY PIN
- FRESHWATER WETLAND

GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT AN 8-LOT SUBDIVISION, WITH ACCESS FROM POOL STREET (ROUTE 9) IN BIDDEFORD, MAINE.
2. ALL BOOK AND PAGE NUMBERS REFER TO THE YORK COUNTY REGISTRY OF DEEDS, UNLESS OTHERWISE NOTED.
3. THE RECORD OWNER OF THE SUBJECT PARCEL IS BEACHWOOD DEVELOPMENT FUND BY A DEED DATED APRIL 24, 2023, AND RECORDED IN BOOK 19228, PAGE 730.
4. THE SUBJECT PARCEL IS SHOWN ON THE TOWN OF BIDDEFORD TAX MAP 5 AS LOT 11-2 AND IS LOCATED IN THE COASTAL RESIDENTIAL DISTRICT.
5. SPACE AND BULK STANDARDS FOR THE COASTAL RESIDENTIAL DISTRICT AS OF THE DATE OF THIS PLAN ARE AS FOLLOWS:

MIN. LOT SIZE:	40,000 S.F.
MIN. FRONTAGE:	150 FT.
MIN. FRONT SETBACK FROM MAJOR RIGHT OF WAY:	40 FT.
MIN. FRONT SETBACK FROM OTHER RIGHT OF WAY:	25 FT.
MIN. SIDE SETBACK:	25 FT.
MIN. REAR SETBACK:	25 FT.
MAX. BUILDING HEIGHT:	35 FT.

MINIMUM LOT SIZE IN THE COASTAL RESIDENTIAL DISTRICT IS DETERMINED BY ARTICLE V-28A CHART 981, TEST PIT PROFILE DESCRIPTIONS FROM LONGVIEW PARTNERS, LLC DATED 5/24/2022 CATEGORIZE ON SITE SOILS BETWEEN PROFILES 2 & 3 WITH RANGING SOIL CONDITIONS.

6. NET RESIDENTIAL AREA CALCULATION

TOTAL PARCEL AREA	29.30 ACRES
LESS STEEP SLOPES & UNSUITABLE SOILS	19.23 ACRES
LESS WETLANDS	0.07 ACRES
TOTAL	10.00 ACRES
MIN. LOT DENSITY	40,000 SF
MAXIMUM LOTS PROPOSED LOTS	11 8

7. THE CITY OF BIDDEFORD SHALL NOT BE RESPONSIBLE FOR MAINTENANCE, REPAIR, OR PLOWING OF THE PROPOSED ROADWAY. FURTHER LOT DIVISIONS UTILIZING THE PRIVATE WAY ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE BOARD.
8. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AN ON THE GROUND SURVEY PERFORMED BY TERRADYN CONSULTANTS, LLC IN MAY 2023 AND SUPPLEMENTED WITH LIDAR REMOTE SENSING, COLLECTED IN 2020 BY THE STATE OF MAINE AND DISTRIBUTED BY THE USGS AS CLASSIFIED LAZ POINT CLOUD.
   NAVD88+GEOID18
   ERROR (95% CONFIDENCE INTERVAL) IN METERS = 0.139
9. PLAN REFERENCES:
   A. "PETER POND - PHASE 2 PLAN SHOWING A STANDARD BOUNDARY SURVEY" PREPARED FOR RICHARD W. BANFIELD BY DOW & COULOMBE, INC., DATED AUG 28, 1989.
   B. "MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP STATE AID HIGHWAY 2" FEDERAL AID PROJECT NO. S-0112(3) DATED DECEMBER 1961, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 39 PAGE 8.
   C. "PLAN SHOWING LOTS BELONGING TO L. GORDON ADAMSON ET AL." PREPARED BY LIBBY & DOW ENGINEERS, DATED 1967, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 43 PAGE 26.
   D. "FINAL PLAN PETER POND - PHASE 3" PREPARED FOR PETER POND, INC., BY DOW & COULOMBE, INC. DATED JULY 22, 1993, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 214 PAGE 3.
9. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802 NAD83, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL-FREQUENCY GPS OBSERVATIONS.
10. THE SUBJECT PARCEL MAY BENEFIT FROM A 6' WIDE PEDESTRIAN EASEMENT AS DESCRIBED IN BOOK 3787, PAGE 218, THIS EASEMENT IS DEPICTED ON PLAN REFERENCE B.A. AS "TO BE ABANDONED", THE CURRENT STATUS OF THIS EASEMENT IS UNKNOWN.
11. THE SUBJECT PARCEL IS SUBJECT TO RIGHTS OF OTHERS TO USE OF THE 30-FOOT WIDE RIGHT OF WAY AND 50-FOOT UTILITY EASEMENT AS SHOWN ON PLAN REFERENCE B.A. AND DESCRIBED IN THE FOLLOWING DEEDS: BOOK 2981, PAGE 302; BOOK 3873, PAGE 117; BOOK 3787, PAGE 218; BOOK 3109, PAGE 19; BOOK 2352, PAGE 142; BOOK 1256, PAGE 417; BOOK 3922, PAGE 123; BOOK 4598, PAGE 131; BOOK 3832, PAGE 230; BOOK 2018, PAGE 42.
12. THE SUBJECT PARCEL IS SUBJECT TO MINERAL RIGHTS RESERVATIONS AND UTILITY EASEMENTS APPEARING OF RECORD.
13. THE WIDTH OF MADDOX POND ROAD VARIES AS DEPICTED ON A HAND-DRAWN PLAN SUPPLIED BY THE CITY OF BIDDEFORD.
14. THE SUBJECT PARCEL IS LOCATED WITHIN ZONE X, AREAS OF MINIMAL FLOOD HAZARD, AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF BIDDEFORD, YORK COUNTY, COMMUNITY-PANEL NUMBER 2301450018, HAVING AN EFFECTIVE DATE OF MAY 15, 1984.

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L1	N 25°03'34" W	20.00'
L2	N 64°56'26" E	50.00'
L3	N 25°03'34" W	20.00'
L4	N 64°56'26" E	20.00'
L5	N 25°03'34" W	50.00'

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C1	141.18'	150.00'	N 32°17'42" W	136.21'
C2	183.87'	150.00'	N 29°49'26" E	172.57'

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C3	23.26'	15.00'	S 75°14'27" W	21.08'
C4	23.22'	15.00'	S 14°45'33" E	21.04'
C5	97.14'	125.00'	N 37°02'07" W	94.71'
C6	70.29'	175.00'	N 47°41'32" W	70.41'
C7	94.26'	175.00'	N 20°41'25" W	93.03'
C8	20.48'	125.00'	N 10°01'59" W	20.46'
C9	58.29'	175.00'	N 4°13'02" E	57.83'
C10	153.23'	125.00'	N 29°49'26" E	143.61'
C11	116.33'	175.00'	N 32°51'13" E	114.68'
C12	20.27'	175.00'	N 55°15'56" E	20.26'
C13	19.51'	175.00'	N 61°44'45" E	19.50'
C14	23.26'	15.00'	S 70°03'34" E	21.21'
C15	23.26'	15.00'	N 19°56'26" E	21.21'

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED _____, 20__
AT ____ H ____ M. AND RECORDED IN PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTER

CITY OF BIDDEFORD
PLANNING BOARD
SUBDIVISION APPROVAL
_____ DATE
_____ CHAIRPERSON

MICHAEL E. TRADEMA-WELANDT
NO. 2015
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

NO.	DATE	REVISIONS
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

DATE: 8/16/2023

ADDRESS: 47 CATACE POINT LANE, SUITE 301, YORK, MAINE 03909
PHONE: (207) 703-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: POOL STREET (RT. 9), BIDDEFORD, ME
SHEET TITLE: SUBDIVISION PLAN
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: 10 KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE:
JOB NO: 23-023
SHEET: C-2.0

D:\CONTracts\Current Projects\Project Files\...\Documents\03 Drafts\CAD Files\dwg\C2-0 Pool Street Subdivision\CAD Files\dwg\C2-0 Subdivision Plan.dwg

1008

NAE-2023-02478

Maine Department of Transportation

Janet T. Mills
Governor

Driveway/Entrance Permit

Bruce A. Van Note
Commissioner

Permit Number: 38786 - **Entrance ID:** 1

OWNER

Name: **Beachwood Development Fund LLC**
Address: **92 York Street**
Kennebunk, ME 04043
Telephone: **(207)985-3646**

Date Printed: **December 14, 2023**

LOCATION

Route: **0009X, Pool Street**
Municipality: **Biddeford**
County: **York**
Tax Map: **5** Lot Number: **17-2**
Culvert Size: **15 inches**
Culvert Type: **plastic**
Culvert Length: **40 feet**
Date of Permit: **December 14, 2023**
Approved Entrance Width: **20 feet**

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, **an Entrance** to **Multi Family 8 or less** at a point **1282** feet **South** from **Maddox Pond Road**, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This Permittee acknowledges and agrees to comply with the Standard Conditions and Approval attached hereto and to any Specific Conditions of Approval shown here.

(G = GPS Location; W = Waiver; S = Special Condition)

G - THE ENTRANCE SHALL BE LOCATED AT GPS COORDINATES: 43.432060N, -70.380422W.

S - In the town of Biddeford on the easterly side of Route 9, the centerline being approximately 1282 feet southwesterly of the centerline of Maddox Pond Road and approximately 51 feet southwesterly of utility pole 12.

S - The driveway must elevated at the platform area for proper sight distances, see attached details.

S - The culvert shall be HDPE smoothbore plastic pipe. The property owner must contact MaineDOT at (207) 883-5180 prior to culvert and entrance installation to review procedures and arrange an inspection.

S - Center line of driveway is to be 51 feet southwesterly from pole # 12 at coordinates 43.432060 -70.380422.

Approved by: Van Pool Date: 12-14-2023

STANDARD CONDITIONS AND APPROVAL

1. Provide, erect and maintain all necessary barricades, lights, warning signs and other devices as directed by MaineDOT to properly safeguard traffic while the construction is in progress.

2. At no time cause the highway to be closed to traffic

3. Where the driveway is located within a curb, curb and gutter, and/or sidewalk section, completely remove the existing curb, curb and gutter, and/or sidewalk as may be required to create the driveway and restore drainage. All driveways abutting sidewalk sections shall meet the requirements set forth in the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12131 et seq.

4. Obtain, have delivered to the site, and install any culverts and/or drainage structures which may be necessary for drainage, the size, type and length as called for in the permit pursuant to 23 M.R.S.A. Sec. 705. All culverts and/or drainage structures shall be new.

5. Start construction of the proposed driveway within twenty-four (24) months of the date of permit issuance and substantially complete construction of the proposed driveway within twelve months of commencement of construction.

6. Comply with all applicable federal, state and municipal regulations and ordinances.

7. Do not alter, without the express written consent of the MaineDOT, any culverts or drainage swales within the MaineDOT right of way.

8. File a copy of the approved driveway permit with the affected municipality or LURC, as appropriate within 5 business days of receiving the MaineDOT approval.

9. Construct and maintain the driveway side slopes to be no steeper than the adjacent roadway side slopes, but in no case to be steeper than 3 horizontal to 1 vertical, unless the side slope is behind existing roadway guardrail, in which case it shall be no steeper than 2 horizontal to 1 vertical.

10. Notify the MaineDOT of a proposed change of use served by the driveway when increase in traffic flow is expected to occur. This does not exempt the need for obtaining a Traffic Movement Permit (TMP) if trip generation meets or exceeds 100 passenger car equivalents (PCE) during the peak hour of the day.

11. Construct or implement and maintain erosion and sedimentation measures sufficient to protect MaineDOT facilities.

12. Driveways shall be designed such that all maneuvering and parking of any vehicles will take place outside the highway right-of-way and where vehicles will exit the premises without backing onto the highway traveled way or shoulders. All driveways will have a turnaround area to accomodate vehicles using the premises.

13. Closing any portion of a highway or roadway including lanes, shoulders, sidewalks, bike lanes, or ATV access routes is not permitted without MaineDOT approval.

FURTHER CONDITION OF THE PERMIT

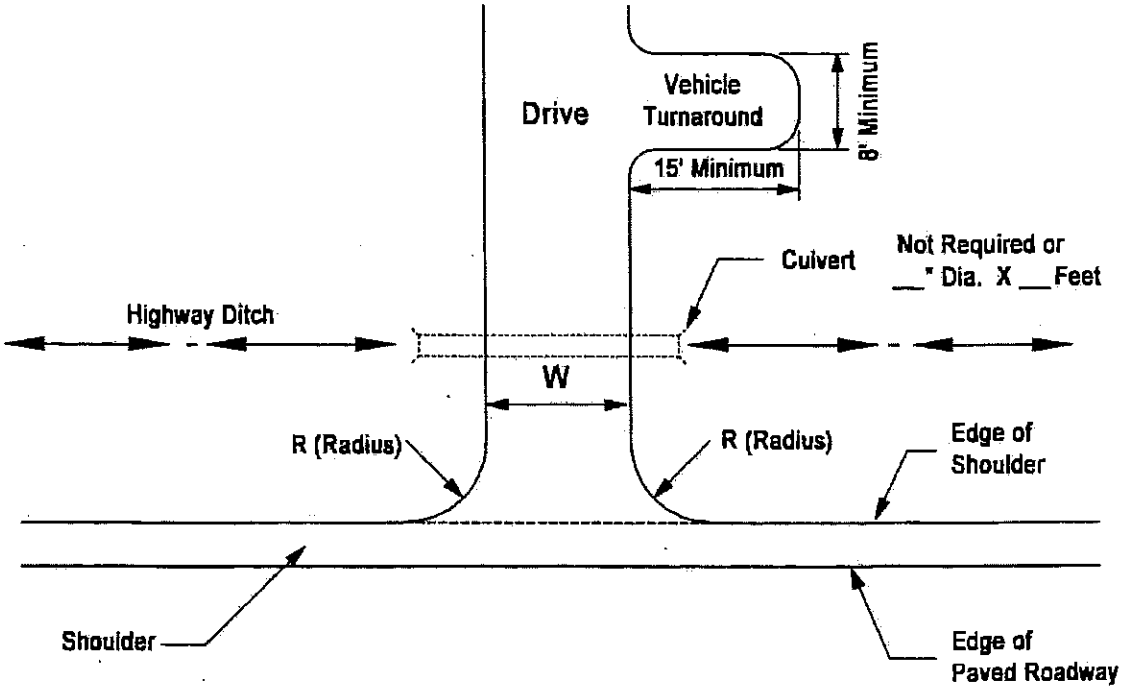
The owner shall assume, the defense of, and pay all damages, fines, and penalties for which he/she shall become liable, and shall indemnify and safe harmless said Department, its representatives, agents and employees from liability, actions against all suits, claims, damages for wrongful death, personal injuries or property damage suffered by any person or association which results from the willful or negligent action or inaction of the owner/applicant (agent) and in proceedings of every kind arising out of the construction and maintenance of said entrance(s), including snow removal.

Nothing herein shall, nor is intended to, waive any defense, immunity or limitation of liability which may be available to the MaineDOT, their officers, agents or employees under the Maine Tort Claims Act or any other privileges and/or immunities provided by law. It is a further condition that the owner will agree to keep the right of way inviolate for public highway purposes and no signs (other than traffic signs and signals), posters, billboards, roadside stands, culvert end walls or private installations shall be permitted within Right of Way limits.

State of Maine
Department of Transportation

Entrance / Driveway Details

PLAN

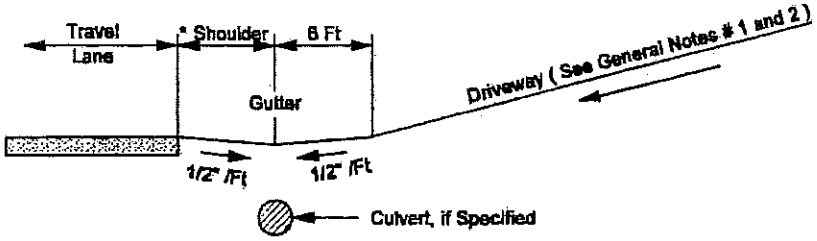


GENERAL NOTES -

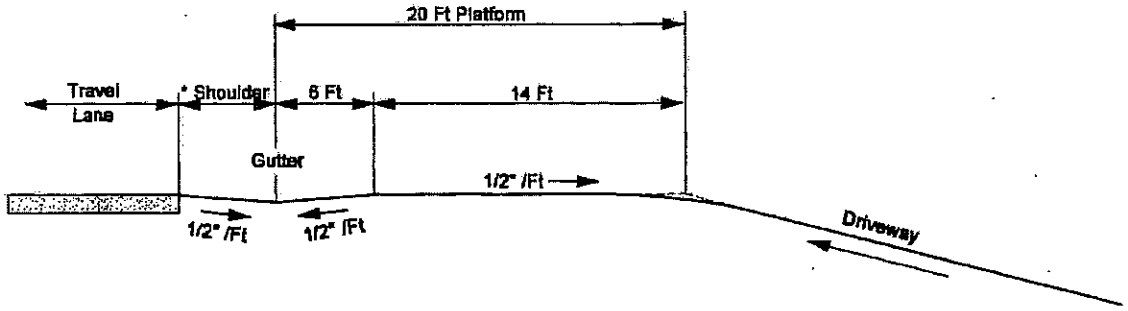
1. ALL RESIDENTAL OR COMMERCIAL DRIVES WITH 10% GRADE OR MORE SLOPING DOWN TOWARDS THE HIGHWAY SHALL BE PAVED TO THE RIGHT OF WAY LINE, AS A MINIMUM, INCUDING SHOULDER, IF GRAVEL AND HAVE DITCHES TO CONTROL RUNOFF.
2. DRIVES SLOPING TO THE HIGHWAY SHALL BE CROWNED (1/2" PER FT. MINIMUM).
3. TO THE MAXIMUM EXTENT PRACTICAL, THE ENTRANCE MUST BE CONSTRUCTED PERPENDICULAR TO THE HIGHWAY AT THE POINT OF ACCESS. EXCEPT WHERE CURBING EXISTS OR IS PROPOSED, THE MINIMUM RADIUS ON THE EDGES OF THE ENTRANCE MUST BE 10 FEET OR AS OTHERWISE REQUIRED AS SHOWN.
4. ENTRANCES/DRIVEWAYS WILL BE BUILT WITH AN ADEQUATE TURN-AROUND AREA ON SITE TO ALLOW ALL VEHICLES TO MANUVER AND PARK WITHOUT BACKING ONTO THE HIGHWAY. THIS TURN-AROUND SHALL BE AT LEAST 8 FEET WIDE BY 15 FEET LONG.
5. ENTRANCES/DRIVEWAYS AND OTHER ASSOCIATED SITE WORK WHICH DIRECTS WATER (RUNOFF) TOWARD THE HIGHWAY MUST BE CONSTRUCTED, CROWNED STABILIZED AND MAINTAINED WITH MATERIALS AND APPROPRIATE TEMPORARY/PERMANENT EROSION CONTROL MATERIALS IN ACCORDANCE WITH MDOT BEST MANAGEMENT PRACTICES.
6. THE PROFILE OF THE ENTRANCES MUST COMPLY WITH THE DETAILS SHOWN ON PAGE 2.

MDOT Entrance / Driveway Details, Continued

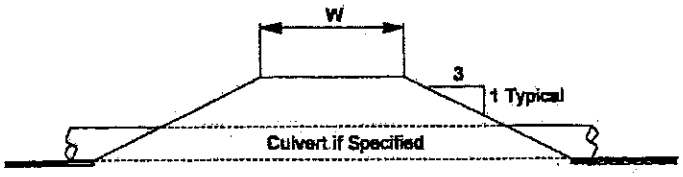
PROFILE
Details

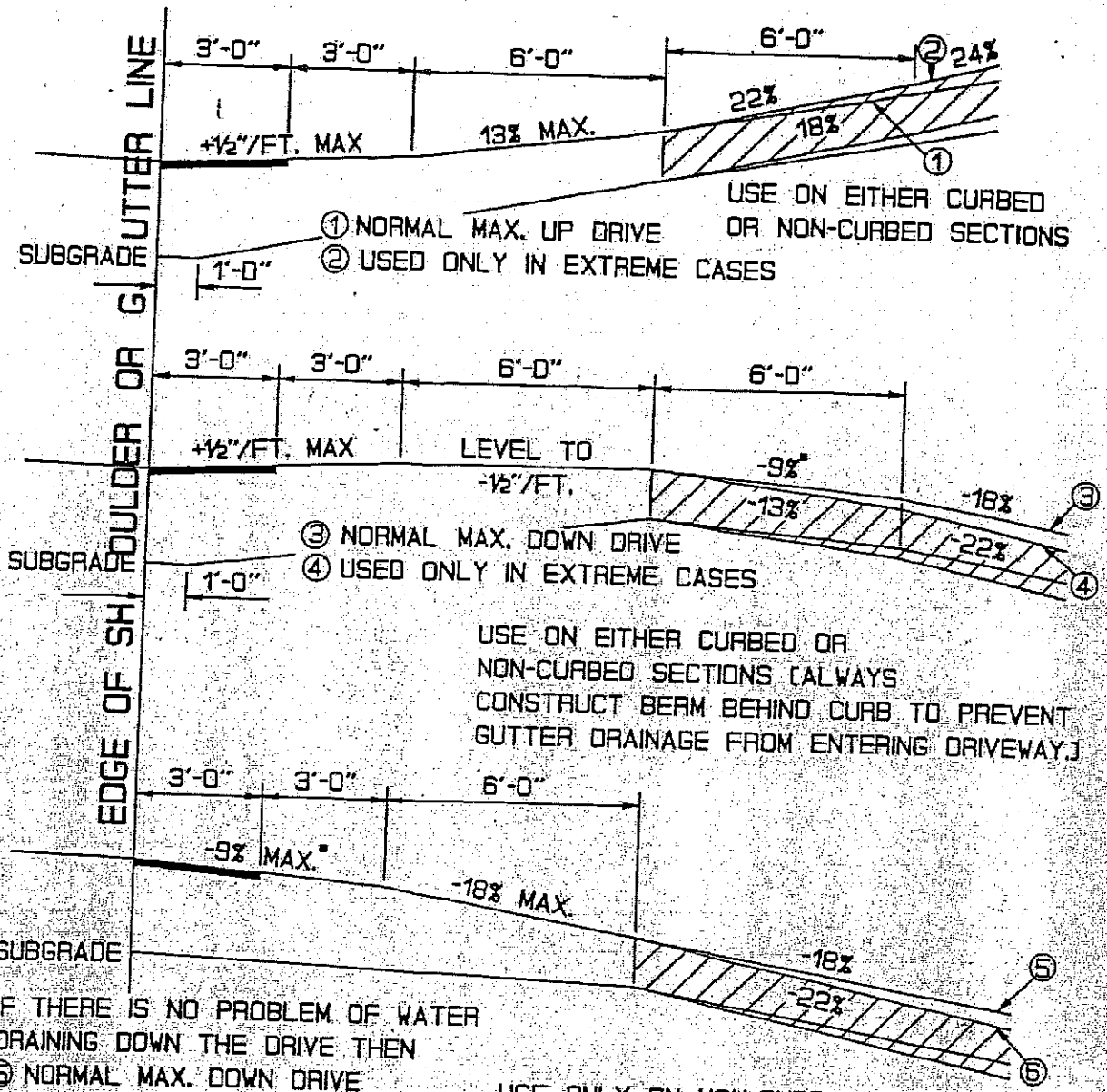


NOTE :
Grade of Existing Shoulder Should Be Maintained To Create A Gutter With a Minimum Of Three Inches Below The Edge Of Traveled Way.
* Distance Of The Gutter From The Edge Of Traveled Way Should Be The Same As Existing Shoulder Or A Minimum Of 4 Feet.



Driveway Cross Section





GENERAL NOTES:

1. THE FIRST 3' SHOWN AS PAVEMENT SHALL BE PAVED ONLY WHEN ABUTTING A PAVED AREA.
2. ALL RESIDENTIAL OR COMMERCIAL DRIVES 10% AND OVER SHALL BE PAVED.

NOTES ON MAXIMUM DRIVEWAY PROFILES:

1. THESE PROFILES ARE A GUIDE FOR THE MAJORITY OF CASES. BUT SHOULD BE FIELD CHECKED WHEN THE MAIN LINE GRADE IS STEEP (4% TO 6% OR GREATER) OR THE ANGLE OF APPROACH TO THE DRIVE IS UNUSUAL.
2. GENERALLY THE MAJORITY OF DRIVES ON A PROJECT WILL BE BUILT WITH FLATTER PROFILES THAN THESE MAXIMUM CASES.
3. WHEN GRADING DRIVES WHICH ARE FLATTER THAN THE MAXIMUM PROFILES THE FOLLOWING RULE OF THUMB SHOULD BE USED; DO NOT EXCEED A GRADE % CHANGE OF MORE THAN 9% IN A 6 FOOT INCREMENT OF DRIVEWAY LENGTH. THIS APPLIES TO BOTH UP AND DOWN PROFILES.

DRIVES ON NON-SIDEWALK SECTIONS

END02

Attachment 9

Stormwater Management Report

TERRADYN CONSULTANTS, LLC

207.926.5111
info@terradynconsultants.com
www.terradynconsultants.com

LONGBOARD RIDGE SUBDIVISION

781 POOL STREET, BIDDEFORD, MAINE

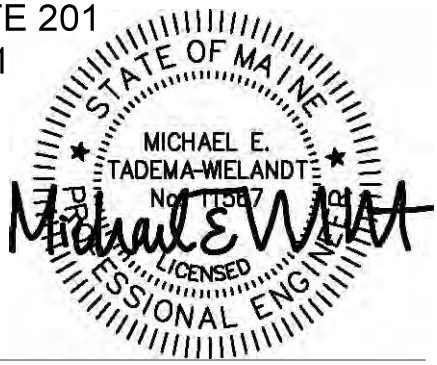
STORMWATER MANAGEMENT REPORT

PREPARED FOR:

BEACHWOOD DEVELOPMENT FUND, LLC
92 YORK STREET
KENNEBUNK, MAINE 04043

PREPARED BY:

TERRADYN CONSULTANTS LLC
565 CONGRESS STREET, SUITE 201
PORTLAND, MAINE 04101



JANUARY 2024

Introduction

The following Stormwater Management Plan has been prepared for Longboard Ridge Subdivision to evaluate stormwater runoff and erosion control for the proposed 8-lot subdivision.

Site Calculations

Below is a summary of existing and proposed impervious and developed areas on the project site.

Total Site Area	25.45 Ac (+/-)
Existing Impervious Area	0.44 Ac
Existing Developed Area	0.44 Ac
Proposed New Impervious (Road Only)	0.55 Ac
Proposed New Developed (Road Only)	1.17 Ac
Proposed Lot Impervious Area (5,000 SF per Lot)	0.92 Ac
Proposed Lot Developed Area (25,000 SF per Lot)	4.59 Ac
Total Impervious Area	1.91 Ac
Total Developed Area	6.20 Ac
Net Change in Impervious Area	1.47 Ac
Net Change in Developed Area	5.76 Ac

Existing Conditions

The project site is approximately 25.45 acres in size and is identified as Lot 17-2 on Biddeford Tax Map 5. The site is located in the Coastal Residential District with small areas in the Stream Protection and Limited Residential Overlay Zones.

The parcel is undeveloped woodland with pockets of freshwater wetlands. An unnamed stream flows along the site's southwestern boundary from northwest to southeast, ultimately reaching Etherington Pond.

A wetland and vernal pool study was conducted on the site by Longview Partners in the spring of 2022. There are approximately 3.8 acres of forested freshwater wetlands on the site.

Seven potential vernal pools were identified on the site and studied in accordance with Maine DEP guidance. The pools were found to not have a high habitat value and are regulated as typical forested wetlands by the Maine Department of Environmental Protection under the Natural Resources Protection Act.

According to the soil survey, the site is comprised of the following soil types:

Name	HSG
Scantic Silt Loam	D
Lyman-Rock	D

The project site is not located within a mapped significant sand and gravel aquifer or in an area of flood hazard, according to the Federal Insurance Rate Map FM2301450011B. The following existing conditions figures with the project site identified are provided in Attachment 1.

Figure 1	USGS Topographic Map
Figure 2	Aerial Photograph
Figure 3	Medium Intensity Soil Survey
Figure 4	Federal Insurance Rate Map
Figure 5	Significant Aquifer Map

Proposed Project

The applicant is proposing to develop an eight-lot subdivision, including a 937 linear-foot road and underground utilities. The Applicant will sell the undeveloped lots.

The proposed lots and infrastructure are located in the eastern part of the site, away from forested wetlands and the onsite stream. Proposed lots range in size from 1.11 acres (Lot 2) to 2.16 acres (Lot 8), and 12.37 acres will be preserved as open space. Lots will be served by individual subsurface wastewater disposal fields and will connect to the public water supply located within Pool Street. Electric and telecommunications services will be installed underground.

Stormwater runoff from the roadway will be managed with open ditches. The project was designed to meet the stormwater performance standards of the City of Biddeford Subdivision Regulations. The roadway will be superelevated to treat 14,793 of Impervious Stormwater runoff as well as 13,722 square feet of developed area from the roadway and adjacent lots in an underdrain soil filter. The rest of the roadway stormwater runoff will be collected in the vegetated swales before being discharged to the wetland system on the site. The system will also attenuate peak flow rates from the developed areas so peak discharge rates from the site will be limited to pre-development levels.

In addition to subdivision approval, a Stormwater Permit by Rule was submitted to the Maine Department of Environmental Protection (MDEP) on October 26,2023. We intend to submit the application for this permit in the coming weeks.

Applicable Design Standards

The Town of Biddeford Subdivision Ordinance Article IV Section 61 A: Stormwater Management

1. *All new construction and development, whether or not served by a stormwater collection and transportation system, shall be designed to reflect or resemble, as nearly as possible, natural runoff conditions in terms of volume, velocity and location of runoff.*
2. *If runoff, after development, would exceed predevelopment runoff conditions, the offsite impact must be evaluated in terms of potential soil erosion and sedimentation, drainage capacity, and the land use/land cover characteristics. Appropriate methods of reducing off-site impact shall be employed.*
3. *Stormwater management evaluations and designs shall be based on a twenty-four-hour, twenty-five-year occurrence interval storm.*
4. *The Planning Board may, when it deems it appropriate, require calculations that are based on a fifty-year storm.*

Stormwater Quantity Control

Stormwater Quantity control is required as part of town requirements for this project; the proposed development has been designed to minimize stormwater runoff from the site in excess of the natural pre-development conditions. A hydrologic analysis of pre-development and post-

development conditions was conducted based upon the methodology contained in the USDA Soil Conservation Service's Technical Releases No. 20 and 55 (SCS TR-20 and TR-55). For York County, Maine a 24-hour SCS Type III Storm distribution was used for the analysis using the following storm frequencies and rainfall amounts, per Maine DEP Chapter 500:

Storm Event	24-Hour Rainfall
2–Year Storm	3.3 inches
10–Year Storm	4.9 inches
25–Year Storm	6.2 inches

Runoff curve numbers, time of concentration, and travel time data were established based on methods outlined in the USDA TR-55 manual.

One underdrain soil filter will provide quantity control of stormwater runoff from the proposed roadway between 2+41 to 8+97. The soil filter outlets to the on-site wetlands and into the stream located along the southwestern parcel boundary.

Individual lot development will be carried out by lot owners, not the applicant. For the post-development model, the following impervious and landscaped areas were assumed based on lot size and configuration. All 8 lots were assumed to have 5,000 sf of impervious area and 20,000 sf of landscaped area. A minimum time of concentration of 5 minutes and a maximum sheet flow distance of 150 linear feet was used in the models.

Pre-Development Conditions

The pre-development HydroCAD model includes four (4) subcatchments and four (4) study points. Stormwater runoff from the site flows primarily through the system of freshwater wetlands to the study points described below.

Study Point SP1 – Located at the southern site boundary, where an unnamed stream flows from Pool Street under Peter Pond Lane in a 40" diameter culvert.

Study Point SP2 – Located at the southern site boundary, runoff flows in a southeast direction along the eastern boundary around adjacent properties and under Maddox Pond Road in a 12" diameter culvert.

Study Point SP3 – Located in the middle of the site, runoff flows southeast to Peter Pond Lane at the eastern border of the site in two culverts (12" Diameter and 18" diameter).

Study Point SP4 – Located in the southern portion of the site, runoff flows southeast to a catch basin next to Peter Pond Lane. A 6" storm drain directs runoff from SP-4 to the south side of Peter Pond Lane.

A Pre-Development Watershed Map, showing sub-watershed boundaries, time of concentration flow paths, and Study Points is provided in Appendix 2. The Pre-development HydroCAD model is attached in Appendix 4.

Existing condition peak rates of runoff at the Study Points are as follows:

Pre-Development Peak Rates of Runoff (cfs)			
	2-Year	**10-Year**	**25-Year**
SP1	8.75	17.44	24.96
SP2	5.21	10.39	14.88
SP3	5.91	11.98	17.27
SP4	1.55	3.08	4.41

The pre-development peak rates of runoff are a baseline used for comparison to the post-development condition.

Post-Development Conditions

The proposed post-development HydroCAD model includes seven (7) subcatchments and four (4) study points. The study points remain the same from the pre-development model. A Post-development Watershed Map showing sub-watershed boundaries, time of concentration flow paths, and Study Points is provided in Appendix 2. The Post-development HydroCAD model is attached in Appendix 5.

Post-development peak rates of runoff at the Study Points are as follows:

Post-Development Peak Rates of Runoff (cfs)			
	2-Year	**10-Year**	**25-Year**
SP1	8.52	16.88	24.42
SP2	5.21	10.39	14.88
SP3	5.91	11.44	16.18
SP4	1.55	3.08	4.41

Peak Flow Analysis

The results of the pre-development and post-development models were compared at the defined Study Points described above. The direct comparison of the pre-development and post-development conditions at the Study Points are as follows:

Peak Runoff Flow Rates Comparison		
Storm Event	**Pre-Development (cfs)**	**Post-Development (cfs)**
	Study Point SP1	
2-Year	8.75	8.52
10-Year	17.44	16.88
25-Year	24.96	24.42
	Study Point SP2	
2-Year	5.21	5.21
10-Year	10.39	10.39
25-Year	14.88	14.88
	Study Point SP3	
2-Year	5.91	5.91
10-Year	11.98	11.44
25-Year	17.27	16.18
	Study Point SP4	
2-Year	1.55	1.55
10-Year	3.08	3.08
25-Year	4.41	4.41

The hydrologic models predict that peak rates of runoff at study points 1, 2, 3 and 4 will decrease or stay the same in the 2, 10 & 25-year design storm events. The reduction in peak flow rates is due to the change in predevelopment sub catchment areas due to the 8-lot development. Runoff from the new road is collected in open ditches and sent to the unnamed stream via vegetated swales and wetland network, which has a large area to collect runoff.

Overall, sub catchments 1 and 3 have an overall reduction in area, which offsets the effects of the increased developed and impervious area. Since there was no change to sub catchment 4 in the pre and post development, there was no change in stormwater runoff.

The reduction in peak flow rates in subcatchment 2 is believed to be the result of modified timing of the peak rates of runoff from different tributary areas resulting from the proposed development. The relatively small amount of impervious area to be constructed, and the associated increase in runoff volume and peak runoff rates from these areas of the site, is expected to be offset by the modified timing of peak runoff rates.

Stormwater Quality Control

The Chapter 500 General Standard does not apply to this development which requires one acre of more of impervious area, or 5 acres or more of developed area.

Summary

The proposed eight (8) lot subdivision includes construction of a 937’ long roadway. Runoff from the road will be collected and discharged into wetlands onsite and eventually the unnamed stream. Pre and post-development hydrologic models were developed to determine the effect of

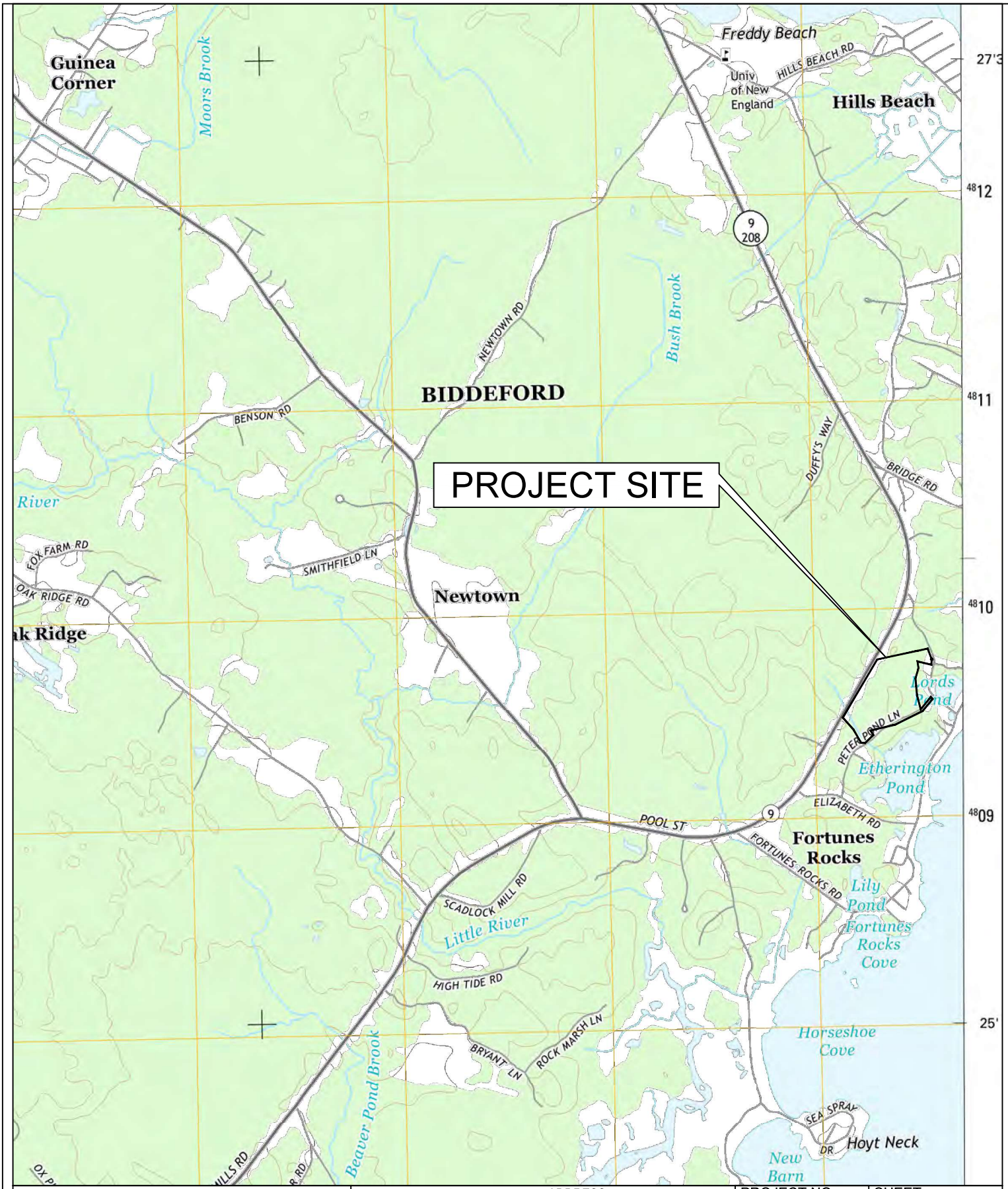
the proposed development on peak runoff rates at the site boundary. Based upon the results of this evaluation, the proposed project meets the applicable performance standards and is not expected to cause flooding, erosion, or other significant adverse effects downstream of the site.

Appendices

1 – Existing Conditions Figures
2 – Watershed Maps
3 – Inspection & Maintenance Manual
4 – Maintenance Agreement
5 – Biddeford Standardized Stormwater Tables
6 – Pre-Development HydroCAD Model
7 – Post-Development HydroCAD Model
8 – Stormwater BMP Calculations

Attachment 1

Existing Conditions Figures



USGS BIDDEFORD QUADRANGLE MAP

PROJECT:
POOL STREET SUBDIVISION
BIDDEFORD MAINE

PREPARED FOR:
BEACHWOOD DEVELOPMENT FUND
92 YORK STREET
KENNEBUNK, MAINE 04043

TERRADYN CONSULTANTS, LLC
ADDRESS:
41 CAMPUS DRIVE, SUITE 301
NEW GLOUCESTER, ME 04260
PHONE:
(207) 926-5111
WEB SITE:
www.terradynconsultants.com
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

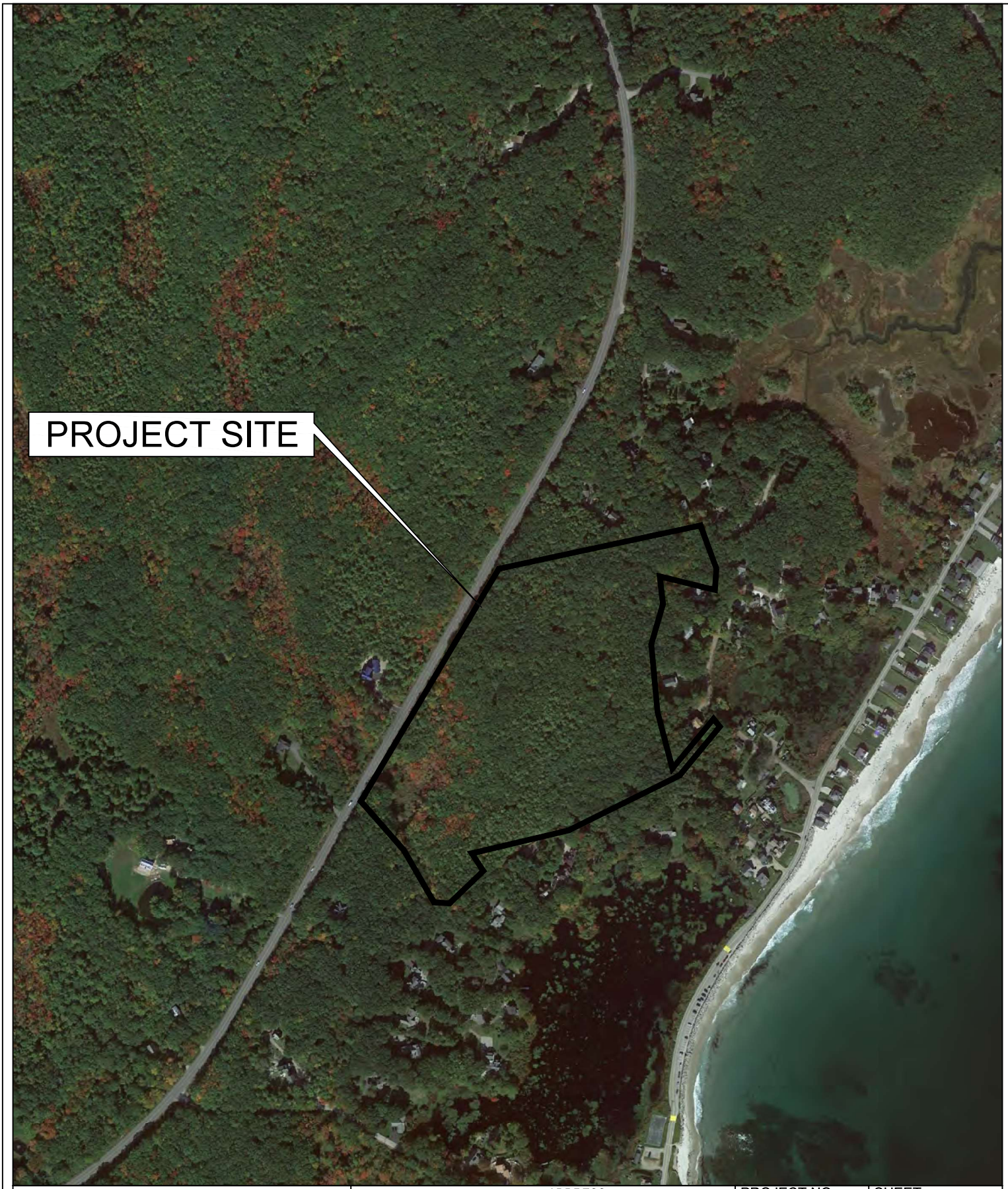
PROJECT NO.
22-023

DATE
5/16/2023

SCALE
1" = 2,000'

SHEET
1

OF
5



AERIAL MAP

PROJECT:
POOL STREET SUBDIVISION
BIDDEFORD MAINE

PREPARED FOR:
BEACHWOOD DEVELOPMENT FUND
92 YORK STREET
KENNEBUNK, MAINE 04043

TERRADYN CONSULTANTS, LLC
ADDRESS:
41 CAMPUS DRIVE, SUITE 301
NEW GLOUCESTER, ME 04260
PHONE:
(207) 926-5111
WEB SITE:
www.terradynconsultants.com
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

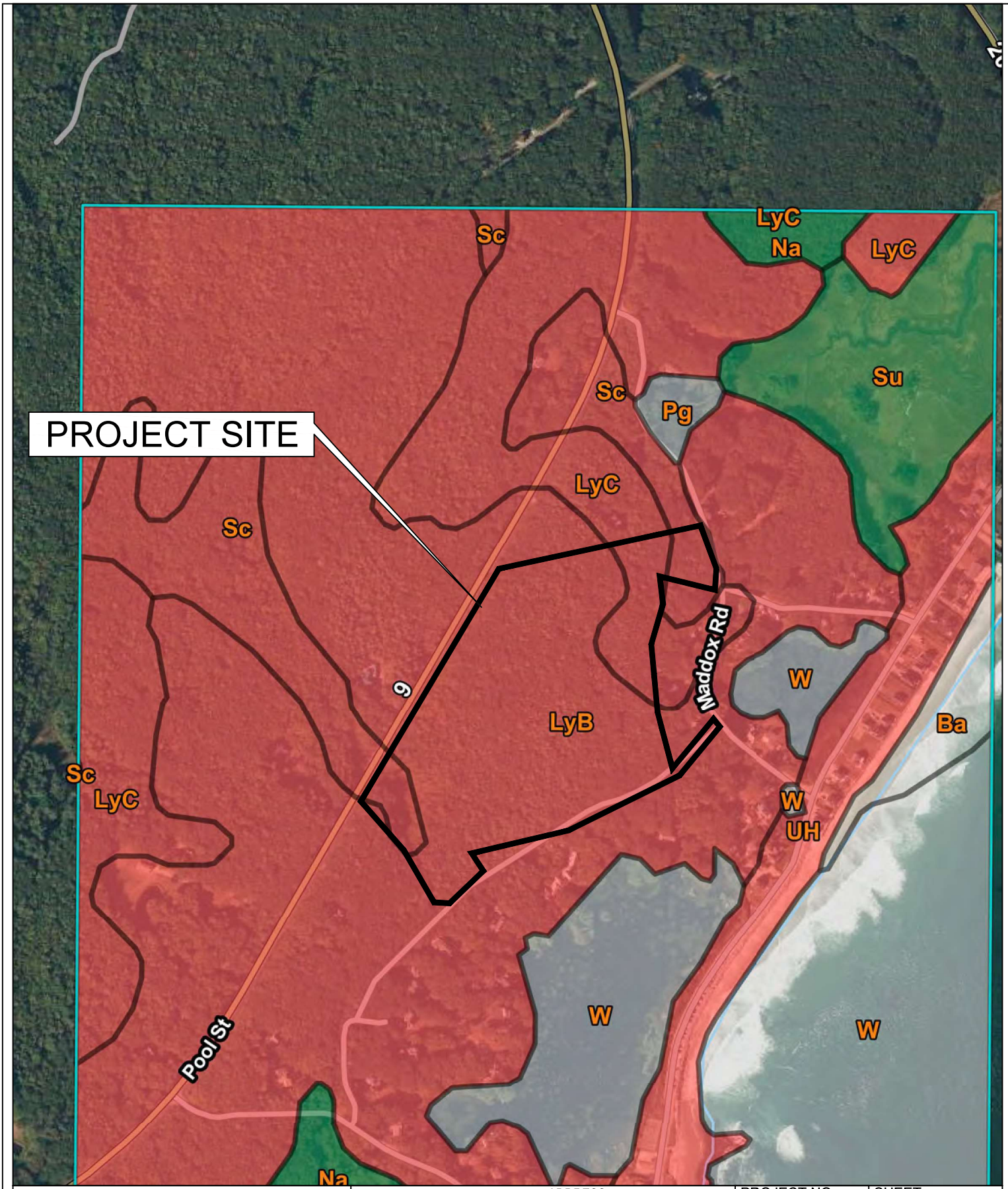
PROJECT NO.
22-023

DATE
5/16/2023

SCALE
1" = 500'

SHEET
2

OF
5



MEDIUM INTENSITY SOILS SURVEY

PROJECT:
POOL STREET SUBDIVISION
BIDDEFORD MAINE

PREPARED FOR:
BEACHWOOD DEVELOPMENT FUND
92 YORK STREET
KENNEBUNK, MAINE 04043

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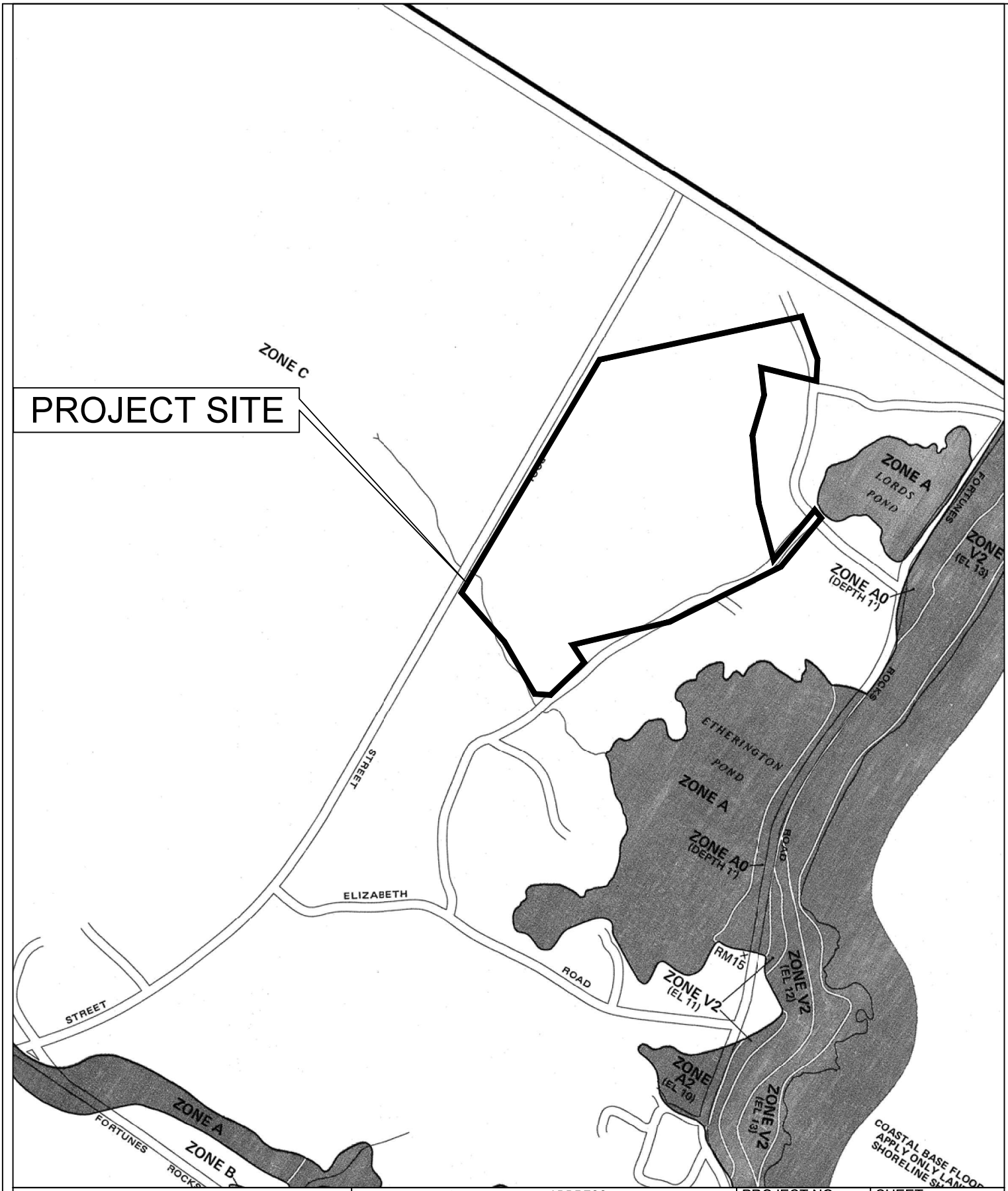
PROJECT NO.
22-023

DATE
5/16/2023

SCALE
1" = 500'

SHEET
3

OF
5



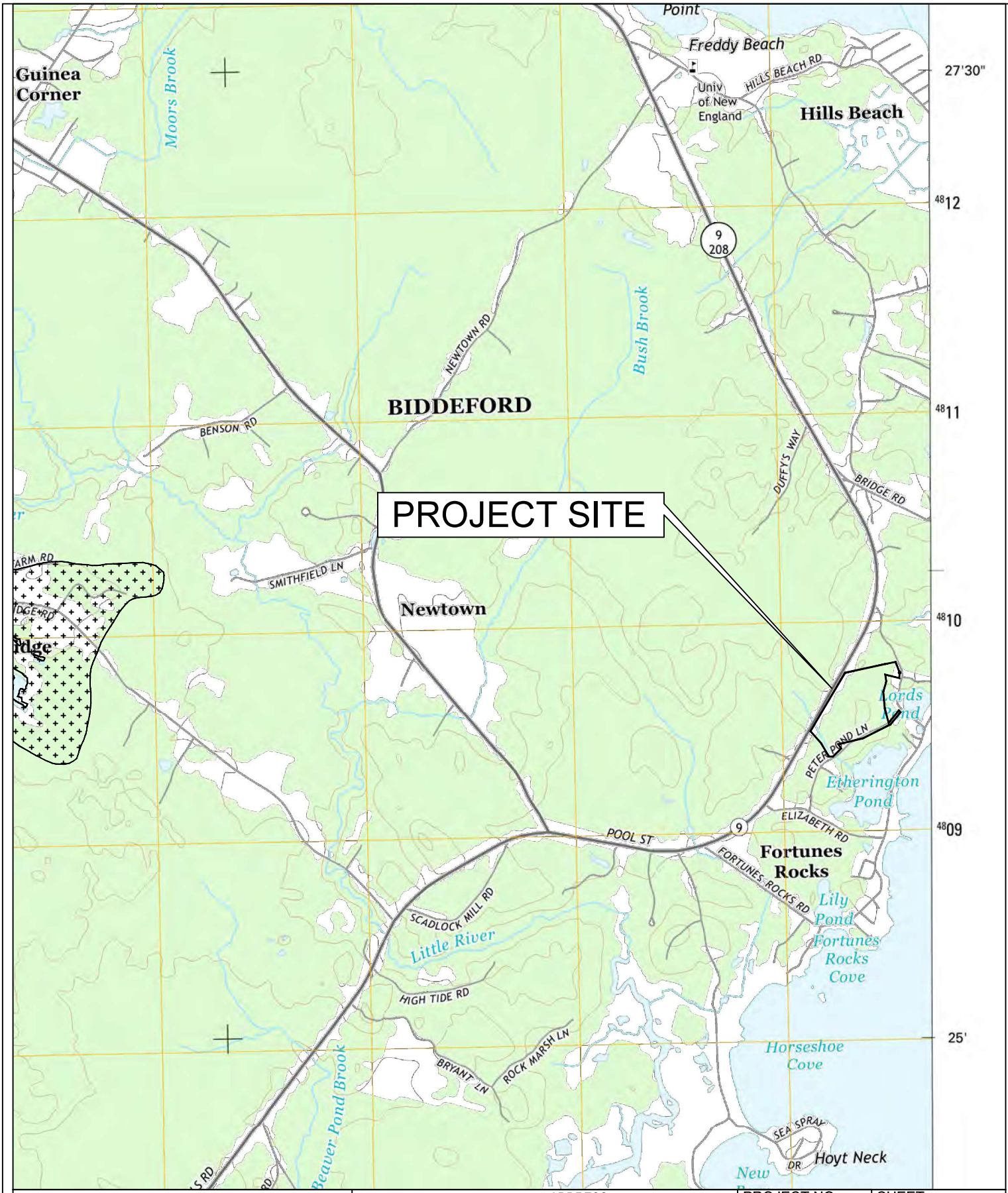
FLOOD INSURANCE RATE MAP

PROJECT:
POOL STREET SUBDIVISION
BIDDEFORD MAINE

PREPARED FOR:
BEACHWOOD DEVELOPMENT FUND
92 YORK STREET
KENNEBUNK, MAINE 04043

TERRADYN CONSULTANTS, LLC
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NEW GLOUCESTER, ME 04260
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(207) 926-5111
WEB SITE:
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PROJECT NO.	SHEET
22-023	4
DATE	OF
5/16/2023	5
SCALE	
1" = 500'	



SIGNIFICANT SAND & GRAVEL AQUIFER MAP

PROJECT:
POOL STREET SUBDIVISION
BIDDEFORD MAINE

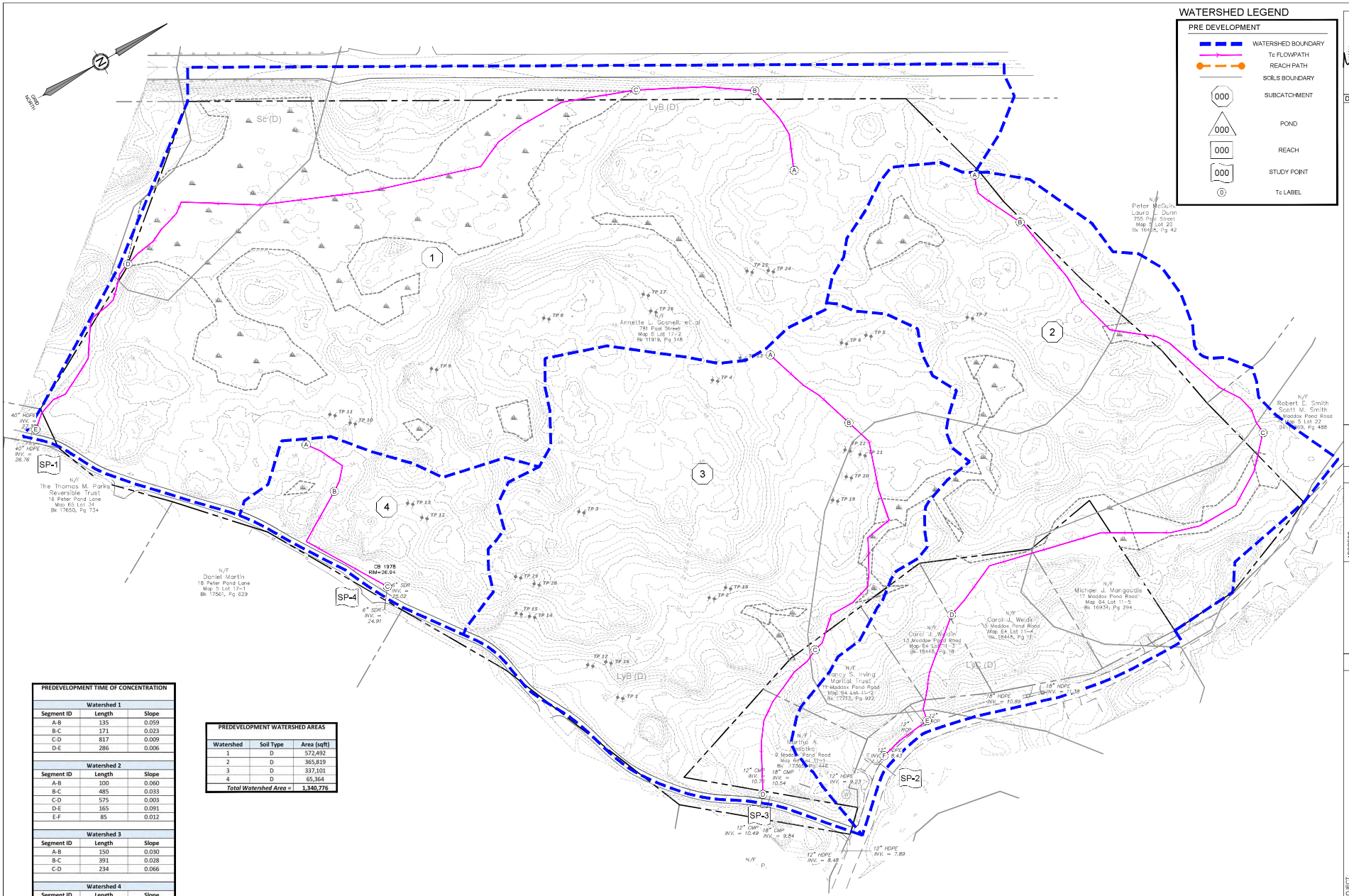
PREPARED FOR:
BEACHWOOD DEVELOPMENT FUND
92 YORK STREET
KENNEBUNK, MAINE 04043

TERRADYN CONSULTANTS, LLC
ADDRESS:
41 CAMPUS DRIVE, SUITE 301
NEW GLOUCESTER, ME 04260
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WEB SITE:
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PROJECT NO.	SHEET
22-023	5
DATE	OF
5/16/2023	5
SCALE	
1" = 2,000'	

Attachment 2

Watershed Maps



PREDEVELOPMENT TIME OF CONCENTRATION

Watershed 1		
Segment ID	Length	Slope
A-B	135	0.059
B-C	171	0.023
C-D	817	0.009
D-E	286	0.006
Watershed 2		
Segment ID	Length	Slope
A-B	100	0.060
B-C	485	0.033
C-D	575	0.003
D-E	165	0.091
E-F	85	0.012
Watershed 3		
Segment ID	Length	Slope
A-B	150	0.030
B-C	391	0.028
C-D	234	0.066
Watershed 4		
Segment ID	Length	Slope
A-B	100	0.040
B-C	217	0.028

PREDEVELOPMENT WATERSHED AREAS

Watershed	Soil Type	Area (sqft)
1	D	572,492
2	D	365,819
3	D	337,101
4	D	65,364
Total Watershed Area =		1,340,776

NO.	DATE	REMARKS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	09/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

DATE: 01/17/2024

ADDRESS: 45 EXCHANGE STREET, SUITE 301 PORTLAND, MAINE 04101
PHONE: (207) 536-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

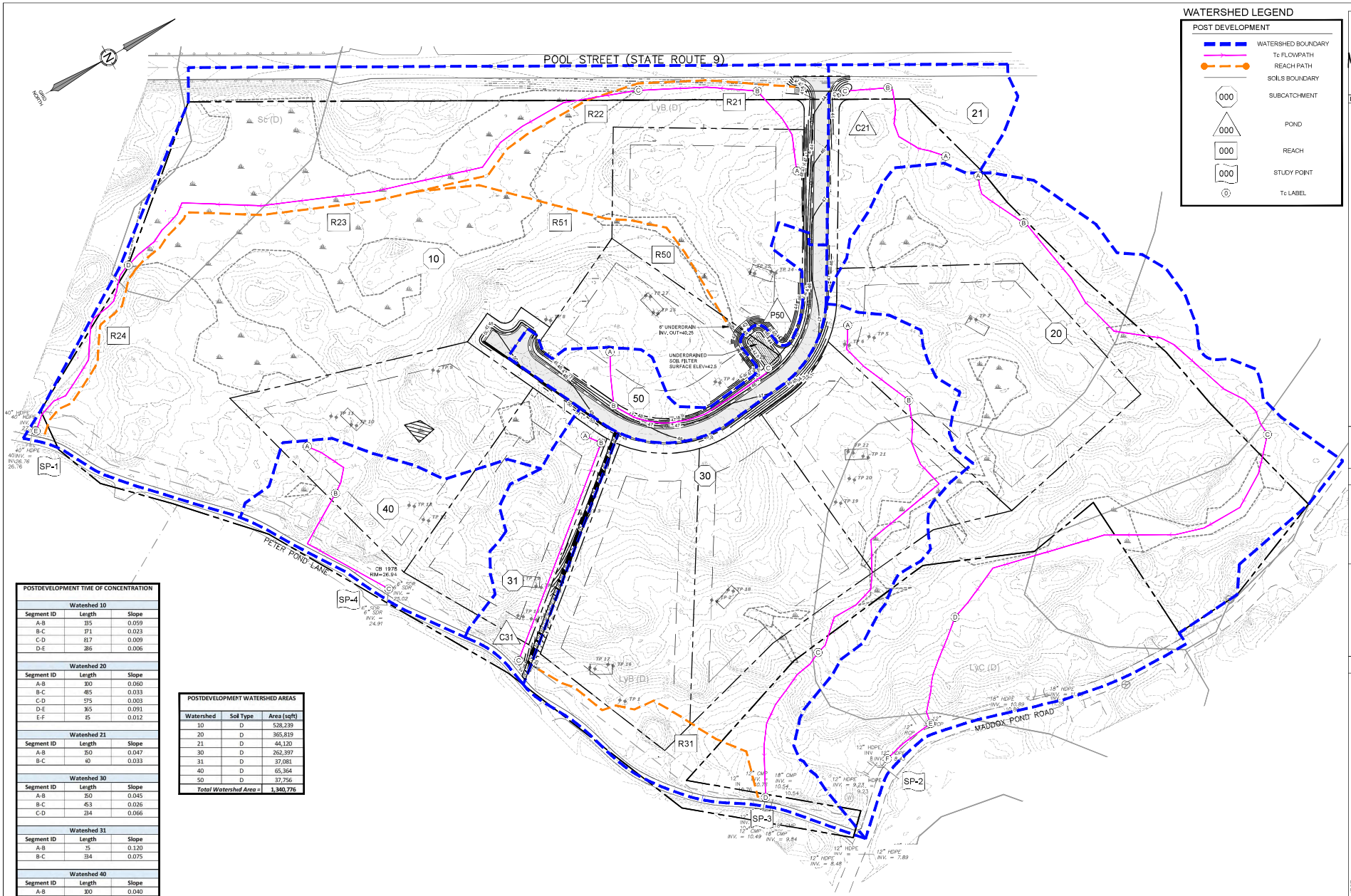
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: 781 POOL STREET, BIDDEFORD, ME
SHEET TITLE: PREDEVELOPMENT WATERSHED MAP
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
P.O. BOX 4567
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: 1" = 60'
JOB NO: 23-023
SHEET: WS-1

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1029



POSTDEVELOPMENT TIME OF CONCENTRATION

Segment ID	Length	Slope
Watershed 10		
A-B	135	0.059
B-C	171	0.023
C-D	817	0.009
D-E	286	0.006
Watershed 20		
A-B	100	0.060
B-C	485	0.033
C-D	575	0.003
D-E	365	0.091
E-F	85	0.012
Watershed 21		
A-B	150	0.047
B-C	40	0.033
Watershed 30		
A-B	150	0.045
B-C	453	0.026
C-D	234	0.066
Watershed 31		
A-B	75	0.120
B-C	394	0.075
Watershed 40		
A-B	300	0.040
B-C	217	0.028
Watershed 50		
A-B	75	0.053
B-C	252	0.018

POSTDEVELOPMENT WATERSHED AREAS

Watershed	Soil Type	Area (sqft)
10	D	528,239
20	D	365,819
21	D	44,120
30	D	262,397
31	D	37,081
40	D	65,364
50	D	37,756
Total Watershed Area =		1,340,776

NO.	DATE	REMARKS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	09/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

DATE: 01/17/2024

ADDRESS: 45 MAGAZINE STREET, SUITE 301 KENNEBUNK, MAINE 04043
PHONE: (207) 936-5111
WEB SITE: www.terradynconsultants.com
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying| Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION/STREET: BEECHWOOD AVE
SHEET TITLE: POSTDEVELOPMENT WATERSHED MAP
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: PO BOX 1187 KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: 1" = 60'
JOB NO: 23-023
SHEET: WS-2

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1030

Attachment 3

Inspection & Maintenance Manual

TERRADYN
CONSULTANTS, LLC

207.926.5111
info@terradynconsultants.com
www.terradynconsultants.com

LONGBOARD RIDGE SUBDIVISION
BIDDEFORD, MAINE
STORMWATER MANAGEMENT SYSTEM
INSPECTION & MAINTENANCE PLAN

Project Owner/Developer: Beachwood Development Fund, LLC.
92 York Street
Kenenbunk, Maine 04043
(650) 985-3646

Responsible Party: Owner or Homeowners Association

Prepared By: Terradyn Consultants, LLC
565 Congress Street, Suite 201
Portland, ME 04101
(207) 926-5111

INTRODUCTION:

Regular inspection and maintenance of the entire stormwater management system is crucial to the long-term effectiveness of the system. The responsible party must provide regular inspection and maintenance of all permanent erosion control measures and stormwater management structures, establish any contract services required to implement the program, and keep records and a maintenance logbook of inspection and maintenance activities. At a minimum, the inspection and maintenance activities outlined herein should be performed at the recommended intervals. A rainfall event of 1" in a 24 hour period would trigger a wet weather post-construction inspection.

All measures must be maintained in effective operating condition. A person with knowledge of erosion and sedimentation practices, stormwater management, and the standards and conditions of all local, state and federal permits for the project shall conduct the inspections. The following areas, facilities, and measures must be inspected and identified deficiencies must be corrected.

INSPECTION TASKS

1. Inspect **vegetated areas**, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

2. Inspect **ditches, swales and other open stormwater channels** in the spring, late fall and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, control vegetated growth that could obstruct flow and repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or sideslopes.

3. Inspect **culverts** in the spring, in late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris at the inlet, the outlet and within the culvert. Repair any erosion damage at the culvert's inlet and outlet.

4. Clear accumulations of winter sand **along roadways** at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader. Grading of gravel roads, or grading of the gravel shoulders of gravel or paved roads, must be routinely performed to ensure that stormwater drains immediately off the road surface to adjacent buffer areas or stable ditches, and is not impeded by accumulations of graded material on the road shoulder or by excavation of false ditches in the shoulder.

5. Inspect **grassed underdrained soil filter** semi-annually and following major storm events. Debris and sediment buildup shall be removed from the forebay and basin as needed. Mowing of the grassed basin shall occur semi-annually to a height of no less than 6-inches. Any bare area or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. Maintaining good grass cover will minimize clogging with fine sediments. If drain time exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity.

6. Inspect **resources** once a year for evidence of erosion, concentrating flow, and encroachment by development. If flows are concentrating within site grading, ditch turnouts must be used to ensure a more even distribution of flow. Check down slope of all turnouts for erosion. If erosion is present, adjust or modify the turnout lip to ensure a better distribution of flow. Clean-out any accumulation of sediment within the turn-out pools.

ATTACHMENTS:
Example Stormwater Management Facilities Inspection & Maintenance Log

Stormwater Management Facilities
Post Construction Inspection & Maintenance Log
Longboard Ridge Subdivision, Biddeford, Maine

General Information:

Inspected by:	Date:	Weather:
Reason for Inspection: (Regular Inspection) (Major Rain Event, 1" in 24 hours)		

BMP	Conditions Observed	Repairs Needed?
1. Vegetated Areas		
2. Ditches, Swales, Open Channels		
3. Culverts		
4. Underdrained Soil Filter		

Detailed Repair Notes:

BMP Type	Date	Description of Repairs & Sediment Disposal

Attachment 4

Maintenance Manual

APPENDIX 1

Maintenance Agreement for Stormwater Management Facilities

This Maintenance Agreement is made this day of _____ 20___ by and between Beachwood Development Fund, LLC ("Applicant") and the City of Biddeford, Maine (the "City").

The project name is Longboard Ridge Subdivision.

The location is: 781 Pool St, Biddeford, Maine 04005.

The project's Tax Map and Lot Number are Tax Map 5 Lot 17-2.

The project is shown on plans entitled "Longboard Ridge Subdivision" most recently revised on January 23, 2024 approved by the Biddeford Planning Board.

The last recorded deeds in the chain of title for the properties within the Project are recorded in the York County Registry of Deeds at Book 19226, Page 730.

WHEREAS, the approval of the Project includes Stormwater Management Facilities which requires periodic maintenance; and

WHEREAS, in consideration of the approval of the Project the City of Biddeford requires that periodic maintenance be performed on the Stormwater Management Facilities;

NOW, THEREFORE, in consideration of the mutual benefits accruing from the approval of the Project by the City and the agreement of Applicant to maintain the Stormwater Management Facilities, the parties hereby agree as follows:

1. Applicant, for itself, and its successors and assigns, agrees to the following:

   (a) To inspect, clean, maintain, and repair the Stormwater Management Facilities, which includes, to the extent they exist, parking areas, catch basins, stormwater treatment and detention facilities, drainage swales, pipes and related structures, at least annually, to prevent the build up and storage of sediment and debris in the system;

   (b) To repair any deficiencies in the Stormwater Management Facilities noted during the annual inspection;

   (c) To provide a summary report on the inspection, maintenance, and repair activities performed annually on the Stormwater Management Facilities to the City Code Enforcement Officer on or before March 1st annually;

   (d) To allow access by Town personnel or the Town's designee for inspecting the Stormwater Management Facilities for conformance with these requirements.

(e) If lots or units will be sold separately, to create an association of lot or unit owners (the "Association") for the purpose of maintaining the Stormwater Management Facilities.

2. Upon creation of the Association, the Association shall become responsible for compliance with the terms of this Agreement.

3. This Agreement shall constitute a covenant running with the land, and Applicant shall reference this Agreement in all deeds conveying any interest in real estate within the Project.

_____

_____ By: _____
Witness Its:

CITY OF BIDDEFORD

_____ By: _____
Witness Its:

STATE OF MAINE
_____, ss. _____, 20__

Personally appeared the above-named _____ _____, the _____ of _____, and acknowledged the foregoing Agreement to be said person's free act and deed in said capacity.

Before me,

_____
Notary Public / Attorney at Law

Print Name: _____

STATE OF MAINE
_____, ss. _____, 20__

Personally appeared the above-named _____ _____, the _____ of the City of Biddeford, and acknowledged the foregoing Agreement to be said his/her free act and deed in said capacity.

Before me,

_____
Notary Public / Attorney at Law

Print Name: _____

Attachment 5

Biddeford Standardized Stormwater Tables

LONGBOARD RIDGE SUBDIVISION - PREDEVELOPMENT LAND COVER SUMMARY							
			Subdrainage Land Cover Areas				
Drainage Area	Area (SF)	Area (AC)	Impervious Area (SF)	Pervious Area HSG 'D' (SF)	Pervious Area HSG 'D' (SF)	Composite CN	Tc (hours)
			CN: 98	CN: 80	CN: 77		
1	572,495	13.14	22,352	-	550,143	78.0	0.85
2	365,819	8.40	14,800	27,000	324,019	78.0	0.96
3	337,101	7.74	5,003	5,000	327,098	77.0	0.60
4	65,364	1.50	2,339	-	63,025	78.0	0.34
TOTAL	1,340,779	30.78	44,494	32,000	1,264,285	77.7	-

*If a drainage area contains multiple soil types with differing HSG classifcations (i.e. 'C' vs 'D'), additional columns should be added for each pervious & gravel hydrologic soil group types (HSG).

**Gravel areas treated as impervious area

LONGBOARD RIDGE SUBDIVISION - POSTDEVELOPMENT LAND COVER SUMMARY							
			Subdrainage Land Cover Areas				
Drainage Area	Area (SF)	Area (AC)	Impervious Area (SF)	Pervious Area HSG 'D' (SF)	Pervious Area HSG 'D' (SF)	Composite CN	Tc (hours)
			CN: 98	CN: 80	CN: 77		
10	528,240	12.13	42,005	55,000	431,234	79.0	0.85
21	44,120	1.01	6,468	1,671	35,981	80.0	0.35
50	37,756	0.87	14,793	13,722	9,241	86.0	0.23
20	365,820	8.40	18,800	39,500	307,519	78.0	0.96
30	262,397	6.02	19,800	72,500	170,097	79.0	0.56
31	37,081	0.85	4,583	10,000	22,498	80.0	0.11
40	65,365	1.50	3,089	10,000	52,275	78.0	0.34
TOTAL	1,340,779	30.78	109,538	202,393	1,028,845	78.9	-

*If a drainage area contains multiple soil types with differing HSG classifcations (i.e. 'C' vs 'D'), additional columns should be added for each pervious & gravel hydrologic soil group types (HSG).

**Gravel areas treated as impervious area

LONGBOARD RIDGE SUBDIVISION - LAND COVER CURVE NUMBER SUMMARY TABLE				
USDA-NRCS SOIL CLASSIFICATION	**HYDROLOGIC SOIL GROUP (HSG)**	**LAND COVER TYPES - CURVE NUMBERS**		
		Impervious	**Pervious, Good (Lawn)**	**Pervious, Good (Woods)**
LyB (Lyman-Rock outcrop complex, 3-8% slope)	D	98	80	77
LyC (Lyman-Rock outcrop complex, 8-15% slope)	D	98	80	77

Source: Urban Hydrology for Small Watersheds - TR-55

**Gravel treated as impervious area*

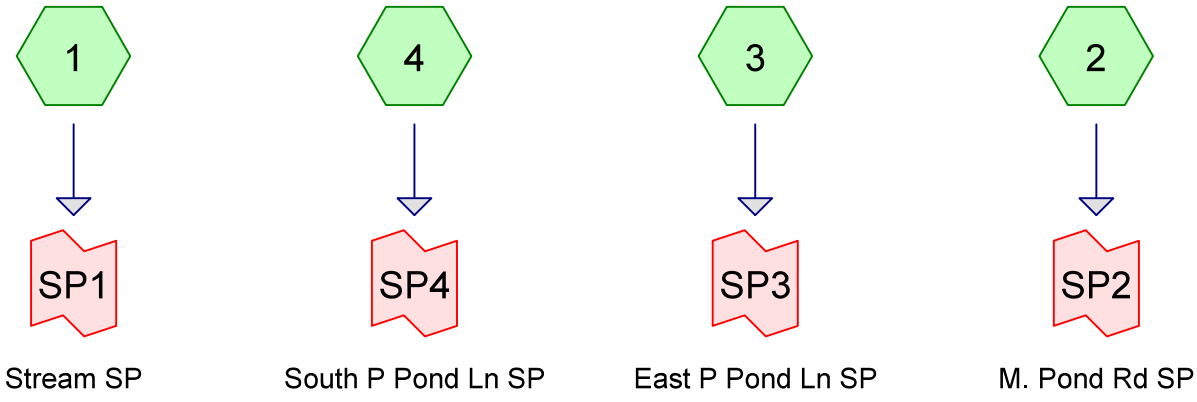
BIDDEFORD - 24 HR RAINFALL DEPTHS	
2-YR	3.3 in
10-YR	4.9 in
25-YR	6.2 in
100-YR	8.7 in

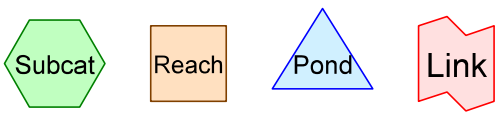
*Per Appendix H of DEP's Chapter 500; Type III Storm

	LONGBOARD RIDGE SUBDIVISION - STORMWATER RUNOFF DISCHARGE SUMMARY			
	STORM FREQUENCY	EXISTING DISCHARGE (CFS)	PROPOSED DISCHARGE (CFS)	NOTES
POI-1	Q_2	8.75 CFS	8.52 CFS	
	Q_{10}	17.44 CFS	16.88 CFS	
	Q_{25}	24.96 CFS	24.42 CFS	
	Q_{100}	39.84 CFS	42.73 CFS	
POI-2	Q_2	5.21 CFS	5.21 CFS	
	Q_{10}	10.39 CFS	10.39 CFS	
	Q_{25}	14.88 CFS	14.88 CFS	
	Q_{100}	23.77 CFS	23.77 CFS	
POI-3	Q_2	5.91 CFS	5.91 CFS	
	Q_{10}	11.98 CFS	11.44 CFS	
	Q_{25}	17.27 CFS	16.18 CFS	
	Q_{100}	27.75 CFS	25.55 CFS	
POI-4	Q_2	1.55 CFS	1.55 CFS	
	Q_{10}	3.08 CFS	3.08 CFS	
	Q_{25}	4.41 CFS	4.41 CFS	
	Q_{100}	7.04 CFS	7.04 CFS	
TOTAL	Q_2	21.42 CFS	21.19 CFS	
	Q_{10}	42.89 CFS	41.79 CFS	
	Q_{25}	61.52 CFS	59.89 CFS	
	Q_{100}	98.40 CFS	99.09 CFS	

Attachment 6

Pre-Development HydroCAD Model





Routing Diagram for 23-023-PRE
Prepared by Terradyn Consultants LLC, Printed 1/23/2024
HydroCAD® 10.20-3g s/n 10466 © 2023 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.735	80	>75% Grass cover, Good, HSG D (2, 3)
0.220	98	Impervious - offsite houses/driveway (2, 3)
0.138	98	Maddox Pond Road (2)
0.198	98	Peter Pond Ln (1, 3, 4)
0.465	98	Pool Street (1)
29.024	77	Woods, Good, HSG D (1, 2, 3, 4)

Summary for Subcatchment 1:

Runoff = 8.75 cfs @ 12.73 hrs, Volume= 1.475 af, Depth= 1.35"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
	550,143	77	Woods, Good, HSG D
*	20,252	98	Pool Street
*	2,100	98	Peter Pond Ln
	572,495	78	Weighted Average
	550,143		96.10% Pervious Area
	22,352		3.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0593	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0057	1.45	5.43	**Trap/Vee/Rect Channel Flow, D-E** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 2:

Runoff = 5.21 cfs @ 12.82 hrs, Volume= 0.943 af, Depth= 1.35"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	6,000	98	Maddox Pond Road
	324,019	77	Woods, Good, HSG D
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
	365,819	78	Weighted Average
	351,019		95.95% Pervious Area
	14,800		4.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 3:

Runoff = 5.91 cfs @ 12.52 hrs, Volume= 0.828 af, Depth= 1.28"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
	327,098	77	Woods, Good, HSG D
*	4,203	98	Peter Pond Ln
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
	337,101	77	Weighted Average
	332,098		98.52% Pervious Area
	5,003		1.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.9	150	0.0300	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
7.8	391	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0660	1.28		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
35.7	775	Total			

Summary for Subcatchment 4:

Runoff = 1.55 cfs @ 12.30 hrs, Volume= 0.168 af, Depth= 1.35"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	63,025	77	Woods, Good, HSG D
	65,364	78	Weighted Average
	63,025		96.42% Pervious Area
	2,339		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Link SP1: Stream SP

Inflow Area = 13.143 ac, 3.90% Impervious, Inflow Depth = 1.35" for 2-yr event
Inflow = 8.75 cfs @ 12.73 hrs, Volume= 1.475 af
Primary = 8.75 cfs @ 12.73 hrs, Volume= 1.475 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 4.05% Impervious, Inflow Depth = 1.35" for 2-yr event
Inflow = 5.21 cfs @ 12.82 hrs, Volume= 0.943 af
Primary = 5.21 cfs @ 12.82 hrs, Volume= 0.943 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 7.739 ac, 1.48% Impervious, Inflow Depth = 1.28" for 2-yr event
Inflow = 5.91 cfs @ 12.52 hrs, Volume= 0.828 af
Primary = 5.91 cfs @ 12.52 hrs, Volume= 0.828 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 3.58% Impervious, Inflow Depth = 1.35" for 2-yr event
Inflow = 1.55 cfs @ 12.30 hrs, Volume= 0.168 af
Primary = 1.55 cfs @ 12.30 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1:

Runoff = 17.44 cfs @ 12.70 hrs, Volume= 2.877 af, Depth= 2.63"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
	550,143	77	Woods, Good, HSG D
*	20,252	98	Pool Street
*	2,100	98	Peter Pond Ln
	572,495	78	Weighted Average
	550,143		96.10% Pervious Area
	22,352		3.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0593	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0057	1.45	5.43	**Trap/Vee/Rect Channel Flow, D-E** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 2:

Runoff = 10.39 cfs @ 12.79 hrs, Volume= 1.838 af, Depth= 2.63"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	6,000	98	Maddox Pond Road
	324,019	77	Woods, Good, HSG D
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
	365,819	78	Weighted Average
	351,019		95.95% Pervious Area
	14,800		4.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 3:

Runoff = 11.98 cfs @ 12.50 hrs, Volume= 1.638 af, Depth= 2.54"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
	327,098	77	Woods, Good, HSG D
*	4,203	98	Peter Pond Ln
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
	337,101	77	Weighted Average
	332,098		98.52% Pervious Area
	5,003		1.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.9	150	0.0300	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
7.8	391	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0660	1.28		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
35.7	775	Total			

Summary for Subcatchment 4:

Runoff = 3.08 cfs @ 12.28 hrs, Volume= 0.328 af, Depth= 2.63"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	63,025	77	Woods, Good, HSG D
	65,364	78	Weighted Average
	63,025		96.42% Pervious Area
	2,339		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Link SP1: Stream SP

Inflow Area = 13.143 ac, 3.90% Impervious, Inflow Depth = 2.63" for 10-yr event
Inflow = 17.44 cfs @ 12.70 hrs, Volume= 2.877 af
Primary = 17.44 cfs @ 12.70 hrs, Volume= 2.877 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 4.05% Impervious, Inflow Depth = 2.63" for 10-yr event
Inflow = 10.39 cfs @ 12.79 hrs, Volume= 1.838 af
Primary = 10.39 cfs @ 12.79 hrs, Volume= 1.838 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 7.739 ac, 1.48% Impervious, Inflow Depth = 2.54" for 10-yr event
Inflow = 11.98 cfs @ 12.50 hrs, Volume= 1.638 af
Primary = 11.98 cfs @ 12.50 hrs, Volume= 1.638 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 3.58% Impervious, Inflow Depth = 2.63" for 10-yr event
Inflow = 3.08 cfs @ 12.28 hrs, Volume= 0.328 af
Primary = 3.08 cfs @ 12.28 hrs, Volume= 0.328 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1:

Runoff = 24.96 cfs @ 12.69 hrs, Volume= 4.114 af, Depth= 3.76"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	550,143	77	Woods, Good, HSG D
*	20,252	98	Pool Street
*	2,100	98	Peter Pond Ln
	572,495	78	Weighted Average
	550,143		96.10% Pervious Area
	22,352		3.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0593	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0057	1.45	5.43	**Trap/Vee/Rect Channel Flow, D-E** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 2:

Runoff = 14.88 cfs @ 12.77 hrs, Volume= 2.629 af, Depth= 3.76"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	6,000	98	Maddox Pond Road
	324,019	77	Woods, Good, HSG D
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
	365,819	78	Weighted Average
	351,019		95.95% Pervious Area
	14,800		4.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 3:

Runoff = 17.27 cfs @ 12.50 hrs, Volume= 2.357 af, Depth= 3.65"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	327,098	77	Woods, Good, HSG D
*	4,203	98	Peter Pond Ln
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
	337,101	77	Weighted Average
	332,098		98.52% Pervious Area
	5,003		1.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.9	150	0.0300	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
7.8	391	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0660	1.28		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
35.7	775	Total			

Summary for Subcatchment 4:

Runoff = 4.41 cfs @ 12.28 hrs, Volume= 0.470 af, Depth= 3.76"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	63,025	77	Woods, Good, HSG D
	65,364	78	Weighted Average
	63,025		96.42% Pervious Area
	2,339		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Link SP1: Stream SP

Inflow Area = 13.143 ac, 3.90% Impervious, Inflow Depth = 3.76" for 25-yr event
Inflow = 24.96 cfs @ 12.69 hrs, Volume= 4.114 af
Primary = 24.96 cfs @ 12.69 hrs, Volume= 4.114 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 4.05% Impervious, Inflow Depth = 3.76" for 25-yr event
Inflow = 14.88 cfs @ 12.77 hrs, Volume= 2.629 af
Primary = 14.88 cfs @ 12.77 hrs, Volume= 2.629 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 7.739 ac, 1.48% Impervious, Inflow Depth = 3.65" for 25-yr event
Inflow = 17.27 cfs @ 12.50 hrs, Volume= 2.357 af
Primary = 17.27 cfs @ 12.50 hrs, Volume= 2.357 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 3.58% Impervious, Inflow Depth = 3.76" for 25-yr event
Inflow = 4.41 cfs @ 12.28 hrs, Volume= 0.470 af
Primary = 4.41 cfs @ 12.28 hrs, Volume= 0.470 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1:

Runoff = 39.84 cfs @ 12.68 hrs, Volume= 6.617 af, Depth= 6.04"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
	550,143	77	Woods, Good, HSG D
*	20,252	98	Pool Street
*	2,100	98	Peter Pond Ln
	572,495	78	Weighted Average
	550,143		96.10% Pervious Area
	22,352		3.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0593	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0057	1.45	5.43	**Trap/Vee/Rect Channel Flow, D-E** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 2:

Runoff = 23.77 cfs @ 12.76 hrs, Volume= 4.228 af, Depth= 6.04"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
*	6,000	98	Maddox Pond Road
	324,019	77	Woods, Good, HSG D
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
	365,819	78	Weighted Average
	351,019		95.95% Pervious Area
	14,800		4.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 3:

Runoff = 27.75 cfs @ 12.49 hrs, Volume= 3.818 af, Depth= 5.92"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
	327,098	77	Woods, Good, HSG D
*	4,203	98	Peter Pond Ln
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
	337,101	77	Weighted Average
	332,098		98.52% Pervious Area
	5,003		1.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.9	150	0.0300	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
7.8	391	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0660	1.28		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
35.7	775	Total			

Summary for Subcatchment 4:

Runoff = 7.04 cfs @ 12.27 hrs, Volume= 0.755 af, Depth= 6.04"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	63,025	77	Woods, Good, HSG D
	65,364	78	Weighted Average
	63,025		96.42% Pervious Area
	2,339		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Link SP1: Stream SP

Inflow Area = 13.143 ac, 3.90% Impervious, Inflow Depth = 6.04" for 100-yr event
Inflow = 39.84 cfs @ 12.68 hrs, Volume= 6.617 af
Primary = 39.84 cfs @ 12.68 hrs, Volume= 6.617 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 4.05% Impervious, Inflow Depth = 6.04" for 100-yr event
Inflow = 23.77 cfs @ 12.76 hrs, Volume= 4.228 af
Primary = 23.77 cfs @ 12.76 hrs, Volume= 4.228 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 7.739 ac, 1.48% Impervious, Inflow Depth = 5.92" for 100-yr event
Inflow = 27.75 cfs @ 12.49 hrs, Volume= 3.818 af
Primary = 27.75 cfs @ 12.49 hrs, Volume= 3.818 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

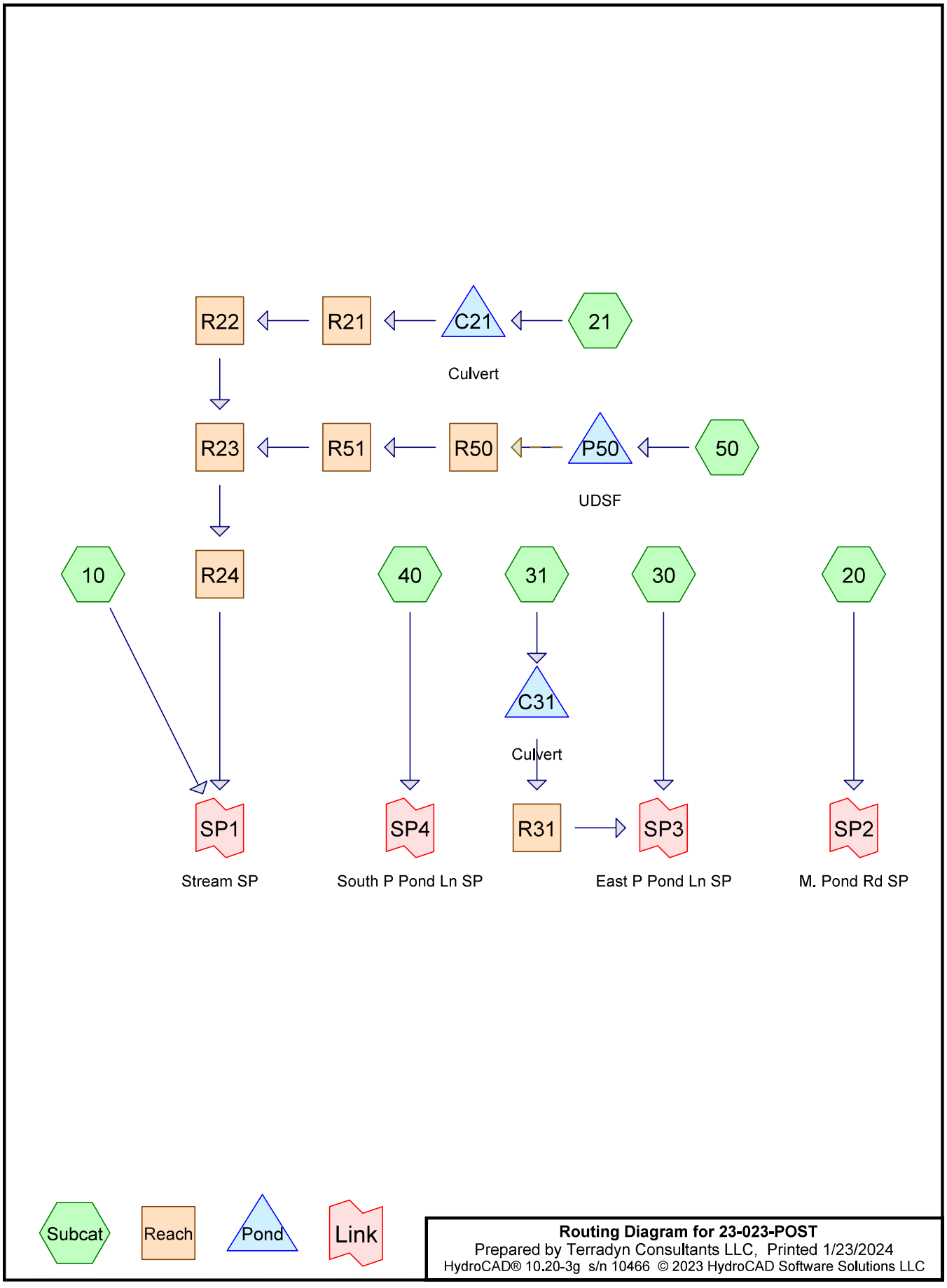
Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 3.58% Impervious, Inflow Depth = 6.04" for 100-yr event
Inflow = 7.04 cfs @ 12.27 hrs, Volume= 0.755 af
Primary = 7.04 cfs @ 12.27 hrs, Volume= 0.755 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Attachment 7

Post-Development HydroCAD Model


R22
R21
C21
21
Culvert
R23
R51
R50
P50
50
UDSF
10
R24
40
31
30
20
C31
Culvert
SP1
SP4
R31
SP3
SP2
Stream SP
South P Pond Ln SP
East P Pond Ln SP
M. Pond Rd SP
Subcat
Reach
Pond
Link
Routing Diagram for 23-023-POST
Prepared by Terradyn Consultants LLC, Printed 1/23/2024
HydroCAD® 10.20-3g s/n 10466 © 2023 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.003	80	>75% Grass cover, Good, HSG D (20, 21, 30, 40)
0.220	98	Impervious - offsite houses/driveway (20, 30)
0.895	98	Lot Impervious (10, 20, 30, 31, 40)
3.644	80	Lot Lawn Area (10, 20, 30, 31, 50)
0.138	98	Maddox Pond Road (20)
0.168	77	Path + ROW (30, 31)
0.184	98	Peter Pond Ln (10, 30, 31, 40)
0.563	98	Pool Street (10, 21)
0.390	98	Proposed Road Imp (21, 50)
0.124	98	Proposed Road Impervious (10)
23.451	77	Woods, Good, HSG D (10, 20, 21, 30, 31, 40, 50)

Summary for Subcatchment 10:

Runoff = 8.51 cfs @ 12.72 hrs, Volume= 1.427 af, Depth= 1.41"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
	431,234	77	Woods, Good, HSG D
*	20,250	98	Pool Street
*	2,100	98	Peter Pond Ln
*	5,405	98	Proposed Road Impervious
*	55,000	80	Lot Lawn Area
*	14,250	98	Lot Impervious
	528,239	79	Weighted Average
	486,234		92.05% Pervious Area
	42,005		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0594	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0056	1.44	5.39	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 20:

Runoff = 5.21 cfs @ 12.82 hrs, Volume= 0.943 af, Depth= 1.35"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
	307,519	77	Woods, Good, HSG D
*	6,000	98	Maddox Pond Road
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
*	4,000	98	Lot Impervious
*	12,500	80	Lot Lawn Area
	365,819	78	Weighted Average
	347,019		94.86% Pervious Area
	18,800		5.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 21:

Runoff = 1.14 cfs @ 12.30 hrs, Volume= 0.125 af, Depth= 1.48"
Routed to Pond C21 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	4,275	98	Pool Street
	35,981	77	Woods, Good, HSG D
*	2,193	98	Proposed Road Imp
	1,671	80	>75% Grass cover, Good, HSG D
	44,120	80	Weighted Average
	37,652		85.34% Pervious Area
	6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides

21.1 210 Total

Summary for Subcatchment 30:

Runoff = 5.27 cfs @ 12.48 hrs, Volume= 0.709 af, Depth= 1.41"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
	168,951	77	Woods, Good, HSG D
*	16,000	98	Lot Impervious
*	67,500	80	Lot Lawn Area
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
*	3,000	98	Peter Pond Ln
*	1,146	77	Path + ROW
	262,397	79	Weighted Average
	242,597		92.45% Pervious Area
	19,800		7.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0450	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
9.3	454	0.0264	0.81		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0661	1.29		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
33.4	838	Total			

Summary for Subcatchment 31:

Runoff = 1.43 cfs @ 12.10 hrs, Volume= 0.105 af, Depth= 1.48"
Routed to Pond C31 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	10,000	80	Lot Lawn Area
*	4,000	98	Lot Impervious
*	583	98	Peter Pond Ln
	16,338	77	Woods, Good, HSG D
*	6,160	77	Path + ROW
	37,081	80	Weighted Average
	32,498		87.64% Pervious Area
	4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Subcatchment 40:

Runoff = 1.55 cfs @ 12.30 hrs, Volume= 0.168 af, Depth= 1.35"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	52,275	77	Woods, Good, HSG D
	10,000	80	>75% Grass cover, Good, HSG D
*	750	98	Lot Impervious
	65,364	78	Weighted Average
	62,275		95.27% Pervious Area
	3,089		4.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Subcatchment 50:

Runoff = 1.53 cfs @ 12.19 hrs, Volume= 0.139 af, Depth= 1.92"
Routed to Pond P50 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	14,793	98	Proposed Road Imp
*	13,722	80	Lot Lawn Area
	9,241	77	Woods, Good, HSG D
	37,756	86	Weighted Average
	22,963		60.82% Pervious Area
	14,793		39.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	75	0.0530	0.11		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.1	252	0.0179	2.01		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
13.5	327	Total			

Summary for Reach R21:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 1.48" for 2-yr event
Inflow = 1.14 cfs @ 12.32 hrs, Volume= 0.125 af
Outflow = 1.12 cfs @ 12.41 hrs, Volume= 0.125 af, Atten= 2%, Lag= 5.8 min
Routed to Reach R22 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.29 fps, Min. Travel Time= 3.3 min
Avg. Velocity = 0.39 fps, Avg. Travel Time= 10.9 min

Peak Storage= 220 cf @ 12.36 hrs
Average Depth at Peak Storage= 0.15' , Surface Width= 6.51'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 9.60 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 253.0' Slope= 0.0178 '/'
Inlet Invert= 40.50', Outlet Invert= 36.00'



‡

Summary for Reach R22:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 1.48" for 2-yr event
Inflow = 1.12 cfs @ 12.41 hrs, Volume= 0.125 af
Outflow = 0.93 cfs @ 12.80 hrs, Volume= 0.125 af, Atten= 17%, Lag= 23.2 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.44 fps, Min. Travel Time= 13.6 min
Avg. Velocity = 0.15 fps, Avg. Travel Time= 41.0 min

Peak Storage= 760 cf @ 12.57 hrs
Average Depth at Peak Storage= 0.04' , Surface Width= 54.01'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 75.94 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 364.0' Slope= 0.0110 '/'
Inlet Invert= 36.00', Outlet Invert= 32.00'



‡

Summary for Reach R23:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 1.44" for 2-yr event
Inflow = 0.93 cfs @ 12.80 hrs, Volume= 0.225 af
Outflow = 0.70 cfs @ 13.46 hrs, Volume= 0.224 af, Atten= 25%, Lag= 39.6 min
Routed to Reach R24 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.31 fps, Min. Travel Time= 23.5 min
Avg. Velocity = 0.14 fps, Avg. Travel Time= 53.9 min

Peak Storage= 982 cf @ 13.07 hrs
Average Depth at Peak Storage= 0.02' , Surface Width= 104.34'
Bank-Full Depth= 0.50' Flow Area= 75.0 sf, Capacity= 158.98 cfs

100.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 100.0 '/' Top Width= 200.00'
Length= 443.0' Slope= 0.0068 '/'
Inlet Invert= 32.00', Outlet Invert= 29.00'



‡

Summary for Reach R24:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 1.43" for 2-yr event
Inflow = 0.70 cfs @ 13.46 hrs, Volume= 0.224 af
Outflow = 0.68 cfs @ 13.65 hrs, Volume= 0.223 af, Atten= 2%, Lag= 11.3 min
Routed to Link SP1 : Stream SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.75 fps, Min. Travel Time= 6.3 min
Avg. Velocity = 0.26 fps, Avg. Travel Time= 18.1 min

Peak Storage= 258 cf @ 13.54 hrs
Average Depth at Peak Storage= 0.16' , Surface Width= 6.57'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 5.44 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 284.0' Slope= 0.0057 '/'
Inlet Invert= 29.00', Outlet Invert= 27.38'



‡

Summary for Reach R31:

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 1.48" for 2-yr event
Inflow = 1.36 cfs @ 12.12 hrs, Volume= 0.105 af
Outflow = 1.23 cfs @ 12.23 hrs, Volume= 0.105 af, Atten= 9%, Lag= 6.4 min
Routed to Link SP3 : East P Pond Ln SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.80 fps, Min. Travel Time= 3.8 min
Avg. Velocity = 0.53 fps, Avg. Travel Time= 12.8 min

Peak Storage= 287 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 11.92'
Bank-Full Depth= 0.50' Flow Area= 8.8 sf, Capacity= 51.76 cfs

10.00' x 0.50' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 15.0 '/' Top Width= 25.00'
Length= 408.0' Slope= 0.0312 '/'
Inlet Invert= 23.25', Outlet Invert= 10.54'



‡

Summary for Reach R50:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 1.42" for 2-yr event
Inflow = 0.28 cfs @ 12.80 hrs, Volume= 0.102 af
Outflow = 0.23 cfs @ 13.54 hrs, Volume= 0.101 af, Atten= 18%, Lag= 44.3 min
Routed to Reach R51 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.27 fps, Min. Travel Time= 21.4 min
Avg. Velocity = 0.13 fps, Avg. Travel Time= 44.0 min

Peak Storage= 297 cf @ 13.18 hrs
Average Depth at Peak Storage= 0.02' , Surface Width= 50.34'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 65.36 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 345.0' Slope= 0.0116 '/'
Inlet Invert= 42.00', Outlet Invert= 38.00'



‡

Summary for Reach R51:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 1.40" for 2-yr event
Inflow = 0.23 cfs @ 13.54 hrs, Volume= 0.101 af
Outflow = 0.22 cfs @ 13.93 hrs, Volume= 0.100 af, Atten= 4%, Lag= 23.3 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.38 fps, Min. Travel Time= 12.3 min
Avg. Velocity = 0.22 fps, Avg. Travel Time= 20.8 min

Peak Storage= 163 cf @ 13.72 hrs
Average Depth at Peak Storage= 0.01' , Surface Width= 51.16'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 141.90 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 278.0' Slope= 0.0216 '/'
Inlet Invert= 38.00', Outlet Invert= 32.00'



‡

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 1.48" for 2-yr event
Inflow = 1.14 cfs @ 12.30 hrs, Volume= 0.125 af
Outflow = 1.14 cfs @ 12.32 hrs, Volume= 0.125 af, Atten= 0%, Lag= 0.9 min
Primary = 1.14 cfs @ 12.32 hrs, Volume= 0.125 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 41.54' @ 12.32 hrs Surf.Area= 218 sf Storage= 104 cf

Plug-Flow detention time= 3.7 min calculated for 0.125 af (100% of inflow)
Center-of-Mass det. time= 3.7 min (858.9 - 855.2)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.13 cfs @ 12.32 hrs HW=41.54' (Free Discharge)
1=Culvert (Inlet Controls 1.13 cfs @ 2.21 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 1.48" for 2-yr event
Inflow = 1.43 cfs @ 12.10 hrs, Volume= 0.105 af
Outflow = 1.36 cfs @ 12.12 hrs, Volume= 0.105 af, Atten= 4%, Lag= 1.4 min
Primary = 1.36 cfs @ 12.12 hrs, Volume= 0.105 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 24.12' @ 12.12 hrs Surf.Area= 348 sf Storage= 115 cf

Plug-Flow detention time= 2.0 min calculated for 0.105 af (100% of inflow)
Center-of-Mass det. time= 2.0 min (843.5 - 841.5)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.32 cfs @ 12.12 hrs HW=24.11' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 1.32 cfs @ 3.28 fps)

Summary for Pond P50: UDSF

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth = 1.92" for 2-yr event
Inflow = 1.53 cfs @ 12.19 hrs, Volume= 0.139 af
Outflow = 0.28 cfs @ 12.80 hrs, Volume= 0.102 af, Atten= 82%, Lag= 36.9 min
Primary = 0.28 cfs @ 12.80 hrs, Volume= 0.102 af
Routed to Reach R50 :
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach R50 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 44.02' @ 12.80 hrs Surf.Area= 1,685 sf Storage= 3,178 cf

Plug-Flow detention time= 526.7 min calculated for 0.102 af (74% of inflow)
Center-of-Mass det. time= 436.9 min (1,265.0 - 828.2)

Volume	Invert	Avail.Storage	Storage Description
#1	40.50'	7,807 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.50	1,215	0.0	0	0
40.51	1,215	40.0	5	5
41.00	1,215	40.0	238	243
42.49	1,215	40.0	724	967
42.50	1,215	100.0	12	979
44.00	1,673	100.0	2,166	3,145
45.00	2,282	100.0	1,978	5,123
46.00	3,086	100.0	2,684	7,807

Device	Routing	Invert	Outlet Devices
#1	Primary	40.50'	**1.0" Round Culvert** L= 35.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 40.50' / 40.25' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.01 sf
#2	Primary	43.71'	**10.0" Round Culvert** L= 75.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 43.71' / 40.00' S= 0.0495 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 0.55 sf
#3	Secondary	44.59'	**7.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.28 cfs @ 12.80 hrs HW=44.02' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 0.01 cfs @ 2.73 fps)
└—**2=Culvert** (Barrel Controls 0.27 cfs @ 2.15 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=40.50' (Free Discharge)
↑—**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Stream SP

Inflow Area = 14.006 ac, 10.37% Impervious, Inflow Depth > 1.41" for 2-yr event
Inflow = 8.52 cfs @ 12.72 hrs, Volume= 1.650 af
Primary = 8.52 cfs @ 12.72 hrs, Volume= 1.650 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 5.14% Impervious, Inflow Depth = 1.35" for 2-yr event
Inflow = 5.21 cfs @ 12.82 hrs, Volume= 0.943 af
Primary = 5.21 cfs @ 12.82 hrs, Volume= 0.943 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 6.875 ac, 8.14% Impervious, Inflow Depth = 1.42" for 2-yr event
Inflow = 5.91 cfs @ 12.46 hrs, Volume= 0.814 af
Primary = 5.91 cfs @ 12.46 hrs, Volume= 0.814 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 4.73% Impervious, Inflow Depth = 1.35" for 2-yr event
Inflow = 1.55 cfs @ 12.30 hrs, Volume= 0.168 af
Primary = 1.55 cfs @ 12.30 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 10:

Runoff = 16.65 cfs @ 12.70 hrs, Volume= 2.744 af, Depth= 2.72"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
	431,234	77	Woods, Good, HSG D
*	20,250	98	Pool Street
*	2,100	98	Peter Pond Ln
*	5,405	98	Proposed Road Impervious
*	55,000	80	Lot Lawn Area
*	14,250	98	Lot Impervious
	528,239	79	Weighted Average
	486,234		92.05% Pervious Area
	42,005		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0594	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0056	1.44	5.39	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 20:

Runoff = 10.39 cfs @ 12.79 hrs, Volume= 1.838 af, Depth= 2.63"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
	307,519	77	Woods, Good, HSG D
*	6,000	98	Maddox Pond Road
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
*	4,000	98	Lot Impervious
*	12,500	80	Lot Lawn Area
	365,819	78	Weighted Average
	347,019		94.86% Pervious Area
	18,800		5.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 21:

Runoff = 2.19 cfs @ 12.29 hrs, Volume= 0.237 af, Depth= 2.81"
Routed to Pond C21 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	4,275	98	Pool Street
	35,981	77	Woods, Good, HSG D
*	2,193	98	Proposed Road Imp
	1,671	80	>75% Grass cover, Good, HSG D
	44,120	80	Weighted Average
	37,652		85.34% Pervious Area
	6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides

21.1 210 Total

Summary for Subcatchment 30:

Runoff = 10.31 cfs @ 12.47 hrs, Volume= 1.363 af, Depth= 2.72"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
	168,951	77	Woods, Good, HSG D
*	16,000	98	Lot Impervious
*	67,500	80	Lot Lawn Area
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
*	3,000	98	Peter Pond Ln
*	1,146	77	Path + ROW
	262,397	79	Weighted Average
	242,597		92.45% Pervious Area
	19,800		7.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0450	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
9.3	454	0.0264	0.81		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0661	1.29		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
33.4	838	Total			

Summary for Subcatchment 31:

Runoff = 2.72 cfs @ 12.10 hrs, Volume= 0.199 af, Depth= 2.81"
Routed to Pond C31 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	10,000	80	Lot Lawn Area
*	4,000	98	Lot Impervious
*	583	98	Peter Pond Ln
	16,338	77	Woods, Good, HSG D
*	6,160	77	Path + ROW
	37,081	80	Weighted Average
	32,498		87.64% Pervious Area
	4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Subcatchment 40:

Runoff = 3.08 cfs @ 12.28 hrs, Volume= 0.328 af, Depth= 2.63"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	52,275	77	Woods, Good, HSG D
	10,000	80	>75% Grass cover, Good, HSG D
*	750	98	Lot Impervious
	65,364	78	Weighted Average
	62,275		95.27% Pervious Area
	3,089		4.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Subcatchment 50:

Runoff = 2.65 cfs @ 12.19 hrs, Volume= 0.244 af, Depth= 3.37"
Routed to Pond P50 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	14,793	98	Proposed Road Imp
*	13,722	80	Lot Lawn Area
	9,241	77	Woods, Good, HSG D
	37,756	86	Weighted Average
	22,963		60.82% Pervious Area
	14,793		39.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	75	0.0530	0.11		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.1	252	0.0179	2.01		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
13.5	327	Total			

Summary for Reach R21:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 2.19 cfs @ 12.31 hrs, Volume= 0.237 af
Outflow = 2.15 cfs @ 12.39 hrs, Volume= 0.237 af, Atten= 2%, Lag= 4.6 min
Routed to Reach R22 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.61 fps, Min. Travel Time= 2.6 min
Avg. Velocity = 0.46 fps, Avg. Travel Time= 9.1 min

Peak Storage= 340 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.22' , Surface Width= 7.20'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 9.60 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 253.0' Slope= 0.0178 '/'
Inlet Invert= 40.50', Outlet Invert= 36.00'



‡

Summary for Reach R22:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 2.15 cfs @ 12.39 hrs, Volume= 0.237 af
Outflow = 1.90 cfs @ 12.67 hrs, Volume= 0.237 af, Atten= 12%, Lag= 17.4 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.58 fps, Min. Travel Time= 10.4 min
Avg. Velocity = 0.17 fps, Avg. Travel Time= 35.4 min

Peak Storage= 1,188 cf @ 12.50 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 56.15'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 75.94 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 364.0' Slope= 0.0110 '/'
Inlet Invert= 36.00', Outlet Invert= 32.00'



‡

Summary for Reach R23:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 2.82" for 10-yr event
Inflow = 2.73 cfs @ 12.84 hrs, Volume= 0.442 af
Outflow = 2.42 cfs @ 13.25 hrs, Volume= 0.441 af, Atten= 11%, Lag= 24.1 min
Routed to Reach R24 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.51 fps, Min. Travel Time= 14.6 min
Avg. Velocity = 0.15 fps, Avg. Travel Time= 49.0 min

Peak Storage= 2,120 cf @ 13.00 hrs
Average Depth at Peak Storage= 0.05' , Surface Width= 109.15'
Bank-Full Depth= 0.50' Flow Area= 75.0 sf, Capacity= 158.98 cfs

100.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 100.0 '/' Top Width= 200.00'
Length= 443.0' Slope= 0.0068 '/'
Inlet Invert= 32.00', Outlet Invert= 29.00'



‡

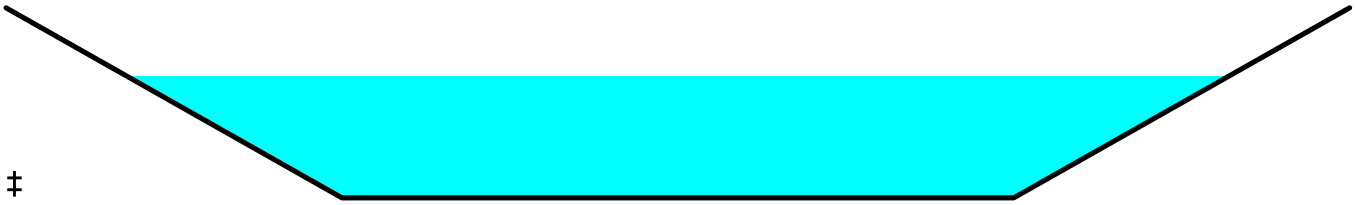
Summary for Reach R24:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 2.81" for 10-yr event
Inflow = 2.42 cfs @ 13.25 hrs, Volume= 0.441 af
Outflow = 2.39 cfs @ 13.37 hrs, Volume= 0.440 af, Atten= 1%, Lag= 7.3 min
Routed to Link SP1 : Stream SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.13 fps, Min. Travel Time= 4.2 min
Avg. Velocity = 0.30 fps, Avg. Travel Time= 16.0 min

Peak Storage= 602 cf @ 13.30 hrs
Average Depth at Peak Storage= 0.32' , Surface Width= 8.21'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 5.44 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 284.0' Slope= 0.0057 '/'
Inlet Invert= 29.00', Outlet Invert= 27.38'



‡

Summary for Reach R31:

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 2.54 cfs @ 12.13 hrs, Volume= 0.199 af
Outflow = 2.44 cfs @ 12.21 hrs, Volume= 0.199 af, Atten= 4%, Lag= 5.0 min
Routed to Link SP3 : East P Pond Ln SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.28 fps, Min. Travel Time= 3.0 min
Avg. Velocity = 0.63 fps, Avg. Travel Time= 10.8 min

Peak Storage= 437 cf @ 12.16 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 12.82'
Bank-Full Depth= 0.50' Flow Area= 8.8 sf, Capacity= 51.76 cfs

10.00' x 0.50' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 15.0 '/' Top Width= 25.00'
Length= 408.0' Slope= 0.0312 '/'
Inlet Invert= 23.25', Outlet Invert= 10.54'



‡

Summary for Reach R50:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 2.86" for 10-yr event
Inflow = 1.46 cfs @ 12.42 hrs, Volume= 0.207 af
Outflow = 1.29 cfs @ 12.77 hrs, Volume= 0.206 af, Atten= 11%, Lag= 20.9 min
Routed to Reach R51 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.53 fps, Min. Travel Time= 10.9 min
Avg. Velocity = 0.14 fps, Avg. Travel Time= 39.8 min

Peak Storage= 846 cf @ 12.59 hrs
Average Depth at Peak Storage= 0.05' , Surface Width= 50.97'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 65.36 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 345.0' Slope= 0.0116 '/'
Inlet Invert= 42.00', Outlet Invert= 38.00'



‡

Summary for Reach R51:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 2.85" for 10-yr event
Inflow = 1.29 cfs @ 12.77 hrs, Volume= 0.206 af
Outflow = 1.25 cfs @ 12.96 hrs, Volume= 0.205 af, Atten= 4%, Lag= 11.3 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.73 fps, Min. Travel Time= 6.3 min
Avg. Velocity = 0.24 fps, Avg. Travel Time= 19.4 min

Peak Storage= 473 cf @ 12.86 hrs
Average Depth at Peak Storage= 0.03' , Surface Width= 53.29'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 141.90 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 278.0' Slope= 0.0216 '/'
Inlet Invert= 38.00', Outlet Invert= 32.00'



‡

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 2.19 cfs @ 12.29 hrs, Volume= 0.237 af
Outflow = 2.19 cfs @ 12.31 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.9 min
Primary = 2.19 cfs @ 12.31 hrs, Volume= 0.237 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 41.79' @ 12.31 hrs Surf.Area= 242 sf Storage= 161 cf

Plug-Flow detention time= 3.2 min calculated for 0.237 af (100% of inflow)
Center-of-Mass det. time= 2.9 min (839.5 - 836.7)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.18 cfs @ 12.31 hrs HW=41.79' (Free Discharge)
1=Culvert (Barrel Controls 2.18 cfs @ 3.80 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 2.72 cfs @ 12.10 hrs, Volume= 0.199 af
Outflow = 2.54 cfs @ 12.13 hrs, Volume= 0.199 af, Atten= 7%, Lag= 1.8 min
Primary = 2.54 cfs @ 12.13 hrs, Volume= 0.199 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 24.40' @ 12.13 hrs Surf.Area= 548 sf Storage= 243 cf

Plug-Flow detention time= 1.8 min calculated for 0.199 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (824.8 - 822.9)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.49 cfs @ 12.13 hrs HW=24.39' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 2.49 cfs @ 3.73 fps)

Summary for Pond P50: UDSF

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth = 3.37" for 10-yr event
Inflow = 2.65 cfs @ 12.19 hrs, Volume= 0.244 af
Outflow = 1.46 cfs @ 12.42 hrs, Volume= 0.207 af, Atten= 45%, Lag= 14.3 min
Primary = 1.46 cfs @ 12.42 hrs, Volume= 0.207 af
Routed to Reach R50 :
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach R50 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 44.55' @ 12.42 hrs Surf.Area= 2,009 sf Storage= 4,161 cf

Plug-Flow detention time= 297.5 min calculated for 0.206 af (85% of inflow)
Center-of-Mass det. time= 234.5 min (1,046.7 - 812.2)

Volume	Invert	Avail.Storage	Storage Description
#1	40.50'	7,807 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.50	1,215	0.0	0	0
40.51	1,215	40.0	5	5
41.00	1,215	40.0	238	243
42.49	1,215	40.0	724	967
42.50	1,215	100.0	12	979
44.00	1,673	100.0	2,166	3,145
45.00	2,282	100.0	1,978	5,123
46.00	3,086	100.0	2,684	7,807

Device	Routing	Invert	Outlet Devices
#1	Primary	40.50'	**1.0" Round Culvert** L= 35.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 40.50' / 40.25' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.01 sf
#2	Primary	43.71'	**10.0" Round Culvert** L= 75.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 43.71' / 40.00' S= 0.0495 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 0.55 sf
#3	Secondary	44.59'	**7.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.46 cfs @ 12.42 hrs HW=44.55' (Free Discharge)
└─**1=Culvert** (Barrel Controls 0.02 cfs @ 2.92 fps)
└─**2=Culvert** (Barrel Controls 1.44 cfs @ 3.26 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=40.50' (Free Discharge)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Stream SP

Inflow Area = 14.006 ac, 10.37% Impervious, Inflow Depth > 2.73" for 10-yr event
Inflow = 16.88 cfs @ 12.71 hrs, Volume= 3.184 af
Primary = 16.88 cfs @ 12.71 hrs, Volume= 3.184 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 5.14% Impervious, Inflow Depth = 2.63" for 10-yr event
Inflow = 10.39 cfs @ 12.79 hrs, Volume= 1.838 af
Primary = 10.39 cfs @ 12.79 hrs, Volume= 1.838 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 6.875 ac, 8.14% Impervious, Inflow Depth = 2.73" for 10-yr event
Inflow = 11.44 cfs @ 12.44 hrs, Volume= 1.562 af
Primary = 11.44 cfs @ 12.44 hrs, Volume= 1.562 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 4.73% Impervious, Inflow Depth = 2.63" for 10-yr event
Inflow = 3.08 cfs @ 12.28 hrs, Volume= 0.328 af
Primary = 3.08 cfs @ 12.28 hrs, Volume= 0.328 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 10:

Runoff = 23.64 cfs @ 12.69 hrs, Volume= 3.899 af, Depth= 3.86"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	431,234	77	Woods, Good, HSG D
*	20,250	98	Pool Street
*	2,100	98	Peter Pond Ln
*	5,405	98	Proposed Road Impervious
*	55,000	80	Lot Lawn Area
*	14,250	98	Lot Impervious
	528,239	79	Weighted Average
	486,234		92.05% Pervious Area
	42,005		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0594	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0056	1.44	5.39	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 20:

Runoff = 14.88 cfs @ 12.77 hrs, Volume= 2.629 af, Depth= 3.76"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	307,519	77	Woods, Good, HSG D
*	6,000	98	Maddox Pond Road
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
*	4,000	98	Lot Impervious
*	12,500	80	Lot Lawn Area
	365,819	78	Weighted Average
	347,019		94.86% Pervious Area
	18,800		5.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 21:

Runoff = 3.08 cfs @ 12.29 hrs, Volume= 0.334 af, Depth= 3.96"
Routed to Pond C21 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	4,275	98	Pool Street
	35,981	77	Woods, Good, HSG D
*	2,193	98	Proposed Road Imp
	1,671	80	>75% Grass cover, Good, HSG D
	44,120	80	Weighted Average
	37,652		85.34% Pervious Area
	6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides

21.1 210 Total

Summary for Subcatchment 30:

Runoff = 14.62 cfs @ 12.46 hrs, Volume= 1.937 af, Depth= 3.86"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
	168,951	77	Woods, Good, HSG D
*	16,000	98	Lot Impervious
*	67,500	80	Lot Lawn Area
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
*	3,000	98	Peter Pond Ln
*	1,146	77	Path + ROW
	262,397	79	Weighted Average
	242,597		92.45% Pervious Area
	19,800		7.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0450	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
9.3	454	0.0264	0.81		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0661	1.29		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
33.4	838	Total			

Summary for Subcatchment 31:

Runoff = 3.82 cfs @ 12.09 hrs, Volume= 0.281 af, Depth= 3.96"
Routed to Pond C31 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	10,000	80	Lot Lawn Area
*	4,000	98	Lot Impervious
*	583	98	Peter Pond Ln
	16,338	77	Woods, Good, HSG D
*	6,160	77	Path + ROW
	37,081	80	Weighted Average
	32,498		87.64% Pervious Area
	4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Subcatchment 40:

Runoff = 4.41 cfs @ 12.28 hrs, Volume= 0.470 af, Depth= 3.76"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	52,275	77	Woods, Good, HSG D
	10,000	80	>75% Grass cover, Good, HSG D
*	750	98	Lot Impervious
	65,364	78	Weighted Average
	62,275		95.27% Pervious Area
	3,089		4.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Subcatchment 50:

Runoff = 3.57 cfs @ 12.18 hrs, Volume= 0.332 af, Depth= 4.60"
Routed to Pond P50 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-yr Rainfall=6.20"

	Area (sf)	CN	Description
*	14,793	98	Proposed Road Imp
*	13,722	80	Lot Lawn Area
	9,241	77	Woods, Good, HSG D
	37,756	86	Weighted Average
	22,963		60.82% Pervious Area
	14,793		39.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	75	0.0530	0.11		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.1	252	0.0179	2.01		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
13.5	327	Total			

Summary for Reach R21:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 3.96" for 25-yr event
Inflow = 3.08 cfs @ 12.31 hrs, Volume= 0.334 af
Outflow = 3.04 cfs @ 12.37 hrs, Volume= 0.334 af, Atten= 1%, Lag= 4.1 min
Routed to Reach R22 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.80 fps, Min. Travel Time= 2.3 min
Avg. Velocity = 0.51 fps, Avg. Travel Time= 8.2 min

Peak Storage= 428 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.27' , Surface Width= 7.67'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 9.60 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 253.0' Slope= 0.0178 '/'
Inlet Invert= 40.50', Outlet Invert= 36.00'



‡

Summary for Reach R22:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 3.96" for 25-yr event
Inflow = 3.04 cfs @ 12.37 hrs, Volume= 0.334 af
Outflow = 2.75 cfs @ 12.63 hrs, Volume= 0.334 af, Atten= 10%, Lag= 15.1 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.67 fps, Min. Travel Time= 9.1 min
Avg. Velocity = 0.19 fps, Avg. Travel Time= 32.6 min

Peak Storage= 1,496 cf @ 12.47 hrs
Average Depth at Peak Storage= 0.08' , Surface Width= 57.64'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 75.94 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 364.0' Slope= 0.0110 '/'
Inlet Invert= 36.00', Outlet Invert= 32.00'



‡

Summary for Reach R23:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 4.01" for 25-yr event
Inflow = 5.04 cfs @ 12.67 hrs, Volume= 0.628 af
Outflow = 4.33 cfs @ 13.01 hrs, Volume= 0.627 af, Atten= 14%, Lag= 20.5 min
Routed to Reach R24 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.63 fps, Min. Travel Time= 11.7 min
Avg. Velocity = 0.16 fps, Avg. Travel Time= 46.3 min

Peak Storage= 3,046 cf @ 12.81 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 112.92'
Bank-Full Depth= 0.50' Flow Area= 75.0 sf, Capacity= 158.98 cfs

100.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 100.0 '/' Top Width= 200.00'
Length= 443.0' Slope= 0.0068 '/'
Inlet Invert= 32.00', Outlet Invert= 29.00'



‡

Summary for Reach R24:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 4.00" for 25-yr event
Inflow = 4.33 cfs @ 13.01 hrs, Volume= 0.627 af
Outflow = 4.27 cfs @ 13.11 hrs, Volume= 0.626 af, Atten= 1%, Lag= 6.4 min
Routed to Link SP1 : Stream SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.35 fps, Min. Travel Time= 3.5 min
Avg. Velocity = 0.32 fps, Avg. Travel Time= 15.0 min

Peak Storage= 899 cf @ 13.05 hrs
Average Depth at Peak Storage= 0.44' , Surface Width= 9.40'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 5.44 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 284.0' Slope= 0.0057 '/'
Inlet Invert= 29.00', Outlet Invert= 27.38'



‡

Summary for Reach R31:

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 3.96" for 25-yr event
Inflow = 3.52 cfs @ 12.13 hrs, Volume= 0.281 af
Outflow = 3.38 cfs @ 12.21 hrs, Volume= 0.281 af, Atten= 4%, Lag= 4.6 min
Routed to Link SP3 : East P Pond Ln SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.55 fps, Min. Travel Time= 2.7 min
Avg. Velocity = 0.69 fps, Avg. Travel Time= 9.8 min

Peak Storage= 544 cf @ 12.16 hrs
Average Depth at Peak Storage= 0.11' , Surface Width= 13.42'
Bank-Full Depth= 0.50' Flow Area= 8.8 sf, Capacity= 51.76 cfs

10.00' x 0.50' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 15.0 '/' Top Width= 25.00'
Length= 408.0' Slope= 0.0312 '/'
Inlet Invert= 23.25', Outlet Invert= 10.54'



‡

Summary for Reach R50:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 4.08" for 25-yr event
Inflow = 2.97 cfs @ 12.28 hrs, Volume= 0.295 af
Outflow = 2.47 cfs @ 12.54 hrs, Volume= 0.294 af, Atten= 17%, Lag= 15.3 min
Routed to Reach R51 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.68 fps, Min. Travel Time= 8.4 min
Avg. Velocity = 0.15 fps, Avg. Travel Time= 37.7 min

Peak Storage= 1,254 cf @ 12.40 hrs
Average Depth at Peak Storage= 0.07' , Surface Width= 51.43'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 65.36 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 345.0' Slope= 0.0116 '/'
Inlet Invert= 42.00', Outlet Invert= 38.00'



‡

Summary for Reach R51:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 4.07" for 25-yr event
Inflow = 2.47 cfs @ 12.54 hrs, Volume= 0.294 af
Outflow = 2.34 cfs @ 12.69 hrs, Volume= 0.294 af, Atten= 5%, Lag= 9.3 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.94 fps, Min. Travel Time= 5.0 min
Avg. Velocity = 0.25 fps, Avg. Travel Time= 18.6 min

Peak Storage= 701 cf @ 12.61 hrs
Average Depth at Peak Storage= 0.05' , Surface Width= 54.81'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 141.90 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 278.0' Slope= 0.0216 '/'
Inlet Invert= 38.00', Outlet Invert= 32.00'



‡

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 3.96" for 25-yr event
Inflow = 3.08 cfs @ 12.29 hrs, Volume= 0.334 af
Outflow = 3.08 cfs @ 12.31 hrs, Volume= 0.334 af, Atten= 0%, Lag= 1.0 min
Primary = 3.08 cfs @ 12.31 hrs, Volume= 0.334 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 41.98' @ 12.31 hrs Surf.Area= 260 sf Storage= 209 cf

Plug-Flow detention time= 2.5 min calculated for 0.334 af (100% of inflow)
Center-of-Mass det. time= 2.5 min (829.3 - 826.8)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.07 cfs @ 12.31 hrs HW=41.98' (Free Discharge)
1=Culvert (Barrel Controls 3.07 cfs @ 4.08 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 3.96" for 25-yr event
Inflow = 3.82 cfs @ 12.09 hrs, Volume= 0.281 af
Outflow = 3.52 cfs @ 12.13 hrs, Volume= 0.281 af, Atten= 8%, Lag= 2.1 min
Primary = 3.52 cfs @ 12.13 hrs, Volume= 0.281 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 24.62' @ 12.13 hrs Surf.Area= 699 sf Storage= 378 cf

Plug-Flow detention time= 1.8 min calculated for 0.281 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (814.8 - 813.1)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.44 cfs @ 12.13 hrs HW=24.60' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 3.44 cfs @ 3.99 fps)

Summary for Pond P50: UDSF

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth = 4.60" for 25-yr event
Inflow = 3.57 cfs @ 12.18 hrs, Volume= 0.332 af
Outflow = 2.97 cfs @ 12.28 hrs, Volume= 0.295 af, Atten= 17%, Lag= 5.9 min
Primary = 1.71 cfs @ 12.33 hrs, Volume= 0.272 af
Routed to Reach R50 :
Secondary = 1.26 cfs @ 12.28 hrs, Volume= 0.023 af
Routed to Reach R50 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 44.77' @ 12.28 hrs Surf.Area= 2,141 sf Storage= 4,611 cf

Plug-Flow detention time= 227.9 min calculated for 0.295 af (89% of inflow)
Center-of-Mass det. time= 175.2 min (978.7 - 803.5)

Volume	Invert	Avail.Storage	Storage Description
#1	40.50'	7,807 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.50	1,215	0.0	0	0
40.51	1,215	40.0	5	5
41.00	1,215	40.0	238	243
42.49	1,215	40.0	724	967
42.50	1,215	100.0	12	979
44.00	1,673	100.0	2,166	3,145
45.00	2,282	100.0	1,978	5,123
46.00	3,086	100.0	2,684	7,807

Device	Routing	Invert	Outlet Devices
#1	Primary	40.50'	**1.0" Round Culvert** L= 35.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 40.50' / 40.25' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.01 sf
#2	Primary	43.71'	**10.0" Round Culvert** L= 75.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 43.71' / 40.00' S= 0.0495 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 0.55 sf
#3	Secondary	44.59'	**7.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.71 cfs @ 12.33 hrs HW=44.75' (Free Discharge)
└─**1=Culvert** (Barrel Controls 0.02 cfs @ 2.99 fps)
└─**2=Culvert** (Barrel Controls 1.70 cfs @ 3.20 fps)

Secondary OutFlow Max=1.22 cfs @ 12.28 hrs HW=44.77' (Free Discharge)
└─**3=Broad-Crested Rectangular Weir** (Weir Controls 1.22 cfs @ 0.99 fps)

Summary for Link SP1: Stream SP

Inflow Area = 14.006 ac, 10.37% Impervious, Inflow Depth > 3.88" for 25-yr event
Inflow = 24.41 cfs @ 12.74 hrs, Volume= 4.526 af
Primary = 24.41 cfs @ 12.74 hrs, Volume= 4.526 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 5.14% Impervious, Inflow Depth = 3.76" for 25-yr event
Inflow = 14.88 cfs @ 12.77 hrs, Volume= 2.629 af
Primary = 14.88 cfs @ 12.77 hrs, Volume= 2.629 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 6.875 ac, 8.14% Impervious, Inflow Depth = 3.87" for 25-yr event
Inflow = 16.18 cfs @ 12.43 hrs, Volume= 2.218 af
Primary = 16.18 cfs @ 12.43 hrs, Volume= 2.218 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 4.73% Impervious, Inflow Depth = 3.76" for 25-yr event
Inflow = 4.41 cfs @ 12.28 hrs, Volume= 0.470 af
Primary = 4.41 cfs @ 12.28 hrs, Volume= 0.470 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 10:

Runoff = 37.42 cfs @ 12.68 hrs, Volume= 6.228 af, Depth= 6.16"
Routed to Link SP1 : Stream SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
	431,234	77	Woods, Good, HSG D
*	20,250	98	Pool Street
*	2,100	98	Peter Pond Ln
*	5,405	98	Proposed Road Impervious
*	55,000	80	Lot Lawn Area
*	14,250	98	Lot Impervious
	528,239	79	Weighted Average
	486,234		92.05% Pervious Area
	42,005		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	135	0.0594	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	171	0.0234	2.94	11.01	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
29.4	817	0.0086	0.46		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
3.3	286	0.0056	1.44	5.39	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
51.1	1,409	Total			

Summary for Subcatchment 20:

Runoff = 23.77 cfs @ 12.76 hrs, Volume= 4.228 af, Depth= 6.04"
Routed to Link SP2 : M. Pond Rd SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
	307,519	77	Woods, Good, HSG D
*	6,000	98	Maddox Pond Road
*	8,800	98	Impervious - offsite houses/driveway
	27,000	80	>75% Grass cover, Good, HSG D
*	4,000	98	Lot Impervious
*	12,500	80	Lot Lawn Area
	365,819	78	Weighted Average
	347,019		94.86% Pervious Area
	18,800		5.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.9	485	0.0330	0.91		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
32.4	575	0.0035	0.30		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
1.8	165	0.0910	1.51		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
0.8	85	0.0120	1.87	1.40	**Trap/Vee/Rect Channel Flow, E-F** Bot.W=1.00' D=0.50' Z= 1.0 '/' Top.W=2.00' n= 0.040 Earth, cobble bottom, clean sides
57.5	1,410	Total			

Summary for Subcatchment 21:

Runoff = 4.83 cfs @ 12.28 hrs, Volume= 0.530 af, Depth= 6.28"
Routed to Pond C21 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
*	4,275	98	Pool Street
	35,981	77	Woods, Good, HSG D
*	2,193	98	Proposed Road Imp
	1,671	80	>75% Grass cover, Good, HSG D
	44,120	80	Weighted Average
	37,652		85.34% Pervious Area
	6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides

21.1 210 Total

Summary for Subcatchment 30:

Runoff = 23.10 cfs @ 12.45 hrs, Volume= 3.094 af, Depth= 6.16"
Routed to Link SP3 : East P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
	168,951	77	Woods, Good, HSG D
*	16,000	98	Lot Impervious
*	67,500	80	Lot Lawn Area
*	800	98	Impervious - offsite houses/driveway
	5,000	80	>75% Grass cover, Good, HSG D
*	3,000	98	Peter Pond Ln
*	1,146	77	Path + ROW
	262,397	79	Weighted Average
	242,597		92.45% Pervious Area
	19,800		7.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0450	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
9.3	454	0.0264	0.81		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
3.0	234	0.0661	1.29		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
33.4	838	Total			

Summary for Subcatchment 31:

Runoff = 5.97 cfs @ 12.09 hrs, Volume= 0.446 af, Depth= 6.28"
Routed to Pond C31 : Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
*	10,000	80	Lot Lawn Area
*	4,000	98	Lot Impervious
*	583	98	Peter Pond Ln
	16,338	77	Woods, Good, HSG D
*	6,160	77	Path + ROW
	37,081	80	Weighted Average
	32,498		87.64% Pervious Area
	4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Subcatchment 40:

Runoff = 7.04 cfs @ 12.27 hrs, Volume= 0.755 af, Depth= 6.04"
Routed to Link SP4 : South P Pond Ln SP

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
*	2,339	98	Peter Pond Ln
	52,275	77	Woods, Good, HSG D
	10,000	80	>75% Grass cover, Good, HSG D
*	750	98	Lot Impervious
	65,364	78	Weighted Average
	62,275		95.27% Pervious Area
	3,089		4.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	100	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.3	217	0.0280	0.84		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
20.3	317	Total			

Summary for Subcatchment 50:

Runoff = 5.33 cfs @ 12.18 hrs, Volume= 0.506 af, Depth= 7.01"
Routed to Pond P50 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=8.70"

	Area (sf)	CN	Description
*	14,793	98	Proposed Road Imp
*	13,722	80	Lot Lawn Area
	9,241	77	Woods, Good, HSG D
	37,756	86	Weighted Average
	22,963		60.82% Pervious Area
	14,793		39.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	75	0.0530	0.11		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.1	252	0.0179	2.01		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
13.5	327	Total			

Summary for Reach R21:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 6.28" for 100-yr event
Inflow = 4.78 cfs @ 12.31 hrs, Volume= 0.530 af
Outflow = 4.72 cfs @ 12.37 hrs, Volume= 0.530 af, Atten= 1%, Lag= 3.5 min
Routed to Reach R22 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.07 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 0.58 fps, Avg. Travel Time= 7.2 min

Peak Storage= 580 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.34' , Surface Width= 8.42'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 9.60 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 253.0' Slope= 0.0178 '/'
Inlet Invert= 40.50', Outlet Invert= 36.00'



‡

Summary for Reach R22:

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 6.28" for 100-yr event
Inflow = 4.72 cfs @ 12.37 hrs, Volume= 0.530 af
Outflow = 4.38 cfs @ 12.59 hrs, Volume= 0.530 af, Atten= 7%, Lag= 12.7 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.80 fps, Min. Travel Time= 7.6 min
Avg. Velocity = 0.21 fps, Avg. Travel Time= 29.1 min

Peak Storage= 2,018 cf @ 12.46 hrs
Average Depth at Peak Storage= 0.10' , Surface Width= 60.07'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 75.94 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 364.0' Slope= 0.0110 '/'
Inlet Invert= 36.00', Outlet Invert= 32.00'



‡

Summary for Reach R23:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 6.37" for 100-yr event
Inflow = 8.66 cfs @ 12.56 hrs, Volume= 0.998 af
Outflow = 7.78 cfs @ 12.83 hrs, Volume= 0.997 af, Atten= 10%, Lag= 16.2 min
Routed to Reach R24 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.78 fps, Min. Travel Time= 9.4 min
Avg. Velocity = 0.17 fps, Avg. Travel Time= 42.5 min

Peak Storage= 4,416 cf @ 12.67 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 118.27'
Bank-Full Depth= 0.50' Flow Area= 75.0 sf, Capacity= 158.98 cfs

100.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 100.0 '/' Top Width= 200.00'
Length= 443.0' Slope= 0.0068 '/'
Inlet Invert= 32.00', Outlet Invert= 29.00'



‡

Summary for Reach R24:

Inflow Area = 1.880 ac, 25.97% Impervious, Inflow Depth > 6.36" for 100-yr event
Inflow = 7.78 cfs @ 12.83 hrs, Volume= 0.997 af
Outflow = 7.70 cfs @ 12.92 hrs, Volume= 0.996 af, Atten= 1%, Lag= 5.6 min
Routed to Link SP1 : Stream SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.58 fps, Min. Travel Time= 3.0 min
Avg. Velocity = 0.35 fps, Avg. Travel Time= 13.5 min

Peak Storage= 1,379 cf @ 12.87 hrs
Average Depth at Peak Storage= 0.61' , Surface Width= 11.11'
Bank-Full Depth= 0.50' Flow Area= 3.8 sf, Capacity= 5.44 cfs

5.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 5.0 '/' Top Width= 10.00'
Length= 284.0' Slope= 0.0057 '/'
Inlet Invert= 29.00', Outlet Invert= 27.38'



‡

Summary for Reach R31:

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 6.28" for 100-yr event
Inflow = 5.08 cfs @ 12.15 hrs, Volume= 0.446 af
Outflow = 4.95 cfs @ 12.21 hrs, Volume= 0.446 af, Atten= 2%, Lag= 4.0 min
Routed to Link SP3 : East P Pond Ln SP

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.90 fps, Min. Travel Time= 2.3 min
Avg. Velocity = 0.79 fps, Avg. Travel Time= 8.6 min

Peak Storage= 701 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.14' , Surface Width= 14.25'
Bank-Full Depth= 0.50' Flow Area= 8.8 sf, Capacity= 51.76 cfs

10.00' x 0.50' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 15.0 '/' Top Width= 25.00'
Length= 408.0' Slope= 0.0312 '/'
Inlet Invert= 23.25', Outlet Invert= 10.54'



‡

Summary for Reach R50:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 6.49" for 100-yr event
Inflow = 5.08 cfs @ 12.23 hrs, Volume= 0.469 af
Outflow = 4.54 cfs @ 12.42 hrs, Volume= 0.468 af, Atten= 11%, Lag= 11.4 min
Routed to Reach R51 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.87 fps, Min. Travel Time= 6.6 min
Avg. Velocity = 0.17 fps, Avg. Travel Time= 34.7 min

Peak Storage= 1,816 cf @ 12.30 hrs
Average Depth at Peak Storage= 0.10' , Surface Width= 52.06'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 65.36 cfs

50.00' x 0.50' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 345.0' Slope= 0.0116 '/'
Inlet Invert= 42.00', Outlet Invert= 38.00'



‡

Summary for Reach R51:

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth > 6.48" for 100-yr event
Inflow = 4.54 cfs @ 12.42 hrs, Volume= 0.468 af
Outflow = 4.34 cfs @ 12.53 hrs, Volume= 0.467 af, Atten= 4%, Lag= 7.1 min
Routed to Reach R23 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.18 fps, Min. Travel Time= 3.9 min
Avg. Velocity = 0.27 fps, Avg. Travel Time= 17.3 min

Peak Storage= 1,035 cf @ 12.46 hrs
Average Depth at Peak Storage= 0.07' , Surface Width= 56.96'
Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 141.90 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 278.0' Slope= 0.0216 '/'
Inlet Invert= 38.00', Outlet Invert= 32.00'



‡

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 6.28" for 100-yr event
Inflow = 4.83 cfs @ 12.28 hrs, Volume= 0.530 af
Outflow = 4.78 cfs @ 12.31 hrs, Volume= 0.530 af, Atten= 1%, Lag= 1.8 min
Primary = 4.78 cfs @ 12.31 hrs, Volume= 0.530 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 42.46' @ 12.31 hrs Surf.Area= 324 sf Storage= 350 cf

Plug-Flow detention time= 2.1 min calculated for 0.530 af (100% of inflow)
Center-of-Mass det. time= 2.2 min (815.9 - 813.8)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.75 cfs @ 12.31 hrs HW=42.45' (Free Discharge)
↑**1=Culvert** (Inlet Controls 4.75 cfs @ 3.87 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 6.28" for 100-yr event
Inflow = 5.97 cfs @ 12.09 hrs, Volume= 0.446 af
Outflow = 5.08 cfs @ 12.15 hrs, Volume= 0.446 af, Atten= 15%, Lag= 3.1 min
Primary = 5.08 cfs @ 12.15 hrs, Volume= 0.446 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 25.07' @ 12.15 hrs Surf.Area= 1,016 sf Storage= 767 cf

Plug-Flow detention time= 1.8 min calculated for 0.445 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (801.9 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.05 cfs @ 12.15 hrs HW=25.06' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 5.05 cfs @ 4.12 fps)

Summary for Pond P50: UDSF

Inflow Area = 0.867 ac, 39.18% Impervious, Inflow Depth = 7.01" for 100-yr event
Inflow = 5.33 cfs @ 12.18 hrs, Volume= 0.506 af
Outflow = 5.08 cfs @ 12.23 hrs, Volume= 0.469 af, Atten= 5%, Lag= 2.7 min
Primary = 1.71 cfs @ 12.48 hrs, Volume= 0.379 af
Routed to Reach R50 :
Secondary = 3.45 cfs @ 12.23 hrs, Volume= 0.090 af
Routed to Reach R50 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 44.93' @ 12.23 hrs Surf.Area= 2,240 sf Storage= 4,966 cf

Plug-Flow detention time= 162.4 min calculated for 0.469 af (93% of inflow)
Center-of-Mass det. time= 123.5 min (915.5 - 792.0)

Volume	Invert	Avail.Storage	Storage Description
#1	40.50'	7,807 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.50	1,215	0.0	0	0
40.51	1,215	40.0	5	5
41.00	1,215	40.0	238	243
42.49	1,215	40.0	724	967
42.50	1,215	100.0	12	979
44.00	1,673	100.0	2,166	3,145
45.00	2,282	100.0	1,978	5,123
46.00	3,086	100.0	2,684	7,807

Device	Routing	Invert	Outlet Devices
#1	Primary	40.50'	**1.0" Round Culvert** L= 35.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 40.50' / 40.25' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.01 sf
#2	Primary	43.71'	**10.0" Round Culvert** L= 75.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 43.71' / 40.00' S= 0.0495 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 0.55 sf
#3	Secondary	44.59'	**7.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.72 cfs @ 12.48 hrs HW=44.75' (Free Discharge)
└─**1=Culvert** (Barrel Controls 0.02 cfs @ 2.99 fps)
└─**2=Culvert** (Barrel Controls 1.70 cfs @ 3.20 fps)

Secondary OutFlow Max=3.37 cfs @ 12.23 hrs HW=44.93' (Free Discharge)
└─**3=Broad-Crested Rectangular Weir** (Weir Controls 3.37 cfs @ 1.43 fps)

Summary for Link SP1: Stream SP

Inflow Area = 14.006 ac, 10.37% Impervious, Inflow Depth > 6.19" for 100-yr event
Inflow = 42.73 cfs @ 12.77 hrs, Volume= 7.224 af
Primary = 42.73 cfs @ 12.77 hrs, Volume= 7.224 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP2: M. Pond Rd SP

Inflow Area = 8.398 ac, 5.14% Impervious, Inflow Depth = 6.04" for 100-yr event
Inflow = 23.77 cfs @ 12.76 hrs, Volume= 4.228 af
Primary = 23.77 cfs @ 12.76 hrs, Volume= 4.228 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP3: East P Pond Ln SP

Inflow Area = 6.875 ac, 8.14% Impervious, Inflow Depth = 6.18" for 100-yr event
Inflow = 25.55 cfs @ 12.42 hrs, Volume= 3.539 af
Primary = 25.55 cfs @ 12.42 hrs, Volume= 3.539 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Link SP4: South P Pond Ln SP

Inflow Area = 1.501 ac, 4.73% Impervious, Inflow Depth = 6.04" for 100-yr event
Inflow = 7.04 cfs @ 12.27 hrs, Volume= 0.755 af
Primary = 7.04 cfs @ 12.27 hrs, Volume= 0.755 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 1L

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Attachment 8

Stormwater BMP Calculations

Underdrained Soil Filter

Tributary Area

Landscaped Area	**13722**
Impervious Area	**14793**
Total	28,515

Minimum Surface Area = 2% x landscaped + 5% x impervoius

Required Min. SA	1014
Maximum SA	3000
Provided SA	**1043**

Channel Protection Volume = 0.4" x landscaped + 1.0" x impervious

Required CPV	1690
Provided CPV	**4144**

Stage Storage

Elevation	Area (sf)	Incremental Volume (CF)	Total Volume (CF)	
42.5	1215	0	0	<-- Surface of Filter
43	1368	646	646	
43.71	1584	1048	1694	<-- Channel Protection Volume
44	1673	472	2166	
45	2282	1978	4144	<-- Top of Berm
46	2371			

DRAWDOWN CALCULATION FOR UDSF

Orifice Invert:	40.25	
Orifice Diameter:	1	in.
Orifice Area (A):	0.00545415	ft^2
WQV Elevation:	44	
Bottom of Stone Elevation:	39.75	
Discharge Coefficient (C):	0.6	
Gravitational Constant (g):	32.2	ft/s^2
Depth Increment:	0.10	ft

Orifice Equation: Q=CA*(2gH)^0.5

Stage-Discharge Table

	Depth (ft)	Stage (ft)	Area (sf)	Incremental Storage (cf	Void Space %	Adjusted Storage (cf)	Discharge (Q),	Time (hr)
	0	40.25	1215	122	40	49	0.000	0.00
	0.10	40.35	1215	122	40	49	0.008	1.63
	0.20	40.45	1215	122	40	49	0.012	1.15
	0.30	40.55	1215	122	40	49	0.014	0.94
	0.40	40.65	1215	122	40	49	0.017	0.81
	0.50	40.75	1215	122	40	49	0.019	0.73
	0.60	40.85	1215	122	40	49	0.020	0.66
	0.70	40.95	1215	122	40	49	0.022	0.61
	0.80	41.05	1215	122	40	49	0.023	0.57
	0.90	41.15	1215	122	40	49	0.025	0.54
	1.00	41.25	1215	122	40	49	0.026	0.51
	1.10	41.35	1215	122	40	49	0.028	0.49
	1.20	41.45	1215	122	40	49	0.029	0.47
	1.30	41.55	1215	122	40	49	0.030	0.45
	1.40	41.65	1215	122	40	49	0.031	0.43
	1.50	41.75	1215	122	40	49	0.032	0.42
	1.60	41.85	1215	122	40	49	0.033	0.41
	1.70	41.95	1215	122	40	49	0.034	0.39
	1.80	42.05	1215	122	40	49	0.035	0.38
	1.90	42.15	1215	122	40	49	0.036	0.37
	2.00	42.25	1215	122	40	49	0.037	0.36
	2.10	42.35	1215	122	40	49	0.038	0.35
	2.20	42.45	1215	122	40	49	0.039	0.35
30.53333	2.25	42.50	**1215**	122	100	122	0.039	0.86
	2.35	42.60	1246	125	100	125	0.040	0.86
	2.45	42.70	1276	128	100	128	0.041	0.86
	2.55	42.80	1307	131	100	131	0.042	0.87
	2.65	42.90	1337	134	100	134	0.043	0.87
	2.75	43.00	1368	137	100	137	0.044	0.87
	2.85	43.10	1398	140	100	140	0.044	0.88
	2.95	43.20	1429	143	100	143	0.045	0.88
	3.05	43.30	1459	146	100	146	0.046	0.88
	3.15	43.40	1490	149	100	149	0.047	0.89
	3.25	43.50	1520	152	100	152	0.047	0.89
	3.35	43.60	1551	155	100	155	0.048	0.90
	3.45	43.70	1581	158	100	158	0.049	0.90
	3.55	43.80	1673	167	100	167	0.049	0.94
	3.65	43.90	1674	167	100	167	0.050	0.93
	3.75	44.00	**1673**	167	100	167	0.051	0.91

27.23 hrs

Culvert Calculations

Manning Equation	Q = VA = (1.00/n)AR^(2/3)*√S
	Q = Flow Velocity (ft^3/s)
	v = velocity (ft/s)
	A = Flow Area (ft^2)
	n = Mannings Roughness Coefficient
	R = Hydraulic Radius (ft)
	s = Channel Slope (ft/ft)

Roadway Culvert SD-2

Pipe Diameter (in)	15
INV. IN	41.0
INV. OUT	40.5
Length (ft)	68
Slope	0.007
n	0.012

25 YR Storm Peak Flow 3.09 CFS (HydroCAD)

Location	Pipe Diameter	Area	Wetted Perimeter	Hydraulic Radius	R 2/3	Slope	Slope 1/2	Flow cubic ft/sec.	Velocity ft./sec.
15 INCH PIPE	15	1.2272	3.9270	0.3125	0.4605	0.0070	0.0837	**5.8550**	4.771

3.08 CFS < 5.855 CFS **proposed pipe is large enough to meet 25 yr storm peak event**

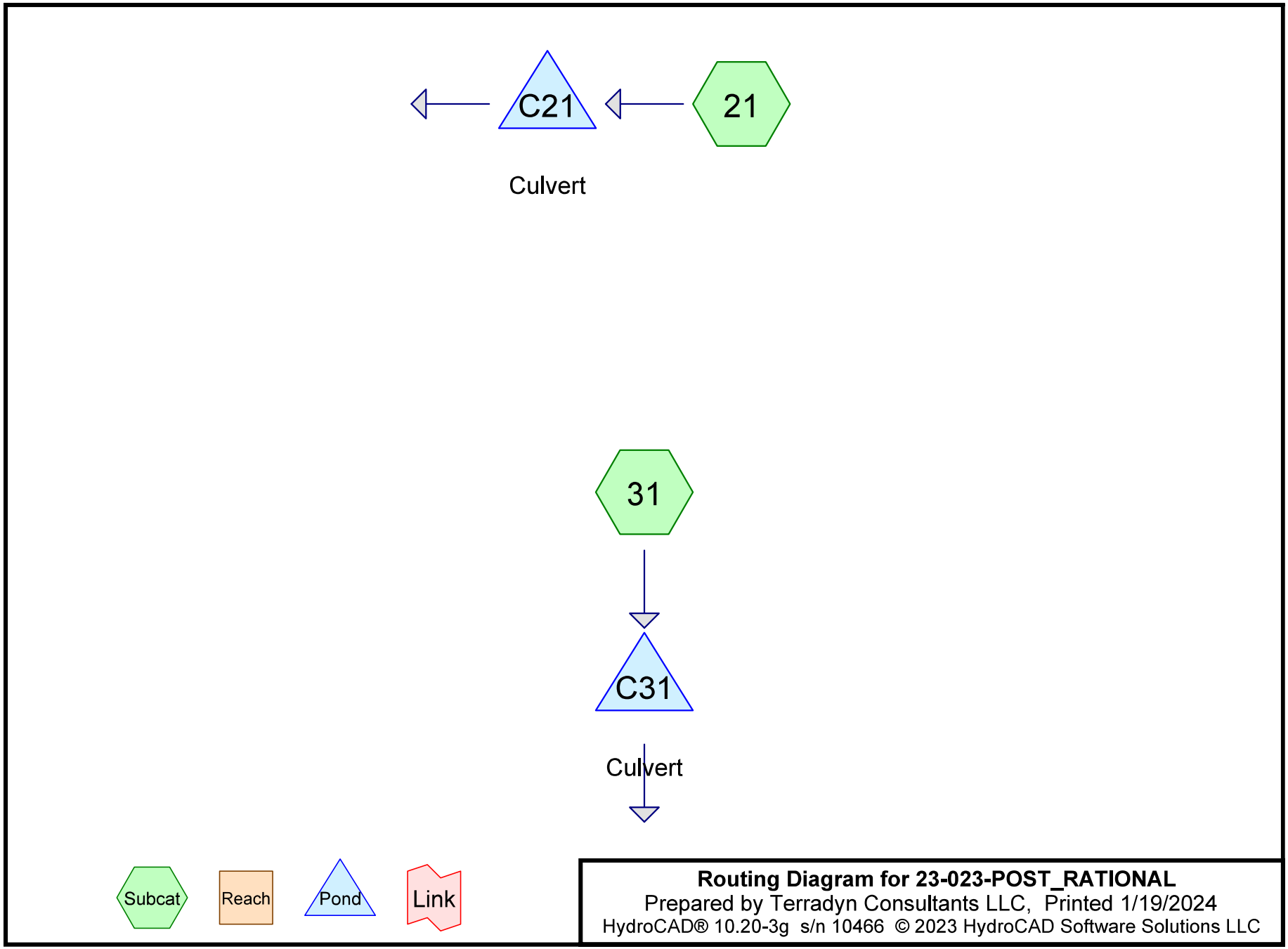
Path Culvert SD-4

Pipe Diameter (in)	15
INV. IN	23.5
INV. OUT	23.25
Length (ft)	20
Slope	0.0125
n	0.012

25 YR Storm Peak Flow 3.63 (HydroCAD)

Location	Pipe Diameter	Area	Wetted Perimeter	Hydraulic Radius	R 2/3	Slope	Slope 1/2	Flow cubic ft/sec.	Velocity ft./sec.
15 INCH PIPE	15	1.2272	3.9270	0.3125	0.4605	0.0125	0.1118	**7.8241**	6.376

3.82 CFS < 7.8241 CFS **proposed pipe is large enough to meet 25 yr storm peak event**



Routing Diagram for 23-023-POST_RATIONAL
Prepared by Terradyn Consultants LLC, Printed 1/19/2024
HydroCAD® 10.20-3g s/n 10466 © 2023 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	C	Description (subcatchment-numbers)
0.038	0.22	>75% Grass cover, Good, HSG D (21)
0.092	0.95	Lot Impervious (31)
0.230	0.22	Lot Lawn Area (31)
0.141	0.85	Path + ROW (31)
0.013	0.95	Peter Pond Ln (31)
0.098	0.95	Pool Street (21)
0.050	0.95	Proposed Road Imp (21)
1.201	0.15	Woods, Good, HSG D (21, 31)

Summary for Subcatchment 21:

Runoff = 0.52 cfs @ 0.36 hrs, Volume= 0.043 af, Depth= 0.51"
Routed to Pond C21 : Culvert

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
ME-BIDDEFORD 25-yr Duration=60 min, Inten=1.88 in/hr

Area (sf)	C	Description
4,275	0.95	Pool Street
35,981	0.15	Woods, Good, HSG D
2,193	0.95	Proposed Road Imp
1,671	0.22	>75% Grass cover, Good, HSG D
44,120	0.27	Weighted Average
37,652		85.34% Pervious Area
6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
21.1	210	Total			

Summary for Subcatchment 31:

Runoff = 0.61 cfs @ 0.11 hrs, Volume= 0.051 af, Depth= 0.71"
Routed to Pond C31 : Culvert

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
ME-BIDDEFORD 25-yr Duration=60 min, Inten=1.88 in/hr

Area (sf)	C	Description
10,000	0.22	Lot Lawn Area
4,000	0.95	Lot Impervious
583	0.95	Peter Pond Ln
16,338	0.15	Woods, Good, HSG D
6,160	0.85	Path + ROW
37,081	0.38	Weighted Average
32,498		87.64% Pervious Area
4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 0.51" for 25-yr event
Inflow = 0.52 cfs @ 0.36 hrs, Volume= 0.043 af
Outflow = 0.52 cfs @ 1.00 hrs, Volume= 0.043 af, Atten= 0%, Lag= 38.4 min
Primary = 0.52 cfs @ 1.00 hrs, Volume= 0.043 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.36' @ 0.93 hrs Surf.Area= 200 sf Storage= 65 cf

Plug-Flow detention time= 2.5 min calculated for 0.043 af (100% of inflow)
Center-of-Mass det. time= 2.4 min (43.0 - 40.6)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.52 cfs @ 1.00 hrs HW=41.36' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 0.52 cfs @ 1.79 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 0.71" for 25-yr event
Inflow = 0.61 cfs @ 0.11 hrs, Volume= 0.051 af
Outflow = 0.61 cfs @ 0.80 hrs, Volume= 0.051 af, Atten= 0%, Lag= 41.4 min
Primary = 0.61 cfs @ 0.80 hrs, Volume= 0.051 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 23.89' @ 0.74 hrs Surf.Area= 218 sf Storage= 52 cf

Plug-Flow detention time= 1.5 min calculated for 0.051 af (100% of inflow)
Center-of-Mass det. time= 1.5 min (34.6 - 33.2)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.61 cfs @ 0.80 hrs HW=23.89' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 0.61 cfs @ 1.88 fps)

Summary for Subcatchment 21:

Runoff = 0.86 cfs @ 0.36 hrs, Volume= 0.071 af, Depth= 0.85"
Routed to Pond C21 : Culvert

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
ME-BIDDEFORD 200-yr Duration=60 min, Inten=3.13 in/hr

Area (sf)	C	Description
4,275	0.95	Pool Street
35,981	0.15	Woods, Good, HSG D
2,193	0.95	Proposed Road Imp
1,671	0.22	>75% Grass cover, Good, HSG D
44,120	0.27	Weighted Average
37,652		85.34% Pervious Area
6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
21.1	210	Total			

Summary for Subcatchment 31:

Runoff = 1.02 cfs @ 0.11 hrs, Volume= 0.084 af, Depth= 1.19"
Routed to Pond C31 : Culvert

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
ME-BIDDEFORD 200-yr Duration=60 min, Inten=3.13 in/hr

Area (sf)	C	Description
10,000	0.22	Lot Lawn Area
4,000	0.95	Lot Impervious
583	0.95	Peter Pond Ln
16,338	0.15	Woods, Good, HSG D
6,160	0.85	Path + ROW
37,081	0.38	Weighted Average
32,498		87.64% Pervious Area
4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 0.85" for 200-yr event
Inflow = 0.86 cfs @ 0.36 hrs, Volume= 0.071 af
Outflow = 0.86 cfs @ 0.91 hrs, Volume= 0.071 af, Atten= 0%, Lag= 33.0 min
Primary = 0.86 cfs @ 0.91 hrs, Volume= 0.071 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.47' @ 0.84 hrs Surf.Area= 210 sf Storage= 88 cf

Plug-Flow detention time= 2.1 min calculated for 0.071 af (100% of inflow)
Center-of-Mass det. time= 1.9 min (42.5 - 40.6)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.86 cfs @ 0.91 hrs HW=41.47' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 0.86 cfs @ 2.06 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 1.19" for 200-yr event
Inflow = 1.02 cfs @ 0.11 hrs, Volume= 0.084 af
Outflow = 1.02 cfs @ 0.88 hrs, Volume= 0.084 af, Atten= 0%, Lag= 46.2 min
Primary = 1.02 cfs @ 0.88 hrs, Volume= 0.084 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 24.02' @ 0.82 hrs Surf.Area= 280 sf Storage= 85 cf

Plug-Flow detention time= 1.4 min calculated for 0.084 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (34.6 - 33.2)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.02 cfs @ 0.88 hrs HW=24.02' (Free Discharge)
└**1=Culvert** (Barrel Controls 1.02 cfs @ 3.12 fps)

Summary for Subcatchment 21:

Runoff = 1.08 cfs @ 0.36 hrs, Volume= 0.090 af, Depth= 1.06"
Routed to Pond C21 : Culvert

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
ME-BIDDEFORD 500-yr Duration=60 min, Inten=3.93 in/hr

Area (sf)	C	Description
4,275	0.95	Pool Street
35,981	0.15	Woods, Good, HSG D
2,193	0.95	Proposed Road Imp
1,671	0.22	>75% Grass cover, Good, HSG D
44,120	0.27	Weighted Average
37,652		85.34% Pervious Area
6,468		14.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0467	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	60	0.0330	3.49	13.07	**Trap/Vee/Rect Channel Flow, B-C** Bot.W=5.00' D=0.50' Z= 5.0 '/' Top.W=10.00' n= 0.040 Earth, cobble bottom, clean sides
21.1	210	Total			

Summary for Subcatchment 31:

Runoff = 1.28 cfs @ 0.11 hrs, Volume= 0.106 af, Depth= 1.49"
Routed to Pond C31 : Culvert

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
ME-BIDDEFORD 500-yr Duration=60 min, Inten=3.93 in/hr

Area (sf)	C	Description
10,000	0.22	Lot Lawn Area
4,000	0.95	Lot Impervious
583	0.95	Peter Pond Ln
16,338	0.15	Woods, Good, HSG D
6,160	0.85	Path + ROW
37,081	0.38	Weighted Average
32,498		87.64% Pervious Area
4,583		12.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	25	0.1200	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	334	0.0750	1.92		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
6.3	359	Total			

Summary for Pond C21: Culvert

Inflow Area = 1.013 ac, 14.66% Impervious, Inflow Depth = 1.06" for 500-yr event
Inflow = 1.08 cfs @ 0.36 hrs, Volume= 0.090 af
Outflow = 1.08 cfs @ 0.88 hrs, Volume= 0.090 af, Atten= 0%, Lag= 31.2 min
Primary = 1.08 cfs @ 0.88 hrs, Volume= 0.090 af
Routed to Reach R21 :

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.53' @ 0.80 hrs Surf.Area= 216 sf Storage= 101 cf

Plug-Flow detention time= 1.9 min calculated for 0.090 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (42.3 - 40.6)

Volume	Invert	Avail.Storage	Storage Description
#1	41.00'	3,240 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
41.00	165	0	0
42.00	262	214	214
43.00	395	329	542
44.00	5,000	2,698	3,240

Device	Routing	Invert	Outlet Devices
#1	Primary	41.00'	**15.0" Round Culvert** L= 68.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 41.00' / 40.50' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.08 cfs @ 0.88 hrs HW=41.53' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 1.08 cfs @ 2.19 fps)

Summary for Pond C31: Culvert

Inflow Area = 0.851 ac, 12.36% Impervious, Inflow Depth = 1.49" for 500-yr event
Inflow = 1.28 cfs @ 0.11 hrs, Volume= 0.106 af
Outflow = 1.28 cfs @ 0.95 hrs, Volume= 0.106 af, Atten= 0%, Lag= 50.4 min
Primary = 1.28 cfs @ 0.95 hrs, Volume= 0.106 af
Routed to Reach R31 :

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 24.09' @ 0.90 hrs Surf.Area= 332 sf Storage= 107 cf

Plug-Flow detention time= 1.4 min calculated for 0.106 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (34.6 - 33.2)

Volume	Invert	Avail.Storage	Storage Description
#1	23.50'	2,010 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
23.50	50	0	0
24.00	266	79	79
25.00	965	616	695
26.00	1,665	1,315	2,010

Device	Routing	Invert	Outlet Devices
#1	Primary	23.50'	**15.0" Round Culvert** L= 26.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 23.50' / 23.25' S= 0.0096 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.28 cfs @ 0.95 hrs HW=24.09' (Free Discharge)
└**1=Culvert** (Barrel Controls 1.28 cfs @ 3.26 fps)

Attachment 10

Ability to Serve

Kennebunk, Kennebunkport & Wells Water District

Proudly serving since 1921

Trustees:
Thomas P. Oliver (Wells)
June Huston (Kennebunk)
James E. Burrows (Kennebunkport)
Frederick A. Lynk (Ogunquit)

Scott J. Minor, Superintendent
Wayne A. Brockway, Treasurer

September 13, 2023

Matthew Pelletier, P.E., Design Engineer
Terradyn Consultants, LLC
565 Congress St, Suite 201
Portland, ME 04101

Subject: Wildes District Rd Subdivision, Kennebunkport – 3 Lot Subdivision – Availability of Water

Dear Mr. Pelletier:

The purpose of this letter is to inform you that near the above location an adequate domestic water supply is available from the District's 12-inch water main along Wildes District Road. Water pressure in this area will typically be above 60 psi. For fire suppression purposes approximately 1,000 gallons per minute at 20 psi residual pressure is available near this location. This figure is an *estimate* for planning purposes only. *An actual field test should be performed by the owner's agent prior to designing any fire suppression system.* If a fire suppression system is required in the future, please contact the District for additional information.

Preliminary plans for the subdivision have been provided. They will be reviewed by the District under separate correspondence. Once the overall project water system is reviewed and approved by the District, the owner will be allowed to request a water main extension pursuant to the District's rules and regulations in effect at that time.

A GIS map of the existing water distribution system in the area of this project is attached for your reference.

If you need any additional information, feel free to contact me.

Sincerely,

Jamie Paschal, P.E.
District Engineer

92 Main Street, P.O. Box 88, Kennebunk, ME 04043
Phone 207-985-3385, Fax 207-985-3102
Visit us at www.kkw.org

SUBDIVISION PLANS

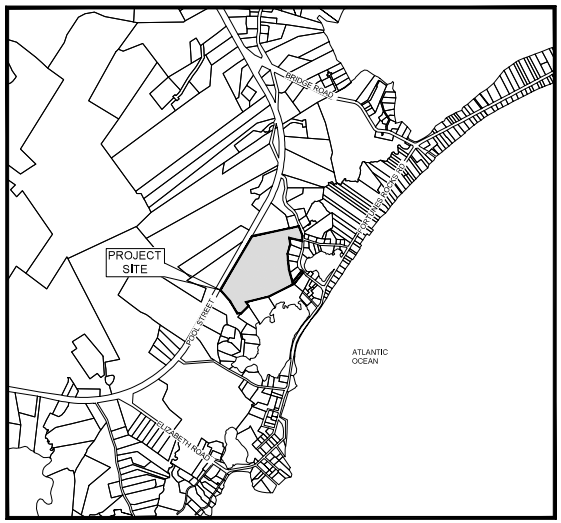
LONGBOARD RIDGE SUBDIVISION

POOL STREET - BIDDEFORD, MAINE

APPLICANT/OWNER:
BEACHWOOD DEVELOPMENT FUND
P.O. BOX 261
KENNEBUNK, MAINE 04043

PROJECT PARCEL SITE
CITY OF BIDDEFORD TAX ASSESSOR'S MAP, LOT NUMBER & ZONING DISTRICT

MAP	LOT	ZONING DISTRICT
5	17-2	COASTAL RESIDENTIAL DISTRICT



LOCATION MAP
SCALE: 1"=1000'

PERMITS

TYPE OF PERMIT	GOVERNING BODY	STATUS
SUBDIVISION APPROVAL	CITY OF BIDDEFORD, MAINE PLANNING BOARD 205 MAIN STREET BIDDEFORD, ME 04005 TEL. 207-571-0700	PRELIMINARY APPROVAL 9/20/2023 FINAL APPROVAL: PENDING
STORMWATER PERMIT BY RULE	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, ME 04103 TEL. 207-822-6300	FILED: 10/26/2023 APPROVED: 11/14/2023
SECTION 404 WETLAND FILL PERMIT	U.S. ARMY CORE OF ENGINEERS MAINE PROJECT OFFICE 442 CIVIC CENTER DRIVE, SUITE 350 AUGUSTA, ME 04330 TEL 207-623-8367	SUBMITTED: 11/06/2023 APPROVED: 01/03/2024 PERMIT # NAE-2023-02478
DRIVEWAY/ENTRANCE PERMIT	MAINE DEPARTMENT OF TRANSPORTATION P.O. BOX 358 SCARBOROUGH, ME 04070 TEL 207-883-3806	APPROVED: 12/01/2023 PERMIT #38786

UTILITIES

SEWER
PRIVATE ONSITE SUBSURFACE WASTEWATER DISPOSAL

WATER
KENNEBUNK, KENNEBUNKPORT & WELLS WATER DISTRICT
92 MAIN STREET
KENNEBUNK, ME 04043

ELECTRIC
CENTRAL MAINE POWER CO.
162 CANCO ROAD
PORTLAND, ME 04103
(207) 842-2367

TELEPHONE
FAIRPOINT COMMUNICATIONS
P.O. BOX 11560
PORTLAND, MAINE 04104
1-888-984-1515

CABLE
SPECTRUM
386 FORE ST #204
PORTLAND, MAINE 04101
(207) 331-5331

DIG SAFE SYSTEM, INC.
TEL. 1-888-DIG-SAFE (344-7233)
FAX 1-781-721-0047
WWW.DIGSAFE.COM

SHEET INDEX

C-1.0	COVER SHEET
1	BOUNDARY RETRACEMENT & EXISTING CONDITIONS PLAN
C-2.0	SUBDIVISION PLAN
C-3.0	ROAD PLAN & PROFILE STA. 0+00 TO STA. 9+37
C-3.1	PATH PLAN & PROFILE STA. 0+00 TO STA. 3+78
C-3.2	PLAN & PROFILE DETAILS
C-3.3	OVERALL DEVELOPMENT PLAN
C-4.0	SITE DETAILS
C-4.1	EROSION CONTROL NOTES & DETAILS
C-4.2	UTILITY DETAILS
C-4.3	STORMWATER DETAILS

PREPARED BY:

CIVIL ENGINEER:
TERRADYN CONSULTANTS, LLC
565 CONGRESS STREET, SUITE 201
PORTLAND, MAINE 04101
(207) 926-5111

SURVEYOR:
TERRADYN CONSULTANTS, LLC
79 MAIN STREET, SUITE 300
AUBURN, MAINE 04210
(207) 946-4480

SOIL SCIENTIST:
LONGVIEW PARTNERS, LLC
6 SECOND STREET
BUXTON, MAINE 04093
(207) 807-1739

GENERAL NOTES

1. THE PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, U.S. ARMY CORPS OF ENGINEERS, MAINE DEPARTMENT OF TRANSPORTATION, THE CITY OF BIDDEFORD, AND THE LOCAL UTILITY COMPANIES.
2. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY THE CITY OF BIDDEFORD OR THE LOCAL UTILITY COMPANIES SHALL BE COORDINATED BY THE CONTRACTOR.
3. THE LOCATION AND/OR ELEVATIONS OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ANY EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIRED TO PREVENT EROSION AND SEDIMENTATION. ADDITIONAL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY THE OWNER, ENGINEER, OR REGULATING AGENCIES.
5. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
6. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE STRICTEST STANDARDS CONTAINED IN THE MAIN DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE PROJECT SPECIFICATIONS, AND THE UTILITY COMPANY AND CITY OF BIDDEFORD REQUIREMENTS.
7. ALL DIMENSIONS, UNLESS OTHERWISE NOTED IS TO THE EDGE OF PAVEMENT, FACE OF CURB, OR THE FACE OF THE BUILDING.
8. ALL SIGNAGE SHALL BE SUPPLIED AND INSTALLED IN COMPLIANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

UTILITY NOTES

1. THE PROJECT WILL BE SERVED BY SUBSURFACE WASTEWATER DISPOSAL SYSTEMS .
2. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n=0.012 OR LESS.

CITY OF BIDDEFORD NOTES

1. THE EXISTING PROJECT SITE IS VACANT, COMPRISED OF WOODS, WETLANDS AND AN UNNAMED STREAM.
2. THE PROPOSED PROJECT IS FOR THE CONSTRUCTION OF AN 8-LOT SUBDIVISION WITH PRIVATE, DEAD-END ROAD AND ASSOCIATED INFRASTRUCTURE
3. THERE ARE NO PROPOSED WAIVERS
4. DRAINAGE WATERSHED: LORDS POND AND ETHERINGTON POND
5. THE PROJECT SITE IS NOT WITHIN THE MS4 URBANIZED AREA
6. THERE ARE WETLANDS AND AN UNNAMED STREAM LOCATED ON-SITE OR ADJACENT TO THE PROPERTY
7. PART OF THE PROJECT IS WITHIN THE 100-YEAR FLOOD ZONE
8. THERE IS NO PUBLIC ROAD PROPOSED
9. THERE IS A PRIVATE ROAD PROPOSED
10. THE LOTS WILL HAVE PRIVATE SEPTIC
11. THE PROJECT WILL NOT CONNECT TO THE PUBLIC STORM DRAIN
12. LIMIT OF DISTURBANCE: 1.17 ACRES
13. EXISTING PERVIOUS COVER: 1,089,435 SF
14. PROPOSED PERVIOUS COVER: 1,069,833 SF
15. EXISTING IMPERVIOUS COVER: 19,166 SF
16. PROPOSED IMPERVIOUS COVER: 23,958 SF
17. EXISTING ROOF: 0 SF
18. PROPOSED ROOF: 0 SF
19. ASSIGNED PLANNING BOARD NUMBER: 2023.33
20. ESTIMATED CUT: 1694 YARDS
21. ESTIMATED FILL: 1169 YARDS

LEGEND

- EXISTING PROPERTY LINE
- PROJECT SITE BOUNDARY
- EXISTING SETBACK LINE
- PROPOSED EASEMENT
- 124 EXISTING MINOR CONTOUR
- 124 EXISTING MAJOR CONTOUR
- 124 PROPOSED CONTOUR
- SD EXISTING STORMDRAIN
- SD PROPOSED STORMDRAIN
- UD EXISTING UNDERDRAIN
- UD PROPSED UNDERDRAIN
- OHE EXISTING OVERHEAD ELECTRIC & TELEPHONE
- OHE PROPOSED OVERHEAD ELECTRIC & TELEPHONE
- UGE EXISTING UNDERGROUND ELECTRIC & TELEPHONE
- UGE PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- PROPOSED EDGE OF GRAVEL
- EXISTING CURB
- PROPOSED CURB
- PROPOSED FENCE
- SF SILT FENCE
- TP-A TEST PIT
- EXISTING VALVE
- PROPOSED VALVE
- EXISTING HYDRANT
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING DRAIN MANHOLE
- PROPOSED DRAIN MANHOLE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- 30.20 EXISTING SPOT GRADE
- 30.20 PROPOSED SPOT GRADE
- SURVEY CONTROL POINT
- EXISTING MONUMENT
- EXISTING IRON PIPE
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED CONCRETE
- PROPOSED PAVEMENT

STATE OF MAINE — MICHAEL F. TADEMA-WELANDT — 3131 — LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	09/18/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 565 CONGRESS STREET, SUITE 201, PORTLAND, MAINE 04101
PHONE: (207) 835-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

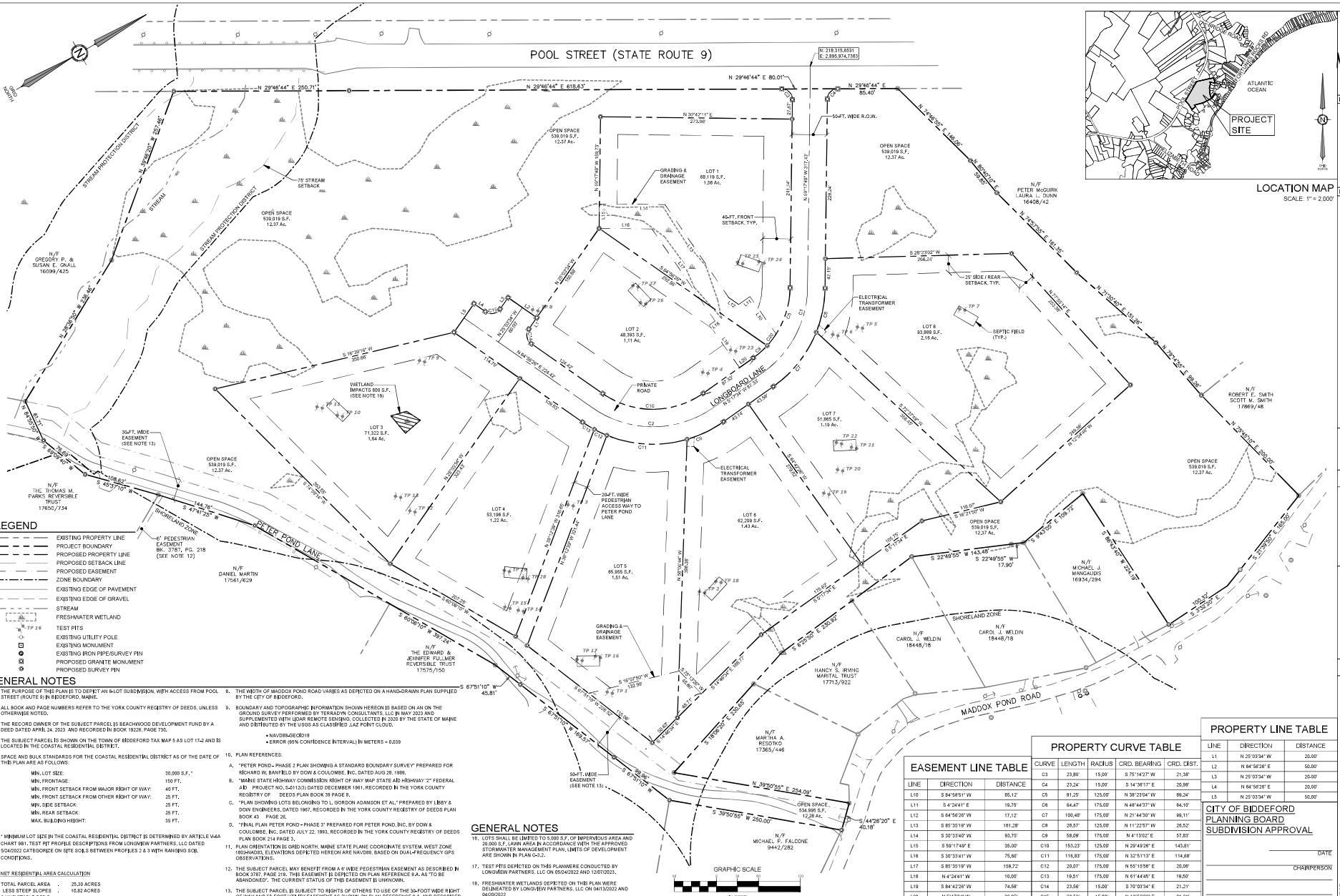
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PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: POOL STREET, BIDDEFORD, ME
SHEET TITLE: COVER SHEET
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
OWNER'S ADDRESS: P.O. BOX 261, KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-1.0

L:\23\Longb...\Cad\Land\Project Files\...\Documents\2023 site\C-1.0 Cover Sheet.dwg

1133



LOCATION MAP
SCALE: 1" = 2,000'

LEGEND

- EXISTING PROPERTY LINE
- PROJECT BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT
- ZONE BOUNDARY
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- STREAM
- FRESHWATER WETLAND
- TP 16 TEST PITS
- EXISTING UTILITY POLE
- EXISTING MONUMENT
- EXISTING IRON PIPE/SURVEY PIN
- PROPOSED GRANITE MONUMENT
- PROPOSED SURVEY PIN

GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT AN 8-LOT SUBDIVISION, WITH ACCESS FROM POOL STREET (ROUTE 9) IN BIDDEFORD, MAINE.
2. ALL BOOK AND PAGE NUMBERS REFER TO THE YORK COUNTY REGISTRY OF DEEDS, UNLESS OTHERWISE NOTED.
3. THE RECORD OWNER OF THE SUBJECT PARCEL IS BEACHWOOD DEVELOPMENT FUND BY A DEED DATED APRIL 24, 2023 AND RECORDED IN BOOK 19228, PAGE 730.
4. THE SUBJECT PARCEL IS SHOWN ON THE TOWN OF BIDDEFORD TAX MAP 5 AS LOT 17-2 AND IS LOCATED IN THE COASTAL RESIDENTIAL DISTRICT.
5. SPACE AND BULK STANDARDS FOR THE COASTAL RESIDENTIAL DISTRICT AS OF THE DATE OF THIS PLAN ARE AS FOLLOWS:

MIN. LOT SIZE:	30,000 S.F.*
MIN. FRONTAGE:	150 FT.
MIN. FRONT SETBACK FROM MAJOR RIGHT OF WAY:	40 FT.
MIN. FRONT SETBACK FROM OTHER RIGHT OF WAY:	25 FT.
MIN. SIDE SETBACK:	25 FT.
MIN. REAR SETBACK:	25 FT.
MAX. BUILDING HEIGHT:	35 FT.

* MINIMUM LOT SIZE IN THE COASTAL RESIDENTIAL DISTRICT IS DETERMINED BY ARTICLE V-6A CHART 9B1, TEST PIT PROFILE DESCRIPTIONS FROM LONGVIEW PARTNERS, LLC DATED 5/24/2022 CATEGORIZE ON SITE SOILS BETWEEN PROFILES 2 & 3 WITH RANGING SOIL CONDITIONS.

6. NET RESIDENTIAL AREA CALCULATION

TOTAL PARCEL AREA	25.20 ACRES
LESS STEEP SLOPES	10.82 ACRES
& UNSUITABLE SOILS	
LESS WETLANDS	3.82 ACRES
TOTAL	10.56 ACRES
MIN. LOT DENSITY	30,000 SF
MAXIMUM LOTS	15
PROPOSED LOTS	8

7. THE CITY OF BIDDEFORD SHALL NOT BE RESPONSIBLE FOR MAINTENANCE, REPAIR, OR PLOWING OF THE PROPOSED ROADWAY; FURTHER LOT DIVISIONS UTILIZING THE PRIVATE WAY ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE BOARD.
8. THE WIDTH OF MADDOX POND ROAD VARIES AS DEPICTED ON A HAND-DRAWN PLAN SUPPLIED BY THE CITY OF BIDDEFORD.
9. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AN ON THE GROUND SURVEY PERFORMED BY TERRADYN CONSULTANTS, LLC IN MAY 2023 AND SUPPLEMENTED WITH LIDAR REMOTE SENSING COLLECTED IN 2020 BY THE STATE OF MAINE AND DISTIBUTED BY THE USGS AS CLASSIFIED .LAZ POINT CLOUD.
   - NAVD88-GEOID18
   - ERROR (95% CONFIDENCE INTERVAL) IN METERS = 0.039
10. PLAN REFERENCES:
    A. "PETER POND - PHASE 2 PLAN SHOWING A STANDARD BOUNDARY SURVEY" PREPARED FOR RICHARD W. BANFIELD BY DOW & COULOMBE, INC. DATED AUG 29, 1989.
    B. "MAINE STATE HIGHWAY COMMISSION RIGHT-OF-WAY MAP STATE AID HIGHWAY "2" FEDERAL AID PROJECT NO. S-4113(3) DATED DECEMBER 1961, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 39 PAGE 8.
    C. "PLAN SHOWING LOTS BELONGING TO L. GORDON ADAMSON ET AL." PREPARED BY LIBBY & DOW ENGINEERS, DATED 1967, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 43 PAGE 26.
    D. "FINAL PLAN PETER POND - PHASE 3" PREPARED FOR PETER POND, INC. BY DOW & COULOMBE, INC. DATED JULY 22, 1993, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 214 PAGE 3.
11. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL-FREQUENCY GPS OBSERVATIONS.
12. THE SUBJECT PARCEL MAY BENEFIT FROM A 6' WIDE PEDESTRIAN EASEMENT AS DESCRIBED IN BOOK 3787, PAGE 218. THIS EASEMENT IS DEPICTED ON PLAN REFERENCE 8.A. AS "TO BE ABANDONED". THE CURRENT STATUS OF THIS EASEMENT IS UNKNOWN.
13. THE SUBJECT PARCEL IS SUBJECT TO RIGHTS OF OTHERS TO USE OF THE 30-FOOT WIDE RIGHT OF WAY AND 50-FOOT UTILITY EASEMENT AS SHOWN ON PLAN REFERENCE 8.A. AND DESCRIBED IN THE FOLLOWING DEEDS: BOOK 2981, PAGE 302; BOOK 3673, PAGE 117; BOOK 3787, PAGE 218; BOOK 3109, PAGE 19; BOOK 2352, PAGE 142; BOOK 1258, PAGE 417; BOOK 3622, PAGE 123; BOOK 4598, PAGE 131; BOOK 3832, PAGE 230; BOOK 2016, PAGE 42.
14. THE SUBJECT PARCEL IS SUBJECT TO MINERAL RIGHTS RESERVATIONS AND UTILITY EASEMENTS APPEARING OF RECORD.
15. THE SUBJECT PARCEL IS LOCATED WITHIN ZONE X, AREAS OF MINIMAL FLOOD HAZARD, AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF BIDDEFORD, YORK COUNTY, COMMUNITY-PANEL NUMBER 2301450018, HAVING AN EFFECTIVE DATE OF MAY 15, 1984.

GENERAL NOTES

16. LOTS SHALL BE LIMITED TO 5,000 S.F. OF IMPERVIOUS AREA AND 20,000 S.F. LAWN AREA IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN. LIMITS OF DEVELOPMENT ARE SHOWN IN PLAN C-3.2.
17. TEST PITS DEPICTED ON THIS PLANWERE CONDUCTED BY LONGVIEW PARTNERS, LLC ON 05/24/2022 AND 12/07/2023.
18. FRESHWATER WETLANDS DEPICTED ON THIS PLAN WERE DELINEATED BY LONGVIEW PARTNERS, LLC ON 04/13/2022 AND 04/20/2022.
19. THIS PROJECT IS SUBJECT TO CONDITIONS OF A WETLAND FILL PERMIT FROM THE U.S. ARMY CORPS OF ENGINEERS FOR 660 S.F. OF WETLAND FILL ON LOT 3. ANY ADDITIONAL WETLAND IMPACT MUST BE APPROVED BY USACOE AND THE MAINE D.E.P. AS APPLICABLE.
20. NO LOT SHALL BE ACCESSED FROM EITHER END OF THE HAMMERHEAD TURN-AROUND.
21. PROPOSED PRIVATE ROAD WILL NOT BE SUBMITTED FOR FUTURE PUBLIC ACCEPTANCE

EASEMENT CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C20	21.21'	125.00'	N 22°20'03" W	21.19'

EASEMENT LINE TABLE

LINE	DIRECTION	DISTANCE
L10	S 84°58'51" W	65.12'
L11	S 4°24'41" E	19.75'
L12	S 64°56'26" W	17.12'
L13	S 85°35'19" W	161.28'
L14	S 30°33'40" W	93.75'
L15	S 59°17'49" E	35.00'
L16	S 30°33'41" W	75.90'
L17	S 85°35'19" W	159.72'
L18	N 4°24'41" W	10.00'
L19	S 84°42'26" W	74.58'
L20	N 5°17'34" W	23.85'

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C3	23.80'	15.00'	S 75°14'27" W	21.38'
C4	23.24'	15.00'	S 14°36'17" E	20.98'
C5	91.25'	125.00'	N 38°23'04" W	89.24'
C6	64.47'	175.00'	N 48°44'37" W	64.10'
C7	100.48'	175.00'	N 21°44'30" W	99.11'
C8	26.57'	125.00'	N 11°22'57" W	26.52'
C9	59.09'	175.00'	N 4°13'02" E	57.83'
C10	153.23'	125.00'	N 29°49'26" E	143.81'
C12	20.07'	175.00'	N 55°15'56" E	20.06'
C13	19.51'	175.00'	N 61°44'45" E	19.50'
C14	23.56'	15.00'	S 70°03'34" E	21.21'
C15	23.56'	15.00'	N 19°56'26" E	21.21'

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C1	141.38'	150.00'	N 32°17'42" W	136.21'
C2	183.87'	150.00'	N 29°49'26" E	172.57'

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L1	N 25°03'34" W	20.00'
L2	N 64°56'26" E	50.00'
L3	N 25°03'34" W	20.00'
L4	N 64°56'26" E	20.00'
L5	N 25°03'34" W	50.00'

CITY OF BIDDEFORD
PLANNING BOARD
SUBDIVISION APPROVAL

DATE

CHAIRPERSON

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED_____, 20____
AT ____h____m____M. AND RECORDED IN PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTER

MICHAEL E. TADEMA-WELANOTTE
NO. 12966
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE
DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	09/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 49 THURSTON DRIVE, SUITE 301, KENNEBUNK, MAINE 04043
PHONE: (207) 939-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

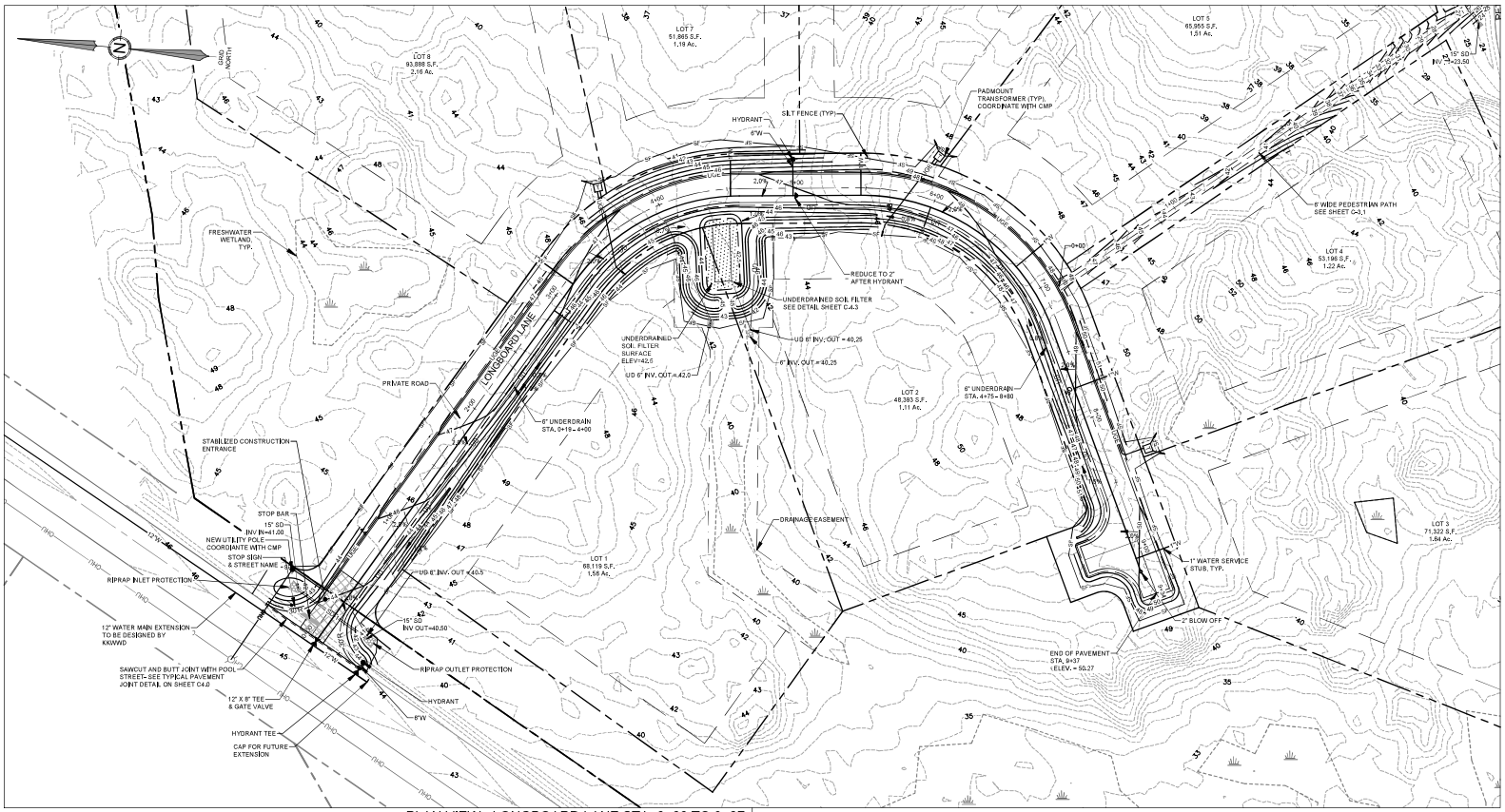
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NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
POOL STREET (ROUTE 9), BIDDEFORD, ME
SHEET TITLE: SUBDIVISION PLAN
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: 1" = 60'
JOB NO: 23-023
SHEET: C-2.0

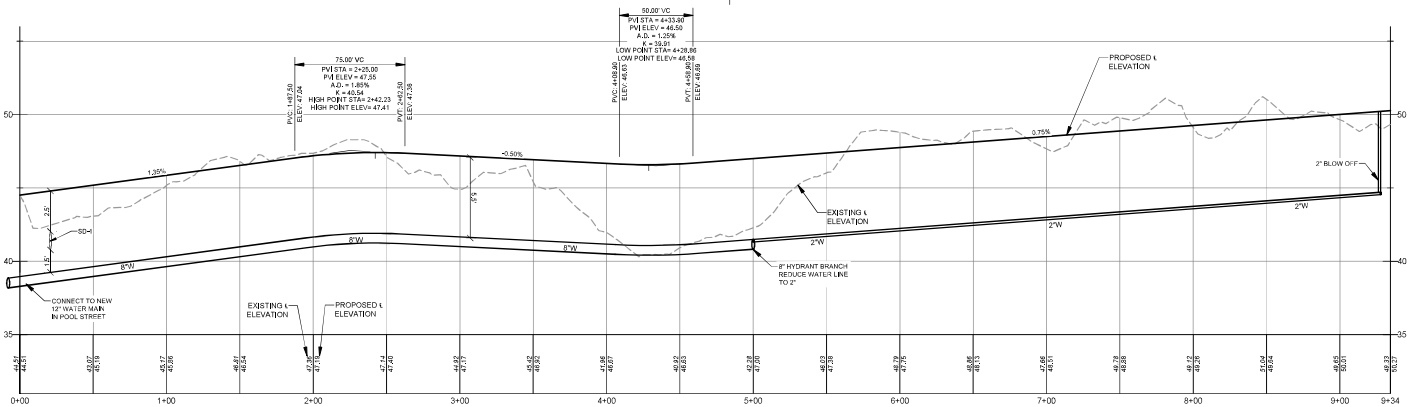
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1134



PLAN VIEW - LONGBOARD LANE STA. 0+00 TO 9+37

SCALE: 1" = 40'



PROFILE - LONGBOARD LANE STA. 0+00 TO 9+37

SCALE: 1" = 40' HORIZ.
1" = 4' VERT.

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-1	15"	61'	0.82%	HDPE
SD-2	15"	26'	0.85%	HDPE

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING ANY EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. STORM DRAIN PIPE SHALL BE SMOOTH BORE POLYETHYLENE UNLESS OTHERWISE NOTED ON THE PLAN.
3. FINAL DESIGN OF THE ELECTRICAL DISTRIBUTION SHALL BE COORDINATED WITH CENTRAL MAINE POWER PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A STREET OPENING PERMIT FROM THE CITY OF BIDDEFORD FOR WORK WITHIN POOL STREET, IF NECESSARY.
5. THE CONTRACTOR SHALL COORDINATE ALL WATER WORK WITH THE KENNEBUNK, KENNEBUNKPORT, & WELLS WATER DISTRICT.
6. ALL WATER MAINS, SERVICES, SERVICE ENTRANCES, METER ARRANGEMENTS AND BACKFLOW PREVENTORS WILL BE IN ACCORDANCE WITH AND TO THE SATISFACTION OF KENNEBUNK, KENNEBUNKPORT, & WELLS WATER DISTRICT STANDARDS AND SPECIFICATIONS, TERMS & CONDITIONS, AND ALSO IN ACCORDANCE WITH ALL MAINE PUBLIC UTILITY COMMISSION RULES & REGULATIONS.
7. ALL NEW OR DEWATERED WATER LINES LARGER THAN 2" IN DIAMETER MUST BE TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA C600, AWWA C651 AND ALL KENNEBUNK, KENNEBUNKPORT, & WELLS WATER DISTRICT STANDARDS TO THE SATISFACTION OF THE WATER DISTRICT.
   - THE APPLICANT WILL NEED TO ARRANGE WORK SUCH THAT FLUSHING AND TESTING IS ABLE TO OCCUR, AND DOES NOT DAMAGE LANDSCAPING OR EROSION CONTROL MEASURES, THE CONTRACTOR SHALL COORDINATE THE TIMING OF THE TEST SO AS NOT TO INTERFERE WITH OTHER WORK ON THE SITE. TESTING AND DISINFECTION MUST BE COMPLETED BEFORE ANY LOTS ARE DEVELOPED. ALL TESTING AND DISINFECTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. DRIVEWAY CULVERTS SHALL BE A MINIMUM 15" IN DIAMETER.
9. ROADWAY RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.
11. ACRES OF DISTURBANCE = 1.17 AC

STATE OF MAINE
MICHAEL E. TADEMA-WEIMONT
NUMBER 12082
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 41 MAIN STREET, SUITE 301 NEW CASTLE, NH 03854
PHONE: (207) 939-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

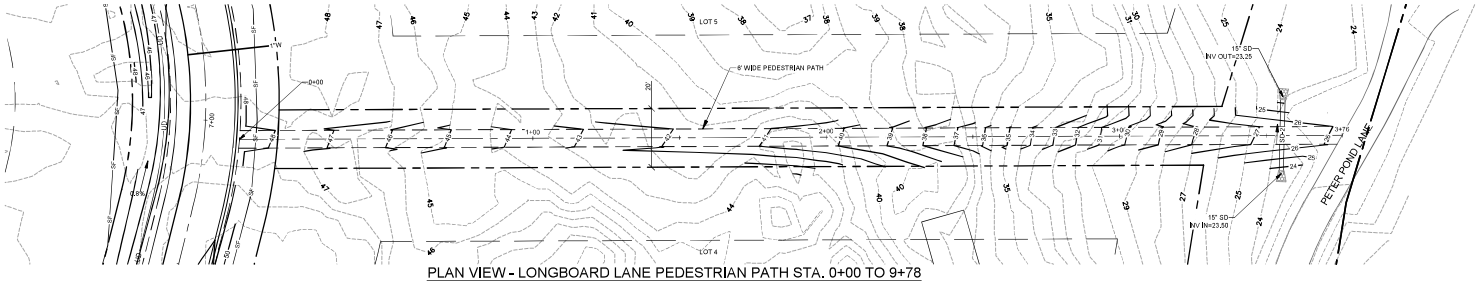
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: POOL STREET, BIDDEFORD, ME
SHEET TITLE: PLAN & PROFILE OF LONGBOARD RIDGE
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
OWNER ADDRESS: 10 KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-3.0

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1135



PLAN VIEW - LONGBOARD LANE PEDESTRIAN PATH STA. 0+00 TO 9+78

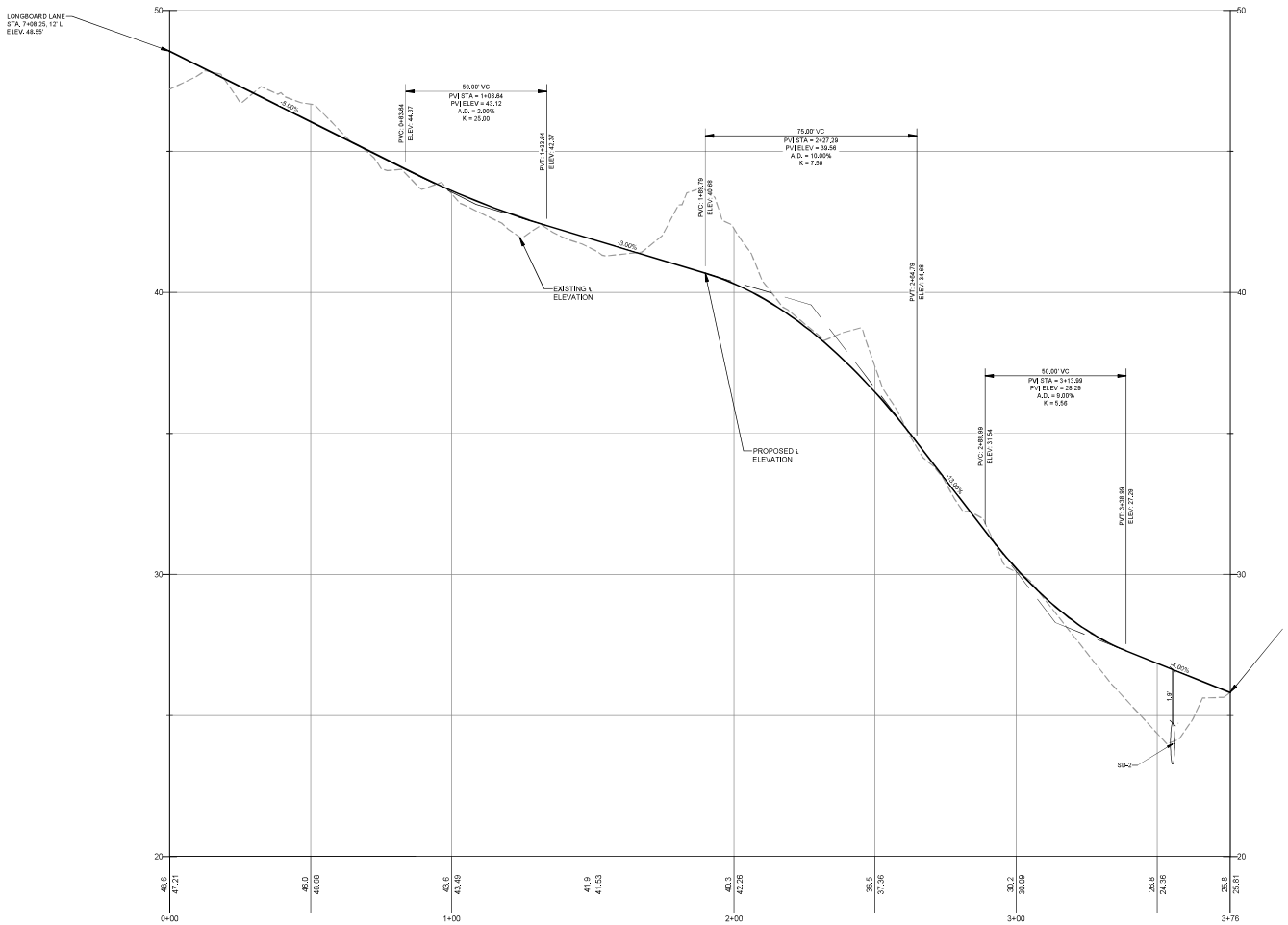
SCALE: 1" = 20'

STORM DRAIN PIPE DATA				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-1	15"	61'	0.82%	HDPE
SD-2	15"	26'	0.85%	HDPE

GRID NORTH

NOTES:

1. STANDARD TRAIL BUILDING AND MAINTENANCE PRACTICES SHOULD BE FOLLOWED SUCH AS THOSE ASSOCIATED WITH AMERICAN TRAILS OR THE UNITED STATES FOREST SERVICE.
2. SEE SHEET C-4.0 FOR A TYPICAL TRAIL CROSS SECTION.
3. CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.



PROFILE - LONGBOARD LANE PEDESTRIAN PATH STA. 0+00 TO 3+78

SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 INCH = 20 FT.

MICHAEL E. TADEMA-WEIMOUTH
No. 13400
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 4 CABOT PLACE, SUITE 301
NEW CASTLE, ME 04080
PHONE: (207) 589-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC

Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: LONGBOARD STREET (BIDDEFORD), ME
SHEET TITLE: PATH PLAN & PROFILE
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: 90 KENDUSKEAG KENNEBUNK, ME 04043

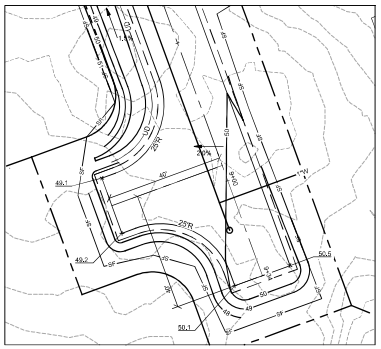
DATE: 3/10/2023
SCALE: 1" = 20'
JOB NO: 23-023
SHEET: C-3.1

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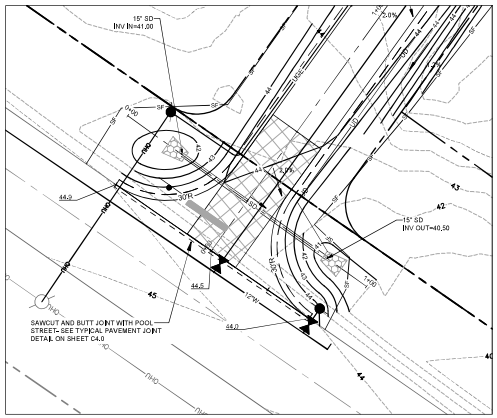
1136

NOTES:

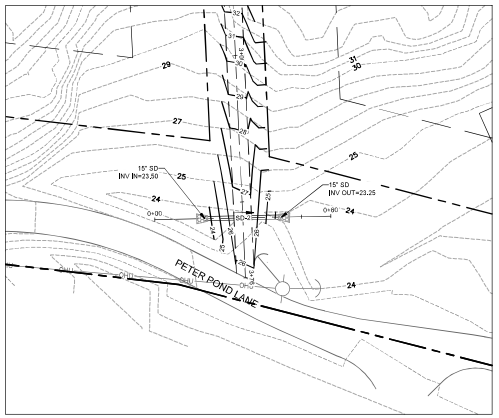
1. CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.



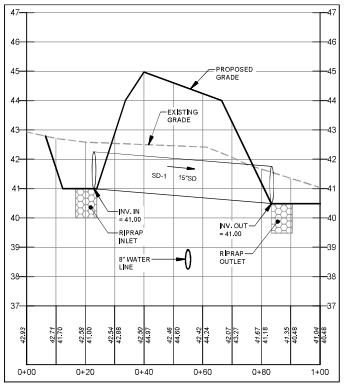
PLAN VIEW - HAMMERHEAD DETAIL
SCALE: 1" = 20'



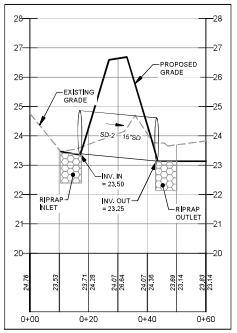
PLAN VIEW - PROPOSED ROAD CONNECTION TO POOL STREET
SCALE: 1" = 20'



PLAN VIEW - STORM DRAIN 2
SCALE: 1" = 20'



CULVERT SECTION - STORM DRAIN 1
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.



CULVERT SECTION - STORM DRAIN 2
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

GRAPHIC SCALE
0 5 10 20 40
(IN FEET)
1 INCH = 20 FT.

STATE OF MAINE
MICHAEL E. TADEMA-WEIMINOTT
No. 12082
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS:
75 CLIMAX STREET, SUITE 301
NEW GLASGOW, NS B2H 4G8
PHONE:
(207) 939-5111
WEB SITE:
www.terradyncons.ca

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
LONGBOARD RIDGE SUBDIVISION
POOL STREET, BIDDEFORD, ME

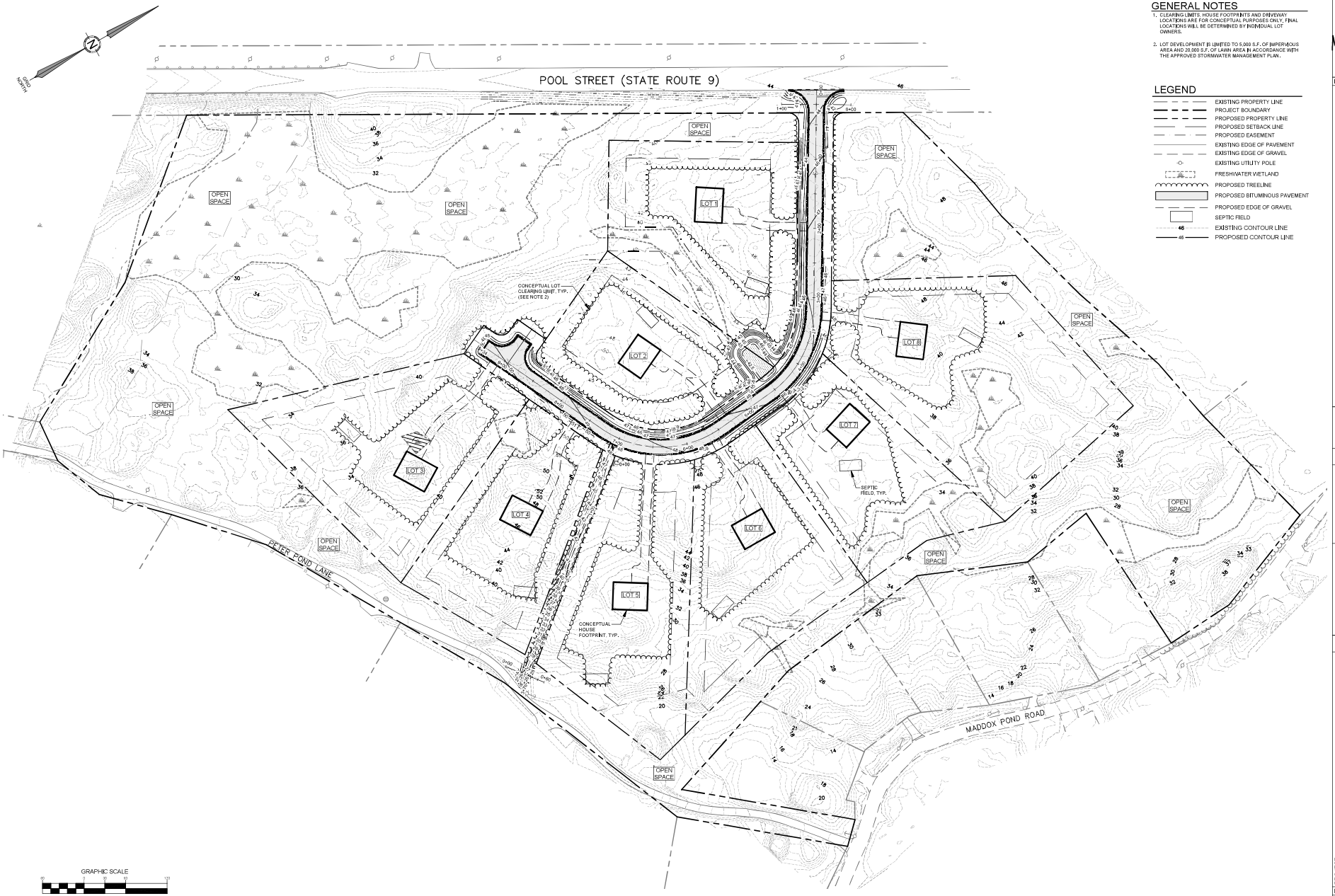
SHEET TITLE:
PLAN & PROFILE DETAILS

RECORD OWNER:
BEACHWOOD DEVELOPMENT FUND
PO BOX 4457
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: 1" = 20'
JOB NO: 23-023
SHEET: C-3.2

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11137



GENERAL NOTES

1. CLEARING LIMITS, HOUSE FOOTPRINTS AND DRIVEWAY LOCATIONS ARE FOR CONCEPTUAL PURPOSES ONLY. FINAL LOCATIONS WILL BE DETERMINED BY INDIVIDUAL LOT OWNERS.
2. LOT DEVELOPMENT IS LIMITED TO 5,000 S.F. OF IMPERVIOUS AREA AND 20,000 S.F. OF LAWN AREA IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN.

LEGEND

- EXISTING PROPERTY LINE
- PROJECT BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- EXISTING UTILITY POLE
- FRESHWATER WETLAND
- PROPOSED TREELINE
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED EDGE OF GRAVEL
- SEPTIC FIELD
- 46 EXISTING CONTOUR LINE
- 46 PROPOSED CONTOUR LINE

STATE OF MAINE
MICHAEL E. TADEMA-WEJANDT
NO. 10082
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL

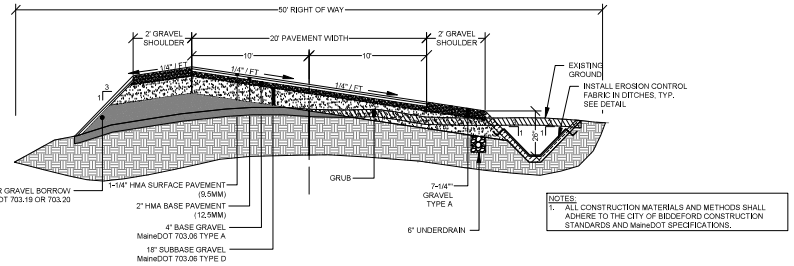
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying| Geomatics
Stormwater Design | Land Planning | Environmental Permitting
ADDRESS: 45 YORK STREET, SUITE 301 KENNEBUNK, MAINE 04043
PHONE: (207) 536-5111
WEB SITE: www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: POOL STREET, BIDDEFORD, ME
SHEET TITLE: OVERALL DEVELOPMENT PLAN
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: 45 YORK STREET KENNEBUNK, ME 04043

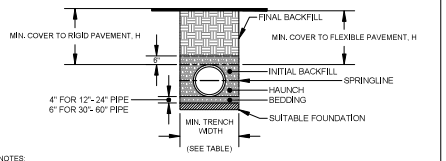
DATE: 3/10/2023
SCALE: 1" = 60'
JOB NO: 23-023
SHEET: C-3.3

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NOTES:
1. ALL CONSTRUCTION MATERIALS AND METHODS SHALL ADHERE TO THE CITY OF BIDDEFORD CONSTRUCTION STANDARDS AND MaineDOT SPECIFICATIONS.

LONGBOARD LANE TYPICAL CROSS SECTION
NOT TO SCALE



NOTES:

1. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

2. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

3. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm), 6" (150mm) FOR 30"-60" (750mm-900mm).

4. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

5. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

RECOMMENDED MINIMUM TRENCH WIDTHS

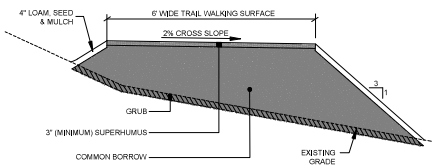
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	25"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

TYPICAL TRENCH DETAIL
NOT TO SCALE

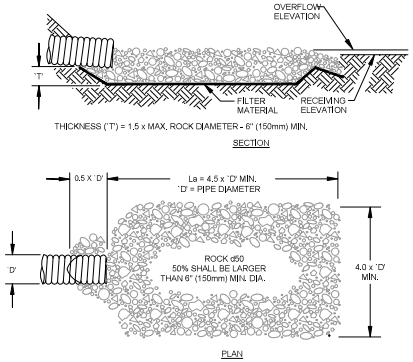


NOTES:

1. STANDARD TRAIL BUILDING PRACTICES, SUCH AS THOSE ASSOCIATED WITH AMERICAN TRAILS OR THE UNITED STATES FOREST SERVICE, SHALL BE USED TO LIMIT EROSION AND PROVIDE FOR PROPOER DRAINAGE SUCH AS GRADE DIPS, KNICKS, AND ROLLING GRADE DIPS.

2. SUPERHUMUS BY CASELLA ORGANICS, 800-933-6474

TRAIL CROSS SECTION
NOT TO SCALE

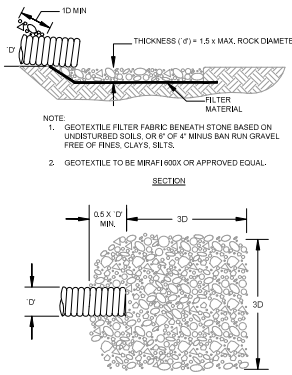


PIPE OUTLET PROTECTION SIZING TABLE

PIPE SIZE (IN)	LENGTH (FT)	WIDTH (FT)
6	2.5	2.0
12	5.0	4.0
15	6.25	5.0
18	7.5	6.0
24	10.0	8.0
30	13.0	10.0
36	15.0	12.0
42	17.5	14.0
48	20.0	16.0
60	25.0	20.0

NOTES:
1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. FILTER MATERIAL SHALL BE FILTER FABRIC (MIRAFI 600X OR APPROVED EQUAL) OR 6" (150mm) THICK MINIMUM GRADED GRAVEL LAYER.

PIPE OUTLET PROTECTION
NOT TO SCALE



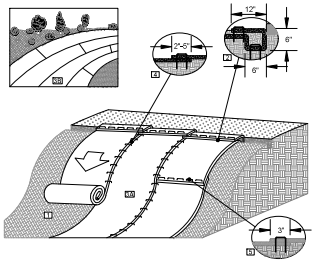
NOTE:
1. GEOTEXTILE FILTER FABRIC BENEATH STONE BASED ON UNDISTURBED SOILS, OR 6" OF 4" MINUS BAN RUN GRAVEL FREE OF FINES, CLAYS, SILTS.
2. GEOTEXTILE TO BE MIRAFI 600X OR APPROVED EQUAL.

PIPE INLET PROTECTION SIZING TABLE

PIPE SIZE (IN)	LENGTH (FT)	WIDTH (FT)
6	2.0	1.5
12	3.5	3.0
15	4.5	3.75
18	5.25	4.5
24	7.0	6.0
30	8.75	7.5
36	10.5	9.0
42	12.25	10.5
48	14.0	12.0
60	17.5	15.0

NOTES:
1. IN DEFINED CHANNELS, APRON SHALL EXTEND FULL WIDTH OF BOTTOM AND ONE FOOT ABOVE MAX. HEADWATER OR UP TO BANK FULL, WHICHEVER IS LESS.

PIPE INLET PROTECTION
NOT TO SCALE



NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6"(15CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECPS.

PHOTODEGRADABLE EROSION CONTROL BLANKET SELECTION

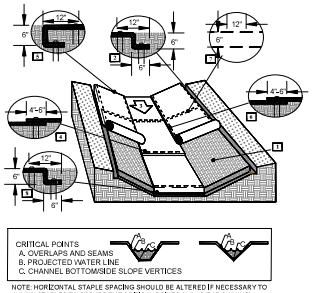
6:1 > 3:1 SLOPES	3:1 > 2:1 SLOPES	≥ 2:1 SLOPES
NA GREEN DS75	NA GREEN S150	NA GREEN SC150

PERMANENT TURF REINFORCEMENT
IF THE PLAN CALLS FOR PERMANENT TURF REINFORCEMENT, USE NORTH AMERICAN GREEN VMAX SC250

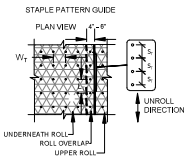
NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH, ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES/PINS SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON THE RECPS TYPE.
5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECPS WIDTH.

EROSION CONTROL FABRIC SLOPE INSTALLATION
NOT TO SCALE



NOTE: HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.



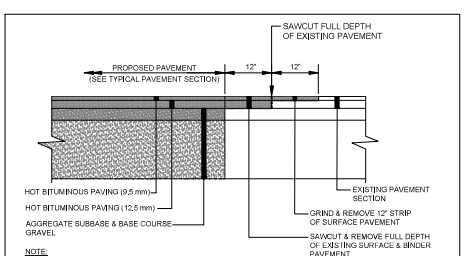
STAPLE PATTERN	
DIMENSION	
W_T	20"
L_T	20"
S_T	18"
NOMINAL FREQUENCY	3.8 / SY

PIN / STAPLE / TWIST PIN, AS APPROPRIATE FOR FIELD CONDITIONS

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. GROUND SURFACE MUST BE FREE OF DEBRIS, ROCKS, CLAY CLODS AND RAKED SMOOTH SUFFICIENT TO ALLOW INTIMATE CONTACT OF THE RECP WITH THE SOIL OVER THE ENTIRETY OF THE INSTALLATION.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES/PINS APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES/PINS SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES/PINS IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. PLACE CONSECUTIVE RECPS END-OVER-END (SHINGLE STYLE) WITH A 4"- 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECPS.
5. FULL LENGTH EDGE OF RECPS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES/PINS SPACED AT S_T APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECPS MUST BE OVERLAPPED APPROXIMATELY 4"- 6" AND SECURED WITH STAPLES/STAKES/PINS AT S_T.
7. IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 6" APART AND 12" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECPS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES/PINS SPACED AT S_T APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
9. FASTENERS SHOULD PROVIDE A MINIMUM OF TWENTY POUNDS OF PULLOUT RESISTANCE. 6" X 1" ELEVEN GAUGE STAPLES ARE TYPICALLY ADEQUATE IN LOOSE SOILS. LONGER STAPLES MAY BE NECESSARY. TWIST PINS CAN PROVIDE THE GREATEST PULLOUT RESISTANCE. IN HARD OR ROCKY SOILS, STRAIGHT PINS MAY BY USED WHERE STAPLES OR TWIST PINS ARE REFUSED. PROVIDED THE MINIMUM PULLOUT REQUIREMENTS ARE MET.

EROSION CONTROL FABRIC CHANNEL INSTALLATION
NOT TO SCALE



NOTE:
CLEAN & APPLY TACK COAT TO SURFACES WHERE NEW BIT. PAVEMENT IS INSTALLED

TYPICAL PAVEMENT JOINT
NOT TO SCALE

MICHAEL E. TADEMA-WELANDT
MAINE LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

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TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LONGBOARD LANE, BIDDEFORD, ME
SHEET TITLE: SITE DETAILS
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
PO BOX 6
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-4.0

L:\2023\Biddeford, City of\Longboard Ridge Subdivision\Site Plan\Permitting\C4.0 Site Details.dwg

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EROSION AND SEDIMENT CONTROL PLAN

PRE-CONSTRUCTION PHASE
A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 MRSA § 480-B. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS, MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED, ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES MUST BE TAKEN, THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE.

BMP CONSTRUCTION PHASE
A. SEDIMENT BARRIERS: PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE PROPOSED DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

B. CONSTRUCTION ENTRANCE: PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

C. RIPRAP. SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH, CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OF THE RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE. WHERE RIPRAP IS USED FOR OUTLET PROTECTION, THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL SO THAT IT IS IN PLACE WHEN THE PIPE OR CHANNEL BEGINS TO OPERATE. MAINTAIN TEMPORARY RIPRAP, SUCH AS TEMPORARY CHECK DAMS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

D. TEMPORARY STABILIZATION. STABILIZE WITH TEMPORARY SEEDING, MULCH, OR OTHER NON-ERODABLE COVER ANY EXPOSED SOILS THAT WILL REMAIN UNWORKED FOR MORE THAN 14 DAYS EXCEPT. STABILIZE AREAS WITHIN 100 FEET OF A WETLAND OR WATERBODY WITHIN 7 DAYS OR PRIOR TO A PREDICTED STORM EVENT, WHICHEVER COMES FIRST. IF HAY OR STRAW MULCH IS USED, THE APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SF OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. HAY MULCH MUST BE KEPT MOIST OR ANCHORED TO PREVENT WIND BLOWING. AN EROSION CONTROL BLANKET OR MAT SHALL BE USED AT THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER) AND ON ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS. GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING, ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE SECOND PHASE, AND SO ON.

E. VEGETATED WATERWAY. UPON FINAL GRADING, THE DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED TO PERMANENT VEGETATION AND MULCHED AND WILL NOT BE USED AS OUTLETS UNTIL A DENSE, VIGOROUS VEGETATIVE COVER HAS BEEN OBTAINED. ONCE SOIL IS EXPOSED FOR WATERWAY CONSTRUCTION, IT SHOULD BE IMMEDIATELY SHAPED, GRADED AND STABILIZED. VEGETATED WATERWAYS NEED TO BE STABILIZED EARLY DURING THE GROWING SEASON (PRIOR TO SEPTEMBER 15). IF FINAL SEEDING OF WATERWAYS IS DELAYED PAST SEPTEMBER 15, EMERGENCY PROVISIONS SUCH AS SOD OR RIPRAP MAY BE REQUIRED TO STABILIZE THE CHANNEL. WATERWAYS SHOULD BE FULLY STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

PERMANENT STABILIZATION DEFINED
A. SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

B. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

C. PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

D. RIPRAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.

E. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

F. DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE CHANNEL.

GENERAL CONSTRUCTION PHASE
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT.

A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY DESIGNATION OF THE OWNER AND INSPECTING ENGINEER.

B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.

E. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

F. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS.

G. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL.

H. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

I. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.

J. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.

K. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS.

L. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.

M. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY.

N. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

O. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

PERMANENT VEGETATION
PERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE ENVIRONMENT.

SEEDBED PREPARATION
A. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.

B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 19.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P2O5-K2O) OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT
A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQ. FT.).

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT IN AREAS OPERATED BY MOWING. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED, ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLED. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

E. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

F. PERMANENT SEEDING SHOULD BE MADE 45 DAYS PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING WITH MULCH AFTER THE FIRST KILLING FROST AND BEFORE SNOWFALL. WHEN CROWN VETCH IS SEEDED IN LATER SUMMER, AT LEAST 30% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, MULCH ACCORDING TO THE TEMPORARY MULCHING BMP AND OVERWINTER STABILIZATION AND CONSTRUCTION TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

G. FOLLOWING SEED BED PREPARTATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS./1,000 S.F., WITH A MIXTURE OF 35% CREEPING RED FESCUE, 8% RED TOP, 34% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.

I. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING.

J. AREAS WHICH CANNOT BE SEEDED WITHIN THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION AND THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE GROWING SEASON.

WINTER CONSTRUCTION PHASE
IF AN AREA IS NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES BY NOVEMBER 15, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES.

A. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.

B. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.

C. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF), THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.

D. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR ALL SLOPES GREATER THAN 8 % OR OTHER AREAS EXPOSED TO DIRECT WIND.

E. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGEWAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3 %.

F. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

G. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SO THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

H. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.

I. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.

J. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THAT SAME DAY.

K. IF SNOWFALL IS GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.

L. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.

M. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

MAINTENANCE AND INSPECTION DURING CONSTRUCTION PHASE
A. INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL) AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. A RAINFALL EVENT OF 1" IN A 24 HOUR PERIOD WOULD TRIGGER A WET WEATHER INSPECTION.

B. MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

C. DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATIONS WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEP STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

GOOD HOUSEKEEPING NOTES:

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT, FOR OIL SPILLS, CALL 1-800-482-0777 (WHICH IS AVAILABLE 24 HOURS A DAY). FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 (WHICH IS AVAILABLE 24 HOURS A DAY). FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT : HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGENCY/INDEX.HTM

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN INFILTRATION AREA OR ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR, PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA. IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

SEE MAINE DEP CHAPTER 500 APPENDIX D FOR LICENSE BY RULE STANDARDS FOR INFILTRATION OF STORMWATER.

NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION, OIL MAY NOT BE USED FOR DUST CONTROL. BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO ANTICIPATED STORM EVENTS. OPERATIONS DURING DRY PERIODS THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

NOTE: DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT MAY VIOLATE STATE WATER QUALITY STANDARDS AND THE *NATURAL RESOURCES PROTECTION ACT*.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISION OF RULES RELATED TO SOLID, UNIVERSAL AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE PESTICIDE REQUIREMENTS.

5. EXCAVATION DEWATERING. EXCAVATION DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY LADEN WITH SEDIMENTS CORRECT AND EXPENSIVE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

NOTE: DEWATERING CONTROLS ARE DISCUSSED IN THE MAINE EROSION AND SEDIMENT CONTROL BMPS, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

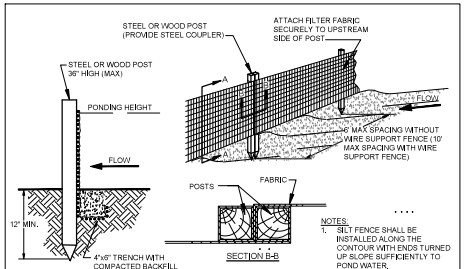
6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

(a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
(b) FIRE HYDRANT FLUSHINGS;
(c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
(d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
(e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
(f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
(g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
(h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
(i) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
(j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
(k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
(l) LANDSCAPE IRRIGATION.

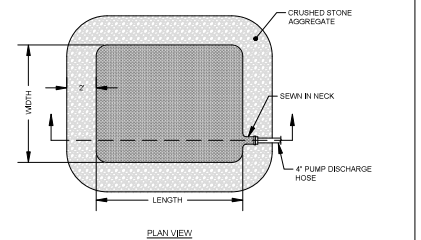
7. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

(a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
(b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
(c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
(d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

8. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

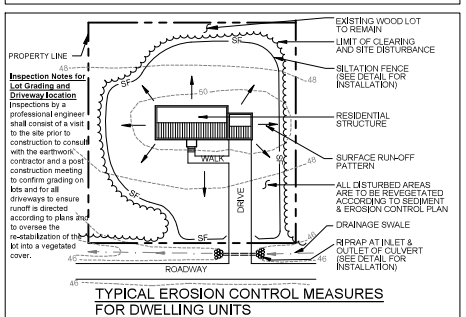


SILT FENCE
NOT TO SCALE



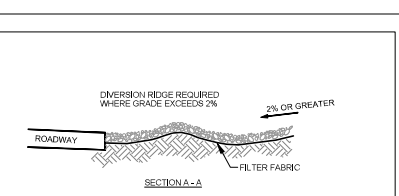
NOTES:
1. DIRTBAG BY ACF ENVIRONMENTAL
2. SEAMS MUST BE HIGH STRENGTH DOUBLE STITCHED "J" SEAMS.
3. CONSTRUCTION DEWATERING OF TURBID WATER SHALL BE PUMPED THROUGH A DIRTBAG AND RELEASED THROUGH A VEGETATED BUFFER AT LEAST 50' UPSTREAM OF WETLAND AREAS.
4. THE DIRTBAG SHALL NOT BE SITED IN CRITICAL AREAS, SUCH AS WETLANDS AND 75 FEET FROM ANY PROTECTED RESOURCE.

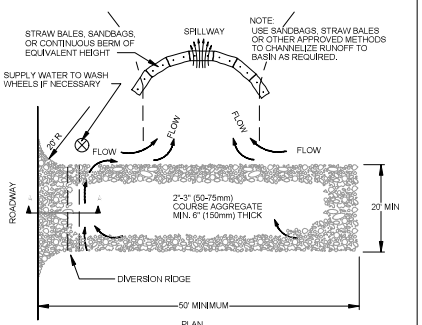
DIRTBAG DETAIL
NOT TO SCALE



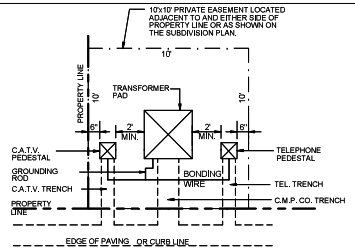
Inspection Notes for Lot Grading and Driveway location
Inspections by a professional engineer shall consist of a visit to the site prior to construction to consult with the earthwork contractor and a post construction meeting to confirm grading on lots and for all driveways to ensure runoff is directed according to plans and to oversee the re-stabilization of the lot into a vegetated cover.

TYPICAL EROSION CONTROL MEASURES FOR DWELLING UNITS
NOT TO SCALE



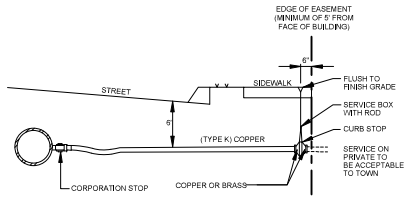


NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC



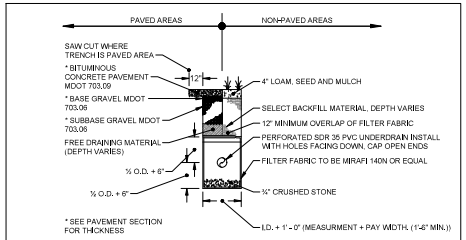
TRANSFORMER DETAIL

NOT TO SCALE



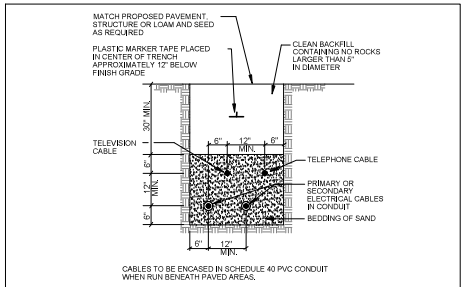
TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE



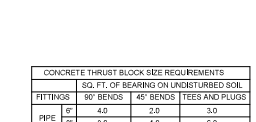
TYPICAL UNDERDRAIN TRENCH SECTION

NOT TO SCALE

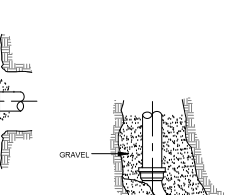


TYPICAL UNDERGROUND CABLE INSTALLATION

NOT TO SCALE

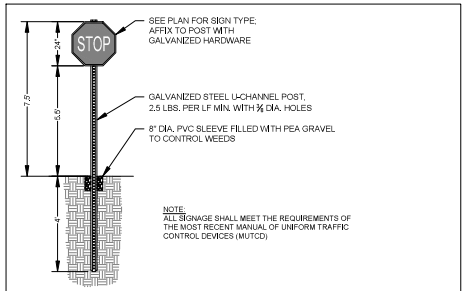


CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
FITTINGS		90° BENDS	45° BENDS	TEES AND PLUGS
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	10	10



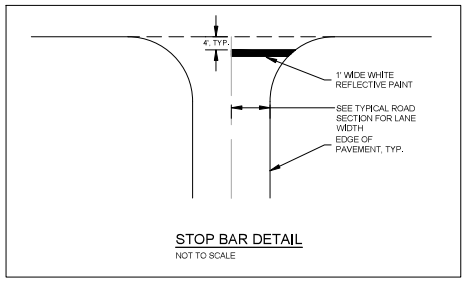
TEE & BEND DETAIL

NOT TO SCALE



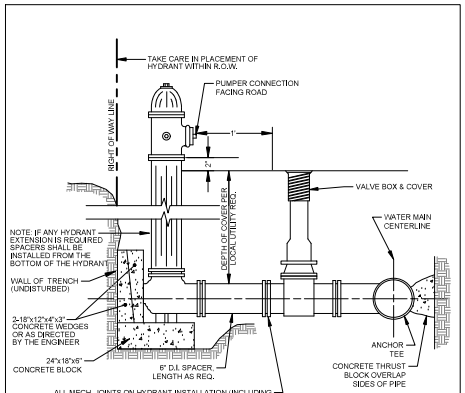
STREET SIGN

NOT TO SCALE



STOP BAR DETAIL

NOT TO SCALE



NOTES:
1. ALL MATERIALS SHALL CONFORM TO THE KENNEBUNK, KENNEBUNKPORT & WELLS WATER DISTRICT REQUIREMENTS
2. HYDRANT SHALL BE OPEN RIGHT
3. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE

TYP. HYDRANT INSTALLATION

NOT TO SCALE

STATE OF MAINE
MICHAEL E. TADEMA-WELANDT
3911
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 47 MAINE STREET, SUITE 301 KENNEBUNK, MAINE 04043
PHONE: (207) 985-4111
WEB SITE: www.terradynconsultants.com
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: STREET, BIDDEFORD, ME
SHEET TITLE: UTILITY AND MISCELLANEOUS DETAILS
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: PO BOX 65 KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-4.2

L:\2023\Longb...\Construction Documents\2023 Jobs\23-023 Post Street Subdivision\CAD\Permitting\23-023-DETAILS.dwg

1141

CONSTRUCTION OVERSIGHT NOTES:

1. CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM.
   - AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
   - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
   - AFTER THE FILTER MEDIA HAS BEEN INSTALLED, PLANTED, AND MULCHED. BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.
   - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
2. ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.
3. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
   - SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
   - PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE. A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
   - PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

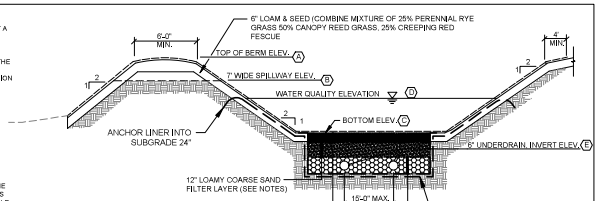
CONSTRUCTION PHASE NOTES:

CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.

COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA. OVERCOMPACTION SHOULD BE AVOIDED.

ADJUST DRAWDOWN TIME: AFTER THE FILTER BASIN IS STABILIZED, THE CONTRACTOR SHALL FILL THE BASIN UP TO THE ELEVATION OF THE WATER QUALITY VOLUME WITH CLEAN WATER AND ADJUST THE BALL VALVE TO ACHIEVE A 24-32 HR. RELEASE TIME.

UNDERDRAINED SOIL FILTER SCHEDULE		
A	TOP OF BERM ELEV.	46.00
B	SPILLWAY ELEV.	44.59
C	SURFACE ELEV.	42.50
D	WATER QUALITY ELEV.	43.71
E	UNDERDRAIN INVERT ELEV.	40.25
	FILTER SURFACE AREA (SF)	1,215
	WATER QUALITY VOLUME (CF)	1,694



FILTER BASIN

NOT TO SCALE

GENERAL NOTES:

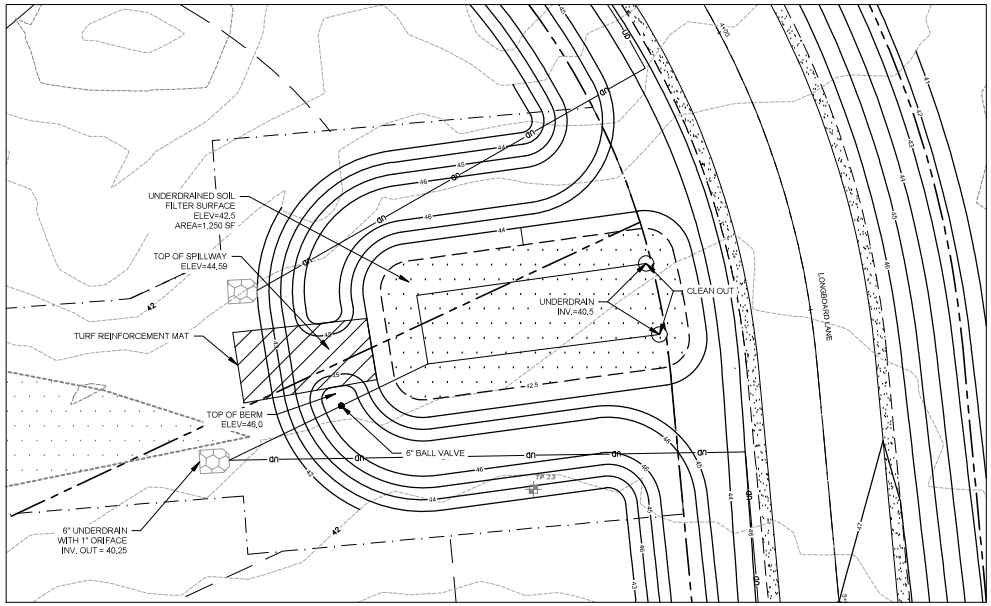
1. THE FILTER LAYER AND TOPSOIL LAYER SHALL MEET THE GRADATION REQUIREMENTS IN THE TABLES BELOW AND SHALL CONTAIN LESS THAN 2% CLAY CONTENT, AS DETERMINED BY HYDROMETER TESTING
2. COMPACTION OF THE FILTER AND TOPSOIL LAYERS SHALL BE COMPLETED PRIOR TO SEEDING OR SODDING.
3. A DENSE COVER OF GRASS OR SOD SHALL BE ESTABLISHED AND MAINTAINED ON THE SURFACE TO PREVENT CLOGGING.
4. PLACE NON WOVEN GEOTEXTILE FABRIC (MIRIFI 140N OR APPROVED EQUAL) ON ALL SIDES AND BOTTOM OF SOIL & GRAVEL FILTER AREA.
5. THE BOTTOM OF THE FILTER BASIN SHALL BE PLANTED WITH THE FOLLOWING SEED MIXTURE OR APPROVED ALTERNATIVE: 25% PERENNIAL RYE, 50% CANOPY REED GRASS, 25% CREEPING RED FESCUE.
6. THE CONTRACTOR SHALL CONDUCT A TEST PIT IN THE FILTER AREA IN THE PRESENCE OF CERTIFIED SOIL SCIENTIST PRIOR TO CONSTRUCTION OF THE BASIN TO DETERMINE THE SEASONAL HIGH GROUNDWATER AND/OR BEDROCK ELEVATION. IF SEASONAL HIGH GROUNDWATER OR BEDROCK IS PRESENT WITHIN 18" OF THE BOTTOM OF THE UNDERDRAIN STONE LAYER A PVC LINER MUST BE INSTALLED AS SHOWN ON THE DETAIL AND MUST EXTEND UP THE SIDES OF THE BASIN TO AN ELEVATION 6" ABOVE THE SEASONAL HIGH GW ELEVATION OR THE WATER QUALITY ELEVATION IF EVIDENCE OF GROUNDWATER IS NOT FOUND. THE RESULTS OF THE TEST PIT AND ANY NECESSARY CHANGES TO THE DESIGN SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO CONSTRUCTION OF THE FILTER BASINS.

LOAMY COARSE SAND (12" FILTER LAYER)	
SIEVE #	% PASSING BY WEIGHT
10	85-100
20	70-100
60	15-40
200	8-15

LOAMY TOPSOIL (6" TOP LAYER)	
SIEVE #	% PASSING BY WEIGHT
4	75-95
10	60-80
40	38-85
200	20-70

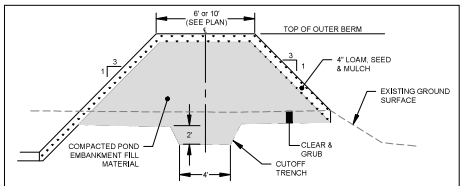
FILTER BASIN DETAILS

NOT TO SCALE



UNDERDRAINED SOIL FILTER PLAN VIEW

SCALE: 1" = 10'



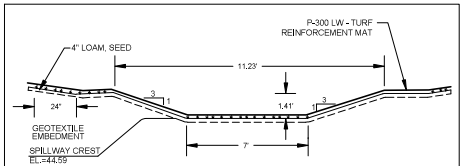
EMBANKMENT FILL MATERIAL:
FILL MUST BE FREE OF FROZEN SOIL, ROCKS OVER SIX INCHES, AND SOD, BRUSH, STUMPS, TREE ROOTS, WOOD, OR OTHER PERISHABLE MATERIALS. EMBANKMENT FILLS LESS THAN 10 FEET IN FILL HEIGHT MUST BE COMPACTED USING COMPACTION METHODS THAT WOULD GUARANTEE A FILL DENSITY OF 90% OF THE MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM-698). ALL EMBANKMENT FILLS MORE THAN 10 FEET IN FILL HEIGHT MUST BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AND MUST HAVE THEIR DENSITY VERIFIED BY FIELD DENSITY TESTING.

EMBANKMENT CONSTRUCTION NOTES:

1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM EMBANKMENT AND POND CONSTRUCTION AREA.
2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY.
4. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED.
5. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN & NOTES.

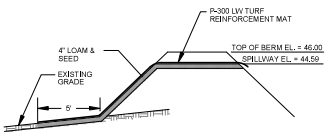
POND EMBANKMENT DETAIL

NOT TO SCALE



SPILLWAY CROSS-SECTION

NOT TO SCALE



EMBANKMENT CONSTRUCTION

1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION.
2. PLACE BORROW MATERIAL IN 8" LIFTS COMPACTED TO 90% OF MAXIMUM DRY DENSITY.
3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

SPILLWAY SECTION

NOT TO SCALE

STATE OF MAINE
MICHAEL E. TADEMA-WELANDER
3931
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL

ADDRESS: 47 CARVER SHORE, SUITE 201 NEWCASTLE, MAINE 04553
PHONE: (207) 563-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LONGBOARD STREET, BIDDEFORD, ME
SHEET TITLE: UNDERDRAINED SOIL FILTER DETAILS
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-4.3

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SUBDIVISION PLANS

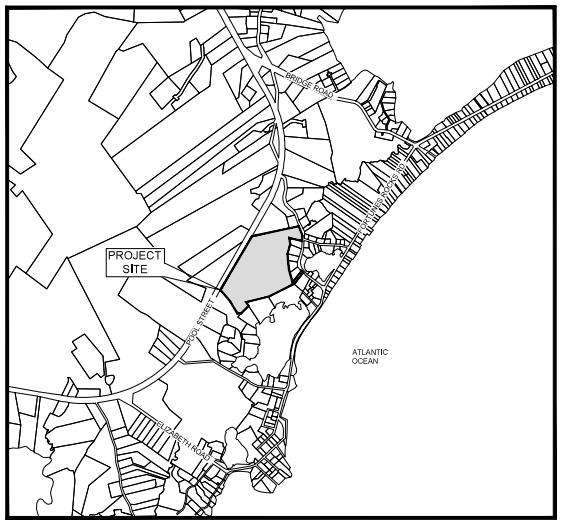
LONGBOARD RIDGE SUBDIVISION

POOL STREET - BIDDEFORD, MAINE

APPLICANT/OWNER:
BEACHWOOD DEVELOPMENT FUND
P.O. BOX 261
KENNEBUNK, MAINE 04043

PROJECT PARCEL SITE
CITY OF BIDDEFORD TAX ASSESSOR'S MAP, LOT NUMBER & ZONING DISTRICT

MAP	LOT	ZONING DISTRICT
5	17-2	COASTAL RESIDENTIAL DISTRICT



LOCATION MAP
SCALE: 1"=1000'

PERMITS

TYPE OF PERMIT	GOVERNING BODY	STATUS
SUBDIVISION APPROVAL	CITY OF BIDDEFORD, MAINE PLANNING BOARD 205 MAIN STREET BIDDEFORD, ME 04005 TEL. 207-571-0700	PRELIMINARY APPROVAL 9/20/2023 FINAL APPROVAL: PENDING
STORMWATER PERMIT BY RULE	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, ME 04103 TEL. 207-822-6300	FILED: 10/26/2023 APPROVED: 11/14/2023
SECTION 404 WETLAND FILL PERMIT	U.S. ARMY CORE OF ENGINEERS MAINE PROJECT OFFICE 442 CIVIC CENTER DRIVE, SUITE 350 AUGUSTA, ME 04330 TEL 207-623-8367	SUBMITTED: 11/06/2023 APPROVED: 01/03/2024 PERMIT # NAE-2023-02478
DRIVEWAY/ENTRANCE PERMIT	MAINE DEPARTMENT OF TRANSPORTATION P.O. BOX 358 SCARBOROUGH, ME 04070 TEL 207-883-3806	APPROVED: 12/01/2023 PERMIT #38786

UTILITIES

SEWER
PRIVATE ONSITE SUBSURFACE WASTEWATER DISPOSAL

WATER
KENNEBUNK, KENNEBUNKPORT & WELLS WATER DISTRICT
92 MAIN STREET
KENNEBUNK, ME 04043

ELECTRIC
CENTRAL MAINE POWER CO.
162 CANCO ROAD
PORTLAND, ME 04103
(207) 842-2367

TELEPHONE
FAIRPOINT COMMUNICATIONS
P.O. BOX 11560
PORTLAND, MAINE 04104
1-888-984-1515

CABLE
SPECTRUM
386 FORE ST #204
PORTLAND, MAINE 04101
(207) 331-5331

DIG SAFE SYSTEM, INC.
TEL. 1-888-DIG-SAFE (344-7233)
FAX 1-781-721-0047
WWW.DIGSAFE.COM

SHEET INDEX

C-1.0	COVER SHEET
1	BOUNDARY RETRACEMENT & EXISTING CONDITIONS PLAN
C-2.0	SUBDIVISION PLAN
C-3.0	ROAD PLAN & PROFILE STA. 0+00 TO STA. 9+37
C-3.1	PATH PLAN & PROFILE STA. 0+00 TO STA. 3+78
C-3.2	PLAN & PROFILE DETAILS
C-3.3	OVERALL DEVELOPMENT PLAN
C-4.0	SITE DETAILS
C-4.1	EROSION CONTROL NOTES & DETAILS
C-4.2	UTILITY DETAILS
C-4.3	STORMWATER DETAILS

PREPARED BY:

CIVIL ENGINEER:
TERRADYN CONSULTANTS, LLC
565 CONGRESS STREET, SUITE 201
PORTLAND, MAINE 04101
(207) 926-5111

SURVEYOR:
TERRADYN CONSULTANTS, LLC
79 MAIN STREET, SUITE 300
AUBURN, MAINE 04210
(207) 946-4480

SOIL SCIENTIST:
LONGVIEW PARTNERS, LLC
6 SECOND STREET
BUXTON, MAINE 04093
(207) 807-1739

GENERAL NOTES

1. THE PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, U.S. ARMY CORPS OF ENGINEERS, MAINE DEPARTMENT OF TRANSPORTATION, THE CITY OF BIDDEFORD, AND THE LOCAL UTILITY COMPANIES.
2. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY THE CITY OF BIDDEFORD OR THE LOCAL UTILITY COMPANIES SHALL BE COORDINATED BY THE CONTRACTOR.
3. THE LOCATION AND/OR ELEVATIONS OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ANY EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIRED TO PREVENT EROSION AND SEDIMENTATION. ADDITIONAL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY THE OWNER, ENGINEER, OR REGULATING AGENCIES.
5. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
6. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE STRICTEST STANDARDS CONTAINED IN THE MAIN DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE PROJECT SPECIFICATIONS, AND THE UTILITY COMPANY AND CITY OF BIDDEFORD REQUIREMENTS.
7. ALL DIMENSIONS, UNLESS OTHERWISE NOTED IS TO THE EDGE OF PAVEMENT, FACE OF CURB, OR THE FACE OF THE BUILDING.
8. ALL SIGNAGE SHALL BE SUPPLIED AND INSTALLED IN COMPLIANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

UTILITY NOTES

1. THE PROJECT WILL BE SERVED BY SUBSURFACE WASTEWATER DISPOSAL SYSTEMS .
2. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n=0.012 OR LESS.

CITY OF BIDDEFORD NOTES

1. THE EXISTING PROJECT SITE IS VACANT, COMPRISED OF WOODS, WETLANDS AND AN UNNAMED STREAM.
2. THE PROPOSED PROJECT IS FOR THE CONSTRUCTION OF AN 8-LOT SUBDIVISION WITH PRIVATE, DEAD-END ROAD AND ASSOCIATED INFRASTRUCTURE
3. THERE ARE NO PROPOSED WAIVERS
4. DRAINAGE WATERSHED: LORDS POND AND ETHERINGTON POND
5. THE PROJECT SITE IS NOT WITHIN THE MS4 URBANIZED AREA
6. THERE ARE WETLANDS AND AN UNNAMED STREAM LOCATED ON-SITE OR ADJACENT TO THE PROPERTY
7. PART OF THE PROJECT IS WITHIN THE 100-YEAR FLOOD ZONE
8. THERE IS NO PUBLIC ROAD PROPOSED
9. THERE IS A PRIVATE ROAD PROPOSED
10. THE LOTS WILL HAVE PRIVATE SEPTIC
11. THE PROJECT WILL NOT CONNECT TO THE PUBLIC STORM DRAIN
12. LIMIT OF DISTURBANCE: 1.17 ACRES
13. EXISTING PERVIOUS COVER: 1,089,435 SF
14. PROPOSED PERVIOUS COVER: 1,069,833 SF
15. EXISTING IMPERVIOUS COVER: 19,166 SF
16. PROPOSED IMPERVIOUS COVER: 23,958 SF
17. EXISTING ROOF: 0 SF
18. PROPOSED ROOF: 0 SF
19. ASSIGNED PLANNING BOARD NUMBER: 2023.33
20. ESTIMATED CUT: 1694 YARDS
21. ESTIMATED FILL: 1169 YARDS

LEGEND

- EXISTING PROPERTY LINE
- PROJECT SITE BOUNDARY
- EXISTING SETBACK LINE
- PROPOSED EASEMENT
- 124 EXISTING MINOR CONTOUR
- 124 EXISTING MAJOR CONTOUR
- 124 PROPOSED CONTOUR
- SD EXISTING STORMDRAIN
- SD PROPOSED STORMDRAIN
- UD EXISTING UNDERDRAIN
- UD PROPSED UNDERDRAIN
- OHE EXISTING OVERHEAD ELECTRIC & TELEPHONE
- OHE PROPOSED OVERHEAD ELECTRIC & TELEPHONE
- UGE EXISTING UNDERGROUND ELECTRIC & TELEPHONE
- UGE PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- PROPOSED EDGE OF GRAVEL
- EXISTING CURB
- PROPOSED CURB
- PROPOSED FENCE
- SF SILT FENCE
- TP-A TEST PIT
- EXISTING VALVE
- PROPOSED VALVE
- EXISTING HYDRANT
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING DRAIN MANHOLE
- PROPOSED DRAIN MANHOLE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- 30.20 EXISTING SPOT GRADE
- 30.20 PROPOSED SPOT GRADE
- SURVEY CONTROL POINT
- EXISTING MONUMENT
- EXISTING IRON PIPE
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED CONCRETE
- PROPOSED PAVEMENT

STATE OF MAINE — MICHAEL F. TADEMA-WELANDT — 3131 — LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	09/18/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 565 CONGRESS STREET, SUITE 201, PORTLAND, MAINE 04101
PHONE: (207) 926-5111
WEB SITE: www.terradyncons.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

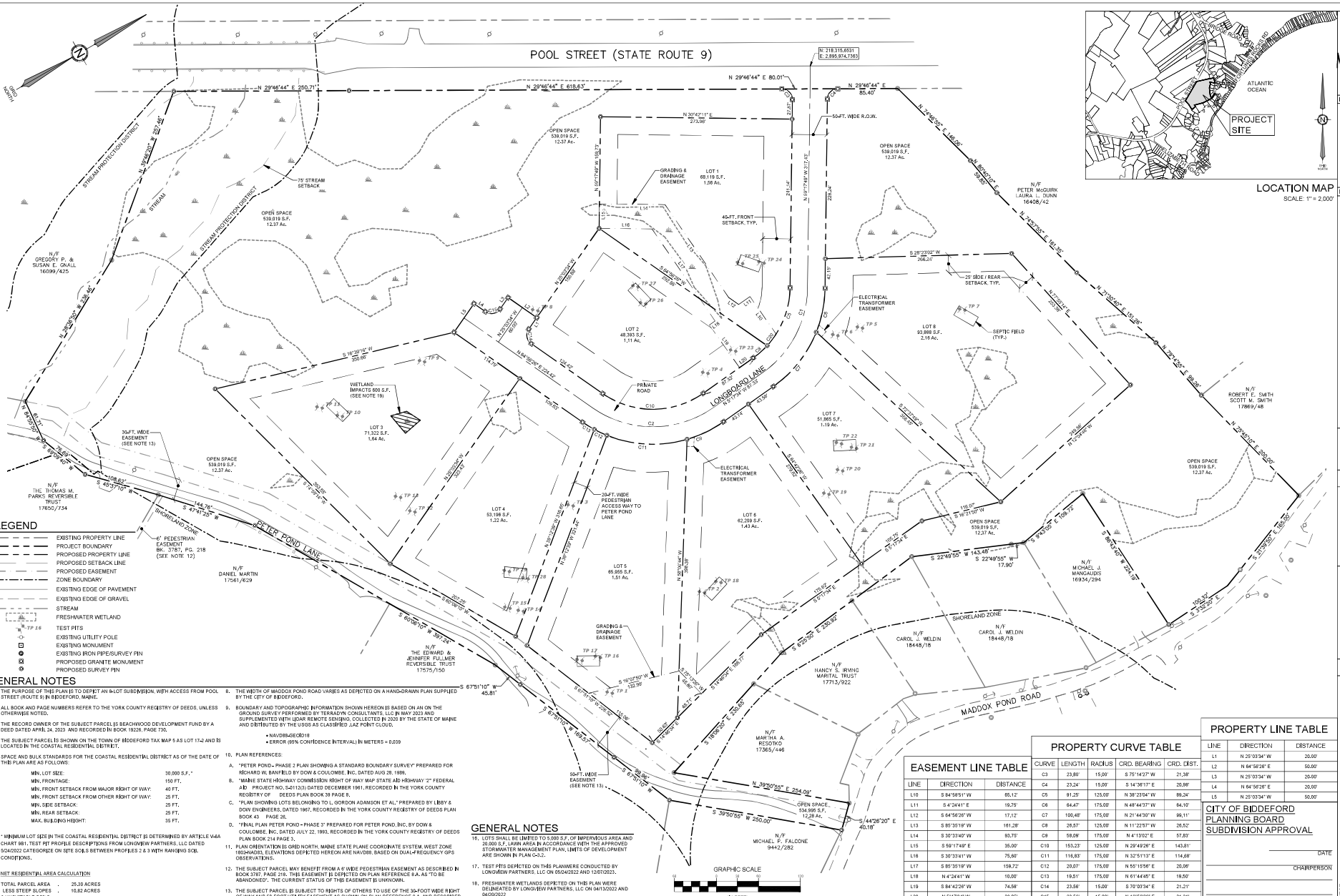
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
POOL STREET, BIDDEFORD, ME
SHEET TITLE: COVER SHEET
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
P.O. BOX 261
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-1.0

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1143



LOCATION MAP

SCALE: 1" = 2,000'

LEGEND

- EXISTING PROPERTY LINE
- PROJECT BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT
- ZONE BOUNDARY
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- STREAM
- FRESHWATER WETLAND
- TP 16 TEST PITS
- EXISTING UTILITY POLE
- EXISTING MONUMENT
- EXISTING IRON PIPE/SURVEY PIN
- PROPOSED GRANITE MONUMENT
- PROPOSED SURVEY PIN

GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT AN 8-LOT SUBDIVISION, WITH ACCESS FROM POOL STREET (ROUTE 9) IN BIDDEFORD, MAINE.
2. ALL BOOK AND PAGE NUMBERS REFER TO THE YORK COUNTY REGISTRY OF DEEDS, UNLESS OTHERWISE NOTED.
3. THE RECORD OWNER OF THE SUBJECT PARCEL IS BEACHWOOD DEVELOPMENT FUND BY A DEED DATED APRIL 24, 2023 AND RECORDED IN BOOK 19228, PAGE 730.
4. THE SUBJECT PARCEL IS SHOWN ON THE TOWN OF BIDDEFORD TAX MAP 5 AS LOT 17-2 AND IS LOCATED IN THE COASTAL RESIDENTIAL DISTRICT.
5. SPACE AND BULK STANDARDS FOR THE COASTAL RESIDENTIAL DISTRICT AS OF THE DATE OF THIS PLAN ARE AS FOLLOWS:

MIN. LOT SIZE:	30,000 S.F.*
MIN. FRONTAGE:	150 FT.
MIN. FRONT SETBACK FROM MAJOR RIGHT OF WAY:	40 FT.
MIN. FRONT SETBACK FROM OTHER RIGHT OF WAY:	25 FT.
MIN. SIDE SETBACK:	25 FT.
MIN. REAR SETBACK:	25 FT.
MAX. BUILDING HEIGHT:	35 FT.

* MINIMUM LOT SIZE IN THE COASTAL RESIDENTIAL DISTRICT IS DETERMINED BY ARTICLE V-4A CHART 9B1, TEST PIT PROFILE DESCRIPTIONS FROM LONGVIEW PARTNERS, LLC DATED 5/24/2022 CATEGORIZE ON SITE SOILS BETWEEN PROFILES 2 & 3 WITH RANGING SOIL CONDITIONS.

6. NET RESIDENTIAL AREA CALCULATION

TOTAL PARCEL AREA	25.30 ACRES
LESS STEEP SLOPES & UNSUITABLE SOILS	10.82 ACRES
LESS WETLANDS	3.62 ACRES
TOTAL	10.86 ACRES
MIN. LOT DENSITY	30,000 SF
MAXIMUM LOTS	15
PROPOSED LOTS	8

7. THE CITY OF BIDDEFORD SHALL NOT BE RESPONSIBLE FOR MAINTENANCE, REPAIR, OR PLOWING OF THE PROPOSED ROADWAY; FURTHER LOT DIVISIONS UTILIZING THE PRIVATE WAY ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE BOARD.
8. THE WIDTH OF MADDOX POND ROAD VARIES AS DEPICTED ON A HAND-DRAWN PLAN SUPPLIED BY THE CITY OF BIDDEFORD.
9. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AN ON THE GROUND SURVEY PERFORMED BY TERRADYN CONSULTANTS, LLC IN MAY 2023 AND SUPPLEMENTED WITH LIDAR REMOTE SENSING COLLECTED IN 2020 BY THE STATE OF MAINE AND DISTRIBUTED BY THE USGS AS CLASSIFIED .LAZ POINT CLOUD.
   - NAVD88-GEOID18
   - ERROR (95% CONFIDENCE INTERVAL) IN METERS = 0.039
10. PLAN REFERENCES:
    A. "PETER POND - PHASE 2 PLAN SHOWING A STANDARD BOUNDARY SURVEY" PREPARED FOR RICHARD W. BANFIELD BY DOW & COULOMBE, INC. DATED AUG 29, 1989.
    B. "MAINE STATE HIGHWAY COMMISSION RIGHT-OF-WAY MAP STATE AID HIGHWAY "2" FEDERAL AID PROJECT NO. S-4113(3) DATED DECEMBER 1961, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 39 PAGE 8.
    C. "PLAN SHOWING LOTS BELONGING TO L. GORDON ADAMSON ET AL." PREPARED BY LIBBY & DOW ENGINEERS, DATED 1967, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 43 PAGE 26.
    D. "FINAL PLAN PETER POND - PHASE 3" PREPARED FOR PETER POND, INC. BY DOW & COULOMBE, INC. DATED JULY 22, 1993, RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 214 PAGE 3.
11. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL-FREQUENCY GPS OBSERVATIONS.
12. THE SUBJECT PARCEL MAY BENEFIT FROM A 6' WIDE PEDESTRIAN EASEMENT AS DESCRIBED IN BOOK 3787, PAGE 218. THIS EASEMENT IS DEPICTED ON PLAN REFERENCE 8.A. AS "TO BE ABANDONED". THE CURRENT STATUS OF THIS EASEMENT IS UNKNOWN.
13. THE SUBJECT PARCEL IS SUBJECT TO RIGHTS OF OTHERS TO USE OF THE 30-FOOT WIDE RIGHT OF WAY AND 50-FOOT UTILITY EASEMENT AS SHOWN ON PLAN REFERENCE 8.A. AND DESCRIBED IN THE FOLLOWING DEEDS: BOOK 2981, PAGE 302; BOOK 3673, PAGE 117; BOOK 3787, PAGE 218; BOOK 3109, PAGE 19; BOOK 2352, PAGE 142; BOOK 1258, PAGE 417; BOOK 3622, PAGE 123; BOOK 4598, PAGE 131; BOOK 3832, PAGE 230; BOOK 2016, PAGE 42.
14. THE SUBJECT PARCEL IS SUBJECT TO MINERAL RIGHTS RESERVATIONS AND UTILITY EASEMENTS APPEARING OF RECORD.
15. THE SUBJECT PARCEL IS LOCATED WITHIN ZONE X, AREAS OF MINIMAL FLOOD HAZARD, AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF BIDDEFORD, YORK COUNTY, COMMUNITY-PANEL NUMBER 2301450018, HAVING AN EFFECTIVE DATE OF MAY 15, 1984.

GENERAL NOTES

16. LOTS SHALL BE LIMITED TO 5,000 S.F. OF IMPERVIOUS AREA AND 20,000 S.F. LAWN AREA IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN. LIMITS OF DEVELOPMENT ARE SHOWN IN PLAN C-3.2.
17. TEST PITS DEPICTED ON THIS PLANWERE CONDUCTED BY LONGVIEW PARTNERS, LLC ON 05/24/2022 AND 12/07/2023.
18. FRESHWATER WETLANDS DEPICTED ON THIS PLAN WERE DELINEATED BY LONGVIEW PARTNERS, LLC ON 04/13/2022 AND 04/20/2022.
19. THIS PROJECT IS SUBJECT TO CONDITIONS OF A WETLAND FILL PERMIT FROM THE U.S. ARMY CORPS OF ENGINEERS FOR 460 S.F. OF WETLAND FILL ON LOT 3. ANY ADDITIONAL WETLAND IMPACT MUST BE APPROVED BY USACOE AND THE MAINE D.E.P. AS APPLICABLE.
20. NO LOT SHALL BE ACCESSED FROM EITHER END OF THE HAMMERHEAD TURN-AROUND.
21. PROPOSED PRIVATE ROAD WILL NOT BE SUBMITTED FOR FUTURE PUBLIC ACCEPTANCE

GRAPHIC SCALE
0 30 60 120
(IN FEET)
1 INCH = 60 FT.

EASEMENT LINE TABLE

LINE	DIRECTION	DISTANCE
L10	S 84°58'51" W	65.12'
L11	S 4°24'41" E	19.75'
L12	S 64°56'26" W	17.12'
L13	S 85°35'19" W	161.28'
L14	S 30°33'40" W	93.75'
L15	S 59°17'49" E	35.00'
L16	S 30°33'41" W	75.90'
L17	S 85°35'19" W	159.72'
L18	N 4°24'41" W	10.00'
L19	S 84°42'26" W	74.58'
L20	N 5°17'34" W	23.85'

EASEMENT CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C20	21.21'	125.00'	N 22°20'03" W	21.19'

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C3	23.80'	15.00'	S 75°14'27" W	21.38'
C4	23.24'	15.00'	S 14°36'17" E	20.98'
C5	91.25'	125.00'	N 38°23'04" W	89.24'
C6	64.47'	175.00'	N 48°44'37" W	64.10'
C7	100.48'	175.00'	N 21°44'30" W	99.11'
C8	26.57'	125.00'	N 11°22'57" W	26.52'
C9	59.09'	175.00'	N 4°13'02" E	57.83'
C10	153.23'	125.00'	N 29°49'26" E	143.81'
C11	116.83'	175.00'	N 32°51'13" E	114.68'
C12	20.07'	175.00'	N 55°15'56" E	20.06'
C13	19.51'	175.00'	N 61°44'45" E	19.50'
C14	23.56'	15.00'	S 70°03'34" E	21.21'
C15	23.56'	15.00'	N 19°56'26" E	21.21'

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C1	141.38'	150.00'	N 32°17'42" W	136.21'
C2	183.87'	150.00'	N 29°49'26" E	172.57'

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L1	N 25°03'34" W	20.00'
L2	N 64°56'26" E	50.00'
L3	N 25°03'34" W	20.00'
L4	N 64°56'26" E	20.00'
L5	N 25°03'34" W	50.00'

CITY OF BIDDEFORD
PLANNING BOARD
SUBDIVISION APPROVAL

DATE

CHAIRPERSON

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS
RECEIVED_____, 20____
AT ____h____m____M. AND RECORDED IN PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTER

MICHAEL E. TADEMA-WELANOTTE
NO. 12459
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE
DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	09/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

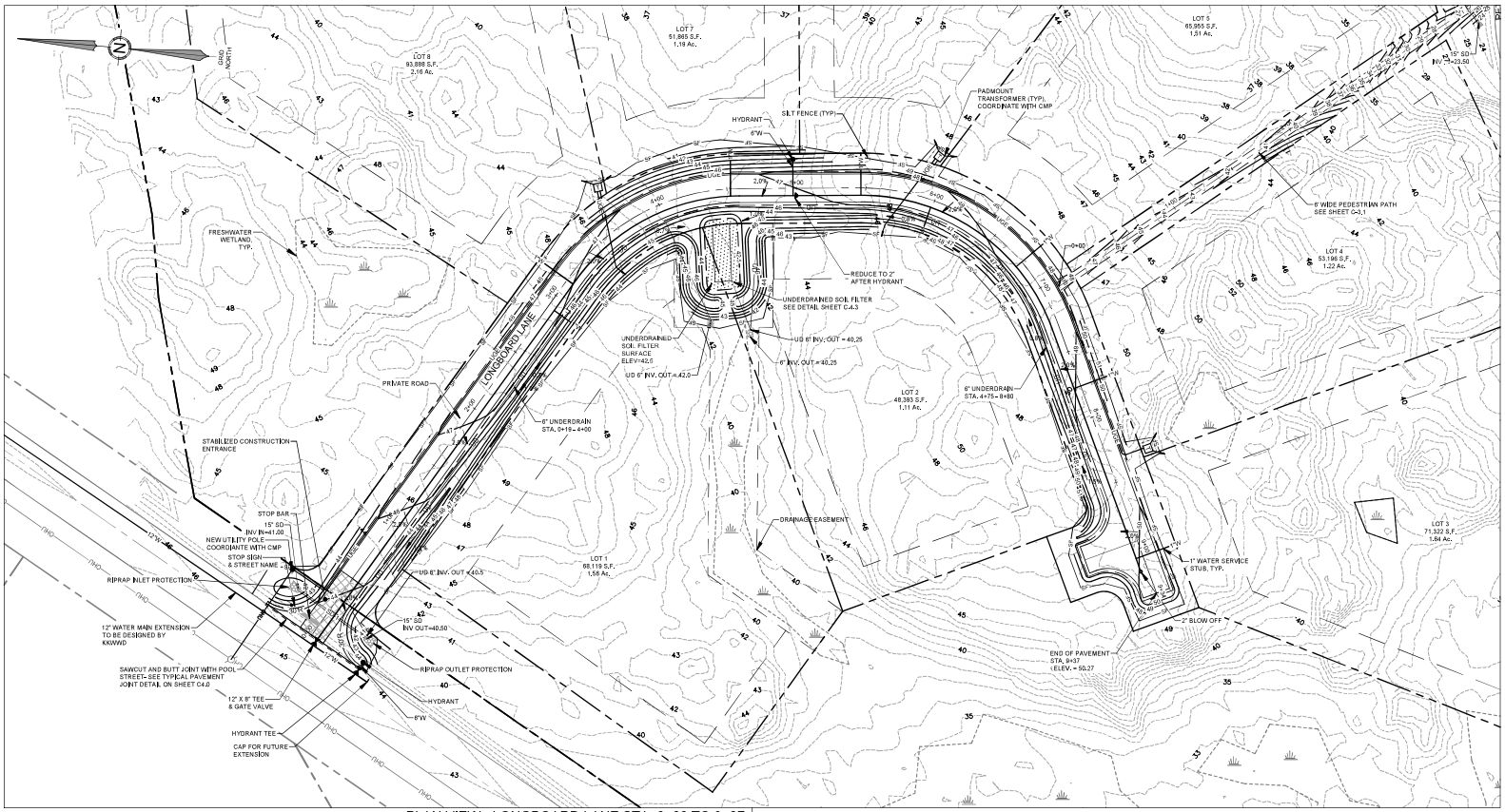
TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting
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PHONE: (207) 939-5111
WEB SITE: www.terradynconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: POOL STREET (ROUTE 9), BIDDEFORD, ME
SHEET TITLE: SUBDIVISION PLAN
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: 10 KEY CIRCLE, KENNEBUNK, ME 04043

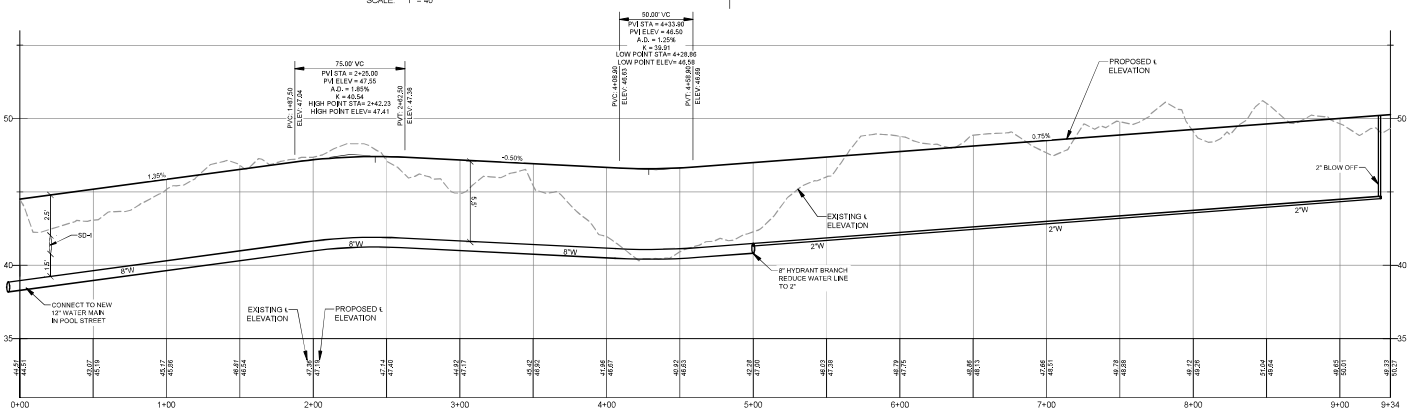
DATE: 3/10/2023
SCALE: 1" = 60'
JOB NO: 23-023
SHEET: C-2.0

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PLAN VIEW - LONGBOARD LANE STA. 0+00 TO 9+37

SCALE: 1" = 40'



PROFILE - LONGBOARD LANE STA. 0+00 TO 9+37

SCALE: 1" = 40' HORIZ.
1" = 4' VERT.

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-1	15"	61'	0.82%	HDPE
SD-2	15"	26'	0.85%	HDPE

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING ANY EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. STORM DRAIN PIPE SHALL BE SMOOTH BORE POLYETHYLENE UNLESS OTHERWISE NOTED ON THE PLAN.
3. FINAL DESIGN OF THE ELECTRICAL DISTRIBUTION SHALL BE COORDINATED WITH CENTRAL MAINE POWER PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A STREET OPENING PERMIT FROM THE CITY OF BIDDEFORD FOR WORK WITHIN POOL STREET, IF NECESSARY.
5. THE CONTRACTOR SHALL COORDINATE ALL WATER WORK WITH THE KENNEBUNK, KENNEBUNKPORT, & WELLS WATER DISTRICT.
6. ALL WATER MAINS, SERVICES, SERVICE ENTRANCES, METER ARRANGEMENTS AND BACKFLOW PREVENTORS WILL BE IN ACCORDANCE WITH AND TO THE SATISFACTION OF KENNEBUNK, KENNEBUNKPORT, & WELLS WATER DISTRICT STANDARDS AND SPECIFICATIONS, TERMS & CONDITIONS, AND ALSO IN ACCORDANCE WITH ALL MAINE PUBLIC UTILITY COMMISSION RULES & REGULATIONS.
7. ALL NEW OR DEWATERED WATER LINES LARGER THAN 2" IN DIAMETER MUST BE TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA C600, AWWA C651 AND ALL KENNEBUNK, KENNEBUNKPORT, & WELLS WATER DISTRICT STANDARDS TO THE SATISFACTION OF THE WATER DISTRICT.
   - THE APPLICANT WILL NEED TO ARRANGE WORK SUCH THAT FLUSHING AND TESTING IS ABLE TO OCCUR, AND DOES NOT DAMAGE LANDSCAPING OR EROSION CONTROL MEASURES, THE CONTRACTOR SHALL COORDINATE THE TIMING OF THE TEST SO AS NOT TO INTERFERE WITH OTHER WORK ON THE SITE. TESTING AND DISINFECTION MUST BE COMPLETED BEFORE ANY LOTS ARE DEVELOPED. ALL TESTING AND DISINFECTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. DRIVEWAY CULVERTS SHALL BE A MINIMUM 15" IN DIAMETER.
9. ROADWAY RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.
11. ACRES OF DISTURBANCE = 1.17 AC

STATE OF MAINE
MICHAEL E. TADEMA-WEIMONT
NUMBER 12106
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 41 MAIN STREET, SUITE 301 KENNEBUNK, MAINE 04043
PHONE: (207) 985-5111
WEB SITE: www.jamesdyntonsurvey.com

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Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

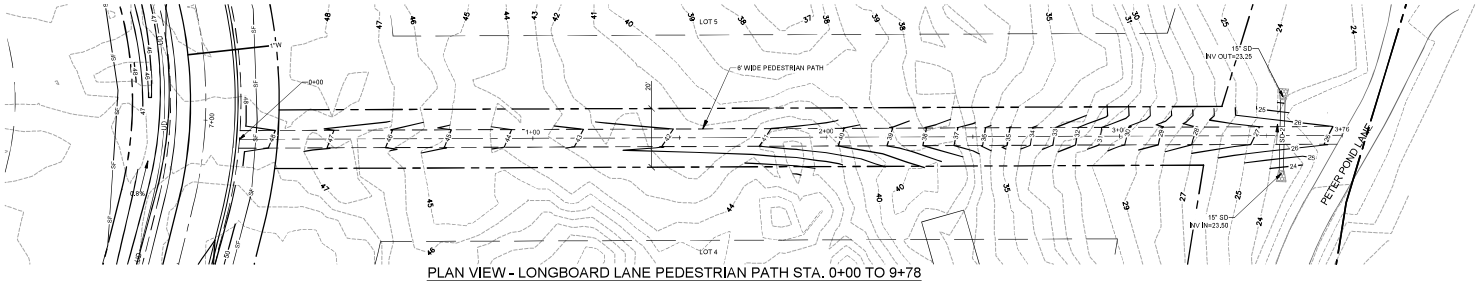
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NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: STREET, BIDDEFORD, ME
SHEET TITLE: PLAN & PROFILE OF LONGBOARD RIDGE
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
POOL STREET, LLC
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-3.0

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PLAN VIEW - LONGBOARD LANE PEDESTRIAN PATH STA. 0+00 TO 9+78

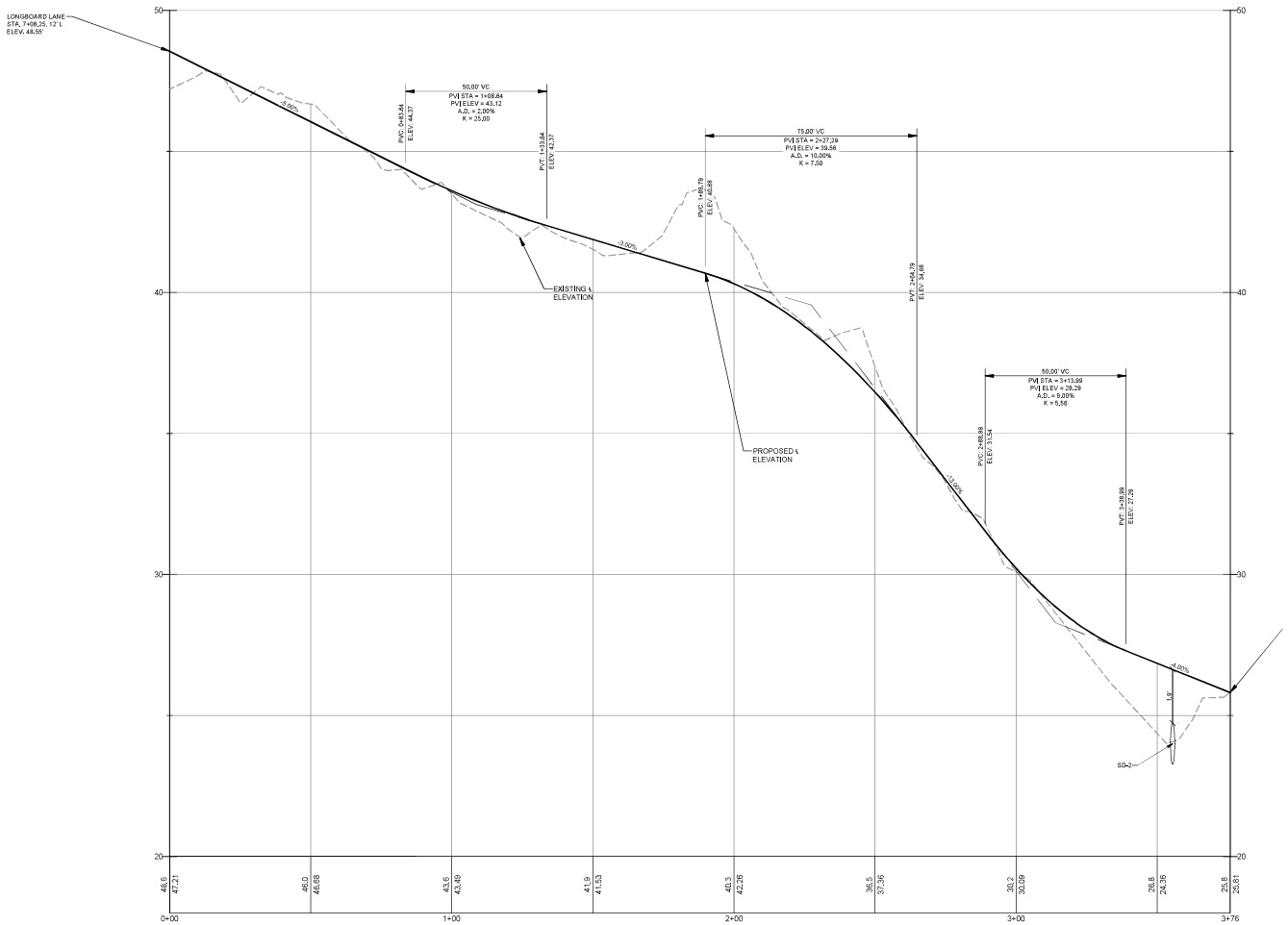
SCALE: 1" = 20'

STORM DRAIN PIPE DATA				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-1	15"	61'	0.82%	HDPE
SD-2	15"	26'	0.85%	HDPE

GRID NORTH

NOTES:

1. STANDARD TRAIL BUILDING AND MAINTENANCE PRACTICES SHOULD BE FOLLOWED SUCH AS THOSE ASSOCIATED WITH AMERICAN TRAILS OR THE UNITED STATES FOREST SERVICE.
2. SEE SHEET C-4.0 FOR A TYPICAL TRAIL CROSS SECTION.
3. CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 2 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.



PROFILE - LONGBOARD LANE PEDESTRIAN PATH STA. 0+00 TO 3+78

SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

GRAPHIC SCALE

0 5 10 20 40

(IN FEET)
1 INCH = 20 FT.

MICHAEL E. TADEMA-WEIMONTH
NO. 12135
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

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TERRADYN CONSULTANTS, LLC

Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
LONGBOARD RIDGE SUBDIVISION
LONGBOARD STREET (BIDDEFORD, ME

SHEET TITLE:
PATH PLAN & PROFILE

RECORD OWNER:
BEACHWOOD DEVELOPMENT FUND
PO BOX 1555
KENNEBUNK, ME 04043

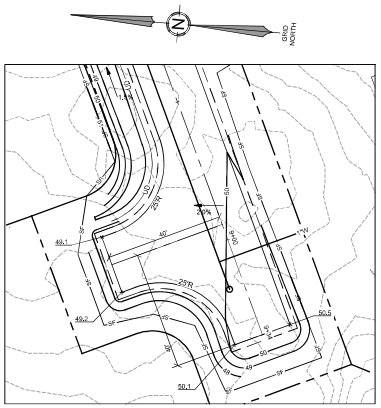
DATE: 3/10/2023
SCALE: 1" = 20'
JOB NO: 23-023
SHEET: C-3.1

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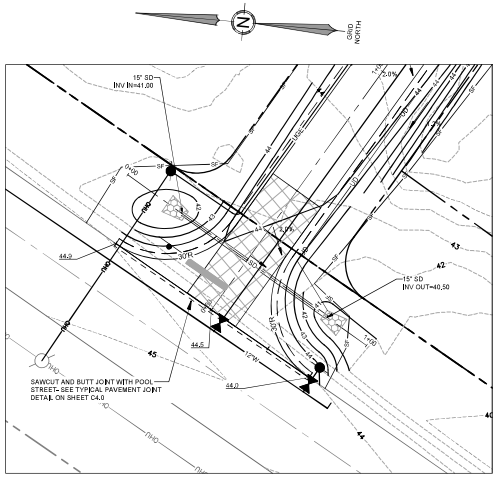
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NOTES:

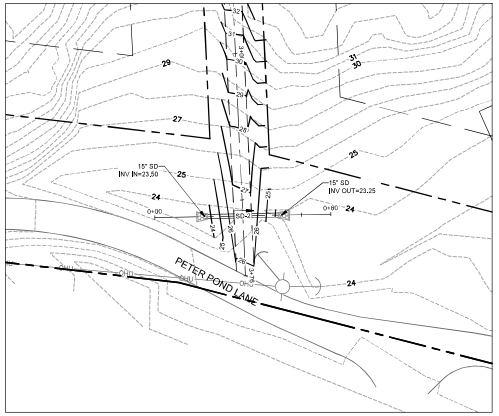
1. CONTRACTOR SHALL PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.



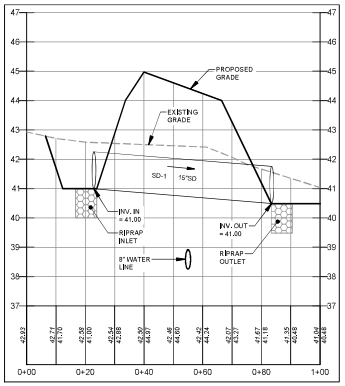
PLAN VIEW - HAMMERHEAD DETAIL
SCALE: 1" = 20'



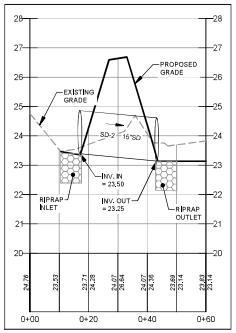
PLAN VIEW - PROPOSED ROAD CONNECTION TO POOL STREET
SCALE: 1" = 20'



PLAN VIEW - STORM DRAIN 2
SCALE: 1" = 20'



CULVERT SECTION - STORM DRAIN 1
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.



CULVERT SECTION - STORM DRAIN 2
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

GRAPHIC SCALE
0 5 10 20 40
(IN FEET)
1 INCH = 20 FT.

STATE OF MAINE
MICHAEL E. TADEMA-WEIMINOTT
No. 12082
LICENSED PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

DATE: 01/17/2024

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TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
LONGBOARD RIDGE SUBDIVISION
POOL STREET, BIDDEFORD, ME

SHEET TITLE:
PLAN & PROFILE DETAILS

RECORD OWNER:
BEACHWOOD DEVELOPMENT FUND
PO BOX 4457
KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: 1" = 20'
JOB NO: 23-023
SHEET: C-3.2

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1147



GENERAL NOTES

1. CLEARING LIMITS, HOUSE FOOTPRINTS AND DRIVEWAY LOCATIONS ARE FOR CONCEPTUAL PURPOSES ONLY. FINAL LOCATIONS WILL BE DETERMINED BY INDIVIDUAL LOT OWNERS.
2. LOT DEVELOPMENT IS LIMITED TO 5,000 S.F. OF IMPERVIOUS AREA AND 20,000 S.F. OF LAWN AREA IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN.

LEGEND

- EXISTING PROPERTY LINE
- PROJECT BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- EXISTING UTILITY POLE
- FRESHWATER WETLAND
- PROPOSED TREELINE
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED EDGE OF GRAVEL
- SEPTIC FIELD
- 46 EXISTING CONTOUR LINE
- 46 PROPOSED CONTOUR LINE

STATE OF MAINE
MICHAEL E. TADEMA-WEILAND
No. 12082
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
1	09/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL

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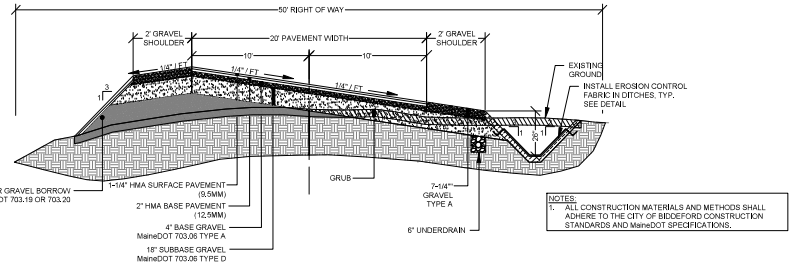
PROJECT: LONGBOARD RIDGE SUBDIVISION
LOCATION: POOL STREET, BIDDEFORD, ME

SHEET TITLE: OVERALL DEVELOPMENT PLAN

RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
POOL STREET
KENNEBUNK, ME 04043

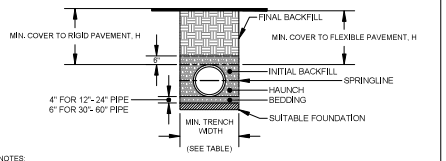
DATE: 3/10/2023
SCALE: 1" = 60'
JOB NO: 23-023
SHEET: C-3.3

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NOTES:
1. ALL CONSTRUCTION MATERIALS AND METHODS SHALL ADHERE TO THE CITY OF BIDDEFORD CONSTRUCTION STANDARDS AND MaineDOT SPECIFICATIONS.

LONGBOARD LANE TYPICAL CROSS SECTION
NOT TO SCALE



NOTES:

1. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

2. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

3. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm), 6" (150mm) FOR 30"-60" (750mm-900mm).

4. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

5. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

RECOMMENDED MINIMUM TRENCH WIDTHS

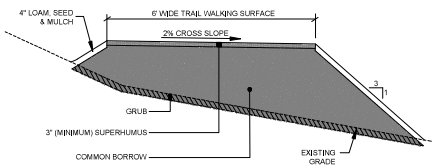
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

TYPICAL TRENCH DETAIL
NOT TO SCALE

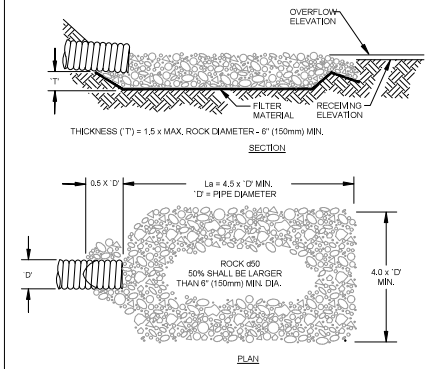


NOTES:

1. STANDARD TRAIL BUILDING PRACTICES, SUCH AS THOSE ASSOCIATED WITH AMERICAN TRAILS OR THE UNITED STATES FOREST SERVICE, SHALL BE USED TO LIMIT EROSION AND PROVIDE FOR PROPOER DRAINAGE SUCH AS GRADE DIPS, KNICKS, AND ROLLING GRADE DIPS.

2. SUPERHUMUS BY CASELLA ORGANICS, 800-933-6474

TRAIL CROSS SECTION
NOT TO SCALE



THICKNESS ('T') = 1.5 x MAX. ROCK DIAMETER - 6" (150mm) MIN.

SECTION

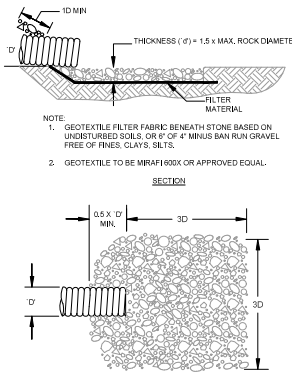
PLAN

PIPE OUTLET PROTECTION SIZING TABLE

PIPE SIZE (IN)	LENGTH (FT)	WIDTH (FT)
6	2.5	2.0
12	5.0	4.0
15	6.25	5.0
18	7.5	6.0
24	10.0	8.0
30	13.0	10.0
36	15.0	12.0
42	17.5	14.0
48	20.0	16.0
60	25.0	20.0

NOTES:
1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. FILTER MATERIAL SHALL BE FILTER FABRIC (MIRAFI 600X OR APPROVED EQUAL) OR 6" (150mm) THICK MINIMUM GRADED GRAVEL LAYER.

PIPE OUTLET PROTECTION
NOT TO SCALE



NOTE:
1. GEOTEXTILE FILTER FABRIC BENEATH STONE BASED ON UNDISTURBED SOILS, OR 6" OF 4" MINUS BAN RUN GRAVEL FREE OF FINES, CLAYS, SILTS.
2. GEOTEXTILE TO BE MIRAFI 600X OR APPROVED EQUAL.

SECTION

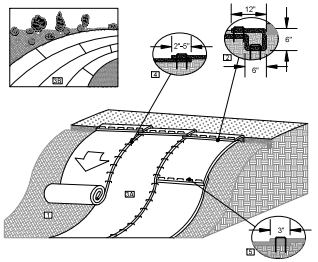
PLAN

PIPE INLET PROTECTION SIZING TABLE

PIPE SIZE (IN)	LENGTH (FT)	WIDTH (FT)
6	2.0	1.5
12	3.5	3.0
15	4.5	3.75
18	5.25	4.5
24	7.0	6.0
30	8.75	7.5
36	10.5	9.0
42	12.25	10.5
48	14.0	12.0
60	17.5	15.0

NOTES:
1. IN DEFINED CHANNELS, APRON SHALL EXTEND FULL WIDTH OF BOTTOM AND ONE FOOT ABOVE MAX. HEADWATER OR UP TO BANK FULL, WHICHEVER IS LESS.

PIPE INLET PROTECTION
NOT TO SCALE



NOTE:
CLEAN & APPLY TACK COAT TO SURFACES WHERE NEW BIT. PAVEMENT IS INSTALLED

TYPICAL PAVEMENT JOINT
NOT TO SCALE

PHOTODEGRADABLE EROSION CONTROL BLANKET SELECTION

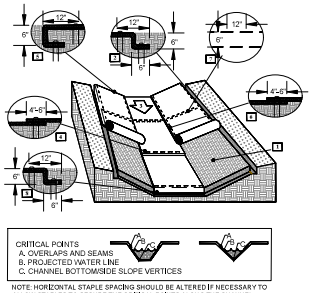
6:1 > 3:1 SLOPES	3:1 > 2:1 SLOPES	≥ 2:1 SLOPES
NA GREEN DS75	NA GREEN S150	NA GREEN SC150

PERMANENT TURF REINFORCEMENT
IF THE PLAN CALLS FOR PERMANENT TURF REINFORCEMENT, USE NORTH AMERICAN GREEN VMAX SC250

NOTES:

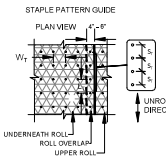
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES/PINS SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON THE RECPS TYPE.
5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECPS WIDTH.

EROSION CONTROL FABRIC SLOPE INSTALLATION
NOT TO SCALE



NOTE: HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

STAPLE PATTERN GUIDE



STAPLE PATTERN	
DIMENSION	
W_T	20"
L_T	20"
S_T	18"
NOMINAL FREQUENCY	3.8 / SY

PIN / STAPLE / TWIST PIN, AS APPROPRIATE FOR FIELD CONDITIONS

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. GROUND SURFACE MUST BE FREE OF DEBRIS, ROCKS, CLAY CLODS AND RAKED SMOOTH SUFFICIENT TO ALLOW INTIMATE CONTACT OF THE RECP WITH THE SOIL OVER THE ENTIRETY OF THE INSTALLATION.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES/PINS APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES/PINS SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES/PINS IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. PLACE CONSECUTIVE RECPS END-OVER-END (SHINGLE STYLE) WITH A 4"- 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECPS.
5. FULL LENGTH EDGE OF RECPS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES/PINS SPACED AT S_T APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECPS MUST BE OVERLAPPED APPROXIMATELY 4"- 6" AND SECURED WITH STAPLES/STAKES/PINS AT S_T.
7. IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 6" APART AND 12" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECPS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES/PINS SPACED AT S_T APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
9. FASTENERS SHOULD PROVIDE A MINIMUM OF TWENTY POUNDS OF PULLOUT RESISTANCE. 6" X 1" ELEVEN GAUGE STAPLES ARE TYPICALLY ADEQUATE IN LOOSE SOILS. LONGER STAPLES MAY BE NECESSARY. TWIST PINS CAN PROVIDE THE GREATEST PULLOUT RESISTANCE. IN HARD OR ROCKY SOILS, STRAIGHT PINS MAY BY USED WHERE STAPLES OR TWIST PINS ARE REFUSED, PROVIDED THE MINIMUM PULLOUT REQUIREMENTS ARE MET.

EROSION CONTROL FABRIC CHANNEL INSTALLATION
NOT TO SCALE

MICHAEL E. TADEMA-WELANDT
No. 13231
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

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Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
STREET: BIDDEFORD, ME
SHEET TITLE: SITE DETAILS
RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
ADDRESS: PO BOX 10 KENNEBUNK, ME 04043

DATE: 3/10/2023
SCALE: AS NOTED
JOB NO: 23-023
SHEET: C-4.0

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EROSION AND SEDIMENT CONTROL PLAN

PRE-CONSTRUCTION PHASE
A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 MRSA § 480-B. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS, MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED, ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES MUST BE TAKEN, THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE.

BMP CONSTRUCTION PHASE
A. SEDIMENT BARRIERS: PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE PROPOSED DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

B. CONSTRUCTION ENTRANCE: PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

C. RIPRAP: SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH, CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OF THE RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE. WHERE RIPRAP IS USED FOR OUTLET PROTECTION, THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL SO THAT IT IS IN PLACE WHEN THE PIPE OR CHANNEL BEGINS TO OPERATE. MAINTAIN TEMPORARY RIPRAP, SUCH AS TEMPORARY CHECK DAMS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

D. TEMPORARY STABILIZATION. STABILIZE WITH TEMPORARY SEEDING, MULCH, OR OTHER NON-ERODABLE COVER ANY EXPOSED SOILS THAT WILL REMAIN UNWORKED FOR MORE THAN 14 DAYS EXCEPT. STABILIZE AREAS WITHIN 100 FEET OF A WETLAND OR WATERBODY WITHIN 7 DAYS OR PRIOR TO A PREDICTED STORM EVENT, WHICHEVER COMES FIRST. IF HAY OR STRAW MULCH IS USED, THE APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SF OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. HAY MULCH MUST BE KEPT MOIST OR ANCHORED TO PREVENT WIND BLOWING. AN EROSION CONTROL BLANKET OR MAT SHALL BE USED AT THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER) AND ON ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS. GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING, ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE SECOND PHASE, AND SO ON.

E. VEGETATED WATERWAY. UPON FINAL GRADING, THE DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED TO PERMANENT VEGETATION AND MULCHED AND WILL NOT BE USED AS OUTLETS UNTIL A DENSE, VIGOROUS VEGETATIVE COVER HAS BEEN OBTAINED. ONCE SOIL IS EXPOSED FOR WATERWAY CONSTRUCTION, IT SHOULD BE IMMEDIATELY SHAPED, GRADED AND STABILIZED. VEGETATED WATERWAYS NEED TO BE STABILIZED EARLY DURING THE GROWING SEASON (PRIOR TO SEPTEMBER 15). IF FINAL SEEDING OF WATERWAYS IS DELAYED PAST SEPTEMBER 15, EMERGENCY PROVISIONS SUCH AS SOD OR RIPRAP MAY BE REQUIRED TO STABILIZE THE CHANNEL. WATERWAYS SHOULD BE FULLY STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

PERMANENT STABILIZATION DEFINED
A. SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

B. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

C. PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

D. RIPRAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.

E. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

F. DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE CHANNEL.

GENERAL CONSTRUCTION PHASE
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT.

A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY DESIGNATION OF THE OWNER AND INSPECTING ENGINEER.

B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.

E. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

F. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS.

G. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL.

H. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

I. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.

J. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.

K. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS.

L. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.

M. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY.

N. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

O. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

PERMANENT VEGETATION
PERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE ENVIRONMENT.

SEEDBED PREPARATION
A. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.

B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 19.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P2O5-K2O) OR EQUIVALENT, APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT
A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQ. FT.).

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT IN AREAS WHERE MECHANICAL OPERATIONS ARE POSSIBLE. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED, ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLED. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

D. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

E. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

F. PERMANENT SEEDING SHOULD BE MADE 45 DAYS PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING WITH MULCH AFTER THE FIRST KILLING FROST AND BEFORE SNOWFALL. WHEN CROWN VETCH IS SEEDED IN LATER SUMMER, AT LEAST 30% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, MULCH ACCORDING TO THE TEMPORARY MULCHING BMP AND OVERWINTER STABILIZATION AND CONSTRUCTION TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

G. FOLLOWING SEED BED PREPARTATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS./1,000 S.F. WITH A MIXTURE OF 35% CREEPING RED FESCUE, 8% RED TOP, 34% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.

I. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING.

J. AREAS WHICH CANNOT BE SEEDED WITHIN THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION AND THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE GROWING SEASON.

WINTER CONSTRUCTION PHASE
IF AN AREA IS NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES BY NOVEMBER 15, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES.

A. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.

B. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.

C. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF), THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.

D. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR ALL SLOPES GREATER THAN 8 % OR OTHER AREAS EXPOSED TO DIRECT WIND.

E. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGEWAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3 %.

F. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

G. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SO THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

H. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.

I. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.

J. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THAT SAME DAY.

K. IF SNOWFALL IS GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.

L. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.

M. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

MAINTENANCE AND INSPECTION DURING CONSTRUCTION PHASE
A. INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL) AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. A RAINFALL EVENT OF 1" IN A 24 HOUR PERIOD WOULD TRIGGER A WET WEATHER INSPECTION.

B. MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

C. DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATIONS WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEP STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

GOOD HOUSEKEEPING NOTES:

1. **SPILL PREVENTION.** CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

   NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT, FOR OIL SPILLS, CALL 1-800-482-0777 (WHICH IS AVAILABLE 24 HOURS A DAY). FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 (WHICH IS AVAILABLE 24 HOURS A DAY). FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT : HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGENCY/INDEX.HTM

2. **GROUNDWATER PROTECTION.** DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN INFILTRATION AREA OR ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR, PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA. IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

   SEE MAINE DEP CHAPTER 500 APPENDIX D FOR LICENSE BY RULE STANDARDS FOR INFILTRATION OF STORMWATER.

   NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).

3. **FUGITIVE SEDIMENT AND DUST.** ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION, OR MAY NOT BE USED FOR DUST CONTROL. BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO ANTICIPATED STORM EVENTS. OPERATIONS DURING DRY PERIODS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

   NOTE: DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT MAY VIOLATE STATE WATER QUALITY STANDARDS AND THE *NATURAL RESOURCES PROTECTION ACT*.

4. **DEBRIS AND OTHER MATERIALS.** MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

   NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISION OF RULES RELATED TO SOLID, UNIVERSAL AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE PESTICIDE REQUIREMENTS.

5. **EXCAVATION DEWATERING.** EXCAVATION DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILT LADEN AND REQUIRES CORRECT AND EFFECTIVE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

   NOTE: DEWATERING CONTROLS ARE DISCUSSED IN THE MAINE EROSION AND SEDIMENT CONTROL BMPS, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

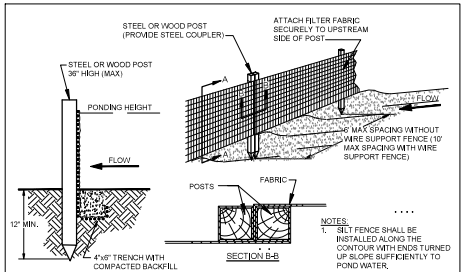
6. **AUTHORIZED NON-STORMWATER DISCHARGES.** IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

   (a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
   (b) FIRE HYDRANT FLUSHINGS;
   (c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
   (d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
   (e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
   (f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) IF DETERGENTS ARE NOT USED;
   (g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
   (h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
   (i) FOUNDATION OR FOOTER DRAINWATER WHERE FLOWS ARE NOT CONTAMINATED;
   (j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
   (k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
   (l) LANDSCAPE IRRIGATION.

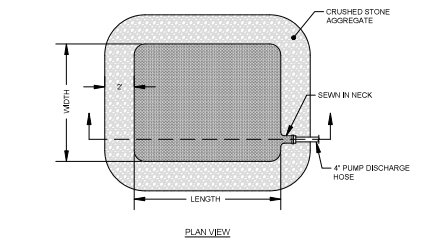
7. **UNAUTHORIZED NON-STORMWATER DISCHARGES.** THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

   (a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
   (b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
   (c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
   (d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

8. **ADDITIONAL REQUIREMENTS.** ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

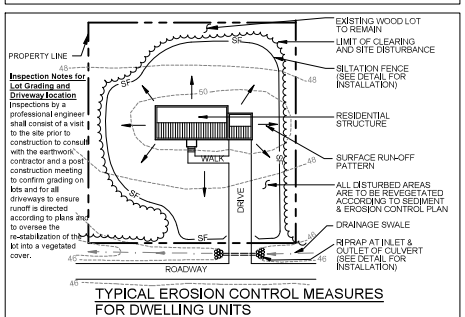


SILT FENCE
NOT TO SCALE



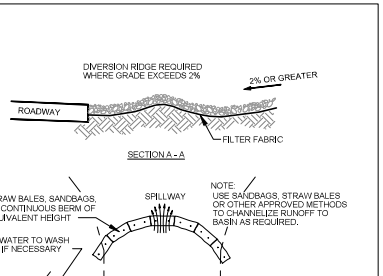
NOTES:
1. DIRTBAG BY ACF ENVIRONMENTAL
2. SEAMS MUST BE HIGH STRENGTH DOUBLE STITCHED "J" SEAMS.
3. CONSTRUCTION DEWATERING OF TURBID WATER SHALL BE PUMPED THROUGH A DIRTBAG AND RELEASED THROUGH A VEGETATED BUFFER AT LEAST 50' UPSTREAM OF WETLAND AREAS.
4. THE DIRTBAG SHALL NOT BE SITED IN CRITICAL AREAS, SUCH AS WETLANDS AND 75 FEET FROM ANY PROTECTED RESOURCE.

DIRTBAG DETAIL
NOT TO SCALE

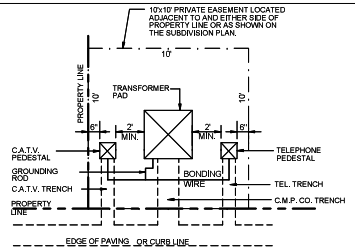


Inspection Notes for Lot Grading and Driveway location
Inspections by a professional engineer shall consist of a visit to the site prior to construction to consult with the earthwork contractor and a post construction meeting to confirm grading on lots and for all driveways to ensure runoff is directed according to plans and to oversee the re-stabilization of the lot into a vegetated cover.

TYPICAL EROSION CONTROL MEASURES FOR DWELLING UNITS
NOT TO SCALE

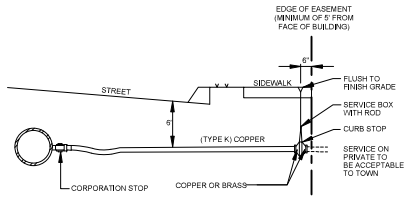


NOTES:
1. THE ENTR

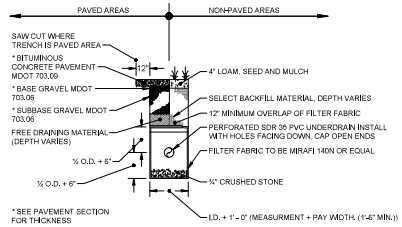


NOTE:
TRANSFORMER PAD AND COVER TO BE FIBERGLASS MEETING CENTRAL MAINE POWER SPECIFICATIONS.

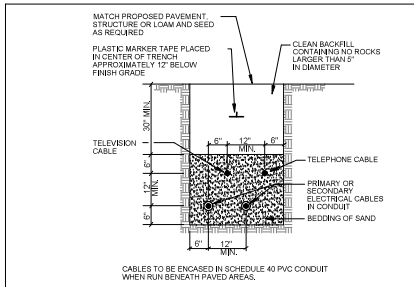
TRANSFORMER DETAIL
NOT TO SCALE



TYPICAL WATER SERVICE CONNECTION
NOT TO SCALE

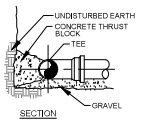


TYPICAL UNDERDRAIN TRENCH SECTION
NOT TO SCALE



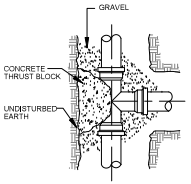
CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS.

TYPICAL UNDERGROUND CABLE INSTALLATION
NOT TO SCALE

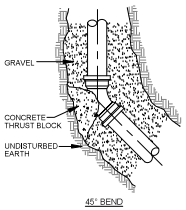


SECTION

CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
FITTINGS		90° BENDS	45° BENDS	TEES AND PLUGS
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	10	10

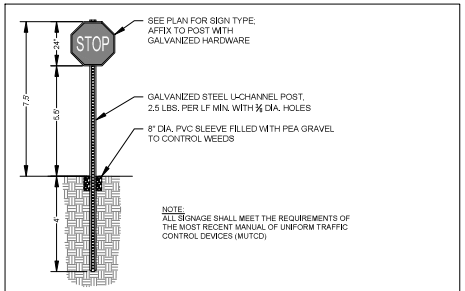


PLAN



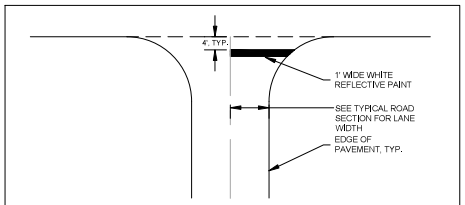
45° BEND

TEE & BEND DETAIL
NOT TO SCALE

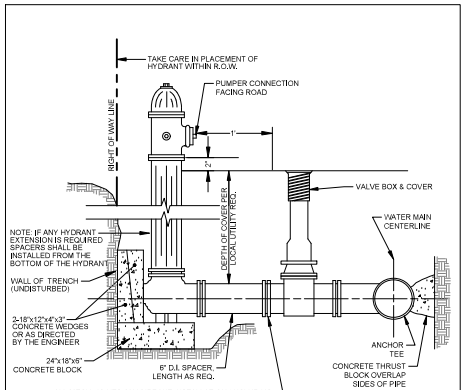


NOTE:
ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF THE MOST RECENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

STREET SIGN
NOT TO SCALE



STOP BAR DETAIL
NOT TO SCALE



ALL MECH. JOINTS ON HYDRANT INSTALLATION (INCLUDING CONNECTION TO WATER MAIN) SHALL HAVE RETAINER GLANDS AND SHALL BE ANCHORED TOGETHER WITH A MINIMUM OF TWO 3/4" DIA. THREADED RODS AND APPURTENANCES.

NOTES:
1. ALL MATERIALS SHALL CONFORM TO THE KENNEBUNK, KENNEBUNKPORT & WELLS WATER DISTRICT REQUIREMENTS
2. HYDRANT SHALL BE OPEN RIGHT
3. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE

TYP. HYDRANT INSTALLATION
NOT TO SCALE

1151

STATE OF MAINE
MICHAEL E. TADEMA-WELANDT
3931
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL

ADDRESS: 47 CLARK DRIVE, SUITE 201 EAST ARUNDEL, ME 04060
PHONE: (207) 835-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
LONGBOARD RIDGE SUBDIVISION
LOCUST STREET, BIDDEFORD, ME

SHEET TITLE:
UTILITY AND MISCELLANEOUS DETAILS

RECORD OWNER:
BEACHWOOD DEVELOPMENT FUND
PO BOX 6
KENNEBUNK, ME 04043

DATE:	3/10/2023
SCALE:	AS NOTED
JOB NO:	23-023
SHEET:	C-4.2

L:\2023\Locals\Cook,Kevin\Project Files\~Documents\2023 Jobs\23-023 Pool Street Subdivision\CAD\Permitting\23-023-DETAILS.dwg

CONSTRUCTION OVERSIGHT NOTES:

1. CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:
   - AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
   - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
   - AFTER THE FILTER MEDIA HAS BEEN INSTALLED, PLANTED, AND MULCHED. BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.
   - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
2. ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.
3. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
   - SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
   - PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE. A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
   - PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

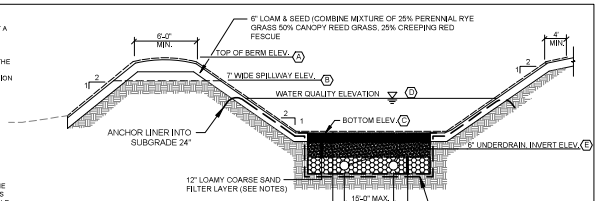
CONSTRUCTION PHASE NOTES:

CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.

COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA. OVERCOMPACTION SHOULD BE AVOIDED.

ADJUST DRAWDOWN TIME: AFTER THE FILTER BASIN IS STABILIZED, THE CONTRACTOR SHALL FILL THE BASIN UP TO THE ELEVATION OF THE WATER QUALITY VOLUME WITH CLEAN WATER AND ADJUST THE BALL VALVE TO ACHIEVE A 24-32 HR. RELEASE TIME.

UNDERDRAINED SOIL FILTER SCHEDULE		
A	TOP OF BERM ELEV.	46.00
B	SPILLWAY ELEV.	44.59
C	SURFACE ELEV.	42.50
D	WATER QUALITY ELEV.	43.71
E	UNDERDRAIN INVERT ELEV.	40.25
	FILTER SURFACE AREA (SF)	1,215
	WATER QUALITY VOLUME (CF)	1,694



FILTER BASIN

NOT TO SCALE

GENERAL NOTES:

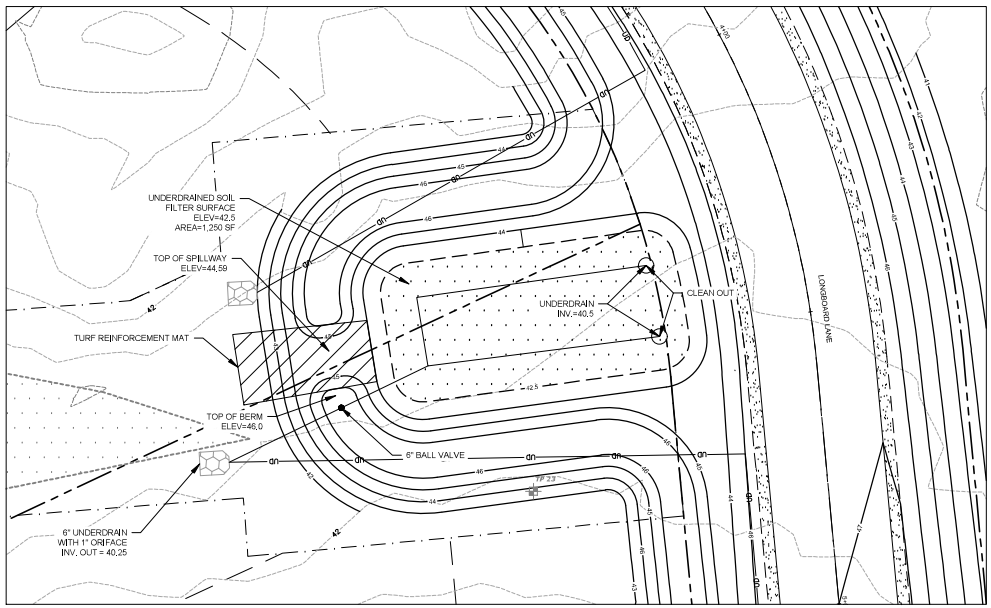
1. THE FILTER LAYER AND TOPSOIL LAYER SHALL MEET THE GRADATION REQUIREMENTS IN THE TABLES BELOW AND SHALL CONTAIN LESS THAN 2% CLAY CONTENT, AS DETERMINED BY HYDROMETER TESTING
2. COMPACTION OF THE FILTER AND TOPSOIL LAYERS SHALL BE COMPLETED PRIOR TO SEEDING OR SODDING.
3. A DENSE COVER OF GRASS OR SOD SHALL BE ESTABLISHED AND MAINTAINED ON THE SURFACE TO PREVENT CLOGGING.
4. PLACE NON WOVEN GEOTEXTILE FABRIC (MIRIFI 140N OR APPROVED EQUAL) ON ALL SIDES AND BOTTOM OF SOIL & GRAVEL FILTER AREA.
5. THE BOTTOM OF THE FILTER BASIN SHALL BE PLANTED WITH THE FOLLOWING SEED MIXTURE OR APPROVED ALTERNATIVE: 25% PERENNIAL RYE, 50% CANOPY REED GRASS, 25% CREEPING RED FESCUE.
6. THE CONTRACTOR SHALL CONDUCT A TEST PIT IN THE FILTER AREA IN THE PRESENCE OF CERTIFIED SOIL SCIENTIST PRIOR TO CONSTRUCTION OF THE BASIN TO DETERMINE THE SEASONAL HIGH GROUNDWATER AND/OR BEDROCK ELEVATION. IF SEASONAL HIGH GROUNDWATER OR BEDROCK IS PRESENT WITHIN 18" OF THE BOTTOM OF THE UNDERDRAIN STONE LAYER A PVC LINER MUST BE INSTALLED AS SHOWN ON THE DETAIL AND MUST EXTEND UP THE SIDES OF THE BASIN TO AN ELEVATION 6" ABOVE THE SEASONAL HIGH GW ELEVATION OR THE WATER QUALITY ELEVATION IF EVIDENCE OF GROUNDWATER IS NOT FOUND. THE RESULTS OF THE TEST PIT AND ANY NECESSARY CHANGES TO THE DESIGN SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO CONSTRUCTION OF THE FILTER BASINS.

LOAMY COARSE SAND (12" FILTER LAYER)	
SIEVE #	% PASSING BY WEIGHT
10	85-100
20	70-100
60	15-40
200	8-15

LOAMY TOPSOIL (6" TOP LAYER)	
SIEVE #	% PASSING BY WEIGHT
4	75-95
10	60-80
40	38-85
200	20-70

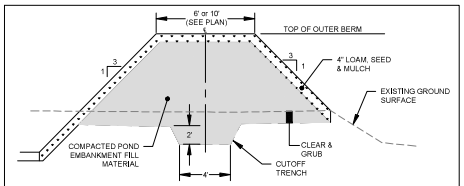
FILTER BASIN DETAILS

NOT TO SCALE



UNDERDRAINED SOIL FILTER PLAN VIEW

SCALE: 1" = 10'



EMBANKMENT FILL MATERIAL:

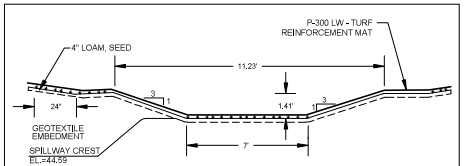
FILL MUST BE FREE OF FROZEN SOIL, ROCKS OVER SIX INCHES, AND SOD, BRUSH, STUMPS, TREE ROOTS, WOOD, OR OTHER PERISHABLE MATERIALS. EMBANKMENT FILLS LESS THAN 10 FEET IN FILL HEIGHT MUST BE COMPACTED USING COMPACTION METHODS THAT WOULD GUARANTEE A FILL DENSITY OF 90% OF THE MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM-698). ALL EMBANKMENT FILLS MORE THAN 10 FEET IN FILL HEIGHT MUST BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AND MUST HAVE THEIR DENSITY VERIFIED BY FIELD DENSITY TESTING.

EMBANKMENT CONSTRUCTION NOTES:

1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM EMBANKMENT AND POND CONSTRUCTION AREA.
2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY.
4. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED.
5. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN & NOTES.

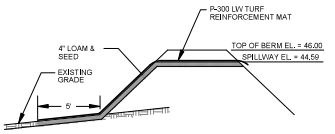
POND EMBANKMENT DETAIL

NOT TO SCALE



SPILLWAY CROSS-SECTION

NOT TO SCALE



EMBANKMENT CONSTRUCTION

1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION.
2. PLACE BORROW MATERIAL IN 8" LIFTS COMPACTED TO 90% OF MAXIMUM DRY DENSITY.
3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

SPILLWAY SECTION

NOT TO SCALE

STATE OF MAINE
MICHAEL E. TADEMA-WELANDT
3231
LICENSED PROFESSIONAL ENGINEER

DATE: 01/17/2024

NO.	DATE	REVISIONS
1	08/16/2023	SUBMITTED FOR PRELIMINARY SUBDIVISION APPROVAL
2	01/17/2024	SUBMITTED FOR FINAL SUBDIVISION APPROVAL

ADDRESS: 47 CARVER SHORE, SUITE 301 NEWCASTLE, MAINE 04553
PHONE: (207) 563-5111
WEB SITE: www.terradynconsultants.com

TERRADYN CONSULTANTS, LLC
Civil Engineering | Land Surveying | Geomatics
Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: LONGBOARD RIDGE SUBDIVISION
LONGBOARD STREET, BIDDEFORD, ME

SHEET TITLE: UNDERDRAINED SOIL FILTER DETAILS

RECORD OWNER: BEACHWOOD DEVELOPMENT FUND
KENNEBUNK, ME 04043

DATE:	3/10/2023
SCALE:	AS NOTED
JOB NO:	23-023
SHEET:	C-4.3

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1152

CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Director/City Planner

DATE: April 24, 2024

RE: 2024.01 Final Site Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32).

MEETING DATE: May 1, 2024 at 6:00 PM

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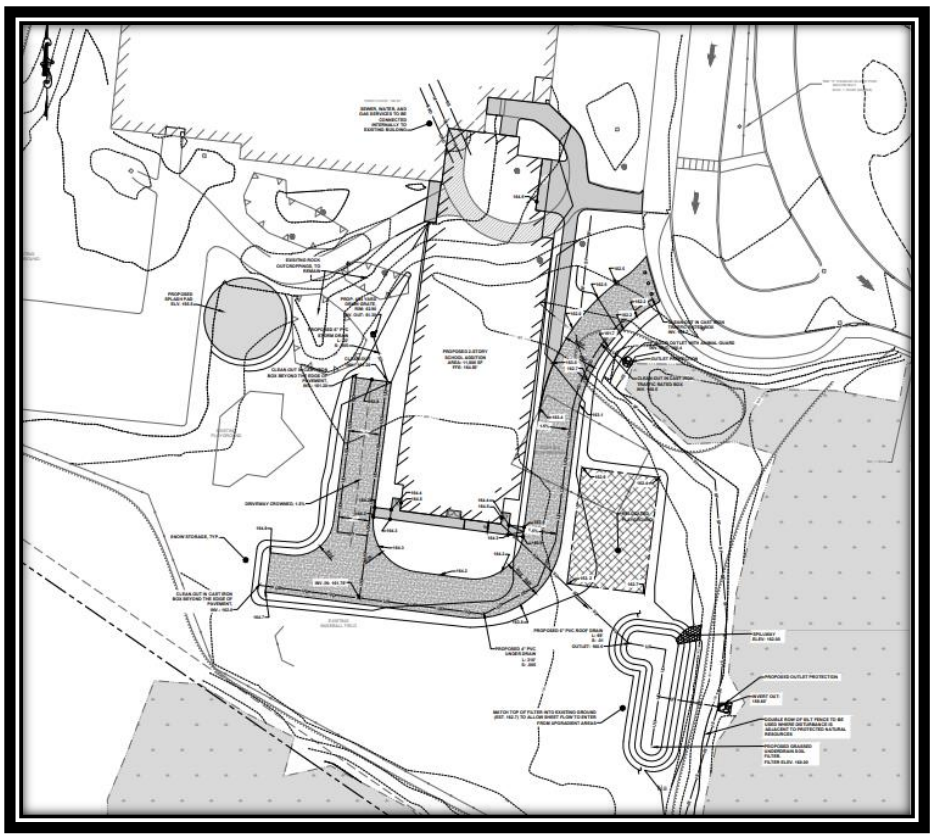
1. INTRODUCTION



The City is in receipt from the Biddeford School Department who are seeking Final review for the proposed expansion to the Biddeford Primary School located at 320 Hill Street. This project received sketch plan review on January 16, 2024 and preliminary approval on March 20, 2024.

As outlined in the submitted sketch and preliminary plans, *"the expansion will include an 11,806 square foot addition that will provide additional elementary classrooms to the school. Other associated improvements will include an emergency access drive, a playground splash pad, and four to six additional parking spaces. Stormwater management to meet Maine Department of Environmental Protection and City standards will be provided by an under-drain soil filter and permeable pavement".* The development triggers Maine Site Law Review, for which the City of Biddeford has Municipal Capacity Authority.

2024.01 Final Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review.
Planning Board Meeting Date: May 1, 2024

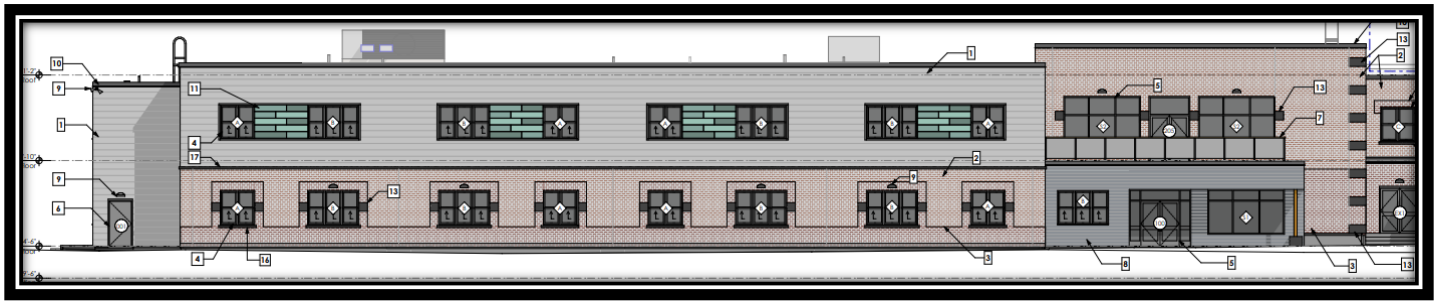


Proposed Building Addition and Site Improvements

The submitted plans illustrate a two story addition to the left of the existing school, as viewed from the main building entrance and pick-up/drop-off aisle. The application states that the addition is 11,806 square foot in area, but in actuality each of the two (2) floors is 11,806 square feet or a total new addition of 23,612 square feet. The addition will provide additional elementary classrooms to the school. The plans also provide an emergency access fire lane which wraps around the addition on three (3) sides. The plans also provide a new playground splash pad, and four to six additional parking spaces.



Proposed Addition shown left and Existing Building at right



Revised Building Elevations incorporating brick to match the existing school

One of the major issues discussed at the Planning Board was the building elevation materials and colors. The Board workshopped the building elevations with representatives of the Biddeford School Department where they presented revised building elevations which incorporated face brick and a revised color palette to match the existing school.

2. PROJECT DATA/INFORMATION

1.	Applicant:	Biddeford School Department 18 Maplewood Avenue Biddeford, ME 04005
2.	Owner of Property:	Same as applicant
3.	Agent:	Haley Ward, Inc. Drew Olehowski P.E., Project Manager 120 Main Street, Suite 132 Saco, ME 04072
4.	Surveyor:	Same as Agent
5.	Project Location:	320 Hill Street
6.	Project Tax Map #/Lot #:	Tax Map 82, Lot 32
7.	Lot Size:	16 Acres
8.	Base Zoning:	R1-A
9.	Overlay Zoning:	N/A
10.	Existing Use:	Primary School
11.	Proposed Use:	Additional classrooms & parking
12.	Approvals Required:	Final Site Plan Review
13.	Uses in the Vicinity:	Residential
14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	
23.	LDR Attachment A: Fees Paid:	Waived with the exception of third party costs
25.	Planning Board Review History: Sketch Plan 1-17-24, Preliminary 3-20-24, Final 5-1-24.	

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan (Land Development Regulations, Article XI) review and approval by the Planning Board.

4. Departmental Review Comments:

A. Planning and Code Enforcement:

B. No Comments at this time

C. Public Works / Engineering:

1. No Comments at this time

D. Engineering Peer Review Comments:

1. No Comments at this time

5. STAFF RECOMMENDATION

This application is a for a Final Plan review and Staff is supportive of the proposal and recommends the Board approve the project with the recommended Conditions of Approval (COA).

SAMPLE MOTIONS:

A. Motion to approve Case # 2024.01 Final Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Final Review, with the attached Findings of Fact (FOF) and Conditions of Approval (COA), as written.

B. Motion to Table Case # 2024.01 Final Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Final Review, based upon the following reasons:

a)_____

b)_____

c)_____

C. Motion to Deny 2024.01 Final Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Final Review, based upon the following reasons:

a)_____

b)_____

c)_____

CITY OF BIDDEFORD

Planning and Development Department

David Galbraith
City Planner & Deputy Director of Planning & Development
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
David.galbraith@biddefordmaine.org

FINDINGS OF FACT AND CONCLUSIONS OF LAW
City of Biddeford School Department
Biddeford Primary School
320 Hill Street Site Plan Approval
May 1, 2024

RE: 2024.01 – Biddeford School Department Final Site Plan Approval for Expansion of the Primary School at 320 Hill Street

Pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has considered the application of Based on its review, including supportive data, public hearing testimony and related materials contained in the record, the Planning Board makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT:

	SUBJECT	***DATA/INFORMATION***
1.	Applicant:	City of Biddeford School Department 18 Maplewood Avenue Biddeford, ME 04005
2.	Owner of Property:	Same as Applicant
3.	Agent:	Drew Olehowski, P.E. Haley Ward, Inc. 120 Main Street #132 Saco, ME 04072
4.	Engineer/Surveyor:	Same as Agent
5.	Project Location:	320 Hill Street
6.	Project Tax Map #/Lot #:	Tax Map 82, Lots 32
7.	Existing Zoning:	R1A
8.	Overlay Zoning:	N/A
9.	Existing Use:	Primary School
10.	Proposed Use:	Expansion of existing primary school
11.	Approvals Required:	
12.	Uses in the Vicinity:	Residential
13.	Parcel Size:	16.00 acres
14.	Limits of Disturbance:	1.13 acres
15.	Drainage Watershed:	Saco River

16.	Water Supply:	Maine Water
17.	Sewerage Disposal:	Public Sewer
18.	Solid Waste Disposal:	Public Trash
19.	Fire Protection:	City of Biddeford
20.	Other Non-City Permits Required:	
21.	LDR Attachment A: Fess Paid:	All Fees Waived Except for 3rd Party

CONCLUSIONS OF LAW:

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;

2. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;

3. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;

4. The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;

5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;

6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;

7. The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;

8. The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;

9. The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;

10. The proposed use would be in compliance with Biddeford's Comprehensive Plan;

11. The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;

12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;

13. Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;

14. Adequate provision has been made to control erosion or sedimentation;

15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;

16. The proposed water supply would meet the demands of the proposed use for fire protection purposes;

17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;

18. The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;

19. When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.

APPROVAL GRANTED:

Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the proposed project summarized within the attached Staff report and pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has approved the application of Final Site Plan review for a proposed expansion to the existing Biddeford Primary School at 320 Hill Street (Tax Map 82, Lot 32) for the Biddeford School Department the recommended Findings of Fact (FOF) with the following Conditions of Approval (COA):

FINDINGS OF FACT AND CONCLUSIONS OF LAW
City of Biddeford School Department
Biddeford Primary School
320 Hill Street Site Plan Approval
May 1, 2024

1. Standard Conditions of Approval apply.
2. All conditions of approval previously adopted for the property are hereby reaffirmed.
3. Prior to the scheduling of the required Pre-construction meeting the Applicant shall make any required changes to the project Civil Plans for the review and approval of the Public Works Director.

_____
Larry Patoine Planning Board Chair

_____
Date

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

April 10, 2024

Biddeford City Hall
Attn: Planning Department
205 Main Street
Biddeford, Maine 04005

Re: Final Site Plan Application | Biddeford Primary School Expansion

Dear Planning Staff & Planning Board,

On behalf of the Biddeford School Department, Haley Ward, Inc. (Haley Ward) is pleased to submit a Final Site Plan Application for the proposed expansion to the Biddeford Primary School, located at 320 Hill Street, for review. The expansion will include an approximately 11,806 square foot building footprint addition to the existing school with the purpose of providing additional classrooms and learning space. Also included in the sitework will be an emergency access drive, eight additional parking spaces on the lower parking areas, and the relocation of an existing playground. The project underwent sketch plan review with the Biddeford Planning Board on January 17, 2024, and Preliminary Review on March 20, 2024.

We request that the project be accepted for Final Site Plan review by City Staff and the Planning Board. Please find the Final site plan checklist and application materials attached. Seven copies of the application materials and Site Plan drawing have been provided.

Thank you for your time and assistance. Please do not hesitate to call if you have any questions or need additional information.

Sincerely,
Haley Ward, Inc.

Drew Olehowski, P.E.
Project Manager

DJO/tal
Attach.

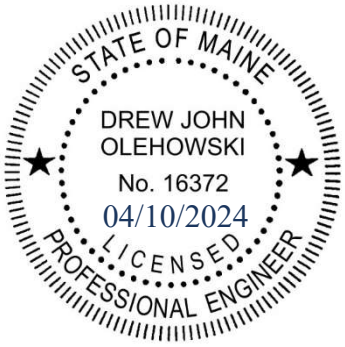
120 Main Street, Suite 132, Saco, ME 04072
T: 207.283.9151 | HALEYWARD.COM

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

FINAL SITE PLAN APPLICATION

TO
CITY OF BIDDEFORD

APPLICANT
BIDDEFORD SCHOOLS
18 Maplewood Avenue, Biddeford, Maine 04005



APRIL 2024
JN: 14125.003

Report Prepared By:
Haley Ward
One Merchants Plaza | Bangor, Maine 04401

Corporate Office
One Merchants Plaza
Suite 701
Bangor, ME 04401
T: 207.989.4824
F: 207.989.4881

HALEYWARD.COM

TABLE OF CONTENTS

APPLICATION

Application
Agent Authorization
Site Plan Drawing Checklist

ATTACHMENTS

Attachment A	Project Narrative
Attachment B	Letters of Approval/Ability to Serve
Attachment C	Financial Capacity / Bond
Attachment D	Deed
Attachment E	Photographs of Site
Attachment F	Geotechnical Report
Attachment G	Natural Resource Report
Attachment H	Stormwater Report
	Pre-Development Hydrology Map and Calculations
	Post-Development Hydrology Map and Calculations
Attachment I	Erosion Control and Maintenance Plan
Attachment J	Architectural Plans and Renderings, Exterior Lighting Cutsheets

PLANS

C001	General Notes & Legend
EX	Existing Conditions Plan
C100	Site Demolition & Erosion Control Plan
C101	Overall Site Plan
C102	Site Plan
C103	Grading & Utility Plan
C104	Emergency Vehicle Access Plan
C501	Site Details

APPLICATION

Application
Agent Authorization
Site Plan Drawing Checklist

City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

__ Shoreland Zoning Permit | X Site Plan Review | __ Extraction
__ Conditional Use Permit | __ Subdivision | __ Private Way
__ Other: _____

Applicant Information:

Name: CITY OF BIDDEFORD, BIDDEFORD SCHOOLS
Mailing Address: 18 MAPLEWOOD AVENUE, BIDDEFORD, ME
Telephone: _____
Email: _____

What is your legal interest in the property?

X Owner __ Potential Buyer with Contract __ Lease/Rental Agreement

Owner's Information:

Name: SAME AS APPLICANT
Mailing Address: _____
Telephone: _____
Email: _____

Agent's Information:

Name: HALEY WARD, INC. ATTN: DREW OLEHOWSKI, PE
Mailing Address: 120 Main St #132, Saco, ME 04072
Telephone: 207-898-4824
Email: DOLEHOWSKI@HALEYWARD.COM

Engineer/Surveyor's Information:

Name: SAME AS AGENT
Mailing Address: _____
Telephone: _____
Email: _____

Project Location and Lot Information:

Street Address: 320 HILL STREET Drainage Watershed: SACO RIVER
Tax Map: 82 Lot: 32
Current Zoning: R1A Shoreland Zoning: NO
Size of Lot: _____( )acres ( )s.f. Lot Frontage: _____
Existing Use of Property: SCHOOL

Property currently serviced by:

X City Road X Public Sewer X Public Water X Public Trash
__ Private Road __ Septic System __ Private Well __ Private Hauler

Slope Conditions in Area of Construction (if applicable):

X Flat (0-3% slope) __Rolling (3-8% slope) __Hilly (8-15% slope) __Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? X (Yes)__(No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes) X (No) if yes attach information
Do you plan to bring fill onto the lot? X(Yes) __(No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

SCHOOL EXPANSION

Property to be Serviced by:

X City Road X Public Sewer X Public Water X Public Trash

__ Private Road __ Septic System __ Private Well __ Private Hauler

Limits of Disturbance: 1.13 (X)acres ( )s.f.

Net change in impervious cover: 0.51 (X)acres ( )s.f.

Is this project part of a larger project? __(Yes) X (No)

Is the project proposing a new Private or Public Road? __(Yes, Private) __(Yes, Public) X (No)

Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) X (Yes) __(No)

Is the project proposing any Stormwater facilities/BMPs? X (Yes) __(No)

Will a Traffic Movement Permit (TMP) be required?: __(Yes) X (No)

__ **If in a Shoreland Zone:**

Percent of residential lot coverage (Max 20%): _____

Percent of structure expansion (Max 30%): _____

__ **If Subdivision Review, number of lots proposed:** _____

__ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: 11,806 SF

Total new square feet paving/parking: 9,831 SF

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval

X Fire Department – Contact Chief or Deputy Chief – 282-9986

X Ability to Serve for Water Service – Maine Water – 282-1543

X Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118

N/A Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127

B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.

C. Photographs of Site.

D. Architectural renderings/drawings of proposed buildings, as required.

E. Engineering Plans, as required.

F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __(Yes) X (No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: _____ (Agent) **Date** 04/10/2024

Signature of Property Owner: _____ **Date** _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

mobile studio design

12 February 2024

Project: Biddeford Primary School Addition
Project Address: 320 Hill Street, Biddeford Maine 04005
Map 82, Lot 32

To Whom It May Concern:

I hereby authorize Mobile Studio Design and Haley Ward to act as my agent for the permitting process for the new construction of a 2-Story addition at Biddeford Primary School.

Sincerely,

Mobile Studio Design, Inc.
128 Main Street, Unit 201
Biddeford, Maine 04005
207.494.4208

CITY OF BIDDEFORD - SITE PLAN APPLICATION DRAWING CHECKLIST *LAST REVISED:03/29/2024*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant for any Site Plan submittal to the Planning Department.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing submittal information with non-acceptable reasoning will be rejected.
4. Items in **BLACK** are required for 'Preliminary Site Plan' approval & 'Final Site Plan' approval.
5. Items in **BLUE** are only required for 'Final Site Plan' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	Biddeford Primary School Expansion
Planning Board # (if available):	
Applicant Name/Info:	City of Biddeford, Biddeford Schools
Submittal #/Type (Prelim/Final):	
Submittal Date:	

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE		CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**				
A	Drawing specific legends (linetypes, hatches, etc.)	Yes			
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	Yes			
C	North arrows, standard engineering scale viewports, dated revision blocks	Yes			
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	Yes			
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	Yes			
2	**COVER SHEET**				
A	Project Name & Property Address	Yes			
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	Yes			
C	Site Location Map	Yes			
D	Sheet Set List of Drawings	Yes			
E	Tax Map and Lot ID	Yes			
F	Zoning & Shoreland Zone Information	Yes			
G	Existing Use Description	Yes			
H	Proposed Use Description	Yes			
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	No			
J	Name of Drainage Watershed	Yes			
K	Within the MS4 Urbanized Area (Yes/No)	Yes			
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	Yes			
M	Within the 100-year Flood Zone (Yes/No)	No			
N	Public Road Proposed (Yes/No)	No			
O	Private Road Proposed (Yes/No)	No			
P	Public Sewer Connection (Yes/No); if yes, need to include a proposed sewer flow calculation per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	Yes			
Q	Public Storm Drain Connection (Yes/No)	No			
R	Limits of Disturbance in acres	Yes			
S	Pervious Land Cover square footage, existing and proposed	Yes			
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	Yes			
U	Building Roof square footage, existing and proposed	Yes			
V	Assigned Planning Board Number	No	Planning Deparmtnet did not assisgn Planning Board Number		
W	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)	Yes			
3	**EXISTING CONDITIONS PLAN**				

A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	Yes			
B	Survey Benchmark Locations (with XYZ Coordinates annotated)	Yes			
C	Property & Right-of-Way Lines	Yes			
D	Boundary line information (bearings, distances, etc.)	Yes			
E	Property pin and monumentation locations	Yes			
F	Existing easements with proper ownership identified	Yes			
G	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	Yes			
H	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
I	100-year Flood Zone Limits & Elevation	No	Project is not within flood zone.		
J	USDA-NRCS Soil Boundaries and Labels	Yes			
K	Existing contours with adequate contour labelling; minimum 1' contour interval	Yes			
L	Existing building FFEs annotated	Yes			
M	Spot elevations for existing building corners, door entrances, accessible parking/walkways, road centerlines, and bottom/top of curbs	Yes			
N	Existing buildings & structures	Yes			
O	Existing pavement areas & number of parking spaces	Yes			
P	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	Yes			
Q	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	Yes			
R	Existing signage and striping	Yes			
S	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	Yes			
T	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	Yes			
U	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	Yes			
V	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	Yes			
W	Location of any borings, drinking wells, and monitoring wells	Yes			
4	**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**				
A	Limits-of-disturbance outlined and acreage annotated	Yes			
B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
C	100-year Flood Zone Limits	No	Not applicable		
D	Callout existing site features to be demolished/removed/replaced	Yes			
E	Callout existing utilities to be demolished/removed/abandoned-in-place	Yes			
F	Hatch existing buildings and pavement to be removed	Yes			
G	Construction Entrance location(s)	Yes			
H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	Yes			
I	Stockpile and staging area(s) identified (with proper perimeter control)	Yes			
J	Inlet protection location(s)	Yes			
K	Note requiring contractor to implement dust control measures throughout construction	Yes			
L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	No	Not applicable		
M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing	No	Groundwater not expected, per geotechincal report		
N	If large development is proposed with an extensive underground stormwater conveyance network, show sediment trap/basin location(s) needed for constructability/phasing; provide sizing calculations	No	Proposed stormwater system is minor.		
5	**SITE PLAN/SUBDIVISION PLAN**				
A	Partial Site Plans needed for any viewport scale greater than 1"=20'	No	Drawings provided at 1"=20'.		
B	Existing property and right-of-way lines	Yes			
C	Proposed subdivision lot lines and labels	No	Not applicable		
D	Required Zoning Setbacks shown with dimensions and annotation	Yes			
E	Bulk requirement summary table (zoning/parking calculations)	Yes			

F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
G	100-year Flood Zone Limits	No	Not applicable		
H	Proposed building outlines, door entrances and loading docks	Yes			
I	Proposed building labels	Yes			
J	Proposed road extents; provide clear annotation if roads will be public or private	No	Not applicable		
K	Proposed parking and accessible parking locations; annotate parking space counts	Yes			
L	Proposed signage, parking striping, and traffic striping	Yes			
M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	No	Not applicable, no ADA ramps or parking proposed.		
N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	Yes			
O	Separate hatching for buildings, sidewalks, pavement, landscaping	Yes			
P	Proposed landscaping; detailed landscaping design should be on separate plans	Yes			
Q	Designated snow storage areas	Yes			
R	Proposed dumpster locations and trash removal access	Yes			
S	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	Yes			
T	Radial dimensions for all curbs, landscaped islands, sidewalks	Yes			
U	Road centerline stationing shown, labelled every 0+50' with curve data	No	Not applicable, no proposed road		
V	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	No	Not applicable, private way not proposed.		
W	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	No	Not applicable, private way not proposed.		
X	Planning Board signature block for final recording	Yes			
6	**GRADING PLAN**				
A	Partial Grading Plans needed for any viewport greater than 1"=20'	Yes			
B	Limits-of-disturbance outlined and acreage annotated	Yes			
C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	Yes			
D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	Yes			
E	Proposed contours with adequate contour labelling; minimum 1' contour interval	Yes			
F	Detailed grading for all ditches, swales, outfalls, and riprap	Yes			
G	All proposed contours tie-into existing contours at limits-of-disturbance outline	Yes			
H	Existing spot elevations for all asphalt and curb tie-in locations	Yes			
I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
J	100-year Flood Zone Limits	No	Not applicable		
K	Proposed spot elevations for all important roadway geometric points and/or on a 50' maximum interval: low/high points, PC/PT, road centerline, edge-of-asphalt	No	No roadways proposed. Proposed grading provided for fire access drivway		
L	Proposed spot elevations for all curblines (bottom/top-of-curb) and sidewalks	Yes			
M	Proposed spot elevations for all parking and drive aisle geometry points	Yes			
N	Proposed spot elevations for all building corners and door-entry locations	Yes			
O	Proposed retaining wall/loading dock elevations (bottom/top of wall)	No	No retaining walls proposed		
P	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	No	No ADA parking space or ramps proposed		
Q	Proposed % slope arrows for all ADA parking spaces and sidewalks	Yes			
R	Proposed longitudinal % slope arrows for drainage ditch centerlines	No	No drainage ditches proposed		
S	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	Yes			
T	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)	Yes			
7	**ROAD PROFILES (if public/private road proposed)**				
A	Existing surface; dashed and screened	No	No public or private road		
B	Proposed surface; continuous and bold	No	No public or private road		
C	Corresponding centerline stationing and curve data annotation	No	No public or private road		
D	Road cross-section including proposed surface cross slopes; include multiple sections for various road cross slope conditions proposed (crowned, superelevated)	No	No public or private road		

E	Horizontal and vertical scale bars	No	No public or private road		
F	Clear annotation if proposed road will be public or private	No	No public or private road		
G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	No	No public or private road		
H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	No	No public or private road		
8	**UTILITY PLAN**				
A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	Yes			
B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	Yes			
C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	Yes			
D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	Yes			
E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	Yes			
F	Proposed storm culverts, outfalls, and riprap locations and sizes	Yes			
G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	Yes			
H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	Yes			
I	Flow directional arrows for storm & sewer pipes	Yes			
J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	Yes			
K	All storm drains must be sized to convey the 25-year storm	Yes			
L	Sewer force main sizes and invert elevations	No	No sewer force main proposed		
M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W)	No	No sewer pump stations proposed		
N	Grease trap & oil-water separator locations, sizes, elevations	No	These systems are not propsoed		
O	Water, gas, electric, and telecom sizes labelled	No	These utilities will be extended from existing building system internally		
9	**UTILITY PROFILES**		Sewer, water, and power utilities are to be internally extended from existing builing to service the expasnion. Proposed stormdrainage systems are minor and are depicted on the provided plan views, profiles are not necessary to convey required information.		
A	Utility profiles for **all** gravity storm drains and sewer pipes, including all laterals, catch basins, culverts, and outfalls; profiles preferred to be aligned on the pipe centerline (not superimposed on the road centerline)	No			
B	Existing surface; dashed and screened	No			
C	Proposed surface; continuous and bold	No			
D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	Yes			
E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	Yes			
F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated	No			
G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated	No			
H	Known ledge or groundwater elevations	No			
I	For all storm drains, 25-year HGL must be shown on profiles with starting tailwater condition identified	No			
J	For storm outfalls, include riprap sizing and grading extents	Yes			
K	Horizontal and vertical scale bars	Yes			
10	**DETAILS**				
A	Road section detail, including pavement & gravel depths	Yes	Access Drive sections and depths provided		
B	Sidewalk, paver, crosswalk, and any other pavement section details	Yes			
C	Pavement sawcut detail	Yes			
D	Utility trench/backfill detail	Yes			
E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	Yes			

F	Signage, striping, and ADA details	Yes			
G	E&S notes and details; only show applicable/proposed measures	Yes			
H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	Yes			
I	Storm outfall & riprap details	Yes			
J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	No			
K	Pump station, grease trap, and oil-water separator details	No	None Proposed		
L	Conduit section details	No	None Proposed		
M	Miscellaneous details (as needed)	No			
11	**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**				
A	As required by ordinance; at a minimum: locations, counts, and species/models must be identified	No	None Proposed		
B	Landscaping & lighting details	No	None proposed		
12	**DOCUMENTS/REPORTS/CALCULATIONS**				
A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction	No	Not required for City project		
B	Predevelopment & Post-development Drainage Area Maps, including: i. Subdrainage areas delineated and labeled ii. Points of Interest/Analysis shown and labeled iii. Hatching for different land cover areas (impervious, pervious, gravel) iv. Time of concentration (Tc) paths & durations	Yes			
C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	Yes			
D	A Performance Guarantee Cost Estimate utilizing Planning's template	No	Not required for City project		
E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	No	Not applicable		
F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches) via the rational method; starting tailwater conditions/documentation must be clearly identified	Yes			
G	If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies	Yes			
H	Sizing calculations for any SWM water quality BMP or detention facility	Yes			

I	A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: i. Annual maintenance requirements ii. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed iii. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	Yes			
J	Salt Management Plan	No	Not applicable, no proposed roadways that would be salted		
K	Sewer pump station sizing calculations	No	None Proposed		
L	Sewer pump station maintenance plan	No	None Proposed		
M	Grease trap sizing calculations	No	None Proposed		
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	No	No HOA Proposed		
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	Yes			

ATTACHMENT A

PROJECT NARRATIVE

PROJECT NARRATIVE

PROJECT DESCRIPTION

The development consists of a proposed two-story school expansion to Biddeford Primary School, located at 320 Hill Street. The expansion will include an 11,806 square foot building footprint addition to house additional classrooms and workspace. The sitework will include an emergency access drive, eight additional parking spaces on the lower parking areas, and relocating an existing playground.

EXISTING CONDITIONS

The subject property is the current site of the Biddeford Primary School. The expansion will take place within the developed footprint of the school grounds including over part of an un-used baseball diamond. A natural resources survey was conducted on the property by Haley Ward, Inc. in the spring of 2023; wetlands were identified adjacent to the project area. The site is dominated by sandy loams.

ZONING

The project parcel is identified as Map 82 Lot 32 on the City of Biddeford's municipal tax maps and is located within the R1A zoning district. The parcel is within the Saco River watershed.

This development is in conformance with all space and bulk standards of the zone. Please see the Site Development Data Table provided on the Site Plans for more information.

SITE ACCESS

Traditional site access will not change due to the addition of the school. A 20-foot-wide driveway has been provided for access around the expansion for emergency vehicles. This driveway will have removal bollards blocking its entrance at all times except for maintenance and emergencies. Sidewalks for pedestrian circulation have been provided around the expansion. The proposed parking spaces in the lower parking lot will not change the circulation of traffic through the site.

PARKING

Parking requirements for both the existing school and the proposed expansion are currently met by the existing number of parking spaces on the site. The school is requesting an additional eight parking spaces be added for observed demand. These parking spaces will be added to the lower parking lot in areas that are currently landscaped. Please see a breakdown of the parking requirements and provisions on the Site Plan.

STORMWATER

The site is subject to an existing Site Law Permit (#L-015965-22-A-N) but meets the criteria for an exemption from an amendment as a modification to an educational institution because it does not exceed an additional 40,000 square feet of disturbed area not to be revegetated in a calendar year (See MDEP correspondence in **Attachment B**.)

A grass underdrained soil filter and porous pavement are proposed to manage stormwater runoff quantity and quality. Please see the provided Stormwater Report in **Attachment H** for more information.

EROSION AND SEDIMENTATION CONTROL

An Erosion and Sedimentation Control Plan has been provided in **Attachment I**.

ARCHITECTURE / LANDSCAPING / LIGHTING

Architectural Renderings and Floorplans of the proposed building have been provided in **Attachment J.** A proposed lighting/photometric plan is included within the drawing set. Existing landscaping will remain around the expansion as much as practically possible.

SOLID WASTE

The dumpsters existing on site in the north corner of the property will be sufficient to handle the excess waste created by the expansion. The existing means of waste disposal will remain unchanged.

UTILITIES

Utilities will be provided through the existing school. Please see the Ability to Serve letters provided by the respective utilities in **Attachment B.**

SNOW STORAGE

Snow will be stockpiled in areas around the perimeter of the new access drive and expansion building as shown on the Site Plan, and removed by a contractor retained by the applicant, if storm conditions warrant.

STATE REVIEW

The project will require a notice to the Maine Department of Environmental Protection (MDEP) proving that the development will adhere to the standards outlined in the existing Site Location of Development Permit. No other state permits are required.

ATTACHMENT B

LETTERS OF APPROVAL/ABILITY TO SERVE

January 10, 2024

Attn: Andrew Godfrey, EI
120 Main Street, Suite 132
Saco, ME

Re: Ability to Serve Determination – Biddeford Primary School Expansion

Greetings,

The Maine Water Company (MWC) has received your request for an Ability to Serve Determination for the property located at 320 Hill Street, Biddeford, Maine for your change of use to include the primary schools expansion.

The request specifies a plan for approximately 12,000 SF in additional building area, and an extension of existing water services. Including the static pressure in the area is approximately **35 psi**.

Based on the criteria you provided, via email on November 16th, 2023, the expected water usage is within the water system's available capacity. The Maine Water Company does have sufficient capacity in the area from the existing 12-inch DIP main on Hill St to serve this project. Additional infrastructure improvements may be required at the expense of the developer to meet the overall needs of this project.

Criteria

Proposed plan for an 11,806 square foot addition to the Biddeford Primary School at 320 Hill Street.

Fixture Count:
18 sinks
16 water closets
4 water fountains
2 hose bibs
1 mop sink

Additional 4" fire service to be sized in accordance with NFPA and approved by Maine Fire Marshal or applicable other.

Conditions of Service

- MWC has the understanding that the existing service lines may not be adequately sized or currently in the incorrect location, and may need modifications.
- The developer is required to pay for the cost of any modifications, renewal of impacted service lines, and retirement of unused or discontinued services to Maine Water Co's standards of best practice.
- MWC has the understanding fire service demand is not to be included in this request, or accounted for in this Ability to Serve Determination.
- Notify Maine Water of any changes to the existing service line connections.
- Additional or a change in backflow devices may be needed to comply with existing cross connection rules.

Should a request for service or completion of the project not be executed within one year of the date of this letter, the Maine Water Co reserves the right to reevaluate its ability to serve this project.

All work must be completed in accordance with MWC Terms and Conditions as well as material specifications. All appropriate paperwork must be completed and deposit paid prior to the start of construction. Please forward all design plan revisions as the project develops to prevent construction delays. Water service will be provided in accordance with Maine Public Utility Commission rules. If you have any additional questions, please do not hesitate to contact our office at 1-800-287-1643 or by email at Evan.Vashon@mainewater.com. We look forward to working with you throughout design and construction.

Sincerely,
The Maine Water Company

Evan Vashon
Engineer

The Maine Water Company
93 Industrial Park Road
Saco, ME 04072

T: 1.800.287.1643
www.mainewater.com

City of Biddeford, Maine

City of Biddeford
Public Works Department / Engineering Division
P.O. Box 586 • 205 Main Street, Suite 301
Biddeford, ME 04005
Phone: (207) 284-9118 • Fax: (207) 571-0662

Letter of Wastewter Treatment Plant Capacity to Serve, **Biddeford Primary School Expansion, Hill Street**

Andrew Godfrey, EI
Civil Engineer
Haley and Ward
120 Main Street, Suite 132
Saco, ME 04072

December 06, 2023

Brief description of project: **Biddeford Primary School Expansion, Hill Street,** Estimated new flows: 1444 gpd.

Determination

The applicant is proposing to build an 11,000 +/- square foot expansion to the Biddeford Primary School on Hill Street.

The City of Biddeford Wastewater Department has reviewed the request to serve the above described project and the supporting information provided by your team. It has been determined that at this time the City has sufficient capacity at the City's Wastewater Treatment Facilities to serve the above described project. It is estimated that 1444 gpd of new flow will be generated from the project. Changes to the project from that presented to this department may require a new review of the request for ability to serve. This determination will be effective for a period of one year from the date above. No roof drains shall be connected into the system.

Upon approval of the Planning Board, the applicant must make application for sewer service. Flow amounts for the project will be determined at the time application is made and may or may not be the amount stated above. The applicant will be required to pay all fees including all impact fees based on the flow amount calculated at the time application is made and prior to the issuance of any building permits.

This Capacity to Serve Letter is intended only to state that the City of Biddeford Wastewater Treatment Plant Facility's has the ability to treat the flow from the above stated project once it is received at the treatment facility.

Project design plans must be submitted to the City for review and comment. The Planning Department, Engineering Department or other persons from the Wastewater Department may require further studies, calculations or documentation to determine any actions that may need to be taken to address any impacts/capacity issues. System upgrades may be required in order to address any impacts this project may have on the City's sewage collection and conveyance system(s) or its components.

Thomas Milligan, PE
City Engineer Emeritus
City of Biddeford Engineering Department
Tom.milligan@biddefordmaine.org
207-284-9118

CC: Jeff Demers, Public Works/Wastewater Director
Craig Chekan, City Engineer
Roby Fecteau, Code Enforcement
David Galbraith, City Planner
Alex Buechner, Superintendent WWTF

The City of Biddeford is an equal opportunity provider. To file a complaint, write to Human Resource Director, 205 Main Street Biddeford, ME 04005, or call (207) 286-0593.

Unitil
ME GAS OPERATIONS

December 6, 2023

Andrew Godfrey, EI
Haley Ward

Re: Ability to Serve for 320 Hill St Biddeford, ME 04005.

Dear Andrew,

Thank you for your interest in using natural gas for the above referenced project.

This is to confirm that natural gas can be made available from our distribution system to serve your proposed project.

Any improvements to the existing distribution system that are necessary to provide this service, as well as the design of the gas system in the project itself, will be established as the overall design and scope of your project progresses.

All work necessary to provide service will be performed in accordance with the Maine Public Utilities Commission requirements.

If you have any further questions or require additional information, please contact me directly at (207) 541-2578 or email at velezc@unitil.com.

Sincerely,

Chasity Velez-Manley

Chasity Velez-Manley
Senior Business Development Representative
(T) 207-541-2578 (F) 207-541-2578

On Oct 18, 2023, at 4:24 PM, Dexter, Edward <Edward.Dexter@Biddefordmaine.org> wrote:

Good afternoon Leah:

In review of your initial drawing I have a concern with the lack of access to the building from the exterior. There does not appear to be any drivable area across the front, side or back that would give fire department access with an aerial ladder truck. I would be more than happy to discuss this with you and how to work this into your plans.

Sincerely,
Ed Dexter

Begin forwarded message:

From: "Dexter, Edward" <Edward.Dexter@Biddefordmaine.org>
Subject: RE: Biddeford Primary School Addition
Date: February 12, 2024 at 11:05:53 AM EST
To: Leah Schaffer <leah@mobilestudiodesign.com>
Cc: "Fecteau, Roby" <Roby.Fecteau@Biddefordmaine.org>, "Welton, Scott" <Scott.Welton@Biddefordmaine.org>, Drew Olehowski <dolehowski@haleyward.com>, "Crocker, Jason" <Jason.Crocker@Biddefordmaine.org>, "Galbraith, David" <David.Galbraith@biddefordmaine.org>

Good Morning Leah:
Thank you for the updated drawings. We appreciate the fire lane and sprinkler information. We would ask that you place a Knox box on the door to the new addition.

Thank you
Ed Dexter

Edward B. Dexter
Assistant Chief

Biddeford Fire Department
152 Alfred St.
Biddeford, ME. 04005

(207) 571-1686 Office
(207) 571-1687 Fax

Drew Olehowski

From: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Sent: Tuesday, October 17, 2023 8:57 AM
To: Drew Olehowski <dolehowski@haleyward.com>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

If your project meets the exemption for educational intuitions, then you can use it. You'll need to roll in the exempt activity the next time you apply for a project at the school and show that it meets Site Law standards at that time.

From: Drew Olehowski <dolehowski@haleyward.com>
Sent: Tuesday, October 17, 2023 7:34 AM
To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

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Good morning, Dawn,

Just checking in on my inquiry from last week. Please let me know your thoughts.

Thank you,

Drew Olehowski, PE
Civil Engineer
t: 207.283.9151 d:207.404.5893
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From: Drew Olehowski
Sent: Tuesday, October 10, 2023 3:02 PM

To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

Hi Dawn,

I was recently looking into a different project and came across this Site Law exemption for educational institutions. Would this apply to our project if it meets the criteria below? Thank you,

27. Exemption for educational institutions. New construction at or a modification of a campus of an educational institution permitted pursuant to this article is exempt from review under this article as provided in this subsection. For purposes of this subsection, "educational institution" means any private or public school or postsecondary institution.

A. New construction at or a modification of a campus of an educational institution permitted pursuant to this article is exempt from review under this article if the additional disturbed area not to be revegetated does not exceed 40,000 square feet ground area in any calendar year and does not exceed 80,000 square feet ground area in total. [PL 2021, c. 123, §2 (AMD).]

B. The permittee shall annually notify the department of any new construction or modifications conducted during the previous 12 months that fall under this exemption. The notice must identify the type, location and ground area of the new construction or modification. With the annual notification, the permittee shall provide to the department development plans certified by a professional engineer for the new construction or modification undertaken pursuant to this subsection. [PL 2011, c. 551, §3 (NEW).]

C. When review under this article is required at an educational institution permitted pursuant to this article, the permittee shall provide plans for the new development, as well as for those activities that have been undertaken pursuant to this subsection. [PL 2011, c. 551, §3 (NEW).]

D. Nothing in this subsection authorizes a person to undertake an activity on a parcel of land affected by an order or permit issued by the department that is contrary to that order or permit. [PL 2011, c. 551, §3 (NEW).]

Drew Olehowski, PE
Civil Engineer
t: 207.283.9151 d:207.404.5893

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From: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Sent: Wednesday, September 6, 2023 8:42 AM
To: Drew Olehowski <dolehowski@haleyward.com>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

The Dept will waive the requirement for a pre-application meeting for this project. Go ahead and submit the application. Know that we are dealing with a high volume of applications and we are still short staffed. Its taking us a long time to get through applications. Your patience is appreciated.

From: Drew Olehowski <dolehowski@haleyward.com>
Sent: Wednesday, September 6, 2023 7:36 AM
To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

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Hi Dawn,

I don't believe a review of the current permit materials will be necessary.

Do you know if we are required to have a pre-application meeting for this amendment, and if so, could you please help with scheduling that?

Thank you,

Drew Olehowski, PE
Civil Engineer
t: 207.283.9151
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From: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Sent: Wednesday, August 9, 2023 4:09 PM
To: Drew Olehowski <dolehowski@haleyward.com>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

You need to address the applicable sections of Site Law.

What permit materials do you need? The current forms? Or the historical permitting record? All file reviews are being handled by the Department's file room in Augusta. They can pull a file for you and you can make an appointment to review in Augusta. Here is the contact info: https://www.maine.gov/dep/maps-data/data.html

---

From: Drew Olehowski <dolehowski@haleyward.com>
Sent: Wednesday, August 9, 2023 1:17 PM
To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

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Hi Dawn,

Just following up on this request.

Thank you,

Drew Olehowski, PE
Civil Engineer
t: 207.283.9151
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From: Drew Olehowski
Sent: Thursday, August 3, 2023 8:06 AM
To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Cc: Jon Whitten, Jr. <jwhitten@haleyward.com>; Leah Schaffer <leah@mobilestudiodesign.com>
Subject: RE: Biddeford Primary School Addition

Good morning, Dawn,

For the Site Law amendment to permit #L-015965-22-A-N, would we need to address all sections of the permit, or just those that will be impacted by this project?

Also, would it be possible to have these permit materials sent to us electronically? If not, I'd like to request they are sent to the Portland DEP office for viewing.

Thank you,

Drew Olehowski, PE
Civil Engineer
t: 207.283.9151

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From: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Sent: Thursday, June 29, 2023 8:23 AM
To: Leah Schaffer <leah@mobilestudiodesign.com>
Cc: Drew Olehowski <dolehowski@haleyward.com>; Jon Whitten, Jr. <jwhitten@haleyward.com>
Subject: RE: Biddeford Primary School Addition

There are 2 types of freshwater wetlands that have setbacks: 1. Peatlands and 2. Wetlands that contain greater that 20,000 sq ft of open water or emergent vegetation. If this wetland does not have either of those 2 things, then there is no setback (the wetland is still considered a WOSS). Stay out of the wetland and you'll only need the Site Amendment.

From: Leah Schaffer <leah@mobilestudiodesign.com>
Sent: Wednesday, June 28, 2023 4:36 PM
To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Cc: Sirois, Alison <Alison.Sirois@maine.gov>; Drew Olehowski <dolehowski@haleyward.com>; Jon Whitten, Jr. <jwhitten@haleyward.com>
Subject: Re: Biddeford Primary School Addition

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Dawn,

Thank you so much for the quick response. The side walk as currently shown would be about 36' from the wetland. With grading extents closer to 30'. We don't anticipate any grading impacts to the wetland itself or any infill. We will be working through the grading in the coming month. If there are any additional buffer requirements please let us know as that would be good to understand as we develop the site design.

Thank you for sending over the previous site law permit information.

Best,

Leah Schaffer, NCARB
Project Architect

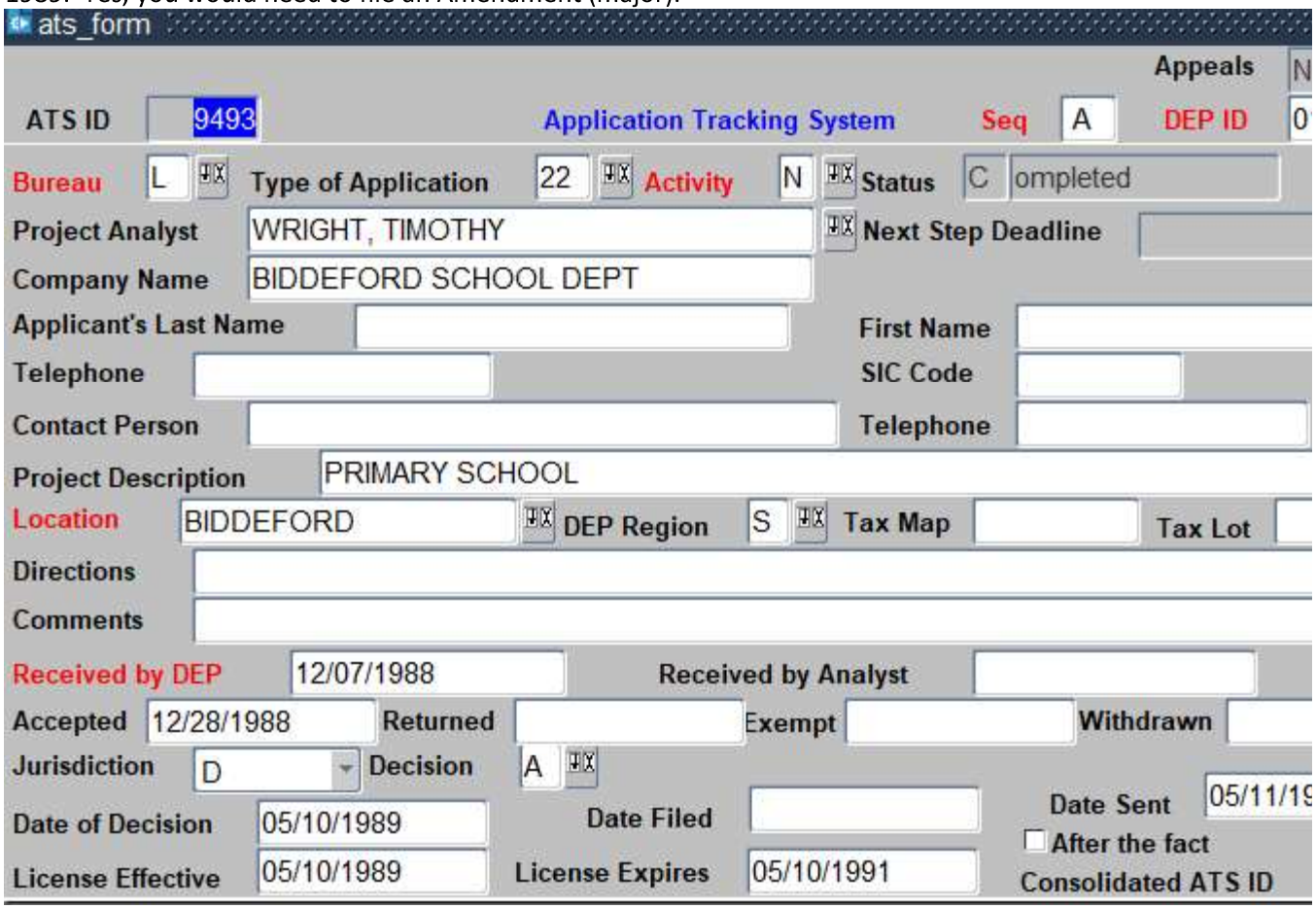
Mobile Studio Design
128 Main Street, Unit 201
Biddeford, Maine 04005

(c) 757.927.5324
(o) 207.494.8102

On Jun 28, 2023, at 4:20 PM, Hallowell, Dawn <Dawn.Hallowell@maine.gov> wrote:

Leah,
The proposed building addition will be 46 feet from the wetland. What about the setback from the sidewalk and associated grading? Will there be any wetland alteration?

As far as Site Law. I believe it does have a site license (see below). DEP #L-015965-22-A-N issued in 1989. Yes, you would need to file an Amendment (major).



Dawn Hallowell
Licensing Director
Bureau of Land Resources
Maine Dept. of Environmental Protection
(207) 557-2624
Dawn.Hallowell@maine.gov

From: Sirois, Alison <Alison.Sirois@maine.gov>
Sent: Wednesday, June 28, 2023 1:58 PM
To: Hallowell, Dawn <Dawn.Hallowell@maine.gov>
Subject: FW: Biddeford Primary School Addition

From: Leah Schaffer <leah@mobilestudiodesign.com>
Sent: Wednesday, June 28, 2023 1:37 PM
To: Sirois, Alison <Alison.Sirois@maine.gov>
Cc: Drew Olehowski <dolehowski@haleyward.com>; Jon Whitten, Jr. <jwhitten@haleyward.com>
Subject: Biddeford Primary School Addition

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Alison,

I hope you are doing well. I wanted to reach out for some clarification on the permitting process required for a new addition to an existing school built in 1990. The project address is 320 Hill Street in Biddeford.

Attached below is a wetland report and schematic site plan showing the new addition proposed location in relation to wetland and existing structure. The wetland has been noted as a WOSS as it includes a stream adjacent to Hill Street. Our proposed addition is 46'+/- at its closest point to the wetland and well over 300 feet from the stream. Are you able to verify any buffer zone required and what permitting process will be needed?

Could you also verify if this would require an amendment to a Site Location permit?

Thank you for your time looking into this. Feel free to reach out with any questions.

Best,

Leah Schaffer, NCARB
Project Architect

Mobile Studio Design
128 Main Street, Unit 201
Biddeford, Maine 04005
(c) 757.927.5324
(o) 207.494.8102

ATTACHMENT C

FINANCIAL CAPACITY/BOND

FINANCIAL CAPACITY

A bond for the project has been passed by voters and the City has the capacity to fund the project.

ATTACHMENT D

DEED

Know All Men by these Presents,

I.R.S.$30.80

That We, Paul H. Lauzon and Cecelia J. Lauzon both of Biddeford in the County of York and State of Maine ----------

in consideration of One dollar and other valuable considerations

paid by THE INHABITANTS OF THE CITY OF BIDDEFORD, a body corporate and politic

the receipt whereof we **do hereby acknowledge, do hereby give, grant, bargain, sell and convey, unto the said** THE INHABITANTS OF THE CITY OF BIDDEFORD

their successors ---------- ~~Heirs~~ and Assigns, forever,

the following described property: All our right, title and interest in and to a certain lot or parcel of land situated in said Biddeford, and bounded and described as follows, viz:

Beginning at the easterly corner of land now or formerly of one Gauthier on the southwesterly side of West Street, at an iron pipe driven into the ground; thence S 52°W by said land of Gauthier eight hundred eighty-five (885) feet to a stone bound; thence the same course by land of owners unknown two hundred fifty-two and 1/10 (252.1) feet to an iron pipe driven into the ground and to Lot No. 2, Range F, on a "Plan of Lots of land in Biddeford, formerly belonging to the Estate of Jeremiah Hill, Esq." said plan being recorded in York County Registry of Deeds in Plan Book 162, Page 284; thence S 37 3/4°E by said Lot No. 2 four hundred thirty and 2/10 (430.2) feet to an iron pipe driven into the ground one (1) rod northwesterly of the Middle Line, so-called; thence northeasterly by a line which is one (1) rod northwesterly of and parallel to said Middle Line seven hundred ninety-four and 1/10 (794.1) feet to an iron pipe driven into the ground and the southwesterly side of land conveyed by Thomas F. Foss to Walter Foss July 23, 1894, recorded in said Registry in Book 462, Page 309, now of Ernest Foss; thence northwesterly by said Walter Foss lot one hundred fifteen and 5/10 (115.5) feet to an iron pipe driven into the ground, said line makes an included angle of 91°19' with the last described line; thence northeasterly by said Walter Foss lot three hundred thirty (330) feet to an iron pipe driven into the ground and to West Street; said line being parallel with and eight (8) rods northwesterly from said Middle Line; thence northwesterly by said West Street making an included angle of 91°19' with the last described line three hundred twenty-four and 2/10 (324.2) feet to the point of beginning.

EXCEPTING AND RESERVING such portions as were conveyed by deed of Andre Boivin, et al, to Arsene J. and Alma Huot under date of February 20, 1958, recorded in said Registry in Book 1362, Page 167.

ALSO EXCEPTING herefrom that portion conveyed as described in a certain Indenture as recorded in said Registry on December 8, 1959, in Book 1424, Page 169 and also as taken by said City of Biddeford in their Instrument dated June 14, 1938, recorded in said Registry in Book 925, Page 185.

ALSO EXCEPTING AND RESERVING any rights of way now in existence along said Middle Line and any other rights of way of record.

ALSO all our right, title and interest in and to a certain other lot or parcel of land in said Biddeford, situated on the northwest side of the Middle Line and being the southwesterly half part of that part of Lot No. 2, Range F, lying northwest of said Middle Line on a Plan of the Hill Estate drawn by Tristram Jordan, Jr. to which reference is hereby made and containing five (5) acres, and one hundred (100) square rods and being the same premises described in deed of

ATTACHMENT E

PHOTOGRAPHS OF SITE

Photo No. 1	
Site Location: Biddeford School	
Description: Overview of school, looking southwest. Proposed expansion to occur in the south, plan left.	

Photo No. 2	
Site Location: Biddeford School	
Description: Area south of the existing school where the proposed expansion will connect.	

Photo No. 3 **Site Location:** Biddeford School **Description:** Looking further south at open area for proposed expansion and emergency access.	

Photo No. 4 **Site Location:** Biddeford School **Description:** Rock outcroppings to remain between the existing and proposed buildings.	

ATTACHMENT F

GEOTECHNICAL REPORT

The key to success starts with a solid foundation.
ENGINEERING | EXPLORATION | EXPERIENCE

Geotechnical Report

Primary School Addition

320 Hill Street, Biddeford, Maine



Client

Biddeford School Department
18 Maplewood Avenue
Biddeford, ME 04005

Project #: 23175
Date: 8/9/2023

SUMMIT
GEOENGINEERING SERVICES

210 Maine Avenue, Farmingdale, ME 04344
www.summitgeoeng.com

Table of Contents

1.0 PROJECT DESCRIPTION 3
2.0 EXPLORATIONS 3
3.0 SUBSURFACE CONDITIONS 4
3.1 SOIL 4
3.2 GROUNDWATER 4
3.3 BEDROCK 5
4.0 GEOTECHNICAL EVALUATIONS AND CONSIDERATIONS 5
5.0 GEOTECHNICAL RECOMMENDATIONS 6
5.1 BEARING CAPACITY AND SUBGRADE PREPARATION 6
5.2 FROST PROTECTION 6
5.3 SEISMIC DESIGN 6
5.4 GROUNDWATER CONTROL 7
5.5 SLABS-ON-GRADE 7
5.5.1 Interior Slabs 7
5.5.2 Exterior Slabs 7
5.5.3 Elevator Slab 8
5.6 PAVEMENT SECTION RECOMMENDATIONS 8
6.0 EARTHWORK CONSIDERATIONS 8
6.1 EARTHWORK FOR CONSTRUCTION 8
6.2 MATERIALS 9
7.0 CLOSURE 10

Appendix A – Exploration Location Plan
Appendix B – Exploration Logs

August 9, 2023
SGS Project #: 23175

Biddeford School Department
18 Maplewood Avenue
Biddeford, ME 04005
Attn: Leah Schafer

Reference: Geotechnical Report – Proposed Primary School Addition
320 Hill Street, Biddeford, Maine

Dear Leah,

Summit Geoengineering Services, Inc. (SGS) has completed a geotechnical investigation in connection with the proposed addition to the Biddeford Primary School at 320 Hill Street in Biddeford, Maine. Our scope of services included the observation of four test borings and the preparation of this geotechnical report summarizing our findings and providing geotechnical recommendations.

1.0 Project Description

The project consists of the construction of a new 2-story addition to the existing primary school. The existing primary school consists of 2-story building with an approximate first floor footprint of 52,250 square feet. The addition will have approximate dimensions 161 feet by 62 feet. An elevator connecting the first and second floor will be constructed in the north end of the building. Existing grades are relatively flat across the site, sloping upwards with closer to the existing building. The site is bordered by a wetland to the east. No structural loads, foundation plans, or site grading plans were available at the time of this report. Recommendations given in this report are made based on an assumed maximum allowable bearing pressure of 3,000 psf and a maximum column load of 100 kips. If loads and footing sizes differ from the assumed values, SGS should be notified so the conditions may be re-evaluated.

2.0 Explorations

Summit Geoengineering Services (SGS) observed the subsurface conditions on July 12, 2023 with the drilling of 4 borings. The borings were completed by SGS using a rubber tracked AMS PowerProbe 9500 VTR drill rig. The borings were explored to depths ranging from 15.6 feet (refusal) to 22 feet. The borings were completed using both 2 ¼-inch hollow stem augers and 3-inch casing. Standard Penetration Tests (SPT) were performed in increments of 5 feet. Soils were visually classified (*ASTM D2488*) using SPT split spoon sampling (*ASTM D1586*). The exploration locations were determined by SGS and marked out by others prior to the explorations. An exploration location plan and the exploration logs are included in *Appendix A* and *Appendix B*, respectively.

3.0 Subsurface Conditions

3.1 Soil

From the explorations, the soil at this site generally consists of the following:

- **Topsoil** (6 inches to 12 inches thick)
- **Fill** (1 foot thick)
- **Stream Alluvium (**13.5 feet to 21 feet thick)
- **Bedrock** (Present at 13.6 to 17 feet BGS or greater)

The **topsoil** generally consists of dark brown sandy silt with rootlets and trace gravel. The topsoil is present in test borings B-1, B-3, and B-4 and is approximately 6 to 12 inches in thickness. The topsoil is visually classified as ML in accordance with the Unified Soil Classification System (USCS) and is considered stiff and damp.

The **fill** generally consists of tan medium to coarse sand with trace silt. The fill is present in exploration B-2, which is immediately adjacent to the existing structure. Portions of the fill appeared to be re-worked native material, consisting of brown silty sand with trace gravel. The fill is approximately 1 foot thick and is visually classified as SP in accordance with the USCS. The fill is considered loose to compact and damp to humid.

The **stream alluvium** generally consisted of two layers, the top consisting of intermixed sand, silt, and clay, and the underlying consisting of a dense sand. The upper layer is damp to saturated, generally increasing in moisture content with depth. It is 13 feet to 20 feet thick and is classified as either ML or CL, in accordance with the USCS. SPT N-values range from 7 to 18 blows per foot (bpf). The underlying sand layer is present in test borings B-1 and B-4 at depths of 17 feet and 22 feet BGS respectively. The underlying sand layer is described as an olive gray dense sand with some to little silt. The sand layer is classified as SP-SM in accordance with the USCS and is considered saturated. SPT-N values in this layer range from 31 to 33 bpf.

Detailed descriptions of the soil can be found in the exploration logs in *Appendix B*.

3.2 Groundwater

Groundwater was measured at the following depths:

GROUNDWATER DEPTH		
Location	**Depth (ft)**	**Reference**
B-1	4.8	Measured in bore hole
B-2	5.5	Measured in bore hole
B-3	2.3	Measured in bore hole
B-4	12.0	Measured in bore hole

In general, groundwater was observed to be present within the upper stream alluvium and is expected to be present during foundation excavation.

3.3 Bedrock

Bedrock was encountered at the depths presented in the bedrock summary table below:

BEDROCK SUMMARY TABLE		
EXPLORATION	**DEPTH (ft BGS)**	**NOTES**
B-1	32.3	Probed to dense strata with drill rods
B-2	13.6	Split spoon refusal at 13.6 ft sloping to 15.6 ft
B-3	17	Hollow stem auger refusal

Bedrock outcrops are visible between B-2 and B-3, suggesting the bedrock layer may undulate between the two explorations. Apart from the outcrops, bedrock is not expected to be present within excavations.

4.0 Geotechnical Evaluations and Considerations

No structural loads or foundation plans were available at the time of this report. Settlement computations were made based on an assumed maximum bearing pressure of 3,000 psf and a maximum column load of 100 kips. Based on this and the data collected during the field explorations, the soils present at the assumed footing elevations are suitable for the building to be supported on conventional spread or continuous footings. SGS estimates settlement within the building footprint to be less than 1-inch. If footing sizes or loads are different than the assumed values, SGS should be notified so the conditions may be re-evaluated.

Due to the presence of shallow groundwater, there is potential for subgrade softening to occur within the sand, silt, and clay layer. To increase the stability of the subgrade, SGS recommends constructing footings on an 8-inch minimum layer of Crushed Stone.

SGS did not perform explorations to observe the existing building conditions, including the existing subgrade conditions and the existing footing geometry. SGS anticipates the exisiting footings to be 4 feet below the existing ground surface. This would place them at or close to the bottom of the new addition exterior footings. In any case, SGS recommends all addition footings adjacent to the existing footings are constructed no higher than the existing building footings. Care should be taken when performing excavations around existing footings to avoid undermining. Stabilization methods such as temporary shoring or other engineered controls are recommended if excavations are expected to be below the bottom of existing footings.

Preliminary concept plans show an elevator located in the northern portion of the building. Assuming an elevator pit depth of 5 feet, bedrock is not expected within the excavation for the elevator pit.

5.0 Geotechnical Recommendations

5.1 Bearing Capacity and Subgrade Preparation

Based on the results of our subsurface explorations, foundations can be supported on conventional spread footing foundations. SGS recommends that the bottom of the footings for the proposed building be constructed on a minimum of 8 inches of ¾-inch Crushed Stone.

Assuming that the recommendations below are followed, the footings can be proportioned using a maximum allowable bearing pressure of 3,000 psf. Total settlement is computed to be less than 1 inch and differential settlement is expected to remain within tolerable limits. The allowable bearing pressure is based on the following construction sequences across the site:

- Remove existing pavement as necessary. Any exposed dry, granular subgrade should be proofrolled using a smooth drum vibratory compactor. Soft, wet, or unstable subgrade should not be proofrolled to avoid further disturbance. SGS recommends excavations to be completed using a smooth-edged bucket to minimize the disturbance of subgrade soils.

- Excavate to 8 inches below the proposed bottom of footing elevation. Remove any large elements, such as cobbles or boulders, if encountered, in the footing subgrade and replace with ¾-inch Crushed Stone. If subgrade below the footing elevation is wet, it should not be proofrolled to avoid disturbing the fine-grained soils. In this case, excavations should be completed using a smooth-edged bucket.

- Place a minimum of 8 inches of Crushed Stone. The Crushed Stone should be compacted to lock the particles together. Footings can be constructed directly on the compacted Crushed Stone. In no case shall footings be constructed in standing water or frozen soil.

- SGS should observe the prepared footing subgrade conditions after excavation and prior to the placement of Crushed Stone.

5.2 Frost Protection

The design air freezing index for the Biddeford, Maine area is approximately 1,190-degree F days (10-year, 90% probability). Based on this, exterior footings and other footings exposed to freezing temperatures should be placed at a minimum depth of **4 feet** in order to provide adequate frost protection. We recommend that all foundations exposed to freezing temperatures be backfilled with Granular Borrow, see *Section 6.2* for gradation requirements. Granular Borrow should be compacted to a minimum of 95% of *ASTM D1557* when under slabs and footings.

5.3 Seismic Design

Based on the present soils, this site can be classified as **Seismic Site Class D** in accordance with ASCE 7-10, 7-16, and 7-22. The following seismic design coefficients should be used:

SUBGRADE SITE SEISMIC DESIGN COEFFICIENTS – ASCE 7			
Seismic Coefficient	**ASCE 7-10 (Class D)**	**ASCE 7-16 (Class D)**	**ASCE 7-22 (Class D)**
S_S	0.252	0.291	0.290
S_1	0.079	0.072	0.063
S_{MS}	0.403	0.456	0.340
S_{M1}	0.190	0.173	0.130
S_{DS}	0.269	0.304	0.220
S_{D1}	0.127	0.115	0.088
PGA_m	0.211 g	0.252 g	0.170 g

No liquefiable soils were encountered in our explorations.

5.4 Groundwater Control

Based on observed groundwater levels, groundwater is anticipated to be at or above the proposed bottom of footing elevations. Based on these conditions, underdrains are recommended. Underdrains, should consist of 4-inch rigid PVC or flexible ADS pipe surrounded by 6 inches of ¾-inch Crushed Stone which is then surrounded by Mirafi 140N or equivalent. Underdrains should be outlet to a free draining location. Where exposed at the ground surface, a screen or other device should be placed over the outlet to prevent the migration of animals into the underdrain system.

In addition, we recommend all exterior grades slope away from the building footprint to reduce runoff water from infiltrating the foundation backfill soils.

5.5 Slabs-on-Grade

All fill should be compacted to a minimum of 95% of *ASTM D1557*. The gradation requirements for Granular Borrow, ¾-inch crushed stone, and Structural Fill can be found in *Section 6.2*.

5.5.1 Interior Slabs

SGS recommends that interior slabs are constructed on 8 inches of Crushed Stone or 12 inches of Structural Fill. Crushed Stone should be tamped to lock the particles together. Fill required to raise the grade to the bottom of the slab should consist of Granular Borrow or Structural Fill. Granular Borrow and Structural Fill should be compacted to a minimum of 95% of their dry density as determined by *ASTM D1557*.

5.5.2 Exterior Slabs

For slabs in unheated entry areas, the following options should be considered for frost protection:

- Construct slab on frost wall foundations, in accordance with *Section 6.1 and 6.2*
- 6-inch slab (minimum thickness) over 2 inches of rigid insulation over 12 inches CS or SF (compacted)

- 6-inch slab (minimum thickness) over 36 inches CS or SF (compacted)

We recommend that insulation, if used, be extended 2 feet beyond the edge of the slabs and that it consist of a rigid polystyrene product.

5.5.3 Elevator Slab

No preliminary elevator slab elevations are available at the time of this report. Based on this, SGS assumes the bottom of the elevator slab will be located 5 feet below the finished floor elevation. Excavation performed for the elevator pit should be performed with a smooth-edged bucket to avoid the disturbance of the subgrade soils. Due to the presence of shallow groundwater, SGS recommends the installation of a sump to prevent water from ponding within the elevator pit. SGS anticipates bedrock will not be present during the excavation of the elevator pit. The elevator foundation should be constructed on a minimum 8-inch layer of Crushed Stone.

5.6 Pavement Section Recommendations

The mean annual freezing index for the Biddeford, Maine area is estimated at 890-degree F days (2-year, 50% probability). Based on the subgrade and mean annual freezing index, the anticipated mean annual frost penetration depth is 36 inches.

For the parking lots and access road, we recommend a minimum total section thickness of **18 inches**. We further recommend that the pavement section consist of the following materials:

PAVEMENT SECTION MATERIALS AND THICKNESSES		
Material	**Thickness (in)**	**Specifications**
Asphalt Surface Course	1 1/4	MDOT 703.09 Type 9.5 mm (Light Duty) or 12.5 mm (Heavy Duty)
Asphalt Binder Course	1 3/4	MDOT 703.09 Type 19 mm
Base Soil	3	MDOT 703.06 Type A
Subbase Soil	12	MDOT 703.06 Type D

Reference: *MDOT Standard Specifications, 2014*

Fill beneath the subbase soil can consist of Structural Fill or Granular Borrow placed and compacted to a minimum of 95% of *ASTM D1557*.

Underdrains are not necessary beneath paved areas. Paved areas should be side sloped to prevent water ponding on the surface.

6.0 Earthwork Considerations

6.1 Earthwork for Construction

The following temporary side slope requirements should be used during construction:

OSHA EXCAVATION STABILITY SOIL CLASSIFICAITON		
Soil Type	**OSHA Classification**	**Occupied Excavation >5 feet Temporary Side Slope Requirement**
Structural Fill (SF)	Type C	1.5H:1V
¾-inch Crushed Stone (CS)		
Granular Borrow (GB)		
Existing Fill	Type B	1H:1V
Stream Alluvium	Type C	1.5H:1V

The permissible slopes noted above are for excavations less than 20 feet deep. Excavations deeper than this should be designed by a professional engineer. If seepage occurs in any occupied excavation deeper than 5 feet, de-watering techniques should be considered and side slopes shall not exceed 1.5H:1V. De-watering in the excavations may also be required if water begins to pond in the excavations. We anticipate that dewatering, if necessary, can be accomplished using shallow sump and pumps. Dewatering is anticipated to be required for the construction of the elevator sump.

Excavations into fine-grained soil should be performed using a smooth-edged bucket. All foundations should be constructed on a minimum of 8 inches of compacted Crushed Stone.

To the extent possible, construction should occur during periods of dry weather to minimize disturbance to excavated subgrade areas. If excavations and construction occur during wet periods, the contractor should employ the necessary measures to eliminate disturbance to the subgrade from heavy rainfall, surface water runoff, freeze/thaw softening, or any other potential weather-related cause of subgrade disturbance.

Once excavation for the footings is initiated, SGS should be contacted to observe the subgrade conditions prior to the placement of any fill.

6.2 Materials

The gradation requirements reflect the portion of soil passing the 3-inch sieve size. The following table presents the recommended grain sizes for the materials to be used at the site:

GRADATION REQUIREMENTS FOR SITE MATERIALS			
Sieve Size	**[1] Structural Fill (SF)**	**[2] Crushed Stone (CS)**	**[3] Granular Borrow (GB)**
4 Inch	---	---	---
3 Inch	100	---	100
2 Inch	---	---	---
1 Inch	---	100	---
¾ Inch	---	90 – 100	---
½ Inch	35 – 80	20 – 55	---
⅜ Inch	---	0 – 15	---
¼ Inch	25 – 65	---	---
No. 4	---	0 – 5	---
No. 40	0 – 30	---	0 – 70
No. 200	0 – 7	---	0 – 7
Maximum Particle Size	6”	1”	6”
[4] Minimum Compaction Requirement	95%	---	[5] 95%

[1]Maine DOT Specification 703.06, 2014, Type D
[2]Maine DOT Specification 703.13, 2020, Crushed Stone ¾-Inch
[3]Maine DOT Specification 703.19, 2020, Granular Borrow
[4]Per ASTM D1557
[5]Compaction requirement for GB can be reduced to 90%, when in landscaping areas.

Crushed Stone should be placed in 12-inch maximum lifts and compacted with a minimum of 4 passes with a vibratory compactor. Granular Borrow should consist of a free draining, granular soil.

7.0 Closure

Our recommendations are based on professional judgment, generally accepted principles of geotechnical engineering and project information provided by others. No other warranty is expressed or implied. Some changes in subsurface conditions from those presented in this report may occur. Should the subsurface conditions, finish grades, or foundation loadings differ materially from those described in this report, SGS should be notified so that we can re-evaluate our recommendations.

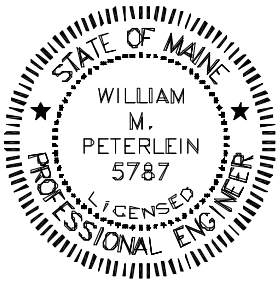
We recommend that a qualified third-party testing agency be retained to provide QA/QC services during construction.

SGS should be contacted to observe the footing subgrade before the placement of the geotextile and Crushed Stone to ensure the subgrade conditions are sufficient to support the proposed foundations.

We appreciate the opportunity to serve you during this phase of your project. If there are any questions or if additional information is required, please do not hesitate to call.

Sincerely,
Summit Geoengineering Services, Inc.

Jason Barnes, E.I.
Geotechnical Engineer



William M. Peterlein, P.E.
President & Principal Engineer

Appendix A

Exploration Location Plan

PLAN REFERENCE

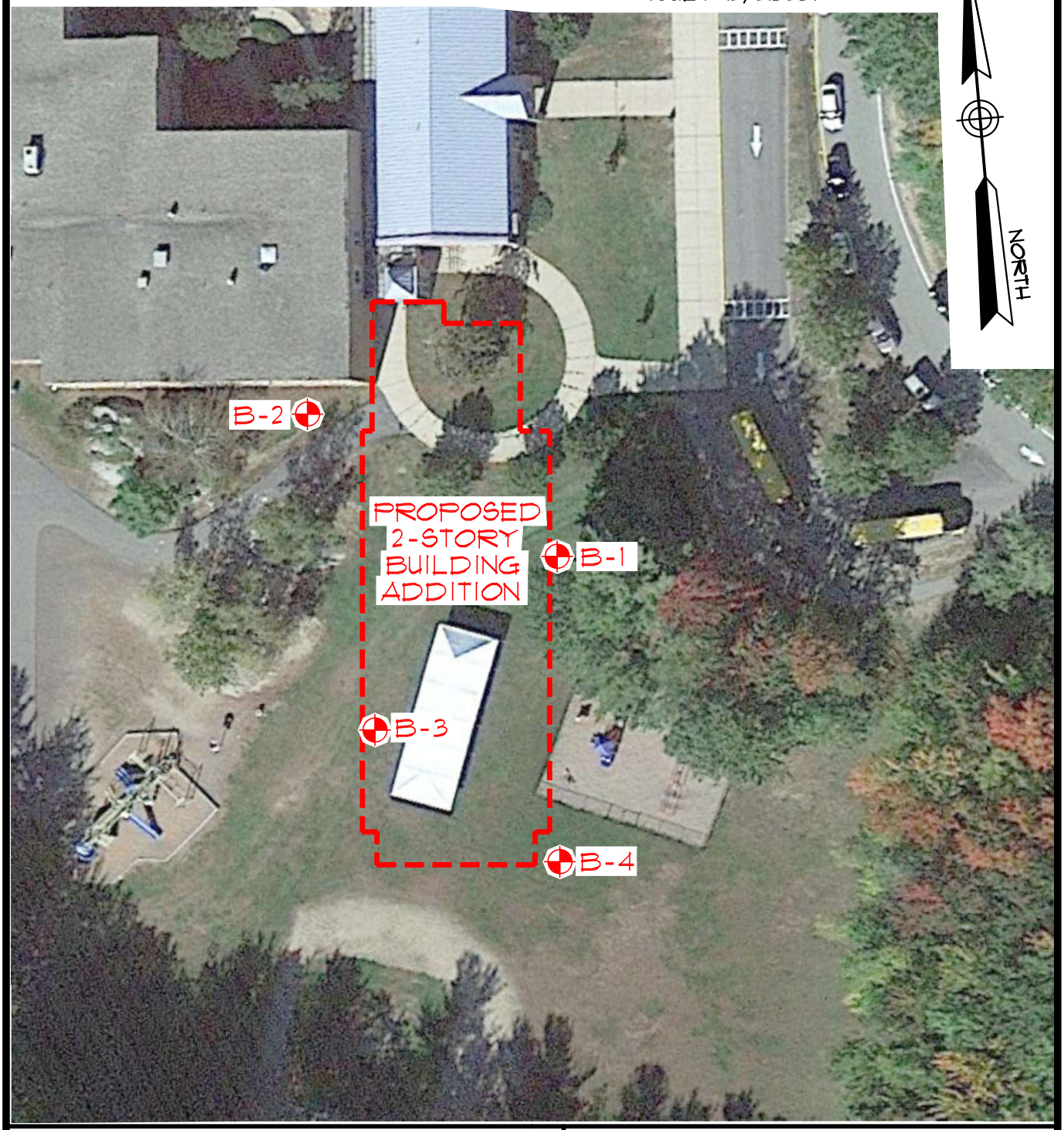
AERIAL IMAGE (OCTOBER 2021) WAS OBTAINED FROM GOOGLE EARTH.

LEGEND

B-1 SUMMIT TEST BORING (JULY 12, 2023)

N

NORTH



EXPLORATION LOCATION PLAN
PROPOSED BUILDING ADDITION

320 HILL STREET - BIDDEFORD, MAINE
PREPARED FOR
BIDDEFORD SCHOOL DEPARTMENT

DATE: 7-19-2023	DRAWN BY: KRF	CHECKED BY: JNB
JOB: 23175	SCALE: 1" = 50'	FILE: 23175 BOR

OFFICE: 210 MAINE AVENUE
FARMINGDALE, MAINE
TEL.: (207) 446-3360

MAIL: P.O. BOX 515
GARDINER, ME 04345

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Appendix B

Exploration Logs

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SOIL BORING LOG

Project:	Biddeford Primary School Addition	Boring #:	B-1
Location:	320 Hill Street	Project #:	23175
City, State:	Biddeford, ME	Sheet:	1 of 1
		Chkd by:	WMP

Drilling Co:	Summit Geoengineering	Boring Elevation:	
Driller:	S. Floyd	Reference:	
Summit Staff:	J. Barnes, E.I., R. Osbourne	Date started: 7/12/2023	Date Completed: 7/12/2023

DRILLING METHOD		SAMPLER	
Vehicle:	ATV	Length:	24" SS
Model:	9500 AMS	Diameter:	2"OD/1.5"ID
Method:	2-1/4" HSA	Hammer:	140 lb
Hammer Style:	Auto	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
7/12/2023	4.5'		Measured immediately after completion
7/12/2023	4.8'		Measured 10 minutes after completion

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/8	0-2	1		Dark brown SAND, some to little Silt, rootlets, compact,		TOPSOIL
1				13		damp, SM		
				40		Cobble in spoon tip		
2				18				
	S-2	24/18	2-4	11		Dark brown SAND, some Silt, compact, humid, SM		
3				15				
				8		Olive gray SILT, some to little Clay, slight mottling,		3.3'
4				8		stiff, humid, ML		STREAM ALLUVIUM
					▽			
5								
	S-3	24/22	5-7	3		Olive gray Silty CLAY, slight mottling, stiff, damp to moist,		5'
6				5		CL		
				5				
7				6				
8								
9								
10								
	S-4	24/14	10-12	3		Gray SILT, little Clay, firm, moist to wet, ML		10'
11				3				
				4				
12				3				
13								
14								
15								
	S-5	24/16	15-17	2		Gray Clayey SILT, stiff, wet, ML		
16				8				
				9		Olive gray SILT trace Clay, heavily mottled,		16'
17				13		very stiff, wet, ML		
						End of Boring at 17' in Running Sands		17'
18						Offset probe to 32.3', Refusal in Dense Strata		
19								
20								
21								
22								
23								
24								
25								
26								
27								

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
LL = Liquid Limit, PI = Plastic Index

Bedrock Joints
Shallow = 0 to 35 degrees
Dipping = 35 to 55 degrees
Steep = 55 to 90 degrees

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SUMMIT
GEOENGINEERING SERVICES

SOIL BORING LOG

Project:	Biddeford Primary School Addition	Boring #:	B-2
Location:	320 Hill Street	Project #:	23175
City, State:	Biddeford, ME	Sheet:	1 of 1
		Chkd by:	WMP

Drilling Co:	Summit Geoengineering	Boring Elevation:	
Driller:	S. Floyd	Reference:	
Summit Staff:	J. Barnes, E.I., R. Osbourne	Date started: 7/12/2023	Date Completed: 7/12/2023

DRILLING METHOD		SAMPLER	
Vehicle:	ATV	Length:	24" SS
Model:	9500 AMS	Diameter:	2"OD/1.5"ID
Method:	3" Casing	Hammer:	140 lb
Hammer Style:	Auto	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
7/12/2023	5.5'		Measured after completion

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/12	0-2	2		Brown Silty SAND trace Gravel, loose,		FILL/REWORKED
1				3		damp, SP		NATIVE
				7		Tan medium to coarse SAND, trace Silt, compact, humid		
2				10		SP		
								2'
3								STREAM ALLUVIUM
4								
5								
	S-2	24/16	5-7	5	▽	Brown medium/coarse SAND, some Silt, trace Clay,		
6				6		compact, damp to moist, SM		
				15				
7				33		Tan to brown medium to coarse SAND, dense,		6.8'
						damp to moist, SP		
8						Rock fragment in spoon		
9								
10								
	S-3	24/24	10-12	3		Same as above		
11				10		Gray to brown Silty CLAY, stiff, wet, CL		10.5'
				21				
12				25		Tan fine SAND, little Silt, dense, wet, SP		11.5'
13								
14	S-5	24/0	13.6-15.6	40		No recovery in spoon		
				40				
15				36				
				33				
16						End of Boring at 15.6', Casing and Spoon Refusal on		15.6'
						Sloping Bedrock		(PROBABLE)
17								BEDROCK
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
LL = Liquid Limit, PI = Plastic Index

Bedrock Joints
Shallow = 0 to 35 degrees
Dipping = 35 to 55 degrees
Steep = 55 to 90 degrees

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SUMMIT
GEOENGINEERING SERVICES

SOIL BORING LOG

Project:	Biddeford Primary School Addition	Boring #:	B-3
Location:	320 Hill Street	Project #:	23175
City, State:	Biddeford, ME	Sheet:	1 of 1
		Chkd by:	WMP

Drilling Co:	Summit Geoengineering	Boring Elevation:	
Driller:	S. Floyd	Reference:	
Summit Staff:	J. Barnes, E.I., R. Osbourne	Date started: 7/12/2023	Date Completed: 7/12/2023

DRILLING METHOD		SAMPLER	
Vehicle:	ATV	Length:	24" SS
Model:	9500 AMS	Diameter:	2"OD/1.5"ID
Method:	2-1/4" HSA	Hammer:	140 lb
Hammer Style:	Auto	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
7/12/2023	2.3'		Measured after completion

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/12	0-2	1		Dark brown Sandy SILT, trace Gravel, loose, damp,		TOPSOIL
1				5		ML		0.5'
				5		Tan coarse to medium SAND, loose, humid, SP		STREAM ALLUVIUM
2				9				
					▼			
3								
4								
5								
	S-2	24/20	5-7	13				
6				6		Olive brown Silty CLAY, firm, moist to wet, CL		
				3				
7				8				
8								
9								
10								
	S-3	24/20	10-12	2		Olive gray Clayey SILT, soft to firm, saturated, ML	water in spoon @10'	10'
11				2				
				6				
12				8				
13								
14								
15								
	S-4	24/18	15-17	1		Olive gray Clayey SILT, weathered rock fragments		
16				18		at 16.8', hard, saturated, ML		
				26				
17				12				
						End of Boring @ 17', Refusal on Probable Bedrock		17'
18								(PROBABLE) BEDROCK
19								
20								
21								
22								
23								
24								
25								
26								
27								

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
LL = Liquid Limit, PI = Plastic Index

Bedrock Joints
Shallow = 0 to 35 degrees
Dipping = 35 to 55 degrees
Steep = 55 to 90 degrees

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SUMMIT
GEOENGINEERING SERVICES

SOIL BORING LOG

Project:	Biddeford Primary School Addition	Boring #:	**B-4**
Location:	320 Hill Street	Project #:	23175
City, State:	Biddeford, ME	Sheet:	1 of 1
		Chkd by:	WMP

Drilling Co:	Summit Geoengineering	Boring Elevation:	
Driller:	S. Floyd	Reference:	
Summit Staff:	J. Barnes, E.I., R. Osbourne	Date started: 7/12/2023	Date Completed: 7/12/2023

DRILLING METHOD		SAMPLER	
Vehicle:	ATV	Length:	24" SS
Model:	9500 AMS	Diameter:	2"OD/1.5"ID
Method:	3" Casing	Hammer:	140 lb
Hammer Style:	Auto	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
7/12/2023	12 ft		Measured in 15 feet of casing

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/12	0-2	1		Dark brown Sandy SILT, trace Gravel, compact,		TOPSOIL
1				5		damp, ML		0.8'
				5		Brown medium to coarse SAND, compact, humid, SW		STREAM ALLUVIUM
2				9				
3								
4								
5	S-2	0/0	5-5.1	50/1"		No recovery, offset boring 2' east		
	S-2a	24/24	5-7	18		Dark brown Sandy SILT, trace Clay, very stiff, humid		
6				9		ML		
				9		Gray Clayey SILT, mottled, stiff, humid to damp, ML	6'	
7				7				
8								
9								
10								
	S-3	24/18	10-12	3		Olive gray Clayey SILT, firm, saturated, ML		
11				3				
				4				
12				6	▽			
13								
14								
15								
	S-4	24/24	15-17	4		Gray Silty CLAY, slight mottling, stiff, wet, CL	15'	
16				9				
				4				
17				3				
18								
19								
20								
	S-5	24/24	20-22	3		Olive gray SAND, some to little Silt, dense, saturated	20'	
21				14		SP-SM		
				17				
22				16				
						End of Boring at 22', No Refusal		22'
23								
24								
25								
26								
27								

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
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11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
LL = Liquid Limit, PI = Plastic Index

Bedrock Joints
Shallow = 0 to 35 degrees
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Steep = 55 to 90 degrees

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
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Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

ATTACHMENT G

NATURAL RESOURCE REPORT

AMBIT ENGINEERING, INC.
A DIVISION OF HALEY WARD, INC.

TECHNICAL REPORT OF WETLAND DELINEATION, CLASSIFICATION & IDENTIFICATION

Haley Ward Project No.:14125.003 **Date(s) of Delineation**: 6/6/23 **Date of Report**: 6/26/23

Field Delineator: Steven D. Riker, CWS (NH) **Compiled by:** Steven D. Riker, CWS (NH)

Project Location/Tax Map & Lot: 320 Hill Street, Biddeford, ME Tax Map 82, Lot 32

Prepared for: Leah Schaffer, Mobile Studio Design, 128 Main Street, Unit 201, Biddeford, ME 04005.

Site Area Observed: Portion of lot to establish wetland buffers and wetland buffer extents toward proposed development area.

Site Conditions: Lot with previously developed uplands and freshwater wetlands.

Weather/Seasonal Conditions: 65 sunny, summer conditions.

Site Disturbance: Historic disturbance around previously developed area.

Wetlands Present: Yes. Property contains freshwater wetlands.

Wetland conditions/atypical situation/problem area: None.

Hydric Soil Criterion: A11. Field Indicators of Hydric Soils in the United States, Version 8.2, USDA-NRCS, 2018.

Delineation Standards Utilized:

1. *US Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (Jan 1987). **AND** Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0, January 2012.
2. Field Indicators of Hydric Soils in the United States, Version 8.2, USDA-NRCS, 2018 **AND (for disturbed sites)** *Field Indicators for Identifying Hydric Soils in New England,* Version 4. NEIWPCC Wetlands Work Group (April 2019).
3. *National List of Plant Species That Occur in Wetlands: Northeast (Region 1).* USFWS (May 1988).

Notes: Haley Ward delineated wetland boundaries on the subject parcel within the scope area using fluorescent pink flagging tape labeled alpha numerically to aid in survey location. Wetland flags A1-A37 delineate a palustrine forested broad leaved deciduous wetland system that is seasonally flooded and/or saturated (PFO1E) There were no potential vernal pools identified within the scope area.

Protected species and habitats were assessed through the MDIFW data layers and through MDIFW's Beginning with Habitat data server. This database did indicate any rare plant and a natural communities on the site or in very close proximity to the site. The nearest rare plant/exemplary community is a "Hemlock-

200 Griffin Rd., Unit 3, Portsmouth, NH 03801
T: 603.430.9282 | HALEYWARD.COM

Hardwood Pocket Swamp" located approximately 950 feet to the southwest of the western access road into the property. Haley Ward reviewed information available on Federal protected species and habitats through the U.S. Fish and Wildlife Service's Information for Planning and Consultation System (IPaC). Review through the IPaC system determined that the project area is within the range of two federally protected species, Northern long-eared bat (Threatened) and within range of one candidate species, Monarch butterfly. The Monarch butterfly is a candidate species.

The State of Maine classifies wetlands as "Wetlands of Special Significance" (WOSS), based on MDEP Rule Chapter 310, Section 4A of *Wetlands and Waterbodies;* or wetlands that do not meet the criteria (not WOSS). Based on my observations of the site, the wetland delineated by flagged lines A1-A37 would be considered WOSS based on association with the exemplary community described above and the wetland is also associated with a stream which flows in a northeasterly direction through the subject parcel.

I would recommend official consultation with State and Federal resource regulatory agencies regarding prior to permit application submission.



Steven D. Riker, CWS (NH)
Wetland Scientist
Ambit Engineering, Inc. Haley Ward

ATTACHMENT H

STORMWATER REPORT

Pre-Development Hydrology Map and Calculations

Post-Development Hydrology Map and Calculations

STORMWATER MANAGEMENT

NARRATIVE

The intent of this Stormwater Management Plan is to comply with the requirements of the City of Biddeford Land Development Regulations and the Maine Department of Environmental Protection (MDEP) Chapter 500 regulations.

The site is subject to an existing Site Law Permit (#L-015965-22-A-N) but meets the criteria for an exemption from an amendment as a "modification to an educational institution that does not exceed an additional 40,000 square feet (sf) of disturbed area not to be revegetated in a calendar year." This project is utilizing this exemption but has still been designed to meet stormwater standards of the held Site Law permit.

This project involves the 11,806sf building expansion of the existing school. This permit application will account for stormwater runoff quantity and quality from the new building, emergency access driveway, and eight parking spaces. This project includes the creation of approximately 0.56 acres (24,536 square feet) of impervious surface and 1.13 acres (49,223 square feet) of disturbed area. Per the current Site Law permit for the property, the project is required to adhere with the Basic Standards, General Standards, and Flooding Standards of Chapter 500. As a result, it will be required to treat 95% of the impervious area. We are proposing to utilize grass under-drained soil filters and porous pavement to provide stormwater management for this project.

Basic Standard Submission: Information is provided as required for the Basic Standard Submission in Section 8 of this application.

General Standards Submission: The following information is provided as required in the General Standard Submission.

1. Drainage Plans: A set of Hydrology Plans are provided within this report. These plans include watershed boundaries and locations of the stormwater management features.
2. Calculations: This project will include best management practices which have been designed in accordance with Chapters 7 and 8 of the MDEP Stormwater BMP Technical Design Manual, Volume III. Sizing calculations are provided in this report.
3. Details, Designs, and Specifications: Please refer to the plans for stormwater management details, designs, and specifications.

Flooding Standard Submission: The following information is provided as required in the Flooding Standard Submission.

1. Control of Peak Flows: The project is required to meet Flooding Standards in accordance with Chapter 500 requirements. The Pre- and Post-Development Hydrology models and narrative are located in within this report.
2. Details, Design, and Specifications: The model runoff calculations are performed using a HydroCAD 10.0 model. Sizing of the required stormwater treatment methods are included in this report.

STORMWATER QUALITY CONTROL NARRATIVE

Based on Maine Department of Environmental Protection stormwater standards, the required treatment is 95% of the impervious surface created by the development.

To meet stormwater quality standards, the project is proposing a grassed underdrain soil filter to treat run-off from the roof of the expansion, and porous pavement to treat the emergency access road and parking spaces. The locations of these treatment devices are shown on the Proposed Site Plan.

The following tables summarize the impervious and developed area created by the project, as well as the treatment structure, area treated, and relationship with the total developed and impervious areas for the project.

SITE AREA

PROJECT AREA	IMPERVIOUS AREA
Total Proposed Site Area	24,536 SF (0.56 acres)
Impervious Removed	2,175 SF (0.05 acres)
New Impervious Created	22,361 sf (0.51 acres)

STORMWATER TREATMENT SYSTEMS (SITE AREA)

TREATMENT METHOD	AREA TREATED
	IMPERVIOUS AREA
Grassed Underdrained Soil Filter	11,870 SF
Emergency Access Drive Porous Pavement	8,176 SF
New Parking Spaces Porous Pavement	1,655 SF
TOTAL TREATED AREA	**21,701 SF**
TOTAL IMPERVIOUS AREA	**22,361 SF**
PERCENT OF TOTAL AREA TREATED	**97.05**

As can be seen in the table above, we are proposing to treat **97.05%** of the Impervious and Developed Area from the site portion of the project. This exceeds the standards required by Chapter 500.

BMP DESCRIPTIONS AND SIZING CALCULATIONS

The proposed stormwater quality control devices have been designed in accordance with the standards outlined in Stormwater Management for Maine, Volume II BMP Manual, January 2006, and revised May 2016. Construction and maintenance will be done according to the standards outlined in this manual. Descriptions of the treatment types follow.

1. Grassed Underdrain Soil Filter

Description:
The proposed soil filter will treat the roof area of the expanded school in Subcatchment 1. This filter is located on Type A, upland soils and will outlet into natural drainage pathways.

Calculations:
This filter was sized using Chapter 7.1 of the MDEP Stormwater BMP Technical Design Manual, Volume III.

Required Filter Area:
5% (imperious area) + 2% (landscaped area)
= 0.05(11,806 SF) + 0.02 (12,315 SF)
= 837 SF (Proposed filter is 890 SF)

Required Treatment Volume:
1-inch*(impervious area) + 0.4-inches*(Landscaped Area)
= (1/12*11,806 SF) +(0.4/12*12,315 SF)
= 1,394 CF (Proposed filter is 2,405 CF @ 18-inches of impoundment depth)

2. Porous Pavement

Description:
The proposed porous pavement will treat the emergency access driveway in Subcatchment 2. Run-off from portions of the sidewalk and landscaped areas around the building will also be captured by this system. The pavement will attenuate and treat runoff within the layers of the driveway, collect the treated water in underdrains, and outlet into natural drainage pathways.

Calculations:
This porous pavement was sized using Chapter 7.7 of the MDEP Stormwater BMP Technical Design Manual, Volume III. This system is not designed as an infiltration system, an impermeable liner will be installed at the base and run-off will be collected and conveyed to an outlet.

STORMWATER PEAK RUNOFF CONTROL NARRATIVE

As previously stated, the project is required to meet the flooding standard under Chapter 500 Section 4.E(2)(a). To meet the flooding standard, HydroCAD calculations were performed to compare pre-development and post-development conditions.

The pre-development site of the area within the proposed addition to the school is a landscaped area and baseball diamond. The areas of the new parking spaces are cleared areas around the existing parking lots. Soils on the site, per the USDA web soil survey, are classified as Naumburg Sand (Hydrologic Soil Group A-D) and Lyman-Rock outcrop complex (Hydrologic Soil Group D).

The entire Site drains to the south and the east to a wetlands complex, which drains to the north. The post-development site was broken into seven subareas encompassing the same footprint as pre-development. Roof runoff from the building addition is collected and conveyed to a grassed under-drain soil filter. The access drive and portions of the sidewalk and landscaped areas are collected by porous pavement. Both of these systems will release runoff as controlled flow to natural drainage pathways.

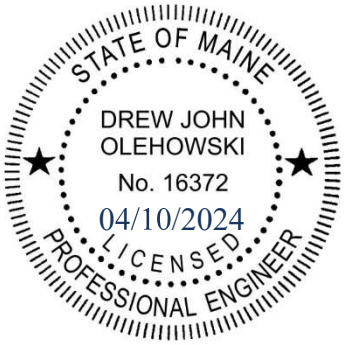
The Summation Point of the culvert draining the wetland was chosen in both pre- and post-development to compare peak flow runoff for the 25-year storm event. Based on results of the HydroCAD, it is expected that stormwater runoff from the site will be lessened in post-development conditions as in pre-development conditions. A comparison of each of the watershed areas in both Pre- and Post-Development is organized in the table below.

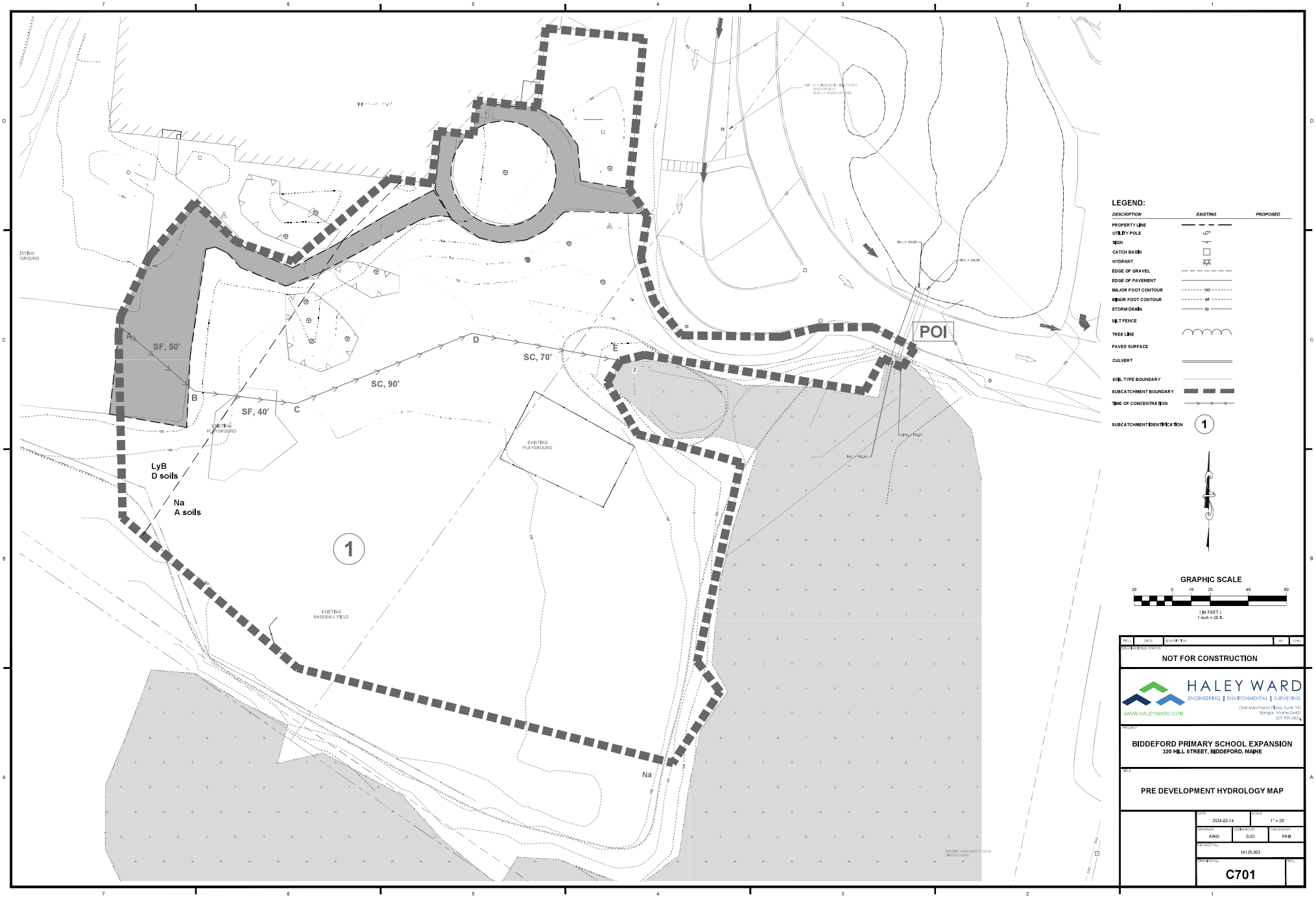
		25 Year (cfs)	25 Year Net Change (cfs)	25 Year % Change
Summation Point 1	Pre	1.36	**-0.07**	**-5.15%**
	Post	1.29		

As seen in the table above, the summation point will see decreased post-development flow rates due to detention in the porous pavement and under-drained filter. For the Summation Point, there will be a decrease of 0.07 CFS for the 25-year storm event. Based on the results of our stormwater management design and calculations we conclude that this project will not have negative impacts on adjacent and downstream areas.

Prepared by:
Haley Ward, Inc.

Drew Olehowski, PE
Project Manager





LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
UTILITY POLE		
SIGN		
CATCH BASIN		
HYDRANT		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR		
MINOR FOOT CONTOUR		
STORM DRAIN		
SILT FENCE		
TREE LINE		
PAVED SURFACE		
CULVERT		
SOIL TYPE BOUNDARY		
SUBCATCHMENT BOUNDARY		
TIME OF CONCENTRATION		
SUBCATCHMENT IDENTIFICATION	1	

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK'D

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

PRE DEVELOPMENT HYDROLOGY MAP

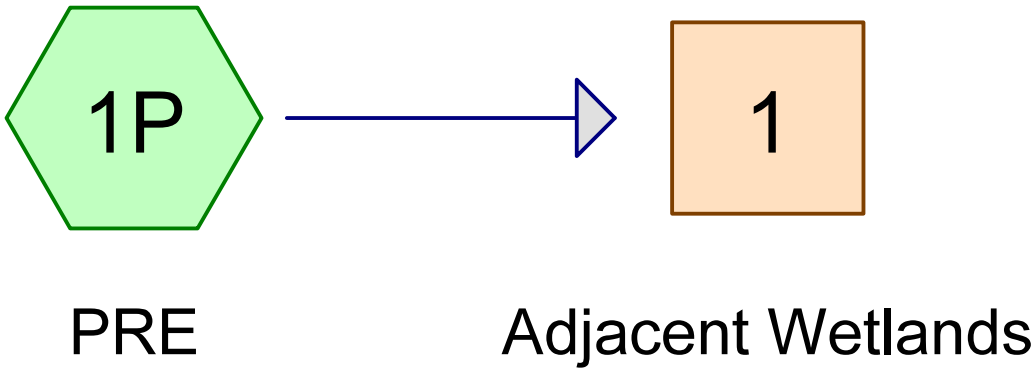
DATE	SCALE
2024.02.14	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
AWG	DJO	PAM

PROJECT NO.
14125.003

DRAWING NO. **C701** REV.

1226



Subcat Reach Pond Link

Routing Diagram for PRE
Prepared by {enter your company name here}, Printed 2/8/2024
HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.563	39	>75% Grass cover, Good, HSG A (1P)
0.131	80	>75% Grass cover, Good, HSG D (1P)
0.174	98	Sidewalks (1P)
1.868	**47**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.563	HSG A	1P
0.000	HSG B	
0.000	HSG C	
0.131	HSG D	1P
0.174	Other	1P
1.868		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.563	0.000	0.000	0.131	0.000	1.694	>75% Grass cover, Good	1P
0.000	0.000	0.000	0.000	0.174	0.174	Sidewalks	1P
1.563	**0.000**	**0.000**	**0.131**	**0.174**	**1.868**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1P: PRE Runoff Area=81,355 sf 9.30% Impervious Runoff Depth>0.90"
Flow Length=250' Tc=10.1 min CN=47 Runoff=1.36 cfs 0.140 af

Reach 1: Adjacent Wetlands Inflow=1.36 cfs 0.140 af
Outflow=1.36 cfs 0.140 af

Total Runoff Area = 1.868 ac Runoff Volume = 0.140 af Average Runoff Depth = 0.90"
90.70% Pervious = 1.694 ac 9.30% Impervious = 0.174 ac

Summary for Subcatchment 1P: PRE

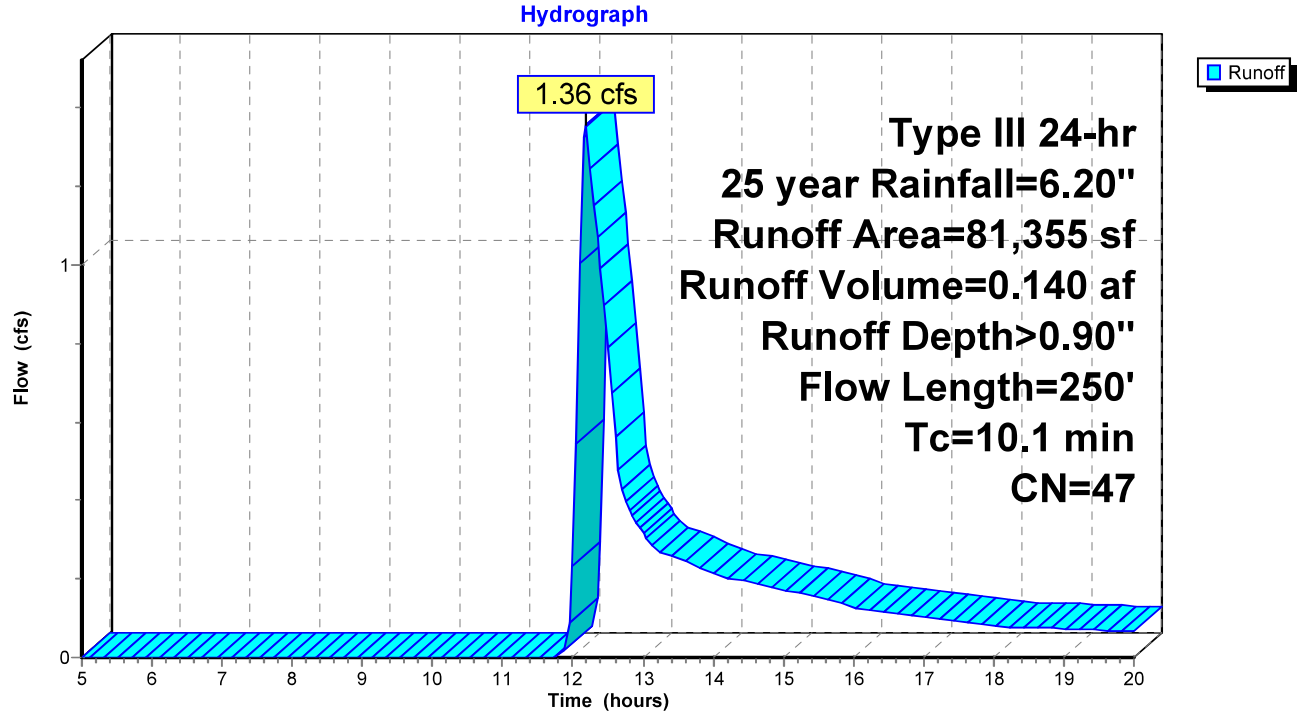
Runoff = 1.36 cfs @ 12.18 hrs, Volume= 0.140 af, Depth> 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	7,570	98	Sidewalks
	68,089	39	>75% Grass cover, Good, HSG A
	5,696	80	>75% Grass cover, Good, HSG D
	81,355	47	Weighted Average
	73,785		90.70% Pervious Area
	7,570		9.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.92		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.30"
6.1	40	0.0100	0.11		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"
2.1	90	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.0	70	0.0300	1.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
10.1	250	Total			

Subcatchment 1P: PRE

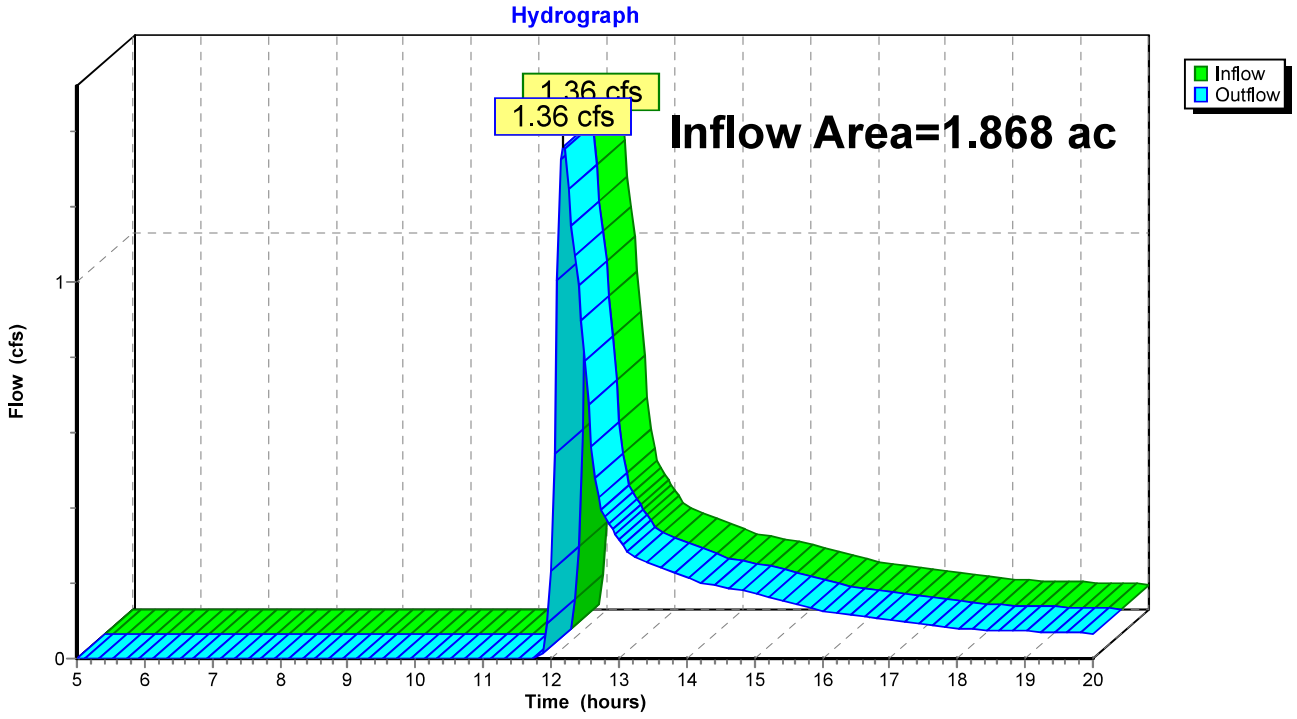


Summary for Reach 1: Adjacent Wetlands

Inflow Area = 1.868 ac, 9.30% Impervious, Inflow Depth > 0.90" for 25 year event
Inflow = 1.36 cfs @ 12.18 hrs, Volume= 0.140 af
Outflow = 1.36 cfs @ 12.18 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1: Adjacent Wetlands



STORMWATER PEAK RUNOFF CONTROL NARRATIVE

As previously stated, the project is required to meet the flooding standard under Chapter 500 Section 4.E(2)(a). To meet the flooding standard, HydroCAD calculations were performed to compare pre-development and post-development conditions.

The pre-development site of the area within the proposed addition to the school is a landscaped area and baseball diamond. The areas of the new parking spaces are cleared areas around the existing parking lots. Soils on the site, per the USDA web soil survey, are classified as Naumburg Sand (Hydrologic Soil Group A-D) and Lyman-Rock outcrop complex (Hydrologic Soil Group D).

The entire Site drains to the south and the east to a wetlands complex, which drains to the north. The post-development site was broken into seven subareas encompassing the same footprint as pre-development. Roof runoff from the building addition is collected and conveyed to a grassed under-drain soil filter. The access drive and portions of the sidewalk and landscaped areas are collected by porous pavement. Both of these systems will release runoff as controlled flow to natural drainage pathways.

The Summation Point of the culvert draining the wetland was chosen in both pre- and post-development to compare peak flow runoff for the 25-year storm event. Based on results of the HydroCAD, it is expected that stormwater runoff from the site will be lessened in post-development conditions as in pre-development conditions. A comparison of each of the watershed areas in both Pre- and Post-Development is organized in the table below.

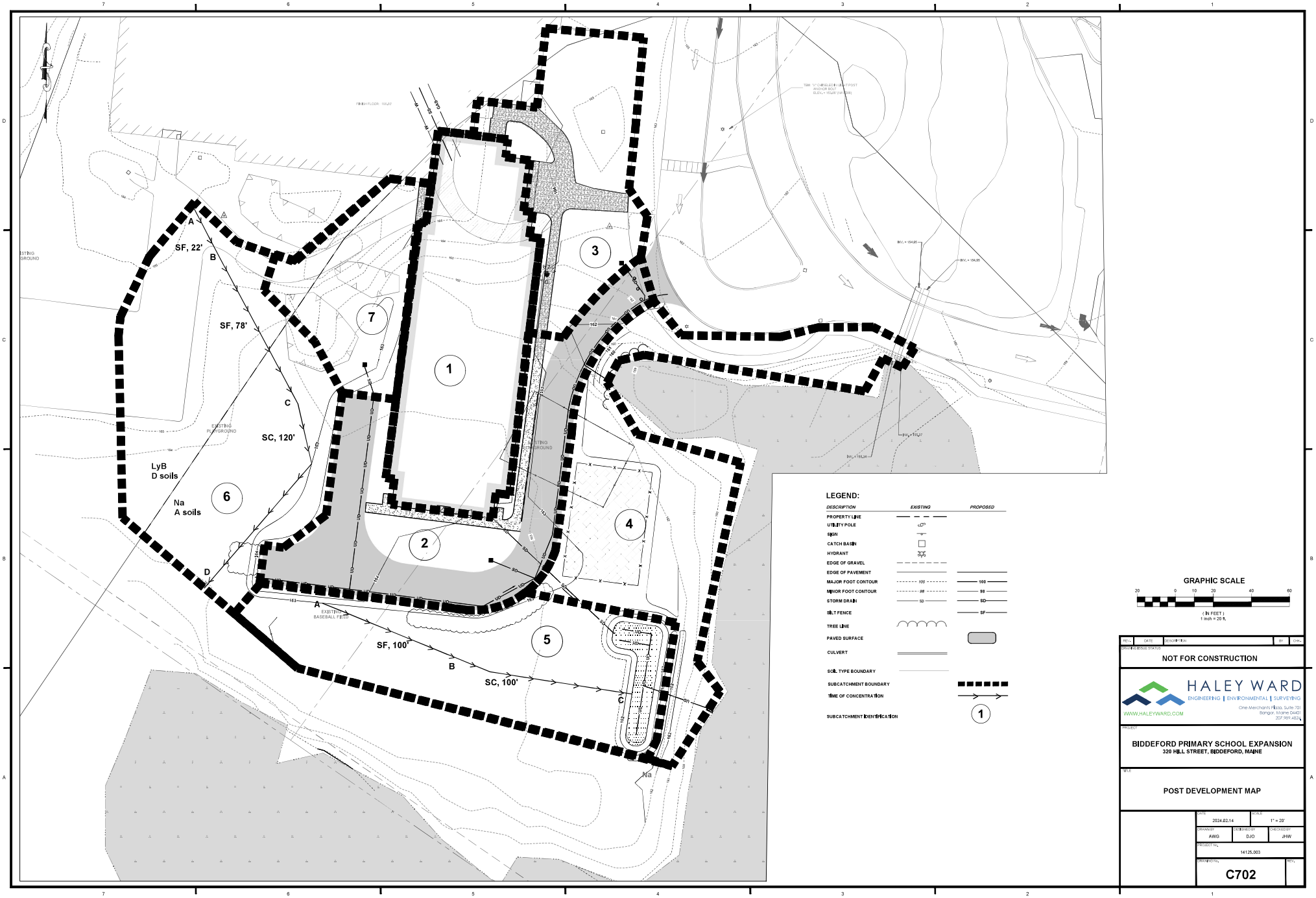
		25 Year (cfs)	25 Year Net Change (cfs)	25 Year % Change
Summation Point 1	Pre	1.36	**-0.07**	**-5.15%**
	Post	1.29		

As seen in the table above, the summation point will see decreased post-development flow rates due to detention in the porous pavement and under-drained filter. For the Summation Point, there will be a decrease of 0.07 CFS for the 25-year storm event. Based on the results of our stormwater management design and calculations we conclude that this project will not have negative impacts on adjacent and downstream areas.

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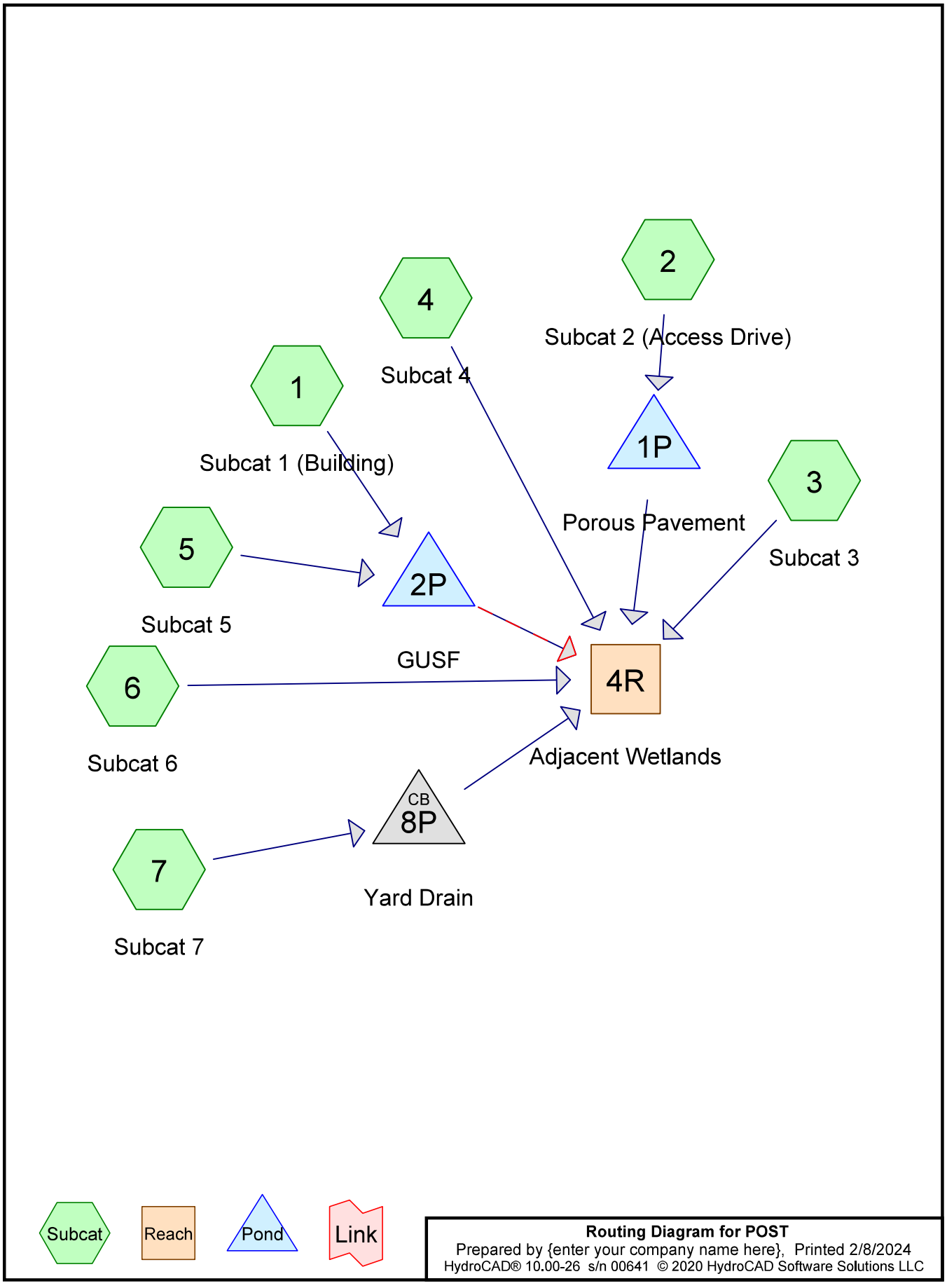
POST DEVELOPMENT MAP

DATE	SCALE
2024.02.14	1" = 20'
DRAWN BY	DESIGNED BY	CHECKED BY
AWG	DJO	JHW

PROJECT NO.
14125.003

DRAWING NO.
C702

1235


2
Subcat 2 (Access Drive)
4
Subcat 4
1
Subcat 1 (Building)
1P
Porous Pavement
3
Subcat 3
5
Subcat 5
2P
GUSF
6
Subcat 6
4R
Adjacent Wetlands
CB
8P
Yard Drain
7
Subcat 7
Subcat
Reach
Pond
Link
Routing Diagram for POST
Prepared by {enter your company name here}, Printed 2/8/2024
HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.108	39	>75% Grass cover, Good, HSG A (2, 3, 4, 5, 6, 7)
0.117	80	>75% Grass cover, Good, HSG D (6, 7)
0.197	98	Access Driveway (2)
0.272	98	Building (1)
0.065	98	Sidewalk (2, 3)
0.108	98	Sidewalks (6, 7)
1.868	**62**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.108	HSG A	2, 3, 4, 5, 6, 7
0.000	HSG B	
0.000	HSG C	
0.117	HSG D	6, 7
0.643	Other	1, 2, 3, 6, 7
1.868		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.108	0.000	0.000	0.117	0.000	1.225	>75% Grass cover, Good	2, 3, 4, 5, 6, 7
0.000	0.000	0.000	0.000	0.197	0.197	Access Driveway	2
0.000	0.000	0.000	0.000	0.272	0.272	Building	1
0.000	0.000	0.000	0.000	0.065	0.065	Sidewalk	2, 3
0.000	0.000	0.000	0.000	0.108	0.108	Sidewalks	6, 7
1.108	**0.000**	**0.000**	**0.117**	**0.643**	**1.868**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	7	0.00	0.00	335.0	0.0060	0.010	6.0	0.0	0.0
2	1P	160.83	159.20	300.0	0.0054	0.013	6.0	0.0	0.0
3	2P	158.80	158.60	35.0	0.0057	0.010	6.0	0.0	0.0
4	8P	161.50	159.50	335.0	0.0060	0.010	6.0	0.0	0.0

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: Subcat 1 (Building) Runoff Area=11,870 sf 100.00% Impervious Runoff Depth>5.51"
Tc=5.0 min CN=98 Runoff=1.67 cfs 0.125 af

Subcatchment 2: Subcat 2 (Access Drive) Runoff Area=12,122 sf 78.86% Impervious Runoff Depth>4.34"
Tc=5.0 min CN=86 Runoff=1.47 cfs 0.101 af

Subcatchment 3: Subcat 3 Runoff Area=8,514 sf 22.07% Impervious Runoff Depth>1.25"
Tc=5.0 min CN=52 Runoff=0.28 cfs 0.020 af

Subcatchment 4: Subcat 4 Runoff Area=13,691 sf 0.00% Impervious Runoff Depth>0.42"
Flow Length=95' Slope=0.0150 '/' Tc=10.4 min CN=39 Runoff=0.06 cfs 0.011 af

Subcatchment 5: Subcat 5 Runoff Area=12,315 sf 0.00% Impervious Runoff Depth>0.42"
Flow Length=200' Slope=0.0100 '/' Tc=15.1 min CN=39 Runoff=0.05 cfs 0.010 af

Subcatchment 6: Subcat 6 Runoff Area=17,176 sf 22.44% Impervious Runoff Depth>2.12"
Flow Length=220' Tc=13.7 min CN=63 Runoff=0.81 cfs 0.070 af

Subcatchment 7: Subcat 7 Runoff Area=5,673 sf 15.07% Impervious Runoff Depth>1.32"
Flow Length=410' Tc=8.6 min CN=53 Runoff=0.18 cfs 0.014 af

Reach 4R: Adjacent Wetlands Inflow=1.29 cfs 0.254 af
Outflow=1.29 cfs 0.254 af

Pond 1P: Porous Pavement Peak Elev=161.00' Storage=3,443 cf Inflow=1.47 cfs 0.101 af
6.0" Round Culvert n=0.013 L=300.0' S=0.0054 '/' Outflow=0.06 cfs 0.026 af

Pond 2P: GUSF Peak Elev=162.79' Storage=2,126 cf Inflow=1.67 cfs 0.135 af
Primary=0.10 cfs 0.099 af Secondary=0.29 cfs 0.014 af Outflow=0.39 cfs 0.113 af

Pond 8P: Yard Drain Peak Elev=161.79' Inflow=0.18 cfs 0.014 af
6.0" Round Culvert n=0.010 L=335.0' S=0.0060 '/' Outflow=0.18 cfs 0.014 af

Total Runoff Area = 1.868 ac Runoff Volume = 0.351 af Average Runoff Depth = 2.26"
65.56% Pervious = 1.225 ac 34.44% Impervious = 0.643 ac

Summary for Subcatchment 1: Subcat 1 (Building)

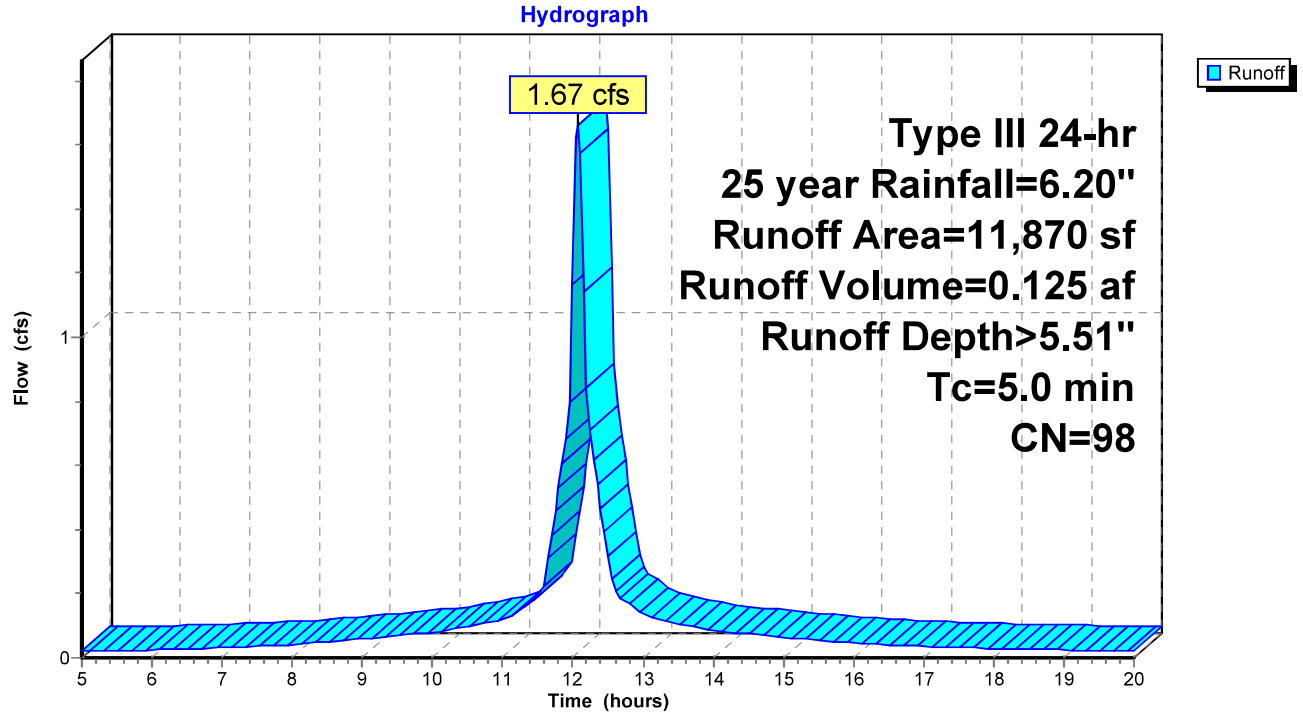
Runoff = 1.67 cfs @ 12.07 hrs, Volume= 0.125 af, Depth> 5.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	11,870	98	Building
	11,870		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1: Subcat 1 (Building)



Summary for Subcatchment 2: Subcat 2 (Access Drive)

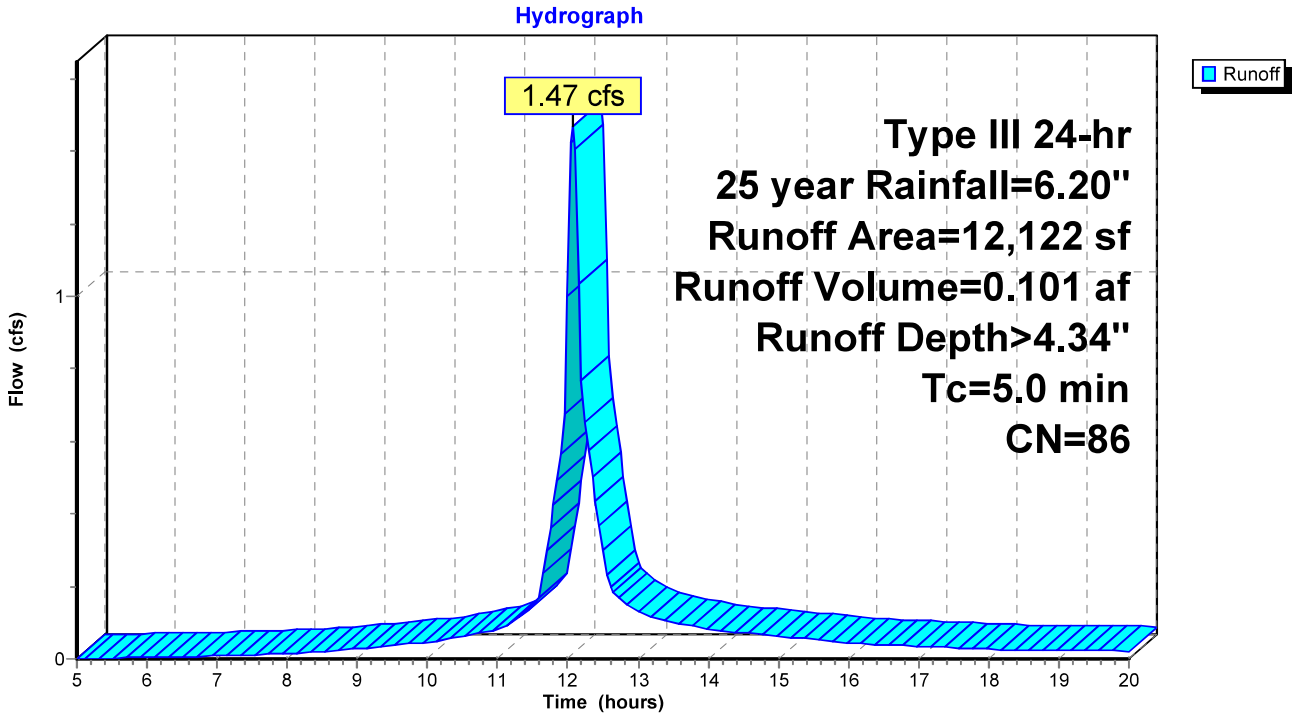
Runoff = 1.47 cfs @ 12.07 hrs, Volume= 0.101 af, Depth> 4.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	8,599	98	Access Driveway
	2,563	39	>75% Grass cover, Good, HSG A
*	960	98	Sidewalk
	12,122	86	Weighted Average
	2,563		21.14% Pervious Area
	9,559		78.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2: Subcat 2 (Access Drive)



Summary for Subcatchment 3: Subcat 3

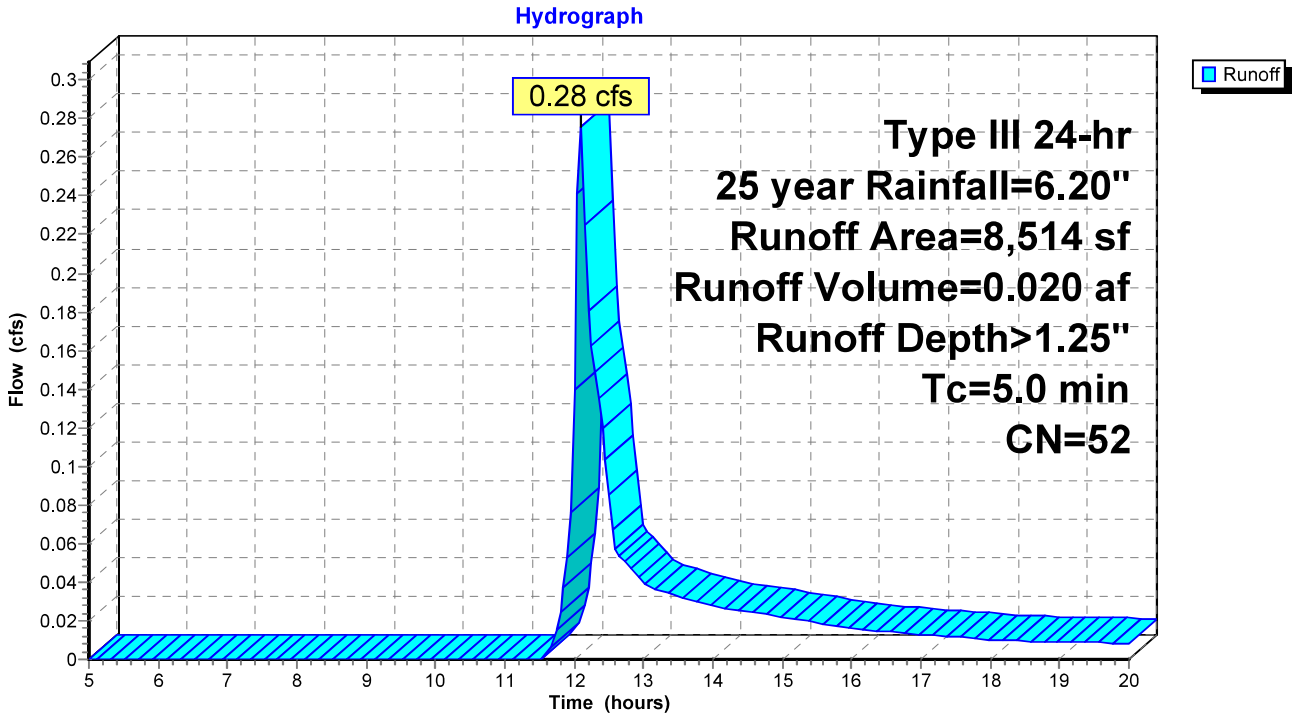
Runoff = 0.28 cfs @ 12.10 hrs, Volume= 0.020 af, Depth> 1.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
	6,635	39	>75% Grass cover, Good, HSG A
*	1,879	98	Sidewalk
	8,514	52	Weighted Average
	6,635		77.93% Pervious Area
	1,879		22.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3: Subcat 3



Summary for Subcatchment 4: Subcat 4

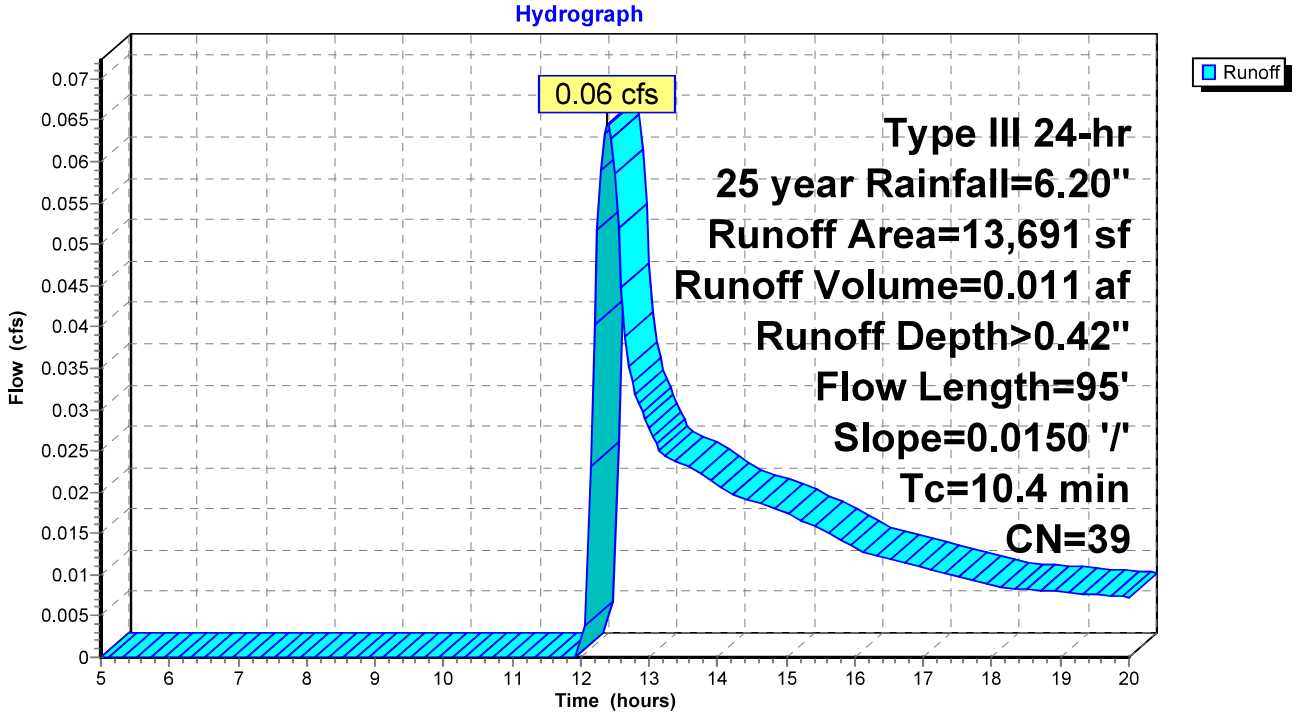
Runoff = 0.06 cfs @ 12.40 hrs, Volume= 0.011 af, Depth> 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

Area (sf)	CN	Description
13,691	39	>75% Grass cover, Good, HSG A
13,691		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	95	0.0150	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"

Subcatchment 4: Subcat 4



Summary for Subcatchment 5: Subcat 5

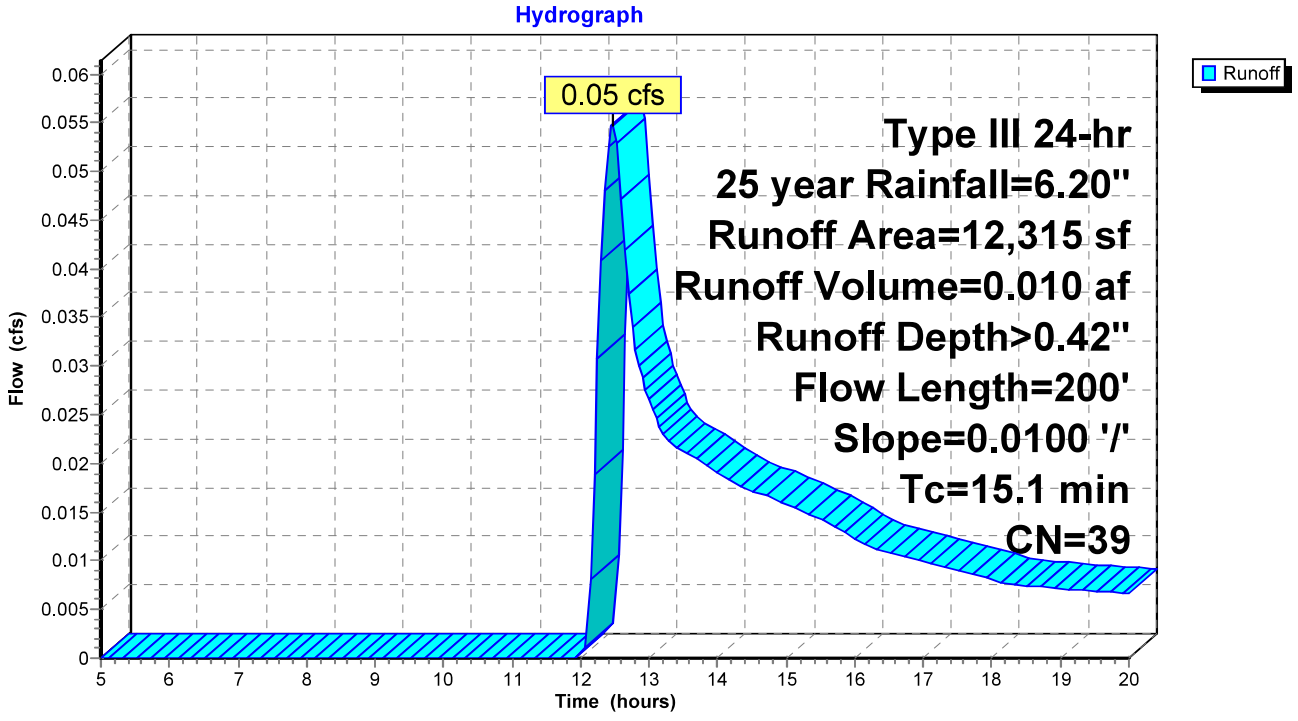
Runoff = 0.05 cfs @ 12.47 hrs, Volume= 0.010 af, Depth> 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

Area (sf)	CN	Description
12,315	39	>75% Grass cover, Good, HSG A
12,315		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"
2.4	100	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
15.1	200	Total			

Subcatchment 5: Subcat 5



Summary for Subcatchment 6: Subcat 6

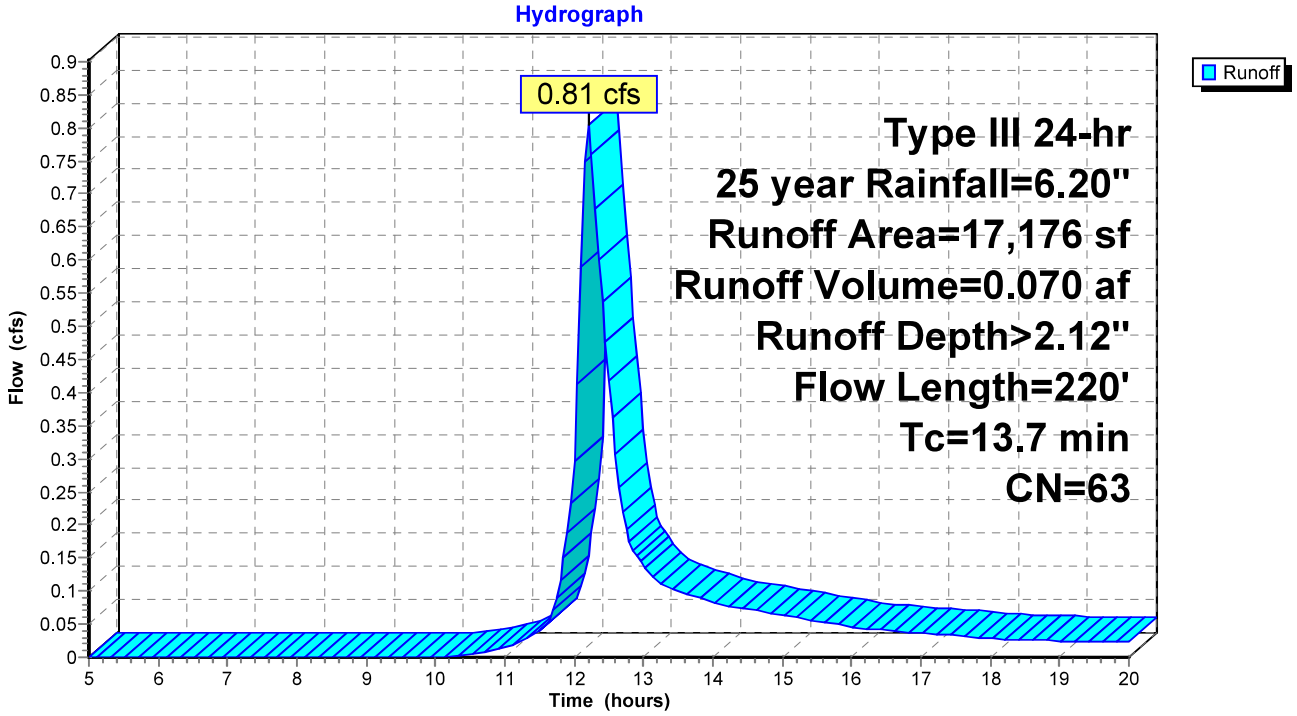
Runoff = 0.81 cfs @ 12.20 hrs, Volume= 0.070 af, Depth> 2.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	3,855	98	Sidewalks
	8,940	39	>75% Grass cover, Good, HSG A
	4,381	80	>75% Grass cover, Good, HSG D
	17,176	63	Weighted Average
	13,321		77.56% Pervious Area
	3,855		22.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	22	0.0150	0.92		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.30"
10.4	78	0.0100	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"
2.9	120	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
13.7	220	Total			

Subcatchment 6: Subcat 6



Summary for Subcatchment 7: Subcat 7

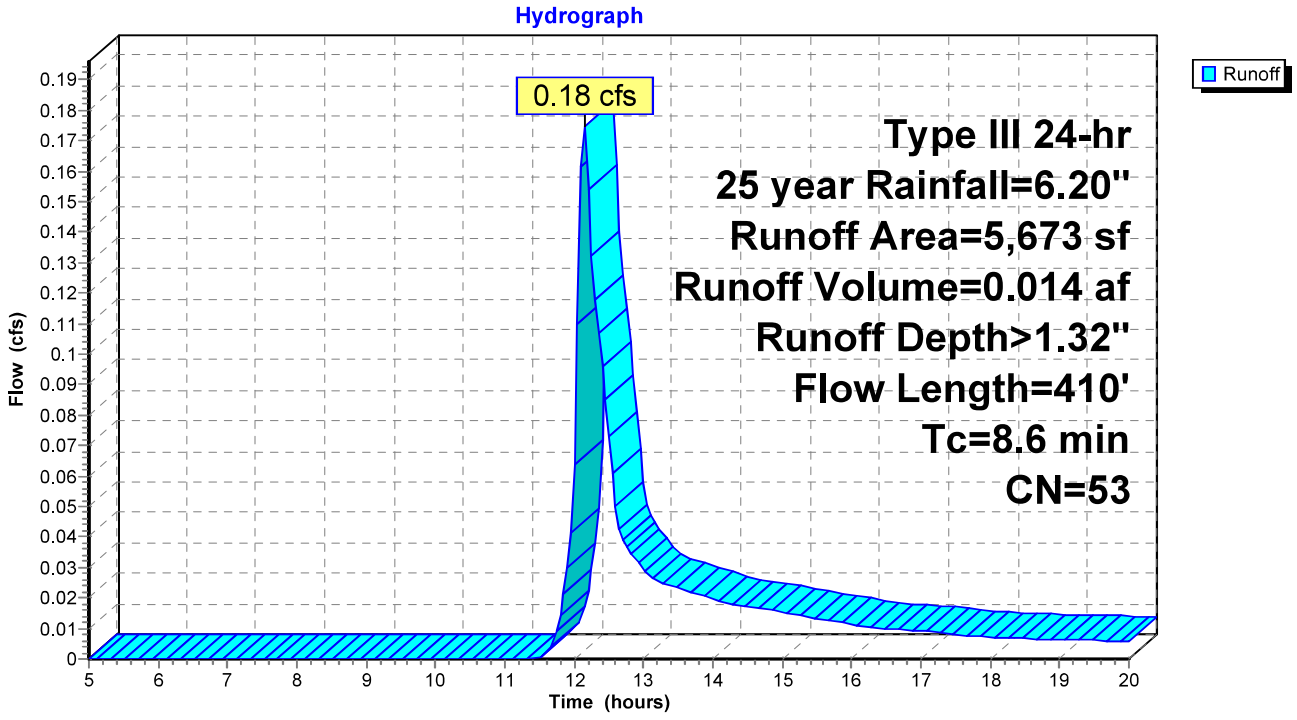
Runoff = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af, Depth> 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	855	98	Sidewalks
	4,103	39	>75% Grass cover, Good, HSG A
	715	80	>75% Grass cover, Good, HSG D
	5,673	53	Weighted Average
	4,818		84.93% Pervious Area
	855		15.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	15	0.0200	0.96		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.30"
6.4	60	0.0200	0.16		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.30"
1.9	335	0.0060	2.88	0.57	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
8.6	410	Total			

Subcatchment 7: Subcat 7

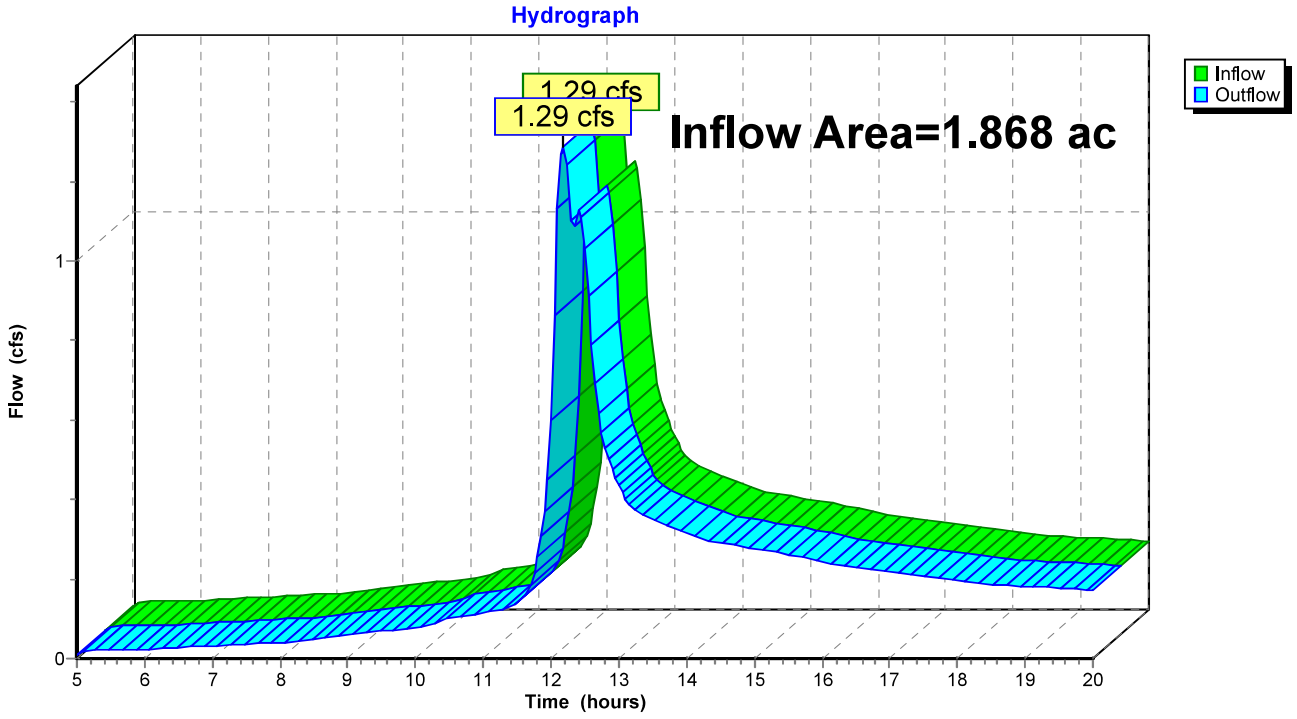


Summary for Reach 4R: Adjacent Wetlands

Inflow Area = 1.868 ac, 34.44% Impervious, Inflow Depth > 1.63" for 25 year event
Inflow = 1.29 cfs @ 12.18 hrs, Volume= 0.254 af
Outflow = 1.29 cfs @ 12.18 hrs, Volume= 0.254 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 4R: Adjacent Wetlands



Summary for Pond 1P: Porous Pavement

Inflow Area = 0.278 ac, 78.86% Impervious, Inflow Depth > 4.34" for 25 year event
Inflow = 1.47 cfs @ 12.07 hrs, Volume= 0.101 af
Outflow = 0.06 cfs @ 15.18 hrs, Volume= 0.026 af, Atten= 96%, Lag= 186.6 min
Primary = 0.06 cfs @ 15.18 hrs, Volume= 0.026 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 161.00' @ 15.18 hrs Surf.Area= 8,599 sf Storage= 3,443 cf

Plug-Flow detention time= 339.3 min calculated for 0.026 af (26% of inflow)
Center-of-Mass det. time= 213.4 min (978.2 - 764.8)

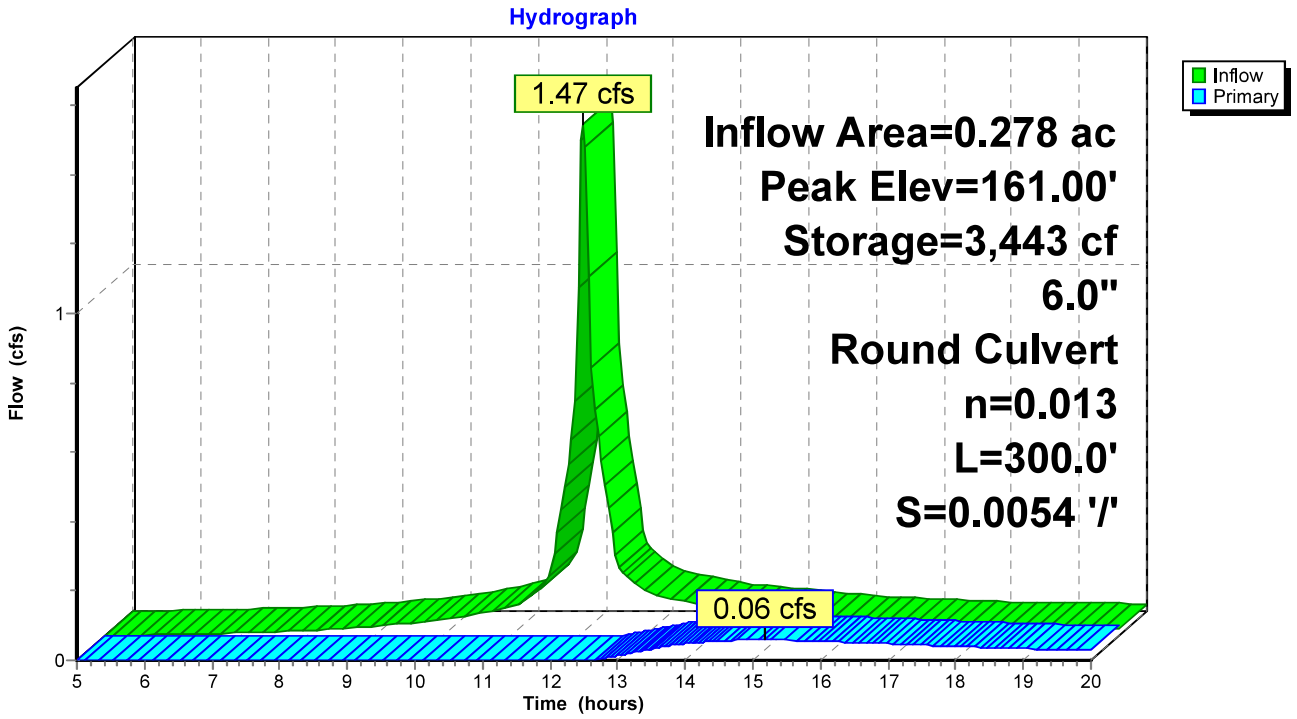
Volume	Invert	Avail.Storage	Storage Description
#1	160.00'	16,338 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 40,845 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
160.00	8,599	0	0
162.00	8,599	17,198	17,198
163.25	8,599	10,749	27,947
163.75	8,599	4,300	32,246
164.75	8,599	8,599	40,845

Device	Routing	Invert	Outlet Devices
#1	Primary	160.83'	**6.0" Round Culvert** L= 300.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.83' / 159.20' S= 0.0054 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.06 cfs @ 15.18 hrs HW=161.00' (Free Discharge)
└**1=Culvert** (Barrel Controls 0.06 cfs @ 1.49 fps)

Pond 1P: Porous Pavement



Summary for Pond 2P: GUSF

Inflow Area = 0.555 ac, 49.08% Impervious, Inflow Depth > 2.92" for 25 year event
Inflow = 1.67 cfs @ 12.07 hrs, Volume= 0.135 af
Outflow = 0.39 cfs @ 12.49 hrs, Volume= 0.113 af, Atten= 76%, Lag= 25.2 min
Primary = 0.10 cfs @ 10.60 hrs, Volume= 0.099 af
Secondary = 0.29 cfs @ 12.49 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 162.79' @ 12.49 hrs Surf.Area= 1,600 sf Storage= 2,126 cf

Plug-Flow detention time= 129.7 min calculated for 0.112 af (83% of inflow)
Center-of-Mass det. time= 79.5 min (824.4 - 744.9)

Volume	Invert	Avail.Storage	Storage Description
#1	161.20'	2,461 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

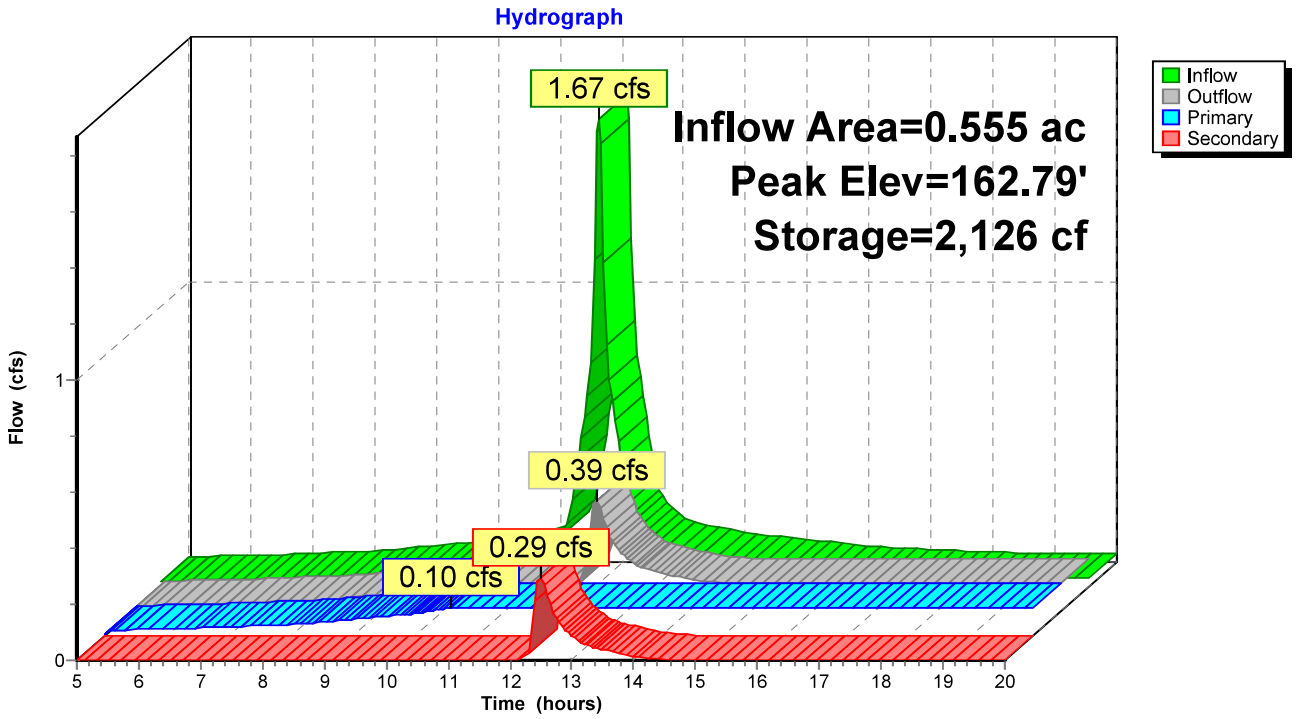
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
161.20	890	0	0
162.00	1,420	924	924
162.70	1,600	1,057	1,981
163.00	1,600	480	2,461

Device	Routing	Invert	Outlet Devices
#1	Primary	158.80'	**6.0" Round Culvert** L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 158.80' / 158.60' S= 0.0057 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Secondary	162.70'	**4.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#3	Device 1	161.20'	**0.10 cfs Exfiltration at all elevations**

Primary OutFlow Max=0.10 cfs @ 10.60 hrs HW=161.22' (Free Discharge)
↑—**1=Culvert** (Passes 0.10 cfs of 1.10 cfs potential flow)
↑—**3=Exfiltration** (Exfiltration Controls 0.10 cfs)

Secondary OutFlow Max=0.29 cfs @ 12.49 hrs HW=162.79' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Weir Controls 0.29 cfs @ 0.81 fps)

Pond 2P: GUSF


Hydrograph
1.67 cfs
0.39 cfs
0.29 cfs
0.10 cfs
Inflow Area=0.555 ac
Peak Elev=162.79'
Storage=2,126 cf
Inflow
Outflow
Primary
Secondary
Flow (cfs)
0
1
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Time (hours)

Summary for Pond 8P: Yard Drain

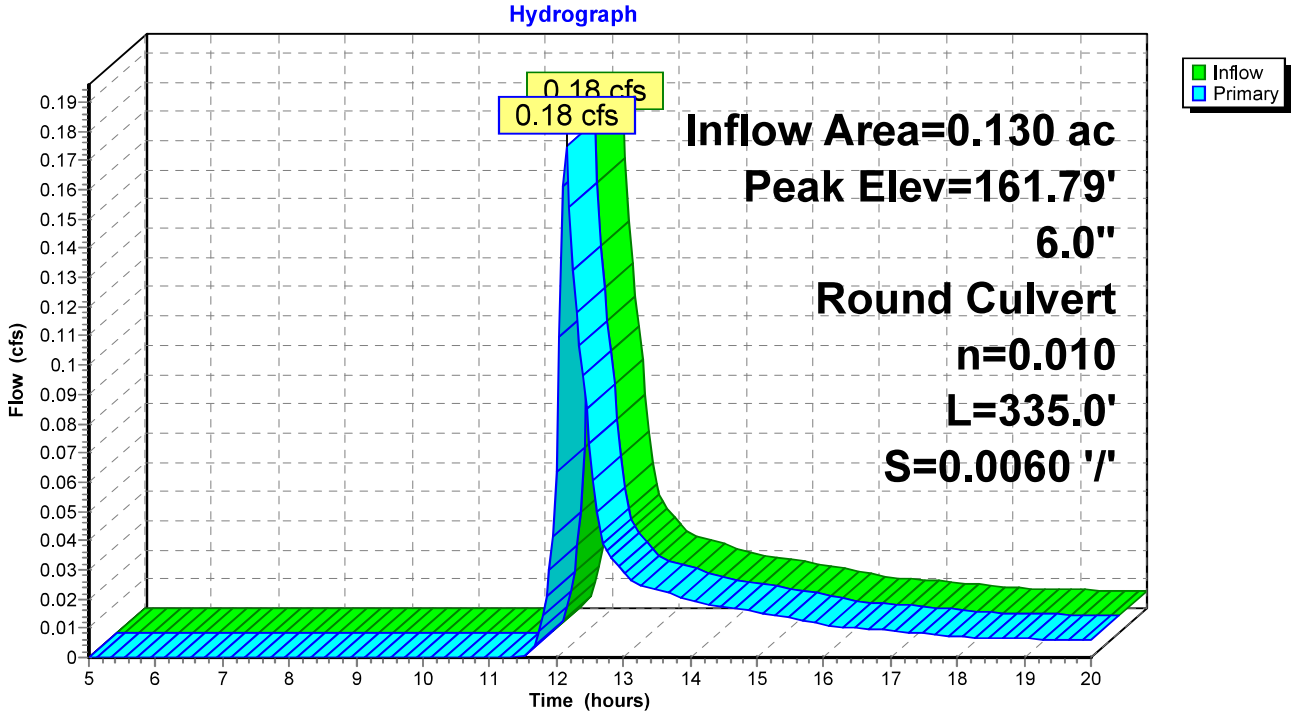
Inflow Area = 0.130 ac, 15.07% Impervious, Inflow Depth > 1.32" for 25 year event
Inflow = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af
Outflow = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min
Primary = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 161.79' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	161.50'	**6.0" Round Culvert** L= 335.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 161.50' / 159.50' S= 0.0060 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.17 cfs @ 12.14 hrs HW=161.79' (Free Discharge)
└**1=Culvert** (Inlet Controls 0.17 cfs @ 1.45 fps)

Pond 8P: Yard Drain



ATTACHMENT I

EROSION CONTROL AND MAINTENANCE PLAN

EROSION AND SEDIMENTATION CONTROL

These erosion control notes address permanent stabilization measures, seeding, and mulching rates, as well as the timing of installation. Construction and installation details are also provided for the project. Additional descriptions and specifications are provided in the Erosion and Sedimentation Control Plan.

An Inspection and Maintenance Plan has been included in this section. This plan includes a list of measures to be inspected and maintained. It also includes the frequency and responsible parties to implement the plan. A Housekeeping Plan has also been submitted; this plan provides controls to address spill prevention and possible contamination of the site.

EROSION AND SEDIMENTATION CONTROL PLAN

A. Narrative: The proposed construction will require the implementation of temporary and permanent erosion control measures. These measures will be implemented in accordance with the Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual, prior to removal of any on-site vegetation or disturbance of any on-site soil. The general erosion and sediment control specifications and details, as provided within this section, are intended to describe measures to be used by contractors working on the site to maintain compliance with the standards established in the BMPs. These standards include information on temporary and permanent erosion control measures, rates of seeding and applied mulch, slope and soil stabilization, effect of construction schedule, and other details. The proposed location and use of erosion control measures on-site are shown on the Site Demolition and Erosion Control Plan C100 located in this application. There are no known existing erosion control concerns with the site. Implementation of proper erosion control measures will be required by site conditions to confine sediment and debris within the limit of soil disturbance. Proper use and maintenance of erosion control measures will provide protection against off-site transport of sediment and discharge of sediment to undisturbed areas of the development.

B. Construction Schedule:

DESCRIPTION	TIME FRAME
Project Begins	Summer 2024
Project Completion	Fall 2024

C. Site Features: For site features please refer to the enclosed plan.

D. Temporary and Permanent Erosion Control Measures: For temporary and permanent erosion control measures please refer to the enclosed plan.

E. Limits of Disturbed Areas: Areas of disturbance will be limited to the proposed work shown on the enclosed plan. The main aspect of the plan is to widen the existing access drive to 20 feet wide and add ditching. Areas outside of the road and grading area will maintain its existing land cover.

F. Design Drawings and Specifications: For design drawings please refer to the enclosed plan. The following specifications will be utilized by the site contractor during construction of the project.

EROSION CONTROL PLAN SPECIFICATIONS

A. General

1. All work and measures will be as per the Maine Erosion and Sediment Control BMPs manual.
2. The following specifications will be employed.

B. Prior to Construction

1. Prior to the beginning of construction, erosion and sedimentation controls shall be in place.

C. During Construction

1. Exposed soil surfaces will be treated immediately if they are to remain ungraded more than 30 days, or if they are at final grades.

2. Drainage ways, either designed or incidental, will have filter barriers installed.

3. All work and materials necessary to minimize sediment loss from the site will be provided.

4. All erosion control measures will be inspected and repaired after every rainfall greater than ½-inch and at least daily during rain events lasting longer than 24 hours.

D. Post Construction

1. Erosion control measures will be maintained until permanent soil stabilization has been achieved with a growth of vegetation greater than 90%.

SOIL PROTECTION AND EROSION CONTROL

PART 1 - GENERAL

1.01 Description of Work

A. Provide and maintain devices to control erosion, siltation, sedimentation, and dust that occur during construction operations. Undertake every reasonable precaution and do whatever is necessary to avoid erosion of soil and to prevent silting of wetland areas and drainage ditches.

B. Provide measures to control dust caused whether on or off the project site.

C. Deficiencies in erosion control measures indicated by failures or erosion will be corrected as soon as reasonably possible by providing additional measures or different techniques to correct the situation and prevent subsequent erosion.

D. Exposure of soils on embankments, excavations, and graded areas will be kept as short as possible. Initiate seeding and other erosion control practices as soon as reasonably possible.

1.02 Quality Assurance

A. Conform to all requirements of applicable Federal, State, and local permits and conform to the recommendations of the Maine Erosion and Sediment Control BMPs whether the measures are specifically noted herein, or not.

B. Standards: Maine Erosion and Sediment Control BMPs Manual, hereinafter called Erosion Control Handbook.

PART 2 - PRODUCTS

2.01 Materials: Use the following materials to implement and construct erosion control measures.

A. Hay Bale: Rectangular shaped bales of hay or straw weighing at least 40 pounds per bale; free from noxious weed seeds and rough or woody materials.

B. Mulch: Type and use as specified by the Erosion Control Handbook

1. Long fibered hay or straw in dry condition and which are relatively free of weeds and foreign matter detrimental to plant life.

2. Mulch netting: Plastic or nylon mesh netting with approximate openings of ¼-inch to 1-inch.

C. Permanent Seeding: Cut and fill slopes and disturbed areas will be stabilized as follows:

1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface.

2. In lieu of tests, agricultural limestone will be spread at the rate of three tons per acre. 10-20-20 fertilizer will follow at the rate of 800 lbs. per acre. These two soil additives will be incorporated into the soil prior to seeding.

3. Following seed bed preparation, back slopes will be seeded to a mixture of 83% creeping red fescue, and 17% rye grass. Seeding rate is 3 lbs. per 1,000 square feet. Lawn quality sod may be substituted for seed.

4. Hay mulch at the rate of 90 lbs. per 1,000 square feet of a hydro-application of asphalt, wood, or paper fiber will be applied following seeding. A suitable binder, such as curason or terrtack, will be used on hay mulch for wind control.

5. If final seeding of the disturbed areas is not completed by September 15th of the year of the construction, then on that date these areas will be graded and a cover crop of rye at the rate of 112 lbs/acre or 3 lbs/1,000 sq. ft. will be applied. The rye seeding will be preceded by an application of 3 tons of lime and 800 lbs. of 10-20-20 fertilizer or its equivalent and covered by a layer of jute mat to aid in stabilization.

PART 3 - EXECUTION

3.01 Construction

A. Hay Bales:

1. Install as directed by Erosion Control Handbook, and stake with required stakes.

B. Mulch:

1. Undertake after each area has been properly prepared.

2. When seed for erosion control is sown prior to placing the mulch, place mulch on the seeded areas within 48 hours after seeding.

3. Blowing chopped mulch will be permitted.

4. Hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see the ground through the mulch.

5. Remove matted mulch or bunches.

C. Temporary Erosion Control Matting (where necessary):

1. Surface Preparation:
   a. Conform to grades for slopes and ditches shown of the drawings.
   b. Finish to a smooth and even condition with all debris, roots, stones, and lumps raked out and removed.
   c. Loosen soil surface to permit bedding of the matting.
   d. Unless otherwise directed, apply seed prior to placement.

2. Installation:
   a. Place strips lengthwise in the direction of the flow of water.
   b. Where strips are laid parallel or meet as in a tee, overlap at least four inches.
   c. Overlap ends at least six inches in a shingle fashion.
   d. The up-slope end of each strip of the matting will be turned down and buried to a depth of not less than six inches with the soil firmly tamped against it.
   e. Build check slots at right angles to the direction of the flow of water. Space so that one check slot or one end occurs within each 50 feet of slope length. Construct by placing a tight fold of the matting at least six inches vertically into the ground and tamp the same as up-slope ends.
   f. Bury edges of matting around the edges of the catch basins and other structures.
   g. Where determined by the Engineers, additional seed will be spread over matting, particularly at those locations disturbed by building the slots. Matting will then be pressed onto the ground with a light lawn roller or by other satisfactory means.
   h. Drive staples vertically into the ground flush with the surface.
   i. On slopes flatter than 4:1, space staples not more than three feet and one row, alternately spaced, down the center.
   j. On grades 4:1 or steeper, place in the same three rows, but spaced two feet apart.
   k. On all overlapping or butting edges, double the number of staples, with the spacing halved; all ends of the matting and all required check slots will likewise have staples spaced every foot.

D. Permanent Seeding:

1. Seed with appropriate seeds and application rates as noted in Section 2.01C.

2. Mulch areas where seeding has been applied. Do not mulch seeded areas where matting will be immediately installed.

E. Topsoil Storage:

1. Topsoil which is stockpiled on the site for use in loam applications will be placed out of natural drainages, in piles that have side slopes of 2:1 to 1.5:1.

2. A trench (depth as required) will be constructed around the base of the pile to prevent eroding soil from washing into drainages.

F. Dust Control: Utilize the application of sprinkled water to reduce the emission of airborne soil particulates from the Project site.

G. Temporary Berms: Construct temporary barriers along the toe of embankments using side drains as necessary.

H. Temporary Basins: Construct temporary sedimentation basins adequate to avoid siltation of surface water bodies.

I. Other Temporary Measures:

1. Type and use will be as specified in the Erosion Control Handbook.

J. Winter Stabilization Notes

1. At this time, it is not expected that significant soil disturbance will occur during winter months or periods of heavy icing. If construction is performed during these times, the following construction practices will be followed.
   a. All disturbed areas not stabilized with stone or other measures will have approved erosion control matting installed and be dormant seeded.
   b. No frozen soil material or material containing significant snow or ice will be used for fill material.
   c. All material stockpiles will have silt fence and/or hay bales installed downgradient of piles.
   d. Follow general erosion control notes described previously wherever possible and as conditions permit.

3.02 Maintenance

A. Inspect erosion control practices immediately after each rainfall greater than ½-inch and at least daily during rainfall lasting longer than 24 hours or snowmelt for damage. Provide maintenance and make appropriate repairs or replacements.

B. Remove silt from around hay bales when it has reached one-foot above grade or prior to expected heavy runoff or siltation.

C. Repair matting if any staples become loosened or raised, or if any matting becomes loose, torn, or undermined, make satisfactory repairs immediately.

3.03 Removal of Temporary Erosion Control

A. Remove temporary materials and devices when permanent soil stabilization has been substantially achieved. For vegetated areas, substantially complete means 95% vegetated cover has been established.

B. Level and grade to the extent required to present a sightly appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.

C. Remove unsuitable materials from site and dispose of them in a lawful manner.

INSPECTION AND MAINTENANCE

The following Maintenance Plan will be employed for this facility. The City of Biddeford will be responsible for all maintenance according to their maintenance agreement. Erosion control measures for this site were designed by:

Drew Olehowski, P.E.
Haley Ward, Inc.
120 Main Street
Saco, Maine 04072
(207) 283-9151
dolehowski@haleyward.com

A Pre- and Post-Construction Maintenance Plan for the stormwater management system and erosion control measures are included in this section.

Per City of Biddeford requirements, an annual inspection is required by a licensed PE, and all inspection reports should be submitted to the Engineering department by March 1st each following year.

MAINTENANCE PLAN

The MDEP's Stormwater Management for Maine: Best Management Practices (2006), and the MDEP's Chapter 500: Stormwater Management were used as guidelines in the development of this Maintenance Plan. General maintenance requirements are listed below.

A. DURING CONSTRUCTION

The general contractor will be responsible for the inspection and maintenance of all stormwater management system components during construction.

Inspection: Inspection of disturbed and impervious areas, erosion control measures, materials' storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site will be performed at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. Inspections shall be conducted by a person with knowledge of erosion and stormwater control, including the standards and conditions in the permit.

Maintenance: All erosion control measures will be kept in effective operating condition until areas are permanently stabilized. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation will be completed within 7 calendar days and prior to any rainfall event.

Documentation: A log shall be kept summarizing the inspections and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, Construction Inspection Log.

B. POST-CONSTRUCTION

The Owner or their assigns will be responsible for the inspection and maintenance of all stormwater management system components.

Inspection and Corrective Action

1. Vegetated Areas: Inspections and maintenance of vegetated areas will be performed early in the growing season or after significant rainfall to identify any erosion problems. Areas where erosion is evident will be covered with an appropriate lining, or erosive flows will be diverted to an area able to handle the flows. Any bare areas or areas with sparse growth will be replanted.

2. Ditches, Swales, and Culverts: Inspections and maintenance of ditches, culverts, and swales will be performed in the Spring, late Fall, and after rain events greater than 1-inch in depth to remove any obstructions to flow, to remove any accumulated sediments within the structures, and to repair any erosion of channel linings, check dams, inlet protection, or outlet protection. Vegetated ditches and swales must be mowed no more than twice per year and cut no less than 6-inch in height.

3. Porous Pavement:
   - Frequent inspections are performed during the first few months following construction. Then, the system is inspected routinely on an annual basis. Inspections should be made after significant storm events to check for surface ponding that could indicate failure due to clogging. Non-routine maintenance may require reconstruction of the surface treatment, and possibly the filter and reservoir layers, to relieve major clogging. Note, a "storm event" is defined by a storm event producing one inch of rain or more.
   - Prevent sedimentation due to the erosion of areas upgradient to the pervious pavement structures.
   - Prevent vehicles with muddy wheels from accessing onto areas intended for pervious pavement.
   - Maintenance of the pervious asphalt pavement shall use pure vacuum, vacuum-assist, or regenerative air technology. (Mechanical sweeping is not adequate to remove fines from pores in the pavement).
   - Sweep and or vacuum pavement twice annually at a minimum.
   - Limit salt use for deicing, and do not use sand.
   - Remove leaves and organic debris in the fall.
   - Measures should be taken to ensure that an area designed to be porous does not receive a future overlay of conventional non-porous paving.

4. Soil Filters:
   - The basin should be inspected semi-annually and following major storm events. Debris and sediment buildup should be removed from the forebay, and basin as needed. Any bare area or erosion rills should be repaired with new filter media, seeded, and mulched.
   - Maintenance Agreement: A legal entity should be established with responsibility for inspecting and maintaining any underdrained filter. The legal agreement establishing the entity should list specific maintenance responsibilities (including timetables) and provide for the funding to cover long-term inspection and maintenance.
   - Drainage: The filter should within 24 to 48 hours following a one-inch storm or greater. If the system drains too fast, an orifice may need to be added on the underdrain outlet or may need to be modified if already present.

- Sediment Removal: Sediment and plant debris should be removed from the pretreatment structure at least annually.
- Mowing: If mowing is desired, only hand-held string trimmers or push-mowers are allowed on the filter (no tractor) and the grass bed should be mowed no more than 2 times per growing season to maintain grass heights of no less than 6 inches.
- Fertilization: Fertilization of the underdrained filter area should be avoided unless absolutely necessary to establish vegetation.
- Harvesting and Weeding: Harvesting and pruning of excessive growth should be done occasionally. Weeding to control unwanted or invasive plants may also be necessary.
- Grass cover: Maintaining a healthy cover of grass will minimize clogging with fine sediments. If ponding exceeds 48 hours, the top of the filter bed should be rototilled to reestablish the soil's filtration capacity.
- Soil Filter Replacement: The top several inches of the filter can be replaced with fresh material if water is ponding for more than 72 hours, or the basin can be rototilled, seeded, and mulched. Once the filter is mature, adding new material (a 1-inch to 2-inch cover of mature compost) can compensate for subsidence.

5. *Inspection* shall be performed by an individual with experience and/or training on the maintenance and functions of these devices.

6. Documentation: A log will be kept summarizing the inspections, maintenance, and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, BMP Inspection Log.

7. Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.

   A. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

   B. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.

   C. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

HOUSEKEEPING

1. Spill Prevention - During construction, controls will be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

2. Groundwater Protection - During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater will not be stored or handled in areas of the site draining to an infiltration area. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

3. Fugitive Sediment and Dust - Actions will be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil will not be used for dust control. Water will be used for dust control during construction.

   Operations during wet months that cause mud to be tracked off the site onto public roads will provide sweeping of the road areas at least once per week and prior to significant storm events.

4. Debris and Other Materials - Litter, construction debris, and chemicals exposed to stormwater will be prevented from becoming a pollutant source. The nature of this development will not cause problems related to debris and other materials.

5. Trench or Foundation De-Watering - If de-watering is necessary, the collected water will be removed from the ponded area and spread through natural wooded buffers or discharged into a construction sedimentation basin. The water will not be allowed to flow over disturbed areas to the site.

BIDDEFORD PRIMARY SCHOOL
CONSTRUCTION INSPECTION LOG

Inspection Date	Inspector (Name and Qualifications)	Major Observations	Work Performed

Notes

1) Major Observations include the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major Observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.
2) Work Performed will include a description of the corrective action taken, the date the corrective action was taken, and the name and qualifications of the person taking the corrective actions
3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
4) The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

BIDDEFORD PRIMARY SCHOOL
BMP INSPECTION LOG

Date	Inspector (Name and Qualifications)	ID Number	BMP Structure	Work Performed	Comments

Notes

1) If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal.
2) BMP structures shall be numbered sequentially and located on attached site map.
3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
4) The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.

INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
	INSPECTION SCHEDULE	**CORRECTIVE ACTIONS**
VEGETATED AREAS	Annually early spring and after heavy rains	Inspect all slopes and embankments and replant areas of bare soil or with sparse growth
		Armor rill erosion areas with riprap or divert the runoff to a stable area
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Mow vegetation as specified for the area
DITCHES, SWALES AND OPEN STORMWATER CHANNELS	Annually spring and late fall and after heavy rains	Remove obstructions, sediments or debris from ditches, swales and other open channels
		Repair any erosion of the ditch lining
		Mow vegetated ditches
		Remove woody vegetation growing through riprap
		Repair any slumping side slopes
		Repair riprap where underlying filter fabric or gravel is showing or if stones have dislodged
CULVERTS	Spring and late fall and after heavy rains	Remove accumulated sediments and debris at the inlet, outlet, or within the conduit
		Remove any obstruction to flow
		Repair any erosion damage at the culvert's inlet and outlet
ROADWAYS	Annually in the spring or as needed	Clear and remove accumulated winter sand in parking lots and along roadways
		Sweep pavement to remove sediment
		Grade road shoulders and remove accumulated winter sand
		Grade gravel roads and gravel shoulders
		Clean-out the sediment within water bars or open-top culverts
		Ensure that stormwater runoff is not impeded by false ditches of sediment in the shoulder
RESOURCE AND TREATEMENT BUFFERS	Annually in the spring	Inspect buffers for evidence of erosion, concentrated flow, or encroachment by development
		Manage the buffer's vegetation with the requirements in any deed restrictions
		Repair any sign of erosion within a buffer
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Install more level spreaders, or ditch turn-outs if needed for a better distribution of flow
		Clean-out any accumulation of sediment within the spreader bays or turnout pools
		Mow non-wooded buffers no shorter than six inches and less than three times per year
FILTRATION AND INFILTRATION BASINS	Annually in the spring and late fall	Clean the basin of debris, sediment and hydrocarbons
		Provide for the removal and disposal of accumulated sediments within the basin
		Renew the basin media if it fails to drain within 72 hours after a one inch rainfall event
		Till, seed and mulch the basin if vegetation is sparse
		Repair riprap where underlying filter fabric or gravel is showing or where stones have dislodged
PROPRIETARY DEVICES	As specified by manufacturer	Contract with a third-party for inspection and maintenance
		Follow the manufacturer's plan for cleaning of devices
OTHER PRACTICES	As specified for devices	Contact the department for appropriate inspection and maintenance requirements for other drainage control and runoff treatment measures.

ATTACHMENT J

ARCHITECTURAL PLANS AND RENDERINGS, EXTERIOR LIGHTING CUTSHEETS



BPS EXISTING PHOTOS

mobile
studio
design



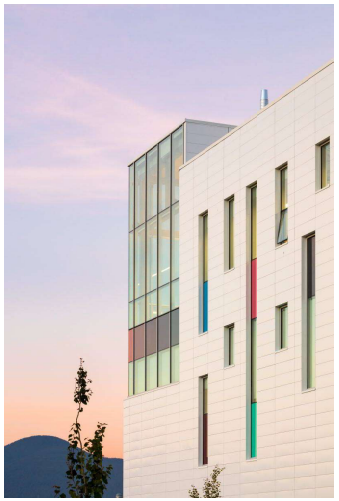


BPS EXISTING PHOTOS

mobile
studio
design

Precedents













BPS Addition- Exterior Cladding

mobile
studio
design



BPS ADDITION

Approach View

mobile
studio
design



BPS ADDITION

West Elevation

mobile
studio
design

GENERAL PLAN NOTES

1. ALL WORK IS TO BE COMPLETED IN CONFORMANCE WITH ALL LOCAL, STATE AND FEDERAL BUILDING CODES.

2. ALL DIMENSIONS FOR WALLS ARE TO ROUGH FRAMING OR FACE OF CONCRETE/MASONRY UNO.

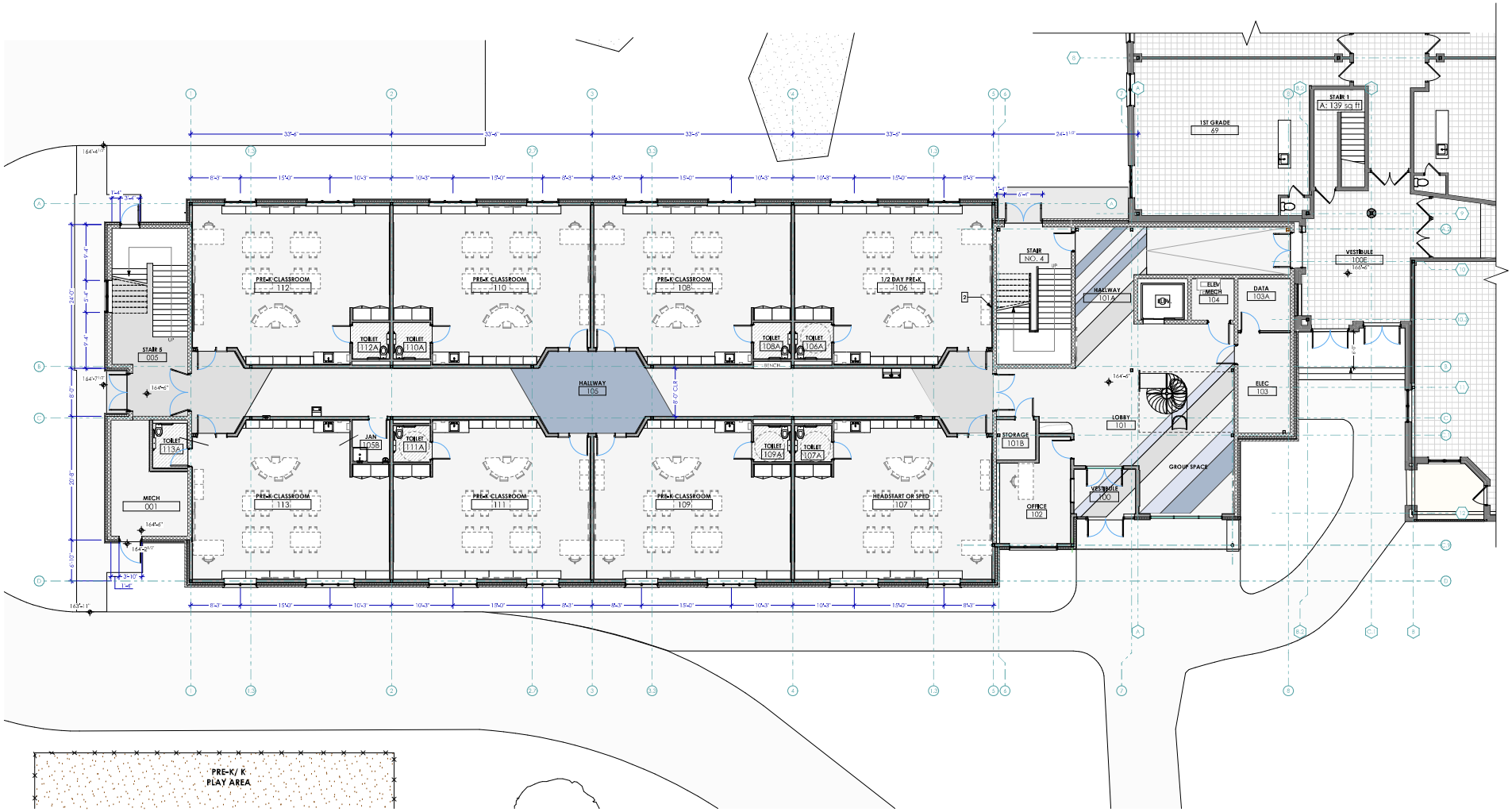
3. SEE SHEET G-101 FOR ALL PARTITION TYPES AND ADDITIONAL NOTES.

4. SEE SHEET A-XXX FOR ROOM & MATERIAL SCHEDULES.

5. PROVIDE CONTROL JOINTS IN GYP. PARTITIONS AT A MAX SPACING OF 30'-0" (28'-0" FOR ABUSE-RESISTANT PARTITIONS).
LOCATE CONTROL JOINT AT EDGES OF DOOR FRAMES UP TO CEILING, WHERE PRACTICAL. REVIEW LOCATIONS WITH ARCHITECT. SEE DETAIL XX/AXXX FOR ADDITIONAL INFORMATION.

6. ALL INTERIOR SWING DOORS TO BE SET 4" FROM ROUGH OPENING TO ROUGH FRAMING OF PERPENDICULAR WALLS/CORNER UNLESS DIMENSIONED OTHERWISE ON PLANS.

PRELIMINARY NOT FOR CONSTRUCTION



1 PROPOSED ADDITION- 1ST FLOOR
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

SUBMISSIONS:

ID	DESCRIPTION	DATE
01	60% DESIGN DEVELOPMENT	10/11/24
02	75% PERMIT SCHEDULE SUBMISSION	12/13/24
03	100% PERMIT SUBMISSION	1/25/25

CHANGES THIS ISSUE:

ID	DESCRIPTION

BIDDEFORD PRIMARY SCHOOL ADDITION

BIDDEFORD SCHOOL DEPARTMENT
320 Hill Street Biddeford, ME 04005

MOBILE STUDIO DESIGN
128 Main Street, Suite 201
Biddeford, ME 04002
office: 207.499.4208

DATE OF ISSUE: 1/25/24

PROJECT STATUS:
CD

ARCHITECT:
Leah Schaffer
leah@mobilestudiodesign.com
757-927-5324

ORIGINAL SHEET SIZE: 30X42

CONSULTANTS:

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STRUCTURAL ENGINEER
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Scott Klahn, P.E.
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MEP ENGINEER
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207-989-4824
Ron Valley, P.E.
rvalley@haleyward.com

GEOTECHNICAL ENGINEER
Summit Engineering
210 Maine Ave, Farmingdale, ME 04344
207-629-5510

CONTRACTOR:
TBD

PLAN- 1ST FLOOR

A-101

mobile studio design

1278

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GENERAL PLAN NOTES

1. ALL WORK IS TO BE COMPLETED IN CONFORMANCE WITH ALL LOCAL, STATE AND FEDERAL BUILDING CODES.

2. ALL DIMENSIONS FOR WALLS ARE TO ROUGH FRAMING OR FACE OF CONCRETE/MASONRY UNO.

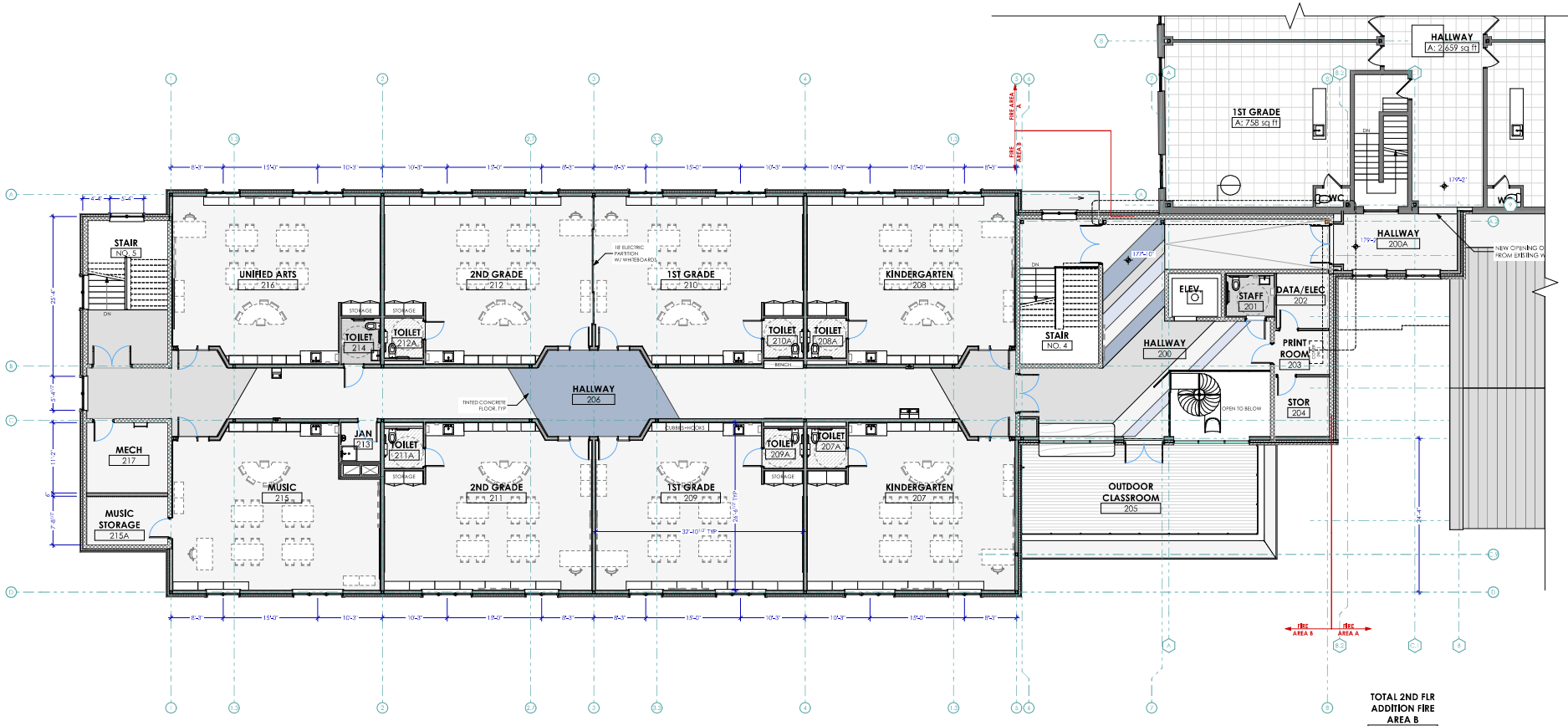
3. SEE SHEET G-003 FOR ALL PARTITION TYPES AND ADDITIONAL NOTES.

4. SEE SHEET A-XXX FOR ROOM & MATERIAL SCHEDULES.

5. PROVIDE CONTROL JOINTS IN GYP. PARTITIONS AT A MAX SPACING OF 30'-0" (28'-0" FOR ABUSE-RESISTANT PARTITIONS).
LOCATE CONTROL JOINT AT EDGES OF DOOR FRAMES UP TO CEILING, WHERE PRACTICAL. REVIEW LOCATIONS WITH ARCHITECT. SEE DETAIL XX/AXXX FOR ADDITIONAL INFORMATION.

6. ALL INTERIOR SWING DOORS TO BE SET 4" FROM ROUGH OPENING TO ROUGH FRAMING OF PERPENDICULAR WALLS/CORNER UNLESS DIMENSIONED OTHERWISE ON PLANS.

PRELIMINARY NOT FOR CONSTRUCTION



TOTAL 2ND FLR ADDITION FIRE AREA B
A: 11,023 sq ft

1 PROPOSED ADDITION- 2ND FLOOR
SCALE: 1/8" = 1'-0"

CHANGES THIS ISSUE:

ID	DESCRIPTION
01	4 PARKING SPACES ELIMINATED

SUBMISSIONS:

ISSUE	DATE	DESCRIPTION
01	4/25/24	50% REVIEW

BIDDEFORD PRIMARY SCHOOL ADDITION
BIDDEFORD SCHOOL DEPARTMENT
320 Hill Street Biddeford, ME 04005

MOBILE STUDIO DESIGN
128 Main Street, Suite 201
Biddeford, ME 04002
office: 207.499.4208

DATE OF ISSUE: 1/25/24

PROJECT STATUS:
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GEOTECHNICAL ENGINEER
Summit Engineering
210 Maine Ave, Farmingdale, ME 04344
207-576-5513

CONTRACTOR:
TBD

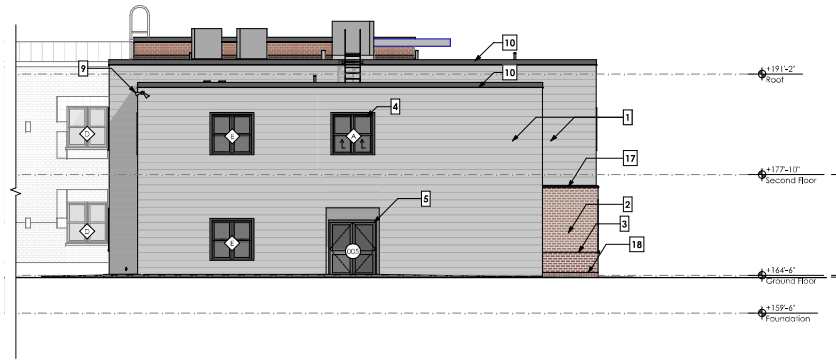
PLAN- 2ND FLOOR

A-102

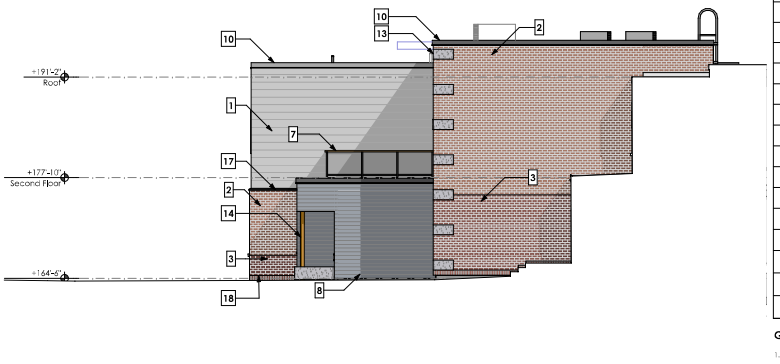
mobile studio design

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1279



1 PROPOSED- SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 PROPOSED- NORTH ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR MATERIAL LEGEND	
ID	NOTES/SPEC
1	HORIZONTAL METAL PANELING WITH CONCEALED FASTENERS BASIS OF DESIGN: MORIN MAL COLOR: TO BE SELECTED FROM STANDARD COLORS
2	BRICK VENEER BASIS OF DESIGN: MATCH TO EXISTING, MORIN
3	BRICK VENEER ACCENT BASIS OF DESIGN: MATCH TO DARKER BRICK AT EXISTING, MORIN OLD PORT NARROW FLASHED RANGE ECONO
4	ALUMINUM WINDOWS BASIS OF DESIGN: KAWNEER AA 5450 ULTRA THERMAL WINDOW
5	ALUMINUM STOREFRONT BASIS OF DESIGN: KAWNEER TRIFAB VG 451T
6	HM STL DOORS
7	GLASS RAILING SYSTEM
8	HORIZONTAL FIBER CEMENT SHIPLAP TO BE PAINTED BASIS OF DESIGN: HARDIE PLANK NICHEL GAP SIDING 8X6
9	EXTERIOR LIGHTS SEE ELECTRICAL
10	ALUMINUM FASCIA TRIM BASIS OF DESIGN: PECKMAN TERMIN EDGE EX; FASCIA, COLOR TO BE SELECTED FROM STANDARD COLORS
11	HORIZONTAL FIBER CEMENT PANELS BASIS OF DESIGN: SUNTONE PANELS, SEE ELEVATION DETAILS FOR SIZES AND COLORS
13	GROUND FACE CMU VENEER BASIS OF DESIGN: GENEST
14	POWDER COATED STL COLUMN
15	STEEL FIRE RATED WINDOW BASIS OF DESIGN:
16	PRECAST CONCRETE SILLS
17	PRECAST CONCRETE COPING
18	BRICK SOLDIER COURSE BASIS OF DESIGN: MATCH TO DARKER BRICK AT EXISTING, MORIN OLD PORT NARROW FLASHED RANGE ECONO

GENERAL ELEVATION NOTES

1. ALL WORK IS TO BE COMPLETED IN CONFORMANCE W/ ALL LOCAL, STATE AND FEDERAL CODES.
2. SIDING TO BE INSTALLED TO ALIGN W/ WINDOWS, DOORS AND OTHER OPENINGS TO THE GREATEST PRACTICAL EXTENT. AVOID CUTS & JOGS LESS THAN 3" WIDE.

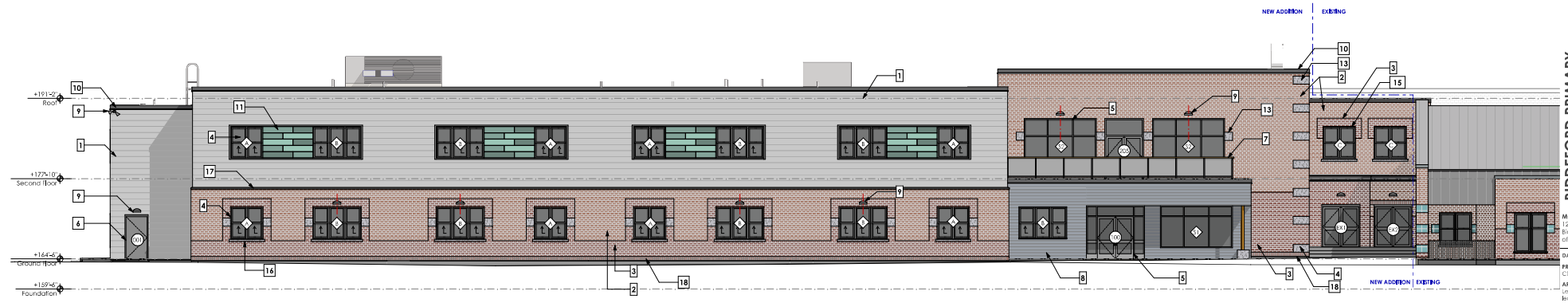
PRELIMINARY NOT FOR CONSTRUCTION

CHANGES THIS ISSUE:

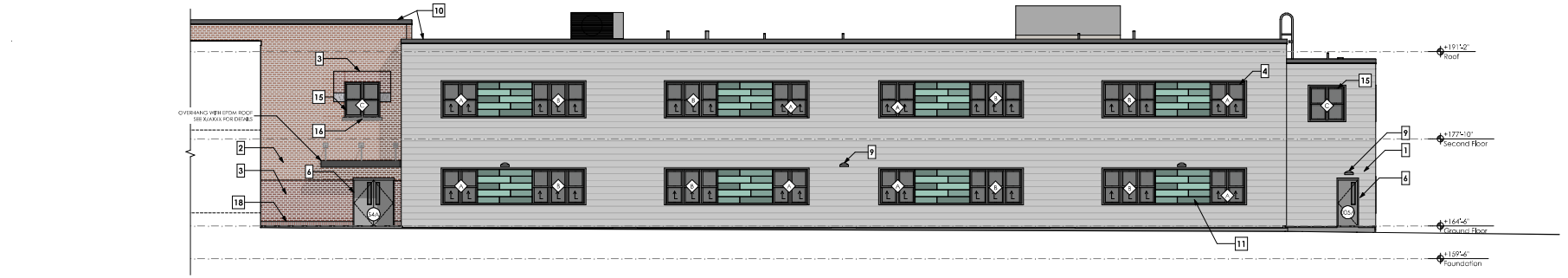
ID	DESCRIPTION

SUBMISSIONS:

ISSUE	DATE	DESCRIPTION
01	1/25/24	PLANNING BOARD FINAL SITE REVIEW
00	4/05/24	DESIGN DEVELOPMENT



3 PROPOSED- EAST ELEVATION
SCALE: 1/8" = 1'-0"



4 PROPOSED- WEST ELEVATION
SCALE: 1/8" = 1'-0"

BIDDEFORD PRIMARY SCHOOL ADDITION
BIDDEFORD SCHOOL DEPARTMENT
320 Hill Street Biddeford, ME 04005

MOBILE STUDIO DESIGN
128 Main Street, Suite 201
Biddeford, ME 04002
office: 207.499.4208

DATE OF ISSUE: 1/25/24

PROJECT STATUS:
CD

ARCHITECT:
Leah Schaffer
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757-927-5324

ORIGINAL SHEET SIZE: 30X42

CONSULTANTS:
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CONTRACTOR:
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BUILDING ELEVATIONS
A-201

mobile studio design

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1280



1 WEST ELEV



2 APPROACH VIEW



3 REAR STAIR ENTRY



4 EAST ELEVATION



5 ENTRY ELEV



6 AERIAL VIEW

PRELIMINARY NOT FOR CONSTRUCTION

CHANGES THIS ISSUE:

ID	DESCRIPTION

SUBMISSIONS:

ISSUE	DATE	DESCRIPTION
01	1/25/24	PLANNING BOARD FINAL SUBMITTAL
00	4/05/24	PLANNING BOARD FINAL RE-REVIEW

BIDDEFORD PRIMARY SCHOOL ADDITION
BIDDEFORD SCHOOL DEPARTMENT
320 Hill Street Biddeford, ME 04005

MOBILE STUDIO DESIGN
128 Main Street, Suite 201
Biddeford, ME 04002
office: 207.499.4208

DATE OF ISSUE: 1/25/24

PROJECT STATUS:
CD

ARCHITECT:
Leah Schaffer
leah@mobilestudiodesign.com
757-927-5324

ORIGINAL SHEET SIZE: 30X42

CONSULTANTS:

CIVIL ENGINEER:
HALEY WARD
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GEOTECHNICAL ENGINEER
Summit Engineering
210 Maine Ave, Farmingdale, ME 04344
207-629-5313

CONTRACTOR:
TBD

3D VIEWS
A-900

mobile studio design

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Submitted by:	Job Name:	Catalog Number:	Type:
VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	Biddeford High School Addition	WSQ LED P2 40K SR3 MVOLT DDBXD	Q2



Inverted available with WLU option only.

WSQ LED

Architectural Wall Sconce

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

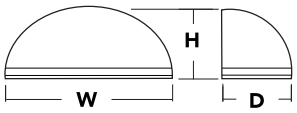
Luminaire

Height: 9-3/8" *(23.8 cm)*

Width: 18" *(45.7 cm)*

Depth: 9" *(22.8 cm)*

Weight: 17 lbs *(7.7 kg)*

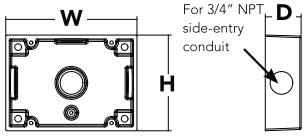


Optional Back Box (BBW)

Height: 4" *(10.2 cm)*

Width: 5-1/2" *(14.0 cm)*

Depth: 1-1/2" *(3.8 cm)*



Introduction

Classic Architectural Wall Sconce with the LED technology. Long-life, maintenance-free product with typical energy savings of 80% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity. The WSQ LED is ideal for replacing existing 50 – 250W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Ordering Information

EXAMPLE: WSQ LED P2 40K SR3 MVOLT DDBTXD

WSQ LED							
Series	**Performance Package**	**Color Temperature**	**Distribution**	**Voltage**	**Mounting**	**Options**	**Finish *(required)***
WSQ LED	P1 P2 P3 P4	30K 40K 50K	SR2 Type II SR3 Type III SR4 Type IV	MVOLT[1] 120 208 240 277 347 480	**Shipped included** (blank) Surface mount **Shipped separately** [2] BBW Surface-mounted back box	**Shipped installed** PE Photoelectric cell, button type [2,3] SF Single fuse (120, 277, 347V) [4] DF Double fuse (208, 240, 480V) [4] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C) [5] E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C) [5] WLU Wet location door for up orientation [6] PIR Motion/ambient light sensor [7] DS Dual switching [8] SPD Separate Surge Protection [9] **Shipped separately** VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Emergency Battery Operation

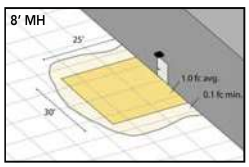
The emergency battery backup (E20WC & E10WH options) is integral to the luminaire - no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

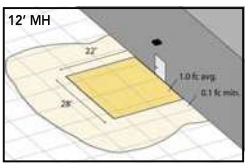
All E20WC & E10WH configurations include an independent secondary driver with an integral relay to immediately detect AC power loss.

The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package Type IV product in emergency mode.

WSR P1 LED 40K SR4 MVOLT E20WC
10′ x 10′ Gridlines
8′ and 12′ Mounting Height





NOTES
1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2. Not available with 480V option.
3. PE option is voltage specific.
4. Single fuse (SF) requires 120V, 277V or 347V options. Double fuse (DF) requires 208V, 240V or 480V options,
5. Not available with 347V or 480V. Not available with WLU.
6. WLU not available with PIR, E20WC or E10WH.
7. When ordering PIR, "PE" will be automatically added to the order line for "dim to off" capability. See PIR Table for default settings.
8. Only available with P3 & P4 packages. Provides 50/50 luminaire operation via two independent drivers and light engines on two separate circuits. Not available with E20WC, E10WH, WLU, SF, or DF. When ordered with photocell (PE) or motion sensor (PIR), only the primary power source leads will be controlled.
9. See electrical section on page 2 for more details.

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Submitted by:	Job Name:	Catalog Number:	Type:
VISIBLE LIGHT MANUFACTURERS' REPRESENTATIVE	Biddeford High School Addition	WSQ LED P2 40K SR3 MVOLT DDBXD	Q2

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT[1])	Dist. Type	30K (3000K, 70CRI)		40K (4000K, 70CRI)		50K (5000K, 70CRI)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P1	20W	SR2	2,111	108	2,251	115	2,305	118
		SR3	2,104	108	2,244	115	2,298	117
		SR4	2,053	105	2,189	112	2,242	115
P2	29W	SR2	2,943	101	3,139	108	3,214	110
		SR3	2,934	101	3,129	107	3,204	110
		SR4	2,863	98	3,053	105	3,126	107
P3	40W	SR2	4,500	114	4,799	122	4,913	125
		SR3	4,486	114	4,784	122	4,898	125
		SR4	4,377	111	4,667	119	4,779	122
P4	61W	SR2	6,159	102	6,567	108	6,724	111
		SR3	6,139	101	6,547	108	6,703	110
		SR4	5,991	99	6,388	105	6,541	108

Motion/Ambient Sensor Default Settings						
	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
*PIR USES SFOD 7						

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Normalized Lumen Multiplier
0°C	32°F	1.05
10°C	50°F	1.03
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **MRW LED P4** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25000	50000	100000	L90
Lumen Maintenance Factor	1	0.96	0.95	0.92	>60000

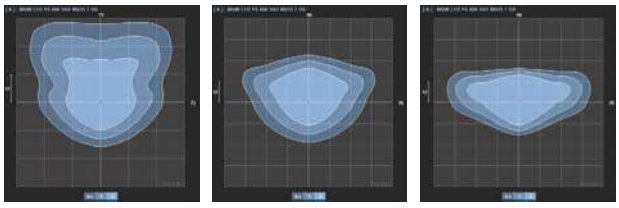
Electrical Load

Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	20W	0.17	0.10	0.09	0.08	0.06	0.05
P2	29W	0.26	0.15	0.13	0.12	0.09	0.07
P3	40W	0.37	0.21	0.18	0.16	0.13	0.09
P4	61W	0.59	0.33	0.18	0.25	0.19	0.14

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WSQ LED homepage.

Isofootcandle plots for the WSQ LED P4 40K SR2, SR3, and SR4. Distances are in units of mounting height (12').



FEATURES & SPECIFICATIONS

INTENDED USE
The classic architectural shape of the WSQ LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION
The die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Precision-molded acrylic lenses are engineered for superior distribution, uniformity, and spacing in wall-mount applications. Light engines are 4000K (70 CRI). The WSQ LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) consist of 8 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 25°C, L77). Class 2 electronic driver has a power factor >90%, THD <20%. and a minimum 6 KV surge protection.When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS
CSA certified to U.S. and Canadian standards. Light engines are IP66 rated; luminaire is IP65 rated and suitable for wet locations when mounted with the lenses down. WLU option offers wet location listing in "up"orientation. Rated for -30°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN ACT
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.
Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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Submitted by:	Job Name:	Catalog Number:	Type:
VISIBLE LIGHT MANUFACTURERS' REPRESENTATIVE	Biddeford High School Addition	WSQ LED P1 40K SR3 277 PE PIR E20WC DDBXD	Q3E



Inverted available with WLU option only.

WSQ LED

Architectural Wall Sconce

Catalog Number

Notes

Type

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Specifications

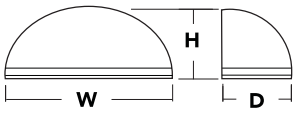
Luminaire

Height: 9-3/8" *(23.8 cm)*

Width: 18" *(45.7 cm)*

Depth: 9" *(22.8 cm)*

Weight: 17 lbs *(7.7 kg)*

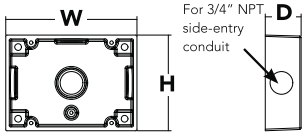


Optional Back Box (BBW)

Height: 4" *(10.2 cm)*

Width: 5-1/2" *(14.0 cm)*

Depth: 1-1/2" *(3.8 cm)*



Introduction

Classic Architectural Wall Sconce with the LED technology. Long-life, maintenance-free product with typical energy savings of 80% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity. The WSQ LED is ideal for replacing existing 50 – 250W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Ordering Information

EXAMPLE: WSQ LED P2 40K SR3 MVOLT DDBTXD

WSQ LED							
Series	**Performance Package**	**Color Temperature**	**Distribution**	**Voltage**	**Mounting**	**Options**	**Finish *(required)***
WSQ LED	P1 P2 P3 P4	30K 40K 50K	SR2 Type II SR3 Type III SR4 Type IV	MVOLT [1] 120 208 240 277 347 480	**Shipped included** (blank) Surface mount **Shipped separately** [2] BBW Surface-mounted back box	**Shipped installed** PE Photoelectric cell, button type [2,3] SF Single fuse (120, 277, 347V) [4] DF Double fuse (208, 240, 480V) [4] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C) [5] E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C) [5] WLU Wet location door for up orientation [6] PIR Motion/ambient light sensor [7] DS Dual switching [8] SPD Separate Surge Protection [9] **Shipped separately** VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Emergency Battery Operation

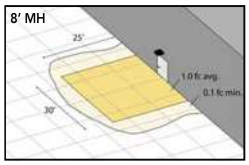
The emergency battery backup (E20WC & E10WH options) is integral to the luminaire - no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

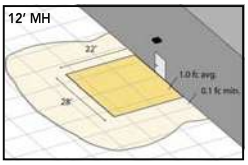
All E20WC & E10WH configurations include an independent secondary driver with an integral relay to immediately detect AC power loss.

The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package Type IV product in emergency mode.

WSR P1 LED 40K SR4 MVOLT E20WC
10' x 10' Gridlines
8' and 12' Mounting Height





NOTES

1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2. Not available with 480V option.
3. PE option is voltage specific.
4. Single fuse (SF) requires 120V, 277V or 347V options. Double fuse (DF) requires 208V, 240V or 480V options,
5. Not available with 347V or 480V. Not available with WLU.
6. WLU not available with PIR, E20WC or E10WH.
7. When ordering PIR, "PE" will be automatically added to the order line for "dim to off" capability. See PIR Table for default settings.
8. Only available with P3 & P4 packages. Provides 50/50 luminaire operation via two independent drivers and light engines on two separate circuits. Not available with E20WC, E10WH, WLU, SF, or DF. When ordered with photocell (PE) or motion sensor (PIR), only the primary power source leads will be controlled.
9. See electrical section on page 2 for more details.

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Submitted by:	Job Name:	Catalog Number:	Type:
VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	Biddeford High School Addition	WSQ LED P1 40K SR3 277 PE PIR E20WC DDBXD	Q3E

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT[1])	Dist. Type	30K (3000K, 70CRI)		40K (4000K, 70CRI)		50K (5000K, 70CRI)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P1	20W	SR2	2,111	108	2,251	115	2,305	118
		SR3	2,104	108	2,244	115	2,298	117
		SR4	2,053	105	2,189	112	2,242	115
P2	29W	SR2	2,943	101	3,139	108	3,214	110
		SR3	2,934	101	3,129	107	3,204	110
		SR4	2,863	98	3,053	105	3,126	107
P3	40W	SR2	4,500	114	4,799	122	4,913	125
		SR3	4,486	114	4,784	122	4,898	125
		SR4	4,377	111	4,667	119	4,779	122
P4	61W	SR2	6,159	102	6,567	108	6,724	111
		SR3	6,139	101	6,547	108	6,703	110
		SR4	5,991	99	6,388	105	6,541	108

Motion/Ambient Sensor Default Settings						
	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
*PIR USES SFOD 7						

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Normalized Lumen Multiplier
0°C	32°F	1.05
10°C	50°F	1.03
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **MRW LED P4** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25000	50000	100000	L90
Lumen Maintenance Factor	1	0.96	0.95	0.92	>60000

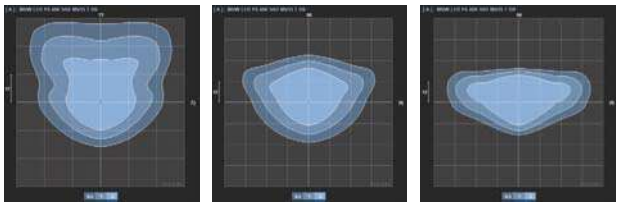
Electrical Load

Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	20W	0.17	0.10	0.09	0.08	0.06	0.05
P2	29W	0.26	0.15	0.13	0.12	0.09	0.07
P3	40W	0.37	0.21	0.18	0.16	0.13	0.09
P4	61W	0.59	0.33	0.18	0.25	0.19	0.14

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WSQ LED homepage.

Isofootcandle plots for the WSQ LED P4 40K SR2, SR3, and SR4. Distances are in units of mounting height (12').



FEATURES & SPECIFICATIONS

INTENDED USE
The classic architectural shape of the WSQ LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION
The die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Precision-molded acrylic lenses are engineered for superior distribution, uniformity, and spacing in wall-mount applications. Light engines are 4000K (70 CRI). The WSQ LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) consist of 8 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 25°C, L77). Class 2 electronic driver has a power factor >90%, THD <20%. and a minimum 6 KV surge protection.When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS
CSA certified to U.S. and Canadian standards. Light engines are IP66 rated; luminaire is IP65 rated and suitable for wet locations when mounted with the lenses down. WLU option offers wet location listing in "up"orientation. Rated for -30°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN ACT
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.
Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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PLANS

C001 - General Notes & Legend
EX - Existing Conditions Plan
C100 - Site Demolition & Erosion Control Plan
C101 - Overall Site Plan
C102 - Site Plan
C103 - Grading & Utility Plan
C104 - Emergency Vehicle Access Plan
C501 - Site Details

BIDDEFORD PRIMARY SCHOOL EXPANSION

320 HILL STREET
BIDDEFORD, ME , 04005

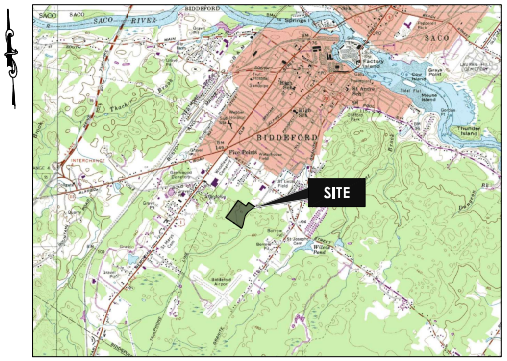
PROJECT INFORMATION

SITE INFORMATION
TAX ID: 82-32, 82-22-26
ACREAGE: 17.09+/- ACRES
ZONE: SINGLE FAMILY RESIDENTIAL 1A
EXISTING USE: EDUCATIONAL
PROPOSED USE: EDUCATIONAL
WATER: MAINE WATER COMPANY
SEWER: MUNICIPAL
ELECTRIC: CENTRAL MAINE POWER
WATERSHED: SACO RIVER
MS4 AREA: YES
FLOOD/SHORELAND ZONE: NO
NET CUT/FILL: 3,527 CY CUT

OWNER/APPLICANT
CITY OF BIDDEFORD
ATTN: BIDDEFORD SCHOOL DEPARTMENT
PO BOX 586
BIDDEFORD, MAINE 04005
T: 207.282.8280

CIVIL ENGINEER
HALEY WARD
ATTN: DREW OLEHOWSKI, P.E.
120 MAIN STREET
SUITE 132
SACO, MAINE 04072
T: 207.283.9151

SURVEYOR
HALEY WARD
ATTN: JEFF TEUNISEN, L.S.
ONE MERCHANTS PLAZA
SUITE 701
BANGOR, ME, 04401
T: 207.989.4824



LOCATION MAP

INDEX OF DRAWINGS

C001 GENERAL NOTES & LEGEND
V101 EXISTING CONDITIONS PLAN
C100 SITE DEMOLITION & EROSION CONTROL PLAN
C101 OVERALL SITE PLAN
C102 SITE PLAN
C103 GRADING & UTILITY PLAN
C104 EMERGENCY VEHICLE ACCESS PLAN
C501 CIVIL DETAILS

NOT FOR CONSTRUCTION
FEBRUARY 14, 2024

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GENERAL NOTES

1. THE UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR.
2. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, AND EMERGENCY SERVICES.
3. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
4. THE WORK SHALL INCORPORATE EROSION CONTROL MEASURES WHICH ARE COMPLIANT WITH THE LATEST VERSION OF "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES".
5. THE LOCATION, TYPE AND SIZE OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND STRUCTURES SHOWN ON THE DRAWINGS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND STRUCTURES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. DEPTH OF SERVICES ARE UNKNOWN AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. EXCAVATING TEST PITS AS NECESSARY TO VERIFY UTILITY LOCATIONS AND DEPTHS SHALL BE INCIDENTAL TO THIS PROJECT.
6. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE UTILITY COMPANIES. DIG SAFE, AND EMERGENCY SERVICES WHERE APPLICABLE. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF ALL BURIED UTILITIES. CONTRACTOR SHALL ALSO CONTACT "DIG SAFE". TELEPHONE NO 800-225-4977. REPAIR OF ANY DAMAGED UTILITY WILL BE INCIDENTAL TO THIS PROJECT.
7. CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN CONTINUOUS TRAFFIC FLOW DURING CONSTRUCTION. THE ROADS SHALL NOT BE CLOSED TO TRAFFIC WITHOUT PERMISSION FROM THE OWNER.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT EQUIPMENT FLUIDS FROM REACHING ANY WATER COURSE. ANY INADVERTENT FLUID DISCHARGES SHALL BE IMMEDIATELY CLEANED FROM THE WATERS USING WHATEVER MEANS NECESSARY, AS DETERMINED BY THE ENGINEER.
9. RESTORE ALL AREA DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL CONDITION (GRAVEL, PAVEMENT, GRASS, ETC.) UNLESS NOTED OTHERWISE ON PLANS. RESTORATION OF GRAVEL ROAD AND DRIVEWAY SURFACES AND LAWNS DAMAGED BY CONTRACTOR SHALL BE INCIDENTAL TO THE PROJECT.
10. EXISTING FACILITIES AND IMPROVEMENTS (I.E. TREES, LIGHT POLES, SIGNS, ETC.) SHALL BE REMOVED AND REPLACED OR PROTECTED AS REQUIRED DURING CONSTRUCTION. THE ASSOCIATED COSTS ARE INCIDENTAL TO THE PROJECT, BRACING OF UTILITY POLES, WHERE REQUIRED, SHALL BE INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
11. WHENEVER POSSIBLE, EXISTING PLANTINGS SHALL BE PRESERVED BY WHATEVER METHOD NECESSARY INCLUDING TRANSPLANTING AND/OR TEMPORARY RELOCATION.
12. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, GATES, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
14. EXISTING FLOWS VARY SIGNIFICANTLY FROM HOUR TO HOUR AND SEASON TO SEASON. PEAK FLOWS ARE INFLUENCED BY RAIN EVENTS AND GROUNDWATER DEPTHS. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO BE PREPARED FOR THESE VARIABLE FLOW CONDITIONS.
15. ALL WORK OF ITEMS SCHEDULED FOR EITHER REMOVAL, DISPOSAL, PLUG, OR ABANDON SHALL BE PERFORMED AS INDICATED ON THE DRAWINGS AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO OTHER PAYMENT SHALL BE MADE.
16. ALL FINISH SURFACES SHALL BE INSTALLED TO PROMOTE POSITIVE DRAINAGE. IN NO WAY SHALL THE NEW FINISH SURFACES AND CATCH BASINS CREATE DRAINAGE PROBLEMS THAT DID NOT EXIST PRIOR TO CONSTRUCTION.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON DRAWINGS.
18. HOURS FOR THE PROJECT WILL BE MONDAY THROUGH FRIDAY, FROM 7:00 AM TO 7:00 PM, UNLESS OTHERWISE AUTHORIZED BY THE OWNER.
19. THE CONTRACTOR SHALL PROVIDE A SEDIMENT BASIN FOR ALL WATER PUMPED FROM EXCAVATIONS. BASIN SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES". THE CONTRACTOR SHALL SUBMIT FOR REVIEW/APPROVAL PRIOR TO BEGINNING ANY PROJECT WORK.

GENERAL CONSTRUCTION NOTES

1. THIS PROJECT GENERALLY CONSISTS OF A BUILDING EXPANSION, INSTALLATION OF STORMWATER TREATMENT SYSTEM, CONSTRUCTION OF A NEW ACCESS ROAD, AND THE DEMOLITION & RELOCATION OF EXISTING SITE FEATURES.
2. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE CITY OF BIDDEFORD, UTILITY COMPANIES, DIG SAFE, AND EMERGENCY SERVICES WHERE APPLICABLE. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF ALL BURIED UTILITIES. CONTRACTOR SHALL ALSO CONTACT "DIG SAFE". TELEPHONE NO 811 OR 888-DIG-SAFE. REPAIR OF ANY DAMAGED UTILITY WILL BE INCIDENTAL TO THIS PROJECT
3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IN WRITING OF ANY CONDITION OR OCCURRENCE THAT REPRESENTS A CHANGE IN PROJECT SCOPE. VERBAL NOTIFICATION IS REQUIRED PRIOR TO PROCEEDING WITH THE WORK OF THE PROJECT AND WRITTEN NOTIFICATION MUST BE PROVIDED. REQUESTS FOR FEE ADJUSTMENTS WILL NOT BE CONSIDERED UNLESS PROPER NOTICE IS GIVEN
4. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
6. THE CONTRACTOR SHALL SUPERVISE AND INSPECT THE WORK OF THE PROJECT IN AN EFFICIENT AND COMPETENT MANNER. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO COMPLETE THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE WORK IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. A REPRESENTATIVE OF THE GENERAL CONTRACTOR SHALL BE PRESENT DURING ALL PHASES OF THE WORK.
7. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. PERFORM ALL WORK IN ACCORDANCE WITH SAFETY STANDARDS OF APPLICABLE LAWS, BUILDING AND CONSTRUCTION CODES. THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND THE REQUIREMENTS OF TITLE 9 OF THE CODE OF FEDERAL REGULATIONS, PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION".
8. THE LOCATIONS OF ALL PROPERTY LINES AND RIGHT OF WAYS ARE APPROXIMATE (SHOWN FOR REFERENCE ONLY) UNLESS NOTED OTHERWISE. PROPERTY LINES AND RIGHT OF WAYS SHOWN ARE NOT INTENDED TO REPRESENT LEGAL BOUNDARIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING TOPOGRAPHY AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING PIPE SIZES, INVERTS, AND LOCATIONS, AND SHALL INCLUDE IN SUBMITTAL PRIOR TO ORDERING.
11. LAYOUT OF THE PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL GRADE AND LAYOUT CONTROL. LAYOUT SHOULD BE PERFORMED WITH SURVEY EQUIPMENT AND OVERSEEN BY A LICENSED SURVEYOR. A CAD FILE WILL BE AVAILABLE TO THE CONTRACTOR.
12. THE WORK SHALL INCORPORATE EROSION CONTROL MEASURES WHICH ARE COMPLIANT WITH THE LATEST VERSION OF "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES".
13. CONTRACTOR SHALL BE REQUIRED TO PROVIDE DUST CONTROL FOR PROJECT WHICH CAN INCLUDE, BUT IS NOT LIMITED TO, WATER AND CALCIUM CHLORIDE. COST IS INCIDENTAL TO THE PROJECT.
14. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, GATES, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
15. CONTRACTOR SHALL BACKFILL TRENCH FOLLOWING EACH DAYS CONSTRUCTION. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT UNLESS APPROVED BY ENGINEER AND PROPERLY BARRICADED (IE. SNOW FENCING, CHAIN LINK FENCING, JERSEY BARRIER OR APPROVED EQUAL, CAUTION RIBBON AND EQUIPMENT PLACEMENT WILL NOT BE APPROVED AS BARRICADING, CONTRACTOR IS RESPONSIBLE TO MAINTAIN TRENCH AS DIRECTED BY THE ENGINEER
16. ALL FINISH SURFACES SHALL BE INSTALLED TO PROMOTE POSITIVE DRAINAGE, IN NO WAY SHALL THE NEW FINISH SURFACES CREATE DRAINAGE PROBLEMS THAT DID NOT EXIST PRIOR TO CONSTRUCTION.
17. EXISTING FACILITIES, PLANTINGS AND IMPROVEMENTS (I.E. TREES, LIGHT POLES, SIGNS, CONCRETE SIDEWALK, ETC.) SHALL BE REMOVED AND REPLACED OR PROTECTED AS REQUIRED DURING CONSTRUCTION. THE ASSOCIATED COSTS ARE INCIDENTAL TO THE PROJECT.
18. ALL MATERIALS SCHEDULED FOR REMOVAL SHALL BE DISPOSED OF IN A LEGAL MANNER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY DEMOLITION MATERIALS.
19. DISPOSAL OF SURPLUS SOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SURPLUS MATERIAL SHALL NOT BE DISPOSED OF ON THE PROJECT SITE. DISPOSAL SHALL BE MADE ONLY AT WASTE AREAS WHICH ARE LICENSED TO ACCEPT SUCH MATERIALS, UNLESS THE MATERIAL IS ACCEPTABLE FOR USE AS FILL IN OTHER AREAS OF THE PROJECT, THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY SURPLUS SOIL MATERIALS.
20. UNLESS OTHERWISE NOTED, RIM ELEVATIONS FOR PROPOSED MANHOLE AND CATCH BASIN STRUCTURES SHALL BE FIELD ADJUSTED TO FINISHED GRADES IN ACCORDANCE WITH DETAILS.
21. THE CONTRACTOR SHALL RAISE ALL EXISTING UTILITY COVERS, GRATES, FRAMES, AND BOXES TO MATCH NEW ELEVATIONS ON THE DRAWINGS, FIELD ADJUSTED TO FINISHED GRADES.
22. ALL TEST PITS NECESSARY TO LOCATE SERVICES SHALL BE INCIDENTAL TO THE PROJECT.

EROSION CONTROL NOTES

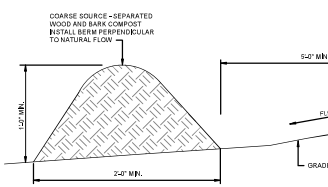
18. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENTATION CONTROL BMPS, PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION.
20. SILT FENCE WILL BE INSPECTED, REPLACED AND/OR REPAIRED IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR LOSS OF SERVICEABILITY DUE TO SEDIMENT ACCUMULATION. AT A MINIMUM, ALL EROSION CONTROL DEVICES WILL BE OBSERVED WEEKLY.
21. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO CONSTRUCTION SITE.
22. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY A SUITABLE GROWTH OF GRASS. ONCE A SUITABLE GROWTH OF GRASS HAS BEEN OBTAINED, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BY THE CONTRACTOR. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THEY ARE REMOVED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, SEEDED, AND MULCHED IMMEDIATELY.
23. ALL DISTURBED AREAS WILL BE SEEDED WITH 2.5 LBS. RED FESCUE AND 0.5 LBS. RYE GRASS PER 1,000 SQUARE FEET AND MULCHED AT A RATE OF 90 LBS. PER 1,000 SQUARE FEET OR EQUIVALENT APPLICATION OF SEED AND MULCH.
24. A SUITABLE BINDER SUCH AS CURASOL OR TERRTACK WILL BE USED ON THE HAY MULCH FOR WIND CONTROL.
25. IF FINAL SEEDING OF DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15th OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SEEDED WITH WINTER RYE AT THE RATE OF 112 POUNDS PER ACRE OR 3 POUNDS PER 1000 SQUARE FEET, THE RYE SEEDING WILL BE PRECEDED BY AN APPLICATION OF 3 TONS OF LIME AND 800 LBS. OF 10-20-20 FERTILIZER OR ITS EQUIVALENT, MULCH WILL BE APPLIED AT A RATE OF 90 POUNDS PER 1000 SQUARE FEET.
26. IF THE RYE SEEDING CANNOT BE COMPLETED BY OCTOBER 1st OR IF THE RYE DOES NOT MAKE ADEQUATE GROWTH BY DECEMBER 1st, THEN ON THOSE DATES, HAY MULCH WILL BE APPLIED AT 150 POUNDS PER 1000 SQUARE FEET.
27. ALL CATCH BASINS ARE TO BE PROTECTED BY STRAW BALE OR SILTFENCE IN ACCORDANCE WITH SECTION 8-3 STORM DRAIN INLET PROTECTION OF THE MAINE BMP HANDBOOK. SURROUNDING AREAS CAN BE EXCAVATED OR LEFT LOW AS A SEDIMENT TRAP. CURB INLETS SHALL BE PROTECTED BY GUTTERSAVER, OR APPROVED EQUIVALENT.
28. INTERIOR SILT FENCES ALONG CONTOUR DIVIDING FLAT AND STEEP SLOPES. AREAS WITH DIFFERENT DISTURBANCE SCHEDULES, AMONG TEMPORARY STOCKPILES OR IN OTHER UNSPECIFIED POSSIBLE CIRCUMSTANCES SHOULD BE CONSIDERED BY THE CONTRACTOR. THE INTENT OF SUCH INTERIOR SILT FENCES IS TO LIMIT SEDIMENT TRANSPORT WITHIN THE SITE TOWARD THE PROTECTED CATCH BASIN INLETS TO MINIMIZE SEDIMENT REMOVAL REQUIRED BY THE EROSION CONTROL NOTE 8 PROTECTIONS AND EXTEND LIFE OF SUCH DEVICES.
29. CONSTRUCTION OVERSIGHT:
    THE CONTRACTOR WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES, IF NECESSARY, THE INSPECTING ENGINEER WILL INTERPRET THE POND'S CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT THE POND HAS BEEN COMPLETED, ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA OR SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPECIFIED IN THE PLANS AND USED ON SITE.
30. UNDERDRAINED FILTER BASINS:
    CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED. COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.
    CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:
    - AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
    - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
    - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED. BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.
    - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND
    - ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

    TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
    - SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
    - PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
    - PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.
13. LOT GRADING AND DRIVEWAY LOCATION:
    INSPECTIONS BY A PROFESSIONAL ENGINEER WILL CONSIST OF A VISIT TO THE SITE PRIOR TO CONSTRUCTION TO CONSULT WITH THE EARTHWORK CONTRACTOR AND A POST CONSTRUCTION MEETING TO CONFIRM GRADING ON LOTS AND FOR ALL DRIVEWAYS TO ENSURE RUNOFF IS DIRECTED ACCORDING TO PLANS AND TO OVERSEE THE RE-STABILIZATION OF THE LOT INTO A VEGETATED COVER.
14. PERVIOUS PAVEMENT:
    INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE CONSTRUCTION AND STABILIZATION OF THE PROPOSED PERVIOUS PAVEMENT AND ITS FILTER COURSE MATERIAL TO BE BUILT ON THE SITE. INSPECTIONS SHALL CONSIST OF AN APPROPRIATE NUMBER OF VISITS TO THE SITE TO INSPECT THE FILTER BED MATERIAL PLACEMENT AND COMPACTION, STORAGE COURSE, PAVEMENT ALTERNATIVE CONSTRUCTION, PAVEMENT INSTALLATION, AND STORMWATER OVERFLOW PATHS CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO FINAL PAVEMENT COMPACTION
15. BASIC STANDARDS - EROSION CONTROL MEASURES:
    MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED, HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE

    CONTRACTOR WILL BE RESPONSIBLE FOR FOLLOWING PROCEDURES FOUND IN THE "MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS" (PUBLISHED MARCH 2015), THE PUBLICATION CAN BE FOUND AT: HTTP://WWW.MAINE.GOV/DEP/LAND/EROSION/ESCBMPS/INDEX.HTML

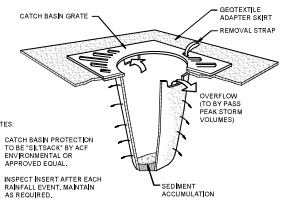
PERMITTING NOTES

1. PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SITE PLAN APPROVAL FROM THE CITY OF BIDDEFORD, THE CONSTRUCTION WILL BE GOVERNED BY THE CITY OF BIDDEFORD LAND USE ORDINANCE,
2. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A MAJOR SITE PLAN APPROVAL FROM THE CITY OF BIDDEFORD.
3. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.



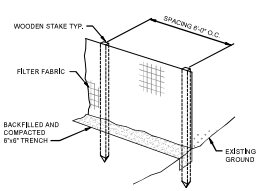
NOTE:
THE EROSION CONTROL MIX MUST BE WELL-GRADED WITH AN ORGANIC COMPONENT THAT IS BETWEEN 50 AND 100% OF DRY WEIGHT, AND THAT IS COMPOSED OF FIBROUS AND ELONGATED FRAGMENTS. THE MINERAL PORTION OF THE MIX SHOULD BE NATURALLY INCLUDED IN THE PRODUCT WITH NO LARGER ROCKS (>4") OR LARGE AMOUNTS OF FINES (SILTS AND CLAYS), IN STUMP GRINDING, THE MINERAL SOIL ORIGINATES FROM THE ROOT BALL AND SHOULD NOT BE REMOVED BEFORE GRINDING, THE MIX SHOULD BE FREE OF REFUSE. MATERIAL TOXIC TO PLANT GROWTH OR UNSUITABLE MATERIAL (BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS).

EROSION CONTROL MIX BERM DETAIL
NTS (MAY BE USED AS AN ALTERNATE TO SILT FENCE)



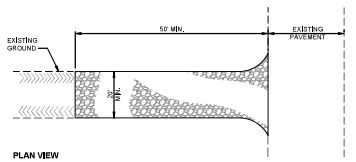
NOTES:
1. CATCH BASIN PROTECTION TO BE "SILTSACK" BY ACF ENVIRONMENTAL OR APPROVED EQUAL.
2. INSPECT INSERT AFTER EACH RAINFALL EVENT. MAINTAIN AS REQUIRED.
3. SEDIMENT WITHIN INSERT SHALL BE EMPTIED WHEN 1/2 FULL.

SEDIMENT SACK INLET PROTECTION DETAIL
NTS (MAY BE USED AS AN ALTERNATE TO HAY BALES)



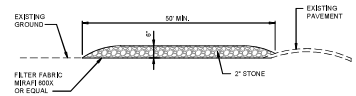
NOTES:
1. KEY FABRIC IN A 6"x6" TRENCH W/BACKFILL AND COMPACT.
2. SILT FENCE SHALL BE A 3' FENCE WITH A MINIMUM GRAB STRENGTH OF 120 LBS.

SILT FENCE DETAIL
NTS



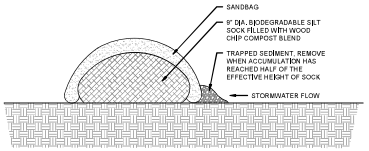
PLAN VIEW

NOTE: CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUDSILT MATERIAL ACCUMULATES

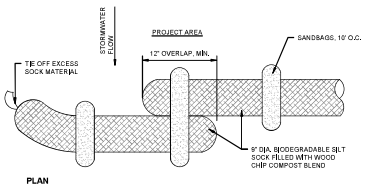


SECTION

STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.

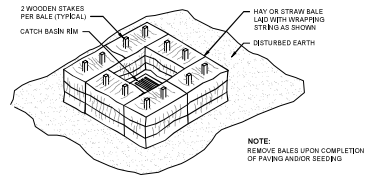


SECTION



PLAN

SILT SOCK DETAIL
N.T.S.



NOTE:
REMOVE BALES UPON COMPLETION OF PAVING AND/OR SEEDING

LOW POINT SEDIMENTATION CONTROL BARRIER DETAIL
N.T.S.

LEGEND:
ITEMS SHOWN MAY NOT APPEAR ON PLANS

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
BENCHMARK		
SURVEY STATION		
IRON PIN		
DRILL HOLE		
BOUND		
TEST PIT		
SEWER MANHOLE	S	
GAS VALVE		
UTILITY POLE		
GUY ANCHOR		
ELECTRICAL MANHOLE	E	
TRANSFORMER		TR
PULLBOX		
WELL	W	W
WATER VALVE	WV	WV
WATER SHUTOFF		
HYDRANT		
AIR RELIEF VALVE		
DRAINAGE MANHOLE	D	D
CATCH BASIN		
CURB INLET		
PARKING LIGHT		
FLOOD LIGHT		
SITE LIGHT		
SIGN		
TRASH CAN		
FLAGPOLE		
MONITORING WELL		MW
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
CURBING		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	99	99
WATERLINE	W	W
STORM DRAIN	SD	SD
UNDER DRAIN		UD
SANITARY SEWER	SS	SS
FORCE MAIN		FM
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
GAS LINE	GAS	GAS
CHAIN LINK FENCE	X	X
GUARDRAIL		
SILT FENCE		SF
TREE LINE		

GRAVEL SURFACE

PAVED SURFACE

CONCRETE SURFACE

BUILDING FOOTPRINT

WETLANDS

RIPRAP

FILTER SURFACE

REV.	DATE	DESCRIPTION	BY	CHK.

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

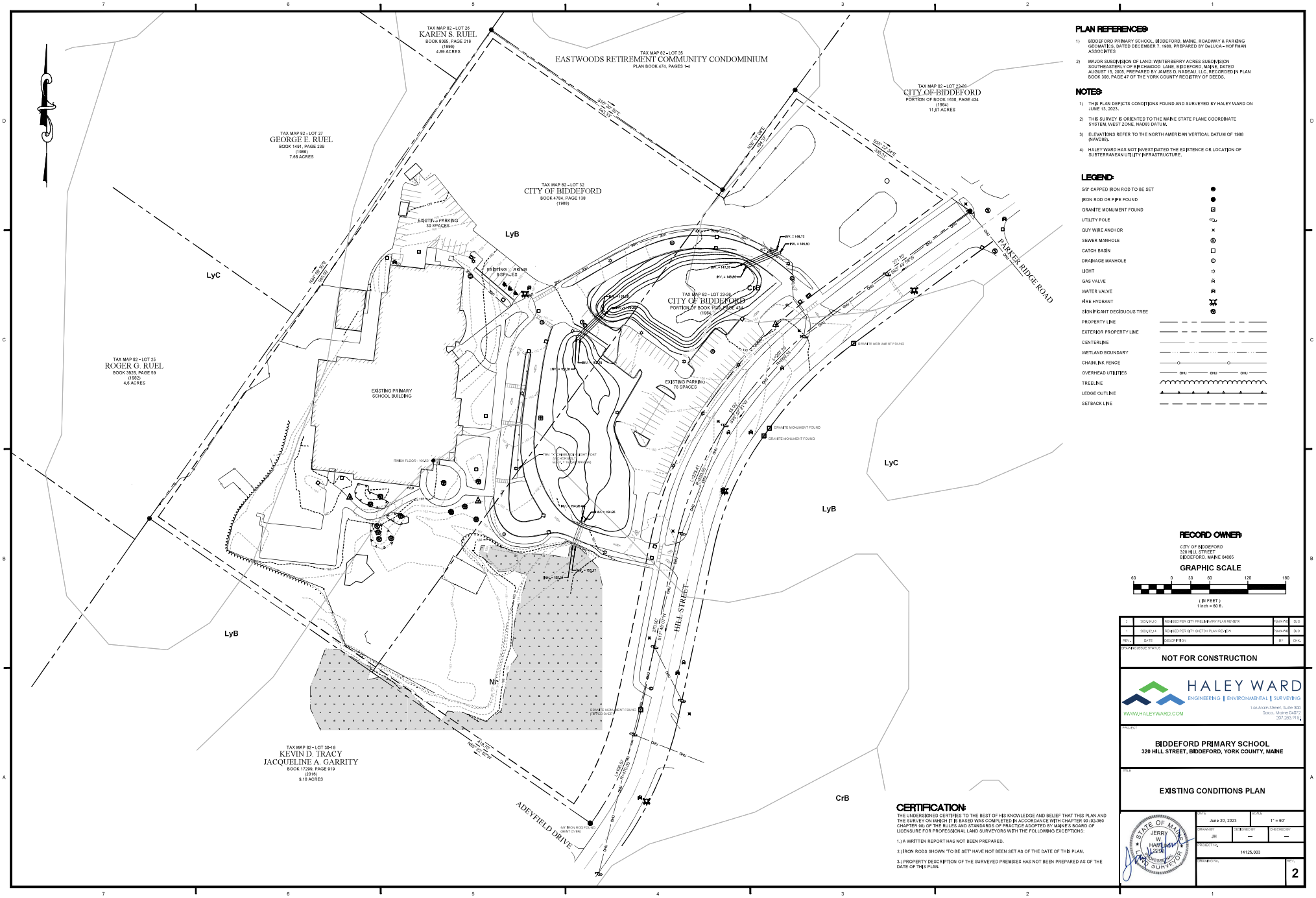
PROJECT
BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE
GENERAL NOTES & LEGEND

STATE OF MAINE — DREW JOHN OLEHOWSKI — No. 16372 — 04/10/2024 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2024.02.13	NTS
DRAWN BY	DESIGNED BY	CHECKED BY
PJM	DJO	PAM
PROJECT NO.	
14125.003	
DRAWING NO.	REV.
C001	

1288



PLAN REFERENCES:

1) BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES
2) MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC, RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.

NOTES:

1) THIS PLAN DEPICTS CONDITIONS FOUND AND SURVEYED BY HALEY WARD ON JUNE 13, 2023.
2) THIS SURVEY IS ORIENTED TO THE MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83 DATUM.
3) ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4) HALEY WARD HAS NOT INVESTIGATED THE EXISTENCE OR LOCATION OF SUBTERRANEAN UTILITY INFRASTRUCTURE.

LEGEND:

- 5/8" CAPPED IRON ROD TO BE SET
- IRON ROD OR PIPE FOUND
- GRANITE MONUMENT FOUND
- UTILITY POLE
- GUY WIRE ANCHOR
- SEWER MANHOLE
- CATCH BASIN
- DRAINAGE MANHOLE
- LIGHT
- GAS VALVE
- WATER VALVE
- FIRE HYDRANT
- SIGNIFICANT DECIDUOUS TREE
- PROPERTY LINE
- EXTERIOR PROPERTY LINE
- CENTERLINE
- WETLAND BOUNDARY
- CHAIN LINK FENCE
- OVERHEAD UTILITIES
- TREELINE
- LEDGE OUTLINE
- SETBACK LINE

RECORD OWNER:

CITY OF BIDDEFORD
320 HILL STREET
BIDDEFORD, MAINE 04005

GRAPHIC SCALE

60 0 30 60 120 180
(IN FEET)
1 inch = 60 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
2	2023.09.20	REVISED PER CITY PRELIMINARY PLAN REVIEW	DRAWING	DJC
1	2023.07.24	REVISED PER CITY SKETCH PLAN REVIEW	DRAWING	DJC

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
146 Main Street, Suite 300
Saco, Maine 04072
207.283.9174

PROJECT

BIDDEFORD PRIMARY SCHOOL
320 HILL STREET, BIDDEFORD, YORK COUNTY, MAINE

TITLE

EXISTING CONDITIONS PLAN

CERTIFICATION:

THE UNDERSIGNED CERTIFIES TO THE BEST OF HIS KNOWLEDGE AND BELIEF THAT THIS PLAN AND THE SURVEY ON WHICH IT IS BASED WAS COMPLETED IN ACCORDANCE WITH CHAPTER 90 (02-388 CHAPTER 90) OF THE RULES AND STANDARDS OF PRACTICE ADOPTED BY MAINE'S BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS WITH THE FOLLOWING EXCEPTIONS:

1.) A WRITTEN REPORT HAS NOT BEEN PREPARED.

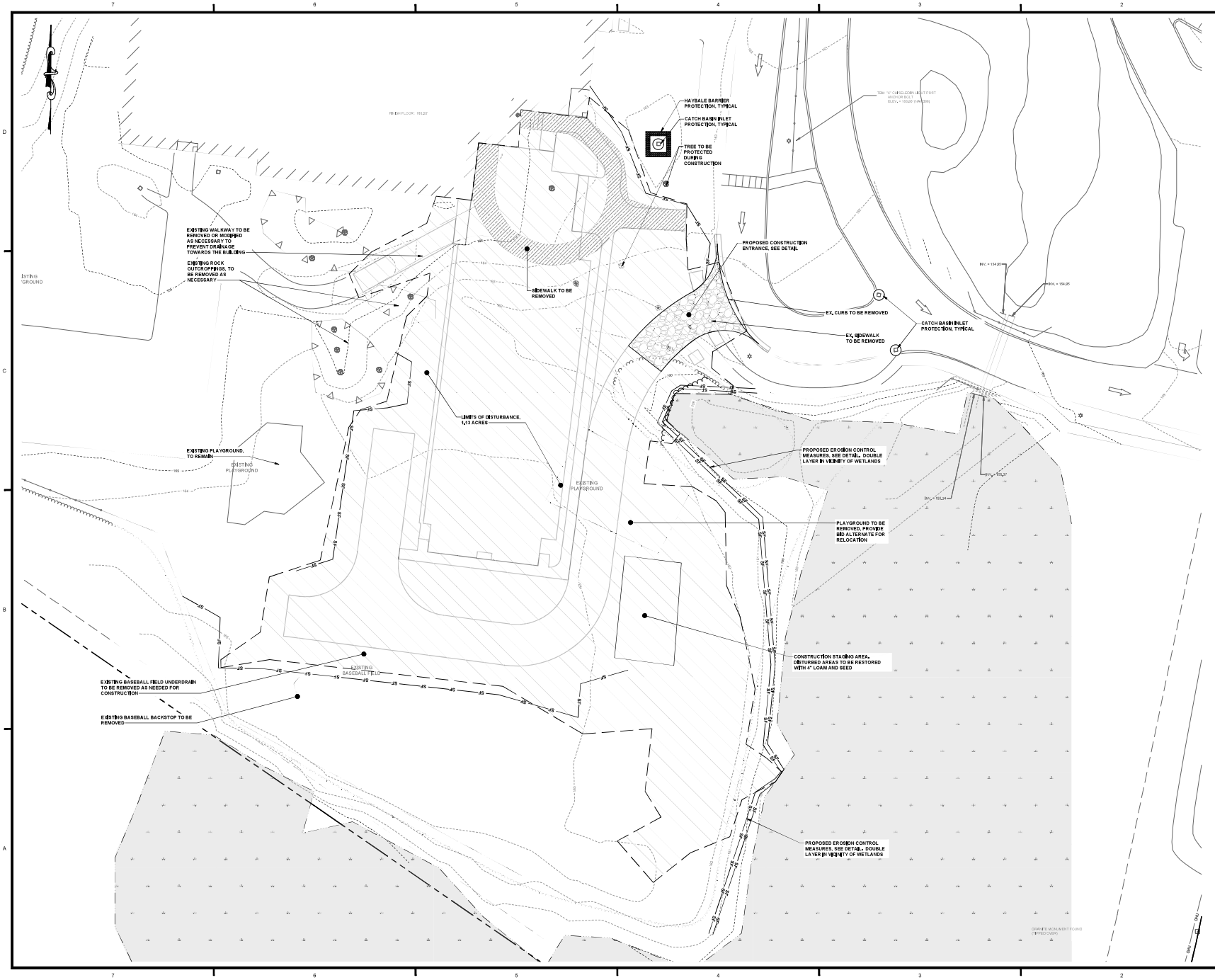
2.) IRON RODS SHOWN "TO BE SET" HAVE NOT BEEN SET AS OF THE DATE OF THIS PLAN.

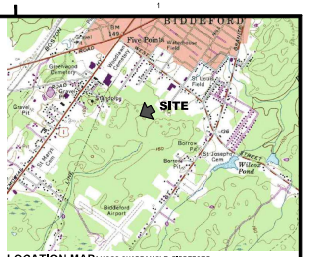
3.) PROPERTY DESCRIPTION OF THE SURVEYED PREMISES HAS NOT BEEN PREPARED AS OF THE DATE OF THIS PLAN.

STATE OF MAINE
JERRY W. HANSON
1296
PROFESSIONAL
LAND SURVEYOR

DATE	SCALE
June 20, 2023	1" = 60'
DRAWN BY	DESIGNED BY	CHECKED BY
JH	—	—
PROJECT NO.	
14125.003	
DRAWING NO.	REV.
	2

12289





LOCATION MAP: USGS QUADRANGLE: BIDDEFORD
SCALE: 1"=2000'
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WWW.MAPTECH.COM/TOPO

PLAN REFERENCE:

1. BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
2. MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC. RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
3. EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK'D
2	2024.04.18	REVISED PER CITY PRELIMINARY PLAN REVIEW	DJO	DJO
1	2024.02.14	REVISED PER CITY SKETCH PLAN REVIEW	DJO	DJO

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

SITE DEMOLITION & EROSION CONTROL PLAN

STATE OF MAINE
DREW JOHN OLECHOWSKI
No. 16372
04/10/2024
LICENSED PROFESSIONAL ENGINEER

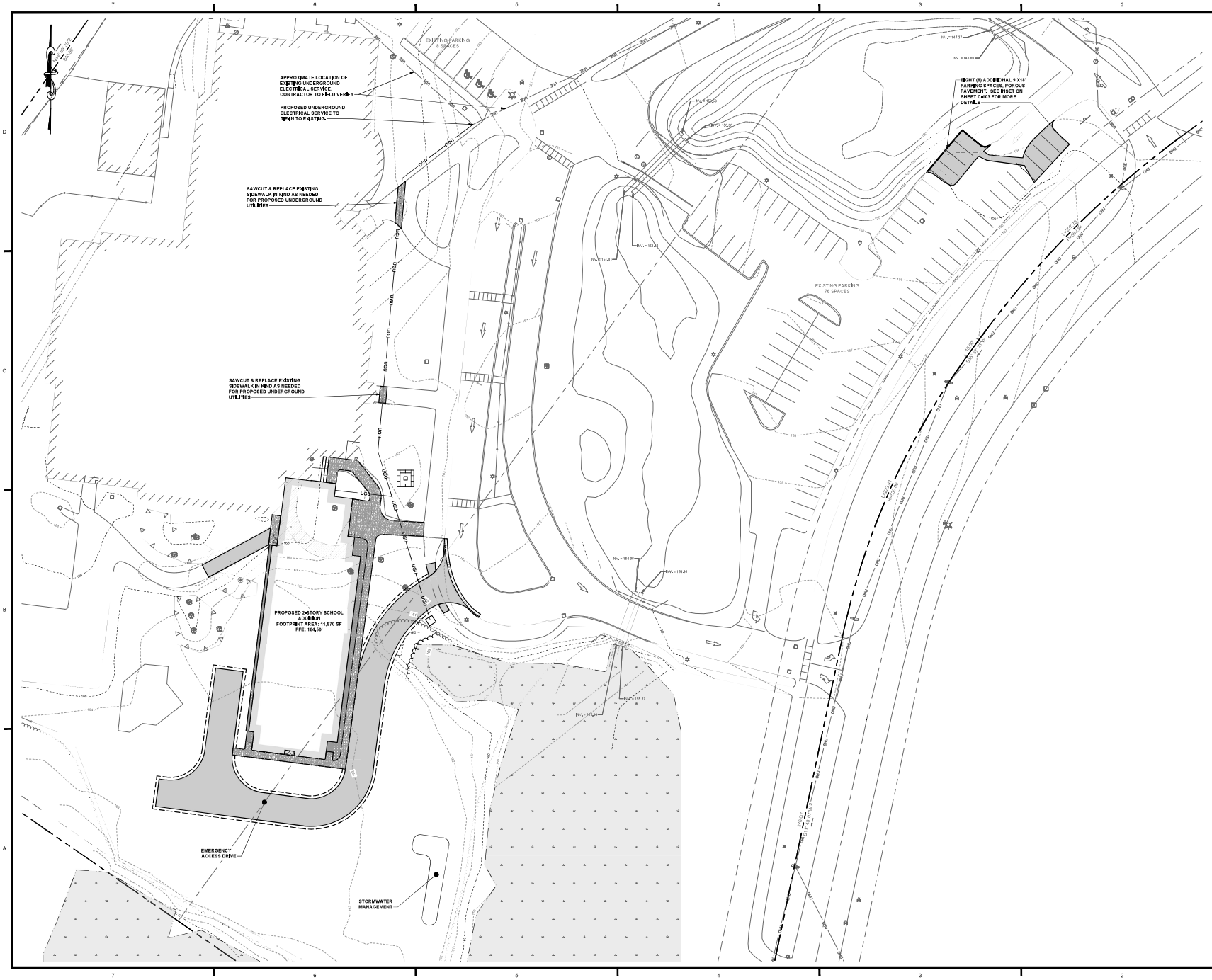
DATE	SCALE
2023.08.14	1" = 20'

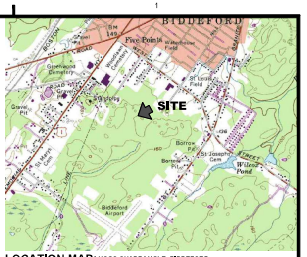
DRAWN BY	DESIGNED BY	CHECKED BY
PJM	DJO	PAM

PROJECT NO.: 14125.003

DRAWING NO.: **C100** REV.: **2**

1290





LOCATION MAP: USGS QUADRANGLE: BIDDEFORD
SCALE: 1"=2000'
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PLAN REFERENCE:

1. BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA-HOFFMAN ASSOCIATES.
2. MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC. RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
3. EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)
1 inch = 30 ft.

REV.	DATE	DESCRIPTION	BY	CHK'D
2	2024.04.15	REVISED PER CITY PRELIMINARY PLAN REVIEW	DAW/EC	DJO
1	2024.03.14	REVISED PER CITY SKETCH PLAN REVIEW	DAW/EC	DJO

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

OVERALL SITE PLAN

STATE OF MAINE
DREW JOHN OLECHOWSKI
No. 16372
04/10/2024
LICENSED PROFESSIONAL ENGINEER

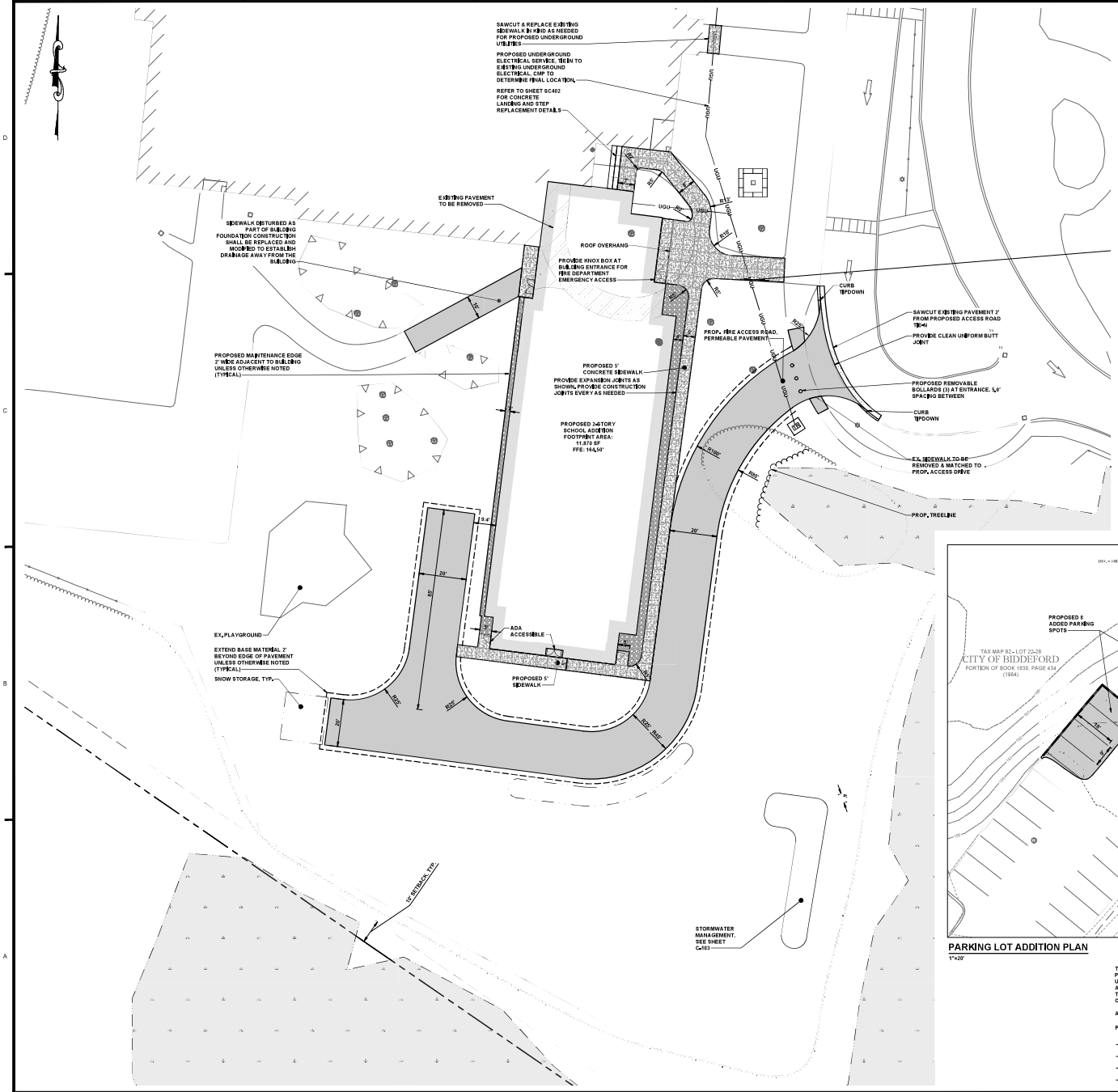
DATE	SCALE
2023.08.14	1" = 30'

DRAWN BY	DESIGNED BY	CHECKED BY
PJM	DJO	PAM

PROJECT NO.: 14125.003

DRAWING NO.: **C101** REV.: **2**

12914

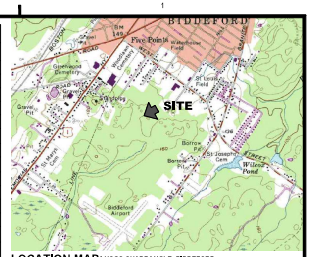


SITE DEVELOPMENT DATA	SF	AC
TOTAL LOT AREA:	744,388	17.09
EXISTING PERVIOUS:	556,308	12.77
PROPOSED PERVIOUS:	531,772	12.21
EXISTING IMPERVIOUS (TO REMAIN):	188,078	4.32
PROPOSED IMPERVIOUS:	24,538	0.56
IMPERVIOUS TO BE REMOVED	2,175	0.05
TREATED IMPERVIOUS	21,701	0.50
EXISTING BUILDING ROOF:	63,069	1.45
PROPOSED BUILDING ROOF:	11,870	0.27
TOTAL IMPERVIOUS:	212,614	4.88
TOTAL DEVELOPED:	364,390	8.37
LIMITS OF DISTURBANCE:	49,223	1.13

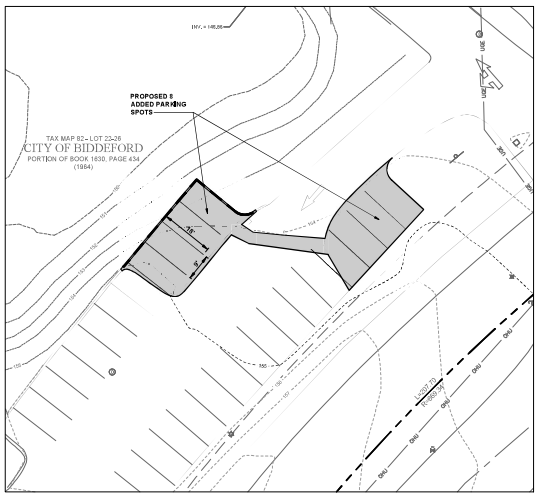
DESIGN STANDARDS	REQ'D	PROVIDED
MINIMUM ROAD FRONTAGE (FT)	100	1,185
MINIMUM SETBACK, FRONT YARD (FT)	40	342
MINIMUM SETBACK, OTHER YARDS (FT)	10	14
MAXIMUM LOT COVERAGE	70%	29%
MAXIMUM BUILDING HEIGHT (FT)	35	31.5

PARKING		
REQUIRED PARKING PER ORDINANCE:		
PRIMARY: 1.5 SPACES PER CLASSROOM	56 CLASSROOMS x 1.5	38
OFFICE SPACE: 1 SPACE PER 200 SF	6,120 SF/200	31
LIBRARY: 1 SPACE PER 500 SF	1,842 SF/500	4
TOTAL REQUIRED SPACES		73
EXISTING PARKING		114
PROPOSED PARKING		8
TOTAL PROVIDED SPACES		122

PROJECT INFORMATION		
APPLICANT:	CITY OF BIDDEFORD	
	ATTN: BIDDEFORD SCHOOL DEPT.	
	PO BOX 586	
	BIDDEFORD, MAINE, 04005	
ENGINEER:	HALEY WARD	
	ATTN: DREW OLEHOWSKI, P.E.	
	120 MAIN STREET	
	SUITE 110	
	SACO, MAINE, 04072	



LOCATION MAP: USGS QUADRANGLE: BIDDEFORD
SCALE: 1"=2000'
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PARKING LOT ADDITION PLAN
1"=20'

PLAN REFERENCE:

1. BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
2. MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC. RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
3. EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.

GRAPHIC SCALE

20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

NO.	DATE	DESCRIPTION	BY	CHK'D
2	2024.04.15	REVISED PER CITY PRELIMINARY PLAN REVIEW	CAW/KS	DJO
1	2024.02.14	REVISED PER CITY SKETCH PLAN REVIEW	CAW/KS	DJO

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

SITE PLAN

THIS IS TO CERTIFY THAT AFTER REVIEWING THE SITE PLAN SUBMISSION INFORMATION FOR THE PROJECT SHOWN ON THIS PLAN AND CONSIDERING EACH OF THE CRITERIA SET FORTH IN THE LAND USE CODE OF THE CITY OF BIDDEFORD, MAINE AND IN ACCORDANCE WITH THE SITE PLAN APPLICATION REQUIREMENTS, THE UNDERSIGNED HAVE MADE FINDINGS OF FACT ESTABLISHING THAT THIS PLAN ALONG WITH ITS ADDITIONAL SUBMISSION INFORMATION HAS MET ALL THE CRITERIA SET FORTH AND THEREFORE THE SITE PLAN IS APPROVED.

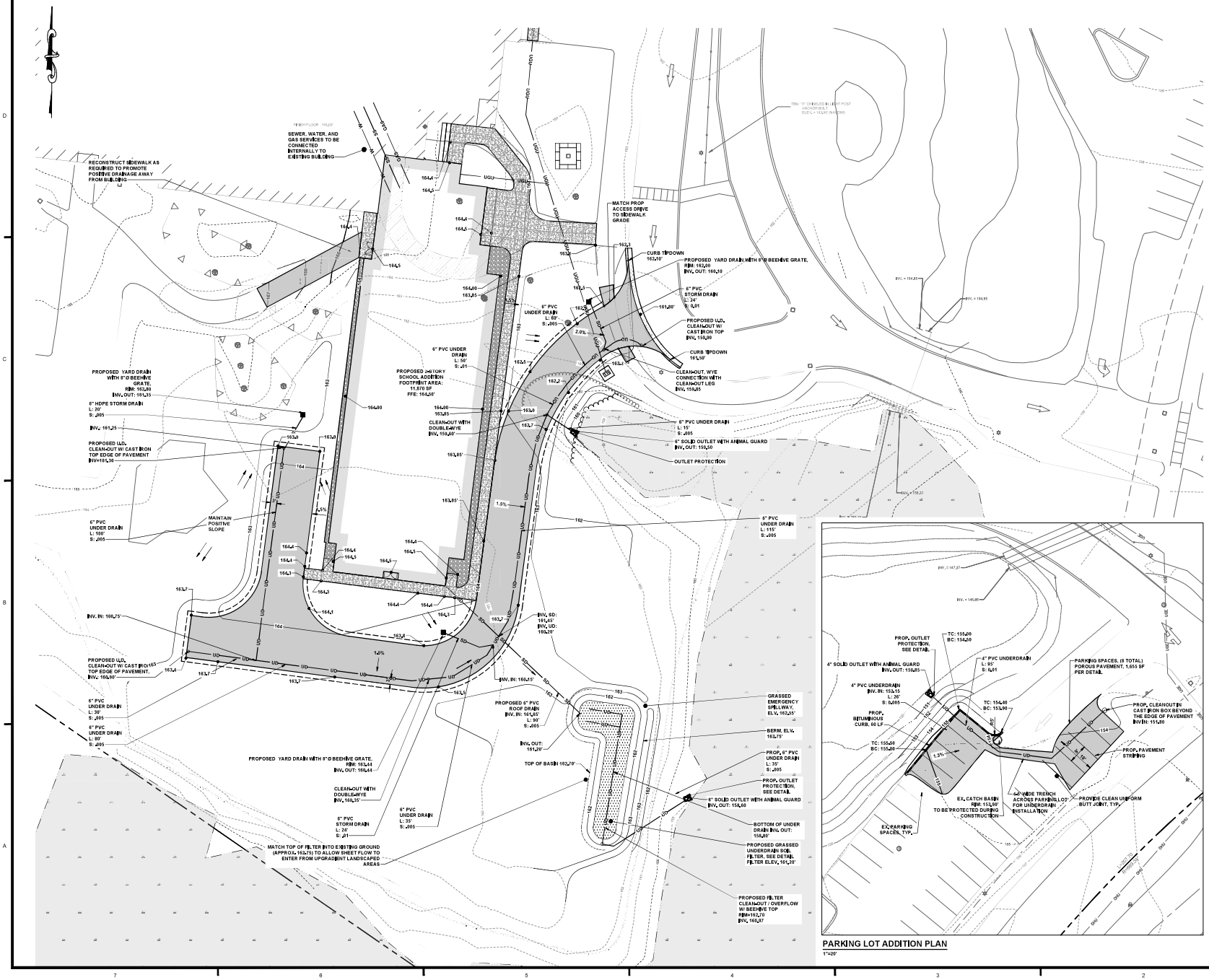
APPROVED BY THE CITY OF BIDDEFORD PLANNING BOARD ON: _____

PLANNING BOARD SIGNED ON: _____

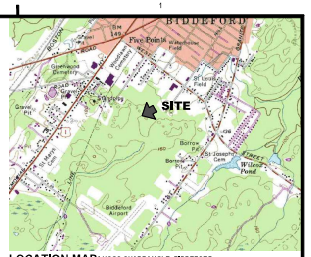
STATE OF MAINE
DREW JOHN OLEHOWSKI
No. 16372
04/10/2024
LICENSED PROFESSIONAL ENGINEER

DATE:	SCALE:
2023.08.14	1" = 20'
DRAWN BY: PJM	DESIGNED BY: DJO
CHECKED BY: PAM	
PROJECT NO.: 14125.003	
DRAWING NO.: C102	REV.: 2

12292



PARKING LOT ADDITION PLAN
1"=20'



LOCATION MAP: USGS QUADRANGLE: BIDDEFORD
SCALE: 1"=2000'
MAPTECH® USGS TOPOGRAPHIC SERIES™, ©MAPTECH®, INC. 978-933-4000 WWW.MAPTECH.COM/TOPO

PLAN REFERENCE:

1. BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
2. MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC. RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
3. EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK'D
2	2024.04.18	REVISED PER CITY PRELIMINARY PLAN REVIEW	CAW/KE	DJO
1	2024.03.14	REVISED PER CITY SKETCH PLAN REVIEW	CAW/KE	DJO

ISSUED FOR / ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

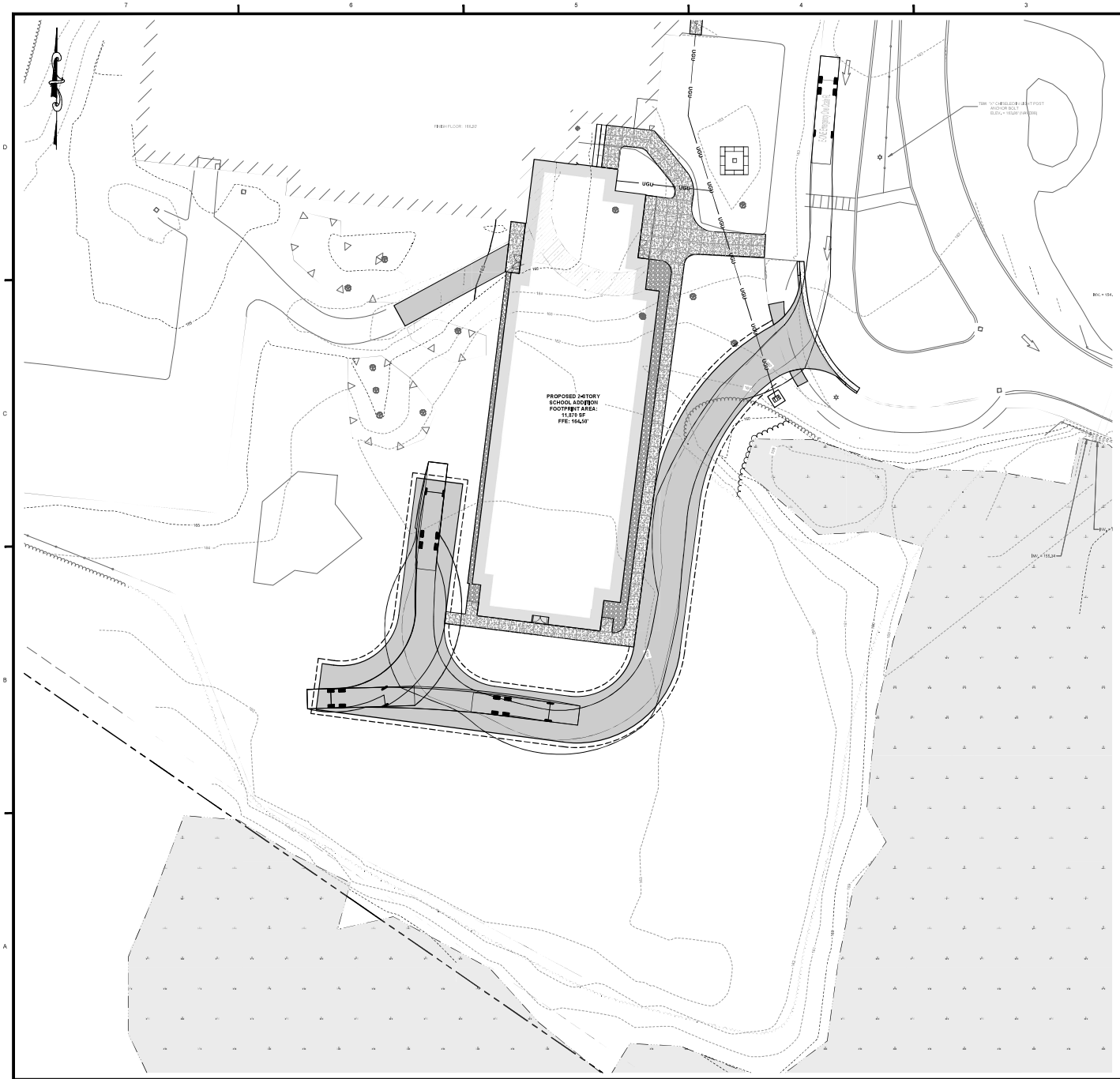
PROJECT
BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

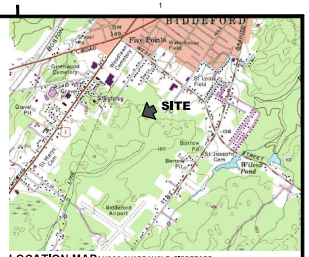
TITLE
GRADING & UTILITY PLAN

STATE OF MAINE
DREW JOHN OLEHOWSKI
No. 16372
04/10/2024
LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2023.08.14	1" = 20'
DRAWN BY	DESIGNED BY	CHECKED BY
PJM	DJO	PAM
PROJECT NO.	
14125.003	
DRAWING NO.	REV.
C103	2

1293





LOCATION MAP: USGS QUADRANGLE: BIDDEFORD
SCALE: 1"=2000'
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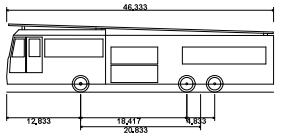
PLAN REFERENCE:

1. BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
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3. EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.



E-ONE Emergency One Ocala FL	
Overall Length	46,333ft
Overall Width	8,333ft
Overall Body Height	11,833ft
Min Body Ground Clearance	1,393ft
Track Width	8,333ft
Lock-to-lock time	6,00s
Max Wheel Angle	45,00°

NO.	DATE	DESCRIPTION	BY	CHK'D
2	2024.04.18	REVISED PER CITY PRELIMINARY PLAN REVIEW	DJO	
1	2024.03.14	REVISED PER CITY SKETCH PLAN REVIEW	DJO	

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

EMERGENCY VEHICLE ACCESS PLAN

STATE OF MAINE
DREW JOHN OLEHOWSKI
No. 16372
04/10/2024
LICENSED PROFESSIONAL ENGINEER

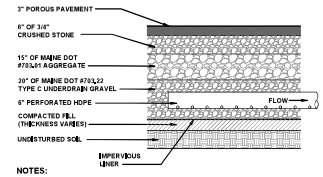
DATE	SCALE
2023.08.14	1" = 20'
DRAWN BY	DESIGNED BY	CHECKED BY
PJM	DJO	PAM
PROJECT NO.	
14125.003	
DRAWING NO.	REV.
C104	2

1294

POROUS ASPHALT GRADATION	
SIEVE SIZE	% PASSING
1/2"	100
3/8"	95
#4	35
#8	15
#16	10
#30	2

MAINE DOT #703.01 SPECIFICATIONS	
SIEVE SIZE	% BY WEIGHT
3/8"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#50	10-30
#100	2-10
#200	0-5 (8-10% PREFERRED)

MAINE DOT #703.22 TYPE C UNDERDRAIN SPECIFICATION	
SIEVE SIZE	% BY WEIGHT
1"	100
3/4"	90-100
3/8"	0-75
#4	0-25
#10	0-5

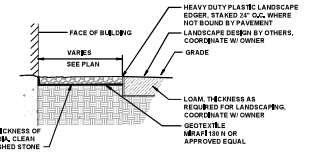


NOTES:

1. CONTRACTOR TO PROTECT POROUS ASPHALT FROM CONTAMINATION WITH SEDIMENT DURING CONSTRUCTION.
2. IF POROUS ASPHALT BECOMES CONTAMINATED DURING CONSTRUCTION, CONTRACTOR SHALL REMOVE AND REPLACE AT NO ADDITIONAL COST TO THE OWNER.
3. TYPE C UNDERDRAIN GRAVEL SECTION THICKNESS MAY VARY. SEE PLAN FOR INVERTS. PROVIDE MINIMUM OF 6" BELOW PIPE AS PIPE BEDDING

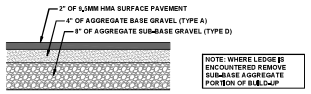
POROUS PAVEMENT DETAIL

N.T.S.



MAINTENANCE EDGE DETAIL

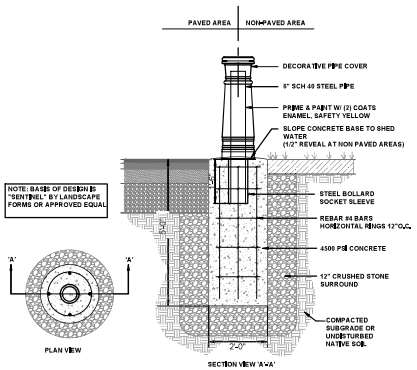
N.T.S.



SIDEWALK BUILDUP

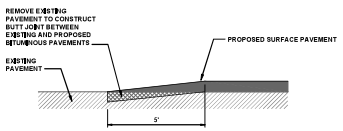
TYPICAL ASPHALT SIDEWALK BUILDUP DETAIL

N.T.S.



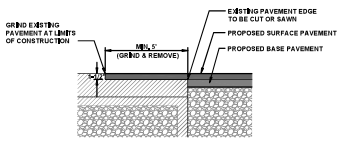
REMOVABLE STEEL BOLLARD DETAIL

N.T.S.



TYPICAL ASPHALT PAVEMENT BUTT JOINT DETAIL

N.T.S.

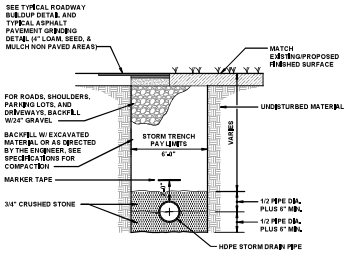


NOTES:

1. EXTEND NEW SURFACE PAVEMENT ACROSS BUTT JOINT IN BASE COURSE.
2. PROVIDE TACK COAT ON ALL SURFACES OF EXISTING PAVEMENT TO BE COVERED.

TYPICAL ASPHALT PAVEMENT GRINDING DETAIL

NTS

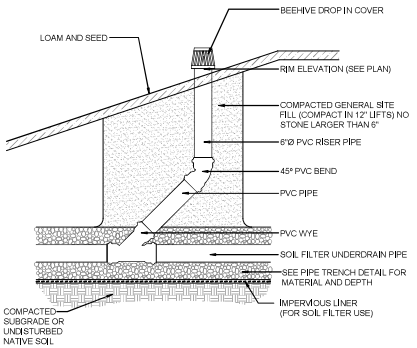


NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

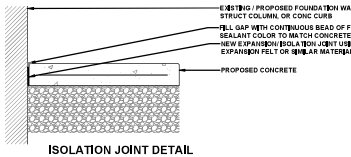
TYPICAL STORM DRAIN TRENCH DETAIL

NTS



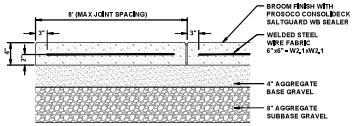
YARD DRAIN AND FILTER CLEANOUT/OVERFLOW DETAIL

N.T.S.



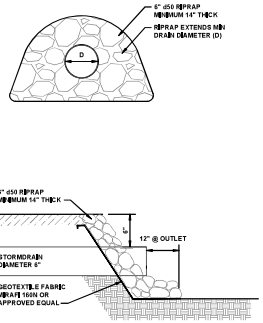
ISOLATION JOINT DETAIL

N.T.S.



TYPICAL CONCRETE SIDEWALK DETAIL

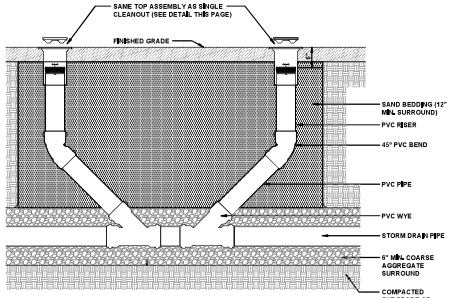
NTS



PROFILE VIEW

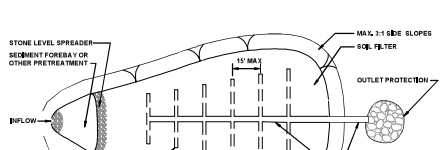
TYPICAL STORMDRAIN OUTLET PROTECTION DETAIL

NTS

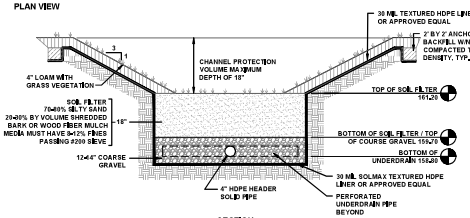


DOUBLE CLEANOUT DETAIL

N.T.S.



PLAN VIEW



SECTION

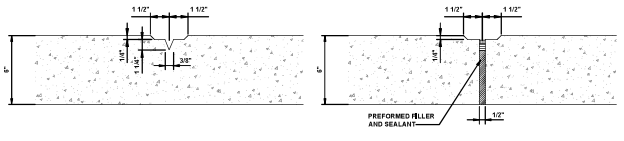
NOTES:

1. GUSF (INCLUDING FOREBAYS) SHALL NOT BE USED FOR SNOW STORAGE.
2. VEHICLES ARE PROHIBITED FROM GUSF.
3. VEGETATION: THE SOIL FILTER SURFACE SHOULD BE PLANTED WITH A GRASS SPECIES THAT IS TOLERANT OF FREQUENT INUNDATION AND WELL DRAINED SOILS, UPON SEEDING. THE SOIL FILTER SHOULD BE MULCHED WITH HAY OR AN EROSION CONTROL MIXTURE. A CONSERVATION TYPE SEED MIXTURE IS APPROPRIATE (OR A 48 LBS/ACRE MIXTURE CONTAINING 20 LBS/ACRE OF CREEPING RED FESCUE AND TALL FESCUE EACH PLUS 5 LBS/ACRE OF BIRDSFOOT TREFOIL).

USF LABEL	EXISTING ELEVATION (+/- (FT)	EMERGENCY SPILLWAY ELEVATION (FT)	PROPOSED TOP OF SOIL FILTER (FT)	PROPOSED BOTTOM OF SOIL FILTER/TOP OF COARSE GRAVEL (FT)	PROPOSED ELEVATION OF PIPE BED (FT)	PROPOSED BOTTOM OF COARSE GRAVEL (FT)	TOP OF BERM (FT)	TREATMENT AREA REQ'D/PROVIDED (SF)	TOTAL STORAGE VOLUME REQ'D/PROVIDED (CF)
A	162	162.55	161.20	159.70	158.95	158.70	162.75	840/890	1402/1945

UNDERDRAIN SOIL FILTER DETAILS

N.T.S.



CONTROL JOINT

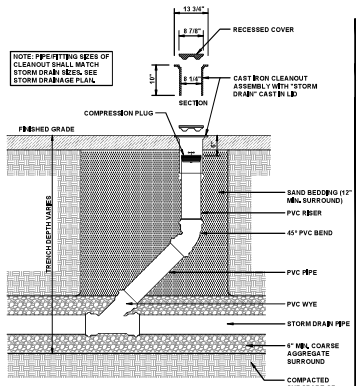
EXPANSION JOINT

NOTES:

1. TOOLED JOINT SURFACES SHALL BE SMOOTH AND AT A CONSTANT DEPTH.
2. CONCRETE REINFORCEMENT NOT SHOWN FOR CLARITY.

TYPICAL CONCRETE SIDEWALK JOINT DETAILS

N.T.S.



STORM DRAIN CLEANOUT DETAIL

N.T.S.

REV.	DATE	DESCRIPTION	BY	CHK'D
2	2024.04.19	REVISED PER CITY PRELIMINARY PLAN REVIEW	CAW/KE	DJO
1	2024.03.14	REVISED PER CITY SKETCH PLAN REVIEW	CAW/KE	DJO

ISSUED/REVISED ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824

PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

SITE DETAILS

STATE OF MAINE — DREW JOHN OLEHOWSKI — No. 16372 — 04/10/2024 — LICENSED PROFESSIONAL ENGINEER

DATE	SCALE
2023.08.14	NTS
DRAWN BY	DESIGNED BY	CHECKED BY
PJM	DJO	PAM
PROJECT NO.	
14125.003	
DRAWING NO.	REV.
C501	2

1295