

City of Biddeford
Planning Board
April 07, 2021 6:00 PM Zoom: Apr 7, 2021 06:00 PM Eastern Time (US and Canada)
Topic: Planning Board Meeting

Please click the link below to join the webinar:

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1. **DECLARATION OF QUORUM/VOTING MEMBERS**
2. **ADJUSTMENTS TO THE AGENDA**
3. **PLANNER'S BUSINESS**
4. **CONSENT AGENDA**
 - 4.A. Approval of Planning Board Meeting Minutes from March 17, 2021
[PB Minutes 031721-DRAFT.pdf](#)
5. **UNFINISHED BUSINESS**
 - 5.A. 2020.11 Site Plan Review for Westfield, Inc. to create multiple office/storage/commercial spaces at 20 Pomerleau Street (Tax Map 2, Lot 81) in the I-3 zone.
 - 1 2020.11 Board Report Final - Westfield, Inc. - 20 Pomerleau.pdf
 - 2 2020.11 Draft FOF and SC Westfield Inc.pdf
 - 3 Westfield Comment Response Letter (March 24 2021).pdf
 - 4 Westfield Planset (March 24 2021) rev 040121.pdf
 - 5 Tansley Landscape Memo.pdf
 - 6 Gould Canam preliminary drawings December 10, 2020.pdf
 - 7 Gould Siding Selections.pdf
 - 8 Gould Rendering Feb 22 2021.pdf
 - 9 Pomerleau Street Stormwater Report - January 2021.pdf
 - 10 Pomerleau Street Comment Response Memo 2021-01-29.pdf
 - 11 Westfield Sewer Ability to Serve.pdf
 - 12 Westfield - Pomerleau Street Final Saucier Comments 020921 - ADDRESSED.pdf
 - 13a MDIFWResponse_ERid5042_ERVerID6033-FINAL.pdf

[13b Topo_ERid5042_ERVerID6033.pdf](#)

[14 Truck turning template from Westfield Comment Response Letter \(March 24 2021\).pdf](#)

[15 Financial Capacity.pdf](#)

6. NEW BUSINESS

6.A. 2021.15 Conditional Use Permit-Stoner & Co. to operate an Adult Use Marijuana Cultivation Facility at 419 Hill Street (Tax Map 74, Lot 9) in the I-2 Zone.

[1 2021.15 Board Report - Stoner & Co - 419 Hill.pdf](#)

[2 2021.15 Draft FOF for Stoner & Co., LLC.pdf](#)

[3 Stoner and Co 419 Hill Site Plan Review Application FEB 2020 \(Final\).pdf](#)

[4 Stoner and Co 419 Hill Street - Full additional documents package \(1\).pdf](#)

[5 Stoner and Co SITE PLAN WITH SIGNATURE BLOCK.pdf](#)

[6 2020.25 Stoner and Co 419 Hill St NOD 120720-signed.pdf](#)

6.B. 2021.16 Conditional Use Permit-Curaleaf Maine Adult Use, Inc. to operate an Adult Use Marijuana Cultivation and Extraction Laboratory at 5 Drapeau Street (Tax Map 12, Lot 22) in the I-1 Zone.

[1 2021.16 Report - Curaleaf - Conditional Use.pdf](#)

[2 2021.16 Draft FOF for Curaleaf - Drapeau.pdf](#)

[3 Cover Letter Conditional Use Review Request.pdf](#)

[4 Biddeford Conditional Use Packet for PB.pdf](#)

[5 Curaleaf Approval 050820.pdf](#)

7. OTHER BUSINESS

8. 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.



CITY OF BIDDEFORD

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Planning Board Meeting Minutes

Date: March 17, 2021
Time: 6:00 PM
Location: REMOTE ACCESS MEETING (1MRSA § 403-A permits public proceedings through remote access during the declaration of state of emergency due to COVID-19).

1. Declaration of Quorum/Voting Members
Quorum Present: Chair William Southwick, Sean Tarpey, Bruce Benway, Spiros Droggitis, Roch Angers, Alexa Plotkin (Alternate Voting Member), Michael Cantara (Alternate Voting Member).
2. Adjustments to the Agenda
3. Planner's Business
4. Consent Agenda
 4. A. Approval of Planning Board Meeting Minutes of March 3, 2021
MOTIONS:
 - Benway-MOTION: To approve Meeting Minutes for February 17, 2021 once typographical errors are corrected.
 - Angers-SECOND
 - Chair Southwick-Roll Call for Vote-Unanimous Approval (4-0) all in favor (Tarpey, Benway, Angers & Droggitis)
5. Unfinished Business
 5. A. 2021.04 Site Plan/Subdivision-Traffic Study Consideration- Tom Watson & Co., LLC for the redevelopment at 1 Gooch Street & 59 Elm Street (Tax Map 40, Lot 56) in the MSRD 3 & General District Shoreland Overlay Zone.
 - Planner Tansley spoke about the fact that at the last meeting this project was brought before the Planning Board. The topic of requesting a traffic study was raised but not resolved. Planner Tansley wanted the Board to resolve this issue one way or another so that they do not have to go back to the applicant and request a traffic study later in the process.
 - John Laliberte representing Tom Watson & Company explained that he understands Planner Tansley's position.
 - Peter Heil of Acorn Engineering spoke on behalf of the applicant. This project will generate 50 trips in AM peak and 50 in PM peak; a traffic study is not required by MDOT because their minimum is 100 trips. The applicant controls the remainder of Gooch Street and has plans to develop it in the future. Therefore, a full study

will be warranted down the road, as this development comes to fruition. They do not believe a traffic study is necessary at this time.

- Mr. Cantara voiced that he does not support the need for a traffic study at this time.
- Mr. Benway agrees with Mr. Cantara.
- Mr. Tarpey believes that is fine, so long as they do not have a total of 4 projects where each project does not trigger a traffic study. However, as a total, they do need a traffic study. When is that picked up?
- Chair Southwick mentioned that the applicant does need to take into consideration pedestrian traffic.
- Planner Tansley told the Board that they could ask for an analysis at the entrance or ask to provide a pedestrian/bicycle analysis to cross the road.
- Mr. Heil said to answer Mr. Tarpey's question, the need for a traffic study will be picked up as they come to the Board. Because all of these projects would be by the same applicant, therefore considered as one project.
- Mr. Cantara asked Planner Tansley if subsequent development occurs, would the Planning Board lose the authority to request a traffic study down the road.
- Planner Tansley explained that as trips accumulate, it will trip the requirement for a traffic study under state law. The Planning Board could request a traffic study at any time. If a different developer comes to the Board with a project in this area, and the Board asks for a traffic study, that new developer would bear the impact of the consequences of the results of the study.
- Mr. Cantara stated that risk should be uncovered in their due diligence.
- Mr. Benway added buyer beware.
- Planner Tansley told the Board that a "Cost Sharing" might be set up for future developers rather than have the last developer pay for everything.
- Mr. Angers asked if there are 4 phases coming out, at which phase do we decide. Across the street is another piece where the old Diamond National building is, and has been talked about. If the Board does not ask for the traffic study from the get go, this Board may not see the 2nd, 3rd or 4th phase and that worries him. He asked what happens if this traffic study does not cover future development?
- Planner Tansley answered that the Board can defer to the state to make the decision and wait for the trigger to be tripped.
- Mr. Benway stated that the minimum trips for the trigger has not been reached yet. It depends on what the future holds, and he is not in favor of deferring to the state.
- Mr. Benway made a motion not to require a traffic study; there was no second so the motion failed.
- John Laliberte told the Board that they have every intention of going forward to develop the rest of Gooch Street. This is just phase 1 out of 3 phases. They are viewing this with a long-term eye.
- Mr. Droggitis asked what is the time frame for the other phases.
- Mr. Laliberte answered a 5-year period.
- Mr. Droggitis asked if the traffic study could range for 5 years out or if a development plan was needed.

- Planner Tansley answered that they would need a development plan.
- Mr. Droggitis told Mr. Laliberte he must have an idea of the development plan.
- Mr. Laliberte said that mixed retail use is planned for #30, as it is 20,000 SF on one floor. The plan for #20 is some form of housing but this is a very loose plan, a lot is missing.
- Mr. Droggitis asked if their projections see a 100-trip threshold.
- Mr. Laliberte replied yes.
- Mr. Droggitis stated that he feels it would be prudent to order the traffic study now rather than later.
- Mr. Hein told the board that without firm programming they cannot prepare formal numbers, things could change and doing the study now will not gain anything. They would have to do another study down the road.
- Mr. Tarpey expressed concern; he is comfortable leaving things for the next phase and follow up. He would rather leave it as is, than have a formal motion.
- Consulting Planner DiMatteo told the Board to come to a consensus on which direction they want to go and communicate that to the applicant.

MOTIONS:

- Benway: Motion: Not to require Tom Watson & Co. to obtain a traffic study at this time prior to approval of this project.
- Mr. Tarpey asked if he could change the motion to include the concern of pedestrian and bicycle traffic crossing the highway.
- Mr. Benway: Although the Board is concerned in regard to the impact on traffic, I move we do not require Tom Watson & Co. to obtain a traffic study at this time, prior to approval of this project.
- Mr. Droggitis: You said approval of the project, we are not approving the project you should say prior to approval of the project
- Mr. Benway: My motion merely suggests that we are concerned about the impact on traffic and we are not requiring a traffic study
- Chair Southwick: I think Sean wanted a motion that specifically mentions pedestrian and bicycle crossing
- Mr. Benway I do not understand a traffic study that does not include pedestrian and bicycle traffic.
- Planner Tansley: I rarely do this but I think I may have the wording of the motion that captures what you are trying to accomplish "Motion: that although the Board is concerned about traffic and bicycle/pedestrian movements, a traffic study is not required for this specific project but may be required for future projects."
- Mr. Benway: So moved
- Mr. Tarpey: Second
- Chair Southwick-Roll Call for Vote-Motion passed (Benway, Tarpey in favor, Mr. Angers against, Mr. Droggitis abstained)

6. New Business

6.A. 2021.07 Public Hearing and take comments regarding a request by the owner (Five Star Holdings) to change the zoning for 1 Enterprise Drive (Tax Map 17, Lot 7-3), part of 451 Alfred Street (Tax Map 17, Lot 7-2) and part of 457 Alfred Street (Tax Map 17, Lot 7) from Industrial-3 (I-3) to Industrial-1 (I-1).

- Planner Tansley gave an overview of the project.
- Mr. Droggitis asked about zoning changes coming to the Planning Board and the procedure.
- Planner Tansley explained the procedure.
- Patrick Donahue represented Five Star Holdings.
- Mr. Donahue talked about his business and steps he has taken in preparation of the changes coming.
- Ms. Plotkin asked him why he wants the land rezoned as opposed to contract zoning.
- Mr. Donahue answered that going through the contract zone process can be difficult.
- Ms. Plotkin stated that the zone abuts a small portion of I-1 and faces Alfred Street. She understands what they want to do, but they will not always be there. The zone change causes a concern of I-1 being on a major corridor.
- Mr. Donahue told the Board that he is open to converting the zone back when it is no longer necessary.
- Chair Southwick asked for comments from the public, there were none, so he took the meeting back to the Board.
- Mr. Cantara asked if there would be a 250' buffer on 111 and Alfred Street.
- Mr. Donahue answered yes.
- Mr. Cantara asked Mr. Donahue to give the highlights of their odor mitigation protocols.
- Mr. Donahue told the Board that he is investing 3 million dollars into this project. He is creating a clean environment with sealed rooms. The Journal Tribune building was hard to market but perfect for cannabis growth. They have HVAC filters, scrubbers, USB lights, and insulated walls.
- Mr. Benway asked Planner Tansley who is concerned about the odor impacts.
- Planner Tansley replied that there have been complaints in other parts of town. No one can guarantee there will be no odor. The City generally has that concern. If this zone change takes, the applicant would have to come back to Planning Board for a Conditional Use Permit.
- Mr. Benway asked Mr. Donahue if the hospital administration knows of his plans.
- Mr. Donahue did not speak with the hospital directly. He knows the abutters all got a notice.
- Mr. Droggitis asked about the recently proposed changes to the City's marijuana law based on state law and odor mitigation requirements; we had engineers testifying that these are the state of the art requirements. Would this applicant have to satisfy those state of the art requirements?
- Planner Tansley answered yes.

- Mr. Cantara confirmed that when the applicant comes back to the Board for permitting, they will be required to bring a more thorough plan and the Board can drill down and ask questions getting answers that are more detailed.
- Planner Tansley told him that is correct.
- Mr. Angers commented that it sounds like the hospital has only been contacted by an abutter card.
- Mr. Donahue replied that He did not reach out to most abutters, but encourages anyone to come and talk to him about his plans.
- Ms. Plotkin had to leave unexpectedly at 7:02 PM.
- Mr. Benway noted that Southern Maine Medical has some of the largest footprints in the City and that Mat or Greg should arrange to speak with the hospital directly.

MOTIONS:

- Benway: Motion: Motion to recommend the Zoning Change pass on to the City Council.
- Angers: Second
- Chair Southwick-Roll Call for Vote-Motion passed 3-1 (Benway, Angers, Droggitis in favor, Tarpey against).

6. B. 2021.08 Conceptual Subdivision Review submission for E & R Development Corp. to construct an 18-lot residential subdivision project to be accessed through Winding Creek Lane (Tax Map 8, Lot 3-1 & Portion of Lot 3) in the R1-A Zone.

- Consulting Planner DiMatteo introduced the project.
- Mike Eon of E & R Development talked about the project showing a plan of land he owns.
- Bill Thompson from BH2M represented the applicant also. They have submitted a sketch plan for an 18 lot residential subdivision. The property is on public water & sewer.
- Chair Southwick took comments/questions from the public.
- Bill DeLong of 55 Parkside asked would this conveyance of land to the City happen before this project.
- Chris Quint of 33 Winding Creek Lane moved here in 2015 and has been very happy but this new plan diminishes his happiness. Studies proposed in the staff report are warranted and should be required. He does not feel this is the original purpose of Clifford Park and to remove even 100' of this park is a travesty. He is also the chair of the HOA for Winding Creek Lane. They have 4 filter beds on the south side of the street. The neighborhood formed an HOA with bi-laws and covenants for the sole purpose of taking care of the filter beds. They pay dues to maintain those filter beds. With the extension of Winding Creek Lane, will the new subdivision be required to have filter beds? Will they be required to form their own HOA or join the existing HOA? If they join the HOA what are the requirements for dues regarding those filter beds. If there are no filter beds proposed, he wants to know why. He encourages the Board to think long and hard about this as he does not think this is the right way to go.

- Kory White of 4 DuPont Road also runs Gorham Bike and Ski. He is concerned about the orange trail being blockaded as it shows on the plans. How can they get around that?
- Marty Grohman of 9 Lisa Lane feels it is remarkable how valuable recreation has become. The usage of the park has tripled and it is a Godsend. Recreation and access is very valuable. He would like to see the building be in harmony with the land. Give much thought and consideration to laying this out. He appreciates Mr. Eon letting the public use his land for years.
- Lisa Edstrom of 32 Greenfield Lane uses the park every day. She loves walking the perimeter, which includes the orange trail, and she does not want to lose it. She hears bard owls a lot as she is walking Blanding's Way. She appreciates that there is going to be a wildlife study, she worries about the wildlife.
- Grace Glynn is a biologist and completed the natural resources survey and vernal pool study in the park last spring. She is concerned about this proposal. Functionally this development would cut off the wildlife block from Clifford Park. This area is remarkable in that they have several rare species of wildlife. They have Blanding's turtles, wood turtles and spotted turtles, the biologists think the spotted turtle is moving back and forth across Clifford. The bottleneck becomes too small and the species cannot survive. She does not think this area of the park is a wise one to lose. Fragmentation is threatening the landscape. Biddeford needs to think about on what side of conservation they want. She appreciates people being open to this discussion. She grew up playing in this park. She appreciates being given the chance to give input.
- Catherine Glynn of 179 Hill Street is one of the founding members of Friends of Clifford Park for Heart of Biddeford in 2014. They have worked hard maintaining the park, they have replaced the chain link fence, volunteers have picked up trash, tours are given, they lead hikes, yearly clean ups, planted a perennial bed and raised money for snow grooming equipment for HOB. This is a heavily used 140-acre forest in the middle of the City. The history of the Clifford, Bouton & Freeman families who donated the land to create this park needs to be taken into consideration. The plan needs to be approached carefully, especially with the orange trail. This area was studied for vernal pools and animals. 200' is a teeny space for animals. She encourages the City to build upon the work that has been done by Grace and Mark Ward.
- Linda Turgeon of 28 Winding Creek Lane wants to make sure the protected ladyslippers that grow wild in the park are not disturbed. She is also concerned about the traffic. This has been a nice little dead-end neighborhood with a lot of children out playing. Making this a through way and/or increased traffic can be a problem.
- Eric Gates of 25 Winding Creek Lane appreciates all the work that is being done and wants to make sure it is done smartly together. Mr. Thompson mentioned that there would be 1 filter bed for 18 units. It boggles his mind how 1 filter bed would be enough when their 15-unit subdivision needed 4. He looks forward to watching and participating in future sessions to insure smart growth.

- Chystina Gastelum of Pike Street also the Chair of the Conservation Commission said they have worked with Grace on some projects so she is pretty familiar with the environmental needs of the area. One thing she has learned through working with Mark Ward is about wildlife corridors. She thinks there may be some misunderstanding of what is happening. If they look at the maps there is development coming in from the north and the south around the West Brook. There is a nice wide area for the wildlife. It will now have to go through a winding corridor where there may be predators, cars etc. That is one of the major problems with the corridor that they see.
- Richard Rhames is on the Conservation Commission, they have not taken this up specifically, so he is speaking as a tree hugger. Getting more land into conservation is always a good thing. He was very impressed by Mr. DiMatteo's report where it suggested the applicant give several scenarios for consideration. We have heard several people testify that further construction would be detrimental to the wildlife in the area. This is one of the few statewide focus areas, and there are not many of these focus areas in the state. It is a state focus area because it is very unique. In the last Comp Plan in the 90's that area was supposed to be changed to a rural zone with mandatory cluster but that was not done. Inland Fisheries & Wildlife did a study in that area and counted Blanding and spotted turtles, 20 years later there was only 1 Blanding turtle counted. The population is under stress and this construction may push it to extinction. Adding more trails pushes the critters 400 feet off the trails because they get scared by dogs, hikers etc. Can recreational trails and wildlife coexist? Have the Planning Board hire outside wildlife consultants but the developer pay. There is a hotbed of wildlife out there.
- Carrie Cote of Winding Creek Lane wanted to say she echoes what all of her neighbors have said. She supports Chris Quint's concern about the filter bed and feels strongly about the conservation piece. She questions the use of filter beds in this plan, they have read studies and listened to the engineers, these filter beds have a shelf life. The HOA is very serious about the maintenance of these pieces of equipment and are closely monitored for this 15-house subdivision. They have put aside funds in case something breaks if this project is added onto their filter beds it will shorten their shelf life. How will this affect their subdivision? She is concerned, it weighs on her mind and it should weigh on others' minds as well. 1 filter bed is not enough for the proposed 18 units. Will the roads have to be widened, sidewalks added? How is this going to impact traffic, what types of houses are going in there, will they be single family, what is the cost, what is the lot size, what kind of neighborhood will this be?
- Chris Gould of 22 Winding Creek Lane thanked all for their attendance and work. He thinks the land swap is not a bad idea. He shares the concerns of the landowners for the animals and wonders if a cluster development would work with a smaller footprint affecting less of the park. He is wary of blasting and the effect it will have on the foundations in the area.
- Planner Tansley spoke suggesting they discuss the questions and put the responses on the website, he has some research to do.

- Mr. Eon wants transparency. This subdivision will have its own HOA and meet the requirements of DEP on the filters. They will be independent from the existing neighborhood and the stormwater will be reviewed annually with a report going to City Hall Engineering. The Orange Trail is 10' wide and going to be the same. He will get together with the neighbors and talk about his plans. The land is in a growth area and the traffic should not be an issue. He feels that Mark Ward who is the guru of the Conservation Commission and Grace Glynn who also has a lot of background with the Conservation Commission should not be working for the City on his project, as it would not be a level playing field. He has looked at cluster development and he would still need 100' of frontage. The houses will be similar to those on Winding Creek Lane but smaller than what is there now and relatively modest. He is sensitive to the wildlife but this is a growth area and he has a right to use the land he has owned for 30 years. He has sat down with public works and the fire department. He will pay for a wildlife study from an outside source.
- Planner Tansley told the Board that if they want to require a wildlife study the staff will get estimates and the Board will authorize the study. We will collect the fee from the applicant and put it in escrow to pay for the study.
- Mr. Benway asked if this would be 2 motions, 1 for the wildlife habitat study and 1 for major or minor subdivision.
- Planner Tansley replied that this is a major subdivision by definition so you have to make a motion, the other motion would be to require a wildlife habitat study and think about whether you want to ask the applicant to provide alternative designs, if so, it would be 3 motions.
- Mr. Cantara commented that he strongly supports the wildlife study for animals and plants. He would also like to see 2 cluster proposals given the sensitivity of the area; smaller lots give something to think about. He would like future plans to reflect trail easements and any lot trails. He commented that everyone who spoke was reasonable and thoughtful and he appreciates that.

MOTIONS:

Benway: Motion: to determine that this project is a major subdivision by proposing greater than 4 lots and to extend a public street.

Angers: Second

Chair Southwick-Roll Call for Vote-Unanimous Approval 4-0 (Benway, Droggitis, Angers, & Tarpey)

Benway: Motion: To require a wildlife habitat study

Angers: Second

Chair Southwick-Roll Call for Vote-Unanimous Approval 4-0 (Benway, Droggitis, Angers, & Tarpey)

Mr. Cantara asked if the Board could formally solicit the Conservation Commission for input in a month-forty five days, answer was yes

Benway: Motion: to require 2 cluster designs at next submittal

Angers: Second

Chair Southwick-Roll Call for Vote-Unanimous Approval 4-0 (Benway, Droggitis, Angers, & Tarpey)

- Mr. Angers asked Mr. DiMatteo to explain some of the corridors in his packet.

- Mr. DiMatteo explained that figure 3 shows the corridor; he forgot to put figure 4 in the packet. There are known habitats in that area and they have to figure out the hotspots. He suggests the applicant wait for the study to come back before he begins the cluster designs.
- Mr. Eon said that where the study is and where he is building are two distinct projects. He wants to sit down to discuss cluster designs. He asked when the staff gets the two or three names for wildlife study if they would include GZA; he has worked with them before. He does not want to wait 2 months to get started he wants to move along.
- 2020.11 Final Site Plan Review for Westfield, Inc. to create multiple office/storage/commercial spaces at 20 Pomerleau Street (Tax Map 2, Lot 81) in the I-3
- Consulting Planner DiMatteo did a brief introduction of the project.
- David Gould was there as the applicant.
- Bill Thompson from BH2M represented the applicant. Mr. Thompson explained more about the project.
- Chair Southwick asked for comments/questions from the public, there being none, he opened the floor back up to the Board.
- Mr. DiMatteo reminded the Board that they are deciding on a couple of things Pulling back the pavement, this is a redevelopment project so they have to make sure things are as conforming as possible.
In regards to the driveway width, he spoke to the City engineer, excess of 40' requires a waiver and they would have to give some templates demonstrating why it needs to be wider. Meet the ordinance in terms of gravel; pull that out of the setback. The building façade ordinance calls for stone, the applicant says it is not going to be stone. The Board does not necessarily require stone but you have to handle it definitively.
- Mr. Thompson can look at the recommendations. They feel that they do need the width for turning and trucks coming & going, the landscaping will be looked at.
- Mr. Benway asked if the Findings of Fact and Inclusions of Law covers what Chris is mentioning or are these new things coming up.
- Planner Tansley answered that the entrance and the pavement is not in the conditions. The site is in the Thatcher Brook watershed and they know that pavement is the #1 culprit for endangering the Brook so they want to get as much pavement out as they can. He thinks it would be a good thing for the applicant to provide turning templates
- Mr. Benway asked if they could get a recommendation from Tom if he makes that a condition.
- Planner Tansley said yes, we do not usually design sites though, but if they provide us with templates we can analyze them and determine the best way. It is not really an easy thing to do as a condition of approval.
- Mr. Benway asked if he tables this until April 7th, can the applicant, Tom, and Chris get together to fill out the kind of conditions that are being requested in the form of a motion so that they do not have to develop this on the fly. He is not

comfortable with that and he is pretty good at what he does and he makes motions, or at least he thinks he is.

- Planner Tansley answered that yes, he is pretty confident that by April 7th they could come up with something for the Board that would address that. It sounds like at least Bruce is interested in having more of a look. The building design item is something the Board really needs to weigh in on. He then showed the ordinance on I-3 and showed the section relative to the building design. It would be prudent for the Board to determine if these materials are acceptable. They are proposing a metal building, that information is in your packet. If the Board is not going to accept the materials, the applicant needs to come back to the Board with other materials. A few other things in the report: parking lot, they discussed, building façade he just went over with them, landscape design, (he is more than comfortable that can be a condition of approval) lot coverage, they have indicated they meet the 75%, he would like to see that noted on the plan, utilities, the applicant has indicated the desire to use existing overhead utilities from Pomerleau Street, lighting they have indicated the wall packs, he is not sure a photometric analysis would provide anything of value. Solid waste that is going to depend on the occupants, if the occupants want a dumpster, that should be on the plan with a pad and screening. If this were to be approved now, he would tell them they could not have a dumpster where it is not on the plan, snow storage and salt management plan, the DEP requires winter maintenance plan, they demonstrate to us where they will store and stockpile snow and how they will treat it when it starts to melt. Tabling it may make the most sense at this time.
- Mr. Benway is ready to make a motion if Planner Tansley or Mr. DiMatteo amend the FOF and Conclusions of Law to specify those things. If he should create something that needs more time than April 7th but he would like to hear from the applicant too.
- Mr. Tarpey said there is a circular ROW the applicant has listed as the applicant's property but he thinks it is the City's property.
- Mr. Thompson showed the curved area of the plan and clarified, Mr. Tarpey accepted. He asked if he could get a ruling tonight on the condition of materials, they are just trying to match the other buildings.

MOTIONS:

Benway: Motion- one of the conditions of approval include that the siding on the building be metal siding

Angers: Second

- Mr. Tarpey asked if they were talking about metal siding or something slightly different from metal siding.
- Mr. Thompson answered that it is coated steel to give it color and integrity against corrosion.

Chair Southwick-Roll Call for Vote-Unanimous Approval 4-0 (Benway, Droggitis, Angers, & Tarpey)

Benway: Motion-to table to allow the applicant to address outstanding issues by staff and the Board (4-7)

Second: Second

Chair Southwick-Roll Call for Vote-Unanimous Approval 4-0 (Benway, Droggitis, Angers, & Tarpey)

- **Chair Southwick introduced one more item for business, the topic is timely. The current modules that we are sending out for the Comp Plan for public engagement. It is important that we get as much feedback as possible. We need to discuss the method of how we get these things out and the nature of what is going out and how we might want to vet them in the future.**
- **Planner Tansley said that some people are having some difficulties with the fact sheet and the survey. The fact sheet is busy and they do not know how to go through the email with the links and such. It is a little difficult and it is a bit out there. He reminded them about the purpose of the PEP AC. They have gotten both positive and negative feedback. When we push out an email in HTML and people who do not have compatible computers, the information will come through incoherent. We have vastly simplified the email and are reworking the website a bit. We are doing a Facebook boost, which will guarantee that many more people will see it. We think that will get a lot more response. We will emphasise when the next one will go out which we have held off on until the Planning Board is comfortable. Danica referred to it as an organic distribution.**
- **Chair Southwick asked if we are redesigning the survey, as they are not user friendly for many many many people. Use a different methodology through MetroQuest.**
- **Mr. Droggitis explained the difficulty he and his wife had taking the survey, he found some of it very frustrating. He also spoke about the overlap of modules.**
- **Planner Tansley understands that there is overlap and it is a beautiful thing, there is common ground, a common theme. The neighborhood theme is to get people to think about what is important to them. We do have a challenge going back and changing the survey that has already gone out. The mapping tool is a challenge. Choosing 5 out of 7 is important, in life you cannot pick everything, there are tradeoffs in life. Eight is the maximum MetroQuest allows; studies show people cannot prioritize beyond 5 things in life.**
- **Mr. Droggitis stated that Facebook & Twitter is a generational thing. He was disappointed that when Saco announced their Comp Plan the Courier printed it on the front page, Biddeford got a mention on page 6. The City needs to find a better way of getting the survey out to people. Alan Casavant has a large network and he could plug this.**
- **Chair Southwick mentioned they have a high number of email lists they should utilize. It is his opinion that this process has little value if they continue on the current path. A small number will see it and many will get frustrated. The Planning Board needs to see the surveys and vet them and the Fact Sheets before they go out. From the beginning, get better at getting the product out.**
- **Planner Tansley said they agree, and never envisioned the PEP AC blessing everything. They envisioned modules develop and send out the product without the PEP AC.**

- Chair Southwick thinks a larger group will lend continuity and help people to understand how to evaluate.
- Mr. Cantara said that different eyes looking at it resonates with him, but that having the Planning Board look at it all, slows down the turnaround time unless they can do it quickly and electronically.
- Chair Southwick said that may be helpful and they take 24-48 hours to complete and provide feedback. They may get good feedback before it goes to the public.
- Mr. Cantara said this speaks to their obligation for due diligence.
- Chair Southwick said some people may have just walked away and they want to give everyone a chance to participate.
- Mr. Cantara is reassured that paper surveys are available and that the final survey is going to everyone.
- Planner Tansley suggested a dry run with PEP AC with 48 hours to redo, they will hold back before the next one goes out. MetroQuest reviews it for 1 week so it will be a total of 2 weeks with PEP AC having it for 1 week. He also wanted to make the point that they are not relying on Facebook or 1 tool. They have ads going in the Courier, Alan's emails, the Biddeford Beat etc.

MOTIONS

- Mr. Benway-Motion-to adjourn
- Mr. Angers-Second
- Chair Southwick-Roll Call for Vote-Unanimous Approval 4-0 (Benway, Droggitis, Angers, & Tarpey)

Meeting was adjourned at 9:55 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.

PLANNING BOARD
REPORT

April 1, 2021

Biddeford Planning Board
Greg Tansley, City Planner
City of Biddeford
205 Main Street
Biddeford, Maine 04005

Application: 4 Unit Warehouse Facility – Westfield Inc.
20 Pomerleau Street (Tax Map 2 Lot 81 and 81-5)

Site Plan Review

Review Status: Revised final plan application.

Board members and Mr. Tansley,

The following application information has been provided for review:

1. Application form dated 12/8/2020.
2. Cover letter dated 12/8/20 and submittal application information *Final Application Packet, 20 Pomerleau Street, Commercial Buildings Site Plan, Biddeford, Maine, for Westfield Inc. December 2020*, prepared by BH2M Engineers and Surveyors.
3. Engineering Plan set entitled: *4 Unit Warehouse Facility, Pomerleau Street, Biddeford, Maine. REV. Date 3/30/2021*. Prepared by BHM2 Engineers and Surveyors.
4. Supplemental application information: BH2M Response to peer-review (Site Design) comments dated 1/29/2021
5. Proposed building, elevations, façade renderings and siding information prepared by Canam Group, Inc.
6. Peer-review comments by Site Design Associates (email dated 2/9/2021)
7. *Supplemental Information: Response to comments letter by BH2M, dated 3/24/2021; Wastewater Treatment Plant Capacity Letter, dated 12/29/2020; Cost Estimate; CFUP calculations; Plan Exhibit Truck Turning Template Pomerleau Street Warehouse Facility...prepared by BH2M; and Salt Management & Winter Maintenance Plan*

With review of the above information and the Land Development Regulations, I offer the following comments on compliance with the City's ordinances.

PROJECT DESCRIPTION

The project site, located in the Industrial-3 Zone, is an existing mixed commercial property partially developed with buildings and parking. The proposal is to construct four new warehouse units (two buildings that are approx. 35-40 feet high in the front and 20 feet high at the rear) that would add 22,500 SF of commercial floor area to the property. The site is serviced by public water and sewer and overhead power lines and the proposed development is located adjacent to the former 'Out of the Rough' and the Biddeford Ice Arena.

COMPLETENESS REVIEW

The application is before the Planning Board as required by Article XI (Site Plan Review) of the Land Development Regulations and appears to be complete with the following exceptions:

1. Ability to serve letters from the City of Biddeford Wastewater Department and Fire Department. **A letter from the Wastewater Department has been submitted.**
2. Financial Capacity Letter.
3. Letter from Maine Inland Fish & Wildlife
4. CFUP (Compensation Fee Utilization Plan) fee calculation for net new pavement/roof/vegetation as required by development within the Thatcher Brook Watershed. **Fee calculation has been submitted.**

COMPLIANCE WITH THE CITY'S ORDINANCES

1. Parking Lot Design. As part of the new warehouse buildings, the existing gravel parking lot is planned to be paved. The applicant and Planning Board should consider having the parking and driveway limits reduced to be conforming with the land use regulations. The existing driveway is approximately 75 feet wide; the standard (Chapter 66 Section 111) is 40 feet wide for Type II-A. The parking spaces and surplus pavement should be removed out of the front yard setback to conform to Article XI Site Plan Standards (Sec. 5.B.4.f.) and Article VI Performance Standards (Sec. 49.A.5). **The applicant has removed the proposed pavement from the front yard setback and has reduced the previously proposed 75-foot driveway width to the conforming 40 feet.**
2. Building Façade. The proposed building façade does not use masonry materials as required in the Industrial-3 zone, Section 5.B.4.a.2 of the Article XI Site Plan Review (Part II). As anticipated by the provision, the applicant should demonstrate to the Planning Board that a masonry building façade is not needed here so the Board can determine if the metal siding proposed will conform to the provision. Building elevation, renderings and siding information has been submitted. **The Planning Board found the metal siding proposed was acceptable.**
3. Landscape Design. The Site Plan includes a number of proposed large and medium shade trees that are located to provide some degree of screening of the parking and new buildings. The applicant and the Board may want to consider additional plantings to provide more screening that would help with the view from the public street. The addition of evergreen trees amongst some of the shade trees proposed, along with dense planting within the

portion of the front yard setback referenced in comment #1 above, would be an overall benefit and help towards conforming to Sec. 49.A.10 under Article VI Performance Standards. Additional evergreen trees were added as requested; however, no plantings were added to the portion of the front yard setback where existing pavement will be removed as also suggested. Plantings in this area addresses Section 49.A.10 and 5.B.4.f.2 of Article XI Site Plan Review (Part II), where maintained landscaped areas are anticipated. In addition, the I-3 Zone (Art. V) anticipates more *stringent* landscaping standards.

4. Maximum Lot Coverage. The standard (75% Maximum) is noted on the plan, however, the actual coverage proposed is not. What percentage of the lot is going to be non-vegetated? The plan has been updated to reflect the new lot coverage (See Note #23).
5. Electrical and telephone Utilities. The proposed development plans for overhead lines. The existing building is serviced by underground utilities. The standard under the Site Plan regulations (Section 5.B. Site Design Criteria) is to place these utilities underground where practicable. The applicant should address, and the Board should determine if its practicable or not. The overhead lines were discussed at the last meeting and the Board had no objection.
6. Lighting. The applicant should review the existing and proposed lighting and determine if the renovated site will be sufficiently lighted while avoiding glare past the property and on to the street. The applicant's agent states in the response to comments letter that lighting was discussed, and the Board found it to be acceptable. Staff recalls that the applicant demonstrating through additional information, such as catalog cuts for the proposed light fixtures, was acceptable by the Board.
7. Solid Waste. It is not evident from the plan the location of existing of proposed dumpster. The applicant should clarify how solid waste and recycling is planned to be managed and confirm that there is a private hauler that services the site. Plan has been revised to include a location to accommodate a dumpster. The label should be revised to include 'enclosure' has detailed on sheet 4.
8. Snow Storage. This is typically identified on the plan and doesn't appear to be. The City is requesting a Winter Maintenance Plan be prepared as part of non-residential developments. The applicant should address snow storage in the Winter Maintenance Plan. A brief description of snow storage and disposal has been added to a combined Salt Management and Winter Maintenance Plan. Applicant should coordinate with Department of Public Works to ensure the plan is adequate.
9. Engineering Peer-review Comments: After review of BH2M's response to comments (3/24/21) by Site Design Associates, the following previous comments (with BH2Ms responses included) remain outstanding. These items need to be satisfactorily addressed as part of final approval; a condition of approval is included in the draft Findings of Fact for the Boards consideration.

- a. *The modelling reflects a peak elevation of 101.9 with a berm elevation of 102.0 in SF 1. The grading should be revised to provide 1 ft of freeboard. RESPONSE: Maine DEP does not require freeboard for soil filters of this type.*
- b. *The modelling reflects a peak elevation of 102.5 with a berm elevation of 102.5 in EC 1. The grading should be revised to provide 1 ft of freeboard. RESPONSE: Modeling shows that the existing storage above the culvert entrance is likely undersized and overtops directly to Pomerleau Street. The proposed condition improves on this by increasing the storage upgradient of the existing culvert and preventing run off from overtopping the inlet.*
- c. *The 25 year peak runoff rate is expected to increase by 50% at AP #2. What is the impact on the capacity of the storm drain out of the structure? The invert, rim, and pipe size should be determined and the increase in the headwater depth provided. RESPONSE: The existing catch basin requires maintenance to fully access. There appears to be a blinded sediment trap under the grate and sediment that needs to be removed in order to properly evaluate the catch basin.*

WAIVER REQUESTS

None requested.

CONCLUSION

The submitted application appears to be in order with the exceptions noted above. If the Planning Board should determine if the revised plans are acceptable and if the Board concurs with the comments above and the suggested conditions of approval it may want to consider granting conditional approval.

SUGGESTED MOTION

Move to grant conditional approval for the Site Plan application for Westfield, Inc. at 20 Pomerleau Street, Tax Map 2 Lot 81 and 81-5 with the conditions outlined in the draft Findings of Fact as presented.

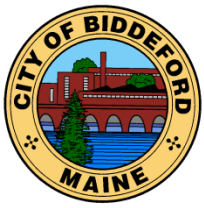
(See Draft Findings of Fact for suggested conditions of approval)

Feel free to contact me with questions.

Best regards,



Christopher Di Matteo
City of Biddeford Contract Planner.
cdimatteo@longmeadowpla.com
207.604.4245



CITY OF BIDDEFORD

Planning and Development Department

FINDINGS OF FACT AND CONCLUSIONS OF LAW SITE PLAN REVIEW

Pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations Article XI, the Biddeford Planning Board has considered the application of **Westfield, Inc.**, 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:

Findings of Fact:

1.	Applicant:	Westfield, Inc., c/o David Gould 26 Rivers Edge Drive Kennebunk, ME 04043
2.	Owner of Property:	Westfield, Inc
3.	Agent:	BH2M Engineers 28 State Street, Gorham, ME 04038
4.	Project Location:	20 Pomerleau Street
5.	Project Tax Map #/Lot #:	Tax Map 2, Lot 81 and Lot 81-5
6.	Lot Size:	16 AC +/-
7.	Existing Zoning:	Industrial -3
8.	Overlay Zoning:	none
9.	Designations:	none
10.	Existing Use:	Mixed Commercial – Warehousing
11.	Proposed Use:	4 units of warehousing and mixed commercial
12.	Floodplain Status:	None
13.	Approvals Required:	Site Plan Review
14.	Uses in the Vicinity:	Mixed Commercial
15.	Dimensional Requirements:	
	Min. Setback from R.O.W: 40 FT	Minimum Rear Setback: 25 FT
	Minimum Side Setback: 25 FT	Maximum Height: 6 stories / 60 FT
16.	Waivers Needed:	a. None
17.	Waivers Granted:	a. None
18.	Variances Needed for Approval:	None.
19.	Other Approvals Required:	Building Permits from the Biddeford Code Enforcement Office.
20.	Other Permits Obtained:	None.
21.	Other Non-City Permits Required:	None
22.	LDR Attachment A: Fees Paid:	Yes

23.	Application Materials Submitted: 1. Application form dated 12/8/2020. 2. Cover letter dated 12/8/20 and submittal application information <i>Final Application Packet, 20 Pomerleau Street, Commercial Buildings Site Plan, Biddeford, Maine, for Westfield Inc. December 2020</i>, prepared by BH2M Engineers and Surveyors. 3. Engineering Plan set entitled: <i>4 Unit Warehouse Facility, Pomerleau Street, Biddeford, Maine</i>. REV. Date 3/30/2021. Prepared by BHM2 Engineers and Surveyors. 4. Supplemental application information: BH2M Response to peer-review (Site Design) comments dated 1/29/2021 5. Proposed building, elevations, façade renderings and siding information prepared by Canam Group, Inc. 6. Peer-review comments by Site Design Associates (email dated 2/9/2021) 7. Supplemental Information: Response to comments letter by BH2M, dated 3/24/2021; Wastewater Treatment Plant Capacity Letter, dated 12/29/2020; Cost Estimate; CFUP calculations; Plan Exhibit Truck Turning Template Pomerleau Street Warehouse Facility...prepared by BH2M; and Salt Management & Winter Maintenance Plan.	
24.	Planning Board Review History:	
	Concept Review:	May 20, 2020
	Final Site Plan Review:	Meeting on March 17, 2021 (continued to April 7, 2021 meeting)
	Final Site Plan Review #2:	Meeting on April 7, 2021

Conclusions of Law:

The Planning Board concludes based on the application information submitted, peer-review and staff reports prepared and testimony provided at their meetings, the application conforms to the following provisions:

- A. Article XI Site Plan Review of the City's Land Development Regulations, including Section 5 Site design and development criteria (subsection B):
 1. **Drainage:** The proposed development has been designed by a licensed engineer and has been reviewed by the City's peer-review engineer and applicable standards related to stormwater and drainage have been adequately addressed.
 2. **Utilities:** The proposed development has been designed by a licensed engineer and has been reviewed by the City's peer-review engineer and applicable standards related to utilities have been adequately addressed.
 3. **Parking:** The proposed development has been designed to provide for sufficient parking spaces and adequately addresses related parking standards.

4. **Structural Layout and Design:** The proposed development has been designed to adequately address the factors to be considered under this the Site Design criterion. This includes the Planning Board finding the use of metal siding for the building façade appropriate as allowed under Section 5.B.4.a.2 of the Article XI; review and approval by the City Fire Department; the removal of paving within the front yard setback; and demonstration that external lighting will not have an adverse impact to abutting properties and traffic.
- B. Article VI Performance standards of the City's Land Development Regulations, all applicable provisions including Section 37 Glare; and Section 49 Off-Street Parking and Loading.

Determination:

Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the application with the following conditions:

Conditions of Approval:

1. **Standard Conditions of Approval apply.**
2. **A Stabilized Construction Access and Erosion and Sediment Control measures shall be constructed prior to any additional site disturbance. Applicant shall notify the Engineering Department once installed for City inspection.**
3. **Prior to any ground disturbance (other than that permitted per Condition of Approval #2 above) or issuance of any permits:**
 - a. **All outstanding engineering peer-review comments shall be addressed to the satisfaction of the City Planner.**
 - b. **Submit an approval letter from the Fire Department**
 - a. **A sewer permit is required. Sewer impact fee will be assessed once final flow numbers are provided to the Director. Provide sanitary pump make, model and flow discharge curve information to the City Engineer.**
 - b. **A pre-construction meeting with the contractor needs to be held with the Engineering Department to discuss inspection requirements.**
 - c. **An Erosion and Site Stabilization Performance Guarantee (acceptable to the Planning Department) in an amount to be determined by the City based on finalized Unit Cost Estimate shall be submitted to the Planning Department.**
 - d. **Winter Maintenance plan that addresses snow storage shall be approved by the City Engineer. Snow storage (temporary or otherwise) is prohibited from stormwater management facilities.**
 - e. **Provide to City Planner for review and approval lighting information for the site demonstrating no glare and excessive light spillage onto the public street.**
 - f. **A stormwater mitigation fee of \$2,205.50 shall be paid to the Planning Department based on the Maine DEP Site Location of Development Act Urban Impaired Stream Compensation Fee Maine DEP Chapter 501 SS 3.A.{1} as follows:**

Pavement 0.07 acres x \$ 12,500 = \$875.00

Building (Roof) 0.23 acres x \$ 5,000 = \$1,150.00

Lawn 0 acres x \$ 2,500 = \$0.00

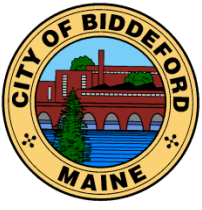
Total Fee = \$ 2,025.00

4. Prior to the issuance of any occupancy permits:

- a. A compliance inspection needs to occur by the Engineering Department to determine that all site improvements as shown on the submitted plan were constructed in accordance with the approved plans.
 - b. A performance guarantee (acceptable to the Engineering Department) in the amount of 150% of any remaining site improvements shall be submitted to the Planning Department. Amount to be determined based on City inspections and the recommendation of the City Engineer.
5. Copies of the maintenance logs for the stormwater facilities shall be submitted to the City for each calendar year no later than January 15th of the following year. If the Engineering Department does not receive these copies within 30 days after the deadline, the applicant may be required to return to the Planning Board for further review.
6. The applicant shall obtain all other pertinent local, state and federal permits, licenses, and insurance such as blasting, building, electrical, plumbing, etc., prior to commencing business, unless authority issuing said permit allows for such actions.
7. Once completed, as-built drawings of the site shall be provided to the Planning Department.
8. Upon completion of the work the project engineer shall certify that the project has been completed as per the approved plans or shall note any deviations from the approved plans.

Planning Board Chairman

Date



CITY OF BIDDEFORD

Planning and Development Department

Standard Conditions of Approval

Owner/Applicant: Westfield, Inc., c/o David Gould
26 Rivers Edge Drive
Kennebunk, ME 04043

Project Description: 4 units of warehousing and mixed commercial and associated site improvements

Project Location: 20 Pomerleau Street

Tax Map / Lot Number: Tax Map 2, Lot 81 and 81-5

Project ID: 2020.11

1. The material provided for the proposed project has been reviewed only for general conformance to the City technical requirements. The applicant(s) and/or their technical consultant shall be responsible for the actual design details and completeness of their work. It is incumbent upon the applicant(s) to ensure that the project is in conformance and complies with all City Codes, ordinances and regulations as well as with all state regulations, including, but not limited to, space and bulk standards, performance standards, use standards and other zoning type requirements.
2. All work shall be in conformance with the approved plans and submission documents. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner and City Engineer for minor changes. The City Planner shall make the determination of major or minor.
3. Contact the Department of Public Works for driveway location permits, curb cut permits and/or street opening permits prior to the start of construction.
4. If Site Development is required as part of the project, an as-built plan must be provided to the City of Biddeford Engineering Office at the end of the project on mylar and on a disk, in a format, which can be read by the City of Biddeford's Geographic Information System software. If a disk copy cannot be provided, a charge for staff time to enter the plan into the City system will be assessed to the applicant.
5. The applicant shall incorporate appropriate erosion control measures into this project to reduce erosion affects from the work. All disturbed areas must be re-vegetated and/or

otherwise stabilized at the appropriate stage of the work per Maine DEP standards in the Best Management Practice (BMP) manual.

6. That the Article VI Performance Standards requirements regarding Dust, Fumes, Vapors & Gases (sect 25), Explosive Materials (sect 28), Glare (sect 37), Noise (sect 48) be followed.
7. The applicant is required to comply with all applicable requirements of Chapter 70 (Utilities) and Chapter 71 (Utilities/Industrial Pretreatment Program).
8. If Site Development is required as part of the project, at the completion of the project the owner/applicant shall request a final inspection. This request shall be directed to the Planning Office. Performance Guarantees and remaining escrow accounts shall not be released until the Planning Office certifies that the project has been completed and is in compliance with the approval and all applicable City Ordinances.

DRAFT



WILLIAM A. THOMPSON
ROBERT C. LIBBY, Jr.
WALTER E. PELKEY
ANDREW S. MORRELL
STEVEN J. BLAKE

Berry, Huff, McDonald, Milligan Inc.
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Gorham, Maine 04038

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www.bh2m.com

March 24, 2021

Greg Tansley
Biddeford City Planner
205 Main Street
P.O. Box 586
Biddeford, Maine 04005

Re: 4 Unit Warehouse Facility
Site Plan Review Comments dated March 10, 2021
Received 1/19/2021

Dear Greg;

The following up on the above referenced memo we have revised the proposed project documents. We are including a revised plan set and stormwater report in addition to the following responses to comments from Christopher Di Matteo and Tom Saucier:

Di Matteo Comments

Completeness Review Comments

The application is before the Planning Board as required by Article XI (Site Plan Review) of the Land Development Regulations and appears to be complete with the following exceptions:

1. Ability to serve letters from the City of Biddeford Wastewater Department and Fire Department.

RESPONSE:

The City of Biddeford Wastewater Department has provided an ability to serve letter dated December 29, 2020 provided previously and also included as attached. The City Fire Department has also been contacted but has not yet responded.

2. Financial Capacity Letter

RESPONSE:

Applicant to provide.

3. Letter from Maine Inland Fish & Wildlife.

RESPONSE:

Maine IF&W has been contacted. Any responses received will be forwarded to your attention.

4. CFUP (Compensation Fee Utilization Plan) fee calculation for net new pavement/roof/vegetation as required by development within the Thatcher Brook Watershed.

RESPONSE:

A calculation for CFUP compensation has been included as attached.

Compliance with the City's Ordinances

1. Parking Lot Design. As part of the new warehouse buildings, the existing gravel parking lot is planned to be paved. The applicant and Planning Board should consider having the parking and driveway limits reduced to be conforming with the land use regulations. The existing driveway is approximately 75 feet wide; the standard (Chapter 66 Section 111) is 40 feet wide for Type II-A. The parking spaces and surplus pavement should be removed out of the front yard setback to conform to Article XI Site Plan Standards (Sec. 5.B.4.f.) and Article VI Performance Standards (Sec. 49.A.5)

RESPONSE:

The existing condition on site shows that the existing entrance is approximately 125' wide. The proposed conditions improve on this by reducing the driveway entrance to 75'. As shown on the attached figure, a WB-62 requires approximately 50' of driveway width to negotiate the turn into the facility. The additional width proposed allows existing vehicles space to exit the facility if a large truck is entering. The plans have also been updated to remove the existing pavement inside the setback along the cul-de-sac at the end of Pomerleau Street.

2. Building Façade. The proposed building façade does not use masonry materials as required in the Industrial-3 zone, Section 5.B.4.a.2 of the Article XI Site Plan Review (Part II). As anticipated by the provision, the applicant should demonstrate to the Planning Board that a masonry building façade is not needed here so the Board can determine if the metal siding proposed will conform to the provision. Building elevation, renderings and siding information has been submitted.

RESPONSE:

The building façade was discussed at the March 17 planning board meeting, and was the proposed siding was found to be acceptable.

3. Landscape Design. The Site Plan includes a number of proposed large and medium shade trees that are located to provide some degree of screening of the parking and new buildings. The applicant and the Board may want to consider additional plantings to provide more screening that would help with the view from the public street. The addition of evergreen trees amongst some of the shade trees proposed, along with dense planting within the portion of the front yard setback referenced in comment #1 above, would be an overall benefit and help towards conforming to Sec. 49.A.10 under Article VI Performance Standards.

RESPONSE:

Landscape Design was discussed at the March 17 planning board meeting; a few additional trees were suggested and are now shown on the plans.

4. Maximum Lot Coverage. The standard (75% Maximum) is noted on the plan, however, the actual coverage proposed is not. What percentage of the lot is going to be non-vegetated?

RESPONSE:

Lot coverage is now provided on the Site Plan as Note 23, showing 54.5% coverage.

5. Electrical and telephone Utilities. The proposed development plans for overhead lines. The existing building is serviced by underground utilities. The standard under the Site Plan regulations (Section 5.B. Site Design Criteria) is to place these utilities underground where practicable. The applicant should address, and the Board should determine if its practicable or not.

RESPONSE:

Above ground utilities were discussed at the March 17 Planning Board Meeting, and it was determined that overhead utilities were appropriate for this project, as there is existing overhead 3-phase power that traverses the site.

6. Lighting. The applicant should review the existing and proposed lighting and determine if the renovated site will be sufficiently lighted while avoiding glare past the property and on to the street.

RESPONSE:

Project lighting was discussed at the March 17 Planning Board Meeting and found to be acceptable.

7. Solid Waste. It is not evident from the plan the location of existing of proposed dumpster. The applicant should clarify how solid waste and recycling is planned to be managed and confirm that there is a private hauler that services the site.

RESPONSE:

Dumpster pads are now shown on the plans.

8. Snow Storage. This is typically identified on the plan, and doesn't appear to be. The City is requesting a Winter Maintenance Plan be prepared as part of non-residential developments. The applicant should address snow storage in the Winter Maintenance Plan.

RESPONSE:

A Salt Management Plan has been included in previous submissions and is also included here as attached. Areas of snow storage are now identified on the plans.

Suggested Conditions of Approval

1. All outstanding review comments shall be addressed to the satisfaction of the City Planner.

RESPONSE:

All current review comments are addressed in this memo.

2. Approval letter from Fire Department.

RESPONSE:

The Fire Department has been contacted but have not received a response.

3. Capacity Letter from the Wastewater Department.

RESPONSE:

See as attached.

4. Letter from the Department of Inland Fish and Wildlife.

RESPONSE:

IF&W has been requested and will be provided when available.

5. Provide CFUP Fee calculation to City staff for review.

RESPONSE:

See as attached.

6. Financial Capacity Letter.

RESPONSE:

Applicant to provide.

7. A pre-construction meeting with the contractor needs to be held with the Engineering Department to discuss inspection requirements.

RESPONSE:

Will schedule prior to construction.

8. Revise Unit Cost Estimate submitted to reflect City Engineer's review and shall be resubmitted to the City Planner.

RESPONSE:

See as attached.

9. An Erosion and Sedimentation Control Performance Guarantee (acceptable to the Planning Department) in an amount to be determined by the City based on Condition of Approval 4) shall be submitted to the Planning Department.

RESPONSE:

Will provide prior to construction once amount is approved by Planning Department.

10. Stabilized Construction Access shall be constructed to the satisfaction of the Engineering Department.

RESPONSE:

A stabilized construction entrance is show on plans and details.

11. Winter Maintenance plan that addresses snow storage be submitted to staff for review and approval (contact City Engineer Tom Milligan for details).

RESPONSE:

See as attached.

12. Provide to Staff for review and approval lighting information for the site demonstrating no glare and excessive light spillage onto the public street.

RESPONSE:

Project lighting was discussed at the March 17 Planning Board Meeting and found to be acceptable.

13. A sewer permit is required prior to any permit issuance. Sewer impact fee will be assessed once final flow numbers are provided to the Director.

RESPONSE:

Will provide prior to construction once amount is approved by Engineering Department.

14. A performance guarantee (acceptable to the Engineering Department) in the amount of 150% of any remaining site improvements shall be submitted to the Planning Department. Amount to be determined based on City inspections and the recommendation of the City Engineer.

RESPONSE:

Will provide prior to construction once amount is approved by Engineering Department.

15. A sewer permit is required prior to any permit issuance. Sewer impact fee will be assessed once final flow numbers are provided to the Director.

RESPONSE:

See response to item 13 above.

16. Payment of the CFUP Fee to the City.

RESPONSE:

See CFUP as attached, will provide prior to construction.

17. No trash is permitted to be placed at the curb for City pickup. All trash pickup and disposal is the responsibility of the applicant.

RESPONSE:

A dumpster pad is now proposed, see site plan and details.

18. Standard Conditions of Approval apply.

RESPONSE:

This condition is recognized.

Saucier Comments

Remaining Comments

- B.1.a. Spot grades should be shown at the accessible parking in front of unit B.

RESPONSE:

Additional spot grades have been provided, showing that this parking spot provides a 2% or less slope.

- B.1.b. The spot grades on the walk near the building entrances are higher than the building FFE. They may want to review this.

RESPONSE:

Grades have been revised to show the walk in front of the rear doors meeting FFE.

- B.1.f. The plan continues to show overhead electrical service.

RESPONSE:

Overhead utilities were discussed at the March 17 Planning Board Meeting, and it was determined that overhead utilities were appropriate for this project, as there is existing overhead 3-phase power that traverses the site. Note 12 on the Site Plan has been updated to reflect this.

- B.2.a. The pavement joint detail should call for milling of the existing surface course of pavement.

RESPONSE:

Detail has been updated to include this language.

- B.2.c. A round frame and grate are specified on the square outlet structure.

RESPONSE:

A square beehive frame and grate are now specified on the details.

- B.2.e. A sizing calculation for the sediment forebay should be provided.

RESPONSE:

A calculation for forebay sizing is attached showing adequate volume.

- B.2.e. The detail for the GUSF shows 6" dia UD while the plan calls for 4" dia. The 6" dia is probably the better option. Also, the specification should call for the UD to be installed holes down.

RESPONSE:

6" pipe is proposed to be a solid collector pipe, with 4" UD pipes branching off to drain the filter. Notes on the Site Plan and Details have been revised to better show this.

A couple of additional comments regarding the stormwater modelling

- The outlet structure detail on sheet 4 calls for the rim elevation to be at elevation 102.0 while the model uses 101.6.

RESPONSE:

Site Plan, Details, and Model are now consistent showing a rim elevation of 101.5.

- The modelling reflects a peak elevation of 101.9 with a berm elevation of 102.0 in SF 1. The grading should be revised to provide 1 ft of freeboard.

RESPONSE:

Maine DEP does not require freeboard for soil filters of this type.

- The modelling reflects a peak elevation of 102.5 with a berm elevation of 102.5 in EC 1. The grading should be revised to provide 1 ft of freeboard.

RESPONSE:

Modeling shows that the existing storage above the culvert entrance is likely undersized and overtops directly to Pomerleau Street. The proposed condition improves on this by increasing the storage upgradient of the existing culvert and preventing run off from overtopping the inlet.

- The modelling reflects a peak elevation of 109.66 at EP 2. A berm should be provided with 1 ft of freeboard to ensure the stormwater remains segregated as designed.

RESPONSE:

A berm is now proposed along the downgradient side of the inlet to the existing culvert.

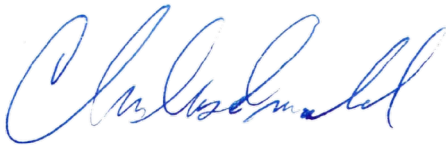
- The 25 year peak runoff rate is expected to increase by 50% at AP #2. What is the impact on the capacity of the storm drain out of the structure? The invert, rim, and pipe size should be determined and the increase in the headwater depth provided.

RESPONSE:

The existing catch basin requires maintenance to fully access. There appears to be a blinded sediment trap under the grate and sediment that needs to be removed in order to properly evaluate the catch basin.

Thank you for providing these comments. We trust that these responses will alleviate your concerns for the project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Christopher MacDonald', is written in a cursive style.

Christopher MacDonald, P.E.
Civil Engineer



CITY OF BIDDEFORD, MAINE

ENGINEERING DIVISION/PUBLIC WORKS DEPARTMENT

P.O. Box 586
Biddeford, Maine 04005
(207) 284-9118
Fax (207) 286-9384

Tom Milligan
Engineering/Wastewater Director

City of Biddeford, Maine
Wastewater Department
205 Main Street · PO Box 586 · Biddeford, Maine 04005-0586
Telephone 207 284-9118

December 29, 2020

Letter of Wastewater Treatment Plant Capacity to Serve

Brief description of project: 4 Unit commercial Project by Westfield Inc., Pomerleau Ave
Estimated flows: 96 gpd.

Determination

The City of Biddeford Wastewater Department has reviewed the request to serve the above-described project. It has been determined that at this time, once the flow reaches the treatment facility, the City has sufficient capacity at the City's Wastewater Treatment Facilities to serve the above described project. It is estimated that 96 gpd of 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.

The property will be served by a private force main sewer connection into an existing private SMH which will then flow to the City 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 any determined pump station upgrade costs based on the flow amount calculated at the time application is made and prior to the issuance of any building permits and/or the issuance of a certificate of occupancy.

This Capacity to Serve Letter is intended only to determine the City of Biddeford Wastewater Treatment Facility's ability to handle and treat the flow from the above stated project once it is received at the treatment facility. The Planning Department, Engineering Department or other persons from the Wastewater Department may require further studies or documentation regarding the impact on the City's sewer collection system or its components.

COST ESTIMATE WORKSHEET

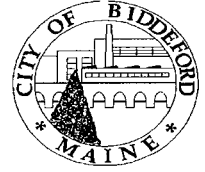
City of Biddeford, Maine

COST ESTIMATE WORKSHEET

OWNER/APPLICANT: **Westfield Inc.**

PROJECT NAME: **Commercial Buildings**

June 2020 REVISED 3/24/2021



	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clearing and Grubbing	Acre	0.7	\$2,000.00	\$1,400.00
2	Erosion/Sediment Control	Lump Sum	1	\$500.00	\$500.00
3	Site Stabilization	Lump Sum	1	\$500.00	\$500.00
4	Ledge Removal	Cubic Yard			\$0.00
5	Sanitary Sewer				
	Manholes	Each	0		\$0.00
	Main Force Main	Linear Foot	425	\$10.00	\$4,250.00
	House Services	Linear Foot	165	\$20.00	\$3,300.00
6	Water Main				
	Main	Linear Foot	0		\$0.00
	House Services	Linear Foot	214	\$20.00	\$4,280.00
	Hydrants	Each	0		\$0.00
7	Electric Overhead On-site				
	Underground Utility Trench	Linear Foot	0		\$0.00
	Conduit/Wiring	Linear Foot	0		\$0.00
	Transformer Bases	Each	0		\$0.00
8	Storm Drainage				
	Pipe/Culvert	Linear Foot	70	\$25.00	\$1,750.00
	Catch Basin	Each	1	\$2,500.00	\$2,500.00
	Other Treatment Devices	Each	0		\$0.00
9	Stormwater Management				
	Outlet Control Structure	Each	1	\$3,000.00	\$3,000.00
	Stromwater Management Facilities	Each	1	\$20,000.00	\$20,000.00
10	Excavate and Grade Subgrade	Cubic Yard	250	\$5.00	\$1,250.00
11	Roadways				
	Subbase Gravel	Cubic Yard	0		\$0.00
	Base/Finish Gravel	Cubic Yard	0		\$0.00
	Base Paving	Ton	0		\$0.00
	Finish Paving	Ton	0		\$0.00
	Geotextile Fabric	Ton	0		\$0.00
12	Sidewalks				
	Subbase Gravel	Cubic Yard	0		\$0.00
	Base/Finish Gravel	Cubic Yard	0		\$0.00
	Base Paving	Ton	0		\$0.00
	Finish Paving	Ton	0		\$0.00
13	Parking Lots/Other Areas				
	Subbase Gravel New Area	Cubic Yard	400	\$10.00	\$4,000.00
	Base/Finish Gravel New Area	Cubic Yard	60	\$14.00	\$840.00
	Base Paving New Area	Ton	92	\$75.00	\$6,900.00
	Finish Paving New Area	Ton	58	\$75.00	\$4,350.00

City of Biddeford, Maine

COST ESTIMATE WORKSHEET

14	Curbing – Bituminous	Linear Foot			\$0.00
15	Curbing - Concrete				
15	Curbing – Granite	Linear Foot			\$0.00
16	Pavement Striping	Linear Foot	220	\$2.00	\$440.00
17	Guardrail	Linear Foot			\$0.00
18	Fencing	Linear Foot			\$0.00
19	Loam and Seed	1,000 Square Feet	10	\$600.00	\$6,000.00
20	Riprap	Cubic Yard			\$0.00
21	Landscaping Trees	Each	13	\$200.00	\$2,600.00
22	Street Lights	Each			\$0.00
23	Site Lighting	Each	4	\$150.00	\$600.00
24	Monuments/Iron Pipes	Lump Sum			\$0.00
25	Clean Up	Lump Sum	1	\$1,000.00	\$1,000.00
26	As Builts	Lump Sum	1	\$500.00	\$500.00
27	Other Grinder Pump	Each		\$5,000.00	\$5,000.00
28	Other				\$0.00
29	Other				\$0.00
30	Other				\$0.00
31	Other				\$0.00

COST ESTIMATE TOTAL:

\$74,960.00

150% of TOTAL:

\$112,440.00

FOR OFFICE USE ONLY

EROSION CONTROL/SITE STABILIZATION BOND (IF APPLICABLE): _____

PERFORMANCE GUARANTEE REQUIRED: _____

Name: _____

Signature: _____

Date: _____

URBAN IMPAIRED STREAM STANDARD

The project is located within the Thatcher Brook Watershed. Thatcher Brook is listed as an Urban Impaired Stream (06-096 CMR 502 Appendix B). The project area is also approved under a previous Site Law Permit. In accordance with 06-096 CMR 500 Section 4.E.(1) the project is subject to the Urban Impaired Stream Standard. The City of Biddeford administers a Compensation Fee Utilization Plan (CFUP) for Thatcher Brook. The Applicant intends to pay a compensation fee to the CFUP to meet the Urban Impaired Stream Standard. The compensation fee for the project is based on Table 1 found in 06-096 CMR 501 3.A.(1). The calculated compensation fee for the project is shown in the Table below.

Type of Surface	Compensation Fee (per acre)	Proposed Area (acres)	Compensation Fee
Non-roof Impervious Area*	\$12,500	0.07	\$875
Roof	\$5,000	0.23	\$1,150
Landscape Area**	\$2,500	0	\$0
Total	\$2,025		

*Total new proposed non-roof impervious = 0.15 ac. The project also proposes 0.16 ac of existing parking and drive areas to be restored as landscaped. Applying a 50% credit to the areas proposed to be converted and subtracting from the proposed non-roof impervious yields 0.07 ac of adjusted proposed non-roof impervious.

**No wooded areas are proposed to be disturbed for construction of the project with proposed graded areas in gravel, paved or landscaped existing conditions.

SALT MANAGEMENT
& WINTER MAINTENANCE PLAN

Snow Storage and Disposal

For the small winter storms, plowed snow will be stored onsite. Care will be taken to avoid storage of plowed snow within any entrances and parking. When accumulated plowed snow exceeds the capacity of the site for storage it will be removed by a subcontractor employed by the owner. The owner and subcontractor shall discuss the selected approved disposal location at the start of the winter season. This site plan shows the primary snow storage area and will not impede the approved use.

SALT MANAGEMENT PLAN

**For: 20 Pomerleau Street – Proposed 4-Unit Commercial Building
Biddeford, Maine**

Owner/Responsible Party:

Westfield Inc.
26 Rivers Edge Drive
Kennebunk, Maine 04043
(207) 468-1778

Purpose

The following Management Plan provides a guide for monitoring and documenting winter salt storage and application as well as snow storage and disposal.

Applicability

Paved access drives, parking areas at 20 Pomerleau Street.

Responsibility

The owner of the facility will have primary responsibility for ensuring that winter maintenance activities are conducted in accordance with this plan. The owner may elect to subcontract winter maintenance responsibilities. A copy of this plan shall be provided to any subcontractors providing winter maintenance services.

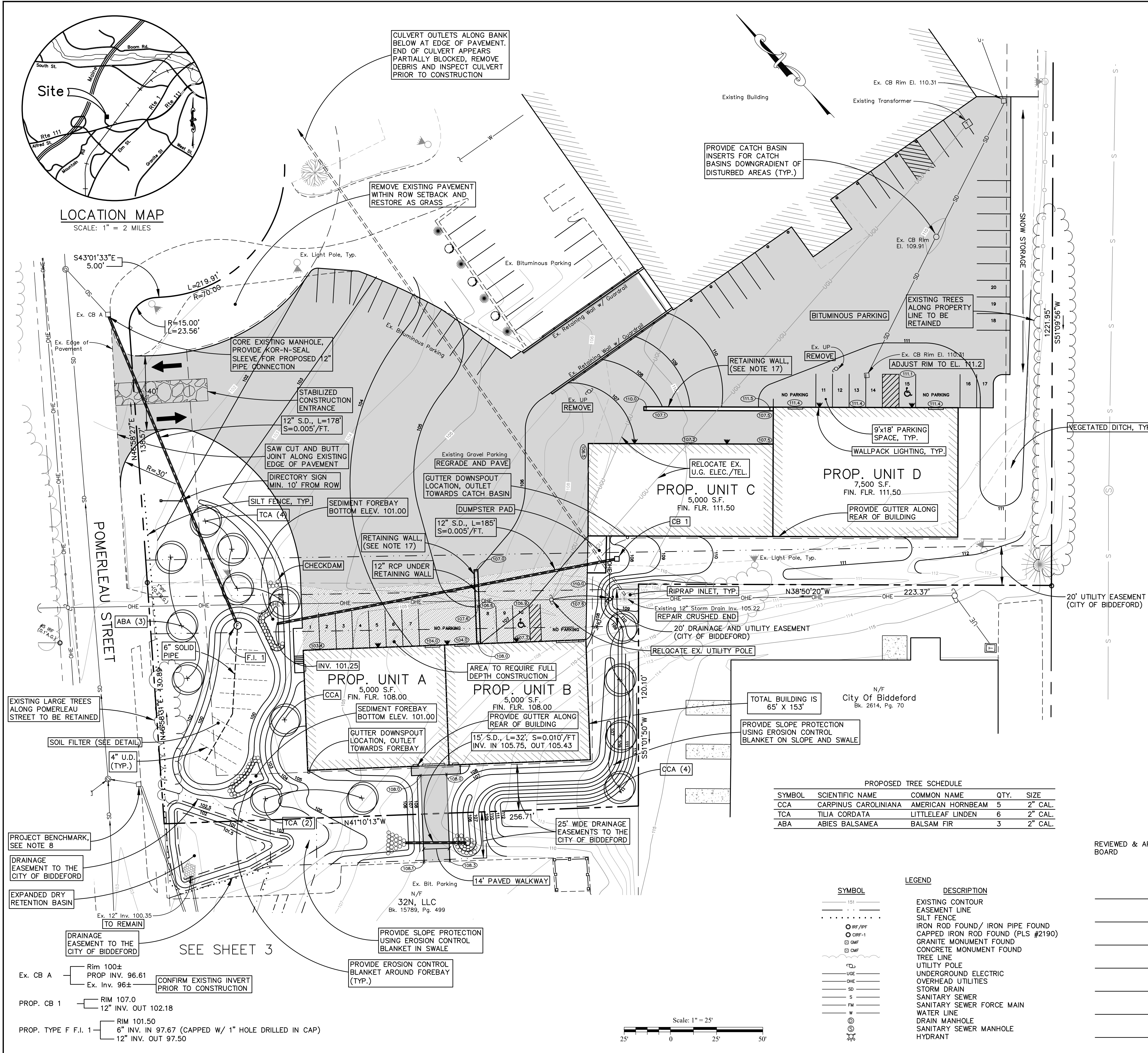
Material Storage, Handling and Application

Minimal salt will be stored onsite. Salt that is stored on site will primarily be used for sidewalk and walkway applications. Salt that is stored onsite will be contained in covered, portable and water tight structures. The structures will be periodically inspected to ensure that they are operating as intended. When the structures show signs of deterioration that limit their effectiveness they will be replaced. Any salt that is spilled during loading and unloading operations will be collected and returned to the salt containment structure.

Plowing of snow in parking areas and removal of snow from walking areas will be completed prior to applying salt. Care will be taken to remove as much snow as possible from these areas prior to application of salt materials or as safety conditions dictate. Application of salt in parking and access drives will primarily be performed mechanically by truck mounted spreaders. Hand spreading of walkway areas will be permitted.

Required Sediment Storage		
Area to be Sanded Draining to Forebay	0.2	acres
Sand Used per Storm	500	lbs/acre-storm
Weight of Sand	90	lbs/cf
# of Storms per Year	10	storms/year
Sediment Storage Required	11.67	cf/year

Proposed Forbay Volume	179 cf	OK!
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- NOTES:
- OWNER/APPLICANT: WESTFIELD INC.
26 RIVERS EDGE DRIVE
KENNEBUNK, ME 04043
 - ENGINEER: ANDREW MORRELL, PE #13285
BH2M
28 STATE STREET
GORHAM, MAINE
 - SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
 - DEED REFERENCES: BK. 9128 PG. 220
BK. 16102, PG. 230
 - TAX MAP REFERENCES: MAP 2, LOT 81
MAP 2, LOT 81-5
 - ZONING: I-3, INDUSTRIAL 3
 - MINIMUM STANDARDS: LOT SIZE - NONE
FRONTAGE - 50'
SETBACKS - 30' FRONT, 25' SIDE/REAR
MAX. LOT COVERAGE - 75%
 - BENCHMARK: EXISTING C.B. RIM IN POMERLEAU STREET
RIM ELEVATION 102.42
 - PROPOSED USE: 4 UNIT WAREHOUSE FACILITY
 - SEWER SERVICE: PUBLIC
 - WATER SERVICE: PUBLIC
 - ELECTRIC/TELEPHONE: OVERHEAD FROM EXISTING UTILITY POLE
 - PARKING: REQUIRED (WAREHOUSE & STORAGE):
- 1 SPACE/2,000 SF + 1 PER EMPLOYEE
- 22,500 SF/2,000 = 11.25 SPACES
- ESTIMATED 8 EMPLOYEES = 8 SPACES
- TOTAL = 19.25 SPACES
PROVIDED: 20 SPACES
 - SIGNS: MAX HEIGHT: 20'
MAX. SIZE: 72 SF OR 30 SF PER BUSINESS
 - PLAN REFERENCES:
 - AMENDED PLAN, THE DIVISION OF LOT 7A, ALFRED ROAD INDUSTRIAL PARK, POMERLEAU STREET, BIDDEFORD, MAINE, JOB # 11003, DATED JANUARY 2011, BY BH2M.
 - AMENDED PLAN OF THE DIVISION OF LOT 7, LAND OF THE CITY OF BIDDEFORD, ALFRED ROAD INDUSTRIAL PARK, POMERLEAU STREET, BIDDEFORD, MAINE, DATED 8-23-02 BY THE CITY OF BIDDEFORD ENGINEERING DEPARTMENT AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 275, PAGE 27.
 - ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH MAINE EROSION AND SEDIMENTATION CONTROL, BMP'S LATEST REVISION.
 - RETAINING WALLS TO BE DESIGNED BY STRUCTURAL ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE AND LOCATING ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. EXISTING UTILITY/LIGHT POLES SHALL BE REMOVED OR RELOCATED AT THE DIRECTION OF THE PROJECT OWNER.
 - ALL DISTURBED AREAS THAT ARE NOT PROPOSED TO BE PAVED SHALL BE LOAMED AND SEED.
 - EXISTING PROPERTY LINE BETWEEN LARGER NORTHERN PARCEL AND SMALLER SOUTHERN PARCEL TO BE DISSOLVED CREATING ONE LARGER PARCEL.
 - WATER SERVICES TO BE SIZED BASED ON PROPOSED USE AND IF SPRINKLERS ARE REQUIRED.
 - SALT MANAGEMENT AND WINTER MAINTENANCE PLAN NARRATIVE HAVE BEEN SUBMITTED TO THE PLANNING DEPARTMENT.
 - LOT COVERAGE
TOTAL IMPERVIOUS AREAS = 9.0 ACRES
TOTAL LOT AREA = 16.5 ACRES
TOTAL PROPOSED LOT COVERAGE = 54.5% OK

PROPOSED TREE SCHEDULE

SYMBOL	SCIENTIFIC NAME	COMMON NAME	QTY.	SIZE
CCA	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	5	2" CAL.
TCA	TILIA CORDATA	LITTLELEAF LINDEN	6	2" CAL.
ABA	ABIES BALSAMEA	BALSAM FIR	3	2" CAL.

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR
---	EASEMENT LINE
---	SILT FENCE
○ R/F / P/F	IRON ROD FOUND/ IRON PIPE FOUND
○ CRF-1	CAPPED IRON ROD FOUND (PLS #2190)
□ SMF	GRANITE MONUMENT FOUND
□ CMF	CONCRETE MONUMENT FOUND
---	TREE LINE
---	UTILITY POLE
---	UNDERGROUND ELECTRIC
---	OVERHEAD UTILITIES
---	STORM DRAIN
---	SANITARY SEWER
---	SANITARY SEWER FORCE MAIN
---	WATER LINE
---	DRAIN MANHOLE
---	SANITARY SEWER MANHOLE
---	HYDRANT

REVIEWED & APPROVED BIDDEFORD PLANNING BOARD

DATE

I CERTIFY THAT THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS TECHNICAL STANDARDS OF PRACTICE FOR A STANDARD BOUNDARY SURVEY WITH THE FOLLOWING EXCEPTIONS:

1. NO SURVEYORS REPORT

ROBERT C. LIBBY JR. PLS #2190

REVISION

NO.	DATE	DESCRIPTION
1	8/17/20	Submitted to City for Review
2	8/27/20	Rev'd. Ex. Utility Locations
3	11/19/20	Building Modifications
4	12/16/20	Submitted for Final Approval
5	01/29/21	Response to review comments
6	02/09/21	Landscaping details provided
7	03/24/21	Response to review comments
8	03/30/21	Reduced curb cut to 40'

STATE OF MAINE
ANDREW S. MORRELL
No. 13285
Professional Engineer
Civil Engineering

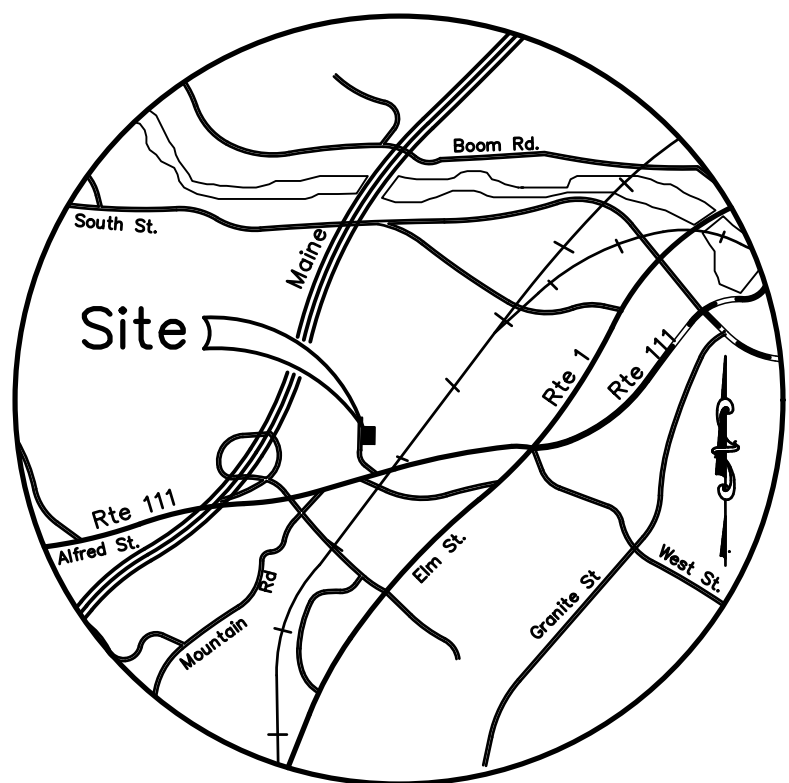
BH2M
Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors
380B Main Street
Gorham, Maine 04038
Tel. (207) 839-2771
www.bh2m.com

SITE PLAN
4-UNIT WAREHOUSE FACILITY
POMERLEAU STREET
BIDDEFORD, MAINE

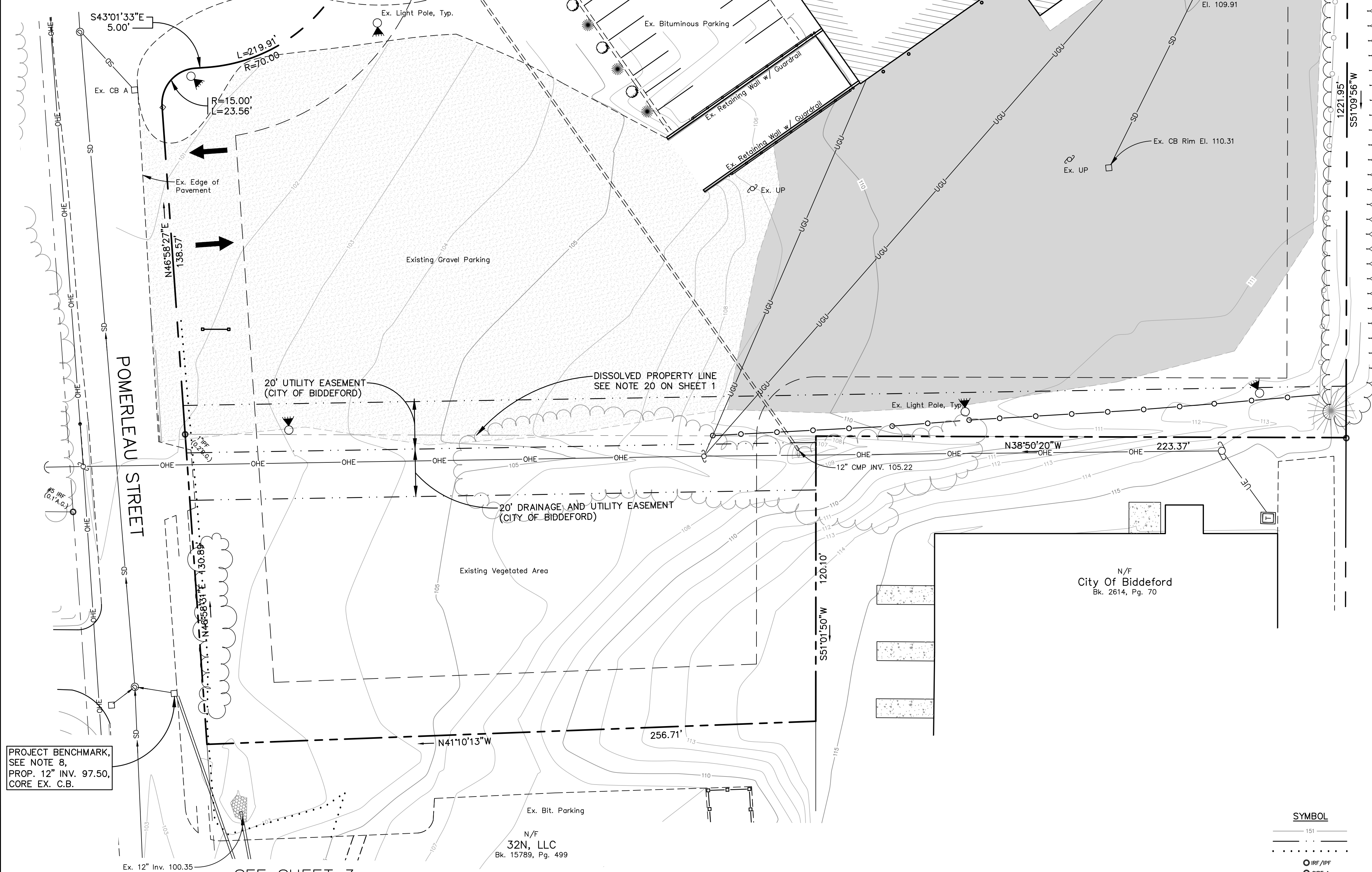
DESIGNED W. Pelkey
DATE Dec. 2019
DRAWN Dept.
SCALE 1" = 25'
CHECKED A. Morrell
JOB. NO. 19203

SHEET
1

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.



LOCATION MAP
SCALE: 1" = 2 MILES



SYMBOL	DESCRIPTION
---	EXISTING CONTOUR
---	EASEMENT LINE
---	SILT FENCE
---	IRON ROD FOUND/ IRON PIPE FOUND
---	CAPPED IRON ROD FOUND (PLS #2190)
---	GRANITE MONUMENT FOUND
---	CONCRETE MONUMENT FOUND
---	TREE LINE
---	UTILITY POLE
---	UNDERGROUND ELECTRIC
---	OVERHEAD UTILITIES
---	STORM DRAIN
---	SANITARY SEWER
---	SANITARY SEWER FORCE MAIN
---	WATER LINE
---	DRAIN MANHOLE
---	SANITARY SEWER MANHOLE
---	HYDRANT

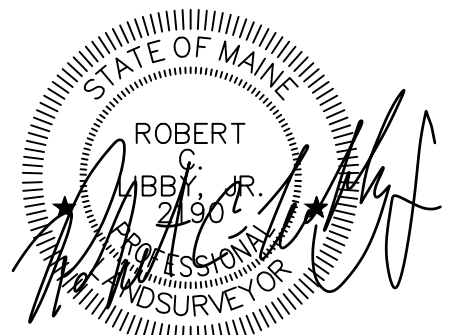
NOTES:

- OWNER/APPLICANT: WESTFIELD INC.
26 RIVERS EDGE DRIVE
KENNEBUNK, ME 04043
- ENGINEER: ANDREW MORRELL, PE #13285
BH2M
380B MAIN STREET
GORHAM, MAINE
- SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
- DEED REFERENCES: BK. 9128 PG. 22
BK. 16102, PG. 230
- TAX MAP REFERENCES: MAP 2, LOT 81
MAP 2, LOT 81-5
- ZONING: I-3, INDUSTRIAL 3
- MINIMUM STANDARDS: LOT SIZE - NONE
FRONTAGE - 50'
SETBACKS - 30' FRONT, 25' SIDE/REAR
MAX. LOT COVERAGE - 75%
- BENCHMARK: EXISTING C.B. RIM IN POMERLEAU STREET
RIM ELEVATION 102.42
- PROPOSED USE: 4 UNIT WAREHOUSE FACILITY
- SEWER SERVICE: PUBLIC
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- ESTIMATED 8 EMPLOYEES = 8 SPACES
- TOTAL = 19.25 SPACES
PROVIDED: 20 SPACES
- SIGNS: MAX HEIGHT: 20'
MAX. SIZE: 72 SF OR 30 SF PER BUSINESS
- PLAN REFERENCES:

- A. AMENDED PLAN, THE DIVISION OF LOT 7A, ALFRED ROAD INDUSTRIAL PARK, POMERLEAU STREET, BIDDEFORD, MAINE, JOB # 11003, DATED JANUARY 2011, BY BH2M.
- B. AMENDED PLAN OF THE DIVISION OF LOT 7, LAND OF THE CITY OF BIDDEFORD, ALFRED ROAD INDUSTRIAL PARK, POMERLEAU STREET, BIDDEFORD, MAINE, DATED 8-23-02 BY THE CITY OF BIDDEFORD ENGINEERING DEPARTMENT AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 275, PAGE 27.

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1. NO SURVEYORS REPORT



ROBERT C. LIBBY JR. PLS #2190

NO.	DATE	REVISION	DESCRIPTION
1	01/29/21		Response to review comments
2	03/24/21		Response to review comments



BH2M

Barry, Huff, McDonald, Milfigan Inc.
Engineers, Surveyors

380B Main Street
Gorham, Maine 04038

Tel. (207) 839-2771
www.bh2m.com

FOR
Westfield Inc.
26 Rivers Edge Drive
Kennebunk, ME

EXISTING CONDITIONS

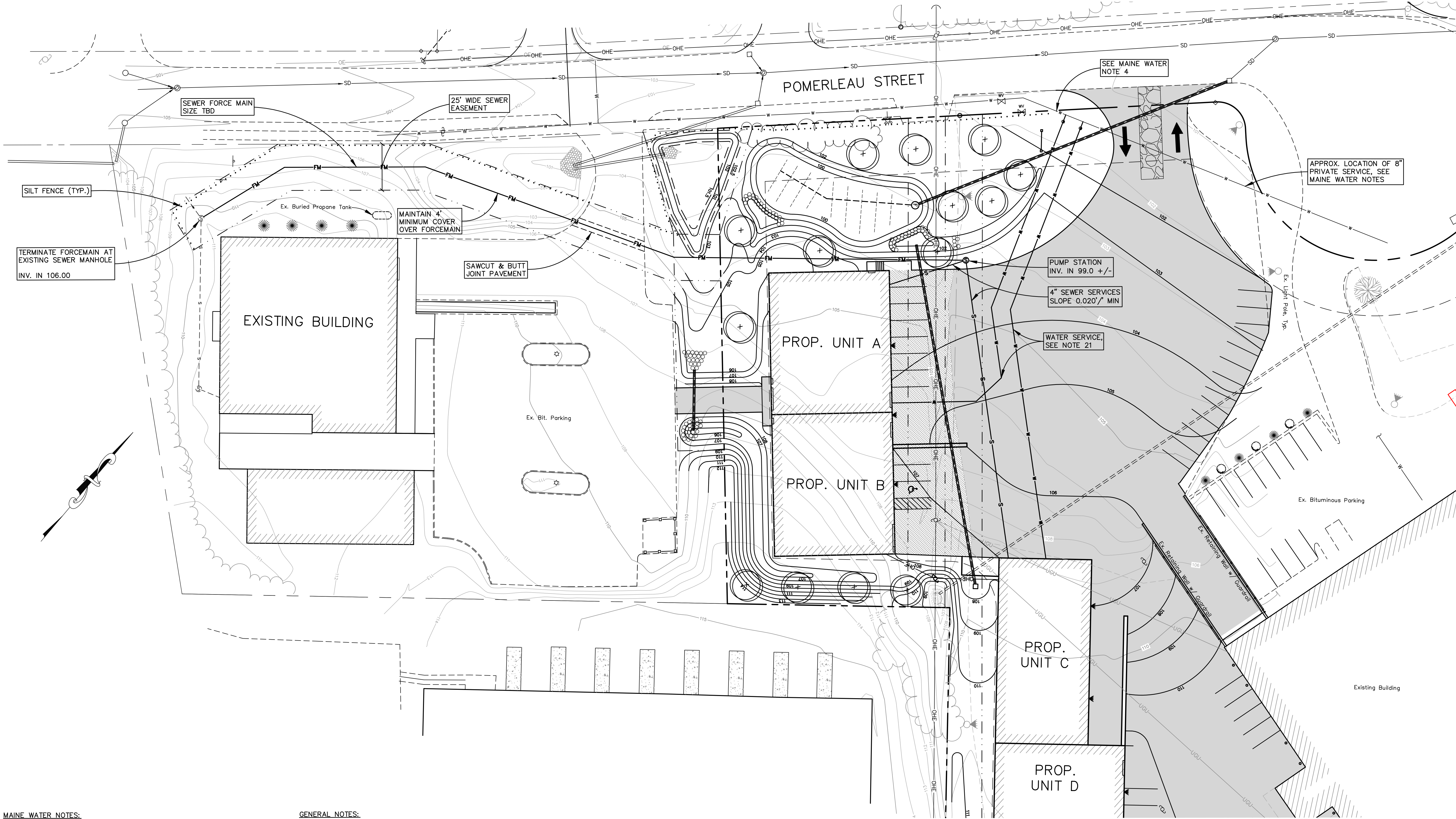
4-UNIT WAREHOUSE FACILITY

POMERLEAU STREET
BIDDEFORD, MAINE

DESIGNED W. Pelkey	DATE January 2021
DRAWN Dept.	SCALE 1" = 25'
CHECKED A. Morrell	JOB. NO. 19203

SHEET 2

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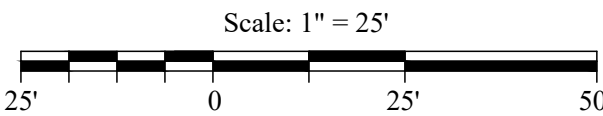


MAINE WATER NOTES:

1. THE LOCATION OF THE EXISTING PRIVATE 8" SERVICE MAIN IS APPROXIMATE AND THE SERVICE MATERIAL IS UNKNOWN. UTILITY LOCATE SERVICES CAN BE SCHEDULED WITH MAINE WATER COMPANY SERVICE DEPARTMENT. PRIVATE UTILITY LOCATE SERVICES MAY BE REQUIRED.
2. DUE TO THE EXISTING PRIVATE SERVICE MAIN THAT SERVICES THIS PARCEL NEW SERVICES FOR NEW BUILDINGS ON THIS SAME PARCEL SHOULD BE TAPPED FROM THE PRIVATE SIDE OF THE SERVICE MAIN BEYOND THE RIGHT-OF-WAY. OWNERSHIP AND MAINTENANCE OF SERVICES AND MAIN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
3. MWC STILL REQUIRES ALL SPECIFICATIONS TO BE FOLLOWED WITH PRIVATE MAINS AND SERVICES. PROPER PERMITS PROVIDED THROUGH MWC REVIEW AND AGREEMENT/CONTRACTS MUST BE OBTAINED BEFORE ANY WORK ON WATERWORKS MATERIALS.
4. THE 8" SERVICE MAIN TRANSITIONS FROM A PUBLIC SERVICE TO A PRIVATE SERVICE WHERE THE 8" MAIN EXITS THE PUBLIC RIGHT-OF-WAY. THE PRIVATE SERVICE MAIN SERVES PARCEL 20-26 POMERLEAU STREET. SEE PLAN FOR APPROXIMATE LOCATION OF TRANSITION.

GENERAL NOTES:

1. CONTRACTOR SHALL CONTACT DIG SAFE TO FLAG UTILITIES PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE AND LOCATING ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. EXISTING UTILITY/LIGHT POLES SHALL BE REMOVED OR RELOCATED AT THE DIRECTION OF THE PROJECT OWNER.
3. WATER SERVICES TO BE SIZED BASED ON PROPOSED USE AND IF SPRINKLERS ARE REQUIRED.



SYMBOL	LEGEND	DESCRIPTION
---	151	EXISTING CONTOUR
-.-.-		EASEMENT LINE
.....		SILT FENCE
○		IRON ROD FOUND/ IRON PIPE FOUND
●		GRANITE MONUMENT FOUND
~		TREE LINE
U		UTILITY POLE
UOE		UNDERGROUND ELECTRIC
OHE		OVERHEAD UTILITIES
SD		STORM DRAIN
S		SANITARY SEWER
FM		SANITARY SEWER FORCE MAIN
W		WATER LINE
⊕		DRAIN MANHOLE
⊙		SANITARY SEWER STRUCTURE
⊗		HYDRANT

NO.	DATE	REVISION	DESCRIPTION
1	12/16/20		Submitted for Final Approval
2	01/29/21		Response to review comments
3	03/24/21		Response to review comments
4	03/30/21		Reduced curb cut to 40'



BH2M
Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors
380B Main Street
Gorham, Maine 04038
Tel. (207) 839-2771
www.bh2m.com

FOR
Westfield Inc.
26 Rivers Edge Drive
Kennebunk, ME

SITE UTILITIES
4-UNIT WAREHOUSE FACILITY
POMERLEAU STREET
BIDDEFORD, MAINE

DESIGNED W. Pelkey	DATE Dec. 2020
DRAWN Dept.	SCALE 1" = 25'
CHECKED A. Morrell	JOB. NO. 19203

SHEET
3

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GRASSED UNDERDRAIN SOIL FILTER NOTES

REFERENCES

1. MAINE STORMWATER BEST MANAGEMENT PRACTICES (BMP), VOLUME III BMP TECHNICAL DESIGN MANUAL, CHAPTER 7 FILTRATION BMP'S (LATEST REVISION).

CONSTRUCTION METHODS

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION MATERIALS, INSTALLATION, MEANS, METHODS, AND SCHEDULING.
2. ALL WORK SHALL BE IN CONFORMANCE WITH THE PROJECT PLANS AND BMP'S REFERENCED ABOVE.
3. THE SOIL FILTER MEDIA AND VEGETATION SHALL NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURES, 90% VEGETATION COVER OR PERMANENT STABILIZATION.

DE-WATERING PLAN

1. DURING CONSTRUCTION OF THE SITE AND VEGETATED SOIL FILTER, THE CONTRACTOR SHALL BE PREPARED TO IMPLEMENT A DEWATERING PLAN IN ANTICIPATION OF HEAVY RAIN EVENTS.
2. THE AREA OF THE BASIN MAY BE EXCAVATED IN PREPARATION OF THE INSTALLATION OF THE UNDERDRAIN AND MAY BE USED FOR A SEDIMENT TRAP FOR THE SITE DURING CONSTRUCTION. AFTER EXCAVATION OF THE BASIN, THE OUTLET STRUCTURE AND PIPING SYSTEM SHALL BE INSTALLED AT THE APPROPRIATE ELEVATION AND PROTECTED WITH A SEDIMENT BARRIER. THE BASIN IS TO BE USED AS A SEDIMENT TRAP. THE SIDES OF THE EMBANKMENTS MUST BE MULCHED AND MAINTAINED TO PREVENT EROSION.

SOIL MEDIA

1. THE SOIL MEDIA SHALL CONSIST OF SILTY SANDY SOIL OR SOIL MIXTURE COMBINED WITH 20% TO 25% BY VOLUME (NO LESS THAN 10% BY DRY WEIGHT) OF MODERATELY SHREDDED BARK OR WOOD FIBER MULCH.
2. THE SOIL FILTER MEDIA SAND SHALL MEET THE GRADATION IN TABLE 7-2 (MDOOT 703.01) WITH ADDITIONAL FINES ADDED IF NECESSARY.
3. THE RESULTING SOIL FILTER MEDIA SHALL HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE AND SHALL HAVE A CLAY CONTENT OF LESS THAN 2%.
4. THE COARSE GRAVEL MATERIAL SHALL MEET THE GRADATION OF TABLE 7.1 (MDOOT 703.22 UNDERDRAIN, TYPE B).
5. THE FILTER MEDIA SHALL BE LIGHTLY COMPACTED BY SATURATING THE MEDIA IN 6" TO 9" LIFTS AND SHALL HAVE A PERMEABILITY OF 2.4 IN/HR TO 4 IN/HR TO 4 IN/HR.
6. THE CLAY CONTENT SHALL BE < 2%.
- CONSTRUCTION
1. SOIL FILTER MEDIA, COARSE GRAVEL, AND UNDERDRAIN BEDDING MATERIAL SHALL BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR.
2. PERFORATED UNDERDRAIN PIPE SHALL BE 4" AND 6" SCHEDULE 40 OR SDR 35 PVC PIPE. SPACED 8 FEET AND 4 FEET ON CENTER AS SHOWN ON PLANS.
3. TRIBUTARY AREAS SHALL BE STABILIZED PRIOR TO INSTALLATION OF THE SOIL FILTER MEDIA MIXTURE AND UNDERDRAIN. STABILIZED IS DEFINED AS PAVED IF IN A PARKING AREA OR ROADWAY AND 50% GRASS CATCH IF IN A VEGETATED AREA.
4. OUTFLOW OF THE VEGETATED SOIL FILTER SHALL BE CONTROLLED BY A 2" PLASTIC TYPE 34-6 BALL VALVE WITH TYPE B15 BALL VALVE HANDLE EXTENSION (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT). A THREE-PIECE VALVE BOX (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT) SHALL BE INSTALLED OVER THE VALVE.
5. ALL EQUIPMENT USED WITHIN THE LIMITS OF THE VEGETATED SOIL FILTER SHALL BE LOW GROUND PRESSURE VEHICLES (LESS THAN 2.0 PSI) WHEN FULLY LOADED.
6. IF VEGETATION IS NOT ESTABLISHED WITHIN THE FIRST YEAR, THE CONTRACTOR SHALL INSTALL A 2-3 INCH LAYER OF LOAM (WITH LESS THAN 2% CLAY AS TESTED VIA HYDROMETER TEST) ON THE SURFACE OF THE GRASS FILTER AND RE-SEED/MULCH.
7. THE SURFACE OF THE VEGETATED SOIL FILTER SHALL BE PLANTED WITH A GRASS SPECIES THAT IS TOLERANT OF FREQUENT INUNDATION AND WELL-DRAINING. UPON SEEDING, THE SURFACES SHALL BE MULCHED WITH HAY OR AN EROSION CONTROL BLANKET BUT SHALL NOT BE FERTILIZED. AN APPROPRIATE SEED MIXTURE SHOULD CONTAIN THE FOLLOWING OR BE AN EQUIVALENT CONSERVATION TYPE MIX:

CREeping RED FESCUE	20 LBS/ACRE
TAI FESCUE	20 LBS/ACRE
BIRDFOOT TREFOIL	8 LBS/ACRE
TOTAL	48 LBS/ACRE

TESTING AND SUBMITTALS

1. THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL TESTING RESULTS SHALL BE SUBMITTED TO THE PROJECT ENGINEER.
2. SUBMIT SAMPLES 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 WILL BE DETERMINED BY TESTING LABORATORY.
3. THE CONTRACTOR SHALL PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHODS FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES, 1996A) ON EACH TYPE OF SAMPLE MATERIAL INCLUDING A HYDROMETER TEST FOR CLAY CONTENT.
4. THE CONTRACTOR SHALL PERFORM A PERMEABILITY TEST ON THE SOIL MEDIA MIXTURE CONFORMING TO ASTM D2434.
5. THE CONTRACTOR SHALL PERFORM ONE COMPACTION DENSITY TEST ON THE IN-PLACE SOIL FILTER MEDIA FOR EVERY 1,000 SF. OF BED OR FRACTION THEREOF. THE TEST SHALL CONFORM TO ASTM D922.
6. UPON COMPLETION OF THE VEGETATED SOIL FILTER MEDIA AND THE ESTABLISHMENT OF 90% CATCH OF GRASS OVER THE FILTER MEDIA, THE CONTRACTOR SHALL FLOOD THE VEGETATED BASIN TO THE SPILLWAY WITH CLEAR WATER AND ADJUST THE OUTFLOW TO OBTAIN A 24-HOUR TO 32-HOUR RELEASE TIME.

CONSTRUCTION OVERSIGHT

1. THE CONTRACTOR SHALL MEET THE "CONSTRUCTION OVERSIGHT" SECTION OF CHAPTER 7, FILTRATION BMP'S (REVISED MAY 2010) OF THE STORMWATER MANAGEMENT FOR MAINE, VOLUME III, BMP'S TECHNICAL DESIGN MANUAL.
2. THE DESIGN ENGINEER SHALL BE CONDUCTING PERIODIC SITE OVERSIGHT OF THE CONSTRUCTION AS DESCRIBED BELOW AND IN COMPLIANCE WITH THE PERMITS.
3. THE ENGINEER SHALL REVIEW AND APPROVE ALL CONTRACTOR SUBMITTALS.
4. THE CONTRACTOR SHALL GIVE THE ENGINEER A PROPOSED CONSTRUCTION SCHEDULE AND A 48-HOUR NOTICE FOR ALL SITE VISITS.
5. INSPECTIONS SHALL INCLUDE:

- PRE-CONSTRUCTION MEETING WITH CONTRACTOR
- INSPECTION OF EXCAVATION IF USED FOR SEDIMENT TRAP
- INSPECTION OF EXCAVATED HOLE
- AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND
- ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACK-FILLED
- AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO
- INSTALLATION OF THE FILTER MEDIA
- AFTER FILTER MEDIA HAS BEEN INSTALLED AND SEEDING
- AFTER ONE YEAR TO INSPECT VEGETATION UPTAKE AND OBSERVE
- FLOODING TEST

TABLE 7-1 UNDERDRAIN SPECS. MDOOT #703.22		TABLE 7-2 AGGREGATE SPECS. MDOOT #703.01		TABLE 7-4 COARSE LOAMY SAND SIEVE ANALYSIS SPECIFICATION	
SIEVE SIZE	% BY WEIGHT	SIEVE SIZE	% BY WEIGHT	SIEVE #	% PASSING BY WEIGHT
UNDERDRAIN TYPE B		UNDERDRAIN TYPE B		UNDERDRAIN TYPE B	
1"	100	3/8"	100	20	85-100
3/4"	85-100	3/4"	85-100	40	70-100
1/2"	75-100	1/2"	75-100	60	15-40
3/8"	15-40	3/8"	15-40	100	5-15
20	5-15	20	5-15	200	0-5
40	0-5	40	0-5		
60	0-5	60	0-5		
100	0-5	100	0-5		
200	0-5	200	0-5		

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1/2"	75-100	1/2"	75-100	60	15-40
3/8"	15-40	3/8"	15-40	100	5-15
20	5-15	20	5-15	200	0-5
40	0-5	40	0-5		
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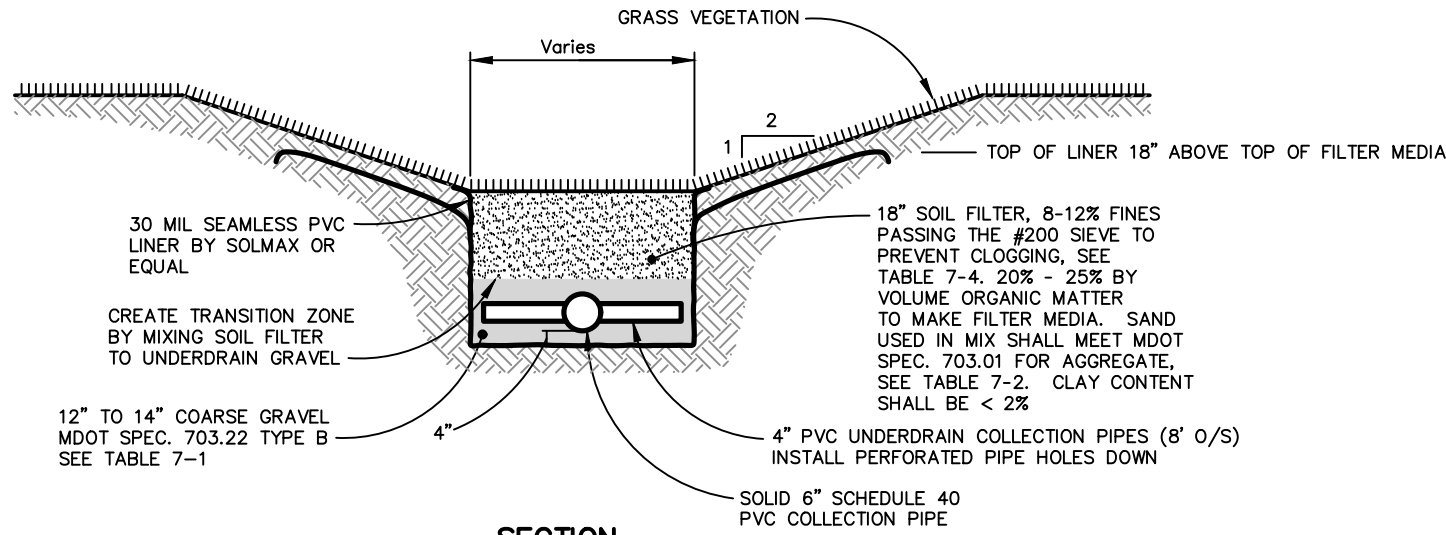
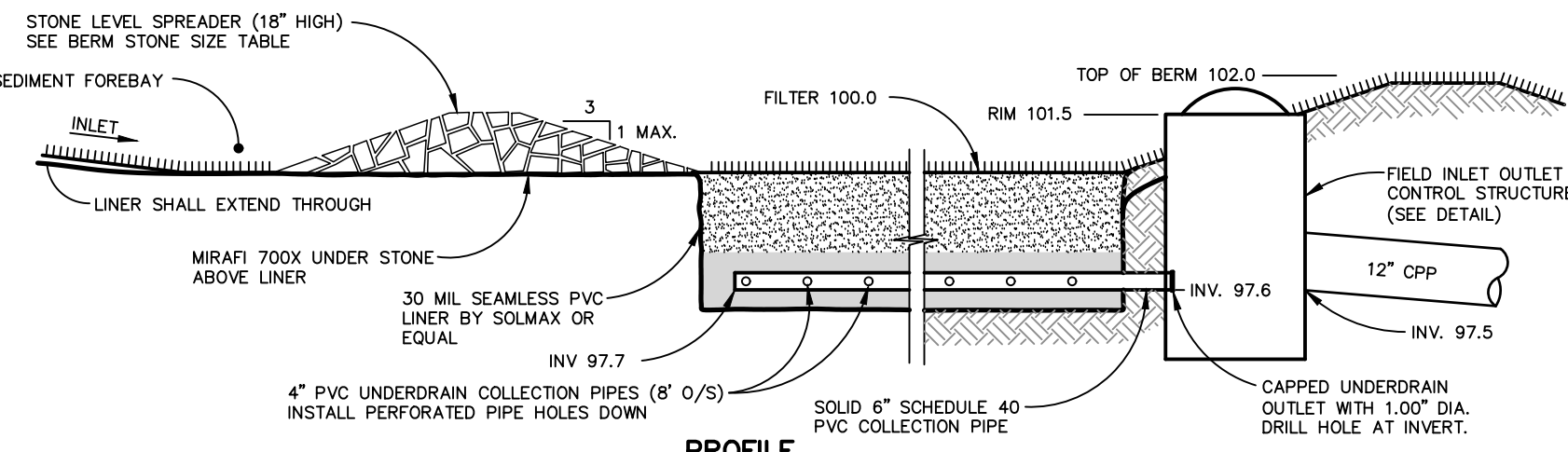
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20	5-15	20	5-15	200	0-5
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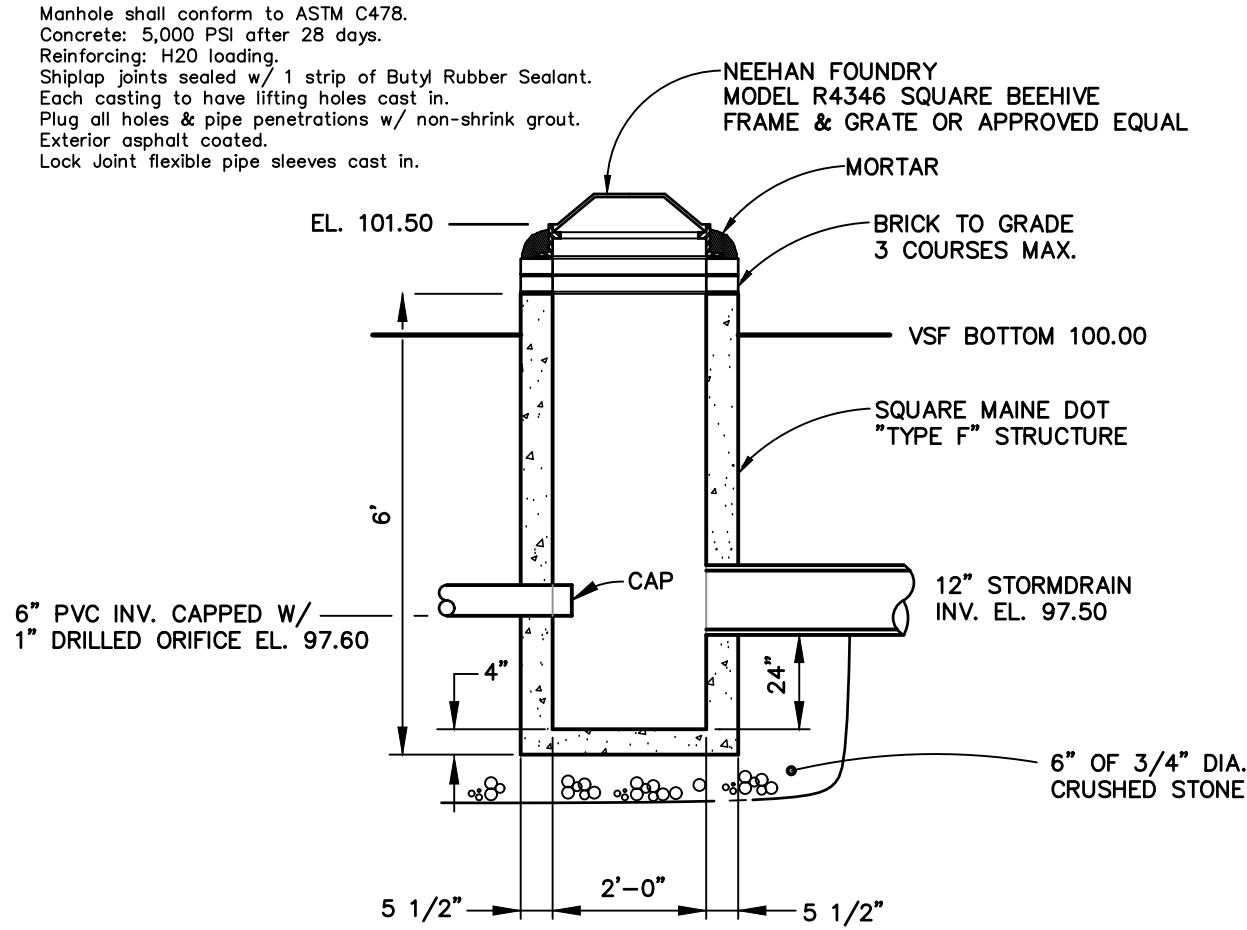
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3/8"	15-40	3/8"	15-40	100	5-15
20	5-15	20	5-15	200	0-5
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60	0-5	60	0-5		
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200	0-5	200	0-5		

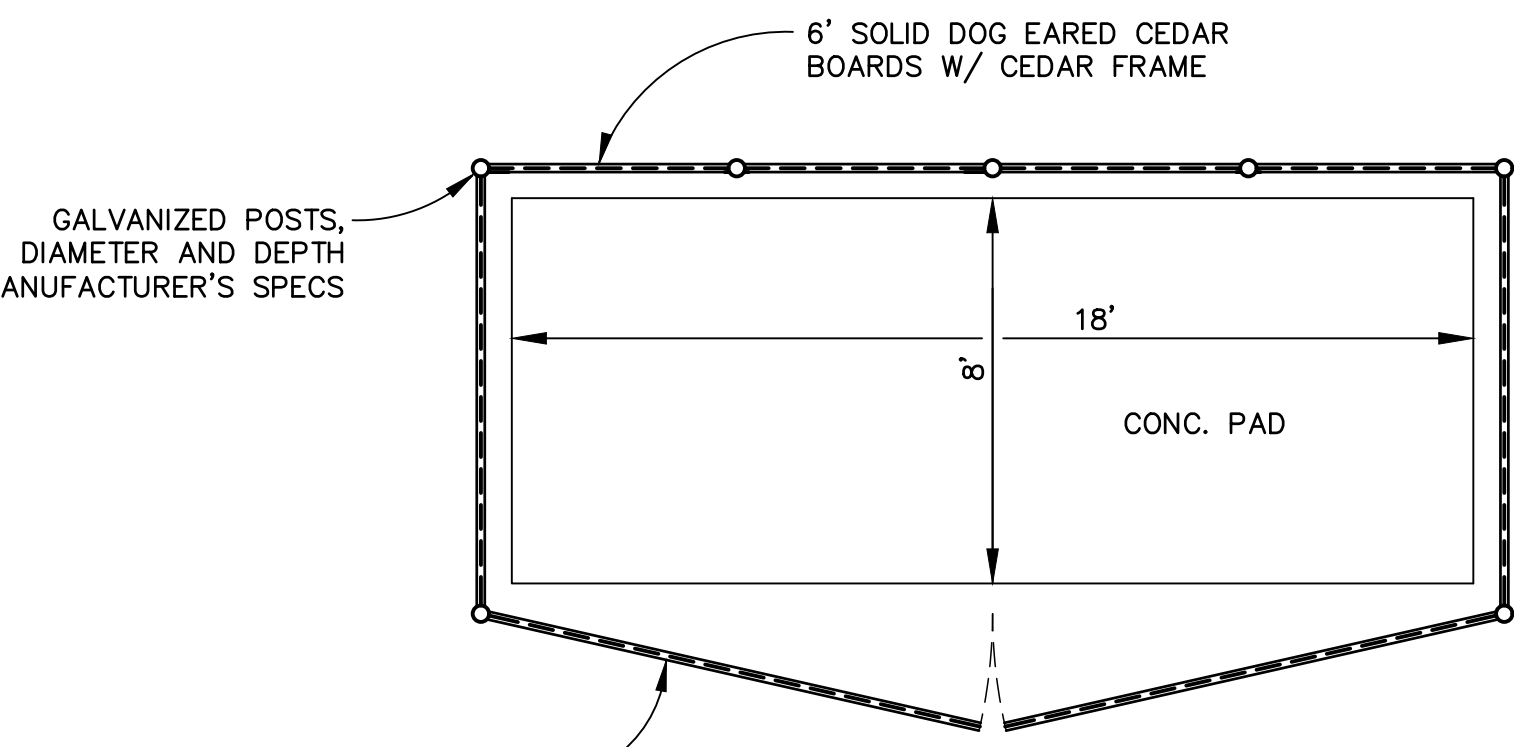
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1/2"	75-100	1/2"	75-100	60	15-40
3/8"	15-40	3/8"	15-40	100	5-15
20	5-15	20	5-15	200	0-5
40	0-5	40	0-5		
60	0-5	60	0-5		
100	0-5	100	0-5		
200	0-5	200	0-5		



GRASSED UNDERDRAIN
SOIL FILTER DETAIL
N.T.S.

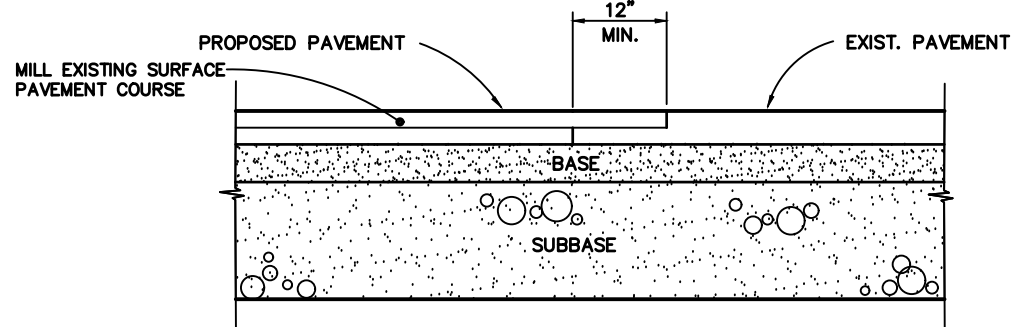


PRECAST CONCRETE
FIELD INLET/OUTLET
CONTROL STRUCTURE
N.T.S.

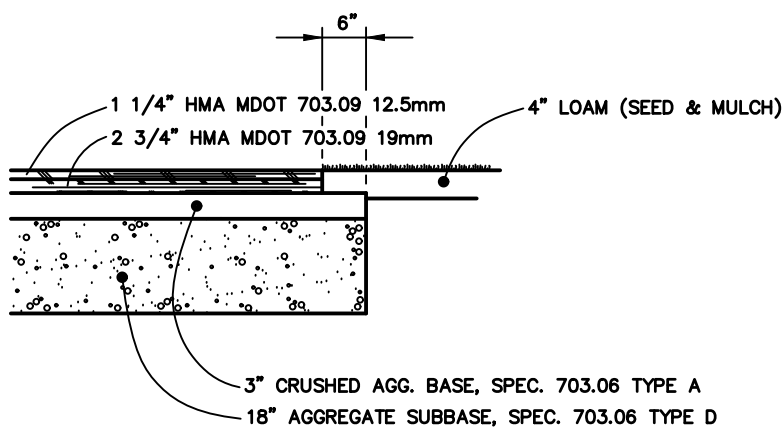


NOTE: PROPOSED FOR USE WITH 2 DUMPSTERS

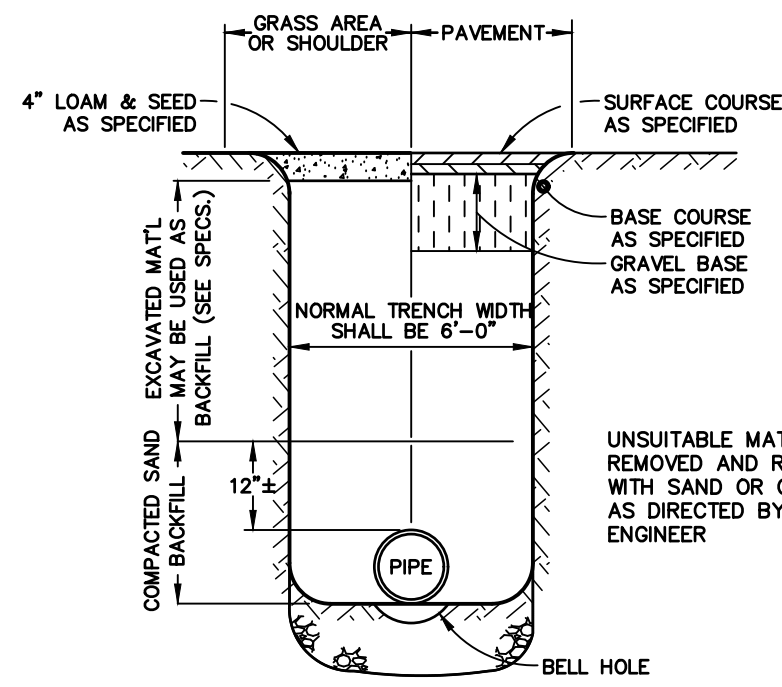
DUMPSTER ENCLOSURE
N.T.S.



PAVEMENT JOINT DETAIL
N.T.S.



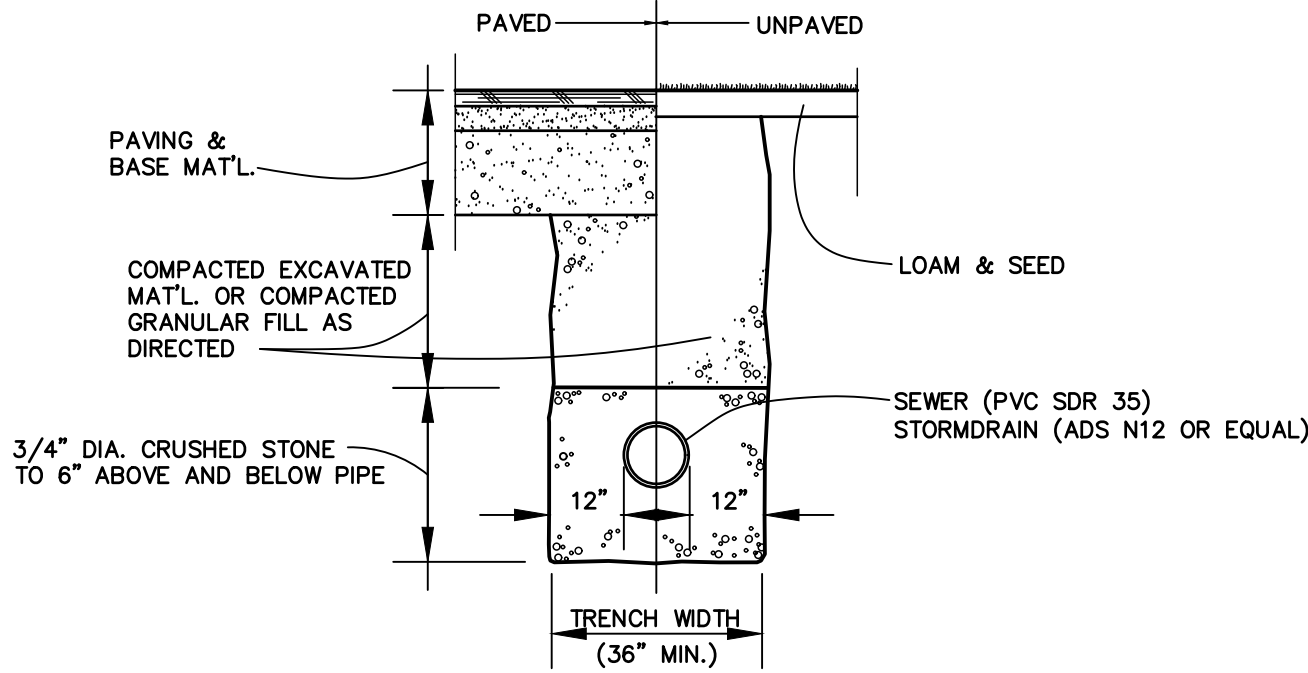
TYP. PAVEMENT DETAIL
N.T.S.



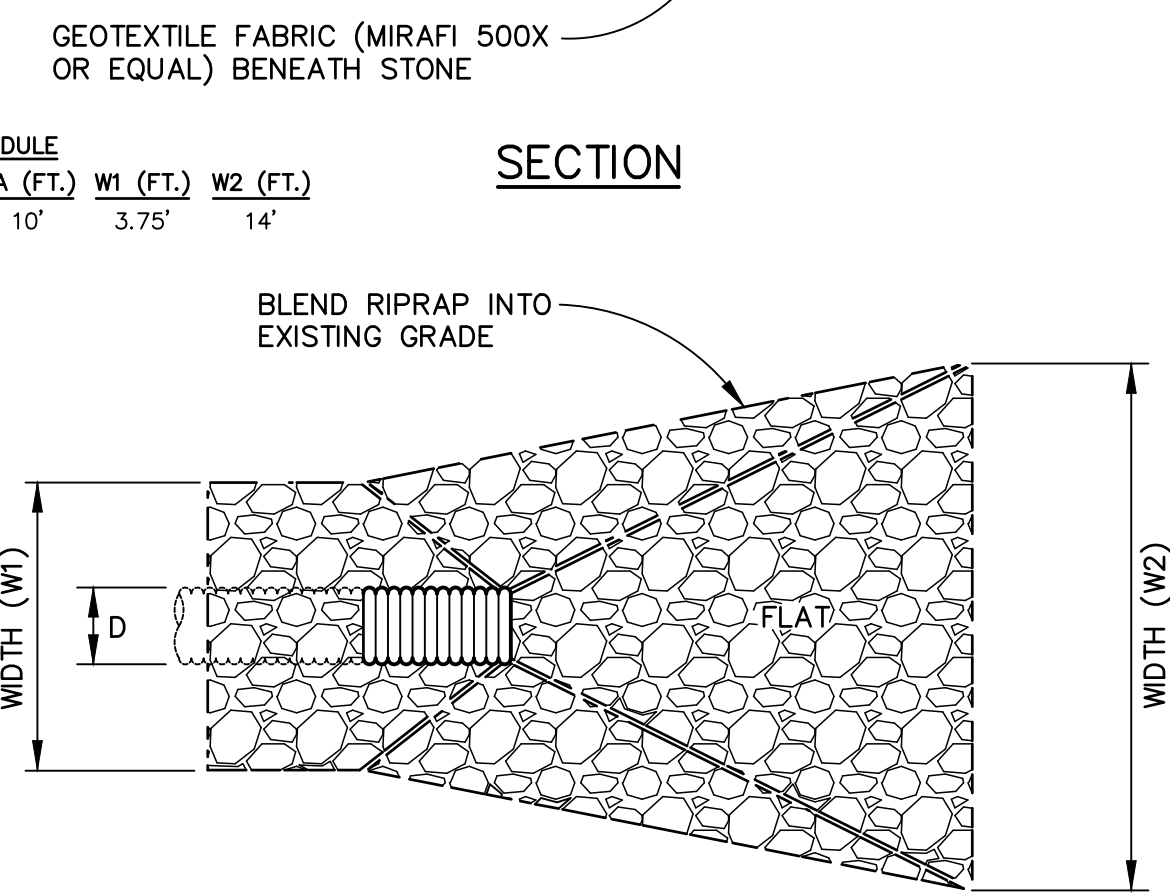
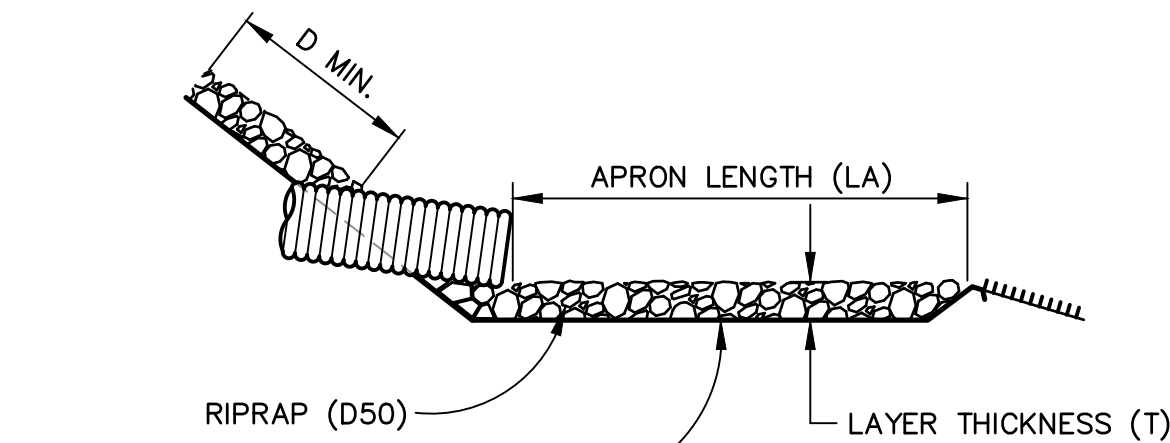
WATER THROUGH
EARTH TRENCH
N.T.S.

NOTES:

1. Trench width shown is payment width for rockexcavation & replacement of unsuitable material.
2. Do not mechanically compact directly over flexible pipe (e.g. PVC, Polyethylene)
3. Concrete pipe shall have sand bedding.

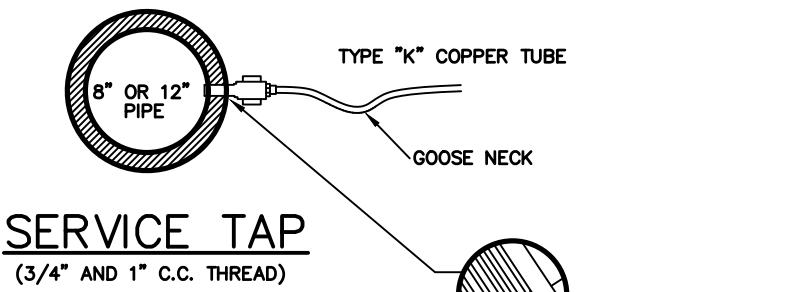


TRENCH DETAIL
N.T.S.

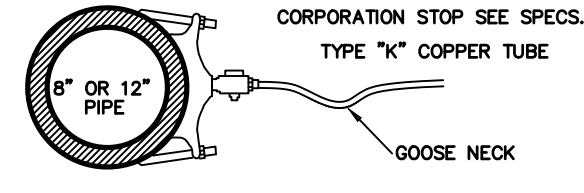


PLAN

PIPE OUTLET PROTECTION
N.T.S.

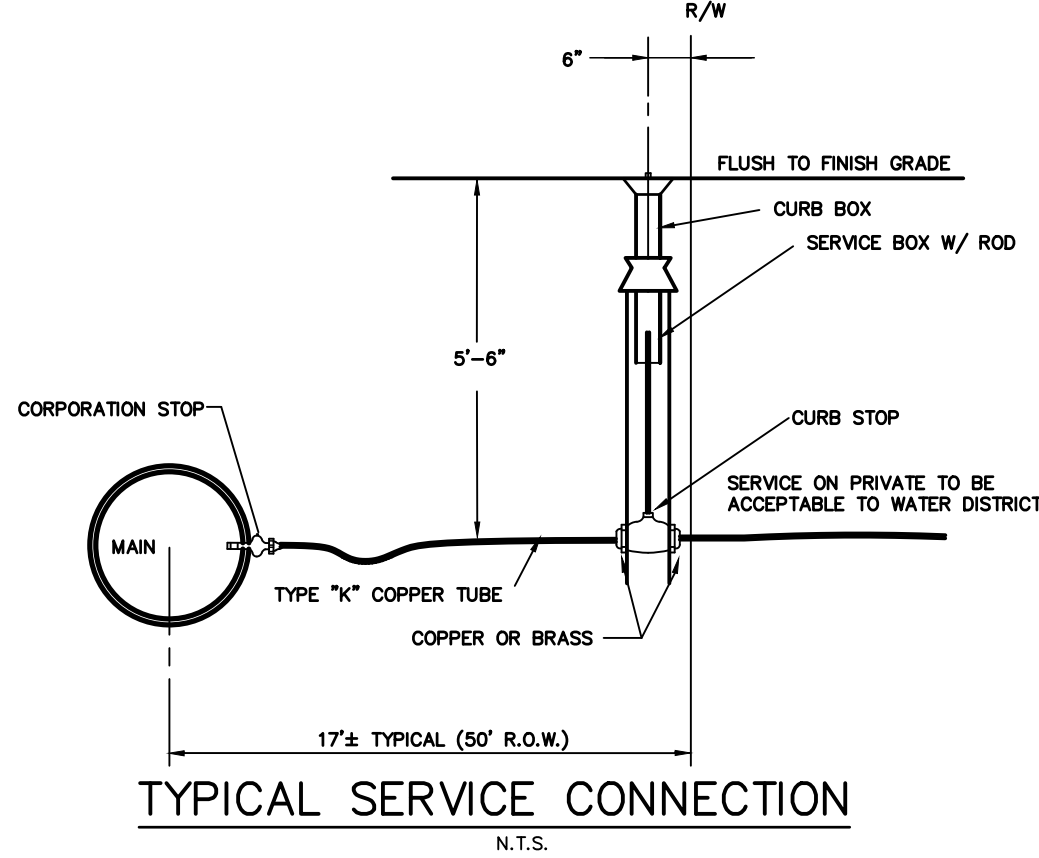


SERVICE TAP
(3/4" AND 1" C.C. THREAD)



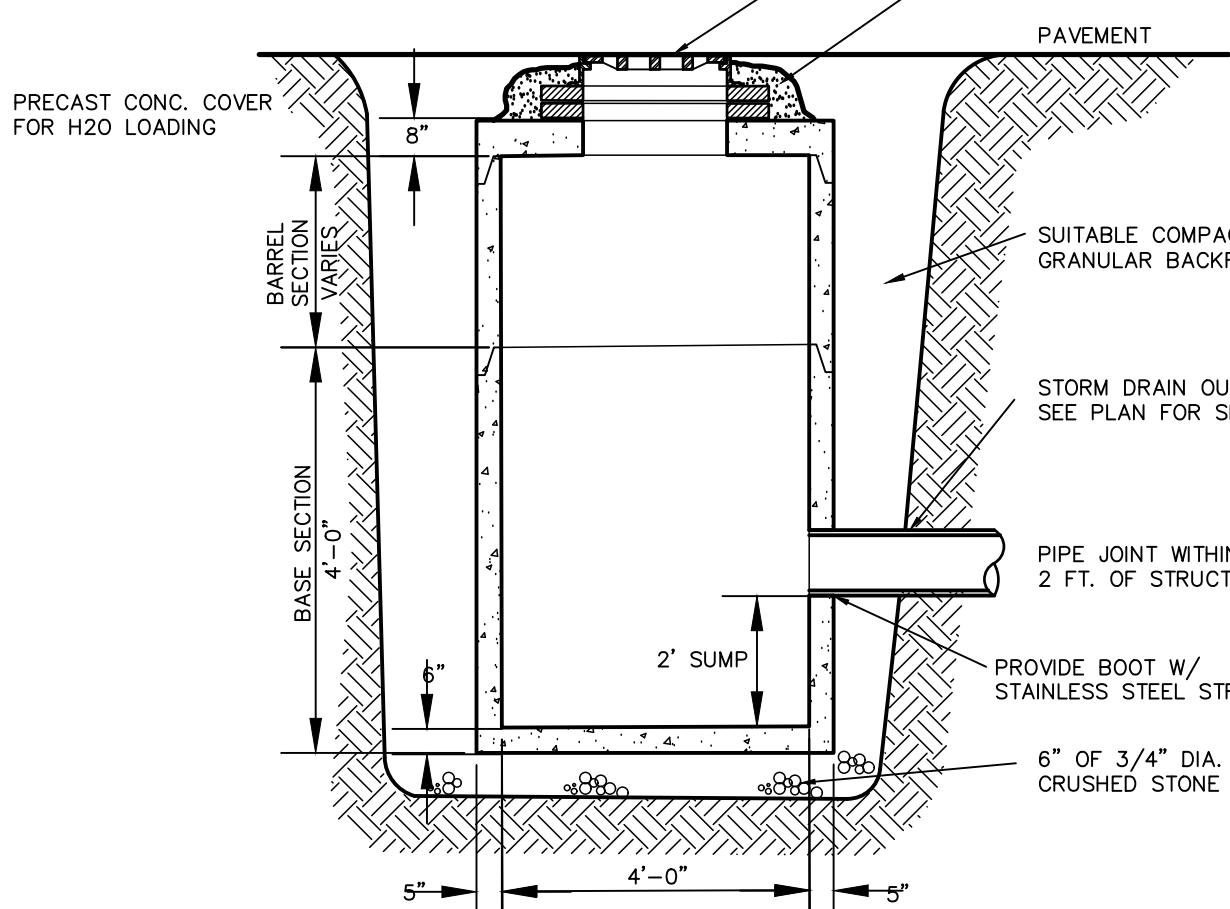
SERVICE SADDLE
(1-1/2" & 2" C.C. OR IRON PIPE THREAD)

NOTE: SERVICE CONNECTIONS (DIRECT TAPS AND SERVICE CLAMPS) WILL BE INSTALLED SO THAT THE OUTLET IS AT AN ANGLE OF NOT MORE THAN 45° ABOVE THE HORIZONTAL. ALWAYS PUT A BEND OR "GOOSENECK" IN THE SERVICE LINE PRIOR TO CONNECTING TO PROVIDE FLEXIBILITY AND "GIVE" TO COUNTERACT THE EFFECTS OF A LOAD DUE TO SETTLEMENT OR EXPANSION AND/OR CONTRACTION (SEE DETAILS).



TYPICAL SERVICE CONNECTION
N.T.S.

Manhole shall conform to ASTM C478.
Concrete: 4,000 PSI after 28 days.
Reinforcing: H20 loading.
Shiplap joints sealed w/ 1 strip of Butyl Rubber Sealant.
Each casting to have lifting holes cast in.
Plug all holes & pipe penetrations w/ non-shrink grout.
Exterior asphalt coated.
Lock joint flexible pipe sleeves cast in.



NOTE: USE A CASCO TRAP ON ALL OUTLETS AS APPLICABLE.

PRECAST CONCRETE
CATCH BASIN DETAIL
N.T.S.

NOTES:

1. Trench width shown is payment width for rockexcavation & replacement of unsuitable material.
2. Do not mechanically compact directly over flexible pipe (e.g. PVC, Polyethylene)
3. Concrete pipe shall have sand bedding.

NO.	DATE	REVISION	DESCRIPTION
1	8/17/20		Submitted to City for Review
2	8/27/20		Rev'd. Ex. Utility Locations
3	12/16/20		Submitted for Final Approval
4	01/29/21		Response to review comments
5	03/24/21		Response to review comments



BH2M

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FOR
Westfield Inc.
26 Rivers Edge Drive
Kansbank, ME

STANDARD DETAILS

4-UNIT WAREHOUSE FACILITY

POMERLEAU STREET
BIDDEFORD, MAINE

DESIGNED W. Pelkey	DATE Dec. 2019
DRAWN Dept.	SCALE N/A
CHECKED A. Morrell	JOB. NO. 19203

SHEET

4

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EROSION AND SEDIMENT CONTROL PLAN

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN THE LATEST REVISION OF THE 2016 MAINE EROSION AND SEDIMENT CONTROL BMP'S MANUAL FOR DESIGNERS AND ENGINEERS, AND THE LATEST REVISION TO THE 2014 MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS. SEE MANUALS FOR ADDITIONAL INFORMATION AND DETAILS.

DURING CONSTRUCTION THE DEVELOPER/APPLICANT OR THEIR REPRESENTATIVES WILL BE RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL BMP'S AS WELL AS ROUTINE INSPECTIONS AND MAINTENANCE OF BMP'S.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES ARE SHOWN ON THE SITE PLAN.

1. ALL CONSTRUCTION INSPECTIONS SHALL BE CONDUCTED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING STANDARDS AND PERMIT CONDITIONS. CONSTRUCTION INSPECTIONS SHALL BE PERFORMED AT LEAST ONCE A WEEK, AND PRIOR TO AND 24 HOURS AFTER A WET WEATHER EVENT (0.5 INCH OR MORE IN A 24 HOUR PERIOD). CONSTRUCTION INSPECTION AND CORRECTIVE ACTION DOCUMENTATION RECORDS IN ACCORDANCE WITH THE INSPECTION AND MAINTENANCE PLAN AND SHALL BE MAINTAINED FOR A MINIMUM OF 5 YEARS.

2. THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDE THE EROSION AND SEDIMENTATION CONTROL MEASURES AS WELL AS DISTURBED AREAS, MATERIAL STORAGE AREAS, AND LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE.

3. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S", DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST REVISION.

4. THOSE AREAS UNDEVELOPED ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 75 FEET OF A WETLAND OR WATERBODY, THE AREA SHALL BE STABILIZED WITHIN 2 DAYS OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

5. EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRES OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

6. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY.

7. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO MORE THAN ONE ACRE OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION.

8. SEDIMENT BARRIERS (EROSION CONTROL MIX, STONE CHECK DAMS, STABILIZED CONSTRUCTION ENTRANCE, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

9. INSTALL EROSION CONTROL MIX AT TOP OF SLOPES TO FILTER SILT FROM RUNOFF. SEE E.C. MIX DETAIL FOR PROPER INSTALLATION. EROSION CONTROL MIX SHALL REMAIN IN PLACE UNTIL THE CONTRACTOR HAS AN EROSION CONTROL MIX BERM IS PROHIBITED AT THE BASE OF SLOPES STEEPER THAN 8X OR WHERE THERE IS FLOWING WATER.

10. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED, AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY BEFORE AND FOLLOWING ANY SIGNIFICANT RAINFALL (0.5 INCH OR MORE IN A 24-HOUR PERIOD) OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. IF AN INSPECTION DETERMINES THAT A CORRECTIVE ACTION IS REQUIRED, THE ACTION OR REPAIR SHALL BE STARTED BY THE END OF THE NEXT WORKDAY AND COMPLETED WITHIN SEVEN DAYS OR BEFORE THE NEXT STORM EVENT. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF. EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. PERMANENT STABILIZATION IS 90% GRASS CATCH IN VEGETATED AREAS.

11. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN ONE AND ONE HALF TO ONE (1.5 TO 1).

12. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

13. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED BY AUG. 15 OR 45 DAYS PRIOR TO THE FIRST KILLING FROST (OCT. 1) TO PROTECT FROM SPRING RUNOFF PROBLEMS.

14. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.

15. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:

a. FOUR INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.

b. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR BEFORE THE NEXT STORM EVENT. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. ONCE A WEEK AND BEFORE AND AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THE PROPER FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85 TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

c. FOLLOWS SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1000 SQ. FT. LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED. SEED MIX SHALL CONTAIN 10% ANNUAL RYE GRASS.

d. HAY MULCH AT THE RATE OF 70-80 LBS PER 1000 SQUARE FEET FOR OVER 75% COVERAGE. FOR UNPROTECTED OR WINDY AREAS, ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD./BLOCK). HYDRAULIC MULCHES MAY ALSO BE USED. APPLIED AT A RATE OF 5 LBS PER 1000 SQUARE FEET FOR PAPER MULCH OR 40 LBS PER 1000 SQUARE FEET OR AS DIRECTED BY THE MANUFACTURER. ON SLOPES GREATER THAN 3:1 EROSION CONTROL MIX MAY BE USED, SEE EROSION CONTROL MIX NOTES BELOW.

e. FOR DISTURBED AREAS TO BE MAINTAINED IN POST-CONSTRUCTION AS A MEADOW BUFFER, APPLY NEW ENGLAND CONSERVATION WILDLIFE MIX BY NEW ENGLAND WETLAND PLANTS, INC., OF AMHERST, MASSACHUSETTS OR APPROVED EQUAL.

16. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS ONCE THE SITE IS STABILIZED WITH 90% GRASS CATCH IN VEGETATED AREAS. TEMPORARY EROSION AND SEDIMENT CONTROL BLANKET SHALL BE USED IN ALL DITCHES AND SWALES AS SHOWN IN DETAILS.

17. WETLANDS WILL BE PROTECTED WITH EROSION CONTROL MIX OR SILT FENCE INSTALLED AT THE EDGE FOR THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION.

18. ALL STORMWATER WILL BE PREVENTED FROM RUNNING INTO STOCKPILES. SEDIMENT BARRIERS WILL BE INSTALLED DOWNGRADIENT OF ALL STOCKPILES.

19. PERMANENT POST-CONSTRUCTION BMP'S (VEGETATED SWALES, WET PONDS, ETC.) WILL NOT BE USED TO MANAGE FLOWS DURING CONSTRUCTION WITHOUT SPECIAL PROTECTION AND/OR RESTORATION.

ADDITIONAL TEMPORARY SEED MIXTURE (FOR PERIODS LESS THAN 12 MONTHS):

SEASON	SEED	RATE
SUMMER (5/15 - 8/15)	SUDAN GRASS	40 LBS/ACRE
	GATS	80 LBS/ACRE
LATE SUMMER/EARLY FALL (8/15 - 9/15)	PERENNIAL RYEGRASS	40 LBS/ACRE
FALL (9/15 - 11/1)	WINTER RYE	112 LBS/ACRE
WINTER (11/1 - 4/1)	MULCH w/ DORMANT SEED	80 LBS/ACRE**
SPRING (4/1 - 7/1)	GATS	80 LBS/ACRE
	ANNUAL RYEGRASS	40 LBS/ACRE

**SEED RATE ONLY

EROSION CONTROL MIX

EROSION CONTROL MIX (ECM) SHALL MEET THE REQUIREMENTS PROVIDED IN THE LATEST REVISION OF MAINE DEP'S EROSION AND SEDIMENTATION CONTROL BMP MANUAL. ECM IS ACCEPTABLE FOR SLOPES GREATER THAN 3:1 BUT LESS THAN 2:1. ECM SHALL CONSIST OF WELL-GRADED ORGANIC COMPONENT 50 - 100% OF DRY WEIGHT, AND COMPRISED OF FIBROUS AND ELONGATED FRAGMENTS. ECM SHALL BE FREE FROM REFUSE, MATERIALS TOXIC TO PLANT GROWTH OR CONSTRUCTION DEBRIS. ECM SHALL BE EVENLY DISTRIBUTED AND APPLIED AT A THICKNESS OF 2" ON 3:1 SLOPES, WITH AN ADDITIONAL 1/2" PER 20" OF SLOPE FOR A MAXIMUM OF 100' IN LENGTH. SLOPES GREATER THAN 3:1, ECM SHALL BE APPLIED AT THICKNESS OF 4" OR 5" FOR SLOPES GREATER THAN 60' IN LENGTH.

NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN ONE AND ONE HALF TO ONE (1.5:1). EROSION CONTROL MIX IS AN ACCEPTABLE STABILIZATION MEASURE FOR SLOPES UP TO 3:1, WITH LIMITS THAT ARE COVERED BY NOTES ON THIS SHEET. SLOPES BETWEEN 3:1 AND 2:1 SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS, AND ALL SLOPES GREATER THAN 2:1 SHALL BE STABILIZED WITH RIPRAP. SEE SLOPE STABILIZATION DETAIL FOR ADDITIONAL INFORMATION.

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EROSION CONTROL DURING CONSTRUCTION

WINTER CONSTRUCTION

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15

2. OVERWINTER STABILIZATION OF DITCHES AND CHANNELS:

ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

A. INSTALL A SOD LINING IN THE DITCH. A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, PROMOTING ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS. SEE THE PERMANENT VEGETATION BMP SECTION.

B. INSTALL A STONE LINING IN THE DITCH. A DITCH MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER MUST BE HIRED TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR SHALL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.



WILLIAM A. THOMPSON
ROBERT C. LIBBY, Jr.
WALTER E. PELKEY
ANDREW S. MORRELL
STEVEN J. BLAKE

Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

380B Main Street
Gorham, Maine 04038

Tel. (207) 839-2771
www.bh2m.com

February 9, 2021

Greg Tansley
Biddeford City Planner
205 Main Street
P.O. Box 586
Biddeford, Maine 04005

Re: 4 Unit Warehouse Facility
Site Design Review Landscaping Comments

Dear Greg;

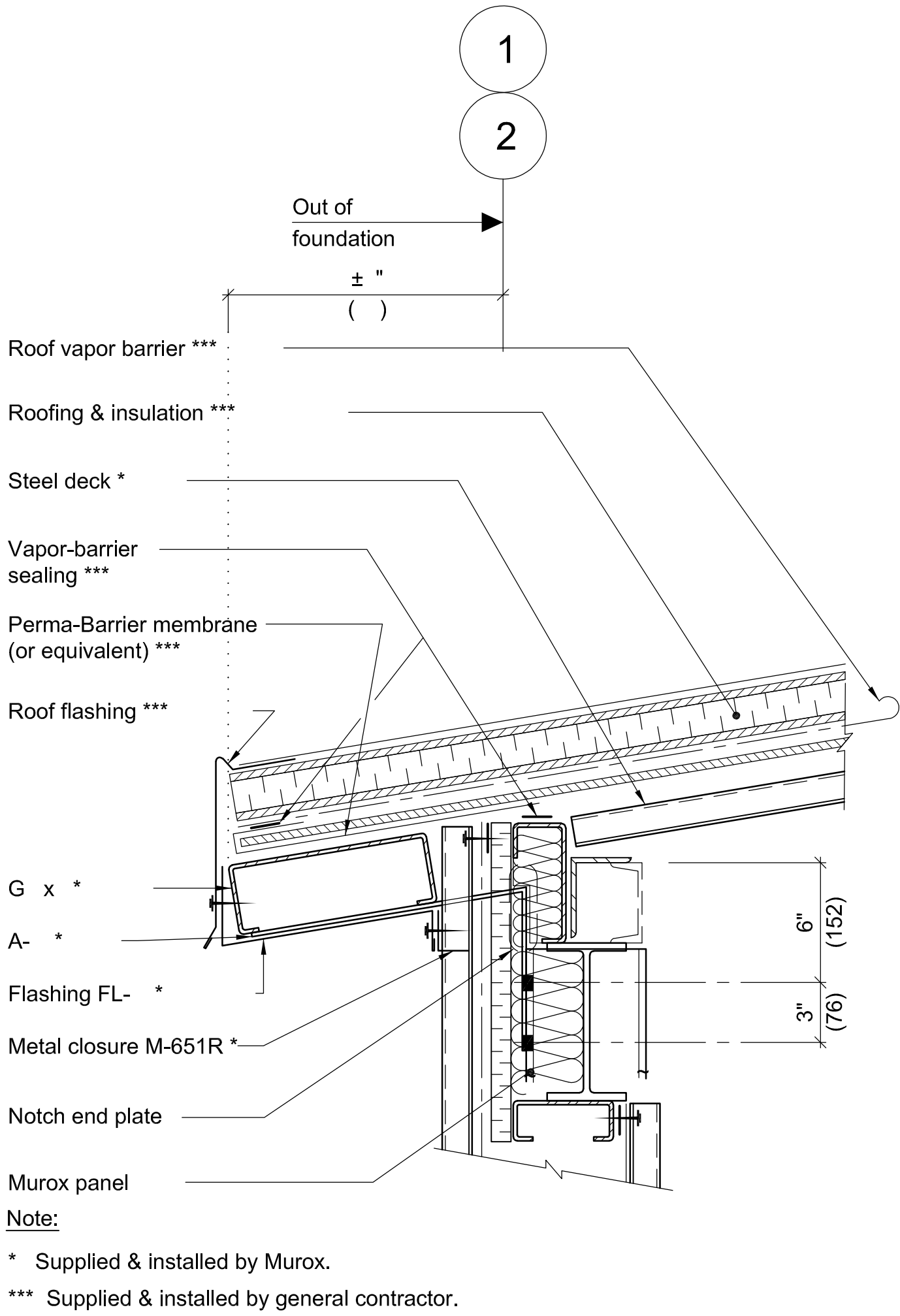
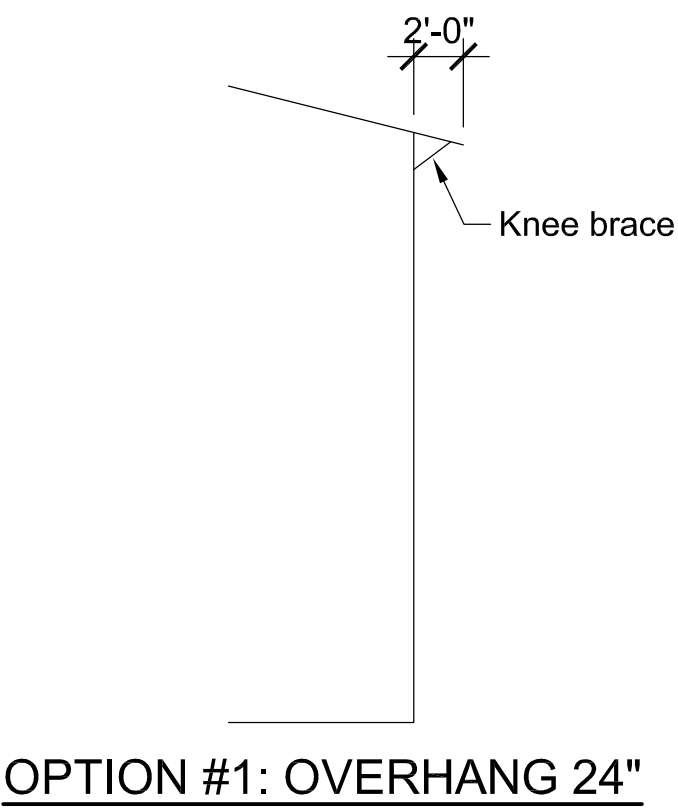
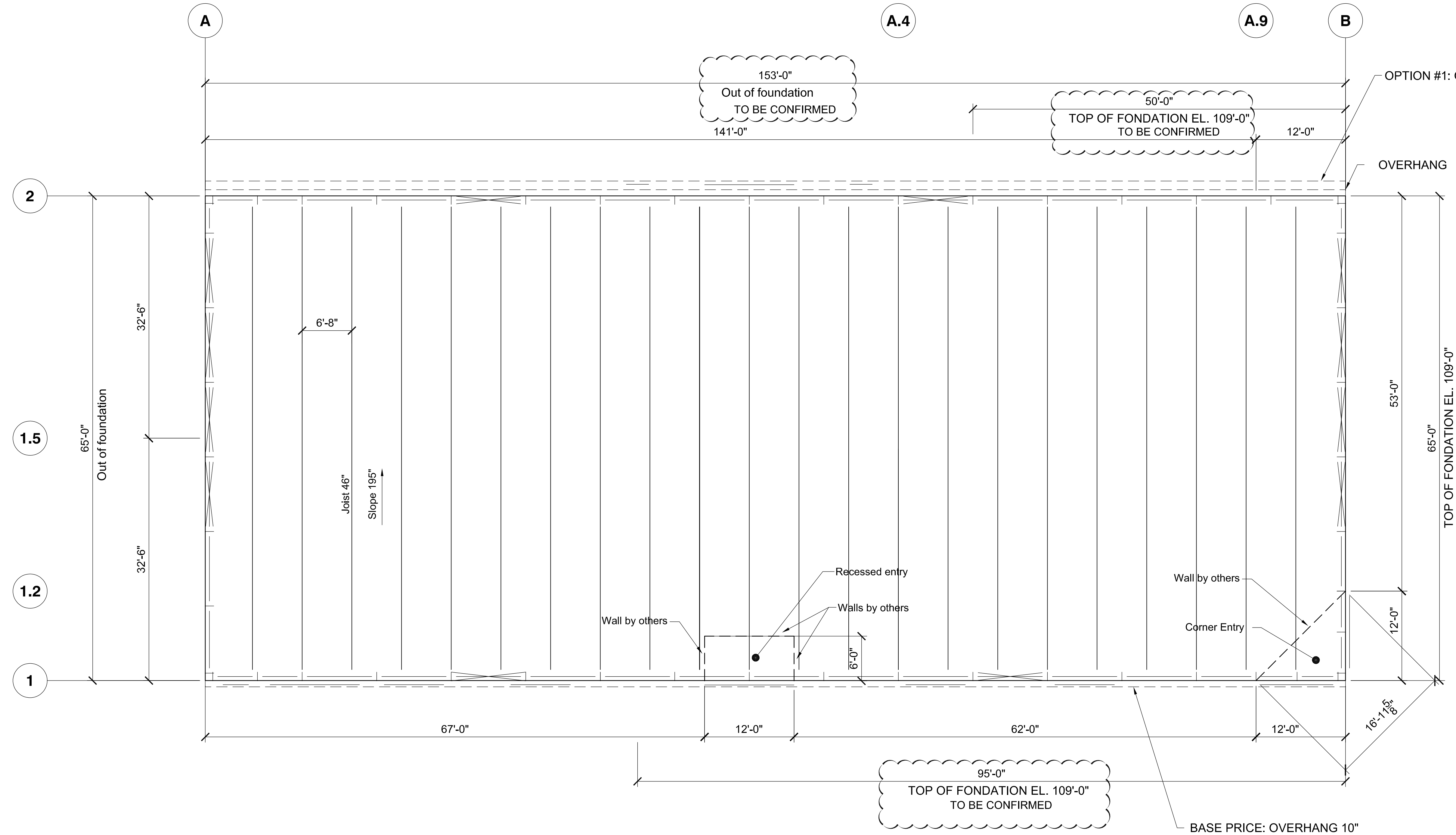
Following up on your January 15, 2021 comments regarding the landscaping details for the project, the site plan has been updated to include additional specific information on the size, type and location of trees proposed for the project. You will find existing trees to remain called out, a proposed tree schedule, and the specific varieties of proposed trees now shown.

You will find that there are trees proposed in the area of units A and B. These trees are positioned along the perimeter of the units and around proposed underdrained soil filter to provide shading and buffering from the neighboring properties and Pomerleau Street. A number of large trees exist along the Pomerleau Street side of the property and these are proposed to remain. Recent changes to the outlet of the underdrained soil filter have removed disturbances associated with the outlet pipe away from the existing stand of trees and through the existing paved areas. Units C and D are proposed in areas of currently developed parking and pavement. This area of the site does not lend itself to having trees or other landscaping placed. There are trees along the top of slope along the southern property line that will continue to provide screening for the area of Units C and D.

Thank you for providing these comments. We trust that these responses will alleviate your concerns for the project.

Sincerely,

Christopher MacDonald, P.E.
Civil Engineer



ROOF

TOP OF SLAB:	108'-0"
TOP OF FOUNDATION TYPICAL U/N:	112'-0"
TOP OF FOUNDATION (SEE SKETCH):	109'-0"
CLEAR HEIGHT:	20'-0"
T.O.S. Line 1:	148'-1"
T.O.S. Line 2:	131'-10"

LOADS

D.L.	18	psf
Coll,	4	psf
Ground snow load	50	psf
Roof Live load	0	psf
Roof Snow load P_f	35	psf
Wind speed (Exposure C)	119	mph
Velocity pressure q_z	30.5	psf

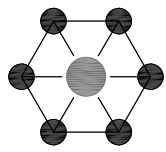
EARTHQUAKE LOADS ASSUME

S_s	0.251
S_i	0.079
SEISMIC DESIGN CATEGORY	B
I_E	1.00
SITE CLASS	D

CONTRACTOR/ERECTOR NOTE:

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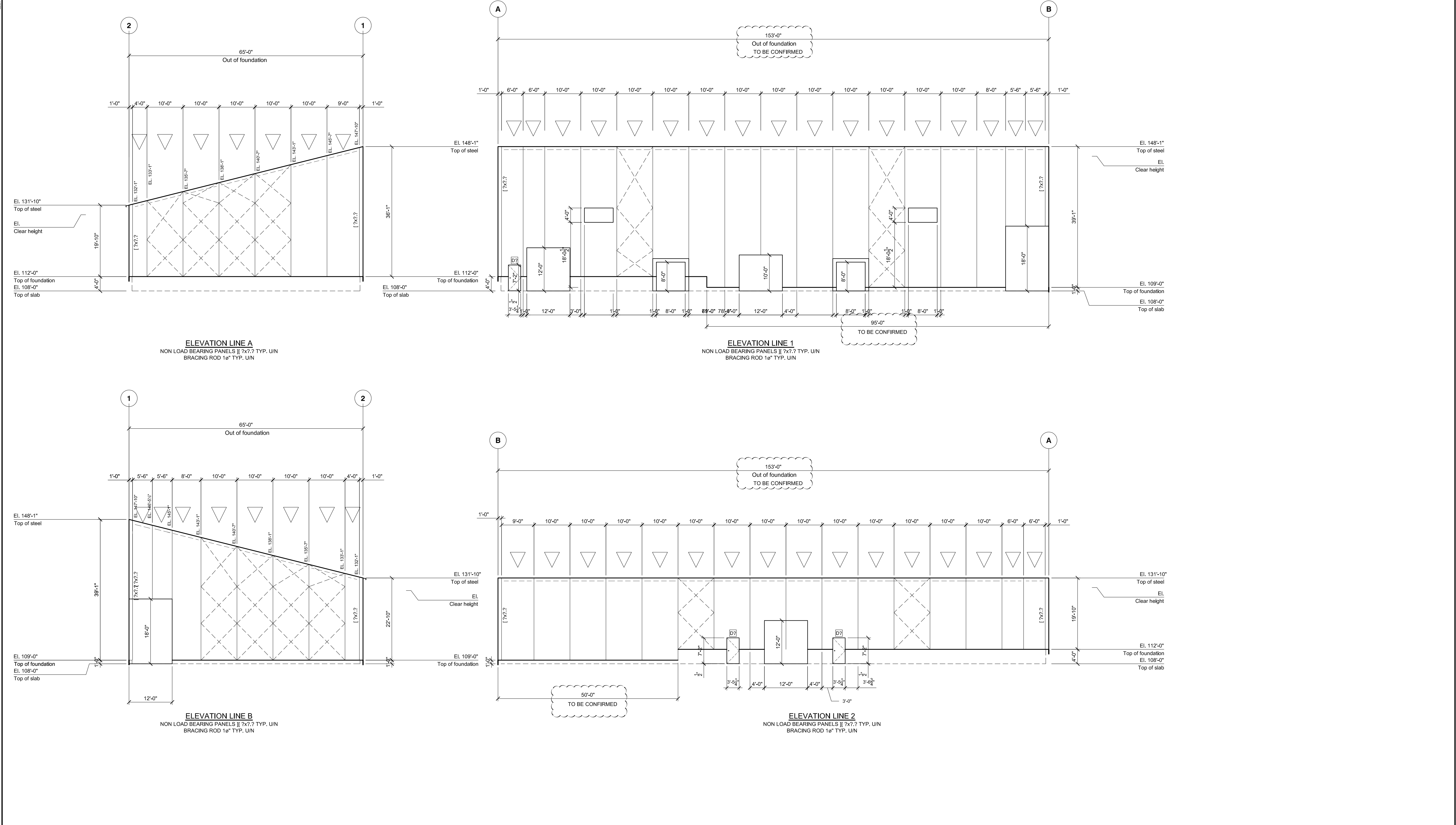
6						Drawn	P.P.
5						Approved by:	
4						Scale	1" = 10'
3						Date	08-26-2020
2	12-04-20	R2			D.P.		
1	0-21-2020	R1			D.P.		
No.	Date	Revision	Drawn	Checked			



CANAM
11505, 1re Avenue, bureau 500, Saint-Georges Beauce
Québec, Canada, G5Y 7X3
Tél.: (418) 228-8031
Fax: (418) 226-4489

Project	Gould Biddeford Maine	Customer	Benchmark
Description	P2020-183 R2	Sheet	1 of 2
Revision			R2

2025-10-20



CONTRACTOR/ERECTOR NOTE:

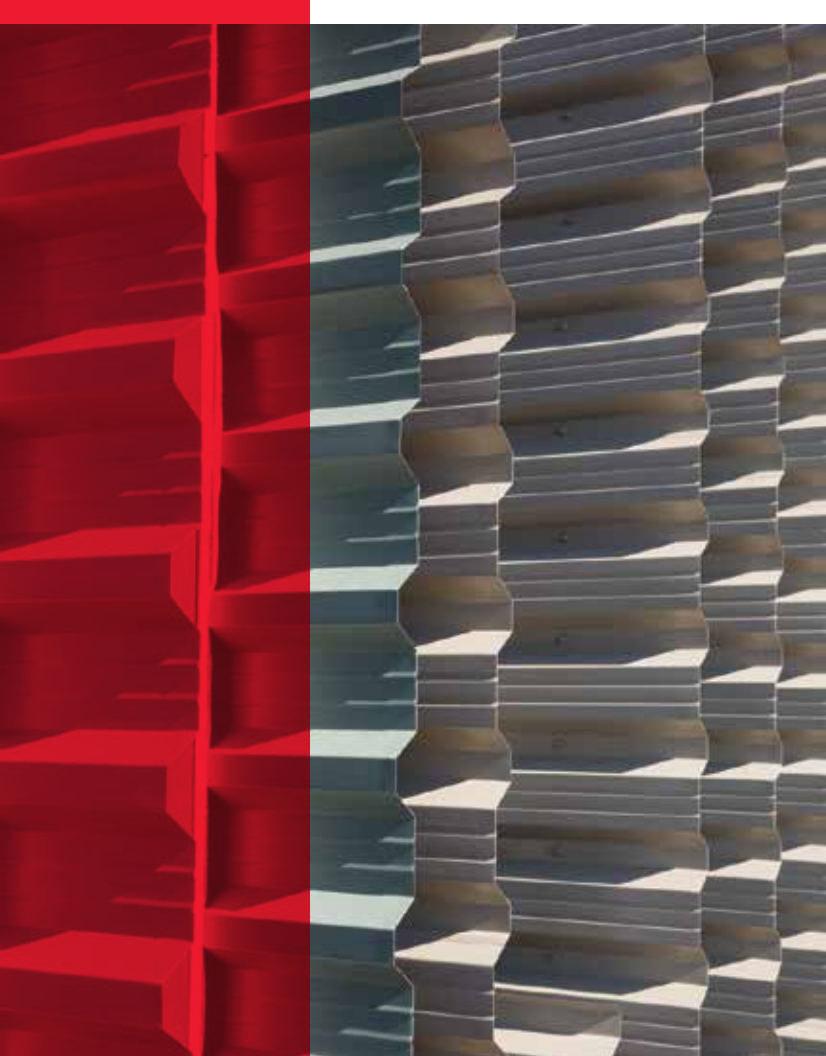
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6						Drawn	Donald Pich.
5						Approved by:	
4						Scale	1" = 10'
3						Date	Nov. 10-2020
2							
1	12-04-20	R2			D.P.		
No.	Date	Revision		Drawn	Checked		

11505, 1re Avenue, bureau 500, Saint-Georges Beauce
Québec, Canada, G5Y 7X3
Tél.: (418) 228-9031
Fax: (418) 226-4489

**Gould
Biddeford
Maine**

Customer Benchmark		
Description Prliminary Sketch		
Project P2020-183 R2	Sheet 2 of 2	Revision R2



MUROY

CLADDING PRODUCTS



CANAM
BUILDINGS

CLADDING FINISHES IN LINE WITH YOUR **ARCHITECTURAL CONCEPTS**

The Murox® building system is a unique approach that lets you erect your building in half the time it takes using traditional construction methods and allows you to choose from a wide selection of cladding finishes that are as distinctive as your design. Whether you opt for Canam cladding or another product on the market, we will help you find the ideal solution for your project.



STEEL CLADDING

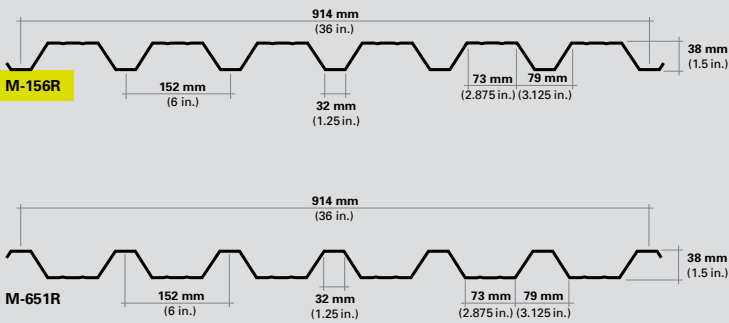
Steel cladding is a cost-effective finish for both the exterior and interior walls of your building. Canam cladding comes in three different profiles, M-156R, M-651R and M-2297, in order to meet your specific needs and tastes.

All Canam cladding products are cold-formed from Perspectra Series™ steel coil that is made to rigid specifications and quality-tested to comply with ASTM A653/A653M or A792/A792M requirements. The cladding is coated with a proven formula of advanced polyester resins with added silicone for enhanced durability and corrosion resistance. Canam cladding is available in a full range of standard and custom colors as well as with the following specialized color coatings: Stelcolour 10000 Series™, Stelcolour Metallic and Elite Series™, and Stelcolour Barrier Series™.

Perspectra Series™	Stelcolour 10000 Series™	Stelcolour Metallic and Elite Series™	Stelcolour Barrier Series™
• Available on a hot-dip galvanized or enhanced corrosion-resistant Galvalume™ (55% aluminium-zinc alloy) base	• PVF₂ topcoat (based on Kynar 500™ and Hylar 5000™ fluoropolymer resins) over a special corrosion-resistant primer	• Four-layer system with three PVF₂ coatings (based on Kynar 500™ and Hylar 5000™ fluoropolymer resins) over a corrosion-resistant primer	• Exclusive thick-film PVC plastisol system
• Resistant to natural elements and pollutants found in urban/industrial environments	• Resistant to natural elements and pollutants found in urban/industrial environments	• Highly resistant to pollutants found in urban environments	• For applications in industrial and other aggressive environments requiring superior corrosion protection
• 40 years of film integrity	• 40 years of film integrity	• 40 years of film integrity	• Extremely flexible coating
• 30 years of stringent color fade and chalk values	• 30 years of stringent color fade and chalk values	• 40 years of stringent color fade and chalk values	• Highly resistant to pollutants such as salts, acids, alkalis, oxidizing agents, industrial and automotive fumes, as well as natural elements

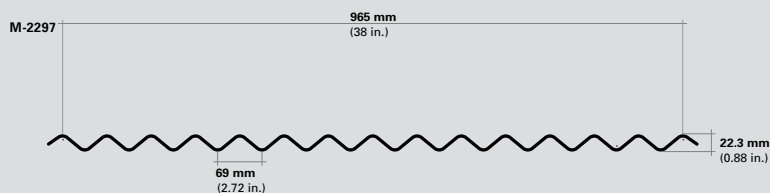
M-156R AND M-651R

- Cover width: 914 mm (36 in.)
- Nominal thickness: 0.38 mm to 0.76 mm (0.015 in. to 0.030 in.)
- Gauge: 24 to 28
- Nominal rib depth: 38 mm (1.5 in.)
- Rib spacing (center to center): 152 mm (6 in.)



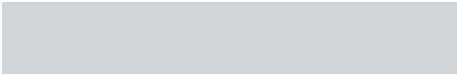
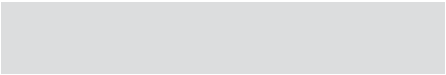
M-2297

- Cover width: 965 mm (38 in.)
- Nominal thickness: 0.38 mm to 0.76 mm (0.015 in. to 0.030 in.)
- Gauge: 22 to 28
- Nominal rib depth: 22.3 mm (0.88 in.)
- Rib spacing (center to center): 69 mm (2.72 in.)



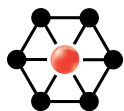
COLOR CHART

Metal cladding designed for installation on the interior and exterior walls of Murox buildings is available in the following colors:

	
QC-18273 Bone White	QC-18317 White-White
	
QC-18305 Stone Grey	QC-18330 Heron Blue
	
Galvalume Plus	QC-18315 Tan
	
QC-18229 Dark Brown	QC-18260 Slate Blue
	
QC-18262 Black	QC-18076 Putnam Ivory
	
QC-18329 Forest Green	

Please note that additional colors are available but may take longer to deliver, incur supplemental costs, or require minimum quantities. We invite you to contact your representative to find out more about product availability, obtain a quote, or for any other information.

The colors shown above were reproduced using a lithographic printing process and are presented for reference purposes. We recommend that you verify the desired color(s) using actual Murox® samples.



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STORMWATER MANAGEMENT REPORT

SITE PLAN 4-Unit Warehouse Facility Biddeford, Maine

Submitted by:

WESTFIELD INC.

Prepared by:



Date:

August 2020

January 2021 Updated

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1.2	DESCRIPTION OF POINTS OF ANALYSIS.....	2
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1.5	BASIC STANDARDS.....	4
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APPENDIX B	SOILS REPORT
APPENDIX C	PRE-DEVELOPMENT CALCULATIONS
APPENDIX D	POST DEVELOPMENT CALCULATIONS
APPENDIX E	STORMWATER TREATMENT CALCULATIONS
APPENDIX F	INSPECTION AND MAINTENANCE MANUAL

1.0 **INTRODUCTION**

Westfield Inc. owns two parcels of land (Map 2, Lot 81 & 81-5) at 20-26 Pomerleau Street in Biddeford. The parcel currently houses a commercial building with associated parking infrastructure. The applicant is looking to construct four new commercial warehouse units along with additional parking infrastructure.

This property is a part of the Alfred Road Industrial Park which has an existing Site Location of Development Act Permit through the Maine DEP. The original permit number for this project is Permit #39-4124-31050. Multiple revisions have been made to this permit over the years, but it is our understanding that this project will not require an amendment to the permit as it was issued prior to DEP's Site Law impervious area standards.

The proposed project as shown on the plans will result in approximately 16,475 square feet of new impervious area. Along with the addition of new impervious area, approximately 71,045 sf of existing impervious area will be redeveloped for this project. The following report has been prepared to address the City of Biddeford Stormwater Standards.

Runoff from the newly developed impervious area will be collected with vegetated swales and a catch basin and discharged to a grassed underdrained soil filter that is proposed outlet into an existing catchbasin located along Pomerleau Street.

1.1 **MODELING METHODOGY AND SOURCE INFORMATION**

Hydrologic Analysis: The pre and post development conditions have been modeled using modeling software (Hydrocad Version 10) which is based upon the methodology contained within the USDA Soil Conservation Service Technical Release 55. Type III 24-hour storm distributions for York County were used for the analysis. The following return periods and 24-hour rainfall depths were used for the analysis:

Return Period	24-Hour Rainfall Depth
2-Year Storm	3.30 inches
10-Year Storm	4.90 inches
25-Year Storm	6.20 inches

Soils: The soils used for the stormwater analysis were digitized from the Natural Resource Conservation Service (NRCS), web soil survey website. The source of the data is the York County Soil Survey (Class D). Refer to the following for additional documentation regarding the soils used for modelling:

- Appendix B of this Report
- Pre and Post Development Watershed Plans (Sheets A and B)

The soils include:

Soil Map Unit	Unit Description	Hydrologic Soil Group
Sc	Scantic Silt Loam, 0 to 3% slopes	D

Topography: Field gathered topography on site, and LIDAR data from the Maine Office of GIS in offsite areas.

1.2 **DESCRIPTION OF POINTS OF ANALYSIS**

The watershed model analyzes the discharge of runoff at two Analysis Points as described below:

Analysis Point #1

Description: Catchbasin along shoulder of Pomerleau Street southwest of the site

Pre-Development Tributary Drainage Areas: 1.86 acres

Post Development Tributary Drainage Areas: 1.90 acres

Analysis Point #2

Description: Catchbasin along shoulder of Pomerleau Street northwest of the site

Pre-Development Tributary Drainage Areas: 1.09 acres

Post Development Tributary Drainage Areas: 1.54 acres

Analysis Point #3

Description: Catchbasin at the end of Pomerleau Street

Pre-Development Tributary Drainage Areas: 1.91 acres

Post Development Tributary Drainage Areas: 1.49 acres

Analysis Point #4

Description: Inlet to 12" CMP along a swale along the eastern side of the site

Pre-Development Tributary Drainage Areas: 1.39 acres

Post Development Tributary Drainage Areas: 1.37 acres

Analysis Point #5

Description: Catchbasin system located south of the existing building onsite

Pre-Development Tributary Drainage Areas: 1.09 acres

Post Development Tributary Drainage Areas: 1.04 acres

1.3 **PRE DEVELOPMENT CONDITIONS**

The Existing Conditions are shown on Sheet A of the accompanying plans. The parcel, located at 20-26 Pomerleau Street in Biddeford, is currently developed with a large commercial building and associated parking areas. The sites stormwater runoff

currently discharges to catchbasins onsite and in Pomerleau Street. The parcel lies within the Thatcher Brook Watershed.

The watershed that was analyzed for this project is approximately 7.33 acres. The analysis points are described in Section 1.2 of this report. The watershed generally flows east to west.

The Pre-Development Watershed Map is included as Sheet A of the accompanying plans and the Calculations are attached as Appendix C.

The Pre-Development Watershed Model predicts the following peak flow rates:

Pre-Development Peak Flows (cu. ft./sec)			
Analysis Point	2-Year	10-Year	25-Year
AP-1	3.64	5.11	7.09
AP-2	2.26	3.75	4.96
AP-3	5.70	8.65	11.04
AP-4	2.51	4.23	6.16
AP-5	2.30	3.76	4.94

Please note that the existing culvert receiving watershed 1.1 appears to be undersized in comparison to the depressed area for the 25 year storm, and the model predicts that this will likely overtop. The model presents this condition, showing excess spilling out of the depression and running along the shoulder to the catch basin, AP 1.

1.4 **POST DEVELOPMENT CONDITIONS**

The project proposes to develop the site that shows existing areas of impervious and vegetated grass surfaces. Proposed conditions will include construction of four commercial warehouse units along with parking infrastructure for each unit. The project proposes 16,475 sf of new impervious area in areas of existing grassed areas requiring treatment. The grassed underdrained soil filter is proposed to capture the following areas based on cover type:

Proposed Impervious Area Treated	=	35,868 sf
Proposed Landscaped Area Treated	=	12,658 sf

Areas of existing vegetation to be redeveloped will be restored to grassed conditions consistent with existing conditions. Comparing the new proposed impervious area to the impervious area proposed to be treated, the project proposes to treat an excess of 19,393 sf

The proposed project will include a Grassed Underdrained Soil Filter to provide water quality treatment and attenuation of peak flows. Treatment sizing calculations can be found in Appendix E.

The Post Development Watershed Map is included as Sheet B of the accompanying plan set and the Calculations are attached as Appendix D.

The Post-Development Watershed Model predicts the following peak flow rates:

Post Development Peak Flows (cu. ft./sec)			
Analysis Point	2-Year	10-Year	25-Year
AP-1	3.53	5.01	5.72
AP-2	1.07	3.78	7.29
AP-3	4.53	6.88	8.77
AP-4	2.46	4.17	5.96
AP-5	1.95	3.29	4.38

1.5 **BASIC STANDARDS**

The proposed project is required to meet the City of Biddeford stormwater ordinance. To meet the Basic Standards the project design must demonstrate that the erosion and sedimentation control, inspection and maintenance, and housekeeping standards, and that the grading or other construction activity will not impede or otherwise alter drainageways so as to have an unreasonable adverse impact on a wetland or waterbody, or an adjacent downslope parcel.

The proposed project will provide temporary (during construction) BMP's and post-construction BMP's. Refer to sheet 5 of the project plans for erosion and sedimentation control narratives and details. The project requirements for inspection and maintenance during construction and post-construction are described in the Erosion and Sedimentation Control - Inspection and Maintenance Plan found in Appendix F of this Report. The housekeeping standards can also be found in the Inspection and Maintenance Plan.

1.6 **FLOODING STANDARD**

The proposed project is not required to meet the Flooding Standards. However, the City of Biddeford requires that pre and post development runoff modelling be evaluated.

The following Table compares the Pre and Post Development peak flow rates for the 2-year, 10-year, and 25-year return periods. Refer to Appendix C for the Pre-Development model and Appendix D for Post Development model.

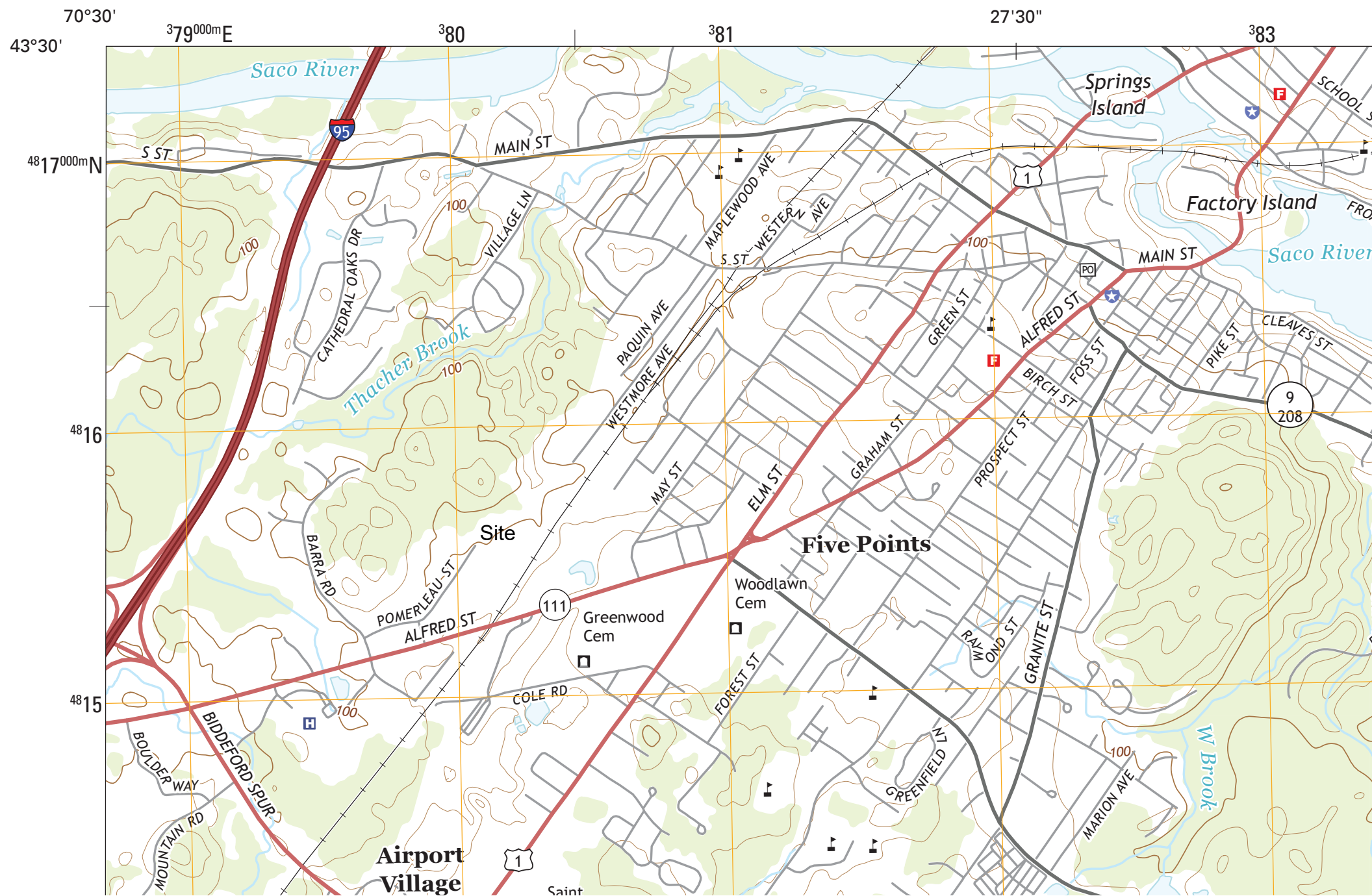
Peak Flow Comparison (cu. ft./sec)						
Analysis Point	2-Year		10-Year		25-Year	
	Pre	Post	Pre	Post	Pre	Post
AP-1	3.64	3.53	5.11	5.01	7.09	5.72
AP-2	2.26	1.07	3.75	3.78	4.96	7.29
AP-3	5.70	4.53	8.65	6.88	11.04	8.77
AP-4	2.51	2.46	4.23	4.17	6.16	5.96
AP-5	2.30	1.95	3.76	3.29	4.94	4.38

This design reduces the peak flow rates to all analysis points with the exception of AP-2, an existing catch basin along Pomerleau Street. AP-2 shows overages in the 10 and 25-year events. This catch basin is the final connection to the drain main running along Pomerleau Street. The drain empties through a 36" diameter outlet at a headwall to an existing stream along the bottom of bank at the northern end of Pomerleau Street. Given the size of the main, the proximity to the outlet, the apparent upstream contributing area to the main, the main outletting to a stream segment, and considering the reductions in AP-1 contributing to the drain main upstream of AP-2 (representing a net increase of approximately 1 cfs under 25-year events), this can be considered a minor increase and will not cause downstream impacts.

1.7 CLOSURE

The proposed stormwater management facilities have been designed to mitigate stormwater impacts associated with development of the proposed project. The proposed stormwater management facilities have been designed to meet the Basic, General and Flooding Standards required by Chapter 500 from the Maine DEP as well as City of Biddeford standards.

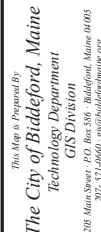
Appendix A
Figures



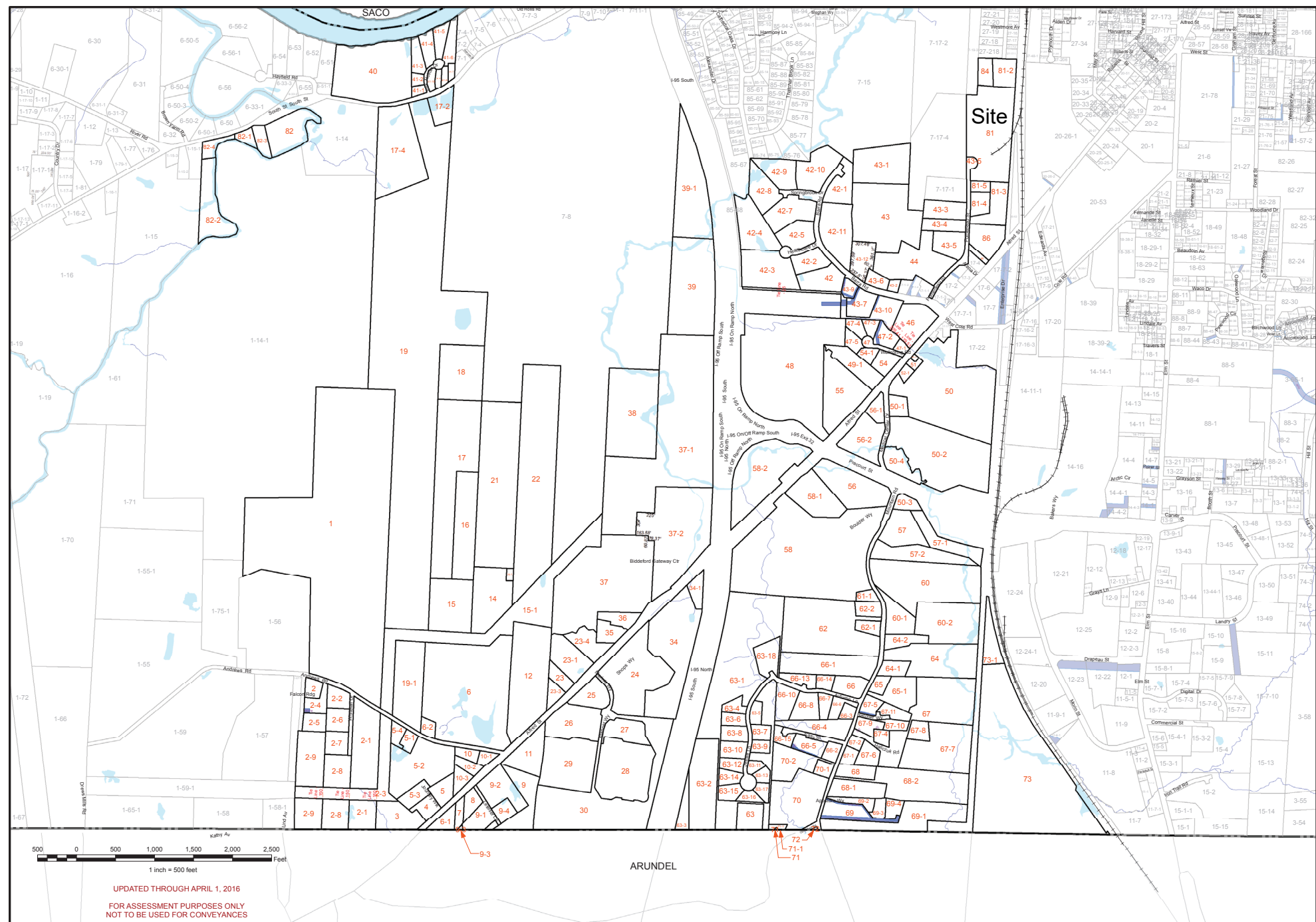


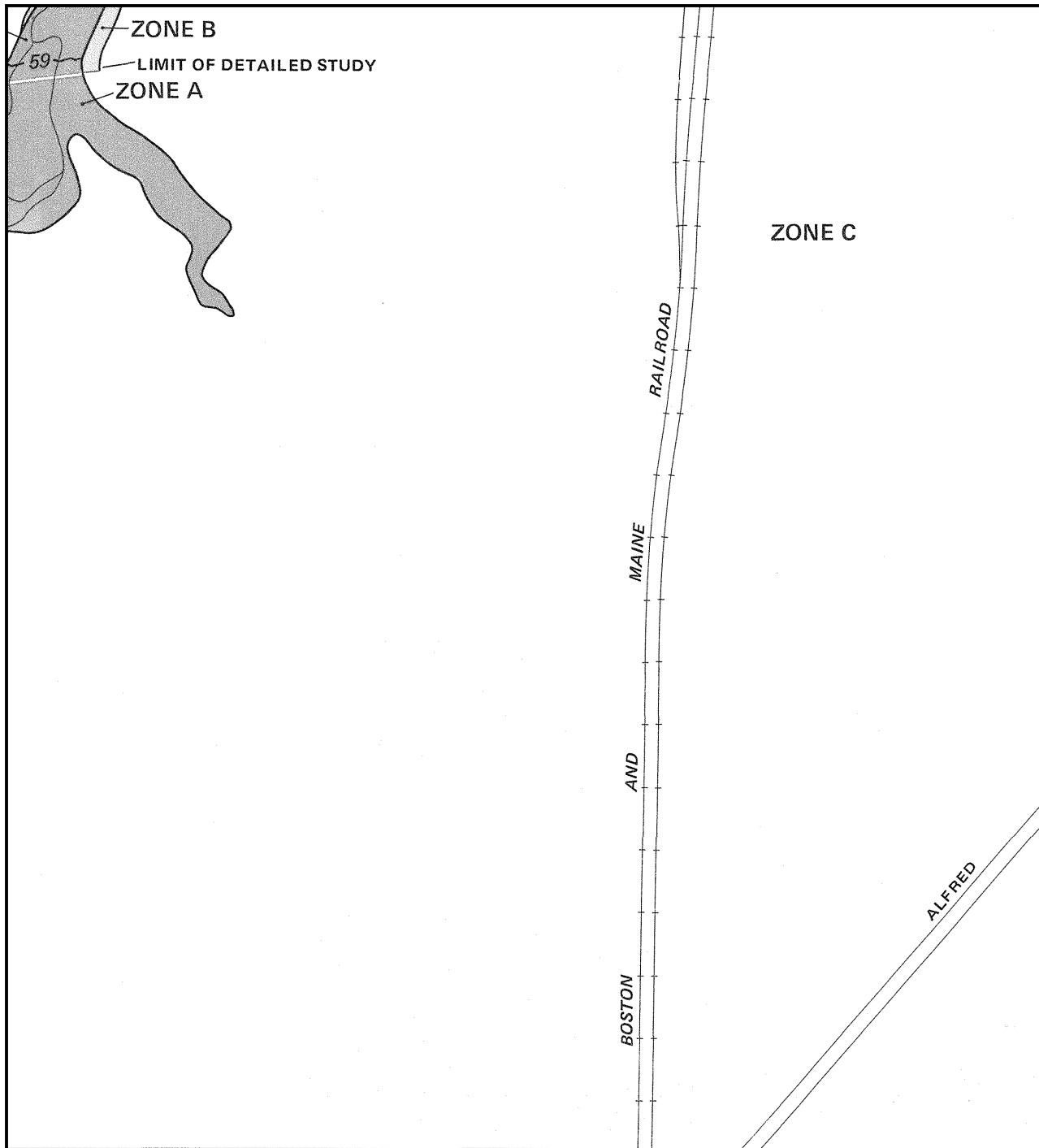
This map is a Map 2 of a set of 88 tax maps for the City of Biddeford, Maine. These maps are for assessment purposes only. The boundaries shown on this map are approximate. For more accurate boundaries the user should contact a surveyor. This map reflects changes made prior to April 1, 2016 and are current up to that date. Changes on or after April 1 will be shown on the next years' maps.

The City of Biddeford, Maine
OFFICIAL TAX MAP
Office of The Tax Assessor
Frank W. Yattaw, CMA/CR
Assessor

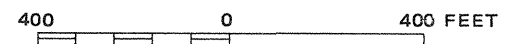


2 Tax Map





APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BIDDEFORD,
MAINE
YORK COUNTY

PANEL 3 OF 11
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230145 0003 B

EFFECTIVE DATE:
MAY 15, 1984



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

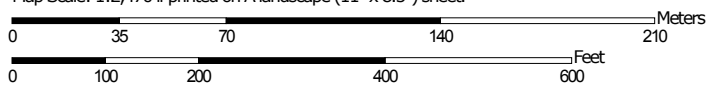
Appendix B
Soils Report

Soil Map—York County, Maine



Soil Map may not be valid at this scale.

Map Scale: 1:2,470 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

3/14/2017
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: York County, Maine

Survey Area Data: Version 15, Sep 15, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

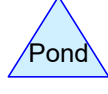
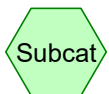
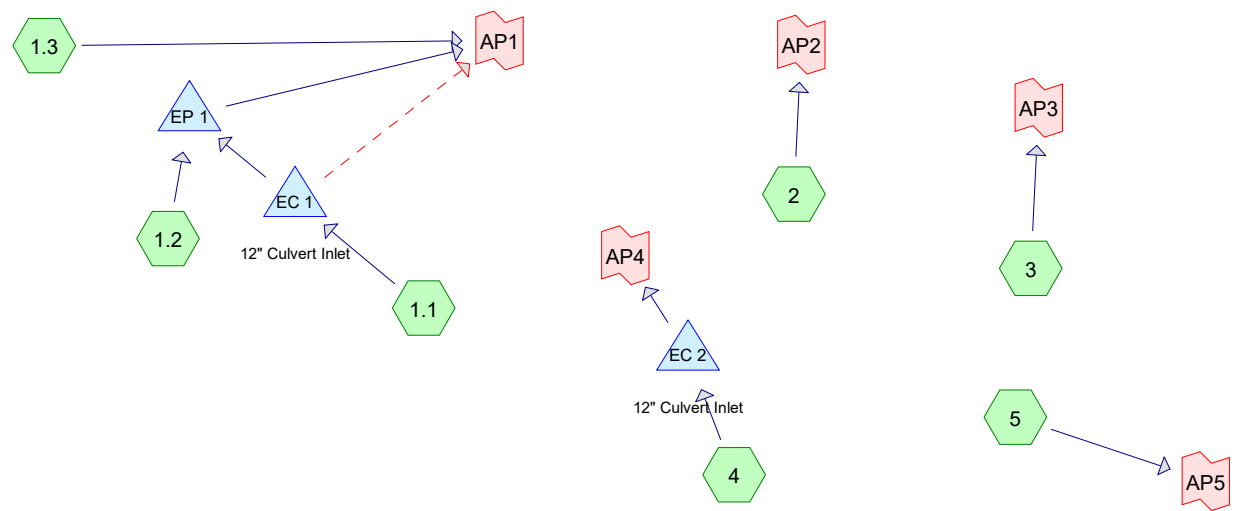
Date(s) aerial images were photographed: Jun 20, 2010—Jul 18, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

York County, Maine (ME031)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Sc	Scantic silt loam, 0 to 3 percent slopes	11.1	100.0%
Totals for Area of Interest		11.1	100.0%

Appendix C
Pre-Development Calculations



Routing Diagram for Pomerleau Warehouse Pre
 Prepared by BH2M, Printed 1/29/2021
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Pomerleau Warehouse Pre

Type III 24-hr 25-YR Rainfall=6.20"

Prepared by BH2M

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Page 2

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 1.1: Runoff Area=59,359 sf 50.94% Impervious Runoff Depth>4.65"
Flow Length=347' Tc=12.0 min CN=89 Runoff=6.19 cfs 0.528 af

Subcatchment 1.2: Runoff Area=13,339 sf 49.43% Impervious Runoff Depth>4.66"
Flow Length=140' Slope=0.0714 '/' Tc=7.6 min CN=89 Runoff=1.59 cfs 0.119 af

Subcatchment 1.3: Runoff Area=8,152 sf 64.61% Impervious Runoff Depth>4.97"
Flow Length=269' Tc=6.0 min CN=92 Runoff=1.06 cfs 0.078 af

Subcatchment 2: Runoff Area=47,558 sf 49.23% Impervious Runoff Depth>4.65"
Flow Length=527' Tc=12.0 min CN=89 Runoff=4.96 cfs 0.423 af

Subcatchment 3: Runoff Area=83,034 sf 88.12% Impervious Runoff Depth>5.36"
Flow Length=498' Tc=6.6 min CN=96 Runoff=11.04 cfs 0.851 af

Subcatchment 4: Runoff Area=60,515 sf 34.48% Impervious Runoff Depth>4.33"
Flow Length=525' Tc=12.5 min CN=86 Runoff=5.90 cfs 0.502 af

Subcatchment 5: Runoff Area=47,454 sf 54.27% Impervious Runoff Depth>4.76"
Flow Length=466' Tc=12.6 min CN=90 Runoff=4.94 cfs 0.432 af

Pond EC 1: 12" Culvert Inlet Peak Elev=102.67' Storage=562 cf Inflow=6.19 cfs 0.528 af
Primary=4.03 cfs 0.505 af Secondary=1.38 cfs 0.011 af Outflow=5.41 cfs 0.516 af

Pond EC 2: 12" Culvert Inlet Peak Elev=109.93' Storage=171 cf Inflow=5.90 cfs 0.502 af
12.0" Round Culvert n=0.013 L=500.0' S=0.0304 '/' Outflow=6.16 cfs 0.502 af

Pond EP 1: Peak Elev=101.81' Storage=355 cf Inflow=5.44 cfs 0.624 af
12.0" Round Culvert n=0.013 L=105.0' S=0.0134 '/' Outflow=5.01 cfs 0.624 af

Link AP1: Inflow=7.09 cfs 0.712 af
Primary=7.09 cfs 0.712 af

Link AP2: Inflow=4.96 cfs 0.423 af
Primary=4.96 cfs 0.423 af

Link AP3: Inflow=11.04 cfs 0.851 af
Primary=11.04 cfs 0.851 af

Link AP4: Inflow=6.16 cfs 0.502 af
Primary=6.16 cfs 0.502 af

Link AP5: Inflow=4.94 cfs 0.432 af
Primary=4.94 cfs 0.432 af

Total Runoff Area = 7.333 ac Runoff Volume = 2.932 af Average Runoff Depth = 4.80"
41.99% Pervious = 3.079 ac 58.01% Impervious = 4.254 ac

Summary for Subcatchment 1.1:

Runoff = 6.19 cfs @ 12.16 hrs, Volume= 0.528 af, Depth> 4.65"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
29,123	80	>75% Grass cover, Good, HSG D
30,236	98	Paved parking, HSG D
59,359	89	Weighted Average
29,123		49.06% Pervious Area
30,236		50.94% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	150	0.0330	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.1	197	0.0400	3.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
12.0	347	Total			

Summary for Subcatchment 1.2:

Runoff = 1.59 cfs @ 12.11 hrs, Volume= 0.119 af, Depth> 4.66"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
6,745	80	>75% Grass cover, Good, HSG D
6,594	98	Paved parking, HSG D
13,339	89	Weighted Average
6,745		50.57% Pervious Area
6,594		49.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	140	0.0714	0.31		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"

Summary for Subcatchment 1.3:

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.078 af, Depth> 4.97"

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-YR Rainfall=6.20"

Pomerleau Warehouse Pre

Type III 24-hr 25-YR Rainfall=6.20"

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Area (sf)	CN	Description
2,885	80	>75% Grass cover, Good, HSG D
5,267	98	Paved parking, HSG D
8,152	92	Weighted Average
2,885		35.39% Pervious Area
5,267		64.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	72	0.0833	0.29		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.6	197	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
5.8	269	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 2:

Runoff = 4.96 cfs @ 12.16 hrs, Volume= 0.423 af, Depth> 4.65"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
24,144	80	>75% Grass cover, Good, HSG D
23,414	98	Paved parking, HSG D
47,558	89	Weighted Average
24,144		50.77% Pervious Area
23,414		49.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	150	0.0466	0.26		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
0.2	30	0.0333	2.74		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.5	132	0.0151	4.52	24.13	Parabolic Channel, W=8.00' D=1.00' Area=5.3 sf Perim=8.3' n= 0.030 Earth, grassed & winding
0.5	58	0.0150	1.84		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
1.3	157	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
12.0	527	Total			

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Subcatchment 3:

Runoff = 11.04 cfs @ 12.09 hrs, Volume= 0.851 af, Depth> 5.36"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
9,868	80	>75% Grass cover, Good, HSG D
73,166	98	Paved parking, HSG D
83,034	96	Weighted Average
9,868		11.88% Pervious Area
73,166		88.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	25	0.0200	0.13		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.7	125	0.0120	1.19		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
1.1	238	0.0336	3.72		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.2	20	0.0200	2.12		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	90	0.0278	3.38		Shallow Concentrated Flow, Paved Kv= 20.3 fps
6.6	498	Total			

Summary for Subcatchment 4:

Runoff = 5.90 cfs @ 12.17 hrs, Volume= 0.502 af, Depth> 4.33"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
39,651	80	>75% Grass cover, Good, HSG D
20,864	98	Paved parking, HSG D
60,515	86	Weighted Average
39,651		65.52% Pervious Area
20,864		34.48% Impervious Area

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Type III 24-hr 25-YR Rainfall=6.20"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	150	0.0400	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.9	175	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.5	200	0.0350	6.80	29.48	Parabolic Channel, W=6.50' D=1.00' Area=4.3 sf Perim=6.9' n= 0.030
12.5	525	Total			

Summary for Subcatchment 5:

Runoff = 4.94 cfs @ 12.17 hrs, Volume= 0.432 af, Depth> 4.76"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
21,703	80	>75% Grass cover, Good, HSG D
25,751	98	Paved parking, HSG D
47,454	90	Weighted Average
21,703		45.73% Pervious Area
25,751		54.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	150	0.0333	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
0.3	64	0.0781	4.19		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.7	87	0.0115	2.18		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.7	165	0.0050	3.72	4.57	Pipe Channel, CMP_Round 15" 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
12.6	466	Total			

Summary for Pond EC 1: 12" Culvert Inlet

Inflow Area = 1.363 ac, 50.94% Impervious, Inflow Depth > 4.65" for 25-YR event
 Inflow = 6.19 cfs @ 12.16 hrs, Volume= 0.528 af
 Outflow = 5.41 cfs @ 12.17 hrs, Volume= 0.516 af, Atten= 13%, Lag= 0.4 min
 Primary = 4.03 cfs @ 12.17 hrs, Volume= 0.505 af
 Secondary = 1.38 cfs @ 12.17 hrs, Volume= 0.011 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4
 Peak Elev= 102.67' @ 12.17 hrs Surf.Area= 1,311 sf Storage= 562 cf

Plug-Flow detention time= 11.2 min calculated for 0.516 af (98% of inflow)
 Center-of-Mass det. time= 1.5 min (764.2 - 762.7)

Pomerleau Warehouse Pre

Type III 24-hr 25-YR Rainfall=6.20"

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Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	562 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
100.00	0	0.0	0	0	0
101.00	36	25.4	12	12	53
102.00	342	85.6	163	175	588
102.50	1,311	139.6	387	562	1,557

Device	Routing	Invert	Outlet Devices
#1	Primary	100.35'	12.0" Round Culvert L= 50.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 100.35' / 98.67' S= 0.0336 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Secondary	102.50'	10.0' long x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.99 cfs @ 12.17 hrs HW=102.64' (Free Discharge)↑**1=Culvert** (Inlet Controls 3.99 cfs @ 5.08 fps)**Secondary OutFlow** Max=1.21 cfs @ 12.17 hrs HW=102.64' (Free Discharge)↑**2=Broad-Crested Rectangular Weir** (Weir Controls 1.21 cfs @ 0.87 fps)**Summary for Pond EC 2: 12" Culvert Inlet**

Inflow Area = 1.389 ac, 34.48% Impervious, Inflow Depth > 4.33" for 25-YR event
 Inflow = 5.90 cfs @ 12.17 hrs, Volume= 0.502 af
 Outflow = 6.16 cfs @ 12.16 hrs, Volume= 0.502 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.16 cfs @ 12.16 hrs, Volume= 0.502 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 109.93' @ 12.16 hrs Surf.Area= 201 sf Storage= 171 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 0.1 min (771.0 - 770.9)

Volume	Invert	Avail.Storage	Storage Description
#1	105.50'	171 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
105.50	0	0.0	0	0	0
106.00	12	19.5	2	2	31
107.00	72	43.3	38	40	154
108.00	201	75.3	131	171	461

Pomerleau Warehouse Pre

Type III 24-hr 25-YR Rainfall=6.20"

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Device	Routing	Invert	Outlet Devices
#1	Primary	105.20'	12.0" Round Culvert L= 500.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 105.20' / 90.00' S= 0.0304 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=5.95 cfs @ 12.16 hrs HW=109.67' (Free Discharge)↑**1=Culvert** (Inlet Controls 5.95 cfs @ 7.57 fps)**Summary for Pond EP 1:**

Inflow Area = 1.669 ac, 50.66% Impervious, Inflow Depth > 4.49" for 25-YR event
 Inflow = 5.44 cfs @ 12.14 hrs, Volume= 0.624 af
 Outflow = 5.01 cfs @ 12.22 hrs, Volume= 0.624 af, Atten= 8%, Lag= 4.6 min
 Primary = 5.01 cfs @ 12.22 hrs, Volume= 0.624 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 101.81' @ 12.22 hrs Surf.Area= 540 sf Storage= 355 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 0.3 min (764.1 - 763.8)

Volume	Invert	Avail.Storage	Storage Description		
#1	98.50'	2,086 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
98.50	0	0.0	0	0	0
101.00	125	59.5	104	104	291
102.00	675	108.4	363	468	950
103.00	2,804	214.0	1,618	2,086	3,664

Device	Routing	Invert	Outlet Devices
#1	Primary	98.50'	12.0" Round Culvert L= 105.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 98.50' / 97.09' S= 0.0134 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=5.00 cfs @ 12.22 hrs HW=101.80' (Free Discharge)↑**1=Culvert** (Inlet Controls 5.00 cfs @ 6.36 fps)**Summary for Link AP1:**

Inflow Area = 1.856 ac, 52.07% Impervious, Inflow Depth > 4.60" for 25-YR event
 Inflow = 7.09 cfs @ 12.16 hrs, Volume= 0.712 af
 Primary = 7.09 cfs @ 12.16 hrs, Volume= 0.712 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP2:

Inflow Area = 1.092 ac, 49.23% Impervious, Inflow Depth > 4.65" for 25-YR event
Inflow = 4.96 cfs @ 12.16 hrs, Volume= 0.423 af
Primary = 4.96 cfs @ 12.16 hrs, Volume= 0.423 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP3:

Inflow Area = 1.906 ac, 88.12% Impervious, Inflow Depth > 5.36" for 25-YR event
Inflow = 11.04 cfs @ 12.09 hrs, Volume= 0.851 af
Primary = 11.04 cfs @ 12.09 hrs, Volume= 0.851 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP4:

Inflow Area = 1.389 ac, 34.48% Impervious, Inflow Depth > 4.33" for 25-YR event
Inflow = 6.16 cfs @ 12.16 hrs, Volume= 0.502 af
Primary = 6.16 cfs @ 12.16 hrs, Volume= 0.502 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP5:

Inflow Area = 1.089 ac, 54.27% Impervious, Inflow Depth > 4.76" for 25-YR event
Inflow = 4.94 cfs @ 12.17 hrs, Volume= 0.432 af
Primary = 4.94 cfs @ 12.17 hrs, Volume= 0.432 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Pomerleau Warehouse Pre

Type III 24-hr 2-YR Rainfall=3.30"

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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 1.1: Runoff Area=59,359 sf 50.94% Impervious Runoff Depth>2.04"
 Flow Length=347' Tc=12.0 min CN=89 Runoff=2.82 cfs 0.231 af

Subcatchment 1.2: Runoff Area=13,339 sf 49.43% Impervious Runoff Depth>2.04"
 Flow Length=140' Slope=0.0714 '/' Tc=7.6 min CN=89 Runoff=0.72 cfs 0.052 af

Subcatchment 1.3: Runoff Area=8,152 sf 64.61% Impervious Runoff Depth>2.31"
 Flow Length=269' Tc=6.0 min CN=92 Runoff=0.51 cfs 0.036 af

Subcatchment 2: Runoff Area=47,558 sf 49.23% Impervious Runoff Depth>2.04"
 Flow Length=527' Tc=12.0 min CN=89 Runoff=2.26 cfs 0.185 af

Subcatchment 3: Runoff Area=83,034 sf 88.12% Impervious Runoff Depth>2.69"
 Flow Length=498' Tc=6.6 min CN=96 Runoff=5.70 cfs 0.427 af

Subcatchment 4: Runoff Area=60,515 sf 34.48% Impervious Runoff Depth>1.79"
 Flow Length=525' Tc=12.5 min CN=86 Runoff=2.52 cfs 0.208 af

Subcatchment 5: Runoff Area=47,454 sf 54.27% Impervious Runoff Depth>2.12"
 Flow Length=466' Tc=12.6 min CN=90 Runoff=2.30 cfs 0.193 af

Pond EC 1: 12" Culvert Inlet Peak Elev=101.68' Storage=87 cf Inflow=2.82 cfs 0.231 af
 Primary=2.71 cfs 0.231 af Secondary=0.00 cfs 0.000 af Outflow=2.71 cfs 0.231 af

Pond EC 2: 12" Culvert Inlet Peak Elev=106.40' Storage=10 cf Inflow=2.52 cfs 0.208 af
 12.0" Round Culvert n=0.013 L=500.0' S=0.0304 '/' Outflow=2.51 cfs 0.208 af

Pond EP 1: Peak Elev=100.20' Storage=33 cf Inflow=3.29 cfs 0.283 af
 12.0" Round Culvert n=0.013 L=105.0' S=0.0134 '/' Outflow=3.27 cfs 0.283 af

Link AP1: Inflow=3.64 cfs 0.319 af
 Primary=3.64 cfs 0.319 af

Link AP2: Inflow=2.26 cfs 0.185 af
 Primary=2.26 cfs 0.185 af

Link AP3: Inflow=5.70 cfs 0.427 af
 Primary=5.70 cfs 0.427 af

Link AP4: Inflow=2.51 cfs 0.208 af
 Primary=2.51 cfs 0.208 af

Link AP5: Inflow=2.30 cfs 0.193 af
 Primary=2.30 cfs 0.193 af

Total Runoff Area = 7.333 ac Runoff Volume = 1.332 af Average Runoff Depth = 2.18"
41.99% Pervious = 3.079 ac 58.01% Impervious = 4.254 ac

Pomerleau Warehouse Pre

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Type III 24-hr 10-YR Rainfall=4.90"

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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 1.1: Runoff Area=59,359 sf 50.94% Impervious Runoff Depth>3.47"
 Flow Length=347' Tc=12.0 min CN=89 Runoff=4.68 cfs 0.393 af

Subcatchment 1.2: Runoff Area=13,339 sf 49.43% Impervious Runoff Depth>3.47"
 Flow Length=140' Slope=0.0714 '/' Tc=7.6 min CN=89 Runoff=1.20 cfs 0.089 af

Subcatchment 1.3: Runoff Area=8,152 sf 64.61% Impervious Runoff Depth>3.77"
 Flow Length=269' Tc=6.0 min CN=92 Runoff=0.81 cfs 0.059 af

Subcatchment 2: Runoff Area=47,558 sf 49.23% Impervious Runoff Depth>3.47"
 Flow Length=527' Tc=12.0 min CN=89 Runoff=3.75 cfs 0.315 af

Subcatchment 3: Runoff Area=83,034 sf 88.12% Impervious Runoff Depth>4.16"
 Flow Length=498' Tc=6.6 min CN=96 Runoff=8.65 cfs 0.661 af

Subcatchment 4: Runoff Area=60,515 sf 34.48% Impervious Runoff Depth>3.17"
 Flow Length=525' Tc=12.5 min CN=86 Runoff=4.38 cfs 0.367 af

Subcatchment 5: Runoff Area=47,454 sf 54.27% Impervious Runoff Depth>3.57"
 Flow Length=466' Tc=12.6 min CN=90 Runoff=3.76 cfs 0.324 af

Pond EC 1: 12" Culvert Inlet Peak Elev=102.52' Storage=562 cf Inflow=4.68 cfs 0.393 af
 Primary=3.86 cfs 0.393 af Secondary=0.09 cfs 0.000 af Outflow=3.95 cfs 0.394 af

Pond EC 2: 12" Culvert Inlet Peak Elev=107.71' Storage=119 cf Inflow=4.38 cfs 0.367 af
 12.0" Round Culvert n=0.013 L=500.0' S=0.0304 '/' Outflow=4.23 cfs 0.367 af

Pond EP 1: Peak Elev=101.35' Storage=172 cf Inflow=4.70 cfs 0.482 af
 12.0" Round Culvert n=0.013 L=105.0' S=0.0134 '/' Outflow=4.58 cfs 0.482 af

Link AP1: Inflow=5.11 cfs 0.541 af
 Primary=5.11 cfs 0.541 af

Link AP2: Inflow=3.75 cfs 0.315 af
 Primary=3.75 cfs 0.315 af

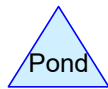
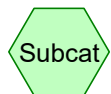
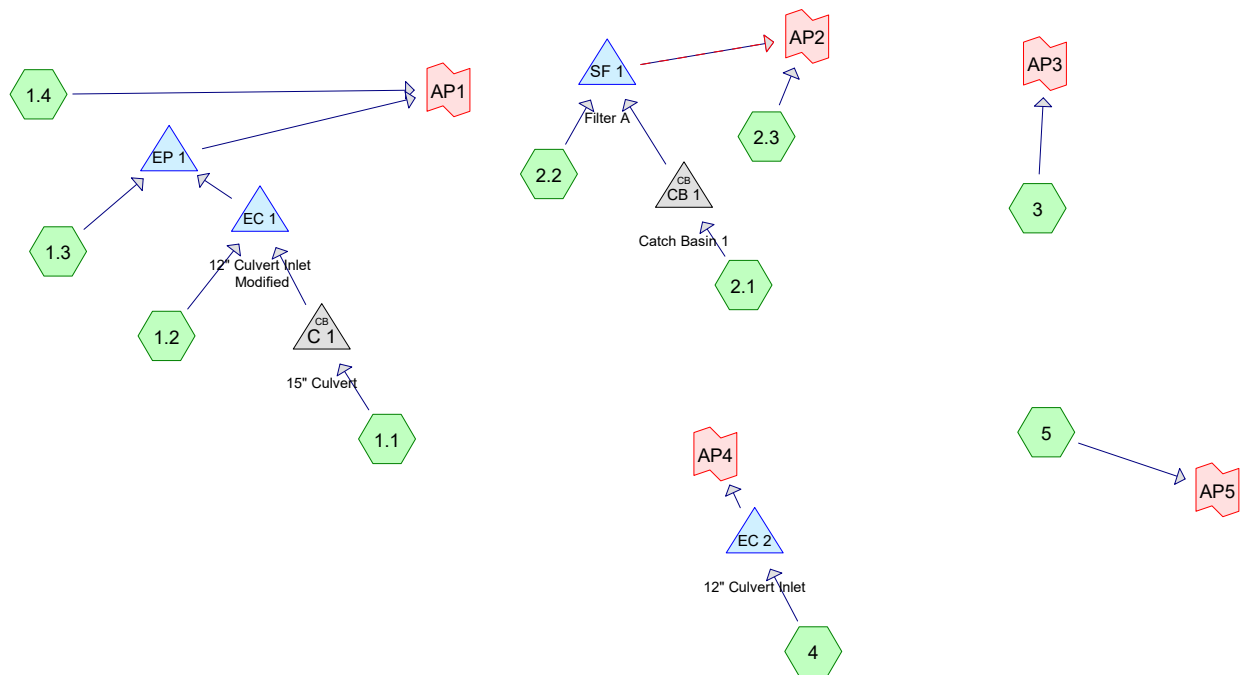
Link AP3: Inflow=8.65 cfs 0.661 af
 Primary=8.65 cfs 0.661 af

Link AP4: Inflow=4.23 cfs 0.367 af
 Primary=4.23 cfs 0.367 af

Link AP5: Inflow=3.76 cfs 0.324 af
 Primary=3.76 cfs 0.324 af

Total Runoff Area = 7.333 ac Runoff Volume = 2.208 af Average Runoff Depth = 3.61"
41.99% Pervious = 3.079 ac 58.01% Impervious = 4.254 ac

Appendix D
Post Development Calculations



Routing Diagram for Pomerleau Warehouse Post
 Prepared by BH2M, Printed 1/29/2021
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Pomerleau Warehouse Post

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Type III 24-hr 25-YR Rainfall=6.20"

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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 1.1:	Runoff Area=36,619 sf 51.39% Impervious Runoff Depth>4.66" Flow Length=186' Tc=6.0 min CN=89 Runoff=4.55 cfs 0.326 af
Subcatchment 1.2:	Runoff Area=24,636 sf 67.38% Impervious Runoff Depth>4.97" Flow Length=203' Tc=6.0 min CN=92 Runoff=3.19 cfs 0.234 af
Subcatchment 1.3:	Runoff Area=13,339 sf 49.43% Impervious Runoff Depth>4.66" Flow Length=140' Slope=0.0714 '/' Tc=7.6 min CN=89 Runoff=1.59 cfs 0.119 af
Subcatchment 1.4:	Runoff Area=8,068 sf 65.28% Impervious Runoff Depth>4.97" Flow Length=269' Tc=6.0 min CN=92 Runoff=1.05 cfs 0.077 af
Subcatchment 2.1:	Runoff Area=16,706 sf 71.83% Impervious Runoff Depth>5.07" Tc=6.0 min CN=93 Runoff=2.19 cfs 0.162 af
Subcatchment 2.2:	Runoff Area=31,820 sf 75.01% Impervious Runoff Depth>5.17" Tc=6.0 min CN=94 Runoff=4.21 cfs 0.315 af
Subcatchment 2.3:	Runoff Area=18,396 sf 64.49% Impervious Runoff Depth>4.97" Flow Length=191' Tc=9.8 min CN=92 Runoff=2.12 cfs 0.175 af
Subcatchment 3:	Runoff Area=65,096 sf 86.65% Impervious Runoff Depth>5.36" Flow Length=570' Tc=6.0 min CN=96 Runoff=8.77 cfs 0.667 af
Subcatchment 4:	Runoff Area=59,476 sf 35.08% Impervious Runoff Depth>4.33" Flow Length=525' Tc=12.5 min CN=86 Runoff=5.80 cfs 0.493 af
Subcatchment 5:	Runoff Area=45,257 sf 44.80% Impervious Runoff Depth>4.54" Flow Length=406' Tc=14.1 min CN=88 Runoff=4.38 cfs 0.393 af
Pond C 1: 15" Culvert	Peak Elev=107.32' Inflow=4.55 cfs 0.326 af 15.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=4.55 cfs 0.326 af
Pond CB 1: Catch Basin 1	Peak Elev=103.09' Inflow=2.19 cfs 0.162 af 12.0" Round Culvert n=0.013 L=172.0' S=0.0050 '/' Outflow=2.19 cfs 0.162 af
Pond EC 1: 12" Culvert Inlet Modified	Peak Elev=102.50' Storage=2,952 cf Inflow=7.74 cfs 0.561 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0336 '/' Outflow=3.83 cfs 0.543 af
Pond EC 2: 12" Culvert Inlet	Peak Elev=109.66' Storage=171 cf Inflow=5.80 cfs 0.493 af 12.0" Round Culvert n=0.013 L=500.0' S=0.0304 '/' Outflow=5.96 cfs 0.493 af
Pond EP 1:	Peak Elev=101.75' Storage=321 cf Inflow=5.40 cfs 0.662 af 12.0" Round Culvert n=0.013 L=105.0' S=0.0134 '/' Outflow=4.95 cfs 0.662 af
Pond SF 1: Filter A	Peak Elev=101.90' Storage=8,397 cf Inflow=6.40 cfs 0.477 af Primary=0.05 cfs 0.047 af Secondary=5.13 cfs 0.269 af Outflow=5.19 cfs 0.316 af

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Type III 24-hr 25-YR Rainfall=6.20"

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Link AP1:

Inflow=5.72 cfs 0.738 af
Primary=5.72 cfs 0.738 af

Link AP2:

Inflow=7.29 cfs 0.491 af
Primary=7.29 cfs 0.491 af

Link AP3:

Inflow=8.77 cfs 0.667 af
Primary=8.77 cfs 0.667 af

Link AP4:

Inflow=5.96 cfs 0.493 af
Primary=5.96 cfs 0.493 af

Link AP5:

Inflow=4.38 cfs 0.393 af
Primary=4.38 cfs 0.393 af

Total Runoff Area = 7.333 ac Runoff Volume = 2.962 af Average Runoff Depth = 4.85"
39.72% Pervious = 2.912 ac 60.28% Impervious = 4.420 ac

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Subcatchment 1.1:

Runoff = 4.55 cfs @ 12.09 hrs, Volume= 0.326 af, Depth> 4.66"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
17,802	80	>75% Grass cover, Good, HSG D
18,817	98	Paved parking, HSG D
36,619	89	Weighted Average
17,802		48.61% Pervious Area
18,817		51.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	65	0.0615	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.0	85	0.0235	1.44		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
0.1	22	0.0235	3.11		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	14	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.6	186	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 1.2:

Runoff = 3.19 cfs @ 12.09 hrs, Volume= 0.234 af, Depth> 4.97"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
8,037	80	>75% Grass cover, Good, HSG D
16,599	98	Paved parking, HSG D
24,636	92	Weighted Average
8,037		32.62% Pervious Area
16,599		67.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	150	0.0267	1.70		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
0.1	23	0.0200	2.87		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	30	0.0800	4.24		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
1.7	203	Total, Increased to minimum Tc = 6.0 min			

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Subcatchment 1.3:

Runoff = 1.59 cfs @ 12.11 hrs, Volume= 0.119 af, Depth> 4.66"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
6,745	80	>75% Grass cover, Good, HSG D
6,594	98	Paved parking, HSG D
13,339	89	Weighted Average
6,745		50.57% Pervious Area
6,594		49.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	140	0.0714	0.31		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"

Summary for Subcatchment 1.4:

Runoff = 1.05 cfs @ 12.09 hrs, Volume= 0.077 af, Depth> 4.97"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
2,801	80	>75% Grass cover, Good, HSG D
5,267	98	Paved parking, HSG D
8,068	92	Weighted Average
2,801		34.72% Pervious Area
5,267		65.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	72	0.0833	0.29		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.6	197	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
5.8	269	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 2.1:

Runoff = 2.19 cfs @ 12.09 hrs, Volume= 0.162 af, Depth> 5.07"

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-YR Rainfall=6.20"

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Type III 24-hr 25-YR Rainfall=6.20"

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Area (sf)	CN	Description
4,706	80	>75% Grass cover, Good, HSG D
12,000	98	Paved parking, HSG D
16,706	93	Weighted Average
4,706		28.17% Pervious Area
12,000		71.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Assumed

Summary for Subcatchment 2.2:

Runoff = 4.21 cfs @ 12.09 hrs, Volume= 0.315 af, Depth> 5.17"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
7,952	80	>75% Grass cover, Good, HSG D
23,868	98	Paved parking, HSG D
31,820	94	Weighted Average
7,952		24.99% Pervious Area
23,868		75.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Assumed

Summary for Subcatchment 2.3:

Runoff = 2.12 cfs @ 12.13 hrs, Volume= 0.175 af, Depth> 4.97"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
6,532	80	>75% Grass cover, Good, HSG D
11,864	98	Paved parking, HSG D
18,396	92	Weighted Average
6,532		35.51% Pervious Area
11,864		64.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0	94	0.0213	0.17		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
0.8	97	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
9.8	191	Total			

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Subcatchment 3:

Runoff = 8.77 cfs @ 12.09 hrs, Volume= 0.667 af, Depth> 5.36"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
8,688	80	>75% Grass cover, Good, HSG D
56,408	98	Paved parking, HSG D
65,096	96	Weighted Average
8,688		13.35% Pervious Area
56,408		86.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	150	0.0266	1.70		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
1.5	256	0.0200	2.87		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.2	23	0.0200	2.12		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.7	141	0.0278	3.38		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	570	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 4:

Runoff = 5.80 cfs @ 12.17 hrs, Volume= 0.493 af, Depth> 4.33"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
38,612	80	>75% Grass cover, Good, HSG D
20,864	98	Paved parking, HSG D
59,476	86	Weighted Average
38,612		64.92% Pervious Area
20,864		35.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	150	0.0400	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.9	175	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.5	200	0.0350	6.80	29.48	Parabolic Channel, W=6.50' D=1.00' Area=4.3 sf Perim=6.9' n= 0.030
12.5	525	Total			

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Subcatchment 5:

Runoff = 4.38 cfs @ 12.19 hrs, Volume= 0.393 af, Depth> 4.54"

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-YR Rainfall=6.20"

Area (sf)	CN	Description
24,982	80	>75% Grass cover, Good, HSG D
20,275	98	Paved parking, HSG D
45,257	88	Weighted Average
24,982		55.20% Pervious Area
20,275		44.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	150	0.0333	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
0.3	64	0.0781	4.19		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.7	45	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
2.2	147	0.0050	1.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
14.1	406	Total			

Summary for Pond C 1: 15" Culvert

Inflow Area = 0.841 ac, 51.39% Impervious, Inflow Depth > 4.66" for 25-YR event
 Inflow = 4.55 cfs @ 12.09 hrs, Volume= 0.326 af
 Outflow = 4.55 cfs @ 12.09 hrs, Volume= 0.326 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.55 cfs @ 12.09 hrs, Volume= 0.326 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 107.32' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	105.75'	15.0" Round Culvert L= 32.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 105.75' / 105.43' S= 0.0100 ' / Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.44 cfs @ 12.09 hrs HW=107.28' (Free Discharge)↑**1=Culvert** (Inlet Controls 4.44 cfs @ 3.62 fps)

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Pond CB 1: Catch Basin 1

Inflow Area = 0.384 ac, 71.83% Impervious, Inflow Depth > 5.07" for 25-YR event
 Inflow = 2.19 cfs @ 12.09 hrs, Volume= 0.162 af
 Outflow = 2.19 cfs @ 12.09 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.19 cfs @ 12.09 hrs, Volume= 0.162 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 103.09' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	102.11'	12.0" Round Culvert L= 172.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 102.11' / 101.25' S= 0.0050 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.13 cfs @ 12.09 hrs HW=103.07' (Free Discharge)
 ↑1=Culvert (Barrel Controls 2.13 cfs @ 3.51 fps)

Summary for Pond EC 1: 12" Culvert Inlet Modified

Inflow Area = 1.406 ac, 57.82% Impervious, Inflow Depth > 4.78" for 25-YR event
 Inflow = 7.74 cfs @ 12.09 hrs, Volume= 0.561 af
 Outflow = 3.83 cfs @ 12.15 hrs, Volume= 0.543 af, Atten= 50%, Lag= 3.7 min
 Primary = 3.83 cfs @ 12.15 hrs, Volume= 0.543 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 8
 Peak Elev= 102.50' @ 12.15 hrs Surf.Area= 1,978 sf Storage= 2,952 cf

Plug-Flow detention time= 23.0 min calculated for 0.543 af (97% of inflow)
 Center-of-Mass det. time= 9.9 min (764.6 - 754.6)

Volume	Invert	Avail.Storage	Storage Description
#1	100.35'	2,953 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
100.35	0	0.0	0	0	0
100.50	978	140.2	49	49	1,564
101.00	1,195	149.6	542	591	1,793
102.00	1,704	177.7	1,442	2,033	2,543
102.50	1,978	187.1	920	2,953	2,830

Device	Routing	Invert	Outlet Devices
#1	Primary	100.35'	12.0" Round Culvert L= 50.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 100.35' / 98.67' S= 0.0336 '/ Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.83 cfs @ 12.15 hrs HW=102.50' (Free Discharge)
 ↑1=Culvert (Inlet Controls 3.83 cfs @ 4.88 fps)

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Type III 24-hr 25-YR Rainfall=6.20"

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Summary for Pond EC 2: 12" Culvert Inlet

Inflow Area = 1.365 ac, 35.08% Impervious, Inflow Depth > 4.33" for 25-YR event
 Inflow = 5.80 cfs @ 12.17 hrs, Volume= 0.493 af
 Outflow = 5.96 cfs @ 12.17 hrs, Volume= 0.493 af, Atten= 0%, Lag= 0.0 min
 Primary = 5.96 cfs @ 12.17 hrs, Volume= 0.493 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 109.66' @ 12.16 hrs Surf.Area= 201 sf Storage= 171 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 0.1 min (771.0 - 770.9)

Volume	Invert	Avail.Storage	Storage Description
#1	105.50'	171 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
105.50	0	0.0	0	0	0
106.00	12	19.5	2	2	31
107.00	72	43.3	38	40	154
108.00	201	75.3	131	171	461

Device	Routing	Invert	Outlet Devices
#1	Primary	105.20'	12.0" Round Culvert L= 500.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 105.20' / 90.00' S= 0.0304 ' S= 0.0304 ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=5.75 cfs @ 12.17 hrs HW=109.41' (Free Discharge)
 ↑ **1=Culvert** (Inlet Controls 5.75 cfs @ 7.32 fps)

Summary for Pond EP 1:

Inflow Area = 1.712 ac, 56.32% Impervious, Inflow Depth > 4.64" for 25-YR event
 Inflow = 5.40 cfs @ 12.12 hrs, Volume= 0.662 af
 Outflow = 4.95 cfs @ 12.21 hrs, Volume= 0.662 af, Atten= 8%, Lag= 5.1 min
 Primary = 4.95 cfs @ 12.21 hrs, Volume= 0.662 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 101.75' @ 12.21 hrs Surf.Area= 495 sf Storage= 321 cf

Plug-Flow detention time= 0.2 min calculated for 0.662 af (100% of inflow)
 Center-of-Mass det. time= 0.2 min (763.8 - 763.6)

Volume	Invert	Avail.Storage	Storage Description
#1	98.50'	2,086 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Pomerleau Warehouse Post

Type III 24-hr 25-YR Rainfall=6.20"

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
98.50	0	0.0	0	0	0
101.00	125	59.5	104	104	291
102.00	675	108.4	363	468	950
103.00	2,804	214.0	1,618	2,086	3,664

Device	Routing	Invert	Outlet Devices
#1	Primary	98.50'	12.0" Round Culvert L= 105.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 98.50' / 97.09' S= 0.0134 ' S= 0.0134 ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=4.94 cfs @ 12.21 hrs HW=101.74' (Free Discharge)

↑**1=Culvert** (Inlet Controls 4.94 cfs @ 6.29 fps)

Summary for Pond SF 1: Filter A

Inflow Area = 1.114 ac, 73.92% Impervious, Inflow Depth > 5.14" for 25-YR event
 Inflow = 6.40 cfs @ 12.09 hrs, Volume= 0.477 af
 Outflow = 5.19 cfs @ 12.15 hrs, Volume= 0.316 af, Atten= 19%, Lag= 3.9 min
 Primary = 0.05 cfs @ 12.15 hrs, Volume= 0.047 af
 Secondary = 5.13 cfs @ 12.15 hrs, Volume= 0.269 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 2
 Peak Elev= 101.90' @ 12.15 hrs Surf.Area= 6,289 sf Storage= 8,397 cf
 Flood Elev= 103.00' Surf.Area= 6,368 sf Storage= 8,797 cf

Plug-Flow detention time= 134.5 min calculated for 0.316 af (66% of inflow)
 Center-of-Mass det. time= 63.1 min (808.6 - 745.5)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	6,336 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 6,153 cf Overall x 40.0% Voids
#2	97.50'	2,461 cf	
		8,797 cf	
			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
100.00	2,461	0	0
101.00	3,156	2,809	2,809
101.50	3,524	1,670	4,479
102.00	3,907	1,858	6,336

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
97.50	2,461	0	0
100.00	2,461	6,153	6,153

Pomerleau Warehouse Post

Type III 24-hr 25-YR Rainfall=6.20"

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Device	Routing	Invert	Outlet Devices
#1	Primary	97.50'	12.0" Round Culvert L= 178.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 97.50' / 96.61' S= 0.0050 ' / Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	97.67'	1.0" Vert. Orifice/Grate C= 0.600
#3	Secondary	101.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.05 cfs @ 12.15 hrs HW=101.90' (Free Discharge)↑ **1=Culvert** (Passes 0.05 cfs of 5.21 cfs potential flow)↑ **2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 9.85 fps)**Secondary OutFlow** Max=5.11 cfs @ 12.15 hrs HW=101.90' (Free Discharge)↑ **3=Orifice/Grate** (Weir Controls 5.11 cfs @ 2.06 fps)**Summary for Link AP1:**

Inflow Area = 1.898 ac, 57.19% Impervious, Inflow Depth > 4.67" for 25-YR event
 Inflow = 5.72 cfs @ 12.13 hrs, Volume= 0.738 af
 Primary = 5.72 cfs @ 12.13 hrs, Volume= 0.738 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP2:

Inflow Area = 1.536 ac, 71.32% Impervious, Inflow Depth > 3.84" for 25-YR event
 Inflow = 7.29 cfs @ 12.15 hrs, Volume= 0.491 af
 Primary = 7.29 cfs @ 12.15 hrs, Volume= 0.491 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP3:

Inflow Area = 1.494 ac, 86.65% Impervious, Inflow Depth > 5.36" for 25-YR event
 Inflow = 8.77 cfs @ 12.09 hrs, Volume= 0.667 af
 Primary = 8.77 cfs @ 12.09 hrs, Volume= 0.667 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP4:

Inflow Area = 1.365 ac, 35.08% Impervious, Inflow Depth > 4.33" for 25-YR event
 Inflow = 5.96 cfs @ 12.17 hrs, Volume= 0.493 af
 Primary = 5.96 cfs @ 12.17 hrs, Volume= 0.493 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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Summary for Link AP5:

Inflow Area = 1.039 ac, 44.80% Impervious, Inflow Depth > 4.54" for 25-YR event
Inflow = 4.38 cfs @ 12.19 hrs, Volume= 0.393 af
Primary = 4.38 cfs @ 12.19 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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Type III 24-hr 2-YR Rainfall=3.30"

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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 1.1:	Runoff Area=36,619 sf 51.39% Impervious Runoff Depth>2.04" Flow Length=186' Tc=6.0 min CN=89 Runoff=2.08 cfs 0.143 af
Subcatchment 1.2:	Runoff Area=24,636 sf 67.38% Impervious Runoff Depth>2.31" Flow Length=203' Tc=6.0 min CN=92 Runoff=1.55 cfs 0.109 af
Subcatchment 1.3:	Runoff Area=13,339 sf 49.43% Impervious Runoff Depth>2.04" Flow Length=140' Slope=0.0714 '/' Tc=7.6 min CN=89 Runoff=0.72 cfs 0.052 af
Subcatchment 1.4:	Runoff Area=8,068 sf 65.28% Impervious Runoff Depth>2.31" Flow Length=269' Tc=6.0 min CN=92 Runoff=0.51 cfs 0.036 af
Subcatchment 2.1:	Runoff Area=16,706 sf 71.83% Impervious Runoff Depth>2.40" Tc=6.0 min CN=93 Runoff=1.08 cfs 0.077 af
Subcatchment 2.2:	Runoff Area=31,820 sf 75.01% Impervious Runoff Depth>2.50" Tc=6.0 min CN=94 Runoff=2.11 cfs 0.152 af
Subcatchment 2.3:	Runoff Area=18,396 sf 64.49% Impervious Runoff Depth>2.31" Flow Length=191' Tc=9.8 min CN=92 Runoff=1.03 cfs 0.081 af
Subcatchment 3:	Runoff Area=65,096 sf 86.65% Impervious Runoff Depth>2.69" Flow Length=570' Tc=6.0 min CN=96 Runoff=4.53 cfs 0.335 af
Subcatchment 4:	Runoff Area=59,476 sf 35.08% Impervious Runoff Depth>1.79" Flow Length=525' Tc=12.5 min CN=86 Runoff=2.48 cfs 0.204 af
Subcatchment 5:	Runoff Area=45,257 sf 44.80% Impervious Runoff Depth>1.95" Flow Length=406' Tc=14.1 min CN=88 Runoff=1.95 cfs 0.169 af
Pond C 1: 15" Culvert	Peak Elev=106.57' Inflow=2.08 cfs 0.143 af 15.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=2.08 cfs 0.143 af
Pond CB 1: Catch Basin 1	Peak Elev=102.73' Inflow=1.08 cfs 0.077 af 12.0" Round Culvert n=0.013 L=172.0' S=0.0050 '/' Outflow=1.08 cfs 0.077 af
Pond EC 1: 12" Culvert Inlet Modified	Peak Elev=101.55' Storage=1,314 cf Inflow=3.63 cfs 0.252 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0336 '/' Outflow=2.49 cfs 0.251 af
Pond EC 2: 12" Culvert Inlet	Peak Elev=106.38' Storage=10 cf Inflow=2.48 cfs 0.204 af 12.0" Round Culvert n=0.013 L=500.0' S=0.0304 '/' Outflow=2.46 cfs 0.204 af
Pond EP 1:	Peak Elev=100.10' Storage=27 cf Inflow=3.13 cfs 0.303 af 12.0" Round Culvert n=0.013 L=105.0' S=0.0134 '/' Outflow=3.13 cfs 0.303 af
Pond SF 1: Filter A	Peak Elev=101.53' Storage=7,059 cf Inflow=3.19 cfs 0.229 af Primary=0.05 cfs 0.040 af Secondary=0.16 cfs 0.029 af Outflow=0.21 cfs 0.069 af

Pomerleau Warehouse Post*Type III 24-hr 2-YR Rainfall=3.30"*

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Link AP1:

Inflow=3.53 cfs 0.339 af

Primary=3.53 cfs 0.339 af

Link AP2:

Inflow=1.07 cfs 0.151 af

Primary=1.07 cfs 0.151 af

Link AP3:

Inflow=4.53 cfs 0.335 af

Primary=4.53 cfs 0.335 af

Link AP4:

Inflow=2.46 cfs 0.204 af

Primary=2.46 cfs 0.204 af

Link AP5:

Inflow=1.95 cfs 0.169 af

Primary=1.95 cfs 0.169 af

Total Runoff Area = 7.333 ac Runoff Volume = 1.357 af Average Runoff Depth = 2.22"
39.72% Pervious = 2.912 ac 60.28% Impervious = 4.420 ac

Pomerleau Warehouse Post

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Type III 24-hr 10-YR Rainfall=4.90"

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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 1.1:	Runoff Area=36,619 sf 51.39% Impervious Runoff Depth>3.47" Flow Length=186' Tc=6.0 min CN=89 Runoff=3.44 cfs 0.243 af
Subcatchment 1.2:	Runoff Area=24,636 sf 67.38% Impervious Runoff Depth>3.77" Flow Length=203' Tc=6.0 min CN=92 Runoff=2.46 cfs 0.178 af
Subcatchment 1.3:	Runoff Area=13,339 sf 49.43% Impervious Runoff Depth>3.47" Flow Length=140' Slope=0.0714 '/' Tc=7.6 min CN=89 Runoff=1.20 cfs 0.089 af
Subcatchment 1.4:	Runoff Area=8,068 sf 65.28% Impervious Runoff Depth>3.77" Flow Length=269' Tc=6.0 min CN=92 Runoff=0.81 cfs 0.058 af
Subcatchment 2.1:	Runoff Area=16,706 sf 71.83% Impervious Runoff Depth>3.87" Tc=6.0 min CN=93 Runoff=1.70 cfs 0.124 af
Subcatchment 2.2:	Runoff Area=31,820 sf 75.01% Impervious Runoff Depth>3.97" Tc=6.0 min CN=94 Runoff=3.28 cfs 0.242 af
Subcatchment 2.3:	Runoff Area=18,396 sf 64.49% Impervious Runoff Depth>3.77" Flow Length=191' Tc=9.8 min CN=92 Runoff=1.63 cfs 0.133 af
Subcatchment 3:	Runoff Area=65,096 sf 86.65% Impervious Runoff Depth>4.16" Flow Length=570' Tc=6.0 min CN=96 Runoff=6.88 cfs 0.518 af
Subcatchment 4:	Runoff Area=59,476 sf 35.08% Impervious Runoff Depth>3.17" Flow Length=525' Tc=12.5 min CN=86 Runoff=4.30 cfs 0.360 af
Subcatchment 5:	Runoff Area=45,257 sf 44.80% Impervious Runoff Depth>3.36" Flow Length=406' Tc=14.1 min CN=88 Runoff=3.29 cfs 0.291 af
Pond C 1: 15" Culvert	Peak Elev=106.91' Inflow=3.44 cfs 0.243 af 15.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=3.44 cfs 0.243 af
Pond CB 1: Catch Basin 1	Peak Elev=102.93' Inflow=1.70 cfs 0.124 af 12.0" Round Culvert n=0.013 L=172.0' S=0.0050 '/' Outflow=1.70 cfs 0.124 af
Pond EC 1: 12" Culvert Inlet Modified	Peak Elev=102.23' Storage=2,442 cf Inflow=5.90 cfs 0.421 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0336 '/' Outflow=3.51 cfs 0.420 af
Pond EC 2: 12" Culvert Inlet	Peak Elev=107.65' Storage=111 cf Inflow=4.30 cfs 0.360 af 12.0" Round Culvert n=0.013 L=500.0' S=0.0304 '/' Outflow=4.17 cfs 0.360 af
Pond EP 1:	Peak Elev=101.19' Storage=135 cf Inflow=4.52 cfs 0.508 af 12.0" Round Culvert n=0.013 L=105.0' S=0.0134 '/' Outflow=4.42 cfs 0.508 af
Pond SF 1: Filter A	Peak Elev=101.74' Storage=7,807 cf Inflow=4.97 cfs 0.366 af Primary=0.05 cfs 0.045 af Secondary=2.42 cfs 0.161 af Outflow=2.47 cfs 0.205 af

Pomerleau Warehouse Post*Type III 24-hr 10-YR Rainfall=4.90"*

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Link AP1:Inflow=5.01 cfs 0.566 af
Primary=5.01 cfs 0.566 af**Link AP2:**Inflow=3.78 cfs 0.338 af
Primary=3.78 cfs 0.338 af**Link AP3:**Inflow=6.88 cfs 0.518 af
Primary=6.88 cfs 0.518 af**Link AP4:**Inflow=4.17 cfs 0.360 af
Primary=4.17 cfs 0.360 af**Link AP5:**Inflow=3.29 cfs 0.291 af
Primary=3.29 cfs 0.291 af**Total Runoff Area = 7.333 ac Runoff Volume = 2.236 af Average Runoff Depth = 3.66"**
39.72% Pervious = 2.912 ac 60.28% Impervious = 4.420 ac

Appendix E
Stormwater Treatment Calculations

Grassed Underdrained Soil Filter Calculations

Subcatchment ID	Impervious Area (sf)	WQ Impervious Area Runoff Depth (inches)	WQ Impervious Volume Required (ft ³)	Landscaped Area (sf)	WQ Landscape Area Runoff Depth (inches)	WQ Landscape Volume Required (ft ³)	Total WQ Volume Required (ft ³)
2.1	12,000	1.00	1,000	4,706	0.4	157	1,157
2.2	23,868	1.00	1,989	7,952	0.4	265	2,254
Total	35,868		2,989	12,658		422	3,411

Summary of Underdrain Filter Sizing	
Total WQ Volume Required (ft ³)	3,411
WQ Volume Provided (ft ³)	4,574
Filter Surface Elevation	100.00
WQ Surface Elevation	101.50
Invert of Underdrain	97.67
5% of Tributary Impervious Area (ft ²)	1,793
2% of Tributary Landscaped (ft ²)	253
Filter Surface Area Required (ft ²)	2,047
Filter Surface Area Provided (ft ²)	2,461

Underdrain Filter Volume				
Elevation	Surface Area (ft ²)	Average Stage Area (ft ²)	Stage Volume (ft ³)	Cumulative Volume (ft ³)
100	2,461			0
101	3,156	2,808	2,808	2,808
101.5	3,907	3,531	1,766	4,574
Water Quality Volume Provided (at Elevation 197.0) =				4,574

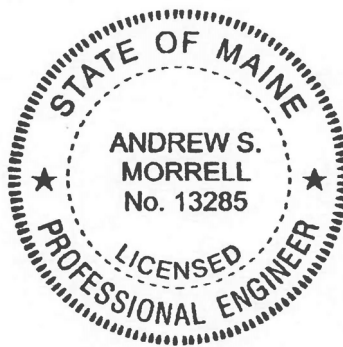
Orifice Eqn: $C \cdot A \cdot (2gH)^{1/2}$

Orifice Sizing	
Discharge Coefficient	0.62
Orifice Size (inches)	1
Orifice Size (feet)	0.08
Orifice Area (ft ²)	0.005
Orifice Centerline Elevation	97.92

Q (cfs)	Stage Elevation	Total Drawdown at Stage	Pond Area	Drawdown Time (hrs)
0.0391	100	0.00	2,461	0.00
0.0476	101	1.00	3,156	18.42
0.0513	101.5	0.50	3,907	10.58
Total Drawdown Time =				28.99

INSPECTION & MAINTENANCE PLAN
FOR STORMWATER FACILITIES

**For
Westfield Inc.
4-Unit Warehouse Facility
Biddeford, Maine**



Prepared By:

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Project Narrative

The proposed project is a four unit commercial warehouse facility. The development includes structures, underground utilities, parking infrastructure and stormwater management facilities. The proposed development is subject to the standard conditions of the City of Biddeford stormwater ordinance. The following outlines the proposed BMP's and their required inspection, maintenance, and reporting:

The Applicant, Westfield Inc., will be responsible for all operation and maintenance of the proposed site improvements during construction. If an inspection determines that corrective action is required during construction the applicant's contractor is responsible for making the repair. This repair shall begin by the end of the following work day and completed within seven days or before the next storm event.

The Applicant, Westfield Inc., will also be responsible for post construction operations and maintenance.

Contacts:

Design Engineer: BH2M
28 State Street
Gorham, Me. 04038
(207) 839-2771

Developer/Applicant: David Gould, Westfield Inc.
26 Rivers Edge Drive
Kennebunk, Maine 04043

Owner: David Gould, Westfield Inc.
26 Rivers Edge Drive
Kennebunk, Maine 04043

Post Construction Stormwater Inspector: (See definition of Inspector in Post Construction
Stormwater Infrastructure Management Ordinance)

Contractors:

Inspection

The applicant, Westfield Inc., is responsible for complying with the City of Biddeford stormwater ordinance. The Applicant will be responsible for inspection and maintenance during construction and will also be responsible for Post-Construction operations. The development is not subject to permitting by the Maine DEP for Stormwater Law.

Purpose

The following O&M Plan provides guidance and schedules for compliance with the City's Post Construction Stormwater Infrastructure Management Ordinance.

Definitions

Significant Period of Rain: 1" or more of rain in a 24-hour period.

Inspection Scope

Construction inspections shall include all disturbed and impervious areas, material storage areas, vehicle access points, and all erosion and sediment control measures.

Inspection Frequency

An inspection is required at least once a week and before and after (within twenty-four (24) hours) a significant storm event during construction. If an inspection determines that corrective action is required, the repair shall begin by the end of the following work day and completed within seven (7) days or before the next storm event.

Inspector Qualifications

For Post-Construction Inspections, the qualified post-construction stormwater inspector with knowledge of erosion and stormwater control, including the standards and conditions of this projects permit shall be retained by the owner.

During construction, it is the responsibility of the applicant and the applicant's contractor to inspect, maintain and repair Post-Construction BMP's until such time that the BMP's are accepted by the Dempsey Drive Business Association.

Inspection/Maintenance Responsibility

The Applicant, Westfield Inc., shall be responsible for inspection and maintenance during construction. If an inspection determines that corrective action is required during construction the applicant's contractor is responsible for making the repair. This repair shall begin by the end of the following work day and completed within seven days or before the next storm event.

It shall also be Westfield Inc's responsibility to retain the services of the Post-Construction Stormwater Inspector and provide for the repair and maintenance noted by inspections, if any. When maintenance is required by inspection, Westfield Inc. shall perform the required maintenance and/or repairs in a timely fashion and notify the inspector when the maintenance is complete. The Association shall maintain detailed records of the inspections and maintenance performed.

Documentation

Construction inspection forms and documentation of corrective active actions shall be maintained for at least three (3) years. Post construction inspection forms and documentation of corrective active actions shall be maintained for at least five (5) years.

O&M Plan

The following is a summary of the required inspection and maintenance for the Post-Construction BMP's:

Access Roads

1. On-site inspection of the roads shall be performed at least twice annually and after a significant period of rainfall.
 - a) All low spots of pooling water shall be re-graded to direct the water off the pavement and to the appropriate, catch basin or ditch.
 - b) Areas of erosions shall be repaired immediately. This includes all grassy area adjacent to the road.
 - c) Sweeping the roadway free of sand after the winter season should be completed annually in the spring of the year.

Storm Drain and Catch Basins

1. Inspect catch basin inlets on a monthly basis for debris or conditions which could inhibit flow entry. Remove debris and properly dispose.
2. Inspect all catch basin structures annually.
 - a) Check that rims are securely attached and properly set to optimize flow entry.
 - b) Measure and record silt accumulation, if any. Sumps shall be cleaned at least on a yearly basis in the spring. All sediment removed should be disposed of properly.
3. Check pipelines annually to determine silt accumulation, if any. Remove excess silt if found.

Vegetated Swales/Ditches

1. On-site inspection of the vegetated ditches shall be on a monthly schedule and after a significant period of rainfall.
 - a) Ditches should be inspected to repair erosion problems, remove any accumulated debris and to check the condition and integrity of the check dams.
 - b) Ditches shall be mowed periodically to a minimum grass height of 6". Ditches shall be maintained such that woody vegetation is removed from the flow line of the ditch or areas that may impede the capacity of the ditch.
 - c) The use of pesticides and fertilizer should be limited to what is needed to promote a healthy/stable growth of vegetation.

Sediment Forebay

1. On-site inspection of the rip-rap on a monthly schedule or after a significant period of rainfall.
 - a.) Carefully inspect to determine if high flows have caused scour beneath the rip-rap or dislodged any of the stones. If repairs are needed, they should be accomplished immediately.

Grassed Underdrain Filter

1. On-site inspection of Grassed Underdrain Filters shall be twice per year (May 1 and October 1). The following shall be accomplished:
 - a.) Record date of inspection
 - b.) Identify person making the inspection
 - c.) Record observed water depth. (If no rain within last 24-36 hours should be dry.
 - d.) Inspect rip rap for debris accumulation
 - e.) Remove debris.
 - f.) Inspect for evidence of snow storage.
 - g.) Inspect for evidence of vehicles driving on bmp.
 - h.) Mow grassed slopes and/or repair slopes if eroded.
 - i.) Clean accumulated sediment from forebay.

Snow Storage Areas

1. On-site inspection of the snow storage areas on an annual schedule.
 - a.) Carefully inspect to determine the condition of vegetation and remove any accumulated debris. If repairs are needed, they should be accomplished immediately.

Attachments

1. Inspection & Maintenance Log
2. See attached Appendix B “Inspection and Maintenance” from MDEP Stormwater Regulations.
3. See attached “Appendix C” from MDEP Stormwater Regulations for performance standards.
4. Final Site Plan – Pomerleau Street

INSPECTION SUMMARY
4-Unit Warehouse Facility

<u>Inspection of</u>	<u>Schedule *</u>
• Access Drives and Parking Areas	
Inspect	Twice Annually
Sweep Parking Areas	Annually
• Storm Drain and Catch Basins	
Inspect (CB Inlets)	Monthly
Inspect (CB Sumps)	Annually
Measure Silt & Remove	Annually
• Sediment Forebay	
Inspect	Monthly
Remove Litter	Annually
• Grassed Underdrain Filter	
Inspect	Bi-Annually
Remove Litter	Annually

* After significant rainstorm in addition to regular inspections. Inspections shall be within 3 days of significant rainfall.

INSPECTION AND MAINTENANCE LOG

4-Unit Warehouse Facility
Post Construction Stormwater
Inspection & Maintenance Log

Date of Inspection: _____

Inspection by: _____

Purpose of Inspection: Monthly, Yearly, Significant Rainfall (circle one)

- Access Drives and Parking Areas

Description of Conditions:

Maintenance & Date of Repairs:

Annual Sweeping (date & Contractors):

Follow Up Needed:

- Storm drain and catch basins

Description:

Description of Conditions:

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor for Sump Cleaning:

Follow Up Needed:

- Sediment Forebay
Description of Conditions:

Maintenance & Date of Repairs:

Follow Up Needed:

- Grassed Underdrained Soil Filter
Description:

Description of Conditions:

Evidence of Snow Storage: Y / N

Evidence of Vehicle on Filter: Y / N

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor for Sump Cleaning:

Follow Up Needed:

Inspector Signature



WILLIAM A. THOMPSON
ROBERT C. LIBBY, Jr.
WALTER E. PELKEY
ANDREW S. MORRELL
STEVEN J. BLAKE

Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

380B Main Street Tel. (207) 839-2771
Gorham, Maine 04038 www.bh2m.com

January 29, 2021

Greg Tansley
Biddeford City Planner
205 Main Street
P.O. Box 586
Biddeford, Maine 04005

Re: 4 Unit Warehouse Facility
 Site Design review dated January 12, 2021
 Received 1/19/2021

Dear Greg;

The following up on the above referenced memo we have revised the proposed project documents. We are including a revised plan set and stormwater report in addition to the following responses to these comments:

A. General

1. It would be helpful if an existing conditions plan was provided.

RESPONSE:

An existing conditions plan is now included in the plan set.

2. There were no drainage plans or building elevations included in the information provided for review. This information is necessary to determine the roof drainage, door locations, and to review the stormwater management plans and report. The applicant has since provided both.

RESPONSE:

Drainage plans have been provided.

3. The cover letter provided indicates that because the project involves less than 20,000 sf of new impervious surface, a CFUP fee is not required. As we discussed, that may not be accurate.

RESPONSE:

We have received clarification that a CFUP fee is required.

B. Drawings

1. Sheet 1 – Site Plan

- a. Spot elevations should be provided at the accessible parking spaces. As currently shown, the space in front of unit D exceeds the 2% maximum.
RESPONSE:
All areas of available parking have final contours shown on the site plan. The 2% parking grade has been adjusted at Building D and relocated handicap parking in the southern units to in front of unit B where the accessible entrance will be located. These grades are now shown as 2%.
- b. Spot grades should be provided along the walk southerly of units A and B.
RESPONSE:
Grades are now shown.
- c. Elevations at the tops and ends of the retaining walls should be shown.
RESPONSE:
Preliminary grades for the top of wall are now shown. Note 17 on Sheet 1 indicates that the retaining walls will be designed by a Structural Engineer. This information will be part of the building permit process.
- d. The grades southerly and easterly of building B are shown to be one foot higher than the finished floor elevation. Will this be problematic with the adjacent drainage swale running full?
RESPONSE:
The swale easterly of building B have been revised to be below FFE.
- e. A saw cut and butt joint should be called for at Pomerleau Street.
RESPONSE:
Sawcut note added at entrance from Pomerleau Street.
- f. Note 12 indicates underground electric from the existing utility pole, while the plan indicates overhead service.
RESPONSE:
This has been resolved to consistently show underground electric.
- g. The grading indicates that the elevations in front of units A and B from the retaining wall to the west will be flat for 35 ft and then run along the building for 60 ft, outletting onto a 3H:1V slope. Perhaps a few more spot grades could be provided to clarify the intent and the grading of the sediment forebay. An erosion control blanket should be specified for this area.
RESPONSE:
Grades of forebay shown; erosion control blanket specified.
- h. A kor-n-seal joint sleeve or equivalent should be specified for the storm drain connection at the catch basin in Pomerleau Street.
RESPONSE:
Existing C.B. in Pomerleau Street shown to be cored and kor-n-seal sleeve

noted.

- i. The plan shows two existing 20 ft wide drainage and utility easement to the city of Biddeford. Currently 3 ph power and a drainage ditch are located within the easement. The plan indicates the power will remain but the stormwater will be rerouted. It seems new easements may be required to accommodate drainage, particularly to the east and south of units A and B.

RESPONSE:

New drainage easements are proposed to the City of Biddeford and locations are shown on the Site Plan. These include the area of the proposed swale southerly of units A and B, as well as the area of the expanded dry basin. These easements are also shown on the abutting property owned by 32N, LLC, which is also a holding of the subject property's owner.

- j. Based on our site visit it appears a substantial amount of runoff from the ice arena roof and abutting property currently run onto the development site to the proposed shallow ditch to be constructed around units A and B noted in the previous comment. We recommend that slope erosion control protection be shown. The capacity of the proposed swale and culvert should be demonstrated. More on this issue in the stormwater comments.

RESPONSE:

Drainage calculations have been comprehensively revised to include offsite areas, including the ice arena. Areas of slope protection have been noted.

- k. Stormwater runoff from the easterly side of the city property including the arena roof, a portion of the drive, and a gravel/lawn area extending to the power lines also appears to be tributary to the existing ditch northerly of the ice arena, ultimately to the existing storm drain inlet located in the easement. The proposed grading would redirect this runoff to the shallow swale southerly of unit D. We suggest a better alternative would be to provide the needed maintenance to the existing swale within the easement, including removal of the vegetation and reestablishing turf, rather than flattening the slope and lessening the capacity as currently shown.

RESPONSE:

During a recent site visit, we note that the brush and saplings in the area of the swale have been cut back and cleaned out. We also note that the swale along the entrance drive to the arena (outside of the watershed of the subject project) has been cleaned out and riprap replaced. There appears to be ongoing maintenance of this area being conducted by the City. Changes in proposed grading now show that we are reducing the contribution slightly to this swale, and are routing proposed run off away from the swale to maintain its existing capacity.

- l. The inlet to the existing culvert shown as "unknown outlet" is badly damaged and in need of repair. This should be removed to sound piping and repaired as

required. The size and invert should be noted on the drawing. Because additional stormwater will be routed to this inlet, we also recommend that the outlet be identified. It seems that it may drain to an existing catch basin in the lower driveway in front of the entrance to Gillespie's office.

RESPONSE:

The culvert has been determined to outlet along the bank north of the edge of pavement at the end of Pomerleau Street. As noted in comment K above, the design now shows a slight reduction in contributing area so its capacity should not be effected. We note on the site plan that the crushed end of the culvert should be repaired, and the exit of the culvert should be exposed and inspected prior to construction.

- m. The striping layout results in a 10 ft wide access aisle at the southeasterly corner of the existing building northerly of unit D. The parking should be rearranged to provide a minimum width of 20 ft for emergency vehicle access and no parking fire lane signage and striping provided. The existing transformer and barrier at that location should also be shown.

RESPONSE:

Parking spots along this area have been removed to maintain a 20' lane.

- n. The hatched area northerly of units A and B represents full depth pavement construction. What is the intent for treatment of the shaded areas shown on the plan?

RESPONSE:

The shaded area will be regraded to the proposed elevations and paved. As the majority of these areas are considered impervious in existing conditions, treatment is not required. The project proposes 16,475 sf of new impervious surfaces in areas shown as vegetated in existing conditions, and proposes to treat 35,868 sf of existing and proposed impervious area. Therefore, the design proposes to exceed the impervious area treatment requirements by 19,393 sf

- o. It seems that drip edges at the rear of the units are necessary given the shed roof style proposed.

RESPONSE:

Gutters are now proposed to collect run off at the rear of the buildings and to ensure these are directed to the grassed underdrained soil filter.

- p. Erosion and sedimentation control measures should be shown on the plan.

RESPONSE:

The site plan shows erosion control silt fence and stone check dams.

- q. The 4 inch underdrains in the GUSF should be called out.

RESPONSE:

The soil filter detail sheet 3 labels all pipe sizes, and 4" underdrains are now called

out on the site plan.

2. Sheet 3 – Standard Details

- a. The pavement joint detail should be revised to call out the sawcut location and milling of the existing pavement.

RESPONSE:

A pavement joint detail is now provided on sheet 4 and sawcut locations called out on the site plan.

- b. Catch basin inserts should be detailed and called for at any catch basins located within disturbed areas, in lieu of the haybale inlet protection shown.

RESPONSE:

Catch basin insert detail is now shown on sheet 5 and a typical note calls out their use on the site plan.

- c. Is the GUSF outlet control structure proposed to be square or round?

RESPONSE:

The GUSF outlet control structure is a square “type-f” catch basin. This is now specified in the detail for the outlet control structure on sheet 4.

- d. The GUSF detail should show the elevations associated with the various storm events, side slopes, a seeding specification, and inspection and testing requirements per the DEP BMP manual.

RESPONSE:

A comprehensive set of notes for the underdrained soil filter is now shown on sheet 4. The predicted elevations of stormwater events for the filter are presented in the stormwater calculations found in Appendix D of the stormwater report.

- e. Specifications for the stone level spreader material should be provided. More detail should be provided for the sediment forebay, including elevations, depth, and width to verify adequate sediment storage volume exists.

RESPONSE:

Grading of the sediment forebays are shown on the site plan, sheet 1. A berm stone size table is now included on sheet 4.

- f. The filter specification calls for sand supplemented with organic matter. The DEP BMP manual suggests that loamy sand or sandy loam should also be included in the filter mix.

RESPONSE:

Soil media details are now included in the soil filter notes on sheet 4 specifying silty sandy soil.

- g. The outlet invert for the 12" CPP matches the proposed invert into the existing catch basin in Pomerleau Street. Some slope should be provided.

RESPONSE:

The outlet control structure design has been changed to outlet to a different structure and is shown above the assumed existing invert of existing catchbasin A.

- h. Pipe material for the 4" diameter underdrain should be specified.

RESPONSE:

The pipe material for the underdrain is now shown as PVC on the details on sheet 4.

- i. A riprap inlet apron detail should be provided.

RESPONSE:

An apron detail is now provided on sheet 5.

- j. Given the Scantic soils, have there been any explorations which indicate the elevation of the seasonal high water table? Will underdrain outside the liner be necessary?

RESPONSE:

Geotechnical investigations are ongoing and a report is pending completion. The groundwater table will be reviewed against the design and considerations for ground water will be made once information is available.

- k. There is a conflict in the definition of a significant storm event in notes 1 and 10 of the Erosion and Sediment Control Plan. During construction, a significant storm event is 0.5" of rainfall in 24 hours.

RESPONSE:

This has been corrected on the updated notes shown on sheet 5.

- l. Construction inspection documentation requirements should be included on the drawing.

RESPONSE:

The note 1 of the Erosion and Sedimentation Control Plan on sheet 5 has been updated to include reference to the Inspection and Maintenance Plan and shows a 5 year document retention policy.

3. Stormwater Management

- a. The stormwater report states that 19,040 sf of new impervious surface will be created as a result of the project, while the cover letter submitted suggests that 16,000 sf will be created.

RESPONSE:

To clarify, 16,475 sf of new impervious surface will be created in currently vegetated areas. The project proposes to treat 35,868 sf of existing and

proposed impervious surfaces.

- b. Existing topography of the lot area should be shown on the existing and post development drainage plans.

RESPONSE:

Off Site topography is now shown on the drainage plans.

- c. As noted previously there appears to be a significant portion of the city ice arena property draining onto the development property at 2 locations. The pre development and post development drainage plans should be updated to include these off site drainage areas.

RESPONSE:

A comprehensive revision of the stormwater analysis has been presented in the revised documents. Offsite areas have been identified and are now considered in pre and post development analyses.

- d. The post development drainage plan should be revised to reflect shed style roofs for buildings C and D, per information provided to our office by BH2M.

RESPONSE:

This has been considered in the revised drainage analysis. Note that these shed roofs are proposed to be collected by gutters.

- e. The existing storm drain inlet size at analysis point 4 should be determined and this area modeled as a pond.

RESPONSE:

This has been incorporated into the revised models.

- f. The subcatchment 1A post development time of concentration path should be revised to follow the proposed contours and other paths updated with the segment information which was missing from the plan.

RESPONSE:

The analysis has been comprehensively revised and no longer shows this issue.

- g. The post development drainage plan includes routing of subcatchment 1A to the proposed GUSF. The routing should include the off site area which will also be routed to the GUSF based on the grading provided to determine what impacts this has on the pond capacity.

RESPONSE:

The analysis has been comprehensively revised and no longer shows this issue.

- h. Subcatchment 4 should be updated to include the area easterly of the ice arena and the ice arena roof which currently drains to the existing swale and the storm drain with the unknown outlet.

RESPONSE:

The stormwater analyses have been revised to include these off site areas.

- i. We did not note any water quality design calculations for the GUSF in the submission.

RESPONSE:

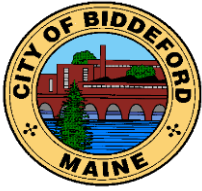
The treatment calculations for the soil filter are included as Appendix E of the stormwater report.

Thank you for providing these comments. We trust that these responses will alleviate your concerns for the project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Christopher MacDonald".

Christopher MacDonald, P.E.
Civil Engineer



CITY OF BIDDEFORD, MAINE

ENGINEERING DIVISION/PUBLIC WORKS DEPARTMENT

P.O. Box 586
Biddeford, Maine 04005
(207) 284-9118
Fax (207) 286-9384

Tom Milligan
Engineering/Wastewater Director

City of Biddeford, Maine
Wastewater Department
205 Main Street · PO Box 586 · Biddeford, Maine 04005-0586
Telephone 207 284-9118

December 29, 2020

Letter of Wastewater Treatment Plant Capacity to Serve

Brief description of project: 4 Unit commercial Project by Westfield Inc., Pomerleau Ave
Estimated flows: 96 gpd.

Determination

The City of Biddeford Wastewater Department has reviewed the request to serve the above-described project. It has been determined that at this time, once the flow reaches the treatment facility, the City has sufficient capacity at the City's Wastewater Treatment Facilities to serve the above described project. It is estimated that 96 gpd of 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.

The property will be served by a private force main sewer connection into an existing private SMH which will then flow to the City 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 any determined pump station upgrade costs based on the flow amount calculated at the time application is made and prior to the issuance of any building permits and/or the issuance of a certificate of occupancy.

This Capacity to Serve Letter is intended only to determine the City of Biddeford Wastewater Treatment Facility's ability to handle and treat the flow from the above stated project once it is received at the treatment facility. The Planning Department, Engineering Department or other persons from the Wastewater Department may require further studies or documentation regarding the impact on the City's sewer collection system or its components.

Thomas Milligan, PE
City Engineer
City of Biddeford Engineering Department
Tom.milligan@biddefordmaine.org
207-284-9118

CC: James Bennett, City Manager
Jeff Demers, Public Works/Wastewater Director
Brian Phinney, COO
Roby Fecteau, Code Enforcement
Greg Tansley, City Planner
Alex Buechner, Superintendent
Matt Eddy, Economic development Director

From: [Tom Saucier](#)
To: [Tansley, Greg](#)
Cc: [Christopher Di Matteo](#)
Subject: Westfield - Pomerleau Street

Hi Greg and Chris

We have undertaken a review of the revised plans and documentation for the subject project. It appears the majority of our original comments have been addressed. A few items remain as noted below, numbered per the response letter:

B.1.a. Spot grades should be shown at the accessible parking in front of unit B.

B.1.b. The spot grades on the walk near the building entrances are higher than the building FFE. They may want to review this.

B.1.f. The plan continues to show overhead electrical service.

B.2.a. The pavement joint detail should call for milling of the existing surface course of pavement.

B.2.c. A round frame and grate are specified on the square outlet structure.

B.2.e. A sizing calculation for the sediment forebay should be provided.

B.2.h. The detail for the GUSF shows 6" dia UD while the plan calls for 4" dia. The 6" dia is probably the better option. Also, the specification should call for the UD to be installed holes down.

A couple of additional comments regarding the stormwater modelling:

- The outlet structure detail on sheet 4 calls for the rim elevation to be at elevation 102.0 while the model uses 101.6.
- The modelling reflects a peak elevation of 101.9 with a berm elevation of 102.0 in SF 1. The grading should be revised to provide 1 ft of freeboard.
- The modelling reflects a peak elevation of 102.5 with a berm elevation of 102.5 in EC 1. The grading should be revised to provide 1 ft of freeboard.
- The modelling reflects a peak elevation of 109.66 at EP 2. A berm should be provided with 1 ft of freeboard to ensure the stormwater remains segregated as designed.
- The 25 year peak runoff rate is expected to increase by 50% at AP #2. What is the impact on the capacity of the storm drain out of the structure? The invert, rim, and pipe size should be determined and the increase in the headwater depth provided.

If you or the applicant have any questions, please let me know.

Thanks
Tom

Tom Saucier, P.E.
Site Design Associates
23 Whitney Way
Topsham, Maine 04086
207-449-4275



STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041



March 24, 2021

Christopher Macdonald
BH2M
28 State Street
Gorham, ME 04038

RE: Information Request – Pomerleau Street Project, Biddeford

Dear Christopher:

Per your request received on March 23, 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 *Pomerleau Street* project in Biddeford. Per your letter, tree clearing will not be part of your project.

Our information indicates no locations of Endangered, Threatened, or Special Concern species within the project area that would be affected by your project. Additionally, our Department has not mapped any Essential or Significant Wildlife Habitats or inland fisheries habitats that would be directly affected by your project.

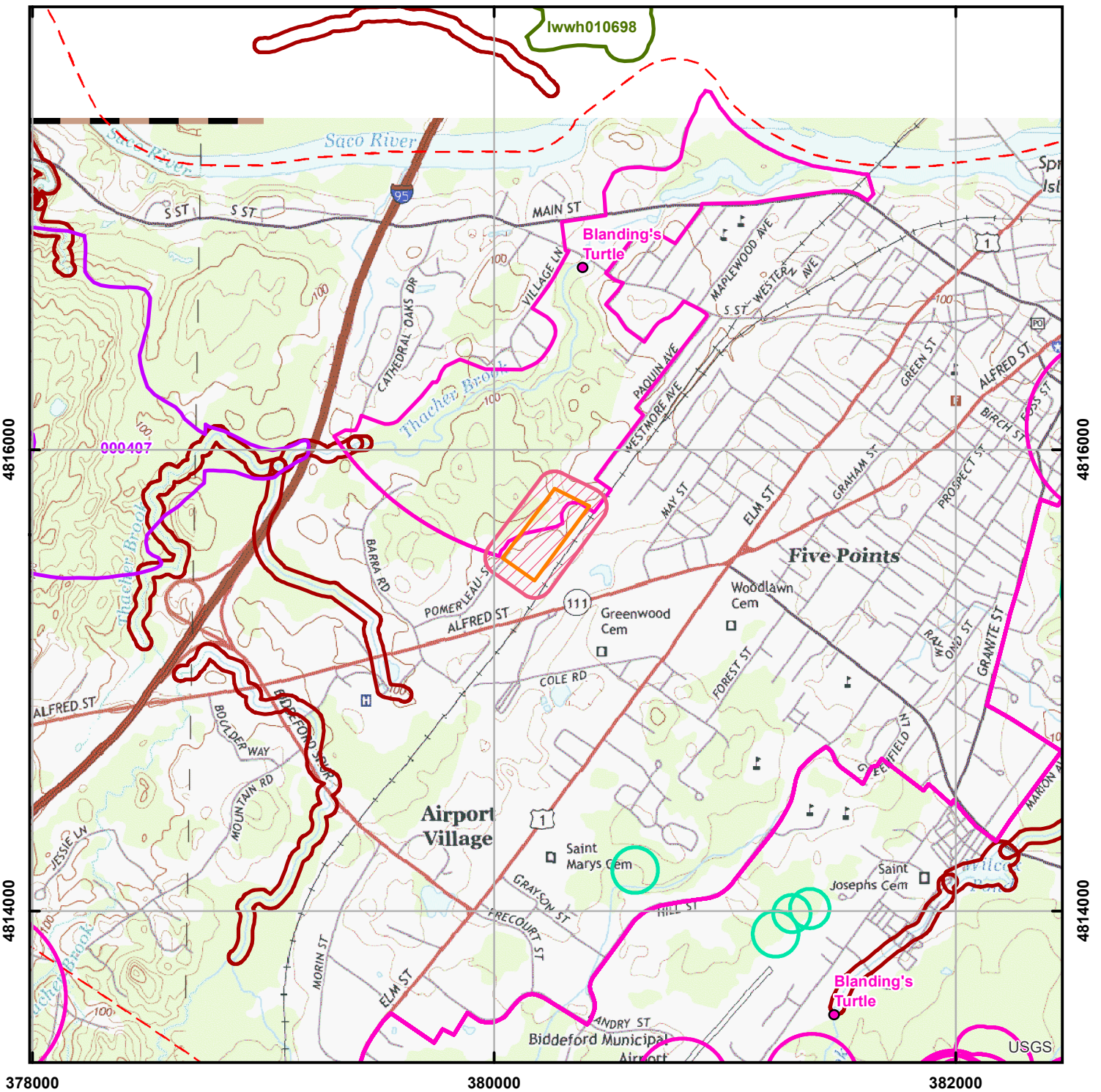
This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional 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

378000 380000 382000



378000 380000 382000



Environmental Review of Fish and Wildlife Observations and Priority Habitats

Project Name: Pomerleau Street, Biddeford
(Version 1)



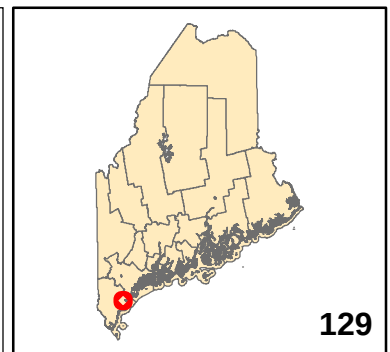
Maine Department of
Inland Fisheries and Wildlife

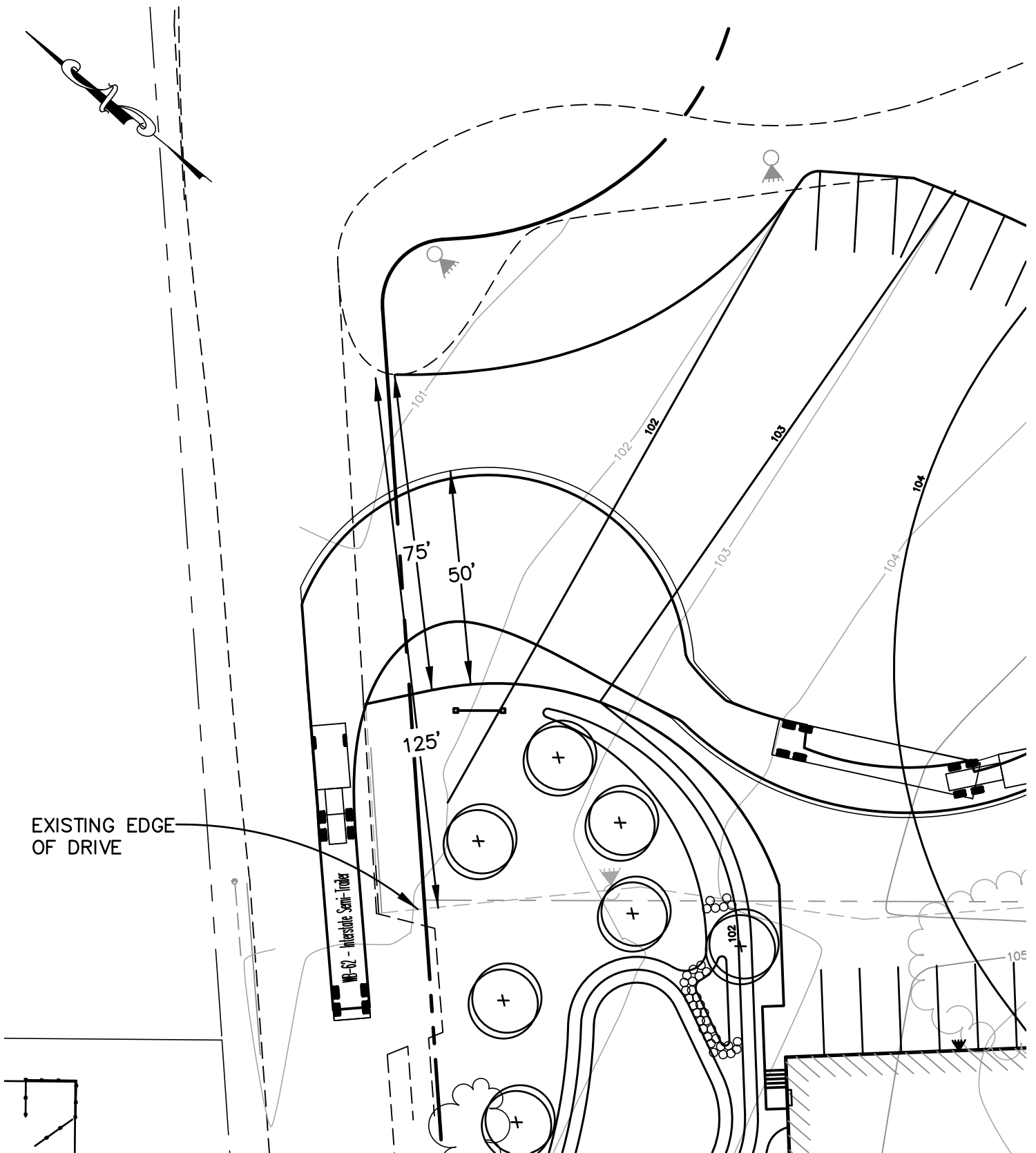
0 0.125 0.25 0.5 0.75 1 Miles

Projection: UTM, NAD83, Zone 19N

Date: 3/23/2021

- | | | |
|-----------------------------------|----------------------------------|---|
| ProjectPoints | Deer Winter Area | Roseate Tern |
| ProjectLines | LUPC p-fw | Piping Plover and Least Tern |
| ProjectPolys | Cooperative DWAs | Aquatic ETSc - 2.5 mi review |
| ProjectSearchAreas - All Versions | Seabird Nesting Islands | Rare Mussels - 5 mi review |
| Maine Cliff and Talus Areas | Shorebird Areas | Maine Heritage Fish Waters |
| | Inland Waterfowl and Wading Bird | Arctic Charr Habitat |
| | 2008 lwwh - Shoreland Zoning | Redfin Pickerel and Swamp Darter Habitats - buffer100ft |
| | Tidal Waterfowl and Wading Bird | Special Concern occupied habitats - 100ft buffer |
| | Significant Vernal Pools | Wild Lake Trout Habitats |
| | Environmental Review Polygons | |





TRUCK TURNING TEMPLATE
POMERLEAU STREET WAREHOUSE FACILITY
BIDDEFORD, MAINE

Scale: 1" = 30'



BH2M

Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

308B Main Street
Gorham, Maine 04038

Tel. (207) 839-2771
www.bh2m.com

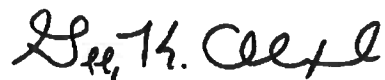
March 31, 2021

To whom it may concern:

Please accept this letter as confirmation that David Gould maintains adequate balances in his investment accounts to support 150% of the estimated \$950,000 cost of a new building to be constructed at 18 Pomerleau Street, Biddeford.

Should you require anything further, please contact Caitlin Damon at 207-774-0022.

Sincerely,



Geoffrey K. Alexander
Chief Executive Officer

Section 2. Formal site review submission procedure.

A. (8)

- a. See attached letter of financial capacity for this self-funded building to be constructed at 18 Pomerleau St. by Westfield, Inc. Estimated construction cost \$80/square foot (\$800,000) plus site work estimated at \$150,000.
- b. David Gould and his companies have renovated or constructed 10 projects in Biddeford since January 2000. These industrial facilities are located at:
 - a. 6,8, and 10 Arctic Circle
 - b. 7,16,20,24 and 26 Pomerleau Street

References:

Roger Poulin-	Baker, Newman and Noyes 800-244-7444
Mark Ross-	Kennebunk Savings Bank 800-339-6573

PLANNING BOARD
REPORT

April 1, 2021

Biddeford Planning Board
Greg Tansley, City Planner
City of Biddeford
205 Main Street
Biddeford, Maine 04005

Application: Marijuana adult cultivation – Stoner & Co., LLC
419 Hill Street (Tax Map 74 Lot 9)

Conditional Use Review

Review Status: New application.

Board members and Mr. Tansley,

The following application information has been provided for review:

1. Application form dated 2/16/2021.
2. Cover letter (Exhibit B), narrative (*Plan to Meeting Adult Use Marijuana Performance Standards: 2/19/21*), conditional license from the state and other MOMP information, public water capacity letter, state Fire Sprinkler Permit, and existing conditions photographs
3. Architectural Plan entitled: *Floor Plan; 419 Hill Street, Biddeford, ME*. Date: 10/8/2020. Prepared by Archetype Architects.
4. Stormwater Management Narrative dated 11/3/2020, prepared by Sebago Technics
5. Engineering Plan set entitled: *419 Hill Street, Biddeford, Maine* Date: 11/3/2020. Prepared by Sebago Technics. Site Plan with REV. date 11/24/2020.
6. Letter by Bennett Engineering, dated 10/29/2020, regarding the proposed Emissions Mitigation System, submitted to address odor management.
7. Waiver request dated 11/30/2020
8. Letters by Stoner & Co., dated 11/30/2020, regarding salt management and solid waste disposal for the property.
9. Capacity Letter from the City of Biddeford Wastewater Department, dated 11/30/2020.
10. Ability to Serve Letter from the City of Biddeford Fire Department, dated 12/1/2020.
11. Completed Cost Estimate Worksheet

With review of the above information and the Land Development Regulations, I offer the following comments on compliance with the City's ordinances.

PROJECT DESCRIPTION

The project site, located in the Industrial -2 Zone, is an approx. 28,300 SF vacant commercial building (formerly Precision Manufacturing) on a 3.4 AC lot with 74 parking spaces and three driveway cuts, two on Hill Street and one on Landry Street. The proposal is to renovate the entire interior of the building to operate an Adult Use Marijuana Cultivation Facility. The proposal does not include any significant changes to the site. The Planning Board granted the applicant approval for establishing a medical marijuana manufacturing facility at this site on 12/2/2020.

COMPLETENESS REVIEW

The application is before the Planning Board as required by Table of Land Uses, Article V (Establishment of Zones) of the Land Development Regulations where Adult Use Marijuana cultivation facilities are permitted in the I-2 zone as a Conditional Use, per Article VII and Article VI Performance Standards (specifically Section 77).

The applicant has prepared and submitted narratives that describe the application's compliance with the above provisions along with the required information related to program space and odor management. The **application appears to be complete** for Board's consideration.

COMPLIANCE WITH THE CITY'S ORDINANCES

PARKING

Parking on the site is depicted on the site plan as a being a total of 74 spaces, however, this total includes approximately 4 spaces located on the abutting property to the north, resulting in a total of 70 parking spaces. The applicant states their plans to have between 50 to 75 employees at the proposed facility. Applying the parking space requirements (Table 6-49B) for the industrial business activity (1 space per employee on the maximum working shift), this would require between 50 and 75 parking spaces. It appears the site's current parking can only accommodate 70 employees; the applicant should clarify what he maximum employee shift is.

Other than the items above, the review focuses on compliance to the Conditional Use Standards (Sec. 6 in Art. VII) and Performance Standards for Medical Marijuana (Sec 77 in Art. VI, recently revised). The applicant has provided a narrative that addressees these standards and it appears they demonstrate compliance.

WAIVER REQUESTS

The applicant is requesting a waiver from the **site development review requirements of Article XI Site Plan Review**. This seems reasonable since the proposed changes to the site are more aligned to maintenance when considering future paving and restriping parking without creating new impervious area.

CONCLUSION

The submitted application for a Conditional Use Permit to establish an adult use marijuana cultivation facility in an existing building appear to be in order. After review of the application material, presentation by the applicant, and public testimony, the Planning Board may want to consider granting conditional approval.

SUGGESTED MOTIONS

Move to waive the regulations of Article XI Site Plan Review, in its entirety, as permitted under Sec. 9.B.2 Waivers of the City's Land Development Regulations.

Move to grant conditional approval for the Conditional Use Permit application for Stoner & Co., LLC, at 419 Hill Street, Tax Map 74, Lot 9 with the conditions outlined in the draft Findings of Fact as presented.

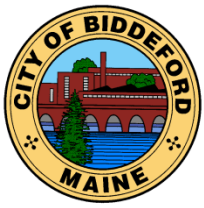
(See Draft Findings of Fact for suggested conditions)

Feel free to contact me with questions.

Best regards,



Christopher Di Matteo
City of Biddeford Contract Planner.
cdimatteo@longmeadowpla.com
207.604.4245



CITY OF BIDDEFORD

Planning and Development Department

FINDINGS OF FACT AND CONCLUSIONS OF LAW CONDITIONAL USE PERMIT

Pursuant to the provisions of the City of Biddeford Land Development Regulations Article VII, Conditional Uses and other applicable provisions, the Biddeford Planning Board has considered the application of **Stoner & Co., LLC**, 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:

Findings of Fact:

1.	Applicant:	Stoner & Co., LLC 147 Clearview Drive Arundel, ME 04046
2.	Owner of Property:	Hill 419, LLC 24 Presidio Way, ME 04105
3.	Architect:	Archetype Architects 48 Union Wharf, Portland, ME 04101
4.	Project Location:	419 Hill Street
5.	Project Tax Map #/Lot #:	Tax Map 74 Lot 9
6.	Lot Size:	3.4 AC +/-
7.	Existing Zoning:	Industrial -2
8.	Overlay Zoning:	none
9.	Designations:	none
10.	Existing Use:	Commercial – vacant
11.	Proposed Use:	Marijuana Adult Use Cultivation Facility
12.	Floodplain Status:	None
13.	Approvals Required:	Conditional Use Permit
14.	Uses in the Vicinity:	Commercial/Industrial
15.	Dimensional Requirements:	
	Min. Setback from R.O.W: 30 FT	Minimum Rear Setback: 25 FT
	Minimum Side Setback: 25 FT	Maximum Height: 6 stories / 60 FT
16.	Waivers Needed:	a. None
17.	Waivers Granted:	a. None
18.	Variances Needed for Approval:	None.
19.	Other Approvals Required:	Building Permits from the Biddeford Code Enforcement Office.
20.	Other Permits Obtained:	None.
21.	Other Non-City Permits Required:	Maine Office of Marijuana Policy (OMP) Retail Location Registration

22.	LDR Attachment A: Fess Paid:	No
23.	Application Materials Submitted: 1. Application form dated 2/16/2021. 2. Cover letter (Exhibit B), narrative (<i>Plan to Meeting Adult Use Marijuana Performance Standards: 2/19/21</i>), conditional license from the state and other MOMP information, public water capacity letter, state Fire Sprinkler Permit, and existing conditions photographs 3. Architectural Plan entitled: <i>Floor Plan; 419 Hill Street, Biddeford, ME.</i> Date: 10/8/2020. Prepared by Archetype Architects. 4. Stormwater Management Narrative dated 11/3/2020, prepared by Sebago Technics 5. Engineering Plan set entitled: <i>419 Hill Street, Biddeford, Maine</i> Date: 11/3/2020. Prepared by Sebago Technics. Site Plan with REV. date 11/24/2020. 6. Letter by Bennett Engineering, dated 10/29/2020, regarding the proposed Emissions Mitigation System, submitted to address odor management. 7. Waiver request dated 11/30/2020 8. Letters by Stoner & Co., dated 11/30/2020, regarding salt management and solid waste disposal for the property. 9. Capacity Letter from the City of Biddeford Wastewater Department, dated 11/30/2020. 10. Ability to Serve Letter from the City of Biddeford Fire Department, dated 12/1/2020. 11. Completed Cost Estimate Worksheet	
24.	Planning Board Review History:	
	Conditional Use Review:	Meeting on April 7, 2021

Conclusions of Law:

The Planning Board concludes the following:

1. The proposed use meets specific requirements set forth in this ordinance, including provisions of the Land Development Regulations, Article VI Performance Standards (Sec. 77) and Article VI Conditional Use and appears to be in compliance with applicable state or federal laws;
2. The proposed use, with review by the Fire Department, State Fire Marshall and the issuance of a building permit 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. No new exterior lighting is proposed and the existing lighting appears 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 existing site includes 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, located within an existing commercial retail plaza, 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 existing parking lot is adequate in size to include 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, adjacent to other commercial retail uses, 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. With no site improvements proposed, 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. With the existing site serviced by public water and sewer, and waste management services, 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. No new site improvements are proposed and the existing site appears to allow for adequate provision 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 existing water supply and recent upgrade to service would meet the demands of the proposed project including fire protection purposes.
17. With consideration of the submitted waste disposal plan and other state and local requirements, 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, historic sites, archeological resources, or on significant wildlife habitat or wetland areas and water bodies, which could be avoided by reasonable modification of the proposal;

Determination:

Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the application with the following conditions:

Conditions of Approval:

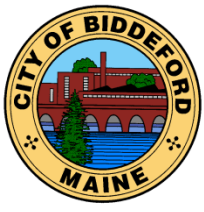
1. **Standard Conditions of Approval apply.**
2. **Prior to the signing of the Site Plan:**
 - a. **Revise plans to reflect comments concerning parking requirements on site and submit to the City Planner for review and approval.**
3. **Prior to the issuance of any occupancy permits:**
 - a. **A compliance inspection needs to occur by the Engineering Department to determine that all site improvements as shown on the submitted plan were constructed in accordance with the approved plans.**
4. **Copies of the maintenance logs for the stormwater facilities shall be submitted to the City for each calendar year no later than January 15th of the following year. If the Engineering Department does not receive these copies within 30 days after the deadline, the applicant may be required to return to the Planning Board for further review.**
5. **The applicant shall obtain all other pertinent local, state and federal permits, licenses, and insurance such as blasting, building, electrical, plumbing, etc., prior to commencing business, unless authority issuing said permit allows for such actions.**
6. **Once completed, as-built drawings of the site shall be provided to the Planning Department.**

7. Upon completion of the work the project engineer shall certify that the project has been completed as per the approved plans or shall note any deviations from the approved plans.

Planning Board Chairman

Date

DRAFT



CITY OF BIDDEFORD

Planning and Development Department

Standard Conditions of Approval

Owner/Applicant: Stoner & Co., LLC
147 Clearview Drive
Arundel, ME 04046

Project Description: Adult Use Marijuana Cultivation Facility

Project Location: 419 Hill Street

Tax Map / Lot Number: Tax Map 74, Lot 9

Project ID: 2021.15

1. The material provided for the proposed project has been reviewed only for general conformance to the City technical requirements. The applicant(s) and/or their technical consultant shall be responsible for the actual design details and completeness of their work. It is incumbent upon the applicant(s) to ensure that the project is in conformance and complies with all City Codes, ordinances and regulations as well as with all state regulations, including, but not limited to, space and bulk standards, performance standards, use standards and other zoning type requirements.
2. All work shall be in conformance with the approved plans and submission documents. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner and City Engineer for minor changes. The City Planner shall make the determination of major or minor.
3. Contact the Department of Public Works for driveway location permits, curb cut permits and/or street opening permits prior to the start of construction.
4. If Site Development is required as part of the project, an as-built plan must be provided to the City of Biddeford Engineering Office at the end of the project on mylar and on a disk, in a format, which can be read by the City of Biddeford's Geographic Information System software. If a disk copy cannot be provided, a charge for staff time to enter the plan into the City system will be assessed to the applicant.
5. The applicant shall incorporate appropriate erosion control measures into this project to reduce erosion affects from the work. All disturbed areas must be re-vegetated and/or otherwise stabilized at the appropriate stage of the work per Maine DEP standards in the Best Management Practice (BMP) manual.

6. That the Article VI Performance Standards requirements regarding Dust, Fumes, Vapors & Gases (sect 25), Explosive Materials (sect 28), Glare (sect 37), Noise (sect 48) be followed.
7. The applicant is required to comply with all applicable requirements of Chapter 70 (Utilities) and Chapter 71 (Utilities/Industrial Pretreatment Program).
8. If Site Development is required as part of the project, at the completion of the project the owner/applicant shall request a final inspection. This request shall be directed to the Planning Office. Performance Guarantees and remaining escrow accounts shall not be released until the Planning Office certifies that the project has been completed and is in compliance with the approval and all applicable City Ordinances.

DRAFT

CITY OF BIDDEFORD, MAINE
PLANNING BOARD
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

APPLICATION FORM

Type of Application:

☐ Shoreland Zoning Permit

☐ Site Plan Review

☐ Extraction

☒ Conditional Use Permit

☐ Subdivision

☐ Private Way

☐ Other: _____

Applicant Information:

Applicant's Name: Morgan Stoner (Manager) – Stoner and Co

Applicant's Mailing Address: 147 Clearview Drive, Arundel Me 04046

Applicant's Telephone: 207-710-9019

What is Applicant's legal interest in the property?

☐ Owner

☐ Potential Buyer with Contract

☒ Lease/Rental Agreement

Owner's Name: Hill 419 LLC

Owner's Address: 24 Presidio Way, Falmouth ME 04105

Owner's Telephone: 207-299-2991

Agent's Name: n/a

Agent's Address: n/a

Telephone: n/a

Engineer/Surveyor: Sebago Technics – Kylie Mason

Engineer/Surveyor's Address: 75 John Roberts Rd #4a, South Portland ME 04106

Telephone: 207-838-5578

Project Location and Lot Information:

Street Address: 419 Hill Street

Tax Map: 74 Lot: 9

Current Zoning: I2 Shoreland Zoning: n/a

Size of lot: 3.44 acres ☒ acres ☐ s.f. Lot Frontage: Approximately 550 FT

Existing Use of Property: Property has been vacant since August 2020. Formerly occupied by Precision Manufacturing, a precision parts manufacturer.

Property currently serviced by:

☒ City Road

☐ Private Road

☒ Public Sewer

☐ Septic System

☒ Public Water

☐ Private Well

☐ Public Trash

☒ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ 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 ☐ No

If yes, attach information

Do you plan to bring fill onto the lot?

☐ Yes ☒ No

If yes, attach information

Description of proposed use of property:

Project/Proposed Use Description: Adult Use Marijuana Cultivation.

Property to be serviced by:

☒ City Road

☐ Private Road

☒ Public Sewer

☐ Septic System

☒ Public Water

☐ Private Well

☐ Public Trash

☒ Private Hauler

Is this project part of a larger project?

☐ Yes ☒ No

☐ If in a Shoreland Zone:

Percent of residential lot coverage (Max. 20%): n/a

Percent of structure expansion (Max. 30%): n/a

☐ If Subdivision Review, number of lots proposed: n/a

☐ If a Private Way is proposed, number of lots served: n/a

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

Total new square feet footprint of structures: n/a

Total new square feet paving/parking: n/a

Waiver Requests (attach details):

1. See attached waiver request - Article XI
2. _____
3. _____
4. _____
5. _____

Attachments:

A. Letters of Approval

- ☒ 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 Dept (Sewer) - 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. Engineered Plans, as required.

Fees (due at time of 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:

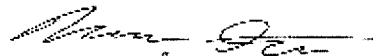
By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and it's 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 review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting this 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.

☐ Project proposed to have 1 acre or more of site disturbance:

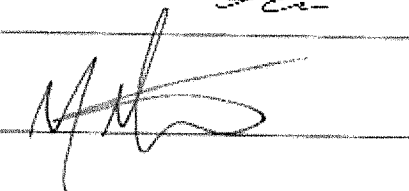
-Project may need to apply for a Maine Construction General Permit and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of applicant:



Date: 2/16/21

Signature of owner of property:



Date: 2/16/21

**IF PLAN APPROVAL IS ANTICIPATED, PROVIDE 2 FULL SIZE MYLARS & 2 FULL SIZE PAPER COPIES FOR BOARD SIGNATURE (AS APPLICABLE).
CHECK WITH PLANNING STAFF FOR CLARIFICATION.**

CHECKLIST FOR ***SITE PLAN*** REQUIREMENTS

YES **NO**

n/a: no new site impact in form of new structure or new impervious.

- | | | |
|--------------------------|--------------------------|--|
| ☐ | ☐ | Be on sheet size of 24 by 36 inches. |
| ☐ | ☐ | The scale of said plan shall be not less than one inch equals 50 feet and shall be indicated on the plat by use of a bar scale. |
| ☐ | ☐ | The plan shall bear the date, title, north point. |
| ☐ | ☐ | The plan shall contain a location or vicinity sketch (suggested scale one inch equals 800 feet). |
| ☐ | ☐ | The plan shall contain the name and address of the developer and applicant. |
| ☐ | ☐ | All appropriate dimensional requirements. |
| ☐ | ☐ | Existing and proposed easements. |
| ☐ | ☐ | Plan of the site showing existing watercourses and water bodies, seasonal wet areas. |
| ☐ | ☐ | Plan of the site showing soil type and location of test borings. |
| ☐ | ☐ | Location of all existing and proposed utilities. |
| ☐ | ☐ | Topographic contours (every five percent for zero to three percent slope; or every two feet for steeper areas). |
| ☐ | ☐ | Plan should include preservation and supplementation of existing dominant vegetation. |
| ☐ | ☐ | Plan shall indicate which features are to be retained and which are to be removed or altered. |
| ☐ | ☐ | Location of stonewalls, graveyards, fences, stands of trees, and other important unique natural areas and site features, including but not limited to floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archaeological resources, together with description of such features. |
| ☐ | ☐ | Plan view of all buildings with their use, size, location, and first-floor elevation in respect to grade. |
| ☐ | ☐ | Standard elevation view of existing and proposed buildings or structures on-site. |

YES NO**n/a: no new site impact in form of new structure or new impervious.**

- | | | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | Outline of any buildings located within 200 feet of such existing or proposed buildings or structures indicating their shape, size, location, heights and volume. |
| ☐ | ☐ | Existing use of abutting properties shall be identified with approximate location of any structures thereon including access roads. |
| ☐ | ☐ | Location, width, curbing, and paving of access ways, egress ways, and streets within the site for both pedestrian and vehicular use. |
| ☐ | ☐ | The location of off-street parking and loading spaces with a layout of the parking indicated. |
| ☐ | ☐ | The size and proposed location of water mains and sanitary sewerage facilities will all necessary engineering data. |
| ☐ | ☐ | The size and location of all other existing and proposed public service connections including, without limitation, gas lines, power lines, telephone lines, and fire alarm connections and locations, indicating whether above or below ground. |
| ☐ | ☐ | The type, nature, and composition of all solid, liquid, and gaseous waste, industrial or otherwise, and the location, type, and design criteria of the storage and disposal facilities dealing with such waste. |
| ☐ | ☐ | A landscape plan and open space areas indicating grade change, vegetation to be preserved, new plantings used to stabilize areas of cut and fill, screening; plus size, location, purpose and type of vegetation. |
| ☐ | ☐ | A drainage plan including location, elevation, layout of catch basins and other surface and subsurface drainage features. |
| ☐ | ☐ | Location, size and design of proposed signs and other advertising or instructional devices. |
| ☐ | ☐ | Existing and proposed contours and finished grade elevations as well as the type, extent, and location of existing and proposed landscaping and open space areas which will be retained. |
| ☐ | ☐ | Location and type of lighting for outdoor facilities. |
| ☐ | ☐ | Lines of existing and proposed abutting streets showing width. |
| ☐ | ☐ | Surveyed property lines showing their bearing and distances and monument locations. |
| ☐ | ☐ | If subdivision is involved, the lines and names of all proposed streets, lanes, ways, or easements intended to be dedicated for public or private use. |

YES **NO**

n/a: no new site impact in form of new structure or new impervious.

- | | | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | Provide copies of any covenants or restrictions that are intended to cover all or part of the land area to be developed. |
| ☐ | ☐ | Indicate limits of the wetland areas on the property. |
| ☐ | ☐ | Delineate existing zoning boundaries within 1,000 feet of the site. |
| ☐ | ☐ | Stamp and signature of either a Maine licensed land surveyor, professional engineer, or architect responsible for said plan. |
| ☐ | ☐ | Any other exhibits or data deemed necessary by the Planning Board to evaluate the proposed development for site plan review purposes. |

Exhibit B

Letter to the Planning Board,

Stoner & Co LLC, currently located at 414 Hill Street in the Biddeford Airport Industrial Park, is applying for conditional use approval for an expansion of their operation to the property located at 419 Hill Street.

Owner's Morgan and Karleena Stoner have operated in the City of Biddeford for almost 4 years and have been a model of compliance and community stewardship at both the municipal and state levels. They are fully compliant with all local and state laws and are permitted to operate as a medical marijuana cultivation business.

They have secured a 10-year lease of the property located at 419 Hill Street.

Stoner & Co having received their Office of Marijuana Policy Tier 4 Cultivation Conditional License, plans to convert this facility to a state-of-the-art Adult Use marijuana cultivation facility. The structure will not be modified. Internal construction will involve a complete renovation of the building. This will include:

- 1) Architect designed partitioning of rooms to modern fire safety and egress requirements.
- 2) Major HVAC and electrical upgrades.
- 3) Engineer designed odor mitigation system.
- 4) Greatly improved security plan and equipment.
- 5) Exterior renovations to include drainage improvements, improved landscaping, selective re-paving of ageing parking areas, striping of parking areas, and facade renovations.
- 6) New 6" waterline has been run to install brand new sprinkler system (no sprinkler exists presently). This investment in improved life safety conditions will cost approximately \$170,000. Eastern Sprinkler has been chosen to install this system.

Work will be done by local contractor Jim Godbout.

Currently Stoner and Co employs 38 people and plans to employ an additional 50-75 individuals at the 419 Hill location within the next several years.

Site design work has been completed by Sebago Engineering and the site has been given a clean environmental report by St. Germain Collins Engineering.

The attached exhibits address all current permit requirements and how they will be met.

Plan to Meet Adult Use Marijuana Performance Standards: 2/19/21

Stoner & Co has taken the time to diligently study and understand the performance standards that must be achieved to be granted a conditional use permit for the intended use. Below is a summary of the outlined requirements and a description demonstrating Stoner & Co's satisfaction of each.

Performance Standards and Satisfaction

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 establishments shall be clearly identified as such on the site plan or conditional use application."

All cultivation, and related activities, will occur indoors. Stoner & Co. does not share space with any other marijuana establishments.

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.
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.
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.
 - 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
 - c. 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.

- d. 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.

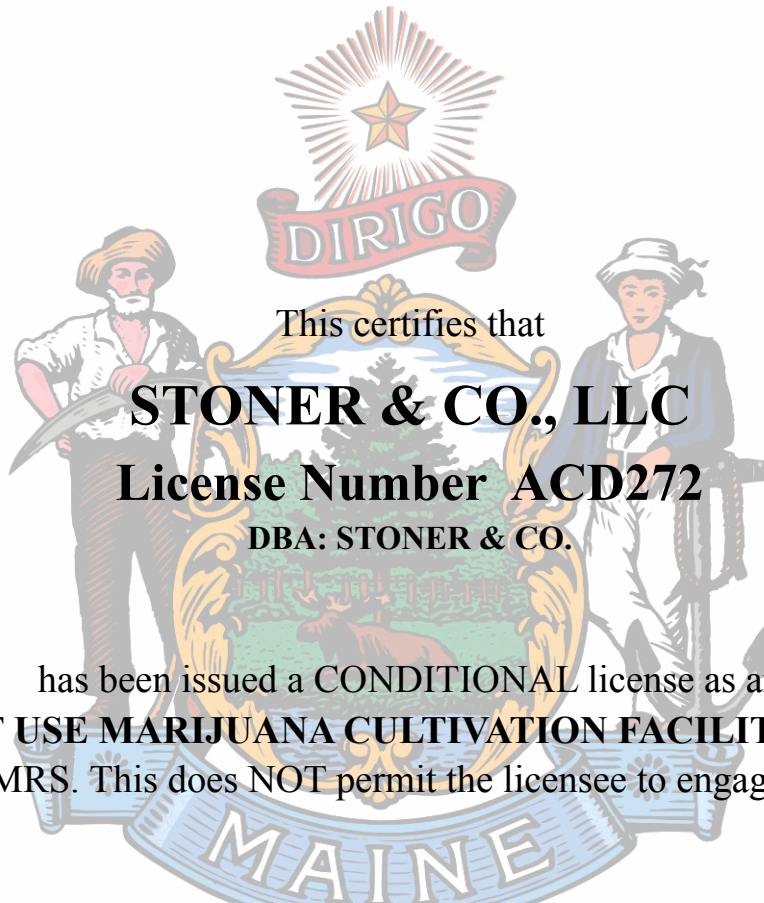
Sufficient measures and means of preventing smoke, debris, dust, fluids and other substances from exiting a marijuana establishment shall be provided at all times.

Odor mitigation is a top priority for Stoner & Co. Management and Staff. To that end, Stoner & Co. is installing a state-of-the-art engineer-approved “emissions mitigation system” at the facility. This system has a proven track record of success in mitigating odor. Stoner & Co has worked with the City of Biddeford during their prior site plan review process to move forward with what is the industry standard in controlling odor at a marijuana cultivation facility. Attached to the submission packet is a copy of this plan prepared by Bennett Engineering.

C.) Security Plan (not required in new ordinance but relevant)

Stoner & Co. has met with the Biddeford Police Department and received approval for their proposed security plan and ensured that it is in line with the state requirements. The security install will be completed by Seacoast Security. Attached is the security plan as developed by Seacoast.

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



This certifies that

STONER & CO., LLC

License Number ACD272

DBA: STONER & CO.

has been issued a **CONDITIONAL** license as an
ADULT USE MARIJUANA CULTIVATION FACILITY, TIER 4
under 28-B MRS. This does **NOT** permit the licensee to engage in any activity.

NOTE: THIS IS NOT AN ACTIVE LICENSE

Issued on:
October 09, 2020

A handwritten signature in black ink, appearing to read 'Erik Gundersen', is written over a horizontal line.

Erik Gundersen, Director
OFFICE OF MARIJUANA POLICY
MAINE ADULT USE MARIJUANA
PROGRAM

Expires on:
October 08, 2021

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

The Conditional License for ACD272 has been issued based on the following organizational structure:

Principals:

MORGAN JAMES STONER, OFFICER
KARLEENA MARIE STONER, OFFICER

Owners:

50.00% - MORGAN JAMES STONER
50.00% - KARLEENA MARIE STONER

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 Marijuana 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.



OFFICE OF MARIJUANA POLICY

DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES

Maine Adult Use Local Authorization Form

This Local Authorization Form must be completed by the proposed municipality or the Maine Land Use Planning Commission. The authorized local official responsible for completing this Form must forward the Form and **all required attachments** to the Office of Marijuana Policy at Licensing.OMP@maine.gov or 162 State House Station, Augusta, Maine 04333.

If the authorized local official in receipt of this Form has not recently met with the Office of Marijuana Policy to discuss the local authorization process and OMP's expectations for completion of this Form, please contact Tracy Jacques, Director of Licensing, at Licensing.OMP@maine.gov or (207) 530-7389 prior to filling it out.

Section 1: License Information. Information generated by the Office of Marijuana Policy.				
Business Legal Name: STONER & CO., LLC	Business DBA: STONER & CO.	Conditional License Number: ACD272		
License Type: ADULT USE MARIJUANA CULTIVATION FACILITY, TIER 4				
Mailing Address: COHEN LAW MAINE LLC PO BOX 5404 PORTLAND, ME 04101-5404		Facility Phone: +1 (207) 387-3192		
		Primary Contact Person: JILL G. POLSTER, ESQ.		
		Primary Contact Email: jill@cohenlawmaine.com		
Section 2: Marijuana Establishment and Local Authorization Information. This section to be completed by the Municipality/Maine Land Use Planning Commission in receipt of request for Local Authorization.				
Physical Location of Establishment (include unit number)	Municipality/Town/Plantation/Township	County	State	ZIP
Tax Map #:		Tax Lot #:		
Owner of Record of the Physical Location Listed Above:				
Date Local Authorization Form Presented to the Municipality/Maine Land Use Planning Commission:		Date Local Authorization Form Approved by Municipality/Maine Land Use Planning Commission:		
If you are requesting Local Authorization from a <i>municipality</i> , complete Section 3.				
If you are requesting Local Authorization from a <i>town, plantation or township in the unorganized and deorganized areas</i> through the Maine Land Use Planning Commission, complete Section 4.				
Section 3: Local Authorization of Marijuana Establishments within Municipalities. This section to be completed by the Municipality in receipt of request for Local Authorization.				
Section 3(a): Request for local authorization to operate marijuana establishment in municipality prohibited unless authorized by municipal ordinance or warrant article. A person seeking to operate a marijuana establishment within a municipality may not request local authorization to operate the marijuana establishment and a municipality may not accept as complete the person's request for local authorization unless the following questions are answered in the affirmative.				
1. Has the legislative body of the municipality voted to adopt a new ordinance, amend an existing ordinance or approve a warrant article allowing some or all types of marijuana establishments within the municipality, including the type of marijuana establishment the person seeks to operate as indicated in the "License Type" box of Section 1 of this form?				

Initials of Signing Jurisdiction Official: _____
Page 1 of 3 for ACD272

☐ Yes ☐ No	
2.	Is a copy the local ordinance, warrant article, or other local regulation authorizing the siting of this establishment attached or included with the submission of this form? ☐ Yes ☐ No
Section 3(b): Minimum authorization criteria. A municipality may not authorize the operation of a marijuana establishment within the municipality unless the following questions are answered in the affirmative.	
1.	Is the marijuana establishment proposed to be located equal to or greater than 1,000 feet of the property line of a preexisting public or private school? If the municipality by ordinance or other regulation prohibits the location of marijuana establishments at distances less than 1,000 feet but not less than 500 feet from the property line of a preexisting public or private school, that lesser distance applies. ☐ Yes ☐ No
2.	Has the person requesting local authorization to operate the marijuana establishment demonstrated possession or entitlement to possession of the proposed licensed premises of the marijuana establishment? ☐ Yes ☐ No If yes, briefly explain:
Section 3(c): Local authorization required for operation of marijuana establishment within municipality. A person may not operate a marijuana establishment within a municipality unless the following questions are answered in the affirmative.	
1.	Has the person obtained all applicable municipal approvals, permits, or licenses that are required by the municipality for the operation of this type of adult use marijuana establishment? By selecting "yes" below, the municipality is affirming that all municipal approvals, permits, or licenses have been approved, granted, or issued and no further action by the municipality is required prior to the Office of Marijuana Policy's issuance of an active license. The Office of Marijuana Policy encourages the municipality to coordinate the issuance date of a local license with the Office when appropriate. ☐ Yes ☐ No
2.	Is a list and copy of all applicable approvals, permits, or licenses with the issuance and expiration dates attached or included with the submission of this form? The Office of Marijuana Policy encourages the municipality to coordinate the issuance date of a local license with the Office when appropriate. ☐ Yes ☐ No
Section 4: Local Authorization of Marijuana Establishments within Towns, Plantations and Townships in the Unorganized and Deorganized Areas. This section to be completed by the Maine Land Use Planning Commission in receipt of request for Local Authorization.	
Section 4(a): Request for local authorization to operate marijuana establishment in town, plantation or township in unorganized and deorganized areas prohibited unless generally allowed by town or plantation or by county commissioners on behalf of township. A person seeking to operate a marijuana establishment within a town, plantation or township located within the unorganized and deorganized areas may not request local authorization unless one of the following questions is answered in the affirmative.	
1.	In the case of a town or plantation, the legislative body of the town or plantation has voted to allow some or all types of marijuana establishments within the town or plantation, including the type of marijuana establishment the person seeks to operate as indicated in the "License Type" box of Section 1 of this form? ☐ Yes ☐ No ☐ Not applicable
2.	In the case of a township, the county commissioners of the county in which the township is located have voted to allow some or all types of marijuana establishments within the township, including the type of marijuana establishment the person seeks to operate as indicated in the "License Type" box of Section 1 of this form? ☐ Yes ☐ No ☐ Not applicable
Section 4(b): Minimum authorization criteria. The Maine Land Use Planning Commission may not certify to the Department local authorization of a marijuana establishment within a town, plantation or township located within the unorganized and deorganized areas unless the following questions are answered in the affirmative.	
1.	Is the marijuana establishment proposed to be located equal to or more than 1,000 feet of the property line of a preexisting public or private school? If the Maine Land Use Planning Commission prohibits the location of marijuana establishments at distances less than 1,000 feet but not less than 500 feet from the property line of a preexisting public or private school, that lesser distance applies. ☐ Yes ☐ No
2.	Has the person requesting local authorization to operate the marijuana establishment demonstrated possession or entitlement to possession of the proposed licensed premises of the marijuana establishment pursuant to a ☐ lease, ☐ rental agreement or ☐ other arrangement for possession of the premises (specify: _____) or ☐ by virtue of ownership of the premises? ☐ Yes ☐ No
Section 4(c): Local authorization required for operation of marijuana establishment in town, plantation or township in unorganized and deorganized areas. A person may not operate a marijuana establishment within a town, plantation or township located within the unorganized and deorganized areas unless the following questions are answered in the affirmative.	

Initials of Signing Jurisdiction Official: _____
 Page 2 of 3 for ACD272

1.	Has the town, plantation or, in the case of a township, the county commissioners of the county in which the township is located, certified to the Maine Land Use Planning Commission that the person has obtained all applicable local approvals, permits or licenses not relating to land use planning and development? ☐ Yes ☐ No
2.	Is a copy of the certification including a list of all applicable approvals, permits, or licenses not relating to land use planning and development with the issuance and expiration dates attached or included with the submission of this form? ☐ Yes ☐ No
3.	Has the person obtained all applicable Maine Land Use Planning Commission approvals, permits, or licenses that are required for the operation of this type of adult use marijuana establishment? By selecting "yes" below, the Maine Land Use Planning Commission is affirming that all Maine Land Use Planning Commission approvals, permits, or licenses have been approved, granted, or issued and no further action by the Maine Land Use Planning Commission is required prior to the Office of Marijuana Policy's issuance of an active license. The Office of Marijuana Policy encourages the Maine Land Use Planning Commission to coordinate the issuance date of a local license with the Office when appropriate. ☐ Yes ☐ No
4.	Is a list and copy of all applicable Maine Land Use Planning Commission approvals, permits, or licenses with the issuance and expiration dates attached or included with the submission of this form? The Office of Marijuana Policy encourages Maine Land Use Planning Commission to coordinate the issuance date of a local license with the Office when appropriate. ☐ Yes ☐ No

Statutory Guidance for Municipalities/Maine Land Use Planning Commission

Pursuant to 28-B M.R.S. §§ 402-403, failure to act on a person's request for local authorization to operate a marijuana establishment in a municipality, town, plantation, or township in an unorganized and deorganized area does not satisfy the local authorization requirement.

Typically, a request for local authorization should be approved or denied within 90 days. For additional information regarding failure to act on a person's request for local authorization and result appeal rights, see 28-B M.R.S. §§402-403.

Pursuant to 28-B M.R.S. §406, any changes in the status of local authorization require notification to the Office of Marijuana Policy within 14 days of the date on which the change occurs, including without limitation, withdrawing authorization or suspending or revoking a local license for the operation of a marijuana establishment.

The completed Maine Adult Use Local Authorization Form can be emailed to the Office of Marijuana Policy at Licensing.OMP@maine.gov or sent to Office of Marijuana Policy, 162 State House Station, Augusta, ME 04333-0162.

Municipality/LUPC Representative

Legal Name and title of Municipality/LUPC Representative:	City:	County:
I hereby affirm and acknowledge that the information above is truthful and complete to the best of my knowledge.		
Signature of Municipality/LUPC Representative (Do not sign until witnessed by notary):		Date:

Notarization

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, at _____, Maine, by _____ to be his/her free act and deed.	
Name of Notary Public (Printed):	Signature of Notary Public:
Notary Public, State of Maine	_____
My commission expires:	STAMP/SEAL

September 15th, 2020

Stoner and Co.
ATTN: Morgan Stoner
414 Hill St
Biddeford, ME 04106

Re: Ability to Serve – 419 Hill St, Biddeford Maine – Warehouse – Cultivation Development

Dear Mr. Stoner,

The Maine Water Company (MWC) has received your request for an Ability to Serve Determination for the property located at 419 Hill St, Biddeford, Maine for the above referenced project. The request indicates that the existing facility will have an expected domestic demand of approximately 1500 gallons per day for irrigation purposes. The facility has also requested a 6-inch fire service to sprinkle the building. The fire service demand is not yet available. The static pressure in the area is approximately 40psi. Based on the criteria that has been presented, MWC does have sufficient capacity in the area from the existing 12-inch ductile iron public main on Hill Street to serve this project. Additional infrastructure improvements may be required at the expense of the developer to meet the overall needs of this project.

Conditions of Service

- A hydrant flow test must be completed at the nearest hydrant to verify that adequate fire flows can be delivered to the proposed project at the expense of the developer.
- The existing domestic service must be inspected by an MWC technician and could require an RPZ backflow device be retrofitted into the existing service line because of the irrigation usage.
- The 6-inch fire service will be tapped from the 12-inch ductile iron main on Hill St.
- Additional changes to this location would require further review from MWC.
- Additional coordination with MWC is required before 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 ability to serve this project.

All work must be completed in accordance with MWC material and installation 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 our standard terms and conditions as well as Maine Public Utilities 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

A handwritten signature in black ink, appearing to read "M. Knipp".

Marcus Knipp, E.I.T.
Engineer



State of Maine
Department of Public Safety



Fire Sprinkler System Permit

FSP15816

419 HILL

Located at:	419 HILL ST
In the Town of:	BIDDEFORD
Occupancy/Use:	Industrial
Type of System:	NFPA 13

Permission is hereby given to:

EASTERN FIRE

Contractor License # **FSC101**

to begin installation according to plans submittal approved by the Office of State Fire Marshal. No departure from the application submittal shall be made without prior approval in writing. This permit is issued under the provisions of Title 32, Chapter 20, Section 1337. Nothing herein shall excuse the holder of this permit from failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. This permit shall be displayed at the construction site or be made readily available.

Permit issued **12/31/2020**

Permit expires at midnight on **06/30/2021**

The expiration date applies only if the installation has not begun by that date and no permission has been granted to extend the date. Once installation begins, then the permit is valid as long as work is continuous.

Michael Sauschuck
Commissioner Of Public Safety

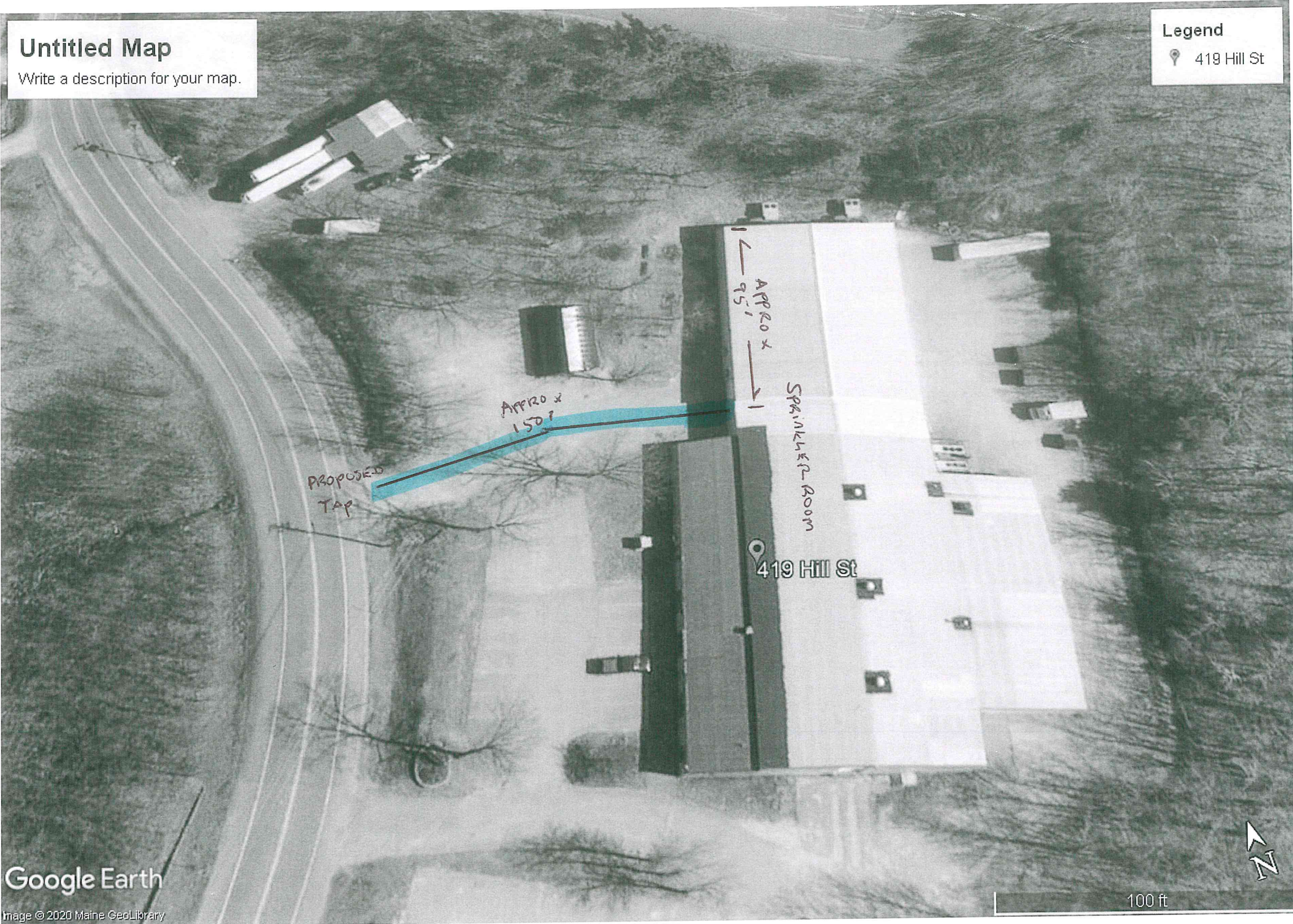
The type of Fire Department Connection and its location is to be according to the Local Fire Department.

Within 30 days of the completion of a new fire sprinkler system or an addition to an existing fire sprinkler system, a sprinkler system contractor shall provide to the commissioner a copy of the permit signed by the certified responsible managing supervisor representing that the fire sprinkler system has been installed according to specifications of the approved plan.

Inspection Dates: _____

Job completed, tested and verified by date of _____

RMS Signature _____



NEIGHBORHOOD PHOTOGRAPHS



N1) Looking northerly along Hill Street – subject @ right



N2) Looking S.W. across Landry St. toward Marcel Ave.



N3) Looking S.E. along Landry Street – subject @ left



N4) View looking westerly along Landry St. from subject



N5) N.W. view along Landry Street – subject @ right



N6) Looking easterly along Landry St. from subject

NEIGHBORHOOD PHOTOGRAPHS



N7) Looking southerly along Hill Street – subject @ left



N8) Northerly view along Hill Street from subject



N9) 415 Hill Street abutting subject to the northwest



N10) 414 Hill St. (Stoner & Co.) to the west across Hill St.



N11) 65 Landry St. (Artas Designs) abutting to the east



N12) 55 Landry St. (General Marine) to the south

SUBJECT PROPERTY PHOTOGRAPHS



1) Westerly (front) and southerly building elevations



2) Westerly elevation and front parking area



3) Westerly elevation of office section



4) Westerly elevation of newer production addition



5) Additional front parking area (north)



6) Westerly (front) elevation of office section

SUBJECT PROPERTY PHOTOGRAPHS



7) Southerly building elevation



8) Southerly building elevations from Landry Street



9) Southerly building elevation



10) Southerly side parking and access



11) Southerly building elevation



12) Easterly elevation

SUBJECT PROPERTY PHOTOGRAPHS



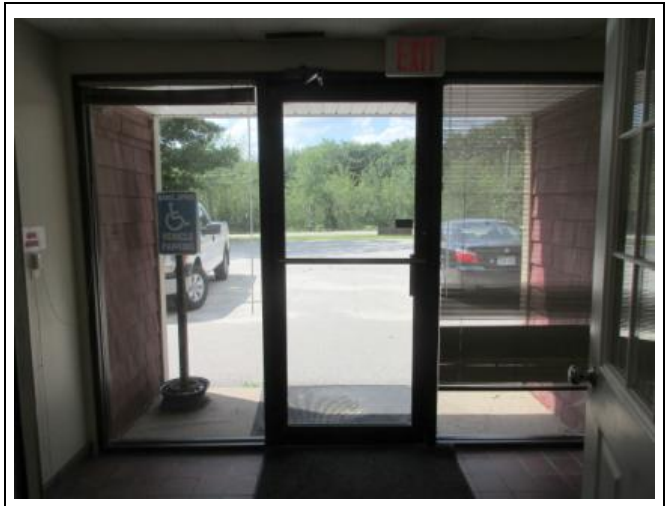
13) Easterly (rear) building elevations



14) Easterly building elevation



15) Northerly elevation showing exterior air handlers



16) Air-lock entrance and lobby area



17) Receptionist area and hallway



18) Private office

SUBJECT PROPERTY PHOTOGRAPHS



19) Larger private office



20) Janitor's/storage closet



21) Office bathroom



22) Larger private office



23) Executive office



24) Common office area

SUBJECT PROPERTY PHOTOGRAPHS



25) Private office



26) Office/"Server" room



27) Employee breakroom/cafeteria



28) Conference room



29) Inspection/conference room



30) Production floor – original section

SUBJECT PROPERTY PHOTOGRAPHS



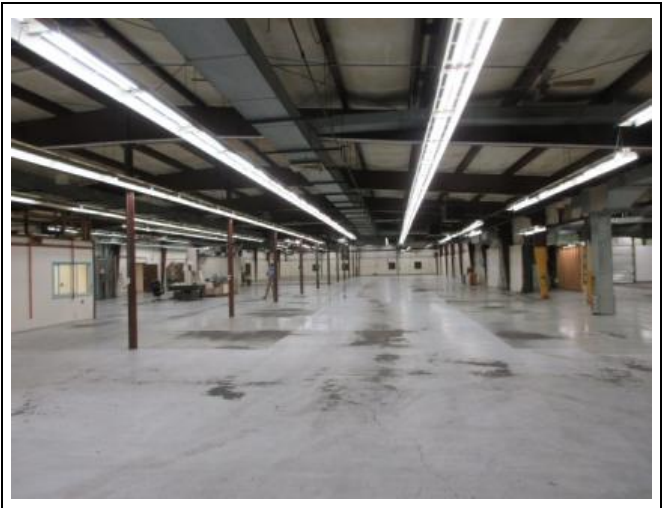
31) One of the main electrical entrances



32) Original production floor looking toward loading door



33) Original production area showing bathrooms



34) Original production area looking toward newer addn.



35) Side production area



36) View of side production area

SUBJECT PROPERTY PHOTOGRAPHS



37) Air compressor



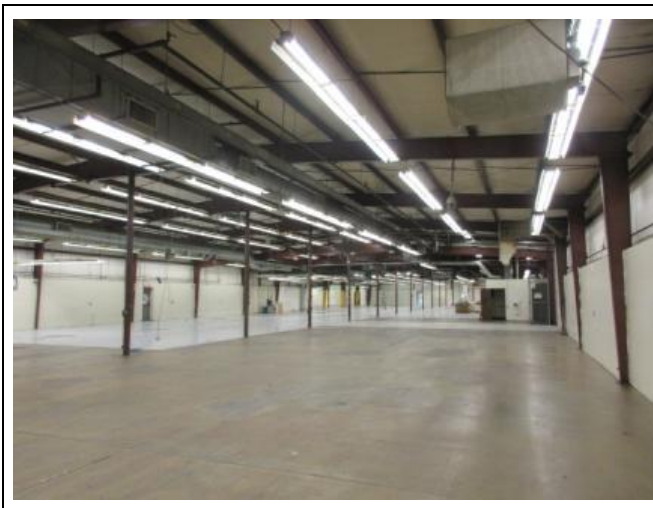
38) Original section looking toward offices



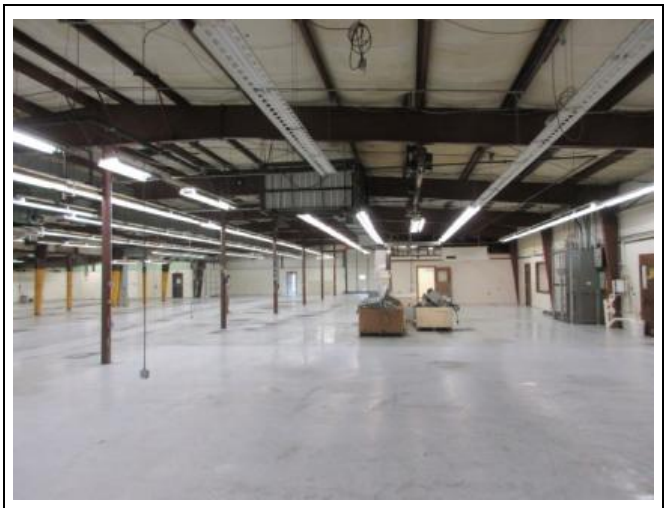
39) A heating unit in original section



40) Production floor looking S.W. from newer addition



41) View of production floor



42) View of production floor

SUBJECT PROPERTY PHOTOGRAPHS



43) One of the main electrical entrances

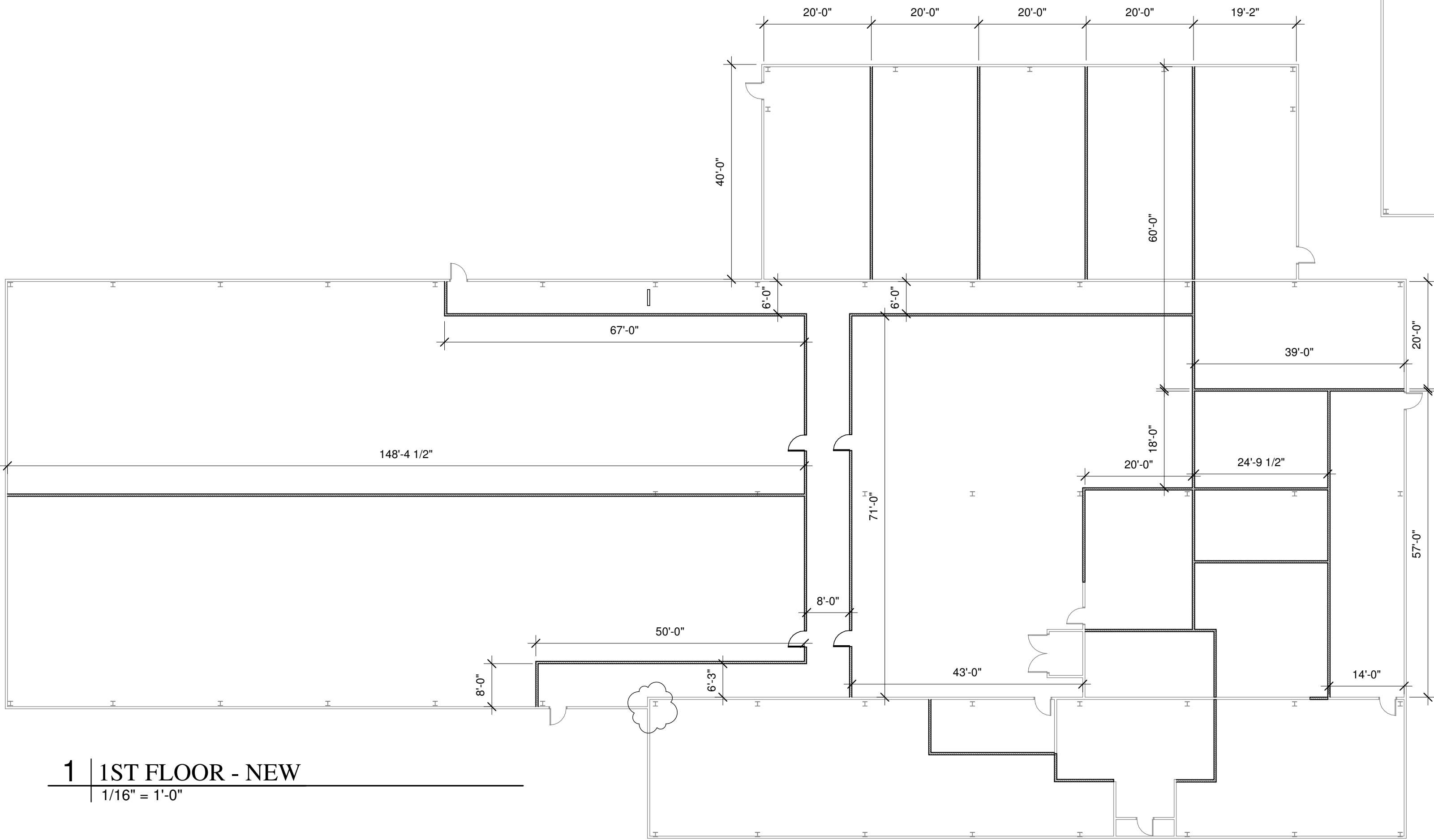
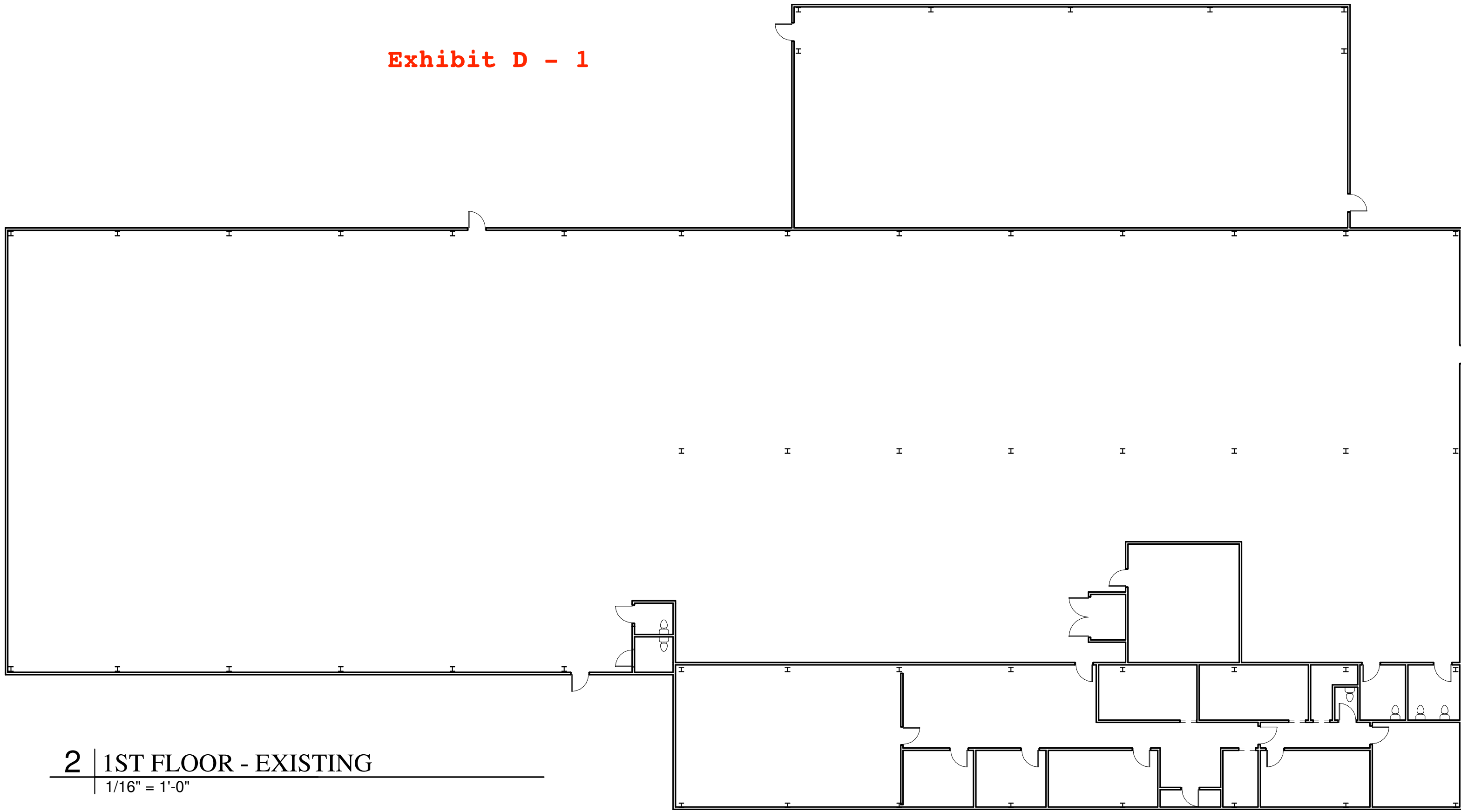


44) Production floor bathroom



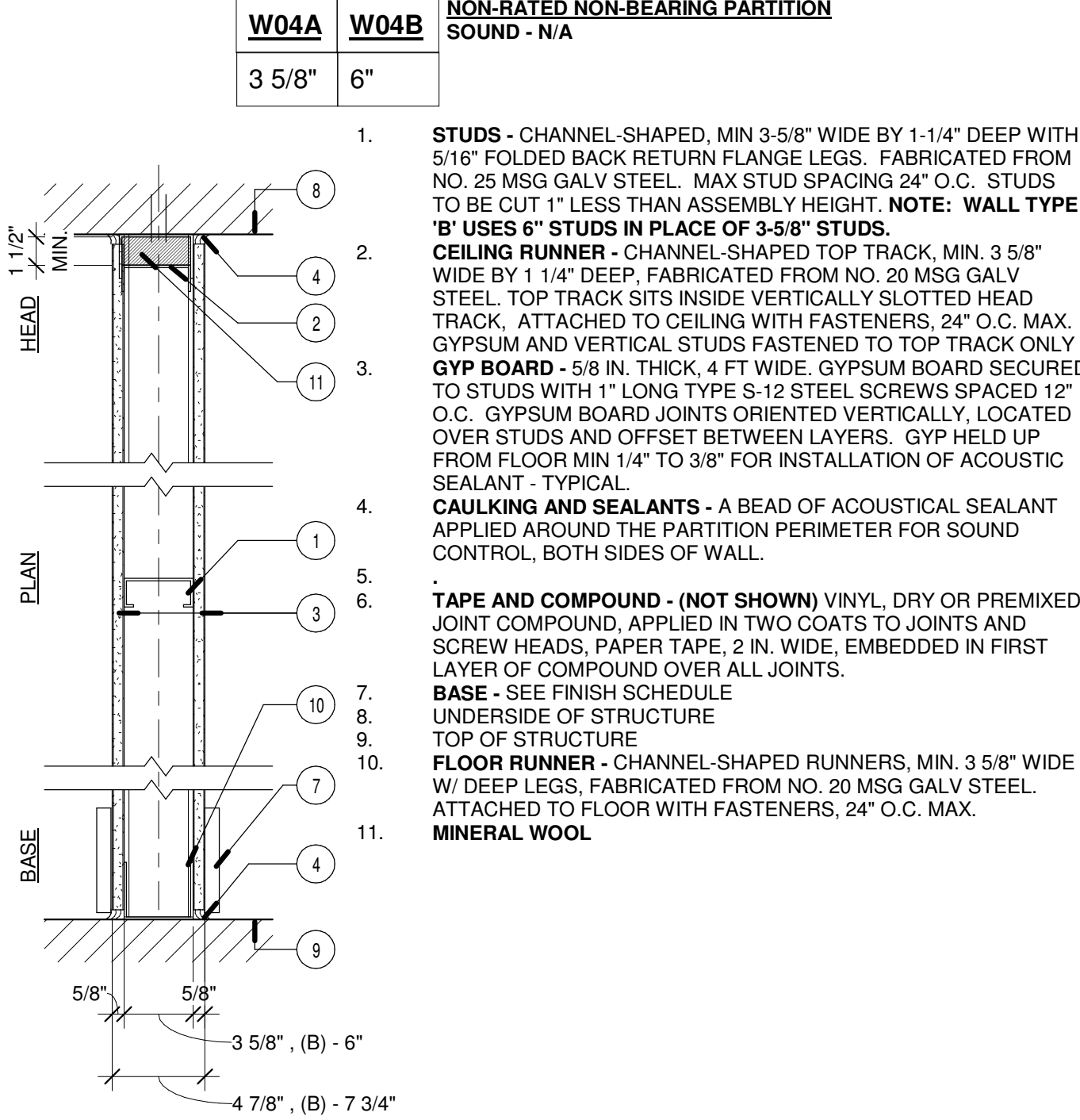
45) View of newer production floor addition

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27,935 SF

4 | WALL 04A&B - NON RATED PARTITION
1 1/2" = 1'-0"



IBC 2015, IEBC 2015
CONSTRUCTION TYPE 2B
EXISTING 1-STORY, PROPOSED 1-STORY
SPRINKLERED
27,935 SF

EXISTING - ASSEMBLY USE
PROPOSED - F-1 (HEMP PRODUCTS)
ALLOWABLE HEIGHT 75'
ALLOWABLE STORIES ABOVE GRADE - 3
ALLOWABLE AREA - 46,500

ACCESSIBLE ROUTE REQUIRED

306.2
T504.3
T504.4
T506.2

1104.4

Prepared For:

Consultant:

Architect:
ARCHETYPE
architects
48 Union Wharf Portland, Maine 04101
(207) 772-6002 ARCHETYPE@ARCHETYPEDA.COM

Project:
419 Hill Street

Biddeford, Maine

Revisions:	Date:	Scale:
1	10-8-2020	As indicated
1	Date 1	Revision 1

FLOOR PLANS

A1.01



STORMWATER MANAGEMENT NARRATIVE

For

**419 HILL STREET
BIDDEFORD, MAINE**

Prepared for

Shoreline Group, LLC
190 U.S. Route 1 #128
Falmouth, ME 04104

November 3, 2020

**STORMWATER MANAGEMENT NARRATIVE
419 HILL STREET
BIDDEFORD, MAINE**

Site Description

The project site is approximately 3.4 acres and is located at 419 Hill Street in Biddeford, within the I-2 Industrial Zoning District, per the City's Zoning Map. The site is bounded by Hill Street to the west, Landry Street to the south, and business developments to the north and east. The site consists of an existing 28,300 SF building with paved parking lots, landscape areas, and associated utility infrastructure.

The site is tributary to Thatcher Brook which flows into the Saco River, and is not listed as an urban impaired stream in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations. The site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the City of Biddeford, Community Panel 2301450009B dated May 15, 1984.

Existing Drainage Conditions

Under existing conditions, runoff from the site generally flows south and west to the existing drainage systems along Hill Street and Landry Street. Runoff from the northwest portion of the site generally flows overland towards the ditches along Hill Street, which convey runoff to an existing 24-inch RCP culvert beneath Hill Street. Runoff from the south and east sides of the site flow overland towards the ditches along Landry Street, which convey runoff to an existing 24-inch CMP culvert beneath Landry Street.

The drainage ditch to the west of the site entrance along Landry Street frequently experiences ponding conditions after rain events. This is likely caused by a clogged or damaged 8-inch CMP culvert beneath the Landry Street entrance that is preventing flow from being conveyed to the downstream 24-inch CMP culvert. The proposed drainage improvements address the issue.

Proposed Drainage Conditions

The applicant is proposing site, drainage, and utility improvements to address immediate repairs needed for the property. Site improvements include pavement repairs, parking lot striping, and minor restoration work; however, the amount of impervious and developed areas will not increase.

The proposed drainage patterns will remain consistent with existing conditions, with runoff continuing to flow overland to the drainage ditches along Hill and Landry Street. The applicant has recently installed a new 18-inch HDPE culvert beneath the Hill Street entrance and will perform inspection and maintenance of the 8-inch CMP culvert beneath the Landry Street entrance. Minor re-grading of the Landry Street entrance will also reduce the demand on the existing 8-inch culvert.

The applicant proposes to implement Erosion and Sedimentation control during construction and until the site is stabilized to prevent unreasonable impacts to the surrounding environment. Erosion and sedimentation controls will be installed in accordance with "Maine Erosion and Sedimentation Control BMPs", published by Maine DEP.

Conclusion

The proposed site and utility improvements will not increase the amount of impervious area and will not alter the drainage patterns that are experienced under existing conditions. The proposed work generally consists of repairs to make the site operational and will not increase the demand on the existing drainage systems along Hill and Landry Street.

We hope that this narrative and plan set provides the information needed to complete your review. Upon your review, please call with any questions or comments. Thank you for your time.

Sincerely,

SEBAGO TECHNICS, INC.



Dylan J. Stuart
Civil Engineer



Cory A. Cormier, P.E.
Senior Project Engineer

419 HILL STREET

419 HILL STREET
BIDDEFORD, MAINE

APPLICANT:
SHORELINE
GROUP, LLC

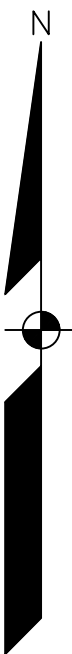
190 US ROUTE ONE #128
FALMOUTH, ME 04104

ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:

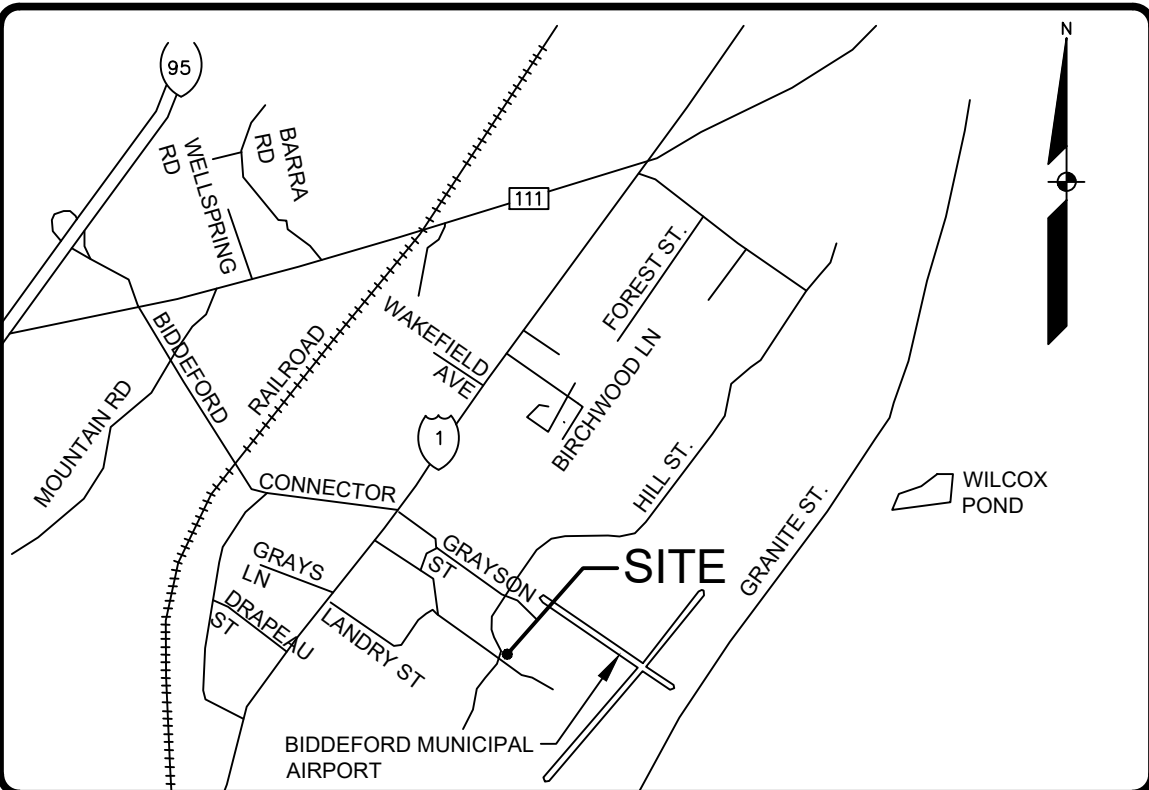
SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100



SCALE: 1" = 50'



LOCATION MAP

NTS

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	SITE PLAN
3	GRADING AND UTILITY PLAN
4	EROSION AND SEDIMENT CONTROL NOTES
5	EROSION AND SEDIMENT CONTROL DETAILS
6	DETAILS
1 OF 1	EXISTING CONDITIONS PLAN

DESIGNED	DJS
DRAWN	MRS
CHECKED	KSM
DATE	11/03/2020
SCALE	1" = 50'
PROJECT	20488

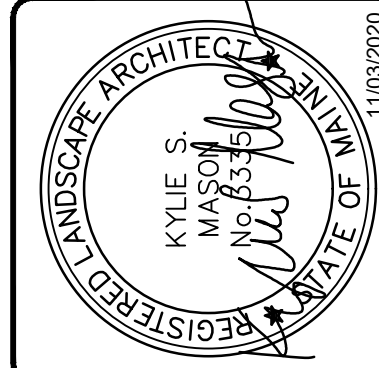
SHEET 1 OF 6

COVER SHEET
OF:
419 HILL STREET
BIDDEFORD, MAINE
FOR:
SHORELINE GROUP, LLC
190 US ROUTE ONE #128
FALMOUTH, ME 04104

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

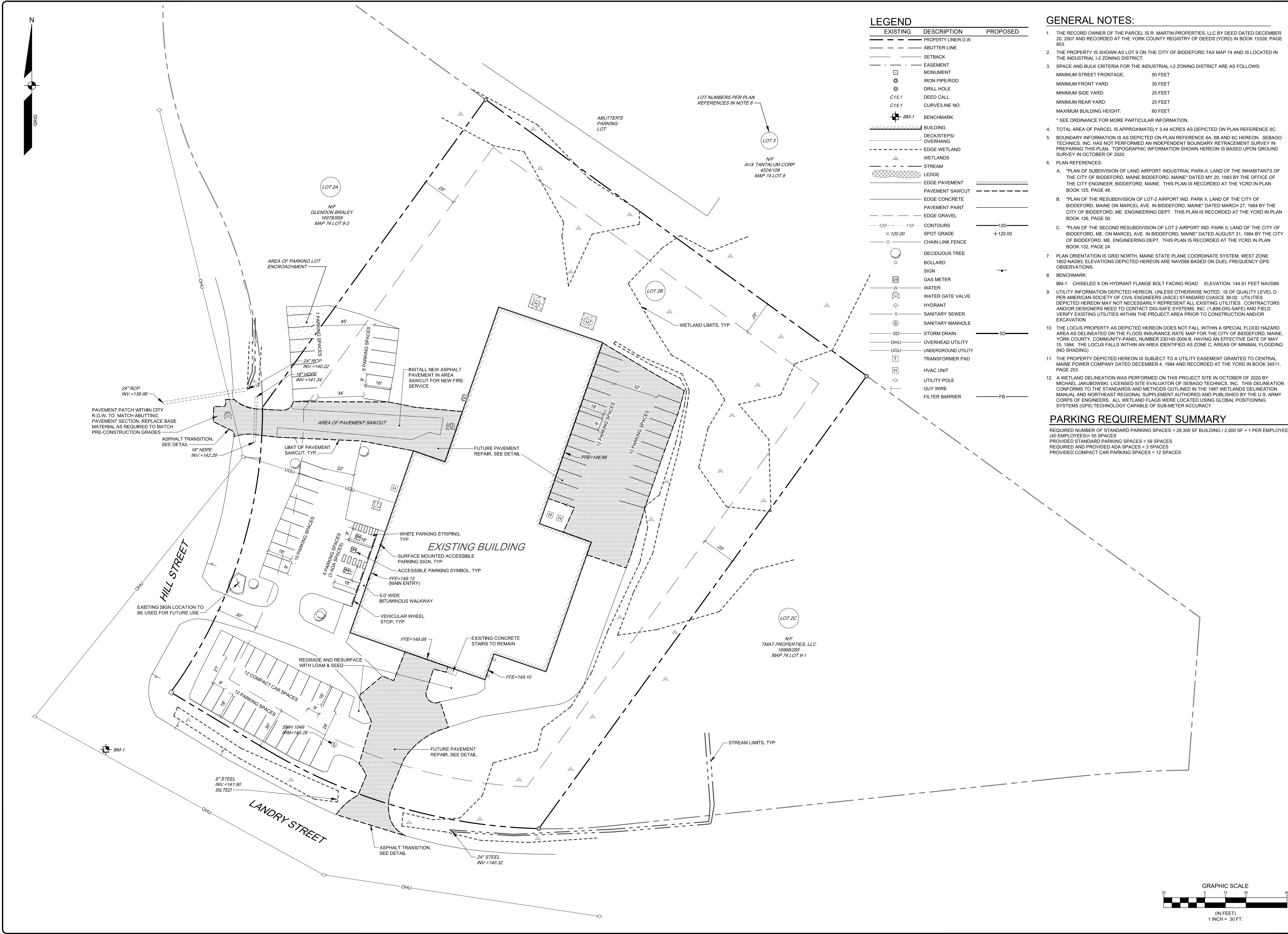
REV	BY	DATE	STATUS	ISSUED FOR CITY REVIEW
A	KSM	11/03/2020		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.



KYLE S. MASON, R.L.A. 3355

20488 Cdwg. TAB1 COVER SHEET



20488 S.dwg, TAB 2 SITE PLAN

SITE PLAN
OF:
419 HILL STREET
BIDDEFORD, MAINE
FOR:
SHORELINE GROUP, LLC
190 US ROUTE ONE #128
FALMOUTH, ME 04104

DESIGNED
DRAWN
CHECKED
DATE
SCALE
PROJECT

DJS
MRS
KSM
11/03/2020
1" = 30'
20488

SEBAGO
TECHINCS
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100
WWW.SEBAGOTECHINCS.COM

REV. BY. DATE. STATUS. ISSUED FOR CITY REVIEW
A. KSM 11/03/2020

11/03/2020
KYLE S. MASON
REGISTERED LANDSCAPE ARCHITECT
MAINE
NO. 6335
KYLE S. MASON, R.L.A. 3355

11/03/2020
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EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. ANY AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD, SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING OR CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL, WITHIN SEVEN (7) DAYS, REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).

TYPES OF MULCH:

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETERIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WIRE-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE BOTTOM OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RE-SEDIMENTATION OF MATERIALS WITH A STIFF BRUSH. SWEEPING SHALL BE PERFORMED UNTIL THE MATERIAL INTO SWALES OR STRUCTURES WITH A MECHANICAL BROOM. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFFSITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE SHORT-TERM VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, 2016 OR LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDBED PREPARATION:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS/1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS/1,000 S.F.
C. WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.	

APPLICATION OF SEED:

A. SEEDING: SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDEP SEED MIX 2 IS DISPLAYED)

SEED TYPE	APPLICATION RATE
CREeping RED FESCUE	0.46 LBS/1,000 S.F. (20 LBS/ACRE)
REDTOP	0.05 LBS/1,000 S.F. (2 LBS/ACRE)
TALL FESCUE	0.46 LBS/1,000 S.F. (20 LBS/ACRE)
TOTAL:	0.97 LBS/1,000 S.F. (40 LBS/ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:

FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL, SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN, IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES – THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS – BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD – THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
- STABILIZE THE SLOPE WITH WOOD WASTE COMPOST – THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SLOPE WITH STONE RIPRAP – THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS – BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION – BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C.) OF THIS STANDARD.
- STABILIZE THE SOIL WITH SOD – THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- STABILIZE THE SOIL WITH MULCH – BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY, TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.
- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

HOUSEKEEPING:

- 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.
- 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 HAZARDOUS 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.
- 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 SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, 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.
- 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.
- EXCAVATION DE-WATERING: EXCAVATION 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 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.
- 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:
 - DISCHARGES FROM FIREFIGHTING ACTIVITY.
 - FIRE HYDRANT FLUSHINGS;
 - VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION AREAS);
 - DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS;
 - ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
 - 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;
 - UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
 - UNCONTAMINATED GROUNDWATER OR SPRING WATER;
 - FOUNDATION OR FOOTER DRAIN-WATER WHERE GROUNDWATER FLOWS ARE NOT CONTAMINATED;
 - UNCONTAMINATED EXCAVATION DEWATERING;
 - POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
 - LANDSCAPE IRRIGATION.
- UNAUTHORIZED NON-STORMWATER DISCHARGES: THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES. SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
 - WASTEWATER FROM THE WASHOUT OR CLEAN OUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS.
 - FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
 - SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
 - TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

WINTER EROSION CONTROL MEASURES

THE WINTER CONSTRUCTION PERIOD IS FROM OCTOBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS/1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS/1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS/1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CEMENT, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATING A GRADE GREATER THAN 33% (3H:1V) SHALL BE REVEGETATED BY REPLACING LOAM AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING. SEED TYPE SHALL BE WINTER RYE.

7. INSPECTION AND MONITORING

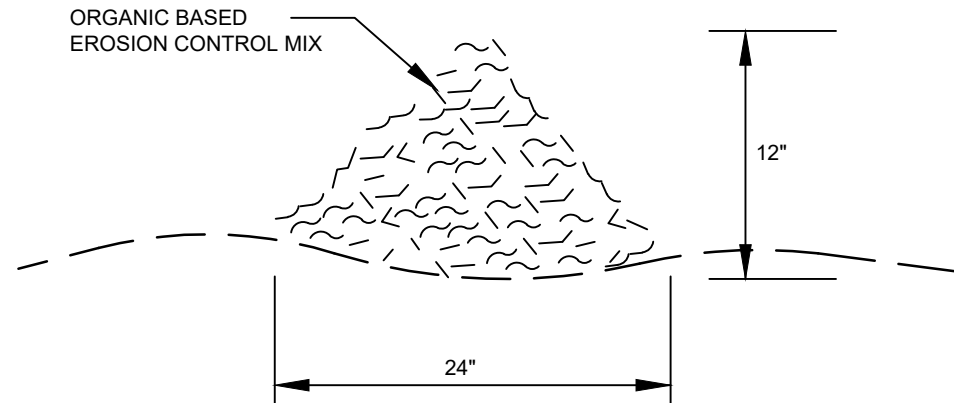
MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AT A MINIMUM, AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAW

- INSPECTIONS/MONITORING:

-
- 50' MIN.
- 8' MIN.
- PUBLIC RIGHT-OF-WAY
- FILTER FABRIC BELOW STONE
- PROFILE
- EXISTING GROUND
- PUBLIC RIGHT-OF-WAY
- PROVIDE APPROPRIATE TRANSITION BETWEEN CONSTRUCTION ENTRANCE AND PUBLIC R.O.W.
- PLAN

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2") USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

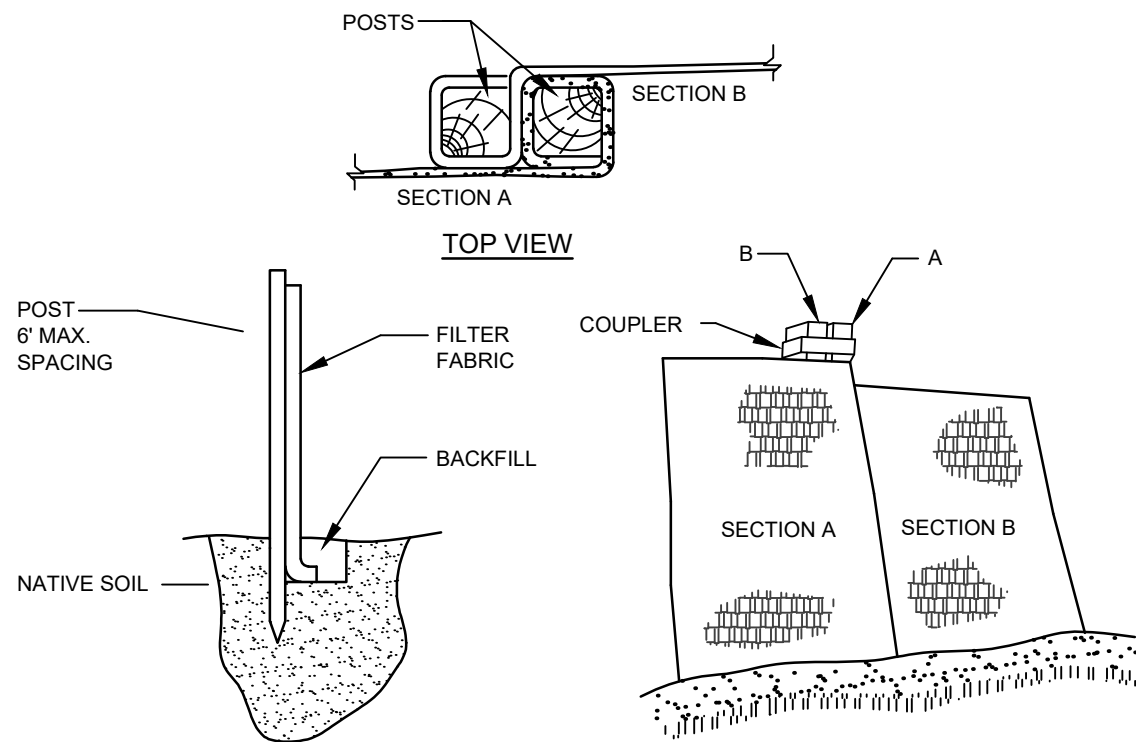
NOT TO SCALE



EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

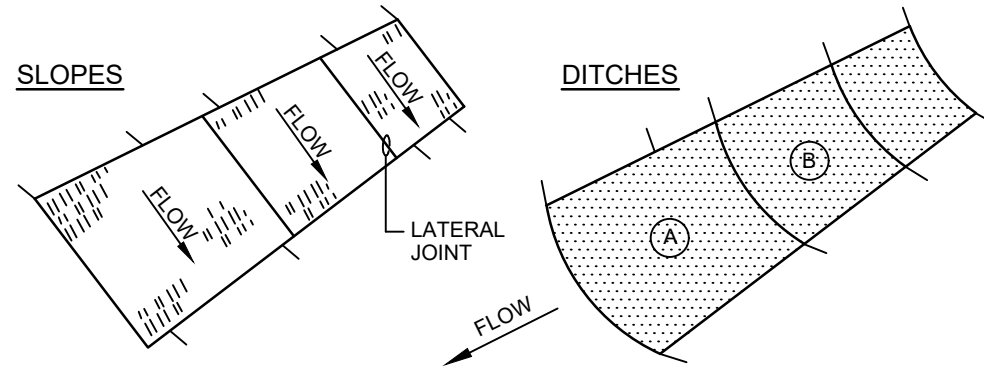
1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.
2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.
4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLAN. AREAS IN AROUND THE BARRIER SHALL BE GRADED TO THE UPHILL SIDE OF THE BARRIER, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

NOT TO SCALE



1. EXCAVATE A 6'x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMING FLIP AT THE BASE. BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
5. JOIN SECTION AS SHOWN ABOVE.
6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

NOT TO SCALE



1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.
3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.
5. WIRE STAPLES TO BE MIN. OF # 11 WIRE 6" LONG AND 1-1/2" WIDE.
6. USE NORTH AMERICAN GREEN D 150 OR APPROVED EQUAL.

NOT TO SCALE

	A	KSM	11/03/2020	ISSUED FOR CITY REVIEW	
	REV:	BY:	DATE:	STATUS:	
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS INC.					

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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
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South Portland, ME 04106
Tel. 207-209-2100

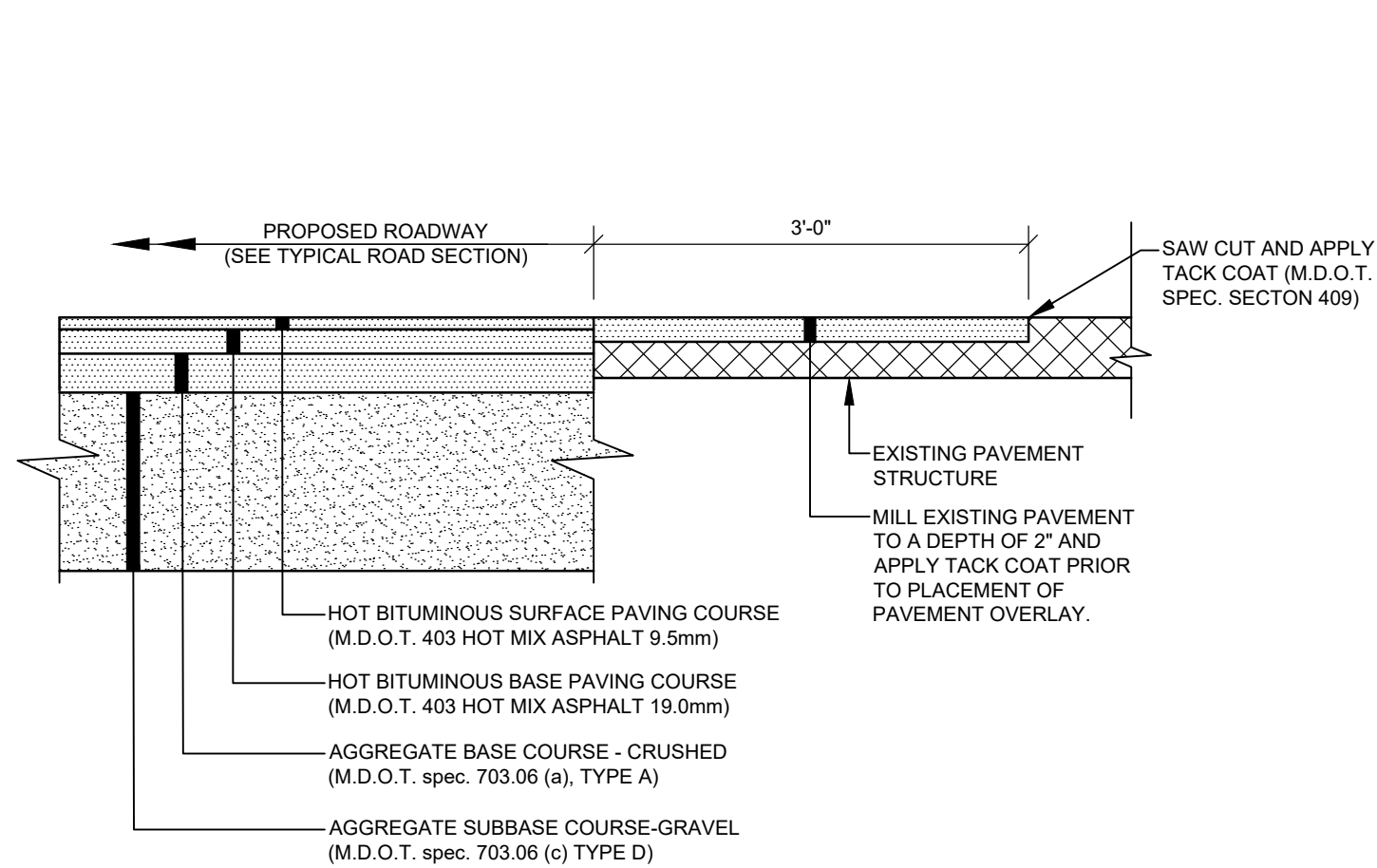
EROSION AND SEDIMENT CONTROL DETAILS

OF: 419 HILL STREET
419 HILL STREET
BIDDEFORD, MAINE

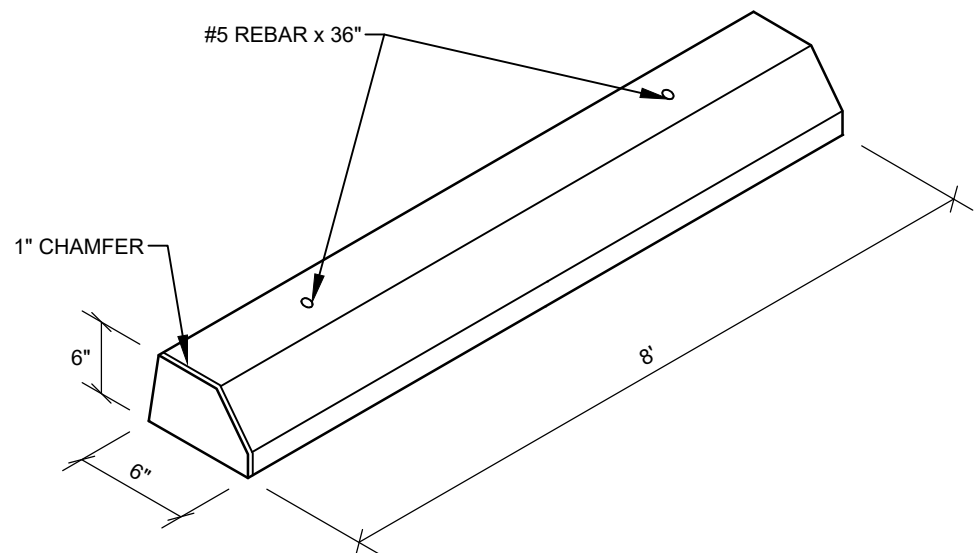
FOR: SHORELINE GROUP, LLC
190 US ROUTE ONE #128
FAIRMOUTH, ME 04104

DESIGNED	DJS
DRAWN	MRS
CHECKED	KSM
DATE	11/03/2020
SCALE	N.T.S.
PROJECT	20488

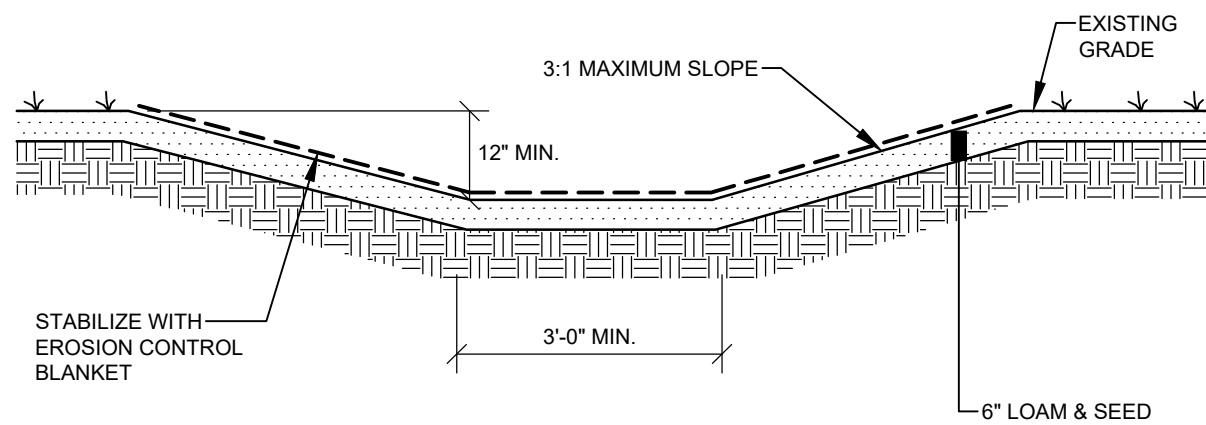
SHEET 5 OF 6



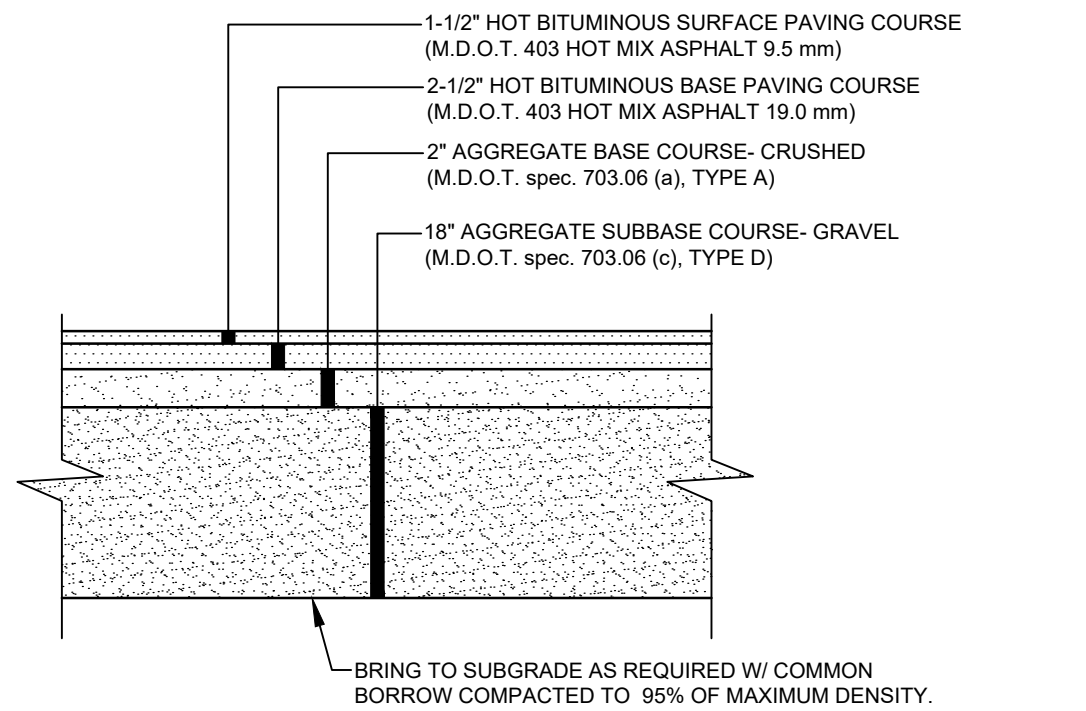
PAVEMENT JOINT
NOT TO SCALE



CONCRETE WHEEL STOP
NOT TO SCALE

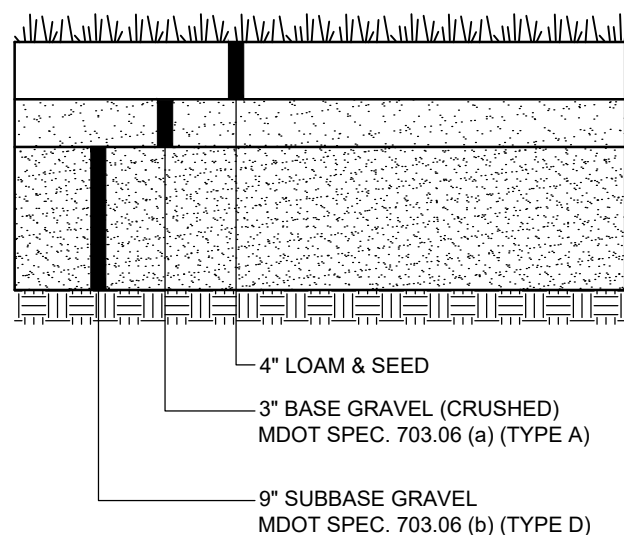


GRASSED SWALE
NOT TO SCALE

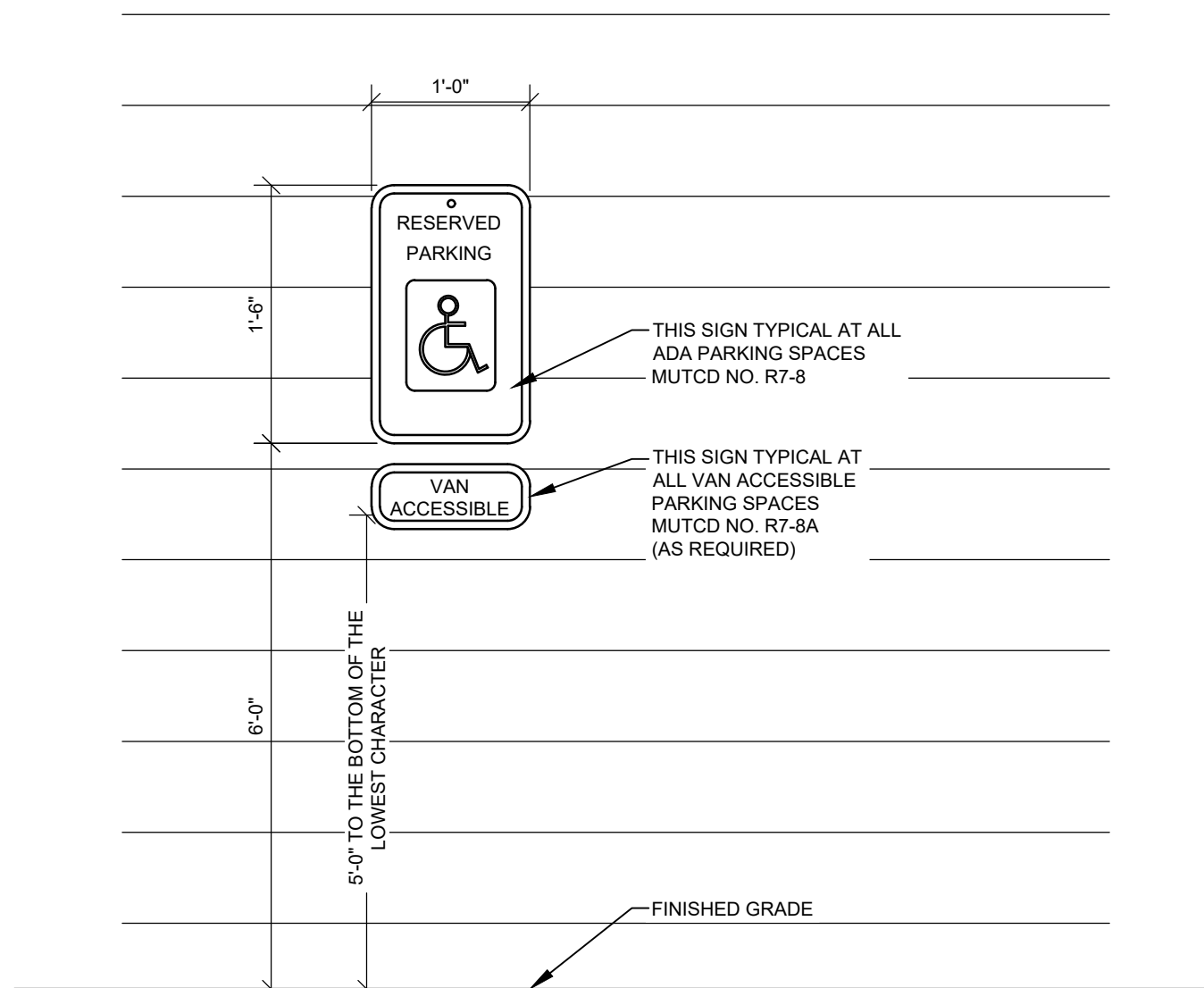


- NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
 2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
 3. CONTRACTOR MAY REPLACE BITUMINOUS PAVING SECTION WITH TWO (2) 1-3/4" LIFTS OF 12.5mm SUPERPAVE MIX. SUBMIT PAVEMENT MIX DESIGN PRIOR TO CONSTRUCTION.

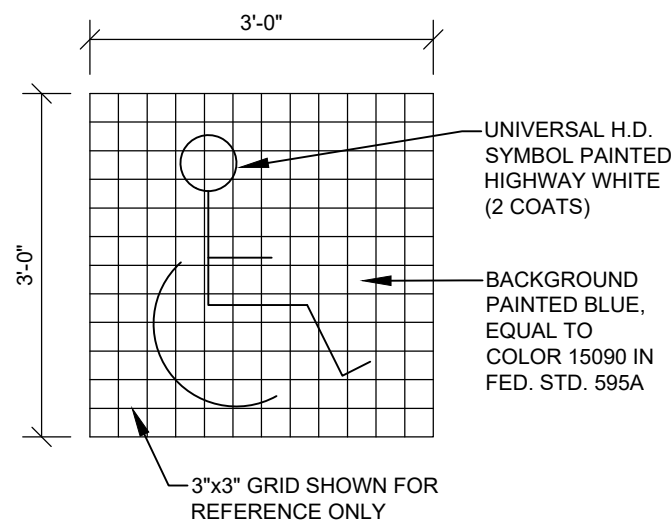
PAVED PARKING LOT SECTION
NOT TO SCALE



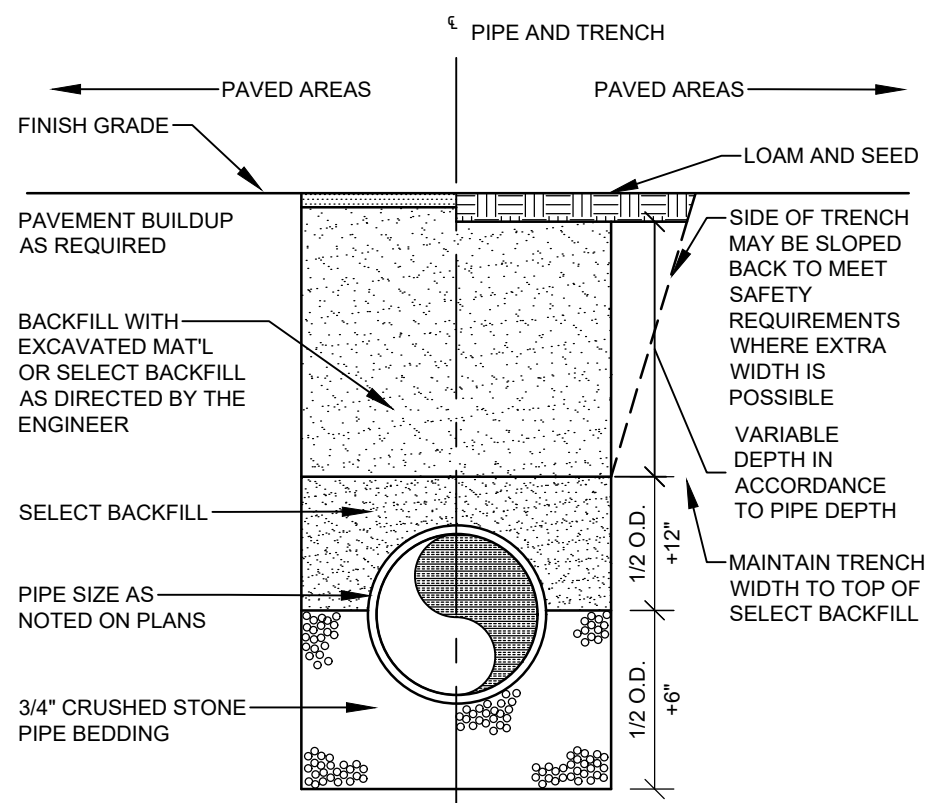
LOAM & SEED
NOT TO SCALE



RESERVED PARKING SIGN
(SURFACE MOUNTED)
NOT TO SCALE



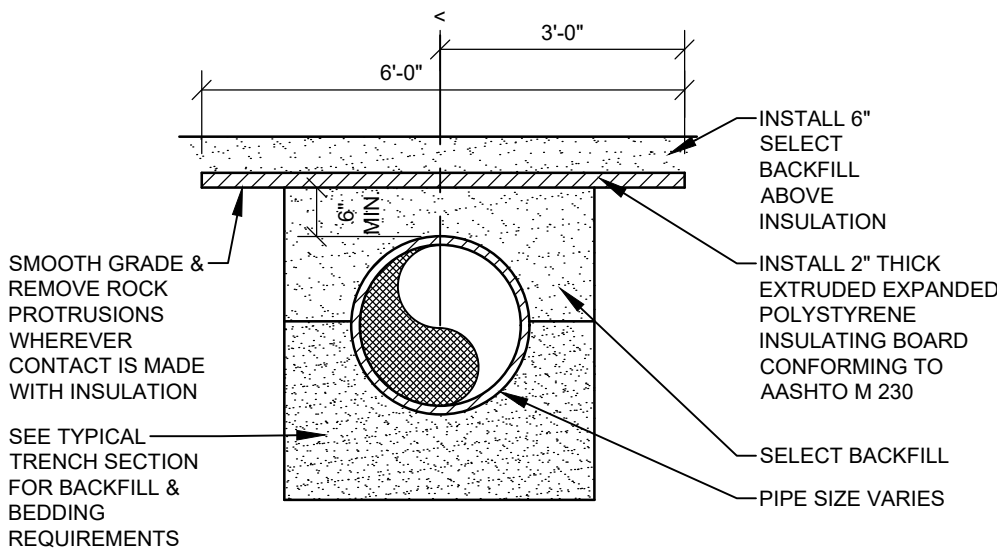
ACCESSIBLE PARKING
SYMBOL
NOT TO SCALE



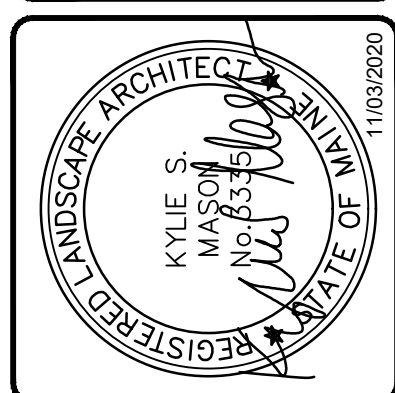
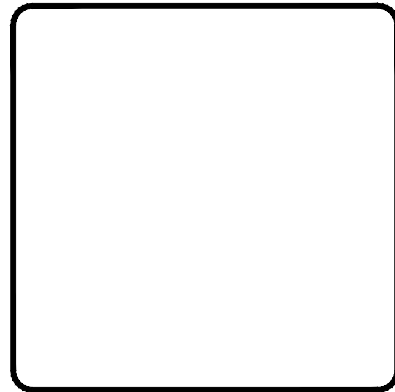
TRENCH BACKFILL SCHEDULE		
PIPE TYPE	PIPE BEDDING MATERIAL	SELECT BACKFILL
CORRUGATED METAL DUCTILE IRON REINFORCED CONCRETE	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL

NOTE:
ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.

TRENCH SECTION
NOT TO SCALE



PIPE INSULATION DETAIL
NOT TO SCALE



REV.	BY	DATE	STATUS	ISSUED FOR CITY REVIEW
A	KSM	11/03/2020	DATE	STATUS

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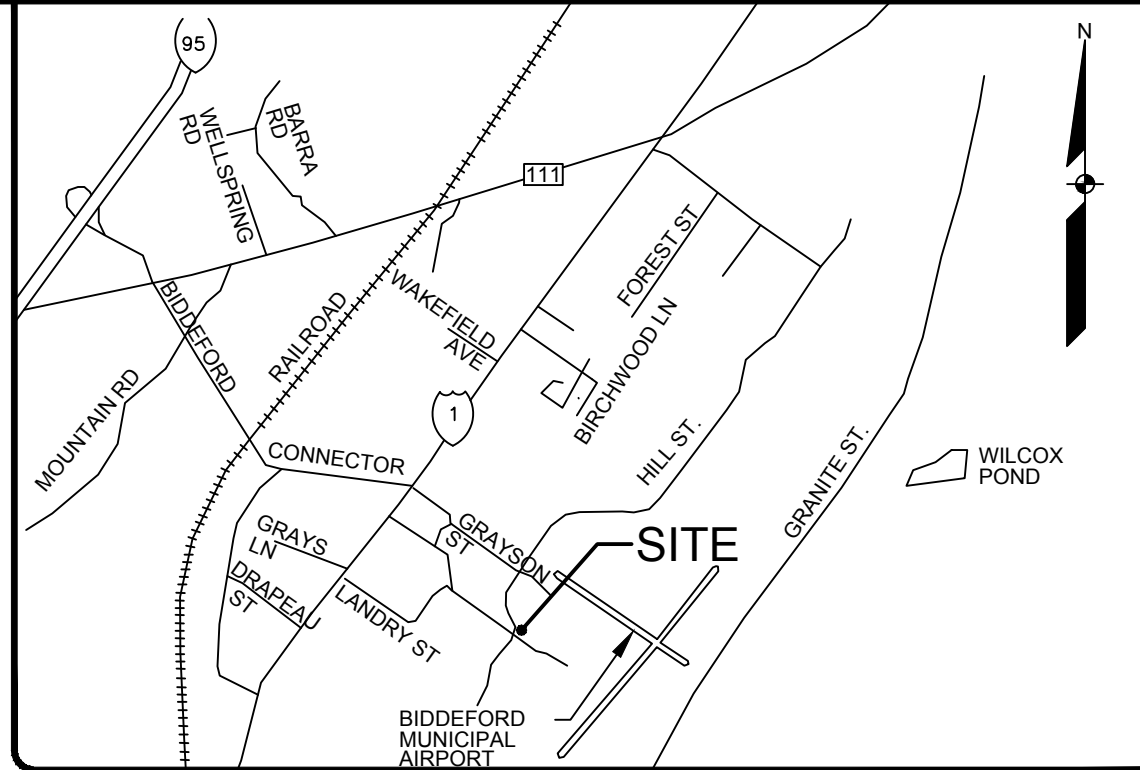
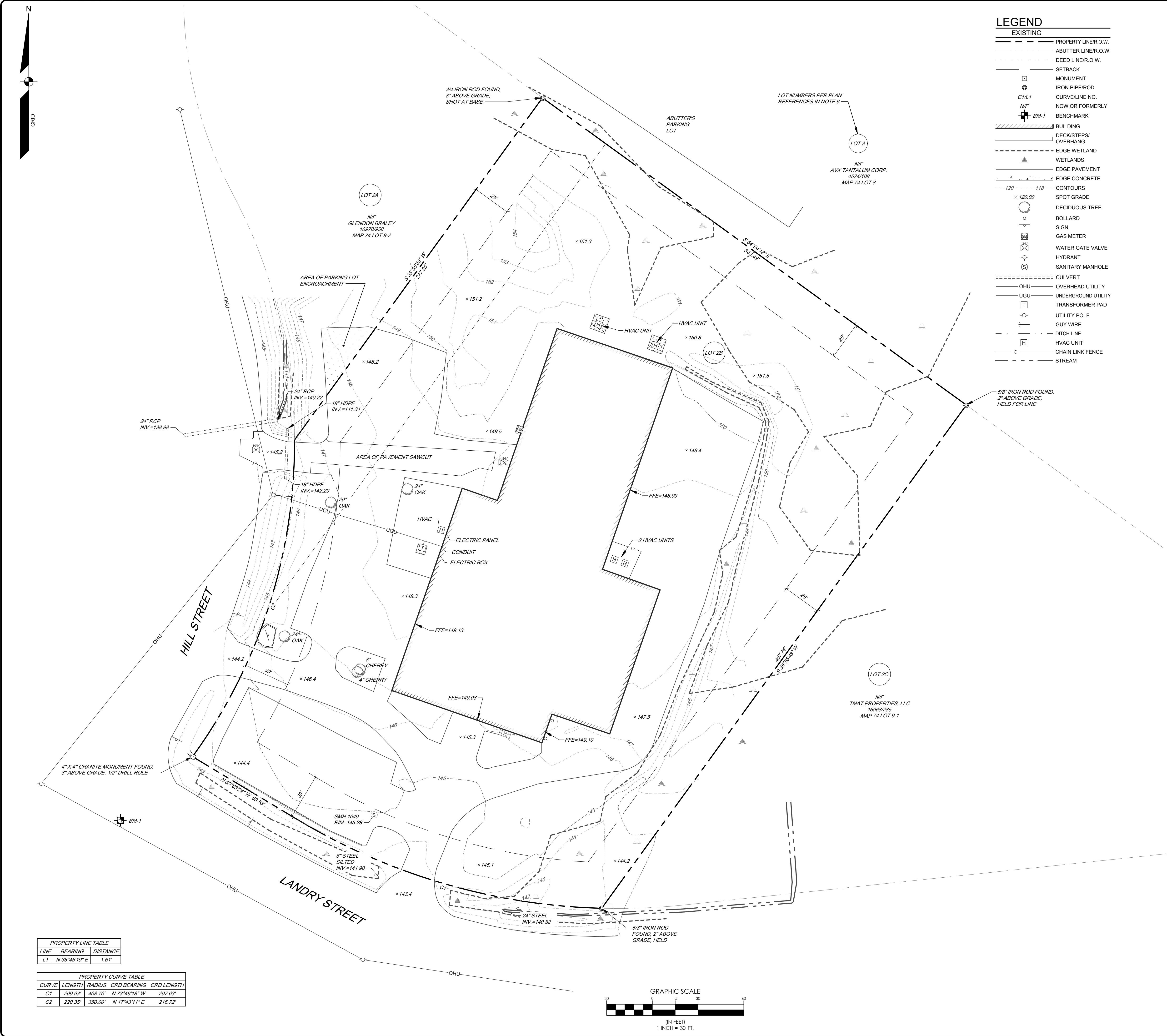


DETAILS
OF:
419 HILL STREET
419 HILL STREET
BIDDEFORD, MAINE
FOR:
SHORELINE GROUP, LLC
190 US ROUTE ONE #128
FALMOUTH, ME 04104

DESIGNED	DJS
DRAWN	MRS
CHECKED	KSM
DATE	11/03/2020
SCALE	N.T.S.
PROJECT	20488

SHEET 6 OF 6

20488 Dwg. TAB 6 DETAILS

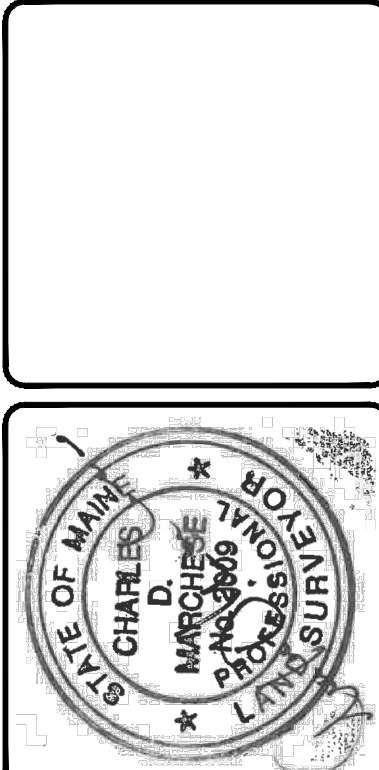


- GENERAL NOTES:**
- THE RECORD OWNER OF THE PARCEL IS R. MARTIN PROPERTIES, LLC BY DEED DATED DECEMBER 20, 2007 AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS (YCRD) IN BOOK 15328, PAGE 853.
 - THE PROPERTY IS SHOWN AS LOT 3 ON THE CITY OF BIDDEFORD TAX MAP 74 AND IS LOCATED IN THE INDUSTRIAL 1-2 ZONING DISTRICT.
 - SPACE AND BULK CRITERIA FOR THE INDUSTRIAL 1-2 ZONING DISTRICT ARE AS FOLLOWS:
MINIMUM STREET FRONTAGE: 50 FEET
MINIMUM FRONT YARD: 30 FEET
MINIMUM SIDE YARD: 25 FEET
MINIMUM REAR YARD: 25 FEET
MAXIMUM BUILDING HEIGHT: 60 FEET
* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
 - TOTAL AREA OF PARCEL IS APPROXIMATELY 3.44 ACRES AS DEPICTED ON PLAN REFERENCE 6C.
 - BOUNDARY INFORMATION IS AS DEPICTED ON PLAN REFERENCE 6A, 6B AND 6C HEREON. SEBAGO TECHNIQS, INC. HAS NOT PERFORMED AN INDEPENDENT BOUNDARY RETRACEMENT SURVEY IN PREPARING THIS PLAN. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON GROUND SURVEY IN OCTOBER OF 2020.
 - PLAN REFERENCES:
 - A. "PLAN OF SUBDIVISION OF LAND AIRPORT INDUSTRIAL PARK-II, LAND OF THE INHABITANTS OF THE CITY OF BIDDEFORD, MAINE BIDDEFORD, MAINE" DATED MY 20, 1983 BY THE OFFICE OF THE CITY ENGINEER, BIDDEFORD, MAINE. THIS PLAN IS RECORDED AT THE YCRD IN PLAN BOOK 125, PAGE 48.
 - B. "PLAN OF THE RESUBDIVISION OF LOT 2 AIRPORT IND. PARK II, LAND OF THE CITY OF BIDDEFORD, MAINE ON MARCEL AVE. IN BIDDEFORD, MAINE" DATED MARCH 27, 1984 BY THE CITY OF BIDDEFORD, ME. ENGINEERING DEPT. THIS PLAN IS RECORDED AT THE YCRD IN PLAN BOOK 126, PAGE 50.
 - C. "PLAN OF THE SECOND RESUBDIVISION OF LOT 2 AIRPORT IND. PARK II, LAND OF THE CITY OF BIDDEFORD, ME. ON MARCEL AVE. IN BIDDEFORD, MAINE" DATED AUGUST 31, 1984 BY THE CITY OF BIDDEFORD, ME. ENGINEERING DEPT. THIS PLAN IS RECORDED AT THE YCRD IN PLAN BOOK 132, PAGE 24.
 - PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83. ELEVATIONS DEPICTED HEREON ARE NAVD88 BASED ON DUEL FREQUENCY GPS OBSERVATIONS.
 - BENCHMARK:
BM-1 CHISELED X ON HYDRANT FLANGE BOLT FACING ROAD ELEVATION: 144.81 FEET NAVD88
 - UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 24/ASCE 38-02. UTILITIES DEPICTED HEREON 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 WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
 - THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF BIDDEFORD, MAINE, YORK COUNTY, COMMUNITY-PANEL NUMBER 230145 0009 B, HAVING AN EFFECTIVE DATE OF MAY 15, 1984. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF MINIMAL FLOODING. (NO SHADING).
 - THE PROPERTY DEPICTED HEREON IS SUBJECT TO A UTILITY EASEMENT GRANTED TO CENTRAL MAINE POWER COMPANY DATED DECEMBER 4, 1984 AND RECORDED AT THE YCRD IN BOOK 34511, PAGE 253.
 - A WETLAND DELINEATION WAS PERFORMED ON THIS PROJECT SITE IN OCTOBER OF 2020 BY MICHAEL JAKUBOWSKI, LICENSED SITE EVALUATOR OF SEBAGO TECHNIQS, INC. THIS DELINEATION CONFORMS TO THE STANDARDS AND METHODS OUTLINED IN THE 1987 WETLANDS DELINEATION MANUAL AND NORTHEAST REGIONAL SUPPLEMENT AUTHORED AND PUBLISHED BY THE U.S. ARMY CORPS OF ENGINEERS. ALL WETLAND FLAGS WERE LOCATED USING GLOBAL POSITIONING SYSTEMS (GPS) TECHNOLOGY CAPABLE OF SUB-METER ACCURACY.

SURVEYOR'S STATEMENT

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.

Charles D. Marchese
CHARLES D. MARCHESE, PLS 2009 OCTOBER 30, 2020



REV.	BY	DATE	STATUS
A	CDM	10-30-2020	ISSUED FOR CLIENT REVIEW



EXISTING CONDITIONS PLAN
OF:
R. MARTIN PROPERTIES, LLC
419 HILL STREET
BIDDEFORD, MAINE
FOR:
SHORELINE GROUP, LLC
190 U.S. ROUTE ONE #128
FALMOUTH, MAINE 04104

RECORD OWNER:
R. MARTIN PROPERTIES, LLC
P.O. BOX 974
BIDDEFORD, MAINE 04005

DESIGNED	-
DRAWN	CDM/TSL
CHECKED	JIB
DATE	10-13-2020
SCALE	1" = 30'
PROJECT	20488

SHEET 1 OF 1

419 HILL STREET

419 HILL STREET
BIDDEFORD, MAINE

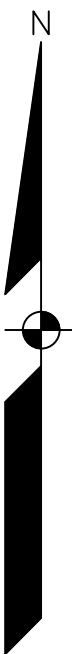
LIGHTING PLAN and FDC LOCATION

APPLICANT:
SHORELINE
GROUP, LLC

190 US ROUTE ONE #128
FALMOUTH, ME 04104

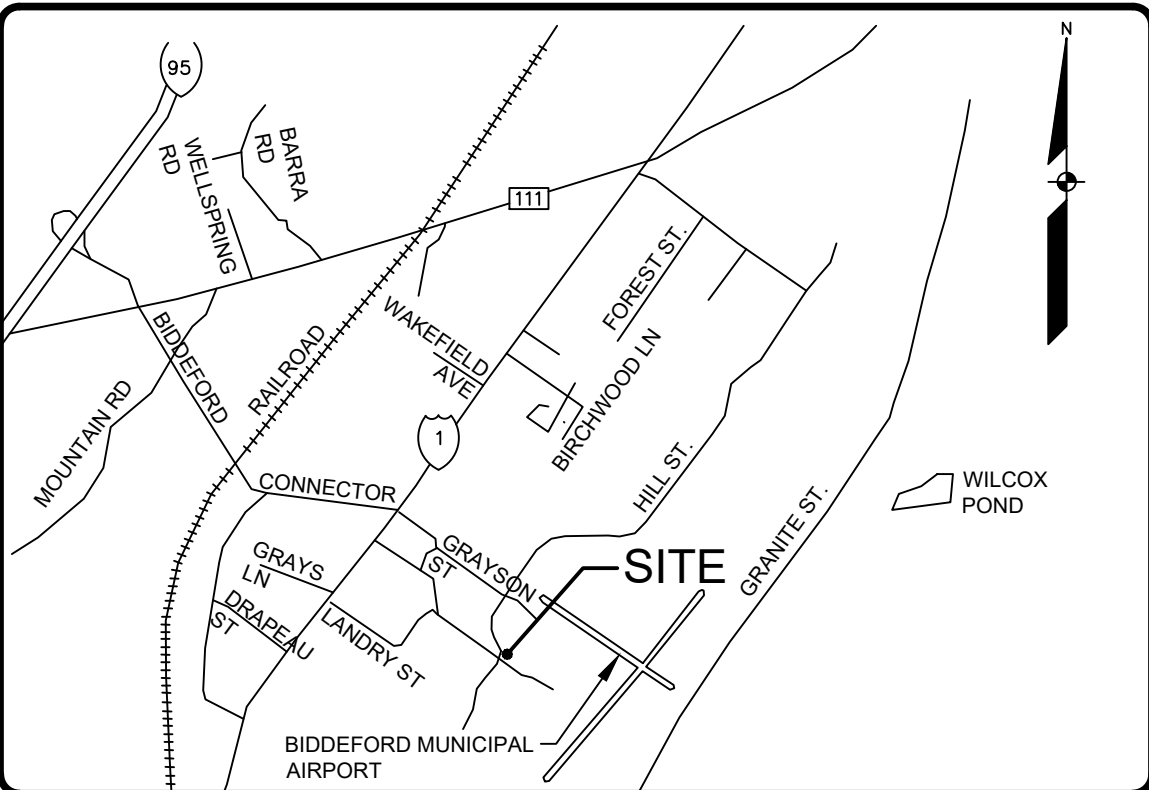
ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100



SCALE: 1" = 50'

- Current flood light locations
- Planned FDC Location



SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	SITE PLAN
3	GRADING AND UTILITY PLAN
4	EROSION AND SEDIMENT CONTROL NOTES
5	EROSION AND SEDIMENT CONTROL DETAILS
6	DETAILS
1 OF 1	EXISTING CONDITIONS PLAN

REV	BY	DATE	STATUS	ISSUED FOR CITY REVIEW
A	KSM	11/03/2020	DATE	STATUS
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WWW.SEBAGOTECHNICS.COM
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South Portland, ME 04106
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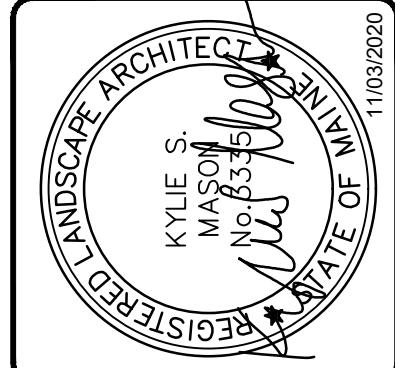
COVER SHEET
OF:
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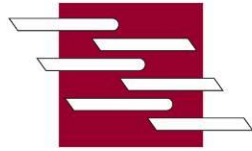
DESIGNED	DJS
DRAWN	MRS
CHECKED	KSM
DATE	11/03/2020
SCALE	1" = 50'
PROJECT	20488

SHEET 1 OF 6

20488 Cdwg. TAB1 COVER SHEET

KYLE S. MASON, R.L.A. 3355





**BENNETT
ENGINEERING**
MECHANICAL • ELECTRICAL

October 29, 2020

City of Biddeford Code Enforcement
205 Main Street
Biddeford, ME 04005

Attn: Scott Welton, Fire and Life Safety Inspector
Re: 419 Hill Street, Biddeford, Maine

At the request of Morgan Stoner, we reviewed proposed equipment and Specifications, dated 10/5/2020 for an emissions mitigation system for the Cannabis Facility at 419 Hill Street, Biddeford, Maine designed to accomplish the following:

The Agriair® 2200 PG air purifier is designed for highly sensitive environments at risk of bio-contamination such as cannabis drying, trimming and packaging areas. The 2200PG contains a medical grade HEPA filter and two ionic oxidation generators that work together to eliminate even sub-micron particulates in the air and prevent microbial contamination of the final cannabis product.

The unit provides multi-level purification of air passing through the unit plus sanitation of the air and surfaces in all the surrounding area. Contaminated air particulates are removed by the 99.99% Hepa filter, then the purified air is mixed with oxidizer plasma generated by the IO generators and is released into the surrounding area killing any mold spores, mildew, viruses, VOC's and odor.

The 2200 PG air purifier offers variable speed airflows and creates a high level of air sanitation in small to large indoor commercial spaces. The unit is portable and lightweight and can operate in occupied spaces, growing or processing areas. These units can be used as air scrubbers to re-circulate and purify air or create either positive or negative air pressure environments.

The Agriair® 2200 PG system provides an economical, safe and effective solution to many of the major air quality concerns of indoor commercial growers.

- Particulates removed with medical grade Hepa filter at 99.99% efficiency at 0.3 microns
 - Virus, microbes, and bio-contaminants on plants and hard to reach surfaces are reduced by 99.99% without biocides or chemicals

- Up to 97% of airborne mold and mildew spores are destroyed before they have a chance of spreading and growing on plants, in vents and air system components.
- Strong odors associated with the indoor production of some crops, and additional odors from added nutrients, can be reduced by 85% thereby eliminating or reducing the need for bulky and expensive carbon filter

We plan to use two of these units for each flower room and one in the veg room, cure room and production rooms. The units we plan on using are the 2200 PGA purifiers. Please let me know if you have any question or need anything else from us.

With the manufacturer recommended number of filtering units the odor will be controlled.

Stephen P. Doel PE
BENNETT ENGINEERING, INC.





North is based on the
Maine State
Coordinate System
NAD 1983

North Rotation is 304°



Feet
300
200
100
0
100

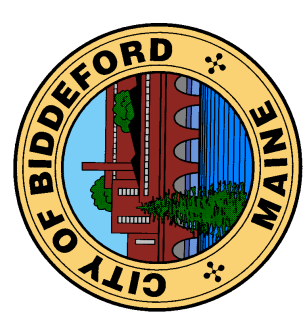
1 inch = 100 feet

UPDATED THROUGH APRIL 1, 2019
FOR ASSESSMENT PURPOSES ONLY
NOT TO BE USED FOR CONVEYANCES

The City of Biddeford, Maine

OFFICIAL TAX MAP

Office of The Tax Assessor
Nicholas D. Desjardins, CMA
Assessor



This Map is Prepared By
The City of Biddeford, Maine
Technology Department
GIS Division

203 Main Street · P.O. Box 586 · Biddeford, Maine 04005
207-571-0660 · gis@biddefordmaine.org

74

Tax Map

185

419 HILL ST

Location 419 HILL ST

Mblu 74/ 9/ /

Acct#

Owner R MARTIN PROPERTIES LLC

Assessment \$1,006,400

Appraisal \$1,006,400

PID 6718

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$811,200	\$195,200	\$1,006,400
Assessment			
Valuation Year	Improvements	Land	Total
2018	\$811,200	\$195,200	\$1,006,400

Owner of Record

Owner R MARTIN PROPERTIES LLC

Sale Price \$0

Co-Owner

Certificate

Address 76 DEEP COVE RD
RAYMOND, ME 04071

Book & Page 15328/0853

Sale Date 12/20/2007

Instrument 1B

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
R MARTIN PROPERTIES LLC	\$0		15328/0853	1B	12/20/2007
AIRPORT INDUSTRIAL PARK	\$0		9187/0242	1B	12/07/1998
MARTIN LESTER W & ROBERT A	\$0		04073/0107		11/14/1987

Building Information

Building 1 : Section 1

Year Built: 1985
Living Area: 28,119
Replacement Cost: \$1,609,742
Building Percent Good: 48

Replacement Cost
Less Depreciation: \$772,700

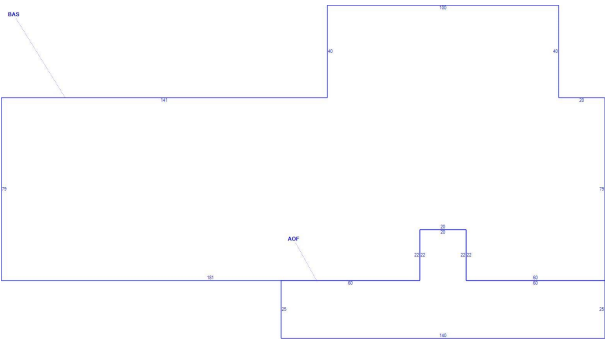
Building Attributes	
Field	Description
STYLE	Pre-Eng Mfg
MODEL	Industrial
Grade	Average
Stories:	1
Occupancy	1.00
Exterior Wall 1	Pre-finish Metl
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Metal/Tin
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr Abv Grad
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Forced Air-Duc
AC Type	None
Struct Class	
Bldg Use	FACTORY
Total Rooms	
Total Bedrms	00
Total Baths	3
Usrfid 218	
Usrfid 219	
1st Floor Use:	4000
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & MIN WL
Rooms/Prtns	AVERAGE
Wall Height	14.00
% Corn Wall	0.00

Building Photo



(http://images.vgsi.com/photos/BiddefordMEPhotos/\00\00\48\15.jpg)

Building Layout



(ParcelSketch.ashx?pid=6718&bid=6995)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	24,179	24,179
AOF	Office, (Average)	3,940	3,940
		28,119	28,119

Extra Features

Extra Features				Legend
Code	Description	Size	Value	Bldg #
LDL1	LOAD LEVELERS	1.00 UNITS	\$3,300	1
A/C	AIR CONDITION	3500.00 UNITS	\$5,700	1

SPR1	SPRINKLERS-WET	24660.00 S.F.	\$16,600	1
SPR2	WET/CONCEALED	3500.00 S.F.	\$2,900	1

Land

Land Use

Use Code 4000
Description FACTORY
Zone I2
Neighborhood 0007
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 3.44
Frontage 0
Depth 0
Assessed Value \$195,200
Appraised Value \$195,200

Outbuildings

Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	PAVING-ASPHALT			10000.00 S.F.	\$10,000	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$672,100	\$195,200	\$867,300
2016	\$672,100	\$169,900	\$842,000
2015	\$672,100	\$169,900	\$842,000

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$672,100	\$195,200	\$867,300
2016	\$672,100	\$169,900	\$842,000
2015	\$672,100	\$169,900	\$842,000

11/30/20

To whom it may concern,

Stoner & Co is requesting a waiver of Article XI, full site plan review for the building located at 419 Hill Street in Biddeford Maine.

There are no building expansions nor increases in impervious surface proposed.

We believe that we have provided sufficient information to consider our application for review.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Morgan Stoner', followed by a horizontal line.

Morgan Stoner
Owner; Stoner & Co

11/30/20

To whom it may concern,

The salt management plan for the site at 419 Hill Street Biddeford Maine is as follows:

- 1) We intend to limit the amount of salt that is utilized on site.
- 2) We will only use salt in pedestrian traveled areas to prevent slip and fall concerns.
- 3) Sand will be utilized for vehicle traveled areas.
- 4) We will sweep the lot in the spring and remove salt from the site where we are able to do so.

Sincerely,



Morgan Stoner
Owner; Stoner & Co

11/30/20

To whom it may concern,

The solid waste disposal plan for the site at 419 Hill Street Biddeford Maine is as follows:

- 1) Waste Management will be utilized for waste disposal. They will remove and dispose of waste once per week.
- 2) The location of the dumpster will be behind the building, out of view from streets, as shown on the attached schematic.
- 3) Plant based waste will always be kept very minimal. Practices are in place to utilize nearly 100% of solid waste derived from plants.

Sincerely,



Morgan Stoner
Owner; Stoner & Co

City of Biddeford, Maine
Wastewater Department
205 Main Street · PO Box 586 · Biddeford, Maine 04005-0586
Telephone 207 284-9118

Letter of Wastewater Treatment Plant Capacity to Serve

419 Hill Street

419 Hill Street
Biddeford, Maine 04005

November 30, 2020

Brief description of project: **Stoner & Co Cannabis Cultivation Facility** Estimated increase in flows: **0 gpd.**

Determination

The City of Biddeford Wastewater Department has reviewed the request to serve the above-described project. 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, based on information provided by the applicant, that 0 gpd of additional flows will be added from the project. No wastewater will be produced during the growing process, only bathroom use from 20-30 employees. Because this is less than the number of employees from the previous operation at this site, there will be no increase in flow to the sewers. 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.

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 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 determine the City of Biddeford Wastewater Treatment Facilities ability to handle and treat the flow from the above stated project once it is received at the treatment facility. The Planning Department, Engineering Department, Public Works or other persons from the Wastewater Department may require further studies or documentation regarding the impact on the City's sewer collection system or its components.

Alex Buechner
Superintendent
City of Biddeford Wastewater Department
Alex.buechner@biddefordmaine.org
207-282-1350

CC: Jeff Demers, Public Works/Wastewater Director
Roby Fecteau, Code Enforcement
Greg Tansley, City Planner
Tom Milligan, City Engineer

Hello Alex,

This letter is to provide information on the wastewater management at 419 Hill Street, Biddeford Maine.

There will be very little waste water discharged from this facility. Employee bathroom usage will be the only major contributor. There will be about 30 employees maximum at this facility when it is at full operating capacity. This count will be spread amongst multiple shifts. It is likely that no more than 20 employees will be in the building at any one time. The previous operation, Precision Manufacturing, had closer to 50 employees. The bathroom facilities have been adequate for their operation over several decades, so we do expect that we should be in good shape on this item.

Water and nutrients applied to the plants will be fully organic with no pesticides or anything of this kind. Furthermore, there should be no reason to discharge this water as a Reverse Osmosis filter will be used to recapture and treat the water so that it can be reused, rather than wasted and discharged. The State of Maine has specific mandates on water discharge related to cannabis cultivation which are intended to be followed closely as well.

The wastewater will be managed as follows: Water and nutrients will be carefully applied to plants that will be sitting in raised tables designed to capture any excess water. Should there be excess water that reaches the table it will drain from the table to a reverse osmosis filtering device that will feed a water retention barrel. This water will be reapplied to the plants and not drained into the waste water system.

There are no floor drains in the building.

Where there will be no water discharge locations other than toilets and bathroom sinks, there will be no reasonable way that employee's (even should they erroneously attempt to discharge water) can do so to any substantial degree.



CITY OF BIDDEFORD FIRE DEPARTMENT

152 Alfred Street
Biddeford, Maine 04005
Tel: 207-282-6632
Fax: 207-283-8243

Chief Scott R. Gagne
Assistant Chief Paul R. LaBrecque
Deputy Chief Kevin D. Duross

Mr. Michael Hunter
419 Hill Street
Biddeford, Maine 04005
December 1, 2020

Subject: Ability to Serve - 419 Hill Street Warehouse Cultivation Building Biddeford, Maine 04005

Dear Mr. Hunter

The Biddeford Fire Department has reviewed the request to serve the above - described project. It is the position of the Biddeford Fire Department, that we will provide emergency service as long as the department is available at time of request. It is of the understanding that the Biddeford Fire Department may request assistance from mutual aid departments in the event the fire department is not available to respond.

State and Local codes for the installation of a new Fire Sprinkler Suppression and Fire Alarm systems are required.

Please contact the Biddeford Fire Department if you have any questions and or concerns.

Respectfully,

Paul R. LaBrecque

Paul R. LaBrecque
Assistant Chief
Office of Fire Prevention

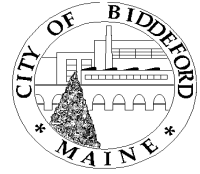
Cc: Greg Tansley Planning Office

City of Biddeford, Maine

COST ESTIMATE WORKSHEET

OWNER/APPLICANT: Stoner & Co
Applicant/Tenant

Hill 419 LLC
Property Owner



PROJECT NAME: 419 Hill Street

	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clearing and Grubbing	Acre	0	\$0.00	\$0.00
2	Erosion/Sediment Control	Lump Sum	1	\$3,200.00	\$3,200.00
3	Site Stabilization	Lump Sum	1	\$2,000.00	\$2,000.00
4	Ledge Removal	Cubic Yard	0	\$0.00	\$0.00
5	Sanitary Sewer				
	Manholes	Each	0	\$0.00	\$0.00
	Main	Linear Foot	0	\$0.00	\$0.00
	House Services	Linear Foot	0	\$0.00	\$0.00
6	Water Main				
	Main	Linear Foot	0	\$0.00	\$0.00
	House Services	Linear Foot	0	\$0.00	\$0.00
	Hydrants	Each	0	\$0.00	\$0.00
7	Electric				
	Underground Utility Trench	Linear Foot	0	\$0.00	\$0.00
	Conduit/Wiring	Linear Foot	0	\$0.00	\$0.00
	Transformer Bases	Each	0	\$0.00	\$0.00
8	Storm Drainage				
	Pipe/Culvert	Linear Foot	70	\$65.00	\$4,550.00
	Catch Basin	Each	0	\$0.00	\$0.00
	Other Treatment Devices	Each	0	\$0.00	\$0.00
9	Stormwater Management				
	Outlet Control Structure	Each	0	\$0.00	\$0.00
	Stormwater Management Facilities	Each	0	\$0.00	\$0.00
10	Excavate and Grade Subgrade	Cubic Yard	0	\$0.00	\$0.00
11	Roadways				
	Subbase Gravel	Cubic Yard	0	\$0.00	\$0.00
	Base/Finish Gravel	Cubic Yard	0	\$0.00	\$0.00
	Base Paving	Ton	0	\$0.00	\$0.00
	Finish Paving	Ton	0	\$0.00	\$0.00
	Geotextile Fabric	Ton	0	\$0.00	\$0.00
12	Sidewalks				
	Subbase Gravel	Cubic Yard	0	\$0.00	\$0.00
	Base/Finish Gravel	Cubic Yard	0	\$0.00	\$0.00
	Base Paving	Ton	0	\$0.00	\$0.00
	Finish Paving	Ton	0	\$0.00	\$0.00
13	Parking Lots/Other Areas				
	Subbase Gravel	Cubic Yard	0	\$0.00	\$0.00
	Base/Finish Gravel	Cubic Yard	0	\$0.00	\$0.00
	Base Paving	Ton	0	\$90.00	\$0.00
	Finish Paving	Ton	150	\$110.00	\$16,500.00

City of Biddeford, Maine

COST ESTIMATE WORKSHEET

14	Curbing – Bituminous	Linear Foot	0	\$0.00	\$0.00
15	Curbing - Concrete	Linear Foot	0	\$0.00	\$0.00
15	Curbing – Granite	Linear Foot	0	\$0.00	\$0.00
16	Pavement Striping	Linear Foot	1300	\$0.25	\$325.00
17	Guardrail	Linear Foot	0	\$0.00	\$0.00
18	Fencing	Linear Foot	0	\$0.00	\$0.00
19	Loam and Seed	1,000 Square Feet	2	\$500.00	\$1,000.00
20	Riprap	Cubic Yard	0	\$0.00	\$0.00
21	Landscaping	Lump Sum	0	\$0.00	\$0.00
22	Street Lights – Site Signage	Each	3	\$150.00	\$450.00
23	Site Lighting	Each	0	\$0.00	\$0.00
24	Monuments/Iron Pipes	Lump Sum	0	\$0.00	\$0.00
25	Clean Up	Lump Sum	1	\$1,000.00	\$1,000.00
26	As Builts	Lump Sum	1	\$1,500.00	\$1,500.00

COST ESTIMATE TOTAL:

\$30,525.00

150% of TOTAL:

\$45,787.50

FOR OFFICE USE ONLY

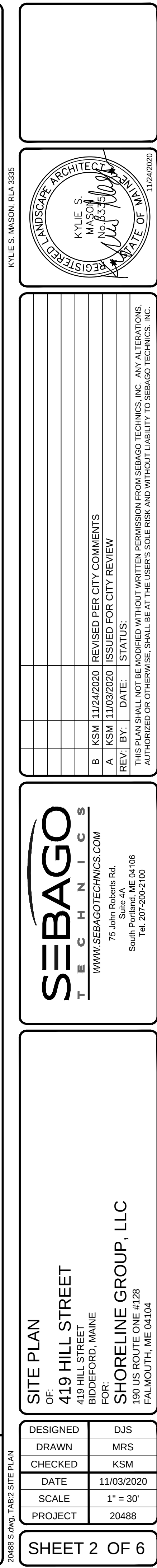
EROSION CONTROL/SITE STABILIZATION BOND (IF APPLICABLE):

PERFORMANCE GUARANTEE REQUIRED:

Name:

Signature:

Date:





CITY OF BIDDEFORD

Planning and Development Department

Greg D. Tansley, A.I.C.P.
City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 282-7119 or (207) 284-9115
Greg.Tansley@biddefordmaine.org

NOTICE OF DECISION

December 7, 2020

Morgan Stoner (via e-mail)
Stoner and Co.
147 Clearview Dr.
Arundel, ME 04046

RE: 2020.25 Conditional Use Permit for a Medical Marijuana Manufacturing (Growing) Facility for Stoner & Co. at 419 Hill Street (Tax Map 74, Lot 9) in the I-2 Zone.

Dear Mr. Stoner,

At their meeting of December 2, 2020, the Biddeford Planning Board reviewed the Conditional Use Permit application for a proposed Medical Marijuana Growing Facility at 419 Hill Street in the I-2 Zone. Hill 419, LLC (24 Presidio Way, Falmouth, ME 04105) owns the property and you presented the application to the Board.

Based on the presentation, materials submitted, and public comment the Planning Board waived full site plan review and approved the Conditional Use Permit, approved the Findings of Fact, and authorized the City Planner to sign the plans conditioned on the following:

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 exterior evidence of cultivation occurring within the property can be visible from any public right-of-way.**
4. **This approval does not take effect until the applicant's security plans have been reviewed and approved by the Biddeford Police Department.**
5. **All marijuana and marijuana byproducts 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-product 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.**
6. **Best management practices shall be adhered to during all ground disturbance operations. All Catch Basin's in the vicinity of earthwork operations shall have silt sacks installed & maintained for the duration of the work.**

7. 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.

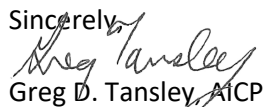
Please provide 1 Mylar Set and 1 Paper Set (each 24" x 36") of the plans for signature and City retention. If the applicant would like a signed set of plans, please provide an additional set(s) for signature.

Following the final approval, such approval shall be valid for one year from the date of said approval. If a building permit has not been issued, then said approval shall become automatically null and void.

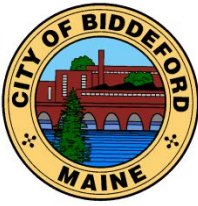
Appeals of the Planning Board's decision may be made as per the Biddeford Revised Code of Ordinances.

If you have any questions please call the Planning and Development Department at 284-9115.

FOR THE BIDDEFORD PLANNING BOARD

Sincerely,

Greg D. Tansley, AICP
City Planner

Cc: M. Hunter, Owner (via e-mail)
L. Marong, Owner (via e-mail)
R. Fecteau, Code Enforcement Officer (via e-mail)
T. Milligan, P.E., City Engineer (via e-mail)
M. Eddy, Planning and Development Director (via e-mail)
File



CITY OF BIDDEFORD

Planning and Development Department

Greg D. Tansley, A.I.C.P.
City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 282-7119 or (207) 284-9115
Greg.Tansley@biddefordmaine.org

Standard Conditions of Approval

Owner: Hill 419, LLC
24 Presidio Way
Falmouth, ME 04105

Applicant: Morgan Stoner (via e-mail)
Stoner and Co.
147 Clearview Dr.
Arundel, ME 04046

Project Description: Medical Marijuana Growing (Cultivation) Facility

Project Location: 419 Hill Street

Tax Map / Lot Number: Tax Map 74, Lot 9

Project ID: 2020.25

1. The material provided for the proposed project has been reviewed only for general conformance to the City technical requirements. The applicant(s) and/or their technical consultant shall be responsible for the actual design details and completeness of their work. It is incumbent upon the applicant(s) to ensure that the project is in conformance and complies with all City Codes, ordinances and regulations as well as with all state regulations, including, but not limited to, space and bulk standards, performance standards, use standards and other zoning type requirements.
2. All work shall be in conformance with the approved plans and submission documents. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner and City Engineer for minor changes. The City Planner shall make the determination of major or minor.
3. If Site Development is required as part of the project, a Letter of Credit or other surety acceptable to the City of Biddeford shall be submitted prior to the issuance of permits or site work being initiated. The financial guarantee shall be established for 150% of the cost of the remaining project improvements. (Items include but are not limited to the following):
 - a. Landscaping
 - b. Paving

- c. Work within ROW (existing or proposed)
 - d. Drainage
 - e. Loam & seed
 - f. Sediment & erosion control
 - g. As-builts
 - h. Monuments
4. Prior to any ground disturbance, the applicant shall establish a construction inspection account equal to: N/A.
 5. Prior to any ground disturbance, a pre-construction meeting with the owner/applicant, contractor, and City is required. Contact the Engineering Department to schedule this meeting.
 6. Contact the Department of Public Works for driveway location permits, curb cut permits and/or street opening permits prior to the start of construction.
 7. If Site Development is required as part of the project, an as-built plan must be provided to the City of Biddeford Engineering Office at the end of the project on mylar and on a disk, in a format, which can be read by the City of Biddeford's Geographic Information System software. If a disk copy cannot be provided, a charge for staff time to enter the plan into the City system will be assessed to the applicant.
 8. The applicant shall incorporate appropriate erosion control measures into this project to reduce erosion affects from the work. All disturbed areas must be re-vegetated and/or otherwise stabilized at the appropriate stage of the work per Maine DEP standards in the Best Management Practice (BMP) manual.
 9. That the Article VI Performance Standards requirements regarding Dust, Fumes, Vapors & Gases (sect 25), Explosive Materials (sect 28), Glare (sect 37), Noise (sect 48) be followed.
 10. The applicant is required to comply with all applicable requirements of Chapter 70 (Utilities) and Chapter 71 (Utilities/Industrial Pretreatment Program).
 11. The applicant shall obtain all other pertinent local, state and federal permits, licenses, and insurance such as blasting, building, electrical, plumbing, etc prior to commencing business.
 12. If Site Development is required as part of the project, at the completion of the project the owner/applicant shall request a final inspection. This request shall be directed to the Planning Office. Performance Guarantees and remaining escrow accounts shall not be released until the Planning Office certifies that the project has been completed and is in compliance with the approval and all applicable City Ordinances.

PLANNING BOARD
REPORT

April 2, 2021

Biddeford Planning Board
Greg Tansley, City Planner
City of Biddeford
205 Main Street
Biddeford, Maine 04005

Application: Marijuana adult cultivation – Curaleaf Maine Adult Use, Inc.
5 Drapeau Street (Tax Map 12 Lot 22)

Conditional Use Review

Review Status: New application.

Board members and Mr. Tansley,

The following application information has been provided for review:

1. Application form dated 2/26/2021.
2. Cover letter by Scott Reed, dated 4/21/2021 *RE: Conditional Use Application for marijuana cultivation facility at 5 Drapeau Street*, includes response to Conditional Use standards (Sec. 6.B.1) and standards under Sec.77; and floor plan exhibits;
3. Curleaf Odor Abatement Plan
4. Sublease Agreement
5. Previous Conditional Use approval for the site, Notice of Decision May 8, 2020.

With review of the above information and the Land Development Regulations, I offer the following comments on compliance with the City's ordinances.

PROJECT DESCRIPTION

The project site, located in the Industrial -1 Zone, is an approx. 97,000 SF commercial building which 68,200 SF is being leased by Maine Organic Therapy's (MOT) Medical Marijuana cultivation facility. The 4.6 AC lot includes 90 parking spaces and access to Drapeau Street. The proposal is to convert 28,200 SF of Medical Marijuana space to Adult Use Marijuana Cultivation Facility, to be subleased to the applicant. The proposal does not include any changes to the site. The Planning Board reviewed this site in May of last year and granted MOT approval for expanding their medical marijuana cultivation facility.

COMPLETENESS REVIEW

The application is before the Planning Board as required by Table of Land Uses, Article V (Establishment of Zones) of the Land Development Regulations where Adult Use Marijuana cultivation facilities are permitted in the I-1 zone as a Conditional Use, per Article VII and Article VI Performance Standards (specifically Section 77).

The applicant has prepared and submitted narratives that describe the application's compliance with the above provisions along with the required information related to program space and odor management. The **application appears to be complete** for Board's consideration.

COMPLIANCE WITH THE CITY'S ORDINANCES

PARKING

The applicant has communicated that there are 90 parking spaces on the site (confirmed with review of the City's GIS aerial imagery). The applicant states their plans to have as many as 60 employees at the facility during the maximum working shift (this total includes employees for both Curaleaf and Maine Organic Therapy. The other occupant at the building has as many as 15 employees. Applying the parking space requirements (Table 6-49B) for the industrial business activity (1 space per employee on the maximum working shift), the current uses/businesses would require 75 parking spaces. It appears the site's current parking can accommodate this.

Other than the item above, the review focuses on compliance to the Conditional Use Standards (Sec. 6 in Art. VII) and Performance Standards for Medical Marijuana (Sec 77 in Art. VI, recently revised). The applicant has provided a narrative that addresses these standards and it appears they demonstrate compliance.

WAIVER REQUESTS

The applicant is requesting a waiver from the **site development review requirements of Article XI Site Plan Review**. This seems reasonable since the proposed changes to the site are more aligned to maintenance when considering future paving and restriping parking without creating new impervious area. There is also a request a waiver from the requirement to supply an approval letter from the Police Department concerning E-911 designation. This item does not need a waiver since it is not applicable to the application (creation of a new street).

CONCLUSION

The submitted application for a Conditional Use Permit to establish an adult use marijuana cultivation facility in an existing building appears to be in order. After review of the application material, presentation by the applicant, and public testimony, the Planning Board may want to consider granting conditional approval.

SUGGESTED MOTIONS

Move to waive the regulations of Article XI Site Plan Review, in its entirety, as permitted under Sec. 9.B.2 Waivers of the City's Land Development Regulations.

Move to grant conditional approval for the Conditional Use Permit application for Curaleaf Maine Adult Use, Inc., at 5 Drapeau Street, Tax Map 12, Lot 22 with the conditions outlined in the draft Findings of Fact as presented.

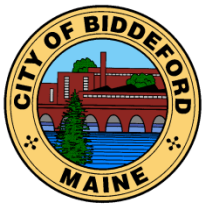
(See Draft Findings of Fact for suggested conditions)

Feel free to contact me with questions.

Best regards,



Christopher Di Matteo
City of Biddeford Contract Planner.
cdimatteo@longmeadowpla.com
207.604.4245



CITY OF BIDDEFORD

Planning and Development Department

FINDINGS OF FACT AND CONCLUSIONS OF LAW CONDITIONAL USE PERMIT

Pursuant to the provisions of the City of Biddeford Land Development Regulations Article VII, Conditional Uses and other applicable provisions, the Biddeford Planning Board has considered the application of **Curaleaf Maine Adult Use, Inc.**, 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:

Findings of Fact:

1.	Applicant:	Curaleaf Maine Adult Use, Inc. 730 Center Street 1-Ct Auburn, ME 04210
2.	Owner of Property:	Go Development, LLC PO Box 111, Kennebunk, ME 04043
3.	Agent:	None
4.	Project Location:	5 Drapeau Street
5.	Project Tax Map #/Lot #:	Tax Map 12 Lot 22
6.	Lot Size:	4.6 AC +/-
7.	Existing Zoning:	Industrial -1
8.	Overlay Zoning:	none
9.	Designations:	none
10.	Existing Use:	Commercial/Medical Marijuana Cultivation
11.	Proposed Use:	Marijuana Adult Use Cultivation Facility
12.	Floodplain Status:	None
13.	Approvals Required:	Conditional Use Permit
14.	Uses in the Vicinity:	Commercial/Industrial
15.	Dimensional Requirements:	
	Min. Setback from R.O.W: 30 FT	Minimum Rear Setback: 25 FT
	Minimum Side Setback: 25 FT	Maximum Height: 6 stories / 60 FT
16.	Waivers Needed:	a. None
17.	Waivers Granted:	a. None
18.	Variances Needed for Approval:	None.
19.	Other Approvals Required:	Building Permits from the Biddeford Code Enforcement Office.
20.	Other Permits Obtained:	None.
21.	Other Non-City Permits Required:	Maine Office of Marijuana Policy (OMP) Retail Location Registration
22.	LDR Attachment A: Fess Paid:	Yes

23.	Application Materials Submitted: 1. Application form dated 2/26/2021. 2. Cover letter by Scott Reed, dated 4/1/2021 <i>RE: Conditional Use Application for marijuana cultivation facility at 5 Drapeau Street</i>, includes response to Conditional Use standards (Sec. 6.B.1) and standards under Sec.77; and floor plan exhibits; 3. Curleaf Odor Abatement Plan 4. Sublease Agreement 5. Previous Conditional Use approval for the site, Notice of Decision May 8, 2020.	
24.	Planning Board Review History:	
	Conditional Use Review:	April 7, 2021

Conclusions of Law:

The Planning Board concludes the following:

1. The proposed use meets specific requirements set forth in this ordinance, including provisions of the Land Development Regulations, Article VI Performance Standards (Sec. 77) and Article VI Conditional Use and appears to be in compliance with applicable state or federal laws;
2. The proposed use, with review by the Fire Department, State Fire Marshall and the issuance of a building permit 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. No new exterior lighting is proposed and the existing lighting appears 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 existing site includes 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, located within an existing commercial retail plaza, 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 existing parking lot is adequate in size to include 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, adjacent to other commercial retail uses, 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. With no site improvements proposed, 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. With the existing site serviced by public water and sewer, and waste management services, 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. No new site improvements are proposed and the existing site appears to allow for adequate provision 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 existing water supply and recent upgrade to service would meet the demands of the proposed project including fire protection purposes.
17. With consideration of the submitted waste disposal plan and other state and local requirements, 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, historic sites, archeological resources, or on significant wildlife habitat or wetland areas and water bodies, which could be avoided by reasonable modification of the proposal;

Determination:

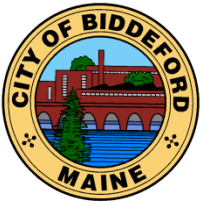
Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the application with the following conditions:

Conditions of Approval:

1. **Standard Conditions of Approval apply.**
2. **The applicant shall obtain all other pertinent local, state and federal permits, licenses, and insurance such as blasting, building, electrical, plumbing, etc., prior to commencing business, unless authority issuing said permit allows for such actions.**

Planning Board Chairman

Date



CITY OF BIDDEFORD

Planning and Development Department

Standard Conditions of Approval

Owner/Applicant: Curaleaf Maine Adult Use, Inc.
730 Center Street 1-Ct
Auburn, ME 04210

Project Description: Adult Use Marijuana Cultivation and Extraction Laboratory

Project Location: 5 Drapeau Street

Tax Map / Lot Number: Tax Map 12, Lot 22

Project ID: 2021.16

1. The material provided for the proposed project has been reviewed only for general conformance to the City technical requirements. The applicant(s) and/or their technical consultant shall be responsible for the actual design details and completeness of their work. It is incumbent upon the applicant(s) to ensure that the project is in conformance and complies with all City Codes, ordinances and regulations as well as with all state regulations, including, but not limited to, space and bulk standards, performance standards, use standards and other zoning type requirements.
2. All work shall be in conformance with the approved plans and submission documents. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner and City Engineer for minor changes. The City Planner shall make the determination of major or minor.
3. Contact the Department of Public Works for driveway location permits, curb cut permits and/or street opening permits prior to the start of construction.
4. If Site Development is required as part of the project, an as-built plan must be provided to the City of Biddeford Engineering Office at the end of the project on mylar and on a disk, in a format, which can be read by the City of Biddeford's Geographic Information System software. If a disk copy cannot be provided, a charge for staff time to enter the plan into the City system will be assessed to the applicant.
5. The applicant shall incorporate appropriate erosion control measures into this project to reduce erosion affects from the work. All disturbed areas must be re-vegetated and/or otherwise stabilized at the appropriate stage of the work per Maine DEP standards in the Best Management Practice (BMP) manual.

6. That the Article VI Performance Standards requirements regarding Dust, Fumes, Vapors & Gases (sect 25), Explosive Materials (sect 28), Glare (sect 37), Noise (sect 48) be followed.
7. The applicant is required to comply with all applicable requirements of Chapter 70 (Utilities) and Chapter 71 (Utilities/Industrial Pretreatment Program).
8. If Site Development is required as part of the project, at the completion of the project the owner/applicant shall request a final inspection. This request shall be directed to the Planning Office. Performance Guarantees and remaining escrow accounts shall not be released until the Planning Office certifies that the project has been completed and is in compliance with the approval and all applicable City Ordinances.

DRAFT



April 1, 2021

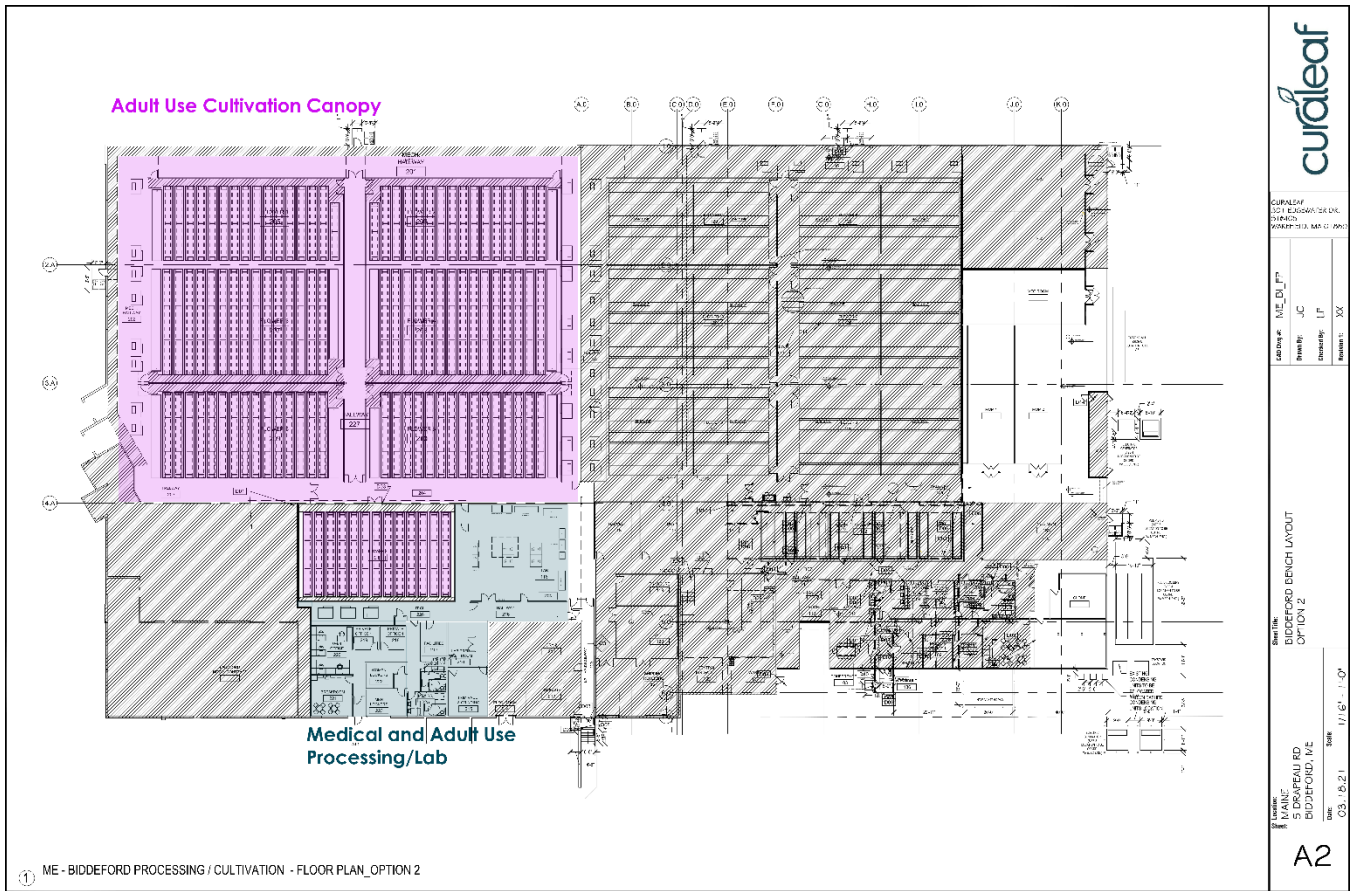
City of Biddeford
Planning Board PO
Box 586
205 Main Street
Biddeford, ME 04005

RE: Conditional Use Application for marijuana cultivation facility at 5
Drapeau Street.

On May 8, 2020 Maine Organic Therapy received approval for a 28,200 sq ft expansion to the existing 40,000 sq ft for the medical cultivation and medical processing lab located at 5 Drapeau St., Biddeford, ME 04005. The total square footage of the facility will be 68,200 sq ft once construction is complete. We are requesting to utilize 28,200 sq ft for Adult Use Cultivation and Adult Use Processing with Adult Use cultivation canopy not to exceed 20,000 sq ft. We currently have 20 employees and will have a staff of 60 employees in January of 2022. There are 90 regular parking spaces and two handicap spaces. There is one other tenant that will utilize 15 parking spaces.

While construction is under way on the expansion (Curaleaf) is requesting conditional use approval to temporarily operate a 9,128 square foot adult use marijuana cultivation, extraction lab and warehouse in the existing 40,000 sq ft at 5 Drapeau Street (Conditional Use Application Attached) co-located with an existing medical cannabis cultivation and extraction lab. This application is submitted in cooperation with the property owner and landlord, GO Development LLC, and the current tenant, Maine Organic Therapy (MOT), who will sublease the space to Curaleaf. Our request for approval is based on our adherence to the City's Conditional Use Ordinance and Marijuana Establishments Ordinance.

The plan of utilizing 9,128 square feet existing space to temporarily house Adult Use cultivation while the expansion is occurring may be confusing. For clarity the final cultivation following the completion of construction is shown below:



Conditional Use Section 6.B.1 Standards of Conditional Uses:

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the facility's ability to meet all requirements set forth in this ordinance, the changed use will be in compliance with applicable state law.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create new fire safety hazards, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create new hazards to motorists and is adequate for the safety of occupants and users and does not damage the value or diminish the useability of adjacent properties, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the buffers or on-site landscaping, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create additional detrimental effect on the use and peaceful enjoyment of abutting property, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the provisions for vehicular loading and unloading and parking, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create additional traffic, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the effect on the value of adjacent properties, as the

facility plan's only change is to the type of marijuana being cultivated or manufactured.

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;

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the effect on the privacy of the residents of the immediate area (if any), as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing would be in compliance with Biddeford's Comprehensive Plan, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, etc. , as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing would not result in changes to flood hazards or flood damage and is in conformance with applicable flood hazard protection requirements, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the plan for disposal of wastewater and solid waste, or to the prevention of ground or surface water contamination, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not impact erosion or sedimentation, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not impact stormwater runoff or other drainage on the site, and will not unduly burden off-site surface water systems, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the water supply demand for fire protection purposes, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the plan for transportation, storage and disposal of hazard substances and materials, as the facility plan's only change is to the type of marijuana being cultivated or manufactured. See the Operating Plan for details procedures for handling waste.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not have an adverse impact on scenic vistas or on wildlife habitat or wetland areas and water bodies, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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.

The site is not located in a Shoreland Zone.

The facility's proposed use will be fully compliant with Part III (Land Development Regulations), Article VI (Performance Standards), Section 77 (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 establishments shall be clearly identified as such on the site plan or conditional use application.

The proposed use and facility is compliant with this ordinance. Common areas shared with MOT are identified on the attached site plan.

- 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.
 - 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.
 - 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.
 - 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.

- 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.
- 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.
- e. All marijuana and marijuana byproducts 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-product 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 as the areas between the storage room and where said material is loaded onto vehicle(s) for disposal.

The proposed use and facility will be compliant with this Ordinance. An odor control plan is attached to this application.

Requested Waivers:

- 1. We request a blanket waiver of all site plan requirements as operations are planned for existing, available leased space.
- 2. We request a waiver to supply a letter from Police Department - E-911 Road Name Designation. The proposed use does not change the E-911 Road Name Designation.

Thank you for your attention to this matter.



Scott K. Reed, President of Curaleaf Maine Adult Use, Inc. and Maine Organic Therapy, Inc.

CITY OF BIDDEFORD, MAINE
PLANNING BOARD
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

APPLICATION FORM

Type of Application:

- | | | |
|--|---|--------------------------------------|
| ☐ Shoreland Zoning Permit | ☐ Site Plan Review | ☐ Extraction |
| ☒ Conditional Use Permit | ☐ Subdivision | ☐ Private Way |
| ☐ Other: _____ | | |

Applicant Information:

Applicant's Name: Curaleaf Maine Adult Use, LLC EIN 84-4644684

Applicant's Mailing Address: 730 Center St 1-C, Auburn, ME 04210

Applicant's Telephone: (207) 420-5455

What is Applicant's legal interest in the property?

- ☐ Owner ☐ Potential Buyer with Contract ☒ Lease/Rental Agreement

Owner's Name: GO Development, LLC

Owner's Address: PO Box 111, Kennebunk, ME 04043

Owner's Telephone: (207) 590-3251

Agent's Name: N/A

Agent's Address: _____

Telephone: _____

Engineer/Surveyor: _____

Engineer/Surveyor's Address: _____

Telephone: _____

Project Location and Lot Information:

Street Address: 5 Drapeau Street, Biddeford, ME 04005

Tax Map: 12 Lot: 22

Current Zoning: I-1 Shoreland Zoning: _____

Size of lot: 4.6 ☒ acres ☐ s.f. Lot Frontage: 425 +/-

Existing Use of Property: Medical Marijuana Cultivation Facility, Extraction Lab, Warehouse

Property currently serviced by:

☒ City Road	☐ Private Road
☒ Public Sewer	☐ Septic System
☒ Public Water	☐ Private Well
☐ Public Trash	☒ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ 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 ☒ No If yes, attach information

Do you plan to bring fill onto the lot? ☐ Yes ☒ No If yes, attach information

Description of proposed use of property:

Project/Proposed Use Description: Converting 10,000 sq ft of approved medical cannabis
cultivation to Adult Use Cultivation and co-locate medical and adult use lab operations

Property to be serviced by:

☒ City Road	☐ Private Road
☒ Public Sewer	☐ Septic System
☒ Public Water	☐ Private Well
☐ Public Trash	☒ Private Hauler

Is this project part of a larger project? ☐ Yes ☒ 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: N/A _____

☐ If a Private Way is proposed, number of lots served: N/A _____

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

Total new square feet footprint of structures: _____

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. Site Plan Review- It is an existing building
2. Letters of approval- all were provided as part of the medical use approval 2020.10,
3. approved on May 6,2020
4. _____
5. _____

Attachments:

A. Letters of Approval

- ☐ 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 Dept (Sewer) - 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. Engineered Plans, as required.

Fees (due at time of 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 it's 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 review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting this 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.

☐ Project proposed to have 1 acre or more of site disturbance:

-Project may need to apply for a Maine Construction General Permit and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of applicant:



Date: 2/26/21

Signature of owner of property:

DocuSigned by:

Paul Gelardi

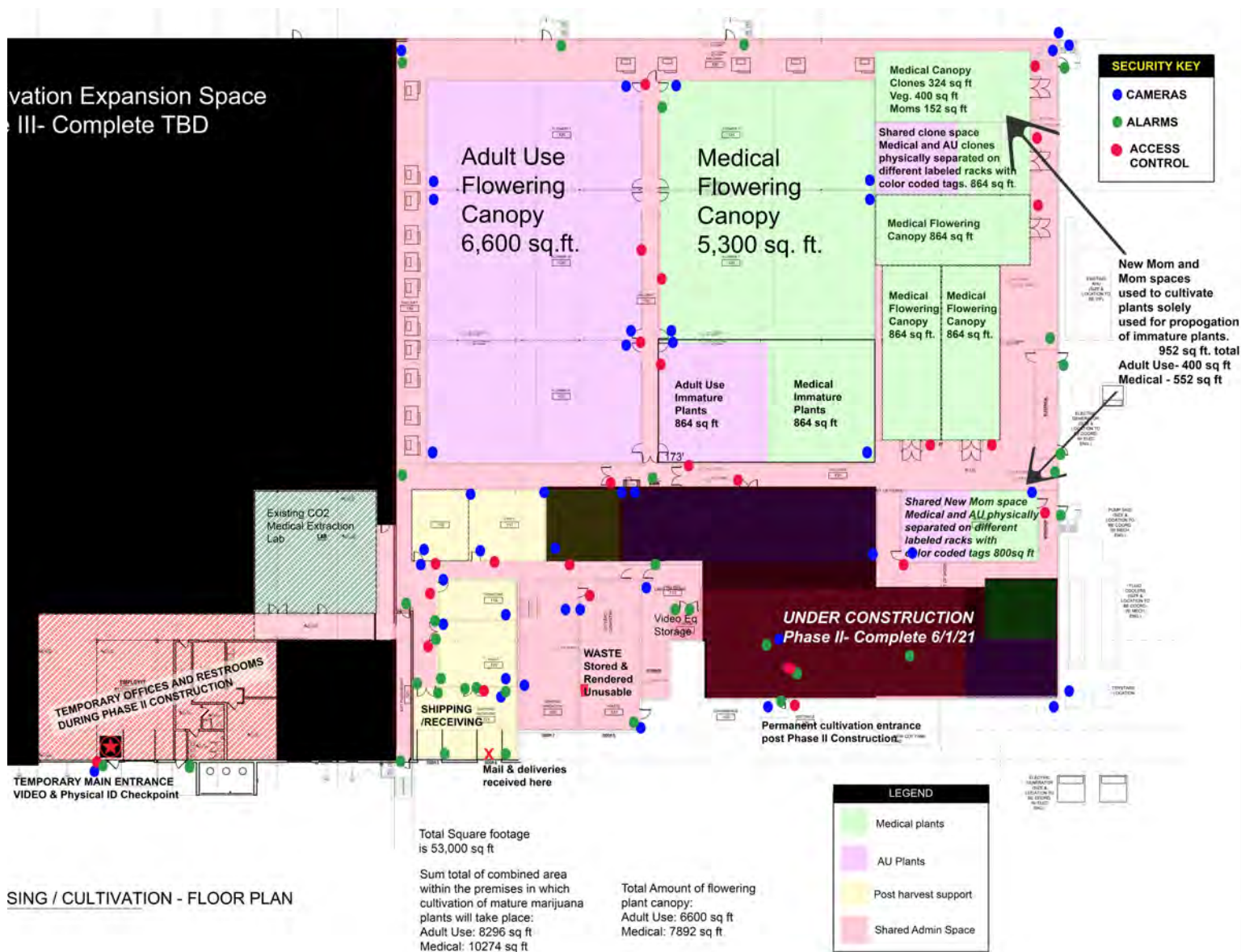
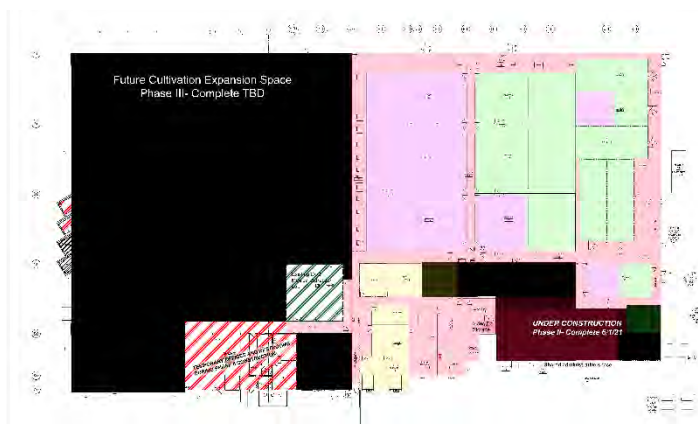
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Date: 2/26/2021

**IF PLAN APPROVAL IS ANTICIPATED, PROVIDE 2 FULL SIZE MYLARS & 2 FULL SIZE PAPER COPIES FOR BOARD SIGNATURE (AS APPLICABLE).
CHECK WITH PLANNING STAFF FOR CLARIFICATION.**



Master Diagram

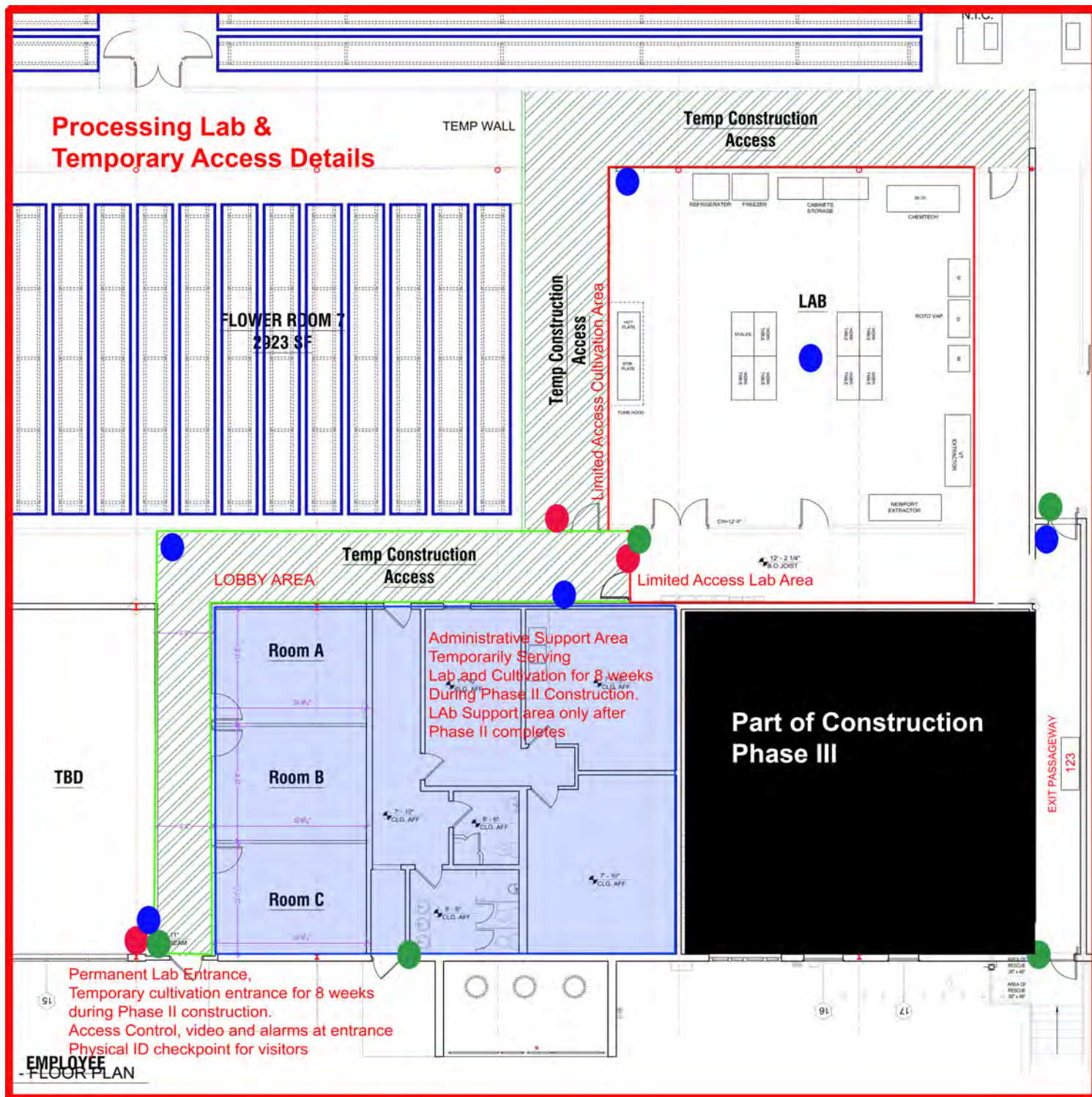


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Addendum 1

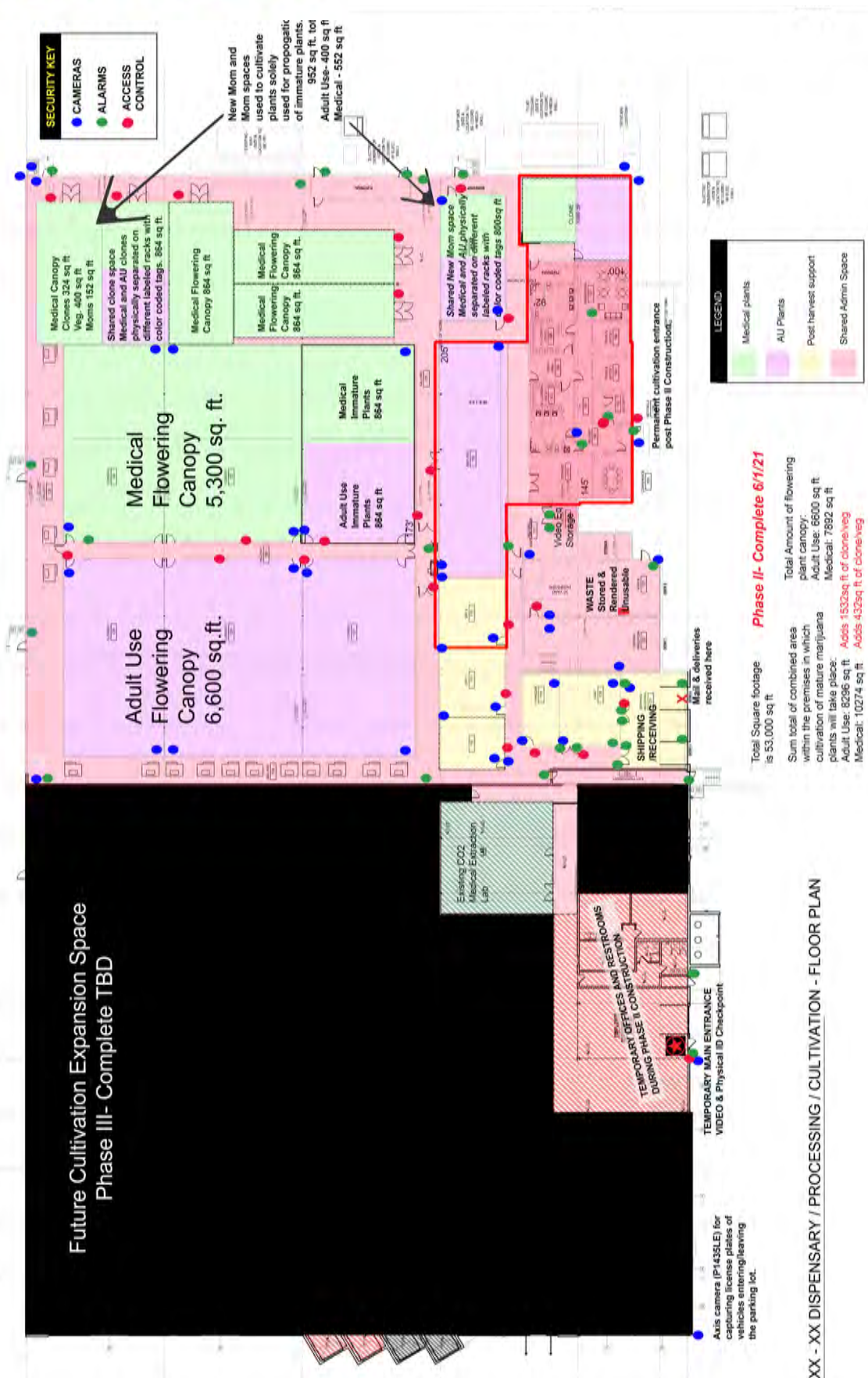
Master Diagram

Lab and temporary access details



MASTER DIAGRAM

Phase II Completion



The conditional use application submitted on March is to change the use of the premises by co-locating 9,128 square feet of the facility with an adult use cultivation and manufacturing operation with the current medical cultivation and manufacturing operation. The facility received a certificate of operation for the medical use on 3/17/2021. There is no change to the building plan.

BIDDEFORD CONDITIONAL USE 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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the facility's ability to meet all requirements set forth in this ordinance, the changed use will be in compliance with applicable state law.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create new fire safety hazards, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create new hazards to motorists and is adequate for the safety of occupants and users and does not damage the value or diminish the usability of adjacent properties, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the buffers or on-site landscaping, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create additional detrimental effect on the use and peaceful enjoyment of abutting property, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the provisions for vehicular loading and unloading and parking, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not create additional traffic, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the effect on the value of adjacent properties, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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;

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the effect on the privacy of the residents of the immediate area (if any), as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing would be in compliance with Biddeford's Comprehensive Plan, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, etc. , as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing would not result in changes to flood hazards or flood damage and is in conformance with applicable flood hazard protection requirements, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the plan for disposal of wastewater and solid waste, or to the prevention of ground or surface water contamination, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not impact erosion or sedimentation, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not impact stormwater runoff or other drainage on the site, and will not unduly burden off-site surface water systems, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the water supply demand for fire protection purposes, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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

The change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not change the plan for transportation, storage and disposal of hazard substances and materials, as the facility plan's only change is to the type of marijuana being cultivated or manufactured. See the Operating Plan for details procedures for handling waste.

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 change of use from medical marijuana cultivation and manufacturing to adult use marijuana cultivation and manufacturing does not have an adverse impact on scenic vistas or on wildlife habitat or wetland areas and water bodies, as the facility plan's only change is to the type of marijuana being cultivated or manufactured.

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.

The site is not locate in a Shoreland Zone.



Curaleaf Odor Abatement Plan

5 Drapeau Street, Biddeford

A. Specific Odor-Emitting Activities

i. Description of Odor-Emitting Activities

The specific Odor emitting activities at the Cultivation facility involve the cultivation and post-harvest of marijuana:

1. Growing cannabis plants
2. Harvesting of cannabis plants
3. Drying of cannabis plants
4. Curing cannabis plants
5. Packaging cannabis plants

There are two (2) major sources of odors to be addressed in any cannabis facility. First, are the naturally occurring terpenes that exist in all plants. These are oils that are secreted that produce a mild odor that plants use as a defense mechanism or to facilitate pollination. The second, and far more noticeable is the microbials and airborne pathogens that can develop. Specifically, the airborne and surface targeted VOCs (Volatile Organic Compounds), pathogens, and microbes including mold, mildew, and bacteria.

ii. Facility Layout Identifying Areas of Odor Emitting Activities and Odor Mitigation Equipment. See *Appendix A1 Master Diagram* and *Appendix A2 Odor Mitigating Equipment/Tech*

- There are (6) packaged RoofTop Units (RTU) that provide Heating, Cooling, and Ventilation for the building. These units have fresh air economizers for high efficiency cooling and ventilation. To work with these units when fresh air is brought in, the equipment also has relief air vents.
- There are also restroom and processing exhaust air fans.
- There is some level of local infiltration and exfiltration within the building envelope that can be caused by prevailing winds.
- Any airflow that enters the building envelope must be made up by air that leaves the building envelope.

B. Odor Mitigating Practices

The key to odor control is controlling the airflow leaving the building envelope and eliminating the airborne microbials and pathogens.

i. Procedural Activities

1. Written and Verbal Procedures: The main control method is the use of carbon filters throughout the facility. Filters are replaced no more than every 90 days by the Head Grower.
2. Recordkeeping Systems and Forms: **Appendix B1** has a training attestation form and **Appendix B2** is a maintenance log. All HVAC and filtration equipment will be maintained and repaired as required per manufacturers maintenance schedule. Maintenance records, carbon filter purchase



invoices, and available carbon filters in the facility as well as training session records will be kept in a central file.

3. Staff and Management Training: See below for detailed information about staff and management training.

ii. Engineering Controls - See Appendix C1 for Letter from Engineering

Curaleaf will use multiple approaches to mitigate the odor in our facility. System design, installation, testing and certification will be completed by professional engineers and installation technicians. Optimal environmental conditions are created with sophisticated climate control systems to maintain precise temperature, humidity, and air quality levels. Full automation allows remote operation and monitoring. A powerful Heating, Ventilation and Air Conditioning (HVAC) system powers air handlers dedicated to individual growing rooms, enabling independent climate control room-by-room, and limits the impact of a failed HVAC unit to a single room. Internal air is conditioned with CO₂ by an emitter set to maintain precise levels. A series of dehumidifiers in each room keep humidity in controlled ranges.

The key to the Odor Mitigation Strategy being employed here is the elimination of the odor causing pathogens, not the masking of them. This coupled with the control of the building envelope and understanding and controlling the exfiltration from the envelope will ensure that the surrounding areas are not affected by the potential odor generated within the cultivation facility. This will be further supplemented by a very extensive sanitization process which includes daily cleansing of all areas of the facility. All walls within the grow environment will be constructed with easily sanitized metal panel construction. Outside air, and by extension exhaust air, in all areas of the building will be properly engineered to minimize envelope exfiltration. Variable Frequency Drives (VFD) will be used with the Building Automation Systems (BAS) to minimize all process air into and out of the building to the extent required by energy code and safety compliance. The odor mitigation engineering controls will serve to ensure:

- The amount of air that exfiltrates the building will be minimized.
- The air that does exfiltrate the building will have the odor bearing pathogens eliminated.
- These odors will be eliminated and not masked or overwhelmed with other odors.

iii. System design

The best control technology (BCT) used includes carbon filters in each room where odors are present. See floor plan for specific locations of odor mitigation equipment. See Appendix D1 for Equip Specs

1. Economizer operation is going to be limited and the spaces rebalanced. This will minimize the amount of air that is brought through the building envelope and is released back outside of the building.
2. Fresh air to rooms that are exposed to the plants in all stages prior to packaging will be minimized to the extent needed for compliance, safety, and comfort.
3. Rooms will be treated with Defender DXM-100 sanitization units. These units create MCI (Multi-Cluster Ions) with high levels of positive and negative ions (Hydrogen Peroxide, Ozonized Ions, Super Oxides, Hydroxides, and Hydroxyls) using Ultra-Violet/Photo-Catalytic Oxidation (UV/PCO)



technology. These ions will eliminate the source of the odors by eliminating the Mold, Mildew, and Bacteria. These units will be specifically used in areas that have potential concentrations of offensive microbials:

- a. Restrooms
 - b. Flower Rooms
 - c. Harvesting Rooms
 - d. Drying Rooms
 - e. Trim Rooms
 - f. Packaging Rooms
 - g. Waste storage rooms
4. All integrated HVAC units that are proposed to be used in all areas exposed to cultivation and drying will have UV/PCO technology integrated into the equipment. As described above, this is far more effective than standard charcoal or UV technology.
 5. In areas that are not conditioned with this custom integrated equipment will utilize additional Defender DXM-100 units.

These two measures will minimize any odor that is created within the building.

iv. Maintenance Plan

Maintenance activities include preventative maintenance, and timely response to malfunction. Carbon filters will be changed every 90 days by the Head Grower. A maintenance log will track all maintenance activities. All HVAC equipment will be maintained and repaired as required per manufacturers maintenance schedule. The Defender DXM-100 units' PCO cell will be replaced every 12-18 months per manufacturer's guidelines. The PCO cell is the catalyst that creates the advanced oxidation that attacks pathogens and reduces VOC's. Maintenance records, carbon filter purchase invoices, and available carbon filters in the facility as well as training session records will be kept in central file.

C. Staff Training

All Curaleaf employees will be trained on general odor control awareness, safety, and odor complaint reporting, including the importance of reporting changes in odors, closing doors and windows and ensuring exhaust and filtration systems are running as required. Comprehensive SOP's will include odor control and filtration system capabilities, problem identification and solutions, safe use, and maintenance of the odor control system. Training consists of a balance of in person and online informational learning sessions, and on-the-job, supervised, practical training. The extent of training is determined by the employee's job duties at the facility.



D. Odor Complaint Tracking and Response

Curaleaf's facility will maintain compliance with all applicable odor control regulations. Curaleaf will maintain an Odor Complaint Tracking and Response Log to record all reports of excess odor in and adjacent to the facility. Employees will be trained to refer all odor complaints to the Compliance Manager, who will record the following:

- Date Observed
- Time Observed
- Description of Odor Observed:
- Contact Info of Reporter
- Name of Employee

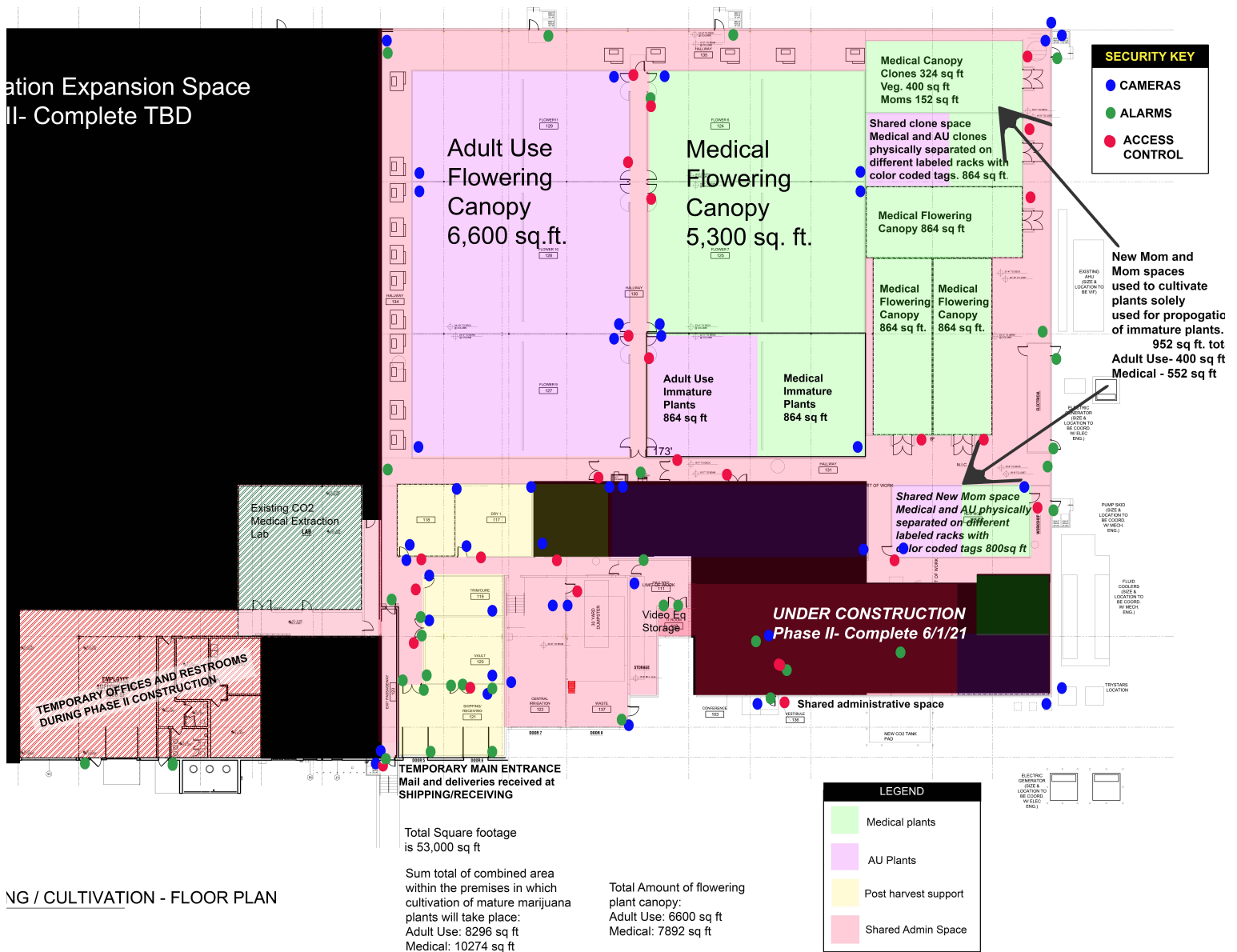
Curaleaf will issue a written response to all odor complaints from local or state officials and from the Office of Marijuana Policy within 30 days of receipt of the written odor complaint.

The Compliance Manager and the Facilities Manager will review odor complaints annually to identify trends and adjust SOPs accordingly.

e. Certified Industrial Hygienist (CIH) Review. ***See Appendix E1.***



APPENDIX A1 Master Diagram

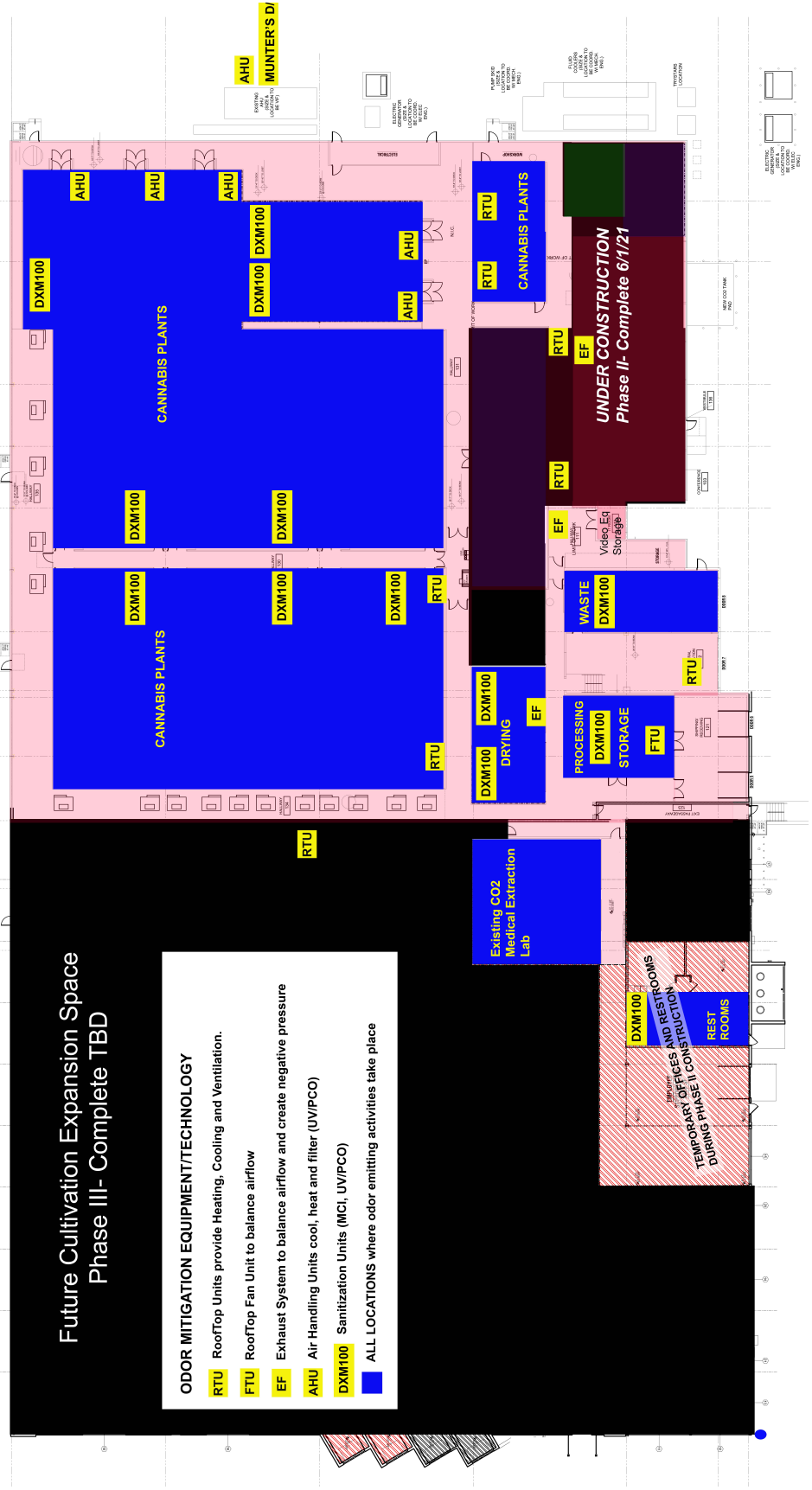


NG / CULTIVATION - FLOOR PLAN

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APPENDIX A2

Odor Mitigation Equipment and Technology



APPENDIX B1

Training Log



Odor Control Training Log

Date: _____

Use this log to document the attendance of annual odor control training.

Topics covered:

Mitigating Odor While Growing Cannabis

Use of Cultivation Equipment

Proper Handling and Storage

Mitigating Odor While Harvesting Cannabis

Mitigating Odor While Drying Cannabis

Use and Maintenance of Equipment

Use and Maintenance of Ventilation System

Facility Controls

TRAINER NAME/Title	Signature
ATTENDEE NAME/Title	Signature

APPENDIX B2

Maintenance Log



	Air Carbon Filter Replacement Schedule						
	May-21	Aug-21	Nov-21	Feb-22	May-22	Aug-22	
	Initial/Date	Initial/Date	Initial/Date	Initial/Date	Initial/Date	Initial/Date	
Flower 1							
Flower 2							
Flower 3							
Flower 4							
Flower 5							
Flower 6							
Flower 8							
Flower 9							
Dry Room 1							
Dry Room 2							
Packaging							
Processing							
Lab							
W's Restroom							
M's Restroom							
Breakroom							

APPENDIX C1

Engineering Letter



October 16, 2020

Members of the Biddeford Planning Board:

My name is Steven Kinz. I am a senior mechanical engineer at Curaleaf. Curaleaf is a leading medical and wellness cannabis operator in the United States that operates 57 marijuana dispensaries, 22 cultivation sites and 30 processing facilities in states across the country that have legalized marijuana. If Biddeford allows adult use marijuana establishments in the I1 zone, Curaleaf intends to partner with Maine Organic Therapy, investing between 15 and 30 million dollars into an adult use cultivation facility at 5 Drapeau Street.

It is my understanding that odor mitigation is a top priority of the city in authorizing and regulating marijuana businesses. I have over 20 years of experience with, and specific expertise in, HVAC system design. Since starting with Curaleaf in 2019 I have worked on dozens of cultivation facilities; specifically, designing and installing odor mitigation and ventilation systems for marijuana cultivation and manufacturing facilities. I have reviewed the city staff's proposal with regard to amendments to the ordinance to address odor and believe that their recommendations align with best practices. Importantly, if adopted staff's recommendation will ensure that only operators that have developed and implemented a robust plan to properly mitigate odor that has been signed off by an engineer will be permitted to operate within the city.

The staff's recommendation for amending the performance criteria addressing odor is:

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: (a) 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. (b) 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. (c) 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.

(i) 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.

(ii) 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

APPENDIX C1

Engineering Letter



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 land uses must 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 and medical 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.

(3) Noxious gases and fumes. Marijuana Cultivating, testing, and processing facilities, in accordance with this ordinance shall include appropriate ventilation systems to mitigate noxious gases or other fumes used or created as part of the production. Gases or fumes shall not extend beyond any boundary line.

I wanted to give you sense of what such a plan might look like. Minus the building layout, below is an example of an odor mitigation plan for a cultivation facility that an applicant would have to submit to meet the robust standards in staff's proposed performance criteria.

Odor Mitigation Study and Proposal 5 Drapeau Street, Biddeford, Maine

In any cannabis cultivation, processing, or dispensing facility there are many sources of odor that can be discerned within the facility. The (2) major sources are the naturally occurring terpenes that exist in all plants. These are oils that are secreted that produce a mild odor that plants use as a defense mechanism or to facilitate pollination. The second, and far more noticeable is the microbials and airborne pathogens that can develop. Specifically, the airborne and surface targeted VOCs (Volatile Organic Compounds), pathogens, and microbes including mold, mildew, and bacteria.

The key to odor control is controlling the airflow leaving the building envelope and eliminating the airborne microbials and pathogens.

Understanding the Building Envelope:

- There are (6) packaged RoofTop Units (RTU) that provide Heating, Cooling, and Ventilation for the building. These units have fresh air economizers for high efficiency cooling and ventilation. To work with these units when fresh air is brought in, the equipment also has relief air vents.
- There are also restroom and processing exhaust air fans.
- There is some level of local infiltration and exfiltration within the building envelope that

APPENDIX C1

Engineering Letter



can be caused by prevailing winds.

- Any airflow that enters the building envelope has to be made up by air that leaves the building envelope.

Corrective Actions (measures in existing areas):

1. Economizer operation is going to be limited and the spaces rebalanced. This will minimize the amount of air that is brought through the building envelope and is released back outside of the building.
2. Fresh air to rooms that are exposed to the plants in all stages prior to packaging will be minimized to the extent needed for compliance, safety, and comfort.
3. These same rooms will be treated with Defender DXM-100 sanitization units. These units create MCI (Multi-Cluster Ions) with high levels of positive and negative ions (Hydrogen Peroxide, Ozonized Ions, Super Oxides, Hydroxides, and Hydroxyls) using Ultra-Violet/Photo-Catalytic Oxidation (UV/PCO) technology. These ions will eliminate the source of the odors by eliminating the Mold, Mildew, and Bacteria. These units will be specifically used in areas that have potential concentrations of offensive microbials:
 - a. Restrooms
 - b. Flower Rooms
 - c. Harvesting Rooms
 - d. Drying Rooms
 - e. Trim Rooms
 - f. Packaging Rooms
 - g. Waste storage rooms
4. By performing these measures:
 - a. The amount of air that exfiltrates the building will be minimized.
 - b. The air that does exfiltrate the building will have the odor bearing pathogens eliminated.
 - c. These odors will be eliminated and not masked or overwhelmed with other odors.
 - d. This technology does not require the use of high maintenance charcoal filters. These filters rely upon active Carbon (or other media) with sufficient mass and surface area to accommodate the level of odor bearing pathogens. It eliminates the odor but will reduce its effectiveness as the odor is absorbed into the media. Therefore, it will lose its odor control ability over time without constant maintenance.

Proactive Measures (measures in expansion areas):

1. All integrated HVAC units that are proposed to be used in all areas exposed to cultivation and drying will have UV/PCO technology integrated into the equipment. As described above, this is far more effective than standard charcoal or UV technology.
2. In areas that are not conditioned with this custom integrated equipment will utilize

APPENDIX C1

Engineering Letter



additional Defender DXM-100 units.

3. These two measures will minimize any odor that is created within the building.
4. Outside air, and by extension exhaust air, in all areas of the building will be properly engineered to minimize envelope exfiltration. Variable Frequency Drives (VFD) will be used with the Building Automation Systems (BAS) to minimize all process air into and out of the building to the extent required by energy code and safety compliance.

The key to the Odor Mitigation Strategy being employed here is the elimination of the odor causing pathogens, not the masking of them. This coupled with the control of the building envelope and understanding and controlling the exfiltration from the envelope will insure that the surrounding areas are not affected by the potential odor generated within the cultivation facility. This will be further supplemented by a very extensive sanitization process which includes daily cleansing of all areas of the facility. All walls within the grow environment will be constructed with easily sanitized metal panel construction.

PRODUCT CUT SHEETS

ProGuard with MCI™ uses an organic sanitization process that helps prevent the growth and spread of molds, mildews, and pathogens including: botrytis, grey mold, powdery mildew, and bacteria allowing you to create a clean room environment in your Cannabis Grow facility.

ProGuard with MCI™ will help you pass Cannabis Lab Testing Regulations by significantly reducing microbial CFUs without damaging your product quality.

Learn how you can protect your valuable cannabis crop using ProGuard with MCI™



Proactive Air & Surface
Sanitization



Innovative Solutions

Innovative Solutions for Everyday Challenges

Gary Mancini
858.382.1933

Mike D'Ambra
858.231.8484

Innovative Solutions

Defender DXM 100 with MCI™



Defender DXM 100 has been designed and engineered to deliver sanitization that is proven to reduce & eradicate surface and airborne pathogens for high load environments in Cannabis Cultivation Centers using the **ProGuard Sanitization Technology**.

Defender DXM 100 is easy to install and maintain as it operates 24/7 in Cannabis facilities.

PRODUCT SPECIFICATIONS

- * Weight of Unit: 6.5 lbs.
- * Dimensions (H x L x D):
12" x 12.4" x 3.1"
- * Electrical Input:
100-240V – 50/60Hz
- * Electrical Output:
12VDC 3A
- * Power Consumption:
Running 14W - 22W
- * **Warranty: 2 Years**

ProGuard Sanitization has been tested and validated by reputable labs across the world to ensure safety and effectiveness in reducing mold, mildew, bacteria, viruses, voc's and other dangerous pathogens.

Applications Include: indoor grow rooms, greenhouses, dry rooms, and more.



Innovative Solutions

Innovative Solutions for Everyday Challenges

Gary Mancini
858.382.1933

Mike D'Ambra
858.231.8484

Learn How Cannabis Cultivators Use Amazing New Technology to Grow “Clean” Product to Pass Regulations

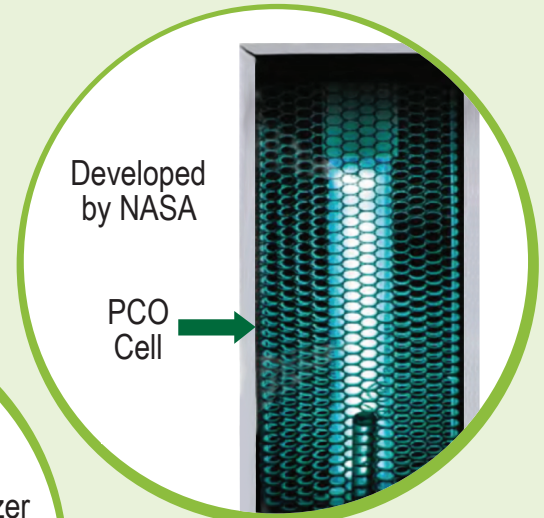
ProGuard is an organic technology that you can use 24/7 to prevent the growth and spread of molds, mildews, and pathogens including: botrytis, grey mold, powdery mildew, and bacteria of all kinds in your Cannabis Grow facility.



ProGuard-MCI™ Sanitization Uses 2 Powerful Kill Mechanisms

ProGuard-MCI™ is a photo-catalytic process (PCO), which uses a target plate with proprietary coatings. The PCO Technology creates hydroxyls, and advanced oxidation which, are very effective at killing pathogens.

The MCI™ technology significantly increases Ion production, while creating Ions which are very stable with longer dwell times. This results in a technology that is very effective at killing microbial and pathogens of all types in High Pathogen Load environments.

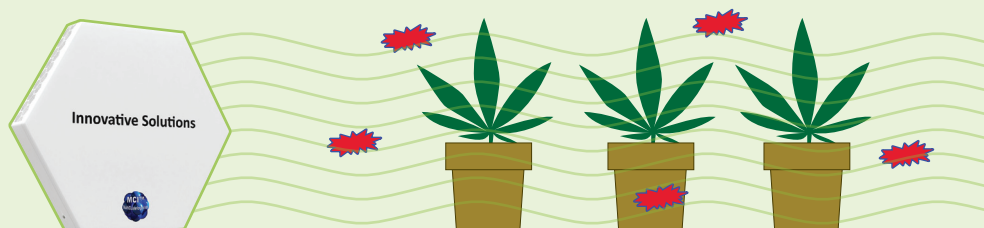


1. Photo Catalytic Oxidation (PCO)

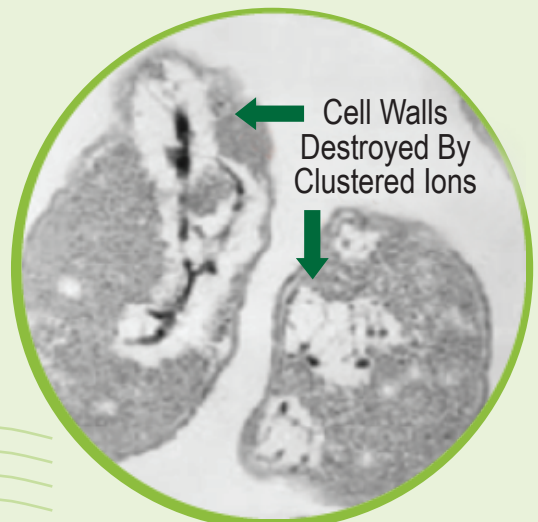
2. Multi-Cluster Ionization (MCI™)

ProGuard-MCI™ Sends Kill Agents Direct to Pathogens in the Room

ProGuard-MCI™ effectively sanitizes both air and surfaces in cultivation environments faster and more thoroughly by using Active Sanitization distribution. It distributes the sanitizing solution into the environment killing pathogens at their point of origin, on pots, on benches, on plants, both in the air and on surfaces.



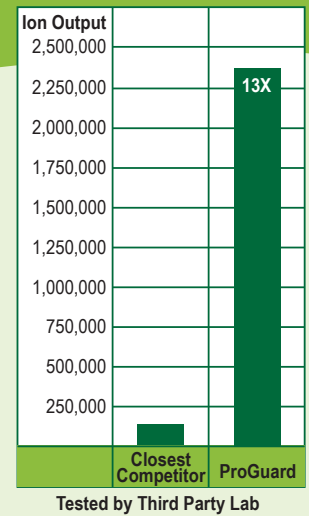
Active Sanitization Process



ProGuard-MCI™ Pierces Holes in Cell Walls



***ProGuard-MCI™
Uses 2 Kill Mechanisms
to Produce More than
13X the Sanitization
Produced by Our
Closest Competitor***

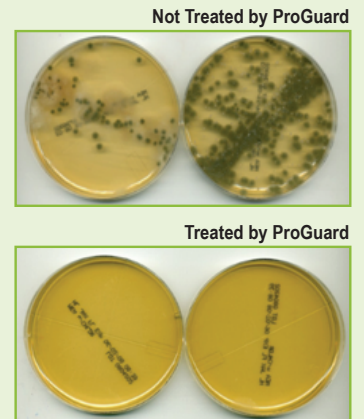


Case Study: Large Medical Cannabis Grower Consistently Failed To Pass 12% of Their Lab Tests – Losing Many Thousands of Dollars

This well-known grower was consistently failing about 12% of their state regulation lab tests due to high microbial pathogen counts on finished product. After using the Amazing ProGuard-MCI™ Technology in one grow facility their pass rate was increased to 100%. They were so pleased with the results they have now installed the ProGuard-MCI™ Sanitization Technology in 3 additional facilities.

Test Results: Reduced Microbials 99.9% Microbiological Lab Tests of Canadian Grower

A very large Canadian Cultivator was having problems passing the Health Canada Regulations, which are the strictest in the world. The ProGuard-MCI™ Sanitization Technology was installed in multiple grow rooms and tested against control grow rooms that did not use the technology. Stainless steel settle plates were placed in both rooms to measure the microbial counts throughout the grow cycle and lab test results continually showed that the grow rooms using the Sanitization Technology had significantly less microbial counts creating a cleaner grow environment for the plants.



***The finished product showed a
Microbial reduction of 99.9%***

Use ProGuard-MCI™ Throughout Your Grow Facility to Produce Quality “Clean” Products

Using ProGuard-MCI™ Sanitization in grow rooms, drying and cure rooms, trim and packaging rooms, helps prevent Powdery Mildew and Botrytis from taking hold. This helps control Bud Rot, which is one of the primary contributors – creating “clean” finished product. The ProGuard-MCI™ cost is very affordable, easy to implement and will provide a short ROI for your valuable crops.

Let Us Help You Design a ProGuard-MCI™ Sanitization System for Your Grow!



Proactive Air & Surface
Sanitization



Innovative Solutions

Innovative Solutions for Everyday Challenges

Gary Mancini
858.382.1933

Mike D'Ambra
858.821.8484

Genesis Air™ 2008 PCP Compound



The Compound Populated Catalyst Panel (PCP Compound) is a combination of PCP Standard and Drop-In technologies. This type of panel may be used in all air handlers with sideload, frontload access or rooftop units (RTU's) or in the ductwork. The PCP Compound is a "scalable" technology; it may be engineered for any size air stream using combinations of standard sizes, or by designing custom units for the non-standard pathways.

GENESIS AIR Photocatalysis GAP™

Providing Environmentally Sound Engineered Solutions for

Indoor Air Quality

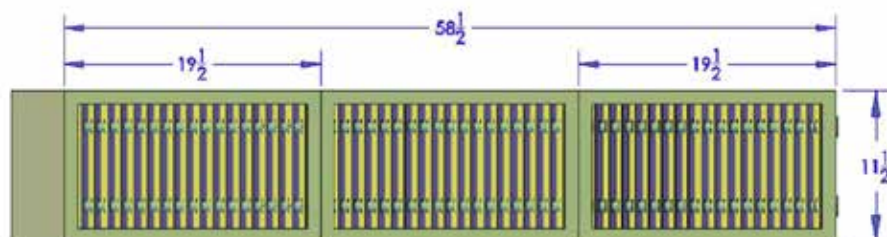
Special Features:

- Non -ozone producing lamps
- Multi panel configurations
- Voltage: 115 60 hrtz
- Amps: 1 per panel Average
- Consult PCP Compound Calculator for estimation of panels

Genesis Air's GAP™ technology (patent pending) often eliminates the need for costly HEPA and carbon filtration. Genesis Air units do not produce ozone.



FIFRA 87447-TX-001



GAP™

Capture

Step 1: Merv Filtration...

Reduces even particles you can't see. High efficiency, high capacity, low resistance particle filter captures most pollen, mold, mildew, ragweed, dust mites, house dust, bacteria, pet dander and many other submicroscopic poisons, allergens and irritants.

Visit our web site:

www.genesisair.com

Clean

Step 2: UVGI Lamps...

GAP™ uses ultraviolet light to energize the photocatalyst and cleans surfaces.

Genesis Air, Inc.
5202 CR 7350 Suite D
Lubbock TX 79424
Phone: 806-745-7000
e-mail: info@genesisair.com

Convert

Step 3: Photocatalysis...

Using Titanium Dioxide energized by UV light Genesis Air, GAP™ produces hydroxyl radicals. Hydroxyl radicals are a natural cleansing agent found in the troposphere. Hydroxyl radicals reduce and oxidize biologics in the air stream such as mold, bacteria and viruses, thus rendering them nonviable. And GAP™ safely reduces concentrations of VOCs.

PCP Compounds

Genesis Air 11.11.11

DIMENSIONAL DATA

A PCP Compound is comprised of PCP Standards connected together with a ballast tray. For example, the drawing below shows three 12"x 20"x 6" PCP Standards clipped together and attached to the spacer/ballast tray. The designation for this style unit requires two numbers. The first is the height, either 12", 16", 20" or 24". The second number is the nominal length of all PCP Standards built into the unit.

A possible letter E located after the length number will designate an external ballast tray is needed. The unit below would be a PCP Compound 1260. The lamps (this example uses 59" lamps) are then inserted thru the holes and attached to the ballast tray by Greensleeves. These are collars permanently mounted to the lamps.

All PCP Compound units are 6" deep nominal; actual dimension is 5 13/16". The catalyst is pleated at one pleat per inch. The ballast tray is incorporated into the unit to house the ballasts internally and to protect the lamps from damage. The table to the right contains all dimensional data for each of the PCP Compounds. All PCP Compounds are rated at 500 fpm. As residence time is the most critical factor in designing a viable solution, do not exceed 500 fpm. Each panel has a 0.05" H₂O pressure drop @ 500 FPM.

POWER

Ballasts are matched to the specific length of lamp. To maintain tested performance, ballasts may not be substituted with another manufacturer's products. The ballasts must be specified as 120v, 60 Hz: contact the factory for other voltage/frequency requirements. The ballast operating temperature range is -20°F to 158°F. Power is delivered from Compound to Compound by a metal conduit running through the catalyst panels.

SAFETY

Safety door switches are recommended and options of a Current Killbox (CKB) on duct/AHU units. This CKB switches off the lamps when air pressure drops below 0.15 inches H₂O. It also includes provisions for a door switch circuit and BAS lamp monitoring circuit.

		Height Designation	Width Designation	Built From Standards	Actual Height	Total length with Ballast Tray and Bolted frames	Lamps	Lamp Length	Amp per Lamp	Total Amps	Approx Weight Gal. lbs.	Approx Weight SS, lbs.
1212	1	12	12	12	11.5	14.936	2	12"	0.224	0.45	7.348	6.488
1216	2	12	16	16	11.5	18.936	2	16"	0.296	0.59	8.224	7.364
1220	3	12	20	20	11.5	22.936	2	20"	0.367	0.73	9.099	8.239
1224	4	12	24	24	11.5	26.936	2	24"	0.519	1.04	9.975	9.115
1228	5	12	28	16	12	30.436	2	28"	0.604	1.21	12.327	11.030
1232	7	12	32	22	9	34.436	2	31"	0.659	1.32	13.203	11.908
1236	6	12	33	24	9	35.936	2	31"	0.659	1.32	13.489	12.192
1236	9	12	36	24	12	36.436	2	36"	0.752	1.50	14.078	12.781
1237	10	12	37	24	13	39.666	2	36"	0.752	1.50	14.331	13.034
1240	11	12	40	20	20	42.436	2	40"	0.844	1.69	14.954	13.657
1241	12	12	41	21	20	43.563	2	40"	0.844	1.69	15.190	13.892
1244	13	12	44	24	20	46.436	2	44"	0.908	1.82	16.829	14.932
1245	14	12	45	24	21	47.563	2	44"	0.908	1.82	16.065	14.717
1246	15	12	46	24	22	48.936	2	44"	0.908	1.82	16.334	15.017
1248	16	12	48	24	24	50.436	2	48"	0.981	1.96	16.705	15.408
1252	17	12	52	24	16	53.936	2	51.5"	1.033	2.07	19.057	17.323
1253	18	12	53	24	20	55.436	2	51.5"	1.033	2.07	19.343	17.609
1256	19	12	56	24	22	57.936	2	55"	1.105	2.21	19.933	18.199
1257	20	12	57	24	24	59.436	2	55"	1.105	2.21	20.219	18.465
1260	21	12	59	21	17	61.668	2	59"	1.17	2.34	20.690	18.966
1260	22	12	60	24	24	61.936	2	59"	1.17	2.34	20.808	19.074
1261	23	12	61	24	24	63.436	2	59"	1.17	2.34	21.095	19.360
1262	24	12	62	24	24	64.188	2	59"	1.17	2.34	21.280	19.544
1612	25	16	12	12	15.5	14.936	3	12"	0.224	0.67	9.753	8.554
1616	26	16	16	16	15.5	18.936	3	16"	0.296	0.89	10.741	9.544
1620	27	16	20	20	15.5	22.936	3	20"	0.367	1.10	11.730	10.532
1621	28	16	21	21	15.5	24.063	3	20"	0.367	1.10	11.994	10.799
1624	29	16	24	24	15.5	26.936	3	24"	0.519	1.56	12.718	11.521
1626	30	16	28	16	12	30.436	3	28"	0.604	1.81	15.655	14.020
1632	31	16	32	22	9	34.436	3	31"	0.659	1.98	16.843	15.019
1633	32	16	33	24	9	35.936	3	31"	0.659	1.98	17.157	15.333
1636	33	16	36	24	12	38.436	3	36"	0.752	2.26	17.831	16.007
1637	34	16	37	24	13	39.668	3	36"	0.752	2.26	18.112	16.288
1640	35	16	40	20	20	42.436	3	40"	0.844	2.53	18.690	16.995
1641	36	16	41	21	20	43.563	3	40"	0.844	2.53	19.084	17.259
1644	37	16	44	24	20	46.436	3	44"	0.908	2.72	19.808	17.984
1645	38	16	45	24	21	47.563	3	44"	0.908	2.72	20.072	18.249
1646	39	16	46	24	22	48.936	3	44"	0.908	2.72	20.370	18.545
1648	40	16	48	24	24	50.436	3	48"	0.981	2.94	20.797	18.972
1652	41	16	52	24	16	53.936	3	51.5"	1.033	3.10	23.938	21.482
1653	42	16	53	24	20	55.436	3	51.5"	1.033	3.10	24.247	21.796
1656	43	16	56	24	22	57.936	3	55"	1.105	3.32	24.922	22.470
1657	44	16	57	24	24	59.436	3	55"	1.105	3.32	25.236	22.784
1659	45	16	59	21	17	61.668	3	59"	1.17	3.51	25.764	23.312
1660	46	16	60	24	24	61.936	3	59"	1.17	3.51	25.910	23.458
1661	47	16	61	24	24	63.436	3	59"	1.17	3.51	26.224	23.773
1662	48	16	62	24	24	64.188	3	59"	1.17	3.51	26.436	23.966
1726	49	17	28	25	17	28.000	3	24"	0.519	1.56	14.000	12.992
2012	50	20	12	12	19.5	14.936	3	12"	0.224	0.67	11.014	9.556
2016	51	20	16	16	19.5	18.936	3	16"	0.296	0.89	12.115	10.657
2020	52	20	20	20	19.5	22.936	3	20"	0.367	1.10	13.217	11.758
2021	53	20	21	21	19.5	24.063	3	20"	0.367	1.10	13.509	12.050
2024	54	20	24	24	19.5	26.936	3	24"	0.519	1.56	14.318	12.859
2026	55	20	28	16	12	30.436	3	28"	0.604	1.81	17.970	15.270
2032	56	20	32	22	9	34.436	3	31"	0.659	1.98	19.071	16.872
2033	57	20	33	24	9	35.936	3	31"	0.659	1.98	19.414	17.214
2036	58	20	36	24	12	38.436	3	36"	0.752	2.26	20.173	17.973
2037	59	20	37	24	13	39.668	3	36"	0.752	2.26	20.481	18.282
2040	60	20	40	20	20	42.436	3	40"	0.844	2.53	21.274	19.074
2041	61	20	41	21	20	43.563	3	40"	0.844	2.53	21.566	19.366
2044	62	20	44	24	20	46.436	3	44"	0.908	2.72	22.375	20.175
2045	63	20	45	24	21	47.563	3	44"	0.908	2.72	22.567	20.468
2046	64	20	46	24	22	48.936	3	44"	0.908	2.72	22.992	20.793
2048	65	20	48	24	24	50.436	3	48"	0.981	2.94	23.476	21.236
2052	66	20	52	24	16	53.936	3	51.5"	1.033	3.10	27.128	24.168
2053	67	20	53	24	20	55.436	3	51.5"	1.033	3.10	27.471	24.590
2056	68	20	56	24	22	57.936	3	55"	1.105	3.32	28.230	25.288
2057	69	20	57	24	24	59.436	3	55"	1.105	3.32	28.572	25.631
2060	70	20	59	21	17	61.668	3	59"	1.17	3.51	29.156	26.216
2060	71	20	60	24	24	61.936	3	59"	1.17	3.51	29.331	26.390
2061	72	20	61	24	24	63.436	3	59"	1.17	3.51	29.673	26.733
2062	73	20	62	24	24	64.188	3	59"	1.17	3.51	29.915	26.974
2412	74	24	12	12	23.5	14.936	4	12"	0.224	0.90	11.527	13.285
2416	75	24	16	16	23.5	18.936	4	16"	0.296	1.16	14.499	12.741
2420	76	24	20	20	23.5	22.936	4	20"	0.367	1.47	15.713	13.955
2421	77	24	21	21	23.5	24.063	4	20"	0.367	1.47	16.003	14.279
2424	78	24	24	24	23.5	26.936	4	24"	0.519	2.08	16.927	15.169
2428	79	24	28	16	12	30.436	4	28"	0.604	2.42	21.229	18.578
2432	80	24	32	22	9	34.436	4	31"	0.659	2.64	22.643	19.792
2433	81	24	33	24	9	35.936	4	31"	0.659	2.64	22.814	20.163
2436	82	24	36	24	12	38.436	4	36"	0.752	3.01	23.657	21.006
2437	83	24	37	24	13	39.668	4	36"	0.752	3.01	23.994	21.343
2440	84	24	40	20	20	42.436	4	40"	0.844	3.38	24.871	22.220
2441	85	24	41	21	20	43.563	4	40"	0.844	3.38	25.192	22.541
2444	86	24	44	24	20	46.436	4	44"	0.908	3.63	26.085	23.434
2445	87	24	45	24	21	47.563	4	44"	0.908	3.63	26.406	23.755
2446	88	24	46	24	22	48.936	4	44"	0.908	3.63	26.759	24.109
2448	89	24	48	24	24	50.436	4	48"	0.981	3.92	27.299	24.649
2452	90	24	52	24	16	53.936	4	51.5"	1.033	4.13	31.601	28.057
2453	91	24	53	24	20	55.436	4	51.5"	1.033	4.13	31.972	28.428
2456	92	24	56	24	22	57.936	4	55"	1.105	4.42	32.615	29.272
2457	93	24	57	24	24	59.436	4	55"	1.105	4.42	33.166	29.642
2459	94	24	59	21	17	61.668	4	59"	1.17	4.66	33.627	30.283
2460	95	24	60	24	24	61.936	4	595				

Black Ops® Carbon Filters

APPENDIX D1 Equip Specs

OverviewVideosSpecs

Product Videos

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FAMILY

HGC746704

HGC746708

HGC746712

HGC746714

HGC746720

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Black Ops® Carbon Filters

Black Ops® Carbon Filters feature virgin activated Australian RC-4/12 granular carbon. The activated carbon absorbs and traps pollutant molecules within the carbon removing contaminants, odors and impurities from the air. Machine packing allows for more carbon and less movement. The open air mesh design maximizes airflow. These filters are lightweight and have powder-coated aluminum tops and bases. Black Ops® filters have a built-in flange and 2 pre-filters are included. They are sized to meet all of your ventilation and air purification needs. 2 year life expectancy.

	Title	MSRP	Wishlist
SIGNATURE	HGC746704 (746704) Black Ops Carbon Filter 6 in x 24 in 550 CFM	\$172.50	+ Wishlist Find Retailer (/page/findretailer?partId=HGC746704)
SIGNATURE	HGC746708 (746708) Black Ops Carbon Filter 8 in x 39 in 950 CFM	\$251.50	+ Wishlist Find Retailer (/page/findretailer?partId=HGC746708)

APPENDIX D1

Equip Specs

	Title	MSRP	Wishlist
SIGNATURE 	HGC746712 <i>(746712)</i> Black Ops Carbon Filter 10 in x 39 in 1400 CFM	\$279.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746712)
SIGNATURE 	HGC746714 <i>(746714)</i> Black Ops Carbon Filter 12 in x 39 in 1700 CFM	\$334.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746714)
SIGNATURE 	HGC746720 <i>(746720)</i> Black Ops Carbon Filter 14 in x 48 in 2500 CFM	\$427.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746720)

Black Ops® Carbon Filters

OverviewVideosSpecs

APPENDIX D1 Equip Specs

HGC746704 - Black Ops Carbon Filter 6 in x 24 in 550 CFM

	EACH	CASE	PALLET
Upc:	849969007428		
Quantity:			
Volume (cf):	2.264		
Dim Weight (in³/lb):	28.142		
Weight (lb):	19.000		
Length (in):	11.400		
Width (in):	12.900		
Height (in):	26.600		
Product Weight (lb):	0.000		
Product Length (in):	9.600		
Product Width (in):	9.600		
Product Height (in):	24.000		

HGC746708 - Black Ops Carbon Filter 8 in x 39 in 950 CFM

	EACH	CASE	PALLET
Upc:	849969007442		20849969007446
Quantity:			24
Volume (cf):	4.456		113.258
Dim Weight (in³/lb):	55.394		1407.982
Weight (lb):	39.230		981.000
Length (in):	41.730		54.500
Width (in):	13.390		42.000
Height (in):	13.780		85.500
Product Weight (lb):	0.000		
Product Length (in):	11.500		
Product Width (in):	11.500		
Product Height (in):	39.000		

HGC746712 - Black Ops Carbon Filter 10 in x 39 in 1400 CFM

	EACH	CASE	PALLET
Upc:	849969007466		20849969007460
Quantity:			6
Volume (cf):	5.877		51.111

APPENDIX D1
Equip Specs

Dim Weight (in³/lb):	73.062	635.396
Weight (lb):	47.280	329.000
Length (in):	40.940	48.000
Width (in):	15.750	40.000
Height (in):	15.750	46.000
Product Weight (lb):	0.000	
Product Length (in):	13.500	
Product Width (in):	13.500	
Product Height (in):	39.000	
HGC746714 - Black Ops Carbon Filter 12 in x 39 in 1700 CFM		
	EACH	CASE
Upc:	849969007473	20849969007477
Quantity:		6
Volume (cf):	8.189	58.125
Dim Weight (in³/lb):	101.797	722.590
Weight (lb):	58.300	395.000
Length (in):	41.340	54.000
Width (in):	18.110	40.000
Height (in):	18.900	46.500
Product Weight (lb):	0.000	
Product Length (in):	15.500	
Product Width (in):	15.500	
Product Height (in):	39.000	
HGC746720 - Black Ops Carbon Filter 14 in x 48 in 2500 CFM		
	EACH	CASE
Upc:	849969007503	20849969007507
Quantity:		4
Volume (cf):	11.621	61.111
Dim Weight (in³/lb):	144.468	759.712
Weight (lb):	85.310	362.000
Length (in):	50.790	48.000
Width (in):	19.690	40.000
Height (in):	20.080	55.000
Product Weight (lb):	0.000	
Product Length (in):	17.400	
Product Width (in):	17.400	
Product Height (in):	48.000	

APPENDIX D1
Equip Specs

	Title	MSRP	Wishlist
SIGNATURE 	HGC746704 <i>(746704)</i> Black Ops Carbon Filter 6 in x 24 in 550 CFM	\$172.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746704)
SIGNATURE 	HGC746708 <i>(746708)</i> Black Ops Carbon Filter 8 in x 39 in 950 CFM	\$251.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746708)
SIGNATURE 	HGC746712 <i>(746712)</i> Black Ops Carbon Filter 10 in x 39 in 1400 CFM	\$279.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746712)
SIGNATURE 	HGC746714 <i>(746714)</i> Black Ops Carbon Filter 12 in x 39 in 1700 CFM	\$334.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746714)
SIGNATURE 	HGC746720 <i>(746720)</i> Black Ops Carbon Filter 14 in x 48 in 2500 CFM	\$427.50	+ Wishlist  Find Retailer (/page/findretailer?partId=HGC746720)



100% Free U.S. Shipping

SHOP BY **SIZE**

SHOP BY **BRAND**

SHOP BY **TYPE**

MERV 13 AIR FILTERS



Traps and blocks 98% of airborne particles • Recommended for superior residential and commercial use and smoke lounges

Improve your indoor air quality with MERV 13 air filters! This pleated filter utilizes an electrostatic charge to remove very fine particles from your air, as well as potential allergens like mold, pet dander, bacteria—even particles that carry viruses. In fact, the MERV 13 filter works up to 30 times more effectively and lasts 3 times longer than ordinary fiberglass filters. Also, it doesn't allow mold, fungus, or mildew to grow in your home or business. They are the highest MERV value safe for residential air conditioner systems or furnaces.

Our MERV 13 filters trap 98% of airborne particles as small as .3 microns. Tobacco smoke particles that remain in the air long after smoking occurs are usually less than one micron, making these filters ideal for superior residential

4.7 ★★★★★
Google
Customer Reviews

[Help](#)

and commercial use and smoke lounges. Our MERV 13 air filters are designed to last 3 months.

We recommend replacing your filter regularly to ensure your air stays clean, energy costs are lowered, and your air conditioner works properly. MERV 13 filters are comparable to MPR 1500/1900 and FPR 10. To learn more about MERV ratings, [click here](#).

If you're looking for an air filter that captures more than 98% of airborne particles in a super home or business or smoking lounge, you need the FilterBuy MERV 13 filter!

★ REVIEWS

All MERV 13 filters are 100% made and manufactured in the USA. Underwriters Laboratories U.L. Class 2.

FilterBuy MERV 13 filters protect your space from:



Pollen



Dust mites



Mold



Large dust particles like, pudding mix



Auto emissions and large particles like milled flower



Sneezes



All bacteria

Recommended for use in:



Superior homes and businesses



Smoking lounges

WHY CHOOSE A FILTERBUY MERV 13 FILTER?

High quality MERV 13 filters shipped in a protective box in a few days at no
this is where I'm buying my HVAC filters from here on out.

4.7 ★★★★★
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MERV 13 filters blocks 98% of pollutants from the air.

This pleated filter traps particles as small as .3 microns, keeping dust, debris, lint, pollen, pet dander, smoke, smog, mold spores, bacteria, and microscopic allergens out of your space. It's also the most efficient filter for larger particles:

- o 3-10 micron particles (Dust, lint, spores, mold): Captures 98% of particles this size
- o 1-3 micron particles (Bacteria, finer dust, animal dander): Captures 90% of particles this size
- o < 1-micron particles (bacteria, tobacco smoke, cooking smoke): Captures about 75% of particles this size

★ REVIEWS

RV 13 filters provide maximum filtration.

- hospital-grade, best-of-breed filters do the job in the spaces that need it st.

MERV 13 filters elevate the performance of your HVAC system.

High-quality, thick pleats filter out almost all harmful particulates while minimizing system backpressure and keeping air flowing nicely.



Simply pick your AC filter size from one of the drop down menus below...

1" Filters	2" Filters	4" Filters
------------	------------	------------

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Google
Customer Reviews



★ REVIEWS what are you looking to remove from your air?		Pollen			
		Dust mites			
		Mold			
		Large dust particles like pudding mix			
		Auto emissions and large particles like milled flower			
		Sneezes			
		All bacteria			
Where will you use your filters?		Basic residential use			
		Standard residential and commercial use			
		Superior residential and commercial use			
		Smoking lounges			

NEED HELP CHOOSING THE RIGHT MERV RATING?

4.7 ★★★★★

Google

Customer Reviews

nds for Minimum Efficiency Reporting Value, measures how
ers remove particles from the air. MERV ratings range from 1-



100% Free U.S. Shipping

SHOP BY **SIZE**

SHOP BY **BRAND**

SHOP BY **TYPE**

All about MERV ratings

★ REVIEWS

Every furnace filter has a Minimum Efficiency Reporting Value (MERV) rating, which measures how efficiently the filter captures particles of specific sizes that pass through it your furnace operates. MERV ratings range from 1 (least efficient) to 16 (extremely efficient). Particles are measured in microns and range from carpet and textile fibers (greater than 10 microns) to microscopic bacteria (less than 0.3 microns).

To determine MERV ratings, air filters are put through two primary tests: The Dust Spot Efficiency Test, which measures the ability of the filter to remove atmospheric dust particles from the air, and the Arrestance Test, which measures the filter's ability to remove synthetic particles that have been injected into the air for testing purposes. Most high-quality filters can remove 90% or more of injected particles from the air in the Arrestance test (in other words, they do a good job of removing what they're expected to). Because atmospheric dust applies equally to all filters, Dust Spot Efficiency varies widely.

To put it into real-world terms, a MERV rating of 1 would be a basic window air conditioning unit -- it filters large particles but isn't meant to clean the air. A 16 is suitable for a hospital surgical environment, with an extremely high level of filtration that isn't necessary for the vast majority of residential homes.

Most residential air filters have a MERV rating of 1 - 4, which on the high end filters out pollen, dust mites, and fibers. These filters are generally disposable panel-type filters that are inexpensive but don't do an adequate job of filtering particles smaller than 10 microns, including mold spores, pet dander and aerosol spray. We offer several grades of filters:

- MERV 8 air filters
- MERV 11 air filters
- MERV 13 air filters



Help

These filters meet the needs of virtually all homes, providing clean, health air, and protecting your HVAC equipment.

When it comes to choosing a residential furnace filter, it's best to factor in your household's health needs, the environment (including pets and other potential indoor pollutants), and your budget. While it's generally true that the higher the MERV rating, the higher the quality, the highest-rated filter isn't necessarily the best choice for all homes. Families with certain health conditions and allergies can benefit from a filter with a MERV rating of 11 or 13, while others can enjoy both affordability and efficiency by choosing 8.

★REVIEWS

What are **MERV** Ratings?

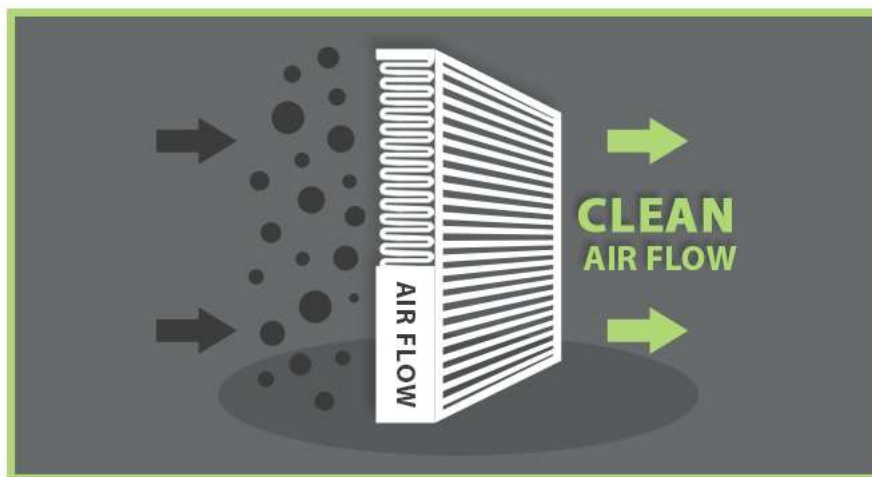


MERV is Minimum Efficiency Reporting Value

Every Furnace Filter has a MERV rating, which measures how efficiently the filter captures particles of specific sizes that pass through it as your furnace operates.

MERV Ratings Range

From 1 = Least Efficient to 20 = Extremely Efficient



4.7 ★★★★★

Google
Customer Reviews

nt, a higher MERV rating means a better filter, but filters with very high MERV
ich capture extremely small particles, tend to be pricey and are probably a
tment only for people with an allergy problem and for commercial

20; the higher the number, the greater percentage of pollutants the filter blocks. Selecting the right rating is important, as it will ensure both a) the right amount of bacteria is removed from your air, and b) your HVAC works properly. Read below to make sure you choose the best MERV rating for your home or business!

Is a MERV 13 filter good? If you're looking for an air filter that captures more than 98% of airborne particles in a super home or business or smoking lounge, you need the FilterBuy MERV 13 filter! This pleated filter traps particles as small as .3 microns, keeping dust, debris, lint, pollen, pet dander, smoke, smog, mold spores, bacteria, and microscopic allergens out of your space. If you're looking for a different MERV rating, you can check out our [MERV 8](#) and [MERV 11](#) filters.

★
REVIEWS

higher MERV rating better than a lower MERV rating? While the higher MERV rating, the more particles it removes from the air, it doesn't always mean it's a better filter for you. Not only does a higher rating mean a greater percentage of trapped bacteria, it also means thicker pleats that will require increased air flow from your HVAC. This is why it's important to choose your rating based on your needs, as well as what your system can handle.

What's the best MERV rating for furnace filters? We offer various MERV ratings not only because different homes and businesses need different efficiency, but also because not all furnaces are the same. That's why there's no single rating that's "best." We recommend considering your lifestyle (allergies, asthma, etc.) and the age of your HVAC equipment to determine the MERV rating that's best for you. To make sure you're getting the right MERV rating, check if your furnace manufacturer has a maximum rating your furnace model can use.

How often should I replace my MERV 13 filter? Our 1", 2", and 4" MERV 3 air filters are designed to last approximately 3 months, while our MERV 13 whole house replacement filters should be replaced every 6 months. If you have pets, kids, or allergy sufferers in your space, we recommend changing your filters more often. It's important to replace your filters regularly, as the older an air filter is, the less bacteria and dirt it's removing from the air, leading to poorer indoor air quality and higher energy costs.

Why don't you carry very low or very high MERV ratings? We carry ratings ranging from MERV 8 to MERV 13, which cover the efficiency most homes need. These ratings provide clean, healthy air and protect your HVAC equipment. Lower ratings (MERV 1-5), most often used for fiberglass filters, provide minimal filtration. Though higher ratings (MERV 14-20) capture very small particles, they tend to be much more expensive and place more pressure on heating and cooling systems to work harder. To find out more information about MERV ratings and what each one means for your indoor air quality, [click here](#).

★ REVIEWS

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Fax: (256) 761-2565

Email: info@filterbuy.com

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APPENDIX D1

Equip Specs



TO: Innovative Solution – ProGuard Customers

FROM: Douglas Hoffman, CEO and Executive Director

NORMI, the National Organization of Remediators and Mold Inspectors, is one of the fastest growing certifying agencies in the country and has been involved in providing high quality training for mold and indoor environmental professionals since 2004. Having trained thousands of construction professionals through the United States, Canada, Europe and South America, NORMI provides over 14 certifications to meet current licensing laws.

As an approved training provider for the EPA and multiple states, NORMI is focused on helping commercial and residential customers find solutions to eliminate mold, viruses, bacteria, and other pathogens to provide a clean healthy indoor environment.

We are very familiar with Innovative Solutions ProGuard Sanitization products. Over the years we have done extensive tests on indoor environments with indoor air quality issues. We have conducted numerous tests that validate the effectiveness of the ProGuard Sanitization System, which utilizes Photo Catalytic Oxidation (PCO) and trademarked Multi-Cluster Ionization (MCI™). These two scientific technologies, when combined and working in synergy, have been proven to be extremely effective at eradicating pathogens in the air and on surfaces.

We have conducted numerous before and after environmental testing, both in the field and under clinical laboratory conditions, which shows that the ProGuard Sanitization Technology effectively eliminates pathogens of all types, including viruses, bacteria, mold, and mildews. Some of the pathogens tested include: Staphylococcus Aureus, E. Coli, Botrytis, MRSA, Salmonella, and many others. Undeniably, the efficacy of these systems far exceeds older technologies and we are proud to endorse their use in any indoor environment.

The ProGuard Sanitization System provides a very safe organic, holistic process that uses a pro-active sanitizing process to continually clean facilities and effectively eliminate pathogens of all types. We highly recommend the ProGuard Air & Surface Purification technology to clients who have air quality or surface contamination concerns and are looking for an effective solution to permanently maintain clean room environments.

Respectfully yours,

A handwritten signature in black ink, appearing to read "D. Hoffman", with a stylized flourish at the end.

D. Douglas Hoffman, Executive Director of NORMI.org
www.DaleDouglasHoffman.com
Cellphone: 813.917.9561
doug@normi.org

APPENDIX E1
Industrial Hygienist Letter



February 24th, 2021

Ms. Jenna McDonald
Compliance Manager
Curaleaf
730 Center St., Suite 1-C
Auburn, Maine 04210

**RE: Odor Control / Mitigation Plan and Code Compliance for Curaleaf located at
5 Drapeau Street, Biddeford, Maine 04005**

To Whom this may concern,

The space that Curaleaf is currently leasing at 5 Drapeau Street. is shown in the attached drawing and is discussed below.

**1. The following is a description of how Curaleaf is to treat the current buildout
(28,000 ft² expansion).**

Each of the following spaces are served by multiple indoor AHUs (air handling units) that cool, heat, and filter the air using MERV 13 filters, and that create neutral pressure within each space (i.e., equal supply air and return air without added ventilation or exhaust). Each of these systems will use Ultra-Violet/Photo-Catalytic Oxidation (UV/PCO) technology to assist with odor control.

These spaces include:

- 1) Flower Rooms 6, 7, 8, 9, 10, & 11
- 2) New Veg Room (room 132)

Each of the following spaces are served by multiple RTUs (Roof Top Units) or FCUs (Fan Coil Units) that cool, heat, and filter the air using MERV 13 filters, and that create neutral pressure by recirculating 100% of the air. Each of the spaces will have its own Defender DXM 100 with MCI™ unit.

These spaces include:

- 3) Harvesting Rooms
- 4) Drying Rooms
- 5) Trim Rooms
- 6) Packaging Rooms
- 7) Waste Storage

Each of the following spaces are served by multiple gas fired RTUs (Roof Top Units) that cool, heat, and filter the air using MERV 13 filters, and that create positive pressure by bring in outside air. These RTUs will also each use Bi-Polar Ionization for additional odor control.

In addition to these RTUs there is one (1) exhaust system in the processing area, EF-3, that will be used to balance the airflow and create slightly negative pressure. This exhaust system will terminate on the roof and will incorporate MERV 14 filters, activated carbon filters, and Bi-Polar Ionization.

These spaces include:

- 8) Offices,
- 9) Corridors throughout, and between product areas
- 10) Packaging
- 11) Mech./ Central Irrigation

2. Entryways and exits.

All common entryways and exits will incorporate air tight air locks. All emergency exits will have air tight seals on all doors.

3. Testing for Employee Exposure Assessment & Exterior Odors by Certified Industrial Hygienist

EXTERIOR TESTING

Exterior odor test protocols applied for cannabis cultivation and manufacturing facilities will be conducted to identify the existence of medical cannabis terpenes (MCT's) at the exterior property lines of a facility located in Biddeford, Maine.

The following nineteen (19) MCT's will be assessed:

- a. (-)-alpha-Bisabolol (23089-26-1)
- b. Camphene (79-92-5)
- c. delta-3-Carene (13466-78-9)
- d. beta-Caryophyllene (87-44-5)
- e. Geraniol (106-24-1)
- f. (-)-Guaial (489-86-1)
- g. alpha-Humulene (6753-98-6)
- h. psopropyltoluene (pcymene) (99-87-6)
- i. (-)-Isopulegol (89-79-2)
- j. d-Limonene (5989-27-5)
- k. Linalool (78-70-6)
- l. beta-Myrcene (123-35-3)
- m. Nerolidol (7212-44- 4)
- n. Ocimene (13877-91-3)
- o. alpha-Pinene (80-56-8)

- p. (-)-beta-Pinene (18172- 67-3)
- q. alpha-Terpinene (99-86-5)
- r. gamma-Terpinene (99-85-4)
- s. Terpinolene (586-62-9)

Samples will be taken at the time that cannabis cultivation and/or manufacturing facilities are at full operating levels.

Two sample sets will be collected at the exterior perimeter property lines of the cultivation/manufacturing facility (i.e., approximately the middle of each compass point location surrounding the building or four locations), as practical. A field blank sample will also be submitted for quality assurance purposes to help assure that any MCT's detected on the collected samples are not due to media contamination. A site plan showing the location(s) from which samples are collected shall be included in the final report of findings.

The flow rate of samples will be 1.0 liter per minute +/-10% provided by a constant flow pump. The flow rate will be measured/set using a primary/secondary calibrator at least before and after sampling with the results averaged to determine the overall flow rate. The sampling time will be at least 24-hours where the combination of flow rate and sampling time results in the collection of at least 1,440 liters of air.

INTERIOR TESTING

Interior testing/assessment for evaluation of potential employee exposures to Carbon Dioxide, Mold, Ozone, and Volatile Organic Compounds (VOC's) will be conducted for approximately 8-hours.

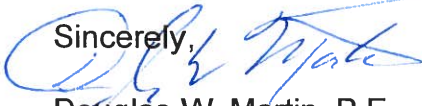
- Carbon Dioxide levels will be measured through-out the workday for various interior building work areas by use of direct-read real-time monitoring equipment as a "mapping" activity.
- Mold exposure evaluation will be by the collection of spore trap air samples with an outdoor control and six (6) interior samples collected.
- Ozone will be measured in the employee breathing zones utilizing sample media and personal sample pumps in accordance with OSHA ID Method 214 with inductive coupled plasma (IC) analysis. NOTE: the OSHA PEL for Ozone is 0.1 ppm. Ozone at 5 ppm is Immediately Dangerous to Life & Health (IDLH).
- VOC exposures will be evaluated by use of passive organic vapor monitors (POVM's) placed in the breathing zone of employees for approximately 8-hours.

Summary

In summary this Odor Management System (**Odor Control / Mitigation Plan**) to meet the Biddeford Code for Marijuana Facilities. Will be accomplished by:

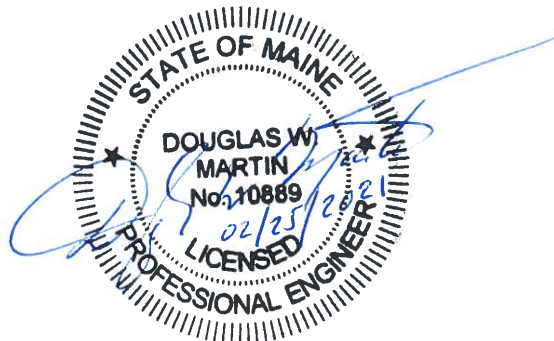
- 1) Air filtration using high efficiency filters (MERV 13) with Ultra-Violet/Photo-Catalytic Oxidation (UV/PCO) technology to assist with odor control for all AHUs, FCU, and RTUs serving production rooms.
- 2) Air filtration using high efficiency filters (MERV 13) with each use Bi-Polar Ionization for additional odor control for all RTUs serves corridors, offices, and common areas.
- 3) Air filtration using MERV 14 filters, activated carbon filters, and Bi-Polar Ionization on the exhaust air in the production area.
- 4) Building pressure control to help eliminate exfiltration from the building to outside.
- 5) Air tight airlocks at common entryways and exits.
- 6) Scheduled Maintenance for filter replacement, and air balancing.
- 7) Testing once the facility is in full operation for final certification.
- 8) Final letter once all the above actions are complete and in compliance and meet acceptable industry standards.

Sincerely,



Douglas W. Martin, P.E.
President

Attachments: Drawings





Dean Associates
Architecture & Interior Design

7 Natural Lane Suite 40
Portland, ME 04106
P: 781.452.1111
www.deanassoc.com

10.	Admission #12	11/16/2020
9.	Admission #1	9/16/2020
8.	100% Construction Drawings Set	8/4/2020
7.	Permit Set	7/24/2020
6.	70% Submittal for Client Review	7/15/2020
5.	20% Submittal for Client Review	6/25/2020
4.	No.	Description
3.	Date	
2.		DWG ISSUE & REVISION HISTORY



Stamp

Key Plan

Project Title:

CURALEAF CULTIVATION FACILITY

**5 DRAPEAU STREET
BIDDEFORD, ME 04005**

Drawing Title:

EGRESS PLAN

Project Number	2020_27
Scale	AS NOTED
Drawn By	ACW
Checked By	JMD
Date	07/24/20
Drawing Number	

CR-1.0

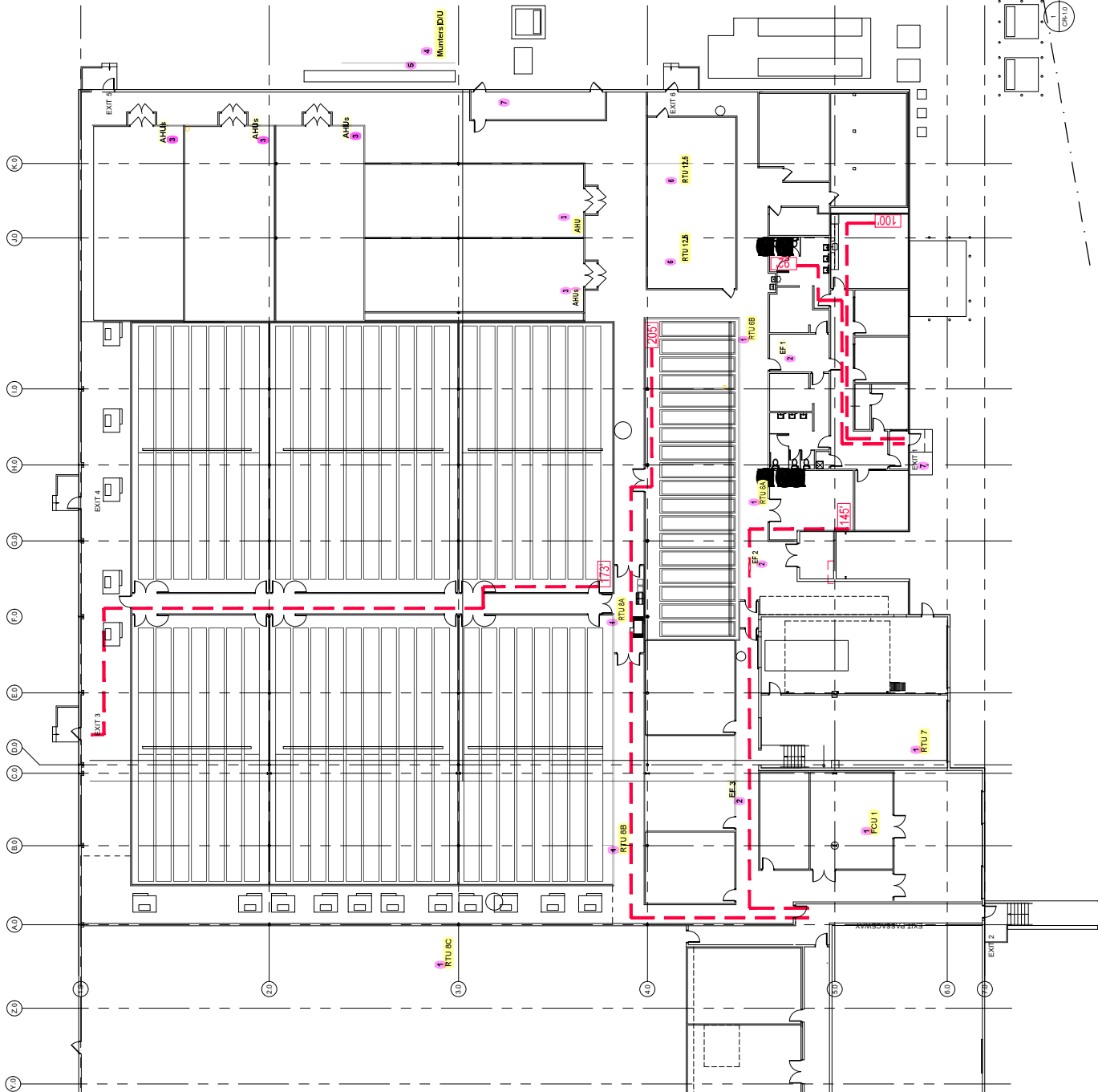
EGRESS NOTES:

EGRESS REQUIREMENTS

TOTAL LEASE AREA: 48,313 GSF
FACTORY F.A. 48,313 SF MAIN FLOOR/100'-488'
TOTAL OCCUPANCY: 488 OCCUPANTS
MINIMUM REQUIRED EXITS: (3) AT MAIN FLOOR, PROVIDED (6)
MAX. EGRESS TRAVEL DISTANCE: 250'-0"
MAX. COMMON PATH OF TRAVEL: 100'-0"
MAX. DEAD END CORRIDOR: 50'-0"

Required Upgrades to the existing HVAC Systems & building structure for Odor Mitigation

1. Add Bio-Polar Ionization to RTUs and FCUs
2. Add Extended Filtration Boxes with MERV 14 to AHUs, AHUs, and Bio-Polar Ionization to EF, AHU, terminate exhaust 10 feet above roof in AHU
3. Increase Filtration in AHUs to MERV 13
4. Add Bio-Polar Ionization to Munters DU
5. Extend Reactivation Air Exhaust to 10 feet above roof in AHU
6. Increase air filtration in RTU to MERV 13
7. Seal air leaks air tight and add SA



EGRESS PLAN
SCALE: 3/32" = 1'-0"

SUBLEASE AGREEMENT

SUBLEASE AGREEMENT (this “**Sublease**”) dated on this 15th day of February, 2021 (the “**Effective Date**”), by and between Primary Organic Therapy, Inc., d/b/a Maine Organic Therapy, Inc., a Maine corporation (the “**Sublandlord**”), and Curaleaf Maine Adult Use, Inc., a Maine corporation (the “**Subtenant**”). The Sublandlord and the Subtenant shall hereafter be referred to as, the “**Parties**.”

W I T N E S S E T H:

WHEREAS, Sublandlord is the tenant under a Lease dated June 26, 2019 (the “**Lease**”), as amended with GO Development, LLC (“**Master Landlord**”), for approximately 68,200 square feet of space (the “**Premises**”) in the building located at 5 Drapeau Street, Biddeford, Maine (the “**Building**”); and

WHEREAS, Subtenant and Sublandlord wish to enter into a sublease agreement for the sublease by Subtenant of a portion of the Premises as described below, subject to the terms and conditions set forth herein.

NOW, THEREFORE, for and in consideration of the premises and the mutual covenants contained herein, and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. **RECITALS.** The above recitals are true and correct in all respects and are hereby restated as if fully set forth herein.
2. **EXISTING LEASE.** Any capitalized term used herein and not otherwise defined herein shall have the meaning given to it in the Lease. To the extent any term or condition of this Sublease conflicts with any term or condition of the Lease, as between Sublandlord and Subtenant (but not as to Master Landlord), this Sublease shall govern.
3. **SUBLET SPACE.** Sublandlord hereby subleases to Subtenant, on the terms and conditions set forth in this Sublease, the portion of the Premises that is shown as cross-hatched on **Exhibit A** attached hereto, which comprises approximately 28,200 square feet, (the “**Sublet Space**”). The Premises is being built out in phases and Subtenant will initially use 1,000 square feet of Premises, but eventually will have full use of the Sublet Space. The Subtenant hereby accepts the Sublet Space in its “as is” condition. The Subtenant hereby represents and agrees that it will not interfere in any manner with Sublandlord’s use and enjoyment of its premises adjacent to the Sublet Space and the Sublandlord hereby represents and agrees that, so long as Subtenant complies with the terms of this Sublease, it will not unreasonably interfere in any manner with Subtenant’s use and enjoyment of the Sublet Space. The Sublet Space will have a separate doorway for ingress/egress to the Sublet Space and in no event will the clients and employees of the Subtenant have access to the Premises from the Sublet Space.

4. **TERM.** The term of this Sublease (the “**Sublease Term**”) shall commence on January 15, 2021 (the “**Commencement Date**”) and shall end on June 30, 2025 (the “**Termination Date**”). Subtenant expressly acknowledges and agrees that notwithstanding anything to the contrary contained in this Sublease, Sublandlord may terminate this Sublease at any time during the Sublease Term by providing Subtenant with at least thirty (30) days prior written notice of the date of such termination.

5. **RENTAL PAYMENTS.** 1\$, *waived*

6. **USE.** Subtenant shall use the Sublet Space only for purposes that State of Maine Office of Marijuana Policy licenses held by Tenant and/or Subtenant allow. Subtenant shall comply, at Subtenant’s sole expense, with all State of Maine regulations outlined in the Maine Adult Use Marijuana Program and with all other laws, ordinances, rules, regulations, orders, certificates of occupancy, conditional use or other permits, variances, covenants and restrictions of record, relating in any manner to the Sublet Space or the Subtenant’s use and occupancy of the Sublet Space.

7. **ASSIGNMENT AND SUBLETTING.** Subtenant shall not assign this Sublease or further sublet all or any part of the Sublet Space without the prior written consent of the Sublandlord, which consent may be withheld in Sublandlord’s sole discretion. Any such assignment or subleasing shall be subject to compliance with the terms and conditions of the Lease.

8. **INDEMNIFICATION.** Except for any such loss, injury or damage that is caused by or results from the gross negligence or willful misconduct of Sublandlord, its employees or agents, Subtenant hereby agrees to indemnify, defend and hold harmless Sublandlord from and against any and all liability for loss, injury or damage, including, without limitation, all costs, expenses, court costs and reasonable attorneys’ fees, imposed on Sublandlord as a result of the negligent acts or omissions of Subtenant, its employees, agents or contractors that occurs (i) in the Sublet Space, or (ii) in the Building wherein the Sublet Space is located. Except for any such loss, injury or damage that is caused by or results from the gross negligence or willful misconduct of Subtenant, its employees or agents, Sublandlord hereby agrees to indemnify, defend and hold harmless Subtenant from and against any and all liability for loss, injury or damage, including, without limitation, all costs, expenses, court costs and reasonable attorneys’ fees, imposed on Subtenant as a result of the negligent acts or omissions of Sublandlord, its employees, agents or contractors that occurs (i) in the Sublet Space, or (ii) in the Building wherein the Sublet Space is located.

9. **NO LIABILITY.** Subtenant shall not hold Sublandlord liable for any latent or patent defect in the Sublet Space. Sublandlord shall not be liable for any failure of water supply, electric current, heating or air conditioning, elevator service, or any other service; nor for injury or damage to person or property caused by fire or theft or by the elements or persons in the Sublet Space, or resulting from the operation of elevators,

heating or air conditioning or lighting apparatus, or from falling plaster, or from steam, gas, electricity, water, rain or dampness, which may leak or flow from any part of the Sublet Space, or from the pipes, appliances, or plumbing work of the same, or from any other place or for damages resulting from the acts or omissions of Sublandlord, Sublandlord's agents, employees, invitees or other occupants of the Sublet Space. All goods or property or personal effects stored or placed by the Subtenant in or about the Sublet Space shall be at the sole risk of the Subtenant.

10. **DEFAULT.** Any one or more of the following shall constitute an "Event of Default" hereunder:

(i) Any failure by Subtenant to comply with any of the terms, conditions, covenants or provisions of this Sublease or imposed upon Subtenant under the Lease which causes a default under the Lease without any notice and cure period.

(ii) Any failure by Subtenant to pay any Base Rent or Additional Rent hereunder on the due date thereof.

(iii) Any failure by Subtenant to comply with any other terms, conditions, covenants or provisions of this Sublease or imposed upon Subtenant under the Lease, and such default continues for a period of fifteen (15) days after written notice thereof to Subtenant.

(iv) The sale of Subtenant's interest in the Subleased Premises under attachment, execution or similar legal process.

(v) The filing of a petition proposing the adjudication of Subtenant as a bankrupt or insolvent or the reorganization of Subtenant or an arrangement by Subtenant with Subtenant's creditors, whether pursuant to the Federal Bankruptcy Code or any similar federal or state proceedings.

(vi) The admission in writing by Subtenant of Subtenant's inability to pay Subtenant's debts when due.

(vii) The appointment of a receiver, trustee, guardian, conservator or similar officer to manage or oversee the business or any property of Subtenant or to wind-up Subtenant's business or affairs.

(viii) The making by Subtenant of an assignment for the benefit of Subtenant's creditors.

(b) **Remedies.** Upon the occurrence of an Event of Default, Sublandlord shall have all of the same rights and remedies against Subtenant that would be available to Master Landlord under the Lease if the occurrence of such Event of Default were attributable to Sublandlord thereunder. In addition thereto, Sublandlord may, at its option, cancel and terminate Subtenant's right of possession under this Sublease without further notice, and Sublandlord shall have the right, in addition to all of the rights and remedies provided by law, to re-enter the Sublet Space by any lawful means, with or without legal

process, and to retake possession thereof, but Subtenant shall remain liable as herein provided. In the event of such re-entry by Sublandlord, Sublandlord may, in its discretion, elect to re-sublet the Sublet Space upon terms and conditions acceptable to Sublandlord, and Subtenant covenants to reimburse Sublandlord for any difference between the rental payable hereunder and the net proceeds of any rent collected by Sublandlord from such reletting, it being agreed that Sublandlord may deduct from such collected rent its expenses (including attorneys' fees) incurred in connection with the reletting.

(c) Right to Cure. If Subtenant shall default in the observance of any provision or covenant on Sublessee's part to be performed, Sublandlord, in addition to all other remedies available to it, may elect, but shall not be required, to perform such obligation of Subtenant and Subtenant shall reimburse Sublandlord for any expenditure incurred in connection therewith, together with interest thereon at a rate of twelve percent (12%) per annum, or at such rate as is provided in the Lease, whichever is greater, upon demand from Sublandlord.

(d) Attorneys' Fees. In the event any sums payable to Sublandlord hereunder are collected at law or through any attorney, Subtenant, in addition to such sums, shall reimburse Sublandlord upon demand for its costs and expenses, including attorneys' fees, incurred by Sublandlord. Subtenant shall pay all attorneys' fees and expenses Sublandlord incurs in enforcing any other obligation of Subtenant hereunder, or in connection with any litigation which Sublandlord shall, without its fault, become involved through or on account of this Sublease.

(e) Waiver of Trial by Jury. Insofar as permitted by law, Sublandlord and Subtenant hereby expressly waive the right to trial by jury in any action or proceeding or counterclaim between the parties hereto, or their successors or permitted assigns, arising out of or in any way connected with this Sublease or any of its provisions, Subtenant's use or occupancy of the Sublet Space, and/or claim of injury or damage.

Notwithstanding any other provision hereof, the termination or expiration of the Lease for any reason shall automatically result in the termination of this Sublease immediately upon such termination or expiration of the Lease and, except as otherwise expressly provided herein, the obligations of the parties hereunder to be performed from and after such termination or expiration shall cease as of the date of such expiration or termination of the Lease. Sublandlord shall in no event be liable to Subtenant for any loss or damage occasioned by, or resulting from, the expiration or termination of the Lease, unless the Lease is terminated by Master Landlord as a direct result of any default by Sublandlord (after notice and expiration of any applicable cure period) under any provision of the Lease not assumed by Subtenant under this Sublease.

11. MAINTENANCE OF THE SUBLET SPACE; PERSONAL PROPERTY TAXES.

(a) The Subtenant shall pay before delinquency all taxes, assessments, license fees and public charges levied, assessed or imposed upon its business operation, as well as upon its subleasehold interest, trade fixtures and furnishings, equipment, leasehold

improvements, Alterations, changes and additions made by the Subtenant and merchandise and personal property of any kind owned, installed or used by the Subtenant in or upon the Sublet Space.

(b) Subtenant shall keep the Sublet Space in a clean, safe and sanitary condition and shall permit no waste or injury to occur to the Sublet Space and fixtures therein, or to any additions, alteration and improvements thereto. All damage caused by Subtenant's negligence, or that of its agents, servants, employees or visitors, shall be repaired promptly by Subtenant at its sole cost and expense. In the event that the Subtenant fails to comply with the foregoing provisions the Sublandlord shall have the option to enter the Sublet Space and make all necessary repairs at Subtenant's cost and expense, the same to be added to and be payable with the next monthly installment of Rent.

12. **COMPLIANCE WITH LEASE.**

(a) Sublandlord and Subtenant hereby acknowledge and agree that this Sublease is subject and subordinate to the terms and conditions of the Lease, a copy of which is attached hereto as **Exhibit B**. All terms, covenants and conditions of the Lease are incorporated herein by reference and made a part hereof and shall be applicable to this Sublease with the same force and effect with respect to the Sublet Space as if Sublandlord were the lessor under the Lease and Subtenant were the lessee thereunder, with the exception that (i) Subtenant is subleasing only the portion of the Premises identified herein as the Sublet Space, (ii) Subtenant shall pay Base Rent and Additional Rent to Sublandlord in such amounts and on such dates as provided in this Sublease, (iii) the term of this Sublease is as set forth herein, (iv) except as otherwise specifically provided for herein, the Sublet Space is being subleased to Subtenant in its "as is" condition and Sublandlord shall have no obligation to make or contribute to the costs of any alterations to prepare the same for occupancy by Subtenant and (vi) Subtenant shall not be entitled to receive any allowances or rent abatements as may be provided in the Lease. In the event of any inconsistency between the terms of the Lease and this Sublease, the terms of this Sublease shall in all cases govern.

(b) Except to the extent inconsistent with the terms of this Sublease, Subtenant assumes and agrees to perform all of the Sublandlord's obligations under the provisions of the Lease to the extent that such obligations are applicable to the Sublet Space during the Sublease Term, except that the obligation to pay rent to Master Landlord under the Lease shall not be an obligation of Subtenant. Neither Sublandlord nor Subtenant shall commit or suffer any act or omission that will violate any of the provisions of the Lease. If the Lease terminates as a result of a default or breach of Subtenant under this Sublease and/or the Lease, then the Subtenant shall be liable to the Master Landlord and Sublandlord for the direct damage suffered as a result of such termination. Neither party will take any actions which may be deemed a breach of the Lease.

(c) Subtenant, at Subtenant's sole cost and expense, shall obtain and shall maintain during the Term hereof the insurance coverages required to be maintained by Sublandlord under the Lease.

13. **SEVERABILITY.** If any paragraph, subparagraph or other provision of this Sublease, or the application of such paragraph, subparagraph or provision, is held invalid, then the remainder of this Sublease, and the application of such paragraph, subparagraph or provision to persons or circumstances other than those with respect to which it is held invalid, shall not be affected thereby.

14. **AMENDMENTS.** Except as otherwise expressly provided for herein, this Sublease may not be amended, altered, or revoked at any time without the mutual agreement in writing of both Parties.

15. **ATTORNEYS' FEES.** In the event that it becomes necessary for any Party hereto to institute legal proceedings against the other Party for matters arising out of this Sublease, the prevailing party shall be entitled to collect attorneys' fees, at the trial and appellate levels, from the non prevailing party.

16. **GOVERNING LAW.** This Sublease, shall be governed by the laws of the State of Maine. Jurisdiction shall only exist in the Courts of the State of Maine.

17. **HEADINGS AND CAPTIONS.** The titles or captions of paragraphs and subparagraphs contained in this Sublease, are provided for convenience of reference only, and shall not be considered a part hereof for purposes of interpreting or applying this Sublease, and, therefore, such titles or captions do not define limit, extend, explain or describe the scope or extent of this Sublease, or any of its terms, provisions, representations, warranties, conditions, etc., in any manner or way whatsoever.

18. **BROKERS.** The Subtenant and the Sublandlord certify that no broker or leasing agent has been involved in connection with this Sublease, and the party against whom a claim is made further agrees to indemnify, defend and hold the other harmless from any claims, causes of action or damages arising out of any broker or leasing agent claiming fees or commissions as a result of the Subtenant's or the Sublandlord's respective acts.

19. **NOTICES.** Any notice or other communication that may be given hereunder shall be in writing and shall be delivered personally, by telecopy, or by recognized overnight courier, to the intended recipient at the address set forth below:

If to Sublandlord: Curaleaf , Inc.
301 Edgewater Place, Suite 405
Wakefield, MA 01880

If to Subtenant: Curaleaf , Inc.
301 Edgewater Place, Suite 405
Wakefield, MA 01880

20. **ENTIRE AGREEMENT.** This Sublease represents the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all prior communications concerning the subject matter.

21. **TIME IS OF THE ESSENCE.** Time is of the essence of this Sublease and all provisions contained herein.

22. **SECURITY DEPOSIT.** *Intentionally Omitted*

23. **ALTERATIONS.** Notwithstanding anything in the Lease to the contrary, Subtenant shall not make or suffer to be made any alterations, additions, or improvements to the Sublet Space, or attach any fixtures or equipment in, on, or to the Sublet Space or any part thereof ("**Alterations**"), without the prior written consent of Sublandlord and Master Landlord. Sublandlord shall reasonably cooperate with Subtenant to obtain the consent of Master Landlord, and any fees billed by Master Landlord in accordance with the Lease in connection with its review of any plans or request for consent, including, without limitation, any administrative fee, construction management or supervisory fee, and any other fees payable by Sublandlord to Master Landlord in connection with a request to approve Alterations requested by Subtenant, shall be paid by Subtenant within ten (10) days of demand. When applying for such consent, Subtenant shall, at its own expense, if requested by either Sublandlord or Master Landlord, furnish complete plans and specifications for such Alterations.

24. **HOLDOVER.** If Subtenant remains in possession of the Sublet Space or any part thereof after the expiration or earlier termination of the Term hereof with Sublandlord's consent, such occupancy shall be a tenancy from month to month upon all the terms and conditions of this Sublease pertaining to the obligations of Subtenant, except that the monthly Base Rent payable by Subtenant shall be two hundred percent (200%) of the monthly Base Rent payable for the month immediately preceding the termination date of this Sublease. If Subtenant remains in possession of the Sublet Space or any part thereof after the expiration of the Term hereof without Sublandlord's consent, Subtenant shall, at Sublandlord's option, be treated as a tenant at sufferance or a trespasser. Nothing contained herein shall be construed to constitute Sublandlord's consent to Subtenant holding over at the expiration or earlier termination of the Sublease Term or to give Subtenant the right to hold over after the expiration or earlier termination of the Sublease Term. Subtenant hereby agrees to indemnify, hold harmless and defend Sublandlord from any cost, loss, claim or liability (including attorneys' fees) Sublandlord may incur as a result of Subtenant's failure to surrender possession of the Sublet Space to Sublandlord upon the termination of this Sublease.

25. **SIGNAGE RIGHTS.** Subtenant shall not place any sign upon the Sublet Space or the Premises (including on the inside or the outside of the doors or windows of the Premises) or the Building without Sublandlord's and Master Landlord's prior written consent, which may be given or withheld in their sole discretion. Any sign Sublandlord or Master Landlord permits Subtenant to place upon the Sublet Space shall be maintained by Subtenant, at Subtenant's sole expense. Subtenant shall be solely responsible for obtaining

any permits required to place any signage upon the Sublet Space, the Premises or the Building and for compliance with all applicable laws relating to any signage placed upon the Sublet Space, the Premises or the Building. At the expiration or any earlier termination of this Sublease, Subtenant shall also be responsible for removing any signage placed upon the Sublet Space, the Premises or the Building by Subtenant and shall repair any damage caused by such removal.

26. **DAMAGE, DESTRUCTION OR CONDEMNATION.** In the event of damage or destruction of the Sublet Space, the Premises or of the Building or the taking of all or any part thereof under the power of eminent domain, this Sublease shall terminate if the Lease is terminated as a result thereof, and the Base Rent payable hereunder shall abate only as long as and to the extent that the rent due from Sublandlord to Master Landlord under the Lease with respect to the Sublet Space abates as a result thereof. Subtenant shall have no claim to Sublandlord's insurance proceeds or to condemnation proceeds.

27. **OFAC DISCLOSURE.** Subtenant represents and warrants to Sublandlord (i) that neither Subtenant nor any person or entity that directly or indirectly owns any interest in Subtenant nor any of its officers, directors or managing members is a person or entity with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the U.S. Department of the Treasury (including those named on OFAC's Specially Designated and Blocked Persons List) or under any statute, executive order (including Executive Order 13224 (the "Executive Order") signed on September 24, 2001 and entitled "Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism"), or other governmental action, (ii) that Sublessee's activities do not violate the International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001 or the regulations or orders promulgated thereunder (as amended from time to time, the "Money Laundering Act"), and (iii) that throughout the Term of this Sublease, Subtenant shall comply with the Executive Order and with the Money Laundering Act

28. **EXECUTION; COUNTERPARTS; ELECTRONIC SIGNATURES.** This Sublease may be executed in two or more counterpart copies and each of such counterparts, for all purposes, shall be deemed to be an original but all of such counterparts together shall constitute but one and the same instrument, binding upon all parties hereto, notwithstanding that all of such parties may not have executed the same counterpart. In addition, Sublandlord and Subtenant further acknowledge and agree that notwithstanding any law or presumption to the contrary, it is the express intention of Sublandlord and Subtenant that an electronic or telefaxed signature of either party or of any witness on this Sublease shall be deemed valid and binding as if the same were an original ink signature of such party or witness on this Sublease and shall be admissible in any proceeding by either party against the other as if the same were an original ink signature on this Sublease.

Signature pages follow

IN WITNESS WHEREOF, the Parties hereto have set their hands and seals on the day and year written above.

SUBLANDLORD:

PRIMARY ORGANIC THERAPY, INC.,
d/b/a MAINE ORGANIC THERAPY, INC.,
a Maine corporation

By: Scott Reed
Name: Scott Reed
Title: President

SUBTENANT:

CURALEAF MAINE ADULT USE, INC., a
Maine corporation

By: Scott Reed
Name: Scott Reed
Title: General Manager

EXHIBIT A

Sketch of Sublet Space

[To be attached]

EXHIBIT B

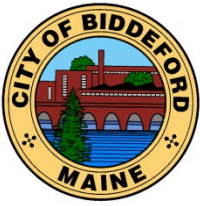
Copy of the Lease

[To be attached]

EXHIBIT C

Description of Landlord's Work

[To be attached]



CITY OF BIDDEFORD

Planning and Development Department

Greg D. Tansley, A.I.C.P.
City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 282-7119 or (207) 284-9115
Greg.Tansley@biddefordmaine.org

NOTICE OF DECISION

May 8, 2020

Bethanie Cardner
GO Development, LLC
PO Box 111
Kennebunk, ME 04043

RE: 2020.10 Conditional Use Permit for Maine Organic Therapy, Inc., to expand its existing Medical Marijuana grow operation at 5 Drapeau Street (Tax Map 12, Lot 22) in the I-1 Zone.

Dear Beth,

At their meeting of May 6, 2020, the Biddeford Planning Board reviewed the Conditional Use Permit/Site Plan for Maine Organic therapy, Inc., for a 28,000 SF expansion of their Medical Marijuana Growing Facility at 5 Drapeau Street (Tax Map 12, Lot 22) in the I-1 Zone. Go Development. LLC owns the property and you presented the application proposal to the Planning Board.

Based on the presentation and the materials submitted, the Planning Board waived Full Site Plan Review, approved the Conditional Use Permit/Site Plan, and approved the findings of fact conditioned on the following:

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 exterior evidence of cultivation occurring within the property can be visible from any public right-of-way.**
4. **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.

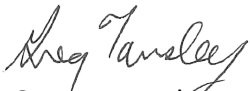
The Planning Board approval shall be valid for one (1) year from the date of said approval. If a building permit has not been issued within one (1) year, then said approval shall become automatically null and void.

Appeals of the Planning Board's decision may be made as per the Biddeford Revised Code of Ordinances.

Please contact us at 284-9115 if you have any questions.

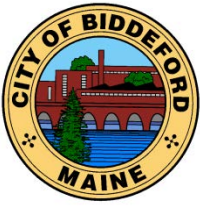
FOR THE BIDDEFORD PLANNING BOARD

Sincerely,



Greg D. Tansley, AICP
City Planner

Cc: R. Fecteau, Code Enforcement Officer (via e-mail)
M. Eddy, Planning and Development Director (via e-mail)
File



CITY OF BIDDEFORD

Planning and Development Department

Greg D. Tansley, A.I.C.P.
City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 282-7119 or (207) 284-9115
Greg.Tansley@biddefordmaine.org

Standard Conditions of Approval

Owner: Bethanie Cardner
GO Development, LLC
PO Box 111
Kennebunk, ME 04043

Applicant: Maine Organic Therapy, Inc.
5 Drapeau Street
Biddeford, ME 04005

Project Description: Expansion of a Medical Marijuana Growing Facility

Project Location: 5 Drapeau Street

Tax Map / Lot Number: Tax Map 12, Lot 22

Project ID: 2020.10

1. The material provided for the proposed project has been reviewed only for general conformance to the City technical requirements. The applicant(s) and/or their technical consultant shall be responsible for the actual design details and completeness of their work. It is incumbent upon the applicant(s) to ensure that the project is in conformance and complies with all City Codes, ordinances and regulations as well as with all state regulations, including, but not limited to, space and bulk standards, performance standards, use standards and other zoning type requirements.
2. All work shall be in conformance with the approved plans and submission documents. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner and City Engineer for minor changes. The City Planner shall make the determination of major or minor.
3. If Site Development is required as part of the project, a Letter of Credit or other surety acceptable to the City of Biddeford shall be submitted prior to the issuance of permits or site work being initiated. The financial guarantee shall be established for 150% of the cost of the remaining project improvements. (Items include but are not limited to the following):
 - a. Landscaping
 - b. Paving
 - c. Work within ROW (existing or proposed)

- d. Drainage
 - e. Loam & seed
 - f. Sediment & erosion control
 - g. As-builts
 - h. Monuments
4. Prior to any ground disturbance, the applicant shall establish a construction inspection account equal to: N/A.
 5. Prior to any ground disturbance, a pre-construction meeting with the owner/applicant, contractor, and City is required. Contact the Engineering Department to schedule this meeting.
 6. Contact the Department of Public Works for driveway location permits, curb cut permits and/or street opening permits prior to the start of construction.
 7. If Site Development is required as part of the project, an as-built plan must be provided to the City of Biddeford Engineering Office at the end of the project on mylar and on a disk, in a format, which can be read by the City of Biddeford's Geographic Information System software. If a disk copy cannot be provided, a charge for staff time to enter the plan into the City system will be assessed to the applicant.
 8. The applicant shall incorporate appropriate erosion control measures into this project to reduce erosion affects from the work. All disturbed areas must be re-vegetated and/or otherwise stabilized at the appropriate stage of the work per Maine DEP standards in the Best Management Practice (BMP) manual.
 9. That the Article VI Performance Standards requirements regarding Dust, Fumes, Vapors & Gases (sect 25), Explosive Materials (sect 28), Glare (sect 37), Noise (sect 48) be followed.
 10. The applicant is required to comply with all applicable requirements of Chapter 70 (Utilities) and Chapter 71 (Utilities/Industrial Pretreatment Program).
 11. The applicant shall obtain all other pertinent local, state and federal permits, licenses, and insurance such as blasting, building, electrical, plumbing, etc prior to commencing business.
 12. If Site Development is required as part of the project, at the completion of the project the owner/applicant shall request a final inspection. This request shall be directed to the Planning Office. Performance Guarantees and remaining escrow accounts shall not be released until the Planning Office certifies that the project has been completed and is in compliance with the approval and all applicable City Ordinances.