Town of Brunswick

PLANNING & CODES

Committee:	**Staff Review Committee**		
Date of Meeting:	12/10/2025	**Time:**	10:00 AM
Minutes Prepared By:	Susan Karnes, Administrative Floater	**Location:**	Town Hall, Council Chambers / Zoom

1. Purpose of Meeting *(Weekly meeting, Training, Workshop, etc.…)*

Weekly meeting

2. Attendance	
Staff:	Ryan Leighton, Director of Public Works Chrissy Adamowicz, Project Manager, Economic Development Trey Crews, Town Engineer Dennis Wilson, Town Arborist Matt James, Land Use Planner Jim Flood, Engineer, Water District Julie Erdman, Director of Planning and Development Taylor Lund, Code Enforcement Officer & Zoning Administrator Taylor Burns, Town Assessor Ashley Charleson, Environmental Planner Todd Riddlon, Police Department Ryan Leighton, Public Works Director
Non-SRC Staff:	
Applicants:	Jon Boyd, E4H Environments for Health Architecture Jeremy Prue, Pine Tree Engineering, Inc Ashley Roan, MaineHealth
Public:	

3. Meeting Agenda

1. **<u>Case No. 25-059 – MaineHealth Mid Coast Cancer Center Renovation:</u>** The Staff Review Committee will review and make a recommendation to the Planning Board on a **Site Plan Amendment** application submitted by Pine Tree Engineering on behalf of the property owner, Mid Coast Health Services, for two one-story additions and the renovation of the existing building and parking area. The subject property is located at 81 Medical Center Drive (Map 45, Lot 32, 32-1) and within the **Growth Mixed-Use 8 (GM8) Zoning District, and the Shoreland Protection Overlay (SPO), Shoreland Protection Overlay – Stream Protection (SPO-SP), Shoreland Protection Overlay – Resource Protection (SPO-RP), Rural Protection Stormwater Management Overlay (RPSMO), Flood Protection Overlay (FPO), Wetland Protection Overlay (WPO), and Cook's Corner Overlay (CCO) subdistricts.** The proposed location of development is only within the **Growth Mixed-Use 8 (GM8) Zoning District and Cook's Corner Overlay (CCO) subdistrict.**

4. Discussion, Decisions, Issues

Jon Boyd: I'm the principal in charge for E4H Architects on the project. We've been working with Mid Coast Health and Maine Health for the last year to develop this project, which involves primarily renovations within 81 Medical Center Drive but also requires two small additions. One is a compounding pharmacy to support their cancer center oncology program and infusion spaces. And the other one is a linear accelerator, which will provide cancer treatment programs to support the other programs within the building.

Dennis Wilson: The one thing I got is your proposed addition for the LINAC system. I would recommend you add 10 evergreen trees along that tree line in a 10-inch spacing to augment that new tree line. Because that'll open up a new environment for those, there is potential for those current trees to die or fall over.

And the only other question I had is the construction entrance. Are you removing vegetation to create that construction entrance? And if so, are you revegetating it after you close it?

Jon Boyd: Yeah. Also, I want to clarify, the trees would be 10 feet on center, right? Not 10 inches?
Dennis: Correct. 10 feet on center.

Jeremy Prue: Just to introduce myself. I'm Jeremy Prue with Pine Tree Engineering, so I'm doing the site civil work for this project. Thank you for the comments, Dennis.

The construction entrance, there's a detail on the back of the plan set that describes the materials used for the construction entrance to control erosion in and out of the site. And after the job is completed it'll be restored back to a loam. It'll be loamed, seeded, mulch, so it'll be grassed again after the construction was complete.

Ryan Leighton: No comments.

Todd Riddlon: No comments.

Chrissy Adamowicz: Did you have a chance to look at the Cook's Corner design standards when you were developing this? Because they do apply. And we reviewed Section 3.4, where it talks about the facade requirements and it doesn't quite meet the requirements. The requirements ask for windows and a broken-up facade. And we were looking at it and we understand that it's not like a really very public facing building. It's not like the full building, but it does apply to additions. But had you considered windows in any parts of the buildings and also maybe vegetation to break it up? The standards talk about a variety of ways to break it up.

3.4 J Windowless circumstances says, “buildings without windows, i.e. a computer, a server building or self-storage buildings, shall incorporate a change in scale and siding materials instead of windows to create a sense of rhythm and cadence to create human scale. These material scale changes shall be demonstrably compatible with the scale and cadence of adjacent building facade treatments”. The LINAC part of the building is towards the back, but the pharmacy faces a parking lot, so that is a little bit human facing.

So, we want to make sure that these standards are enforced and utilized.

Jon Boyd: The linear accelerator is closest to Medical Center Drive, the pharmacy's in the back. I don't know if you have floor plans for this, but the linear accelerator is a three-foot-thick concrete vault that has radiation in it. If you put windows on the building, they would be looking at a concrete wall. So, it's not practical. The one place where we can have a window is as it's shown, you can see the thick three-foot-thick concrete walls that go around. The other room is the control room, and they don't want a window in there because they're looking at computer screens and they're looking at technical stuff. A lot of times they're sitting in the dark and if we put a window there, it would have to have a pretty robust blackout shade on it. And then the one in the room in the corner is the control room, which is chock a block with electrical equipment to support the linear accelerator.

So, we have put a window in one place, we're going to make that window a little bit taller so that it goes all the way to the floor because they're going to move the four ton gantry unit for the linear accelerator in that they're going to move it in through that hole. And then when it needs to be replaced in seven to 10 years, they'll use that as a method to pull it out. Because finding a pathway through the existing building for that big piece of equipment is not practical.

We did try to break it up and match the banding at the bottom to the existing building. We didn't feel like we could confidently match that brick. So, because of the scale of the building and the purpose of the building, we came up with a design that we felt would complement the existing building but not necessarily try to match it exactly. Now we could do, with the panels we're doing, we could maybe do some different colors. So, they wouldn't be windows per se, but they would maybe help create a rhythm and be similar to the window that we're showing.

And then as far as the pharmacy is concerned, on the back of the building, pretty much everything that wraps around the building except where we're showing the two small windows our clean rooms we just can't have windows in those spaces. One of them is hazardous storage. The other one is for compounding drugs and medications. We put as many windows in as we could, given the purpose of the spaces. They're pretty highly technical.

Julie Erdman: What is the material on the siding material? **Jon:** It's called azac. It's a cementitious panel. It replicates natural stone. It actually might be a quartz product, I'm not sure of its physical makeup, but it looks like a stone panel when it's installed and it's very smooth, unlike the base, which is the split face block, concrete block or CMU that I think you guys probably are used to seeing.

Julie: Would you, at least with the pharmacy portion, be able to add some plantings along that windowless facade to kind of to break up that wall? **Jon:** On the pharmacy, on the lower left-hand corner where we see the two small windows. That's the only face that we could do plantings on the opposite side, which is over here on the other small elevation, that's the sidewalk entrance into the back of the building. There's literally no place to put plantings without reconfiguring that staff entrance, which is also an exit access way. And then the long face of the building that's facing us in the middle is literally about 18 inches from the edge of the drive lane of the parking lot. Again, there's no opportunity there. We could put some plantings on the street facing side of the of the linear accelerator, which would be the top image with the window.

Julie: Okay. And you mentioned maybe breaking up the wall with a different material or a different color. **Jon:** We'd have to look at that.

Dennis Wilson: The 18 inches along that linear wall that's got nothing, you can put environmental grass in there to help shape that. The 18 inches will be totally fine for that kind of plant environment. **Jon:** Yeah, I'm not opposed to that. We could do that.

Taylor Burns: No comments.

Trey Crews: Jeremy, can you just briefly speak to the existing storm water infrastructure? I know you're removing some of the parking lot for a building and then there's a new one impervious surface, there's a new sidewalk connection. Can you just kind of speak of what the existing stormwater does, the increase of it, impervious capacity, et cetera. Can you just give a brief overview of what's there?

Jeremy Prue: The existing stormwater, it's more or less a fill slope running to the east of the property. Where the LINAC unit's going to be, that's pretty flat grassed area, and basically the water will flow down that bank towards the, basically a forested area, forested wetland.

And in the parking lot, of course it's impervious where the pharmacy unit's going. There are parking spaces. It's the sidewalk that's all impervious there. And the existing drainage are catch basins in the center of the parking lot. So, it flows away from that pharmacy unit. I don't anticipate any negative change to the stormwater flow in the parking lot from the pharmacy because it's not like the water's running to where we were. It's all running away. And you can see on the grading plan for where the LINAC, generator pad, and construction entrance are that we're basically just extending that fill slope. It'll change the grading, but it won't change the method of sheet flowing to that forested buffer.

Trey Crews: Can you confirm that with this new pharmacy, this new medical testing lab, there's no anticipated increase in trips to the facility itself. They're just maybe rearranging what's already there. If there are, this property is subject to the Cook's Corner transportation impact fee.

Jeremy Prue: Yeah. This is more for John or Ashley, but the capabilities are adding here, allow them to do certain things, but we don't foresee a generation of additional trips from this. It just gives them different capabilities. Is that correct?

Ashley: Ashley with MaineHealth. In order to bring on the service line for all of the cancer services we're providing, we are removing neurology, ENT and some other services from the building. We see it as an even swap in providers and patients will be coming to and from the building.

Trey Crews: I see that you're adding a new sidewalk and A-R-R-F-B to the parking lot on the other side. I don't see any sort of grading plans for it, so I just would like you to add some notes that it needs to be ADA accessible when it's built by the contractor. I know that parking lot is at a much higher elevation, making sure that it follows maximum slope in the direction of travel, any ramps that might be necessary. Just make sure that it's noted to be ADA compliant. **Jeremy:** Yes, absolutely, we will. And that's the intention, it'll be an ADA facility.

Trey: On your erosion and sedimentation control, you include very detailed notes and some standard details. But can you provide an additional plan just showing where you intend the contractor to install these erosion control measures? Where the actual limit of disturbance is, just provide them better direction than leaving it up on their own to do it? **Jeremy:** Yes, absolutely. We show the proposed tree line. What we'll do is I'll add a proposed erosion control barrier. A silt fence or ECM berm, essentially. Okay. **Trey:** Yeah. If you just include that for that. And then, I believe your narrative mentions you already have bike parking provided. I didn't see it called out on the plan. If you just note it somewhere on the plan, just make sure that it's there.

Julie Erdman: I was hoping that you could provide a table on the site plan, just showing how the dimensional and density standards are met or the dimensional standards, really not density. Just

what they are in that zoning district and what they are for the lot, your setbacks and impervious surface coverage and such.

Jeremy Prue: Okay. More or less just a table of the requirements and that we've met them. **Julie:** Yep. And maybe if you could provide an inset showing the larger parcel. The full parcel on the plan.

J**ulie Erdman:** And there's a request for a waiver for the tree survey. Waivers have been a hot button issue at planning board right now, and I don't know what the likelihood is of that being approved. I would recommend, it seems like it would be a fairly easy thing to do. There are not too many trees that are coming out.

Jeremy: Yeah. Just to give a little background on, the reason I asked that waiver request is that there's not that much tree clearing and there's not that many trees to add, but it's more or less a cost and a time situation that, we have a topographical survey, so to really put that on the right spot out there, we'd have to have the survey crew go back out there for at least half a day to go out and survey just to the 10 trees. And given that it's a minor clearing, overall, we thought that it might be okay just to show that where we're clearing in general, but we don't have every specific tree called out, though. Just for ease and for just cost as well. Okay. It's not as simple as just like pulling tapes because we want to make sure it's actually located properly. Like it, we would really would want it to be surveyed on a job like this. So that's the only reason I asked for that waiver. J**ulie:** Okay. It's, and again it's your discretion, but**…** Just so you're aware of what's been going on at planning board lately.

Julie Erdman: Stormwater management permit, and it says that you are applying for an amendment. Is that something that's already been applied for?

Jeremy Prue: We've already been in talks with DEP about this because we were, I'll probably get all the terminology wrong, but we were a site law situation initially with the permit. All we're required to, and we're not adding more than 10,000 square feet of impervious in any given year, I think it was. All we need to do is report at the end of the project what had changed and the measures that were taken. We've already talked DEP; we're going to be compliant with that. At the completion of this project, we'll submit everything that we need to be compliant with that stormwater permit. But we've already gone through all those channels.

J**ulie Erdman:** I didn't see anything in the plans that show what's going on with stormwater now. Is that something you can provide for us for planning board? **Jeremy:** I can at least add a narrative of that, what I described earlier, about how existing sheet flow to a forested wetland, it's basically going to be the same, slightly different, as you can tell, there's not that much site change work. It's a lot of it is internal for the project. J**ulie:** Okay. Chrissy already mentioned Cook's Corner Design standards. I think that's all I've got.

Matt James: I had sent in my initial email to you a recommendation to do the 10-inch caliper tree survey. I'd also still recommend that is done, especially because of Dennis's comments, with trees moving around. I wouldn't be as concerned with it if it was on like a completely flat area, but because there is like some amount of slope over there, if other trees were to die, we'd like to know what kind of caused that to happen, what trees were removed. If trees come down, you can also have erosion problems. But again, it is your choice whether or not you want to proceed with asking for a waiver.

The only other thing I had asked about was the interior of the building and whether or not you're going to be changing the internal plumbing in a way that would increase or decrease your water service. Looks like you are potentially moving some bathrooms around, but it was pretty dense in

there, so I'm not a hundred percent sure what is going to end up changing. **Jeremy:** That's a good Jon question.

Jon Boyd: We can give you a (*unintelligible word)* of what's added.

Taylor Lund: It looks like you guys have plenty of parking. I would add your square footage of the building, how many spaces you have, how many spaces you're removing, how many spaces will be there at the end of that, because it looks like you're getting rid of four or five or something like that. Thanks.

Jeremy Prue: They've added a lot of parking over the years, far and above what they need for the requirements. I can't remember exactly how we wrote it, but it was more or less that we've added so much over the years. We've been compliant. We keep adding some, we've only taken away four, so we should be in good shape, but I will add those numbers in there.

Ashley Charleson: I believe it's page 70 of the actual packet, but under 4.3.1 for the mapping of natural and historic areas requirements. In your packet, it indicates that these features are displayed on the existing conditions site plan and the legend reads or references the stream and edge of waterline on site. But from what I saw, this is the extent to what I assume is the wetland delineation and mapping of national areas that you're referring to.

Can you confirm when your wetland delineation was conducted and is there a reason it wasn't included in the report? I know it's a minimal amount of new area disturbed, but it says there was one conducted and I'm just curious.

Jeremy Prue: This has been a project that's been conducted over many phases, and so that's been done. I have to look into the existing conditions and the survey itself.

Ashley Charleson: I could maybe save you a little time. I do want to see the wetland delineation report if you have it at least some reference to it was conducted, who conducted it, a summary of any findings, relevant photographs of the area, just so we get a sense for what it looks like.

Jeremy: Yeah, it's just to adjust that, the wetlands we don't have any specific notes in our survey of when that was reported. We took that map from the previous phase and we've redone the topographic survey so I can figure out when that was done for you. We do show the wetland boundary on the plans. We don't have the delineation note. I could track down the delineation report one that when I can go back for that.

Ashley: And then just a few other minor ones. If you could provide updated maps in your application packet as well as your plan set. Boundaries like the wetland should be clearly delineated. And if you could please also use the town overlays that fall within your parcel area. Even a screenshot from our GIS web application would suffice. Just so we have a clear sense of what overlays exist on the property and where.

I would also recommend providing a map of the project area from beginning with habitat site. And then another just super minimal. If you could please reach out to the Maine Natural Areas Program, IF&W as well, we can get a clear sense of if there are any existing sensitive, threatened, what have you, habitats, species, vegetation on site. Email communication or scanned letters would suffice, but we do want to see those included please.

Jeremy Prue: Okay. That sounds great. When we do the overall site plan that shows the entire parcel, could we show a lot of the overlays on that and then just have a little area of where we're working? So, you get all the mapping done at once. Is that okay? **Ashley:** Potentially, if that

suffices for our standard, that's fine. But yeah, if you could also just make sure to include those communications. We just want confirmation of what's out there.

Jim Flood: No comments.

Trey Crews: You mentioned that the existing parking lot flows to a closed drainage system. Can you provide a detail on your erosion control plan for protecting that inlet from any additional erosion or sedimentation going into that **Jeremy:** Do you need a detail on the plans or can I give you a verbal response or covered by those notes? **Trey:** I think it's best to provide clear direction to the contractor of -he needs to protect this inlet, here's what's being recommended, here's the standard, a typical detail for it. Doesn't have to be overly complicated. **Jeremy:** As you noted, we have a lot of those erosion control notes. I believe there's a silt trap or sediment trap note in there about how during construction, any in the area will have that kind of, that orange silt trap in the inlet so that anything gets caught in there. If not, I'll make sure I add it. **Trey:** Or when you make a map just showing/specifying where the limits of disturbance, where the measures go, just include that.

Matt James: Do you guys have any questions for us?

Jon Boyd: One question for you, Matt, to clarify. The count of the existing toilets versus new added is that apply to sinks as well? There are instances where we're turning offices into exam rooms and vice versa versus, so we have hand sinks obviously in exam rooms, and we're removing some hand sinks from exam rooms that become offices. So, I can give you a count of those as well. Or are you just primarily worried about toilets?

Matt: If there's any sinks or toilets or eye washing station showers, things like that. Anything that might be used that would increase your usage? If it's just a one-to-one, replacement throughout the building, then, I'm probably fine with not seeing that, but if it is an increase or an additional toilet or sink, then we'd like to see that. And of course, you'll have to go through all your building and plumbing permits, but I just wanted to double-check on your service.

Jim Flood: Matt, I think they have a four-inch domestic service, which should be plenty for any change use. But I agree. It would be good to know if there's going to be any change in demand.

From: Jeremy Prue
To: Matthew James
Cc: Pine Tree Engineering; Ashley Roan; Jon Boyd; Julie Erdman
Subject: RE: MaineHealth Site Plan
Date: Tuesday, February 3, 2026 1:26:11 PM
Attachments: image003.png
image004.png
RE 95041.21 MCH Cancer Center Renovation - Proposed Walkway.msg

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Hi Matt,
After our meeting, I reviewed the video of the meeting in its entirety and came up with the following comments that required changes to our application. Please see this table for SRC Comments Received and the Applicant Response, which points to the changes made within the application that was submitted on 1/20/26.

Landscaping Comments	Applicant Response
1. Add 10 evergreen trees at 10' o.c. spacing along proposed treelines	The proposed trees have been added to AS1.00 Proposed Site Plan.
2. Add note about revegetating construction entrance after construction	See Note 7 on the Construction Entrance detail on AS2.00 ESC Notes and Details.
3. Add ornamental grass along parking lot side of pharmacy, near bollards	See Section B-B on AS3.00 Civil Details
Architecture Comments	
4. Review Cooks Corner Design Standards, specifically Section 3.4 Fa?ade Requirements, and within 3.4.j.	See Exhibit 8: Cook's Corner Design Standards Narrative.
Engineering Comments	
5. Add notes to clarify that the walkway will be Accessible	This was discussed with Town Engineer Trey Crews after the meeting via phone call and in the attached email. It was agreed upon that the proposed walkway did not need to be Accessible. See General Notes - Note 1 on AS1.00 Proposed Site Plan for design parameters for the walkway, as requested.
6. Add Erosion Control Barrier linework to plans	Linework for the temporary sediment barrier has been added to AS1.00 Proposed Site Plan.
7. Add bicycle rack locations and callouts to plan (min. 13 spaces)	The proposed bicycle rack has been added to AS1.00 Proposed

	Site Plan.
8. Add callouts for sediment sack to inlets	A callout for Temporary inlet protection has been added to AS1.00 Proposed Site Plan
General Comments	
9. Add table of requirements plans (dimensional standards, density standards)	See Exhibit 2: Overall Site Plan.
10. Create overall site plan that shows entire parcel to be included in the application	See Exhibit 2: Overall Site Plan.
11. Provide more information on if the water supply requirements will be increasing, based on modifications to internal plumbing (existing 4" domestic service)	See Exhibit 9: Chapter 4 Development Standards, Section 4.5.2. for the updated response.
12. In item #10 above, include parking SF of building, and total parking	See Exhibit 2: Overall Site Plan.
13. Provide wetland delineation report	See Exhibit 9: Chapter 4 Development Standards, Section 4.3.1. for the updated response. The wetland delineation report is on file with the Town from previous applications, as this is an amendment.
14. Provide updated mapping, including Town overlays. This will be shown in #10 above.	See Exhibit 2: Overall Site Plan.
15. Reach out to Maine Natural Areas Program and IF&W for existing sensitive/threatened habitat/species on-site. Email is sufficient	See Exhibit 7: Environmental Review.

Please let me know if you need anything further on this.

Thank you,

Jeremy Prue, P.E.
Project Manager

PINE TREE ENGINEERING

53 Front St, Bath, ME 04530
Office: (207) 443-1508
Mobile: (207) 713-5427

Response to Development Review Application Question 11

Between January and February 1989, Mid Coast Health Services took ownership of several parcels of land along Medical Center Drive in Brunswick, Maine, now known as 81 Medical Center Drive ("Property"). *See* the following Book and Page references in the Registry of Deeds for Cumberland County ("Registry"): 8628/148; 8660/183; 8654/342. On July 6, 2007, Mid Coast Health Services entered into a Ground Lease with respect to the Property with Bath Road Associates, LLC, a New York limited liability company. *See* Memorandum of Ground Lease recorded in the Registry at Book 25280, Page 322. Pursuant to the terms of that lease agreement, Bath Road Associates constructed and retained title to a medical office building on the Property ("Building"). MaineHealth is the current tenant of the Building.

Mid Coast Health Services formally changed its name to Mid Coast-Parkview Health (Maine Secretary of State Charter No. 19870489ND) after 2007, and Mid Coast-Parkview Health merged into MaineHealth on January 1, 2021 (Maine Secretary of State Charter No. 19510013ND). MaineHealth is the current owner of the Property, the lessor under the ground lease, and the tenant of the Building. Bath Road Associates, LLC remains the owner of the Building and the lessor under the ground lease.

MaineHealth now brings this Application to build two structures on the Property: one structure will house a pharmacy, and the other structure will house a LINAC ("Structures"). The Structures will be attached to and accessed via the Building. However, the Structures will be owned by MaineHealth, not Bath Road Associates. Bath Road Associates, therefore, will have no ownership interest in the project.

Bath Road Associates has reviewed MaineHealth's construction plans and this Application, and consents to the project as described.

Sincerely,

Christopher T. Bowe, MD 1-19-26

Christopher T. Bowe, MD

Seen and Agreed to:
BATH ROAD ASSOCIATES, LLC

_____

Name:
Title:

Bath Road Associates, LLC
By: Bath Road Management, LLC
Its: Managing Member

By: _____
Gary Parrotta, Member

Town Of Brunswick
Planning & Development
85 Union Street
Brunswick, ME 04011

Attn: Matt James

Subject: LINAC Operation, Waste, and Regulatory Requirements – 81 Medical Center Drive

Thank you for your question regarding waste management for the proposed medical linear accelerator (LINAC) at 81 Medical Center Drive.

LINAC Operation and Waste Generation

The LINAC we are installing is a *radiation-producing machine* used for therapeutic medical x-ray treatment. It does *not use, generate, or store radioactive materials* as defined by Maine's Radiation Control Regulations (10-144 C.M.R. Chapter 220) or federal standards. In a medical LINAC (with maximum photon energy of 10 MV), the accelerated electrons interact with a target to produce therapeutic x-rays, but *no radioactive isotopes are created or left behind* in normal operation. Consequently:

- There are no radioactive waste products from LINAC operation.
- There is no byproduct radioactive material requiring disposal under radioactive materials licensing rules.

State Regulatory Framework

The Maine Department of Health and Human Services (DHHS), Radiation Control Program regulates radiation safety in the state under *10-144 C.M.R. Chapter 220* – Rules Relating to Radiation Protection. This set of regulations includes:

- Licensing of radioactive material and devices using radioactive material (*Part C*).
- Requirements for radiation-producing machines, including therapeutic radiation machines such as LINACs (*Part X*).

Because the LINAC does not involve radioactive materials, *it does not trigger a radioactive materials license* under Part C and is not subject to radioactive waste disposal regulations. The regulatory controls that do apply are those for radiation-producing machines, which focus on safety procedures and shielding rather than waste.

Additionally, under *Maine statute (Title 22, §677)*, the Department may license or register other radiation sources, but it also allows for exemptions where use does not pose a significant risk — such as the operation of diagnostic and therapeutic radiation machines not involving radioactive materials.

Federal Context

At the federal level, 10 C.F.R. Part 20 defines standards for protection against radiation from licensed activities involving radioactive materials; these do not apply to radiation-producing machines that do not use or create radioactive material.

Equipment Maintenance, Decommissioning, and Removal

- Routine maintenance, repairs, and eventual removal or replacement of the LINAC are handled by the *manufacturer/vendor (Varian Medical Systems)* or licensed medical equipment service providers.
- Because the LINAC itself is not radioactive, *any removed components do not constitute radioactive waste.*
- Structural shielding (e.g., concrete) is simply demolished or repurposed following standard construction practices and *is not subject to radioactive waste disposal requirements.*

This approach is consistent with standard practice in radiation oncology facilities and does not require a radioactive materials waste management plan.

TOWN OF BRUNSWICK

MAJOR DEVELOPMENT REVIEW APPLICATION

STREAMLINED FINAL PLAN

MAINEHEALTH MID COAST CANCER CENTER RENOVATION

ARCHITECT
E4H – ENVIRONMENTS FOR HEALTH
75 YORK STREET, SUITE 3
PORTLAND, MAINE 04101

MEP & STRUCTURAL ENGINEERING
RFS – RIST, FROST, SHUMWAY ENGINEERING
71 WATER STREET
LACONIA, NEW HAMPSHIRE 03246

CIVIL ENGINEERING
PINE TREE ENGINEERING, INC.
53 FRONT STREET
BATH, MAINE 04530

DECEMBER 2025

Pine Tree Engineering, Inc.

53 Front Street
Bath, Maine 04530
(207) 443-1508
Fax: (207) 442-7029
E-mail: pte@pte-maine.com

January 20, 2026

Ms. Julie Erdman, Director of Planning & Development
Town of Brunswick
85 Union Street
Brunswick, Maine 04011

Subject: **Major Development Review Application**
MaineHealth Mid Coast Cancer Center Renovation **#95041.21**
Brunswick, Maine

Dear Julie:

On behalf of MaineHealth, we have enclosed a Major Development Review Application for renovations to their Mid Coast Hospital campus.

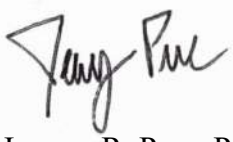
The proposed project is for two (2) one-story building additions to 81 Medical Center Drive office building, one to house the linear accelerator (LINAC) system, and the other to house a pharmacy, thus, the project requires a Major Development Review.

Details of the proposed project can be reviewed on the enclosed plans.

Please contact us if you have any questions concerning this application.

Sincerely,

PINE TREE ENGINEERING, INC.



Jeremy R. Prue, P.E.
Civil Project Manager

JRP/tls
Enclosures

c. Ashley Roan, MaineHealth (Via Email)
Architect, E4H – Environments for Health (Via Email)
MEP & Structural Engineer, RIFS – Rist, Frost, Shumway Engineering (Via Email)

MaineHealth

November 18, 2025

To whom it may concern:

By this letter, I authorize Pine Tree Engineering, Inc. to act on behalf of MaineHealth / Mid Coast Hospital as our Agent for the preparation and submission of all federal, state, and local town or city permit applications, along with all relevant documents, submittals, and correspondence related to the Coastal Cancer Project at Mid Coast Hospital in Brunswick, Maine. This authorization includes attending meetings and site visits, appearing before all boards, commissions, and/or committees, and providing other services as required to complete the aforementioned tasks.

Thank you for your assistance and coordination on this project. Should you have any additional questions, please do not hesitate to contact me at 207-471-0591 or by email at Christoper.bowe@mainehealth.org.

Authorized by:

Christopher Bowe

Christoper Bowe
President
MaineHealth / Mid Coast Hospital

DEVELOPMENT REVIEW APPLICATION

1. Development Review application type (refer to **Appendix D**):

- [ ] **Minor Development Review**
- [ ] Major Development Review: **Sketch Plan**
- [x] Major Development Review: **Final Plan**

2. Project Name: MaineHealth Mid Coast Cancer Center Additions

3. Project Applicant

Name: Christopher Bowe - MaineHealth
Address: 81 Medical Center Drive
Brunswick ME 04011
Phone Number:
Email: christoper.bowe@mainehealth.org

4. Property Owner (name on deed)

Name: MaineHealth - Successor by Merger - MidCoast Health Services Corporation
Address: 58 Baribeau Drive
Brunswick, ME 04011
Phone Number:
Email:

5. Authorized Representative

Name: Jeremy R. Prue, P.E. - Pine Tree Engineering, Inc. (PE16639)
Address: 53 Front Street
Bath, ME 04530
Phone Number: (207) 443-1508
Email: jrprue@pte-maine.com

6. List of Design Consultants. Indicate the registration number, address and phone number, email for any additional project engineers, surveyors, architects, landscape architects or planners:

1. E4H Environments for Health Architecture, 163 Fore Street, 4th Floor Portland, ME 04101 (207) 773-8841
   Jon Boyd AIA, LEED AP, LSSGB Senior Principal, Maine #3028 Jon.Boyd@e4harchitecture.com
2. RFS - Rist, Frost, Shumway Engineering, 71 Water Street, Laconia, NH 03246 O:(603) 524-4647
   Christopher M. Shumway, Maine PE No. 10820, LEED AP, President
3.

7. Physical location of property: 81 Medical Center Drive, Brunswick ME 04011

8. Lot Size: 113 Acres

9. Zoning District: Growth Mixed Use-4 (GM4); Growth Mixed Use-8 (GM8)

10. Overlay Zoning District(s): Shoreland Protection Overlay (SPO), Rural Protection Stormwater Management Overlay (RPSMO), Shoreland Protection Subdistrict (SPO-SP), SPO-RP FEMA, SPO-RP Steep Slope, SPO-RP Wetlands, Cooks Corner Impact Fee, Cooks Corner Overlay Zone, Medical Use Overlay, Opportunity Zone, Wildlife Protection Block, Growth Zone

11. Indicate the interest of the applicant in the property and abutting property. For example, is the applicant the owner of the property and abutting property? If not, who owns the property subject to this application? If property owner is an organization, what is the applicant's affiliation?

Applicant is the owner of the property.

12. Assessor's Tax Map 45 Lot Number 32 of subject property.

13. Brief description of proposed use/subdivision: The proposed development will not change the existing use. The site will remain in operation as a medical office building with associated parking lot.

14. Describe specific physical improvements to be done: MaineHealth is building two different one-story additions to the existing building. The first is a 1,186 SF addition for a new pharmacy and the second is a 2,325 SF addition for the new LINAC unit. Beyond the building additions will include regrading of the existing slopes, selectively clearing trees, and sitework to tie into the existing parking lot.

Property Owner Signature: Christopher Bowe Date: 1-20-26

Property Owner Name Printed:
Christoper Bowe - MaineHealth

Applicant Signature: Christopher Bowe Date: 1-20-26

Applicant Name & Title Printed:
Christoper Bowe - MaineHealth

REQUIREMENTS FOR FINAL PLAN, STREAMLINED REVIEW & MINOR REVIEW APPLICATION SUBMITTAL Please mark box with one of the following: "W" (Waiver); "P" (Pending); "X" (Submitted) or "N/A" (Not applicable)		Final Plan	Streamlined	Minor
General	Application form and fee	X	--	--
	Name of development	X	--	--
	Existing zoning district and overlay designations	X	--	--
	Location map	X	--	--
	Names of current owner(s) of subject parcel and abutting parcels	X	--	--
	Names of engineer and surveyor; and professional registration numbers of those who prepared the plan	X	--	--
	Location of features, natural and artificial, such as water bodies, wetlands, streams, important habitats, vegetation, railroads, ditches and buildings	X	--	--
	Documentation of Right, Title and Interest	X	--	--
	Drafts of legal documents appropriate to the application, including: deeds, easements, conservation easements, deed restrictions or covenants, home/property owners association declarations and by-laws, and such other agreements or documents as are necessary to show the manner in which common areas will be owned, maintained, and protected	X	--	--
	Draft performance guarantee or conditional agreement	N/A	--	--
Survey, Topography, & Existing Conditions	Scale, date, north point, and area	X	--	--
	A survey submitted (stamped for final plan submittal) by a professional surveyor with a current license by the State of Maine Board of Licensure for Professional Surveyors	X	--	--
	Boundaries of all lots and tracts with accurate distances and bearings, locations of all permanent monuments property identified as existing or proposed	X	--	--
	Existing easements associated with the development	X	--	--
	Location of existing utilities; water, sewer, electrical lines, and profiles of underground facilities	X	--	--
Survey, Topography, & Existing Conditions	Existing location, size, profile and cross section of sanitary sewers; description, plan and location of other means of sewage disposal with evidence of soil suitability	NA		
	Topography with contour intervals of not more than two (2) feet	X	--	--
	A Medium Intensity Soil Survey, available from the Cumberland County Soil and water Conservation District,. The Planning Board may require a Class A (high intensity) Soil Survey, prepared in accordance with the standards of the Maine Association of Professional Soil Scientists, if issues of water quality, wetlands or other natural constraints are noted.	X	--	--
	Existing locations of sidewalks	X	--	--
	A delineation of wetlands, floodplains, important habitats, and other environmentally sensitive areas	X	--	--
	Approximate locations of dedicated public open space, areas protected by conservation easements and recreation areas	X	--	--

REQUIREMENTS FOR FINAL PLAN, STREAMLINED REVIEW & MINOR REVIEW APPLICATION SUBMITTAL Please mark box with one of the following: "W" (Waiver); "P" (Pending); "X" (Submitted) or "N/A" (Not applicable)		Final Plan	Streamlined	Minor
Infrastructure - Proposed	Name, location, width of paving and rights-of-way, profile, cross-section dimensions, curve radii of existing and proposed streets; profiles of center-lines of proposed streets, at a horizontal scale of one (1) inch = 50 feet and vertical scale of one (1) = five (5) feet, with all evaluations referred to in U.S.G.S. datum	X	--	--
	Proposed easements associated with the development	N/A	--	--
	Kind, location, profile and cross-section of all proposed drainage facilities, both within and connections to the proposed development, and a storm-water management plan in accordance with Section	X	--	--
	Location of proposed utilities; water, sewer, electrical lines, and profiles of underground facilities. Tentative locations of private wells.	N/A	--	--
	Proposed location, size, profile and cross section of sanitary sewers; description, plan and location of other means of sewage disposal with evidence of soil suitability	N/A	--	--
	Proposed locations, widths and profiles of sidewalks	X	--	--
	Locations and dimensions of proposed vehicular and bicycle parking areas, including proposed shared parking arrangement if applicable.	X	--	--
Infrastructure - Proposed	Grading, erosion control, and landscaping plan; proposed finished grades, slopes, swells, and ground cover or other means of stabilization	X	--	--
	Storm water management plan for the proposed project prepared by a professional engineer	X	--	--
	The size and proposed location of water supply and sewage disposal systems	N/A	--	--
	Where a septic system is to be used, evidence of soil suitability	N/A	--	--
	A statement from the General Manager of the Brunswick Sewer District as to conditions under which the Sewer District will provide public sewer and approval of the proposed sanitary sewer infrastructure	N/A	--	--
	A statement from the Fire Chief recommending the number, size and location of hydrants, available pressure levels, road layout and street and project name, and any other fire protection measures to be taken	N/A	--	--
	A statement from the General Manager of the Brunswick and Topsham Water District as to conditions under which public water will be provided and approval of the proposed water distribution infrastructure	N/A	--	--
Proposed Development Plan	Lighting plan showing details of all proposed lighting and the location of that lighting in relation to the site	X	--	--
	Reference to special conditions stipulated by the Review Authority	N/A	--	--
	Proposed ownership and approximate location and dimensions of open spaces for conservation and recreation. Dedicated public open specs, areas protected by conservation easements, and existing and proposed open spaces or recreation areas and potential connectivity to adjoining open space.	X	--	--
	When applicable, a table indicating the maximum number of lots permitted based upon the applicable dimensional requirements, the number of lots proposed, and the number of lots permitted to be further subdivided.	N/A	--	--
	Building envelopes showing acceptable locations for principal and accessory structures, setbacks and impervious coverage	X	--	--

REQUIREMENTS FOR FINAL PLAN, STREAMLINED REVIEW & MINOR REVIEW APPLICATION SUBMITTAL Please mark box with one of the following: "W" (Waiver); "P" (Pending); "X" (Submitted) or "N/A" (Not applicable)		Final Plan	Streamlined	Minor
Proposed Development Plan	Disclosure of any required permits or, if a permit has already been granted, a copy of that permit	N/A	--	--
	A statement from the General Manager of the Brunswick and Topsham Water District regarding the proposed development if located within an Aquifer Protection Zone	N/A	--	--
	A plan of all new construction, expansion and/or redevelopment of existing facilities, including type, size, footprint, floor layout, setback, elevation of first floor slab, storage and loading areas	X	--	--
	An elevation view of all sides of each building proposed indicating height, color, bulk, surface treatment, signage and other features as may be required by specific design standards	X	--	--
	A circulation plan describing all pedestrian and vehicle traffic flow on surrounding road systems	X	--	--
	A site landscaping plan indicating grade change, vegetation to be preserved, new plantings used to stabilize areas of cut and fill, screening, the size, locations and purpose and type of vegetation	X	--	--
	Number of lots if a subdivision	N/A	--	--
	A plan showing all ten (10) inch caliper trees to be removed as a result of the development proposal	W	--	--
	All applicable materials necessary for the Review Authority to review the proposal in accordance with the criteria of Chapter 5.	X	--	--
	Any additional studies required by the Review Authority	N/A	--	--

TABLE OF CONTENTS

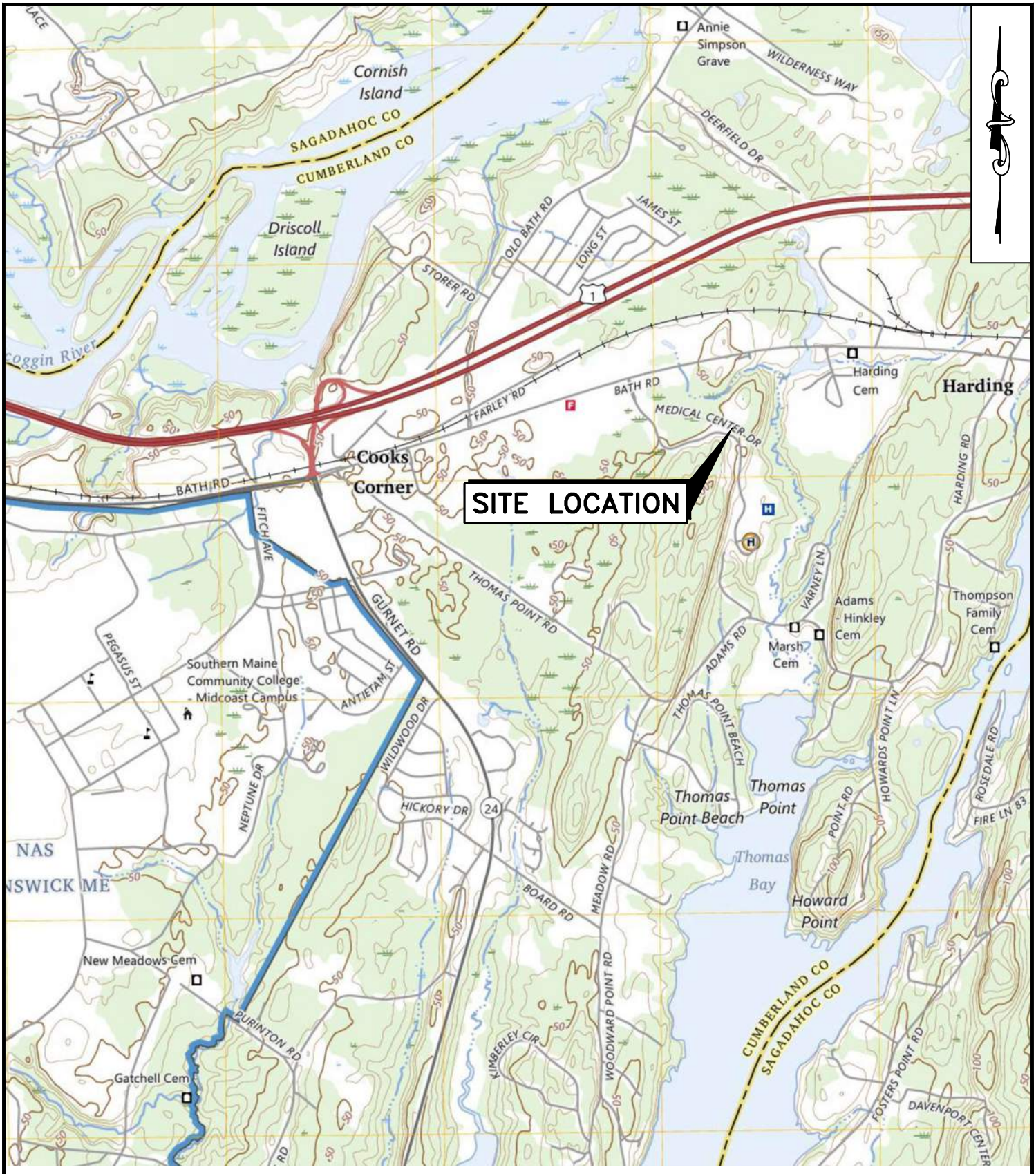
Transmittal Letter, Authorized Agent Letter

Town of Brunswick
Major Development Review Application – Streamlined Final Plan

EXHIBITS

EXHIBIT 1

Location Map



2000' 0 1000' 2000' 4000'

1 inch = 2000 ft.

LATITUDE: 43°54'34.2"N
LONGITUDE: 69°53'33.8"W

LOCATION MAP
MID COAST CANCER CENTER RENOVATION

PINE TREE ENGINEERING
53 Front Street
Bath, Maine 04530
Tel: (207) 443-1508
Fax: (207) 442-7029
Civil/Environmental Engineering • Surveying

APPLICATION BY: MAINEHEALTH
81 MEDICAL CENTER DRIVE
BRUNSWICK, ME 04011

DATE OCTOBER 10, 2025

SHEET 1 OF 1

G:\Projects\1995\95041.21\DWG\8x11-MAP.dwg

10/08/25 10:30am

EXHIBIT 2

Overall Site Plan

PERFORMANCE STANDARDS (GM8)		
	REQUIRED	CURRENT AS PROPOSED
MIN. LOT SIZE (NON-RESIDENTIAL)	7,000 SF	113 AC
NET SITE AREA	–	84.4 AC
MIN. FRONT SETBACKS	20 FT	EXCEEDS
MIN. REAR AND SIDE SETBACKS	30 FT	EXCEEDS
MAX. BUILDING HEIGHT	40 FT	COMPLIES
MAX. FOOTPRINT FACTOR	25% OF LOT AREA	2.50%
MAX. GROSS DENSITY FACTOR	50% OF LOT AREA	20.18%
MIN. BICYCLE PARKING SPACES	20	25
MIN. VEHICLE PARKING SPACES (81 MEDICAL CENTER DR.)	151	193

NOTES:
1. OWNER: MID COAST HEALTH SERVICES INC. (MAP 45, LOT 32).
2. ZONING: GROWTH MIXED-USE 4 (GM4)
GROWTH MIXED-USE 8 (GM8)
MEDICAL USE OVERLAY
COOKS CORNER OVERLAY
SHORELAND PROTECTION OVERLAY
RURAL PROTECTION STORMWATER MANAGEMENT OVERLAY
WILDLIFE PROTECTION OVERLAY BLOCK

LEGEND

COLOR	DESCRIPTION
	RURAL PROTECTION STORMWATER MANAGEMENT OVERLAY
	SHORELAND PROTECTION OVERLAY
	WILDLIFE PROTECTION OVERLAY
	PARCEL BOUNDARY
	ZONE LINE

N/F
BATH IRON WORKS CORP.
290 BATH ROAD
BOOK 35343 PAGE 0224

BATH ROAD

N/F
DARLING'S
262 BATH ROAD
BOOK 37590
PAGE 0218

N/F
MID COAST HOSPITAL
0 MEDICAL DRIVE
BOOK 36258 PAGE 0157

GM4

N/F
MAINEHEALTH
11 MEDICAL CENTER DRIVE
BOOK 40999 PAGE 0160

N/F
SOWLES REAL ESTATE LLC
314 BATH ROAD
BOOK 31998 PAGE 0068

N/F
TOWN OF BRUNSWICK
0 BATH ROAD

GM8

N/F
SOWLES REAL ESTATE LLC
316 BATH ROAD
BOOK 35643 PAGE 0247

N/F
MID COAST HOSPITAL
15 MEDICAL CENTER DRIVE
BOOK 25299 PAGE 0324

MEDICAL CENTER DRIVE

N/F
SOWLES REAL ESTATE LLC
316 BATH ROAD
BOOK 35643 PAGE 0247

N/F
MID COAST HOSPITAL
0 ADAMS ROAD
BOOK 27496 PAGE 0061

N/F
PICONE, LEO & PAMELA
330 BATH ROAD
BOOK 33557 PAGE 0342

81 MEDICAL CENTER DR.

PROJECT SITE

N/F
KERKSTRA, SUSAN B.
& JONATHAN G (JT)
4 CRANBERRY DRIVE
BOOK 38653 PAGE 0016

N/F
WARREN, JOHN F III
332 BATH ROAD
BOOK 35301 PAGE 0322

121 MEDICAL CENTER DRIVE

123 MEDICAL CENTER DRIVE

N/F
MID COAST HEALTH SERVICES
0 ADAMS ROAD
BOOK 16535 PAGE 0260

N/F
BATH IRON WORKS CORP.
16 MALLETT PARK ROAD
BOOK 38203 PAGE 0070

N/F
CARPENTER, DAVID R & MARY R
50 VARNEY LANE
BOOK 12758 PAGE 0005

N/F
THOMPSON, WILLIAM H. &
MICHELLE (JT)
42 VARNEY LANE
BOOK 27440 PAGE 0220

N/F
FOOTER, JOSEPH A.
255 ADAMS ROAD
BOOK 35431 PAGE 0027

OVERALL SITE PLAN
SCALE: 1" = 200'

GRAPHIC SCALE
200 0 100 200 400 800
(IN FEET)

REV	DATE	STATUS	BY	CHKD	APPD

DESIGNED BY:	–
DRAWN BY:	–
CHECKED BY:	–
APPROVED BY:	–
DATE:	–

PINE TREE ENGINEERING
Civil/Environmental Engineering • Surveying
53 Front Street
Bath, Maine 04530
Tel: (207) 443-1508
Fax: (207) 442-7029

CLIENT
MAINEHEALTH
MID COAST HOSPITAL
123 MEDICAL CENTER DRIVE
BRUNSWICK, MAINE 04011

PROJECT
MAINEHEALTH MID COAST
CANCER CENTER RENOVATION

TITLE
OVERALL SITE PLAN

SCALE	AS SHOWN
PROJECT NO.	95041.21
DRAWING NO.	95041.21 P-Site
SHT.	1 of 1
REV.	–

G:\Projects\1995\95041.21\DWG\95041.21 P-Site.dwg
12/17/25 2:12pm

EXHIBIT 3

Owner's Title, Right and Interest

January 20, 2026

Narrative regarding ownership was approved by Town Attorney prior to filing and is pending signature.

Once narrative has been signed it will be submitted to the Town by Applicant.

Section 2

002450

Know All Men By These Presents.

That I, JOSEPH A. FOOTER, of Brunswick, in the County of Cumberland, and State of Maine,

in consideration of One Dollar and other good and valuable considerations,

paid by MID COAST HEALTH SERVICES CORPORATION, a corporation organized and existing under the laws of the State of Maine, with a place of business in Brunswick, in the County of Cumberland, and State of Maine,

the receipt whereof I *do hereby acknowledge, do hereby* give, grant, bargain, sell and convey *unto the said* MID COAST HEALTH SERVICES CORPORATION, 58 Baribeau Drive, Brunswick, Maine, 04011, its successors ~~heirs~~ *and assigns forever,*

~~accordingly to our previous deed~~

A certain lot or parcel of land, situated in Brunswick, in the County of Cumberland and State of Maine, on the northwesterly side of the Adams Road, so-called, and being more specifically bounded and described as follows:

Beginning at a point in the northeast line of land now or formerly of Alvin B. Allen, Arthur Altschuler and David Altschuler and being the southerly corner of land now or formerly of H. William Sowles, John W. Sowles and Peter P. Sowles, recorded in the Cumberland County Registry of Deeds Book 6493, Page 111, and being the northwesterly corner of land herein conveyed by Joseph A. Footer, recorded in the Cumberland County Registry of Deeds Book 4609, Page 268; thence south eighty-nine degrees, five minutes, forty-four seconds east (S 89° 05' 44" E) along the southerly line of the said H. William Sowles et al. and along the southerly line of land now or formerly of Marian B. Washburn, recorded in the Cumberland County Registry of Deeds Book 2935, Page 528, and along the northerly line of land herein conveyed by the said Joseph A. Footer a distance of seven hundred forty-eight and twenty-nine hundredths feet (748.29') to a point being the southeasterly corner of land now or formerly of Earnest Washburn, recorded in the Cumberland County Registry of Deeds Book 1976, Page 277, and being the westerly corner of land now or formerly of Felton Pervier and Rita Pervier, recorded in the Cumberland County Registry of Deeds Book 2991, Page 178, and being the northeasterly corner of land herein conveyed by the said Joseph A. Footer; thence forty-one degrees, zero minutes, thirty-four seconds east (S 41° 00' 34" E) along the southwesterly line of the said Felton Pervier and Rita Pervier and the northeasterly line of land herein conveyed by the said Joseph A. Footer a distance of seven hundred sixteen and seventeen hundredths feet (716.17') to a point marked by an iron rod; thence continuing south forty-one degrees, zero minutes, thirty-four seconds east (S 41° 00' 34" E) along the southwesterly line of the said Felton Pervier and Rita Pervier and the northeasterly line of land herein conveyed by the said Joseph A. Footer a distance of approximately one hundred forty feet (140') more or less to the centerline of the brook; thence southwesterly by the centerline of said brook a distance of twenty-one hundred forty feet (2140') more or less to a point in the easterly property line of land now or formerly of Charles Warren Ring, recorded in the Cumberland County Registry of Deeds Book 2660, Page 135; thence

BK 8621PG0148

REAL ESTATE TRANSFER TAX PAID

north forty-one degrees, thirty minutes, twenty-six seconds west (N 41° 30' 26" W) along the easterly line of the said Charles Warren Ring and the westerly line of land herein conveyed by the said Joseph A. Footer a distance of approximately twenty-three hundred forty feet (2340') more or less to a point marked by a 1 1/4" diameter iron pipe being the northeasterly corner of the said Charles Warren Ring and being the southeasterly line of said Alvin B. Allen et. al. and being the northwesterly corner of land herein conveyed by the said Joseph A. Footer; thence north forty-seven degrees, thirty-two minutes, thirty-eight seconds east (N 47° 32' 38" E) along the southeasterly line of said Alvin B. Allen et. al. and the northwesterly line of land herein conveyed by the said Joseph A. Footer a distance of five hundred twenty-nine and ninety-one hundredths feet (529.91') to a point marked by a 1 1/2" diameter iron pipe being the southwesterly corner of the said Alvin B. Allen et. al.; thence north forty-one degrees, thirty-seven minutes, fifty-three seconds west (N 41° 37' 53" W) along the northeasterly line of the said Alvin B. Allen et. al. and the southwesterly line of the said Joseph A. Footer a distance of four hundred sixty-five and eighty-four hundredths feet (465.84') to the point of beginning. Containing forty-three acres (43 ac.).

Subject, however, to the rights held by New England Telephone and Telegraph Company, by virtue of Easement dated January 21, 1911, and recorded in the Cumberland County Registry of Deeds in Book 868, Page 491.

For source of title reference may be had to the following instruments: Mary D. Footer to Joseph A. Footer, dated December 21, 1973, and recorded in the Cumberland County Registry of Deeds in Book 3498, Page 69; Mary D. Footer to Joseph A. Footer, dated February 1, 1974, and recorded in the Cumberland County Registry of Deeds in Book 3508, Page 150; and Mary A. Parnham to Joseph A. Footer, dated August 30, 1974, and recorded in the Cumberland County Registry of Deeds in Book 3594, Page 165. Reference may also be had to Judgment entered in the matter of Joseph A. Footer v. Nancy W. Footer, dated May 6, 1980, and recorded in the Cumberland County Registry of Deeds in Book 4598, Page 261; and Release Deed of Nancy Waterman f/k/a Nancy W. Footer to Joseph A. Footer, dated May 7, 1980, and recorded in the Cumberland County Registry of Deeds in Book 4609, Page 268.

BK 6620 PG 0150

To Have and to Hold *the aforegranted and bargained premises with all the privileges and appurtenances thereof to the said*

MID COAST HEALTH SERVICES CORPORATION, its successors ~~xxxx~~ *and assigns, to* them *and their use and behoof forever.*

And I *do* *COVENANT with the said Grantee* , its successors ~~xxxx~~ *and assigns, that* I am *lawfully seized in fee of the premises that they are free of all encumbrances:*

that I *have good right to sell and convey the same to the said Grantee to hold as aforesaid; and that* I *and* my *heirs shall and will WARRANT and DEFEND the same to the said Grantee* , its successors *and assigns forever, against the lawful claims and demands of all persons.*

In Witness Whereof, I, the said JOSEPH A. FOOTER,

RECEIVED
REGISTRY OF DEEDS
1989 JAN 17 AM 11:10
CUMBERLAND COUNTY

~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~
~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~, *have hereunto set* my *hand and seal this* 13th *day of* January *in the year of our Lord one thousand nine hundred and* eighty-nine.

Signed, Sealed and Delivered,
in presence of

Roger R. Therriault (signature)

Joseph A. Footer (signature)
Joseph A. Footer

State of Maine,
SAGADAHOC } ss.

January 13, 1989

Personally appeared the above named

JOSEPH A. FOOTER *and acknowledged the above instrument to be* his *free act and deed.*

Before me,

Roger R. Therriault (signature)

~~xxxxxxxxxxxxxxxx~~
Roger R. Therriault, Attorney At Law
~~xxxxxxxxxxxx~~

BK8660PG0183

007393

MATTHEW B. ALLEN of Brookline, Massachusetts, DOUGLAS ALLEN of Brookline, Massachusetts, ELIZABETH ALLEN of New York, New York, EMILY ALLEN of New York, New York, MILTON ALTSCHULER of Houston, Texas, and GEORGE S. ABRAMS AS TRUSTEE OF THE ARTHUR ALTSCHULER IRREVOCABLE TRUST of Boston, Massachusetts

For consideration paid, grant(s) to MID COAST HEALTH SERVICES, a Maine corporation, with a principal place of business at 58 Baribeau Drive, Brunswick, Maine, the land in Brunswick, in the County of Cumberland and State of Maine, as follows:

A certain lot or parcel of land situated in the Town of Brunswick, County of Cumberland and State of Maine, lying on the southerly side of U.S. Route One, also known as the Bath Road, said lot or parcel of land being more particularly bounded and described as follows:

Beginning at a point in the southerly right of way of the Bath Road fifty and zero hundredths feet (50.00') southwesterly from the northwesterly corner of land now or formerly of Douglas Schmidt, et als. (by deed recorded in the Cumberland County Registry of Deeds, Book 4352, Page 66); thence south two degrees, three minutes, forty five seconds east (S 02° 03' 45" E) by and along remaining land of the Grantors a distance of two hundred forty one and zero hundredths feet (241.00') to a point of curve; thence by a curve concave to the northeast having a radius of six hundred fifty and zero hundredths feet (650.00') a delta angle of thirty nine degrees, twenty eight minutes, twenty four seconds (39° 28' 24") with a distance of four hundred forty seven and eighty one hundredths feet (447.81') by and along said remaining land of the Grantors to a

point; thence south forty one degrees, thirty two minutes, nine seconds east (S 41° 32' 09" E) by and along said remaining land of the Grantors a distance of five hundred twenty and ninety five hundredths feet (520.95') to a point in the northwesterly line of land now or formerly of Joseph A. Footer (by deed recorded in the Cumberland County Registry of Deeds, Book 4609, Page 268); thence south forty seven degrees, thirty two minutes, thirty eight seconds west (S 47° 32' 38" W) along land of said Footer a distance of fifty and one hundredths feet (50.01') to a point marked by a 1-1/4" diameter iron pipe marking the northwesterly corner of land of said Footer and being the northeast corner of land now or formerly of Charles Warren Ring (by deed recorded in the Cumberland County Registry of Deeds, Book 2660, Page 135); thence south forty seven degrees, thirty one minutes, thirteen seconds west (S 47° 31' 13" W) along the northerly line of land of said Ring a distance of one thousand, one hundred twenty nine and thirty five hundredths feet (1129.35') to a point marked by a granite monument in the northeasterly line of land of James T. Redding (by deed recorded in the Cumberland County Registry of Deeds, Book 3264, Page 322); thence north thirty seven degrees, twenty eight minutes, four seconds west (N 37° 28' 04" W) by and along land of said Redding and land now or formerly of William S. Dodge a distance of five hundred twenty and sixty nine hundredths feet (520.69') to a point; thence north forty seven degrees, thirty one minutes, thirteen seconds east (N 47° 31' 13" E) by and along said remaining land of the Grantors a distance of one thousand forty and seventeen hundredths feet (1040.17') to a point; thence north forty two degrees, twenty eight minutes, forty seven seconds west (N 42° 28' 47" W) by and along said remaining land of the Grantors a distance of five and ninety one hundredths feet (5.91') to a point of curve; thence by a curve concave to the northeast having a radius of seven hundred fifty and zero hundredths feet (750.00') a delta angle of thirty nine degrees nineteen minutes, fifty seconds (39° 19' 50") and a distance of five hundred fourteen and eighty four hundredths feet (514.84') by and along said remaining land of the Grantors to a point; Thence north two degrees, three minutes, forty five seconds west (N 02° 03' 45" W) along land of the said Grantors a distance of two hundred forty and twenty eight hundredths feet (240.28') to a point in the southerly right of way line of the Bath Road; Thence along a curve concave to the south having a radius of thirteen thousand, one hundred eighty nine and ten hundredths feet (13,189.10') a delta angle of zero degrees, twenty six minutes, four seconds (0° 26' 04") and a distance of one hundred and zero hundredths feet (100.00) by and along the southerly right of way of the Bath Road to the point of beginning.

The above described and conveyed premises contain fifteen and forty nine hundredths (15.49) acres and are more particularly shown on plan entitled "Proposed Property Acquisition, Mid Coast Health Services" by Kimball Chase Company, Inc. dated December 15, 1988 and to be recorded in the Cumberland County Registry of Deeds.

Grantors herein, for themselves and their heirs and assigns, in common with the Grantees, their successors, assigns and others, except and reserve a perpetual easement over, under and across a portion of the above described and conveyed parcel, said easement area being more particularly bounded and described as follows:

Beginning at a point in the southerly right of way of the Bath Road fifty and zero hundredths feet (50.00') southwesterly from the north westerly corner of land now or formerly of Douglas Schmidt, Robert Molean, Elmer Saltzman and Leo Loiselle (by deed recorded in the Cumberland County Registry of Deeds, Book 4352, Page 66); Thence south two degrees, three minutes, forty five seconds east (S 02° 03' 45" E) by and along remaining land of the Grantors a distance of two hundred forty one and zero hundredths feet (241.00') to a point of curve; Thence by a curve concave to the northeast having a radius of six hundred fifty and zero hundredths feet (650.00') a delta angle of thirty nine degrees, twenty eight minutes, twenty four seconds (39° 28' 24") with a distance of four hundred forty seven and eighty one hundredths feet (447.81') along said remaining land of the Grantors to a point; Thence south forty one degrees, thirty two minutes, nine seconds east (S 41° 32' 09" E) along land of said remaining land of the Grantors a distance of five hundred twenty and ninety five hundredths feet (520.95') to a point in the north westerly line of land now or formerly of Joseph A. Footer (by deed recorded in the Cumberland County Registry of Deeds, Book 4609, Page 268); Thence south forty seven degrees, thirty two minutes, thirty eight seconds west (S 47° 32' 38" W) along land of said Footer a distance of fifty and one hundredths feet (50.01') to a point marked by a 1-1/4" diameter iron pipe marking the northwesterly corner of land of said Footer and being the north east corner of land now or formerly of Charles Warren Ring (by deed recorded in the Cumberland County Registry of Deeds, Book 2660, Page 1350; thence South 47° 31' 13" West by and along said land of Ring fifty (50) feet, more or less, to a point; thence North 41° 32' 09" West across the property hereinabove described and conveyed five hundred twenty (520) feet, more or less, to a point at remaining land of the Grantors herein; Thence north forty two degrees, twenty eight minutes, forty seven seconds west (N 42° 28' 47" W) along land of the said Alvin B. Allen et. al. a distance of five and ninety one hundredths feet (5.91') to a point of curve; Thence by a curve concave to the north east

having a radius of seven hundred fifty and zero hundredths (750.00') a delta angle of thirty nine degrees nineteen minutes, fifty seconds (39° 19' 50") and a distance of five hundred fourteen and eighty four hundredths feet (514.84') along land of the said Grantors to a point; Thence north two degrees, three minutes, forty five seconds west (N 02° 03' 45" W) along land of the said Grantors a distance of two hundred forty and twenty eight hundredths feet (240.28') to a point in the southerly right of way line of the Bath Road; Thence along a curve concave to the south having a radius of thirteen thousand, one hundred eighty nine and ten hundredths feet (13,189.10') a delta angle of zero degrees, twenty six minutes, four seconds (0° 26' 04") and a distance of one hundred and zero hundredths feet (100.00) along the southerly right of way of the Bath Road to the point of beginning.

The above perpetual easement shall be for all purposes of an easement to benefit remaining land of the Grantors herein, including the following purposes: (A) as a roadway and means of ingress to and egress from other land of the Grantors herein by vehicular, pedestrian and all other modes of passage including the right to use any such roadway constructed and installed by the Grantee herein or its successors and assigns; and (B) to use and to connect to sewer and water lines, overhead and underground utility lines, wires and pipes, and any appurtenances to any of the foregoing, which are now or may hereafter be installed in said easement area by the Grantee herein, or its successors and assigns, and the right of the Grantors herein, their heirs, personal representatives, successors and assigns, to construct, install, lay, maintain, repair and replace sewer and water lines, overhead and underground utility lines, wires, and pipes, and appurtenances to any of the foregoing.

The above described and conveyed premises are a portion only of the premises conveyed to the Grantors herein by Alvin B. Allen and David Altschuler, as Trustees of the Brunswick Shopping Plaza Trust by deed dated February 3, 1989 and recorded in the Cumberland County Registry of Deeds, ~~in Book _____, Page _____~~. R.C.R.

TO HAVE AND TO HOLD the aforegranted and bargained premises, with all privileges and appurtenances thereof to the said MID COAST HEALTH SERVICES, its successors and assigns, forever, to them and their use and behoof forever.

AND we do hereby covenant with the said Grantee, its successors and assigns, that we are lawfully seized in fee of the premises; that they are free of all encumbrances, except as aforesaid; that we have good right to sell and convey the same to the said Grantee to hold as aforesaid, and that we and our heirs and assigns, shall and will WARRANT AND DEFEND the same

to the said Grantee, its successors and assigns forever, against the lawful claims and demands of all persons.

IN WITNESS WHEREOF, the said MATTHEW B. ALLEN, DOUGLAS ALLEN, ELIZABETH ALLEN, EMILY ALLEN, MILTON ALTSCHULER, and GEORGE S. ABRAMS AS TRUSTEE OF THE ARTHUR ALTSCHULER IRREVOCABLE TRUST have hereunto set our hands and seals this 3rd day of February, 1989

Matthew B. Allen
MATTHEW B. ALLEN

DOUGLAS ALLEN

ELIZABETH ALLEN
Matthew B. Allen atty. in fact
ELIZABEH ALLEN

EMILY ALLEN
Matthew B. Allen atty. in fact
EMILY ALLEN

MILTON ALTSCHULER BY HIS ATTORNEY-IN-FACT DAVID ALTSCHULER

THE ARTHUR ALTSCHULER IRREVOCABLE TRUST

By George S. Abrams, Trustee
GEORGE S. ABRAMS, TRUSTEE

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Middlesex

February 3, 1989

Then personally appeared the above named David Altschuler, attorney for Milton Altschuler and acknowledged the foregoing instrument to be his/her/their free act and deed, before me

Barbara Mayford SEAL
NOTARY PUBLIC

RECEIVED
RECORDED IN CUMB. CO. OF DEEDS
1989 FEB 16 PM 2:40
CUMBERLAND COUNTY
James S. Walsh

BK8654PG0342

006513

SHORT FORM WARRANTY DEED

CHARLES WARREN RING, whose mailing address is RR#5, Adams Road, Brunswick, Maine 04011, FOR CONSIDERATION PAID, grants to MID COAST HEALTH SERVICES, a Maine corporation whose mailing address is 58 Baribeau Drive, Brunswick, Maine 04011, with WARRANTY COVENANTS, certain real property, located in Brunswick, Cumberland County, Maine, more particularly described on Exhibit A attached hereto and made a part hereof.

WITNESS my hand and seal this 10th day of February, 1989.

WITNESS:

Philip H. Gleason

Name: PHILIP H. GLEASON

Charles Warren Ring

Charles Warren Ring

State of Maine
County of Cumberland, ss.

February 10, 1989

PERSONALLY APPEARED the above-named Charles Warren Ring and acknowledged the foregoing instrument to be his free act and deed.

Before me,

Philip H. Gleason

Name: PHILIP H. GLEASON
Title: ATTORNEY AT LAW

19047002.021
205.286

EXHIBIT A

A CERTAIN LOT OR PARCEL OF LAND LOCATED SOUTHERLY OF THE BATH ROAD (OLD U.S. ROUTE ONE), BOUNDED AND DESCRIBED AS FOLLOWS:

Beginning at a point marked by granite being the southerly corner of land now or formerly Alvin B. Allen, Arthur Altschuler and David Altschuler and being the north westerly corner of land now or formerly Charles Warren Ring recorded in the Cumberland County Registry of Deeds Book 2660, Page 135;

thence north forty seven degrees, thirty one minutes, thirteen seconds east (N 47° 31' 13" E) along the south easterly line of the said Alvin B. Allen and the north westerly line of the said Charles Warren Ring a distance of one thousand, one hundred twenty nine and thirty five hundredths feet (1129.35') to a point marked by a 1 1/4" dia. iron pipe being the northerly corner of the said Charles Warren Ring and a north Westerly corner of land now or formerly Joseph A. Footer recorded in the Cumberland County Registry of Deeds Book 4609, Page 268;

thence south forty one degrees, thirty minutes, twenty six seconds east (S 41° 30' 26" E) along the south westerly line of the said Joseph A. Footer and the north easterly line of the said Charles Warren Ring a distance of approximately two thousand three hundred forty feet (2340'±) to the center line of Thompson's Brook; thence south westerly by the centerline of the

EXHIBIT A

said Thompson's Brook a distance of fifteen hundred fifty feet (1550'±) to a point in the south westerly line of the said Charles Warren Ring;

thence north forty one degrees, thirty minutes, twenty six seconds west (N 41° 30' 26" W) along land of the said Charles W. Ring a distance approximately eight hundred feet (800'±) to a point being a north easterly corner of the said Charles W. Ring;

thence south twenty-one degrees, twenty three minutes, two seconds west (S 21° 23' 02" W) along a northerly line of the said Charles W. Ring a distance of one hundred sixty eight and fifty one hundredths feet (168.51') to a point being a south westerly corner of land of the said Charles W. Ring;

thence north forty one degrees, thirty minutes, twenty six seconds west (N 41° 30' 26" W) along the south westerly line of the said Charles Warren Ring a distance of one thousand, five hundred and thirteen hundredths (1500.13'±) to the point of beginning containing approximately fifty four and seven tenths acres (54.7± ac).

The grantor, Charles W. Ring, reserves the right to an access easement to a point of land on the northerly side of Thompson's Brook. The location of said easement to be determined by Mid Coast Health Services in conjunction with the facilities to be constructed on the property being conveyed herein.

EXHIBIT A

TOGETHER WITH THE PERPETUAL RIGHT AND EASEMENT, IN COMMON WITH THE GRANTOR, HIS HEIRS AND ASSIGNS, TO PASS AND REPASS ON FOOT AND WITH VEHICLES AT ANY AND ALL TIMES AND TO [illegible] REPAIR, MAINTAIN, REPLACE AND REMOVE UTILITY PIPES AND MAINS, [illegible] UPON, UNDER OR OVER AND POLES AND WIRES WITH ALL [illegible] ADJACENT LAND OF GRANTOR, BOUNDED AND DESCRIBED AS FOLLOWS:

EASEMENT ONE:

Beginning at a point marked by an iron pipe, being the south easterly corner of land now or formerly of James T. Reding, recorded in the Cumberland County Registry of Deeds, Book 3264, Page 322;

thence south thirty six degrees, twenty four minutes, fourteen seconds west (S 36° 24' 14" W) along the southerly line of the said James T. Reding parcel a distance of two hundred sixty four and eighty five hundredths feet (264.85'), to a point being the south westerly corner of the said James T. Reding parcel, also being the south easterly corner of land now or formerly of Charles W. Ring and recorded in the Cumberland County Registry of Deeds, Book 2473, Page 457;

thence south nineteen degrees, fifty four minutes, thirty four seconds west (S 19° 54' 34" W) along the southerly line of the said Charles W. Ring a distance of three hundred eight and eight hundredths feet (308.08') a point being the south westerly corner of the said Charles W. Ring and being in the easterly line of land now or formerly of Konover Family Limited recorded in the Cumberland County Registry of Deeds, Book 6812, Page 312 and being the north westerly corner of other land of Charles W. Ring recorded in the Cumberland County Registry of Deeds, Book 2660, Page 135;

BK06547P00345

thence south forty one degrees six minutes, forty nine seconds east (S 41° 06' 49" E) along the easterly line of the said Konover Family Limited a distance of fifty seven and fifteen hundredths feet (57.15') to a point in the easterly line of the said Konover Family Limited;

thence north nineteen degrees, fifty four minutes, thirty four east (N 19° 54' 34" E) a distance of three hundred twenty eight and fifty two hundredths feet (328.52') to a point;

thence north thirty six degrees, twenty four minutes, fourteen seconds east (N 36° 24' 14" E) a distance of two hundred forty six and eighty nine hundredths feet (246.89') to a point in the easterly line of other land of the said Charles W. Ring;

thence north forty one degrees, thirty minutes, twenty six seconds west (N 41° 30' 26" W) along the easterly line of other land of the said Charles W. Ring, a distance of fifty one and thirteen hundredths feet (51.13') to the point of beginning.

EXHIBIT A

EASEMENT TWO:

Beginning at a point in the northerly right-of-way of the Adams Road at the south easterly corner of land now or formerly of William M. Greene and Judith A. Greene and recorded in the Cumberland County Registry of Deeds, Book 3828, Page 246;

thence north twenty seven degrees, seventeen minutes, ten seconds east (N 27° 17' 10" E) along the easterly line of the said William M. Greene and Judith A. Greene a distance of twenty nine and seventy five hundredths feet (29.75') to an angle point in the easterly line of the said William M. Greene and Judith A. Greene;

thence north forty one degrees, zero minutes, five seconds west (N 41° 00' 05" W) along the easterly line of the said William M. Greene and Judith A. Greene a distance of four hundred ten and twenty seven hundredths feet (410.27') to the north easterly corner of the said William M. Greene and Judith A. Greene;

thence along land now or formerly Charles W. Ring and recorded in the Cumberland County Registry of Deeds, Book 2660, Page 135 by a curve concave to the east having a radius of three hundred and zero hundredths feet (300.00'), a delta angle of twenty seven degrees,

EXHIBIT A

twenty five minutes, seven seconds (27° 25' 07") a distance of one hundred forty three and fifty six hundredths feet (143.56') to a point;

thence north thirteen degrees, thirty four minutes, fifty nine seconds west (N 13° 34' 59" W) along land of the said Charles W. Ring a distance of forty two and five hundredths feet (42.05') to a point;

thence along land of the said Charles W. Ring by a curve concave south easterly having a radius of three hundred and zero hundredths feet (300.00'), a delta angle of thirty four degrees, fifty eight minutes, one second (34° 58' 01"), a distance of one hundred eighty three and nine hundredths feet (183.09') to a point;

thence north twenty one degrees, twenty three minutes, two seconds east (N 21° 23' 02" E) along land of the said Charles W. Ring a distance of four hundred thirty five and seventy five hundredths feet (435.75') to a point in the easterly line of land of the said Charles W. Ring;

thence south forty one degrees, thirty minutes, twenty six seconds east (S 41° 30' 26" E) along the easterly line of land of the said Charles W. Ring a distance of fifty six and seventeen hundredths feet (56.17') to a point in the easterly line of land of the said Charles W. Ring;

EXCIBIT A

thence south twenty one degrees, twenty three minutes, two seconds west (S 21° 23' 02" W) along land of the said Charles W. Ring a distance of four hundred ten and sixteen hundredths feet (410.16') to a point;

thence along land of the said Charles W. Ring by a curve concave south easterly having a radius of two hundred fifty and zero hundredths feet (250.00'), a delta angle of thirty four degrees, fifty eight minutes, one second (34° 58' 01"), a distance of one hundred fifty two and fifty seven hundredths feet (152.57') to a point;

thence south thirteen degrees, thirty four minutes, fifty nine seconds east (S 13° 34' 59" E) along land of the said Charles W. Ring a distance of forty and five hundredths feet (42.05') to point;

thence along land of the said Charles W. Ring by a curve concave to the east having a radius of two hundred fifty and zero hundredths feet (250.00'), a delta angle of twenty seven degrees, twenty five minutes, seven seconds (27° 25' 07"), a distance of one hundred nineteen and sixty four hundredths feet (119.64') to a point;

thence south forty one degrees, zero minutes, five seconds east (54° 00' 05" E) along land of the said Charles W. Ring also being parallel and fifty and zero hundredths feet (50.00') from the

EXHIBIT A

easterly line of the said William M. Greene and Judith A. Greene a distance of four hundred forty four and seventeen hundredths feet (444.17') to a point;

thence south twenty seven degrees, seventeen minutes, ten seconds west along land of said Charles W. Ring a distance of sixty four and eighty six hundredths feet (64.86') to a point in the northerly right-of-way line of the said Adams Road;

thence north sixty one degrees, twenty minutes, eleven seconds west (N 61° 20' 11" W) along the northerly right-of-way of the said Adams Road and southerly line of land of the said Charles W. Ring a distance of fifty and one hundredths feet (50.01') to the point of beginning.

RECEIVED
RECORDED REGISTRY OF DEEDS
1989 FEB 10 PM 3:38
CUMBERLAND COUNTY
James J Walsh

EXHIBIT 4

List of Abutters

BATH IRON WORKS CORPORATION
MS1145
700 WASHINGTON ST
BATH ME , 04530
.

BATH IRON WORKS CORPORATION
MS1145
700 WASHINGTON ST
BATH ME , 04530
.

BATH ROAD ASSOCIATES LLC
309 N WATER ST STE 500
MILWAUKEE WI , 53202
.

BRUNSWICK APARTMENTS LLC
310 SEVEN FIELDS BLVD STE 350
SEVEN FIELDS PA , 16046
.

BRUNSWICK ASSOCIATES LLC
C/O SLATE PROPERTY TAX SOLUTIONS
546 SILICON DR #100
SOUTHLAKE TX , 76092
.

BRUNSWICK MAINE MEDICAL REAL ESTATE LLC
310 BATH RD
BRUNSWICK ME , 04011
.

BRUNSWICK, TOWN OF
85 UNION ST
BRUNSWICK ME , 04011
.

CARPENTER, DAVID R
50 VARNEY LN
BRUNSWICK ME , 04011
.

DARLING'S
96 PARKWAY SOUTH
BREWER ME , 04412
.

FOOTER, JOSEPH A
255 ADAMS RD
BRUNSWICK ME , 04011
.

J&B FITZPATRICK FAMILY PROPERTIES, LLC
450 BATH RD
BRUNSWICK ME , 04011
.

KERKSTRA, SUSAN B
4 CRANBERRY DR
BRUNSWICK ME , 04011
.

MAINEHEALTH
ATTN: ACCOUNTING
329 MAINE ST
BRUNSWICK ME , 04011
.

MID COAST HEALTH SERVICES
329 MAINE ST STE C120
BRUNSWICK ME , 04011
.

MID COAST HEALTH SERVICES
C/O SLATE PROPERTY TAX SOLUTIONS
546 SILICON DR #100
SOUTHLAKE TX , 76092
.

MID COAST HEALTH SERVICES INC
123 MEDICAL CENTER DR
SUITE 2200
BRUNSWICK ME , 04011
.

MID COAST HEALTH SERVICES INC
309 N WATER ST STE 500
MILWAUKEE WI , 53202
.

MID COAST HOSPITAL
ATTN: SHARON
329 MAINE ST
BRUNSWICK ME , 04011
.

MID COAST HOSPITAL
123 MEDICAL CENTER DR
BRUNSWICK ME , 04011
.

MID COAST HOSPITAL
123 MEDICAL CENTER DR
SUITE 2200
BRUNSWICK ME , 04011
.

NORTHBRIDGE SUNNYBROOK II LLC
C/O LAURY DELANO
340 BATH RD
BRUNSWICK ME , 04011
.

PICONE, LEO
PO BOX 602
BRUNSWICK ME , 04011
.

SOWLES REAL ESTATE LLC
187 ROUTE 1
FALMOUTH ME , 04105
.

SOWLES REAL ESTATE LLC
187 ROUTE 1
FALMOUTH ME , 04105
.

THOMPSON, WILLIAM H & MICHELLE B JT
42 VARNEY LN
BRUNSWICK ME , 04011
.

WARREN, JOHN F III
332 BATH RD
BRUNSWICK ME , 04011
.

EXHIBIT 5

Soil Map

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cumberland County and Part of Oxford County, Maine

October 9, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:2,200 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

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

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 1:24,000.

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: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 22, Aug 29, 2025

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

Date(s) aerial images were photographed: Jul 22, 2021—Oct 7, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Au	Au Gres loamy sand	2.1	9.3%
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	4.7	21.2%
HrC	Lyman-Tunbridge complex, 8 to 15 percent slopes, rocky	8.1	36.3%
Tm	Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes	0.1	0.3%
WmB	Windsor loamy sand, 0 to 8 percent slopes	5.3	23.7%
WmC	Windsor loamy sand, 8 to 15 percent slopes	2.0	9.0%
Totals for Area of Interest		**22.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cumberland County and Part of Oxford County, Maine

Au—Au Gres loamy sand

Map Unit Setting

National map unit symbol: blgr
Elevation: 10 to 1,800 feet
Mean annual precipitation: 29 to 50 inches
Mean annual air temperature: 41 to 46 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Au gres and similar soils: 85 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Au Gres

Setting

Landform: Outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits derived from granite and gneiss

Typical profile

H1 - 0 to 10 inches: loamy sand
H2 - 10 to 32 inches: loamy sand
H3 - 32 to 65 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Saugatuck

Percent of map unit: 6 percent
Landform: Outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Scantic

Percent of map unit: 2 percent
Landform: Coastal plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Walpole

Percent of map unit: 2 percent
Landform: Outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

HrB—Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky

Map Unit Setting

National map unit symbol: 2x1cx
Elevation: 0 to 520 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lyman and similar soils: 50 percent
Tunbridge and similar soils: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lyman

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 3 inches: loam
E - 3 to 5 inches: fine sandy loam
Bhs - 5 to 7 inches: loam
Bs1 - 7 to 11 inches: loam
Bs2 - 11 to 18 inches: channery loam
R - 18 to 79 inches: bedrock

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 11 to 24 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: F144BY702ME - Shallow and Moderately-deep Till
Hydric soil rating: No

Description of Tunbridge

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
Oa - 3 to 5 inches: highly decomposed plant material
E - 5 to 8 inches: fine sandy loam
Bhs - 8 to 11 inches: fine sandy loam
Bs - 11 to 26 inches: fine sandy loam
BC - 26 to 28 inches: fine sandy loam
R - 28 to 79 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 21 to 41 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F144BY702ME - Shallow and Moderately-deep Till
Hydric soil rating: No

HrC—Lyman-Tunbridge complex, 8 to 15 percent slopes, rocky

Map Unit Setting

National map unit symbol: 2x1cy
Elevation: 0 to 520 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Lyman and similar soils: 45 percent
Tunbridge and similar soils: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lyman

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loam
E - 3 to 5 inches: fine sandy loam
Bhs - 5 to 7 inches: loam
Bs1 - 7 to 11 inches: loam
Bs2 - 11 to 18 inches: channery loam
R - 18 to 79 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 11 to 24 inches to lithic bedrock
Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: F144BY702ME - Shallow and Moderately-deep Till
Hydric soil rating: No

Description of Tunbridge

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
Oa - 3 to 5 inches: highly decomposed plant material
E - 5 to 8 inches: fine sandy loam
Bhs - 8 to 11 inches: fine sandy loam
Bs - 11 to 26 inches: fine sandy loam
BC - 26 to 28 inches: fine sandy loam
R - 28 to 79 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 21 to 41 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F144BY702ME - Shallow and Moderately-deep Till
Hydric soil rating: No

Tm—Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2x1d9
Elevation: 0 to 10 feet
Mean annual precipitation: 63 to 87 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Pemaquid and similar soils: 40 percent
Todds point and similar soils: 30 percent
Damariscotta and similar soils: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pemaquid

Setting

Landform: Tidal marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Herbaceous organic material over sandy marine deposits

Typical profile

Oi - 0 to 16 inches: peat
Oe - 16 to 35 inches: mucky peat
Cseg - 35 to 65 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water supply, 0 to 60 inches: Very high (about 14.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Todds Point

Setting

Landform: Tidal marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Herbaceous organic material

Typical profile

Oe1 - 0 to 31 inches: mucky peat
Oe2 - 31 to 42 inches: mucky peat
Oa - 42 to 65 inches: muck

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water supply, 0 to 60 inches: Very high (about 16.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Damariscotta

Setting

Landform: Tidal marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciomarine deposits

Typical profile

Ase1 - 0 to 10 inches: mucky loamy fine sand
Ase2 - 10 to 21 inches: mucky loamy fine sand
Cseg - 21 to 65 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 20.0
Available water supply, 0 to 60 inches: High (about 11.6 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Phippsburg
Percent of map unit: 8 percent
Landform: Tidal marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Todds point, moderately deep
Percent of map unit: 5 percent
Landform: Tidal marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Fort knox
Percent of map unit: 1 percent
Landform: Tidal marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Gouldsboro
Percent of map unit: 1 percent
Landform: Tidal marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

WmB—Windsor loamy sand, 0 to 8 percent slopes

Map Unit Setting
National map unit symbol: 2w2x2
Elevation: 0 to 1,410 feet
Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Windsor and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor

Setting

Landform: Dunes, outwash plains, deltas, outwash terraces
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand
C - 25 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

WmC—Windsor loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svkq
Elevation: 0 to 1,260 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days
Farmland classification: Farmland of local importance

Map Unit Composition

Windsor and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor

Setting

Landform: — error in exists on —
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
Ap - 1 to 11 inches: loamy sand
Bw - 11 to 31 inches: loamy sand
C - 31 to 65 inches: sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Physical Properties

This folder contains a collection of tabular reports that present soil physical properties. The reports (tables) include all selected map units and components for each map unit. Soil physical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is

given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause

damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://soils.usda.gov)

Physical Soil Properties–Cumberland County and Part of Oxford County, Maine														
Map symbol and soil name	**Depth**	**Sand**	**Silt**	**Clay**	**Moist bulk density**	**Saturated hydraulic conductivity**	**Available water capacity**	**Linear extensibility**	**Organic matter**	**Erosion factors**			**Wind erodibility group**	**Wind erodibility index**
										Kw	**Kf**	**T**		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Au—Au Gres loamy sand														
Au gres	0-10	70-81- 90	0-16- 30	1- 3- 5	1.20-1.50	14.11-42.34	0.05-0.09	0.0-2.9	3.0-7.0	.15	.15	5	2	134
	10-32	70-80- 90	0-17- 30	1- 3- 5	1.20-1.50	42.34-141.14	0.06-0.08	0.0-2.9	0.5-3.0	.15	.15			
	32-65	85-91-100	0- 6- 10	1- 3- 5	1.45-1.65	42.34-141.14	0.04-0.06	0.0-2.9	0.1-0.5	.02	.02			
HrB—Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky														
Lyman	0-1	—	—	—	0.17-0.33	10.00-99.00	0.15-0.39	—	35.0-95.0			1	5	56
	1-3	40-52- 80	10-41- 50	1- 7- 10	0.70-1.31	1.00-99.00	0.19-0.23	0.1-1.0	4.0-20.0	.32	.32			
	3-5	40-59- 80	10-37- 50	1- 4- 10	1.48-1.54	1.00-99.00	0.12-0.16	0.5-1.4	1.4-5.7	.37	.37			
	5-7	40-52- 80	10-41- 50	1- 7- 10	0.57-1.44	1.00-99.00	0.16-0.21	0.1-1.0	3.1-25.0	.32	.32			
	7-11	40-52- 80	10-41- 50	1- 7- 10	0.58-1.45	1.00-99.00	0.17-0.21	0.1-1.0	2.2-18.0	.32	.32			
	11-18	40-52- 80	10-41- 50	1- 7- 10	0.89-1.45	1.00-99.00	0.14-0.18	0.5-1.2	2.2-7.0	.24	.32			
	18-79	—	—	—	—	0.01-100.00	—	—	—					
Tunbridge	0-3	—	—	—	0.17-0.33	10.00-99.00	0.15-0.39	—	35.0-95.0			2	3	86
	3-5	—	—	—	0.17-0.33	10.00-99.00	0.35-0.50	—	35.0-95.0					
	5-8	40-59- 80	10-37- 50	1- 4- 10	1.48-1.54	1.00-100.00	0.12-0.16	0.4-1.3	1.4-5.7	.37	.37			
	8-11	40-59- 80	10-34- 50	1- 7- 10	0.57-1.44	1.00-100.00	0.14-0.21	0.0-0.9	3.1-25.0	.32	.32			
	11-26	40-59- 80	10-37- 50	1- 4- 10	0.58-1.45	1.00-100.00	0.13-0.21	0.1-0.9	2.2-18.0	.37	.37			
	26-28	40-59- 80	10-37- 50	1- 4- 10	1.31-1.58	1.00-100.00	0.10-0.14	0.4-1.0	1.0-4.2	.43	.43			
	28-79	—	—	—	—	0.01-100.00	—	—	—					

Physical Soil Properties–Cumberland County and Part of Oxford County, Maine														
Map symbol and soil name	**Depth**	**Sand**	**Silt**	**Clay**	**Moist bulk density**	**Saturated hydraulic conductivity**	**Available water capacity**	**Linear extensibility**	**Organic matter**	**Erosion factors**			**Wind erodibility group**	**Wind erodibility index**
										Kw	**Kf**	**T**		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
HrC—Lyman-Tunbridge complex, 8 to 15 percent slopes, rocky														
Lyman	0-1	—	—	—	0.17-0.33	10.00-99.00	0.15-0.39	—	35.0-95.0			1	5	56
	1-3	40-52- 80	10-41- 50	1- 7- 10	0.70-1.31	1.00-99.00	0.19-0.23	0.1-1.0	4.0-20.0	.32	.32			
	3-5	40-59- 80	10-37- 50	1- 4- 10	1.48-1.54	1.00-99.00	0.12-0.16	0.5-1.4	1.4-5.7	.37	.37			
	5-7	40-52- 80	10-41- 50	1- 7- 10	0.57-1.44	1.00-99.00	0.16-0.21	0.1-1.0	3.1-25.0	.32	.32			
	7-11	40-52- 80	10-41- 50	1- 7- 10	0.58-1.45	1.00-99.00	0.17-0.21	0.1-1.0	2.2-18.0	.32	.32			
	11-18	40-52- 80	10-41- 50	1- 7- 10	0.89-1.45	1.00-99.00	0.14-0.18	0.5-1.2	2.2-7.0	.24	.32			
	18-79	—	—	—	—	0.01-100.00	—	—	—					
Tunbridge	0-3	—	—	—	0.17-0.33	10.00-99.00	0.15-0.39	—	35.0-95.0			2	3	86
	3-5	—	—	—	0.17-0.33	10.00-99.00	0.35-0.50	—	35.0-95.0					
	5-8	40-59- 80	10-37- 50	1- 4- 10	1.48-1.54	1.00-100.00	0.12-0.16	0.4-1.3	1.4-5.7	.37	.37			
	8-11	40-59- 80	10-34- 50	1- 7- 10	0.57-1.44	1.00-100.00	0.14-0.21	0.0-0.9	3.1-25.0	.32	.32			
	11-26	40-59- 80	10-37- 50	1- 4- 10	0.58-1.45	1.00-100.00	0.13-0.21	0.1-0.9	2.2-18.0	.37	.37			
	26-28	40-59- 80	10-37- 50	1- 4- 10	1.31-1.58	1.00-100.00	0.10-0.14	0.4-1.0	1.0-4.2	.43	.43			
	28-79	—	—	—	—	0.01-100.00	—	—	—					

Physical Soil Properties–Cumberland County and Part of Oxford County, Maine														
Map symbol and soil name	**Depth**	**Sand**	**Silt**	**Clay**	**Moist bulk density**	**Saturated hydraulic conductivity**	**Available water capacity**	**Linear extensibility**	**Organic matter**	**Erosion factors**			**Wind erodibility group**	**Wind erodibility index**
										Kw	**Kf**	**T**		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Tm—Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes														
Pemaquid	0-16	0- 0- 0	0- 0- 0	0- 0- 0	0.11-0.32	10.00-100.00	0.18-0.36	—	55.0-90.0			1	8	0
	16-35	0- 0- 0	0- 0- 0	0- 0- 0	0.17-0.42	10.00-100.00	0.18-0.36	—	35.0-85.0					
	35-65	88-93-100	0- 5- 8	0- 2- 4	1.48-1.57	100.00-705.00	0.12-0.24	0.0-0.2	4.0-12.0	.02	.02			
Todds point	0-31	0- 0- 0	0- 0- 0	0- 0- 0	0.11-0.32	10.00-100.00	0.18-0.36	—	55.0-90.0			1	8	0
	31-42	0- 0- 0	0- 0- 0	0- 0- 0	0.11-0.32	10.00-100.00	0.18-0.36	—	55.0-90.0					
	42-65	0- 0- 0	0- 0- 0	0- 0- 0	0.17-0.42	10.00-100.00	0.18-0.36	—	35.0-85.0					
Damariscotta	0-10	70-79-100	0-17- 30	0- 4- 15	0.71-1.47	10.00-705.00	0.16-0.28	0.0-1.4	5.0-20.0	.05	.05	5	8	0
	10-21	70-79-100	0-17- 30	0- 4- 15	0.71-1.47	10.00-705.00	0.16-0.28	0.0-1.4	5.0-20.0	.05	.05			
	21-65	88-93-100	0- 5- 8	0- 2- 4	1.48-1.57	100.00-705.00	0.12-0.24	0.0-0.2	4.0-12.0	.02	.02			
WmB—Windsor loamy sand, 0 to 8 percent slopes														
Windsor	0-1	—	—	—	0.20-0.60	10.00-705.00	0.17-0.38	—	75.0-99.5			5	2	134
	1-3	75-85- 92	5-14- 23	0- 1- 5	1.19-1.49	10.00-705.00	0.05-0.12	0.0-0.4	0.6-6.0	.15	.15			
	3-25	70-85- 98	0-14- 30	0- 1- 8	1.42-1.58	10.00-705.00	0.02-0.11	0.0-0.6	0.1-2.0	.15	.15			
	25-65	70-94-100	0- 6- 30	0- 0- 8	1.48-1.84	10.00-705.00	0.02-0.11	0.0-0.7	0.0-0.5	.02	.02			

Physical Soil Properties–Cumberland County and Part of Oxford County, Maine														
Map symbol and soil name	**Depth**	**Sand**	**Silt**	**Clay**	**Moist bulk density**	**Saturated hydraulic conductivity**	**Available water capacity**	**Linear extensibility**	**Organic matter**	**Erosion factors**			**Wind erodibility group**	**Wind erodibility index**
										Kw	**Kf**	**T**		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
WmC—Windsor loamy sand, 8 to 15 percent slopes														
Windsor	0-1	—	—	—	0.20-0.60	10.00-705.00	0.15-0.38	—	75.0-99.5			5	2	134
	1-11	75-85- 92	5-14- 23	0- 1- 5	1.19-1.49	10.00-705.00	0.05-0.14	0.0-0.4	0.6-6.0	.15	.15			
	11-31	70-85- 98	0-14- 30	0- 1- 8	1.42-1.58	10.00-705.00	0.02-0.10	0.0-0.6	0.1-2.0	.15	.15			
	31-65	70-94-100	0- 6- 30	0- 0- 8	1.48-1.84	10.00-705.00	0.02-0.06	0.0-0.7	0.0-0.5	.02	.02			

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EXHIBIT 6

Financial Capacity Letter

November 19, 2025

Julie Erdman
Director of Planning and Development
Town of Brunswick
85 Union Street
Brunswick, ME 04011

Re: Coastal Cancer Project

Dear Julie,

The construction cost estimate for the Coastal Cancer Project at 81 Medical Center Drive is $10,800,000. MaineHealth has the financial capacity to complete this project. The source of funding for the building is capital funds allocated within MaineHealth's approved budget. Upon completion, MaineHealth will have adequate resources to operate and maintain the facility.

Regards,

_____

Rich Bayman
Chief Financial Officer
MaineHealth

MaineHealth - Coastal Cancer Center - 81 Medical Center Drive Construction Cost Breakout			
Item	**Category**		**Total Cost**
01-50	Allowances	$	30,000.00
02-20	Selective Demolition	$	221,118.00
03-30	Concrete	$	694,362.00
04-20	Masonry	$	63,667.00
05-12	Structural Steel	$	57,891.00
05-50	Miscellaneous Metals	$	18,300.00
06-10	Rough Carpentry	$	16,680.00
06-25	Finish Carpentry	$	195,500.00
07-10	Waterproofing and Joint Sealants	$	48,706.00
07-42	Metal/Composite Panels & Siding	$	170,350.00
07-50	Membrane Roofing	$	159,290.00
07-81	Fireproofing	$	2,600.00
07-84	Firestopping	$	30,000.00
08-10	Doors, Frames & Hardware	$	203,965.00
05-56	Glass & Glazing	$	30,190.00
09-21	Drywall	$	580,360.00
09-51	Acoustical Ceilings	$	187,404.00
09-65	Flooring	$	404,805.00
09-90	Painting	$	99,752.00
10-01	Typical Specialties	$	23,548.00
10-95	Wall Protection/Clean Rooms	$	362,135.00
12-20	Window Treatments	$	16,400.00
13-49	Radiation Protection	$	192,345.00
21-01	Fire Protection	$	386,175.00
22-01	Plumbing	$	369,970.00
23-01	HVAC	$	1,915,825.00
26-01	Electrical	$	1,552,901.00
31-23	Sitework	$	226,928.00
	SUBTOTAL	$	8,261,167.00
	Tariff Allowance	$	123,917.00
	Contigency	$	998,113.00
	Subcontractor Bonds	$	120,913.00
	Building Permit	$	19,133.00
	General Conditions	$	698,400.00
	General Requirements	$	280,700.00
	General Liability Insurance	$	100,534.00
	Contractor Fee	$	197,123.00
	SUBTOTAL	$	2,538,833.00
	TOTAL CONSTRUCTION	**$**	**10,800,000.00**

EXHIBIT 7

Environmental Review (MNAP & MDIFW)

Pine Tree Engineering

From: St.Hilaire, Lisa <Lisa.St.Hilaire@maine.gov>
Sent: Monday, December 15, 2025 12:51 PM
To: Pine Tree Engineering; Stepanauskas, Abby
Cc: Puryear, Kristen
Subject: RE: MNAP & MDIFW Project Review - Maine Health

Hi Tara,

MNAP routinely receives requests from consultants to review development projects-frequently as part of a pre-application review prior to DEP permitting or because town ordinances require a response from us regarding rare, threatened, and endangered plants and rare or exemplary natural communities and ecosystems. Your request is consistent with the types of requests we receive from consultants because a municipal ordinance requires it.

It is part of our authorizing legislation that we can charge a fee for this work, and we have done so for decades. We have not yet raised our fees, though we may in the future as our expenses have increased in the past decade or so. FMI our site review, https://www.maine.gov/dacf/mnap/assistance/review.htm, fee structure, https://www.maine.gov/dacf/mnap/assistance/fee.htm, and authorizing legislation, http://mainelegislature.org/legis/statutes/12/title12sec544.html (in particular note §544, 3, D).

The Salt-hay Saltmarsh at Thomas Point Marsh occurs from Thomas Point, includes the marshy areas at the north end of Thomas Bay, and then extends across Thomas Point Road north along the stream. The property boundary for Brunswick Tax Map 45 Lot 32 includes the stream and the northerly portion of the Salth-hay Saltmarsh mapped at Thomas Point Marsh. The project area shown on the response we sent you is just the northern portion of Lot 32 as you indicated the work is associated with 81 Medical Center Drive versus the entire lot.

You also indicated that the plan is to construct an addition on the east side of the building. It's helpful for us when we know the scope of work and limit of disturbance around projects, and we often receive requests that include site plans and/or project/limit of disturbance boundaries. MNAP's response recommends that an undisturbed and vegetated buffer of at least 250-feet remains around the portion of the Salt-hay Saltmarsh along the stream on the east side of the property. Provided that your addition, and parking or access to it, does not extend into this area, there should be no concerns.

Thank you,

-Lisa

maine
MAINE NATURAL AREAS PROGRAM
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY

Lisa St. Hilaire, Information Manager
207-287-8044 (office)
she/her why pronouns matter

Maine Natural Areas Program
Department of Agriculture, Conservation and Forestry
177 State House Station | Augusta, ME 04333

From: Pine Tree Engineering <pte@pte-maine.com>
Sent: Friday, December 12, 2025 3:44 PM

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

December 12, 2025

Tara Smith
Pine Tree Engineering
53 Front Street
Bath, ME 04530

Via email: pte@pte-maine.com

Re: Rare and exemplary botanical features in proximity to: Mid Coast Cancer Center Renovation, 81 Medical Center Drive, Brunswick, Maine.

Dear Tara Smith:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received December 11, 2025 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Brunswick, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, the project area abuts and may include portions of Thomas Point Marsh, a mapped Salt-hay Saltmarsh associated with Thomas Bay. Salt-hay Saltmarsh is a rare wetland type in Maine and is considered a Wetland of Special Significance by the Maine DEP. MNAP recommends that no development or clearing occurs within 250-feet of the edge of the Salt-hay Saltmarsh and that a vegetated, intact buffer of at least 75-feet remains along the unnamed stream and adjacent forested wetland directly west of the existing facility and parking lot. MNAP further recommends that the project adheres to local and state Shoreland Zoning, including the use of standard best management practices for erosion and sedimentation. Please see the attached maps and fact sheet for more information about this Salt Hay Saltmarsh.

Feature	State Status	State Rank	Global Rank	Occurrence Rank	Site
Salt-hay Saltmarsh	N/A	S3	G5	C Fair	Thomas Point Marsh

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
90 BLOSSOM LANE, DEERING BUILDING

PHONE: (207) 287-8044
WWW.MAINE.GOV/DACF/MNAP

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of $75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for $150.00 for two hours of our services.

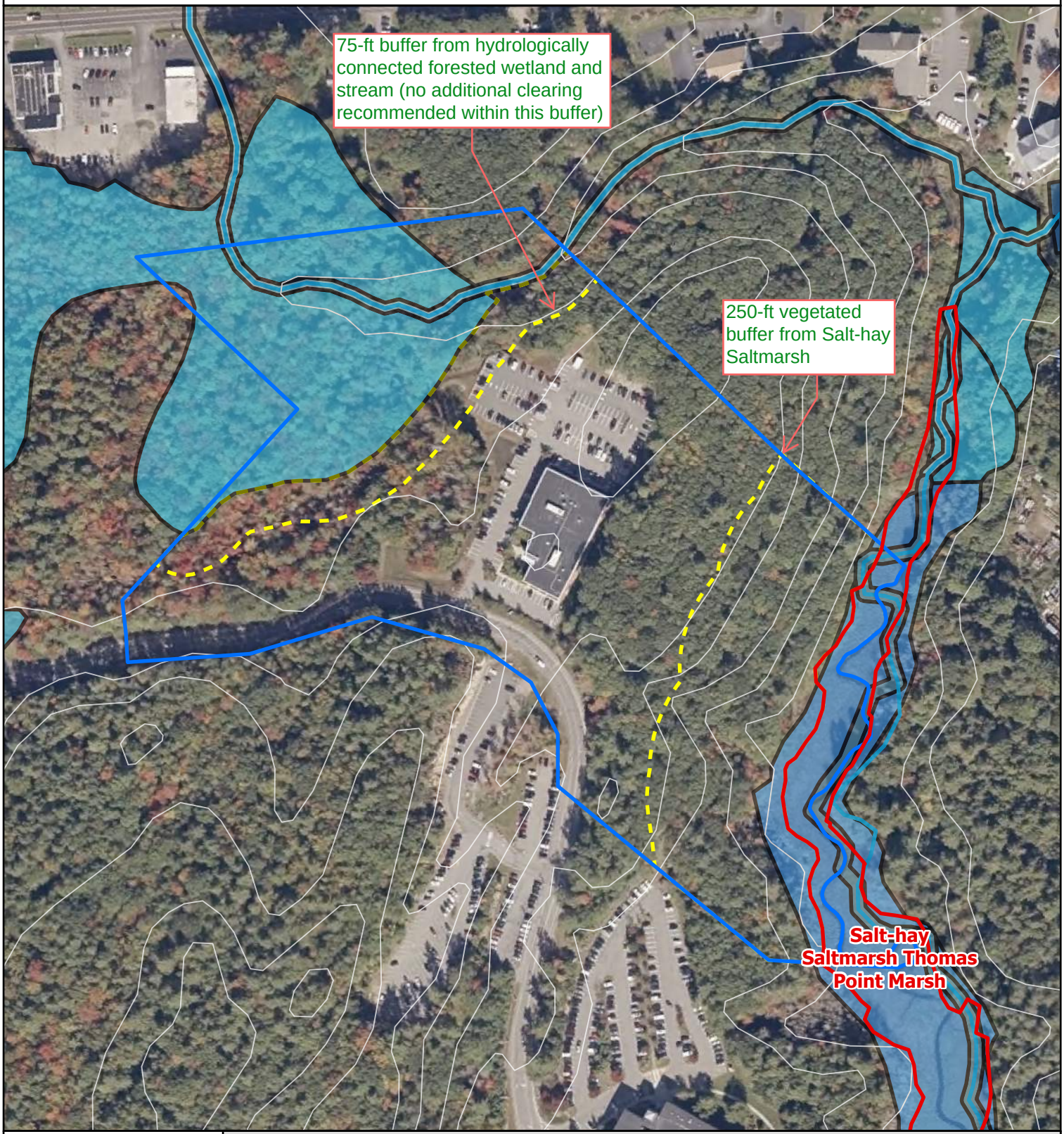
Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Abby Stepanauskas

Abby Stepanauskas | Ecologist | Maine Natural Areas Program
207-287-8048 | abby.stepanauskas@maine.gov

Mid Coast Cancer Center Renovation, 81 Medical Center Drive, Brunswick, Maine.



0 125 250 US Feet

Current Time: 12/12/2025 3:26 PM

Approximate Project Area

Recommended Buffer

Rare/Exemplary Natural Community/Ecosystem

National Wetlands Inventory (USFWS)

Wetland Type

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Forested/ Shrub Wetland

Freshwater Pond

Riverine

Salt-hay Saltmarsh

Spartina Saltmarsh

State Rank S3

Community Description

These tidal marshes consist of expanses of saltmeadow cordgrass, smooth cordgrass, and/or black-grass. Shrubs are virtually absent, and the herbaceous cover is usually >85%. Much of the marsh is high marsh, where saltmeadow cordgrass forms meadows, and where black-grass may be dominant at slightly higher elevations. In the low marsh, along creeks or at elevations just below mean high water, smooth cordgrass is abundant. Salt pannes with abundant seashore saltgrass may dot the high marsh; goosetongue may also be locally common. Sea lavender and seaside goldenrod are often found at the upper tidal fringe. The dominant species typically form bands corresponding to tidal inundation zones.

Soil and Site Characteristics

Spartina saltmarshes are typically associated with beach-dune systems (back barrier marshes) or the outer reaches of estuaries (finger marshes). They are extensive along both sides of the tidal river or stream. The extensive high marsh zone is only flooded by above average tides. Salt marsh peat is typically several meters thick. Most are large (>10 acres), but they occasionally occur as smaller pockets along estuaries and coves.

Saltmarsh False-foxglove

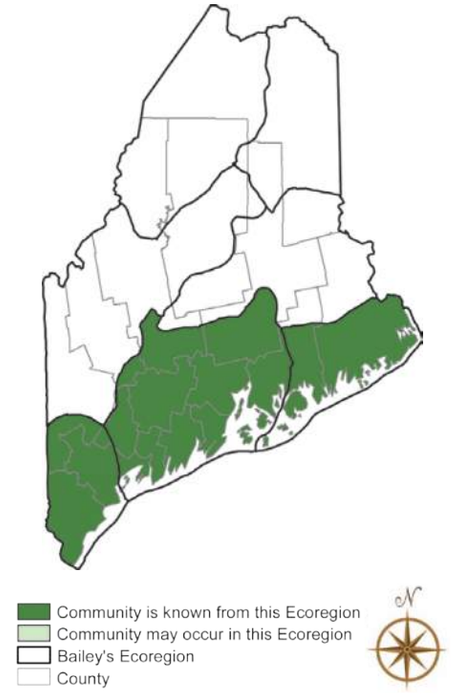
Diagnostics

These types are coastal back dune marshes, or near the outer reaches of estuaries, with saltmeadow cordgrass, smooth cordgrass, and black-grass totaling >35% cover, often in bands. The high marsh is well developed.

Similar Types

Mixed Graminoid-Forb Saltmarshes may also have cordgrasses and/or black-grass abundant, but will also have a mix of other co-dominant species, which tend to occur in patches rather than tidal zones; they are typically smaller, often less than 5 acres, and tend to occur farther upstream in estuaries or in smaller, more protected pockets. Brackish Tidal Marshes, which also occur farther upstream in estuaries, lack saltmarsh cordgrasses.

Location Map



Spartina Saltmarsh – Kinney Shores

Conservation, Wildlife, and Management Considerations

Few of the larger saltmarshes in Maine are pristine, with some having been filled and nearly all ditched at one time or another. With wetland protection in recent decades many of those that remain are reverting to a more natural hydrologic regime. Many of the remaining high quality Spartina Saltmarshes are on public land or private conservation land. Maintenance of appropriate wetland buffers can help reduce degradation that could result from adjacent land uses.

Saltmarshes are important nesting habitat for Nelson's sharp-tailed sparrow, seaside sparrow, and the rare saltmarsh sharp-tailed sparrow. These wetlands also provide foraging habitat for a large number of wadingbirds and shorebirds, including rare species such as the laughing gull, black-crowned night-heron, and least tern. The big bluet, a rare damselfly, inhabits saltmarsh ponds with emergent vegetation in southern Maine.

Distribution

Coastal Maine, mostly southwest of Merrymeeting Bay (Eastern Broadleaf Forest Province); sporadic and less well developed downeast. Extends southward along the Atlantic coast.

Landscape Pattern: Large Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Herb

Alkali bulrush
Black-grass*
Common arrow-grass*
Goosetongue*
Purple-stemmed aster
Saltmeadow cordgrass*
Sea milkwort*
Seashore saltgrass*
Seaside goldenrod*
Smooth cordgrass*
Wire rush*

Associated Rare Plants

Dwarf glasswort
Lilaeopsis
Saltmarsh bulrush
Saltmarsh false-foxglove
Slender blue flag

Associated Rare Animals

Big bluet
Black-crowned night-heron
Laughing gull
Least tern
Saltmarsh sharp-tailed sparrow
Short-eared owl

Examples on Conservation Lands You Can Visit

- Bass Harbor Marsh, Acadia National Park – Hancock Co.
- Morse Mountain Preserve – Sagadahoc Co.
- Rachel Carson National Wildlife Refuge – York Co.
- Reid State Park– Sagadahoc Co.
- Scarborough Marsh Wildlife Management Area – Cumberland Co.

Rare and Exemplary Botanical Features within 4 miles of

Project: Mid Coast Cancer Center Renovation, 81 Medical Center Drive, Brunswick, Maine.

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Alder Thicket						
		S5	G4G5	1995-09-08	1	
American Sea-blite						
	T	S2	G5	1899	4	Tidal wetland (non-forested, wetland)
Beaked Spikerush						
	T	S1	G5	1921-07-12	3	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
	T	S1	G5	1921-07-12	2	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
Birch - Oak Rocky Woodland						
		S3	G3G5	2015-09-25	21	
Climbing Hempweed						
	PE	SH	G5	1916-08	1	Dry barrens (partly forested, upland),Open wetland, not coastal nor rivershore (non-forested, wetland)
Clothed Sedge						
	E	S1	G4	1898-06-15	1	Dry barrens (partly forested, upland)
	E	S1	G4	2020-06-22	4	Dry barrens (partly forested, upland)

Dry Land Sedge					
SC	S2	G5	2002-09-26	10	Old field/roadside (non-forested, wetland or upland)
SC	S2	G5	2025-08-19	12	Old field/roadside (non-forested, wetland or upland)
SC	S2	G5	2020-06-22	16	Old field/roadside (non-forested, wetland or upland)
Dwarf Bulrush					
T	S1	G5	2010-08-26	12	Open wetland, not coastal nor rivershore (non-forested, wetland)
T	S1	G5	2017-09-16	5	Open wetland, not coastal nor rivershore (non-forested, wetland)
Eaton's Bur-marigold					
SC	S2	G3	2017-09-24	1	Tidal wetland (non-forested, wetland)
SC	S2	G3	2017-09-26	3	Tidal wetland (non-forested, wetland)
SC	S2	G3	2010-09-08	8	Tidal wetland (non-forested, wetland)
SC	S2	G3	2024-09-12	12	Tidal wetland (non-forested, wetland)
SC	S2	G3	2017-09-12	23	Tidal wetland (non-forested, wetland)
SC	S2	G3	2015-08-14	5	Tidal wetland (non-forested, wetland)
Estuary Bur-marigold					
SC	S3	G4	2017-08-29	1	Tidal wetland (non-forested, wetland)
SC	S3	G4	2017-09-26	5	

Estuary Bur-marigold					
					Tidal wetland (non-forested, wetland)
SC	S3	G4	2024-09-12	7	Tidal wetland (non-forested, wetland)
SC	S3	G4	2010-09-08	14	Tidal wetland (non-forested, wetland)
SC	S3	G4	2010-08-26	19	Tidal wetland (non-forested, wetland)
SC	S3	G4	2015-08-14	40	Tidal wetland (non-forested, wetland)
Freshwater Tidal Marsh					
	S2	G4?	2013-09-11	14	
	S2	G4?	2013-09-25	4	
	S2	G4?	2016-06-14	5	
	S2	G4?	2013-07-02	9	
	S2	G4?	2024-09-12	3	
	S2	G4?	2013-09-25	7	
Great Blue Lobelia					
PE	SX	G5	1900	2	Forested wetland,Non-tidal rivershore (non-forested, seasonally wet)
Lilaeopsis					
SC	S2	G5	2011-09-03	5	

Lilaeopsis					
					Tidal wetland (non-forested, wetland)
Long's Bitter-cress					
	T	S2	G3	2018-08-30	1 Tidal wetland (non-forested, wetland)
	T	S2	G3	2015-09-20	3 Tidal wetland (non-forested, wetland)
	T	S2	G3	2017-09-26	5 Tidal wetland (non-forested, wetland)
	T	S2	G3	2010-08-28	7 Tidal wetland (non-forested, wetland)
	T	S2	G3	2013-09-11	18 Tidal wetland (non-forested, wetland)
Marsh Bulrush					
	E	S1	G3	2024-09-12	6 Tidal wetland (non-forested, wetland)
Mountain Honeysuckle					
	E	S2	G5	2016-06-02	8 Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	E	S2	G5	1933-09	4 Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	E	S2	G5	1912-06	3 Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	E	S2	G5	1911-06	2 Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	E	S2	G5	2018-09-20	18 Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	E	S2	G5	2020-07-07	20

Mountain Honeysuckle					
					Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
Mudwort					
	SC	S3	G5	2013-09-11	39 Tidal wetland (non-forested, wetland)
	SC	S3	G5	2024-09-12	4 Tidal wetland (non-forested, wetland)
	SC	S3	G5	2010-09-28	30 Tidal wetland (non-forested, wetland)
	SC	S3	G5	2013-09-25	8 Tidal wetland (non-forested, wetland)
Narrow-leaf Arrowhead					
	SC	S2	G4	2002-07-19	4
Parker's Pipewort					
	SC	S3	G3	2017-09-26	2 Tidal wetland (non-forested, wetland)
	SC	S3	G3	2024-09-12	6 Tidal wetland (non-forested, wetland)
	SC	S3	G3	2010-09-28	24 Tidal wetland (non-forested, wetland)
	SC	S3	G3	1990-09-25	28 Tidal wetland (non-forested, wetland)
	SC	S3	G3	2017-08-29	1 Tidal wetland (non-forested, wetland)
	SC	S3	G3	2015-08-14	40 Tidal wetland (non-forested, wetland)

Pitch Pine - Heath Barren					
	S1	G3G5	2002-09-26	1	
Pitch Pine Bog					
	S2	G3G5	2002-09-26	9	
Pygmyweed					
SC	S2S3	G5	2013-09-25	1	Open water (non-forested, wetland)
SC	S2S3	G5	2024-09-12	12	Open water (non-forested, wetland)
SC	S2S3	G5	2017-09-12	15	Open water (non-forested, wetland)
SC	S2S3	G5	2013-09-25	7	Open water (non-forested, wetland)
SC	S2S3	G5	1911-09-20	5	Open water (non-forested, wetland)
SC	S2S3	G5	2013-09-11	31	Open water (non-forested, wetland)
Salt-hay Saltmarsh					
	S3	G5	2011-08-04	41	
	S3	G5	2018-09-20	45	
	S3	G5	2009	25	
Saltmarsh Bulrush					
T	S2	G5	2011-08-04	2	

Saltmarsh Bulrush					
Saltmarsh False-foxglove					
SC	S3	G5	2018-09-20	39	Tidal wetland (non-forested, wetland)
Sandplain Grassland					
	S1	GNR	2020-06-22	4	
	S1	GNR	2014-08-25	3	
Sassafras					
SC	S2	G5	1906	10	Hardwood to mixed forest (forest, upland),Old field/roadside (non-forested, wetland or upland)
Showy Lady's-slipper					
SC	S3	G4G5	1907-07-09	38	Forested wetland,Open wetland, not coastal nor rivershore (non-forested, wetland)
Silver Maple Floodplain Forest					
	S3	GNR	2015-05-08	1	
Small Reed Grass					
SC	S3	G5	2018-09-13	13	Old field/roadside (non-forested, wetland or upland)
Smooth Sandwort					
SC	S3	G4	1890	10	

Smooth Sandwort					
					Rocky summits and outcrops (non-forested, upland)
Spongy-leaved Arrowhead					
	SC	S3	G5T4	2013-09-25	1 Tidal wetland (non-forested, wetland)
	SC	S3	G5T4	2024-09-12	7 Tidal wetland (non-forested, wetland)
	SC	S3	G5T4	2017-08-29	22 Tidal wetland (non-forested, wetland)
	SC	S3	G5T4	2008-08-29	28 Tidal wetland (non-forested, wetland)
	SC	S3	G5T4	2010-08-28	31 Tidal wetland (non-forested, wetland)
	SC	S3	G5T4	1992-07-30	33 Tidal wetland (non-forested, wetland)
	SC	S3	G5T4	2011-08-16	49 Tidal wetland (non-forested, wetland)
Spreading Sedge					
	E	S2	G5	1985-06-31	2 Hardwood to mixed forest (forest, upland)
Stiff Arrowhead					
	SC	S2	G5	1916	1 Tidal wetland (non-forested, wetland)
	SC	S2	G5	2007-09-07	2 Tidal wetland (non-forested, wetland)
	SC	S2	G5	2013-09-25	4 Tidal wetland (non-forested, wetland)
	SC	S2	G5	2024-08-23	8

Stiff Arrowhead					
					Tidal wetland (non-forested, wetland)
SC	S2	G5	2011-08-16	22	Tidal wetland (non-forested, wetland)
Tidal Spikerush					
SC	S2	G2	2000-08-27	1	Tidal wetland (non-forested, wetland)
SC	S2	G2	2000-10-10	2	Tidal wetland (non-forested, wetland)
Unicorn Root					
E	S1	G5	1884	1	Dry barrens (partly forested, upland)
Water Pimpernel					
SC	S3	G5	2024-09-12	6	Tidal wetland (non-forested, wetland)
SC	S3	G5	2017-09-12	8	Tidal wetland (non-forested, wetland)
SC	S3	G5	2010-08-16	16	Tidal wetland (non-forested, wetland)
Yellow Pond-lily					
SC	S2	G5T5	2024-09-12	6	Open water (non-forested, wetland)
SC	S2	G5T5	2017-09-11	2	Open water (non-forested, wetland)
SC	S2	G5T5	2013-09-11	11	Open water (non-forested, wetland)

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Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 **G1**	**Critically Imperiled** – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 **G2**	**Imperiled** – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 **G3**	**Vulnerable** – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 **G4**	**Apparently Secure** – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 **G5**	**Secure** – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX **GX**	**Presumed Extinct** – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH **GH**	**Possibly Extinct** – Known from only historical occurrences but still some hope of rediscovery.
S#S# **G#G#**	**Range Rank** – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU **GU**	**Unrankable** – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR **SNR**	**Unranked** – Global or subnational conservation status not yet assessed.
SNA **GNA**	**Not Applicable** – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems.
Qualifier	**Definition**
S#? **G#?**	**Inexact Numeric Rank** – Denotes inexact numeric rank.
Q	**Questionable taxonomy that may reduce conservation priority** – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The "Q" modifier is only used at a global level.
T#	**Infraspecific Taxon (trinomial)** – The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	**Endangered** – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	**Threatened** – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	**Special Concern** – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	**Potentially Extirpated** – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	**Excellent** – Excellent estimated viability/ecological integrity.
B	**Good** – Good estimated viability/ecological integrity.
C	**Fair** – Fair estimated viability/ecological integrity.
D	**Poor** – Poor estimated viability/ecological integrity.
E	**Extant** – Verified extant, but viability/ecological integrity not assessed.
H	**Historical** – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	**Extirpated** – Documented loss of population/destruction of habitat.
U	**Unrankable** – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	**Not Ranked** – An occurrence rank has not been assigned.

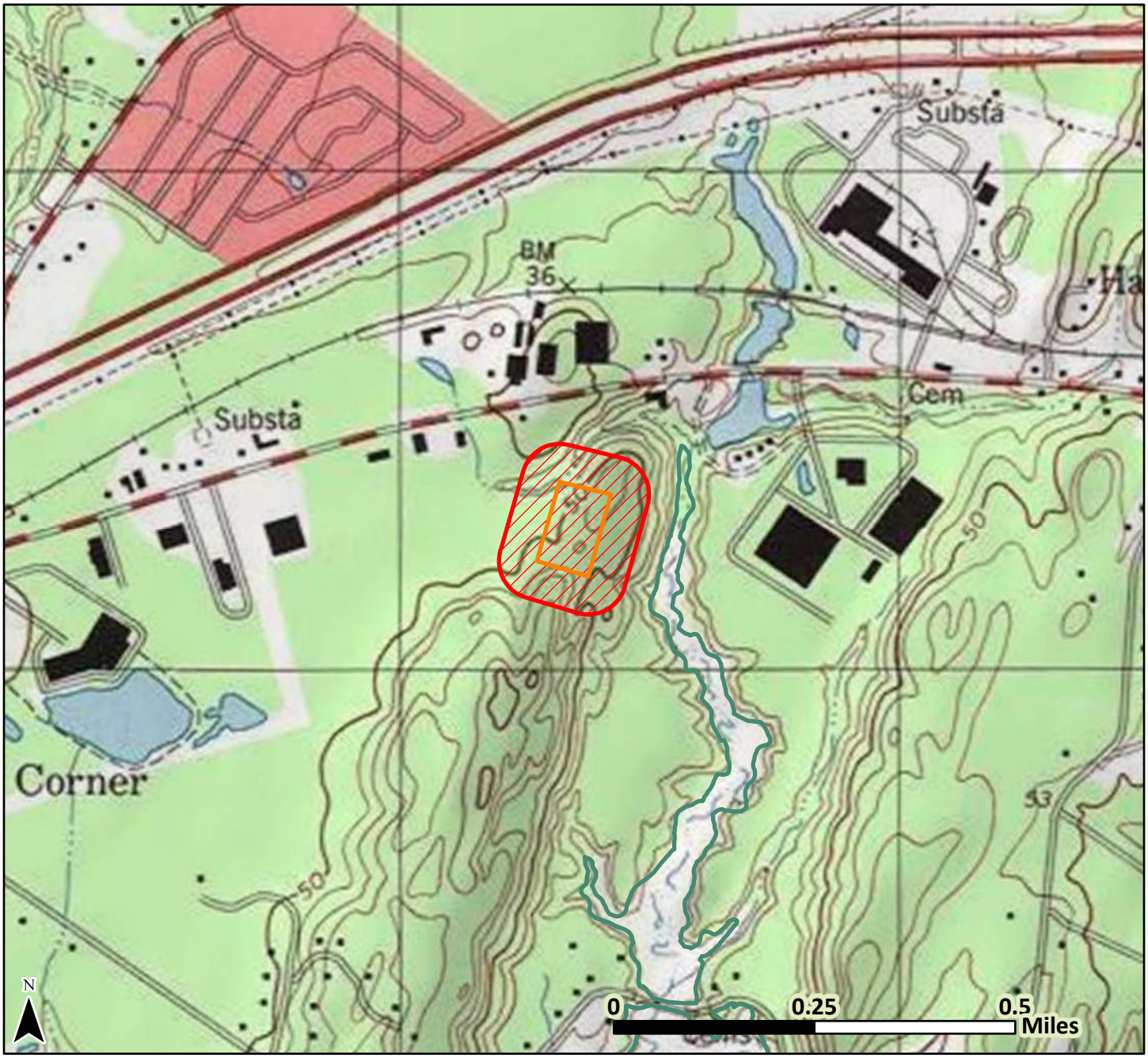
Visit the Maine Natural Areas Program website for more information
http://www.maine.gov/dacf/mnap

Maine Department of Inland Fisheries and Wildlife

Project Area Review of Fish and Wildlife Observations and Priority Habitats

81 Medical Center Drive, Renovation, Brunswick

Project ID 9736, Version ID 11311

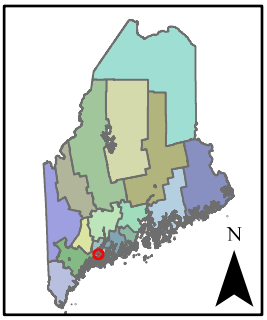


Legend only lists resources visible in the map; see response letter for all resources that were evaluated.

- County Boundary
- Township Boundary
- Project Footprint
- Search Area
- Tidal Waterfowl/Wading Bird

Date: 12/15/2025

UTM Zone 19N, NAD83



This map contains sensitive information - do not distribute it beyond the project applicant, consultant, or the permitting agency.

JANET T. MILLS
GOVERNOR

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

JUDITH CAMUSO
COMMISSIONER

December 18, 2025

Tara Smith
Pine Tree Engineering, Inc.
53 Front Street
Bath, ME 04530

RE: Information Request - 81 Medical Center Drive, Renovation, Brunswick Project ID 9736-11311

Dear Tara:

Per your request received on **December 11, 2025**, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information sources for known locations of Endangered, Threatened, and Special Concern (Rare) species; designated Essential and Significant Wildlife Habitats; inland fisheries and aquatic habitats; and other protected natural resource concerns within the vicinity of the ***81 Medical Center Drive, Renovation, Brunswick*** project, pursuant to MDIFW's authority. MDIFW understands the project proposes expansion of an existing medical office building, tree clearing, grading, and associated site work. Please note that as project details are lacking, our comments should be considered preliminary.

Our Department has not mapped any Essential Habitats that would be affected by this project.

ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES

Bat Species

Of the eight species of bats that occur in Maine, four species are afforded protection under the Maine Endangered Species Act (MESA, 12 M.R.S 12801 et. seq.): little brown bat (State Endangered), northern long-eared bat (State Endangered), eastern small-footed bat (State Threatened), and tri-colored bat (State Threatened). The four remaining bat species are designated as Species of Special Concern: big brown bat, red bat, hoary bat, and silver-haired bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during spring/fall migration, the summer breeding season, and/or for overwintering. However, our Department does not anticipate significant impacts to any of the bat species as a result of project activities.

SIGNIFICANT WILDLIFE HABITAT

Significant Vernal Pools

At this time MDIFW Significant Wildlife Habitat maps indicate no known presence of Significant Vernal Pools (SVPs) in the project search area. However, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. SVPs are not included on

MDIFW maps until project areas have been surveyed using approved methods and the survey results confirmed. Therefore, their absence from resource maps is not necessarily indicative of an absence on the ground. Our Department recommends that any potential Significant Vernal Pool depressions be avoided as well as the 250-feet surrounding the pool, which is the associated Critical Terrestrial Habitat.

If not already completed, we recommend that surveys for vernal pools be conducted within the project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, survey forms should be submitted to our Department for review well before the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

AQUATIC RESOURCES

Fish Habitat

We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions.

Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e., natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fisheries and aquatic habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance, we recommend additional consultation with the municipality, and other state resource and regulatory 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. For information on federally listed species, contact the U.S. Fish and Wildlife Service's Maine Field Office (207-469-7300, mainefieldoffice@fws.gov).

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,

Andrew J. Wood
Environmental Review Coordinator

EXHIBIT 8

Cook's Corner Design Standards Narrative

Midcoast Oncology 81 Medical Center Drive

Existing Building Entrance

Existing Façade Materials

Rendering of proposed addition

The existing medical office building at 81 Medical Center Drive, on the Midcoast campus was built in 2007. The exterior façade consists of a base of concrete masonry or CMU, slightly pink buff colored, a medium color red brick veneer, and slightly pink, buff colored pre-cast lintels at the windows and cornice band at the top of the wall. The aluminum store front windows are white.

Section 3.4 Façade Requirements, and within 3.4.j.

> *C. Secondary Facades - Secondary facades are any building facades that do not face a public space or street and do not include a main building entrance. Secondary facade design does not need to match primary facade design, but should be complementary to*
> *the primary facade. Building utilities not located on roofs shall be located along secondary facades and screened accordingly from public view. Private entrances, such as maintenance or secondary residential tenant entrances, shall be located along the secondary facade.*

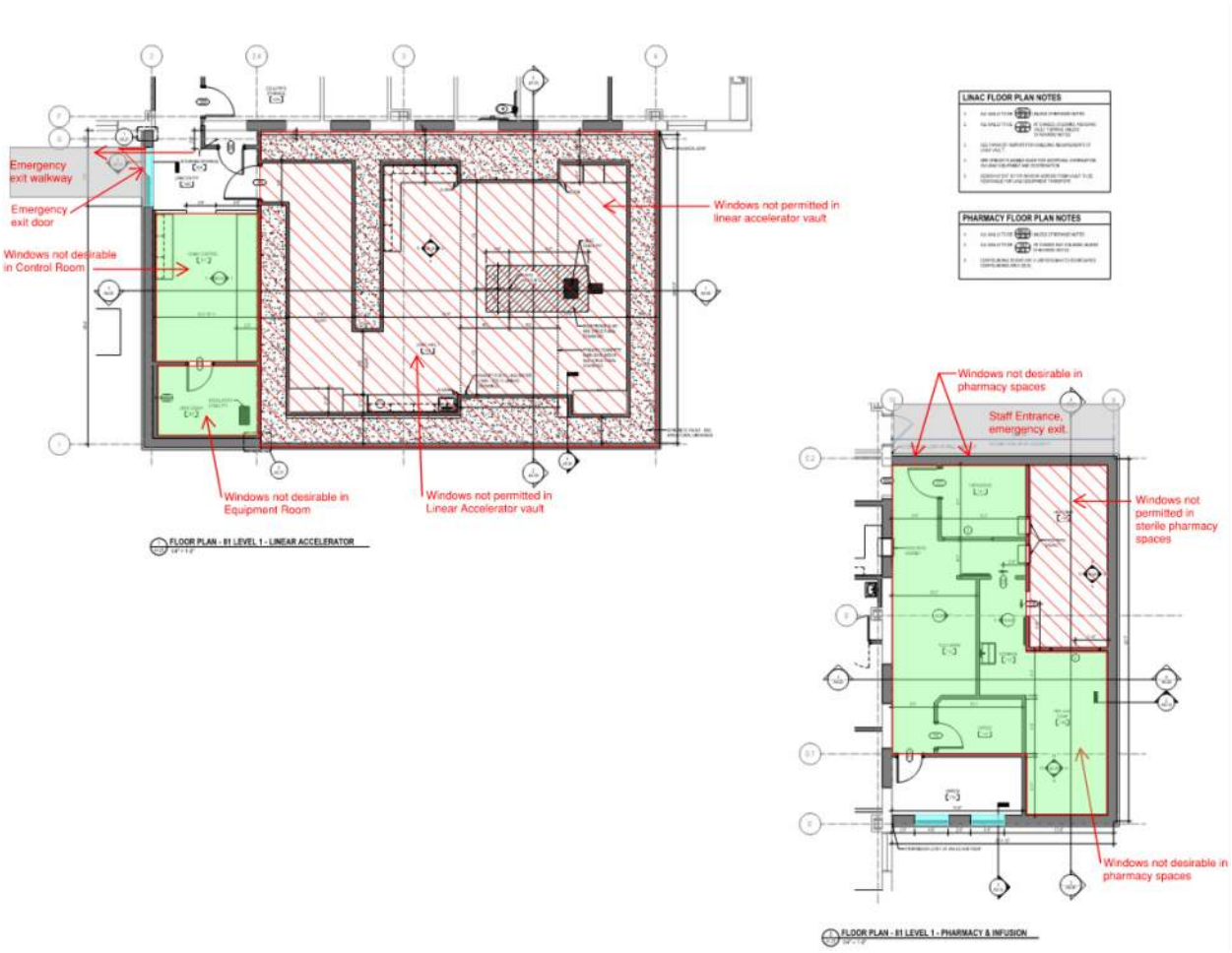
The two additions to 81 medical center drive are secondary facades according to the definition in Section 3.4 Façade Requirements item C.

The design of these additions cake into account the scale, materials and colors of the existing building, by complementing these colors and materials rather than attempting to copy directly as it is difficult to match brick and precast that have weathered for 18 years.

> *J. Windowless Circumstances - Buildings without windows, i.e. a computer server building or self-storage buildings, shall incorporate a change in scale in siding materials, instead of windows, to create a sense of rhythm and cadence to create human scale. These material*
> *scale changes shall be demonstrably compatible with the scale and cadence of adjacent building facade treatments.*

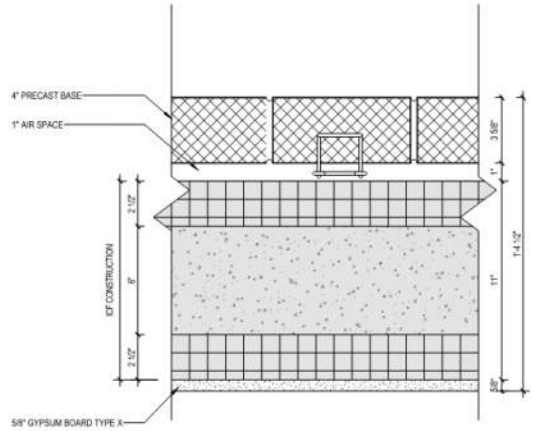
We have included floor plans of the additions showing the technical and scientific use of the internal spaces and noted that some of these spaces cannot have windows, or that windows are undesirable for various reasons. The use of these additions is very different from the use of the existing building.

We believe that the proposed design is sensitive to the aesthetic of the existing building, without directly copying it. While we do not provide a facade that are symmetrical, or have rhythm, the proposed design provide compatibility and balance while expressing the use of the spaces within.

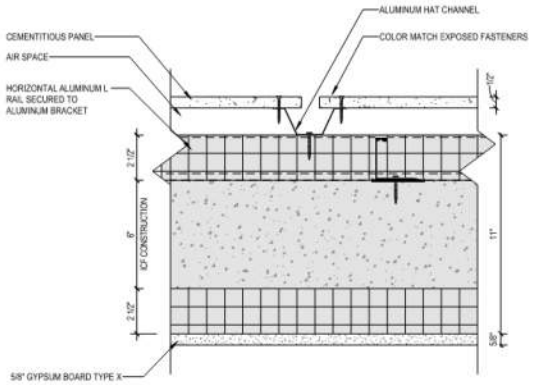


Building Addition Plans

Proposed colors for Equitone cementitious exterior wall panels. Final colors to be determined. See rendering provided.

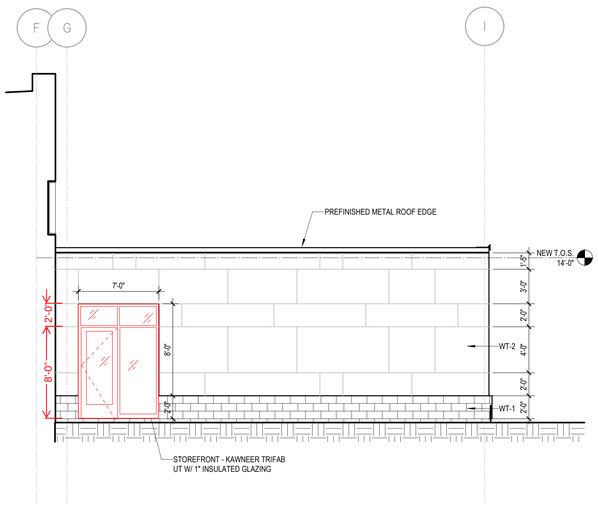


WT-1

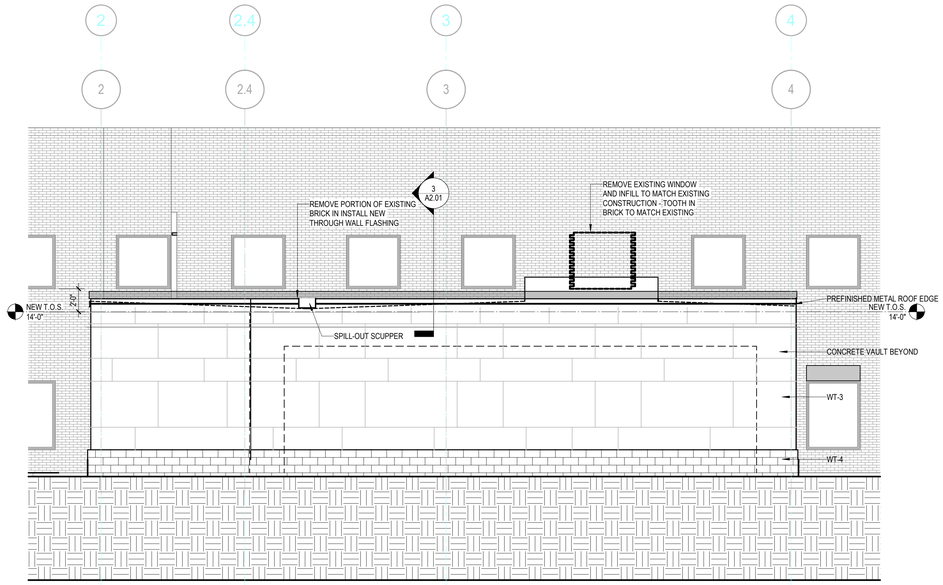


WT-2

5 / A5.10 **EXTERIOR WALL TYPES**
NOT TO SCALE



1 LINAC SOUTH
A4.01 3/16" = 1'-0"



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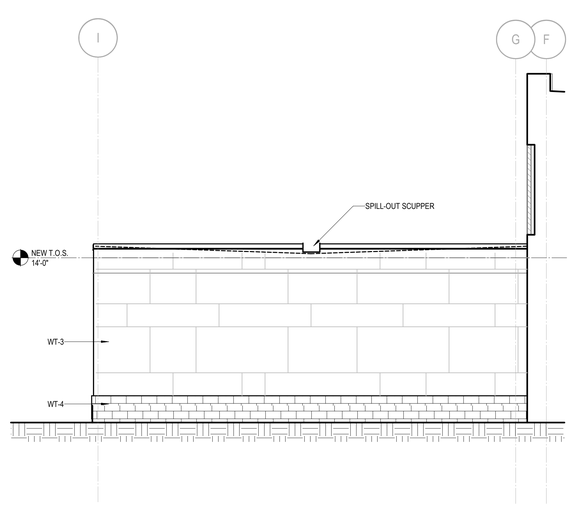

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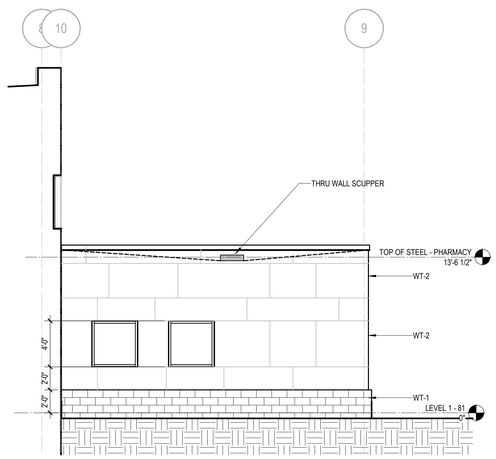

4 PHARM EAST
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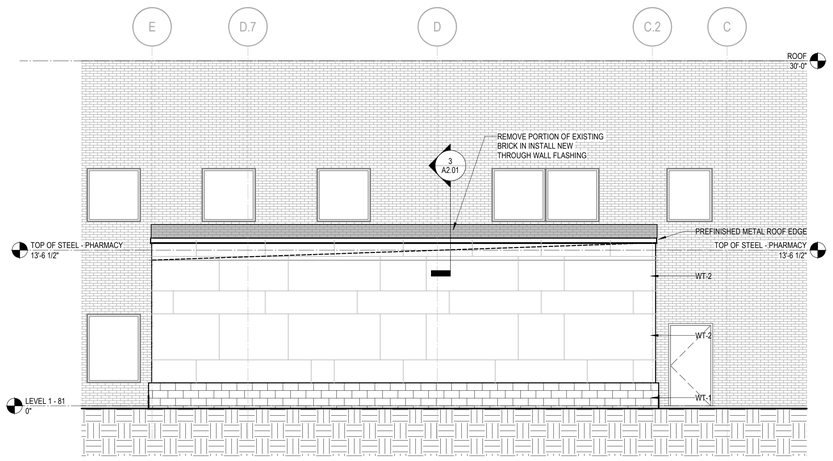

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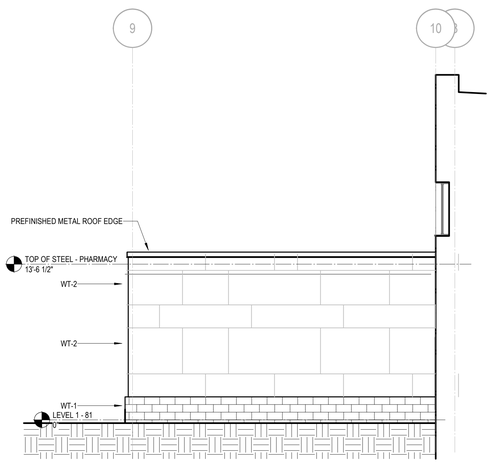


6 PHARM WEST
A4.01 3/16" = 1'-0"

ENVIRONMENTS FOR HEALTH ARCHITECTURE
e4h
75 York St, Suite 3, Portland ME 04101
888.781.8441 207.773.8841 e4harchitecture.com

RFS engineering

MaineHealth

PINE TREE ENGINEERING

MAINEHEALTH
MID COAST CANCER CENTER RENOVATION
81 Medical Center Drive
Brunswick, ME 04011

PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION
	9.23.25	BUILDING 81 DD
	10.28.25	BUILDING 81 CD

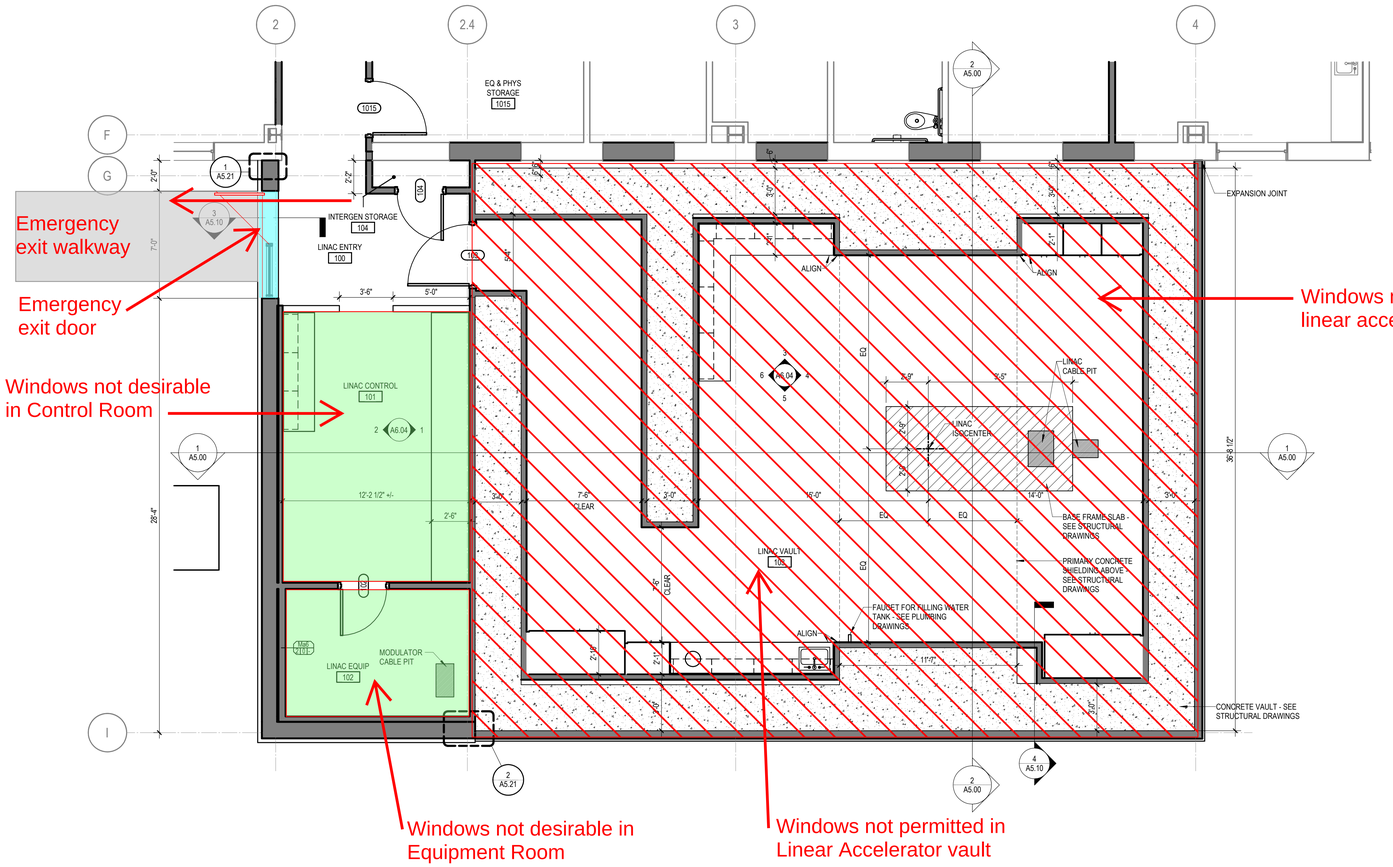
LICENSED ARCHITECT
JON M. BOYD, AIA
3028
STATE OF MAINE

DATE: 10.28.2025

SHEET TITLE AND NUMBER:

A4.01

ELEVATIONS-
EXTERIOR- BUILDING



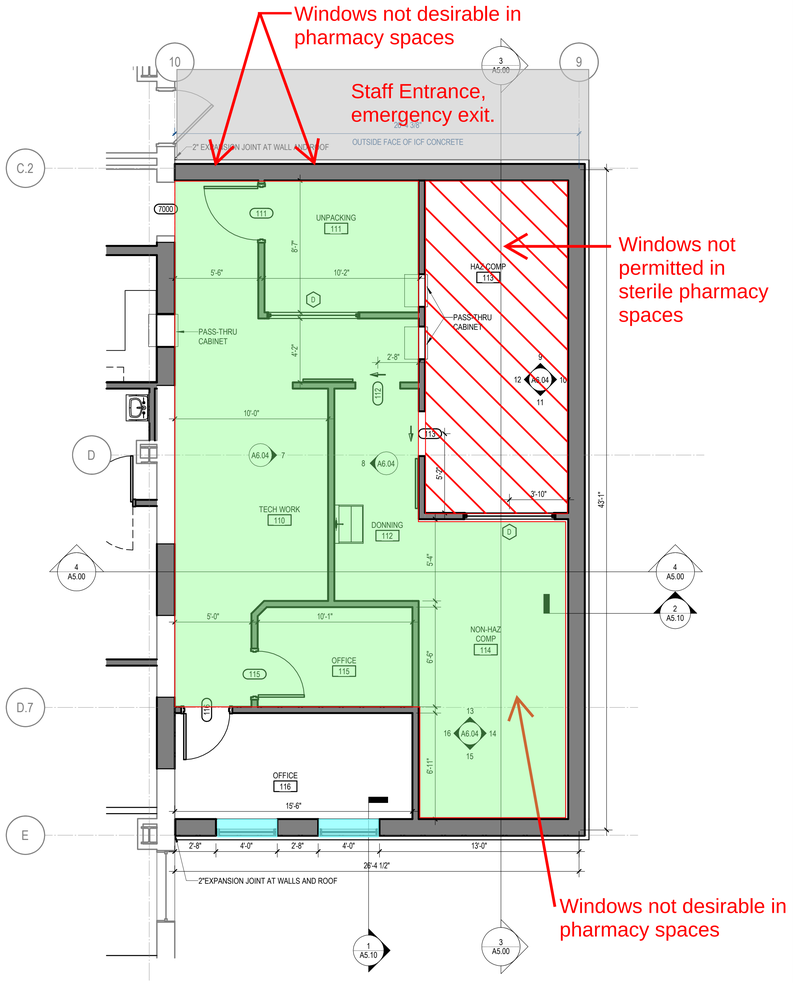
1 A1.25 **FLOOR PLAN - 81 LEVEL 1 - LINEAR ACCELERATOR**
1/4" = 1'-0"

LINAC FLOOR PLAN NOTES

1. ALL WALLS TO BE Ma3 1.0 A UNLESS OTHERWISE NOTED.
2. ALL WALLS TO BE Ma3 2.0 I- AT CHASES, COLUMNS, AND LINAC VAULT FURRING UNLESS OTHERWISE NOTED.
3. SEE PHYSICIST REPORT FOR SHIELDING REQUIREMENTS OF LINAC VAULT.
4. SEE VENDOR PLANNING GUIDE FOR ADDITIONAL INFORMATION ON LINAC EQUIPMENT AND COORDINATION.
5. DESIGN INTENT IS FOR WINDOW ACROSS FROM VAULT TO BE REMOVABLE FOR LINAC EQUIPMENT TRANSPORT.

PHARMACY FLOOR PLAN NOTES

1. ALL WALLS TO BE Ma3 1.0 A UNLESS OTHERWISE NOTED.
2. ALL WALLS TO BE Ma3 2.0 I- AT CHASES AND COLUMNS UNLESS OTHERWISE NOTED.
3. COMPOUNDING ROOMS ARE A USP DESIGNATED SEGREGATED COMPOUNDING AREA (SCA).



2 A1.25 **FLOOR PLAN - 81 LEVEL 1 - PHARMACY & INFUSION**
1/4" = 1'-0"

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(C) 2025 E4H - Environments for Health, LLC
RFS engineering
MaineHealth
PINE TREE ENGINEERING

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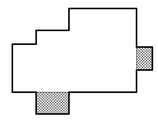
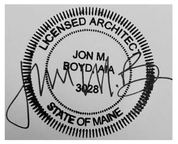
	10.28.25	BUILDING 81 CD

KEY PLAN:





DATE: 10.28.2025

SHEET TITLE AND NUMBER:

A1.25

81 - FLOOR PLAN - LINAC & PHARMACY

EXHIBIT 9

Chapter 4 Development Standards

Brunswick Zoning Ordinance
Chapter 4 — Property Development Standards
MaineHealth Mid Coast Cancer Center Renovation

4.1 Applicability of Property Development Standards

The proposed development is in compliance with the standards set forth in Chapter 4 – Property Development Standards in Exhibit 9.

4.2 Dimensional and Density Standards

The proposed building additions are located in the Growth Mixed-Use 8 (GM8) zoning district. The project complies with the requirement detailed in Table 4.2.3. Dimensional and Density Standards for Growth Area Zoning Districts.

4.3 Natural and Historic Areas

4.3.1. Mapping of Natural and Historic Areas Requirements

The Existing Conditions Plan (AS0.10) in Exhibit 10 shows existing features on site. The boundary of forested wetlands was located east of the proposed building additions during a wetland delineation survey (on file with the Town from previous applications). The proposed building additions have been designed to avoid impacting any applicable features to the greatest extent practicable.

4.3.2. Pollution

The proposed building additions comply with this standard. This project will not result in undue water or air pollution.

4.3.3. Protection of Natural Vegetation

The proposed development complies with this standard. This project is not located in a Scenic Area. Tree clearing is proposed but to the minimal extent practicable.

4.3.4. Protection of Significant Plant and Animal Habitat

The majority of the proposed development is located on developed area and will have no adverse effect on Important Plant and Animal Habitats. The development is outside of the Wildlife Protection Overlay as shown on the Overall Site Plan in Exhibit 2.

Pine Tree Engineering reached out to and received responses from the Maine Natural Areas Program (MNAP) and the Maine Department of Inland Fisheries and Wildlife (MDIFW) (see Exhibit 7). MNAP recommends a 250’ vegetated buffer be maintained along the edge of the Salt-hay Saltmarsh near the development. MNAP also recommends no additional clearing within a 75’ vegetated buffer along the edge of the forested wetland West of the development. MDIFW recommends a 100’ vegetated buffer be maintained along the stream near the development. The proposed development is located outside of all three of the recommended buffers.

4.3.5. Steep Slopes

The area of proposed development does not contain 5,000 or more contiguous square feet of slopes exceeding 25% grade.

4.3.6. Erosion and Sedimentation

The proposed development complies with this standard. An Erosion and Sedimentation Control Notes and Details plan (AS2.00) is included within the Construction Drawings in Exhibit 10. Erosion and sedimentation within the disturbed areas of the site will be controlled through the use of sediment barriers including silt fence, composite filter sock, stone check dams, and erosion control mix berms to minimize the transport of sediment from the site. The project has been designed to incorporate Best Management Practices (BMPs) as outlined in the Maine Erosion and Sediment Control BMPs as published by the Maine Department of Environmental Control, current edition. Permanent and temporary erosion control features will be detailed in the Construction Specifications. The contractor will be bound to meet both the Construction Specifications for the project and the performance standards of the BMPs including erosion control, stabilization, maintenance, and inspection requirements.

4.3.7. Ground Water

The proposed development complies with this standard. This project will not result in undue adverse effect on the quality or quantity of groundwater in the area. No subsurface wastewater disposal system is proposed.

4.3.8. Surface Waters, Wetland, and Marine Resources

The proposed development complies with this standard. No undue adverse effect on the quality of the forested wetlands East of the proposed building additions will occur.

4.3.9. Historic and Archeological Resources

The proposed development complies with this standard. No undue adverse effect on any historic or archeological resources will occur as a result of this project.

4.4 Flood Hazard Areas

The proposed development is not in the Flood Protection Overlay district.

4.5 Basic and Municipal Services

4.5.1. Sewage Disposal

The renovations at the 81 Medical Center Drive building will lead to a minor increase in the building's fixture units. These minor revisions will not exceed the capacity of the existing sanitary sewer service.

4.5.2. Water Supply and Quality

The renovations at the 81 Medical Center Drive building will lead to a minor increase in the building's fixture units. The modifications to internal plumbing will result in a net increase of 50 cold water fixture units. Combined with the existing fixtures, the new water demand will not exceed the capacity of the existing 4-inch water service.

4.5.3. Solid Waste Disposal

This project will not cause an unreasonable burden on the municipality's ability to dispose of solid waste.

4.5.4. Stormwater Management

The proposed development has been designed to minimize the total area of impervious surface on the development site and shall incorporate stormwater management measures to minimize runoff volume and rate, as well as pollutant and nutrient loadings, from the site. The existing Maine DEP Site Law stormwater management permit will be revised as part of an exemption, as already discussed with Maine DEP personnel.

4.6 Landscaping Requirements

The proposed development complies with this standard. Proposed tree removal has been limited to only what is required for the proposed grading of the LINAC building addition and the proposed generator pad. Additionally, ten evergreen trees will be planted at a spacing of 10 feet along the proposed treeline.

4.7 Residential Recreation Requirements

The proposed development does not include new dwelling units.

4.8 Circulation and Access

4.8.1. Street Standards

The proposed development complies with this standard. There is no proposed change of use for the site and therefore the existing traffic, access, and streets will remain unchanged. Therefore, the proposed development is not expected to cause unreasonable congestion or unsafe conditions on existing public roads.

4.8.2. Refer to Chapter 14 of The Brunswick Municipal Code of Ordinances

This standard is not applicable; this development is on a private road and there is no proposed change of use for the site and therefore the existing traffic, access, and streets will remain unchanged.

4.8.3. Pedestrian and Bicycle Access

The proposed development complies with this standard and will make use of the existing pedestrian and bicycle access on the site. The proposed walkway to the new LINAC unit complies with this standard.

4.8.4. Access for Persons with Disabilities

The proposed development complies with this standard. The existing medical office building provides internal Accessible access to the proposed building additions.

4.8.5. Shoreline Access

There is no shoreline associated with the property.

4.9 Parking and Loading

4.9.1. Minimum and Maximum Vehicle Parking Requirements

In 2007, the original 81 Medical Center Drive building application was approved with its proposed parking, which included 134 parking spaces.

In 2016, 65 additional parking spaces were added to the 81 Medical Center Drive building parking lot as part of a parking expansion project. Since there was no expansion in the building footprint and thus the required parking space quantity was not increased, this is a net of 65 spaces in excess of the required and approved amount.

In the current application, the addition of 3,511 SF of gross building area will require 11 new parking spaces. The proposed development reduces the amount of existing parking spaces by 6. Thus, the net required amount of new parking spaces to be added is 17, which has already been compensated for by the 65 spaces added in 2016. The proposed development meets this standard.

4.9.2. Minimum Bicycle Parking Requirements

As a result of the proposed development, there are 20 spaces required at 81 Medical Center Drive (for 193 parking spaces). This project proposed 25 total bicycle parking spaces, and therefore the proposed development meets this standard.

4.9.3. Design, Construction and Maintenance of Parking Areas

The proposed development complies with this standard.

4.9.4. Parking Alternatives

Section 4.9.1 has been met.

4.9.5. Minimum Off-Street Loading Requirements

The proposed development complies with this standard.

4.10 Lighting

4.10.1. Outdoor Lighting

New outdoor lighting shall not adversely impact road safety or adjacent properties and uses.

4.11 Architectural Compatibility

The relationship of materials, texture and color of the building façade of the LINAC and Pharmacy additions shall be visually compatible with that of the existing building and are designed to complement, but not copy the brick and pre-cast base of the 81 Medical Center Drive building. Please see the Cooks Corner Design Standards Narrative in Exhibit 8 for more information.

4.12 Neighborhood Protection Standards

The Neighborhood Protection Standards do not apply to the proposed development.

4.13 Signs

The proposed development does not involve proposed signs.

4.14 Performance Standards

4.14.1. Operations of Uses and Development

A. The proposed development shall comply with this standard.

B. The proposed development shall comply with this standard.

C. The equivalent sound level measured in dBA (decibels-day/night average) resulting from any activity shall not exceed at any point on or beyond the lot line the maximum levels as set forth in the following table:

Table 4.14.1.B:
Maximum Equivalent Sound Level Measured in dBA [1],[2]

Districts	Day	Night
Rural Area districts, GO, GN	50	40
Growth Residential (GR)	55	45
GM1, GM2, GM3, GM6, GM8, GC1, GC2, GC3, GC4, GC5	60	50
GM4, GM5, GM7, GA, GI	70	60

NOTES:
[1] The maximum equivalent sound level measured in dBA for any activity shall be computed based on representative samples during hours of operation over a one hour period. Daytime hours extend from 6:00 am to 8:00 pm.
[2] The sound level meter must be calibrated using manufacturing standards before and after conducting the measurement. The meter shall meet Type I or Type II specifications for ANSC standards.

This project parcel is in the following districts:

Growth Mixed Use-4 (GM4); Growth Mixed Use-8 (GM8)

The sound level of the standby generator, measured at the closest property line will be between 29db and 50db when running.

This falls within the allowable sound level from table 4.14.1.B, see above.

- If a lot abuts a district requiring a lower noise level, the maximum permitted level for the lot shall be reduced by five (5) dBA, provided, however, that the sound level shall not exceed 55 dBA or whichever is lower at the affected lot boundaries.
- Noise associated with construction may achieve a maximum equivalent sound level measured in dBA of 75 between the hours of 7:00 am and 7:00 pm. *Project activities during construction shall comply with this requirement.*

Fuel Tank Capacity, L (gal.)	Est. Fuel Supply Hours at 60 Hz with Full Load	Max. Length, mm (in.)	Max. Width, mm (in.)	Sound Pressure Level, dB(A)	Max. Height, mm (in.)	Weight, kg (lb.)
Lift base	0	3525 (138.8)	1154 (45.4)	69	1713 (67.4)	1616 (3562)

D. The proposed development shall comply with this standard.

E. The proposed development shall comply with this standard.

F. The proposed development shall comply with this standard.

G. There are no new uses or activities that will cause inherent and recurring generated vibration perceptible without instruments at any point along the property line, as part of this project.

H. The proposed development shall comply with this standard.

I. The proposed development shall comply with this standard.

J. All installed outdoor lighting will be operated to comply with Section 4.10 (Outdoor Lighting). The building materials do not have high light-reflective qualities and shall not be used in the construction of buildings in such manner that reflected sunlight will throw intense glare to surrounding areas.

4.15 Site Feature Maintenance

The proposed development shall comply with this standard. Site maintenance, including maintenance of the stormwater management facilities, parking areas, and outdoor lighting, will be managed by the applicant in compliance with the Brunswick Zoning Ordinance standards.

4.16 Financial and Technical Capacity

The proposed development complies with this standard. A letter from the applicant has been provided by the applicant showing their financial and technical capacity to meet the standards of the proposed building additions and has been included in Exhibit 6.

4.17 Administrative Adjustments/Alternative Equivalent Compliance

The proposed development shall comply with this standard. The project has been designed in accordance with the Town of Brunswick Zoning Ordinance.

4.18 Affordable Housing

This standard is not applicable to the proposed development.

EXHIBIT 10

Construction Drawings

MID COAST CANCER CENTER RENOVATION

BUILDING 81

MAINE HEALTH - MID COAST HOSPITAL
BRUNSWICK, ME 04011

ISSUED FOR: CONSTRUCTION

OWNER
MAINE HEALTH
22 BRAMHALL STREET
PORTLAND, ME 04102
207.835.9239

CONTACT: ASHLEY ROAN

ARCHITECT
E4H - ENVIRONMENTS FOR HEALTH
75 YORK STREET, SUITE 3
PORTLAND, ME 04101
207.773.8841

CONTACT: CAITLIN TORRANCE

MEP & STRUCTURAL ENGINEER
RFS - RIST, FROST, SHUMWAY ENGINEERING
71 WATER STREET
LACONIA, NH 03246
603.524.4647

CONTACT: PATRICK HART

CIVIL ENGINEER
PINE TREE ENGINEERING
53 FRONT STREET
BATH, ME 04530
207.443.1508

CONTACT: JEREMY PRUE

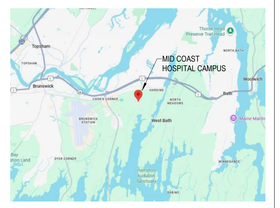
CONSTRUCTION MANAGER
CONSIGLI
15 FRANKLIN STREET
PORTLAND, ME 04101
207.773.3000

CONTACT: CHAD WHALEN

SHEET INDEX

SHEET INDEX

VICINITY MAP



LOCATION MAP

SHEET NUMBERING

AD-100.00
- DISCIPLINE
- DISCIPLINE SUBSET
- SUB-SHEET
- SEQUENCE
- SHEET TYPE

DISCIPLINE DESIGNATORS

G	GENERAL
Z	ZONING
EN	ENERGY ANALYSIS
H	HAZARD
BPP	PAVEMENT PLAN
C	CIVIL
L	LANDSCAPE
LI	IRRIGATION
S	STRUCTURE
AD	DEMO - ARCHITECTURAL
AS	ARCHITECTURAL SITE PLAN
A	ARCHITECTURE
ID	INTERIOR DESIGN
EQ	EQUIPMENT
FP	FIRE PROTECTION
PD	DEMO - PLUMBING
P	PLUMBING
MD	DEMO - MECHANICAL
M	MECHANICAL
ED	DEMO - ELECTRICAL
E	ELECTRICAL
FA	FIRE ALARM
T	COMMUNICATION
XF	FOOD SERVICES
X	OTHER

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RFS engineering

MaineHealth

PINE TREE ENGINEERING

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PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION
	9.23.25	BUILDING 81 CD
	10.28.25	BUILDING 81 CD
1	Date 10	BULLETIN 3 - 121

DATE: 10.28.2025

BULLETIN 3 - 121

SHEET TITLE AND NUMBER:

G0.00

COVER SHEET

GENERAL NOTES - REFERENCE FLOOR PLANS

1. REFER TO ENLARGED FLOOR PLANS (A1.XX SERIES) FOR MORE INFORMATION. REFERENCE PLANS ARE INTENDED TO PROVIDE CONTEXT FOR ENLARGED PLANS.
2. ALL ARCHITECTURAL PLAN TYPES (RCP, EQUIPMENT, INTERIORS, ETC) REFLECT AREAS SHOWN ON THIS REFERENCE PLAN.
3. CONSTRUCTION MAY OCCUR IN PHASES; PHASES ARE NOT SHOWN IN DRAWING SET, AND LOCATION AND TIMELINE TBD BY CONTRACTOR. FINAL BUILT CONDITION IS SHOWN IN DRAWINGS.

1 A1.01 **FLOOR PLAN - OVERALL 81 LEVEL 1**
1/8" = 1'-0"

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888.781.8441 207.773.8841 75 York St, Suite 3, Portland ME 04101 e4harchitecture.com

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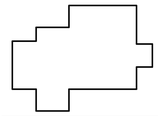
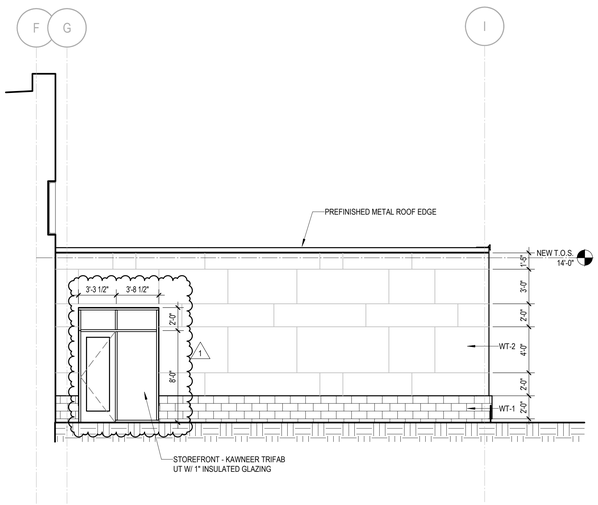


DATE: 10.28.2025

SHEET TITLE AND NUMBER:

A1.01

REFERENCE PLAN - BLDG 81



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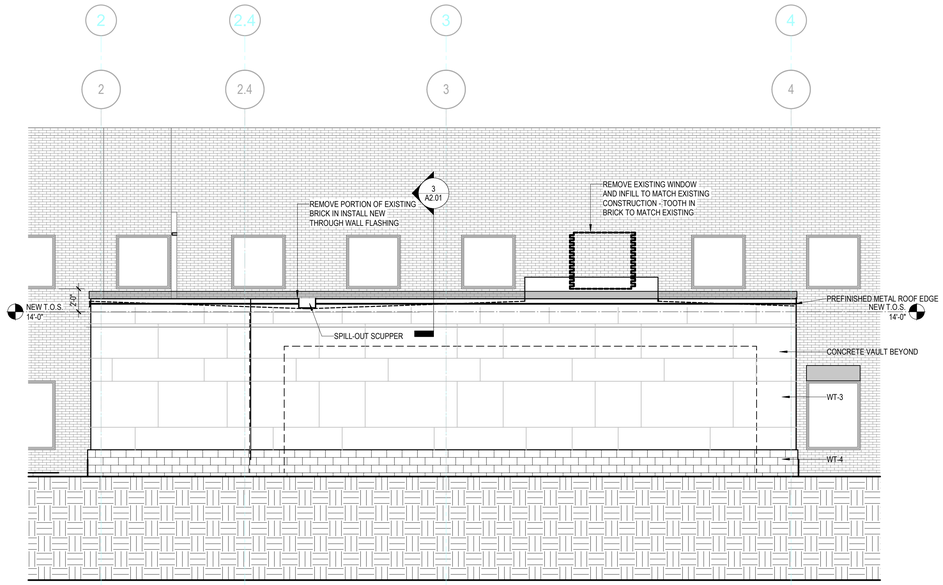

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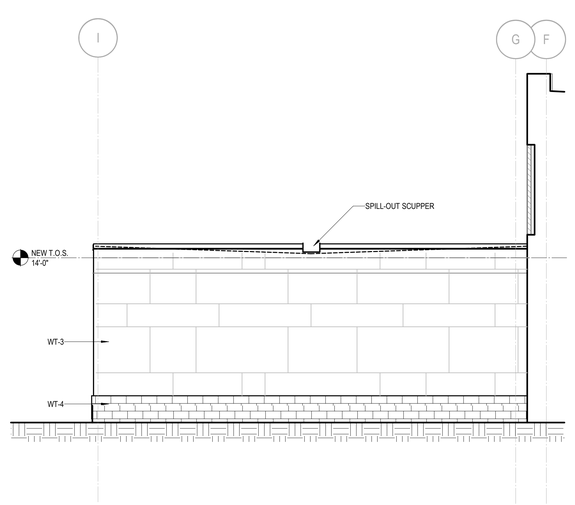

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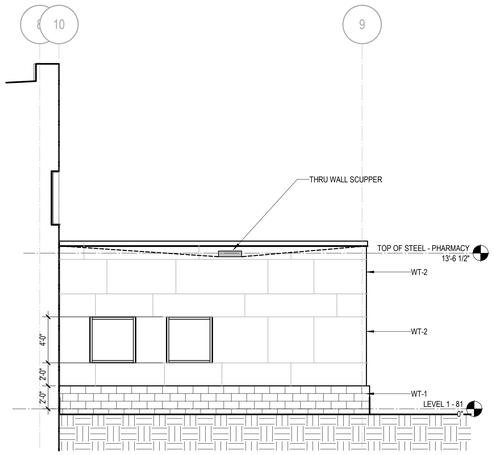

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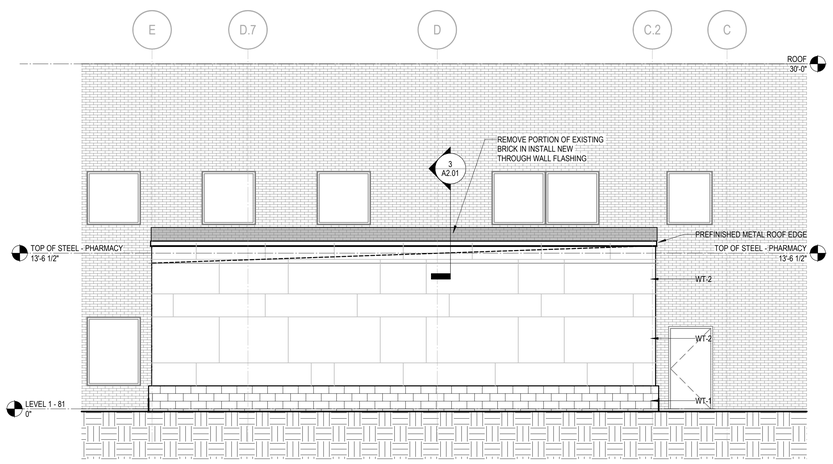
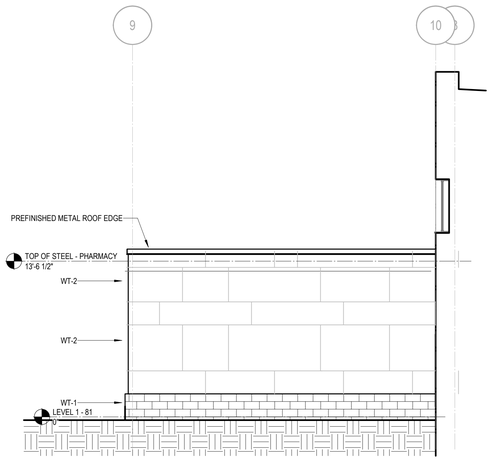


5 PHARM NORTH
A4.01 3/16" = 1'-0"



6 PHARM WEST
A4.01 3/16" = 1'-0"

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MaineHealth

PINE TREE ENGINEERING

MAINEHEALTH
MID COAST CANCER CENTER RENOVATION
81 Medical Center Drive
Brunswick, ME 04011

PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION
	9.23.25	BUILDING 81 DD
	10.28.25	BUILDING 81 CD
1	Date 11	BULLETIN 2 - 81

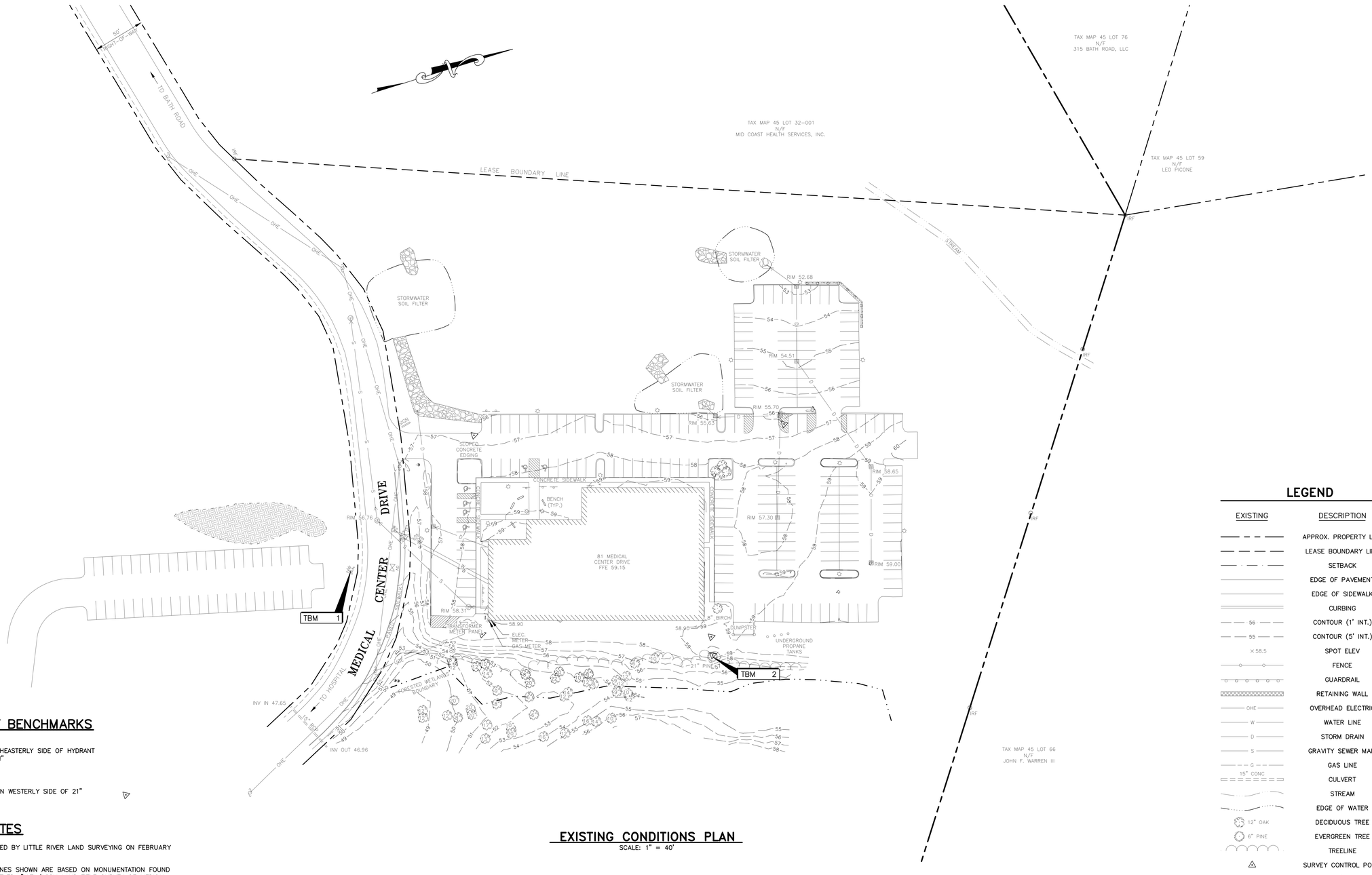
DATE: 10.28.2025

BULLETIN 2 - 81

SHEET TITLE AND NUMBER:

A4.01

ELEVATIONS-
EXTERIOR- BUILDING



TEMPORARY BENCHMARKS

TBM 1
TOP OF NUT ON NORTHEASTERLY SIDE OF HYDRANT
NEXT TO "N" IN "OPEN"
ELEV. 57.63

TBM 2
TOP OF PK NAIL SET IN WESTERLY SIDE OF 21" PINE ROOT
ELEV. 60.39

SURVEY NOTES

1. SURVEY PERFORMED BY LITTLE RIVER LAND SURVEYING ON FEBRUARY 13, 2025.
2. THE PROPERTY LINES SHOWN ARE BASED ON MONUMENTATION FOUND AND A PLAN ENTITLED, "ALTA/ACSM LAND TITLE SURVEY OF MEDICAL OFFICE BUILDING II" PREPARED BY BRIAN SMITH SURVEYING, INC. AND DATED SEPTEMBER 1, 2010, APPARENTLY UNRECORDED.
3. BEARINGS ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM OF 1983, MAINE WEST ZONE, AS DETERMINED BY STATIC GNSS OBSERVATION WITH POST PROCESSING BY THE NATIONAL GEODETIC SURVEY ONLINE POSITIONING USER SERVICE.
4. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88 COMPUTED USING GEOID 18) AS DETERMINED BY STATIC GNSS OBSERVATION WITH POST PROCESSING BY THE NATIONAL GEODETIC SURVEY ONLINE POSITIONING USER SERVICE.
5. THE PROJECT AREA IS SHOWN IN ZONE X, AS DEPICTED ON THE FLOOD INSURANCE RATE MAP FOR CUMBERLAND COUNTY WITH MAP NUMBERS 23005C0367F, AND AN EFFECTIVE DATE OF JUNE 20, 2024.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THIS SURVEYOR MAKES NO GUARANTEE THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR DOES NOT WARRANT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
7. ELEVATIONS SHOWN ARE FOR DESIGN PURPOSES ONLY. CONTRACTORS SHOULD VERIFY ACCURACY OF ALL BENCHMARKS PRIOR TO CONSTRUCTION.

EXISTING CONDITIONS PLAN

SCALE: 1" = 40'

LEGEND

EXISTING	DESCRIPTION
	APPROX. PROPERTY LINE
	LEASE BOUNDARY LINE
	SETBACK
	EDGE OF PAVEMENT
	EDGE OF SIDEWALK
	CURBING
56	CONTOUR (1' INT.)
55	CONTOUR (5' INT.)
×58.5	SPOT ELEV
	FENCE
	GUARDRAIL
	RETAINING WALL
OHE	OVERHEAD ELECTRIC
W	WATER LINE
D	STORM DRAIN
S	GRAVITY SEWER MAIN
G	GAS LINE
15" CONC.	CULVERT
	STREAM
	EDGE OF WATER
12" OAK	DECIDUOUS TREE
6" PINE	EVERGREEN TREE
	TREELINE
	SURVEY CONTROL POINT
IRF	IRON PIPE/ROD FOUND
	UTILITY POLE
	GUY ANCHOR
	LIGHT POST
S	SEWER MANHOLE
D	DRAIN MANHOLE
	CATCH BASIN
	HYDRANT
	WATER SHUT-OFF
GV	GATE VALVE
	SIGN
	BUILDING/STRUCTURE
	RIPRAP
	EXPOSED BEDROCK

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81 Medical Center Drive
Brunswick, ME 04011

PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION

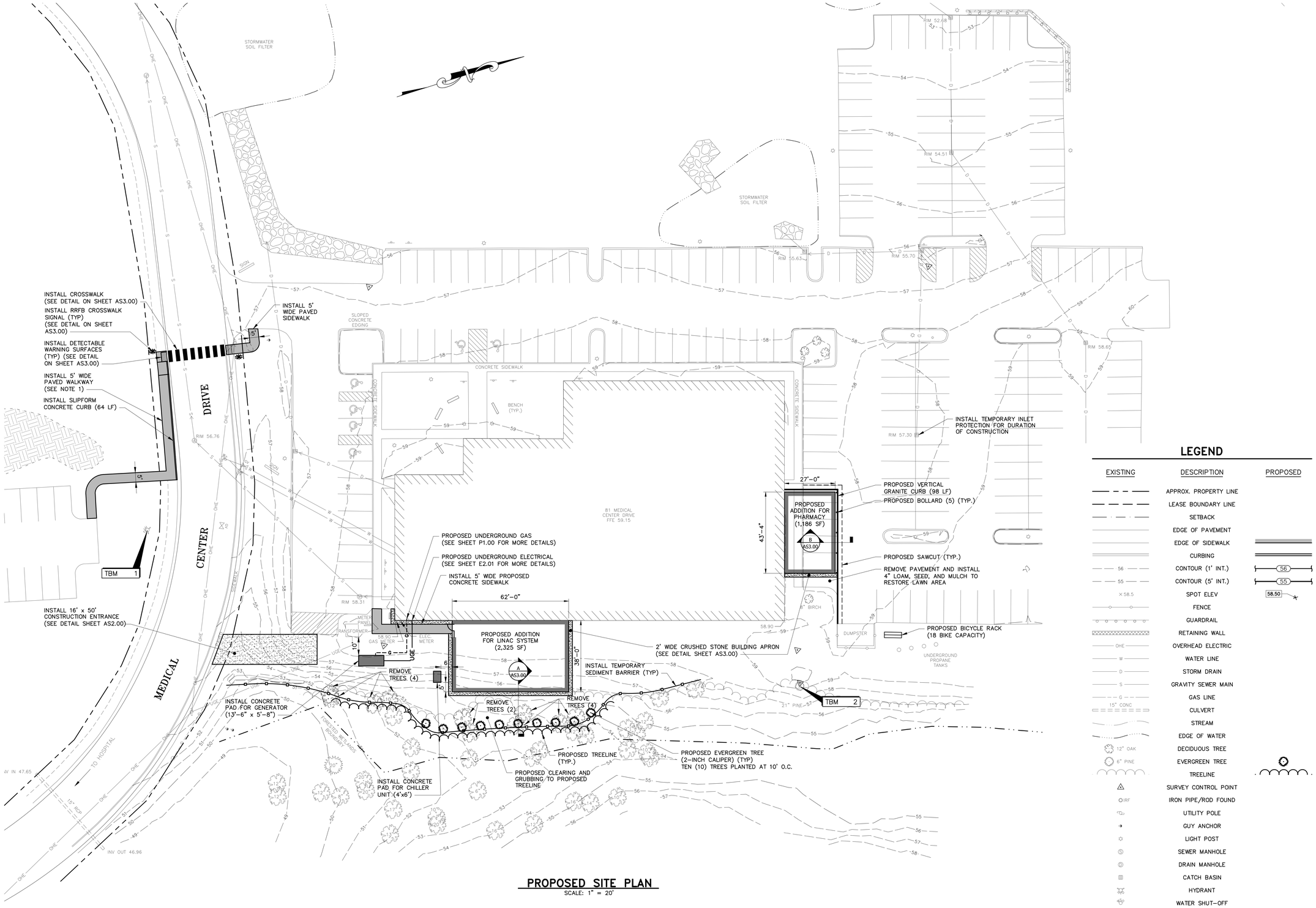
STATE OF MAINE
JEREMY ROBERT PRUE
No. 16639
REGISTERED PROFESSIONAL ENGINEER

DATE: 10.28.2025

SHEET TITLE AND NUMBER:

AS0.10

EXISTING CONDITIONS PLAN



PROPOSED SITE PLAN

SCALE: 1" = 20'

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	APPROX. PROPERTY LINE	
	LEASE BOUNDARY LINE	
	SETBACK	
	EDGE OF PAVEMENT	
	EDGE OF SIDEWALK	
	CURBING	
56	CONTOUR (1' INT.)	56
55	CONTOUR (5' INT.)	55
× 58.5	SPOT ELEV	58.50
	FENCE	
	GUARDRAIL	
	RETAINING WALL	
OHE	OVERHEAD ELECTRIC	
W	WATER LINE	
D	STORM DRAIN	
S	GRAVITY SEWER MAIN	
G	GAS LINE	
15" CONC	CULVERT	
	STREAM	
	EDGE OF WATER	
12" OAK	DECIDUOUS TREE	
6" PINE	EVERGREEN TREE	
	TREELINE	
	SURVEY CONTROL POINT	
IRF	IRON PIPE/ROD FOUND	
	UTILITY POLE	
	GUY ANCHOR	
	LIGHT POST	
S	SEWER MANHOLE	
D	DRAIN MANHOLE	
CB	CATCH BASIN	
	HYDRANT	
WSO	WATER SHUT-OFF	
GV	GATE VALVE	
	SIGN	
	BUILDING/STRUCTURE	
	RIPRAP	
	EXPOSED BEDROCK	
	SEDIMENT BARRIER	
	CROSSWALK	
	DETECTABLE WARNING FIELD	
	RRFB/POST/SIGN ASSEMBLY	

TEMPORARY BENCHMARKS

TBM 1
TOP OF NUT ON NORTHEASTERLY SIDE OF HYDRANT NEXT TO "N" IN "OPEN"
ELEV. 57.63

TBM 2
TOP OF PK NAIL SET IN WESTERLY SIDE OF 21" PINE ROOT
ELEV. 60.39

GENERAL NOTES

1. THE PAVED WALKWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING DESIGN PARAMETERS:
   - –TRANSVERSE SLOPE: –2% MAX.
   - –LONGITUDINAL SLOPE: –12% MAX.

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DATE: 10.28.2025

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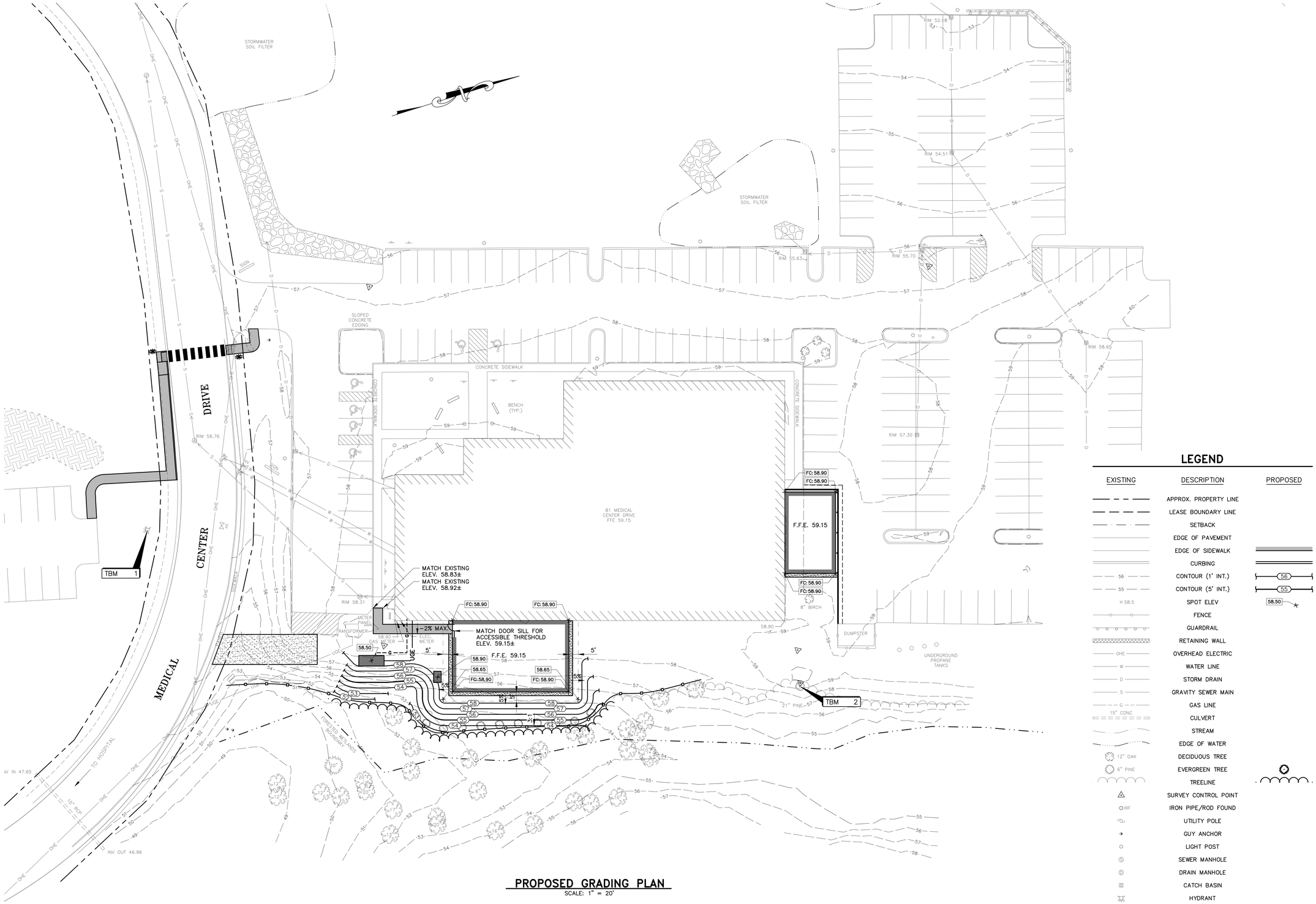
AS1.00

PROPOSED SITE PLAN



PROPOSED GRADING PLAN

SCALE: 1" = 20'

TEMPORARY BENCHMARKS

TBM 1
TOP OF NUT ON NORTHEASTERLY SIDE OF HYDRANT NEXT TO "N" IN "OPEN"
ELEV. 57.63

TBM 2
TOP OF PK NAIL SET IN WESTERLY SIDE OF 21" PINE ROOT
ELEV. 60.39

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	APPROX. PROPERTY LINE	
	LEASE BOUNDARY LINE	
	SETBACK	
	EDGE OF PAVEMENT	
	EDGE OF SIDEWALK	
	CURBING	
56	CONTOUR (1' INT.)	56
55	CONTOUR (5' INT.)	55
×58.5	SPOT ELEV	58.50
	FENCE	
	GUARDRAIL	
	RETAINING WALL	
OHE	OVERHEAD ELECTRIC	
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6" PINE	EVERGREEN TREE	
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IRF	IRON PIPE/ROD FOUND	
	UTILITY POLE	
	GUY ANCHOR	
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	CATCH BASIN	
	HYDRANT	
WS	WATER SHUT-OFF	
GV	GATE VALVE	
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	RIPRAP	
	EXPOSED BEDROCK	
	SEDIMENT BARRIER	
	CROSSWALK	
	DETECTABLE WARNING FIELD	
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PROPOSED GRADING PLAN

CONSTRUCTION NOTES

A. EROSION AND SEDIMENTATION CONTROL

A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 M.R.S. §480–B. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS. MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED. ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES MUST BE TAKEN. THE DEPARTMENT HAS PREPARED PROTOCOLS FOR THE CONTROL OF EROSION AND SEDIMENTATION. SEE "MAINE EROSION AND SEDIMENT CONTROL BMPS MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION."

1. POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES. CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND VOLUME, TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE.

   WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

2. SEDIMENT BARRIERS. PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWNGRADIENT EDGE, AND ALONG THE EXISTING CONTOUR, OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE. SEDIMENT BARRIERS SHALL TERMINATE BY TURNING UPGRADIENT. MAINTAIN THE SEDIMENT BARRIERS BY REMOVING ACCUMULATED SEDIMENT, OR REMOVING AND REPLACING THE BARRIER, UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE.

3. STABILIZED CONSTRUCTION ENTRANCE. PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE, UNDERLAIN BY A GEOTEXTILE FILTER FABRIC, USED TO PREVENT TRAFFIC FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

4. TEMPORARY STABILIZATION. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON–ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

5. REMOVAL OF TEMPORARY MEASURES. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE. IT IS RECOMMENDED THAT SILT FENCES BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL TO AVOID ADDITIONAL SOIL DISTURBANCE.

6. PERMANENT STABILIZATION. IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB–BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE–OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL–ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

   (a) SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

   (b) SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE–OFF.

   (c) PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

   (d) RIPRAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL–GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.

   (e) AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.

   (f) PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN EVENT

   (g) DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL–GRADED RIPRAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON–EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN–CUTTING OF THE CHANNEL.

7. WINTER CONSTRUCTION. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

   (a) SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.

   (b) SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

   (c) DITCH. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

   (d) SLOPES. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.

8. STORMWATER CHANNELS. DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG–TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME RUN–OFF. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY–SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER APPENDIX A(5)(G) ABOVE.

   (a) THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.

   (b) WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN ¼ ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.

9. ROADS. GRAVEL AND PAVED ROADS MUST BE DESIGNED AND CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET GUTTERS.

10. CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNINTENDED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES, SUCH AS APRONS, TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.

11. PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. THE PARKING AREA'S SUBBASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY–PASS OF RUNOFF TO OTHER AREAS.

B. INSPECTION AND MAINTENANCE

1. DURING CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

   (a) INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.

   (b) MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

   (c) DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

   THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

2. POST–CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET AFTER CONSTRUCTION.

   (a) PLAN. CARRY OUT AN APPROVED INSPECTION AND MAINTENANCE PLAN THAT IS CONSISTENT WITH THE MINIMUM REQUIREMENTS OF THIS SECTION. THE PLAN MUST ADDRESS INSPECTION AND MAINTENANCE OF THE PROJECT'S PERMANENT EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT SYSTEM. THIS PLAN MAY BE COMBINED WITH THE PLAN LISTED IN SECTION 2(A) OF THIS APPENDIX. SEE SECTION 7(C)(2) FOR SUBMISSION REQUIREMENTS.

   (b) INSPECTION AND MAINTENANCE. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. THE FOLLOWING AREAS, FACILITIES, AND MEASURES MUST BE INSPECTED AND IDENTIFIED DEFICIENCIES MUST BE CORRECTED. AREAS, FACILITIES, AND MEASURES OTHER THAN THOSE LISTED BELOW MAY ALSO REQUIRE INSPECTION ON A SPECIFIC SITE. INSPECTION OR MAINTENANCE TASKS OTHER THAN THOSE DISCUSSED BELOW MUST BE INCLUDED IN THE MAINTENANCE PLAN DEVELOPED FOR A SPECIFIC SITE.

      (i) INSPECT VEGETATED AREAS, PARTICULARLY SLOPES AND EMBANKMENTS, EARLY IN THE GROWING SEASON OR AFTER HEAVY RAINS TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. REPLANT BARE AREAS OR AREAS WITH SPARSE GROWTH. WHERE RILL EROSION IS EVIDENT, ARMOR THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE EROSIVE FLOWS TO ON–SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOWS. SEE PERMANENT STABILIZATION STANDARDS IN APPENDIX A(5).

      (ii) INSPECT DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW, REMOVE ACCUMULATED SEDIMENTS AND DEBRIS, TO CONTROL VEGETATED GROWTH THAT COULD OBSTRUCT FLOW, AND TO REPAIR ANY EROSION OF THE DITCH LINING. VEGETATED DITCHES MUST BE MOWED AT LEAST ANNUALLY OR OTHERWISE MAINTAINED TO CONTROL THE GROWTH OF WOODY VEGETATION AND MAINTAIN FLOW CAPACITY. ANY WOODY VEGETATION GROWING THROUGH RIPRAP LININGS MUST ALSO BE REMOVED. REPAIR ANY SLUMPING SIDE SLOPES AS SOON AS PRACTICABLE. IF THE DITCH HAS A RIPRAP LINING, REPLACE RIPRAP ON AREAS WHERE ANY UNDERLYING FILTER FABRIC OR UNDERDRAIN GRAVEL IS SHOWING THROUGH THE STONE OR WHERE STONES HAVE DISLODGED. THE CHANNEL MUST RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDESLOPES.

      (iii) INSPECT CULVERTS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW; REMOVE ACCUMULATED SEDIMENTS AND DEBRIS AT THE INLET, AT THE OUTLET, AND WITHIN THE CONDUIT; AND TO REPAIR ANY EROSION DAMAGE AT THE CULVERT'S INLET AND OUTLET.

      (iv) INSPECT AND CLEAN OUT CATCH BASINS. CLEAN–OUT MUST INCLUDE THE REMOVAL AND LEGAL DISPOSAL OF ANY ACCUMULATED SEDIMENTS AND DEBRIS AT THE BOTTOM OF THE BASIN, AT ANY INLET GRATES, AT ANY INFLOW CHANNELS TO THE BASIN, AND AT ANY PIPES BETWEEN BASINS. IF THE BASIN OUTLET IS DESIGNED TO TRAP FLOATABLE MATERIALS, THEN REMOVE THE FLOATING DEBRIS AND ANY FLOATING OILS (USING OIL–ABSORPTIVE PADS).

      (v) INSPECT RESOURCE AND TREATMENT BUFFERS ONCE A YEAR FOR EVIDENCE OF EROSION, CONCENTRATING FLOW, AND ENCROACHMENT BY DEVELOPMENT. IF FLOWS ARE CONCENTRATING WITHIN A BUFFER, SITE GRADING, LEVEL SPREADERS, OR DITCH TURN–OUTS MUST BE USED TO ENSURE A MORE EVEN DISTRIBUTION OF FLOW INTO A BUFFER. ADDITIONALLY, SLOPE REPAIRS SHALL BE MADE WITH RIPRAP MATERIAL TO PREVENT FURTHER EROSION FROM DOWNGRADIENT RUNOFF THROUGHOUT THE BUFFER. CHECK DOWN SLOPE OF ALL SPREADERS AND TURN–OUTS FOR EROSION. IF EROSION IS PRESENT, ADJUST OR MODIFY THE SPREADER'S OR TURNOUT'S LIP TO ENSURE A BETTER DISTRIBUTION OF FLOW INTO A BUFFER. CLEAN–OUT ANY ACCUMULATION OF SEDIMENT WITHIN THE SPREADER BAYS OR TURN–OUT POOLS.

      (vi) INSPECT AT LEAST ONCE PER YEAR, EACH STORMWATER MANAGEMENT POND OR BASIN, INCLUDING THE POND'S EMBANKMENTS, OUTLET STRUCTURE, AND EMERGENCY SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE POND. CONTROL WOODY VEGETATION ON THE POND'S EMBANKMENTS.

      (vii) INSPECT AT LEAST ONE PER YEAR, EACH UNDERDRAINED FILTER, INCLUDING THE FILTER EMBANKMENTS, VEGETATION, UNDERDRAIN PIPING, AND OVERFLOW SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE FILTER. IF NEEDED, REHABILITATE ANY CLOGGED SURFACE LININGS, AND FLUSH UNDERDRAIN PIPING.

      (viii) INSPECT EACH MANUFACTURED SYSTEM INSTALLED ON THE SITE, INCLUDING THE SYSTEM'S INLET, TREATMENT CHAMBER(S), AND OUTLET AT LEAST ONCE PER YEAR, OR IN ACCORDANCE WITH THE MAINTENANCE GUIDELINES RECOMMENDED BY THE MANUFACTURER BASED ON THE ESTIMATED RUNOFF AND POLLUTANT LOAD EXPECTED TO THE SYSTEM FROM THE PROJECT. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS, DEBRIS, AND CONTAMINATED WATERS FROM THE SYSTEM AND, IF APPLICABLE, REMOVE AND REPLACE ANY CLOGGED OR SPENT FILTER MEDIA.

   (c) REGULAR MAINTENANCE

      (i) CLEAR ACCUMULATIONS OF WINTER SAND IN PARKING LOTS AND ALONG ROADWAYS AT LEAST ONCE A YEAR, PREFERABLY IN THE SPRING. ACCUMULATIONS ON PAVEMENT MAY BE REMOVED BY PAVEMENT SWEEPING. ACCUMULATIONS OF SAND ALONG ROAD SHOULDERS MAY BE REMOVED BY GRADING EXCESS SAND TO THE PAVEMENT EDGE AND REMOVING IT MANUALLY OR BY A FRONT–END LOADER. GRADING OF GRAVEL ROADS, OR GRADING OF THE GRAVEL SHOULDERS OF GRAVEL OR PAVED ROADS, MUST BE ROUTINELY PERFORMED TO ENSURE THAT STORMWATER DRAINS IMMEDIATELY OFF THE ROAD SURFACE TO ADJACENT BUFFER AREAS OR STABLE DITCHES, AND IS NOT IMPEDED BY ACCUMULATIONS OF GRADED MATERIAL ON THE ROAD SHOULDER OR BY EXCAVATION OF FALSE DITCHES IN THE SHOULDER. IF WATER BARS OR OPEN–TOP CULVERTS ARE USED TO DIVERT RUNOFF FROM ROAD SURFACES, CLEAN–OUT ANY SEDIMENTS WITHIN OR AT THE OUTLET OF THESE STRUCTURES TO RESTORE THEIR FUNCTION.

      (ii) MANAGE EACH BUFFER'S VEGETATION CONSISTENTLY WITH THE REQUIREMENTS IN ANY DEED RESTRICTIONS FOR THE BUFFER. WOODED BUFFERS MUST REMAIN FULLY WOODED AND HAVE NO DISTURBANCE TO THE DUFF LAYER. VEGETATION IN NON–WOODED BUFFERS MAY NOT BE CUT MORE THAN THREE TIMES PER YEAR, AND MAY NOT BE CUT SHORTER THAN SIX INCHES.

   (d) DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING INSPECTIONS, MAINTENANCE, AND ANY CORRECTIVE ACTIONS TAKEN. THE LOG MUST INCLUDE THE DATE ON WHICH EACH INSPECTION OR MAINTENANCE TASK WAS PERFORMED, A DESCRIPTION OF THE INSPECTION FINDINGS OR MAINTENANCE COMPLETED, AND THE NAME OF THE INSPECTOR OR MAINTENANCE PERSONNEL PERFORMING THE TASK. IF A MAINTENANCE TASK REQUIRES THE CLEAN–OUT OF ANY SEDIMENTS OR DEBRIS, INDICATE WHERE THE SEDIMENT AND DEBRIS WAS DISPOSED AFTER REMOVAL. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST FIVE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

C. HOUSEKEEPING

THESE PERFORMANCE STANDARDS APPLY TO ALL PROJECTS EXCEPT FOR STORMWATER PBR PROJECTS.

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

   NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1–800–482–0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1–800–452–6446 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT: HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. 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.

   NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465–C(1).

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF–SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO 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.

   NOTE: DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT MAY VIOLATE STATE WATER QUALITY STANDARDS AND THE NATURAL RESOURCES PROTECTION ACT.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

   NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST–CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISION OF RULES RELATED TO SOLID, UNIVERSAL, AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE PESTICIDE REQUIREMENTS.

5. EXCAVATION 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.

   NOTE: DEWATERING CONTROLS ARE DISCUSSED IN THE "MAINE EROSION AND SEDIMENT CONTROL BMPS, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION."

6. AUTHORIZED NON–STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON–STORMWATER DISCHARGES. WHERE ALLOWED NON–STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON–STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON–STORMWATER DISCHARGES ARE:

   (a) DISCHARGES FROM FIREFIGHTING ACTIVITY;

   (b) FIRE HYDRANT FLUSHINGS;

   (c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);

   (d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);

   (e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;

   (f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;

   (g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;

   (h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;

   (i) FOUNDATION OR FOOTER DRAIN–WATER WHERE FLOWS ARE NOT CONTAMINATED;

   (j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));

   (k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND

   (l) LANDSCAPE IRRIGATION.

7. UNAUTHORIZED NON–STORMWATER DISCHARGES

   THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON_STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

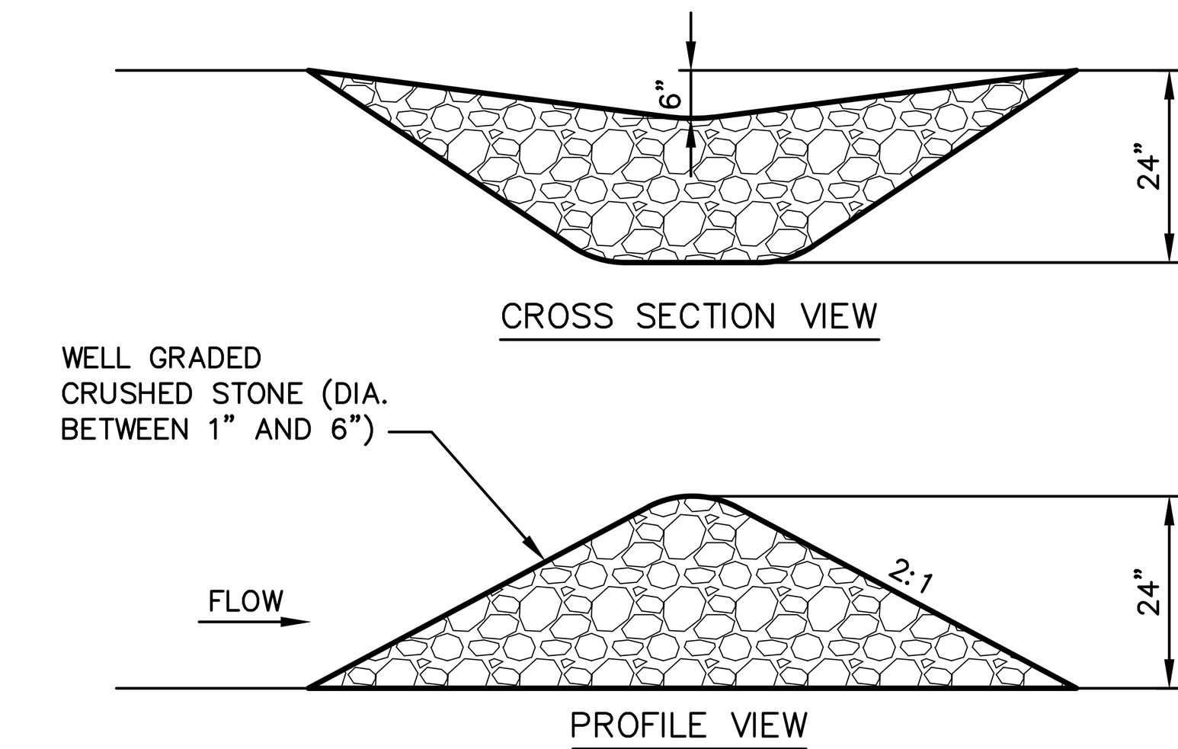
   (a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;

   (b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;

   (c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND

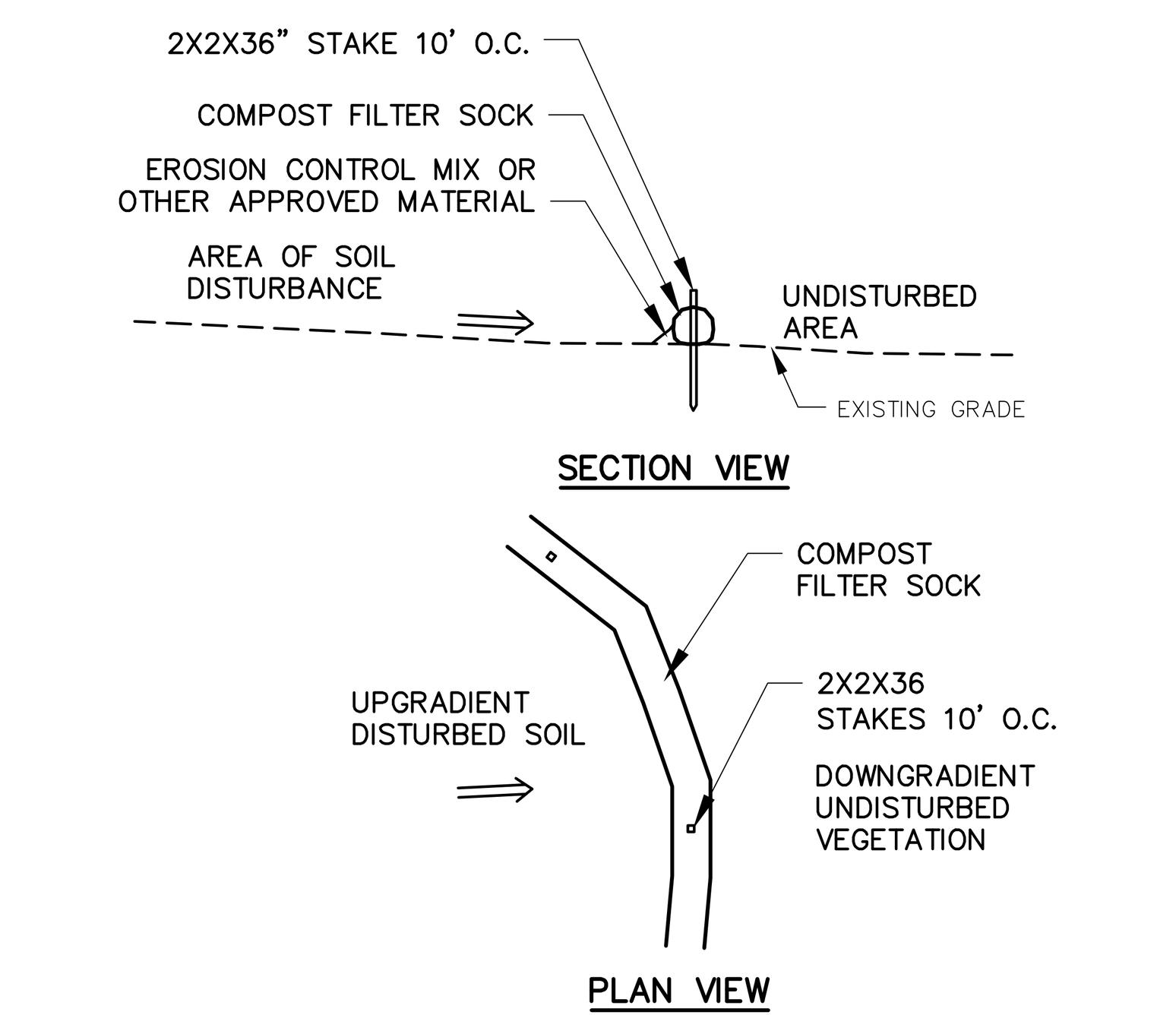
   (d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

8. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE–SPECIFIC BASIS.



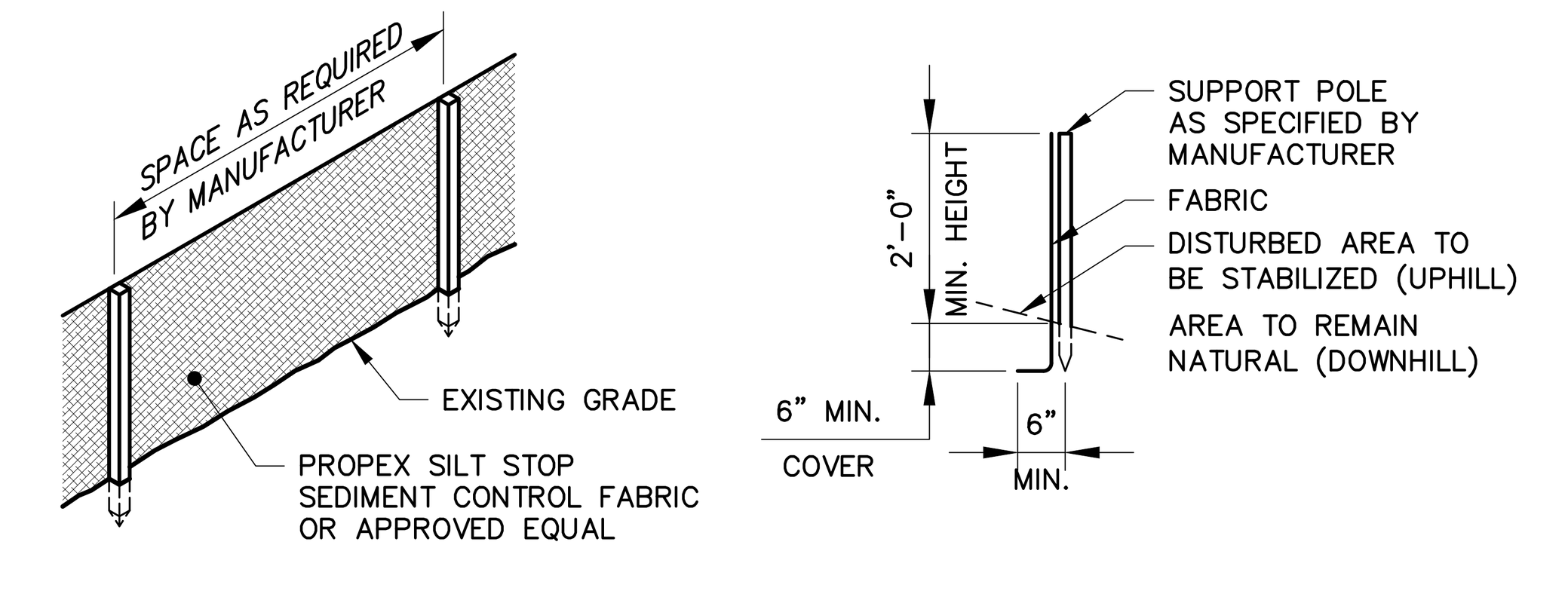
STONE CHECK DAM DETAIL

SCALE: 1/2" = 1'–0"



COMPOST FILTER SOCK DETAIL

SCALE: 1" = 5'–0"



SILT FENCE DETAIL

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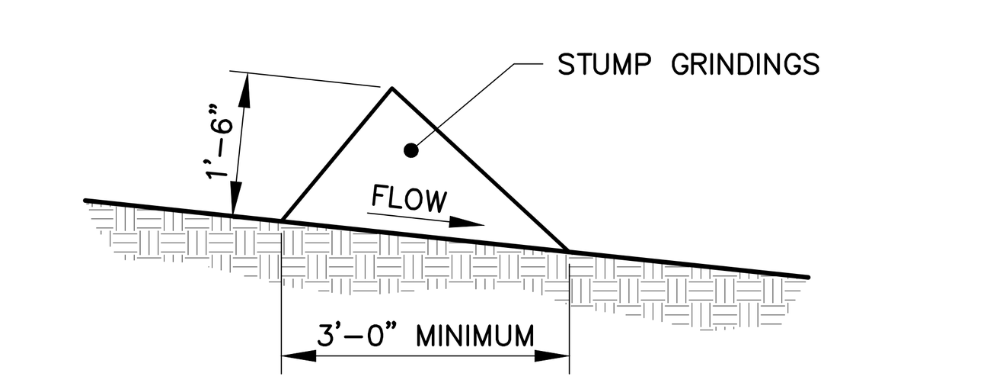
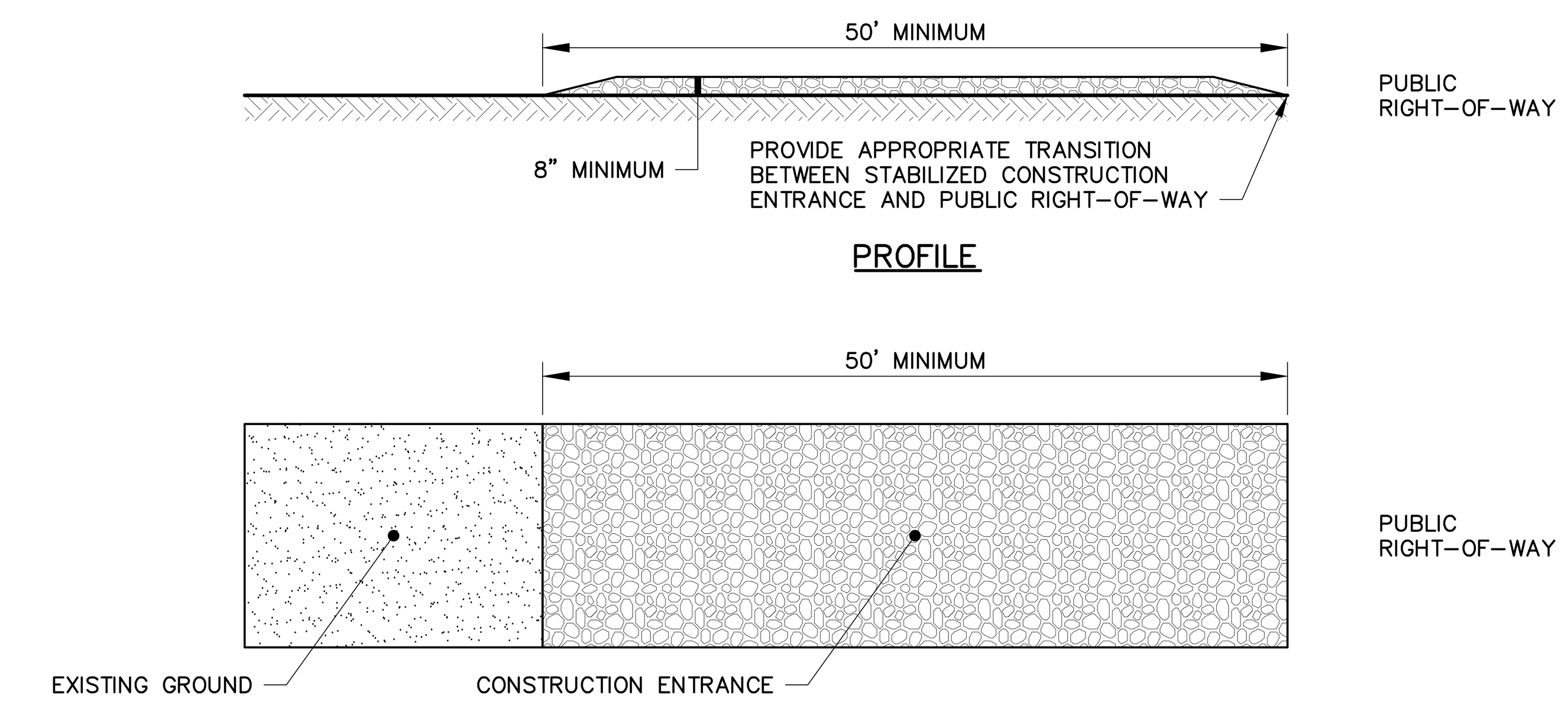


NOTES:

1. AN EROSION CONTROL MIX BERM MAY BE USED IN LIEU OF SILT FENCE.
2. FOR OVER–WINTER PROTECTION, A DOUBLE ROW OF EROSION CONTROL MIX BERMS, INSTALLED PARALLEL AND SPACED 10 FEET APART, SHALL BE PLACED FOR ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE.

EROSION CONTROL MIX BERM DETAIL

SCALE: 1/2" = 1'–0"



CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE – AASHTO DESIGNATION M 43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE FIELD OR BANK RUN STONE.
2. LENGTH – AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH – NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING – WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CLEAN STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
7. RESTORATION – AT THE COMPLETION, THE CONSTRUCTION ENTRANCE SHALL BE REMOVED AND 3" LOAM, SEED, AND MULCH SHALL BE INSTALLED TO RESTORE A GRASSED AREA WITHIN THE FOOTPRINT.

CONSTRUCTION ENTRANCE

SCALE: N.T.S.

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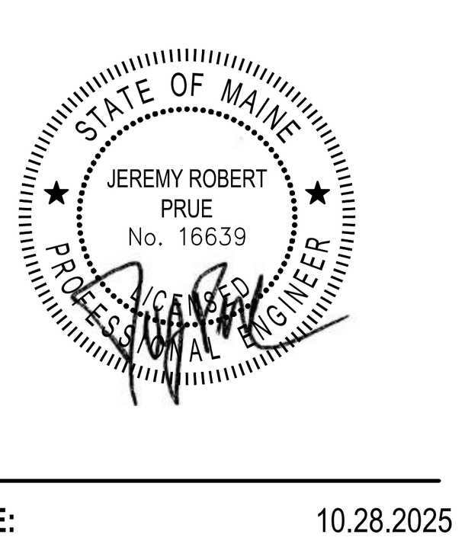
MID COAST CANCER CENTER RENOVATION
81 Medical Center Drive
Brunswick, ME 04011

PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION

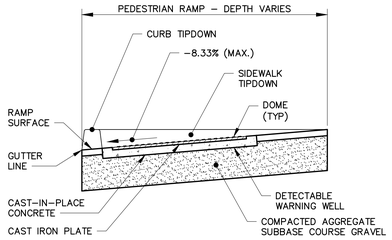


DATE: 10.28.2025

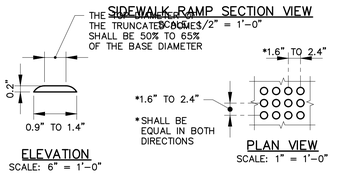
SHEET TITLE AND NUMBER:

AS2.00

EROSION AND SEDIMENTATION CONTROL NOTES AND DETAILS

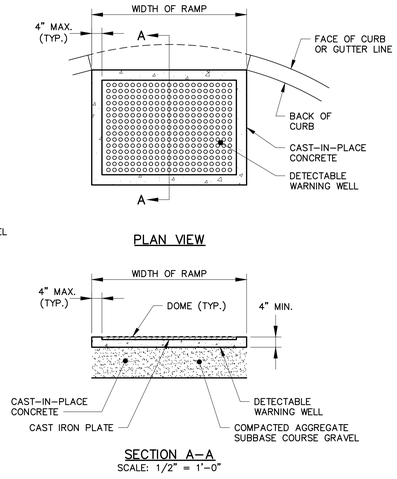


SIDEWALK RAMP SECTION VIEW
SCALE: 1/2" = 1'-0"



ELEVATION
SCALE: 6" = 1'-0"

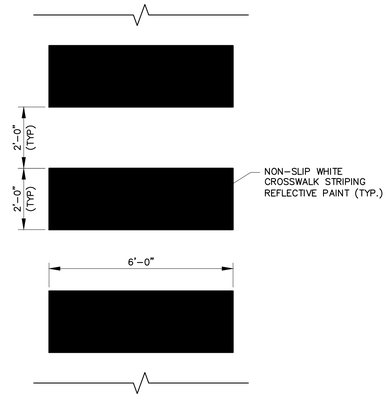
PLAN VIEW
SCALE: 1" = 1'-0"



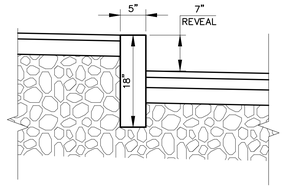
PLAN VIEW

SECTION A–A
SCALE: 1/2" = 1'-0"

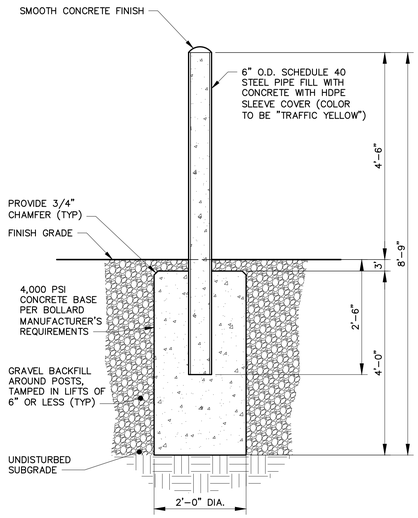
DETECTABLE WARNING DETAIL
SCALE: AS SHOWN



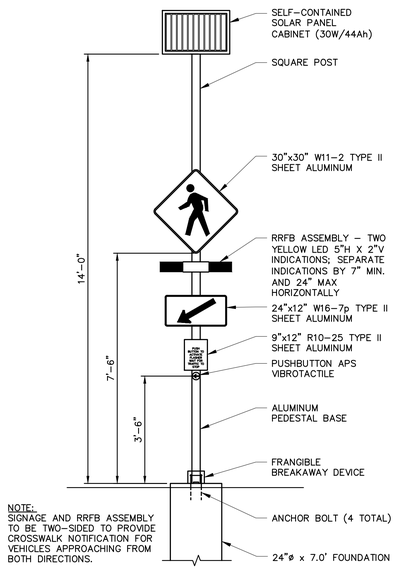
CROSSWALK STRIPING DETAIL
SCALE: 1/2" = 1'-0"



GRANITE CURB DETAIL
SCALE: 1" = 1'-0"

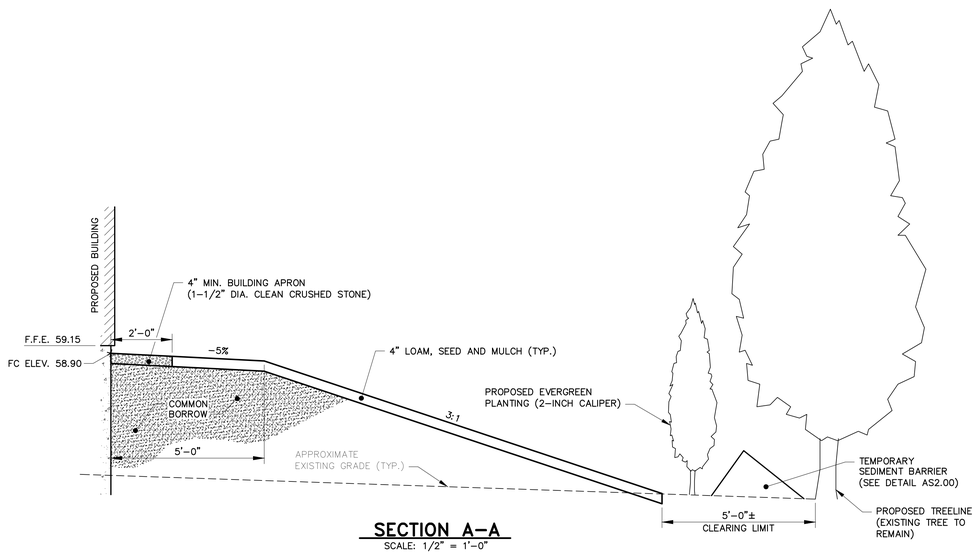


CONCRETE BOLLARD
SCALE: 3/4" = 1'-0"



NOTE:
SIGNAGE AND RRFB ASSEMBLY TO BE TWO–SIDED TO PROVIDE CROSSWALK NOTIFICATION FOR VEHICLES APPROACHING FROM BOTH DIRECTIONS.

RECTANGULAR RAPID FLASHING BEACON
SCALE: NTS



SECTION A–A
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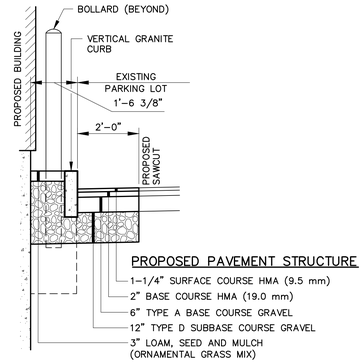

SECTION B–B
SCALE: 1/2" = 1'-0"

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81 Medical Center Drive
Brunswick, ME 04011

PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION

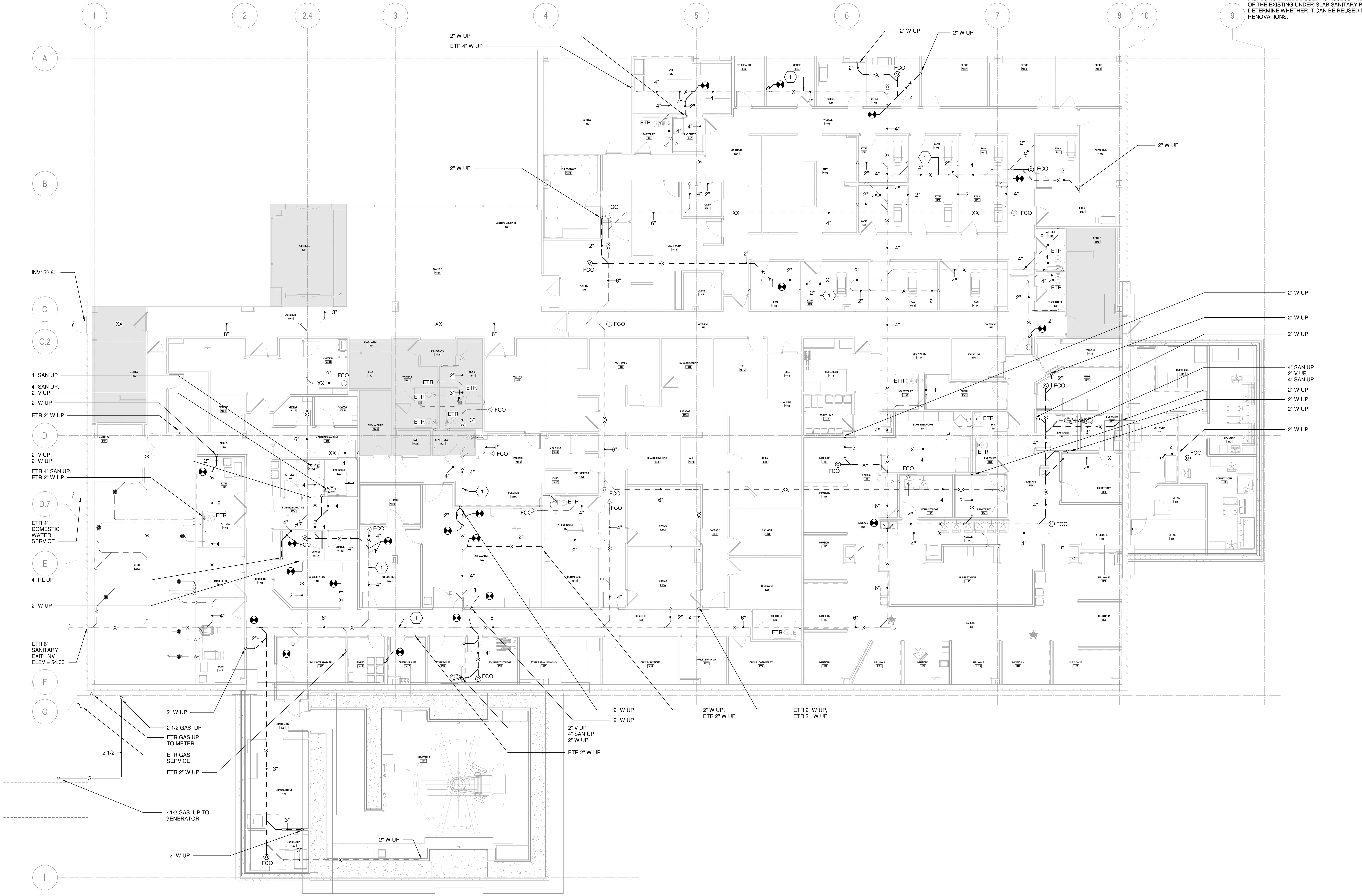
STATE OF MAINE
JEREMY ROBERT PRUE
No. 16639
REGISTERED PROFESSIONAL ENGINEER
10.28.2025

DATE: 10.28.2025

SHEET TITLE AND NUMBER:

AS3.00

CIVIL DETAILS



KEYED NOTES:

1. THE PLUMBING SUB-CONTRACTOR MUST CONDUCT A VIDEO INSPECTION TO CONFIRM THE LOCATION OF THE EXISTING UNDER-SLAB SANITARY DRAIN BEFORE CUTTING INTO THE SLAB. THE FINDINGS FROM THIS INSPECTION WILL BE USED TO ASSESS THE CONDITION OF THE EXISTING UNDER-SLAB SANITARY PIPING AND TO DETERMINE WHETHER IT CAN BE REUSED IN THE RENOVATIONS.

1 PLUMBING UNDERSLAB PLAN - BUILDING 81
1/8" = 1'-0"

ENVIRONMENTS FOR HEALTH ARCHITECTURE
e4h
888.781.8441 207.773.8841 75 York St, Suite 3, Portland ME 04101
e4harchitecture.com

RFS
RFS Engineering
NH: 71 Water St | Laconia, NH 03246
P: 603.524.4647
MA: 24 Federal St, 3rd Floor | Boston, MA 02110
P: 617.494.1464
ME: 82 Hanover St, Suite 2 | Portland, ME 04101
P: 207.761.4647
www.rfsengineering.com
RFS Project #: 10594.001

MaineHealth

PINE TREE ENGINEERING

MAINEHEALTH
MID COAST CANCER CENTER RENOVATION
81 Medical Center Drive
Brunswick, ME 04011

PROJECT NUMBER: 2024014

Δ	DATE	DESCRIPTION
	9.23.25	BUILDING 81 DD
	10.28.25	BUILDING 81 CD

KEY PLAN:

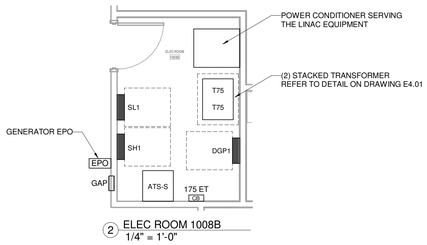
STATE OF MAINE CHRISTOPHER M. SHUMWAY No. 10820 LICENSED PROFESSIONAL ENGINEER

DATE: 10.28.2025

SHEET TITLE AND NUMBER:

P1.00

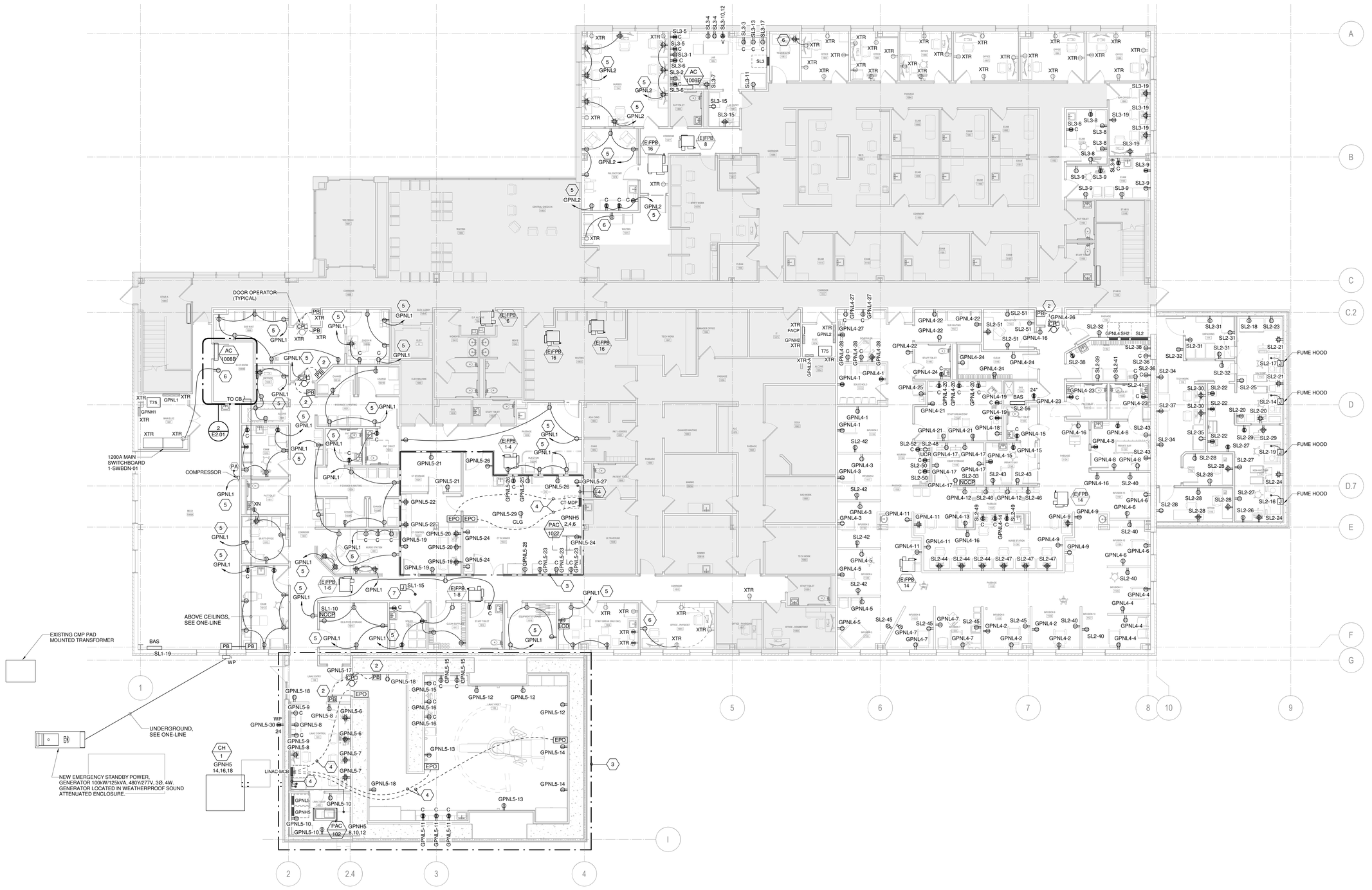
PLUMBING UNDERSLAB PLAN - BLDG 81



2 ELEC ROOM 1008B
1/4" = 1'-0"

DRAWING NOTES

1. REFER TO ARCHITECTURAL DRAWINGS, DETAILS AND ELEVATIONS FOR LOCATION AND MOUNTING HEIGHT OF ALL DEVICES PRIOR TO INSTALLATION.
2. COORDINATE MOTORIZED DOOR PUSH BUTTON LOCATION AND MOUNTING WITH OWNER AND ARCHITECT PRIOR TO RUNNING ANY CABLE OR CONDUIT.
3. AS PART OF THE CONTRACT DOCUMENTS, ELECTRICAL CONTRACTOR SHALL REFER TO FINAL APPROVED MANUFACTURER SHOP DRAWINGS FOR WIRING, RACEWAYS, BOXES AND ALL EQUIPMENTS. REFER TO E5.00 SERIES DRAWINGS FOR MORE INFO ABOUT ELECTRICAL REQUIREMENTS.
4. PER MANUFACTURER RECOMMENDATION.
5. WIRE TO THIS PANEL USING EXISTING 20A/1P CIRCUIT BREAKER AVAILABLE AFTER DEMOLITION. PROVIDE A NEW PANELBOARD DIRECTORY INDICATING BOTH EXISTING AND NEW CIRCUITS AS REQUIRED.
6. INTERCEPT EXISTING BRANCH CIRCUIT AND EXTEND TO SERVE NEW RECEPTACLE AS SHOWN.
7. ELECTRICAL CONTRACTOR SHALL PROVIDE 2#10 & 1#10G., 3/4" CONDUIT FROM THIS PANEL TO JUNCTION BOX FOR CONNECTION OF ALL THE NEW DAMPERS. FOR LOCATION OF DAMPERS, REFER TO MECHANICAL AND FIRE ALARM DRAWINGS.



1 POWER OVERALL LEVEL 1 PLAN - BLDG 81
1/8" = 1'-0"

ENVIRONMENTS FOR HEALTH **ARCHITECTURE**
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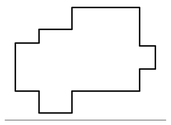

DATE: 10.28.2025

SHEET TITLE AND NUMBER:

E2.01

POWER OVERALL LEVEL 1 PLAN - BLDG 81