

**Planning Board Meeting
September 26, 2023 – 7:00 PM
Town Office Conference Room**



Meeting Materials

Planning Board
Tuesday, September 26, 2023
7:00 PM – Town Office Conference Room

CALL TO ORDER

MINUTES

September 12, 2023

COMMUNICATIONS

OLD BUSINESS

NEW BUSINESS

CEDC to discuss Downtown Design Standards

Formal Site Plan – Poland Animal Hospital (VetCor of Poland) – 1195 and 1197 Maine Street
– Map 39 Lots 29 and 30

Formal Site Plan – Peter Ferland – 202 Torrey Road – Map 3 Lot 9

Findings of Fact and Conclusions of Law for:

Formal Shoreland Zoning Application – Gregory and Karen Henderson – 155 Loon Point Lane
– Map 47 Lot 7

ANY OTHER BUSINESS

ADJOURNMENT

POLAND PLANNING BOARD
MINUTES OF MEETING
September 12, 2023
Approved on _____, 2023

CALL TO ORDER – Chairperson James Porter called the meeting to order at 7:00pm with Members Cheryl Skilling, George Greenwood, James Walker, Alternate Member Heather Ryan, and CEO Scott Neal present. Member Jon Gilson is absent with notice. Alternate Member Heather Ryan is a voting member for this meeting.

MINUTES – August 22, 2023 – Member Greenwood moved to approve the minutes. Member Ryan seconded the motion. Discussion: None Vote: 3-yes 0-no 2-abstained (Members Skilling and Walker abstained from voting as they were not voting members at the August 22nd meeting.)

COMMUNICATIONS – None

OLD BUSINESS – None

NEW BUSINESS – Sketch Plan Review – Matt New – Maine Street – Map 15 Lot 5C
Shane Howley from Main-Land and Matt New presented the project to the Board. Mr. New would like to build a four bay car wash, consisting of three self-serve bays and one automatic wash bay. The car wash will be on public water and private sewer with a water reclamation system. There won't be any access onto Tripp Lake Road, but they may need to work with MEDot to move the curb cut on the property to a different location.

The Board reminded Mr. New to pay attention to Section 508.28.F., the section on signs, and the downtown design standard sections for the building and landscaping.

Member Greenwood moved to approve the checklist as complete. Member Skilling seconded the motion. Discussion: None Vote: 5-yes 0-no

Formal Shoreland Zoning Application – Gregory and Karen Henderson – 155 Loon Point Lane – Map 47 Lot 7

Stuart Davis of Davis Land Surveying presented the project to the Board. The Applicant is looking to renovate the existing home and remove and replace the front porch and back deck. The deck and stairs will not move any closer to the resource.

Member Greenwood moved to approve the checklist as complete. Member Ryan seconded the motion. Discussion: None Vote: 5-yes 0-no

Member Greenwood moved to approve the Formal Shoreland Zoning Application with the following conditions: no public hearing and no site walk. Member Skilling seconded the motion. Discussion: None Vote: 5-yes 0-no

POLAND PLANNING BOARD
MINUTES OF MEETING
September 12, 2023
Approved on _____, 2023

Informational – Matt New – Maine Street – Map 15 Lot 5B

Mr. New informed the Board that he had gotten answers to his questions and no longer needed to talk to the Board about this matter.

ANY OTHER BUSINESS – Member Greenwood had questions about whether an alternate can vote on minutes from a meeting where they weren't a voting member. Ms. Merrill will look into that.

ADJOURN – Member Greenwood moved to adjourn the meeting at 7:48 p.m. Member Skilling seconded the motion. Discussion: None Vote: 5-yes 0-no

Recorded by: Sarah Merrill

Planning Board

James Porter, Chairperson

George Greenwood, Vice Chairperson

Absent with Notice
Jonahan Gilson, Secretary

Cheryl Skilling, Member

James Wlaker, Jr., Member

Heather Ryan, Alternate Member



Town of Poland PLANNING BOARD AGENDA REQUEST

Date of meeting you are requesting to be scheduled for: 9 / 26 / 2023

Meetings are normally conducted in the Municipal Conference Room at the Town Office from 7:00 to 9:00 pm.

Applicant Information

Applicant's Name: Town of Poland (CEDC) Email: polandcedc@polandtownoffice.org
Mailing Address: 1231 Maine Street, Poland, ME 04274 Map: N/A Lot: N/A Sub-lot: N/A
Home Phone: 207-344-7238 Work Phone: 207-344-7238 Cell Phone: 207-344-7238

Project Information

Type of Application: ☒ Informational ☐ Sketch Plan ☐ Site Review ☐ Shoreland ☐ Subdivision
Property Address/ Road Location for project: N/A
Map: N/A Lot: N/A Sub-lot: N/A Zoning: N/A Lake Watershed: N/A
Description of Project/ Business to be discussed: Continue discussion of last years proposed downtown design standard amendments, following the failed vote. Is there anything else the CEDC can do to help the Planning Board with this project?

IMPORTANT – READ CAREFULLY

The Code Office **must** receive the original application, plus nine (9) copies, a digital PDF copy on either a cd or USB drive, and appropriate fees by **Thursday at 1:00 pm**, twelve (12) days before the stated meeting to be put on the meeting agenda.

- New business is scheduled on the agenda in the order this office receives completed applications.
- If you want your application reviewed for contents prior to the meeting, it must be in the Code office fourteen (14) days before the meeting.
- Should the Planning Board choose to adjourn before all business is addressed, all remaining business will be tabled until the next available meeting.
- Unfinished business is conducted before new business is addressed.

Applicant's Signature:  Date: 8/30/2023

OFFICE USE ONLY

Date: _____ Time: _____ Received By: _____



Town of Poland Site Plan Application

For

Poland Animal Hospital Addition Poland, Maine

Prepared for
VETCor of Poland LLC
141 Longwater Drive, Suite 108
Norwell, MA 020161

Prepared by
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106

August 2023

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August 11, 2023
230327

Scott Neal
Code Enforcement Officer
Town of Poland
1231 Maine Street
Poland, ME 04274

Poland Animal Hospital Expansion
1195-1197 Maine Street, Poland, ME
Applicant: VetCor of Poland, LLC

Dear Scott:

On behalf of VetCor of Poland, LLC, Sebago Technics, Inc (Sebago) is pleased to submit the enclosed plans and supporting application materials for a Site Plan Review to expand the Poland Animal Hospital located at 1195-1197 Maine Street, Tax Map 39 Lots 29 & 30. We respectfully request placement on the next available Planning Board agenda that allows sufficient time to review the application materials, either August 22, 2023 or September 12, 2023.

The project is located within the Downtown District and Aquifer Protection 1 Overlay District and involves the construction of a $\pm 1,475$ SF addition to the existing $\pm 1,425$ SF facility, as well as modifications to existing landscaping, parking, entrances, and utilities. The proposed building design meets the town's Comprehensive Land Use Code (CLUC) §508.30(A) Downtown District Design Standards, detailed in the enclosed Exhibit 9. The proposed landscaping is intended to create an aesthetically pleasing corner on Maine Street as people enter the Downtown District in Poland. The proposed parking lot and entrance configuration improves vehicle access, circulation, and safety. A traffic memorandum and Maine Department of Transportation entrance permit are included with the application materials. The facility is currently served by a private well and sanitary system. The proposed improvements include a new private sanitary system located outside of the aquifer and a public water connection.

As outlined in the CLUC §509.8 Site Plan Review requirements, we have included the following:

- 10 full sized copies of the plan set;
- 10 application packets with attachments (original and 9 copies);
- A link to the digital files has been forwarded via an e-mail link; and
- Check #88716 for \$175.50 (\$150 application fee + \$25.50 for notice)

We look forward to discussing the project further with the Planning Board. If you should have any questions or require additional information, I can be contacted via e-mail at pgere@sebagotechincs.com or my direct line 207-200-2133.

Sincerely,

Sebago Technics, Inc.

A handwritten signature in black ink, appearing to read 'P. Gere', is positioned above the printed name.

Patrick M. Gere, PE
Project Manager

Enc.

Exhibit 1

Application Form



Town of Poland, Maine Planning Board

Formal Site Plan Review

Instructions:

1. **Read every part of this document. Failure to follow requirements can and will delay the Planning Board's decisions.**
2. Fill out the forms on pages 1 through 6. Obtain or get copies of information as required by the application on these pages.
3. Use the "Submission Checklist" on pages 5 and 6 to make sure submission requirements are met.
 - a. The checklist is a summary of the standard requirements in Section 509.8 of the Comprehensive Land Use Code.
 - i. The actual Code wording may be found on-line at www.polandtownoffice.org. Go to the "Code Enforcement" page, select "Comprehensive Land Use Code" at that bottom of the page. Hardcopies are available for purchase at the town office.
 - b. Make sure all waiver requests have a written statement for each request. Check with the Code Enforcement Office to make sure items stated as "On File" are indeed in the town office.
 - c. Some requirements may need only a one paragraph or one sentence statement. Make sure all requests are answered.
4. **NUMBER OF COPIES OF THE APPLICATION AND DUE DATE**
 - a. A total of at least ten (10) copies of the plans and one PDF copy (on either cd or usb) are needed. Be sure to make a copy for yourself.
 - b. The Code Enforcement Office must receive the original application, an additional 9 copies, and a digital PDF copy (either cd or usb) with appropriate fees by 1:00 p.m. eleven (11) days before the stated meeting to be put on the upcoming agenda.
 - c. If review for missing information by the Code Enforcement Officer is desired, a copy must be submitted to the CEO at least 14 days prior to the meeting.
 - d. The application must be on file for public review for at least 10 days prior to the meeting. Applications received after the Agenda is posted may not be reviewed by the Board for your scheduled meeting date.
5. **Check with this office to make sure that all departments have responded to your application prior to the meeting.**

PROJECT NAME: Poland Animal Hospital Expansion

Date of Planning Board Review: ____ / ____ / ____ Application # ____

LOT INFORMATION:

Tax Assessor's Map # 039 Lot # 30 & 29 Sub lot # ____

Watershed: Waterhouse Brook

Property's Road Location: 1195 & 1197 Maine Street

Lot Size: 1.07 & 0.5 (1.57 total) Acres or Sq. Ft. Road Frontage: 379 Ft. total

Year lot created: pre 1950 est (If unknown, give best estimate with "est." after date)

Zoning District(s): DT Flood Zone: X Aquifer Overlay: Overlay 1 (portion of site)

Current use of lot: 1195 Maine Street is an empty lot (formally developed with a structure and driveway)

1197 Maine Street is utilized as an animal hospital.

LAND OWNER(s):

Name(s) Derralyn Rennix

Company Relic, LLC

Mail Address: 47 Cook Road Main Phone (207) 240-5898

Town/State/Zip Ottisfield, ME 04270

Alternate Phone: ____

APPLICANT or CONTACT PERSON:Applicant is: _____ Landowner _____ Contractor X Lease/
Renter _____ Buyer**If landowner, write "Same" below and continue to next block below. If not the landowner, submit a letter of permission to construct on or use the land, or copy of a contract to buy from the landowner, along with the following information:**

Name(s): _____

Company VetCor of Poland, LLCMail Address: 141 Longwater Drive Suite 108 Main Phone: 781-831-0945 - -Town/State/Zip Norwell, MA 02061 Alternate Phone: _____ - -**THIS APPLICATION IS FOR:**

(Check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> New Development |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Change In Use |
| <input type="checkbox"/> Institutional | <input type="checkbox"/> Expansion of Use |
| <input type="checkbox"/> Governmental | <input checked="" type="checkbox"/> Expansion of Structure(s) |
| <input type="checkbox"/> Open Space | <input type="checkbox"/> Resumption of Use |

EXISTING LOT CONDITIONS:

(This page is to describe what is on your lot currently)

1. General

Does this lot have any development? (If No, go to "Proposed Development")

X Yes No

a. Is there an existing Well

X Yes No

b. Is there an existing Septic System

X Yes No

i) If yes, submit a copy of a septic permit, or drawing(s) showing size & location.

c. Is there an existing Road Entry

X Yes No

i) If yes, will there be any changes/modifications?

X Yes No

ii) (If no, submit copy of appropriate road entry application if entrance is onto a state or town road.)

d. Any structures to be removed

 YesX No

i) If yes, submit information about the structure to be removed and how any debris will be disposed of.

2. Existing Land Development & Improvements NOT Including Buildings

a. Size of lawns

20,803 Sq. Ft.

or Acres

b. Size of fields

n/a Sq. Ft.

or Acres

c. Size of driveways/roads

8,510 Sq. Ft.

d. Size of other non-vegetated areas

1,820 Sq. Ft.

e. Wetlands already filled

0 Sq. Ft.**3. Existing Main Structure**

a. Ground Footprint

1424 Sq. Ft.

b. Total Gross Floor Space (exterior dimensions of all floors)

 Sq. Ft.

c. Road Frontage Setback

23 Ft.

- | | | | |
|--|---|----------|---------|
| d. Side Setback | | 9 | Ft. |
| e. Rear Setback | | 325 | Ft. |
| f. Distance to Great Pond | <u> X </u> Not applicable (over 250') | | Ft. |
| g. Distance to Stream | <u> X </u> Not applicable (over 250') | | Ft. |
| h. Distance to Wetlands | <u> X </u> Not applicable (over 250') | | Ft. |
| 4. Foundation Type | <u> </u> Full Basement <u> </u> Frost Walls <u> X </u> Slab <u> </u> Piers | | |
| 5. Existing Accessory Structure(s) | | | |
| a. Total Number of Structures | | 1 (shed) | |
| b. Total Ground Footprint | | 144 | Sq. Ft. |
| c. Total Floor Space | | 144 | Sq. Ft. |
| d. Closest Road Setback | | 123.8 | Ft. |
| e. Closest Side Setback | | 17.7 | Ft. |
| f. Closest Rear Setback | | 256.7 | Ft. |
| g. Distance to Great Pond | <u> X </u> Not applicable (over 250') | | Ft. |
| h. Distance to Streams | <u> X </u> Not applicable (over 250') | | Ft. |
| i. Distance to Wetlands | <u> X </u> Not applicable (over 250') | | Ft. |
| 6. Total Existing Impervious Surfaces | | 11,898 | Sq. Ft. |
| a. Add 2c + 2d + 3a + 5b | | | |

PROPOSED DEVELOPMENT:

- | | | | |
|--|--|-------|---------|
| 1. Wetlands to be impacted | | 0 | Sq. Ft. |
| 2. New footprint(s) and developed area(s): | | | |
| a. Changes in building footprint(s) | | 1,428 | Sq. Ft. |
| b. Changes in driveway/roadway | | 285 | Sq. Ft. |
| c. Changes in patios, walkways, etc. | | 1,211 | Sq. Ft. |
| d. TOTAL (2a+2b+2c) | | 3,782 | Sq. Ft. |
| 3. Percentage of lot covered by impervious surfaces: | | 26.4 | % |
| a. (Equals [areas on line 6 page 2 + line 2d above] / [Total lot area measured in sq. ft.] * 100%) | | | |

SUBMISSIONS:

1. **Attach drawings and/or statements describing the following items, if applicable:**
 - a. Provide a copy of deed and Tax Assessor's information card.
 - b. Provide a map of the general area showing land features within at least ½ mile of this lot.
 - c. Provide site plan(s) of your lot with existing development and its dimensions shown.
 - d. Provide site plan(s) of your lot with proposed development and its dimensions shown.
 - i. (May be combined on existing development drawing.)
 - e. Provide detailed plans of proposed structural development and changes.
 - f. Provide statements or drawings of methods of infrastructure:
 - i. Water supply
 - ii. Sewage disposal
 - iii. Fire protection
 - iv. Electricity
 - v. Solid waste disposal
 - g. Type, size, and location of signs.
 - h. Number of parking spaces.
 - i. Provide phosphorus loading calculation if in a great pond watershed area.
 - j. Anticipated date for start of construction.
 - k. Anticipated date for completion of construction.
 - l. Standard submissions requirements shall follow Section 509.8 of the Comprehensive Land Use Code. Copies of the Code are available for viewing at the Town Office and Library. Copies are available for purchase (\$25.00) in the Code Enforcement Office.
 - i. (Use checklist starting on page 6 for summary of usual requirements.)
 - m. Other requirements unique to your project added by the Planning Board.

2. **List all state and federal approvals, permits, and licenses required, if any, for the project:**

This includes but is not limited to the following:

1. State highway entrance permit.
2. Soil disturbances involving more than one acre.
3. Impact on more than 4,300 square feet of any type wetland.
4. Soil disturbances within 100 feet of lakes, rivers or streams.
5. Activity within 75 feet, over the water, or in the water of lakes, rivers, or streams.
6. Timber harvesting.
7. Flood zones.
8. Discharges and emissions

DISCLOSURE: (READ BEFORE SIGNING)

1. I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this document is to the best of my knowledge true and accurate. I agree to comply with all the Town of Poland's ordinances and the State of Maine's statutes regulating the activities sought in this application as well as any permit(s) approved for this application.
2. I understand that all construction of structures shall conform to or exceed the minimum requirements of the Maine Uniform Building and Energy Code, and the NFPA-101 Life Safety Code, 2009
3. I understand that any approval is valid for only the use(s) as specified in this application. The permitting authority must approve any change(s) made to the use(s) sought in the application. Any approval issued for this application is approved on the basis of truthful information provided by the applicant(s), and as allowed by the ordinances of the town.
4. I understand that it is my responsibility to assure that the lot description herein accurately describes its ownership, its boundary lines, and the setback measurements from the legal boundary lines.
5. I understand that I have the burden of proof as to the legal right to use the property, and that approval of this application in no way relieves me of this burden. Any approval issued does not constitute a resolution in favor of me or the landowner in any matters regarding the property boundaries, ownership, or similar titles.
6. I understand that all necessary **Building and Use Permits** shall be secured from the Code Enforcement Office after the Planning Board grants approval of this application.
7. I understand that a **Certificate of Occupancy or Compliance** shall be required prior to the start of any use or occupancy associated with this application unless a signed written waiver is issued with the permit. Fines and penalties may be issued if use or occupancy is started prior to the issuance of the certificate.
8. I understand that the **approval becomes invalid** if construction or use has not commenced within twelve (12) months of the Planning Board's approval date, construction is suspended for more than six (6) months and no notice for just cause is submitted prior to the end of the six (6) months, or it is found that false statements have been furnished in this application.
9. I understand that if I fail to comply with the aforementioned statements, a "STOP WORK" order may be issued for which I will immediately halt any construction and/or use(s) that are approved for this application. This failure may also require that I return the property to its natural state or as closely thereto before the use(s) was/were approved.
10. I understand that failure to follow these requirements will lead to Violation Notices and Citations that have fines and penalties. This in turn can lead to civil proceedings in District and/or Superior Court.
11. I understand that **all state and federal permits** are my responsibility as the applicant and/or owner and will secure the same prior to the start of the project.

Applicant's Signature(s)

Date

Submission CHECKLIST

The following list is a short summary of the information required in Chapter 509.8 of the Comprehensive Land Use Code for the Town of Poland, Maine. Please checkmark or place an "X" in the left-hand columns if the information has been provided, if you request a waiver from submitting the information, or you believe the information is not applicable to your application. If a waiver(s) is requested, or the information is not applicable, a written explanation is required. Columns on the right are for the Planning Board's use.

For Applicant Use			Section 509.8.A Submission requirements	For Planning Board Use			
Provided	Waiver Request	Not Applicable		Received	On File	Waived	Not Applicable
X			1. Site Plan Drawings				
X			2. Signed copy of application				
X			3.a. Name & address of owner				
X			Name of development				
X			Name & address of abutters within 500' of lot for development				
X			Map of general location				
X			Show all contiguous properties				
X			Names, Map, & lot #'s on drawings				
X			Copy of deeds, agreements				
X			Engineer/ designer of plans				
X			Existing Conditions (Site Plan)				
X			Zoning Districts on and/or abutting project's lot shown				
X			Bearings & Distances shown on drawings				
X			Location of utilities, culverts, drains				
X			Location, name of existing r/w				
X			Location, dimensions of existing structures				
X			Location, dimensions of existing roads, walks, parking, loading, etc.				
X			Location of intersection within 200'				
		X	Location of open drains, wetlands, wildlife areas, historic sites, etc.				
X			Direction of surface drainage				
		X	100-yr. Floodplain				
X			Signs				
		X	Easement, covenants, restrictions				
X			Proposed Development (Site Plan)				
X			Location & dimensions of all new structures. New development delineated from existing development				
X			Setback dimensions shown & met				
X			Exterior lighting (Will meet full cutoff requirements)				
		X	Incineration devices				
		X	Noise of machinery and operations				
		X	Type of odors generated				
X			Septic system and other soils reports				
X			Water supply				
		X	Raw & finished materials stored outside				
X			Contours shown at PB specified intervals				
X			Curbs, sidewalks, drives, fences, retaining walls, parking, etc.				
X			Landscaping plan				
X			Easements, r/w, legal restrictions				
X			Abutters' property lines, names				
X			TRAFFIC DATA				

For Applicant Use			Section 509.8.A Submission requirements	For Planning Board Use			
Provided	Waiver Request	Not Applicable		Received	On File	Waived	Not Applicable
X			Peak hour traffic				
X			Traffic counts				
X			Traffic accident data				
X			Road capacities				
X			Traffic signs, signals				
X			STORMWATER & EROSION				
X			Method for handling stormwater shown				
X			Flow direction				
X			Catch basins, dry wells, ditches, etc.				
X			Engineering Analysis of stormwater				
X			Erosion control measures				
		X	Hydrologist groundwater impact				
X			Utility plans for all utilities				
X			Cross-section profile of roads, walks				
X			Construction drawings of roads, utilities				
X			Cost analysis of project and financial capability demonstrated				
		X	Phosphorus control plan if in watershed of a great pond				
		X	Submission of waiver requests				
X			Copies of state, federal applications, permits, &/or licenses required for this project.				
			Condition A.				
			Condition B.				
			Condition C.				
			Condition D.				
			Condition E.				

This application was first looked at by the Planning Board on ___ / ___ / ___ but does not create vested rights in the initiation of the review process.

By vote of the Board this application requires an on-site inspection: _____ Yes _____ No
If yes, an onsite inspection is scheduled for ___ / ___ / ___ at ___ : ___ ___ AM ___ PM

By vote of the Board this application requires a public hearing: _____ Yes _____ No
If yes, public hearing is scheduled for ___ / ___ / ___ at ___ : ___ ___ AM ___ PM

Conditions of Approval for Formal Site Review: _____

Planning Board Chair

___ / ___ / ___
Date

Site Review and Shoreland Zoning Review Fees:

Type of fee	Fee	Units or Comments
Application – sketch plans, Rough design	\$75.00	Each application (no other fees)
Application – formal	\$150.00	Each application + fees below
Notification of Abutters	\$0.75 per	All abutters within 500 ft. of the property must be notified.
Approval extension, Planning Board Approval only	\$50.00	One extension only (no other fees)
Escrow, minimum amount	\$700.00	When required by Planning Board
Extension of approval	\$100.00	Before approval expires
Auto graveyards, recycle business	\$5.00	Per vehicle storage slot (parking space)
Junkyard, Storage Lots	\$1.50	Per ft of outside storage
Residential Towers	\$20.00 + \$5.00 per \$1,000.00	Based on Cost of Work
Commercial Towers	\$20.00 + \$10.00 per \$1,000.00	Based on Cost of Work
Notifications	\$.75	Each Notification, First Class Mail sent by Town

1. Building and Structures may include up to five times the footprint area of the building for grounds improvements, exclusive of the building footprint, as part of the building review fee.
2. Building and Grounds Improvement Fees. The sum of these two fees may be limited to \$2,500.00 per application at the discretion of the Planning Board. (Junkyards, auto graveyards, recycling business, and towers excluded.
3. Reduced Fees: The Planning Board may, upon application therefore, allow a reduced total site review fees to \$50.00 in any case which it determines that the work for which the permit is sought will be performed within the Shoreland Zone. The project shall be intended solely for the purpose of protecting a Great Pond, Stream, River, or other Natural Resources through the implementation of Conservation, Best Management Practices, or other environmental safeguards. Also, the project shall not result in the enlargement of any building or structure or an intensification of the existing use of the property.
4. Review Escrow Funds may be used by the Town to pay for professional reviews an advice requested by the Planning Board or Code Enforcement Officer related to the applicant's proposed development. Review escrow funds deposited by the applicant not spent during the course of the Town's review shall be returned to the developer within sixty days after the Planning Board's decision on the application is final. If Professional review and advice fees exceed the amount deposited, the developer shall pay the amount outstanding before final approval or any permit is granted.

Town of Poland, Maine
PLANNING BOARD AGENDA REQUEST

Date of meeting you are requesting to be scheduled for: 08 / 22 / 23 Meetings are normally
conducted from 7:00 to 10:00 PM in the Municipal Conference Room at the Town Office
Map 039 Lot 29 & 30 Sub-lot

Applicant's Name: VetCorof Poland, LLC
Mailing Address: 141 Longwater Drive, Suite 108
Town, State, Zip: Norwell MA 02061

Home Phone: Hours:
Work Phone: 781-831-0945 Hours:

Type of application: Sketch Plan ☒ Site Review Shoreland Subdivision Informational
Road location for project: 1195 & 1197 Maine Street
Zoning: DT Lake Watershed: Waterhouse Brook Nature of
business to be discussed (Brief description): Improvements to the site including a building addition,
parking reconfiguration, landscaping, and utilities.

IMPORTANT - READ CAREFULLY:

This Office must receive the original application, plus nine (9) copies, a digital PDF copy (on either cd or usb), and appropriate fees by Friday at 1:00 p.m., eleven (11) days before the stated meeting to be put on the upcoming agenda.

- New business is scheduled on the agenda in the order this office receives this form.
- If you want your application reviewed for contents prior to the meeting, it must be in this office 14 days before the meeting.
- Should the Board choose to adjourn before all business is addressed, all remaining business will be tabled until the next available meeting.
- Unfinished business is conducted before new business is addressed.

Applicant's Signature:  Date: 7/24/2023

OFFICE USE ONLY:

Request Taken By: Date: / / Time: : a.m. p.m.

Exhibit 2

Right, Title or Interest

Exhibit 2 – Right, Title, or Interest

The proposed project site is owned by ReLic, LLC as described in Book 8372 Page 273 and Book 8140 Page 120 at the Androscoggin County Registry of Deeds. The project site is leased by VetCor of Poland LLC. The applicant has consent from ReLic, LLC to complete improvements to the site. Please see this Exhibit for a copy of the deeds, property cards, proof of leasing agreement, and consent to renovate documentation.



July 19, 2023

RELIC, LLC
c/o Dr. Derralyn Rennix and Brad LaRoche
47 Cook Road
Otisfield, ME 04270

Re: Lease, dated as of January 5, 2018 by and between VetCor of Poland LLC as tenant ("Tenant") and RELIC, LLC as landlord ("Landlord") relating to the premises located at 1197 and 1195 Maine Street, Poland, ME 04274 (the "Premises"); Consent to Renovation of the Premises

Dear Derralyn and Brad:

This letter summarizes our proposal to obtain your formal, written consent to the proposed renovation project we have planned for Poland Animal Hospital (the "Hospital").

Consent to Renovation: This Letter (after execution by you) shall serve as Landlord's written consent pursuant to Article 9.03 of the Lease for Tenant to renovate the Hospital in accordance with such construction and renovation plans which include, but are not limited to expansion of the building (an addition), certain interior renovations to aesthetically update the Hospital, septic system upgrades, parking upgrades, and landscaping (subject to such further change orders that may occur during the renovation process, but in all cases such change orders shall not result in material changes in the construction process without seeking your consent to the same) collectively, (the "Renovation"). As provided under the Lease, the Renovation shall be completed at the Tenant's cost and expense.

If you are in agreement with the foregoing terms, please execute this letter where indicated below and return one fully executed copy to me via email.

Please contact me at jagan@vetcor.com if you have any questions.

Thank you for your assistance.

Very truly yours,

VETCOR PROFESSIONAL PRACTICES

LLC

VETCOR OF POLAND LLC

James Agan
Vice President of Facilities

Consent to Renovation Granted:

LANDLORD:

RELIC, LLC

By:

Dr. Derralyn Rennix

Date: 7/19/23, 2023

Warranty Deed

Stephen J. Kinney of 112 Colbath Road, Poland, County of Androscoggin, State of Maine 04273, for consideration paid, grants to **ReLic, LLC**, a Maine Limited Liability Company with a place of business at 47 Cook Road, Otisfield, County of Oxford, State of Maine 04270, with **Warranty Covenants**, the land in the Town of Poland, County of Androscoggin, State of Maine, with any buildings thereon, bounded and described as follows:

A Certain Lot or Parcel of Land with the buildings and improvements thereon situated at 1197 Maine Street in Poland, Androscoggin County, State of Maine, described as follows:

Bounded northerly by land now or formerly of P. E. Dunn, also referred to as being land now or formerly of Emilie A. and Wilbur B. Allen;

Bounded westerly by land now or formerly of Wade, which line may be marked in whole or in part by a stonewall;

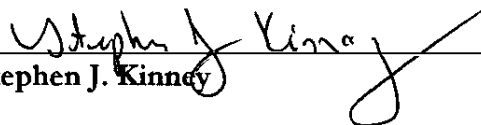
Bounded southerly by land now or formerly of one McAllister, by the former schoolhouse lot, and by land now or formerly of Bridges, also referred to as being land now or formerly of Briggs;

Bounded easterly by Route 26, also known as Maine Street.

Being the Same Premises conveyed to Stephen J. Kinney by MA Development, Inc. by deed dated December 30, 1998 and recorded in the Androscoggin County Registry of Deeds in Book 4154, Page 161.

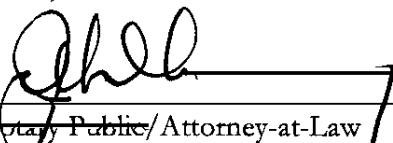
Witness my hand and seal this 31 day of March, 2011.

State of Maine
Androscoggin, ss.


Stephen J. Kinney

March 31, 2011

Then personally appeared the above-named **Stephen J. Kinney** and acknowledged the foregoing instrument to be his free act and deed. Before me,


Notary Public/Attorney-at-Law
John W. Conway

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

MAINE REAL ESTATE
TRANSFER TAX PAID

WARRANTY DEED

WILLIAM C. BENTLEY, not married, with a mailing address of 122 Jordan Shore Drive, Poland, County of Androscoggin, State of Maine, for consideration paid, grant to

RELIC, LLC, with a mailing address of P. O. Box 144, Casco, ME 04015, with **warranty covenants**, the land with all buildings and other improvements thereon, located at 1195 Maine Street in Poland, Androscoggin County, State of Maine as follows:

A certain lot or parcel of land with any improvements thereon situated in the Town of Poland, County of Androscoggin and State of Maine, said property once known as the Charles Rowe Store, more recently known as the Poland Corner Country Store, and bounded and described as follows:

Beginning on the southerly side of State Highway No. 26, leading from Gray to Paris and at its juncture with the westerly side of the White Oak Hill Road; thence in a general southerly direction along the westerly side of said road about seven (7) rods to the Poland Corner School House Lot; thence in a general westerly direction six (6) rods to the property now or formerly owned by the Briggs' heirs; thence in a general northerly direction along the line of the property owned by said Briggs' heirs about seven (7) rods to the southerly side line of said Highway; thence by the southerly side line of said Highway about six (6) rods to the point of beginning.

Also a certain lot or parcel of land with any improvements thereon situated on the northwesterly side of White Oak Hill Road in the Town of Poland, County of Androscoggin, and State of Maine, and being the premises described in a deed dated December 25, 1861 and recorded in the Androscoggin County Registry of Deeds in Book 28, Page 533, bounded and described as follows:

MAINE REAL ESTATE
TRANSFER TAX PAID

Being bounded southwesterly now or formerly by the town pound and by land now or formerly of James Emery; northwesterly by land now or formerly of Cyrus Briggs, northeasterly by the store lot now or formerly of Thomas Lane, and southeasterly by the road, the same containing one fourth of an acre, more or less.

Also including any property acquired by Paul A Goss et al by a Quitclaim Deed from Emilie Briggs Allen and John S. Briggs dated May 23, 1948 and recorded in Androscoggin Registry of Deeds in Book 597, Page 578 and excepting any property as conveyed by said Goss to said Emilie Briggs Allen by Quitclaim Deed dated May 23, 1948 and recorded in Book 597, Page 568.

Also releasing (without any covenants of title) all rights in and to the land underlying any public, private, proposed, discontinued or abandoned road, to the center line of said road, such parts of roads only to the extent they abut the above lot. This is subject to the right of others to use said roads, as established by law.

The grantor intends to convey all of the premises as described in the deed from ICON Properties, LLC to William C. Bentley dated October 13, 2010 and recorded in the Androscoggin County Registry of Deeds in Book 8033, Page 113.

This is intended to take effect as a sealed instrument.

DATE: APRIL 6, 2012

WITNESS




WILLIAM C. BENTLEY

STATE OF MAINE
ANDROSCOGGIN, SS.

APRIL 6, 2012

Personally appeared before me the above named **WILLIAM C. BENTLEY**, and acknowledged the foregoing instrument to be his free act and deed.



~~Notary Public~~ Attorney at Law
Printed Name: John W. Conway

THE PARTIES ARE NOTIFIED THAT NO TITLE SEARCH WAS CONDUCTED BY THE PREPARER OF THIS DEED PRIOR TO THE DELIVERY OF THIS DEED.

This deed was prepared by Andrew B. Choate, Esq., 70 Rachel Boulevard, Lewiston, ME 04240.

ANDROSCOGGIN COUNTY
TINA M CHOQUINARD
REGISTER OF DEEDS

LEASE

[Poland Animal Hospital, Poland, ME]

Lease (the "Lease") made as of the 5th day of January 2018, by and between RELIC, LLC, a Maine limited liability company with an address at 47 Cook Rd., Otisfield, Maine 04270 ("Landlord"), and VetCor of Poland LLC, a Delaware limited liability company with an address at 350 Lincoln Place, Suite 111, Hingham, MA 02043 ("Tenant").

WITNESSETH:

ARTICLE I: PREMISES

Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, certain premises located in a building at and known as Poland Animal Hospital, 1197 and 1195 Maine Street, Poland, ME 04274 (the "Premises"), consisting of approximately 1,320 square feet and as depicted and outlined on Exhibit A attached hereto, together with the right to use and enjoy, in common with Landlord, all associated parking areas, driveways, sidewalks, common areas and other appurtenances. The Premises constitutes a portion of the entire tract of land owned by Landlord along Maine Street (the "Property"), which Property is more particularly described in the legal description attached hereto as Exhibit B attached hereto.

ARTICLE II: TERM

- 2.01 Initial Term. The initial term of this Lease shall commence on the date hereof (the "Commencement Date") and shall terminate on the tenth anniversary of the date hereof (the "Expiration Date"), subject to extension as hereinafter set forth.
- 2.02 Renewal Option. Tenant shall have the option to renew this Lease for three (3) additional five (5) year terms (each additional term is a "Renewal Term"), provided that:

- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, Landlord and Tenant have herewith duly executed this Lease as of the date and year first above written.

LANDLORD:

RELIC, LLC

By: 

Name: Dr. Derralyn Rennix
Title: Manager


TENANT:

VETCOR OF POLAND LLC

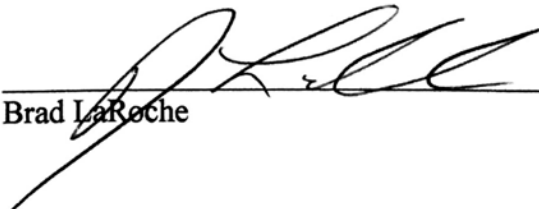
By: _____

Name: Peter R. DeFeo
Title: Chief Development Officer and General Counsel

LANDLORD PARTIES (for purposes of Sections 17.09 and 17.10 only):



Dr. Derralyn Rennix



Brad LaRoche

[Signature Page -- Lease]

IN WITNESS WHEREOF, Landlord and Tenant have herewith duly executed this Lease as of the date and year first above written.

LANDLORD:

RELIC, LLC

By: _____
Name: Dr. Derralyn Rennix
Title: Manager

TENANT:

VETCOR OF POLAND LLC

By:  _____
Name: Peter R. DeFeo
Title: Chief Development Officer and General Counsel

LANDLORD PARTIES (for purposes of Sections 17.09 and 17.10 only):

Dr. Derralyn Rennix

Brad LaRouche

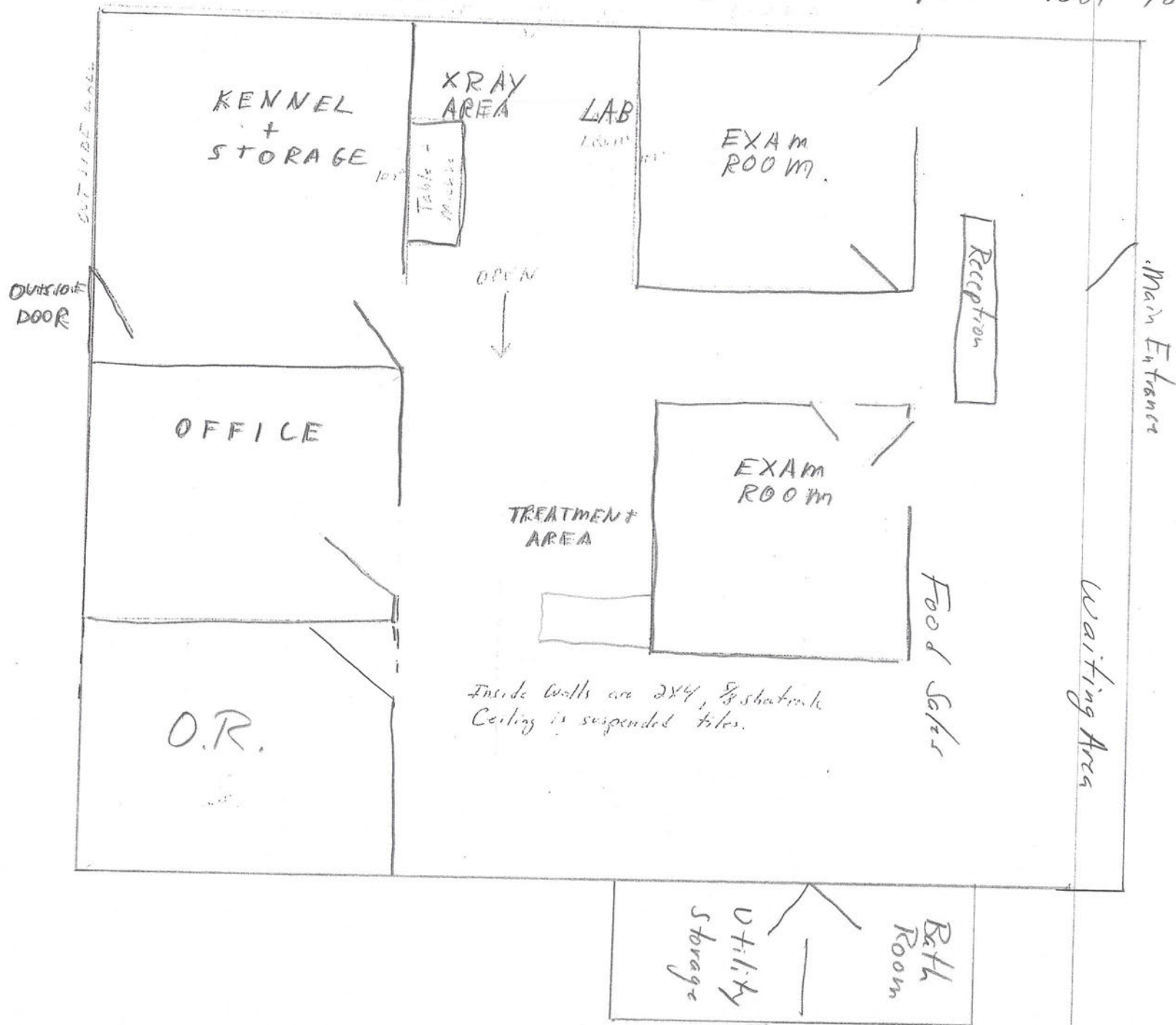
[Signature Page – Lease]

EXHIBIT A

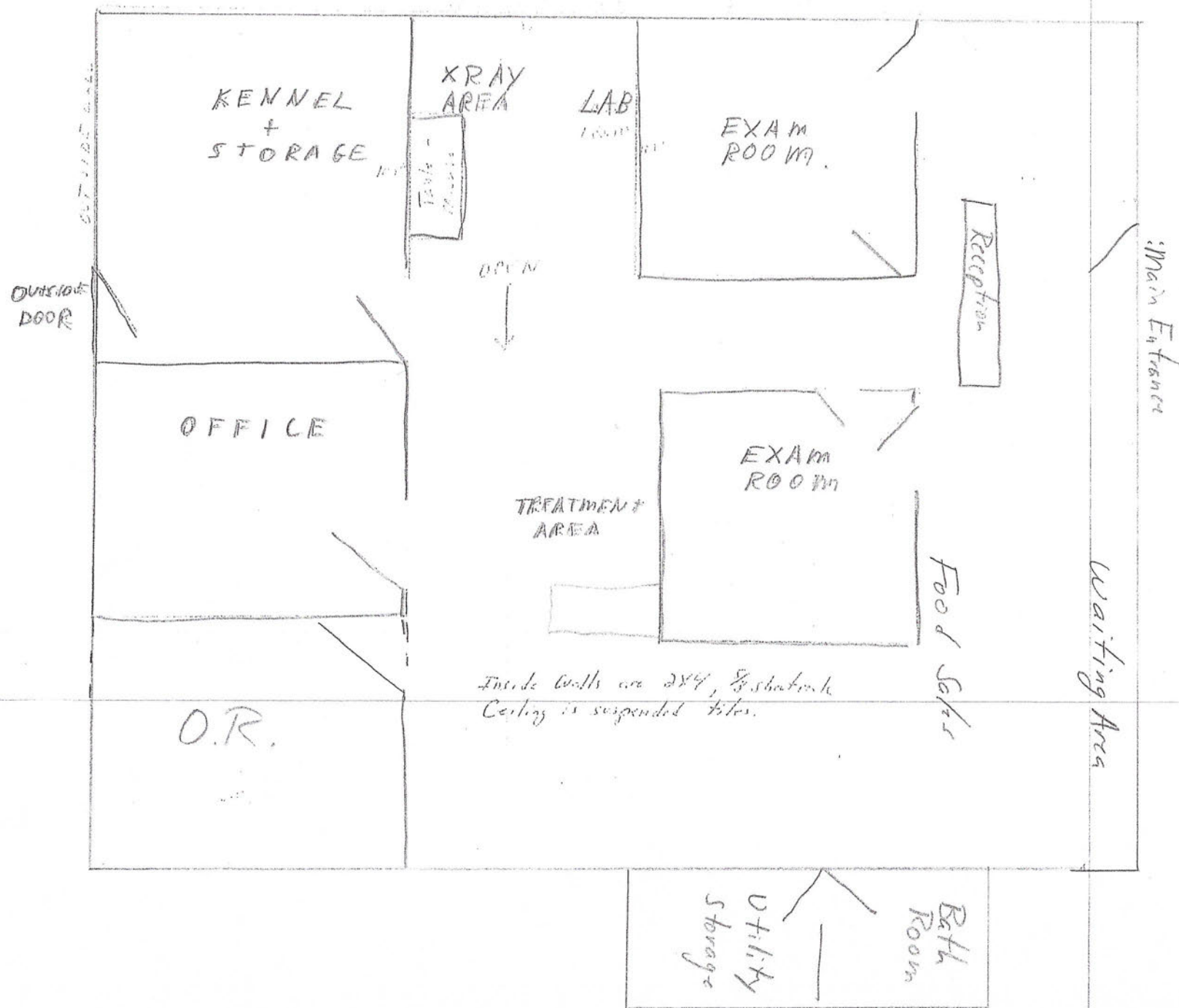
PREMISES DESCRIPTION

Attached.

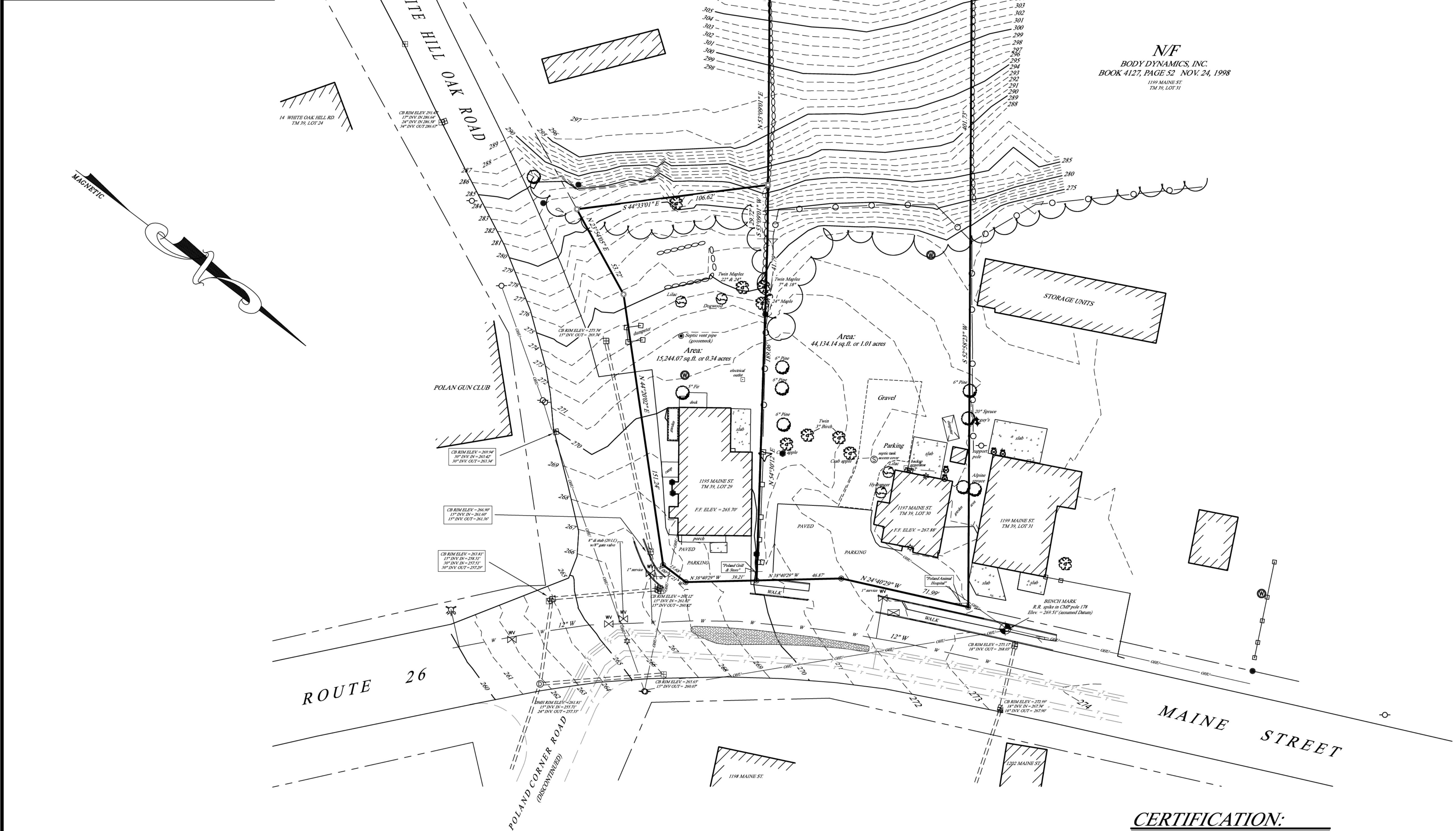
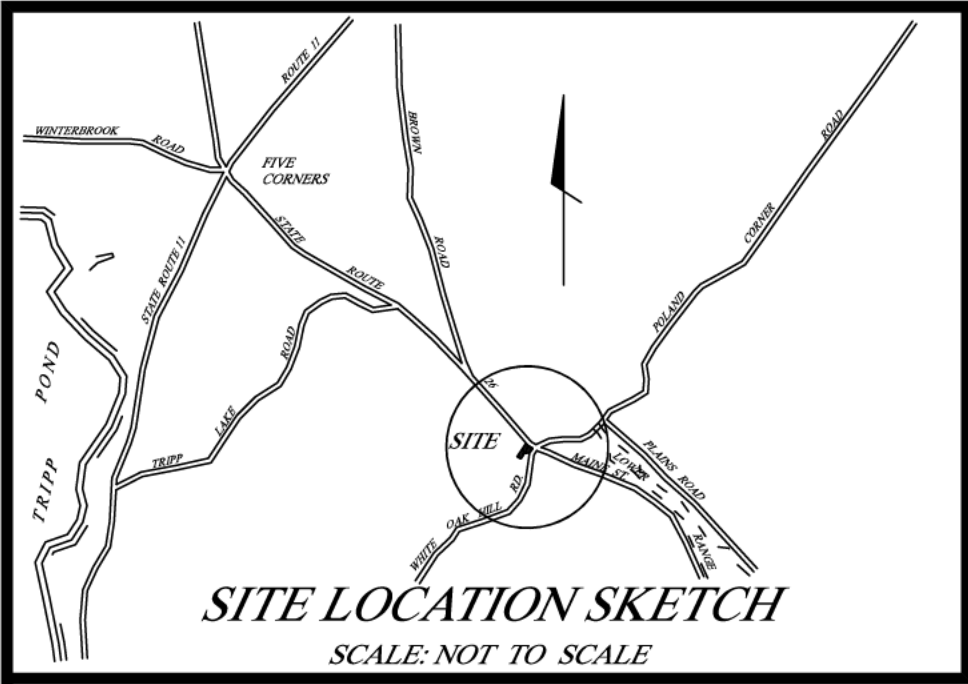
Poland Animal Hospital Floorplan - Not to Scale



Poland Animal Hospital Floorplan - Not to Scale







RECORDING INFORMATION:

ANDROSCOGGIN COUNTY REGISTRY OF DEEDS

RECEIVED _____ AT _____ HOUR _____ MIN. _____ M.

AND RECORDED IN PLAN BOOK _____, PAGE _____

ATTEST _____

REGISTRAR

TOTAL AREA:

1.35 acres or 59,378.21 sq. ft.

CERTIFICATION:

TO THE BEST OF MY KNOWLEDGE, I HAVE USED ORDINARY AND PRUDENT CONDUCT EXPECTED OF PROFESSIONAL LAND SURVEYORS AND THE RESULTS SHOWN HERE REPRESENT THE LICENSEE'S RESPONSIBILITY TO THE PUBLIC AS REQUIRED UNDER THE STANDARDS OF PRACTICE AS DICTATED BY THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS (M.R.S.A. TITLE 32, CHAPTER 121 DATED APRIL, 2001).

EXCEPT AS FOLLOWS:

1) NO WRITTEN REPORT TO DATE.

2) NO DEED DESCRIPTION TO DATE.

PLAN PREPARED BY: K.W.M.

PLAN CHECKED BY: P.E.P. THIS PLAN IS NOT VALID UNLESS EMBOSSED ABOVE

LEGEND:

- IRON PIPE FOUND (3/4" hollow pipe unless noted)
- IRON PIN SET (5/8" rebar with yellow cap inscribed JKL Land Surveying, PLS 2216)
- MAG NAIL SET IN PAVEMENT
- N/F NOW OR FORMERLY
- UTILITY POLE
- HARDWOOD TREE
- SOFTWOOD TREE
- WELL
- HYDRANT
- ☆ LAMP (exterior)
- RIGHT OF WAY LIMITS
- === EDGE OF PAVEMENT
- CHAIN LINK FENCE
- POST & RAIL FENCE
- STONE WALL
- W --- W --- WATER LINE (Scaled)
- OHU --- OHU --- OVERHEAD UTILITY
- ===== UNDER DRAIN

NOTES:

- 1) BEARINGS ARE REFERENCED TO MAGNETIC NORTH, MAY 2012.
- 2) DEED REFERENCES ARE MADE TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS - AUBURN, MAINE.
- 3) STATE ROUTE 26 IS FOUR RODS (66') WIDE AND THE LOCATION IS BASED ON THE MAINE DOT PLAN REFERRED TO IN REFERENCE 1 BELOW.
- 4) WHITE OAK HILL ROAD IS FOUR RODS (66') WIDE AND THE LOCATION IS BASED ON THE MAINE D.O.T. PLAN REFERRED TO IN REFERENCE 1 BELOW.
- 5) ELEVATIONS AND CONTOURS ARE BASED ON ASSUMED DATUM.
- 6) THE PROJECT SITE IS DESIGNATED ON TAX MAP 39, LOTS 29 AND 30.
- 7) NOT ALL UNDERGROUND UTILITIES HAVE BEEN CONFIRMED. ALL UNDERGROUND UTILITIES ARE TO BE FIELD VERIFIED BY DIG SAFE AND/OR THE RESPECTIVE UTILITY COMPANY BEFORE ANY EXCAVATION BEGINS. THIS PLAN DOES NOT ASSURE THE EXISTENCE OR ABSENCE OF UNDERGROUND UTILITIES.

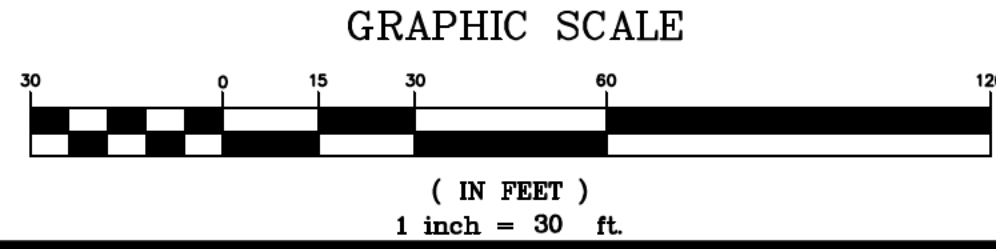
REFERENCES:

- 1) STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP - ROUTE 26 - POLAND, MAINE - D.O.T. FILE NO. 1-283 SHEETS 30 AND 31 DATED MAY 2008 ON FILE WITH MDOOT - AUGUSTA, MAINE.
- 2) PLAN OF A STANDARD BOUNDARY SURVEY MADE FOR P.E. DUNN, INC. STATE ROUTE 26 - POLAND, MAINE DATED JUNE 01, 1994 BY JOHN A. BELDING LAND SURVEYOR - OTISFIELD, MAINE.

OWNER OF RECORD:

RE LIC, LLC

BOOK 8372, PAGE 273 APRIL 006, 2012 AND BOOK 8140, PAGE 120 MARCH 31, 2011



--- PERIMETER BOUNDARY SURVEY ---

EXISTING CONDITIONS SURVEY

1195-1197 MAINE STREET --- STATE ROUTE 26 --- POLAND, MAINE

MADE FOR

RE LIC, LLC

47 COOK ROAD --- OTISFIELD, MAINE 04270

JKL LAND SURVEYING

4 NORTH STREET, SUITE 3 - MECHANIC FALLS, MAINE 04256

(207) 346-3556 --- Email: jklsurvey@roadrunner.com

BOOK: 156 FILE: ### JOB NO: 12017 DISC SURVEY CD 2012 MAY 22, 2012

PROVIDING "DIRECTIONS" FOR THE FUTURE

N/F

SKILLINGS

AGE 80 JULY 07, 1995

100' DIA. HILL RD
MAIN LOT 2"

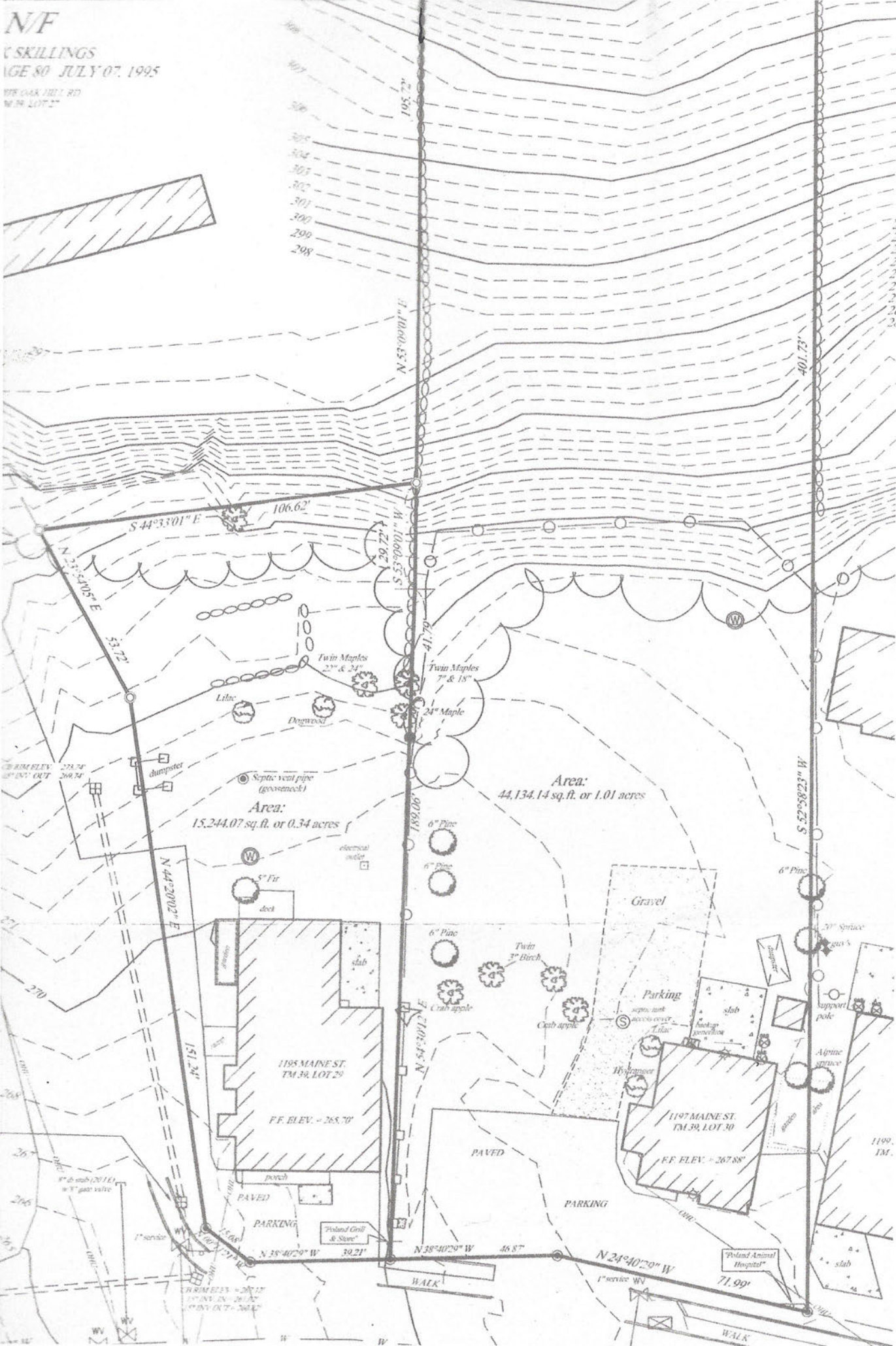


EXHIBIT B

LEGAL DESCRIPTION

Attached.

1197 Maine Street

A Certain Lot or Parcel of Land with the buildings and improvements thereon situated at 1197 Maine Street in Poland, Androscoggin County, State of Maine, described as follows:

Bounded northerly by land now or formerly of P. E. Dunn, also referred to as being land now or formerly of Emilie A. and Wilbur B. Allen;

Bounded westerly by land now or formerly of Wade, which line may be marked in whole or in part by a stonewall;

Bounded southerly by land now or formerly of one McAllister, by the former schoolhouse lot, and by land now or formerly of Bridges, also referred to as being land now or formerly of Briggs;

Bounded easterly by Route 26, also known as Maine Street.

Being the Same Premises conveyed to Stephen J. Kinney by MA Development, Inc. by deed dated December 30, 1998 and recorded in the Androscoggin County Registry of Deeds in Book 4154, Page 161.

1195 Maine Street

A certain lot or parcel of land with any improvements thereon situated in the Town of Poland, County of Androscoggin and State of Maine, said property once known as the Charles Rowe Store, more recently known as the Poland Corner Country Store, and bounded and described as follows:

Beginning on the southerly side of State Highway No. 26, leading from Gray to Paris and at its juncture with the westerly side of the White Oak Hill Road; thence in a general southerly direction along the westerly side of said road about seven (7) rods to the Poland Corner School House Lot; thence in a general westerly direction six (6) rods to the property now or formerly owned by the Briggs' heirs; thence in a general northerly direction along the line of the property owned by said Briggs' heirs about seven (7) rods to the southerly side line of said Highway; thence by the southerly side line of said Highway about six (6) rods to the point of beginning.

Also a certain lot or parcel of land with any improvements thereon situated on the northwesterly side of White Oak Hill Road in the Town of Poland, County of Androscoggin, and State of Maine, and being the premises described in a deed dated December 25, 1861 and recorded in the Androscoggin County Registry of Deeds in Book 28, Page 533, bounded and described as follows:

Being bounded southwesterly now or formerly by the town pound and by land now or formerly of James Emery; northwesterly by land now or formerly of Cyrus Briggs, northeasterly by the store lot now or formerly of Thomas Lane, and southeasterly by the road, the same containing one fourth of an acre, more or less.

EXHIBIT C

[REDACTED]

[REDACTED]



Property Card: 1195 MAINE ST.
Poland, ME

NO PHOTO
AVAILABLE

Parcel ID: 0039-0029
Trio Account #: 2628

Owner: RELIC, LLC
Co-Owner:
Mailing Address: 47 COOK RD
OTISFIELD, ME 04270

Valuation	Building Sketch
Card Number: 1 Acreage: 0.5 Land Value: \$56,050 Building Value: \$0 Total Value: \$0 Taxes: \$796	NO SKETCH AVAILABLE
Building Information	
Year Built: Remodled: Living Area (sqft): Basement: Finished Basement: Number of Rooms: Number of Bedrooms: Number of Full Baths: Number of Half Baths:	Stories: Exterior Walls: Roofing Materials: Foundation: Insulation: Fireplace: Heating: A/C: Attic:



Property Card: 1197 MAINE ST.
Poland, ME



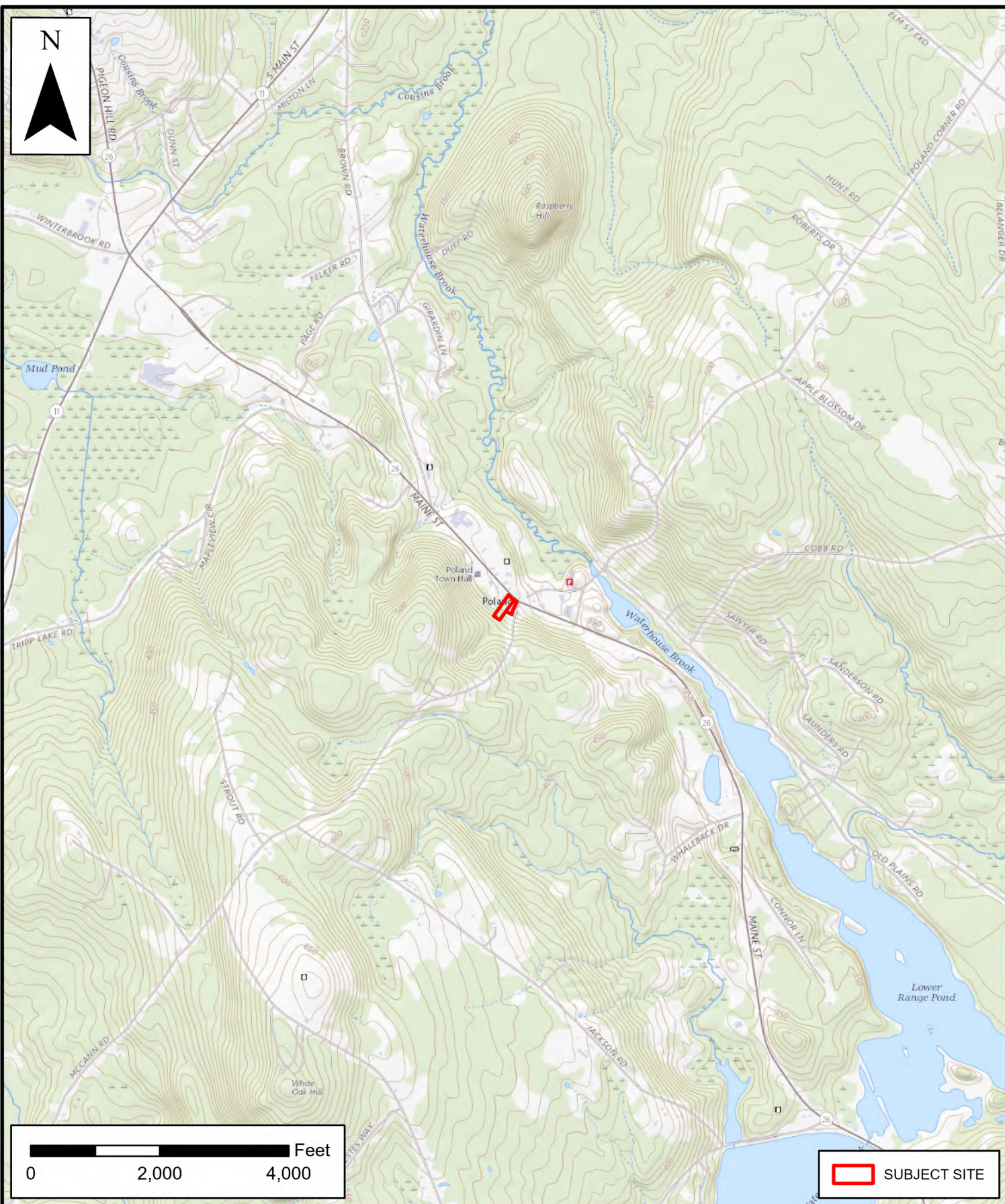
Parcel ID: 0039-0030
Trio Account #: 2629

Owner: RELIC, LLC
Co-Owner:
Mailing Address: 47 COOK RD
OTISFIELD, ME 04270

Valuation	Building Sketch
Card Number: 1 Acreage: 1.07 Land Value: \$81,740 Building Value: \$84,870 Total Value: \$84,870 Taxes: \$2,366	NO SKETCH AVAILABLE
Building Information	
Year Built: Remodled: Living Area (sqft): Basement: Finished Basement: Number of Rooms: Number of Bedrooms: Number of Full Baths: Number of Half Baths:	Stories: Exterior Walls: Roofing Materials: Foundation: Insulation: Fireplace: Heating: A/C: Attic:

Exhibit 3

Location Map



SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

TAX PARCEL MAP POLAND ANIMAL HOSPITAL

LOCATION:

1197 MAINE ST
POLAND, ME

INFORMATION:

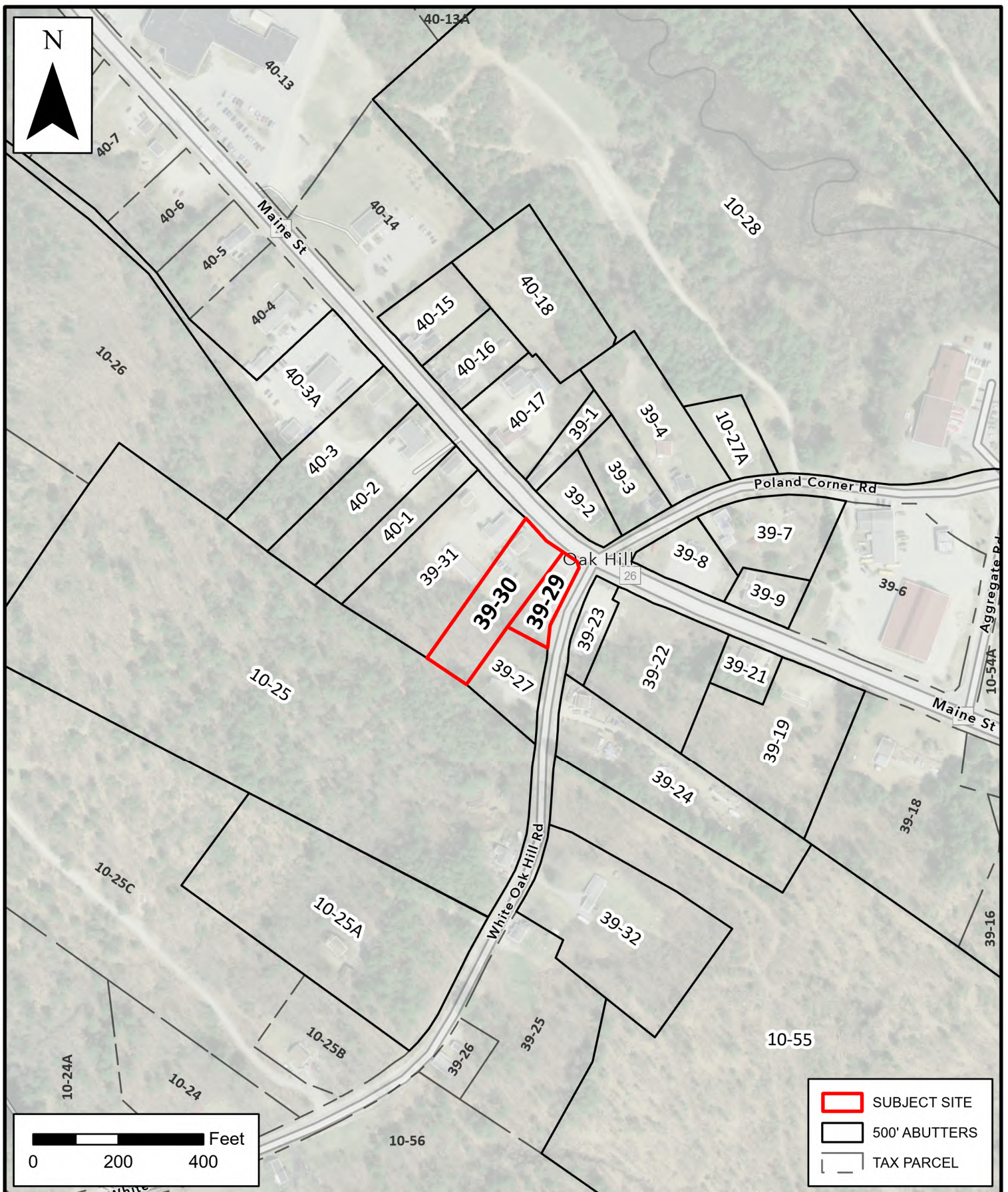
TOWN OF POLAND, ME
USGS BASEMAP

SCALE: 1:24,000

DATE: 6/22/2023

Exhibit 4

Copy of Tax Map & List of Abutters within 500 Feet



SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

TAX PARCEL MAP POLAND ANIMAL HOSPITAL

LOCATION:

1197 MAINE ST
POLAND, ME

INFORMATION:

TOWN OF POLAND, ME
2018 ORTHOREGIONAL IMAGERY

SCALE: 1:3,600

DATE: 6/22/2023

SUBJECT SITE

MAP	LOT	GRANTEE	CO-GRANTEE	MAILING 1	MAILING 2	CITY	STATE	ZIP	LOCATION
39	30	RELIC, LLC		47 COOK RD		OTISFIELD	ME	04270	1197 MAINE ST
39	29	RELIC, LLC		47 COOK RD		OTISFIELD	ME	04270	1195 MAINE ST

DIRECT ABUTTERS

MAP	LOT	GRANTEE	CO-GRANTEE	MAILING 1	MAILING 2	CITY	STATE	ZIP	LOCATION
10	25	KAHKONEN, KEVIN A		30 WHITE OAK HILL RD		POLAND	ME	04274	29 WHITE OAK HILL RD
39	1	RAISING THE ROOF, LLC		1416 MAINE ST		POLAND	ME	04274	1202 MAINE ST
39	2	ROSE, CHARLOTTE		1198 MAINE ST		POLAND	ME	04274	1198 MAINE ST
39	8	KIMBALL RE HOLDING LLC		756 MEGQUIER HILL RD		POLAND	ME	04274	1184 MAINE ST
39	23	G W PROPERTIES, LLC		41 GABRIEL WOODS RD		NEW GLOUCESTER	ME	04260	6 WHITE OAK HILL RD
39	24	GREEN, PETER P SR		14 WHITE OAK HILL RD		POLAND	ME	04274	14 WHITE OAK HILL RD
39	27	SKILLINGS, MARK		13 WHITE OAK HILL RD		POLAND	ME	04274	13 WHITE OAK HILL RD
39	31	MILLER, DAWN		PO BOX 271		MINOT	ME	04258	1199 MAINE ST

500FT ABUTTERS

MAP	LOT	GRANTEE	CO-GRANTEE	MAILING 1	MAILING 2	CITY	STATE	ZIP	LOCATION
10	25A	CALDWELL, PATRICIA M		45 WHITE OAK HILL ROAD		POLAND	ME	04274	45 WHITE OAK HILL RD
10	27A	PETERS, SUSAN G		15 POLAND CORNER RD		POLAND	ME	04274	15 POLAND CORNER RD
10	28	POLAND, TOWN OF		1231 MAINE ST		POLAND	ME	04274	33 POLAND CORNER RD
10	55	LEARNED, THOMAS H		1143 MAINE ST		POLAND	ME	04274	122 THE LEARNED WAY
39	3	DAVIGNON, SPRING D		7 POLAND CORNER RD		POLAND	ME	04274	7 POLAND CORNER RD
39	4	BEACH, PETER A		11 POLAND CORNER RD		POLAND	ME	04274	11 POLAND CORNER RD
39	7	CARVILLE, LIAM P		12 POLAND CORNER RD		POLAND	ME	04274	12 POLAND CORNER RD
39	9	PITCHER, JAMIE B		1178 MAINE ST		POLAND	ME	04274	1178 MAINE ST
39	19	LAPRE, DEBRA A		29 GARLAND SWAMP RD		POLAND	ME	04274	1171 MAINE ST
39	21	ROWE, BRANDI L		1175 MAINE ST		POLAND	ME	04274	1175 MAINE ST
39	22	LAPRE, ANNA M		29 GARLAND SWAMP RD		POLAND	ME	04274	1185 MAINE ST
39	32	KAHKONEN, KEVIN A		29 WHITE OAK HILL RD		POLAND	ME	04274	30 WHITE OAK HILL ROAD
40	1	CONSOLIDATED COMMUNICATIONS OF MAINE		2116 SOUTH 17TH STREET	C/O TAX DEPARTMENT	MATTOON	IL	61938	1207 MAINE ST
40	2	POLAND, TOWN OF		1231 MAINE ST		POLAND	ME	04274	1211 MAINE ST
40	3	POLAND, TOWN OF		1232 MAINE ST		POLAND	ME	04274	1217 MAINE ST
40	3A	POLAND, TOWN OF		1233 MAINE ST		POLAND	ME	04274	1219 MAINE ST
40	15	ATTWOOD FARM & KITCHEN LLC		277 POLAND CORNER RD		POLAND	ME	04274	1220 MAINE ST
40	16	ELLIS, MICHAEL E		1216 MAINE ST		POLAND	ME	04274	1216 MAINE ST
40	17	POLAND COMMUNITY FOOD BANK		1208 MAINE ST		POLAND	ME	04274	1212 MAINE ST
40	18	LOCUST CEMETERY				POLAND	ME	04274	MAINE ST

Exhibit 5

Utilities

Exhibit 5 – Utilities

The proposed project involves improvements to the existing facility. The project site is comprised of two lots that were each previously serviced by two separate septic systems and wells. The proposed project involves the removal of the existing septic systems, decommissioning of the wells, installation of a new septic system and connection to public water. Please see this Exhibit for a copy of the HHE-200 form, water capacity request letter to the Mechanic Falls Water Department, and the plan set for septic location and utility connection information.

The confirmation of capacity letter from the Mechanic Falls Water Department will be forwarded upon receipt.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

City, Town, or Plantation		POLAND	
Street or Road		1197 MAINE STREET	
Subdivision, Lot #			
OWNER/APPLICANT INFORMATION			
Name (last, first, MI)		<input type="checkbox"/> Owner <input checked="" type="checkbox"/> Applicant VETCOR OF POLAND LLC	
Mailing Address of Owner/Applicant		141 LONGWATER DRIVE, SUITE 108 NORWELL, MA 02161	
Daytime Tel. #		(781) 831-0945	
OWNER OR APPLICANT STATEMENT I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.		CAUTION: INSPECTION REQUIRED I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. (1st) Date Approved _____ Local Plumbing Inspector Signature _____ (2nd) Date Approved _____	
PERMIT INFORMATION			
TYPE OF APPLICATION <input type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input checked="" type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. <25% Expansion <input checked="" type="checkbox"/> b. ≥25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion		THIS APPLICATION REQUIRES <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	
SIZE OF PROPERTY 1.5± <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES		DISPOSAL SYSTEM TO SERVE <input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input checked="" type="checkbox"/> 3. Other: VETERINARY HOSPITAL (specify) Current Use <input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped	
SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		DISPOSAL SYSTEM COMPONENTS <input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components	
		TYPE OF WATER SUPPLY <input type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input checked="" type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other	
DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK <input checked="" type="checkbox"/> 1. Concrete <input checked="" type="checkbox"/> a. Regular <input type="checkbox"/> b. Low profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: 2 @ 1,000 GAL.		DISPOSAL FIELD TYPE & SIZE <input type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input checked="" type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. Cluster array <input type="checkbox"/> c. Linear <input checked="" type="checkbox"/> b. Regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: 2,016 <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.	
SOIL DATA & DESIGN CLASS PROFILE CONDITION 5 C at Observation Hole # TP-1 Depth 39 " of Most Limiting Soil Factor		GARBAGE DISPOSAL UNIT <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. Multi-compartment tank <input type="checkbox"/> b. ___ tanks in series <input type="checkbox"/> c. Increase in tank capacity <input type="checkbox"/> d. Filter on tank outlet EFFLUENT/EJECTOR PUMP <input type="checkbox"/> 1. Not Required <input type="checkbox"/> 2. May Be Required <input checked="" type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ GAL.	
		DESIGN FLOW 750 _____ gallons per day BASED ON: <input type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input checked="" type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities 3 VETERINARIANS @ 250 GPD = 750 GPD <input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER METER DATA LATITUDE AND LONGITUDE at center of disposal area Lat. 44 d 03 m 38.4 s Lon. -70 d 23 m 39.1 s	
SITE EVALUATOR STATEMENT			
I certify that on 6-5-23 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).			
Site Evaluator Signature Anna K. Biddle		434 SE # (207) 200-2052	
Date 6-28-23		E-mail Address abiddle@sebagotechnics.com	
Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.			

Town, City, Plantation
POLAND

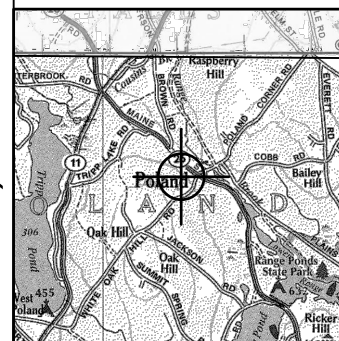
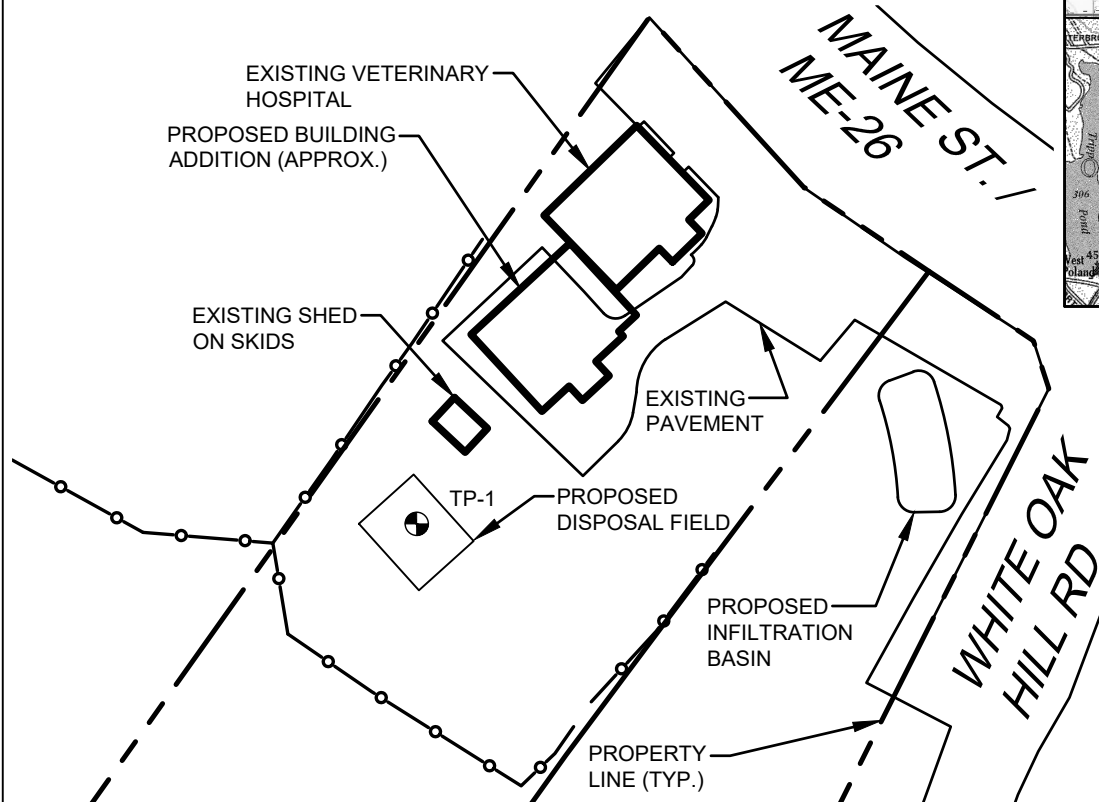
Street, Road, Subdivision
1197 MAINE STREET

Owner or Applicant Name
VETCOR OF POLAND LLC

IPF = IRON PIN FOUND
TP = TEST PIT B = BORING

SCALE: 1" = 60'

SITE LOCATION PLAN



Observation Hole TP-1 ☒ Test pit ☐ Boring

0-1 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	LOAMY FINE SAND	FRIABLE	DARK BROWN	
10	FINE SAND		YELLOWISH BROWN	
20	FINE TO MEDIUM SAND			
30		LOOSE		
40	FINE SAND	FRIABLE	LIGHT BROWNISH GRAY MIXED	FEW, FINE COMMON, MEDIUM, DISTINCT
50	LIMIT OF EXCAVATION = 44"			

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
5 Profile C Condition	0-3 %	39 "	

Observation Hole _____ ☐ Test pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

The graph illustrates the relationship between soil depth and various soil properties. The Y-axis represents the depth below the mineral soil surface in inches, ranging from 0 to 50. The X-axis represents four soil properties: Texture, Consistency, Color, and Mottling. A diagonal line starts at (0, 50) and ends at (50, 0), indicating that as depth increases, the values for these properties also increase.

Soil Classification		Slope	Limiting Factor	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile	Condition	%	"	

A. K. Rind

Site Evaluator Signature

434

SE #

6-28-23

Date _____

Page 2 of 3
HHE-200 Rev. 02/11

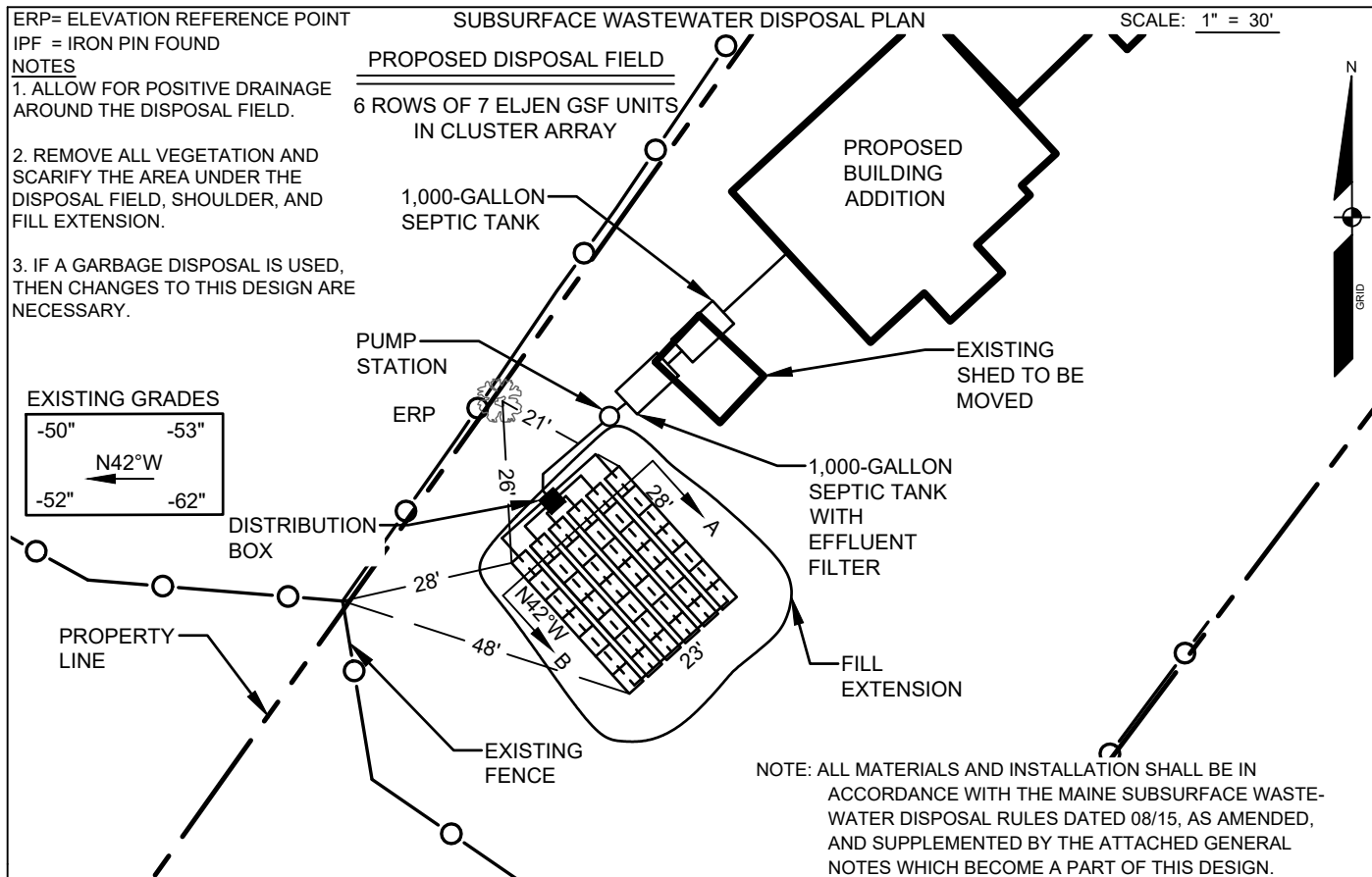
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

Town, City, Plantation
POLAND

Street, Road, Subdivision
1197 MAINE STREET

Owner or Applicant Name
VETCOR OF POLAND LLC



BACKFILL REQUIREMENTS

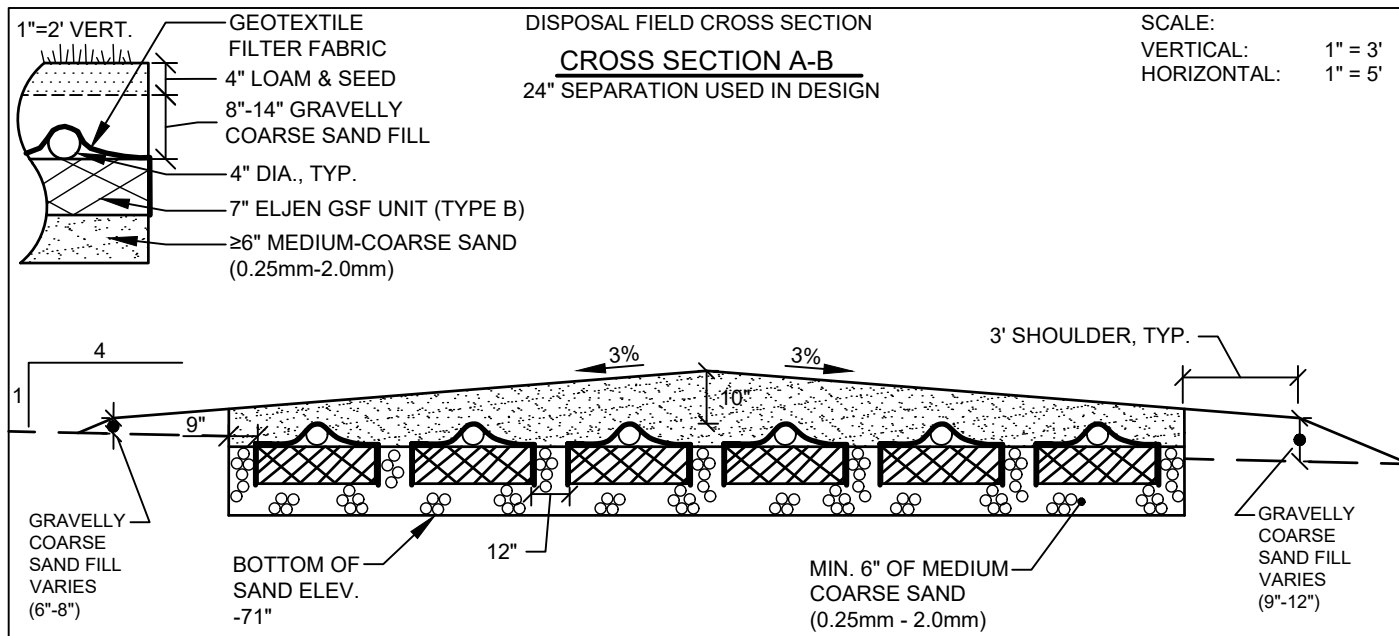
Depth of Fill (Upslope)	6" TO 8"±
Depth of Fill (Downslope)	9" TO 18"±

CONSTRUCTION ELEVATIONS

Finished Grade Elevation	-44"
Top of Distribution Pipe or Proprietary Device	-54"
Bottom of Disposal Area (Bottom of Eljen)	-65"

ELEVATION REFERENCE POINT

Location & Description	NAIL UP 45" IN A 6" DIAMETER ASPEN
Reference Elevation	0"



A. K. Hill
Site Evaluator Signature

434
SE #

6-28-23
Date

Page 3 of 3
HHE-200 Rev. 02/11

General Notes
(attachment to form HHE-200)
<1,000 gpd Septic System

1. The nature of the site evaluation profession is one of interpretation of soil and site conditions. We, in the field, attempt to both provide a satisfactory service to the client, and comply by the rules by which we are bound - The Maine Subsurface Wastewater Disposal Rules. If at any time you, the client, are not satisfied with the service provided or the results found, it is your right to hire another site evaluator for a second opinion.
2. Property information is supplied by the owner, applicant or representative. Such information presented herein shall be verified as correct by the owner or applicant prior to signing this application.
3. All work shall be in accordance with the Maine Subsurface Wastewater Disposal Rules dated 8/3/15, as amended.
4. All work on the disposal field should be performed under dry conditions.
5. No vehicular or equipment traffic to be allowed on disposal area unless H-20 load is specified. Disposal field shall be constructed from outside the corner stakes located in the field. The downslope area is also to be protected in the same manner.
6. Backfill, if required, is to be gravelly coarse sand texture and to be free of foreign debris (per Table 11A of the Maine Subsurface Wastewater Disposal Rules). If backfill is coarser than original soil, then mix a minimum of 4" of backfill material into original soil.
7. No neighboring wells are apparent (unless so indicated) within 100' of disposal area. Owner or applicant shall verify this prior to signing the application.
8. The disposal field stone shall be clean, uniform in size and free of fines, dust, ashes, or clay. It shall have a nominal size of ¾" or 1½" (per Table 11B of the Maine Subsurface Wastewater Disposal Rules).
9. Minimum separation distances required (unless reduced by variance or special circumstance).
 - a) wells with water usage of 2000 or more gpd or public water supply wells:

Disposal Fields:	300'
Treatment Tanks:	150'
 - b) potable water supply to disposal field: 100'
 - c) potable water supply to treatment tank: 50'
 - d) treatment tank or disposal field to lake, river, stream or brook: 100' for major watercourse,
50' for minor watercourse
 - e) house to treatment tank: 8'
 - f) house to disposal field: 20'
- For all other separation distances, use separations for less than 1,000 gpd per Maine Subsurface Wastewater Disposal Rules Table 7B for first-time systems and Table 8A for replacement systems.
10. Location of septic system near a wetland may require a separate permit. As such, the owner, prior to construction of the septic system, shall hire a professional to evaluate proximity of adjacent wetlands and prepare necessary permit applications.
11. Garbage disposals are not recommended and, if installed, are done so at the owner's risk. The additional waste load requires increased maintenance frequency and may cause premature failure of disposal field.
12. Pump stations, when required, shall be installed watertight to prevent infiltration of ground and/or surface water.
13. Force mains and pressure lines shall be flushed of any foreign material and pumps shall be checked for proper on/off cycle before being put into service.
14. Force mains, pump stations, and/or gravity piping subject to freezing shall be installed below frost line or adequately insulated.

Sebago Technics, Inc., 75 John Roberts Rd., Suite 4A, South Portland, ME 04106-6963 (207) 200-2063

July 21 2023
230327

Jake Verrill, Superintendent
Mechanic Falls Water Department
62 Highland Avenue
Mechanic Falls, ME 04256

Ability to Serve Request – Portland Animal Hospital
Proposed Building Expansion
1195-1197 Main Street, Poland, ME

Dear Jake:

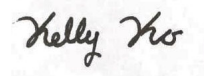
Sebago Technics, Inc. has been retained to prepare plans and permit applications for the proposed building expansion of the Poland Animal Hospital, located at 1195-1197 Maine Street. The proposed development consists of an approximately 1,500 square-foot building addition that adjoins the southern face of the existing building. The existing facility is currently served by private on-site water. We respectfully request your review of the capacity to serve both the existing and proposed buildings.

As seen in the enclosed Grading and Utility plan, a 2-inch domestic service is proposed to connect to the northern side of the existing building. Water will be internally routed to reach the proposed building. The proposed connection would tap into the existing gate valve, which connects to the water main within Maine Street. Uses within the building are anticipated to be mostly by employees, as well as a small amount of customer traffic, likely not demanding a high volume of water.

Please see the attached fixture count worksheet which shows what devices in the proposed building generate the water demand for the site.

We are hopeful that we have provided sufficient information for you to review the proposed project and to provide comments on the proposed water service connection. If you have any questions or need additional information, please do not hesitate to contact me. I can be reached best on my direct line at 207-482-6305.

Sincerely,
SEBAGO TECHNICS, INC.



Kelly Koehler, EI
Civil Engineer
Enc.

Peak Flow Based on Fixture Count

Adapted from 2009 Maine State Internal Plumbing Code

Customer
Street Address
City

Poland Animal Hospital
1195-1197 Maine Street
Poland

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub (Tub and Sprayer)	4	x	1	=	4
Bidet	1	x	0	=	0
Dental Unit	1	x	0	=	0
Drinking Fountain - Public	0.5	x	0	=	0
Kitchen Sink	1.5	x	3	=	4.5
Bathroom Sink	1	x	2	=	2
Showerhead (Shower Only)	2	x	0	=	0
Service Sink	3	x	3	=	9
Toilet -Flushometer(high pressure)	5	x	0	=	0
-Tank Type	2.5	x	2	=	5
Urinal -Flushometer Valve	5	x	0	=	0
-Tank Type	2	x	0	=	0
Wash Sink (Each Set of Faucets)	2	x	0	=	0
Dishwasher	1.5	x	0	=	0
Washing Machine	4	x	1	=	4
Hose (outdoor spigot) <3/4 in.	2.5	x	0	=	0

Combined Fixture Value Total

28.5

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

Fire Sprinkler System(Yes/No)?

Irrigation(Yes/No)?

If yes, gpm required by
irrigation designer:

Total Fixed Demand (Peak Flow)

0

**Customer only needs to complete the
cells highlighted in blue**

Exhibit 6

Financial & Technical Capacity

Exhibit 6 – Financial & Technical Capacity

Financial Capacity

Evidence of financial capacity will be provided under a separate cover prior to the scheduled Planning Board meeting. Confidential information is available that confirms financial capacity. The applicant has contacted their financial institution for a letter that demonstrates capacity without confidential information to share publicly.

Technical Capacity.

The applicant has retained Sebago Technics, Inc. for engineering and permitting services.

Sebago Technics, Inc. (STI) is a multi-disciplinary engineering firm that offers a wide range of services specializing in land development, planning, permitting, and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, soil science, wetlands science, land surveying, and environmental services.

Exhibit 7

Soils 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 Androscoggin and Sagadahoc Counties, Maine



July 3, 2023

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.

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ChC—Charlton very stony fine sandy loam, 8 to 15 percent slopes.....	15
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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

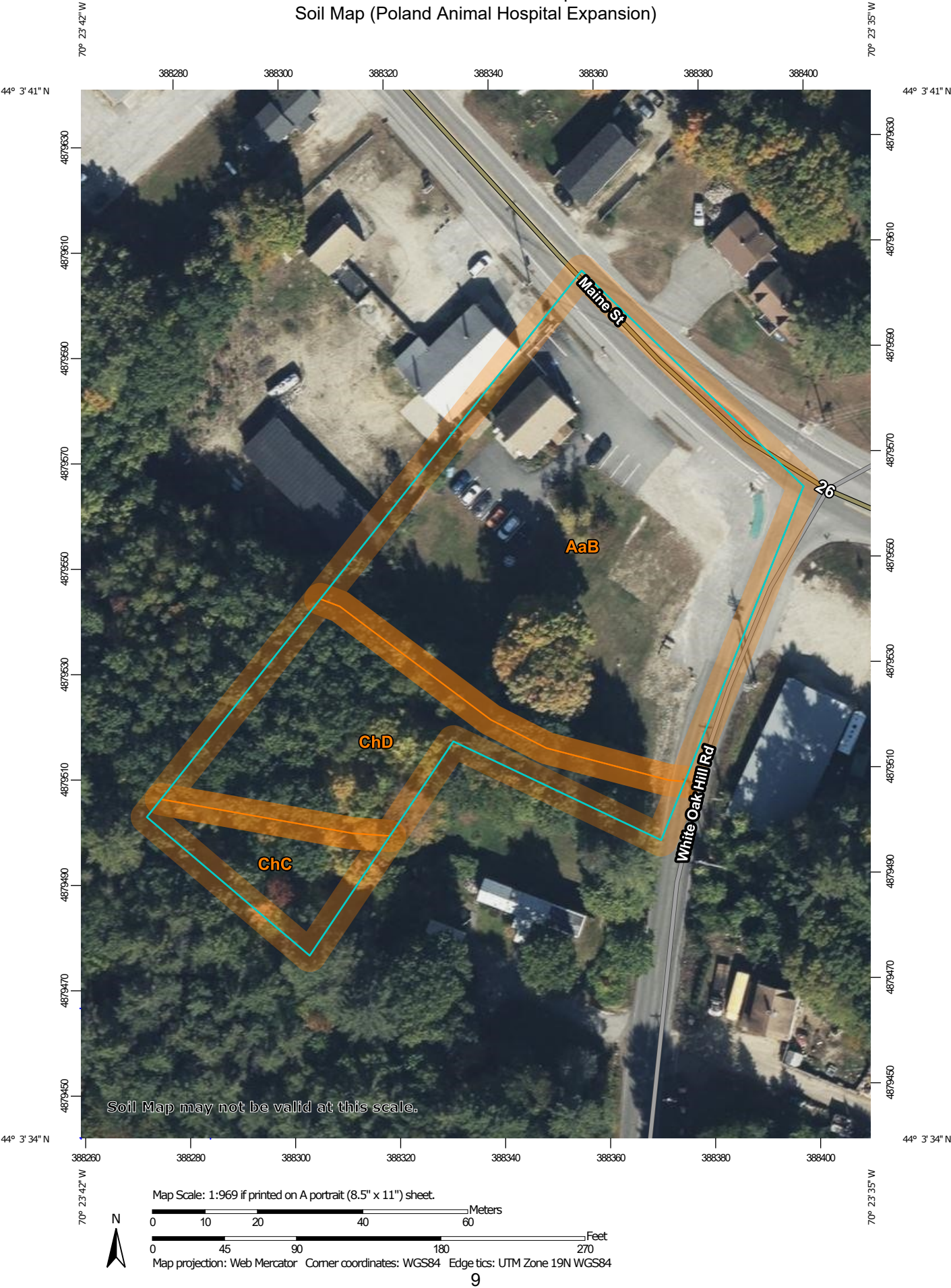
Custom Soil Resource Report

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 (Poland Animal Hospital Expansion)



Custom Soil Resource Report

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 1:15,800.

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: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 23, Aug 30, 2022

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

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 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 (Poland Animal Hospital Expansion)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	1.2	66.7%
ChC	Charlton very stony fine sandy loam, 8 to 15 percent slopes	0.2	8.4%
ChD	Charlton very stony fine sandy loam, 15 to 25 percent slopes	0.5	24.9%
Totals for Area of Interest		1.8	100.0%

Map Unit Descriptions (Poland Animal Hospital Expansion)

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.

Custom Soil Resource Report

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.

Androscoggin and Sagadahoc Counties, Maine

AaB—Adams loamy sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wqn9

Elevation: 10 to 2,000 feet

Mean annual precipitation: 31 to 95 inches

Mean annual air temperature: 27 to 52 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Adams and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adams

Setting

Landform: Outwash terraces

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: loamy sand

Bs - 7 to 21 inches: sand

BC - 21 to 27 inches: sand

C - 27 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively 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: 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 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Ecological site: F144BY601ME - Dry Sand

Hydric soil rating: No

ChC—Charlton very stony fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9kcy
Elevation: 50 to 3,500 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 100 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Charlton and similar soils: 86 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Till plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Coarse-loamy supraglacial meltout till derived from mica schist

Typical profile

H1 - 0 to 7 inches: fine sandy loam
H2 - 7 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 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: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

ChD—Charlton very stony fine sandy loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 9kcz
Elevation: 50 to 3,500 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 100 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Charlton

Setting

Landform: Till plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Coarse-loamy supraglacial meltout till derived from mica schist

Typical profile

H1 - 0 to 7 inches: fine sandy loam
H2 - 7 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: fine sandy loam

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 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: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

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Custom Soil Resource Report

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Exhibit 8

Traffic Memo

Exhibit 8 – Traffic Analysis

The project involves improvements to an existing animal hospital. The project area is comprised of two lots with three existing access points. The proposed project will include closing one of the access points and improvements to the two remaining access points. A Driveway Entrance permit has been received from the Maine Department of Transportation. Sebago Technics conducted a Traffic Impact Assessment for the proposed site improvements. This review determined that the proposed addition will result in approximately 5 additional am/pm trips to the site. Please see this Exhibit for the Traffic Impact Assessment memo from Sebago Technics and a copy of the Driveway Entrance permit received from the Maine DOT.

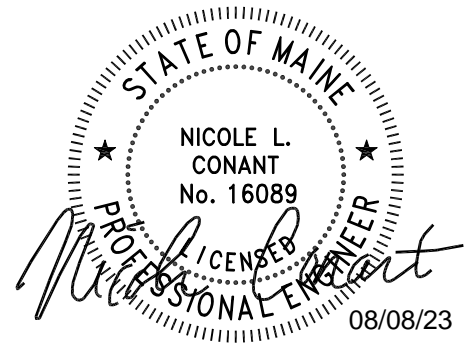
Memorandum

230327

To: Patrick Gere, P.E., Sebago Technics
From: Nikki Conant, P.E., Sebago Technics
Griffin Steinman, EI, Sebago Technics

Date: August 8, 2023

Subject: Traffic Impact Assessment, Poland Animal Hospital Expansion, Poland



Introduction

The purpose of this memorandum is to provide a Traffic Impact Assessment (TIA) for a proposed expansion of the Poland Animal Hospital at 1197 Maine Street (Route 26) in Poland, Maine. The development proposes to expand the approximately 1,300 square foot (SF) building by providing an addition of 1,428 SF.

Access to the site is proposed via a full movement access to White Oak Hill Road and to Maine Street. It should be noted that the redevelopment of the site provides a reduction in the number of accesses. This memorandum details the calculated trip generation for the development, provides a crash data review for roadways in the vicinity of the site, and evaluates sight distance for the proposed accesses.

Trip Generation

Trip generation was completed utilizing the 11th edition of the Institute of Transportation Engineers (ITE), *Trip Generation Manual*. Land use code (LUC) 640 – Animal Hospital/Veterinary Clinic was utilized based on 1,428 SF. ITE defines LUC 640 as a “a facility that specializes in the medical care and treatment of animals.” Estimated trip generation for the proposed addition is outlined in Table 1.

Table 1 – ITE Trip Generation
Land Use Code 640 – Animal Hospital/Veterinary Clinic
1,428 SF

<i>Time Period</i>	<i>Average Rate per 1,000 SF</i>	<i>Trips</i>	<i>Entering</i>	<i>Exiting</i>
Weekday	21.50	32	16 (50%)	16 (50%)
AM Peak Hour – Adjacent Street (7 – 9 AM)	3.64	5	3 (67%)	2 (33%)
AM Peak Hour – Generator	3.73	5	3 (53%)	2 (47%)
PM Peak Hour – Adjacent Street (4 – 6 PM)	3.53	5	2 (40%)	3 (60%)
PM Peak Hour – Generator	3.83	5	3 (52%)	2 (48%)

As demonstrated in Table 1, the proposed addition is estimated to generate a total of five (5) new trips in the AM and PM peak hours of the generator, respectively. Given this level of trip generation, a Traffic Movement Permit (TMP) is not required from the Maine Department of Transportation (MaineDOT) as project trip generation does not exceed the 100-trip threshold during a peak hour period.

It is important to note that because the existing facility appears to have been built and occupied over 10 years ago, the trips from the existing use are grandfathered and do not contribute towards determining the need for a TMP from MaineDOT.

Crash Data

The MaineDOT Public Map Viewer was utilized to determine if there are any high crash locations (HCL) within the immediate vicinity of the site. An intersection or section of roadway is deemed an HCL if two criteria are met: a Critical Rate Factor (CRF) greater than 1.0 and a minimum of eight (8) crashes in a three-year period.

Maine Street and White Oak Hill Road in the immediate vicinity of the proposed accesses were reviewed for the most recent three-year period from 2020 to 2022. Based on the crash information neither roadway, in the vicinity of the site drives, are currently designated as a high crash location.

It should be noted that White Oak Hill Road was considered a HCL in the previous 2021 study period. As such, the MaineDOT collision diagram, which is attached to the memorandum, was reviewed, revealing that most crashes were related to snow/icy road condition likely due to the grade of White Oak Hill Road. As such, there are currently no recommendations for improvements in conjunction with this project.

Sight Distance Analysis

Sight distance was reviewed in the field on June 26, 2023 for the proposed connections to Maine Street and White Oak Hill Road. Measurements were conducted from a point 10 feet behind the edge of the travel way, considering a height of eye of 3.5 feet and a height of object of 4.25 feet. Sight distance analysis was completed in accordance with the standards set forth by both MaineDOT's *Chapter 299: Highway Driveway and Entrance Rules* and the Town of Poland *Land Use Ordinance*. Maine Street (Route 26) is a state aid roadway outside of the State Urban Compact and is listed on MaineDOT's Entrance Permit Rules, Appendix C1 as a Mobility Arterial Corridor. A Mobility Arterial corridor is defined as a "Non-Compact Arterial that has a posted speed limit of 40 MPH or more & is:

1. Part of an arterial corridor located between Urban Compact Areas or Service Centers that carries an average annual daily traffic of at least 5,000 vehicles per day for at least 50% of its length or
2. Part of a Retrograde Arterial Corridor located between Mobility Arterial described in (1)."

Sight distance was reviewed for MaineDOT's typical sight distance standards, the greater mobility standards, and the Town of Poland's Standards as outlined in Table 2.

Table 2 – Sight Distance Requirements

<i>Posted Speed (MPH)</i>	<i>MaineDOT Minimum Sight Distance (feet)</i>	<i>Town of Poland Minimum Sight Distance (feet)</i>	<i>MaineDOT Mobility Minimum Sight Distance (feet)</i>
25	200'	250'	N/A
30	250'	300'	N/A
35	305'	350'	N/A
40	360'	400'	580'
45	425'	450'	710'
50	495'	500'	840'
55	570'	550'	990'

According to the MaineDOT Public Map Viewer, the posted speed limit on both Maine Street and White Oak Hill Road is 35 MPH. Both speed limits were confirmed in the field, thus corresponding to a required sight distance of 305 feet by MaineDOT and a greater 350 feet by Town of Poland Standards. The greater mobility requirements were not applicable given the posted speed limit in vicinity of the site on Maine Street. Sight distance measurements for both driveway locations are summarized in Table 3.

Table 3 – Sight Distance Measurements

<i>Driveway</i>	<i>Sight Distance Looking Left</i>	<i>Sight Distance Looking Right</i>
Maine Street (Route 26)	700'+ (Image 1)	700'+ (Image 2)
White Oak Hill Road	125' (Image 3)*	660' (Image 4)

*Measured to the intersection of Maine Street



Image 1: Maine Street Looking Left



Image 2: Maine Street Looking Right



Image 3: White Oak Hill Road Looking Left



Image 4: White Oak Hill Road Looking Right

As outlined in the previous table, sight distance for both driveways exceeded the required minimum for a 35 MPH roadway. Sight distance to the left at the White Oak Hill Road driveway extends to the intersection of Maine Street and White Oak Hill Road.

Conclusion

Sebago Technics, Inc. has completed the traffic impact assessment for the Poland Animal Hospital Expansion in Poland, Maine and provides the following conclusions:

- The proposed 1,428 SF addition is calculated to generate a total of five (5) trips during the AM, PM, and Saturday peak hours of the generator, respectively. As such, a TMP is not required by the MaineDOT.
- Maine Street and White Oak Hill Road in the immediate vicinity of the proposed entrances, are not currently classified as high crash locations. White Oak Hill Road was considered a HCL in the previous 2021 study period, but a review of the HCL collision diagram revealed no correctable crash pattern. As such, no recommendations for improvements are included with this development.
- Sight distance from the proposed access locations on Maine Street and White Oak Hill Road exceed both MaineDOT and Town of Poland requirements. It is important to note that no landscaping, signage, or other features shall be located within the sight triangle of the proposed driveway.

Attachments

2021 HCL Collision Diagram

Poland

Link: I253-3749

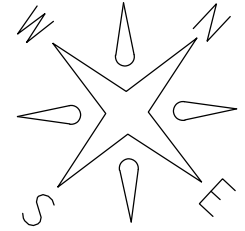
Element: 3I23784

Study Period: 2019-2021

of Crashes: 8 / CRF: 1.00

Prepared by Office of Safety & Mobility

RFK3 I-10-23



I253

3749

White Oak Hill Road

pole
(B)

A

36810 I2-20-21 5:09P D/C Deer

33750 I2-26-20 12:30P D/C Vehicle defect

33712 I1-27-21 8:56P I/C Over steering

58260 7-7-19 11:26A D/CL Avoiding vehicle

24532 9-11-21 4:51A D/C Fell asleep

37036 I2-24-21 7:52A I/C Road conditions

30425 I2-5-20 12:49P S/S Road Conditions

606 I-4-19 8:47A SL/C Unsafe speed

pole

driveway

pole

tree

rock

pole

driveway



Janet T. Mills
GOVERNOR

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
REGION 1
P.O. BOX 358
SCARBOROUGH, MAINE 04070-0358

Bruce A. Van Note
COMMISSIONER

July 28, 2023

Owner(s) of Parcel: **Relic, LLC**
47 Cook Road
Otisfield, ME 04270

Applicant(s): **VetCor of Poland, LLC**
141 Longwater Drive, Suite 108
Norwell, MA 02061

Patrick Gere, PE
Sebago Technics, Inc.
75 John Roberts Rd., Suite 4A,
South Portland, ME 04106

Permit number: 38414

Dear Mr. Gere:

Enclosed, please find a Memorandum of Highway Driveway Permit Waiver in regard to your property located on Route 26 in Poland, Maine. This waiver must be recorded at the Androscoggin County Registry of Deeds within 90 days from the date of issue. Once it has been recorded, a copy must be returned to this office, either mailed to MaineDOT, P.O. Box 358, Scarborough, ME 04070 or emailed to region1permits@maine.gov.

The entrance permit is valid upon delivery; however, **failure to record the waiver within 90 days will render the permit invalid.**

If you have any questions, feel free to contact our office at (207) 885-7000.

Sincerely,

Van Terrell
MaineDOT Permit Specialist

**MEMORANDUM OF
HIGHWAY DRIVEWAY / ENTRANCE PERMIT WAIVER**

Pursuant to 23 M.R.S.A. § 704 and the Driveway and Entrance Rules promulgated hereunder, 17-229 CMR Chapter 299, the **Maine Department of Transportation** has granted a waiver that allows the access to the highway from the parcel of land, all as described below.

Owner(s) of Parcel: **Relic, LLC**
47 Cook Road
Otisfield, ME 04270

Applicant(s): **VetCor of Poland, LLC**
141 Longwater Drive, Suite 108
Norwell, MA 02061

Patrick Gere, PE
Sebago Technics, Inc.
75 John Roberts Rd., Suite 4A,
South Portland, ME 04106

Permit number: 38414

Parcel Description:

Location: **Poland**, Androscoggin County, on the southwesterly side of **Route 26/Main Street**
Deed Reference: Androscoggin County, Book #8372, Page #273 & Book#8140 Page#120
Street Address: Route 26, Poland
Tax Map Reference: Map 39, Lot 29 & 30

Entrance Description:

Location: **In the Town of Poland on the southwesterly side of Route 26, the centerline being approximately 115 feet northwesterly of White Oak Hill Road and approximately 96 feet southeasterly of utility pole 178 (N 44.060928, W - 70.393782)**

Type: Entrance 24 feet in width plus radii.

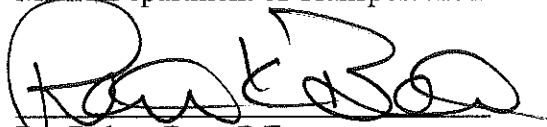
Use: An entrance to serve a Veterinary Hospital

Special Waiver Conditions:

- W-1) The double frontage rule has been waived.
- W-2) The corner clearance rule has been waived.

Maine Department of Transportation

Date: 7/28/2023

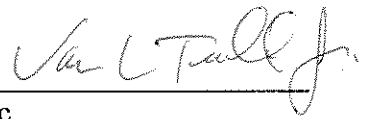


By: Robert Betz, P.E.
Southern Maine, Region Engineer

STATE OF MAINE
County of Cumberland

Date: 7-28-2023

Personally appeared the above named Robert Betz and acknowledged the foregoing instrument to be his free act and deed in his said capacity.


Notary Public

Print Name: Van L. Terrell Jr

My Commission Expires: _____
April 12, 2029



Maine Department of Transportation

Janet T. Mills
Governor

Driveway/Entrance Permit

Bruce A. Van Note
Commissioner

Permit Number: 38414 - Entrance ID: 1

OWNER
Name: RELIC, LLC
Address: 47 Cook Road
Otisfield, ME 04270
Telephone: (207)240-5898

Date Printed: July 28, 2023

LOCATION

Route: 0026X, Maine Street
Municipality: Poland
County: Androscoggin
Tax Map: 39 Lot Number: 29 & 30
Culvert Size: inches
Culvert Type: N/R
Culvert Length: feet
Date of Permit: July 28, 2023
Approved Entrance Width: 24 feet

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, **an Entrance to Veterinary Hospital** at a point **115 feet North** from **White Oak Hill Road**, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This Permittee acknowledges and agrees to comply with the Standard Conditions and Approval attached hereto and to any Specific Conditions of Approval shown here.

(G = GPS Location; W = Waiver; S = Special Condition)

G - THE ENTRANCE SHALL BE LOCATED AT GPS COORDINATES: 44.060928N, -70.939782W.

W - The double frontage rule has been waived.

W - The corner clearance rule has been waived.

S - In the Town of Poland on the southwesterly side of Route 26, the centerline being approximately 115 feet northwesterly of White Oak Hill Road and approximately 96 feet southeasterly of utility pole 178 with a second entrance on White Oak Hill Road 67 feet south of Route 26.

S - THE SIDEWALK AND CURB CUT MUST BE RECONSTRUCTED TO MEET MaineDOT & THE TOWN OF POLAND STANDARDS, INCLUDING APPROPRIATE TIP DOWNS NEEDED TO MEET ADA REQUIREMENTS.

The MaineDOT has determined that:

1. The waiver will not significantly detract from public safety,
2. The proposed driveway/entrance meets the standards to the maximum extent practicable, and
3. There is no feasible alternative.

A notarized, written waiver determination has been sent to the owner. The owner shall record the waiver determination in the Registry of Deeds in the County in which the property is located within 90 days of the date of the waiver, or the waiver will be null and void and the permit will expire.

Approved by: Van Note Date: 7-28-2023

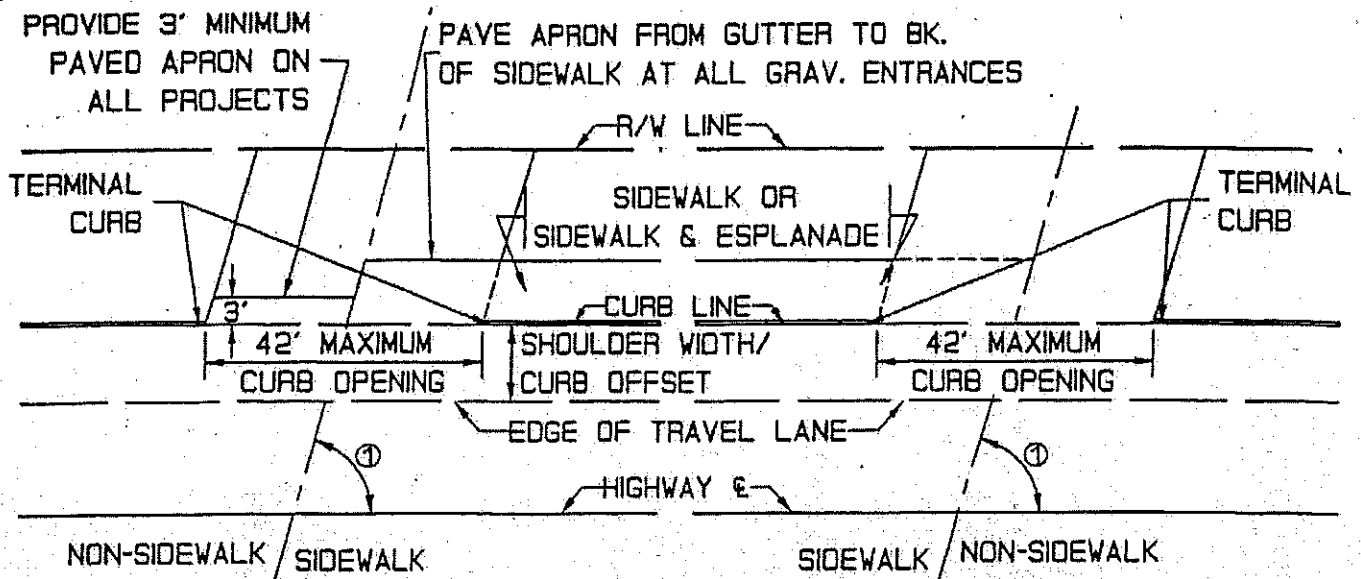
STANDARD CONDITIONS AND APPROVAL

1. Provide, erect and maintain all necessary barricades, lights, warning signs and other devices as directed by MaineDOT to properly safeguard traffic while the construction is in progress.
2. At no time cause the highway to be closed to traffic
3. Where the driveway is located within a curb, curb and gutter, and/or sidewalk section, completely remove the existing curb, curb and gutter, and/or sidewalk as may be required to create the driveway and restore drainage. All driveways abutting sidewalk sections shall meet the requirements set forth in the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12131 et seq.
4. Obtain, have delivered to the site, and install any culverts and/or drainage structures which may be necessary for drainage, the size, type and length as called for in the permit pursuant to 23 M.R.S.A. Sec. 705. All culverts and/or drainage structures shall be new.
5. Start construction of the proposed driveway within twenty-four (24) months of the date of permit issuance and substantially complete construction of the proposed driveway within twelve months of commencement of construction.
6. Comply with all applicable federal, state and municipal regulations and ordinances.
7. Do not alter, without the express written consent of the MaineDOT, any culverts or drainage swales within the MaineDOT right of way.
8. File a copy of the approved driveway permit with the affected municipality or LURC, as appropriate within 5 business days of receiving the MaineDOT approval.
9. Construct and maintain the driveway side slopes to be no steeper than the adjacent roadway side slopes, but in no case to be steeper than 3 horizontal to 1 vertical, unless the side slope is behind existing roadway guardrail, in which case it shall be no steeper than 2 horizontal to 1 vertical.
10. Notify the MaineDOT of a proposed change of use served by the driveway when increase in traffic flow is expected to occur. This does not exempt the need for obtaining a Traffic Movement Permit (TMP) if trip generation meets or exceeds 100 passenger car equivalents (PCE) during the peak hour of the day.
11. Construct or implement and maintain erosion and sedimentation measures sufficient to protect MaineDOT facilities.
12. Driveways shall be designed such that all maneuvering and parking of any vehicles will take place outside the highway right-of-way and where vehicles will exit the premises without backing onto the highway traveled way or shoulders. All driveways will have a turnaround area to accommodate vehicles using the premises.
13. Closing any portion of a highway or roadway including lanes, shoulders, sidewalks, bike lanes, or ATV access routes is not permitted without MaineDOT approval.

FURTHER CONDITION OF THE PERMIT

The owner shall assume, the defense of, and pay all damages, fines, and penalties for which he/she shall become liable, and shall indemnify and safe harmless said Department, its representatives, agents and employees from liability, actions against all suits, claims, damages for wrongful death, personal injuries or property damage suffered by any person or association which results from the willful or negligent action or inaction of the owner/applicant (agent) and in proceedings of every kind arising out of the construction and maintenance of said entrance(s), including snow removal.

Nothing herein shall, nor is intended to, waive any defense, immunity or limitation of liability which may be available to the MaineDOT, their officers, agents or employees under the Maine Tort Claims Act or any other privileges and/or immunities provided by law. It is a further condition that the owner will agree to keep the right of way inviolate for public highway purposes and no signs (other than traffic signs and signals), posters, billboards, roadside stands, culvert end walls or private installations shall be permitted within Right of Way limits.



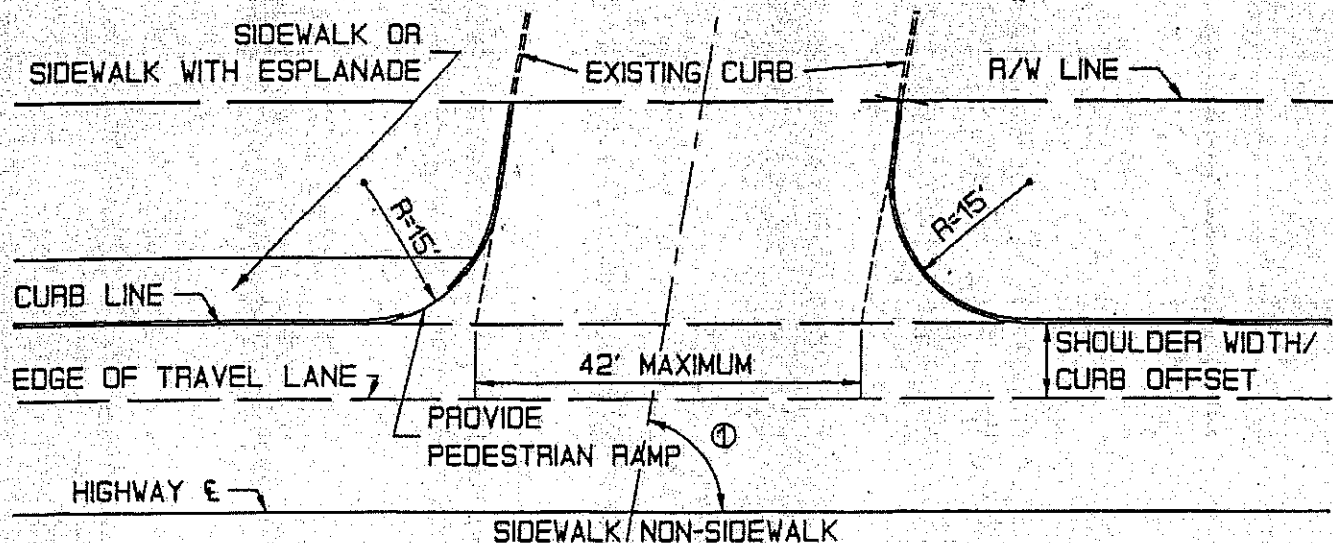
GRAVEL ENTRANCE

PAVED ENTRANCES

- ① MINIMUM ENTRANCE ANGLE IS 45° WHERE THE SHOULDER WIDTH \geq 6' AND 60° WHERE THE SHOULDER WIDTH $<$ 6'.
- ② IF THERE ARE HIGH TRUCK TURNING VOLUMES, THE DESIGNER SHOULD CONSIDER PROVIDING TURNING RADII OF 15' - 25' AND/OR A WIDER OPENING AND/OR LIMITING THE ANGLE OF TURN TO ACCOMMODATE TRUCKS.

UNCURBED COMMERCIAL/INDUSTRIAL ENTRANCE ONTO CURBED HIGHWAY (WITH/WITHOUT SIDEWALK)

EN007

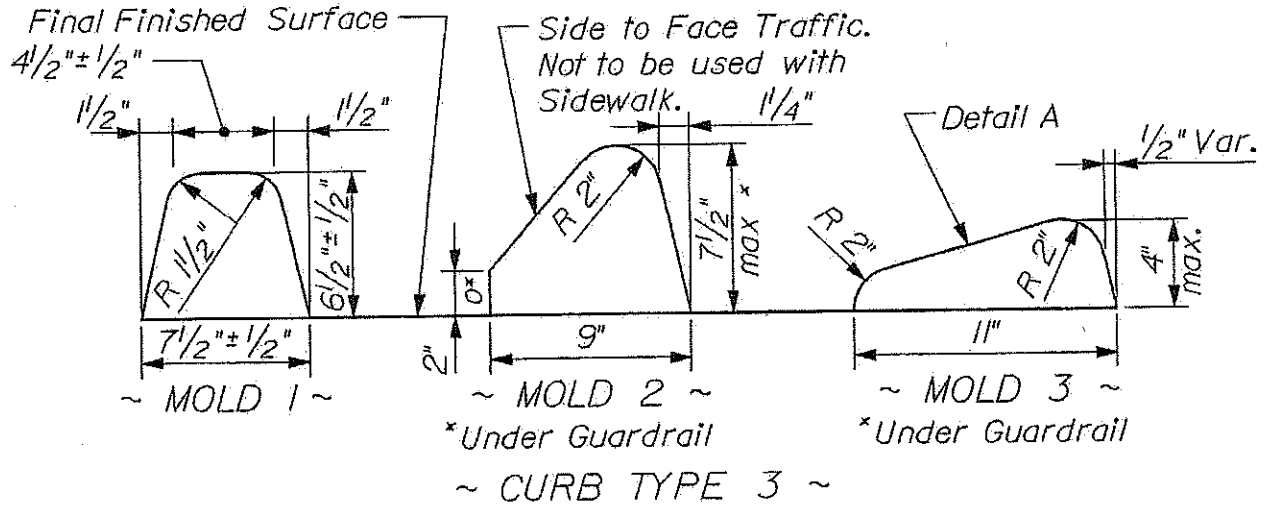
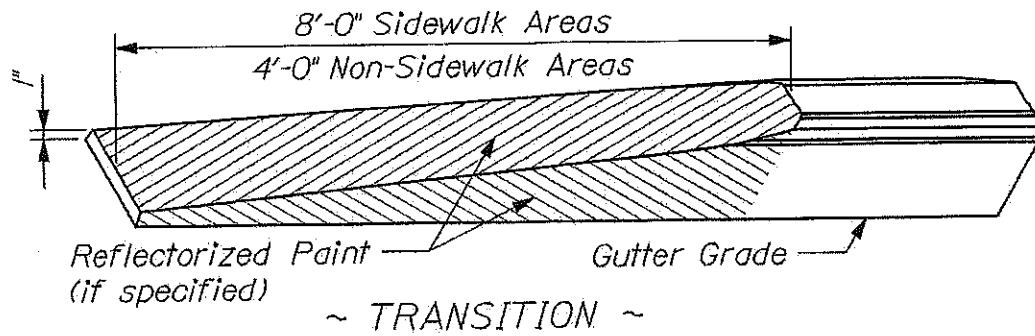


PAVED ENTRANCE

- ① MINIMUM ENTRANCE ANGLE IS 45° WHERE THE SHOULDER WIDTH \geq 6' AND 60° WHERE THE SHOULDER WIDTH $<$ 6'.

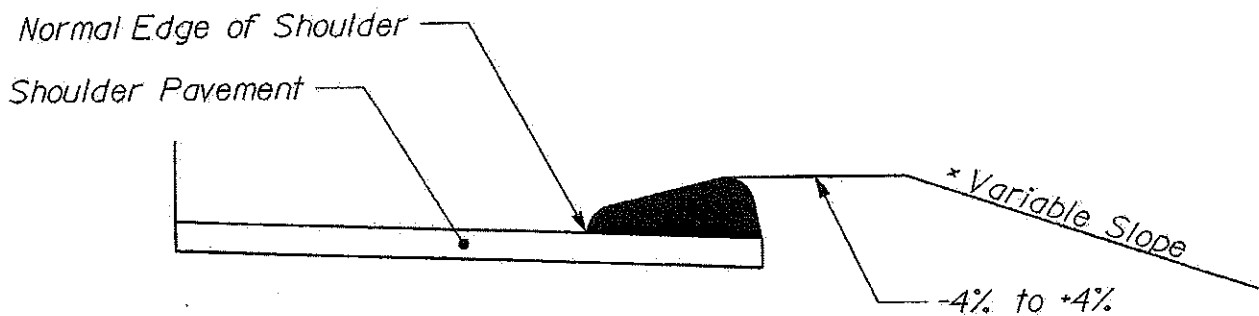
CURBED COMMERCIAL/INDUSTRIAL ENTRANCE ONTO CURBED HIGHWAY (WITH/WITHOUT SIDEWALK)

EN008



Curb Mold 2 or 3 shall be used in all situations except for where the curb forms the edge of the sidewalk. Mold 1 shall be used in conjunction with sidewalks or where there is a potential for sidewalks. Mold 3 shall be used in situations where the design speed exceeds 45 mph. Maximum height of Curb under Guardrail shall not exceed 4".

~ DETAIL A ~



* See Typical Sections for Project

CURB TYPE 3
609(03)

Exhibit 9

Submission Requirements

Exhibit 9 – General Review Standards (Section 509.9 Comprehensive Land Use Code)**A. Preservation of Landscape**

The existing treeline and proposed limit of clearing are identified on the plans. A Landscaping Plan has been prepared by a Registered Landscape Architect and is included with the plan set. The proposed landscaping complements existing features of the site and creates a seamless look between the existing and new features. There are no environmentally sensitive areas located within the proposed development area. Please see the plan set for additional information.

B. Relation of Proposed Buildings to Environment

The project involves an addition to an existing building. The proposed addition will be of a similar scale and architectural design to the existing building and will provide a uniform and harmonious appearance from both Maine Street and White Oak Hill Road. Refer to the plan set for additional information.

C. Compatibility with Residential Areas

The proposed project involves an addition to an existing facility that is located in a mixed-use area. It will not result in an impactful increase of traffic, unsightly views, noise increase, lighting glare, odor nuisance, or a loss of privacy. Please see Exhibit 8 for additional traffic information and the plan set.

D. Vehicular Access

The project proposes to close an existing curb cut on Route 26 and reduce the width of two other site entrances. The entrance modifications have received approval from the Maine DOT. Refer to Exhibit 8 and the plan set for additional information.

E. Vehicular Access to Routes 11, 26, 121, and 122

The proposed improvements to the site include modifications to two existing curb cuts on Route 26. Refer to Exhibit 8, the plan set, and Section D above for more information.

F. Surface Water

The project proposes to collect and treat stormwater runoff with DEP approved Best Management Practices (BMPs) including a bioretention cell and a roof dripline filter. Runoff ultimately drains to a DOT-maintained cross culvert under Maine Street. Post-development peak flowrates presented in the Stormwater Management Report are below pre-development levels. The project will not result in undue surface water pollution. Please see Exhibit 10 for the Stormwater Report and the plan set for more detailed information.

G. Conservation, Erosion, and Sediment Control

The proposed project will utilize DEP approved Erosion and Sedimentation (E&S) Control Best Management Practices. The plans include E&S notes and details. Please see the plan set for more detailed information regarding E&S control.

H. Phosphorous Export

Not applicable, the proposed project is located within the Waterhouse Brook watershed. The project is not located within the direct watershed of a lake or pond listed in Section 612.17. Please see Exhibit 10 for the Stormwater Management Report.

I. Site Conditions

Cleared vegetation will be managed offsite at the discretion of the General Contractor (GC). The project includes a stabilized construction entrance. The GC will be responsible for periodic street sweeping during construction. Please see the plan set for detailed information regarding dust control during construction, proposed site clearing, landscaping, and grading.

J. Sign

The business sign is planned for modification under a separate cover and will be coordinated and permitted with the Code Enforcement Department. The business sign modification will meet sign requirements listed in Section 508.18 for the Downtown District.

K. Special Features

The proposed project has been designed to adhere to the required setbacks. A snow storage area and screened solid waste management area are depicted on the plans. Utility connections are shown and detailed within the plan set. Please see the plans set for additional information.

L. Exterior Lighting

A photometric plan is included with the application materials that meets town standards (≤ 0.5 foot-candles at the property line) and includes full cut off LED luminaries. The project proposes two new light poles. Please see the plan set for lighting placement information and the photometric plan.

M. Emergency Vehicle Access

The proposed project has been designed to provide convenient and safe emergency vehicle access to the site.

N. Municipal Services

The proposed project involves an addition to an existing facility. The proposed addition will not result in any unreasonably adverse impact to any municipal services.

O. Water Supply

The existing facility utilized an onsite well. The proposed project will rely solely on public water. Please see Exhibit 5 and the plan set for additional information.

P. Ground Water

The proposed addition will not result in an undue effect on the quality or quantity of the groundwater. The site has been designed considering the location of the aquifer overlay zone. Please see Exhibit 10 for the Stormwater Management Report and the plan set.

Q. Air Emissions

The proposed project involves an addition to an existing animal hospital, it will not result in the generation of dust, ash, smoke, or other particulate matter that could be a hazard to the environment or human health.

R. Odor Control

The proposed project involves an addition to an existing animal hospital, it will not produce offensive or harmful odors perceptible beyond the lot line.

S. Noise

The proposed project involves an addition to an existing facility. The site will continue to be in conformance with the Town noise ordinance.

T. Sewage Disposal

The proposed project involves the discontinued use of the two existing septic systems on site and the installation of a new, more efficient septic system. Please see Exhibit 5 for the HHE-200 form for the proposed new septic site and the plan set for location information.

U. Waste Disposal

The project involves an addition to an established animal hospital. It is not anticipated that the addition will result in a significant increased generation of solid waste. Existing solid waste disposal provisions will be adhered to.

V. Buffer Areas

Buffering landscaping is proposed. Refer to the Landscaping Plan within the plan set.

W. Financial and Technical Capacity

The applicant has the financial and technical capacity for the proposed project. Please see Exhibit 6 for additional information.

X. Conformance with Comprehensive Plan

The proposed building addition and site improvements are in conformance with the Comprehensive Plan:

- Ground water protection - The proposed improvements include removal of two septic systems, one of which has failed, and replacing them with a new appropriately sized septic system in a location outside the Aquifer Overlay zone.
- Public Infrastructure Service Connections - The proposed improvements include connecting the site to public water and decommissioning the existing wells on site.
- Preservation of Woodland - The proposed improvements have been concentrated towards the front of the site, preserving the wooded back portion of the parcel.

508.30 Downtown District Design Standards

A. The following design standards are applicable to all new and expanded non-residential structures and residential structures that are converted to non-residential use.

1. Pitched roofs with a minimum pitch of 5/12 shall be used for new construction or expansions of existing buildings that result in an increase of 100% or more in floor area. If the structure is too large to accommodate a pitched roof, the Planning Board shall allow use of roof treatments to provide the appearance of a pitched roof if the Board determines that such treatment fulfills the intent of this subsection to the maximum practical extent.

Pitched roofs are proposed with an 8/12 pitch, exceeding the minimum 5/12 pitch required.

2. Building facade colors shall be non-reflective, subtle, neutral, or earth tone. The use of high intensity colors, metallic colors, fluorescent colors or black on facades shall be prohibited. Building trim and architectural accent elements may feature colors or black, but such colors shall be muted, not metallic, not fluorescent, and not specific to particular uses or tenants. Standard corporate and trademark colors shall be permitted only on signage. Neon lighting or fixtures shall be limited to internal signage.

Building façade colors are yet to be selected. However, the choice will include non-reflective, subtle, neutral, or earth tones that are not specific to a particular use or tenant and consistent with the existing building.

3. Exterior building materials shall be of comparable aesthetic quality on all sides. Building materials such as glass, brick, tinted and decorative concrete block, wood, and exterior insulation and finish systems (EIFS) shall be used. Decorative architectural metal with concealed fasteners or decorative tilt-up concrete panels may be approved if incorporated into the overall design of the building.

The proposed addition will utilize materials of comparable aesthetic quality around the complete exterior of the building.

4. Public entryways shall be clearly defined and highly visible on the building's exterior design and shall be emphasized by on-site traffic flow patterns. Two (2) or more of the following design features shall be incorporated into all public entryways: canopies or porticos, overhangs, projections, arcades, peaked roof forms, arches, outdoor patios, display windows, distinct architectural details.

The public entryway is clearly defined and highly visible. The entryway vestibule design features a canopy or portico with a peaked roof form. Please refer to the architectural elevations within the plan set for entryway design features.

5. The building's architecture shall reflect traditional New England building forms such as pitched roofs, dormers and windows (rather than undifferentiated plate glass). Freestanding accessory structures, such as ATM's, gas pump canopies, sheds, etc., shall be treated as architectural elements and meet the same design standards as the principal structures on the site.

The proposed addition has been designed to be in keeping with the existing building and the surrounding area. The building architecture reflects traditional New England building forms through the inclusion of pitched roofs and ¼" clear float glass windows. The front building elevation includes a

window with spandrel glazing. Freestanding accessory structures are not proposed. Refer to the architectural elevations.

6. All trash collection areas that are not within an enclosed building or underground must be screened or recessed so that they are not visible from public streets, public sidewalks, internal pedestrian walkways, or adjacent residential properties and meet the minimum setback for accessory structures.

Trash collection is proposed within a screened dumpster enclosure on a concrete pad with bollards. The trash collection area is not visible from public streets, public sidewalks, internal pedestrian walkways, or adjacent residential properties and meets setback requirements. Refer to the plan set for collection area location and screening treatments.

7. Chain link or wire mesh fencing, including vinyl covered metal fencing, may not be used for security, access control or screening. However, chain link fencing, fence posts, rails, or mechanical features finished with a black vinyl coating, may be used for security, access control, or screening where installed behind the principle structure's rear façade. No portion of black vinyl coated fencing or mechanical features associated with the fence system may project closer to the street frontage than the line which is parallel to the buildings rear façade as measured from the principle main building corner. Small structural projections, porches, decks, and architectural projections shall not constitute the reference line of the rear façade.

Black vinyl-coated chain link fencing is proposed behind the principal structure for a dog-walk area. This fenced area is located behind the rear façade and does not project closer to the street frontage than the building.

8. Loading docks must be screened from surrounding roads and developed properties by walls matching the building's exterior or fully opaque landscaping.

Not applicable, loading docks are not proposed as part of this project.

9. Interconnections between adjacent properties shall be developed where feasible to encourage pedestrian movement and reduce vehicular trips onto the roadway network.

The project is located across two parcels, Tax Map 39 Lots 29 & 30, and provides interconnection between the lots.

508.28 Aquifer Protection Overlay District Requirements

The proposed project has been designed in conformance with DEP's Chapter 500 stormwater requirements. Please see the plans set and Exhibit 10 for the Stormwater Management Report.

**UCL2**

ARCHITECTURAL AREA/SITE

DATE:

LOCATION:

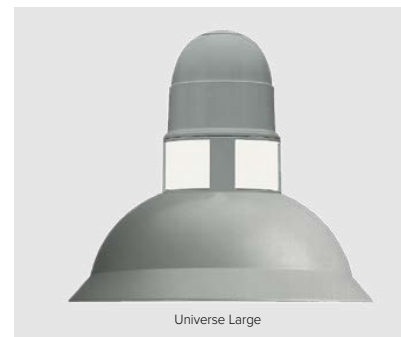
TYPE:

PROJECT:

CATALOG #:

FEATURES

- Reliable, uniform, glare free illumination
- Types 1, 2, 3, 4W, 5Q, and 5W distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral Surge protection: 10k in parallel, 20k in series
- Upgrade Kits
- Utilizes Strike Optics for precise distributions, maximum fixture spacing and minimal backlight.



Universe Large

SPECIFICATIONS**CONSTRUCTION**

- All housing components are die cast aluminum 360 alloy, sealed with continuous silicone rubber gaskets
- Standard configurations do not require a flat lens, optional lenses is tempered glass
- All internal and external hardware is stainless steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Optical bezel finish is match the luminaire housing

LED/OPTICS

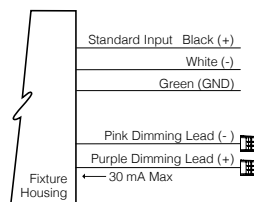
- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate
- Optics are held in place without the use of adhesives
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features individual LED optical control based on high performance TIR optical designs
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

ELECTRICAL

- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J
- Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control



- Driver and surge suppressor are mounted to a prewired tray with quick disconnects that may be removed from the gear compartment

CONTROLS

- Egress adapter(s) shall slip over a 4"/100mm DIA. pole with the luminaire or arm slipping over the adapter to add a total of 4.5"/114mm to the overall height. Adapter(s) shall be prewired, independently rotatable 359°, and have a cast access cover with an integral lens and lanyard

CONTROLS (CONTINUED)

- Photocell adapter shall include an internal twist lock receptacle. Photocell by others
- Egress adapter shall require an auxiliary 120 volt supply for operation of an integral MR16 lamp in the event of emergency. The lamp may be aimed and locked into position with an adjustment range of 15°-45°. Adapter shall have a socket that accepts miniature bi-pin MR16 lamps up to 50 watts, lamp by others

CERTIFICATIONS

- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020

WARRANTY

- 5 year warranty

KEY DATA

KEY DATA	
LUMEN RANGE	4,033–19,516
WATTAGE RANGE	69.9–160.4
EFFICACY RANGE (LPW)	43.3–137.3
INPUT CURRENT RANGE (mA)	335/500/700 mA
WEIGHT	47 lbs 21.3 kg 56 lbs 25.4 kg
EPA	1.05 to 1.95


LNC

COMPACT LED LITEPAK

FEATURES

- Compact LNC LED is designed for perimeter illumination and available in 3 lumen packages for safety, security and identity
- 3000K, 4000K, 5000K and Amber color temperatures
- Up to 4:1 spacing to mounting height ratio means fewer fixtures to install
- Acrylic diffuser included! Use for applications near entrances or locations where reduced brightness is desired. (Maximum spacing with diffuser 30ft)
- Die-cast aluminum housing with decorative Laredo styling
- Full cut-off neighbor friendly
- Listed to UL1598 for use in wet locations



*3000K and warmer CCTs only

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____



LNC-5L



LNC-7L



LNC-9L



With diffuser

SPECIFICATIONS

CONSTRUCTION

- Decorative die-cast aluminum housing and door
- Rugged design protects internal components and provides excellent thermal management for long life
- Powder paint finishes provide lasting appearance in outdoor environments
- Full cut-off distribution; Ambient diffuser included, use for applications near entrances or locations where reduced brightness is desired

OPTICS

- Drivers are 120-277V, 50/60Hz Type II, III and Type IV lenses provide wide lateral spread
- 3000K - 80 CRI, 4000K - 70 CRI, and 5000K - 70 CRI, CCT nominal
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion

INSTALLATION

- Quick mount adapter provides quick installation, designed for recessed box 4" square junction box

ELECTRICAL

- 60,000 hours minimum LED life at L96 rating per IESNA TM-21-11
- Minimum operating temperature is -40°C/-40°F
- 0-10V dimming 120-277V only
- LNC5L – 5 LEDs, Types II, III or IV available, see page 2 for electrical details
- LNC7L – 7 LEDs, Type II, III or IV available, see page 2 for electrical details
- LNC9L – 9 LEDs, Types II, III or IV available, see page 2 for electrical details

CONTROLS

- Photocontrol option is available to provide dusk-to-dawn control for additional energy savings

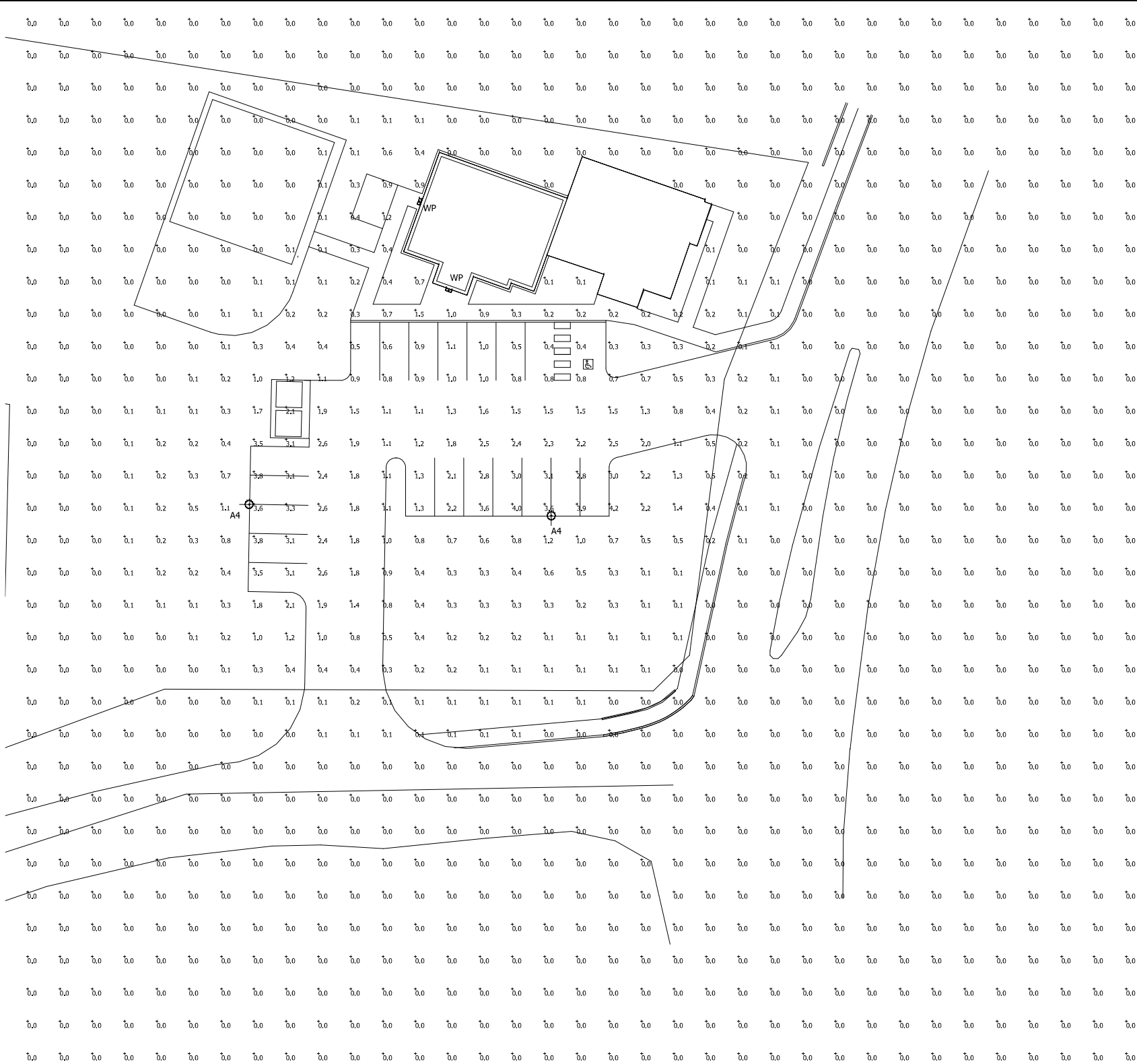
CERTIFICATIONS

- Listed and labeled to UL 1598 for wet locations, 25°C ambient environments

WARRANTY

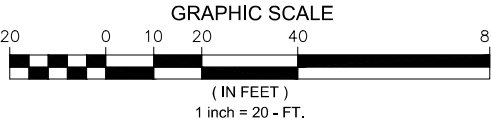
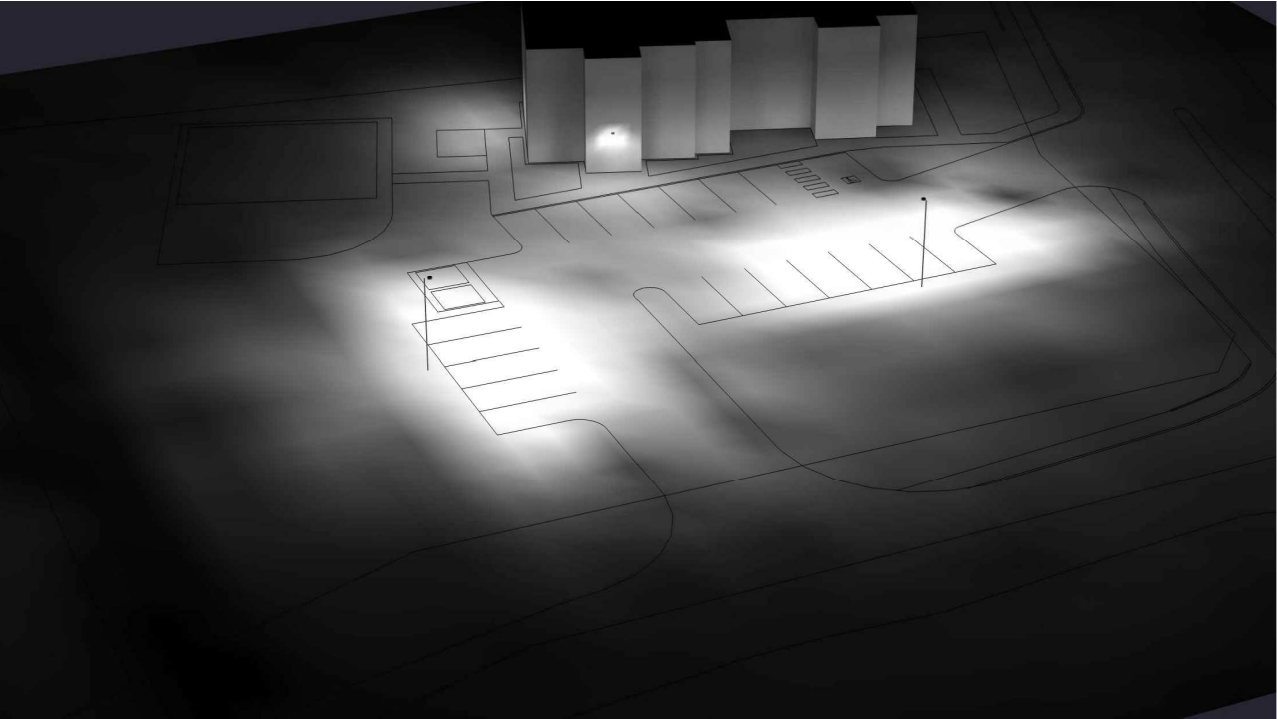
- 5 year warranty

KEY DATA	
Lumen Range	800–2100
Wattage Range	13–22
Efficacy Range (LPW)	64–95
Fixture Projected Life (Hours)	L96>60K
Weights lbs. (kg)	9.6 (24.5)

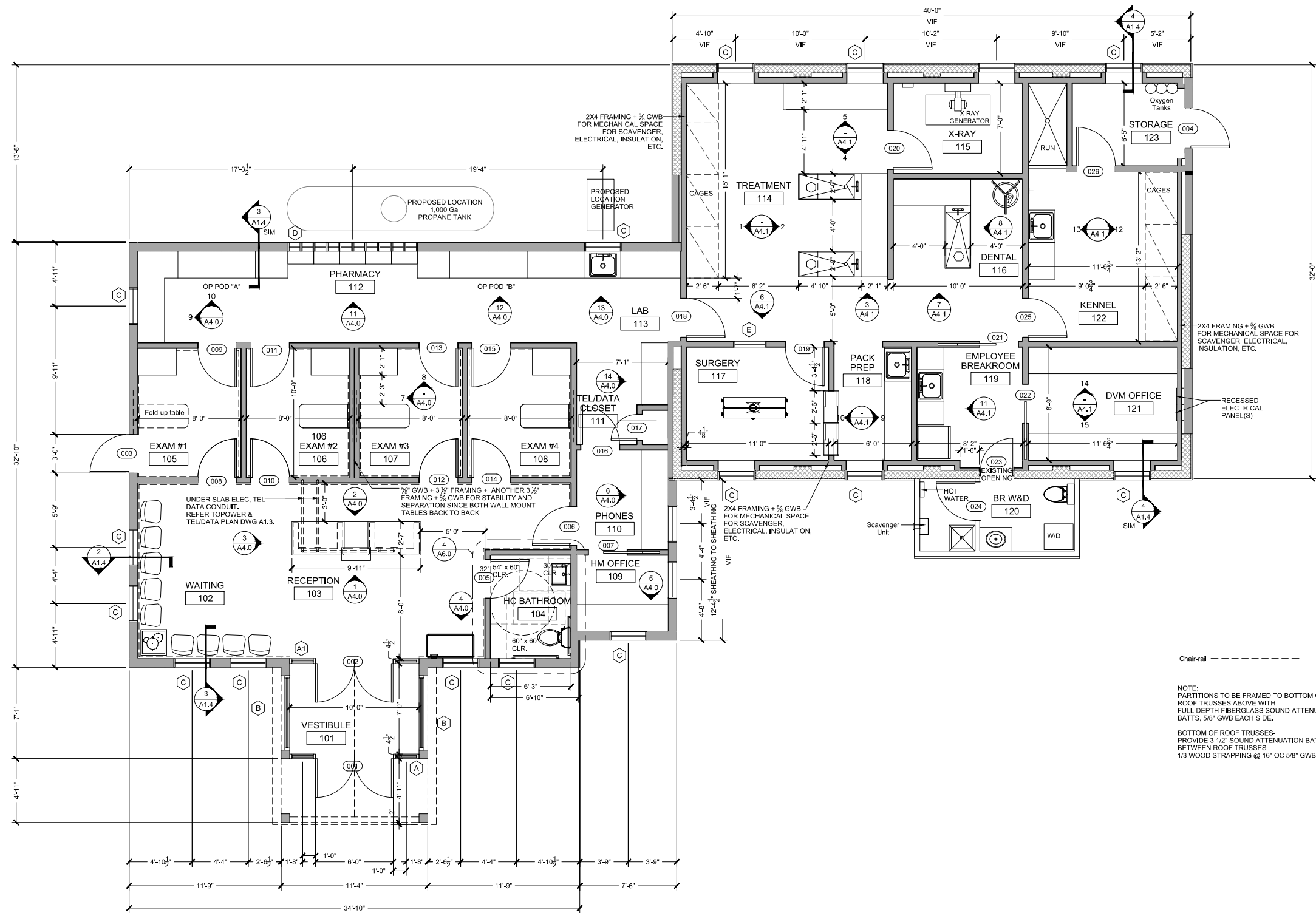


Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
	2	A4	18' - 0" AFG	0.900	12397	115	UCL2-ANG-72L-500-3K7-4W
	2	WP	9' - 0" AFG	0.900	849	13	LNC-5LU-3K-4

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Overall Area	Illuminance	Fc	0.12	4.2	0.0	N.A.	N.A.
Parking Area	Illuminance	Fc	1.73	4.2	0.3	5.77	14.00
Property Line	Illuminance	Fc	0.04	0.4	0.0	N.A.	N.A.



1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO CURRENT. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.														
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.														
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.														
TITLE: POLAND ANIMAL HOSPITAL POLAND, ME SITE PHOTOMETRIC PLAN					REVISED FROM DRAWING NUMBER(S):		Current®		DN BY: DHK		DATE: 06/22/23		CHK BY: N/A	
									REV. BY:		DATE:		SCALE: AS NOTED	
									QUOTE: N/A		DRAWING / DESIGN NO.:			
									A231041					



1
A1.1
GROUND FLOOR
CONSTRUCTION PLAN
SCALE: 1/4" = 1'-0"



Dean Associates
Architects Incorporated
Architecture & Interior Design

7 Kimball Lane Suite E6
Lynnfield MA 01940
p: 781.397.8092 f: 781.397.8094
www.deanassoc.com

DRAFT
**NOT FOR
CONSTRUCTION**

	PROGRESS	8/1/2022
No.	Description	Date

DWG ISSUE & REVISION HISTORY

Stamp

Key Plan

Project Title:

**VETCOR POLAND
ANIMAL HOSPITAL**

1197 MAINE STREET
POLAND, ME 04274

Drawing Title:

CONSTRUCTION PLAN

Project Number
2022.08

Scale
AS NOTED

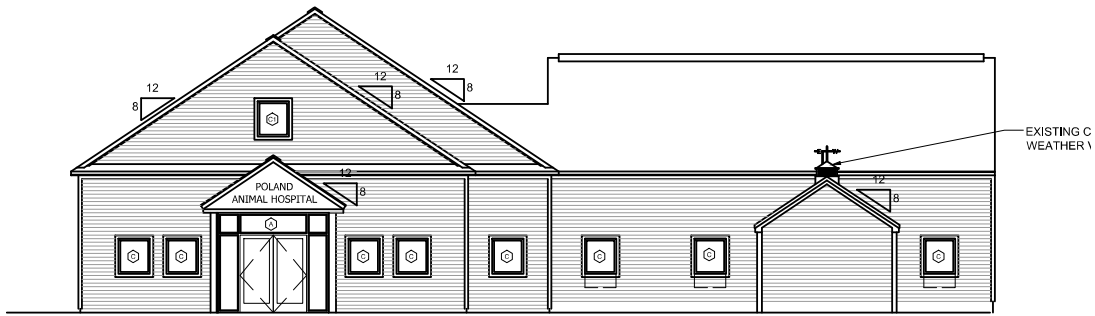
Drawn By
WAM

Checked By
JWD

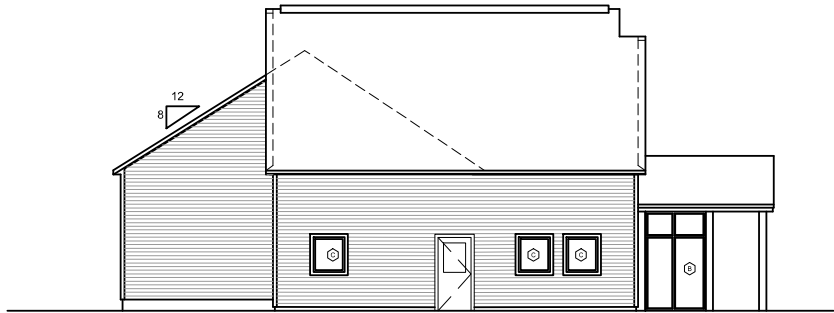
Date
5/23/2022

Drawing Number

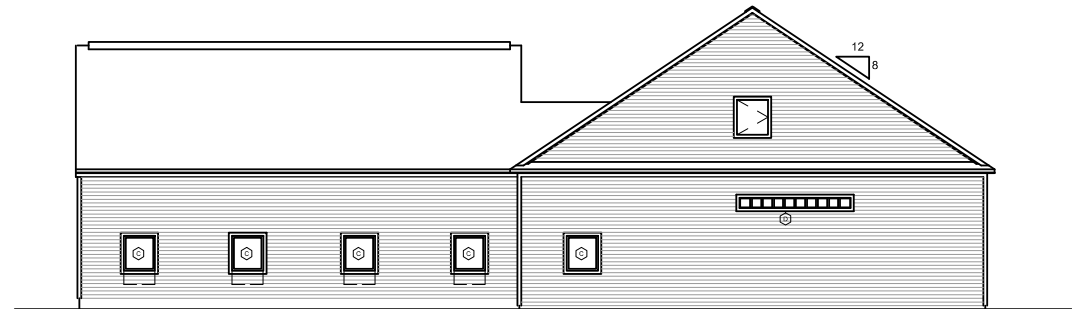
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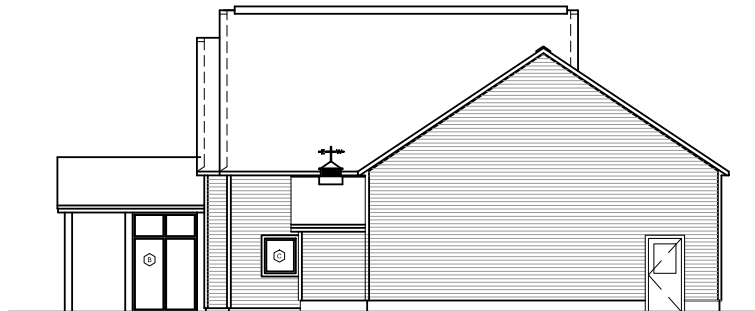
1 FRONT ELEVATION
A3.0 SCALE: 1/8" = 1'-0"



2 RIGHT SIDE ELEVATION
A3.0 SCALE: 1/8" = 1'-0"



3 REAR ELEVATION
A3.0 SCALE: 1/8" = 1'-0"



4 LEFT SIDE ELEVATION
A3.0 SCALE: 1/8" = 1'-0"



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www.deanassoc.com

DRAFT
NOT FOR
CONSTRUCTION

	PROGRESS	8/1/2022
No.	Description	Date

DWG ISSUE & REVISION HISTORY

Stamp

Key Plan

Project Title:

VET FOR POLAND
VETERINARY HOSPITAL
453 CORNELIA STREET
PLATTSBURGH, NY 10601

Drawing Title:

EXTERIOR
ELEVATIONS

Project Number 2022.08

Scale AS NOTED

Drawn By WAM

Checked By JWD

Date 5/23/2022

Drawing Number
A3.0

Exhibit 10

Stormwater Report

Exhibit 10 – Stormwater Report

Please see the stormwater report submitted under separate cover.

POLAND ANIMAL HOSPITAL EXPANSION

1195-1197 MAINE STREET
POLAND, MAINE

APPLICANT:

VETCOR OF POLAND LLC
141 LONGWATER DRIVE, SUITE 108
NORWELL, MA 02061

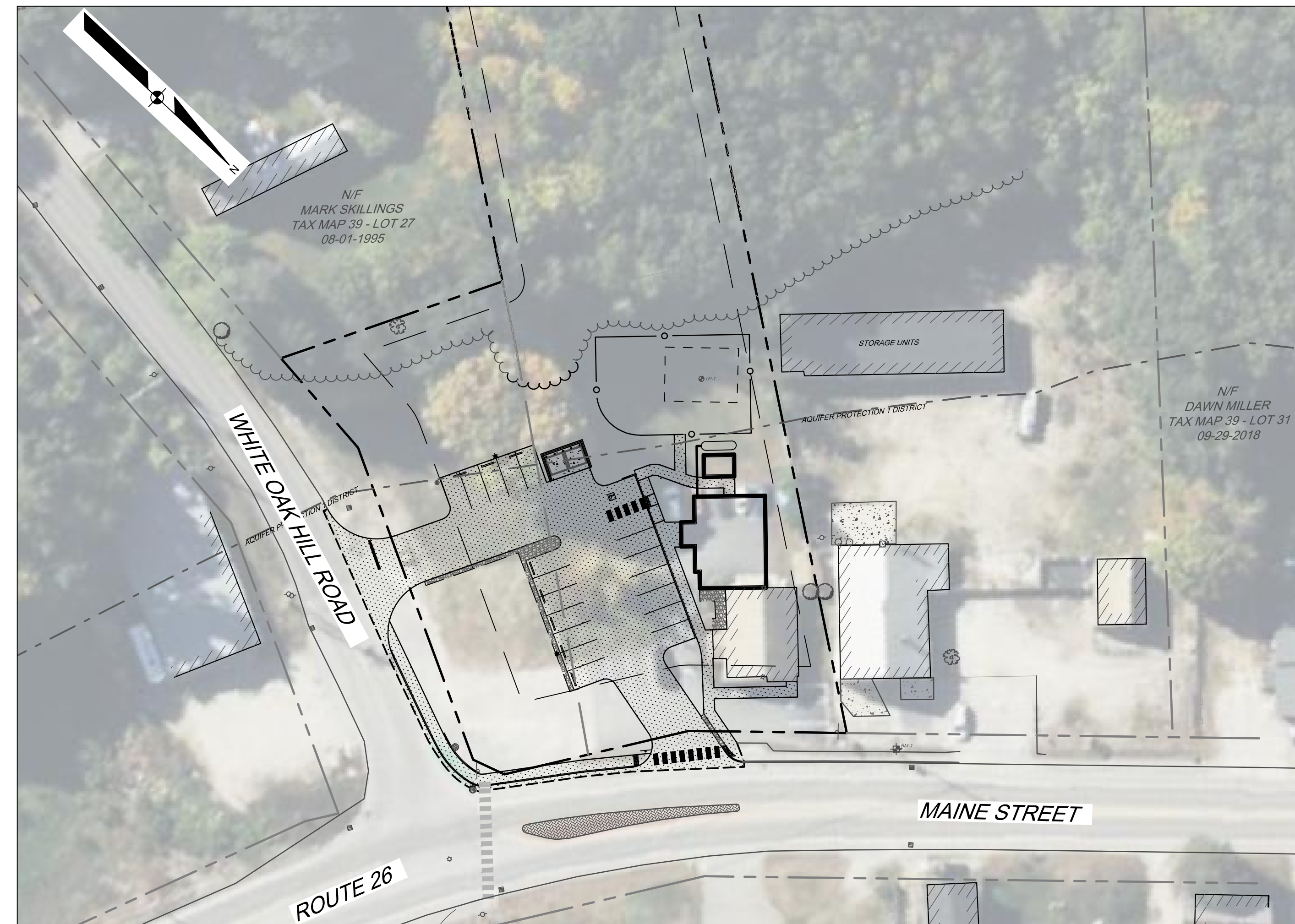
ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:



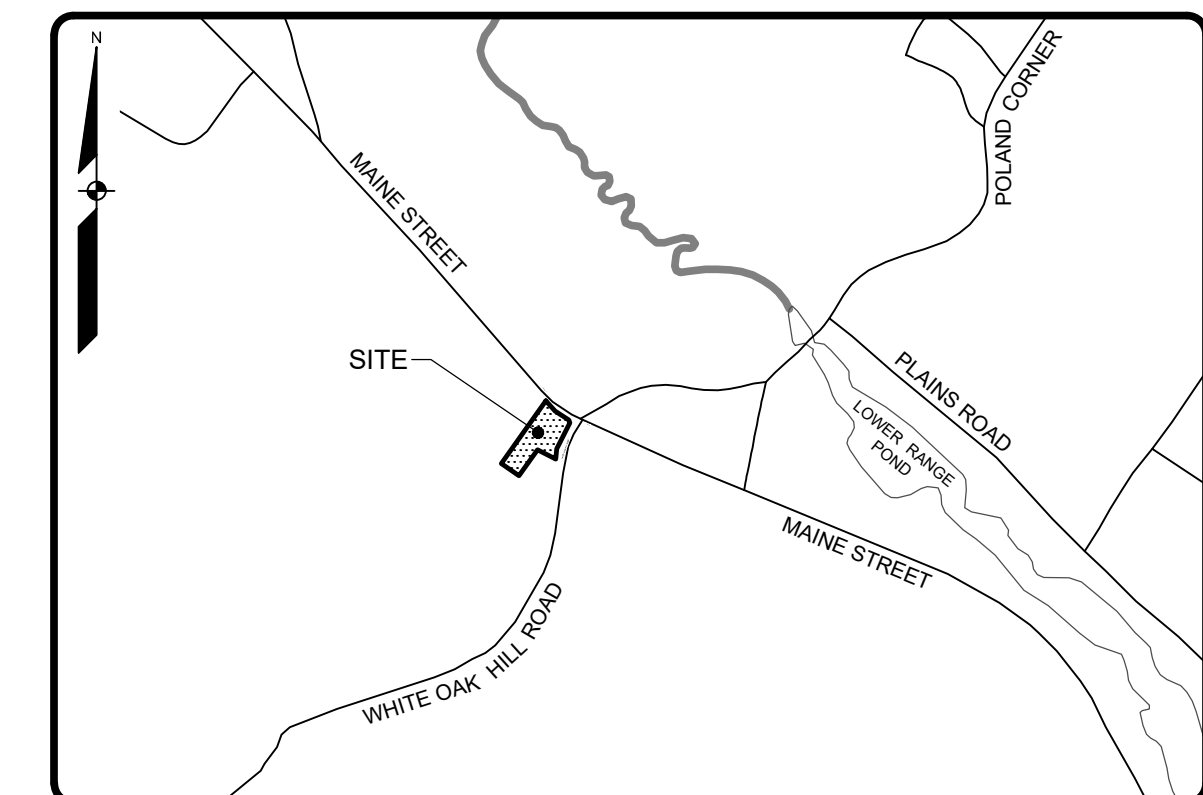
PROJECT ARCHITECT:

DEAN ASSOCIATES ARCHITECTS, INC.

7 KIMBALL LANE
BUILDING E, THIRD FLOOR
LYNNFIELD, MA 01940
(781) 397-8092
JAMES W. DEAN, RA



SCALE: 1" = 40'



LOCATION MAP

Sheet List Table

SHEET TITLE

- 1 COVER SHEET
- 2 NOTES & LEGEND
- 3 DEMO PLAN
- 4 SITE PLAN
- 5 GRADING & UTILITY PLAN
- 6 LANDSCAPING PLAN
- 7 EROSION CONTROL NOTES
- 8 DETAILS 1
- 9 DETAILS 2
- 10 DETAILS 3
- 11 DETAILS 4
- EXISTING CONDITIONS SURVEY

COVER SHEET
OF:

POLAND ANIMAL HOSPITAL EXPANSION
11195-1197 MAINE STREET
POLAND, MAINE

FOR:
VETCOR OF POLAND LLC
141 LONGWATER DRIVE, SUITE 108
NORWELL, MA 02061

DESIGNED	KGK
DRAWN	ABB
CHECKED	PMG
DATE	08/10/2023
SCALE	1" = 40'
PROJECT	230327

SHEET 1 OF 11

F:\Projects\23000\230327\DWG\Design\230327 C.dwg - 8/10/2023 3:52 PM - PATRICK GERE

EXISTING		PROPOSED
----	PROPERTY LINE/R.O.W.	
----	ABUTTER LINE/R.O.W.	
----	DEED LINE/R.O.W.	
----	TIE LINE	
----	SETBACK	
----	EASEMENT	
----	BUFFER	
----	FLOODPLAIN	
----	FLOODWAY	
----	CENTERLINE	
[]	MONUMENT	■
()	IRON PIPE/ROD	●
	DRILL HOLE	⊙
C1/L1	DEED CALL	
C1/L1	CURVE/LINE NO.	C1/L1
----	SOILS	
----	ZONE LINE	
=====	ZONE LINE ON PL	
<div style="border: 1px solid black; padding: 2px;">BENCHMARK DESCRIPTION WITH ELEVATION</div>	BENCHMARK	
▲	SURVEY CONTROL	
TP-1	TEST PIT	
MW-1	MONITORING WELL	
B-1	BORING	
=====	BUILDING	=====
=====	DECK/STEPS/ OVERHANG	=====
- - - - -	EDGE WETLAND	
	WETLANDS	
┐	UPLANDS	
~~~~~	STREAM	
▨	LEDGE	
=====	EDGE PAVEMENT	=====
=====	PAVEMENT SAWCUT	=====
=====	EDGE CONCRETE	=====
=====	PAVEMENT PAINT	=====
=====	EDGE GRAVEL	=====
=====	CURB LINE	=====
=====	EDGE OF WATER	=====
~~~~~	TREELINE	~~~~~
-120-----+118-	CONTOURS	-120-----+120.00
○	X 120.00	○
×	CHAIN LINK FENCE	×
×	BARB WIRE FENCE	×
□	STOCKADE FENCE	□
=====	GUARD RAIL	=====
○○○○○	STONE WALL	○○○○○
=====	RETAINING WALL	=====
◯	DECIDUOUS TREE	◯ X
◯	CONIFEROUS TREE	◯ X
— — — — —	MULCH LINE	— — — — —
○	BOLLARD	●
— — — — —	SIGN	— — — — —
+	RAILROAD	+ C
G	GAS	G
GV	GAS GATE VALVE	GV
GM	GAS METER	GM
G	GAS MANHOLE	G
W	WATER	W
WV	WATER GATE VALVE	WV
WS	WATER SHUT OFF	WS
WD	HYDRANT	WD
WM	WATER MANHOLE	WM
W	WELL	W
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
S	SANITARY MANHOLE	S
SD	STORM DRAIN	SD
UD	UNDER DRAIN	UD
D	DRAINAGE MANHOLE	D
☉	CATCH BASIN	☉
OHU	OVERHEAD UTILITY	OHU
UGU	UNDERGROUND UTILITY	UGU
T	TRANSFORMER PAD	T
E	ELECTRICAL MANHOLE	E
EM	ELECTRIC METER	EM
H	HVAC UNIT	H
T	TELEPHONE MANHOLE	T
*	LIGHT POLE	* * *
○	UTILITY POLE	○
---	GUY WIRE	---
----	DRAINAGE DITCH	----
▨	EROSION CONTROL BLANKET	▨
=====	FILTER BARRIER	===== FB
=====	RIPRAP	=====
=====	CHECK DAM	=====
=====	INLET PROTECTION	=====
=====	BOULDER	=====
----	STREAM	----

THE RECORD OWNER OF THE PARCEL IS RELIC, LLC. BY DEED DATED APRIL 9, 2012 AND APRIL 4, 2011 AND RECORDED AT THE ANDROSOGGIN COUNTY REGISTRY OF DEEDS (ACRD) IN BOOK 8372 & 8140, PAGE 273 & 120.

2. THE BOUNDARY SHOWN HEREON IS BASED UPON PLAN REFERENCE A AND NOTE 1 ONLY. SEBAGO TECHINCS HAS NOT PERFORMED AN INDEPENDENT BOUNDARY SURVEY OF THE PARCEL SHOWN HEREON.

3. THE PROPERTY IS SHOWN AS LOT 29 & 30 ON THE TOWN OF POLAND TAX MAP 39 AND IS LOCATED IN THE DOWNTOWN DISTRICT. PORTIONS OF THE PROPERTY ARE LOCATED WITHIN THE AQUIFER PROTECTION OVERLAY 1 DISTRICT.

4. TOTAL AREA OF PARCEL IS APPROXIMATELY 1.35 ACRES.

5. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHINCS, INC. IN JUNE AND JULY OF 2023.

6. PLAN REFERENCES:
A "EXISTING CONDITIONS SURVEY OF 1195-1197 MAINE STREET, STATE ROUTE 26, POLAND, MAINE" FOR RELIC, LLC BY JKL LAND SURVEYING dated MAY 22, 2012.

7. BASIS OF BEARING IS GRID NORTH: MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE, 1802-NAD83 (2011) IN INTERNATIONAL FEET. ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL FREQUENCY GPS OBSERVATIONS.

8. BENCHMARK: BM-1 RR SPIKE IN POWER POLE 178 ELEVATION: 337.59' (NAVD88)

9. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CIASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.

10. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR POLAND, MAINE, ANDROSOGGIN COUNTY, MAINE, NO. 23001C2922, HAVING AN EFFECTIVE DATE OF JULY 8, 2013. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE X. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

11. SPACE AND BULK CRITERIA FOR THE DOWNTOWN DISTRICT ARE AS FOLLOWS:
MINIMUM LOT SIZE: 20,000 SF
MINIMUM STREET FRONTAGE: 100 FEET
MINIMUM FRONT YARD: 30 FEET
MINIMUM SIDE YARD: 10 FEET
MINIMUM REAR YARD: 10 FEET
MAXIMUM BUILDING HEIGHT: 25 FEET
MAXIMUM BUILDING COVERAGE: 75%
* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

12. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.

13. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

14. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.

15. PROVIDE ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

16. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.

17. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.

18. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.

19. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.

20. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPs" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION. LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

21. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF JOINT TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.

22. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.

23. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.

24. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.

25. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

26. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.

27. WHERE THE TERMS "APPROVED EQUAL," "OTHER APPROVED," "EQUAL TO," "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGEMENT OF SEBAGO TECHINCS, INC.

28. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.

29. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.

30. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.

31. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.

32. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS. REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION. CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT AREA HAVE BEEN OBSTRUCTED BY HISHER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

33. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW THROUGH THE EXISTING CLOSED STORM DRAINAGE SYSTEM DURING CONSTRUCTION AND SHALL SUBMIT A WORK PLAN FOR APPROVAL BY THE DESIGN ENGINEER.

1. PROTECT EXISTING BOUNDARY LINE MONUMENTATION, IF DISTURBED. EXISTING MONUMENTATION TO BE RESET BY A PROFESSIONAL LAND SURVEYOR.
2. DEMOLITION OF UTILITIES REQUIRING TREE REMOVAL SHALL BE COORDINATED WITH THE OWNER AND IN ACCORDANCE WITH PROJECT PLANS.
3. UTILITY DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION.
4. EXISTING SEWER AND STORM DRAINAGE INFRASTRUCTURE TO REMAIN ACTIVE DURING CONSTRUCTION AND UPON COMPLETION OF PROJECT. DEMOLITION/CONSTRUCTION ACTIVITIES SHALL NOT INTERFERE OR IMPEDE EXISTING FLOWS. CONTRACTOR SHALL PROVIDE BYPASS PUMPS AS REQUIRED DURING SEWER AND STORM DEMOLITION AND NEW CONSTRUCTION. DAMAGE TO EXISTING SEWER INFRASTRUCTURE SHALL BE REPAIRED BY CONTRACTOR AT THEIR EXPENSE.
5. DEMOLITION SHOWN IS FOR MAJOR SITE ELEMENTS TO BE DEMOLISHED. OTHER MINOR DEMOLITION MAY BE REQUIRED AS PART OF CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. COORDINATE ALL DEMOLITION WORK WITH SITE AND BUILDING DRAWINGS.
6. PRIOR TO ANY DEMOLITION, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF DEMOLITION PLANS TO THE OWNER. THIS PLAN SHALL DEPICT LOCATIONS OF PROPOSED TERMINATIONS AND ANY TEMPORARY SERVICES THAT WILL BE NEEDED.
7. CONTRACTOR REQUIRED TO CONFIRM/MAINTAIN BENCHMARKS. IF IMPACTED CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION/RELOCATION AND COORDINATION WITH PROJECT TEAM.

1. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THE PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H:V) SHALL BE LINED WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS INDICATED.
2. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAJOR EROSION AND SEDIMENT CONTROL BMP'S" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER, U.S. DEPARTMENT OF AGRICULTURE, NATIONAL SERVICE CENTER, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPEVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAIL.
4. SEE UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

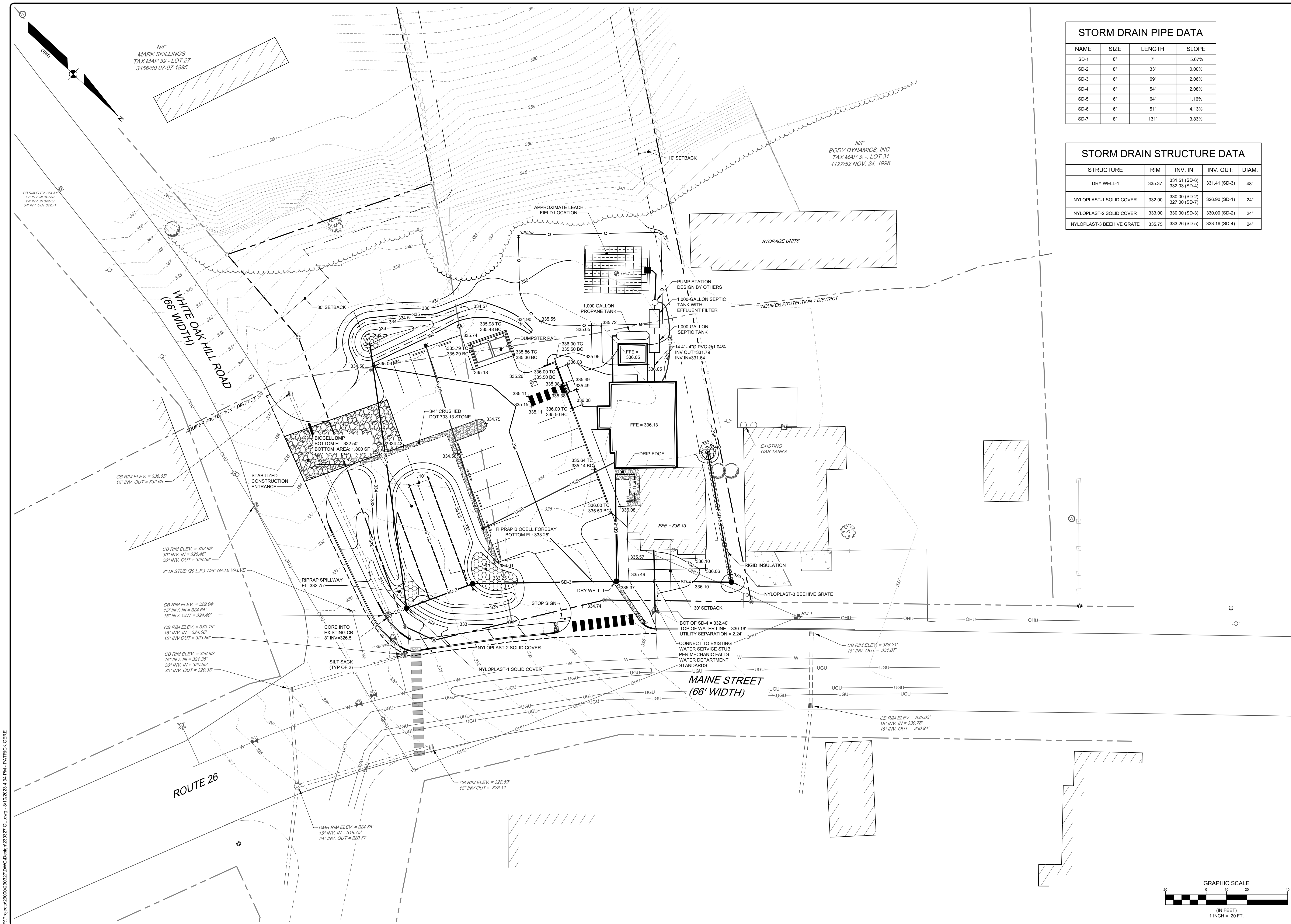
1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. WETLANDS, ASSOCIATED SETBACKS AND STREAM SETBACKS TO BE STAKED BY OWNER PRIOR TO SITE DISTURBANCE.
3. BEFORE TREE CLEARING, REFER TO PLANS FOR WOODED BUFFER LOCATIONS. TREES SHALL NOT BE CLEARED WITHIN DESIGNATED WOODED BUFFER AREAS.
4. GRADING AND CLEARING LIMITS SHALL NOT ENCROACH ON ADJACENT PROPERTIES UNLESS NOT OTHERWISE ON THE PLANS.
5. OPEN AREAS SHALL BE LIMITED TO AREAS BEING WORKED IN. THE AREA STRIPPED OF EXISTING VEGETATION AT ANY GIVEN TIME SHALL BE MINIMIZED AND BE PHASED WHERE PRACTICAL SO THE AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. STABILIZE CONSTRUCTION AREAS BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED. SURFACES SHALL BE STABILIZED PRIOR TO DIRECTING STORMWATER RUNOFF TOWARD STORMWATER BIMPS. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

1. PLANT QUANTITIES SHOWN ON PLANT LISTS ARE FOR CONVENIENCE TO THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL INSTALLATION AS SHOWN ON PLANS.
2. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF "U.S.A. STANDARD FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
4. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING, STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER.
5. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BY THE CONTRACTOR AND A PERIOD OF TWO YEARS THEREAFTER BY THE OWNER FROM DATE OF INSTALLATION. DURING ONE YEAR GUARANTEE PERIOD, DEAD PLANT MATERIAL SHALL BE REPLACED AT COST TO THE OWNER. AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
6. ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
7. EXISTING TREES TO BE PRESERVED WILL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF THE UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, CURBS, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER.
9. ALL SHRUB BEDS SHALL BE MULCHED WITH 3" CLEAN SHREDDED DARK BROWN BARK MULCH.
10. THE CONTRACTOR SHALL PROVIDE 4" LOAM FOR ALL AREAS TO BE SODDED OR SEEDED. PLANTING AREAS SHALL RECEIVE 12" ROOTED THICKNESS OF LOAM. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
11. ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.
12. WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR PERENNIAL AND ANNUAL FLOWER BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.
13. DURING CLEANING OF SITE AND PRIOR TO TREE AND SHRUB INSTALLATION, CONTRACTOR SHALL REMOVE INVASIVE PLANTS. AREAS WHERE INVASIVE PLANTS ARE REMOVED AND NO OTHER PLANTING IS PROPOSED, AREA SHALL BE LOAM AND SEEDED.

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PROTECT EXISTING ONSITE SEWER PIPE AND ADJUST MANHOLE RIMS TO GRADE WHERE APPLICABLE.
2. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE CONTRACTOR SHALL REQUEST ENGINEERS APPROVAL TO USE OR NOT USE A GROUND LASER.
3. MAINTAIN MINIMUM 5'-6" OF COVER ABOVE TOP OF WATER SERVICE PIPE.
4. MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES. MAINTAIN MINIMUM 18 INCH VERTICAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES.
5. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SERVICES SHALL MAINTAIN 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND TOP OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
6. PIPE:
 - a. SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
 - b. STORM DRAIN SHALL BE ADS N-12 DUAL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
 - c. WATER PIPE AND FITTINGS SHALL CONFORM TO THE DISTRICT HAVING JURISDICTIONS SPECIFICATIONS. MAIN WATER SERVICE PIPE SHALL BE DUCTILE IRON, CLASS 52 PUSH-ON PIPE MEETING THE REQUIREMENTS OF AWWA/C111/A21.1 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/C111/A21.1 WITH LINING THICK THE THICKNESS SPECIFIED, AND COATED TWICE WITH A BITUMINOUS SEAL COATING TO PROVIDE THRUST BLOCKS AT ALL WATER SERVICE BENDS.
7. COORDINATE ALL UTILITY LOCATIONS AND INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
8. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE DISTRICT HAVING JURISDICTION.
9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
10. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
11. CONTRACTOR SHALL FURNISH AND INSTALL TENSILE CURB MATERIALS AND BACKFILL FOR ALL

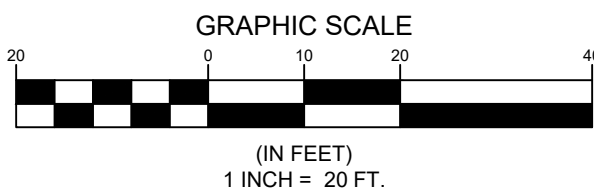
AC	ACRE
AFG	ABOVE FINISH GRADE
APPROX.	APPROXIMATELY
BC	BOTTOM OF CURB
BIT	BITUMINOUS CONCRETE CURB
BLDG	BITUMEN
BLDG	BUILDING
BW	BOTTOM OF WALL
CB	CATCH BASIN
CONC	CONCRETE
CONT	CONTINUOUS
DI	DUCTILE IRON
DA	DIAMETER
DMH	DRAIN MANHOLE
E.W.	EACH WAY
ELEV	ELEVATION
FF	FINISH FLOOR ELEVATION
FIN. GR.	FINISH GRADE
FTG	FOOTING
HDPE	HIGH DENSITY POLYETHYLENE
HOT	HEIGHT
HMA	HOT MIX ASPHALT
INVT	INVERT
LF	LINEAR FEET
LSA	LANDSCAPE ARCHITECTURE
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND CEMENT CONCRETE
R	RADIUS
R.O.F.	RIGHT OF WAY
S.F.	SQUARE FEET
SCH.	SCHEDULE
SCV	SUPPLY CONCRETE SLOPED CURB
SCVC	SUPPLY CONCRETE VERTICAL CURB
SD	STEEL
SM	SLOPED GRANITE CURB
SMH	SEWER MANHOLE
SS	SANITARY SEWER
SSG	SALVAGED SLOPED GRANITE CURB
SSC	SLOPED GRANITE CURB
TC	TOP OF CURB
TW	TOP OF WALL
TY	TYPICAL
VGC	VERTICAL GRANITE CURB
VIF	VERIFY IN FIELD

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STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-1	8"	7'	5.67%
SD-2	8"	33'	0.00%
SD-3	6"	69'	2.06%
SD-4	6"	54'	2.08%
SD-5	6"	64'	1.16%
SD-6	6"	51'	4.13%
SD-7	8"	131'	3.83%

STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
DRY WELL-1	335.37	331.51 (SD-6) 332.03 (SD-4)	331.41 (SD-3)	48"
NYLOPLAST-1 SOLID COVER	332.00	330.00 (SD-2) 327.00 (SD-7)	326.90 (SD-1)	24"
NYLOPLAST-2 SOLID COVER	333.00	330.00 (SD-3)	330.00 (SD-2)	24"
NYLOPLAST-3 BEEHIVE GRATE	335.75	333.26 (SD-5)	333.16 (SD-4)	24"



PATRICK M. GERE, P.E. 14406

STATE OF MAINE
PATRICK M. GERE
14406
MAINE ENGINEERING

DESIGNED

KGK

DRAWN

ABB

CHECKED

PMG

DATE

08/10/2023

SCALE

1" = 20'

PROJECT

230327

GRADING & UTILITY PLAN

OF:

POLAND ANIMAL HOSPITAL EXPANSION

1195-1197 MAINE STREET
POLAND, MAINE

FOR:

VETCOR OF POLAND LLC

141 LONGWATER DRIVE, SUITE 108
NORWELL, MA 02061

SHEET 5 OF 11

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THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SERAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SERAGO TECHNICS, INC.

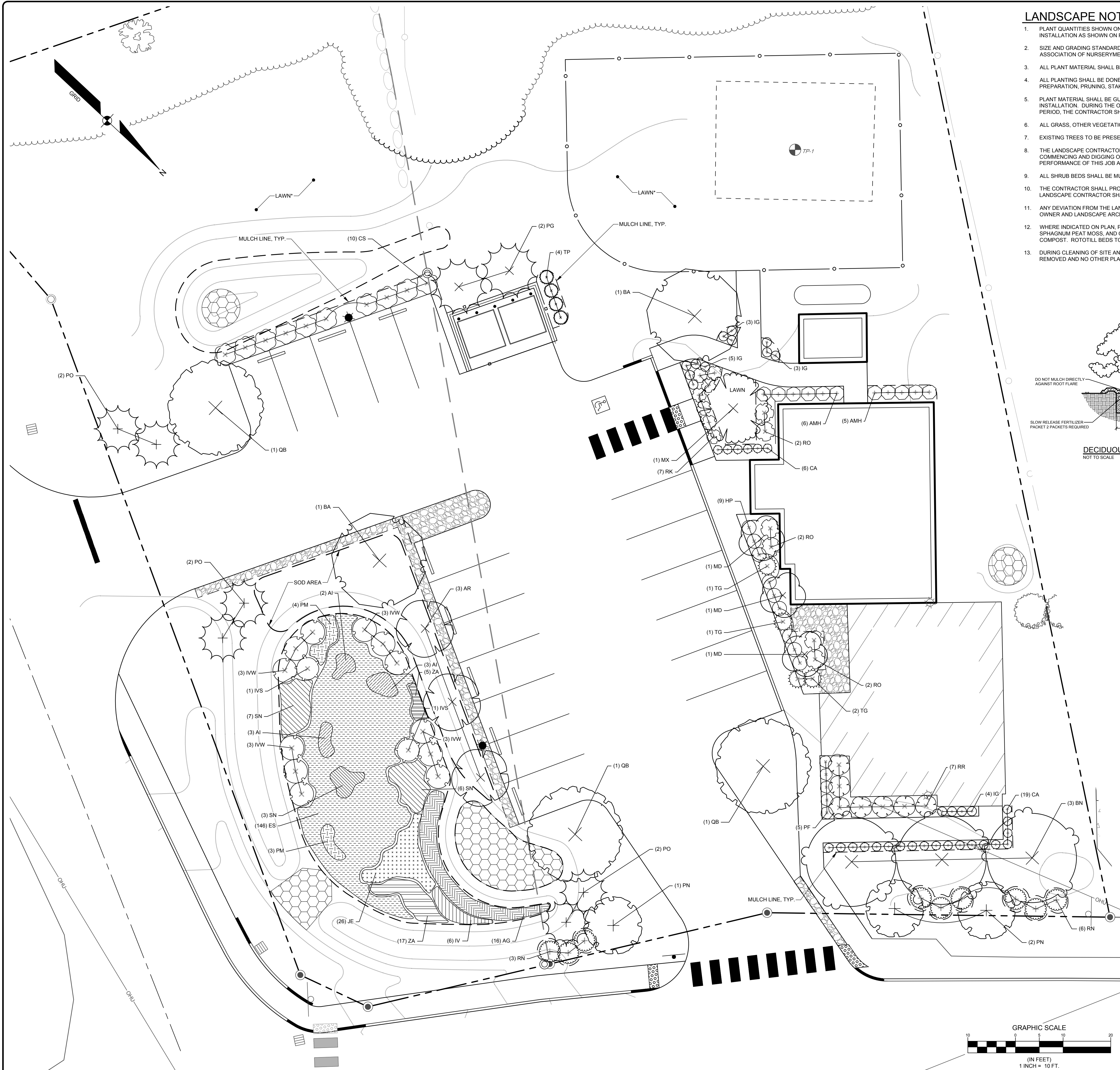
SEBAGO

TECHNICS

WWW.SERAGOTECHNICS.COM

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EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING OR CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES). TYPES OF MULCH:

HAY OR STRAW SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL, SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETRIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE BOTTOM OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET) SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET) MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RECOVERY OF TRACKED SEDIMENT WITH A STREET SWEEP, NOT BRUSHING THE MATERIAL INTO SWALES OR STRUCTURES WITH A MECHANICAL BROOM. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDBED PREPARATION:

- FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER TWO INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.
WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.	

APPLICATION OF SEED:

- SEEDING SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (CONSERVATION MIX)

SEED TYPE	APPLICATION RATE
FESCUE, FAWN	0.34 LBS/1,000 S.F. (15 LBS/ACRE)
BIRD'S FOOT TREFOIL, VARIETY NOT STATED	0.28 LBS/1,000 S.F. (12 LBS/ACRE)
ANNUAL RYEGRASS	0.18 LBS/1,000 S.F. (8 LBS/ACRE)
TIMOTHY, CLIMAX	0.18 LBS/1,000 S.F. (8 LBS/ACRE)
ALSKIE CLOVER	0.11 LBS/1,000 S.F. (5 LBS/ACRE)
REDTOP	0.05 LBS/1,000 S.F. (2 LBS/ACRE)
TOTAL	1.14 LBS/1,000 S.F. (50 LBS/ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

- HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

- MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:

FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN, WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR. HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES – THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS – BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD – THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
- STABILIZE THE SLOPE WITH WOOD WASTE COMPOST – THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SLOPE WITH STONE RIPRAP – THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES – BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SLOPS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION – BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C) OF THIS STANDARD.
- STABILIZE THE SOIL WITH SOD – THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- STABILIZE THE SOIL WITH MULCH – BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY, TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.
- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

HOUSEKEEPING:

- SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.
- GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF 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, BUMPS, AND OTHER FORMS OF SECONDARY CONTAMINATION THAT PREVENT DISCHARGE TO GROUNDWATER OR MATERIALS THAT PREVENT DISCHARGE TO GROUNDWATER. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A PLAN FOR THE 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.
- FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.
- DEBRIS AND OTHER MATERIALS: MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- EXCAVATION DE-WATERING: EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODDED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFERDAM SEDIMENTATION BASIN, AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
- AUTHORIZED NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES, WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST. THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
 - DISCHARGES FROM FIREFIGHTING ACTIVITY;
 - FIRE HYDRANT FLUSHINGS;
 - VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
 - DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS;
 - ROUTINE EXTERIOR BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
 - PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
 - UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
 - UNCONTAMINATED GROUNDWATER OR SPRING WATER;
 - FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
 - UNCONTAMINATED EXCAVATION DEWATERING;
 - POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
 - LANDSCAPE IRRIGATION.
- UNAUTHORIZED NON-STORMWATER DISCHARGES: THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES. SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
 - WASTEWATER FROM THE WASHOUT OR CLEAN OUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
 - FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
 - SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
 - TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

WINTER EROSION CONTROL MEASURES

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 1 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENUED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

ALL AREA SHALL BE CONSIDERED TO BE DENUED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

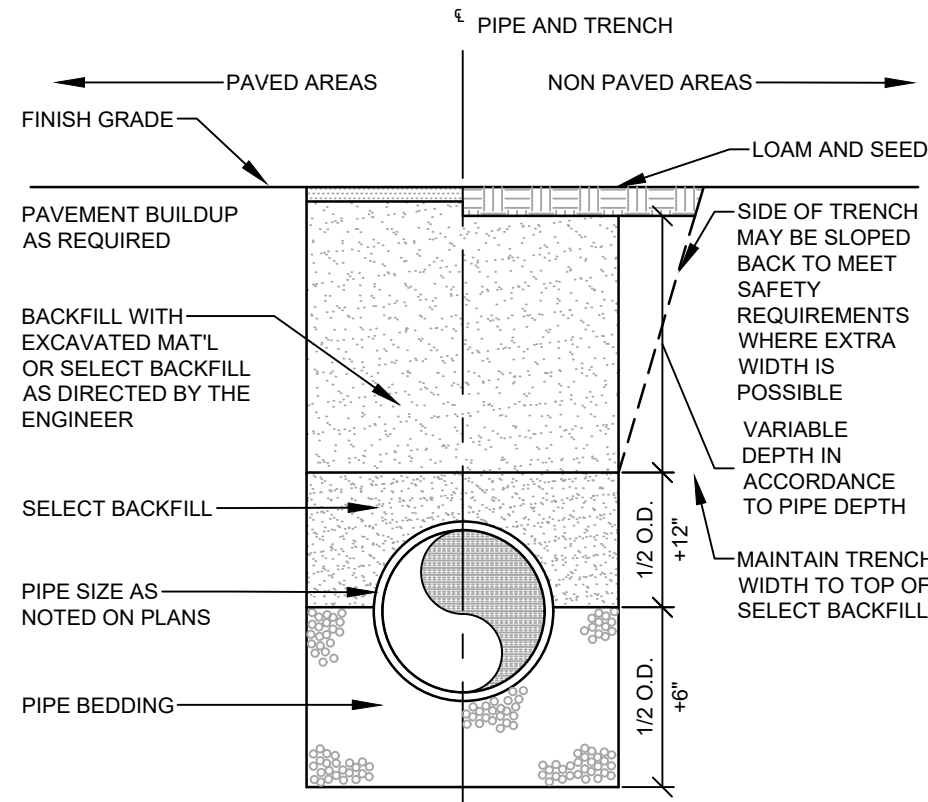
SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS./1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADING WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS./1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING. SEED TYPE SHALL BE WINTER RYE.

7. INSPECTION AND MONITORING

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AT A MINIMUM, AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGET

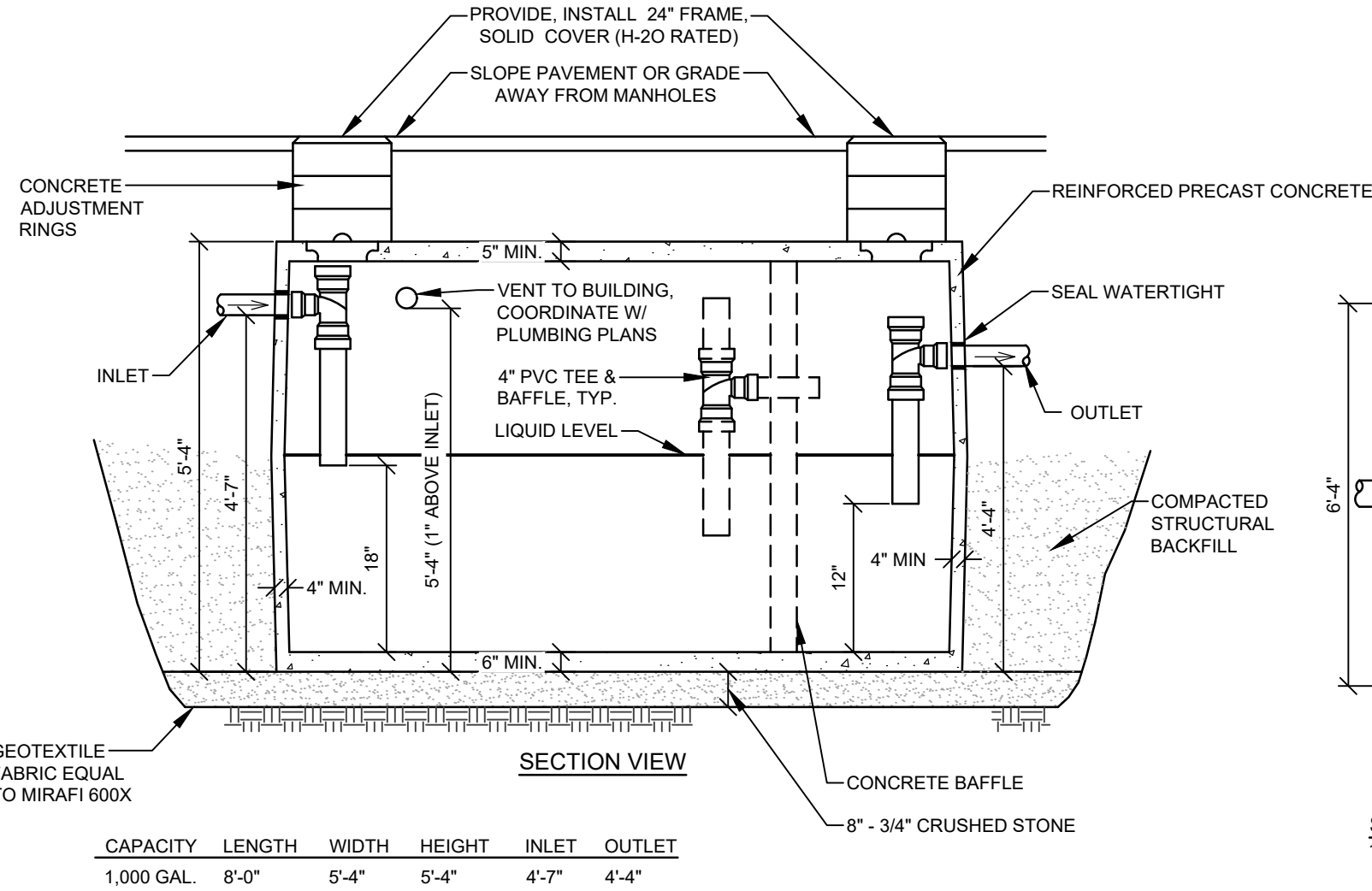


TRENCH BACKFILL SCHEDULE		
PIPE TYPE	PIPE BEDDING MATERIAL	SELECT BACKFILL
CORRUGATED METAL DUCTILE IRON REINFORCED CONCRETE	MDOT 703 22 TYPE B UD BACKFILL	MDOT 703 22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703 13 3/4" CRUSHED STONE	MDOT 703 22 TYPE B UD BACKFILL, OR MDOT 703 13 3/4" CRUSHED STONE
PERFORATED PVC-SDR 35 HDPE	MDOT 703 13 3/4" CRUSHED STONE	MDOT 703 22 TYPE B UD BACKFILL, OR MDOT 703 13 3/4" CRUSHED STONE

NOTE:
ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.

TRENCH SECTION

NOT TO SCALE

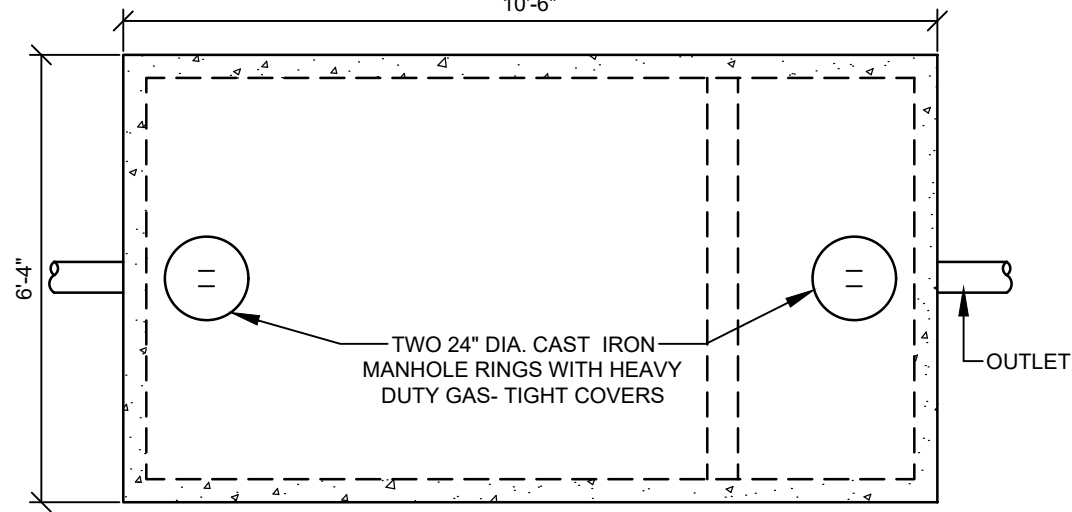


CAPACITY	LENGTH	WIDTH	HEIGHT	INLET	OUTLET
1,000 GAL.	8'-0"	5'-4"	5'-4"	4'-7"	4'-4"

- NOTES:
1. COAT INTERIOR OF TANK WITH EPOXY SEALER
 2. ALL CONCRETE HAS A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS.
 3. SHALL BE DESIGNED FOR H-20 LOADINGS.
 4. THE TONGUE AND GROOVE CENTER SEAM IS SEALED WITH A BUTYL SEALANT.
 5. THE PVC TEE BAFFLES FOR THIS TANK CAN BE MOVED TO ANY OF THE (3) INLETS OR OUTLETS.
 6. POLYLOK PIPE SEALS STANDARD AT ALL PIPE PENETRATIONS.
 7. DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS.
 8. COAT EXTERIOR OF CONCRETE WITH BITUMASTIC SEALANT.
 9. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS.
 10. SEE HHE-200 AND UTILITY PLANS FOR PIPE SIZES AND INVERTS.

1,000 GAL. SEPTIC TANK

NOT TO SCALE



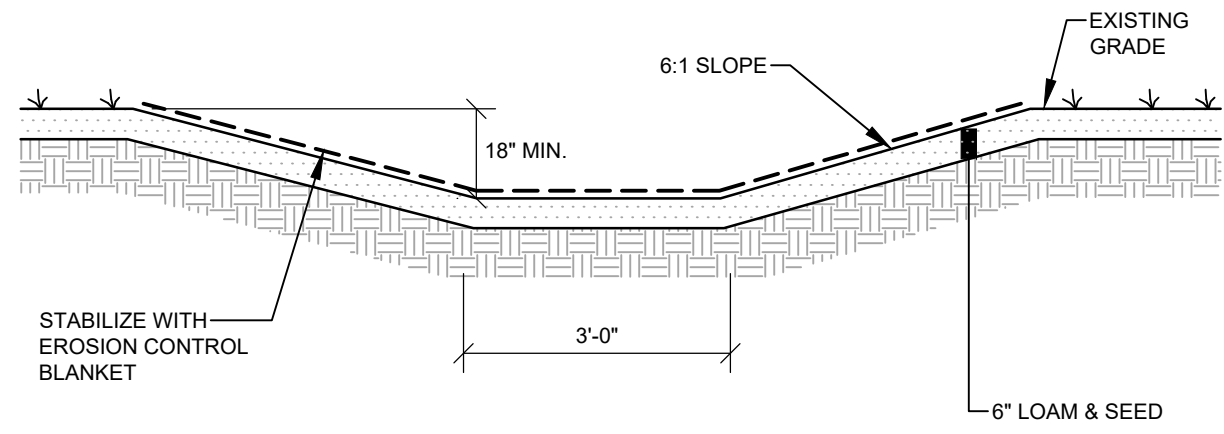
PLAN VIEW

STRUCTURAL NOTES:

1. CONCRETE:
 - a) 28 DAY COMPRESSIVE STRENGTH FC= 4,000 PSI.
 - b) CEMENT TO BE TYPE III PER ASTM C-150
 - c) 4%-6% ENTRAINED AIR
2. STRUCTURAL REINFORCEMENT:
 - a) REINFORCED FOR H-20 LOADING
3. BAR CLEARANCE/PROTECTION:
 - a) 1 1/2" CLR. (UNLESS OTHERWISE NOTED)

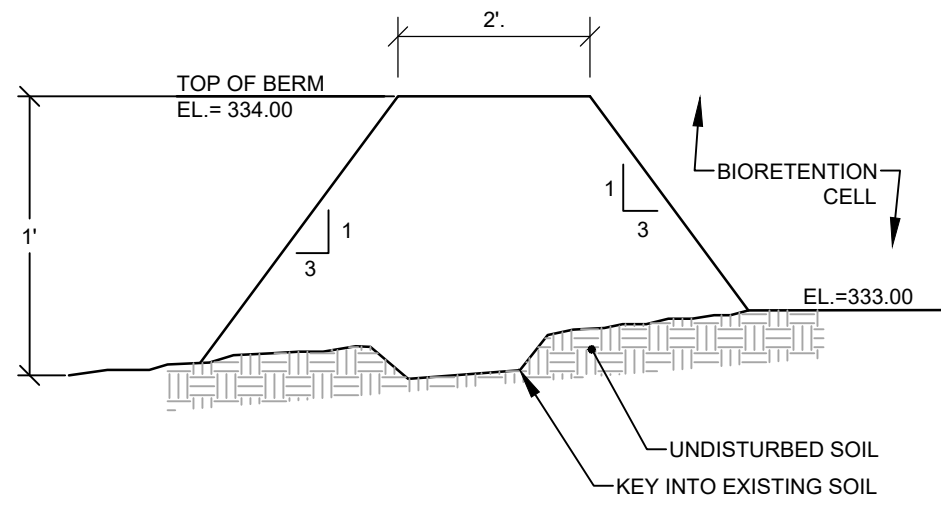
INSTALLATION REQUIREMENTS:

1. TO BE INSTALLED ON MIN. 8" THICK BED OF CRUSHED 3/4" STONE.
 2. USE 1" CON-SEAL 102 AT JOINTS.
 3. JOINT GAPS LESS THAN 0.5", GROUT TO FILL VOIDS.
- GENERAL NOTES:
1. ALL BAFFLES AND WEIRS TO BE PRECAST CONCRETE.
 2. CONTRACTOR TO: SUPPLY AND INSTALL ALL PIPING & SAMPLING TEES GROUT IN ALL PIPES FILL WITH CLEAN WATER PRIOR TO "START-UP" OF SYSTEM VERIFY ALL BLOCKOUT SIZES AND LOCATIONS.
 3. PUMP BY OTHERS.



GRASSED SWALE

NOT TO SCALE

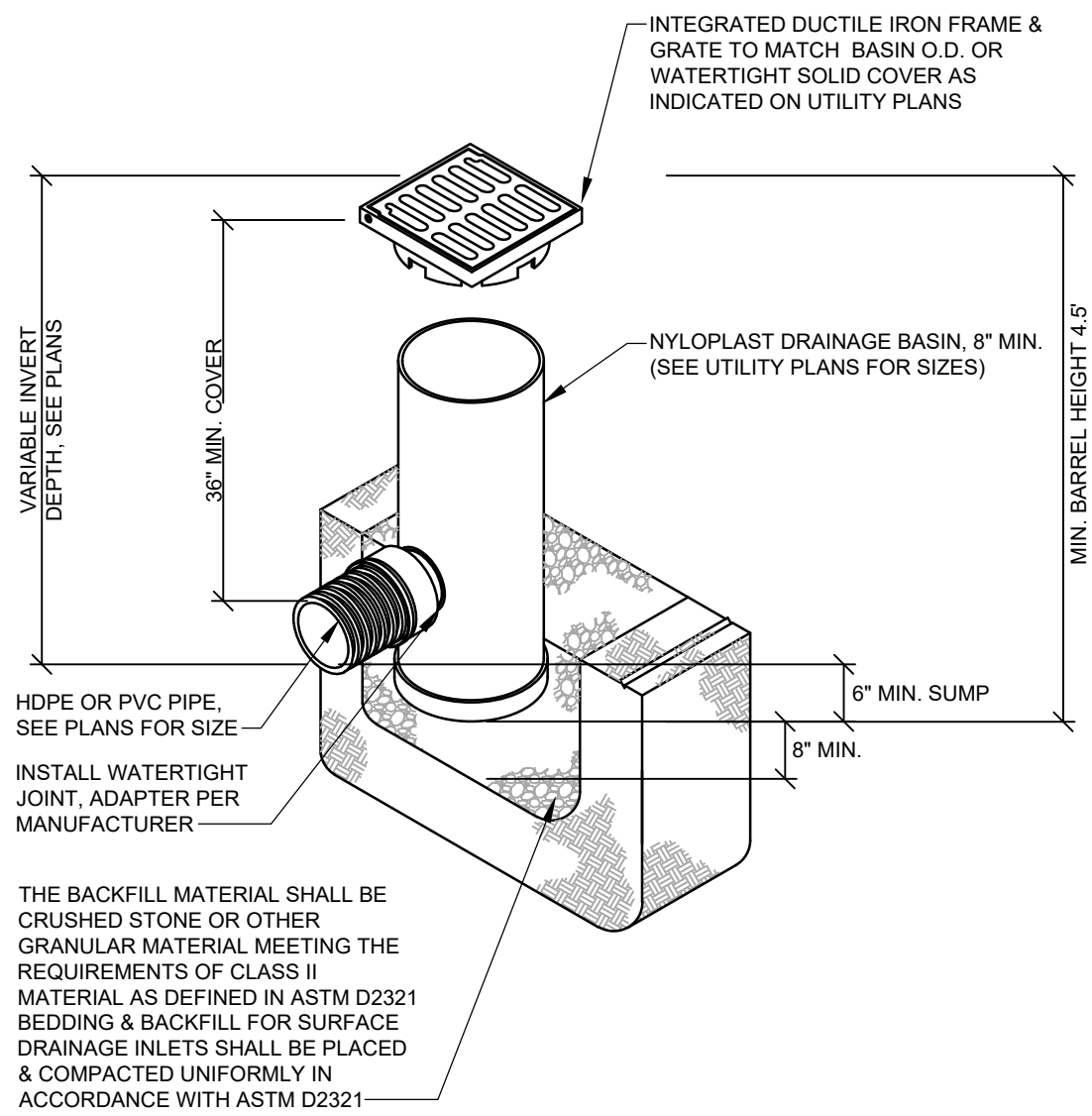


EMBANKMENT CONSTRUCTION:

1. CONSTRUCTION MATERIAL SHALL MEET M.D.O.T. SPECIFICATION 703.18.
2. PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAX. DENSITY.
3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS.
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

BERM DETAIL

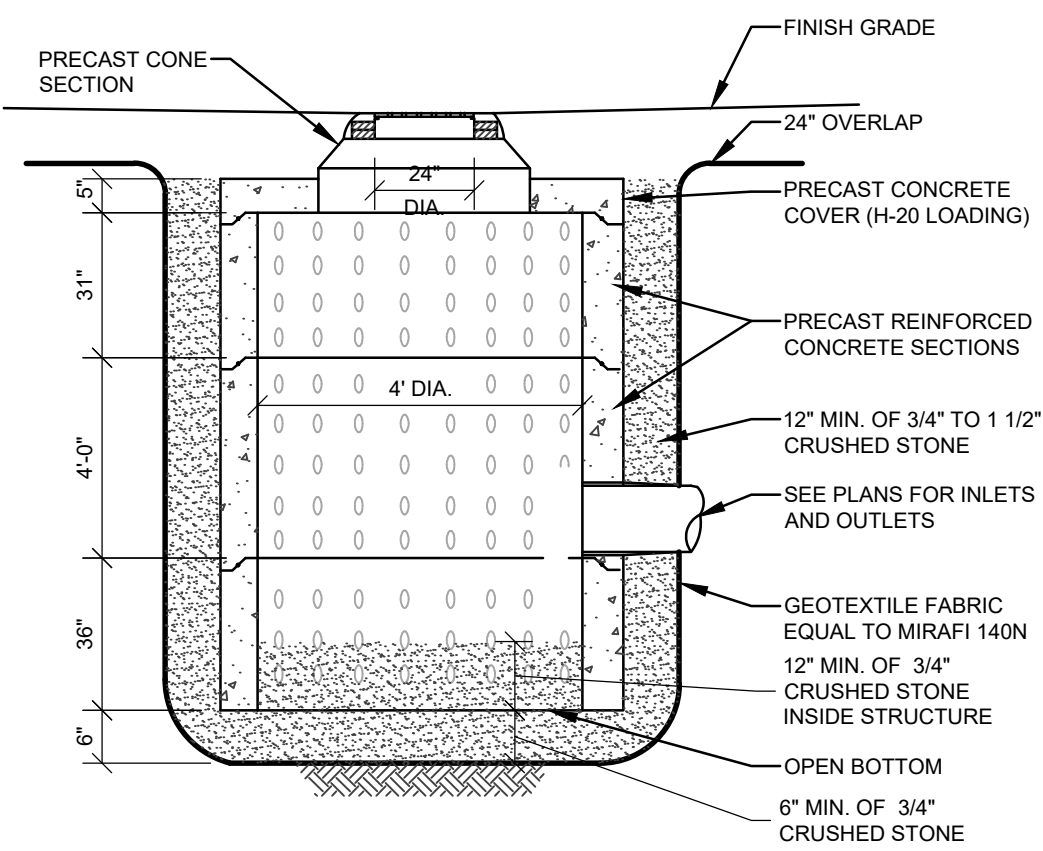
NOT TO SCALE



- NOTES:
1. INSTALL BASIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 2. INSTALL DOME GRATE IN PLANT BED AREAS.

TYP. NYLOPLAST FIELD INLET

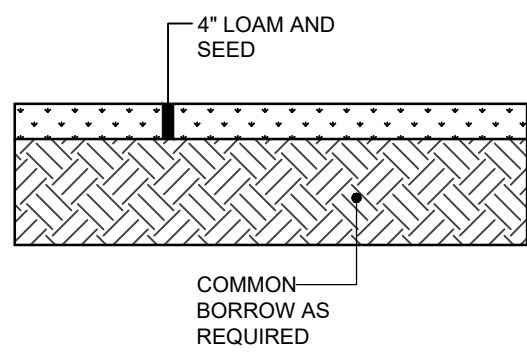
NOT TO SCALE



- NOTES:
1. CONCRETE: 4000 psi AFTER 28 DAYS.
 2. CATCH BASIN FRAME AND GRATE TO BE ETHERIDGE FOUNDRY M248G AND DMH TO BE M248S.
 3. EACH 4' VERTICAL DRYWELL SECTION TO HAVE AT LEAST 238 OPENINGS.
 4. PIPE SIZES, LOCATIONS, AND INVERTS AS NOTED ON PLAN.
 5. DRAINAGE STRUCTURES AND RISERS TO BE SIZED FOR H20 LOADING.

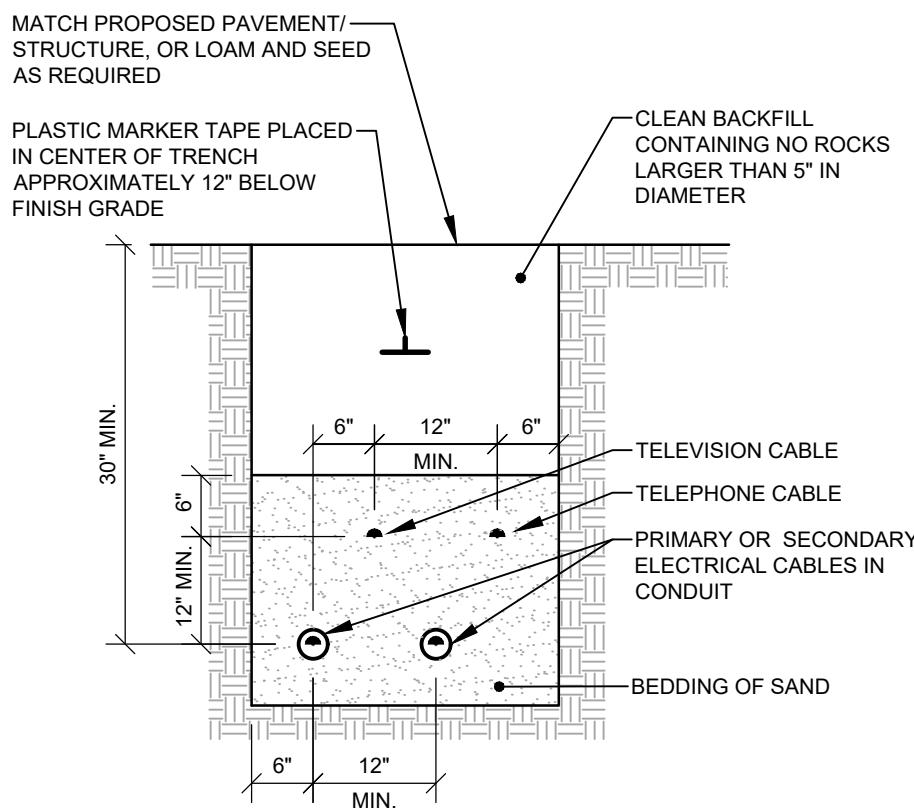
DRY WELL

NOT TO SCALE



LOAM & SEED SECTION

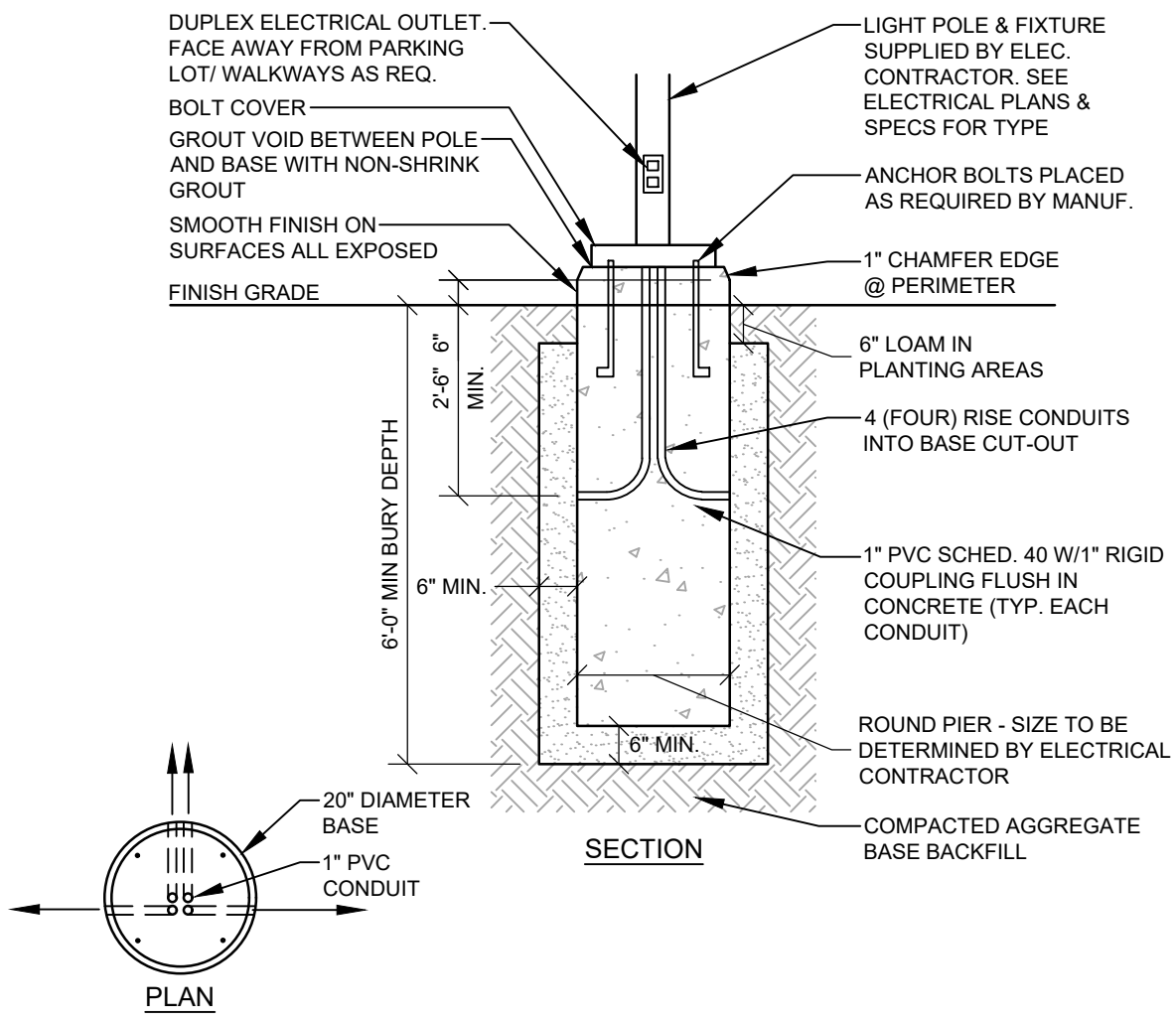
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- NOTES:
1. CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT.

UNDERGROUND CABLE INSTALLATION

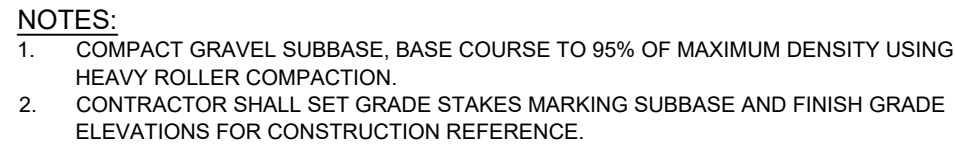
NOT TO SCALE



- NOTES:
1. CONCRETE FC=5000 psi @ 28 DAYS WITH STEEL REINFORCEMENT
 2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONTRACTOR
 3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
 4. INSTALL BASE 3'-0" ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE IN PARKING LOT PAVEMENT. MAINTAIN MINIMUM BURY DEPTH.
 5. LIGHT POLE BASE AS MANUFACTURED BY SUPERIOR CONCRETE OR APPROVED EQUAL

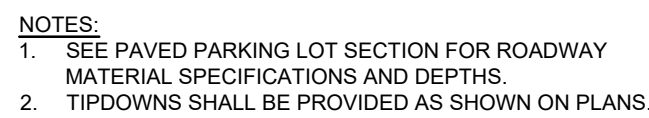
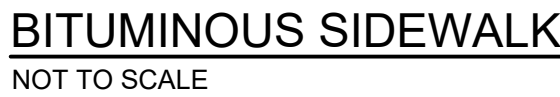
20" ROUND LIGHT POLE BASE

NOT TO SCALE



PAVED PARKING LOT SECTION

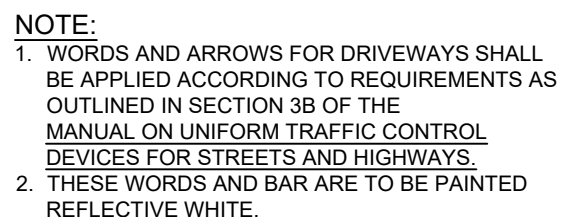
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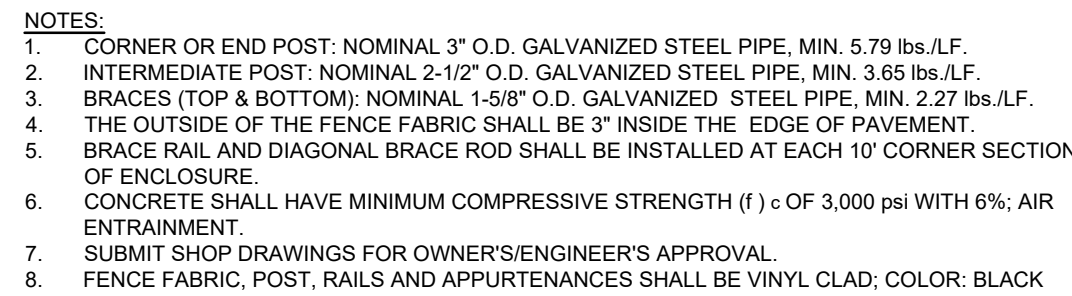
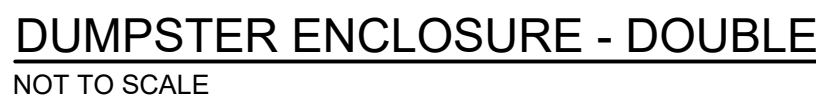
SLIPFORM CURB SECTION
NOT TO SCALE

TRUNCATED DOME PAVING

NOT TO SCALE



STOP BAR
NOT TO SCALE



NOT TO SCALE

BIORETENTION FILTER CONSTRUCTION OVERSIGHT NOTES

THE APPLICANT WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF THE UNDERDRAIN. THE PROFESSIONAL ENGINEER WILL INTERPRET THE UNDERDRAIN'S CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE CONTRACTOR SHALL SUBMIT A WRITING TO THE APPLICANT IN WRITING TO STATE THAT THE BIORETENTION FILTER HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE LOCATION OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA OR SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SILT MEDIA SPECIFIED IN THE PLANS.

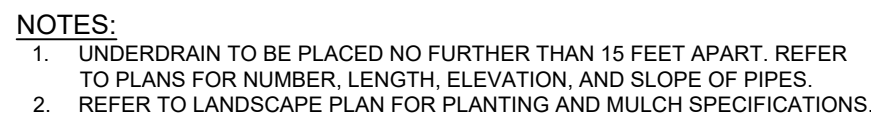
1. CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE UNDERDRAIN HAS BEEN PERMANENTLY STABILIZED, UNLESS OTHERWISE APPROVED BY THE PROFESSIONAL ENGINEER. THE SOIL FILTER MEDIA MUST BE INSTALLED AFTER THE VEGETATION IS ESTABLISHED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
2. COMPACTION OF MATERIAL: FILTER SOIL MEDIA AND UNDERDRAIN - SUBGRADE MATERIAL SHALL BE COMPACTED TO 95% PROCTOR AND 92% STANDARD PROCTOR. THE FILTER SOIL MUST BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.
3. CONSTRUCTION OVERSIGHT: INSPECTION BY THE DESIGN ENGINEER SHALL BE REQUIRED AT THE FOLLOWING STAGES:
 - A. THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED (NOT BACKFILLED).
 - B. THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
 - C. THE FILTER MEDIA HAS BEEN INSTALLED, SEEDING AND BACKFILLING COMPLETED.
 - D. THE FIRST YEAR OF OPERATION, TO INSPECT VEGETATION AND MAKE CORRECTIONS.
 - E. ALL MATERIAL INTENDED FOR THE FILTER BASIN MUST BE INSPECTED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING ALL SPECIFICATIONS.

TESTING

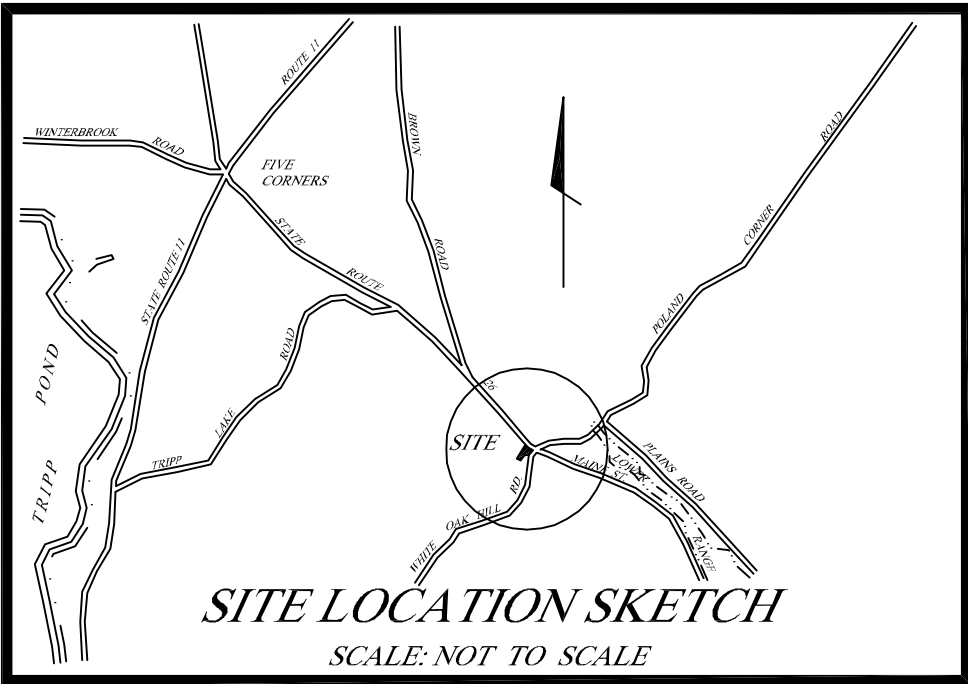
1. THE BIORETENTION FILTER SAMPLES SHALL CONSIST OF TWO LAYERS IDENTIFIED AS 12" FILTER MEDIA AND 12" UNDERDRAIN BEDDING MATERIAL. THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOIL MEDIA AND SUBMIT THE 12" FILTER MEDIA AND SUBMIT GRADATIONS TO THE ENGINEER FOR APPROVAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS. THE TESTING METHOD, NUMBER OF TESTS, AND SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.

1. THE BIORETENTION FILTER LAYER SHALL BE AT LEAST 18" DEEP AND MUST EXTEND ACROSS THE ENTIRE FILTER AREA. THE SOIL FILTER MUST BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, AND SIMILAR OBJECTS LARGER THAN 2". CLAY CONTENT SHALL NOT EXCEED 2%.
2. ONSITE TOPSOIL SHALL BE SCREENED FOR STONES LARGER THAN 2 INCHES AND BE TESTED TO VERIFY THERE IS LESS THAN 2% CLAY CONTENT AND 5% - 8% HUMIFIED ORGANIC MATTER. IF IT DOES NOT MEET THESE REQUIREMENTS, THEN LOAM FROM OFFSITE SHALL BE A CONSISTENT LOAMY TOPSOIL IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS:
 3. THE SOIL MEDIA CONSISTS OF 6" OF TOPSOIL OVERLAIN ON 12" OF LOAMY COARSE SAND LOOSELY INSTALLED AND MEETING THE FOLLOWING REQUIREMENTS:

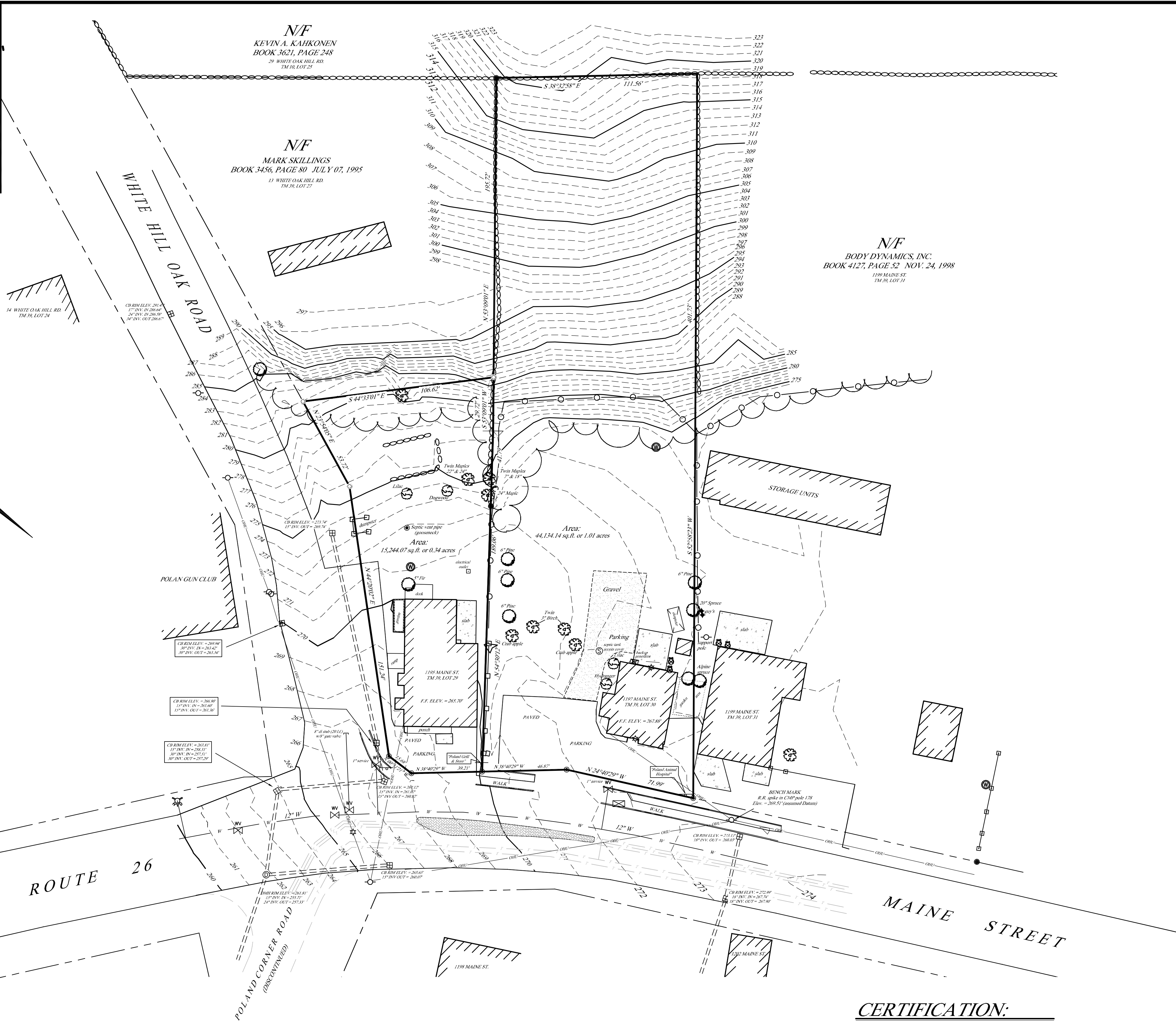
4. FILTER MUST BE PERMEABLE ENOUGH TO ENSURE DRAINAGE WITHIN 24 - 48 HOURS, WITH SUFFICIENT FINES FOR FILTRATION OF PARTICLES AND DISSOLVED POLLUTANTS. AMOUNT OF FINES AND LEVEL OF COMPACTION OF THE MEDIA SHALL BE CONSIDERED.
5. THE FILTER SOIL AND SUBSOIL COMPONENTS SHALL BE TESTED IN ACCORDANCE WITH THE TESTING AND SUBMITTALS NOTES.
6. UNDERDRAIN STONE BEDDING MATERIAL CONSISTING OF WELL GRADED AND CLEAN COARSE GRAVEL MUST CONFORM TO THE MDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL MATERIAL. THE BEDDING MATERIAL MUST HAVE NO MORE THAN 5% PASSING THE 200 SIEVE.



NOT TO SCALE



SITE LOCATION SKETCH
SCALE: NOT TO SCALE

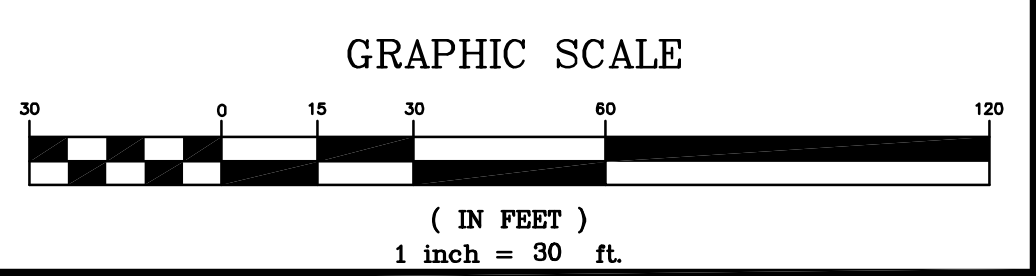


LEGEND:	
●	IRON PIPE FOUND (3/4" hollow pipe unless noted)
○	IRON PIN SET (5/8" rebar with yellow cap inscribed JKL Land Surveying, PLS 2216)
●	MAG NAIL SET IN PAVEMENT
N/F	NOW OR FORMERLY
○	UTILITY POLE
○	HARDWOOD TREE
○	SOFTWOOD TREE
○	WELL
○	HYDRANT
☆	LAMP (exterior)
---	RIGHT OF WAY LIMITS
---	EDGE OF PAVEMENT
---	CHAIN LINK FENCE
---	POST & RAIL FENCE
---	STONE WALL
---	WATER LINE (Scaled)
---	TELEPHONE/CABLE (Scaled)
---	OVERHEAD UTILITY
---	UNDER DRAIN

- NOTES:**
- 1) BEARINGS ARE REFERENCED TO MAGNETIC NORTH, MAY 2012.
 - 2) DEED REFERENCES ARE MADE TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS - AUBURN, MAINE.
 - 3) STATE ROUTE 26 IS FOUR RODS (66') WIDE AND THE LOCATION IS BASED ON THE MAINE DOT PLAN REFERRED TO IN REFERENCE 1 BELOW.
 - 4) WHITE OAK HILL ROAD IS FOUR RODS (66') WIDE AND THE LOCATION IS BASED ON THE MAINE D.O.T. PLAN REFERRED TO IN REFERENCE 1 BELOW.
 - 5) ELEVATIONS AND CONTOURS ARE BASED ON ASSUMED DATUM.
 - 6) THE PROJECT SITE IS DESIGNATED ON TAX MAP 39, LOTS 29 AND 30.
 - 7) NOT ALL UNDERGROUND UTILITIES HAVE BEEN CONFIRMED. ALL UNDERGROUND UTILITIES ARE TO BE FIELD VERIFIED BY DIG SAFE AND/OR THE RESPECTIVE UTILITY COMPANY BEFORE ANY EXCAVATION BEGINS. THIS PLAN DOES NOT ASSURE THE EXISTENCE OR ABSENCE OF UNDERGROUND UTILITIES.

- REFERENCES:**
- 1) STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP - ROUTE 26 - POLAND, MAINE - D.O.T. FILE NO. 1-283 SHEETS 30 AND 31 DATED MAY 2008 ON FILE WITH MDOT - AUGUSTA, MAINE.
 - 2) PLAN OF A STANDARD BOUNDARY SURVEY MADE FOR P.E. DUNN, INC. - STATE ROUTE 26 - POLAND, MAINE DATED JUNE 01, 1994 BY JOHN A. BELDING LAND SURVEYOR - OTISFIELD, MAINE.

OWNER OF RECORD:
RE LIC, LLC
BOOK 8372, PAGE 273 APRIL 006, 2012 AND
BOOK 8140, PAGE 120 MARCH 31, 2011



--- PERIMETER BOUNDARY SURVEY ---
EXISTING CONDITIONS SURVEY
1195-1197 MAINE STREET --- STATE ROUTE 26 --- POLAND, MAINE
MADE FOR
RE LIC, LLC
47 COOK ROAD --- OTISFIELD, MAINE 04270
JKL LAND SURVEYING
4 NORTH STREET, SUITE 3 -- MECHANIC FALLS, MAINE 04256
(207) 346-3556 --- Email: jklsurvey@prodrunner.com
BOOK: 156 FILE: ### JOB NO.: 12017 DISC: SURVEY CD 2012
MAY 22, 2012
PROVIDING "DIRECTIONS" FOR THE FUTURE

RECORDING INFORMATION:
ANDROSCOGGIN COUNTY REGISTRY OF DEEDS
RECEIVED _____ AT _____ HOUR _____ MIN. _____ M.
AND RECORDED IN PLAN BOOK _____, PAGE _____
ATTEST _____ REGISTRAR

TOTAL AREA:
1.35 acres or 59,378.21 sq. ft.

CERTIFICATION:

TO THE BEST OF MY KNOWLEDGE, I HAVE USED ORDINARY AND PRUDENT CONDUCT EXPECTED OF PROFESSIONAL LAND SURVEYORS AND THE RESULTS SHOWN HERE REPRESENT THE LICENSEE'S RESPONSIBILITY TO THE PUBLIC AS REQUIRED UNDER THE STANDARDS OF PRACTICE AS DEFINED BY THE BOARD OF LICENSEES FOR PROFESSIONAL LAND SURVEYORS (M.R.S.A. TITLE 32, CHAPTER 121 DATED APRIL, 2001).

- EXCEPT AS FOLLOWS:
1) NO WRITTEN REPORT TO DATE.
2) NO DEED DESCRIPTION TO DATE.

PLAN PREPARED BY: K.W.M.
PLAN CHECKED BY: P.E.P.



THIS PLAN IS NOT VALID UNLESS EMBOSSED ABOVE



August 16, 2023
230327

Scott Neal
Code Enforcement Officer
Town of Poland
1231 Maine Street
Poland, ME 04274

Poland Animal Hospital Expansion
1195-1197 Maine Street, Poland, ME
Applicant: VetCor of Poland, LLC

Dear Scott:

On behalf of VetCor of Poland, LLC, Sebago Technics, Inc (Sebago) submits the enclosed supplemental information to support the Planning Board's Site Plan Review of the Poland Animal Hospital Expansion project located at 1195-1197 Maine Street, Tax Map 39 Lots 29 & 30. We have included the following:

- 10 copies of evidence of financial capacity;
- A USB thumb drive containing a digital copy of the application materials; and
- Check #88719 for \$700.00 for third party review escrow.

We look forward to discussing the project further with the Planning Board. If you should have any questions or require additional information, I can be contacted via e-mail at pgere@sebagotechincs.com or my direct line 207-200-2133.

Sincerely,

Sebago Technics, Inc.

A handwritten signature in black ink, appearing to read "P. Gere", written over a horizontal line.

Patrick M. Gere, PE
Project Manager

Enclosures



J.P.Morgan

August 14, 2023

Peter Raymond
VetCor Professional Practices LLC
141 LONGWATER DRIVE STE 108, NORWELL,
MA, 02061-, USA

IMPORTANT | Account Information

To Whom It May Concern,

This letter is being delivered to you to provide information on **VetCor Professional Practices LLC's** banking relationship with JPMorgan Chase Bank, N.A (the "Bank").

We can hereby confirm that **VetCor Professional Practices LLC** has maintained accounts at the Bank since **12/10/2021** and has operated the accounts in a satisfactory manner.

Furthermore, the account number ending in **x2613** shows that between 12/10/2021 and 8/14/2023 have maintained an average daily balance of over **\$1,000,000.00**.

Please be advised that this letter refers only to facts as they exist as of the date of this letter and the Bank shall have no duty or obligation to inform the addressee hereof of any future changes in such facts. This letter is solely for the benefit of the addressee hereof for the referenced purpose, and may not be relied on by any other person or for any other purpose.

We are here to help.

Please call me if you have additional questions. Thank you for your business and the opportunity to serve you.

Sincerely,

Arthur Ibarra
Client Service Associate
JPMorgan Chase Bank, N.A.
8181 Communication Pky, Plano, TX 75024
469-462-1075
Arthur.Ibarra@Chase.com

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The information in this letter is provided as an accommodation to the inquirer. This letter and any information provided in connection therewith are furnished on the condition that they are strictly confidential, that no liability or responsibility whatsoever in connection therewith shall attach to Bank or any of its officers, employees, or agents, that this letter makes no representations regarding the general condition of the companies named herein, their management, or their future ability to meet their obligations, and that information provided in this letter or in connection therewith is subject to change without notice.

230327



STORMWATER MANAGEMENT REPORT

For

POLAND ANIMAL HOSPITAL EXPANSION POLAND, MAINE

Prepared for:

VetCor of Poland LLC
141 Longwater Drive, Suite 108
Norwell, MA 020161

Prepared by:

Sebago Technics, Inc.
75 John Roberts Rd, Suite 4A
South Portland, ME 04106

August 2023

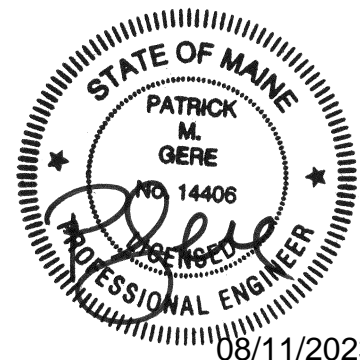


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Appendices

Appendix 1:	Stormwater Quality Calculations
Appendix 2A:	Hydrologic Modeling– Existing Conditions HydroCAD Summary
Appendix 2B:	Hydrologic Modeling – Proposed Conditions HydroCAD Summary
Appendix 3:	Inspection, Maintenance, and Housekeeping Plan
Appendix 4:	Subsurface Investigations
Appendix 5:	Stormwater Management Plans

**STORMWATER MANAGEMENT REPORT
POLAND ANIMAL HOSPITAL EXPANSION
POLAND, MAINE**

1. Introduction

This Stormwater Management Report has been prepared to present analyses performed to address the potential impacts associated with the project due to proposed modifications in stormwater runoff characteristics and land cover changes. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and to comply with applicable regulatory requirements.

2. Existing Conditions

Located in Poland Maine, the approximate 1.4-acre project site is partially developed with a $\pm 1,425$ square foot veterinary clinic, asphalt parking and circulation areas, and private and public utility service connections. Existing impervious areas are broken down in the table below. The site is identified on the Town of Poland Tax Map 39 as Lots 29 and 30. The site is bounded by Maine Street to the northeast, White Oak Hill Road to the southeast, woods to the southwest, and Poland Community Center to the northwest. Slopes on the site range between flat to moderate in areas to be developed. Along the southwest side of the property, slopes reach up to 30 percent. Approximately 0.6 acres of wooded area exist on site.

EXISTING IMPERVIOUS AREA	
IMPERVIOUS AREA	SQUARE FEET
EXISTING VET BUILDING	$\pm 1,425$
EXISTING SHED	± 145
EXISTING PAVEMENT	$\pm 8,485$
EXISTING GRAVEL	$\pm 1,445$
TOTAL	$\pm 11,500$
PERCENT IMPERVIOUS	$\pm 19 \%$

The project site is located within the Waterhouse Brook Watershed. There is no existing stormwater detention or treatment system located on site. Stormwater runoff from the site drains northeast to the intersection of Maine Street and White Oak Hill Road. Located within this intersection are two existing catchbasins that capture the majority of the runoff offsite. Runoff captured in this closed drainage system outlets to Waterhouse Brook.

3. Soils

Soil information for the site was obtained via the United States Department of Agriculture Natural Resource Conservation Services (NRCS) Web Soil Survey. The Hydrologic Soil Groups (HSG) of the soils on site as classified by NRCS are delineated on the stormwater management plans and are as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
AaB	Adams Loamy Sand	0-8	A
ChC	Charlton Very Stony Fine Sandy Loam	8-15	A
ChD	Charlton Very Stony Fine Sandy Loam	15-25	A

A copy of the Class D (Medium Intensity) NRCS Web Soil Survey is included in Appendix 4.

4. Proposed Site Improvements

The proposed development includes the addition of a new $\pm 1,475$ square foot building attached to the rear of the existing building, the relocation of an existing shed, a new paved parking lot to reconfigure the existing parking and circulation areas, stormwater management systems, and a new sanitary system to serve the expanded building.

PROPOSED IMPERVIOUS AREA	
IMPERVIOUS AREA	SQUARE FEET
VET BUILDING (ADDITION+EXISTING)	$\pm 2,900$
RELOCATED SHED	± 150
PAVED PARKING LOT	$\pm 8,500$
SIDEWALK	$\pm 1,300$
TOTAL	$\pm 12,850$
PERCENT IMPERVIOUS	$\pm 21\%$

The overall project will result in approximately 0.78 acres of developed land, including 0.3 acres of impervious surfaces and 0.48 acres of landscaped area.

DEVELOPMENT SUMMARY	
IMPERVIOUS AREA	0.30 ACRES
LANDSCAPED AREA	0.48 ACRES
TOTAL DEVELOPED AREA	0.78 ACRES

Existing drainage patterns are not expected to be significantly altered given that site runoff will continue to drain towards the northeast corner of the property via stretches of sheet, shallow concentrated, and channelized flow. The stormwater management plan includes treatment measures that will provide pollutant removal or treatment and mitigate the increased frequency and duration of channel erosive flows due to runoff from smaller storms and potential temperature impacts, per the standards outlined in Chapter 500 of the Maine Department of Environmental Protection (MDEP). Stormwater Best Management Practices (BMPs) to be

constructed for stormwater treatment and detention of runoff attributed to the project include a bioretention cell, a roofline filter, and a dry well.

5. Existing Conditions Model

The pre-development watershed plan consists of two subcatchments labeled 1S and 2S in the HydroCAD model. One location was identified as a Point of Analysis (POA) for analyzing peak runoff rates. The overall drainage area included in the model is approximately 1.37 acres.

POA-1: Watersheds 1S and 2S are both tributary to POA-1, with an overall runoff area of approximately 1.37 acres. 1S is identified as the southeastern portion of the site. The total tributary area that 1S contributes is approximately 0.28 acres. 2S represents the remaining portion of the site, with a contributing area of approximately 1.08 acres. Stormwater runoff from 1S and 2S drains northeast off of the property towards two existing catchbasins located in the intersection of Maine Street and White Oak Hill Road.

6. Proposed Conditions Model

The post-development watershed plan consists of five subcatchments. These subcatchment areas represent the areas from the existing condition that have been altered as a result of the proposed development. The overall drainage area of the model remains equal to the pre-development model at 1.37 acres.

POA-1: Subcatchments 1S, 2S, 3S, 4S, and 5S are tributary to POA-1 in the post-development condition. These areas represent the pre-development subcatchments 1S and 2S as a result of the proposed development. Subcatchment 1S represents the southwest portion of the site that drains to a small swale (1P), then discharges via an 8-inch culvert to 5P, which then outlets to an existing catch basin, 6P. Subcatchment 2S represents the majority of developed portion of the project site at approximately 0.42 acres. 2S drains to a bioretention cell (2P), then discharges via an 8-inch culvert to 5P, which outlets to the existing catchbasin, 6P. Subcatchment 3S represents a portion of the existing and proposed building's roof area that drains to a roof dripline filter. The roof dripline filter discharges to a dry well (4P) via a 6-inch culvert. Stormwater runoff that does not exfiltrate into the ground discharges via a 6-inch overflow pipe to the bioretention cell, 2P. Subcatchment 4S represents a portion of the building's roof area and the developed area directly behind the buildings. Stormwater runoff from 4S is captured via a 6-inch culvert, represented by 1R, which then drains into 2R, and then discharges into 4P. Subcatchment 5S represents the remaining roof area and developed area behind the buildings. Stormwater runoff from 5S is captured via a 6-inch culvert, represented by 2R, which then discharges to 4P. Overall, the area tributary to POA-1 in the post-development condition is equal to 1.37 acres.

7. Stormwater Management

Land Use Performance Standards – Comprehensive Land Use Code, Section 508.28 G-2

Peak discharge rates will be limited to the predevelopment levels for the 2-year, 10-year, and 25-year frequency, 24-hour storms, to meet the Town of Poland's Land Use quantity standard for stormwater management. Since the development will result in less than 25,000 square feet, the quality standard does not need to be met. However, the client is still providing adequate treatment through the implementation of BMPs in accordance with the MDEP's Chapter 500 Stormwater Management Rules.

To mitigate the changes in hydrologic patterns due to the development of this project, a bioretention cell, a roof dripline filter, and a dry well have been implemented into the stormwater management infrastructure. A bioretention filter captures and retains runoff and passes it through a soil filter media to remove a wide range of pollutants. Roof dripline filters detain runoff from peaked roofs without gutters, pass it through a filter media, and then discharge the runoff via an underdrain pipe. Dry wells assist in managing stormwater runoff by having runoff enter the well by an inflow pipe and then infiltrate through the bottom and sides of the pit. Proposed treatment of runoff from 58% of all developed surfaces and 87% of the total impervious area will be achieved via the bioretention filter and the roof dripline filter.

We have avoided adverse impacts by providing an Inspection, Maintenance, and Housekeeping Plan (Appendix 3) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following BMPs guidelines.

BMP sizing and treatment calculations are provided in Appendix 1.

Stormwater Runoff Evaluation

Stormwater runoff is being managed, stored, and treated in a bioretention filter cell, a roof dripline filter, and a dry well designed to have adequate capacity and stability to receive the project's runoff. A runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)." HydroCAD computer software was utilized to perform the calculations.

Runoff curve numbers were determined for each of the watersheds by measuring the area of each HSG within each type of land cover. The type of land cover was determined based on survey data, field reconnaissance, and aerial photography. Time of concentration flowpaths were determined from site topographic maps per SCS procedures.

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for Androscoggin County are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Androscoggin County	
2-year	3.0
10-year	4.3
25-year	5.4
50-year	6.4

The following table presents the results of the peak runoff calculations at the analysis points for existing conditions and the masterplan development.

Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
POA-1	2-year	0.01	0.00
	10-year	0.15	0.10
	25-year	0.48	0.12
	50-year	0.98	0.17

The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 2) along with the Stormwater Management Plans (Appendix 5). The model predicts that the peak runoff rate in the post-development condition at Point of Analysis 1 is less than the peak runoff rates in the pre-development condition

8. Summary

The proposed development has been designed to manage stormwater runoff through BMPs approved by the MDEP. Stormwater BMPs are proposed to provide treatment of 58% of the developed area and 87% of the total impervious area. Runoff discharging from the site will be at or below pre-development conditions for the 2-, 10-, 25, and 50- year storm events at POA-1. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

SEBAGO TECHNICS, INC.

Patrick Gere, PE
Project Manager

KGK/PMG

Appendix 1

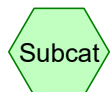
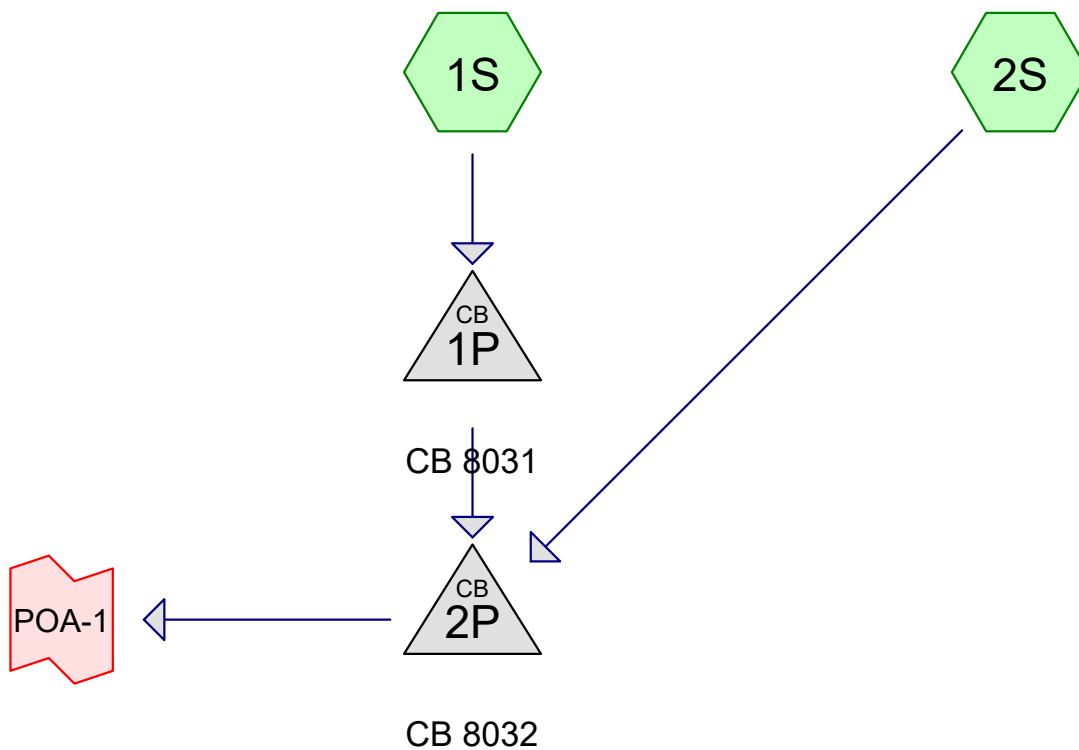
Stormwater Quality Calculations

Job # 230327

TOTAL IMPERVIOUS AREA (S.F.)	12,845	TOTAL DEVELOPED AREA (S.F.)	34,615
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)	11,235	TOTAL AREA RECEIVING TREATMENT (S.F.)	19,915
% OF IMPERVIOUS AREA RECEIVING TREATMENT	87.47%	% OF AREA RECEIVING TREATMENT	57.53%

Appendix 2A

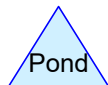
Existing Conditions HydroCAD Summary



Subcat



Reach



Pond



Link

Routing Diagram for 230327 PRE

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230327 PRE

Prepared by Sebago Technics, Inc

Printed 8/8/2023

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.508	30	Brush, Good, HSG A (1S, 2S)
0.041	96	Gravel surface, HSG A (1S, 2S)
0.196	98	Paved parking, HSG A (1S, 2S)
0.036	98	Roofs, HSG A (2S)
0.589	36	Woods, Fair, HSG A (1S, 2S)
1.370	46	TOTAL AREA

230327 PRE

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.370	HSG A	1S, 2S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.370		TOTAL AREA

230327 PRE*Type III 24-hr 2-YR Rainfall=3.00"*

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S:

Runoff Area=12,330 sf 6.45% Impervious Runoff Depth=0.00"
Flow Length=196' Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af

Subcatchment2S:

Runoff Area=47,340 sf 19.63% Impervious Runoff Depth=0.06"
Flow Length=425' Tc=13.4 min CN=48 Runoff=0.01 cfs 0.005 af

Pond 1P: CB 8031

Peak Elev=324.64' Inflow=0.00 cfs 0.000 af
15.0" Round Culvert n=0.013 L=17.7' S=0.0271 '/' Outflow=0.00 cfs 0.000 af

Pond 2P: CB 8032

Peak Elev=324.11' Inflow=0.01 cfs 0.005 af
15.0" Round Culvert n=0.013 L=55.5' S=0.0488 '/' Outflow=0.01 cfs 0.005 af

Link POA-1:

Inflow=0.01 cfs 0.005 af
Primary=0.01 cfs 0.005 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.005 af Average Runoff Depth = 0.05"
83.09% Pervious = 1.138 ac 16.91% Impervious = 0.232 ac

230327 PRE*Type III 24-hr 10-YR Rainfall=4.30"*

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S:

Runoff Area=12,330 sf 6.45% Impervious Runoff Depth=0.08"
Flow Length=196' Tc=6.0 min CN=39 Runoff=0.00 cfs 0.002 af

Subcatchment2S:

Runoff Area=47,340 sf 19.63% Impervious Runoff Depth=0.35"
Flow Length=425' Tc=13.4 min CN=48 Runoff=0.15 cfs 0.032 af

Pond 1P: CB 8031

Peak Elev=324.67' Inflow=0.00 cfs 0.002 af
15.0" Round Culvert n=0.013 L=17.7' S=0.0271 '/' Outflow=0.00 cfs 0.002 af

Pond 2P: CB 8032

Peak Elev=324.26' Inflow=0.15 cfs 0.034 af
15.0" Round Culvert n=0.013 L=55.5' S=0.0488 '/' Outflow=0.15 cfs 0.034 af

Link POA-1:

Inflow=0.15 cfs 0.034 af
Primary=0.15 cfs 0.034 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.034 af Average Runoff Depth = 0.30"
83.09% Pervious = 1.138 ac 16.91% Impervious = 0.232 ac

230327 PRE*Type III 24-hr 25-YR Rainfall=5.40"*

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S:

Runoff Area=12,330 sf 6.45% Impervious Runoff Depth=0.29"
Flow Length=196' Tc=6.0 min CN=39 Runoff=0.02 cfs 0.007 af

Subcatchment2S:

Runoff Area=47,340 sf 19.63% Impervious Runoff Depth=0.74"
Flow Length=425' Tc=13.4 min CN=48 Runoff=0.46 cfs 0.067 af

Pond 1P: CB 8031

Peak Elev=324.72' Inflow=0.02 cfs 0.007 af
15.0" Round Culvert n=0.013 L=17.7' S=0.0271 '/' Outflow=0.02 cfs 0.007 af

Pond 2P: CB 8032

Peak Elev=324.42' Inflow=0.48 cfs 0.074 af
15.0" Round Culvert n=0.013 L=55.5' S=0.0488 '/' Outflow=0.48 cfs 0.074 af

Link POA-1:

Inflow=0.48 cfs 0.074 af
Primary=0.48 cfs 0.074 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.074 af Average Runoff Depth = 0.65"
83.09% Pervious = 1.138 ac 16.91% Impervious = 0.232 ac

230327 PRE*Type III 24-hr 50-YR Rainfall=6.40"*

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S:

Runoff Area=12,330 sf 6.45% Impervious Runoff Depth=0.57"
Flow Length=196' Tc=6.0 min CN=39 Runoff=0.07 cfs 0.013 af

Subcatchment2S:

Runoff Area=47,340 sf 19.63% Impervious Runoff Depth=1.19"
Flow Length=425' Tc=13.4 min CN=48 Runoff=0.92 cfs 0.108 af

Pond 1P: CB 8031

Peak Elev=324.78' Inflow=0.07 cfs 0.013 af
15.0" Round Culvert n=0.013 L=17.7' S=0.0271 '/' Outflow=0.07 cfs 0.013 af

Pond 2P: CB 8032

Peak Elev=324.59' Inflow=0.98 cfs 0.121 af
15.0" Round Culvert n=0.013 L=55.5' S=0.0488 '/' Outflow=0.98 cfs 0.121 af

Link POA-1:

Inflow=0.98 cfs 0.121 af
Primary=0.98 cfs 0.121 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.121 af Average Runoff Depth = 1.06"
83.09% Pervious = 1.138 ac 16.91% Impervious = 0.232 ac

Summary for Subcatchment 1S:

Runoff = 0.00 cfs @ 14.98 hrs, Volume= 0.002 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
795	98	Paved parking, HSG A
575	96	Gravel surface, HSG A
2,180	36	Woods, Fair, HSG A
8,780	30	Brush, Good, HSG A
12,330	39	Weighted Average
11,535		93.55% Pervious Area
795		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	18	0.1700	0.13		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.00"
0.3	82	0.1100	5.34		Shallow Concentrated Flow, b-c
					Unpaved Kv= 16.1 fps
0.5	59	0.0340	1.84		Shallow Concentrated Flow, C-D
					Nearly Bare & Untilled Kv= 10.0 fps
0.1	25	0.0400	3.22		Shallow Concentrated Flow, D-E
					Unpaved Kv= 16.1 fps
0.1	12	0.0830	2.88		Shallow Concentrated Flow, E-F
					Nearly Bare & Untilled Kv= 10.0 fps
2.6					Direct Entry, DIRECT
6.0	196	Total			

Summary for Subcatchment 2S:

Runoff = 0.15 cfs @ 12.44 hrs, Volume= 0.032 af, Depth= 0.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
7,725	98	Paved parking, HSG A
1,570	98	Roofs, HSG A
23,490	36	Woods, Fair, HSG A
13,340	30	Brush, Good, HSG A
1,215	96	Gravel surface, HSG A
47,340	48	Weighted Average
38,045		80.37% Pervious Area
9,295		19.63% Impervious Area

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Type III 24-hr 10-YR Rainfall=4.30"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	57	0.1600	0.15		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.6	44	0.2000	0.16		Sheet Flow, B-C Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	61	0.2100	2.29		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
0.3	50	0.3400	2.92		Shallow Concentrated Flow, D-E Woodland Kv= 5.0 fps
1.7	160	0.0250	1.58		Shallow Concentrated Flow, E-F Nearly Bare & Untilled Kv= 10.0 fps
0.1	27	0.0370	3.10		Shallow Concentrated Flow, F-G Unpaved Kv= 16.1 fps
0.1	26	0.0380	3.96		Shallow Concentrated Flow, G-H Paved Kv= 20.3 fps
13.4	425	Total			

Summary for Pond 1P: CB 8031

Inflow Area = 0.283 ac, 6.45% Impervious, Inflow Depth = 0.08" for 10-YR event
 Inflow = 0.00 cfs @ 14.98 hrs, Volume= 0.002 af
 Outflow = 0.00 cfs @ 14.98 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.00 cfs @ 14.98 hrs, Volume= 0.002 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 324.67' @ 14.98 hrs

Flood Elev= 329.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	324.64'	15.0" Round Culvert L= 17.7' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 324.64' / 324.16' S= 0.0271 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.00 cfs @ 14.98 hrs HW=324.67' TW=324.17' (Dynamic Tailwater)↑**1=Culvert** (Inlet Controls 0.00 cfs @ 0.45 fps)**Summary for Pond 2P: CB 8032**

Inflow Area = 1.370 ac, 16.91% Impervious, Inflow Depth = 0.30" for 10-YR event
 Inflow = 0.15 cfs @ 12.44 hrs, Volume= 0.034 af
 Outflow = 0.15 cfs @ 12.44 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.15 cfs @ 12.44 hrs, Volume= 0.034 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 324.26' @ 12.44 hrs

Flood Elev= 330.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	324.06'	15.0" Round Culvert

L= 55.5' CPP, projecting, no headwall, Ke= 0.900
Inlet / Outlet Invert= 324.06' / 321.35' S= 0.0488 '/' Cc= 0.900
n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.15 cfs @ 12.44 hrs HW=324.26' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.15 cfs @ 1.20 fps)

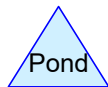
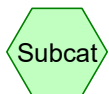
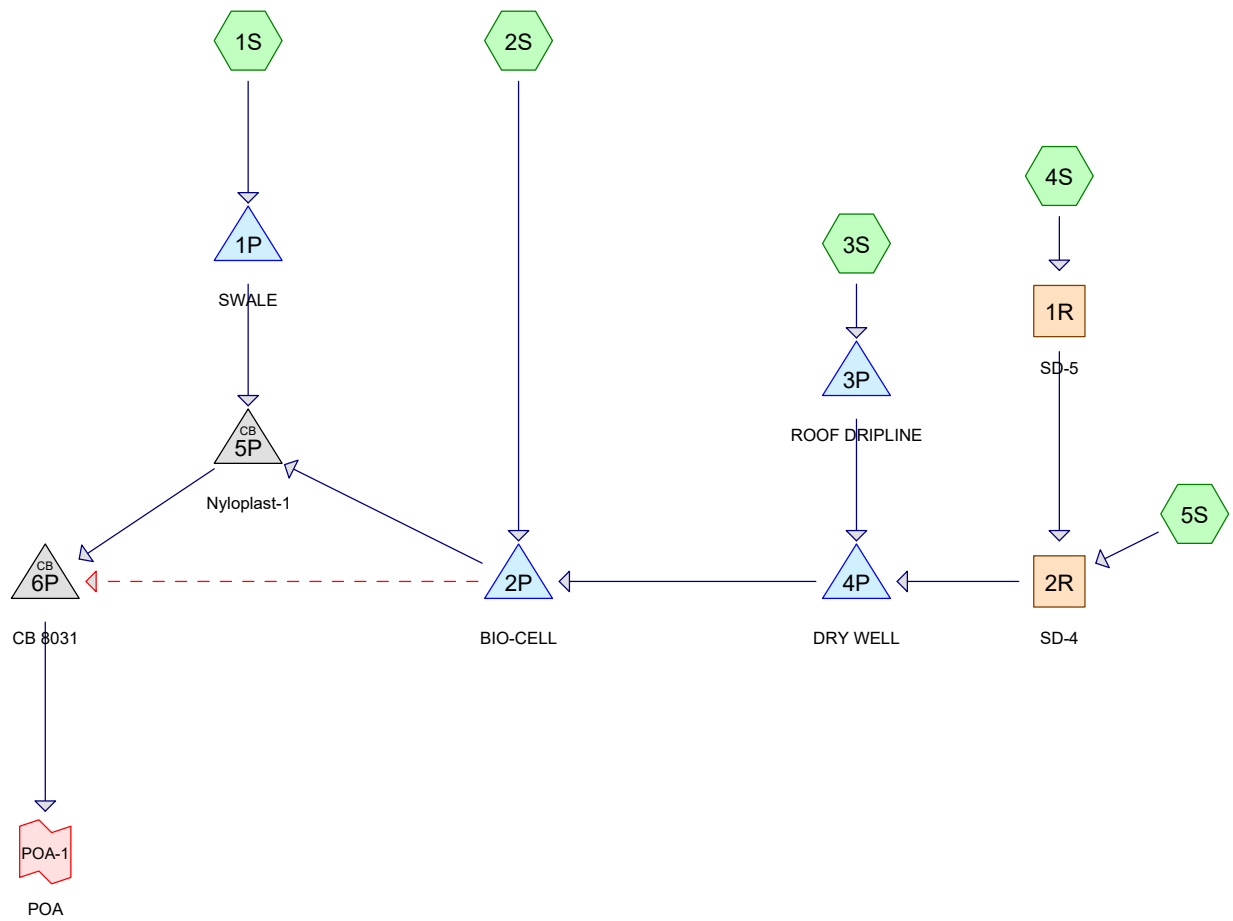
Summary for Link POA-1:

Inflow Area = 1.370 ac, 16.91% Impervious, Inflow Depth = 0.30" for 10-YR event
Inflow = 0.15 cfs @ 12.44 hrs, Volume= 0.034 af
Primary = 0.15 cfs @ 12.44 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Appendix 2B

Proposed Conditions HydroCAD Summary



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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.058	39	>75% Grass cover, Good, HSG A (3S, 4S, 5S)
0.194	30	Brush, Good, HSG A (2S)
0.248	30	Meadow, non-grazed, HSG A (1S)
0.227	98	Paved parking, HSG A (1S, 2S, 5S)
0.068	98	Roofs, HSG A (1S, 2S, 3S, 4S, 5S)
0.575	36	Woods, Fair, HSG A (1S)
1.370	48	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.370	HSG A	1S, 2S, 3S, 4S, 5S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.370		TOTAL AREA

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Type III 24-hr 2-YR Rainfall=3.00"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=36,490 sf 1.78% Impervious Runoff Depth=0.00"
 Flow Length=382' Tc=16.6 min CN=35 Runoff=0.00 cfs 0.000 af

Subcatchment2S: Runoff Area=18,510 sf 54.35% Impervious Runoff Depth=0.58"
 Flow Length=112' Tc=6.0 min CN=67 Runoff=0.23 cfs 0.021 af

Subcatchment3S: Runoff Area=1,405 sf 83.63% Impervious Runoff Depth=1.82"
 Tc=6.0 min CN=88 Runoff=0.07 cfs 0.005 af

Subcatchment4S: Runoff Area=1,935 sf 23.51% Impervious Runoff Depth=0.15"
 Tc=6.0 min CN=53 Runoff=0.00 cfs 0.001 af

Subcatchment5S: Runoff Area=1,330 sf 37.97% Impervious Runoff Depth=0.37"
 Tc=6.0 min CN=61 Runoff=0.01 cfs 0.001 af

Reach 1R: SD-5 Avg. Flow Depth=0.02' Max Vel=0.82 fps Inflow=0.00 cfs 0.001 af
 6.0" Round Pipe n=0.010 L=64.0' S=0.0116 '/ Capacity=0.78 cfs Outflow=0.00 cfs 0.001 af

Reach 2R: SD-4 Avg. Flow Depth=0.03' Max Vel=1.53 fps Inflow=0.01 cfs 0.001 af
 6.0" Round Pipe n=0.010 L=54.0' S=0.0209 '/ Capacity=1.06 cfs Outflow=0.01 cfs 0.001 af

Pond 1P: SWALE Peak Elev=332.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
 8.0" Round Culvert n=0.010 L=131.6' S=0.0380 '/ Outflow=0.00 cfs 0.000 af

Pond 2P: BIO-CELL Peak Elev=329.88' Storage=99 cf Inflow=0.23 cfs 0.022 af
 Discarded=0.10 cfs 0.022 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.10 cfs 0.022 af

Pond 3P: ROOF DRIPLINE Peak Elev=333.80' Storage=37 cf Inflow=0.07 cfs 0.005 af
 6.0" Round Culvert n=0.010 L=51.0' S=0.0416 '/ Outflow=0.07 cfs 0.004 af

Pond 4P: DRY WELL Peak Elev=331.45' Storage=0.004 af Inflow=0.07 cfs 0.006 af
 Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.002 af Outflow=0.00 cfs 0.002 af

Pond 5P: Nyloplast-1 Peak Elev=326.90' Inflow=0.00 cfs 0.000 af
 8.0" Round Culvert n=0.010 L=7.0' S=0.0571 '/ Outflow=0.00 cfs 0.000 af

Pond 6P: CB 8031 Peak Elev=324.64' Inflow=0.00 cfs 0.000 af
 15.0" Round Culvert n=0.013 L=18.0' S=0.0322 '/ Outflow=0.00 cfs 0.000 af

Link POA-1: POA Inflow=0.00 cfs 0.000 af
 Primary=0.00 cfs 0.000 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.027 af Average Runoff Depth = 0.24"
78.47% Pervious = 1.075 ac 21.53% Impervious = 0.295 ac

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Type III 24-hr 10-YR Rainfall=4.30"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=36,490 sf 1.78% Impervious Runoff Depth=0.02"
 Flow Length=382' Tc=16.6 min CN=35 Runoff=0.00 cfs 0.001 af

Subcatchment2S: Runoff Area=18,510 sf 54.35% Impervious Runoff Depth=1.33"
 Flow Length=112' Tc=6.0 min CN=67 Runoff=0.62 cfs 0.047 af

Subcatchment3S: Runoff Area=1,405 sf 83.63% Impervious Runoff Depth=3.01"
 Tc=6.0 min CN=88 Runoff=0.11 cfs 0.008 af

Subcatchment4S: Runoff Area=1,935 sf 23.51% Impervious Runoff Depth=0.56"
 Tc=6.0 min CN=53 Runoff=0.02 cfs 0.002 af

Subcatchment5S: Runoff Area=1,330 sf 37.97% Impervious Runoff Depth=0.97"
 Tc=6.0 min CN=61 Runoff=0.03 cfs 0.002 af

Reach 1R: SD-5 Avg. Flow Depth=0.05' Max Vel=1.62 fps Inflow=0.02 cfs 0.002 af
 6.0" Round Pipe n=0.010 L=64.0' S=0.0116 '/' Capacity=0.78 cfs Outflow=0.02 cfs 0.002 af

Reach 2R: SD-4 Avg. Flow Depth=0.07' Max Vel=2.68 fps Inflow=0.05 cfs 0.005 af
 6.0" Round Pipe n=0.010 L=54.0' S=0.0209 '/' Capacity=1.06 cfs Outflow=0.05 cfs 0.005 af

Pond 1P: SWALE Peak Elev=332.03' Storage=1 cf Inflow=0.00 cfs 0.001 af
 8.0" Round Culvert n=0.010 L=131.6' S=0.0380 '/' Outflow=0.00 cfs 0.001 af

Pond 2P: BIO-CELL Peak Elev=330.43' Storage=496 cf Inflow=0.62 cfs 0.055 af
 Discarded=0.10 cfs 0.047 af Primary=0.10 cfs 0.009 af Secondary=0.00 cfs 0.000 af Outflow=0.20 cfs 0.055 af

Pond 3P: ROOF DRIPLINE Peak Elev=333.85' Storage=41 cf Inflow=0.11 cfs 0.008 af
 6.0" Round Culvert n=0.010 L=51.0' S=0.0416 '/' Outflow=0.11 cfs 0.008 af

Pond 4P: DRY WELL Peak Elev=331.60' Storage=0.004 af Inflow=0.15 cfs 0.012 af
 Discarded=0.00 cfs 0.000 af Primary=0.08 cfs 0.008 af Outflow=0.08 cfs 0.008 af

Pond 5P: Nyloplast-1 Peak Elev=327.07' Inflow=0.10 cfs 0.010 af
 8.0" Round Culvert n=0.010 L=7.0' S=0.0571 '/' Outflow=0.10 cfs 0.010 af

Pond 6P: CB 8031 Peak Elev=324.80' Inflow=0.10 cfs 0.010 af
 15.0" Round Culvert n=0.013 L=18.0' S=0.0322 '/' Outflow=0.10 cfs 0.010 af

Link POA-1: POA Inflow=0.10 cfs 0.010 af
 Primary=0.10 cfs 0.010 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.061 af Average Runoff Depth = 0.54"
78.47% Pervious = 1.075 ac 21.53% Impervious = 0.295 ac

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Type III 24-hr 25-YR Rainfall=5.40"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=36,490 sf 1.78% Impervious Runoff Depth=0.14"
 Flow Length=382' Tc=16.6 min CN=35 Runoff=0.02 cfs 0.010 af

Subcatchment2S: Runoff Area=18,510 sf 54.35% Impervious Runoff Depth=2.09"
 Flow Length=112' Tc=6.0 min CN=67 Runoff=1.01 cfs 0.074 af

Subcatchment3S: Runoff Area=1,405 sf 83.63% Impervious Runoff Depth=4.05"
 Tc=6.0 min CN=88 Runoff=0.15 cfs 0.011 af

Subcatchment4S: Runoff Area=1,935 sf 23.51% Impervious Runoff Depth=1.05"
 Tc=6.0 min CN=53 Runoff=0.04 cfs 0.004 af

Subcatchment5S: Runoff Area=1,330 sf 37.97% Impervious Runoff Depth=1.62"
 Tc=6.0 min CN=61 Runoff=0.05 cfs 0.004 af

Reach 1R: SD-5 Avg. Flow Depth=0.08' Max Vel=2.15 fps Inflow=0.04 cfs 0.004 af
 6.0" Round Pipe n=0.010 L=64.0' S=0.0116 '/ Capacity=0.78 cfs Outflow=0.04 cfs 0.004 af

Reach 2R: SD-4 Avg. Flow Depth=0.10' Max Vel=3.35 fps Inflow=0.10 cfs 0.008 af
 6.0" Round Pipe n=0.010 L=54.0' S=0.0209 '/ Capacity=1.06 cfs Outflow=0.10 cfs 0.008 af

Pond 1P: SWALE Peak Elev=332.07' Storage=2 cf Inflow=0.02 cfs 0.010 af
 8.0" Round Culvert n=0.010 L=131.6' S=0.0380 '/ Outflow=0.02 cfs 0.010 af

Pond 2P: BIO-CELL Peak Elev=331.45' Storage=1,143 cf Inflow=1.23 cfs 0.088 af
 Discarded=0.10 cfs 0.062 af Primary=0.10 cfs 0.026 af Secondary=0.00 cfs 0.000 af Outflow=0.20 cfs 0.088 af

Pond 3P: ROOF DRIPLINE Peak Elev=333.89' Storage=44 cf Inflow=0.15 cfs 0.011 af
 6.0" Round Culvert n=0.010 L=51.0' S=0.0416 '/ Outflow=0.14 cfs 0.010 af

Pond 4P: DRY WELL Peak Elev=331.77' Storage=0.004 af Inflow=0.24 cfs 0.018 af
 Discarded=0.00 cfs 0.000 af Primary=0.24 cfs 0.014 af Outflow=0.24 cfs 0.014 af

Pond 5P: Nyloplast-1 Peak Elev=327.09' Inflow=0.12 cfs 0.036 af
 8.0" Round Culvert n=0.010 L=7.0' S=0.0571 '/ Outflow=0.12 cfs 0.036 af

Pond 6P: CB 8031 Peak Elev=324.81' Inflow=0.12 cfs 0.036 af
 15.0" Round Culvert n=0.013 L=18.0' S=0.0322 '/ Outflow=0.12 cfs 0.036 af

Link POA-1: POA Inflow=0.12 cfs 0.036 af
 Primary=0.12 cfs 0.036 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.103 af Average Runoff Depth = 0.90"
78.47% Pervious = 1.075 ac 21.53% Impervious = 0.295 ac

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Type III 24-hr 50-YR Rainfall=6.40"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=36,490 sf 1.78% Impervious Runoff Depth=0.34"
 Flow Length=382' Tc=16.6 min CN=35 Runoff=0.07 cfs 0.024 af

Subcatchment2S: Runoff Area=18,510 sf 54.35% Impervious Runoff Depth=2.84"
 Flow Length=112' Tc=6.0 min CN=67 Runoff=1.40 cfs 0.100 af

Subcatchment3S: Runoff Area=1,405 sf 83.63% Impervious Runoff Depth=5.01"
 Tc=6.0 min CN=88 Runoff=0.18 cfs 0.013 af

Subcatchment4S: Runoff Area=1,935 sf 23.51% Impervious Runoff Depth=1.59"
 Tc=6.0 min CN=53 Runoff=0.07 cfs 0.006 af

Subcatchment5S: Runoff Area=1,330 sf 37.97% Impervious Runoff Depth=2.28"
 Tc=6.0 min CN=61 Runoff=0.08 cfs 0.006 af

Reach 1R: SD-5 Avg. Flow Depth=0.10' Max Vel=2.50 fps Inflow=0.07 cfs 0.006 af
 6.0" Round Pipe n=0.010 L=64.0' S=0.0116 '/' Capacity=0.78 cfs Outflow=0.07 cfs 0.006 af

Reach 2R: SD-4 Avg. Flow Depth=0.13' Max Vel=3.81 fps Inflow=0.15 cfs 0.012 af
 6.0" Round Pipe n=0.010 L=54.0' S=0.0209 '/' Capacity=1.06 cfs Outflow=0.15 cfs 0.012 af

Pond 1P: SWALE Peak Elev=332.16' Storage=5 cf Inflow=0.07 cfs 0.024 af
 8.0" Round Culvert n=0.010 L=131.6' S=0.0380 '/' Outflow=0.07 cfs 0.024 af

Pond 2P: BIO-CELL Peak Elev=332.38' Storage=1,858 cf Inflow=1.72 cfs 0.121 af
 Discarded=0.10 cfs 0.077 af Primary=0.10 cfs 0.044 af Secondary=0.00 cfs 0.000 af Outflow=0.20 cfs 0.121 af

Pond 3P: ROOF DRIPLINE Peak Elev=333.93' Storage=47 cf Inflow=0.18 cfs 0.013 af
 6.0" Round Culvert n=0.010 L=51.0' S=0.0416 '/' Outflow=0.18 cfs 0.013 af

Pond 4P: DRY WELL Peak Elev=332.39' Storage=0.005 af Inflow=0.33 cfs 0.025 af
 Discarded=0.00 cfs 0.000 af Primary=0.33 cfs 0.021 af Outflow=0.33 cfs 0.021 af

Pond 5P: Nyloplast-1 Peak Elev=327.13' Inflow=0.17 cfs 0.067 af
 8.0" Round Culvert n=0.010 L=7.0' S=0.0571 '/' Outflow=0.17 cfs 0.067 af

Pond 6P: CB 8031 Peak Elev=324.85' Inflow=0.17 cfs 0.067 af
 15.0" Round Culvert n=0.013 L=18.0' S=0.0322 '/' Outflow=0.17 cfs 0.067 af

Link POA-1: POA Inflow=0.17 cfs 0.067 af
 Primary=0.17 cfs 0.067 af

Total Runoff Area = 1.370 ac Runoff Volume = 0.149 af Average Runoff Depth = 1.31"
78.47% Pervious = 1.075 ac 21.53% Impervious = 0.295 ac

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Type III 24-hr 10-YR Rainfall=4.30"

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Summary for Subcatchment 1S:

Runoff = 0.00 cfs @ 21.71 hrs, Volume= 0.001 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
10,785	30	Meadow, non-grazed, HSG A
25,055	36	Woods, Fair, HSG A
300	98	Paved parking, HSG A
350	98	Roofs, HSG A
36,490	35	Weighted Average
35,840		98.22% Pervious Area
650		1.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	68	0.1600	0.09		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.00"
3.4	32	0.2200	0.16		Sheet Flow, B-C
					Woods: Light underbrush n= 0.400 P2= 3.00"
0.2	72	0.2100	7.38		Shallow Concentrated Flow, C-D
					Unpaved Kv= 16.1 fps
0.1	50	0.2800	8.52		Shallow Concentrated Flow, D-E
					Unpaved Kv= 16.1 fps
0.3	60	0.0420	3.30		Shallow Concentrated Flow, E-F
					Unpaved Kv= 16.1 fps
0.3	100	0.0140	5.20	16.63	Trap/Vee/Rect Channel Flow, F-G
					Bot.W=3.00' D=1.00' Z= 0.2 '/' Top.W=3.40'
					n= 0.025 Earth, grassed & winding
16.6	382	Total			

Summary for Subcatchment 2S:

Runoff = 0.62 cfs @ 12.10 hrs, Volume= 0.047 af, Depth= 1.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
8,450	30	Brush, Good, HSG A
9,555	98	Paved parking, HSG A
505	98	Roofs, HSG A
18,510	67	Weighted Average
8,450		45.65% Pervious Area
10,060		54.35% Impervious Area

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Type III 24-hr 10-YR Rainfall=4.30"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	94	0.0160	1.20		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.00"
0.1	18	0.0350	3.01		Shallow Concentrated Flow, B-C
					Unpaved Kv= 16.1 fps
4.6					Direct Entry, DIRECT
6.0	112	Total			

Summary for Subcatchment 3S:

Runoff = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af, Depth= 3.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
230	39	>75% Grass cover, Good, HSG A
1,175	98	Roofs, HSG A
1,405	88	Weighted Average
230		16.37% Pervious Area
1,175		83.63% Impervious Area

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

Summary for Subcatchment 4S:

Runoff = 0.02 cfs @ 12.13 hrs, Volume= 0.002 af, Depth= 0.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
1,480	39	>75% Grass cover, Good, HSG A
455	98	Roofs, HSG A
1,935	53	Weighted Average
1,480		76.49% Pervious Area
455		23.51% Impervious Area

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

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Type III 24-hr 10-YR Rainfall=4.30"

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Summary for Subcatchment 5S:

Runoff = 0.03 cfs @ 12.10 hrs, Volume= 0.002 af, Depth= 0.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
825	39	>75% Grass cover, Good, HSG A
40	98	Paved parking, HSG A
465	98	Roofs, HSG A
1,330	61	Weighted Average
825		62.03% Pervious Area
505		37.97% Impervious Area

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

Summary for Reach 1R: SD-5

Inflow Area = 0.044 ac, 23.51% Impervious, Inflow Depth = 0.56" for 10-YR event

Inflow = 0.02 cfs @ 12.13 hrs, Volume= 0.002 af

Outflow = 0.02 cfs @ 12.13 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.5 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 1.62 fps, Min. Travel Time= 0.7 min

Avg. Velocity = 0.79 fps, Avg. Travel Time= 1.3 min

Peak Storage= 1 cf @ 12.13 hrs

Average Depth at Peak Storage= 0.05'

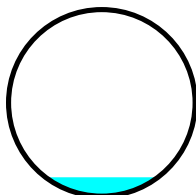
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 0.78 cfs

6.0" Round Pipe

n= 0.010 PVC, smooth interior

Length= 64.0' Slope= 0.0116 '/'

Inlet Invert= 334.00', Outlet Invert= 333.26'



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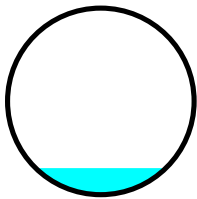
Summary for Reach 2R: SD-4

Inflow Area = 0.075 ac, 29.40% Impervious, Inflow Depth = 0.73" for 10-YR event
 Inflow = 0.05 cfs @ 12.12 hrs, Volume= 0.005 af
 Outflow = 0.05 cfs @ 12.12 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 2.68 fps, Min. Travel Time= 0.3 min
 Avg. Velocity= 1.20 fps, Avg. Travel Time= 0.7 min

Peak Storage= 1 cf @ 12.12 hrs
 Average Depth at Peak Storage= 0.07'
 Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.06 cfs

6.0" Round Pipe
 n= 0.010 PVC, smooth interior
 Length= 54.0' Slope= 0.0209 '
 Inlet Invert= 333.16', Outlet Invert= 332.03'

**Summary for Pond 1P: SWALE**

Inflow Area = 0.838 ac, 1.78% Impervious, Inflow Depth = 0.02" for 10-YR event
 Inflow = 0.00 cfs @ 21.71 hrs, Volume= 0.001 af
 Outflow = 0.00 cfs @ 21.72 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.6 min
 Primary = 0.00 cfs @ 21.72 hrs, Volume= 0.001 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 332.03' @ 21.72 hrs Surf.Area= 26 sf Storage= 1 cf
 Flood Elev= 335.00' Surf.Area= 1,055 sf Storage= 1,080 cf

Plug-Flow detention time= 6.0 min calculated for 0.001 af (100% of inflow)
 Center-of-Mass det. time= 6.0 min (1,227.8 - 1,221.8)

Volume	Invert	Avail.Storage	Storage Description
#1	332.00'	1,080 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
332.00	24	23.6	0	0	24
333.00	168	61.8	85	85	287
334.00	417	92.4	283	368	670
335.00	1,055	208.0	712	1,080	3,438

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Device	Routing	Invert	Outlet Devices
#1	Primary	332.00'	8.0" Round Culvert L= 131.6' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 332.00' / 327.00' S= 0.0380 ' / Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.00 cfs @ 21.72 hrs HW=332.03' TW=326.92' (Dynamic Tailwater)

←**1=Culvert** (Inlet Controls 0.00 cfs @ 0.44 fps)

Summary for Pond 2P: BIO-CELL

Inflow Area =	0.532 ac, 52.61% Impervious, Inflow Depth = 1.25" for 10-YR event
Inflow =	0.62 cfs @ 12.10 hrs, Volume= 0.055 af
Outflow =	0.20 cfs @ 12.30 hrs, Volume= 0.055 af, Atten= 68%, Lag= 12.2 min
Discarded =	0.10 cfs @ 11.95 hrs, Volume= 0.047 af
Primary =	0.10 cfs @ 12.30 hrs, Volume= 0.009 af
Secondary =	0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 330.43' @ 12.53 hrs Surf.Area= 1,800 sf Storage= 496 cf

Plug-Flow detention time= 20.9 min calculated for 0.055 af (100% of inflow)

Center-of-Mass det. time= 20.9 min (895.1 - 874.2)

Volume	Invert	Avail.Storage	Storage Description	
#1	329.74'	4,137 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
329.74	1,800	0.0	0	0
329.75	1,800	40.0	7	7
330.74	1,800	40.0	713	720
330.75	1,800	33.0	6	726
332.24	1,800	33.0	885	1,611
332.25	1,800	33.0	6	1,617
332.50	1,800	100.0	450	2,067
332.99	2,064	100.0	947	3,014
333.00	2,064	100.0	21	3,034
333.50	2,346	100.0	1,103	4,137

Device	Routing	Invert	Outlet Devices
#1	Primary	330.00'	8.0" Round 8" UD HEADER L= 33.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 330.00' / 330.00' S= 0.0000 ' / Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf
#2	Device 1	329.74'	2.410 in/hr FILTRATION TO UD over Surface area
#3	Discarded	329.74'	2.410 in/hr Exfiltration over Surface area from 328.75' - 329.83' Excluded Surface area = 0 sf Phase-In= 0.01'
#4	Secondary	332.75'	10.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50

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Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.10 cfs @ 11.95 hrs HW=329.78' (Free Discharge)↑**3=Exfiltration** (Exfiltration Controls 0.10 cfs)**Primary OutFlow** Max=0.10 cfs @ 12.30 hrs HW=330.31' TW=327.07' (Dynamic Tailwater)↑**1=8" UD HEADER** (Passes 0.10 cfs of 0.13 cfs potential flow)↑**2=FILTRATION TO UD** (Exfiltration Controls 0.10 cfs)**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=329.74' TW=324.64' (Dynamic Tailwater)↑**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)**Summary for Pond 3P: ROOF DRIPLINE**

Inflow Area = 0.032 ac, 83.63% Impervious, Inflow Depth = 3.01" for 10-YR event
 Inflow = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af
 Outflow = 0.11 cfs @ 12.11 hrs, Volume= 0.008 af, Atten= 4%, Lag= 1.4 min
 Primary = 0.11 cfs @ 12.11 hrs, Volume= 0.008 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 333.85' @ 12.11 hrs Surf.Area= 180 sf Storage= 41 cf

Flood Elev= 336.05' Surf.Area= 180 sf Storage= 163 cf

Plug-Flow detention time= 64.1 min calculated for 0.008 af (93% of inflow)

Center-of-Mass det. time= 26.8 min (830.2 - 803.4)

Volume	Invert	Avail.Storage	Storage Description	
#1	333.28'	167 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
333.28	180	0.0	0	0
333.38	180	40.0	7	7
334.74	180	40.0	98	105
334.75	180	20.0	0	105
335.74	180	20.0	36	141
335.75	180	40.0	1	142
336.10	180	40.0	25	167

Device	Routing	Invert	Outlet Devices
#1	Primary	333.63'	6.0" Round Culvert L= 51.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 333.63' / 331.51' S= 0.0416 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.11 cfs @ 12.11 hrs HW=333.85' TW=328.80' (Dynamic Tailwater)↑**1=Culvert** (Inlet Controls 0.11 cfs @ 1.27 fps)

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Summary for Pond 4P: DRY WELL

Inflow Area = 0.107 ac, 45.72% Impervious, Inflow Depth = 1.35" for 10-YR event
 Inflow = 0.15 cfs @ 12.11 hrs, Volume= 0.012 af
 Outflow = 0.08 cfs @ 12.30 hrs, Volume= 0.008 af, Atten= 47%, Lag= 11.3 min
 Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Primary = 0.08 cfs @ 12.30 hrs, Volume= 0.008 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 331.60' @ 12.30 hrs Surf.Area= 0.001 ac Storage= 0.004 af
 Flood Elev= 335.37' Surf.Area= 0.001 ac Storage= 0.006 af

Plug-Flow detention time= 182.8 min calculated for 0.008 af (67% of inflow)
 Center-of-Mass det. time= 72.4 min (929.3 - 856.9)

Volume	Invert	Avail.Storage	Storage Description
#1	324.78'	0.003 af	4.00'D x 10.00'H Vertical Cone/Cylinder Inside #2 0.005 af Overall - 6.0" Wall Thickness = 0.003 af
#2	324.28'	0.003 af	8.00'D x 10.50'H Vertical Cone/Cylinder 0.012 af Overall - 0.005 af Embedded = 0.008 af x 40.0% Voids
		0.006 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	331.28'	14.170 in/hr Exfiltration over Surface area from 331.28' - 335.37' Excluded Surface area = 0.001 ac Phase-In= 0.01'
#2	Primary	331.41'	6.0" Round Culvert L= 69.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 331.41' / 330.00' S= 0.0204 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=324.28' (Free Discharge)

↑ **1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.08 cfs @ 12.30 hrs HW=331.60' TW=330.31' (Dynamic Tailwater)

↑ **2=Culvert** (Inlet Controls 0.08 cfs @ 1.18 fps)

Summary for Pond 5P: Nyloplast-1

Inflow Area = 1.370 ac, 21.53% Impervious, Inflow Depth = 0.09" for 10-YR event
 Inflow = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af
 Outflow = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 327.07' @ 12.30 hrs
 Flood Elev= 333.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	326.90'	8.0" Round Culvert L= 7.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 326.90' / 326.50' S= 0.0571 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

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Primary OutFlow Max=0.10 cfs @ 12.30 hrs HW=327.07' TW=324.80' (Dynamic Tailwater)↑**1=Culvert** (Inlet Controls 0.10 cfs @ 1.41 fps)**Summary for Pond 6P: CB 8031**

Inflow Area = 1.370 ac, 21.53% Impervious, Inflow Depth = 0.09" for 10-YR event
 Inflow = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af
 Outflow = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 324.80' @ 12.30 hrs

Flood Elev= 329.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	324.64'	15.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 324.64' / 324.06' S= 0.0322 ' / Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.10 cfs @ 12.30 hrs HW=324.80' TW=0.00' (Dynamic Tailwater)↑**1=Culvert** (Inlet Controls 0.10 cfs @ 1.08 fps)**Summary for Link POA-1: POA**

Inflow Area = 1.370 ac, 21.53% Impervious, Inflow Depth = 0.09" for 10-YR event
 Inflow = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af
 Primary = 0.10 cfs @ 12.30 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Appendix 3

Inspection, Maintenance, and Housekeeping Plan



INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

For:
Poland Animal Hospital Expansion
Poland, Maine

By:
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures as well as stormwater management facilities for the project. This plan also outlines several housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.
2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed

to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains

into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

- A. Spill prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- C. Fugitive sediment and dust: Actions must be taken to 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.
- D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area

that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

Post-Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.

A. **Vegetated Areas:**

- Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains (>0.5") to identify active or potential erosion problems.
- Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. **Ditches, Swales and Other Open Channels:**

- Inspect ditches, swales, level spreaders and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
- Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
- Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
- If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.

C. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains (>0.5") to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Roof Drip Edges:

- These structures may not be paved over or altered in anyway. No gutter may be installed on the roof line.
- Debris and sediment buildup shall be removed as needed. Any bare area or erosion rills shall be repaired with new stone.
- See inspection log within Attachment 1 of this document for the inspection requirements of this BMP.

F. Underdrained Bioretention Cell:

- Debris and sediment buildup shall be removed from the forebay and basin as needed. Any bare area or erosion rills shall be repaired with new filter media, seeded, and mulched.
- The organic mulch within the remedial cover should be removed and replaced with a 2–3-inch layer of fresh mulch annually or as needed.
- The soil filter mulch shall be replaced with fresh material on a yearly basis.
- Fertilization of the filter area should be avoided unless absolutely necessary to establish vegetation.
- Harvesting and pruning of excessive growth should be done occasionally.
- See inspection log within Attachment 1 of this document for the inspection requirements of this BMP.

G. Dry Well

- See inspection log within Attachment 1 of this document for the inspection requirements of this BMP.

3. Documentation:

- A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.
- B. A log summarizing the inspections and any corrective action taken must be maintained. 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 controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

- 4. Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

ATTACHMENT 1 – STORMWATER INSPECTION AND MAINTENANCE LOG

**Poland Animal Hospital Expansion
1195-1197 Maine Street
Poland, Maine**

This log is intended to accompany the Inspection, Maintenance, and Housekeeping Plan for the Poland Animal Hospital Expansion project in Poland, Maine. The following items shall be checked, cleaned, and maintained on a regular basis as specified in the Maintenance Plan and as described in the sections below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the Town of Poland and the Maine DEP. Qualified personnel familiar with the drainage systems and soils shall perform all inspections. A copy of the construction and post-construction maintenance logs are provided.

Appendix 4

Subsurface Investigations

Hydrologic Soil Group—Androscoggin and Sagadahoc Counties, Maine



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines


 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

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 1:15,800.

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: Androscoggin and Sagadahoc Counties, Maine
 Survey Area Data: Version 23, Aug 30, 2022

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

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	A	5.5	43.6%
ChC	Charlton very stony fine sandy loam, 8 to 15 percent slopes	A	4.7	36.8%
ChD	Charlton very stony fine sandy loam, 15 to 25 percent slopes	A	1.8	14.4%
HrC	Lyman-Tunbridge complex, 8 to 15 percent slopes, rocky	D	0.7	5.1%
Totals for Area of Interest			12.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Town, City, Plantation
POLAND

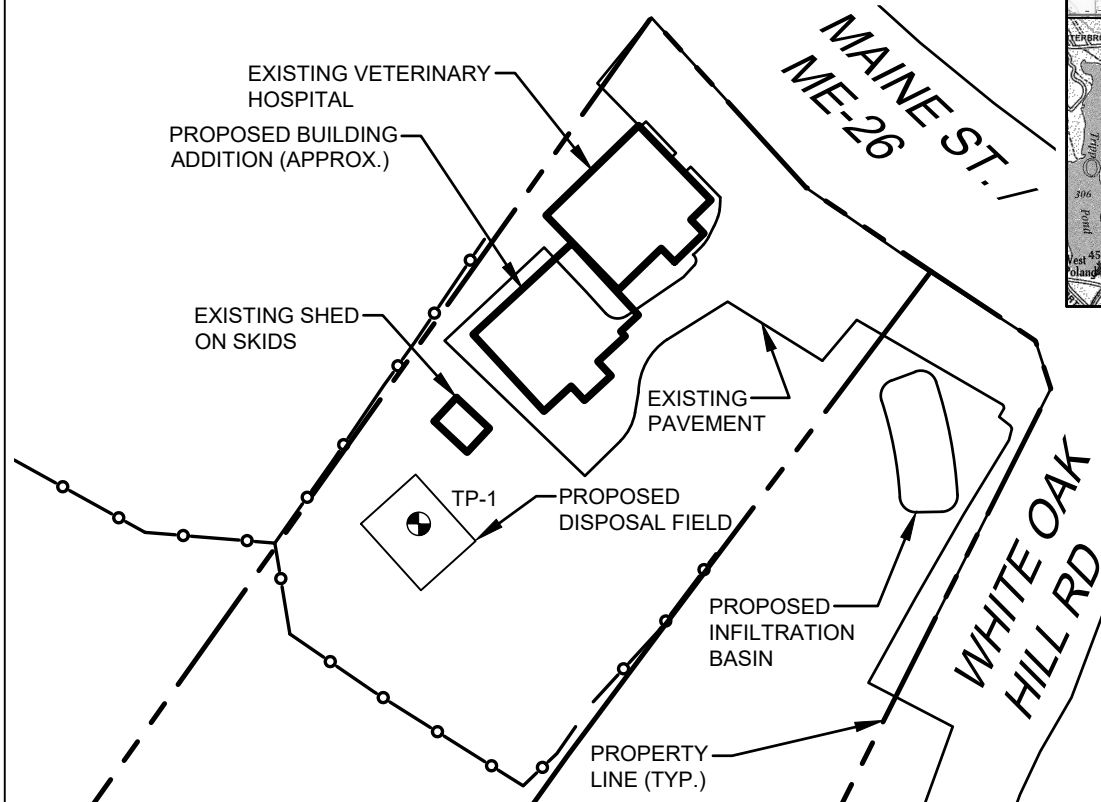
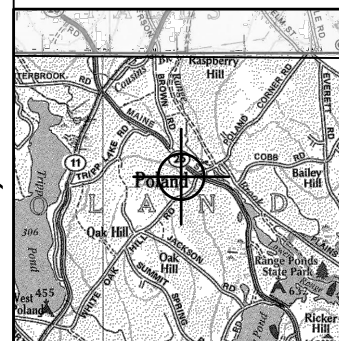
Street, Road, Subdivision
1197 MAINE STREET

Owner or Applicant Name
VETCOR OF POLAND LLC

IPF = IRON PIN FOUND
TP = TEST PIT B = BORING

SCALE: 1" = 60'

SITE LOCATION PLAN



Observation Hole TP-1 ☒ Test pit ☐ Boring

0-1 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	LOAMY FINE SAND	FRIABLE	DARK BROWN	
10	FINE SAND		YELLOWISH BROWN	
20	FINE TO MEDIUM SAND			
30		LOOSE		
40	FINE SAND	FRIABLE	LIGHT BROWNISH GRAY MIXED	FEW, FINE COMMON, MEDIUM, DISTINCT
50	LIMIT OF EXCAVATION = 44"			

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
<div style="display: flex; justify-content: space-around;"> <div>5</div> <div>C</div> </div> <div style="display: flex; justify-content: space-around;"> <div>Profile</div> <div>Condition</div> </div>	0-3 %	39 "	

Observation Hole _____ ☐ Test pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

The graph shows a linear relationship between depth below mineral soil surface (inches) and four soil properties: Texture, Consistency, Color, and Mottling. The y-axis ranges from 0 to 50 inches. A diagonal line indicates a linear relationship between depth and the properties.

Soil Classification		Slope	Limiting Factor	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile	Condition	_____ %	_____ "	

A. K. Rind

Site Evaluator Signature

434

SE #

6-28-23

Date _____

Page 2 of 3
HHE-200 Rev. 02/11

Appendix 5

Stormwater Management Plans

F:\Projects\23002327\DWG\Design\230327 SW.dwg - 8/10/2023 4:35 PM - PATRICK GERE



PROPOSED DRAINAGE PLAN
OF:
POLAND ANIMAL HOSPITAL EXPANSION
1195-1197 MAINE STREET
POLAND, MAINE

FOR:
VETCOR OF POLAND LLC
141 LONGWATER DRIVE, SUITE 108
NORWELL, MA 02061

DESIGNED	KGK
DRAWN	ABB
CHECKED	PMG
DATE	08/10/2023
SCALE	1" = 20'
PROJECT	230327

SHEET 2 OF 2

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

STATE OF MAINE
PATRICK M. GERE, P.E. 14408
MAINE
REGISTERED PROFESSIONAL ENGINEER
EXPIRATION DATE 08/31/2023

REV. | BY. | DATE | STATUS:
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

**Pineland**

Cumberland Hall
41 Campus Drive, Suite 301
New Gloucester, ME 04260

Portland

565 Congress Street, Suite 310
Portland, ME 04101

Engineering Review Memorandum

To: Town of Poland Planning Board (Terradyn #23-101)

From: Craig Sweet, P.E., Terradyn Consultants, LLC.

Date: September 18, 2023

Subject: Planning Board Meeting Site Plan Review

Project: Poland Animal Hospital Expansion

Applicant: VetCor of Poland LLC., 141 Longwater Drive, Suite 108, Norwell, MA.
Tax Map 39 Lots 29 & 30.

Project Description and Background:

The approximate 1.4-acre project site is located within the Downtown District and Aquifer Protection 1 Overlay District and is partially developed with a $\pm 1,425$ square foot veterinary clinic, asphalt parking and circulation areas, and private and public utility service connections. The site is bounded by Maine Street to the northeast, White Oak Hill Road to the southeast, woods to the southwest, and Poland Community Center to the northwest. Slopes on the site range between flat to moderate in areas to be developed. Along the southwest side of the property, slopes reach up to 30 percent. Approximately 0.6 acres of wooded area exist on site. The proposed project involves the construction of a $\pm 1,475$ SF addition to the existing $\pm 1,425$ SF facility, as well as modifications to existing landscaping, parking, entrances, and utilities.

To assist the Planning Board, we have provided our engineering review comments following the General Review Standards as outlined in section 509.9 of the Poland CLUC. In addition, we have added comments or responses as to how the project also meets the Downtown District Design Standards as listed under Section 508.30.

Site Plan Review Standards:

1. Preservation of Landscape:

The existing tree line and proposed limits of clearing are shown on the plans. A landscaping plan has been provided showing large amounts of vegetation restored on the property.

2. Relation of Proposed Buildings to Environment:

The project proposes an addition to the existing animal hospital building and a proposed shed.

These the buildings will be located on a high visibility area of the Downtown District. Building elevations were included in the application materials. Building colors were not included in that information. Additional comments regarding the building are provided in section 508.3 below.

3. Compatibility with Residential Areas:

The proposed project is across RT. 26 from residential dwellings in a mixed-use area. The proposed expansion appears to be compatible with neighboring areas. The Traffic Impact Assessment indicates that the proposed addition will generate 5 new trips in the AM and PM peak hours which is assumed to be a minimal increase.

4. Vehicular Access:

The Applicant has provided a Traffic Impact Assessment meeting the requirements of this section.

5. Vehicular access to Routes 11, 26, 121, and 122

The applicant proposes to close an existing curb cut and modify a second curb cut. A Maine DOT entrance permit has been included with the application.

The project is a low volume driveway with less than 50 vehicle trips per day, the applicant should confirm that the intersection with Route 26 is not less than 60 degrees.

A vehicle tracking turning analysis depicting delivery, waste haulers, and emergency vehicle movements should also be included with the application materials. The Town's Fire Department and Public Works will need to review vehicle movements to confirm safe access prior to approval.

6. Surface Water:

The project proposes to collect and treat onsite stormwater via under drained bioretention cell along the northeastern corner of the parcel. Drainage ultimately discharges into an existing catch basin within the White Oak Hill Road Right-of-Way into the drainage system within Route 26. Post-development peak flow rates presented in the Stormwater Management Report are below pre-development levels and are relatively minor. However, clarification and revisions are required to address the following comments:

1. Test pits identifying separation to seasonal high groundwater and confirmation that an impermeable liner is not required for the bioretention filter for the project have not been included within the submission.
2. Indicate the peak elevations for the 2, 10, and 25-year storm events on the bioretention filter detail included on sheet 11 of 11.
3. The stormwater report provides information that BMP sizing and treatment calculations are provided in Appendix 1. It appears that the water quality sizing calculations for the proposed BMPs meeting DEP design criteria for the bioretention filter cell, roof dripline filter, and dry wells have not been provided.

4. The applicant shall provide the Town with evidence of an executed maintenance agreement for the BMP's.
5. The plans indicate 8" pipe sizes. Section 509.9F and 613.4 of the Ordinance indicates that 12" minimum pipe sizes should be used. Please provide additional clarification as to why 12" pipes cannot be utilized.
6. The post-development HydroCAD model includes a 2.41 in/hour exfiltration through the constructed filter as recommended in the DEP Maine Stormwater BMP Manual. However, the post-development HydroCAD model includes a 14.170 in/hr exfiltration rate for drywell (pond 4P). Please provide additional clarification as to the 14.170 in/hr exfiltration rate for drywell (pond 4P).
7. The post-development HydroCAD model for the drywell (pond 4p) appears to include an additional crushed stone storage reservoir. If this is the case, the reservoir should be detailed on the plans.
8. It is unclear if the bioretention filter meets the target detention time of 24 to 48 hours. Please provide documentation and calculations.
9. Include a detail for the emergency spillway and indicate peak elevations for the 2, 10, and 25-year storm events.
10. The applicant will need to provide the Town with evidence of an executed maintenance agreement for BMPs.

7. Conservation, Erosion, and Sediment Control:

The project avoids impacts to neighboring properties, plan set includes erosion control notes and details. The applicant should consider adding erosion control berms/ silt fence along the western side of the Route 26 entrance to prevent sediment runoff into Route 26 during the regrading.

8. Phosphorus Export:

The proposed project is in the Waterhouse Brook watershed. This section is not applicable.

9. Site Conditions:

The applicant should indicate if cleared vegetation will be stored/processed/managed on or offsite. The project includes a stabilized construction entrance. We recommend the contractor is made responsible for periodic street sweeping during construction.

10. Signs:

The Applicant has indicated the sign modification will be submitted under a separate cover.

11. Special Features:

The applicant should consider screening the propane tank.

12. Exterior Lighting:

The applicant has provided a photometric plan addressing this section.

13. Emergency Vehicle Access:

The application materials do not include emergency vehicle turning plans documenting adequate access. The Fire Department and Board need additional information to satisfy the criteria.

14. Municipal Services

The applicable Town Department should provide comments on the development. As this is an expansion of the existing use it does not appear to have adverse impacts on municipal services.

15. Water Supply:

The applicant has provided a request for service letter to the Mechanic Falls Water Department. The proposed expansion does not appear to have any adverse impacts to the existing water supply. Confirmation from the water district should be forwarded to the Town upon receipt.

16. Groundwater

The application meets the applicable standards of this section.

17. Air Emissions

No adverse impacts are expected by the expansion of the existing use.

18. Odor Control

No adverse impacts are expected by the expansion of the existing use.

19. Noise:

The application involves the expansion of the existing use on site, and also includes the construction of a fenced dog walking area. It is assumed that this area would not create any adverse noise impacts from the animals outside, the Board may want to ask for some additional clarifying information on when these areas are to be utilized.

20. Sewage Disposal:

The proposed project will provide a subsurface wastewater system under the dog run area. HHE 200 forms have been submitted along with the application.

21. Waste Disposal:

A proposed dumpster location is shown on the plans, the dumpsters will be screened from the roadway via fencing. The use is an expansion of the existing animal hospital use however the Board may wish to discuss the waste generation and management associated with the medical waste from the facility.

22. Buffer Areas:

The applicant has provided a Landscaping Plan with screening along the Route 26 and White Oak Hill Road frontages and the front of the buildings. No screening is provided along the property line with the neighboring parcel; however, no screening currently exists in this location either. The Board may wish to discuss if they feel screening in this area is necessary.

23. Financial and Technical Capacity:

The applicant has demonstrated adequate financial and technical capacity.

24. Conformance with Comprehensive Plan.

The proposed project will have to comply with Section 508.30 Downtown District Design Standards before determining if it is in conformance with the Comprehensive Plan.

Downtown District Design Standards:

1. Pitched Roofs:

The applicant has proposed 8/12 pitch roofs exceeding the minimum 5/12

2. Building Facade:

The applicant has indicated that building façade colors are yet to be determined and that colors picked will meet the standards outlined. The Board should consider that the applicant provides the color choice to Town Staff during the building permit process to ensure conformance with the section.

3. Exterior Building Materials Facade:

The applicant has indicated that the proposed addition will utilize materials comparable to the existing building.

4. Public Entryways:

The public entryway will feature a canopy with a peaked form roof to meet the requirements of this section.

5. Buildings Architecture:

The addition is proposed to keep to the design of the existing structure and appears to meet the requirements of this section.

6. Trash Collection:

The trash collection area is located within the proposed parking area proposed to be screened by cedar fencing.

7. Chain link fence:

Vinyl-coated chain link fence is proposed for the dog-walk area, the use of this fencing in this area appears to meet the requirements of the section.

8. Loading Docks:

The applicant is not proposing any loading docks.

9. Interconnections between properties:

The proposed project had provided interconnect between properties where feasible for the proposed expansion.

Technical Review:

We have reviewed the submitted design from Sebago Technics, Inc., dated August 11, 2023, for the purposes of determining if the project is compliant with the Site Plan Standards (sect 509.8) and meets the requirements as applied for the proposed commercial development.

1. Sheet 2 of 11 – Notes & Legend:

- a. General Note 7 provides information that the survey is based off grid north while the plans indicate the survey is based off magnetic north.

2. Sheet 4 or 11 – Site Plan:

- a. The plan identifies a small snow storage area proximate to the dumpster enclosure. The applicant should consider identifying additional snow storage areas for the project.
- b. The plan depicts shared wheel stops for several proposed parking spaces. The applicant should consider a single wheel stop for each proposed parking space.
- c. The plan includes an ADA parking space. The applicant should consider adding ADA signage for the proposed ADA parking space.
- d. The plan identifies a proposed stop bar at the ingress/egress to White Oak Hill Road while a stop sign is identified at the ingress/egress to Maine Street. The applicant should consider including consistent traffic symbols at both ingress/egress locations.

3. Sheet 5 or 11 – Grading & Utility Plan:

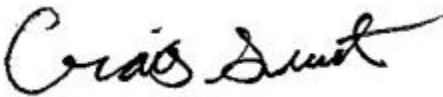
- a. The plan should include any proposed slopes for BMP underdrain piping.
- b. It is unclear how stormwater runoff flows from proposed developed areas are conveyed to the riprap bio cell forebay identified on the plan. If the stone at the eastern edge of the parking lot is intended to convey runoff flows to the forebay, the applicant should consider providing a detail and include any depth, fabric, ect., and remove proposed utilities from the conveyance BMP.
- c. Additional spot grades and match lines should be provided at the ingress/egresses to White Oak Hill Road and Maine Street to clarify design intent and constructability during construction.
- d. Additional spot grades should be provided at the entrance to the proposed building to ensure adherence to ADA cross slopes.
- e. Additional spot grades should be provided at the ADA ramps/landings along Maine Street to clarify design intent and constructability of the ADA ramps/landings during construction.
- f. The plan should include the locations of all proposed erosion control barriers for the project.
- g. The applicant should review the proposed pipe elevations for the SD-1 – SD-5 conveyance system to ensure there is sufficient pipe cover and proposed pipes are not located within the pavement build-up to the extent possible. Additionally, SD-5 should be reviewed for proper cover of the pipe and insulation if pipes are to be upsized in accordance with Ordinance requirements.

Closure:

Based upon our review, the application is largely complete, however there are a few areas that require some additional clarification from the applicant prior to providing a complete review. We suggest the applicant provide additional clarification for review prior to formal approval action from the Board.

Sincerely,

TERRADYN CONSULTANTS, LLC



Craig Sweet, P.E

APPLICANT or CONTACT PERSON:

Applicant is: _____ Landowner _____ Contractor _____ Renter _____ Buyer

If landowner, write "Same" below and continue to next block below. If not the landowner, submit a letter of permission to construct on or use the land, or copy of a contract to buy from the landowner, along with the following information:

Name(s): Same

Company _____

Mail Address: _____ Main Phone: _____ - _____ - _____

Town/State/Zip _____ Alternate Phone: _____ - _____ - _____

THIS APPLICATION IS FOR:

(Check all that apply)

- ☐ Commercial
- ☐ Industrial
- ☐ Institutional
- ☐ Governmental
- ☐ Open Space

- ☒ New Development
- ☐ Change In Use
- ☐ Expansion of Use
- ☐ Expansion of Structure(s)
- ☐ Resumption of Use

EXISTING LOT CONDITIONS:

(This page is to describe what is on your lot currently)

1. General

Does this lot have any development? (If No, go to "Proposed Development") _____ Yes

☒ No

a. Is there an existing Well _____ Yes

☒ No

b. Is there an existing Septic System _____ Yes

_____ No

i) If yes, submit a copy of a septic permit, or drawing(s) showing size & location.

c. Is there an existing Road Entry _____ Yes

_____ No

i) If yes, will there be any changes/modifications? _____ Yes

_____ No

ii) (If no, submit copy of appropriate road entry application if entrance is onto a state or town road.)

d. Any structures to be removed _____ Yes

_____ No

i) If yes, submit information about the structure to be removed and how any debris will be disposed of.

2. Existing Land Development & Improvements NOT Including Buildingsa. Size of lawns _____ Sq. Ft.
or Acresb. Size of fields _____ Sq. Ft.
or Acres

c. Size of driveways/roads _____ Sq. Ft.

d. Size of other non-vegetated areas _____ Sq. Ft.

e. Wetlands already filled _____ Sq. Ft.

3. Existing Main Structure

a. Ground Footprint _____ Sq. Ft.

b. Total Gross Floor Space (exterior dimensions of all floors) _____ Sq. Ft.

c. Road Frontage Setback _____ Ft.

- d. Side Setback _____ Ft.
 e. Rear Setback _____ Ft.
 f. Distance to Great Pond _____ Not applicable (over 250') _____ Ft.
 g. Distance to Stream _____ Not applicable (over 250') _____ Ft.
 h. Distance to Wetlands _____ Not applicable (over 250') _____ Ft.
4. **Foundation Type** _____ Full Basement _____ Frost Walls _____ Slab _____ Piers
5. **Existing Accessory Structure(s)**
- a. Total Number of Structures _____
 b. Total Ground Footprint _____ Sq. Ft.
 c. Total Floor Space _____ Sq. Ft.
 d. Closest Road Setback _____ Ft.
 e. Closest Side Setback _____ Ft.
 f. Closest Rear Setback _____ Ft.
 g. Distance to Great Pond _____ Not applicable (over 250') _____ Ft.
 h. Distance to Streams _____ Not applicable (over 250') _____ Ft.
 i. Distance to Wetlands _____ Not applicable (over 250') _____ Ft.
6. **Total Existing Impervious Surfaces** _____ Sq. Ft.
 a. $Add\ 2c + 2d + 3a + 5b$

PROPOSED DEVELOPMENT:

1. Wetlands to be impacted _____ 1 Acre _____ Sq. Ft.
 2. New footprint(s) and developed area(s):
 a. Changes in building footprint(s) _____ 1 Acre _____ Sq. Ft.
 b. Changes in driveway/roadway _____ .75 Acre _____ Sq. Ft.
 c. Changes in patios, walkways, etc. _____
 d. TOTAL (2a+2b+2c) _____ 1 Acre _____ Sq. Ft.
 3. Percentage of lot covered by impervious surfaces: _____ %
 a. $(Equals\ [areas\ on\ line\ 6\ page\ 2 + line\ 2d\ above] / [Total\ lot\ area\ measured\ in\ sq.\ ft.] * 100\%)$

SUBMISSIONS:

1. **Attach drawings and/or statements describing the following items, if applicable:**
- Provide a copy of deed and Tax Assessor's information card.
 - Provide a map of the general area showing land features within at least ½ mile of this lot.
 - Provide site plan(s) of your lot with existing development and its dimensions shown.
 - Provide site plan(s) of your lot with proposed development and its dimensions shown.
 - (May be combined on existing development drawing.)*
 - Provide detailed plans of proposed structural development and changes.
 - Provide statements or drawings of methods of infrastructure:
 - Water supply
 - Sewage disposal
 - Fire protection
 - Electricity
 - Solid waste disposal
 - Type, size, and location of signs.
 - Number of parking spaces.
 - Provide phosphorus loading calculation if in a great pond watershed area.
 - Anticipated date for start of construction.
 - Anticipated date for completion of construction.
 - Standard submissions requirements shall follow Section 509.8 of the Comprehensive Land Use Code. Copies of the Code are available for viewing at the Town Office and Library. Copies are available for purchase (\$25.00) in the Code Enforcement Office.
 - (Use checklist starting on page 6 for summary of usual requirements.)*
 - Other requirements unique to your project added by the Planning Board.

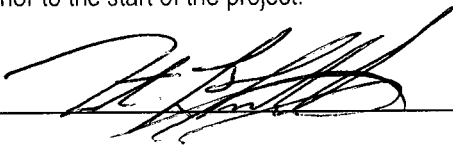
2. **List all state and federal approvals, permits, and licenses required, if any, for the project:**

This includes but is not limited to the following:

1. State highway entrance permit.
2. Soil disturbances involving more than one acre.
3. Impact on more than 4,300 square feet of any type wetland.
4. Soil disturbances within 100 feet of lakes, rivers or streams.
5. Activity within 75 feet, over the water, or in the water of lakes, rivers, or streams.
6. Timber harvesting.
7. Flood zones.
8. Discharges and emissions

DISCLOSURE: (READ BEFORE SIGNING)

1. I hereby acknowledge that I have read this application and pertinent sections of the ordinances, and state that the information in this document is to the best of my knowledge true and accurate. I agree to comply with all the Town of Poland's ordinances and the State of Maine's statutes regulating the activities sought in this application as well as any permit(s) approved for this application.
2. I understand that all construction of structures shall conform to or exceed the minimum requirements of the Maine Uniform Building and Energy Code, and the NFPA-101 Life Safety Code, 2009
3. I understand that any approval is valid for only the use(s) as specified in this application. The permitting authority must approve any change(s) made to the use(s) sought in the application. Any approval issued for this application is approved on the basis of truthful information provided by the applicant(s), and as allowed by the ordinances of the town.
4. I understand that it is my responsibility to assure that the lot description herein accurately describes its ownership, its boundary lines, and the setback measurements from the legal boundary lines.
5. I understand that I have the burden of proof as to the legal right to use the property, and that approval of this application in no way relieves me of this burden. Any approval issued does not constitute a resolution in favor of me or the landowner in any matters regarding the property boundaries, ownership, or similar titles.
6. I understand that all necessary **Building and Use Permits** shall be secured from the Code Enforcement Office after the Planning Board grants approval of this application.
7. I understand that a **Certificate of Occupancy or Compliance** shall be required prior to the start of any use or occupancy associated with this application unless a signed written waiver is issued with the permit. Fines and penalties may be issued if use or occupancy is started prior to the issuance of the certificate.
8. I understand that the **approval becomes invalid** if construction or use has not commenced within twelve (12) months of the Planning Board's approval date, construction is suspended for more than six (6) months and no notice for just cause is submitted prior to the end of the six (6) months, or it is found that false statements have been furnished in this application.
9. I understand that if I fail to comply with the aforementioned statements, a "STOP WORK" order may be issued for which I will immediately halt any construction and/or use(s) that are approved for this application. This failure may also require that I return the property to its natural state or as closely thereto before the use(s) was/were approved.
10. I understand that failure to follow these requirements will lead to Violation Notices and Citations that have fines and penalties. This in turn can lead to civil proceedings in District and/or Superior Court.
11. I understand that **all state and federal permits** are my responsibility as the applicant and/or owner and will secure the same prior to the start of the project.



Applicant's Signature(s)

9-14-23

Date

Submission CHECKLIST

The following list is a short summary of the information required in Chapter 509.8 of the Comprehensive Land Use Code for the Town of Poland, Maine. Please checkmark or place an "X" in the left-hand columns if the information has been provided, if you request a waiver from submitting the information, or you believe the information is not applicable to your application. If a waiver(s) is requested, or the information is not applicable, a written explanation is required. Columns on the right are for the Planning Board's use.

For Applicant Use			Section 509.8.A Submission requirements	For Planning Board Use			
Provided	Waiver Request	Not Applicable		Received	On File	Waived	Not Applicable
X			1. Site Plan Drawings				
X			2. Signed copy of application				
X			3.a. Name & address of owner				
		X	Name of development				
X			Name & address of abutters within 500' of lot for development				
X			Map of general location				
X			Show all contiguous properties				
X			Names, Map, & lot #'s on drawings				
X			Copy of deeds, agreements				
X			Engineer/ designer of plans				
X			Existing Conditions (Site Plan)				
X			Zoning Districts on and/or abutting project's lot shown				
X			Bearings & Distances shown on drawings				
		X	Location of utilities, culverts, drains				
		X	Location, name of existing r/w				
		X	Location, dimensions of existing structures				
		X	Location, dimensions of existing roads, walks, parking, loading, etc.				
X			Location of intersection within 200'				
		X	Location of open drains, wetlands, wildlife areas, historic sites, etc.				
		X	Direction of surface drainage				
X			100-yr. Floodplain				
		X	Signs				
		X	Easement, covenants, restrictions				
X			Proposed Development (Site Plan)				
		X	Location & dimensions of all new structures. New development delineated from existing development				
X			Setback dimensions shown & met				
		X	Exterior lighting (Will meet full cutoff requirements)				
		X	Incineration devices				
		X	Noise of machinery and operations				
		X	Type of odors generated				
		X	Septic system and other soils reports				
		X	Water supply				
		X	Raw & finished materials stored outside				
		X	Contours shown at PB specified intervals				
		X	Curbs, sidewalks, drives, fences, retaining walls, parking, etc.				
		X	Landscaping plan				
		X	Easements, r/w, legal restrictions				
X			Abutters' property lines, names				
		X	TRAFFIC DATA				

For Applicant Use			Section 509.8.A Submission requirements	For Planning Board Use			
Provided	Waiver Request	Not Applicable		Received	On File	Waived	Not Applicable
		X	Peak hour traffic				
		X	Traffic counts				
		X	Traffic accident data				
		X	Road capacities				
		X	Traffic signs, signals				
X			STORMWATER & EROSION				
X			Method for handling stormwater shown				
X			Flow direction				
X		X	Catch basins, dry wells, ditches, etc.				
X			Engineering Analysis of stormwater				
X			Erosion control measures				
		X	Hydrologist groundwater impact				
		X	Utility plans for all utilities				
		X	Cross-section profile of roads, walks				
X			Construction drawings of roads, utilities				
		X	Cost analysis of project and financial capability demonstrated				
		X	Phosphorus control plan if in watershed of a great pond				
		X	Submission of waiver requests				
		X	Copies of state, federal applications, permits, &/or licenses required for this project.				
			Condition A.				
			Condition B.				
			Condition C.				
			Condition D.				
			Condition E.				

This application was first looked at by the Planning Board on ___ / ___ / ___ but does not create vested rights in the initiation of the review process.

By vote of the Board this application requires an on-site inspection: _____ Yes _____ No
 If yes, an onsite inspection is scheduled for ___ / ___ / ___ at ___ : ___ ___ AM ___ PM

By vote of the Board this application requires a public hearing: _____ Yes _____ No
 If yes, public hearing is scheduled for ___ / ___ / ___ at ___ : ___ ___ AM ___ PM

Conditions of Approval for Formal Site Review: _____

 _____ / _____ / _____
Planning Board Chair **Date**

Site Review and Shoreland Zoning Review Fees:

Type of fee	Fee	Units or Comments
Application – sketch plans, Rough design	\$100.00	Each application (no other fees)
Application – formal	\$175.00	Each application + fees below
Notification of Abutters	\$1.00 per	All abutters within 500 ft. of the property must be notified.
Approval extension, Planning Board Approval only	\$75.00	One extension only (no other fees)
Escrow, minimum amount	\$700.00	When required by Planning Board
Formal Shoreland Zoning Application	\$175.00	Approvals by the PB, Permits still Required
Auto graveyards, recycle business	\$5.00	Per vehicle storage slot (parking space)
Junkyard, Storage Lots	\$1.50	Per ft of outside storage
Residential Towers	\$20.00 + \$5.00 per \$1,000.00	Based on Cost of Work
Commercial Towers	\$20.00 + \$10.00 per \$1,000.00	Based on Cost of Work

1. Building and Structures may include up to five times the footprint area of the building for grounds improvements, exclusive of the building footprint, as part of the building review fee.
2. Building and Grounds Improvement Fees. The sum of these two fees may be limited to \$2,500.00 per application at the discretion of the Planning Board. (Junkyards, auto graveyards, recycling business, and towers excluded).
3. Reduced Fees: The Planning Board may, upon application therefore, allow a reduced total site review fees to \$50.00 in any case which it determines that the work for which the permit is sought will be performed within the Shoreland Zone. The project shall be intended solely for the purpose of protecting a Great Pond, Stream, River, or other Natural Resources through the implementation of Conservation, Best Management Practices, or other environmental safeguards. Also, the project shall not result in the enlargement of any building or structure or an intensification of the existing use of the property.
4. Review Escrow Funds may be used by the Town to pay for professional reviews an advice requested by the Planning Board or Code Enforcement Officer related to the applicant's proposed development. Review escrow funds deposited by the applicant not spent during the course of the Town's review shall be returned to the developer within sixty days after the Planning Board's decision on the application is final. If Professional review and advice fees exceed the amount deposited, the developer shall pay the amount outstanding before final approval or any permit is granted.

Town of Poland, Maine
PLANNING BOARD AGENDA REQUEST

Date of meeting you are requesting to be scheduled for: ____/____/____ Meetings are normally conducted from 7:00 to 9:00 PM in the Municipal Conference Room at the Town Office

Map ____ Lot ____ Sub-lot ____

Applicant's Name: Peter Farland
Mailing Address: 679 Empire Rd
Town, State, Zip: Poland Me 09274
Home Phone: 207-440-0002 Hours: ____
Work Phone: ____ Hours: ____

Type of application: ____ Sketch Plan ____ Site Review ____ Shoreland ____ Subdivision ____ Informational
Road location for project: ____
Zoning: ____ Lake Watershed: ____ Nature of
business to be discussed (Brief description): Driveway and House and Storage yard

IMPORTANT - READ CAREFULLY:

This Office must receive the original application, plus nine (9) copies, a digital PDF copy (on either cd or usb), and appropriate fees by Thursday at 1:00 p.m., twelve (12) days before the stated meeting to be put on the upcoming agenda.

- New business is scheduled on the agenda in the order this office receives this form.
- If you want your application reviewed for contents prior to the meeting, it must be in this office 14 days before the meeting.
- Should the Board choose to adjourn before all business is addressed, all remaining business will be tabled until the next available meeting.
- Unfinished business is conducted before new business is addressed.

Applicant's Signature:  Date: 9/14/23

OFFICE USE ONLY:

Request Taken By: ____ Date: ____/____/____ Time: ____:____ a.m. p.m.

JONES ASSOCIATES

Foresters, Surveyors and
Environmental Consultants



WETLAND REPORT

TORREY ROAD

POLAND, MAINE 04274

<p><u>Prepared for:</u> Peter Ferland 679 Empire Road Poland, Maine 04274</p>	<p><u>Prepared by:</u> Jones Associates, Inc. 280 Poland Spring Road Auburn, Maine 04210</p>
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This wetland delineation was conducted by:

Dave Forbes
Jones Associates, Inc.

JA Job #22-033PO
September 2022

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INTRODUCTION

Jones Associates, Inc. was contracted to provide wetland delineation services for Peter Ferland on Tax Map 0003-0009A and an associated proposed right-of-way located off Torrey Road in Poland, Maine 04274. The delineation encompassed +/- 15-acres of Lot 0009A located to the north of Torrey Road. The following report summarizes site conditions observed during a site visit in June of 2022.

Wetland/upland boundaries were identified and delineated according to *U.S. Army Corps of Engineers (ACOE) Wetlands Delineation Manual (Environmental Laboratory 1987)* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, January 2012*. Wetlands were identified based on the presence of hydric soil (inundated or saturated soil conditions resulting from permanent or periodic inundation by ground water or surface water), hydrology (movement and distribution of water), and predominance of hydrophytic species (Hydrophytes: vegetation typically adapted for life in saturated soil conditions).

Wetland delineations consist of transecting the property, examining periodic soil samples, observing any evidence of hydrology, and assessing each stratum of vegetation for its percentage of hydrophytic species. If all three factors were evident, the study plot was considered wetland habitat. Transitions between upland and wetland were clearly marked with blue sub-zero flagging every 30-40 feet and labeled with alphanumeric codes to identify individual systems (A1, A2, A3....).

Wetland flags were located with using Leica Global Positioning System (GPS) technology with expected average accuracy of sub-meter. This method is recognized by both state and federal agencies. This being stated, Jones Associates, Inc. recommends that the wetland boundary be surveyed using a more precise method of location if any fill or regulated activities are to be performed within 20 feet of the GPS located wetland.

EXISTING CONDITIONS

The property is bound by forested properties to the north, east, and west. The proposed right-of-way extends south through agricultural fields to Torrey Road.

The property consists mostly of agricultural fields. The northeast corner of the property contains scrub-shrub vegetation that transitions to forest near the edges of the property. There are agricultural drainage swales located along the edges of the property and along the associated right-of-way.

The National Wetlands Inventory (NWI) was used as a preliminary resource in order to identify potential wetlands on-site. No wetlands were identified using this information. However, on-site observations indicated wetlands were present on-site.

WETLAND CHARACTERISTICS

The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

--Corps of Engineers Wetlands Delineation Manual (U.S. Army Corps of Engineers 1987)

The property contains five wetlands (Wetlands A, B, C, D, E, and F) which are shown on the attached Wetland Delineation Plan.

These wetlands exhibited similar characteristics, such that they can be accurately described using one data sheet. These wetlands can be described using the Wetlands and Deepwater Habitats Classifications (below) as palustrine (P) scrub-shrub (SS) wetlands with broad-leaved deciduous vegetation (1) that are saturated (B) or (PSS1B). Hydrological indicators in these wetlands consist of saturation (6"), water-stained leaves, drainage patterns, and geomorphic position. Vegetation in these wetlands consists of yellow birch (*Betula alleghaniensis*), speckled alder (*Alnus incana*), common winterberry (*Ilex verticillate*), broad-leaved cat-tail (*Typha latifolia*), rufous bulrush (*Scirpus pendulus*), and sensitive fern (*Onoclea sensibilis*) indicating the presence of hydrophytic vegetation. Soils in these wetlands were colored at 10YR 3/3 from 0-3", 10YR 5/4 from 3-10", and 10YR 3/1 from 10-24" with a hydric soil indicator of sandy mucky mineral.

WETLANDS OF SPECIAL SIGNIFICANCE (WOSS)

No Wetlands of Special Significance were identified during investigations.

STREAMS

No streams were observed to be present on-site. Please refer to Addendum 4.B (Stream Channels) for more detailed information on stream criteria.

RARE OR UNUSUAL FEATURES AND VERNAL POOLS

Jones Associates Inc. did not identify any potential vernal pools during investigations. No unusual plant or animal species were observed within the property. Vegetation on this property was dominated by plant communities typical of this region of Maine.

NORTHERN LONG-EARED BAT

If impacts are proposed on-site, then the items found in Section 1 of the Addendum below will need to be addressed for Northern Long-Eared Bats (NLEB).



WETLAND DELINEATION CHECKLIST

Job #:	22-033PO		
Client:	Peter Ferland		
Site Address:	Torrey Road, Poland, ME 04274		

Wetland Scientist:	Dave Forbes
Date of Office Review:	05/2022
Date(s) of Field Delineation:	05/2022

Wetlands of Special Significance

Yes	No	
	X	Does the on-site or immediately adjacent wetland contain a mapped and numbered DWA?
	X	Does the on-site or immediately adjacent wetland contain an Inland Waterfowl Wading Bird Habitat?
	X	Does the on-site or immediately adjacent wetland contain a potential significant vernal pool?
	X	Are there areas of open water or wetlands with emergent marsh vegetation greater than 20,000 sq. ft. on-site or immediately adjacent?
	X	Does the on-site or immediately adjacent wetland contain a 100-year flood plain?
	X	Does the on-site or immediately adjacent wetland contain a S1 or S2 community?
	X	Does the on-site or immediately adjacent wetland contain a significant wildlife habitat?
	X	Is the on-site wetland within 250' of a coastal wetland?
	X	Is the on-site wetland within 250' of a great pond?
	X	Does the site contain peatlands?
	X	Are there wetlands occurring within 25' of a river, stream, or brook?

Stormwater Qualifications

X		Is the site in the watershed of a Great Pond or Impaired stream?
	X	Is the site in a lake watershed?
X		Is the site in a watershed most at risk?

Additional Comments:

FEMA flood zone FIRM:

Poland 23001C0316E, Effective July 08, 2013

Watershed:

HUC_8: 01040002	Lower Androscoggin River Watershed
HUC_10: 0104000209	Little Androscoggin River Watershed
HUC_12: 010400020910	Taylor Pond – Little Androscoggin River

PHOTOS

Characteristic Wetlands



Characteristic Wetlands



Characteristic Wetlands



Characteristic Uplands



ADDENDUM

1. NORTHERN LONG-EARED BAT

The United States Fish and Wildlife Service listed the Northern Long-Eared Bat (NLEB) (*Myotis septentrionalis*) as threatened with Interim 4(d) Rule. This listing affects development occurring within the range of the NLEB (www.fws.gov/midwest/endangered/mammals/nleb/nlebRangeMap.html) and within the White Nose Syndrome Buffer Zone (<http://www.fws.gov/midwest/nleb/WNSBuffer.pdf>) that could cause purposeful or incidental take (harm, kill or otherwise harass). This includes the clearing of trees where NLEB could be living, activity occurring within 0.25 miles of a known, occupied hibernacula, and activities occurring within a 150-foot radius from a maternity roosting tree during the pup rearing season from June 1 to July 31st. If your project requires such action a permit may be necessary.

2. SOILS

According to U.S. Department of Agriculture, Natural Resources Conservation Service, five soil types are located within the project area. Characteristics of each series are described in the soil report according to: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture, Official Soil Series Descriptions, <https://soilseries.sc.egov.usda.gov/osdname.aspx>.

ADAMS SERIES

The Adams series consists of very deep, excessively and somewhat excessively drained soils formed in glacial-fluvial or glacio-lacustrine sand. They are on outwash plains, deltas, lake plains, moraines, terraces, and eskers. Saturated hydraulic conductivity is high or very high. Slope ranges from 0 through 70 percent. Mean annual temperature is 6 degrees C. and mean annual precipitation is 970 millimeters.

TYPICAL PEDON: Adams loamy fine sand, on a 1 percent slope in a forested area. (Colors are for moist soil unless otherwise noted.)

GEOGRAPHIC SETTING: Adams soils are on nearly level to very steep sand plains, kames, moraines, benches, eskers, deltas, and terraces. Slope ranges from 0 through 70 percent. These soils formed in sandy glaciofluvial or glaciolacustrine deposits from predominantly crystalline rock or meta-sandstone. Mean annual temperature ranges from 3 to 8 degrees C., mean annual precipitation ranges from 760 to 1270 millimeters, and mean annual frost-free period ranges from 70 to 160 days. Elevation ranges from 80 to 915 meters above sea level.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Somewhat excessively drained. Runoff is very slow to medium. Saturated hydraulic conductivity is high or very high in the mineral

surface layer and upper part of the subsoil and very high in the lower part of the subsoil and substratum.

USE AND VEGETATION: Extensive areas are idle and support aspen, birch, and pine seedlings or sweet fern, spirea, and brambles. Uncleared areas support maple, beech, spruce, and pine. Farmed areas are used mainly for hay or pasture with limited acreages of corn and small grain.

HINCKLEY SERIES

The Hinckley series consists of very deep, excessively drained soils formed in glaciofluvial materials. They are nearly level through very steep soils on outwash terraces, outwash plains, outwash deltas, kames, kame terraces, and eskers. Saturated hydraulic conductivity is high or very high. Slope ranges from 0 to 60 percent. Mean annual temperature is about 7 degrees C, and mean annual precipitation is about 1143 mm.

TYPICAL PEDON: Hinckley loamy sand in woodland at an elevation of about 240 meters. (All colors are for moist soil.)

GEOGRAPHIC SETTING: Hinckley soils are nearly level through very steep soils on outwash terraces, outwash plains, outwash deltas, kames, kame terraces, and eskers. Slope is generally 0 through 8 percent on tops of the terraces, outwash plains and deltas. Slope of 8 through 60 percent or more are on the kames, eskers and margins of the outwash plains, deltas, and terraces. The soils formed in glaciofluvial sand and gravel derived principally from granite, gneiss, and schist. Mean annual temperature ranges from 7 to 13 degrees C, and mean annual precipitation ranges from 1016 to 1270 mm. Length of the growing season ranges from 140 through 240 days.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Excessively drained. Surface runoff is negligible through low. Saturated hydraulic conductivity is high or very high.

USE AND VEGETATION: Cleared areas are used for hay, pasture, and silage corn. In the southern Connecticut River Valley, Hinckley soils are used for growing tobacco and truck crops and in eastern Massachusetts, truck crops. Most areas are forested, brush land or used as urban land. Northern red, black, white, scarlet and scrub oak, eastern white and pitch pine, eastern hemlock, and gray birch are the common trees. Unimproved pasture and idle land support hardhack, little bluestem, bracken fern, sweet fern, and low bush blueberry.

NINIGRET SERIES

The Ninigret series consists of very deep, moderately well drained soils formed in loamy over sandy and gravelly glacial outwash. They are nearly level to strongly sloping soils on glaciofluvial landforms, typically in slight depressions and broad drainage ways. Slope ranges from 0 through 15 percent. Saturated hydraulic conductivity is moderately high or high in the solum and high or very high in the substratum. Mean annual temperature is about 49 degrees F. and mean annual precipitation is about 48 inches.

TYPICAL PEDON: Ninigret fine sandy loam - idle field, 2 percent slope. (Colors are for moist soil unless otherwise noted.)

GEOGRAPHIC SETTING: Ninigret soils are nearly level to strongly sloping soils on glaciofluvial landforms. Slopes range from 0 through 15 percent, but commonly are 0 through 8 percent. The soils formed in loamy over stratified sandy and gravelly glacial outwash derived from a variety of acid rocks. Mean annual temperature ranges from 45 through 52 degrees F., mean annual precipitation ranges from 35 through 50 inches, and the growing season ranges from 120 through 195 days.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Moderately well drained. Surface runoff is negligible to medium. Saturated hydraulic conductivity is moderately high or high in the solum and high or very high in the substratum. The soil has a seasonal high water table.

USE AND VEGETATION: Much of the acreage is used for cultivated crops, hay, or pasture. Common crops are silage corn, vegetables, tobacco, and nursery stock. Some areas are idle, wooded, or used for community development. Common trees are red, white and black oak, red maple, sugar maple, white pine, gray birch, white ash, and hemlock.

CHARLTON SERIES

The Charlton series consists of very deep, well drained soils formed in loamy melt-out till. They are nearly level to very steep soils on moraines, hills, and ridges. Slope ranges from 0 to 60 percent. Saturated hydraulic conductivity is moderately high or high. Mean annual temperature is about 9 degrees C and mean annual precipitation is about 1205 mm.

TYPICAL PEDON: Charlton fine sandy loam - forested, very stony, at an elevation of about 170 meters. (Colors are for moist soil unless otherwise noted.)

GEOGRAPHIC SETTING: Charlton soils are nearly level to very steep soils on moraines and glaciated upland hills and ridges. Slope ranges from 0 to 60 percent. The soils formed in acid melt-out till derived mainly from schist, gneiss, or granite. Mean annual temperature ranges from 7 to 11 degrees C and mean annual precipitation commonly ranges from 940 to 1245 cm, but the range includes as low as 660 cm in some places east of the Adirondack Mountains in the Champlain Valley of New York. The growing season ranges from 115 to 185 days.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Well drained. Runoff is negligible to medium. Saturated hydraulic conductivity is moderately high or high in the mineral soil.

USE AND VEGETATION: Areas cleared of stones are used for cultivated crops, specialty crops, hay, and pasture. Many scattered areas are used for community development. Stony areas are mostly wooded. Common trees are northern red, white, and black oak, hickory, sugar maple, red maple, black and gray birch, white ash, beech, white pine, and hemlock.

MERRIMAC SERIES

The Merrimac series consists of very deep, somewhat excessively drained soils formed in outwash. They are nearly level through very steep soils on outwash terraces and plains and other glaciofluvial landforms. Slope ranges from 0 through 35 percent. Saturated hydraulic conductivity is high or very high. Mean annual temperature is about 48 degrees F. (9 degrees C.) and mean annual precipitation is about 42 inches (1067 millimeters).

TYPICAL PEDON: Merrimac fine sandy loam cultivated, at an elevation of about 122 meters. (Colors are for moist soil.)

GEOGRAPHIC SETTING: Merrimac soils are level to very steep soils on outwash plains and valley trains, and associated kames, eskers, stream terraces and water deposited parts of moraines. The steeper slopes are on the margin escarpments of terraces and plains, and on eskers and kames. Slope ranges from 0 through 35 percent. The soils formed in water sorted gravelly and sandy material derived mainly from granitic, gneissic, and some schistose rocks. Mean annual precipitation ranges from 28 through 55 inches (711 through 1397 millimeters); mean annual air temperature ranges from 45 through 50 degrees F. (7 through 10 degrees C.), mean growing season ranges from 120 through 200 days.

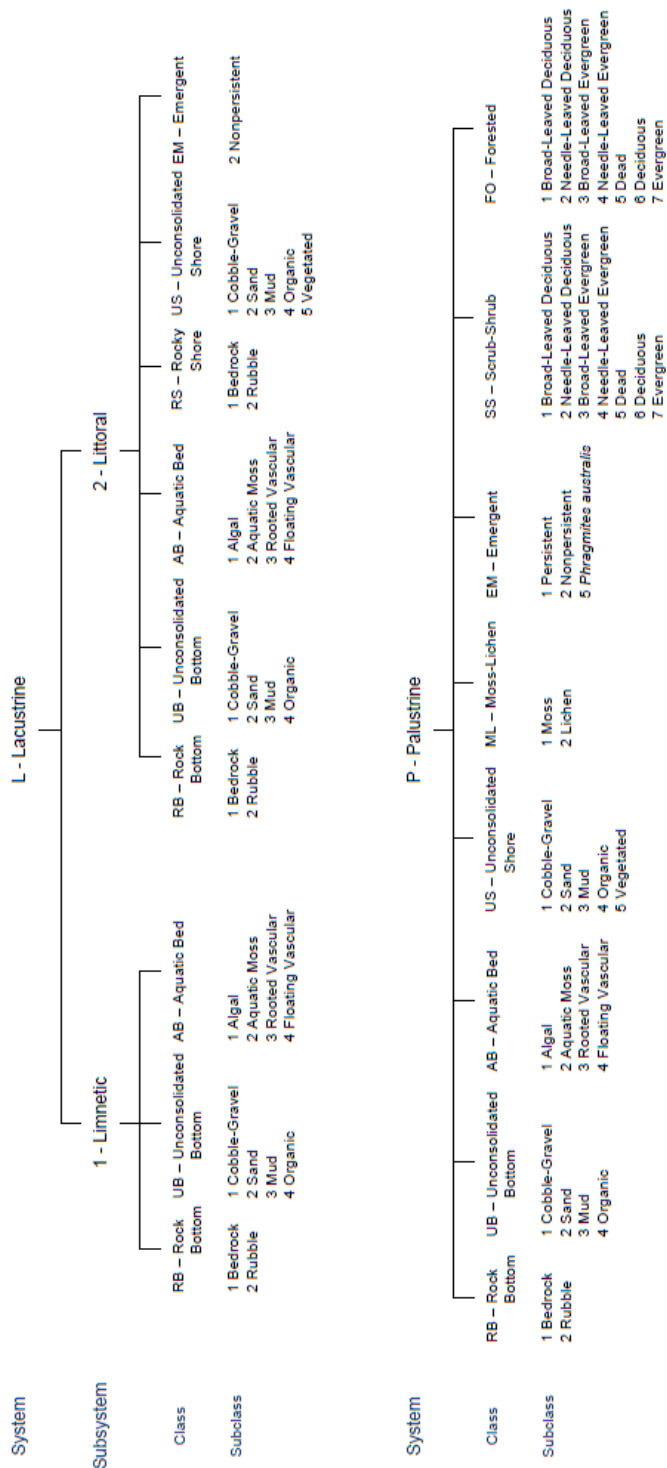
DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Somewhat excessively drained. Runoff is negligible through medium. Saturated hydraulic conductivity is high or very high.

USE AND VEGETATION: Most areas are cultivated and used for growing hay, pasture, silage, corn, or truck crops. Some areas are used to grow tobacco in the Connecticut River Valley in Massachusetts and Connecticut. Some areas are forested with mostly white pine, gray birch, hemlock, red maple, and red, black, white, and scarlet oaks.

US Fish and Wildlife Service, <http://www.fws.gov/wetlands/Documents/Wetlands-and-Deepwater-Habitats-Classification-chart.pdf>



WETLANDS AND DEEPWATER HABITATS CLASSIFICATION



MODIFIERS			
In order to more adequately describe the wetland and deepwater habitats, one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The famed modifier may also be applied to the ecological system.			
Water Regime		Water Chemistry	
Nontidal	Freshwater Tidal	Coastal Halinity	Inland Salinity
A Temporarily Flooded	L Subtidal	1 Hyperhaline	7 Hypersaline
B Saturated	M Irregularly Exposed	2 Euhaline	8 Eusaline
C Seasonally Flooded	N Regularly Flooded	3 Mixohaline (Brackish)	9 Mixohaline
E Seasonally Flooded/ Saturated	P Irregularly Flooded	4 Polyhaline	0 Fresh
F Semipermanently Flooded		5 Mesohaline	
G Intermittently Exposed		6 Oligohaline	
H Permanently Flooded		0 Fresh	
J Intermittently Flooded			
K Artificially Flooded			
Special Modifiers		pH Modifiers for all Fresh Water	
b Beaver			g Organic
d Partly Drained/Ditched			n Mineral
f Farmed			
h Diked/Impounded			
r Artificial			
s Spoil			
x Excavated			

4. WETLAND RULES AND INFORMATION

A. WETLANDS OF SPECIAL SIGNIFICANCE

All coastal wetlands and great ponds are considered wetlands of special significance. In addition, certain freshwater wetlands are considered wetlands of special significance.

A. Freshwater Wetlands of Special Significance. A freshwater wetland of special significance has one or more of the following characteristics.

- (1) Critically imperiled or imperiled community. The freshwater wetland contains a natural community that is critically imperiled (S1) or imperiled (S2) as defined by the Natural Areas Program.
- (2) Significant wildlife habitat. The freshwater wetland contains significant wildlife habitat as defined by 38 M.R.S.A. § 480-B (10).
- (3) Location near coastal wetland. The freshwater wetland area is located within 250 feet of a coastal wetland.
- (4) Location near GPA great pond. The freshwater wetland area is located within 250 feet of the normal high water line, and within the same watershed, of any lake or pond classified as GPA under 38 M.R.S.A. § 465-A.
- (5) Aquatic vegetation, emergent marsh vegetation or open water. The freshwater wetland contains, under normal circumstances, at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water.
- (6) Wetlands subject to flooding. The freshwater wetland area is inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency or other site-specific information.
- (7) Peatlands. The freshwater wetland is or contains peatlands, except that the department may determine that a previously mined peatland, or portion thereof, is not a wetland of special significance.
- (8) River, stream or brook. The freshwater wetland area is located within 25 feet of a river, stream or brook.

B. Permit Process. Alterations of wetlands of special significance usually require an individual permit. However, some alterations of freshwater wetlands of special significance may be eligible for Tier 1 or 2 review if the department determines, at the applicant's request, that the activity will not negatively affect the freshwater wetlands or other protected natural resources present. In making this determination, the department considers such factors as the size of the alteration, functions of the impacted area, existing development or character of the area in and around the alteration site, elevation differences and hydrological connection to surface water or other protected natural resources, among other things.

C. Seasonal Factors. When determining the significance of a resource or impact from an activity, seasonal factors and events that temporarily reduce the numbers or visibility of

plants or animals, or obscure the topography and characteristics of a wetland such as a period of high water, snow and ice cover, erosion event, or drought, are taken into account. Determinations may be deferred for an amount of time necessary to allow an assessment of the resource without such seasonal factors.

B. STREAM CHANNELS

According to Maine's Natural Resource Protection Act, Title 38, Article 5-A, Protection of Natural Resources, §480-B Definitions:

"River, stream or brook" means a channel between defined banks. A channel is created by the action of surface water and has two or more of the following characteristics:

- (1) It is depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map or, if that is not available, a 15-minute series topographic map.
- (2) It contains or is known to contain flowing water continuously for a period of at least 6 months of the year in most years.
- (3) The channel bed is primarily composed of mineral material such as sand and gravel, parent material or bedrock that has been deposited or scoured by water.
- (4) The channel contains aquatic animals such as fish, aquatic insects or mollusks in the water or, if no surface water is present, within the stream bed.
- (5) The channel contains aquatic vegetation and is essentially devoid of upland vegetation.

"River, stream or brook" does not mean a ditch or other drainage way constructed, or constructed and maintained, solely for the purpose of draining storm water or a grassy swale.

C. VERNAL POOLS

As defined by Maine's Department of Environmental Protection (MDEP): A vernal pool, also referred to as a seasonal forest pool, is a natural, temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubrachipus spp.*), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition.

As of September 1, 2007, "Significant Vernal Pools" are defined by MDEP as "Significant Wildlife Habitat." As read in MDEP's Chapter 335 -- Significant Wildlife Habitat Rules, "Whether a vernal pool is a significant vernal pool is determined by the number and type of pool-breeding amphibian egg masses in a pool, or the presence of fairy shrimp, or use by threatened or endangered species as specified in Section 9(B). Significant vernal pool habitat consists of a vernal pool depression and a portion of the critical terrestrial habitat within a 250-foot radius of the spring or fall high water mark of the depression. An activity that takes place in, on, over, or adjacent to a significant vernal pool habitat must meet the standards of this chapter."

Species and abundance criteria required for Significant Vernal Pools.

Species	Abundance Criteria
Fairy shrimp	Presence in any life stage.
Blue spotted salamanders	Presence of 10 or more egg masses.
Spotted salamanders	Presence of 20 or more egg masses.
Wood frogs	Presence of 40 or more egg masses.

MDEP habitat management standards for significant vernal pools: To the greatest extent practicable, the following management practices must be followed within significant vernal pool habitat.

- (1) No disturbance within the vernal pool depression;
- (2) Maintain a minimum of 75% of the critical terrestrial habitat as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris.
- (3) Maintain or restore forest corridors connecting wetlands and significant vernal pools;
- (4) Minimize forest floor disturbance; and
- (5) Maintain native understory vegetation and downed woody debris.

If more than 25% of the critical terrestrial habitat has been previously developed, restoring a portion of that area through supplemental planting or regrowth of native forest species may be considered toward meeting these standards, or towards standards for avoidance, minimization, or compensation. For purposes of Chapter 355, developed area includes disturbed areas excluding

areas that are returned to a condition with the same drainage patterns and the same or improved cover type that existed prior to the disturbance;

Currently, Army Corps of Engineers (ACOE) regulate vernal pools but do not have specific characteristics that define a vernal pool, or a definition of which vernal pools require protection or buffering. They review each site on a case by case basis. ACOE's jurisdiction does not begin until the waters of the United States are impacted.

D. MDEP NRPA - PERMIT BY RULE

A "permit by rule" or "PBR", when approved by MDEP, is an approval for an activity that requires a permit under the Natural Resources Protection Act (NRPA). Only those activities described in Chapter 305 may proceed under the PBR process. A PBR activity will not significantly affect the environment if carried out in accordance with this chapter, and generally has less of an impact on the environment than an activity requiring an individual permit. A PBR satisfies the NRPA permit requirement and Water Quality Certification requirement. The following projects may be eligible as PBR activities:

Section (2) Activity Adjacent to Protected Natural Resource

(An activity adjacent to (any land area within 75 feet, measured horizontally, of the normal high water line), but not in: a coastal wetland, great pond, river, stream or brook or significant wildlife habitat contained within a freshwater wetland; or freshwater wetlands consisting of or containing: under normal circumstances, at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, except for artificial ponds or impoundments; or peatlands dominated by shrubs, sedges and sphagnum moss.

Section (3) Placement of permanent intake pipes and water monitoring devices (including drilled wells)

Section (4) Replacement of Structures

Section (6) Movement of Rocks or Vegetation

Section (7) Placement of outfall pipes (including ditches and drain tiles)

Section (8) Shoreline stabilization using vegetation or riprap

Section (9) Construction of crossings (utility lines, pipes and cables)

Section (10) Construction of stream crossings (bridges, culverts and fords)

Section (11) State Transportation Facilities

Section (12) Restoration of natural areas (i.e., "undoing" human alteration)

Section (13) Fisheries & wildlife habitat creation or enhancement and water quality improvement projects

Section (15) Public Boat Ramps

Section (16) Selected activities in coastal sand dunes

Section (17) Transfers and Permit Extensions

Section (18) One-time renewals of maintenance dredging permits

Section (19) Activities in/on/over significant vernal pool habitat

Section (20) Activities located in/on/over high or moderate value inland waterfowl & wading bird habitat or shorebird nesting, feeding & roosting areas

E. MDEP NRPA - TIER REVIEW PROCESS

NRPA's Tier Review process constitutes an application to the Maine Department of Environmental Protection (MDEP) for a proposed alteration to a freshwater wetland that qualifies for Tier 1, 2 or 3 review. The square footage of impact is based on the alteration or impact of the whole activity in the wetland. If any part of the overall activity requires a higher tier review, then the whole activity will be reviewed under that higher tier.

The Tier Review process is required for impacts larger than 4,300 square feet, and for requesting a permit for activities in, on, or over a protected natural resource. It is also used for activities adjacent to certain protected natural resources (38 MRSA 480-C(1)). The Tier Review process is required when the activity is not eligible for a PBR.

According to 38 M.R.S.A. Section 480-X(2), an application for a permit to undertake activities altering freshwater wetlands must be reviewed in accordance with the following:

- (1) A Tier 1 review process applies to any activity that involves a freshwater wetland alteration up to 15,000 square feet and does not involve the alteration of freshwater wetlands listed in 38 M.R.S.A. Section 480-X(4);
- (2) A Tier 2 review process applies to any activity that involves a freshwater wetland alteration of 15,000 square feet up to one acre and does not involve the alteration of freshwater wetlands listed in 38 M.R.S.A. Section 480-X (4 or 5);
- (3) A Tier 3 review process applies to any activity that does involve a freshwater wetland alteration greater than one acre, or an alteration of a freshwater wetland listed in 38 M.R.S.A. Section 480-X (4 or 5).

According to 38 M.R.S.A. Section 480-X(4), the following activities are not eligible for Tier 1 or Tier 2 review unless MDEP determines that the activity will not negatively affect the freshwater wetlands and other protected natural resources present.

- (1) Activities located within 250 feet of a coastal wetland;
- (2) Activities located within 250 feet of the normal high-water line, and within the same watershed, of any lake or pond classified as GPA under section 465-A;
- (3) Activities occurring in freshwater wetlands, other than artificial ponds or impoundments, containing under normal circumstances at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water;
- (4) Activities occurring in freshwater wetlands that are inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency or other site-specific information;
- (5) Activities occurring in freshwater wetlands containing significant wildlife habitat that has been mapped, identified or defined, as required pursuant to section 480-B(10), at the time of the filing by the applicant;

- (6) Activities occurring in peatlands dominated by shrubs, sedges and sphagnum moss, except that applications proposing work in previously mined peatlands may be considered by the department for Tier 1 or Tier 2 review, as applicable;
- (7) Activities occurring within 25 feet of a river, stream or brook.

According to 38 M.R.S.A. Section 480-X(5), an activity in freshwater wetlands containing a natural community that is imperiled (S2) or critically imperiled (S1), as defined by the Natural Areas Program pursuant to Title 12, Section 544 is not eligible for Tier 2 review unless the department determines that the activity will not negatively affect the freshwater wetlands and other protected natural resources present.

NRPA General Requirements for both the Tier 1 and Tier 2 review process require that the proposed freshwater wetland alteration must be avoided, if feasible, after considering cost, logistics, technology and the overall purpose of the project. However, if unavoidable, the alteration must be limited to the minimum amount necessary to complete the project. The project must utilize both temporary and permanent erosion control measures to prevent sedimentation of any protected natural resource. In addition, the alteration site must maintain an undisturbed 25 foot buffer strip between the activity and any river, stream or brook and must not violate any state water quality law, including those governing the classification of the State's waters.

F. U.S. ARMY CORPS OF ENGINEERS REVIEW PROCESS

The New England District of the U.S. Army Corps of Engineers (ACOE) requires authorization regardless of the amount of proposed alterations to freshwater wetlands. The New England District of ACOE issues 23 General Permits (GPs), for activities subject to ACOE jurisdiction in waters of the United States within the boundaries of the State of Maine including tribal lands, and in adjacent ocean waters to the seaward limit of the outer continental shelf. These GPs are issued in accordance with ACOE regulations at 33 CFR 320 – 332 and specifically 33 CFR 325.2(e)(2).

Permits are required from the ACOE for the following work:

- A. The construction of any structure in, over, or under any navigable water of the U.S. (see 33 CFR 328), the excavating or dredging from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters. The ACOE regulates these activities under Section 10 of the Rivers and Harbors Act of 1899 (see 33 CFR 322);
- B. The discharge of dredged or fill material and certain discharges associated with excavation into waters of the U.S. including wetlands. The ACOE regulates these activities under Section 404 of the Clean Water Act (see 33 CFR 323); and
- C. The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates these activities under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (see 33 CFR 324).

In order for activities to qualify for these General Permits (GPs), they shall meet the GPs terms and eligibility criteria within pages 1-4 of the Department of the Army General Permits for the State of Maine, all applicable general conditions (GCs) in Section IV of the Department of the Army General Permits for the State of Maine, and terms of the Maine General Permits in Section V of the Department of the Army General Permits for the State of Maine. Any activity not specifically listed may still be eligible for authorization under these GPs; prospective permittees are advised to contact the ACOE for specific eligibility determination.

Under these GPs, activities may qualify for the following:

- Self-Verification (SV): Prospective permittees shall confirm that the activity meets all the applicable terms and conditions of SV. Consultation with the ACOE and/or other relevant federal and state agencies may be necessary to ensure compliance with the applicable general conditions (GCs) and related federal laws such as the National Historic Preservation Act (GC 15), the Endangered Species Act (GC 16), the Magnuson-Stevens Fishery Conservation and Management Act (GC 17), and the Wild and Scenic Rivers Act (GC 13). Activities that are eligible for SV are authorized under these GPs provided the prospective permittee has:
 - i. Confirmed that the activity meets all applicable terms and conditions of SV.
 - ii. Provided notifications to the State Historic Preservation Officer (SHPO) (the SHPO in the State of Maine is the Maine Historic Preservation Commission, or MHPC) and all

- five federally-recognized tribes in the State of Maine (Tribal Historic Preservation Officers, or THPOs) listed in Section VIII before submitting the SV to the ACOE in order to be reviewed for the presence of historic, archeological, architectural, or tribal resources in the action area that the activity may affect (see GC 15). Prospective permittees are not required to wait for a response to their notifications before submitting the SV to the ACOE.
- iii. At least two weeks before work is to commence, submitted to the ACOE a Self-Verification Notification Form (SVNF, page 36) with all of the following attachments: location map, project plans, and an Official Species List of federally threatened and endangered species that may occur in the activity's action area and the email address of the person who generated the list (see GC 16).

NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF itself; however, the applicant shall not rely on the state permitting agency to provide the Corps a copy of their state permit application.

- **Pre-Construction Notification (PCN):** Notification to, and written verification from the ACOE is required. For activities that do not qualify for SV or where otherwise required by the terms and conditions of the GPs, the prospective permittee shall submit a PCN and obtain written verification from the ACOE before starting work in Corps jurisdiction. The ACOE will coordinate review of all PCN activities with other federal and state agencies, as appropriate. The ACOE will attempt to issue written verification of the PCN within 60 days of receiving a complete application.

All prospective permittees for PCN activities shall follow the instructions on found on pages 37 – 42, and in particular:

- Submit directly to the ACOE application form *ENG Form 4345* (pages 40 – 42), or the surrogate state permit application form as noted above.
- Provide project information outlined on pages 37 – 42 (Content of a Pre-Construction Notification).
- Submit an Official Species List of federally threatened and endangered species that may occur in the activity's action area and the email address of the person who generated the list (GC 16).
- Provide notifications to the SHPO (MHPC) and all five THPOs in the State of Maine listed in Section VIII before submitting the PCN to the ACOE in order to be reviewed for the presence of historic, archeological, architectural, or tribal resources in the action area that the activity may affect (see GC 15). The PCN shall include documentation that MHPC and all of the THPOs were notified (a copy of the prospective permittee's cover letter or emails to MHPC and the THPOs is acceptable). Prospective permittees are not required to wait for a response to their notifications before submitting a PCN to the ACOE.

Projects that are not eligible to GPs require an Individual Permit.

- Individual Permit (IP): Prospective permittees shall submit an application directly to the ACOE. These GPs do not affect the ACOE IP review process or activities exempt from ACOE regulation. For general information regarding IPs prospective permittees are encouraged to contact the ACOE.

In addition, the ACOE retains discretionary authority on a case-by-case basis to elevate GP-eligible activities to an IP based on concerns for the aquatic environment or for any other factor of the public interest (33 CFR 320.4(a)). Whenever the ACOE notifies a prospective permittee that an IP is required, no work in ACOE jurisdiction may be conducted until the ACOE issues the required authorization in writing indicating that the work may proceed

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- United States Fish and Wildlife Service, National Wetlands inventory: www.fws.gov/wetlands/
- United States Army Corps of Engineers, New England District:
www.nae.usace.army.mil/Missions/Regulatory.aspx
- United States Natural Resources Conservation Service, United States Department of Agriculture, Official Soil Series Descriptions: soils.usda.gov/technical/classification/osd/index.html.

ATTACHMENTS:

- **NRCS CUSTOM SOIL RESOURCE REPORT**
- **WETLAND DELINEATION DATASHEETS**
- **WETLAND DELINEATION PLAN**



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 **Androscoggin and Sagadahoc Counties, Maine**



September 2, 2022

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.

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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

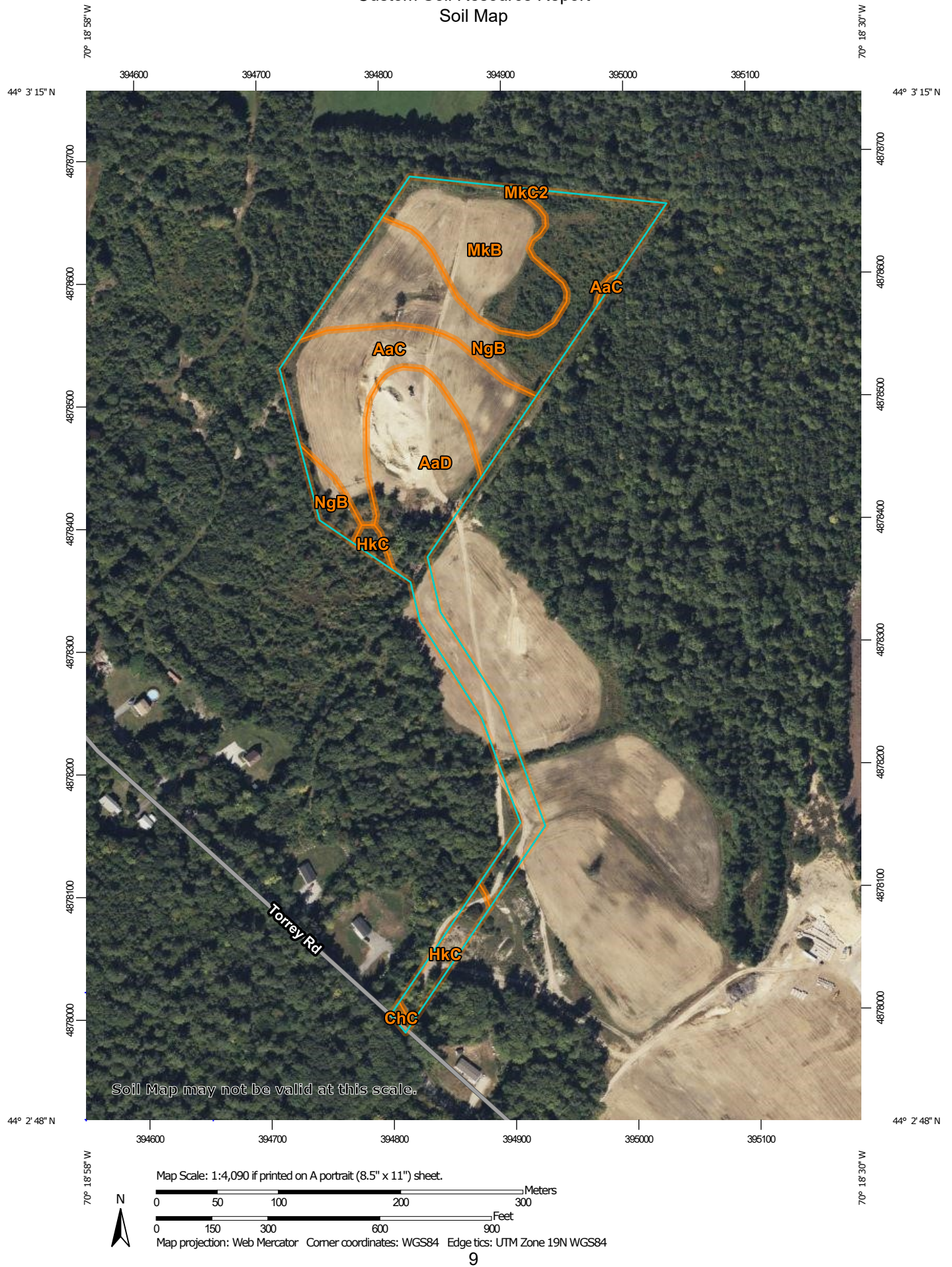
Custom Soil Resource Report

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



Custom Soil Resource Report

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 1:15,800.

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: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 22, Aug 30, 2021

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

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 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
AaC	Adams loamy sand, 8 to 15 percent slopes	3.5	22.3%
AaD	Adams loamy sand, 15 to 30 percent slopes	4.1	25.8%
ChC	Charlton very stony fine sandy loam, 8 to 15 percent slopes	0.0	0.3%
HkC	Hinckley gravelly sandy loam, 8 to 15 percent slopes	0.7	4.2%
MkB	Merrimac fine sandy loam, 0 to 8 percent slopes	2.8	17.5%
MkC2	Merrimac fine sandy loam, 8 to 15 percent slopes, eroded	0.0	0.1%
NgB	Ninigret fine sandy loam, 0 to 8 percent slopes	4.7	29.8%
Totals for Area of Interest		15.9	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.

Androscoggin and Sagadahoc Counties, Maine

AaC—Adams loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2wqn8

Elevation: 10 to 2,000 feet

Mean annual precipitation: 31 to 95 inches

Mean annual air temperature: 27 to 52 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Adams and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adams

Setting

Landform: Outwash terraces

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: loamy sand

Bs - 7 to 21 inches: sand

BC - 21 to 27 inches: sand

C - 27 to 65 inches: sand

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively 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: 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 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: F144BY601ME - Dry Sand

Hydric soil rating: No

AaD—Adams loamy sand, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: 9kcf
Elevation: 300 to 2,200 feet
Mean annual precipitation: 30 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Adams and similar soils: 86 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adams

Setting

Landform: Outwash terraces
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial deposits derived from crystallin rock

Typical profile

H1 - 0 to 4 inches: loamy sand
H2 - 4 to 24 inches: loamy sand
H3 - 24 to 40 inches: fine sand

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 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: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

ChC—Charlton very stony fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9kcy
Elevation: 50 to 3,500 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 100 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Charlton and similar soils: 86 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Till plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Coarse-loamy supraglacial meltout till derived from mica schist

Typical profile

H1 - 0 to 7 inches: fine sandy loam
H2 - 7 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 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: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

HkC—Hinckley gravelly sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9kdb

Elevation: 10 to 2,000 feet

Mean annual precipitation: 30 to 48 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Hinckley and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hinckley

Setting

Landform: Outwash terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy-skeletal glaciofluvial deposits derived from granite and gneiss

Typical profile

H1 - 0 to 4 inches: gravelly sandy loam

H2 - 4 to 20 inches: gravelly loamy sand

H3 - 20 to 44 inches: very cobbly sand

H4 - 44 to 65 inches: stratified very gravelly coarse sand

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 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: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: F144BY601ME - Dry Sand

Hydric soil rating: No

MkB—Merrimac fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9kdt
Elevation: 10 to 2,000 feet
Mean annual precipitation: 34 to 46 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 90 to 140 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Merrimac

Setting

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

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 22 inches: gravelly fine sandy loam
H3 - 22 to 28 inches: very gravelly loamy sand
H4 - 28 to 65 inches: stratified extremely gravelly coarse sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 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 5.2 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

MkC2—Merrimac fine sandy loam, 8 to 15 percent slopes, eroded

Map Unit Setting

National map unit symbol: 9kdv

Elevation: 10 to 2,000 feet

Mean annual precipitation: 34 to 46 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 140 days

Farmland classification: Not prime farmland

Map Unit Composition

Merrimac and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Merrimac

Setting

Landform: Outwash terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits derived from granite and gneiss

Typical profile

H1 - 0 to 5 inches: fine sandy loam

H2 - 5 to 18 inches: gravelly fine sandy loam

H3 - 18 to 24 inches: very gravelly loamy sand

H4 - 24 to 65 inches: stratified extremely gravelly coarse sand

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 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 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: A

Ecological site: F144BY601ME - Dry Sand

Hydric soil rating: No

NgB—Ninigret fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9kdx
Elevation: 20 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Ninigret

Setting

Landform: Outwash terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Coarse-loamy glaciofluvial deposits derived from slate

Typical profile

H1 - 0 to 8 inches: fine sandy loam
H2 - 8 to 28 inches: fine sandy loam
H3 - 28 to 65 inches: loamy fine sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F144BY505ME - Loamy over Sandy
Hydric soil rating: No

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Custom Soil Resource Report

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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ferland, Torrey Rd. City/County: Poland / Androscoggin Sampling Date: 05/31/2022
 Applicant/Owner: Peter Ferland State: ME Sampling Point: UPLA
 Investigator(s): DF Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex Slope (%): 2
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44°03'08.5737" Long: 70°18'42.3449" Datum: WGS 84
 Soil Map Unit Name: Androscoggin and Sagadahoc Counties NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: UPLA

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer rubrum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)																
2. <u>Quercus rubra</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Pinus strobus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>25</u>	=Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>210</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.82</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>55</u> (A)	<u>210</u> (B)	Prevalence Index = B/A = <u>3.82</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>45</u>	x 4 = <u>180</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>55</u> (A)	<u>210</u> (B)																			
Prevalence Index = B/A = <u>3.82</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Fagus grandifolia</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>15</u>	=Total Cover	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Maianthemum canadense</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>15</u>	=Total Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: UPLA

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ferland, Torrey Rd. City/County: Poland / Androscoggin Sampling Date: 05/31/2022
 Applicant/Owner: Peter Ferland State: ME Sampling Point: WETA
 Investigator(s): DF Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44°03'09.6447" Long: 70°18'42.0846" Datum: WGS 84
 Soil Map Unit Name: Androscoggin and Sagadahoc Counties NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: WETA

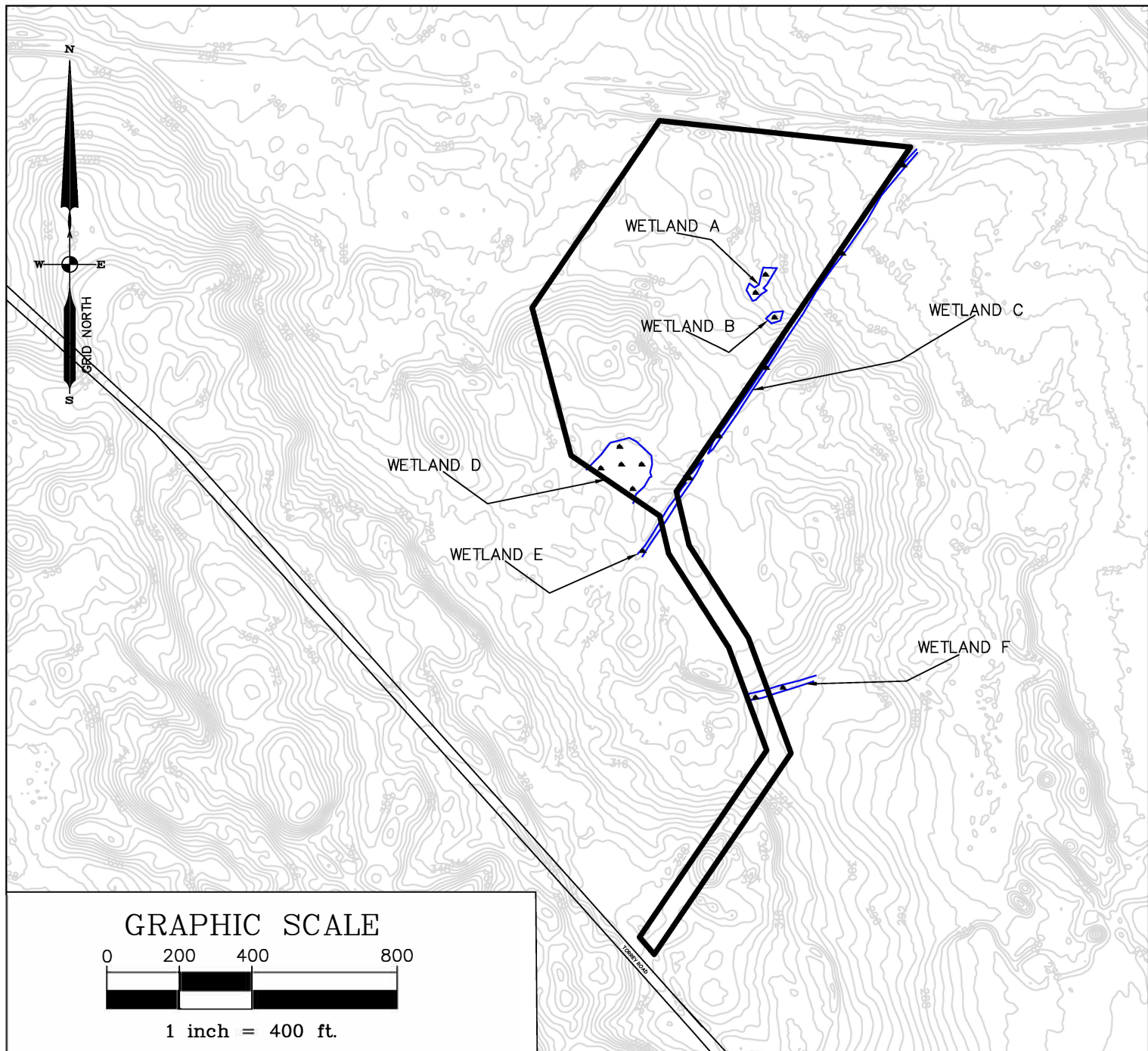
	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30'</u>)																				
1. <u>Betula alleghaniensis</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>25</u>	<u>=Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Alnus incana</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>70</u></td> <td>x 1 = <u>70</u></td> </tr> <tr> <td>FACW species <u>75</u></td> <td>x 2 = <u>150</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>170</u> (A)</td> <td><u>295</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.74</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>70</u>	x 1 = <u>70</u>	FACW species <u>75</u>	x 2 = <u>150</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>170</u> (A)	<u>295</u> (B)	Prevalence Index = B/A = <u>1.74</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>70</u>	x 1 = <u>70</u>																			
FACW species <u>75</u>	x 2 = <u>150</u>																			
FAC species <u>25</u>	x 3 = <u>75</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>170</u> (A)	<u>295</u> (B)																			
Prevalence Index = B/A = <u>1.74</u>																				
2. <u>Ilex verticillata</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>45</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Typha latifolia</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Scirpus pendulus</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Onoclea sensibilis</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>100</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

Remarks: (Include photo numbers here or on a separate sheet.)

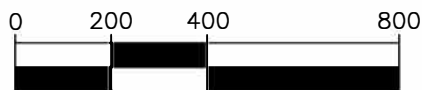
SOIL

Sampling Point: WETA

[illegible]

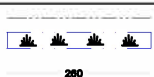


GRAPHIC SCALE



1 inch = 400 ft.

LEGEND



PROPERTY BOUNDARY (APPROX.)
DELINEATED WETLANDS
2 FT NOAA LIDAR CONTOURS

NOTES:

1. PARCEL BOUNDARY INFORMATION WAS DIGITIZED AND ROTATED INTO THE DRAWING APPROXIMATELY BASED ON TOWN OF POLAND TAX MAP INFORMATION.
2. DATUM: NAD83 STATE PLANE MAINE WEST (FEET).
3. 2 FOOT CONTOURS OBTAINED FROM NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA).
4. WETLAND BOUNDARIES WERE IDENTIFIED AND DELINEATED BY JONES ASSOCIATES INC IN JUNE OF 2022 ACCORDING TO U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987) AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION.
5. WETLAND FLAGS WERE LOCATED USING LEICA GLOBAL POSITIONING SYSTEM (GPS) TECHNOLOGY WITH EXPECTED AVERAGE ACCURACY OF SUB-METER. THIS METHOD IS RECOGNIZED BY BOTH STATE AND FEDERAL AGENCIES. HOWEVER, JONES ASSOCIATES INC RECOMMENDS THAT THE WETLAND BOUNDARY BE SURVEYED USING A MORE PRECISE METHOD IF ANY FILL OR REGULATED ACTIVITIES ARE TO BE PERFORMED WITHIN 20 FEET OF THE GPS LOCATED WETLAND.

PLAN TITLE:

WETLAND DELINEATION PLAN

TORREY ROAD
TAX MAP 0003-0009A
POLAND, MAINE 04274

PREPARED FOR:

PETER FERLAND
679 EMPIRE ROAD
POLAND, MAINE 04274

PREPARED BY:

**JONES
ASSOCIATES INC.**

Foresters, Surveyors And
Environmental Consultants



280 POLAND SPRING ROAD, AUBURN, MAINE 04210
(207) 241-0235

PLAN DATE:

OCTOBER 2022

FIELD WORK DATE:

JUNE 2022

SCALE: 1"=400'

PROJ. #: 22-033PO

POLAND LAND USE STANDARDS

1. BACK LOT STREET DESIGN STANDARDS:

DESCRIPTION	BACKLOT
MINIMUM R/W WIDTH	60'
MINIMUM PAVEMENT OR GRAVEL TRAVEL WIDTH	12'
MINIMUM SHOULDERS	2'
SIDEWALK	N/A
MAXIMUM GRADIENT	12.00%
MINIMUM RADIUS AT CENTERLINE	150
MINIMUM TANGENT BETWEEN REVERSE CURVES	N/A
PAVEMENT OR GRAVEL CROWN	1/2"/FT
ANGLE AT INTERSECTIONS (DEGREES)	75
MAXIMUM GRADIENT W/1 75' OF INTERSECTION	3.00%
MINIMUM CURB RADIUS AT INTERSECTIONS	15

2. BACK LOT HAMMERHEAD DESIGN STANDARDS:

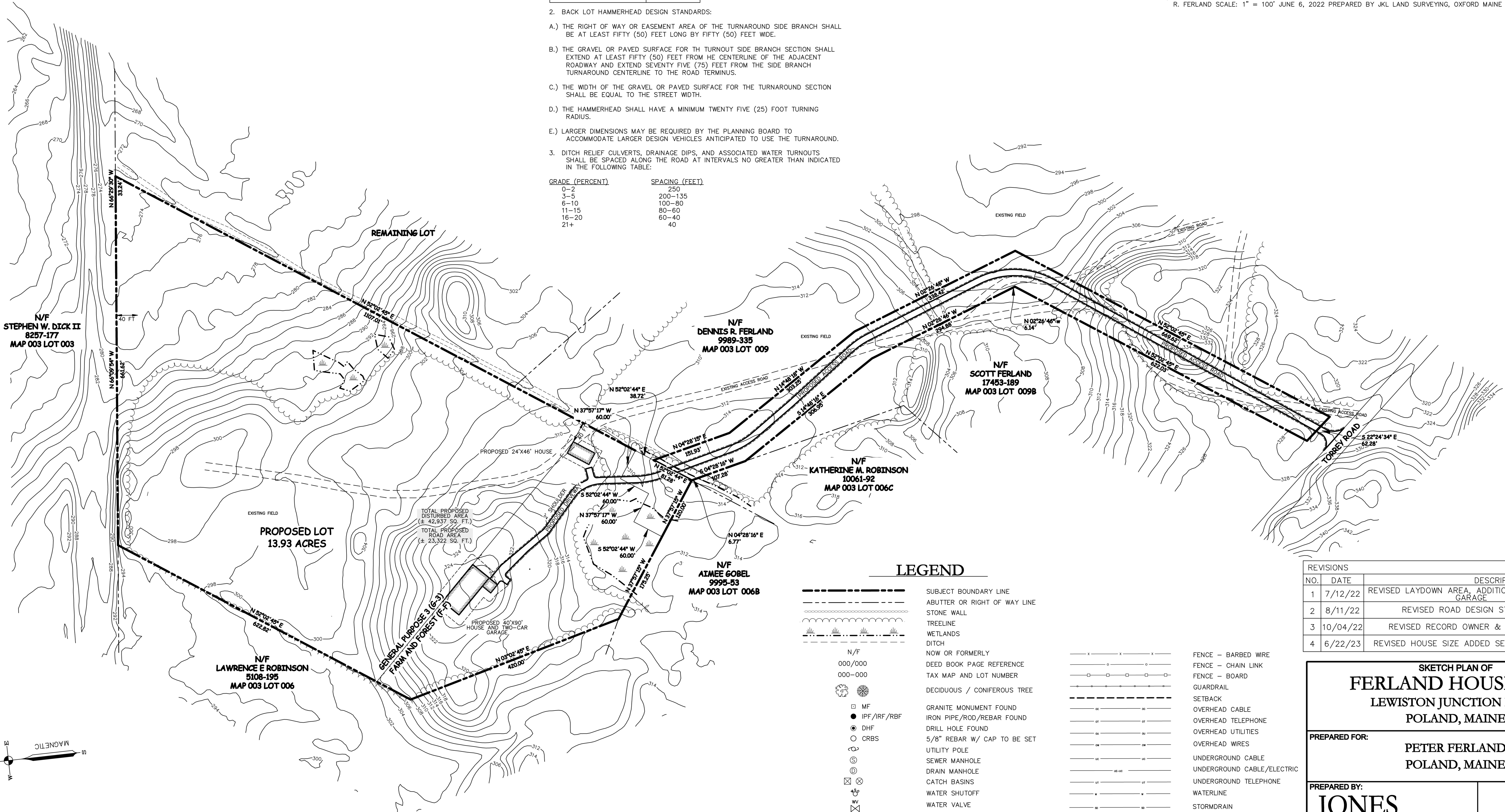
- A.) THE RIGHT OF WAY OR EASEMENT AREA OF THE TURNAROUND SIDE BRANCH SHALL BE AT LEAST FIFTY (50) FEET LONG BY FIFTY (50) FEET WIDE.
- B.) THE GRAVEL OR PAVED SURFACE FOR TH TURNOUT SIDE BRANCH SECTION SHALL EXTEND AT LEAST FIFTY (50) FEET FROM HE CENTERLINE OF THE ADJACENT ROADWAY AND EXTEND SEVENTY FIVE (75) FEET FROM THE SIDE BRANCH TURNAROUND CENTERLINE TO THE ROAD TERMINUS.
- C.) THE WIDTH OF THE GRAVEL OR PAVED SURFACE FOR THE TURNAROUND SECTION SHALL BE EQUAL TO THE STREET WIDTH.
- D.) THE HAMMERHEAD SHALL HAVE A MINIMUM TWENTY FIVE (25) FOOT TURNING RADIUS.
- E.) LARGER DIMENSIONS MAY BE REQUIRED BY THE PLANNING BOARD TO ACCOMMODATE LARGER DESIGN VEHICLES ANTICIPATED TO USE THE TURNAROUND.
3. DITCH RELIEF CULVERTS, DRAINAGE DIPS, AND ASSOCIATED WATER TURNOUTS SHALL BE SPACED ALONG THE ROAD AT INTERVALS NO GREATER THAN INDICATED IN THE FOLLOWING TABLE:

GRADE (PERCENT)	SPACING (FEET)
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-40
21+	40

NOTES:

- RECORD OWNER: DENNIS R. FERLAND
- PARCEL DEED REFERENCE: SEE DEED FROM LAWRENCE E. & DONNA M. ROBINSON TO DENNIS R. FERLAND DATED 07-20-2016, RECORDED AT THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS IN BOOK 9418, PAGE 330.
- ALL BOOK AND PAGE REFERENCES REFER TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS.
- PARCEL TAX MAP REFERENCE: TOWN OF POLAND, MAINE MAP 0003, LOT 0009A
- TOTAL AREA OF PROPOSED PARCEL 606,873 SQUARE FEET OR 13.93 ACRES.
- LIDAR CONTOURS OBTAINED FROM NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA).
- WETLAND BOUNDARIES WERE IDENTIFIED AND DELINEATED BY JONES ASSOCIATES INC IN JUNE OF 2022 ACCORDING TO U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987) AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION.
- WETLAND FLAGS WERE LOCATED USING LEICA GLOBAL POSITIONING SYSTEM (GPS) TECHNOLOGY WITH EXPECTED AVERAGE ACCURACY OF SUB-METER. THIS METHOD IS RECOGNIZED BY BOTH STATE AND FEDERAL AGENCIES. HOWEVER, JONES ASSOCIATES INC RECOMMENDS THAT THE WETLAND BOUNDARY BE SURVEYED USING A MORE PRECISE METHOD IF ANY FILL OR REGULATED ACTIVITIES ARE TO BE PERFORMED WITHIN 20 FEET OF THE GPS LOCATED WETLAND.
- EXISTING ROADS AND TREELINES ARE TRACED FROM AERIAL IMAGERY.
- PROJECT AREA FALLS WITHIN THE LITTLE ANDROSCOGGIN AND ROYAL RIVER WATERSHEDS.
- IF DISTURBED AREA IS GREATER THAN 1 ACRE A STORMWATER PBR THROUGH MDEP WILL BE REQUIRED.
- THIS IS NOT A SURVEY, PARCEL BOUNDARIES BASED ON PLAN REFERENCE A.
- PLAN REFERENCES:

A.) PARTIAL PERIMETER BOUNDARY SURVEY - PLAN OF PROPERTY TORREY ROAD - POLAND, MAINE MADE FOR DENNIS R. FERLAND SCALE: 1" = 100' JUNE 6, 2022 PREPARED BY JKL LAND SURVEYING, OXFORD MAINE



REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	7/12/22	REVISED LAYDOWN AREA, ADDITION OF HOUSE AND GARAGE	JR
2	8/11/22	REVISED ROAD DESIGN STANDARDS	EJ
3	10/04/22	REVISED RECORD OWNER & ROAD NAME	JD
4	6/22/23	REVISED HOUSE SIZE ADDED SECOND DWELLING	EJ

SKETCH PLAN OF

FERLAND HOUSE LOT

LEWISTON JUNCTION ROAD

POLAND, MAINE

PREPARED FOR:

PETER FERLAND

POLAND, MAINE

PREPARED BY:

JONES ASSOCIATES INC.

Foresters, Surveyors And Environmental Consultants

280 POLAND SPRING ROAD, AUBURN, MAINE 04210
(207) 241-0235

PLAN DATE:

SEPTEMBER 12, 2022

SCALE: 1"=100'

PROJ. #: 22-033



Planning Board Office

1231 Maine Street,
Poland, Maine 04274-7328

Findings of Fact & Conclusion of Law

Date: September 12, 2023

Application Type: Formal Shoreland Zoning Application

Owners Name: Gregory N. and Karen E. Henderson, Trustees of the Henderson Living Trust
(15 Valentine Apt #2 Cambridge, MA 02139)

Located at: 155 Loon Point Lane

Parcel ID: 0047-0007

Zoning Districts: Farm and Forest and Limited Residential.

Project Description:

On September 12, 2023, Gregory and Karen Henderson submitted a Formal Shoreland Zoning Application to remove an existing 303.81 sq. ft. deck and stairs and replace it with a new 293.97 sq. ft. deck and stairs with a screen room underneath the deck. The existing front porch will also be replaced with a new 32' x 4' wide open porch. The existing impervious coverage of 19.2% will be reduced to 19.1%.

303.2.G. In addition to the standards contained elsewhere in Comprehensive Land Use Code (CLUC), the Planning Board shall consider the following in the Shoreland Area as defined:

1. Will maintain safe and healthful conditions

The proposed building will not interfere with the general health or safety of any neighbors. Based on this information the Planning Board (Board) finds that this criterion will be met.

2. Will not result in water pollution, erosion, or sedimentation to surface waters

Based on the plan submitted the Board finds that the issues of water pollution, erosion, or sedimentation to surface waters have been properly addressed. Based on this information the Board finds that this criterion will be met.

3. Will adequately provide for disposal of all wastewater

There is an existing subsurface waste system and there are no new bedrooms proposed. Based on this information the Board finds that this criterion will be met.

4. Will not have an adverse impact on spawning grounds, fish, aquatic life, birds, or other wildlife habitat

The structure is located completely on land and will not have an impact on the spawning grounds, fish, aquatic life, birds, or other wildlife habitat. Based on this information the Board finds this criterion will be met.

5. Will conserve shore cover and visual, as well as actual, points of access to inland waters

The Applicant is proposing to revegetate all disturbed areas. Based on this information above and in the record the Board finds that this criterion will be met.

6. Will protect archaeological and historic resources as designated in the Town of Poland Comprehensive Plan

The parcel and abutting parcels do not appear to be associated with any archaeological or historic resources as designated in the Comprehensive Plan. Therefore, the Board finds that this section is not applicable.

7. Will avoid problems associated with floodplain development and use

The structure associated with this application has a finished floor level that is one foot above base flood elevation. Based on this information above and in the record the Board finds that this criterion will be met.

504.3 Nonconforming Structures

504.3. A. Expansions of Nonconforming Structures

The Applicant is not proposing an expansion of a nonconforming structure; therefore, the Board finds that this section is not applicable.

504.3. B. Relocation of Nonconforming Structures

The Applicant has not proposed to relocate the existing home; therefore, the Board finds that this section is not applicable.

507.3.C. Reconstruction or Replacement of Nonconforming Structures

The Board must determine if the proposed structure meets the setbacks to the greatest practical extent. The Board considered the size of the lot, the slope of the land, the potential for soil erosion, the location of other similar structures on the adjacent property, the location of the existing rain gardens and underdrainage, the location of the existing septic system, and the type and amount of vegetation that may need to be removed if the structure would be relocated. The Applicant has not proposed to reconstruct or replace the existing home; therefore, the Board finds that this section is not applicable.

504.3. D. Change of Use of a Nonconforming Structure

This application is not for a change of use of the existing nonconforming structure; therefore, the Board finds that this section is not applicable.

504.3. E. Planning Board Special Review for a Legal Nonconforming Single-Family Dwelling Located in a Shoreland Zoning District

Setback reductions were not applied for, and the new addition will be no closer to the resource than the existing structure; based on this information the Board finds that this criterion will be met.

508.27 Shoreland Zoning Standards

508.27.B. Principal and Accessory Structures

Chapter 5 §504.3 provides the performance standards for relocation and/or reconstruction of nonconforming structures. The Applicant has not proposed any accessory structures; therefore, the Board finds that this section is not applicable.

508.27.C. Multiple Principal Structures

This application does not include multiple principal structures; therefore, the Board finds that this section is not applicable.

508.27.D. Structures and Uses Extending Over or Below the Normal High Water Line of a Water Body or within a Wetland

This application does not include any permanent structures projecting into or over water bodies or within a wetland; therefore, the Board finds that this section is not applicable.

508.27.E. Individual Private Campsites

This application does not include any individual private campsites; therefore, the Board finds that this section is not applicable.

508.27.F. Parking Areas

There are no proposed parking areas with this application nor is the parcel located in the Resource Protection Shoreland Zoning District; therefore, the Board finds that this section is not applicable.

508.27.G. Roads and Driveways

There are no proposed driveway changes with this application nor is the parcel located in the Resource Protection Shoreland Zoning District; therefore, the Board finds that this section is not applicable.

508.27.H. Storm Water Runoff

The phosphorus calculation form submitted with the application shows the required 30 points. Based on this information and the information in the record the Board finds that this criterion will be met.

508.27.I. Essential Services

The Applicant is not proposing to install any new electrical poles, transmission lines, satellite dishes, generators, hydrants etc.; therefore, the Board finds that this section is not applicable.

508.27.J. Mineral Exploration and Excavation Permits

The application is not for mineral exploration or any other mining or gravel pit operations; therefore, the Board finds that this section is not applicable.

508.27.K. Agriculture

The Applicant is not proposing any livestock grazing areas, manure stockpiles, or any agriculture activities within the parcel; therefore, the Board finds that this section is not applicable.

508.27.M. Clearing or Removal of Vegetation for Development Other Than Timber Harvesting or Individual Private Campsites

Any proposed removal of vegetation will be permitted by the Code Enforcement Office and a replanting plan will be needed. Based on this information the Board finds that this criterion will be met.

Conclusion

- The application checklist was approved as complete on September 12, 2023, at which time the Board voted to waive the requirement for a site walk and public hearing.
- The Applicant has provided the Board with a Deed (Book 8736, Page 113) showing reasonable right, title, or interest in the property.
- The Board has concluded that they have the jurisdiction to review the application under section Chapter 5 §504.3 (Nonconforming Structures).

Therefore, the Town of Poland Planning Board hereby approves (5-0) with the following conditions, the application for Gregory and Karen Henderson to remove an existing 303.81 square foot deck and stairs and replace it with a new 293.97 square foot deck and stairs with a screen room underneath the deck and replace the existing front porch with a 32' x 4' open porch as described in the application dated September 12, 2023, the approved site plan dated August 28, 2023, and the above findings of facts.

Conditions of Approval

- Soil Erosion Control and Stormwater Management Measures shall be in place prior to construction. The Code Enforcement Officer may require additional measures to be taken.
- Soil disturbance during the period March 1st to May 1st is prohibited.
- Any disturbed soils shall be revegetated immediately upon completion of construction and any disturbed soils within 100-ft. of the high-water mark shall be revegetated per the approved plan.
- This approval will expire twelve (12) months from the date of Planning Board approval if the project or the use has not been started within this allotted time.
- Building/use permits shall be obtained prior to the start of construction/use.
- A certified person in erosion control practices by the Maine Department of Environmental Protection must be present at the site each day earthmoving activity occurs for a duration that is sufficient to ensure that proper erosion and sedimentation control practices are followed. This is required until erosion and sedimentation control measures have been installed, which will either stay in place permanently or stay in place until the area is sufficiently covered with vegetation necessary to prevent soil erosion.
- The Applicant has agreed to follow the recommendations by Androscoggin County Soil and Water Conservation District regarding pre and post storm water, erosion, and phosphorus issues within the parcel.
- Plan approval is also conditioned upon compliance by the Applicant with the plans and specifications which have been received by the Planning Board in connection with the development proposal as well as with any oral or written commitments regarding the project which were specifically made by the Applicant to the Board in the course of its deliberations.

- The Applicant must apply for and obtain all applicable permits for the proposed development under the Natural Resources Protection Act, Title 38 M.R.S.A. section 480-C, the Site Location of Development Act, the Erosion and Sedimentation Control law, Title 38 M.R.S.A. section 420-C, the Stormwater Management Law, the Federal Clean Waters Act as delegated to the State of Maine, and all other applicable state and federal laws regulating the use or development of land.
- The new site plan must be recorded with the Androscoggin County Registry of Deeds within 90 days of approval.

Pursuant to Section 304.5.B of the CLUC anyone aggrieved of this decision may file a written appeal within thirty (30) days of date of this decision in accordance with Rule 80-B of the Maine Rules of Civil Procedure.

Date Approved: September 12, 2023
Poland Planning Board

George Greenwood, Chairperson

James Porter, Vice -Chairperson

Cheryl Skilling, Secretary

James Walker, Member

Absent with Notice

Jonathan Gilson, Member

Heather Ryan, Alternate Member