



TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

www.exeternh.gov

PUBLIC NOTICE EXETER CONSERVATION COMMISSION

Monthly Meeting

The Exeter Conservation Commission will in the Nowak Room, Exeter Town Offices
at 10 Front Street, Exeter on **Tuesday, August 10th, 2021 at 7:00 P.M.**

Call to Order:

1. Introduction of Members Present
2. Public Comment

Action Items:

1. NHDES Wetland Dredge and Fill application for 26,665 SF of temporary wetland impacts and 1,250 SF of permanent wetland impacts within the tidal buffer zone of the Squamscott River for horizontal directional drilling beneath the river to replace failing sewer siphons in the Jady Hill and Swasey Parkway areas as part of the Sewer Siphon Repair/Upgrade effort. Tax Map/Lots 64/36, 64/45 and 64/86. (Britt Eckstrom, Wright-Pierce and Paul Vlasich, DPW)
2. NHDES Minimum Impact Expedited Dredge and Fill application for wetland impacts resulting from roadway access for a 16-unit condo development proposed along both Tamarind Way and a portion of the cul-de-sac on Cullen Way. The project will include a total of 2,960 SF of wetland impact, including 1,680 SF of forested wetlands and 1,280 SF of impact to existing farm pond. Tax Map 96-15-1 (Brian Griset, applicant and Jim Gove, GES Inc).
3. Recommendation to Select Board on Bower Land Donation (Tax Map/Lot 28/16, Beech Hill Road)
4. Committee Reports
 - a. Appointment of Tree Committee & River Study Committee representatives
 - b. Property Management
 - i. Conservation Land Mowing Proposal
 - ii. LCHIP Grant Update
 - c. Trails
 - d. Outreach Events
5. 2022 Budget
6. Approval of Minutes: July 13th 2021 Meeting
7. Other Business
8. Next Meeting: Date Scheduled (9/14/21), Submission Deadline (9/3/21)

Andrew Koff

Exeter Conservation Commission

Posted August 6, 2021 Exeter Town Website www.exeternh.gov and Town Office kiosk.

ZOOM Public Access Information:

Virtual Meetings can be watched on Channel 22 and on Exeter TV's Facebook and YouTube pages.

To participate in public comment, click this link: <https://exeternh.zoom.us/j/83737348082>

To participate via telephone, call: +1 646 558 8656 and enter the Webinar ID: 837 3734 8082

Please join the meeting with your full name if you want to speak.

Use the "Raise Hand" button to alert the chair you wish to speak. On the phone, press *9.

More instructions for how to participate can be found here: <https://www.exeternh.gov/townmanager/virtual-town-meetings>

Contact us at extvg@exeternh.gov or 603-418-6425 with any technical issues.

**TOWN OF EXETER
PLANNING DEPARTMENT MEMORANDUM**

Date: August 6th, 2021
To: Conservation Commission Board Members
From: Kristen Murphy, Natural Resource Planner
Subject: August 10th Conservation Commission Meeting

1. Sewer Siphon Repair/Upgrade Wetland D&F

The existing sewer siphons were evaluated by camera and found to be severely compromised. You can view photos of the current condition of the pipe in the [January 25th Select Board meeting](#) at minute mark 1:26. This project entails impacts resulting from excavating to a depth in order to directional drill under the Squamscott River to replace and upgrade the existing sewer siphons.

Suggested Motion for State Wetland Application:

_____ We have reviewed this application and have **no objection** to the application as proposed.

_____ We have reviewed this application and recommend that the wetland application be **(approved with conditions) (denied)** as noted below:

2. Tamarind/Cullen Way 16-unit Condo Wetland D&F

This project was before this board in 11/29/19 for consideration of conserving a portion of the property, and on 5/11/21 for the Exeter Wetland and Shoreland Conditional Use Permits. The Commission voted to have no objection to the conditional use permit. This application is in support of securing the State wetland permit.

Suggested Motion for State Wetland Application:

_____ We have reviewed this application and have **no objection** to the application as proposed.

_____ We have reviewed this application and recommend that the wetland application be **(approved with conditions) (denied)** as noted below:

3. Bower Land Donation

See memo in your packet

Suggested Motion:

_____ Based on the information provided, we **RECOMMEND** the Select Board accept the donation of the 5.0 acre Bower property (Map 28, Lot 16) for conservation purposes.

_____ Based on the information provided, we **DO NOT** recommend the Select Board accept the donation of the 5.0 acre Bower property (Map 28, Lot 16) due to the concerns noted below:

4. Tree Committee and River Study Committee Representatives

With the resignation of Ginny and Sally we do not currently have conservation commission representatives on either the Tree Committee or the River Study Committee. The Tree Committee meets about monthly on varying days at 8:30 am. The River Study Committee meets on the 3rd Thursday of each month at 3:00 pm.

5. Conservation Land Mowing

Field of Dreams Mowing has proposed the same rate for the 2021 mowing of conservation properties. Those rates are as follows: (Total \$1575 or \$1825-if full Morrissette)

Irvine Conservation Area \$500

White's Meadow / Perry Property \$850

Morrissette Conservation Area \$225 Partial, \$250 Full Field

5. 2022 Budget:

I have included a copy of the budget for 2022 which includes expenditures through June. Please let me know if you wish to discuss any modifications to next year's request. Also note the low expenditure. This will be a topic of concern by the budget committee.

TOWN OF EXETER

JULY 2021

New Hampshire Department of Environmental Services
Wetland Permit Application

Squamscott River Sewer Siphon Upgrades

Exeter, NH

July 16, 2021
W-P Project No. 20387A

Eben Lewis
Wetlands Bureau, Land Resources Management
Water Division, NHDES
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095

Subject: NHDES Wetlands Permit Application
Squamscott River Sewer Siphon Upgrades
Town of Exeter, NH

Dear Mr. Lewis,

On behalf of the Town of Exeter, please find enclosed a Wetlands Permit Application and attachments related to proposed impact to jurisdictional areas necessary for upgrades associated with the Squamscott River Sewer Siphon.

We are hopeful that this project will be bid this Summer and we anticipate that construction activities will commence at the site in Fall 2021 (pending environmental approvals and funding) with completion by Spring 2022.

It has been a pleasure to coordinate with you on this project to date. Please feel free to contact me if you have any questions or need any additional information during your review.

Sincerely,
WRIGHT-PIERCE



Britt Eckstrom, PE
Project Manager
Britt.eckstrom@wright-pierce.com

Enclosures

cc: *Paul Vlasich, PE, Jen Mates, PE – Town of Exeter
Kevin Garvey, PE – Wright-Pierce
Exeter-Squamscott River Local Advisory Committee (ESRLAC), Exeter Conservation Commission*

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
WETLAND PERMIT APPLICATION

Squamscott River Sewer Siphon Upgrades
Exeter, NH

JULY 2021

PREPARED FOR:

TOWN OF EXETER
10 FRONT STREET
EXETER, NH 03833

PREPARED BY:

WRIGHT-PIERCE
230 Commerce Way, Suite 302
Portsmouth, NH 03801
Phone: 603.430.3728 | Fax:
603.430.4083

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Application and Fee



**STANDARD DREDGE AND FILL
WETLANDS PERMIT APPLICATION**
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: Town of Exeter

TOWN NAME: Exeter

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the [Waiver Request Form](#).

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))	
Please use the Wetland Permit Planning Tool (WPPT) , the Natural Heritage Bureau (NHB) DataCheck Tool , the Aquatic Restoration Mapper , or other sources to assist in identifying key features such as: priority resource areas (PRAs) , protected species or habitats , coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the property contain a PRA? If yes, provide the following information:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04. 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Protected species or habitat? <ul style="list-style-type: none"> ○ If yes, species or habitat name(s): <u>Seaside Brookweed, Spongy-Leaved Arrowhead, Northern Black Racer</u> ○ NHB Project ID #: <u>21-1968</u> 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
• Bog?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
• Designated prime wetland or duly-established 100-foot buffer?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • Name of Local River Management Advisory Committee (LAC): <u>Exeter-Squamscott River LAC</u> 	

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

<ul style="list-style-type: none"> A copy of the application was sent to the LAC on Month: 08 Day: 02 Year: 2021 	
<p>For dredging projects, is the subject property contaminated?</p> <ul style="list-style-type: none"> If yes, list contaminant: N/A 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Is there potential to impact impaired waters, class A waters, or outstanding resource waters?</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>For stream crossing projects, provide watershed size (see WPPT or Stream Stats): N/A</p>	
<p>SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i)) Provide a brief description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.</p> <p>The Town of Exeter, NH, intends to replace the existing dual 8-inch, 860 linear foot ductile iron sewer siphons installed under the Squamscott River in 1965. The existing sewer siphons, located between dual 36-inch combined sewer/stormwater siphons, convey sewage from the Jady Hill area, Hayes Trailer Park, portions of Portsmouth Avenue and all the flow from the Webster Avenue Pump Station. The existing siphons were inspected and observed to have significant corrosion, pitting, and abrasion, with water entering through defects found in the pipe. The Town is proposing to replace the deteriorated siphons and to increase the capacity of the siphons to meet the growing needs and future development within the Town.</p> <p>To meet the present and future needs of the Town along with hydraulic design guidelines, the proposed project includes installing a three-barrel HDPE sewer siphon. The proposed construction method is to install siphons using horizontal directional drilling (HDD) to install the siphons beneath the river. Installation of the proposed siphon system will replace the nearly failing pipes and increase the capacity of the sewer system, in advance of the Webster Ave Pump Station Upgrades currently in design.</p> <p>The proposed impact area within the previously disturbed tidal buffer zone for the project includes 26,665 sq ft of temporary impact (trench work to install sewer, construction access/laydown, HDD pits, access drive) and 1,250 sq ft of permanent impact (Manholes, access drive). A 12 ft wide access drive is proposed to provide access for maintenance and inspection of the siphon inlet structure. See Wetland Impact Figures (Section 3). The proposed impacts are located within the previously disturbed 100' Tidal Buffer Zone. No direct wetland impacts are proposed.</p>	
<p>SECTION 3 - PROJECT LOCATION Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.</p>	
<p>ADDRESS: Swasey Parkway/Jady Hill Ave</p>	
<p>TOWN/CITY: Exeter</p>	
<p>TAX MAP/BLOCK/LOT/UNIT: 64-36, 64-45, 64-86</p>	
<p>US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Squamscott River <input type="checkbox"/> N/A</p>	
<p>(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): _____ ° North</p>	

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

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[redacted] ° West		
SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))		
If the applicant is a trust or a company, then complete with the trust or company information.		
NAME: Town of Exeter		
MAILING ADDRESS: 10 Front Street		
TOWN/CITY: Exeter	STATE: NH	ZIP CODE: 03882
EMAIL ADDRESS: jmates@exeternh.gov		
FAX: [redacted]	PHONE: 603-418-6431	
ELECTRONIC COMMUNICATION: By initialing here: <i>JM</i> I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c))		
<input type="checkbox"/> N/A		
LAST NAME, FIRST NAME, M.I.: Eckstrom, Britt - PE		
COMPANY NAME: Wright-Pierce		
MAILING ADDRESS: 230 Commerce Way Suite 302		
TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: britt.eckstrom@wright-pierce.com		
FAX: [redacted]	PHONE: 603-570-7126	
ELECTRONIC COMMUNICATION: By initialing here BE, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b))		
If the owner is a trust or a company, then complete with the trust or company information.		
<input checked="" type="checkbox"/> Same as applicant		
NAME: [redacted]		
MAILING ADDRESS: [redacted]		
TOWN/CITY: [redacted]	STATE: [redacted]	ZIP CODE: [redacted]
EMAIL ADDRESS: [redacted]		
FAX: [redacted]	PHONE: [redacted]	
ELECTRONIC COMMUNICATION: By initialing here [redacted], I hereby authorize NHDES to communicate all matters relative to this application electronically.		

SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

The proposed wetland impacts are located entirely within a previously developed Tidal Buffer Zone (TBZ) currently maintained as lawns. The proposed impacts will be for excavation necessary to complete horizontal directional drilling (HDD), connection to the existing sewer system, installation of a concrete siphon vault, and construction of an access drive. Impacted areas will be restored to match existing ground cover condition. Standard erosion control practices will be used through construction to prevent impacts to the Squamscott River. The HOTL was delineated by the certified wetland scientist. The proposed project will not permanently impact the ability for the buffer area to provide habitat value and provide stability of the coastal shoreline. The proposed project will increase the resiliency of the sewer system by replacing the existing siphon that is undersized for future needs and near failure. The proposed project does not include any impacts to non-tidal wetlands.

SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#) and the [Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet](#). For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the [Avoidance and Minimization Checklist](#), the [Avoidance and Minimization Narrative](#), or your own avoidance and minimization narrative.

*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation [pre-application meeting](#) must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: 07 Day: 12 Year: 2021

N/A - Mitigation is not required

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: I confirm submittal.

N/A – Compensatory mitigation is not required

SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/ivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Scrub-shrub Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Emergent Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Wet Meadow			<input type="checkbox"/>			<input type="checkbox"/>
	Vernal Pool			<input type="checkbox"/>			<input type="checkbox"/>
	Designated Prime Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Duly-established 100-foot Prime Wetland Buffer			<input type="checkbox"/>			<input type="checkbox"/>
Surface Water	Intermittent / Ephemeral Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Perennial Stream or River			<input type="checkbox"/>			<input type="checkbox"/>
	Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - River			<input type="checkbox"/>			<input type="checkbox"/>
Banks	Bank - Intermittent Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Bank - Perennial Stream / River			<input type="checkbox"/>			<input type="checkbox"/>
	Bank / Shoreline - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
Tidal	Tidal Waters			<input type="checkbox"/>			<input type="checkbox"/>
	Tidal Marsh			<input type="checkbox"/>			<input type="checkbox"/>
	Sand Dune			<input type="checkbox"/>			<input type="checkbox"/>
	Undeveloped Tidal Buffer Zone (TBZ)			<input type="checkbox"/>			<input type="checkbox"/>
	Previously-developed TBZ	1,250		<input type="checkbox"/>	26,665		<input type="checkbox"/>
	Docking - Tidal Water			<input type="checkbox"/>			<input type="checkbox"/>
TOTAL		1,250			26,665		

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)

<input type="checkbox"/> MINIMUM IMPACT FEE: Flat fee of \$400.	
<input type="checkbox"/> NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION: Flat fee of \$400 (refer to RSA 482-A:3, 1(c) for restrictions).	
<input checked="" type="checkbox"/> MINOR OR MAJOR IMPACT FEE: Calculate using the table below:	
Permanent and temporary (non-docking): 27,915 SF	× \$0.40 = \$ 11,166
Seasonal docking structure: SF	× \$2.00 = \$
Permanent docking structure: SF	× \$4.00 = \$
Projects proposing shoreline structures (including docks) add \$400 = \$	
Total = \$ 11,166	
The application fee for minor or major impact is the above calculated total or \$400, whichever is greater = \$ 11,166	

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov





SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)

Indicate the project classification.

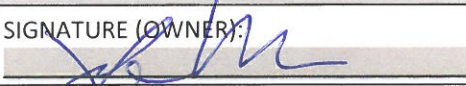
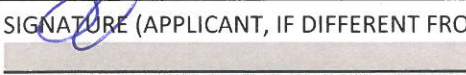



Minimum Impact Project
 Minor Project
 Major Project

SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)

Initial each box below to certify:

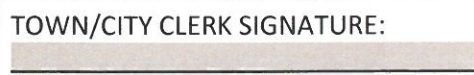



Initials: 	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: 	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.
Initials: 	The signer understands that: <ul style="list-style-type: none"> The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: <ol style="list-style-type: none"> Deny the application. Revoke any approval that is granted based on the information. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.
Initials: 	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)

SIGNATURE (OWNER): 	PRINT NAME LEGIBLY: JENNIFER MATES	DATE: 7/29/2021
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): 	PRINT NAME LEGIBLY: 	DATE: 
SIGNATURE (AGENT, IF APPLICABLE): 	PRINT NAME LEGIBLY: Britt Eckstrom	DATE: 7/22/2021

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

TOWN/CITY CLERK SIGNATURE: 	PRINT NAME LEGIBLY: 
TOWN/CITY: 	DATE: 

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to "Treasurer – State of NH".

2

US Army Corps of Engineers



**US Army Corps
of Engineers**®
New England District

Appendix B

New Hampshire General Permits (GPs) Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the New Hampshire DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to <https://www.nae.usace.army.mil/Missions/Regulatory/> “Useful Documents, Forms and Publications” and then “Corps Application Form and Guidance.” Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

All Projects:

- New Hampshire Department of Environmental Services (DES) Wetlands Permit Application.
- Request for Project Review Form by the New Hampshire Division of Historical Resources (DHR).
<https://www.nh.gov/nhdhr/review/rpr.htm>.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible plans no larger than 11”x17” with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
 - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
 - Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
 - Project limits with existing and proposed conditions.
 - Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
 - Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the OHW in inland waters and below the HTL in coastal waters.
 - Delineation of all waterways and wetlands on the project site,;
- Use Federal delineation methods and include Corps wetland delineation data sheets (GC 2).
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.



**US Army Corps
of Engineers**®
New England District

**New Hampshire General Permits (GPs)
Appendix B - Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)**

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 5, regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm to determine if there is an impaired water in the vicinity of your work area.*	X	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/ . The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	N/A	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	N/A	
2.7 What is the area of the proposed fill in wetlands?	N/A	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	N/A	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index	X	

3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: <ul style="list-style-type: none"> • PDF: https://wildlife.state.nh.us/wildlife/wap-high-rank.html. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html. 			X
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?			X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?			X
3.5 Are stream crossings designed in accordance with the GC 21?			N/A
4. Flooding/Floodplain Values	Yes	No	
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?	X		
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?			N/A
5. Historic/Archaeological Resources			
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	X		

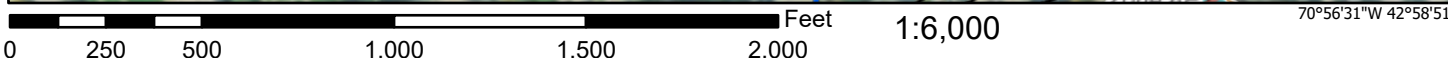
*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.

National Flood Hazard Layer FIRMMette



70°57'9"W 42°59'17"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway	

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X	Future Conditions 1% Annual Chance Flood Hazard Zone X	Area with Reduced Flood Risk due to Levee. See Notes. Zone X	Area with Flood Risk due to Levee Zone D

OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X	Effective LOMRs	Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer	Levee, Dike, or Floodwall

OTHER FEATURES	Cross Sections with 1% Annual Chance Water Surface Elevation	Coastal Transect	Base Flood Elevation Line (BFE)	Limit of Study	Jurisdiction Boundary	Coastal Transect Baseline	Profile Baseline	Hydrographic Feature

MAP PANELS	Digital Data Available	No Digital Data Available	Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/7/2021 at 11:18 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources
State Historic Preservation Office
Attention: Review & Compliance
19 Pillsbury Street, Concord, NH 03301-3570

RECEIVED
MAY 28 2021

DHR Use Only	
R&C #	11789
Log In Date	5/28/21
Response Date	6/22/21
Sent Date	6/22/21

Request for Project Review by the New Hampshire Division of Historical Resources

- This is a new submittal
 This is additional information relating to DHR Review & Compliance (R&C) #:

GENERAL PROJECT INFORMATION

Project Title Squamscott River Sewer Siphon Improvement Project

Project Location Multiple in Town of Exeter, NH - see attached.

City/Town Exeter, NH Tax Map Multiple Lot # Multiple

NH State Plane - Feet Geographic Coordinates: Easting Northing
(See RPR Instructions and R&C FAQs for guidance.)

Lead Federal Agency and Contact (if applicable) New Hampshire Dept. of Environmental Services
(Agency providing funds, licenses, or permits)

Permit Type and Permit or Job Reference # CWSRF Loan

State Agency and Contact (if applicable) Nina Buckman (CWSRF Program Coord./603-271-0734)

Permit Type and Permit or Job Reference # ID # TBD

APPLICANT INFORMATION

Applicant Name Town of Exeter, NH (attn. Jennifer Mates, P.E. Assistant Town Engineer)

Mailing Address 10 Front Street Phone Number 603-418-6431

City Exeter State New Hampshire Zip 03833 Email jmates@exeternh.gov

CONTACT PERSON TO RECEIVE RESPONSE

Name/Company Wright-Pierce (attn. Chris Norton)

Mailing Address 250 Commercial Street, Suite 4014 Phone Number 603-606-4422

City Manchester State New Hampshire Zip 03101 Email christopher.norton@wright-pierce.com

This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. Please refer to the Request for Project Review Instructions for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: www.nh.gov/nhdhr/review or contact the R&C Specialist at marika.labash@dnr.nh.gov or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION **11789**

Project Boundaries and Description

- Attach the Project Mapping *using EMMIT or relevant portion of a 7.5' USGS Map.* (See RPR Instructions and R&C FAQs for guidance.)
- Attach a detailed narrative description of the proposed project.
- Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation.
- Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (*Informative photo captions are requested.*)
- A DHR records search must be conducted to identify properties within or adjacent to the project area. Provide records search results via EMMIT or in **Table 1.** (*Blank table forms are available on the DHR website.*)
EMMIT or in-house records search conducted on / / .

Architecture

Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? Yes No
If no, skip to Archaeology section. If yes, submit all of the following information:

Approximate age(s):

- Photographs of *each* resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.)
- If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.)

Archaeology

Does the proposed undertaking involve ground-disturbing activity? Yes No
If yes, submit all of the following information:

- Description of current and previous land use and disturbances.
- Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)

Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.

DHR Comment/Finding Recommendation *This Space for Division of Historical Resources Use Only*

- Insufficient information to initiate review. Additional information is needed in order to complete review.
- No Potential to cause Effects No Historic Properties Affected No Adverse Effect Adverse Effect

Comments: CONCUR WITH RESULTS OF PHASE IA ARCHAEOLOGICAL SURVEY +
RECOMMENDATION OF NO FURTHER STUDY. SHOULD PUBLIC CONCERN
ARISE CONCERNING HISTORIC PROPERTIES, PLEASE NOTIFY THE DHR.

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized Signature: *Nedki Mulla, DSHR* Date: *6/22/21*

June 18, 2020
W-P Project No. T15497

Exeter Heritage Commission
Planning Department
10 Front Street
Exeter, New Hampshire 03833

Subject: Squamscott River Sewer Siphons and Webster Avenue Pump Station
Rehabilitation Design Project
Request for Heritage Commission Comment

Hello:

The Town of Exeter, New Hampshire is applying for a Clean Water State Revolving Fund (CWSRF) loan through the State of New Hampshire Department of Environmental Services (NHDES). The proposed project consists of constructing an additional sewage siphon barrel to improve the capacity of existing sewage siphon piping located under the Squamscott River that transports sewage from Portsmouth Avenue and the Jady Hill Avenue areas to the Town's Main Pump Station. The project scope also consists of design for the rehabilitation of the Webster Avenue Pump Station and its force main. The construction phase of the Webster Avenue Pump Station and force main rehabilitation design will be performed under a separate project and CWSRF loan.

The Town of Exeter has retained Wright-Pierce to assist with preparation of the CWSRF loan application. This application includes a review performed by the New Hampshire Division of Historical Resources (NHDHR). The preliminary review recommended a Phase 1A archaeological survey, which will be performed as part of the preliminary design and the Town's Heritage Commission be included for comment on the project, if interested. Additional detail on the project scope and area is attached for the Heritage Commission's reference. Any comments provided are greatly appreciated and will be shared with the NHDHR to assist their review of the project.

If you require further information or wish to discuss the project, please contact me at (603)-606-4422 or by email at christopher.norton@wright-pierce.com

Sincerely,
WRIGHT-PIERCE



Chris Norton, PE
Project Engineer



Attachments:

Project Narrative
Project Site Map

cc: Paul Vlasich – Town of Exeter
Jennifer Mates – Town of Exeter
Matt Berube – Town of Exeter
Kevin Garvey – Wright-Pierce

Project Narrative:

The Town of Exeter (the Town) owns, operates, and maintains the sewer utilities in Exeter, New Hampshire, including the Squamscott River Sewer Siphon which consists of two parallel 8-inch inverted sewage siphon pipes under the Squamscott River that transport sewage from the Webster Avenue Pump Station and the Jady Hill Avenue neighborhood to the Town's Main Pump Station. As part of this project, the Town is looking to add additional capacity to the Webster Avenue Pump Station, including its connecting force main, and to the Squamscott River Sewer Siphon. The Town has already made improvements to their Wastewater Treatment Facility (WWTF) and Main Pump Station to allow for additional upstream capacity.

An engineering analysis of the Squamscott River Sewer Siphon identified minor capacity concerns during normal dry weather flows and found the siphons undersized for new connections or during extreme wet weather events. This analysis has historically been confirmed through sanitary sewer overflows (SSOs) immediately upstream of the two siphon pipes at Duck Point located at the bottom of Jady Hill Avenue. Increasing sewer siphon pipe capacity will reduce the risk of SSOs and allow for improvements to sewer infrastructure, located upstream of the siphon pipes.

In addition to the design, bidding, and construction of the Squamscott River Sewer Siphons, the scope of this project will also consist of designing the rehabilitation of the Webster Avenue Pump Station and its connecting force main along Webster Avenue, Douglass Way, and Jady Hill Avenue. The Webster Avenue Pump Station was originally constructed in 1965 and was comprehensively upgraded in 2000. The pump station's small wet well and issues with potential pump cavitation as well as developmental growth along Portsmouth Avenue have contributed to the capacity concerns at the pump station that warrants improvements to handle current and future flows. The construction of improvements to the Webster Avenue Pump Station and its connecting force main will be performed under a separate, supplemental project.

The sewer siphon improvements will consist of constructing a third sewer siphon barrel under the Squamscott River, between Swasey Parkway and Jady Hill Avenue, and performing subsurface geotechnical investigations along the alignment of the new siphon. No existing buildings are anticipated to be impacted by this portion of the scope. Previous and current land use of this area is recreational and residential, however, given the culturally sensitive nature of historical Native American habitats in the vicinity of Duck Point and the Squamscott River, a Phase 1A Archaeological Study will be performed in this area only.

The project scope area will also include the Webster Avenue Pump Station site and its force main. This portion of the work is strictly for design purposes and will not involve the pump station site, however, subsurface geological investigations for design will be performed within a 300 foot by 300 foot area centered on the pump station. This area was previously disturbed by construction and continues to be used by the Town for supporting pump station operations. It is anticipated that the Webster Avenue Pump Station and connecting force main portion of the project area will not include any known or suspected archaeological resources.

Sewer Siphon Pipes Improvements Area Where A Third Sewer Siphon Pipe Will Be Constructed Within

Webster Avenue Force Main Replacement Area

Webster Avenue Pump Station Improvements Area

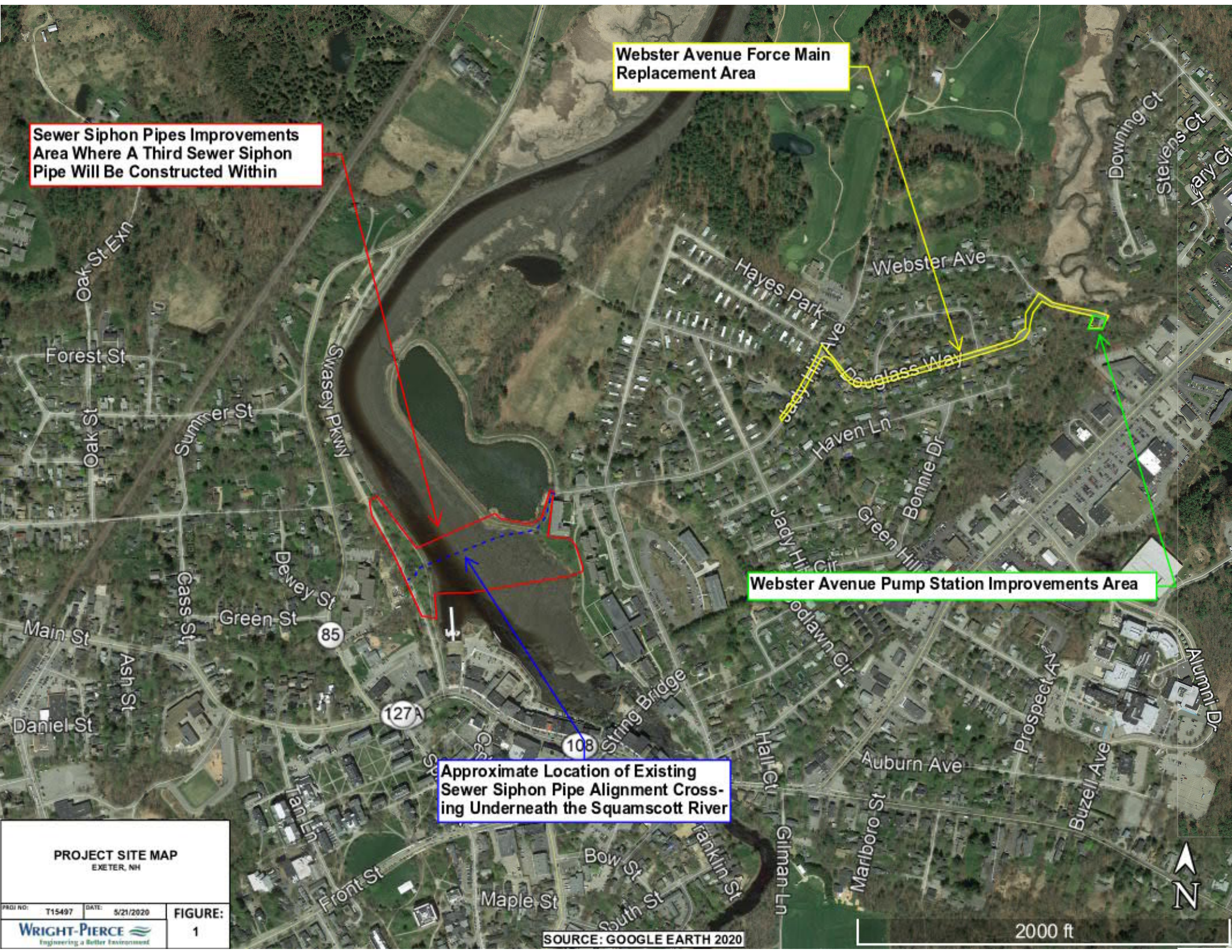
Approximate Location of Existing Sewer Siphon Pipe Alignment Crossing Underneath the Squamscott River

PROJECT SITE MAP
EXETER, NH

PROJ NO:	T15497	DATE:	5/21/2020	FIGURE: 1

SOURCE: GOOGLE EARTH 2020

2000 ft



Jacob Shactman

From: Kevin Garvey
Sent: Friday, June 11, 2021 3:14 PM
To: Jacob Shactman
Subject: FW: Request for Heritage Commission Comment

From: Jennifer Mates <jmates@exeternh.gov>
Sent: Thursday, June 18, 2020 11:11 AM
To: Christopher Norton <christopher.norton@wright-pierce.com>; Barbara Mcevoy <bmcevoy@exeternh.gov>
Cc: merkfly@comcast.net; Kevin Garvey <kevin.garvey@wright-pierce.com>; mberube@exeternh.gov;
pvlasich@exeternh.gov
Subject: Re: Request for Heritage Commission Comment

Hi All,
I also forwarded it to the Planning Department.
Thanks,
Jen

Jennifer Mates, P.E.
Assistant Town Engineer
Public Works Department
13 Newfields Road
Exeter, NH 03833
(603) 418-6431
jmates@exeternh.gov

Like us on [Facebook!](#)

On Thu, Jun 18, 2020 at 10:51 AM Christopher Norton <christopher.norton@wright-pierce.com> wrote:

Good Morning John,

I am writing to reach out for the Town Heritage Commission's interest in commenting on a wastewater project that Wright-Pierce is assisting the Town of Exeter with. The attached letter summarizes the project scope and project area.

We welcome any comments provided. Feel free to contact me by phone or email for further information or wish to discuss the project.

Sincerely,

Chris N.

Christopher Norton, PE

Wright-Pierce | Wastewater Engineer II
Direct 603.606.4422



Visit our website for industry insights: www.wright-pierce.com



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
<http://www.fws.gov/newengland>

In Reply Refer To:

June 11, 2021

Consultation Code: 05E1NE00-2021-SLI-3799

Event Code: 05E1NE00-2021-E-11372

Project Name: Exeter Sewer Siphon Upgrades

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2021-SLI-3799

Event Code: 05E1NE00-2021-E-11372

Project Name: Exeter Sewer Siphon Upgrades

Project Type: WASTEWATER PIPELINE

Project Description: The proposed project scope consists of construction of a horizontal directionally drilled three-barrel sewer siphon underneath the Squamscott River between Jady Hill Avenue and Swasey Parkway.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.98394595,-70.94860975566104,14z>



Counties: Rockingham County, New Hampshire

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



3

Project Plans

TOWN OF EXETER, NEW HAMPSHIRE

CONTRACT DRAWINGS FOR

SQUAMSCOTT RIVER

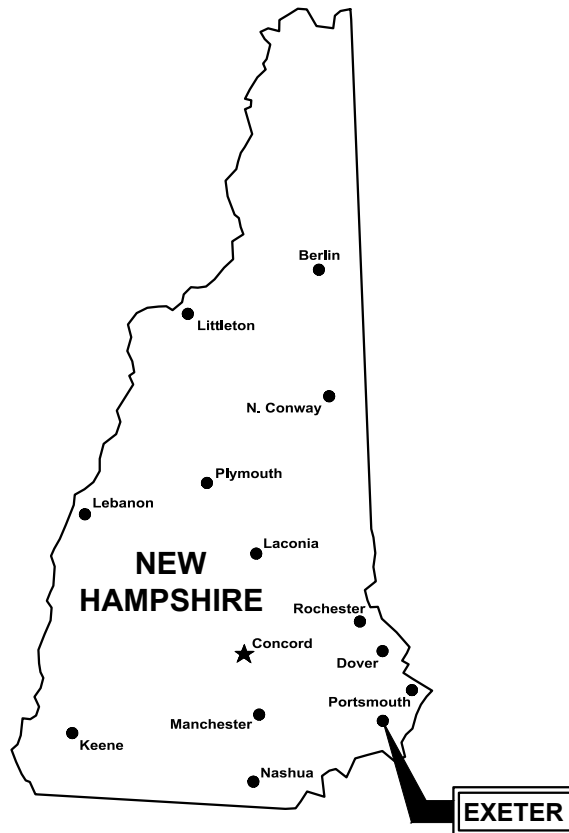
SEWER SIPHON UPGRADES

CWSRF- CS-330130-18

TOWN BID NO. XX-XX

JULY 2021

90% DESIGN SET



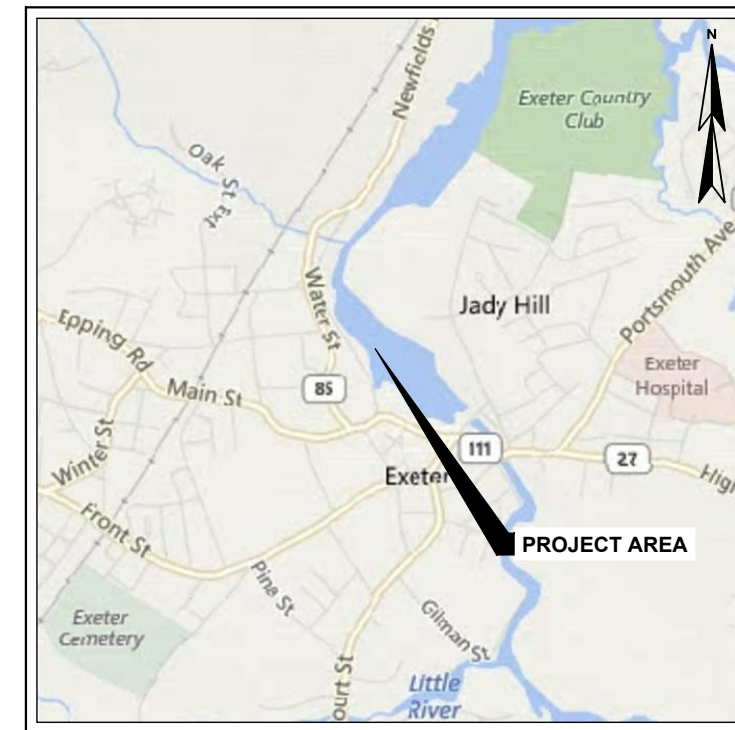
DRAWING INDEX

GENERAL

COVER SHEET

CIVIL

- C-1 GENERAL NOTES, LEGEND, ABBREVIATIONS, AND DETAILS
- C-2 PLAN AND PROFILE I
- C-3 PLAN AND PROFILE II
- C-4 PLAN AND PROFILE III
- C-5 DETAILS I
- C-6 DETAILS II
- C-7 EROSION CONTROL NOTES AND DETAILS



LOCATION PLAN
SCALE: 1"=1,000'



888.621.8156 | www.wright-pierce.com

FOR REVIEW _____

FOR BIDDING _____

WP PROJECT No. 20387A

GENERAL NOTES

1. THE OWNER WILL BE RESPONSIBLE FOR OBTAINING THE PERMITS LISTED IN THE SUPPLEMENTARY OR SPECIAL CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH PERMIT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. COPIES OF ALL OBTAINED PERMITS ARE AVAILABLE FOR REVIEW FROM THE OWNER OR ENGINEER. ALL OTHER PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHTS OF WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. COPIES OF ALL RIGHTS OF WAY AND EASEMENTS ARE AVAILABLE FOR REVIEW FROM THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS IN ACCORDANCE WITH THE MUTCD AND ALL STATE AND LOCAL REGULATIONS EXCEPT AS NOTED IN THE CONTRACT DRAWINGS. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER PRIOR TO COMMENCING CONSTRUCTION. THE POLICE DEPARTMENT AND FIRE DEPARTMENT ARE TO BE NOTIFIED AT LEAST 24-HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR. REFER TO SPECIFICATION SECTION 0157.0.
4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
5. CONTRACTOR SHALL COMPLY WITH THE COORDINATION REQUIREMENTS AND RELATED COSTS, IF ANY, AS SPECIFIED IN SPECIFICATION SECTION 0105.0.
6. CONTRACTOR SHALL NOTE THAT, IN GENERAL, ALL EXISTING CONDITION INFORMATION ON THE DRAWINGS ARE SHOWN WITH A LIGHTER LINE WEIGHT AND WITH A SLANTED TYPE TEXT.
7. ALL EXISTING SEWER AND STORM DRAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING SEWERS, STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, EXCEPT WHEN IN DIRECT CONFLICT WITH THE NEW SEWER OR WHEN NOT SHOWN OR INDICATED.
8. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY OR RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
9. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO THE ENGINEER FOR REVIEW FOR CONFORMANCE WITH THE PLANS. TESTS PITS ARE REQUIRED WHERE SHOWN ON THE DRAWINGS. TEST PITS ARE TO BE EXCAVATED BY THE CONTRACTOR TO CONNECT TO PROPOSED SEWERS TO EXISTING SEWERS. THE RESULTS OF TEST PITS DUG TO DETERMINE EXISTING SEWER ELEVATIONS AND LOCATIONS WILL BE REPORTED TO THE ENGINEER. ADJUSTMENTS TO INVERTS, LENGTHS, AND SLOPES OF PROPOSED SEWER MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. THE HORIZONTAL ALIGNMENT OF THE NEW SEWERS AND SIPHONS MAY BE ADJUSTED IN THE FIELD SUBJECT TO PRIOR APPROVAL OF THE ENGINEER.
10. A PORTION OF THE WORK AREA IS LOCATED WITHIN A "GROUNDWATER MANAGEMENT ZONE" (GMZ) AND HAS "ACTIVITY AND USE RESTRICTIONS" (AUR) AS A RESULT OF A FORMER GAS MANUFACTURING PLANT THAT WAS LOCATED ACROSS WATER STREET FROM EXETER HOUSING AUTHORITY. TREATMENT AND DISPOSAL OF DEWATERING EFFLUENT ASSOCIATED WITH CONSTRUCTION WILL BE UNDERTAKEN AND PAID FOR BY NORTHERN UTILITIES, INC. IN ACCORDANCE WITH ITS AGREEMENT WITH THE TOWN OF EXETER DATED AUGUST 2, 2001. REFER TO SUMMARY OF WORK SPECIFICATION THE CONSTRUCTION DEWATERING SPECIFICATION AND APPENDIX "B" FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING DEWATERED EFFLUENT DURING EXCAVATION INTO A FRAC TANK PROVIDED AND BY NORTHERN UTILITIES. NORTHERN UTILITIES WILL BE RESPONSIBLE FOR TREATMENT AND DISPOSAL OF THE EFFLUENT.
11. CONSTRUCTION IMPACTS WITHIN WETLAND AND SHORELAND JURISDICTIONAL AREAS SHALL BE DONE WITHIN THE EXTENTS OF THE IMPACTS PERMITTED.

EXISTING SITE CONDITIONS

1. THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AS SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND MAY NOT BE COMPLETE. NO GUARANTEE IS MADE THAT UTILITIES OR STRUCTURES WILL BE ENCOUNTERED WHERE SHOWN, OR THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. ALL LOCATIONS AND SIZES OF EXISTING UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD WITH TEST PITS AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION OF NEW FACILITIES OR PIPING THAT MAY BE AFFECTED. THE CONTRACTOR WILL REALIGN NEW PIPE LOCATIONS AS REQUIRED TO CONFORM TO EXISTING LINES AND AS APPROVED BY THE ENGINEER.
2. BELOW GRADE UTILITY INFORMATION IS BASED ON INFORMATION PROVIDED BY EACH UTILITY. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE PRIOR TO COMMENCING WORK. REFER TO SPECIFICATION SECTION 0105.0. ADDITIONAL TEST PITS, BEYOND THOSE SHOWN, MAY BE REQUIRED. UTILITY CONTACTS ARE AS FOLLOWS:

ELECTRIC: UNUTIL-ELECTRIC TEL. (800) 582-7276	WATER/SEWER/DRAIN: TOWN OF EXETER PUBLIC WORKS DEPARTMENT 13 NEWFIELDS ROAD EXETER, NH 03833 (603) 773-6157	LANDSCAPING: PISCATAQUA LANDSCAPING TEL. (207) 439-2241
TELEPHONE/CABLE TV: COMCAST 115 EPPING ROAD EXETER, NH 03833 TEL. (800) 266-2278	DIG SAFE: TEL. (800) DIGSAFE	TREE SERVICE: VALLEY TREE SERVICE TEL. (978) 374-7207
GAS: UNUTIL-GAS TEL. (866) 933-3820	AECOM: TEL. (798) 905-2311	

3. HAZARDOUS ENVIRONMENTAL CONDITIONS HAVE BEEN IDENTIFIED WITHIN THE AREA OF WORK. REFER TO SPECIFICATION SECTION C-2 SPECIAL CONDITIONS. IF THE PRESENCE OF ADDITIONAL HAZARDOUS ENVIRONMENTAL CONDITIONS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER IMMEDIATELY. ALL ACTIVITIES, HANDLING AND DISPOSAL OF HAZARDOUS ENVIRONMENTAL CONDITIONS AND MATERIALS SHALL BE IN ACCORDANCE WITH OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS.

SITE DEMOLITION

1. REFER TO THE EXISTING SITE PLAN, FOR ADDITIONAL INFORMATION REGARDING EXISTING FACILITIES. REFER TO THE LAYOUT DRAWING FOR LIMITS OF WORK.
2. REFER TO SPECIFICATION SECTION 01010A, WHICH CONTAINS INFORMATION ON CONSTRAINTS OF CONSTRUCTION SEQUENCING.
3. DEMOLISH/REMOVE EXISTING PIPING AS REQUIRED FOR CONSTRUCTION OF NEW FACILITIES. ALL PIPING, EQUIPMENT AND MATERIALS TO BE DEMOLISHED AND/OR REMOVED FROM SERVICE SHALL BE COORDINATED WITH THE OWNER AND ENGINEER BEFORE COMMENCING THAT WORK. EXISTING PIPING THAT NEEDS TO BE REMOVED TO CONSTRUCT THE NEW FACILITIES, BUT IS TO REMAIN, SHALL BE REINSTALLED/REPLACED AS NEEDED. EXISTING PIPES AND CONDUIT DESIGNATED AS "ABANDONED" MAY BE REMOVED IF THE CONTRACTOR SO CHOOSES. IF ABANDONED PIPE CONFLICTS WITH NEW SITE PIPING OR FACILITIES, THEN A PORTION OF THE ABANDONED PIPE SHALL BE REMOVED, AND THE NEW ENDS OF ABANDONED PIPE CAPPED OR PLUGGED WITH CONCRETE.
4. ALL EXISTING PIPING AND UTILITIES WHICH ARE BENEATH PROPOSED STRUCTURES, AND ARE TO BE ABANDONED, SHALL BE REMOVED TO A MINIMUM OF 5-FEET OUTSIDE OF THE STRUCTURE. PIPE AND UTILITIES BENEATH PROPOSED STRUCTURES THAT ARE TO REMAIN SHALL BE CONCRETE ENCASED, UNLESS OTHERWISE INDICATED.

5. SEVERING OF EXISTING UTILITIES FOR ABANDONMENT, OR REMOVAL OF A SEGMENT FROM SERVICE, SHALL BE PERFORMED IN SUCH A MANNER AS TO ALLOW THE REMAINING ACTIVE SEGMENT TO CONTINUE IN ITS INTENDED SERVICE. CAP ACTIVE SEGMENTS WITH APPROPRIATE FITTINGS, JOINT RESTRAINT, ETC. TO ENSURE THEIR INTEGRITY. PLUG ENDS OF ABANDONED PIPE SEGMENTS WITH CONCRETE UNLESS SPECIAL CIRCUMSTANCES DICTATE PLUGGING ABANDONED PIPES WITH BLIND FLANGES, RESTRAINED MECHANICAL JOINT PLUGS, ETC. AS APPROPRIATE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROPRIATE DISPOSAL OF FLOWS RESULTING FROM PRECIPITATION AND GROUNDWATER DEWATERING OPERATIONS.

SITE CLEARING, GRUBBING AND GRADING

1. STRIPPING OF TOPSOIL (LOAM) SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 0211.5.
2. CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL AND DRAINAGE MEASURES IN ALL AREAS OF WORK, AND CONFINE SOIL SEDIMENT TO WITHIN THE LIMITS OF EXCAVATION AND GRADING. PRIOR TO BEGINNING EXCAVATION WORK, EROSION CONTROL FENCE SHALL BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE ACTUAL LIMITS OF GRUBBING AND/OR GRADING, AND AS SHOWN ON THE DRAWINGS. EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE A MINIMUM, CONTRACTOR SHALL TAKE ALL OTHER NECESSARY MEASURES. EROSION CONTROL FENCE SHALL ALSO BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE TOPSOIL STOCKPILES. ALL DISTURBED EARTH SURFACES SHALL BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIAL SHALL BE STABILIZED IN A MANNER THAT WILL MINIMIZE EROSION. ALL INSTALLED EROSION CONTROL FACILITIES SHALL BE REMOVED AT THE END OF THE PROJECT. REFER TO SPECIFICATION SECTION 0227.0.
3. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY HAY BALE FILTERS TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL COLLECTED SEDIMENT, AND THAT WHICH COLLECTS IN THE STORM DRAIN SYSTEM. REFER TO THE CIVIL DETAIL DRAWINGS.
4. TEST PIT AND/OR BORING LOGS FOR THE PROJECT SITE ARE INCLUDED IN APPENDIX A OF THE SPECIFICATIONS. THESE ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. PLEASE NOTE THAT THE SOIL DESCRIPTIONS PROVIDED ON THE TEST PIT BORING LOGS DO NOT REPRESENT FIELD CONDITIONS OTHER THAN AT THE SPECIFIC TEST BORING LOCATIONS. THE CONDITIONS BETWEEN BORING LOCATIONS MAY VARY FROM THOSE SHOWN ON THE TEST BORING LOGS.
5. CONTRACTOR SHALL CONTROL DUST ON THE CONSTRUCTION SITE TO A REASONABLE LIMIT, AS DETERMINED BY THE ENGINEER, AND AS OUTLINED IN SPECIFICATION SECTION 01562.
6. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS AND PLANT DRIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE ASSOCIATED CLEAN UP.
7. ALL CATCH BASINS, MANHOLES, VALVE PITS, VALVE BOXES AND OTHER BURIED FACILITIES WITH SURFACE ACCESS SHALL BE ADJUSTED TO MATCH FINAL GRADES, UNLESS OTHERWISE INDICATED.
8. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT, WITH EXCESS MATERIAL DISPOSED OF AT A LOCATION PROVIDED BY THE CONTRACTOR. THESE PROVISIONS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF OBLIGATIONS TO PROPERLY DISPOSE OF AND REPLACE ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CONTRACT DOCUMENTS.
9. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, TO THE SATISFACTION OF THE OWNER AND ENGINEER.
10. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINE GRADING WITH THE ENGINEER.
11. ALL ROAD AND DRIVE CROSS SLOPES SHALL PITCH 1/4-INCH PER FOOT MINIMUM. ALL PAVED SURFACES SHALL PITCH 1% UNLESS OTHERWISE NOTED. REFER TO THE CIVIL DETAIL DRAWINGS.
12. ALL NON-ROADWAY AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE TOPSOILED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED, UNLESS OTHERWISE NOTED. THE TOP 4-INCHES OF SOIL SHALL BE TOPSOIL. REFER TO SPECIFICATION SECTION 02485, LOAM AND SEED.

CIVIL SITE LAYOUT

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PROVIDED LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
2. REFER TO THE SITE PIPING AND SITE GRADING DRAWINGS FOR ADDITIONAL LAYOUT INFORMATION.
3. IN GENERAL, THE GIVEN STRUCTURE LOCATIONS ARE TO THE OUTSIDE FACE OF THE STRUCTURE FOUNDATION WALL, NOT FOOTINGS. RADII SHOWN FOR ROADS ARE TO EDGE OF PAVEMENT.
4. THE LOCATIONS AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER. THE CONTRACTOR SHALL LIMIT ACTIVITIES TO THESE AREAS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING AND RESETTING ALL EXISTING PROPERTY MONUMENTATION DISTURBED BY CONSTRUCTION. THIS WORK SHALL BE DONE BY A LAND SURVEYOR REGISTERED IN THE STATE OF NEW HAMPSHIRE, AT NO ADDITIONAL COST TO THE OWNER.
6. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
7. ALL ELEVATIONS ARE IN FEET AND REFER TO THE NGVD DATUM. ORIENTATION IS BASED ON NH STATE PLANE NAD83. PROJECT BENCHMARK(S) ARE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VERIFY ALL ELEVATION REFERENCE INFORMATION PRIOR TO USE IN CONSTRUCTION.
8. THE FEMA 100 YEAR FLOODPLAIN ELEVATION FOR THE PROJECT AREA IS 8 FT (NGVD29).

CIVIL SITE PIPING

1. NEW PENETRATIONS THROUGH EXISTING STRUCTURE WALLS SHALL BE BY CORING MACHINE AND KOR N SEAL BOOTS, UNLESS OTHERWISE INDICATED. OPENINGS TO BE COMPATIBLE WITH REQUIRED PIPING AND STANDARD KOR N SEAL BOOT SIZES.
2. TRENCH INSULATION SHALL BE USED WHERE DEPTH OF COVER IS LESS THAN 5-FEET. REFER TO THE CIVIL DETAIL DRAWINGS FOR THE TRENCH INSULATION DETAIL.
3. MANHOLES ARE 4-FEET IN DIAMETER UNLESS OTHERWISE NOTED. THE TOP OF MANHOLE FRAMES SHALL BE SET FLUSH WITH FINISH GRADE, UNLESS OTHERWISE NOTED ON DRAWINGS. SEWER MANHOLE INVERTS SHOWN ON THE DRAWINGS ARE TO THE INSIDE FACE OF THE MANHOLE.
4. CONTRACTOR SHALL RE-SHAPE INVERTS AS REQUIRED WHEN CONNECTING INTO EXISTING MANHOLES.
5. REFER TO SPECIFICATION SECTION 02200 FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.
6. COMPACTION TESTS WILL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200. ANY SETTLEMENT OCCURRING WITHIN ONE-YEAR OF FINAL COMPLETION OF THE WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST.
7. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.

8. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE CIVIL EXISTING CONDITIONS AND DEMOLITION PLAN. ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION MATERIALS IN ACCORDANCE WITH SPECIFICATION SECTION 02050.
10. WHERE POSSIBLE, WATER LINES SHOULD BE INSTALLED OVER WASTEWATER LINES. A MINIMUM SEPARATION OF 18-INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE WASTEWATER LINE SHALL BE MAINTAINED, IF POSSIBLE. WHERE A WATER LINE CROSSES UNDER A WASTEWATER LINE, A FULL LENGTH OF PIPE SHALL BE CENTERED ABOVE THE WATER LINE SO THAT BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE 18-INCHES OF VERTICAL SEPARATION IS NOT POSSIBLE, THE CONTRACTOR SHALL OBTAIN A SEPARATION REQUIREMENT WAIVER FROM DES.

SURVEY NOTES:

1. EXISTING CONDITIONS SITE PLAN DEVELOPED FROM SURVEY DRAWING PREPARED BY DOUCET SURVEY, LLC, DATED OCTOBER 1, 2020, AND EXISTING AVAILABLE RECORD DRAWING INFORMATION.
2. WETLAND BOUNDARIES DELINEATED BY MARC JACOBS, CSS CWS, PWS, CPESC IN AUGUST 2020. WETLANDS FLAGS SURVEYED BY DOUCET SURVEY, LLC.
3. HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VR5 NETWORK.
4. VERTICAL DATUM IS BASED ON NGVD29 PER DISK B 14 1934 WITH A PUBLISHED ELEVATION OF 37.67'.
5. ALL UNDERGROUND UTILITIES (ELECTRIC, GAS, TEL, WATER, SEWER DRAIN SERVICES) ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
6. OVERALL PARCEL BOUNDARIES AS SHOWN HEREON ARE BASED ON GIS DATA AND ARE IN THEIR ORIGINAL LOCATION. THE PARCEL BOUNDARIES HAVE BEEN TRIMMED OR EXTENDED TO MATCH THE RIGHT OF WAY LINE AS DETERMINED BY THE SURVEYOR. SEE RIGHT OF WAY NOTES FOR FURTHER EXPLANATIONS.
7. FLOOD PLAIN DATA AS SHOWN IS BASED ON GIS DATA AND ARE IN THEIR ORIGINAL LOCATION.

RIGHT OF WAY AND EASEMENT NOTES:

- E. EASEMENTS SHOWN HEREON ARE PER R.C.R.D. BOOK 5329, PAGE 2167 AND PLAN D-17346. THE LOCATIONS ARE SOMEWHAT APPROXIMATE. THE STATUS OF SAID EASEMENTS IS NOT KNOWN. A BOUNDARY SURVEY AND TITLE SEARCH WOULD BE REQUIRED TO PINPOINT THE LOCATIONS AND STATUS OF THESE.



BLACK RACER SNAKE (STATE THREATENED):

- SOLID BLACK WITH A WHITE THROAT AND CHIN
- SLENDER WITH GLOSSY SCALES, 3-6 FT. LONG
- HATCHLINGS ARE VERY SMALL AND PATTERNED

ALL OBSERVATIONS OF NORTHERN BLACK RACER SNAKES ENCOUNTERED FROM THE END OF SEPTEMBER THROUGH THE MONTH OF APRIL MUST BE IMMEDIATELY REPORTED TO THE NHFG DEPARTMENT (MELISSA.OPERALSKI 603-479-1129 (CELL) OR BRENDAN CLIFFORD 603-944-0885) AS THIS INDICATES A POTENTIAL HIBERNACULUM IN THE AREA. PLEASE ATTEMPT TO PHOTOGRAPH THIS SPECIES IF POSSIBLE.

CIVIL ABBREVIATIONS

&	AND	Ø, DIA	DIAMETER
#, NO	NUMBER	APP'D	APPROVED
APPROX	APPROXIMATE	BLDG	BUILDING
CB	CATCH BASIN	CEN	CENTER
CFS	CUBIC FEET PER SECOND	CI	CENTERLINE
CMP	CORRUGATED METAL PIPE	CO	CLEANOUT
CONC	CONCRETE	COR	CORNER
CY	CUBIC YARD	DEMO	DEMOLITION
DMH	DRAIN MANHOLE	DI	DUCTILE IRON
DR	DRAIN	DWG	DRAWING
EL	ELEVATION	EMH	ELECTRIC MANHOLE
EMH	ELECTRIC MANHOLE	FM	FORCE MAIN
FT	FEET	G	GYRANT
HYD	HYDRANT	IN	INCH
INF	INFLUENT	INV	INVERT
LBS	POUNDS	MAX	MAXIMUM
MH	MANHOLE	MIN	MINIMUM
MW	MONITORING WELL	N	NORTH
NGVD	NATIONAL GEODETIC VERTICAL DATUM	N/A	NOT AVAILABLE/APPLICABLE
NTS	NOT TO SCALE	OD	OUTSIDE DIAMETER
PC	PERFORATED CLAY	PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH	PS	PRIMARY SLUDGE
PVC	POINT OF TANGENCY	PT	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE	RD	REQUIRED
REQ'D	REQUIRED	S	SLOPE, SEWER
S	SLOPE, SEWER	SD	STORM DRAIN
SF	SQUARE FEET	SQ	SQUARE
SMH	SANITARY SEWER MANHOLE	STA	STATION
SQ	SQUARE	T, XFMR	TRANSFORMER
TBM	TEMPORARY BENCH MARK	THK	THICKNESS
THK	THICKNESS	TOS	TOP OF STRUCTURE
TYP	TYPICAL	UD	UNDERDRAIN
UG	UNDERGROUND	UGE	UNDERGROUND ELECTRIC
VC	VITRIFIED CLAY	W	WITH
W	POTABLE WATER		

EXISTING	PROPOSED

NO	REVISIONS	APP'D	DATE

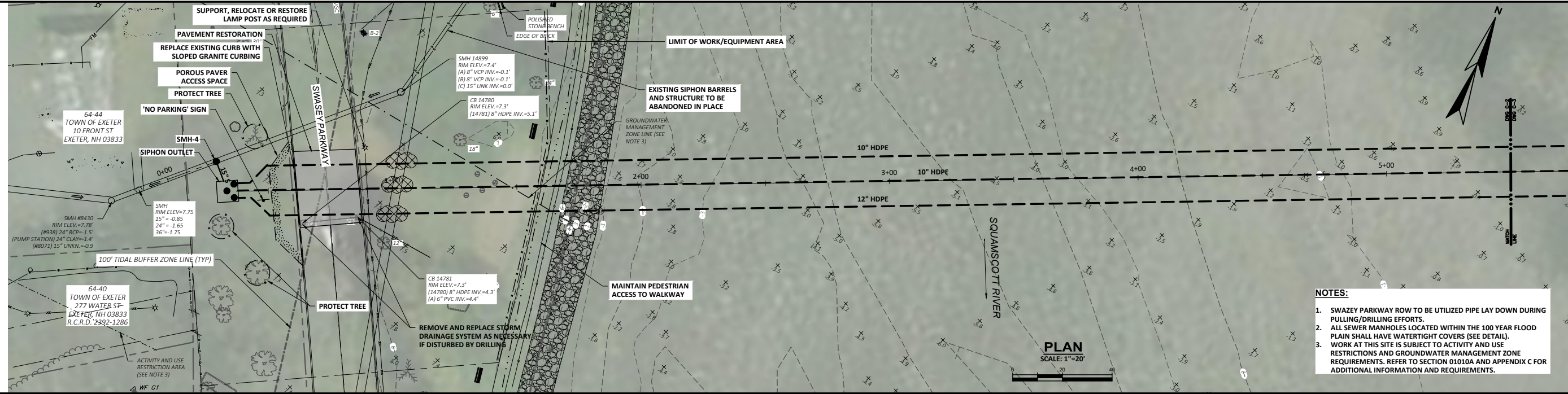
PROJECT NO: 20207
 DESIGNED: J.HAUMANN
 CAD COOR: D.FLORA
 CAD: D.FLORA
 CHECKED: K.GARVEY
 DATE: JUNE 2021
 APPROVED: K.GARVEY
 DATE:
 SUBMISSION: 60% DESIGN SET



WRIGHT-PIERCE
 603.606.4420 | www.wright-pierce.com
250 COMMERCIAL STREET, SUITE 4024, MANCHESTER, NH 03101

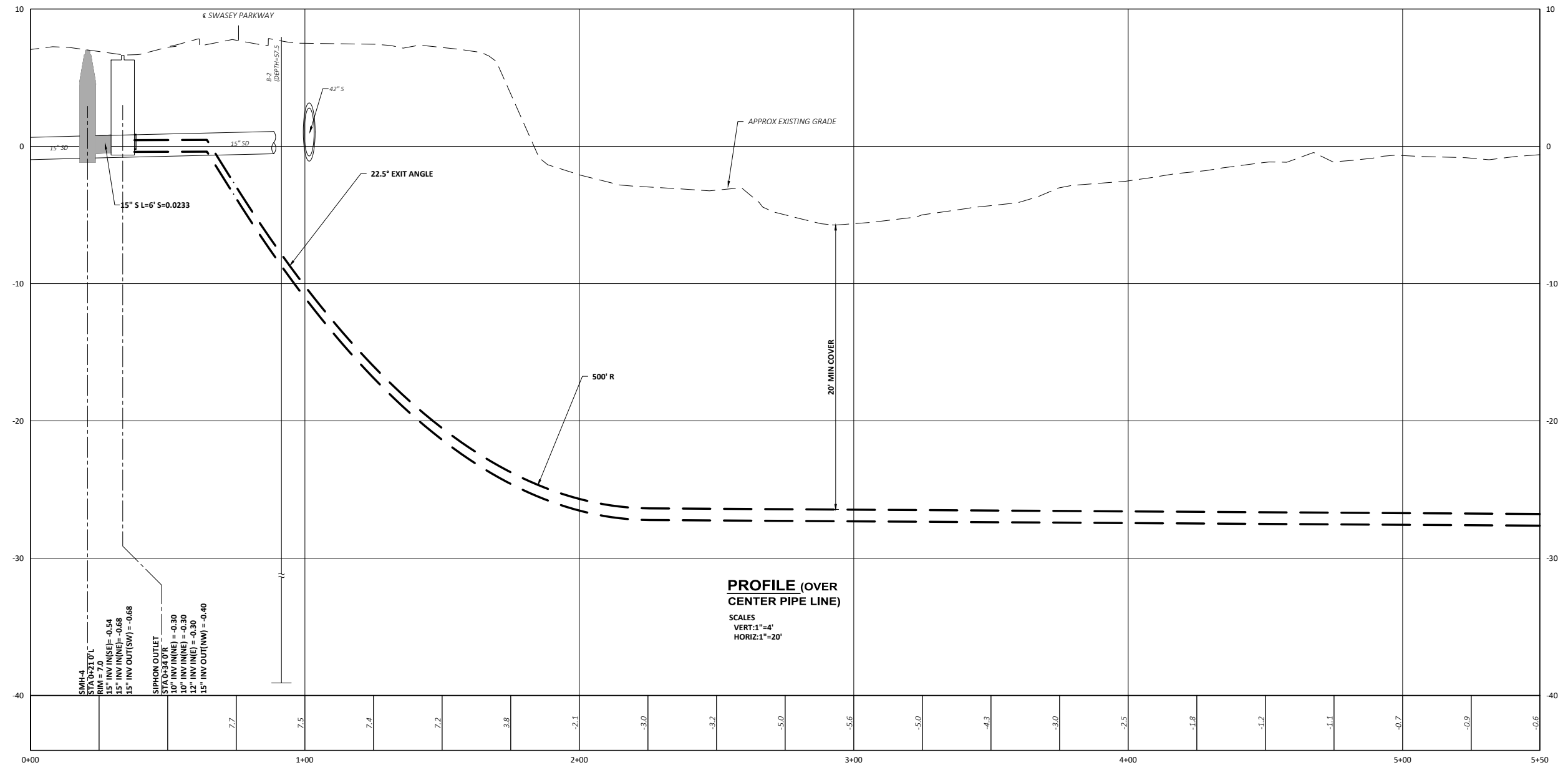
**TOWN OF EXETER, NH
 SQUAMSCOTT RIVER
 SEWER SIPHON UPGRADES**

GENERAL NOTES, LEGEND AND ABBREVIATIONS



NO	REVISIONS	APPD	DATE

PROJECT NO: 20387
 DESIGNED: J. HAUSMANN
 CAD COORD: D. FUDA
 CAD: D. FUDA
 CHECKED: K. GARVEY
 DATE: JUNE 2021
 APPROVED: K. GARVEY
 DATE:
 SUBMISSION: 65% DESIGN SET

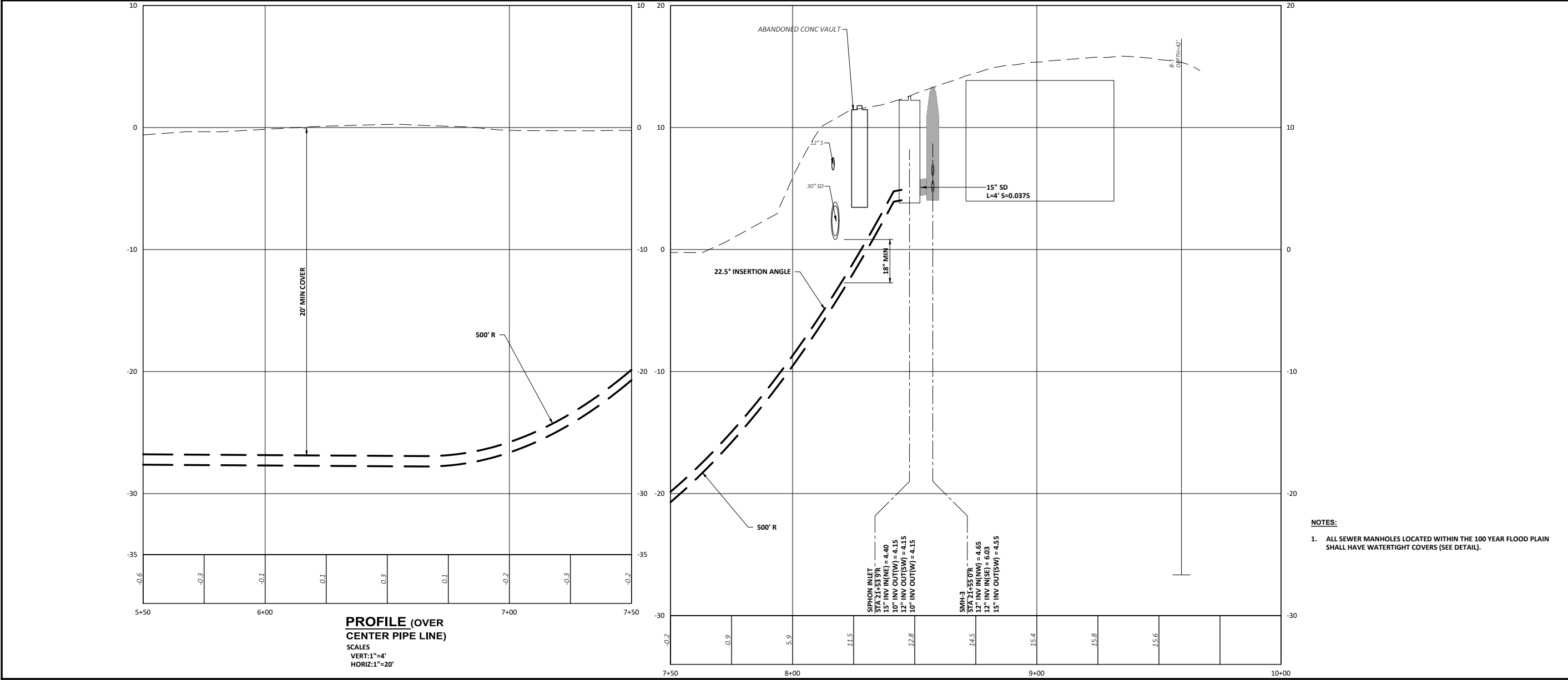
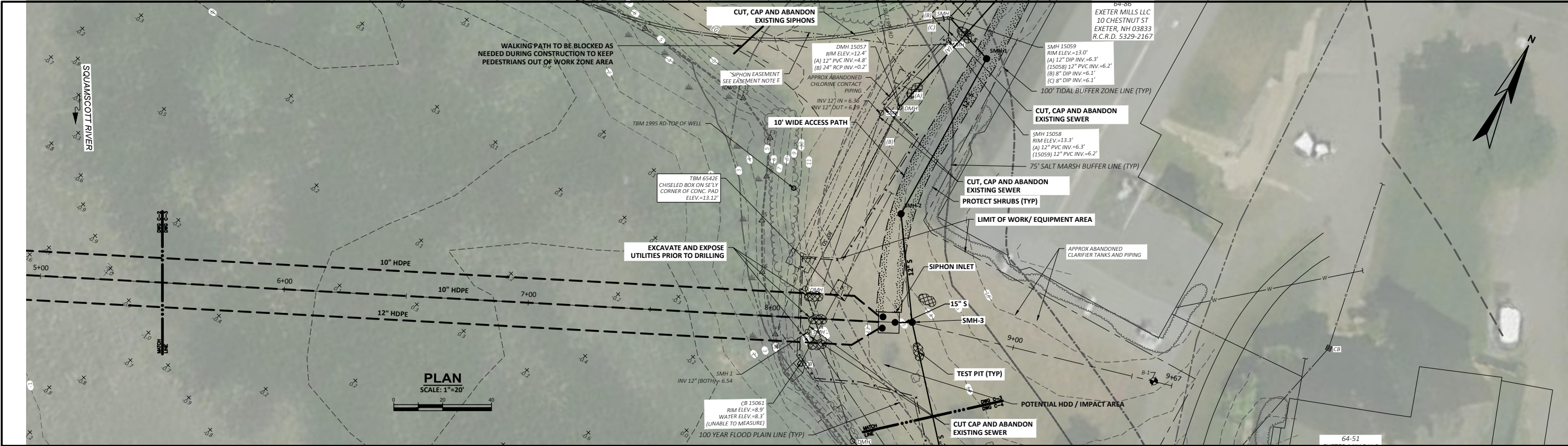


TOWN OF EXETER, NH
 SQUAMSCOTT RIVER
 SEWER SIPHON UPGRADES

PLAN AND PROFILE I

LAST SAVED BY: DENISE FUDA / 1/16/2021 3:22 PM

J:\ENGINEERING\20387-SIPHONS-WEBSTER\DESIGN\DRAWINGS\SEWER\SIPHONS\20387-CS-PLAN PROFILE II | 1.2.5889 | ... | 7/16/2021 3:30:31 PM | DENISE FUDA



NOTES:
 1. ALL SEWER MANHOLES LOCATED WITHIN THE 100 YEAR FLOOD PLAIN SHALL HAVE WATERTIGHT COVERS (SEE DETAIL).

NO	REVISIONS	APPD	DATE

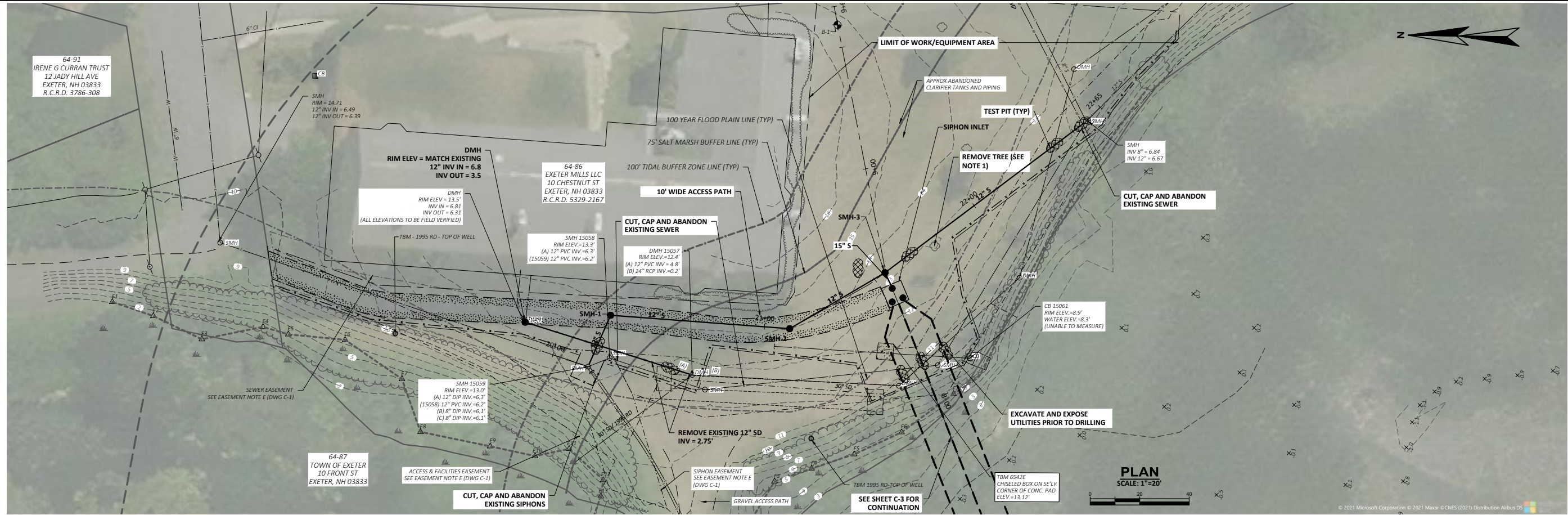
PROJECT NO: 20387
 DESIGNED: J. HAUBMANN
 CAD COORD: D. FUDA
 CAD: D. FUDA
 CHECKED: K. GARVEY
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 APPROVED: K. GARVEY
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TOWN OF EXETER, NH
 SQUAMSCOTT RIVER
 SEWER SIPHON UPGRADES

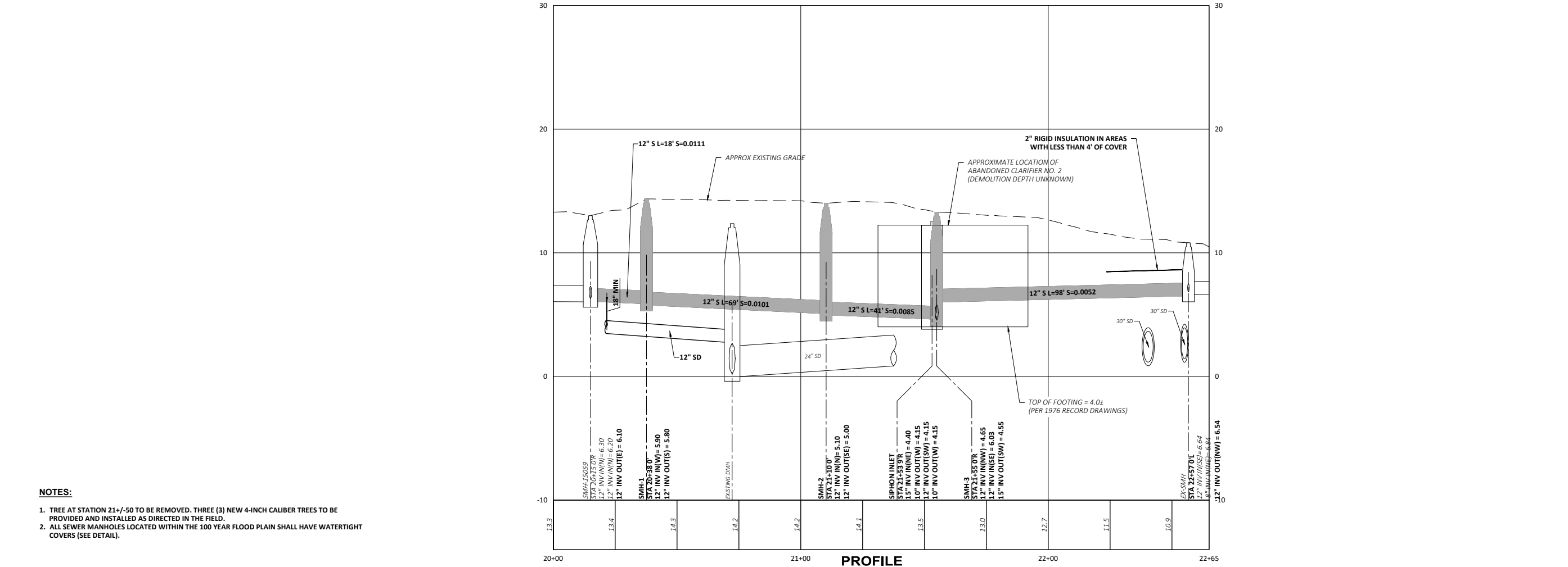
PLAN AND PROFILE II

DRAWING
C-3



NO	REVISIONS	APPD	DATE

PROJECT NO:	20387
DESIGNED:	J. HAUSMANN
CAD COORD:	D. FUDA
CAD:	D. FUDA
CHECKED:	K. GARVEY
DATE:	JUNE 2021
APPROVED:	K. GARVEY
DATE:	
SUBMISSION:	65% DESIGN SET



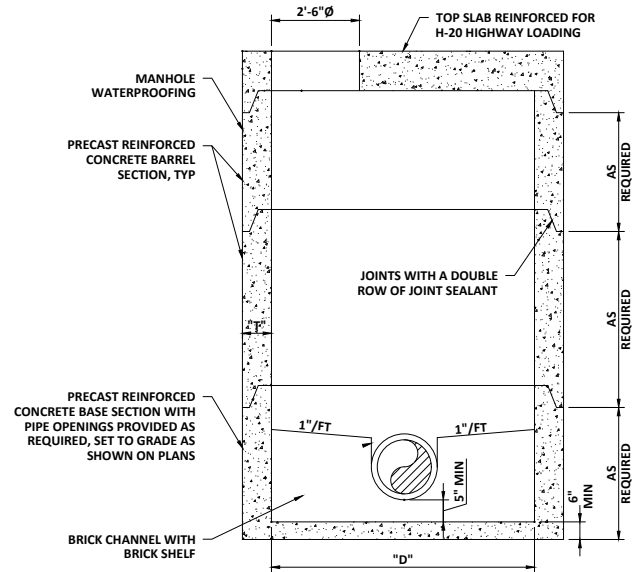
- NOTES:**
- TREE AT STATION 21+/-50 TO BE REMOVED. THREE (3) NEW 4-INCH CALIBER TREES TO BE PROVIDED AND INSTALLED AS DIRECTED IN THE FIELD.
 - ALL SEWER MANHOLES LOCATED WITHIN THE 100 YEAR FLOOD PLAIN SHALL HAVE WATERTIGHT COVERS (SEE DETAIL).

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TOWN OF EXETER, NH
 SQUAMSCOTT RIVER
 SEWER SIPHON UPGRADES

PLAN AND PROFILE III

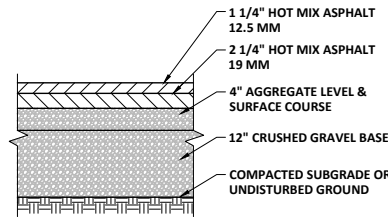
DRAWING
 C-4



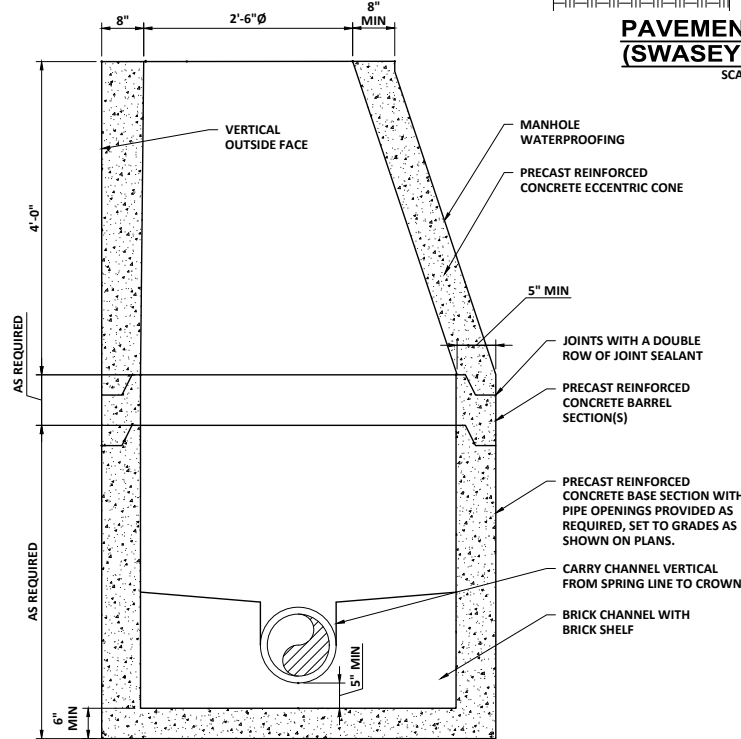
NOTE: MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT ON A SMOOTH RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW.

DIAMETER ("D")	MAX PIPE DIAMETER STRAIGHT THRU TO 45° DEFLECTION	MINIMUM WALL THICKNESS ("T")
48"	UP TO 30" O.D.	5"
60"	UP TO 44" O.D.	6"
72"	UP TO 51" O.D.	7"
96"	UP TO 72" O.D.	9"

FLAT SLAB TOP MANHOLE
SCALE: NTS

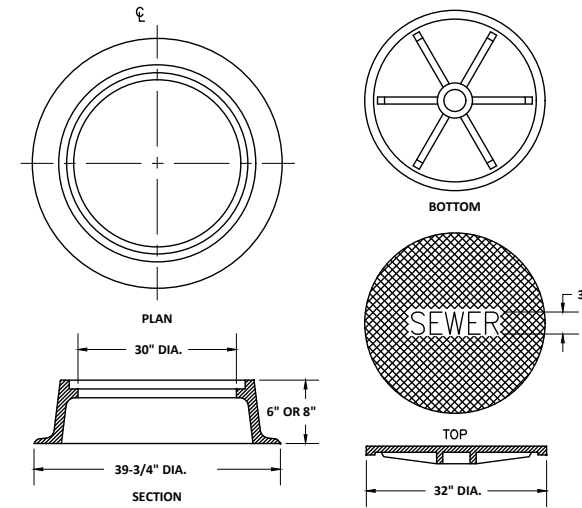


PAVEMENT SECTION (SWASEY PARKWAY)
SCALE: NTS

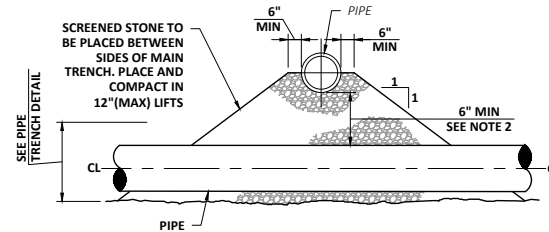


NOTES:
1. MANHOLE CHANNELS REQUIRING A CHANGE IN DIRECTION ARE TO BE BUILT ON A SMOOTH CURVE OF THE LONGEST POSSIBLE RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW.
2. USE A FLAT SLAB TOP MANHOLE WHEN THE HEIGHT DIFFERENCE BETWEEN THE HIGHEST INVERT AND RIM IS LESS THAN 6'-0" AND WHEN MANHOLE DIAMETER IS GREATER THAN 4'-0".

TYPICAL 4-FT MANHOLE
SCALE: "NTS"

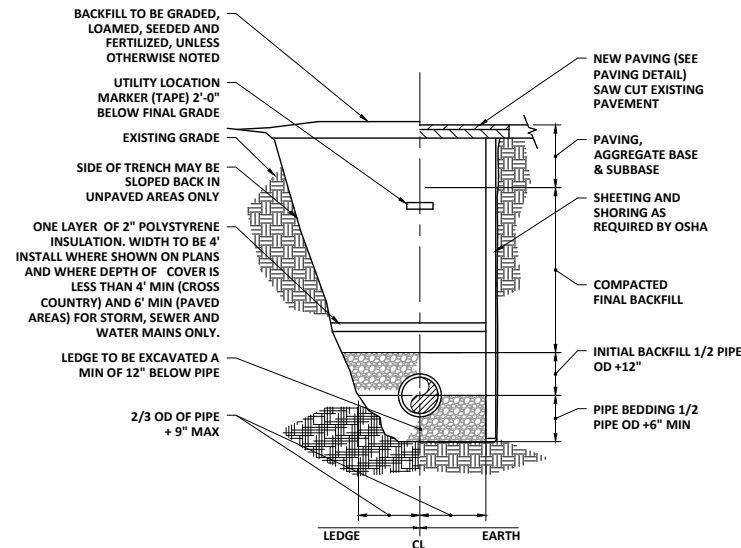


SEWER MANHOLES (HEAVY DUTY COVER)
SCALE: NTS



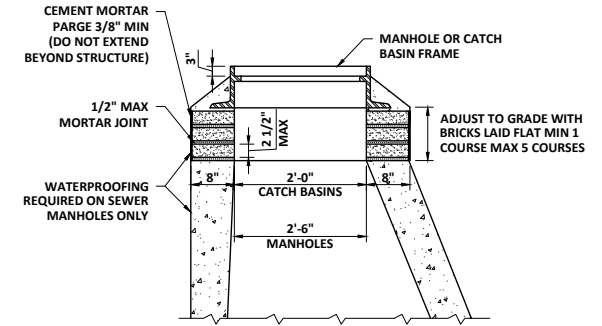
NOTES:
1. JOINTS ON EACH PIPE TO BE AS FAR FROM INTERSECTION AS POSSIBLE.
2. IF LESS THAN 12", FLOWABLE FILL MAY BE REQUIRED RATHER THAN SCREENED STONE TO FACILITATE PROPER PIPE BEDDING AND COMPACTION AT ENGINEER'S DISCRETION. REFER TO SPECIFICATIONS SECTION 02225 FOR ADDITIONAL INFORMATION.

PIPE CROSSING
SCALE: NTS

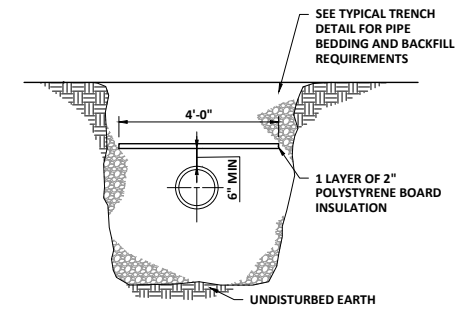


NOTES:
1. ALL EXCAVATION MUST MEET OSHA STANDARDS.
2. INSTALL 3 FOOT LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100' AND WHERE SHOWN ON PLANS TO PREVENT TRENCH GROUNDWATER FROM BEING CHANNELLED ALONG BEDDING/INITIAL BACKFILL.
3. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.

PIPE TRENCH
SCALE: "NTS"

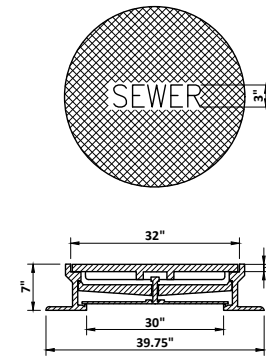


MANHOLE AND CATCH BASIN FRAME INSTALLATION
SCALE: NTS



NOTE: TRENCH PIPE INSULATION TO BE USED WHERE DEPTH OF COVER IS LESS THAN ** FEET OR AS DIRECTED BY THE ENGINEER

TRENCH PIPE INSULATION
SCALE: NTS



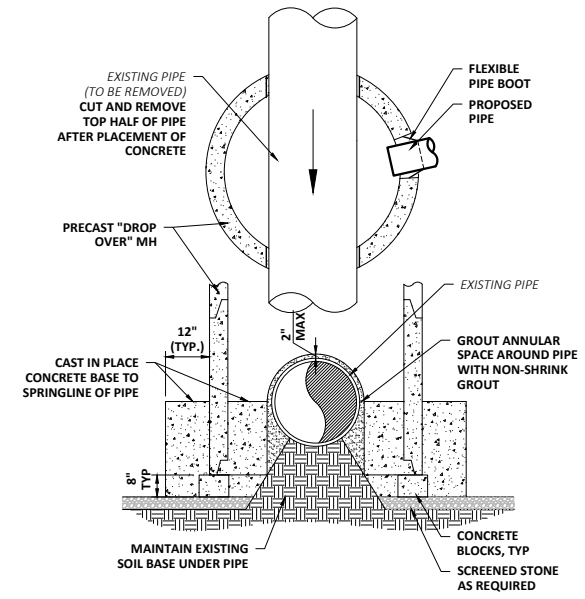
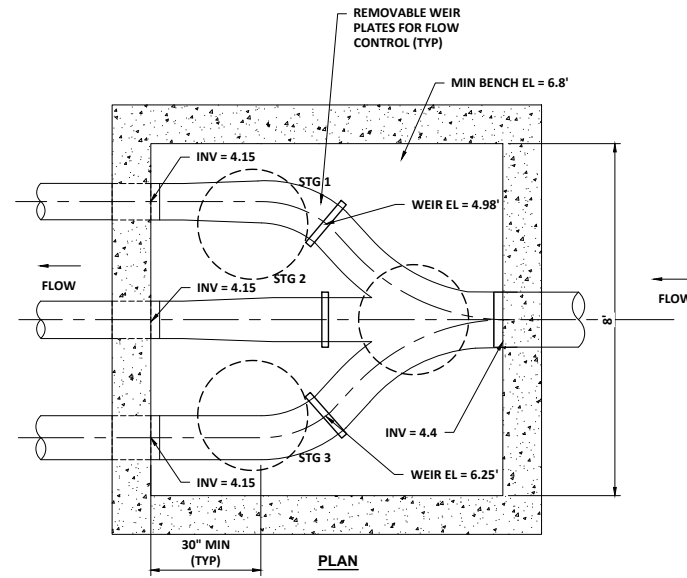
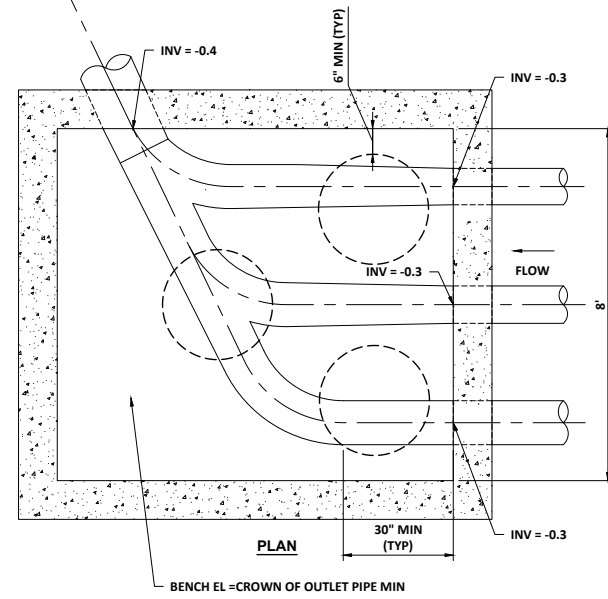
WATERTIGHT COVER AND FRAME
SCALE: NTS

NO	REVISIONS	DATE

PROJECT NO: 20387	DESIGNED: J. HAUSMANN	CAD: D. FUDA	CHECKED: K. GARVEY	DATE: JUNE 2021	APPROVED: K. GARVEY	SUBMISSION: 60% DESIGN SET
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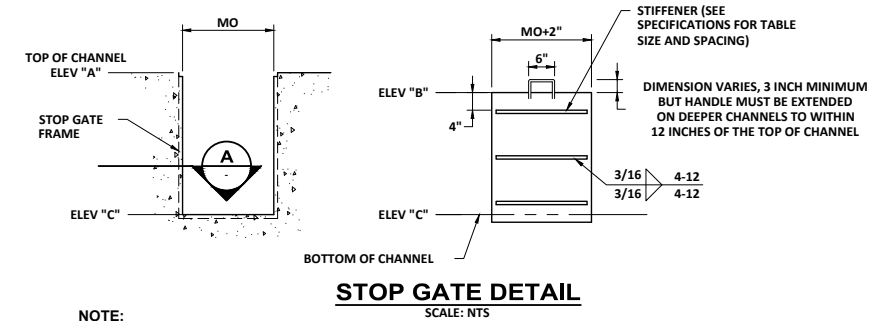
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TOWN OF EXETER, NH
SQUAMSCOTT RIVER
SEWER SIPHON UPGRADES
DRAWING
C-5
DETAILS I

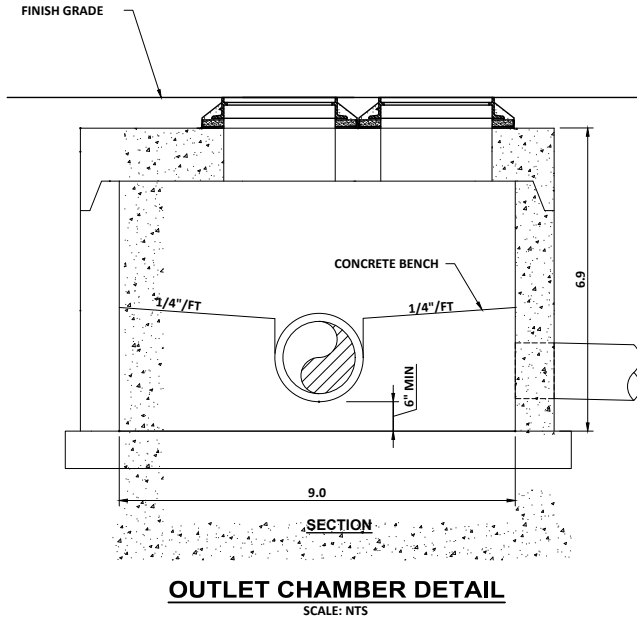
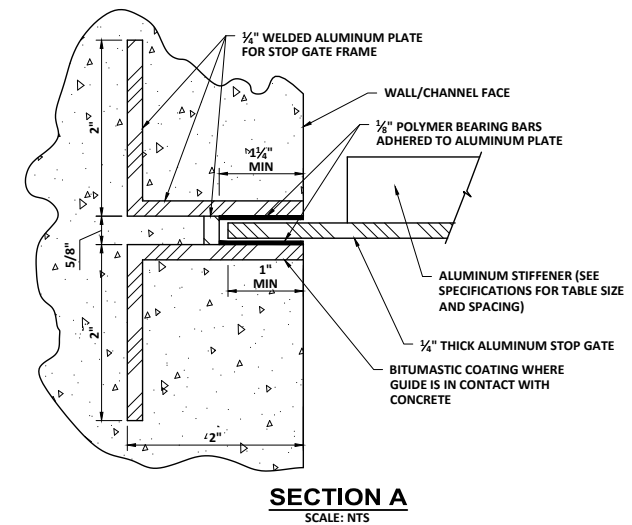


STOP GATE SCHEDULE					
LOCATION	STOP GATE No.	MO	ELEVATION "A"	ELEVATION "B"	ELEVATION "C"
INLET CHAMBER	STG-1	12"	6.8	4.98	4.15
INLET CHAMBER	STG-2	12"	6.8	N/A	4.15
INLET CHAMBER	STG-3	12"	6.8	6.25	4.15

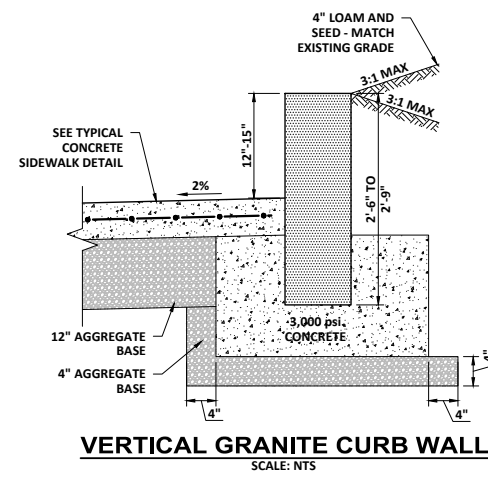
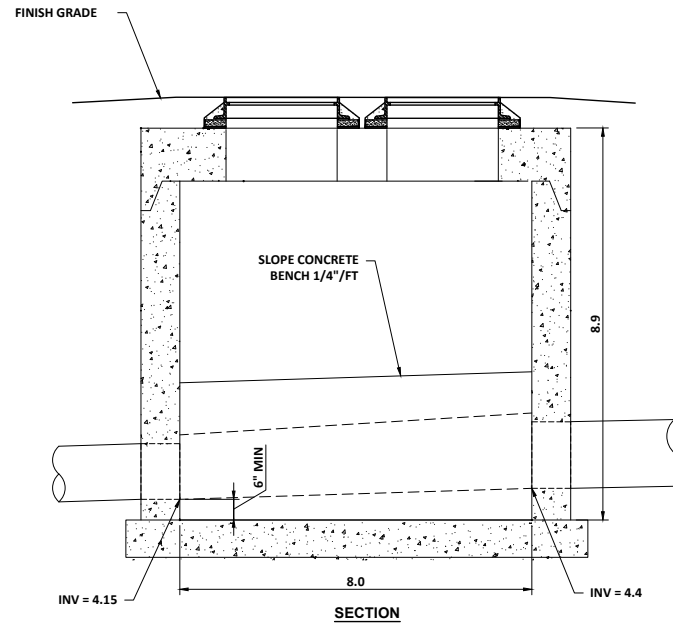
- NOTE:**
1. PROVIDE A WALL BRACKET AT EACH LOCATION WHERE APPROPRIATE FOR STORAGE OF EACH STOP GATE WHEN NOT IN USE. EACH GATE SHALL BE NUMBERED TO PROVIDE IDENTIFICATION.
 2. A FRAME SHALL BE PROVIDED AT STG 2, BUT NO WEIR SHALL BE INSTALLED INITIALLY.
 3. PROVIDE A SPARE GATE FOR EACH OF STG 1 AND STG 3.



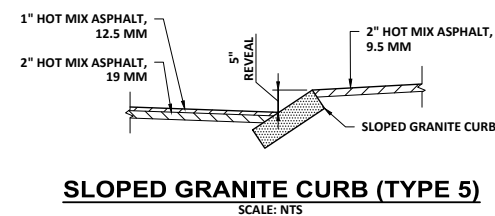
- NOTE:**
- PROVIDE A WALL BRACKET AT EACH LOCATION WHERE APPROPRIATE FOR STORAGE OF EACH STOP GATE WHEN NOT IN USE. EACH GATE SHALL BE NUMBERED TO PROVIDE IDENTIFICATION.



- NOTE:**
- CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT ON A SMOOTH RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW.



CONCRETE FILL NOTE:
CONCRETE FILL MIX PROPERTIES SHALL BE PROPORTIONED TO A MINIMUM STRENGTH OF 3,000 PSI AT 28 DAYS.



NO	REVISIONS	APPD	DATE

PROJECT NO: 20387
DESIGNED: J. HAUSMANN
CAD COORD: D. FUDA
CAD: D. FUDA
CHECKED: K. GARVEY
DATE: JUNE 2021
APPROVED: K. GARVEY
DATE:
SUBMISSION: 60% DESIGN SET

WRIGHT-PIERCE
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TOWN OF EXETER, NH
SQUAMSCOTT RIVER
SEWER SIPHON UPGRADES

EROSION AND SEDIMENTATION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE NEW HAMPSHIRE STORMWATER MANUAL BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, TERRAIN ALTERATION BUREAU, DATED DECEMBER 2008

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES REQUIRED ARE SHOWN ON THE DRAWINGS. PROVIDE SILT FENCE, STONE CHECK DAMS AND OTHER EROSION CONTROL MEASURES AS REQUIRED TO ADEQUATELY PREVENT SEDIMENT TRANSPORT AS NOTED IN THE BMP.

ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL AND THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, ENV-Wq 1500: ALTERATION OF TERRAIN, DECEMBER 2008

1. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION, IN NO CASE AT MORE THAN 5 ACRES AT A TIME, WILL BE MAINTAINED IN AN UNTREATED OR UN-VEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL, AREAS TO BE VEGETATED SHALL BE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
2. TEMPORARY STORAGE OF STOCKPILED MATERIAL SHALL BE STABILIZED IN A MANNER THAT WILL MINIMIZE EROSION.
3. EROSION CONTROL MEASURES SUCH AS SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, ETC.) AND OUTLET PROTECTION (WHERE APPLICABLE) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OR EARTH MOVING OPERATIONS OF UPGRADIENT DRAINAGE AREAS.
4. FUGITIVE DUST MUST BE CONTROLLED IN ACCORDANCE WITH NEW HAMPSHIRE STANDARDS.
5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED AND/OR WILL NOT ERODE UNDER THE CONDITIONS OF A 10-YEAR STORM. STABILIZATION SHALL BE DEFINED AS ONE OF THE FOLLOWING:
 - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATIVE GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIALS SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL NOT BE STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL (3 TO 1) UNLESS STABILIZED WITH PERMANENT EROSION CONTROL MEASURES. IF MOWING IS TO OCCUR, MAXIMUM SLOPE ANGLE SHALL BE THREE HORIZONTAL TO ONE VERTICAL (3 TO 1). ON SLOPES FOUR HORIZONTAL TO ONE VERTICAL (4 TO 1), FINAL PREPARATION SHOULD INCLUDE SURFACE ROUGHENING.
7. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND RE-GRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER. AT NO TIME SHALL THE INTEGRITY OF THE EROSION CONTROL FENCE BE IN DANGER DUE TO BUILD UP OF SEDIMENT.
8. RE-VEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND RE-VEGETATED.
9. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 2 BALES (70-90 LBS) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE.
10. DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
11. SEED MIX SELECTION AND APPLICATION RATES WILL BE CONSISTENT WITH THE FOLLOWING TABLES AS REFERENCED FROM MINNICK, E.L. AND H.T. MARSHALL, STORMWATER MANAGEMENT AND EROSION CONTROL FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, ROCKINGHAM COUNTY CONSERVATION DISTRICT, AUGUST 1992, AND TABLES 4-1 THROUGH 4-3 OF SECTION 3 IN THE NEW HAMPSHIRE STORMWATER MANUAL. NOTE: REED CANARY GRASS SHALL NOT BE USED.
12. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE WORK AREA IS STABILIZED.
13. WETLANDS (EXCEPT THOSE WHICH ARE TO BE FILLED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS) WILL BE PROTECTED WITH SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
14. IN GENERAL, AREAS WITHIN 100 FEET OF DELINEATED WETLANDS OR STREAMS SHALL HAVE A MAXIMUM PERIOD OF EXPOSURE OF NOT MORE THAN 15 DAYS.
15. FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IN ALL AREAS WITHIN 100 FEET OF DELINEATED WETLANDS OR STREAMS.

EROSION CONTROL DURING WINTER CONSTRUCTION

1. WINTER CONSTRUCTION PERIOD DEFINED: NOVEMBER 1 THROUGH MAY 1
2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREAS SHOULD BE LIMITED TO WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY PRECIPITATION EVENT.
4. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
5. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
6. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3

LIME AND FERTILIZER SCHEDULE

SEEDING TYPE	SEED DATES	LIME RATE (TONE/ACRE)	FERTILIZER RATE/RATIO (TYPE) [LBS/1,000 SQ. FT.]
PERMANENT AND/OR TEMPORARY	MAY. 1 - SEPT. 15	3	600/ENGINEER APPROVED (N-P205-K20)

- NOTES:
1. USE LOW PHOSPHATE FERTILIZER AT ALL TIMES AND SLOW RELEASE NITROGEN FERTILIZER WHEN BETWEEN 25 AND 250 FEET OF A SURFACE WATER BODY.
 2. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
 3. APPLY LIMESTONE AT 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE.

TEMPORARY VEGETATION (TABLE 4-1)

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

DATES	SEED	RATE
PRIOR TO MAY 15	OATS	80 LBS/ACRE
AUG. 15 - SEP. 15	ANNUAL RYE GRASS	40 LBS/ACRE
AUG. 15 - SEP. 15	WINTER RYE GRASS	112 LBS/ACRE
APR. 1 - JUN. 1 (AUG. 15 - SEP. 15)	PERENNIAL RYE GRASS	40 LBS/ACRE

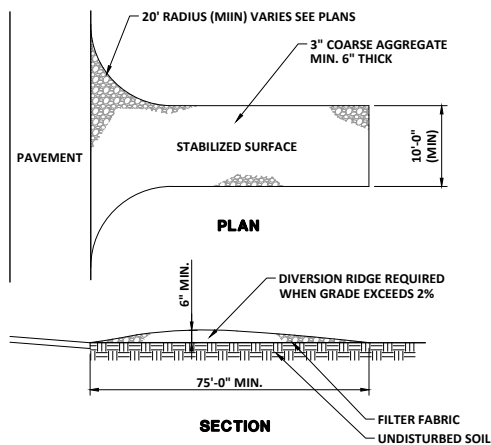
PERMANENT VEGETATION (TABLE 4-2)

USE	MIXTURE TABLES	SOIL DRAINAGE			
		I.	II.	III.	IV.
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	EXC.	FAIR
	C	POOR	GOOD	EXC.	GOOD
	E	FAIR	EXC.	EXC.	POOR
WATERWAYS, EMERGENCY SPILLWAYS AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXC.	EXC.	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXC.	EXC.	FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF)	F	FAIR	EXC.	EXC.	
	G	FAIR	EXC.	EXC.	

- NOTES:
1. I. DROUGHTY
 - II. WELL DRAINED
 - III. MODERATELY WELL DRAINED
 - IV. POORLY DRAINED
 2. EXC. - EXCELLENT
 3. REFER TO TABLE 4-3 FOR SEED MIXTURE AND APPLICATION RATES

PERMANENT VEGETATION (TABLE 4-3)

MIXTURE	SPECIES	RATE-POUNDS PER 1,000 SQ. FT.	
A	TALL FESCUE	20	0.45
	CREeping RED FESCUE	20	0.45
	REDTOP	2	0.05
	TOTAL	42	0.95
B	TALL FESCUE	15	0.35
	CREeping RED FESCUE	10	0.25
	CROWN VETCH/OR	15	0.35
	FLATPEA	30	0.75
	TOTAL	40 OR 55	0.95 OR 1.35
C	TALL FESCUE	20	0.45
	CREeping RED FESCUE	20	0.45
	BIRDSFOOT TREFOIL	8	0.2
	TOTAL	48	1.10
E	CREeping RED FESCUE	50	1.15
	KENTUCKY BLUEGRASS	50	1.15
	TOTAL	100	2.30
	F	TALL FESCUE	150



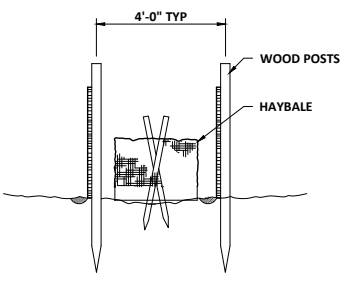
DITCH SLOPE (FT/FT)	L (FT)
0.020	100
0.030	66
0.040	50
0.050	40
0.080	25
0.100	20
0.120	17
0.150	13

STONE CHECK DAM DETAIL
NTS

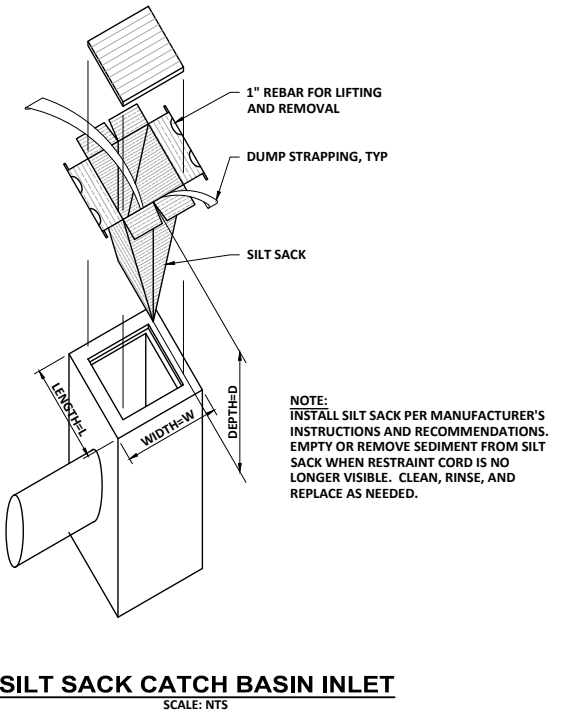
(TEMPORARY, TO BE REMOVED PRIOR TO FINAL SITE PAVING)

- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 4. PROVIDE WASH WATER STATION TO CLEAN WHEELS AS NECESSARY.

STABILIZED CONSTRUCTION ENTRANCE
NTS

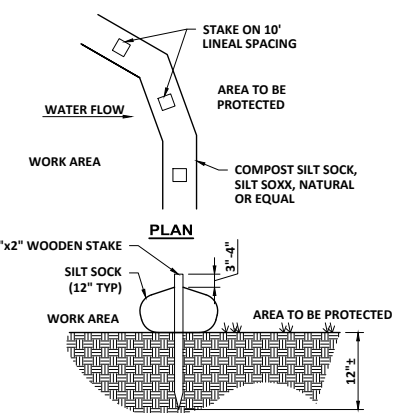


COMBINATION SILT FENCE AND HAY BALE BARRIER
SCALE: NTS



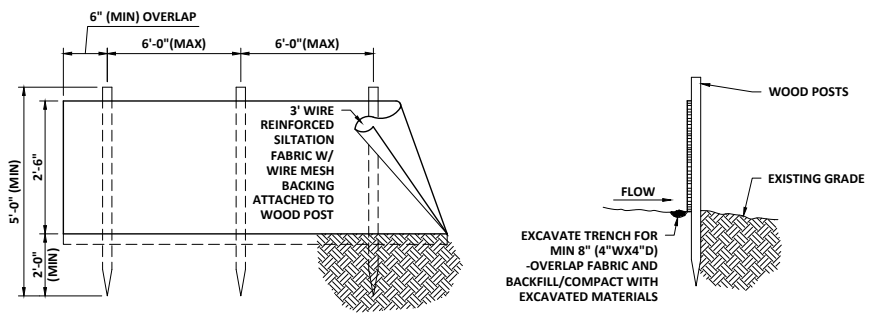
SILT SACK CATCH BASIN INLET
SCALE: NTS

NOTE: INSTALL SILT SACK PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. EMPTY OR REMOVE SEDIMENT FROM SILT SACK WHEN RESTRAINT CORD IS NO LONGER VISIBLE. CLEAN, RINSE, AND REPLACE AS NEEDED.



- NOTES:
1. ALL MATERIAL TO MEET SPECIFICATIONS
 2. SILT SOCK COMPOST/STOCK/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
 3. SILT SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER
 4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SILT SOCK
SCALE: "NTS"



- NOTES:
1. MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET
 2. MAXIMUM SLOPE ABOVE FENCE SHALL BE 2H TO 1V

SILT FENCE INSTALLATION DETAIL
SCALE: "NTS"

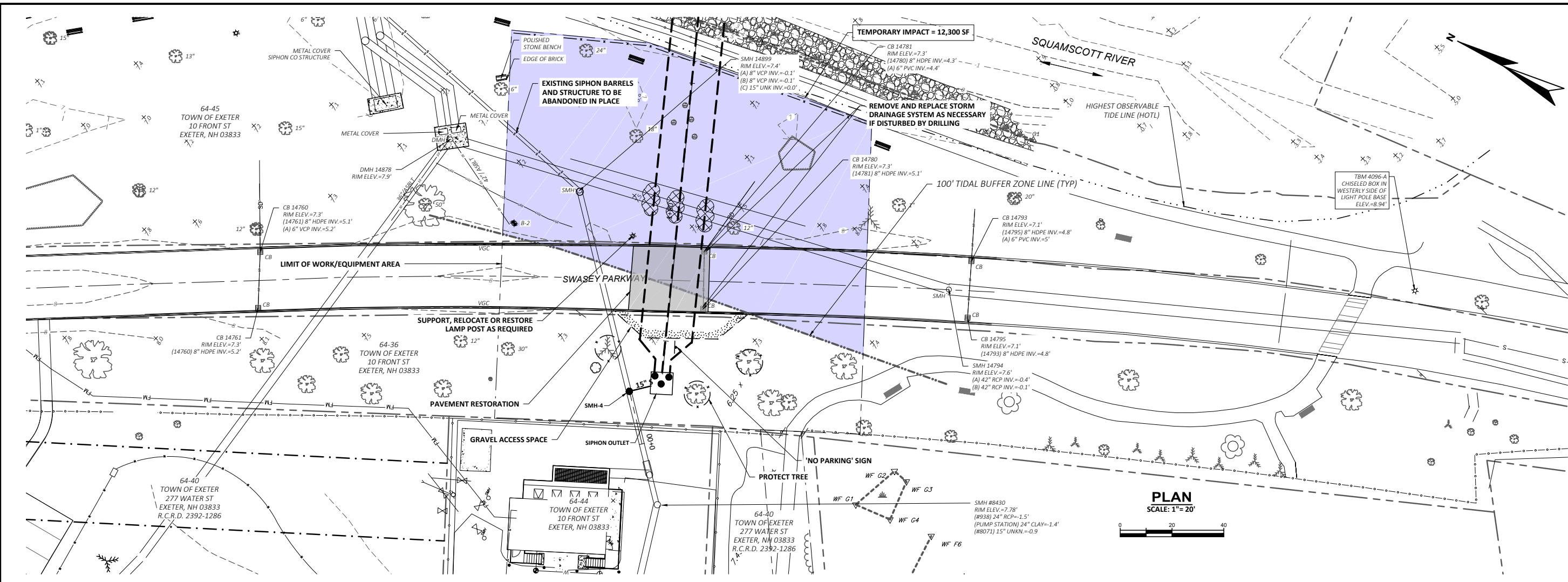
NO	REVISIONS	APPD	DATE

PROJECT NO: 2017
 DESIGNED: J. HALL
 CAD COR'DR: D.FUDA
 CAD: D.FUDA
 CHECKED: K.GARVEY
 DATE: JUNE 2021
 APPROVED: K.GARVEY
 DATE:
 SUBMISSION: 60% DESIGN SET

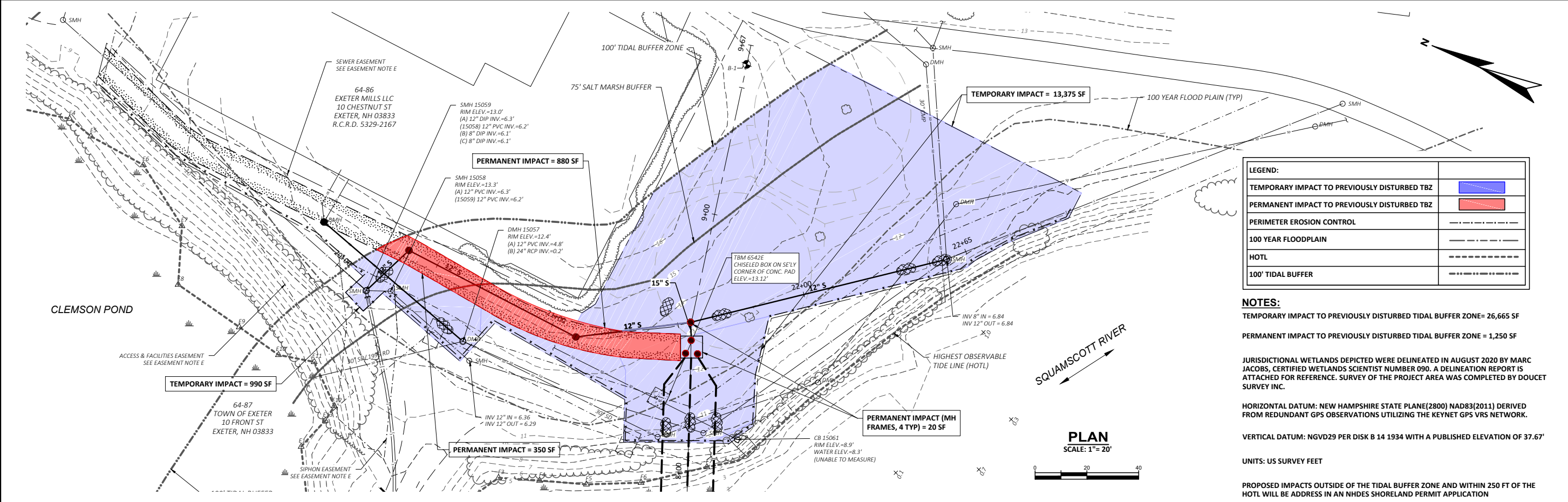
WRIGHT-PIERCE
 603.606.4420 | www.wright-pierce.com
 250 COMMERCIAL STREET, SUITE 404, MANCHESTER, NH 03101

LAST SAVED BY: DENISE.FUDA 7/14/2021 1:27 PM

J:\ENG\NH\EXETER\20387-SIPHONS\DRAWINGS\SEWERSIPHONS\CIV\20387-CS-PERMIT-SET.DWG | WETLAND PERMITTING | 1:10.12364677 | ... | 7/14/2021 1:39:58 PM | DENISE.FUDA



PLAN SCALE: 1"=20'



PLAN SCALE: 1"=20'

LEGEND:	
TEMPORARY IMPACT TO PREVIOUSLY DISTURBED TBZ	
PERMANENT IMPACT TO PREVIOUSLY DISTURBED TBZ	
PERIMETER EROSION CONTROL	
100 YEAR FLOODPLAIN	
HOTL	
100' TIDAL BUFFER	

NOTES:

TEMPORARY IMPACT TO PREVIOUSLY DISTURBED TIDAL BUFFER ZONE= 26,665 SF

PERMANENT IMPACT TO PREVIOUSLY DISTURBED TIDAL BUFFER ZONE = 1,250 SF

JURISDICTIONAL WETLANDS DEPICTED WERE DELINEATED IN AUGUST 2020 BY MARC JACOBS, CERTIFIED WETLANDS SCIENTIST NUMBER 090. A DELINEATION REPORT IS ATTACHED FOR REFERENCE. SURVEY OF THE PROJECT AREA WAS COMPLETED BY DOUCET SURVEY INC.

HORIZONTAL DATUM: NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.

VERTICAL DATUM: NGVD29 PER DISK B 14 1934 WITH A PUBLISHED ELEVATION OF 37.67'

UNITS: US SURVEY FEET

PROPOSED IMPACTS OUTSIDE OF THE TIDAL BUFFER ZONE AND WITHIN 250 FT OF THE HOTL WILL BE ADDRESS IN AN NHDES SHORELAND PERMIT APPLICATION

NO	REVISIONS	APPD	DATE

PROJECT NO: 20387
 DESIGNED: J.S.HACTMAN
 CAD DRAWN: D.FUDA
 CAD: D.FUDA
 CHECKED: K.GARVEY
 DATE: JUNE 2021
 APPROVED: K.GARVEY
 DATE:
 SUBMISSION: 60% DESIGN SET

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TOWN OF EXETER, NH
 SQUAMSCOTT RIVER
 SEWER SIPHON UPGRADES

WETLAND PERMITTING PLAN

DRAWING **F-1**



4

Project Narrative

Project Introduction

The Town of Exeter, NH, intends to replace the existing dual 8-inch, 860 linear foot ductile iron sewer siphons installed under the Squamscott River in 1965. The existing sewer siphons, located between dual 36-inch combined sewer/stormwater siphons, convey sewage from the Jady Hill area, Hayes Trailer Park, portions of Portsmouth Avenue and all the flow from the Webster Avenue Pump Station. The existing siphons were inspected and observed to have significant corrosion, pitting, and abrasion, with water entering through defects found in the pipe. The Town's goal of the project is to increase resiliency and the capacity of the siphon to meet the growing needs and future development within the Town.

To meet the present and future needs of the Town, the proposed project includes replacing the existing siphons with a new three-barrel HDPE sewer siphon. Horizontal directional drilling (HDD) is the proposed construction method to install the siphons beneath the river. Installation of the proposed siphon system will replace the nearly failing pipes and increase the capacity of the sewer system, in advance of the Webster Ave Pump Station Upgrades, currently in design.

Natural Resources

Wetlands

The project area is located along the tidally influenced Squamscott River. The Squamscott River outlets to Great Bay to the north of the project area.

Wetlands and resource areas were delineated at each site by Marc Jacobs, CWS in August 2020. Resource areas within the project area include the 100' Tidal Buffer Zone (TBZ) offset from the HOTL and the manmade Clemson Pond CSO Detention Pond. Refer to wetland delineation report included in Section 6.

Marc Jacobs identified areas of salt marsh along the 'F' flag series along the eastern shore of the Squamscott River. The limit of salt marsh is coincident with the Highest Observable Tide Line (HOTL) in most locations. A small portion of the HOTL located along the eastern bank was estimated by matching the same elevation identified by Marc Jacobs. This was done in order to show the TBZ for the entire project area.

Rare, Endangered and Threatened Species

Coordination with the New Hampshire Natural Heritage Bureau (NHB) determined that they do not expect impacts to any rare wildlife, plant, and/or natural community despite record within the vicinity of the project area. The determination was made on June 24, 2021. The NHB report (NHB21-1968) along with correspondence with NHB and NHFG is included in Section 13. Per the request of NHFG, a photo and description identifying the black racer (state threatened species) has been added to DWG C-1 along with contact info if the species is identified on site.

Proposed Project

The proposed project includes installing a HDD three barrel sewer siphon beneath the Squamscott River, access structures and sewer reconnections on either side of the river. Two HDD pits will be excavated on either side of the river to allow for entry/exit of the siphons drilling beneath the Squamscott River. A portion of gravity sewer and stormdrain will be replaced within the project area along with the construction of an access drive for maintenance of the siphon structures.

Proposed Wetland Impacts

The proposed impact area for the project includes 26,665 sq ft of temporary impact (trench work to install sewer, stormdrain, construction access/laydown, HDD pits) and 1,250 sq ft of permanent impact (Manholes, access

drive). See Wetland Impact Figures (Section 3). The proposed wetland impacts are located within the previously disturbed Tidal Buffer Zone. No direct wetland impacts are proposed.

The project proposes temporary impacts are as follows:

Activity	Tidal Buffer Zone (sq ft)
Trench Excavation, Test Pits, HDD Entry/Exit, Construction Access/Laydown	26,665
Total	26,665

The project proposes permanent impacts to jurisdictional areas as follows:

Activity	Tidal Buffer Zone (sq ft)
Manholes	20
Access Drive	1,230
Total	1,250

Env-Wt 605.03 indicates permanent impacts within previously developed buffer zone are exempt from compensatory mitigation if they are located more than 75 ft from salt marsh. A portion of the proposed impacts are located within 75 ft from salt marsh ('F' series flagging). The design evaluated ways to move the proposed project further from the salt marsh but the existing site conditions made this impractical.

Proposed Construction BMPs

In general, proposed construction will be completed in accordance with the Best Management Practices Manual: Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire.

The following sections describe how the proposed project will meet standard permit conditions required in Env-Wt 307.

Env-Wt 307.03 Protection of Water Quality

- a. Best management practices (BMPs) will be used to protect water quality during construction.
- b. Soil stockpiles will be managed to minimize risk of erosion and sedimentation to tidal waters.
- c. All water quality measures will be designed to provide maximum protection during storm events during construction and will be removed when construction is complete and vegetated areas are stable. Wildlife friendly erosion control shall be used.
- d. During construction, erosion and sedimentation controls will be inspected, replaced, and/or repaired every 7 days and immediately following any significant rainfall or snowmelt. Any accumulated sediments will be removed and disposed of to a stable and suitable site.
- e. Areas disturbed during construction will be permanently stabilized within 3 days of completion of final grades.
- f. Impacts to surface waters are not proposed.

- g. The contractor will be required to inspect equipment daily for leaking fuel, oil and hydraulic fluid prior to initiating work. All leaks shall be contained and repaired to prevent fluids from reaching groundwater, surface water or wetlands. Drilling fluid will be used as necessary for HDD and contained within drill pits.
- h. Equipment will be staged and refueled in accordance with Env-Wt 307.15.

Env-Wt 307.04 Protection of Fisheries and Breeding Areas Required

The proposed project is not anticipated to have any impacts to fish and shellfish. No work will be conducted within the waterway. Erosion and sedimentation BMPs will be utilized to prevent discharge of sediment with stormwater runoff.

Env-Wt 307.05 Protection Against Invasive Species

- a. Not applicable.
- b. Not applicable.
- c. Not applicable.
- d. Not applicable.
- e. To prevent the use of soil or seed stock containing nuisance or invasive species, the Contractor will be required to follow the Invasive Plant BMPs.

During delineation of wetlands and other resource areas, Marc Jacobs observed the presence of Japanese knotweed, purple loosestrife, Asian bittersweet, glossy buckthorn, multiflora rose, common buckthorn, burning bush, autumn olive and honeysuckle. The Contractor will be required to complete the project such that the project will not cause the spread of invasive species. Any impacted invasive species will be removed and disposed of properly.

Env-Wt 307.06 Protection of Rare, Threatened or Endangered Species or Critical Habitat

- a-c. All proposed activities will be conducted so as to minimize impacts to threatened and endangered species. A photo and description identifying the black racer snake has been added to Drawing C-1, along with contact information if identified. See Section 13 for concurrence with NHB and NHFG that not impacts are anticipated as a result of the proposed project

Env-Wt 307.07 Consistency with Shoreland Water Quality Protection Act

All project activities will be conducted in compliance with the applicable requirements of RSA 483-B and Env-Wq 1400 during and after construction. A Shoreland Permit by Notification will be submitted for impacts outside of the 100' TBZ and within 250 ft of the HOTL.

Env-Wt 307.08 Protection of Designated Prime Wetlands and Duly-Established 100-foot Buffers

The Town of Exeter does have designated prime wetlands, but none exist within the project area.

Env-Wt 307.09 Shoreline Structures

The proposed project does not involve the construction of any structures over public waters.

Env-Wt 307.10 Dredging Activity Conditions

Not applicable.

Env-Wt 307.11 Filling Activities

- a. It is anticipated that the existing soils will be used to restore the impacted areas. If fill needs to be brought from an offsite location it will not contain any material that could contaminate the surface, groundwater or tidal waters.
- b. Limits of permitted impacts will be identified prior to commencement of work to ensure that fill does not spill over or erode into areas where filling is not authorized.
- c. Slopes shall be immediately stabilized by methods specified in Env-Wq 1506 and in accordance with the NHDES Stormwater Manual to prevent erosion into adjacent wetlands and surface waters.
- d. Not applicable.
- e. The proposed project will restore existing grades and will not change the direction of surface water runoff.
- f. Not applicable.
- g. Authorized temporary fill will be placed on geotextile fabric within jurisdictional areas.
- h. Not applicable.
- i. The use of corduroy is not proposed.
- j. Impacted jurisdictional areas will be restored to pre-construction conditions and elevations.
- k. Not applicable.
- l. Not applicable.

Env-Wt 307.12 Restoring Temporary Impacts; Site Stabilization

- a. Within 3 days of final grading or temporary suspension of work in an area that is in or adjacent to surface waters, all exposed soil areas shall be stabilized by seeding and mulching, if during the growing season or mulching with tackifiers on slopes less than 3:1 or netting and pinning on slopes steeper than 3:1 if not within the growing season.
- b. Impacts to the tidal buffer zone will be restored to match current conditions. Restored lawn areas will be stabilized with a lawn seed mix free of weeds and invasive species.
- c. Any seed mix used shall not contain plant species that are exotic aquatic weeds.
- d. Mulch used within an area being restored shall be natural straw or equivalent non-toxic, non-seedbearing organic material.
- e. Wetland soils from areas vegetated with invasive plant species shall not be used in the area being restored.
- f. If any temporary impact area that is stabilized with seeding or plantings does not have at least 75% successful establishment of wetlands vegetation after 2 growing seasons, the area shall be replanted or reseeded, as applicable.
- g. If a temporary impact area is restored by seeding or plantings, then:
 - (1) The work shall not be deemed successful if the area is invaded with invasive species during the first full growing season following the completion of construction; and
 - (2) The person responsible for the work shall submit a remediation plan to the department that proposes measures to be taken to eradicate nuisance species during this same period.
- h. Unless otherwise authorized, any trees cut in an area of authorized temporary impacts shall be cut at ground level with the shrub and tree roots left intact, to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area. This permit application requests authorization to remove trees and roots from the TBZ where trench excavation is proposed in order to install the new sewer and water utilities.

- i. Unless otherwise authorized, wetland areas where permanent impacts are not authorized shall be restored to their pre-impact conditions and elevation by replacing the removed soil and vegetation in their pre-construction location and elevation matching as close as practicable to pre-construction conditions.

Env-Wt 307.13 Property Line Setbacks

The proposed project includes impacts both in Town owned property and on private property (Map 64 Lot 86). The Town has had preliminary discussions with the affected property owner and an easement is in development. A copy of the executed easement or written authorization will be provided to NHDES when available.

Env-Wt 307.14 Rock Removal

The proposed project does not involve removing any rocks from surface waters.

Env-Wt 307.15 Use of Heavy Equipment in Wetlands

- a. This permit application is requesting authorization to use heavy equipment within the TBZ as shown on plans.
- b. Mobile heavy equipment will be prohibited from being stored, maintained, or repaired in wetlands, except where storing, repairing, or refueling cannot practicably be complete and secondary containment is provided.
- c. The proposed project does not require operation of equipment over wetlands.
- d. Timber mats are not anticipated, but if necessary, shall be in good condition prior to installation, use and removal and thoroughly cleaned before re-use.
- e. Timbers mats shall be placed in the wetland from the upland or from equipment positioned on timber mats; be installed, used and removed so as to minimize impacts to wetland areas; and be installed with adequate erosion and sediment controls as approaches to the mats to promote a smooth transition to and minimize sediment tracking onto, the mats.

Env-Wt 307.16 Adherence to Approved Plans Required

Construction documents will require that the contractor complete all work in accordance with the approved plans. A qualified professional will periodically inspect the construction site to confirm work is being performed in accordance with the approved permit conditions.

Env-Wt 307.18 Reports

All required reporting will be completed in accordance with the approved permit conditions.

Env-Wt 313.01 Criteria for Approving Standard Permit Applications

- a. A waiver is being requested for the functional assessment requirement. Compensatory mitigation will be provided by the Town of Exeter in the form of an in-lieu payment to the Aquatic Resource Mitigation Fund. Resource and project specific criteria are included in Section 5 and 6 respectively. The proposed project will occur within Town owned property and where authorization is granted by the owner to complete the work.
- b. Not applicable.
- c. The proposed project has been designed to minimize adverse impacts to jurisdictional areas.

July 16, 2021
W-P Project No. 20387A

Eben Lewis
Wetlands Bureau, Land Resources Management
Water Division, NHDES
29 Hazen Drive; PO Box 95 Concord, NH 03302-0095

Subject: NHDES Wetlands Permit Application
Squamscott River Sewer Siphon Upgrades - Town of Exeter, NH

Dear Mr. Lewis:

On behalf of the Town of Exeter, NH and in accordance with Env-Wt 204, we respectfully request the following waiver for the above-referenced project.

Applicant/Owner:

Town of Exeter
13 Newfields Road
Exeter, NH 03833

Project Location:

Jady Hill Ave, Swasey Pkwy
Squamscott River
Exeter, NH 03833

Regulation: Env-Wt 311.03(b)(10). requires that "For minor and major projects, a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10, unless the project is limited to non-tidal shoreline structures that comply with the avoidance and minimization guidelines included in chapter 12 of the A/M BMPs, available as noted in Appendix B, specifically only for shoreline structure placement relative to vegetated wetlands and bank access locations relative to the shoreland waterfront buffer and applicable design and construction requirements of Env-Wt 500"

Waiver Request: To waive the requirement for a functional assessment.

Basis for Waiver: The proposed impacts are located within a previously disturbed tidal buffer zone. There are no proposed direct impacts to wetlands since the Town is proposing to use horizontal directional drilling to install the replacement siphons. Also, the proposed project involves replacement of an existing utility that must reconnect to the existing sewer system on either side of the Squamscott River. Therefore, design of the project does not allow for consideration of alternative locations for the replacement infrastructure that would typically be informed by a functional assessment. Finally, the project has been designed to limit disturbance to jurisdictional areas to the minimum extent practicable and proper sediment and erosion controls will be used during construction.

Sincerely,
WRIGHT-PIERCE
Britt Eckstrom, PE



Britt.eckstrom@wright-pierce.com

Enclosures

cc: Paul Vlasich, PE, Jen Mates, PE – Town of Exeter
Kevin Garvey, PE – Wright-Pierce
Exeter-Squamscott River Local Advisory Committee (ESRLAC), Exeter Conservation Commission

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Resource Specific Information

Applicable resource specific information required by Env-Wt 311.09 is presented as follows:

- a. *Project in tidal areas – Applicant shall submit information required by Env-Wt 600 – Refer to Section 6*
- b. *Project affecting non-tidal shoreline – Not applicable*
- c. *Projects within the protected shoreland:*
 - 1. *Reference line – HOTL, shown on Project Plans in Section 3*
 - 2. *Location of existing structures – shown on Project Plans in Section 3*
 - 3. *Location of proposed structure – proposed Inlet/Outlet Structures shown on Project Plans in Section 3*
 - 4. *Projects adjacent to tidal water, landward limit of the TBZ – shown on Project Plans in Section 3*
 - 5. *Total disturbed area within the protected shoreland: ~12,000 sq ft*
- d. *Stream crossing projects – Not applicable*

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Project Specific Information

The information provided below indicates how the proposed project meets the requirements of Env-Wt 600. The following Sections 1 through 8 correspond to the sections specified on the Coastal Resource Worksheet. Refer to Section 17 for the completed worksheet.

Section 1. Required Information (Env-Wt 603.02; Env-Wt 603.06; Env-Wt 603.09)

Refer to Project Narrative in Section 4 for a description of the proposed project and natural resources present at the project site.

Section 2 Data Screening

The Wetland Permit Planning Tool and NH GRANIT was used to determine the presence of the following resource areas near the project site:

- Salt marsh – Salt marsh was found in mapping and observed by Marc Jacobs CWS at wetland flags F2-F7. Refer to the Wetland Report in Section 6.
- Eel grass beds – Not present within the project area.
- Shellfish site – Not present within the project area.
- Projected sea-level rise (SLR) – The project area is subject to SLR.
- 100-year flood plain – The project is partially located with the 100-year flood plain.

Refer to Wetland Permit Planning Tool map attached to the Coastal Resources Worksheet in Section 16.

Section 3 Coastal Functional Assessment

A Coastal Functional Assessment was not completed for this project.

Section 4 Vulnerability Assessment

A site-specific vulnerability assessment was completed for the project area. Refer to Section 16.

Section 5 Design Plans

Design plans are included in Section 3.

Section 6 Water Depth Supporting Information

There are no impacts proposed below the HOTL.

Section 7 General Criteria for Tidal Beaches, Tidal Shoreline, and Sand Dunes

The proposed project only involves impacts to previously disturbed tidal buffer zone and does not involve impacts to tidal areas.

Section 8 How Project meets Relevant Standard Conditions and Approval Criteria

Refer to the Project Narrative included in Section 4 which describes how the proposed project will meet the general criteria for projects in the tidal buffer zone.



VIA EMAIL to mike.theriault@wright-pierce.com

October 2, 2020

Mr. Michael R. Theriault, P.E., Project Manager
Wright-Pierce
250 Commercial Street, Suite 4014
Manchester, NH 03101

Re: Douglass Way, Jady Hill Avenue, Webster Avenue, Swazey Parkway – Wheelwright Creek,
Squamscott River and Clemson Pond
Exeter, NH

Dear Mr. Theriault,

The following remarks summarize our preliminary observations made during the delineation of jurisdictional wetlands at the above-referenced location. Site inspections were conducted on August 14 and 17, 2020 to identify and delineate wetlands according to the New Hampshire Department of Environmental Services (NHDES) – Code of Administrative Rules Section Env-Wt 100 – 900 and the Town of Exeter Zoning Ordinance – Article 9 – Natural Resource Protection – §9.1 Wetlands Conservation District. The area-of-interest (AOI) generally includes lands immediately adjacent to Clemson Pond, Douglass Way, Jady Hill Avenue, Swazey Parkway (partial) and Webster Avenue (near the existing sewer pump station).

Jurisdictional wetlands were identified and wetland-upland boundaries within the AOI were identified and delineated in the field based upon on-the-ground investigations conducted using the technical guidance identified in the certification note at the end of this report. Jurisdictional wetland-upland boundaries within the AOI were marked in the field with solid color pink survey flags. Each flag bears a letter and number to assist in their subsequent field location by instrument survey. The following flag sequences were used: A1-A8, B1-B16, C1-C5, D1-D37, E1-E25, F1-F7, F1a-F1j and G1-G4. The flags were subsequently located via survey by Doucet Survey, LLC and are depicted on site plans prepared for Wright-Pierce dated October 1, 2020 which are included herein by reference. Only the wetland-upland boundaries closest to existing facilities and proposed work within the AOI were delineated.

General Wetland Descriptions

The following section generally describes wetland hydrology, vegetation and soil conditions at this location. The information is organized by wetland flag series or, where appropriate, groups of flag series that generally define a discreet wetland area. Classification of the dominant wetland types according to the National Wetland Inventory and Cowardin system are also identified below.

Wetland Flag Series 'A'

The wetland area identified by flags A1-A8 represents a variety of conditions but generally comprise freshwater wetlands having poorly drained hydric soils that are subject to periodic flooding. Wetland flags A1-A4± generally represent a natural wetland-upland boundary associated with palustrine forested (PFO) freshwater wetlands that also have a significant palustrine scrub-shrub (PSS) component toward the interior. Wetland flags A4-A5± generally represent a possible man-made wetland-upland boundary associated with PSS wetlands at the edge of a riprap apron. The apron contains a significant population of wetland plants, such as jewelweed (*Impatiens capensis*), but we have assumed that it was constructed in uplands and the wetland plants have subsequently colonized the area. Wetland flags A5-A8± generally represent a man-made wetland-upland boundary located at the toe-of-fill associated with construction of Webster Avenue. Wetland flag A8 is located at a 24-inch diameter corrugated metal pipe (CMP) which conveys an unnamed brook beneath Webster Avenue to tidally influenced wetlands associated with Wheelwright Creek. The stream channel appears to have been modified by excavation and or filling. The brook was observed to be flowing as a trickle during our site investigations, which were conducted under drought conditions.

Wetland Flag Series 'B'

The wetland area identified by flags B1-B16 represents a variety of freshwater wetland conditions that have mostly been altered at one time or another. The dominant soil substrate involves poorly drained hydric soils. Wetland flag B1 starts at the 24-inch diameter CMP referenced above. Wetland flags B1-B10± generally represent a possible man-made wetland-upland boundary, associated with PFO/PSS wetlands, which appears to be the result of filling. Wetland flags B10-B12± generally represent a possible man-made wetland-upland boundary associated with PFO/PSS wetlands which appear to be the result of an altered plant community. Wetland flags B12-B16± represent PFO wetlands at the toe of a fill slope associated with a developed commercial property that fronts on Portsmouth Avenue (NH Route 108). Wetland flag B16± is located adjacent to a storm drain outlet having a significant plume of sand. This sandy area is infested with Japanese knotweed, an invasive species. It is likely that occasional shallow surface flow takes place between wet flags B10/B11 and the wetland identified by the "D" series flags, especially flags D10/D11 and D15, during heavy storm events, and possibly as a result of the storm drain, but we did not connect the 'B' and 'D' wetland areas. The lands between the 'B' and 'D' wetlands, which have no trees, were previously altered.

Wetland Flag Series 'C'

The wetland area identified by flags C1-C5 represents a pile of fill comprised by soil and brush. We estimate the pile to be approximately 3-5 years old. We estimate that the area beneath the fill represents former wetlands. The dominant soil substrate involves poorly drained hydric soils.

Wetland Flag Series 'D'

The wetland area identified by flags D1-D37 represents a variety of conditions including both freshwater and tidal wetlands adjacent to Wheelwright Creek.

Wetland flags D1-D6±, D9-D12±, D14-D16± and D19-D21± identify the boundary of densely vegetated PSS freshwater wetlands having poorly drained hydric soils. These wetlands generally classify as palustrine forested.

Wetland flags D6-D9±, D12-D14±, D16-D19± and D21-D37± represent the wetland-upland boundary associated with tidally influenced wetlands classified as estuarine, intertidal, emergent, persistent, irregularly flooded (E2EM1P). The tidal wetlands represent the dominant condition along the wetland-upland boundary identified by the 'D' series flags. These flags identify the Highest Observable Tide Line (HOTL) and as such also represent the reference line for administration of the Shoreland Water Quality Protection Act discussed below. While there is a narrow band of poorly drained soils along the periphery and in the freshwater wetlands, the 'D' series flags should generally be interpreted to represent wetlands having very poorly drained soils for administration of wetland buffers under the local zoning ordinance described below. Wetland flags D26-D30± represent the top-of-bank. Wetland flags D28-D34± represent the toe-of-fill associated with the construction of Webster Avenue. Wetland flag D29± is located at a 24-inch diameter CMP which is completely rusted through on this end. Wetland flags D35-D37± represent a natural wetland-upland boundary and the riparian area is steep and densely forested here. Significant portions of the 'D' flag series represent designated prime wetlands, which are discussed below.

Wetland Flag Series 'E'

The wetland area identified by flags E1-E16± generally represent the inside edge of the toe-of-fill from a berm that resulted in the creation of Clemson Pond, which sits adjacent to the Squamscott River and is approximately 7 acres in size. Clemson Pond is man-made chiefly by filling / impoundment and serves as a Combined Wastewater Overflow Detention Pond. It appears that wetland resources were filled to create the pond. The flags identify freshwater wetlands that have developed near the toe-of-fill around the perimeter of the inside of the berm and pond. The PEM wetlands are dominated by broad-leaved cat-tails (*Typha latifolia*) with a PSS component a little further up the slope, especially between wetland flags E4-E8, where the wetland hydrology also appears to include a groundwater discharge component. However, the overarching wetland classification is palustrine, unconsolidated bottom, artificially flooded, excavated (PUBKx). Soils at the wetland-upland boundary are poorly drained. Very poorly drained soils may exist within 10-feet of the wetland-upland boundary but, due to the nature and use of Clemson Pond, we did not investigate this thoroughly.

Wetland Flag Series 'F'

The wetland area identified by flags F1-F7± and F1a-F1j also represent the HOTL associated with the Squamscott River. Wetland flags F1-F2± and F1a-F1j are located part way up the berm created by the construction of Clemson Pond. Wetland flags F2-F7 represent a natural wetland-upland boundary between forested riparian areas (which do not extend back from the river very far due to nearby development) and tidal wetlands dominated by a narrow band of narrow-leaved cat-tail (*Typha angustifolia*) that gives way to an expanse of salt marsh species such as salt hay grass (*Spartina patens*).

The dominant classification of vegetated wetlands closest to the delineated wetland-upland boundary is estuarine, intertidal, emergent, persistent, regularly flooded (E2EM1N). Looking toward Swazey Parkway from the berm that encloses Clemson Pond, there are other wetlands between the E2EM1N wetlands and the river which classify as estuarine, intertidal, unconsolidated shore, mud, regularly flooded (E2US3N). Finally, the river itself classifies as estuarine, subtidal (subsystem), unconsolidated bottom, subtidal (water regime) (E1UBL). The E1UBL classification extends all the way to the Swazey Parkway side of the AOI. Similar to the 'D' series flags, the 'F' series flags should generally be interpreted to represent wetlands having very poorly drained soils for administration of wetland buffers pursuant to the local wetland ordinance.

Wetland Flag Series 'G'

The wetland area identified by flags G1-G4± also represent the HOTL associated with the Squamscott River adjacent to the Swazey Parkway. Wetland flags G1-G4 are located part way up the slope which is man-made and heavily armored with granite blocks. As described above, the river classifies as estuarine, subtidal (subsystem), unconsolidated bottom, subtidal (water regime) (E1UBL). The soil between the blocks is vegetated with emergent / herbaceous vegetation species that include tall meadow-rue (*Thalictrum pubescens*), curly dock (*Rumex crispus*), purple loosestrife (*Lythrum salicaria*) and seaside goldenrod (*Solidago sempervirens*) among other species. Occasional tree species (growing as shrubs) such as green ash (*Fraxinus pennsylvanica*) and American elm (*Ulmus Americana*) were observed growing at and above the HOTL but it appears that the shrubby vegetation is periodically pruned, presumably to maintain a view of the river and protect the slope from tree roots which could eventually damage the armoring and stability of the slope. Trees can occasionally be found at the top-of-slope along the river but generally not within the AOI. Dominant tree species involve red maple (*Acer rubrum*). As with the 'D' and 'F' flag series, the 'G' series flags should generally be interpreted to represent wetlands having very poorly drained soils for administration of wetland buffers pursuant to the local wetland ordinance, in addition to other buffers that may apply.

Invasive Species

The following species, which are considered invasive according to commonly accepted sources, were observed within the AOI during our site investigations: Japanese knotweed (*Polygonum cuspidatum*), purple loosestrife, Asian bittersweet (*Celastrus orbiculata*), glossy buckthorn (*Frangula alnus*), multiflora rose (*Rosa multiflora*), common buckthorn (*Rhamnus cathartica*), burning bush (*Euonymus alatus*), autumn olive (*Elaeagnus umbellata*) and honeysuckle (*Lonicera* sp.). Japanese knotweed, bittersweet and purple loosestrife are considered Type II Priority Invasive Plant Species by the NH Department of Transportation (NHDOT). There is no NHDOT jurisdiction within the AOI but NHDOT Type II priority invasive plant species can be dispersed by seed *and* vegetative means (root and stem fragments) and thus are very easily spread by construction and infrastructure maintenance activities.

Local Zoning

The Town of Exeter Zoning Ordinance – Article 9 – Natural Resource Protection establishes the Wetlands Conservation Overlay District (§9.1). The district includes all wetlands, regardless of size, and surface waters of the state (§9.1.3.A and B.); in this case Wheelwright Creek and the Squamscott River. The district includes all streams depicted on United States Geological Survey topographic maps and includes intermittent streams (§9.1.3.C.). The district does not regulate man-made drainage structures (§9.1.3.D.); in this case the area identified by flags E1-A16 along the edge of Clemson Pond.

The district creates buffers between 25-feet and 125-feet depending upon the proposed use and the resource type involved. The district creates a limited use minimum 40-foot buffer to wetlands having poorly drained hydric soils and a limited use minimum 50-foot buffer to wetlands having very poorly drained hydric soils. Limited use is restricted to those uses which are listed as permitted or conditionally permitted. Site development such as utilities are considered a conditionally permitted use.

Uses in the Wetland Conservation Overlay District permitted by Conditional Use Permit (CUP), as issued by the Exeter Planning Board after recommendation by the Exeter Conservation Commission, include utilities and structures (§9.1.6.A.1.), provided, among seven (7) other criteria, there is no alternative design which does not impact the wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible (§9.1.6.B.1-8.). It is not clear that municipal projects are exempted from the regulations.

The Town of Exeter Zoning Ordinance – Article 9 – Natural Resource Protection establishes the Shoreland Protection District (§9.3). The district includes all land within 300-feet of the shoreline of the salt water section of the Squamscott River and the seasonal high water level of its fresh major tributaries (§9.3.3.C.1.). The district also regulates all land within 150-foot horizontal distance of the upland extent of any salt marsh adjacent to the river (§9.3.3.C.3.).

The district does not specifically permit or prohibit (municipal) utilities and says that industrial or commercial uses not otherwise prohibited in §9.3.4.F. are permitted by conditional use. The district requires a CUP for alteration of the land surface within 150 feet of the vegetative buffer within 75 feet of the shoreline, which may be more applicable to an underground utility project. (Refer to §9.3.4.D. and §9.3.4.E.)

The Exeter Planning Board may grant a CUP for proposed uses in the Shoreland Protection District, provided, among four (4) other criteria, the proposed use will not detrimentally affect the surface water quality of the adjacent river or otherwise result in unhealthful conditions. (§9.3.4.G.2.a-e.)

State Jurisdiction

All wetlands and any banks are jurisdictional under NH RSA 482:A and the NH Code of Administrative Rules – Chapter Env-Wt 100-900. With the exception of prime wetlands in certain communities, the NHDES does not require a buffer to freshwater wetlands, to the extent that any work in adjacent uplands does not cause indirect impacts, such as sedimentation, to areas under NHDES jurisdiction. Portions of the site adjacent to tidal wetlands and waters are subject to the 100-foot tidal buffer zone according to Env-Wt 602.52.

Shoreland Protection

Wheelwright Creek is not identified on the New Hampshire Department of Environmental Services – Consolidated List of Waterbodies Subject to the Shoreland Water Quality Protection Act (SWQPA – RSA 483-B). However, Wheelwright Creek and associated wetlands are tidally influenced and thus subject to the SWQPA¹. The Squamscott River is tidally influenced at this location and is also subject to the SWQPA. The SWQPA encumbers all areas falling within 250-feet of the reference line. The SWQPA involves various buffers (waterfront, woodland etc.) which have different requirements for compliance.

Priority Resource Areas

Areas that embody bogs, sand dunes, tidal waters, tidal wetlands, undeveloped tidal buffer zone, floodplain wetlands adjacent to a tier 3 or higher watercourse, designated prime wetland or duly established prime wetland buffer zone and/or documented occurrences of protected rare species or habitat are considered Priority Resource Areas (PRA). Projects which propose impacts to jurisdictional areas that involve PRA's are elevated to major project classification for permitting review purposes, with a couple of exceptions. With the possible exception of rare species, remote sensing and direct observation confirm that the PRA's underlined above exist within the AOI. We have not contacted the Natural Heritage Bureau for information regarding rare species, which we presume will take place during the permitting process for any proposed project going forward.

¹It appears that the tidal influence of Wheelwright Creek may extend to the upstream side of the Webster Avenue, into wetlands identified by the 'A' and 'B' series flags, based upon our observations (made at low tide) of site characteristics which seem to indicate that the culvert is completely submerged at high tide. Additional investigations would be necessary to determine the extent of the tidal influence if deemed necessary for permitting or other purposes.

Prime Wetlands

The NHDES applies applicable rules and law to all municipally designated prime wetlands (and in certain municipalities all land within 100-feet of municipally designated prime wetlands). Prime wetlands are those wetlands with higher functions and values and receive additional protection under the law. Exeter has municipally designated prime wetlands recognized by NHDES. Prime wetlands in Exeter do not have a 100-foot state buffer. (Local buffers apply however.) Prime wetlands exist adjacent to the existing sewer pump station at the end of Webster Avenue as identified by the 'D' wetland flags series. Prime wetlands associated with the Squamscott River exist and are located well downstream of the AOI. Refer to Figure 1 below.

FIGURE 1



Designated Rivers

Designated Rivers are managed and protected for their outstanding natural and cultural resources in accordance with NH RSA 483, the Rivers Management and Protection Act. The Squamscott River was designated in 2011. Major activities on designated rivers such as dams and interbasin transfers and other activities within 1,320 feet of the river such as new or expanding solid waste facilities, among others, are subject to review and may require coordination with the Exeter-Squamscott River Local Advisory Committee. The committee is usually comprised of one member from each of the communities within the river's watershed. William Meserve is the current chairperson of the committee. Contact Theresa Walker at the Rockingham Planning Commission (603-778-0885) to coordinate any review.

Vernal Pools

Vernal pools are temporary bodies of water that provide essential breeding habitat for certain amphibians and invertebrates as well as important supporting habitat for numerous other species, especially reptiles such as turtles. We did not observe any areas within the AOI that in our opinion constitute a likely vernal pool according to the NH Code of Administrative Rules – Env-Wt 103.64, Env-Wt 104.15 and Env-Wt 104.44. It should be noted that August does not represent ideal circumstances for observation of primary vernal pool indicators, even during non-drought conditions.

The above represents a brief summary of the applicable local wetland zoning and state jurisdiction. We recommend that you consult this office, the Exeter Planning Department, especially the Natural Resource Planner for the Town of Exeter - Kristen Murphy, or the NHDES for further guidance before proceeding with any design, permitting or construction at this location.

Wetland Function

Keeping in mind the altered status of the areas that are the subject of this report, the dominant functions of the major wetland areas along the Squamscott River and Wheelwright Creek are educational potential (primarily due to ease of access), fisheries habitat, wetland-based recreation and wildlife habitat. Wetlands along the river also have the opportunity to provide shoreline anchoring functions. Statements regarding wetland function are based upon initial observations only and are intended to address rule Env-Wt 306.05(a)(1); these statements do not represent a formal wetland functional assessment.

Other

Due to the observations above and the altered nature of wetlands at this location, delineation methodology required the use of best professional judgment in addition to guidance on altered conditions found in the technical manuals cited below. Wetland alterations undertaken without permits after 1967 in tidal wetlands and 1969 in freshwater wetlands may be considered violations by NHDES. With the possible exception of wetland flag series 'C', wetland alterations at this location do not appear to have taken place recently (within the last year for the purposes of this report) but may have taken place after the wetlands law became effective. Additional investigations would be needed to establish the extent or timing of alterations.

Certification Note

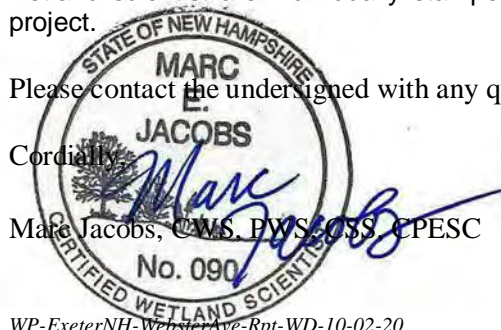
The following certification note should be inserted into any drawings that reflect the delineated wetland-upland boundary:

Manmade and natural jurisdictional wetland boundaries were delineated by Marc Jacobs, Certified Wetland Scientist number 090, in August 2020 according to the standards of the US Army Corps of Engineers - *Wetlands Delineation Manual, Technical Report Y-87-1*, January 1987; the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Version 2, January 2012; NH RSA 482-A.; the Code of Administrative Rules, NH Department of Environmental Services-Wetlands Bureau – Chapter Env-Wt 100-900; as well as the Town of Exeter Zoning Ordinance – Article 9. Predominant hydric soils were identified utilizing the *Field Indicators for Identifying Hydric Soils in New England*, Version 4, May 2017 and the *Field Indicators of Hydric Soils in the United States*, Version 8, October 2016. The indicator status of vegetation as hydrophytic was determined using the *Northcentral and Northeast 2016 Regional Wetland Plant List*, U.S. Army Corps of Engineers. Copies of site plans depicting the wetland delineation which have been reviewed by the wetland scientist are individually stamped, signed and dated. This note has been customized for this project.

Please contact the undersigned with any questions regarding the above-referenced information.

Cordially,

Marc Jacobs, CWS, PWS, CESS, CPESC





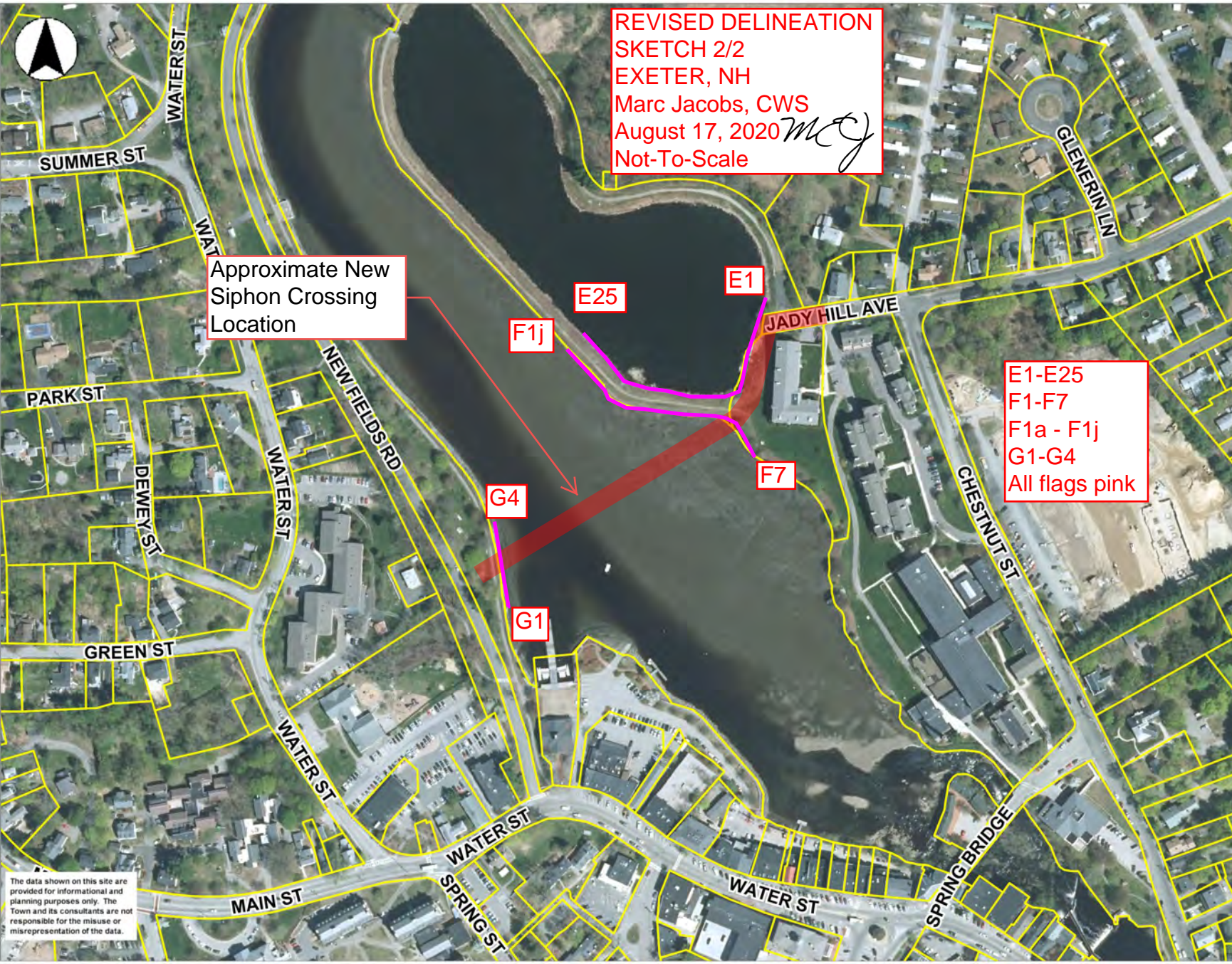
**REVISED DELINEATION
SKETCH 2/2
EXETER, NH**
 Marc Jacobs, CWS
 August 17, 2020 *MJ*
 Not-To-Scale



Parcels w/Orthos
 NH Highways
 Interstate
 US Highway
 State Highway
 Town Boundary
 Abutting Towns

Approximate New
Siphon Crossing
Location

E1-E25
 F1-F7
 F1a - F1j
 G1-G4
 All flags pink



The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.

0 410 820 ft

Printed on 04/29/2020 at 03:51 PM

Exeter MapsOnline



7

Authorizations

The proposed project area on the western side of the Squamscott River is all located on Town-owned property. On the east side of the river, the proposed project requires impacts to private property at 1 Jady Hill Ave (Map 64 Lot 86). The Town has had discussions with the property owner and agreed in principle on the required work. The Town is in the process of hiring a surveyor to perform a metes and bounds survey to develop temporary and permanent easement plans. A copy of the signed easement agreement will be provided to NHDES when available. It is requested that the permit be issued with a condition stipulating that a fully executed agreement be provided to NHDES prior to any work commencing on the private property, in the event the signed easement is not available prior to NHDES decision issuance timeframe.

Abutter notification is not required for this project per Env-Wt 306.06(c)(4), 307.13(c).

8

Tax Map



USGS High Resolution Orthoimagery, 2015;
Map Developed by Wright-Pierce, 2021.

JDM w:\GIS_Development\Projects\NH_Exeter\20387_ShorelandPBN\MXD\Figure3-TaxMap-8x11.mxd



The project area includes proposed wetland impacts within the following properties:

Address	Map / Lot	Owner Name	Mail Address
Swasey Parkway	64 / 45	Town of Exeter	10 Front Street Exeter, NH 03833
Water Street	64 / 36	Town of Exeter	10 Front Street Exeter, NH 03833
1 Jady Hill Avenue	64 / 86	Exeter Mills LLC	10 Chestnut Street Exeter, NH 03833

9

Photographs



Note: All photographs taken May 25, 2021



Photo 1: Proposed Access Drive, Siphon Inlet, and Sewer Connection (Facing North)



Photo 2: Proposed Sewer Connection (Facing Southwest)



Photo 3: Eastern Squamscott River Bank (Facing South)



Photo 4: Western Squamscott River Bank and Swasey Parkway (Facing North)



Photo 5: Proposed HDD Pit and Siphon Outlet Location

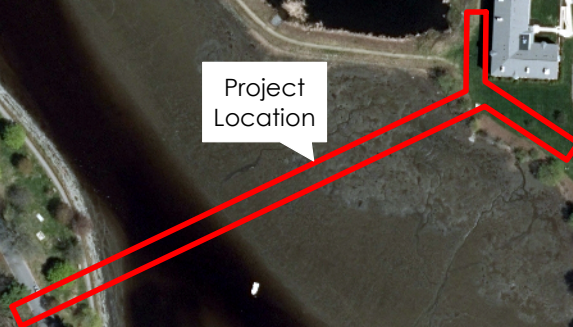
10

USGS Map

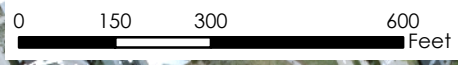


USGS High Resolution Orthoimagery, 2015;
Map Developed by Wright-Pierce, 2021.

Project
Location

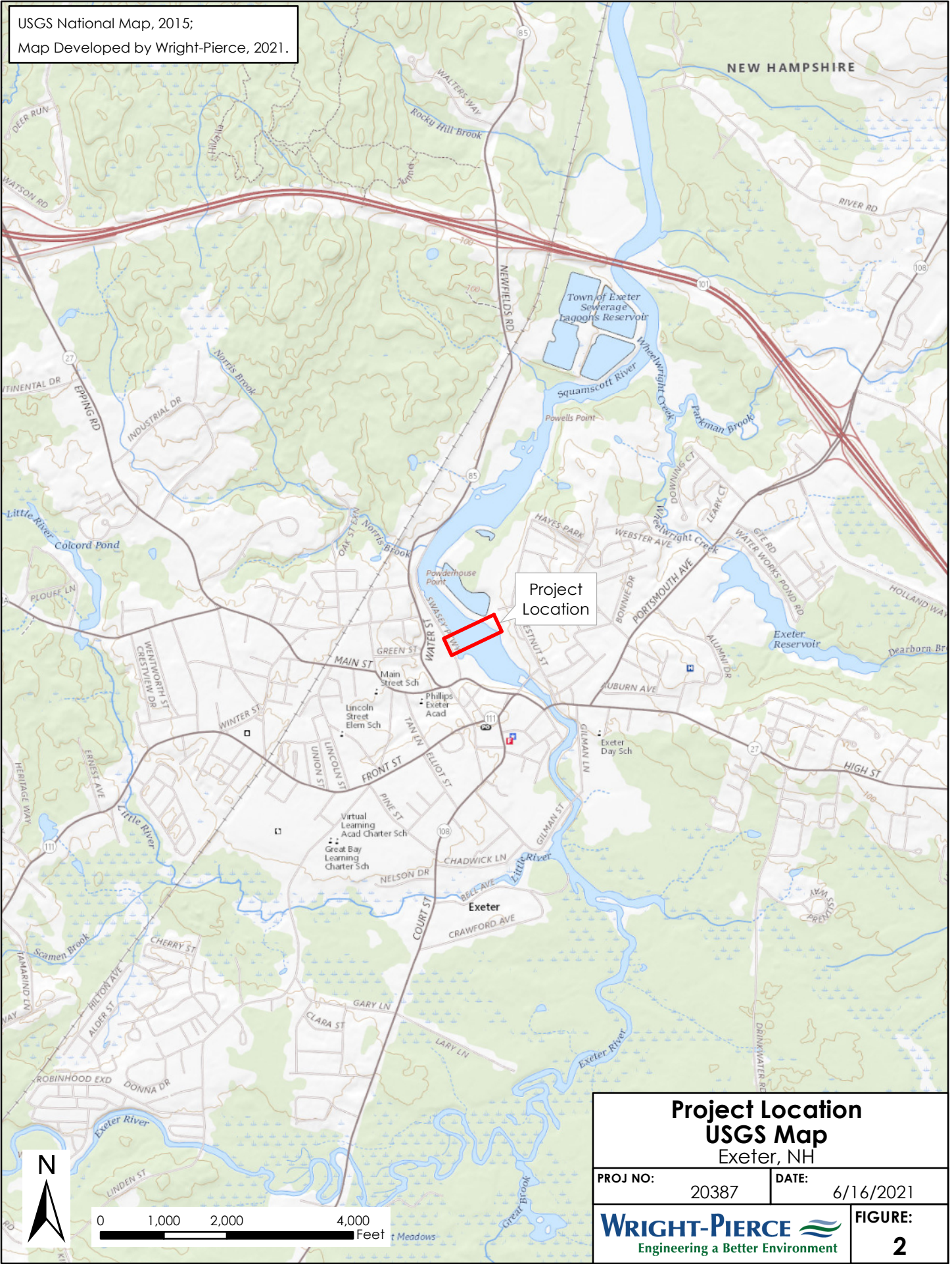


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Project Location Aerial Imagery Exeter, NH	
PROJ NO: 20387	DATE: 6/16/2021
WRIGHT-PIERCE Engineering a Better Environment	FIGURE: 1

USGS National Map, 2015;
 Map Developed by Wright-Pierce, 2021.



JDM W:\GIS_Development\Projects\NH\Exeter\20387_ShorelandPBN\MXD\Figure 1-USGS-8x11.mxd



Project Location USGS Map Exeter, NH	
PROJ NO: 20387	DATE: 6/16/2021
WRIGHT-PIERCE	
Engineering a Better Environment	
FIGURE: 2	

Proposed Construction Sequence



The proposed project is anticipated to begin constructed in Fall 2021 at the earliest. A general sequence of construction activities is provided below. The estimated construction duration is eight months, including a winter shutdown. The final schedule will be determined by the Town and contractor upon receipt of permit approvals.

General Schedule:

1. Contractor mobilizes to project area
2. Install perimeter silt fence and other applicable erosion and sedimentation controls practices.
3. Prepare staging area.
4. Excavate horizontal directional drill pits.
5. Construct 3 new sewer siphons using horizontal directional drill method.
6. Commence sewer installation in accordance with approved plans.
7. Connect new siphons to existing sewer system in accordance with approved plans.
8. Abandon existing sewers in place.
9. Install access drive stabilization.
10. Stabilize disturbed areas with pavement or loam and seed.
11. Remove accumulated sediment from sediment barriers as necessary.
12. Once the site is permanently stabilized, remove all temporary erosion control measures.
13. Monitor restored areas for one growing seasons to confirm restoration was successful.



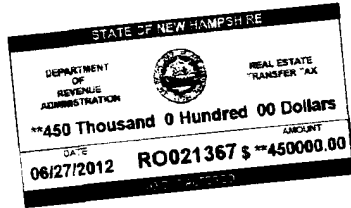
12

Easements

The following deed is provided for Map 64 Lot 86, owned by Exeter Mills, LLC.

The Town has had discussions with the property owner and agreed in principle on the required work. The Town is in the process of hiring a surveyor to perform a metes and bounds survey to develop temporary and permanent easement plans.

031518



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WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that THE GUARDIAN LIFE INSURANCE COMPANY OF AMERICA, a New York corporation, as successor by merger to BERKSHIRE LIFE INSURANCE COMPANY, a Massachusetts corporation, having a place of business at 7 Hanover Square, 20th Floor-B, New York, New York 10004,

for consideration paid, hereby grants to EXETER MILLS, LLC, a New Hampshire limited liability company, having a place of business at 8 Newmarket Road, Durham, New Hampshire 03824,

with WARRANTY COVENANTS, two parcels of land, together with the improvements thereon located in Exeter, Rockingham County, New Hampshire, and identified as Tax Map 64, Lots 86 and 51 and more particularly described below:

PARCEL 1 – TAX MAP 64 LOT 86

Said Parcel 1 being shown on a plan of land titled “Site Plan in Exeter, NH for Arbor Exeter Limited Partnership”, said plan recorded as Plan No. D-17346, said Parcel 1 being more particularly described as follows:

Beginning at the northeasterly corner of the premises at a point at other land formerly of Arbor Exeter Limited Partnership at the southerly side of Jady Hill Avenue as shown on Site Plan No. D-17346 referenced above; thence

1. South 18° 09’ 47” west, a distance of 66.85 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence
2. South 17° 42’ 27” west, a distance of 104.43 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence

ROCKINGHAM COUNTY
REGISTRY OF DEEDS

3. South 10° 49' 22" west, a distance of 51.42 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence
4. South 02° 40' 32" west, a distance of 90.46 feet to a point at land formerly of Arbor Exeter Limited Partnership to a point; thence
5. South 00° 52' 12" west, a distance of 58.02 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence
6. South 00° 58' 03" east, a distance of 44.82 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence
7. Along a curve to the right with a radius of 107.32 feet, a distance of 49.06 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence
8. South 25° 13' 28" west, a distance of 22.99 feet along land formerly of Arbor Exeter Limited Partnership to a point; thence
9. North 89° 20' 52" west, a distance of 28 feet along land formerly of Arbor Exeter Limited Partnership to a point on the Squamscott River; thence
10. In a generally northerly and northwesterly direction along the Squamscott River, a distance of 346 feet, more or less, to a point now or formerly of the Town of Exeter; thence
11. Along a curve as shown on the Site Plan D-17346 in a northerly and northeasterly direction along said land formerly of the Town of Exeter, a distance of 98 feet, more or less, to a point at the holding pond as shown on said site plan; thence
12. In a generally northeasterly direction along the holding pond, a distance of 147 feet, more or less, to a point on the southerly side of Jady Hill Avenue; thence
13. South 82° 44' 18" east along the southerly side of Jady Hill Avenue, a distance of 140 feet, more or less, to the point of beginning.

Containing 1.56 acres pursuant to said Plan D-17346.

Said Parcel 1 together with and subject to the following:

1. Facts, details, easements and restrictions disclosed by recorded Plan D-17346.
2. Rights, easements and reservations contained in the deed from the Town of Exeter to Arbor Exeter Limited Partnership dated December 4, 1987, recorded at Book 2717, Page 2370.
3. Town of Exeter sewer easement dated July 28, 1964, recorded at Book 1764, Page 177, as relocated by deed dated April 5, 1974, recorded at Book 2219, Page 522, as

affected by Amendment Easement (sewer easement) dated October 13, 1987 between the Town of Exeter and Arbor Exeter Limited Partnership, recorded at Book 2709, Page 387.

4. Rights and easements in favor of the Town of Exeter, for pedestrian and vehicular ingress and egress as set forth in the deed of Pendleton Water Company, Inc. and Clemson Fabrics Corporation to the Town of Exeter, dated October 7, 1981, recorded at Book 2400, Page 92, as affect by Amendment Easement (Access Easement), dated October 13, 1987, between the Town of Exeter and Arbor Exeter Limited Partnership, recorded at Book 2709, Page 390.
5. Dam privileges, water and flowage rights granted to the Town of Exeter and reservations, exceptions and provisions in deed dated October 7, 1981 and recorded with the Registry in Book 2400, Page 92.

PARCEL 2 – TAX MAP 64 LOT 51

Said Parcel 2 being a certain tract or parcel of land with the buildings thereon situated in said Exeter, being the lot described as “Exeter Mill Condominium I” on a Plan entitled “Combined Site Plan – Exeter Mill Condominium I and Exeter Mill Condominium II, Chestnut Street, Exeter, N.H.”, dated July 27, 1987, prepared by W.C. Cammett Engineering, Inc. of N.H., recorded in Rockingham County Registry of Deeds as Plan No. D-17125 (the “Cammett Plan”), and bounded and described as follows:

Beginning at the northeasterly corner of the premises at the intersection of Jady Hill Avenue and Chestnut Street; thence running S. 03°49’18” E. Along the westerly side of Chestnut Street a distance of 494.30 feet to a point; thence turning and running S. 09°37’18” E. along the westerly side of Chestnut Street a distance of 63.76 feet to a point at Exeter Mill Condominium II; thence turning and running along the following 13 courses and distances along the said adjoining condominium:

N. 80°30’21” W.	140.93 feet
S. 74°19’16” W.	87.50 feet
S. 15°40’44” E.	178.00 feet
S. 74°19’16” W.	29.30 feet
S. 15°40’44” E.	90.00 feet
S. 74°19’16” W.	102.19 feet
S. 31°21’08” W.	25.00 feet
S. 17°04’44” E.	45.00 feet
N. 72°55’16” E.	10.00 feet
S. 19°22’02” E.	62.00 feet
N. 69°57’04” E.	58.49 feet
N. 67°43’57” E.	33.09 feet
N. 74°19’16” E.	224.22 feet

to a point on the westerly side of Chestnut Street; thence turning and running S. 09°37’18” E. along the westerly side of Chestnut Street a distance of 124.73 feet to a point at the intersection of Chestnut Street and String Bridge Street; thence turning and running along said intersection along a curve to the right with a radius of 18 feet a distance of 22.82 feet to the northerly side of String Bridge Street;

thence turning and running S. 63°01'00" W. along the westerly side of String Bridge Street 131.58 feet; thence turning and running S. 63°58'00" W. along the westerly side of Chestnut Street a distance of 58.40 feet to a point at a rock retaining wall at the Exeter River; thence turning and running N. 19°01'00" W. along said retaining wall a distance of 72.97 feet; thence turning and running in a generally northerly and northwesterly and at times northeasterly direction along the shore of the Squamscott River a distance of 708 feet, more or less, to a point at land of the Town of Exeter; thence turning and running along the following ten courses and distances along the southerly and easterly boundaries of said Town of Exeter land:

S. 89°20'52" E.	28.00 feet
N. 25°13'28" E.	22.99 feet
Curve to the right radius 107.32 feet	49.06 feet
N. 00°58'03" W.	44.82 feet
N. 00°52'12" E.	58.02 feet
N. 02°40'32" E.	90.46 feet
N. 10°49'22" E.	51.42 feet
N. 17°42'27" E.	104.43 feet
N. 18°09'47" E.	66.85 feet
S. 82°44'18" E.	154.68 feet

to the point of beginning.

And said Parcel 2 being a certain tract or parcel of land with the buildings thereon situated in said Exeter, being the lot described as "Exeter Mill Condominium II" on the "Cammett Plan", and bounded and describe as follows:

Beginning at the northeasterly corner of the parcel at the westerly side of Chestnut Street and the corner of the lot described on said Plan as "Exeter Mill Condominium I"; thence running South 09°37'18" East along the westerly side of Chestnut Street a distance of 325.27 feet to a point at the said lot described on said Plan as "Exeter Mill Condominium I"; thence turning and running along the following 13 courses and distances along said lot designated "Exeter Mill Condominium I":

S. 74°19'16" W.	224.22 feet
S. 67°43'57" W.	33.09 feet
S. 69°57'04" W.	58.49 feet
N. 19°22'02" W.	62.00 feet
S. 72°55'16" W.	10.00 feet
N. 17°04'44" W.	45.00 feet
N. 31°21'08" E.	25.00 feet
N. 74°19'16" E.	102.19 feet
N. 15°40'44" W.	90.00 feet
N. 74°19'16" E.	29.30 feet
N. 15°40'44" W.	178.00 feet
N. 74°19'16" E.	87.50 feet
S. 80°30'21" E.	140.93 feet

to the point of beginning.

Said parcels being together with and subject to the following:

1. Easements and restrictions of record which appear on the plan titled "Subdivision of Land, Exeter N.H. for Clemson Automotive Fabrics", dated July 29, 1981, Sheet 1 of 2 and Sheet 2 of 2, by John W. Durgin Associates, Inc. recorded in the Rockingham County Registry of Deeds (the "Registry") as Plan #D-10389.
2. Sewer Easement granted to the Town of Exeter dated July 28, 1964 and recorded with the Registry in Book 1764, Page 177 as relocated by deed dated April 5, 1974 and recorded with said Deeds in Book 2219, Page 522, as amended pursuant to an Amendment to Easement by and between the Town of Exeter and Arbor Exeter Limited Partnership dated October 12, 1987 and recorded with the Registry in Book 2709, Page 387.
3. A certain easement in favor of the Town of Exeter for pedestrian and vehicular ingress and egress as described under Parcel 2, Page 3 of the a deed to the Town of Exeter dated October 7, 1981, recorded at Book 2400, Page 92.
4. Utility Easement granted to Exeter and Hampton Electric Company and New England Telephone and Telegraph Company dated April 22, 1982 and recorded with the Registry in Book 2411, Page 549.
5. Drainage Easement granted to the Town of Exeter dated May 10, 1985 and recorded with the Registry in Book 2549, Page 314, as amended pursuant to an Amendment of Easement by and between the Town of Exeter and Arbor Exeter Limited Partnership dated October 13, 1987 and recorded with the Registry at Book 2709, Page 385.
6. Easement (meter reading) to the Town of Exeter dated March 31, 1989 and recorded with the Registry in Book 2796, Page 2263.
7. Public Access Easement to the Town of Exeter dated November 28, 1988 and recorded with said Deeds in Book 2834, Page 2523.
8. Declaration of Easements dated September 13, 1990 and recorded with said Deeds in Book 2856, Page 1908 as shown on a plan titled, "Easement Plan in Exeter, N.H. for Arbor Exeter Limited Partnership" dated October 16, 1990 and recorded with the Registry as Plan D-20688.
9. Rights of parties in possession as tenants-at-will and terms of unrecorded leases as set forth in an Affidavit as to party's in possession.
10. Notice of Lease by and between Berkshire Life Insurance Company (Lessor) and TeleCorp Realty, L.L.C. (successor in interest to TeleCorp Holding Corp., Inc.) dated September 15, 1998 and recorded with the Registry in Book 3342, Page 2409.

11. Utility Easement to Exeter Electric dated March 13, 1996 and recorded with the Registry in Book 3143, Page 2993.
12. Dam privileges, water and flowage rights granted to the Town of Exeter and reservations, exceptions and provisions in deed dated October 7, 1981 and recorded with the Registry in Book 2400, Page 92.
13. Notes, matters and encumbrances as shown on the plan titled "Existing Conditions Plan, 10-20 Chestnut Street, Guardian Life Insurance Company of America" prepared by Cammett Engineering dated May 24, 2012.
14. Facts, details, easements and restrictions disclosed by recorded Plans D-20688, C-10443 and D-17125.

The two parcels are also shown on the plans titled "Existing Conditions Plan 10-20 Chestnut St. Exeter, NH" dated as of May 24, 2012 (the "Plan"), recorded herewith; provided, however, that the WARRANTY COVENANTS with respect to the above described parcels shall not be applicable to the property as described on the Plan, which shall be granted with QUITCLAIM COVENANTS.

Meaning and intending to convey the same premises conveyed to the grantor herein by deed dated September 29, 1993, recorded in the Rockingham Registry of Deeds at Book 3009, Page 814, by deed dated March 5, 1992, recorded in the Rockingham Registry of Deeds at Book 2913, Page 586, and by deed dated December 20, 1990, recorded in the Rockingham Registry of Deed at Book 2904, Page 1705.

Executed this 22nd day of June, 2012.

THE GUARDIAN LIFE INSURANCE COMPANY OF AMERICA, as successor by merger to Berkshire Life Insurance Company

By: 

Name: Matthew Brennan

Title: Senior Director, Real Estate Investments

STATE OF NEW YORK)
) ss.
CITY/COUNTY OF NEW YORK)

I, Aida M. Vega, a Notary Public in and for said jurisdiction named above, hereby certify that Matthew Brennan, whose name as Senior Director, Real Estate Investments, of The Guardian Life Insurance Company of America, is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the contents of said instrument, he, as such officer, and with full authority, executed the same voluntarily for and as the act of said company on the day that same bears date.

Given under my hand and official seal this 22 day of June, 2012.

Aida M. Vega
Name: Aida M. Vega
Notary Public



39100317.6

13

NHB Correspondence

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

To: Jacob Shactman, Wright-Pierce
230 Commerce Way
Suite 302
Portsmouth, NH 03801

From: Jessica Bouchard, NH Natural Heritage Bureau

Date: 6/24/2021 (valid until 06/24/2022)

Re: Review by NH Natural Heritage Bureau

Permits: NHDES - Wetland Standard Dredge & Fill - Major

NHB ID: NHB21-1968

Town: Exeter

Location: Squamscott River, Jady Hill Ave,
Swasey Pkw, and Webster Ave

Description: The proposed project scope consists of construction of a sewer siphon pipe crossing underneath the Squamscott River between Jady Hill Avenue and Swasey Parkway. This new siphon pipe will be directionally drilled adjacent to the two existing siphon pipes that cross the river to minimize disturbance. The project scope will also consist of upgrading the Webster Avenue Pump Station and replacing its existing connecting force main.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments **NHB: Please clarify if and where river bank impacts will occur, and send a site plan overlaid on an aerial photo background that clearly shows all impacts to the banks of the Squamscott River. Please provide photos of the locations of the entry and exit pits.**
F&G: Contact NHF&G to address wildlife concerns.

Plant species	State¹	Federal	Notes
seaside brookweed (<i>Samolus valerandi ssp. parviflorus</i>)	E	--	Occurs on river and streambanks, as well as estuarine and seashore habitats. Threats include direct destruction of the plants and major alterations of their habitat.
spongy-leaved arrowhead (<i>Sagittaria spatulata</i>)	E	--	Primarily vulnerable to changes to the hydrology of its habitat, especially alterations that change water levels. It may also be susceptible to increased pollutants and nutrients carried in stormwater runoff.

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

Vertebrate species	State¹	Federal	Notes
Northern Black Racer (<i>Coluber constrictor constrictor</i>)	T	--	Contact the NH Fish & Game Dept (see below).

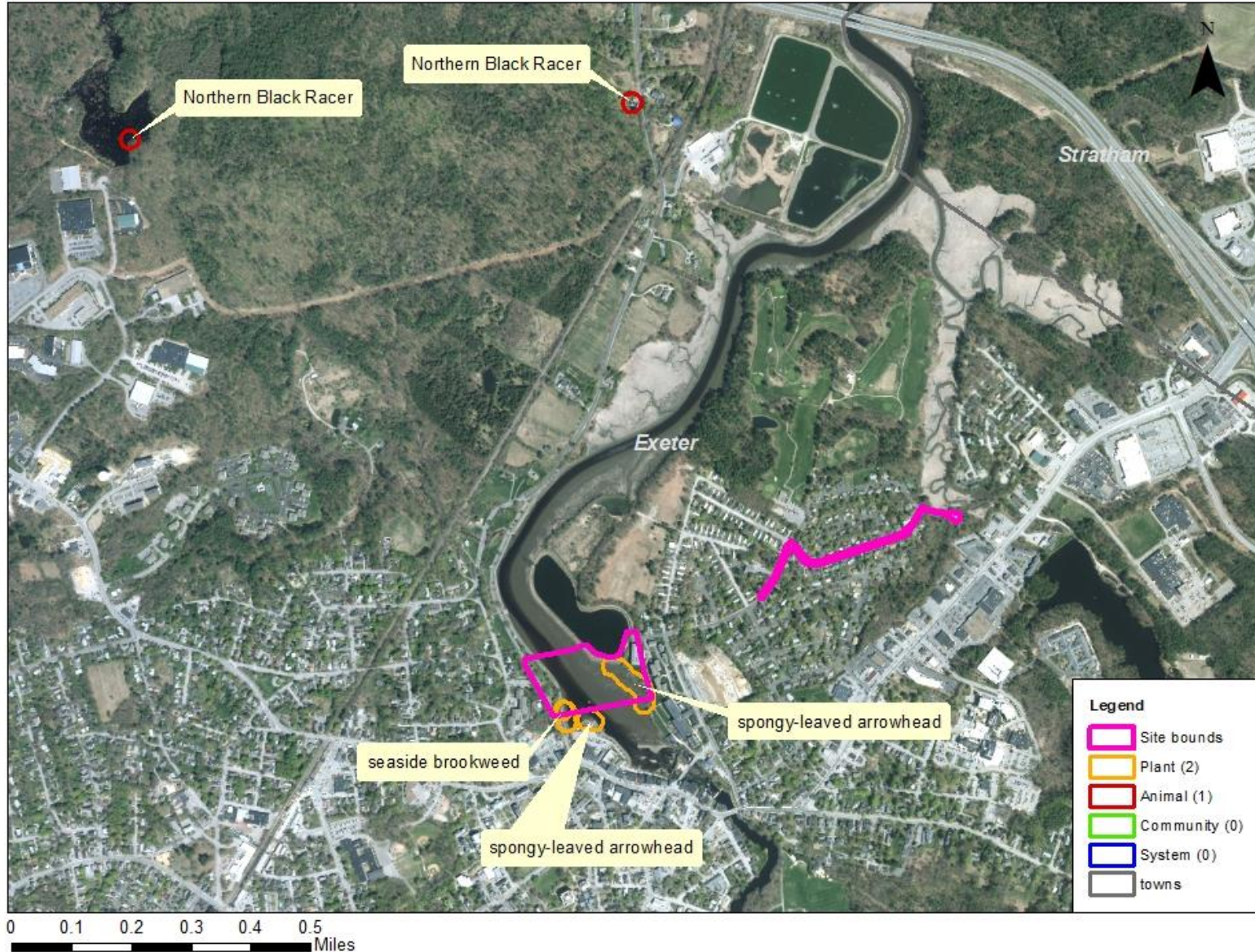
¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NHF&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

CONFIDENTIAL – NH Dept. of Environmental Services review

NHB21-1968



New Hampshire Natural Heritage Bureau - Plant Record

seaside brookweed (*Samolus valerandi* ssp. *parviflorus*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: --

Detailed Description: 2019: More than 100 plants observed.

General Area: 2019: River shore mudflat with little-headed spikesedge (*Eleocharis parvula*), soft-stemmed bulrush (*Schoenoplectus tabernaemontani*), rough-fruited water-hemp (*Amaranthus tuberculatus*), spongy-leaved arrowhead (*Sagittaria spatulata*), and rushes (*Juncus* spp.).

General Comments: --
Management: --
Comments:

Location

Survey Site Name: Squamscott River at Exeter
Managed By:

County: Rockingham
Town(s): Exeter
Size: .4 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2019: Western shore of Squamscott River in Exeter, immediately adjacent to Phillips Exeter Academy's boathouse.

Dates documented

First reported: 2019-09-06 Last reported: 2019-09-06

New Hampshire Natural Heritage Bureau - Animal Record

Northern Black Racer (*Coluber constrictor constrictor*)

Legal Status

Federal: Not listed
State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: --

Detailed Description: 2012: Area 13078: 1 adult observed. 2009: Area 14214: 1 adult observed, sex unknown.
General Area: 2012: Area 13078: Residential yard. 2009: Area 14214: Edge of beaver pond which has most of its margin forested with mixed hardwood.

General Comments: --
Management: --
Comments:

Location

Survey Site Name: The Oaklands
Managed By:

County: Rockingham
Town(s): Exeter
Size: .9 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2012: Area 13078: 20 Newfields Road, Exeter. 2009: Area 14214: Edge of beaver pond facing North in Henderson/Swasey Town Forest, Exeter.

Dates documented

First reported: 2009-04-28 Last reported: 2012-06-23

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

Jacob Shactman

From: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Sent: Tuesday, July 13, 2021 9:14 AM
To: Jacob Shactman
Cc: Tuttle, Kim; Britt Eckstrom; Kevin Garvey
Subject: RE: NHB review: NHB21-1968

Hi Jake,

Thank you for the follow-up. NHB has no additional questions or concerns regarding the project.

Jessica Bouchard
Environmental Reviewer / Ecological Information Specialist
New Hampshire Natural Heritage Bureau (NHB)
Division of Forests & Lands
NH Dept. of Natural & Cultural Resources
172 Pembroke Rd
Concord, NH 03301
(603) 271-2834 (office)

[NHB DataCheck Tool](#)

From: Jacob Shactman <jacob.shactman@wright-pierce.com>
Sent: Monday, July 12, 2021 3:46 PM
To: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Britt Eckstrom <britt.eckstrom@wright-pierce.com>; Kevin Garvey <kevin.garvey@wright-pierce.com>
Subject: RE: NHB review: NHB21-1968

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Jessica,

Thank you for reviewing this material and getting back to us on this project. There is no work proposed within any wetlands, only within the jurisdictional 100' Tidal Buffer Zone, so no impacts within any mudflats or marsh areas. On the eastern shoreline, the closest impacts to the bank include three test pits proposed within previously disturbed area, which will be restored and seeded to match existing conditions. No impacts are proposed along the toe of the bank.

Please let me know if you have any additional questions or if there is anything else I can provide you with to help make your determination.

Thanks,
Jake

From: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Sent: Monday, July 12, 2021 2:59 PM
To: Jacob Shactman <jacob.shactman@wright-pierce.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Britt Eckstrom <britt.eckstrom@wright-pierce.com>; Kevin Garvey

<kevin.garvey@wright-pierce.com>

Subject: RE: NHB review: NHB21-1968

Hi Jake and Britt,

Thank you for the requested information. Britt, I just emailed you about this project because I did not realize that Jake's email, sent before I was out on vacation, was regarding the same project.

I reviewed the mitigation pre-application materials, which included the materials provided in this email. The two listed species (spongy-leaved arrowhead and seaside brookweed) found within the project vicinity are both found in tidal river shores. In the project area, spongy-leaved arrowhead was documented in the river shore mudflat and in the tidal brackish marsh. Seaside brookweed was documented in the river shore mudflat.

Can you verify that no work is occurring along the toe of the bank, in areas where mudflats and brackish marsh occur? The aerial imagery overlaid with proposed conditions is a bit dark and difficult to discern. The proposed impact plans, however, appear to indicate that all work on the western shoreline will occur above the top of the river bank, and that impacts on the eastern shoreline could occur within the bank (based on grade lines), but only at the upper portion.

Thank you,

Jessica Bouchard
Environmental Reviewer / Ecological Information Specialist
New Hampshire Natural Heritage Bureau (NHB)
Division of Forests & Lands
NH Dept. of Natural & Cultural Resources
172 Pembroke Rd
Concord, NH 03301
(603) 271-2834 (office)

[NHB DataCheck Tool](#)

From: Jacob Shactman <jacob.shactman@wright-pierce.com>

Sent: Monday, June 28, 2021 11:36 AM

To: DNCR: NHB Review <nhbreview@dncr.nh.gov>

Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Britt Eckstrom <britt.eckstrom@wright-pierce.com>; Kevin Garvey <kevin.garvey@wright-pierce.com>

Subject: RE: NHB review: NHB21-1968

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Jessica,

Thank you for your review of this project. As requested, I have attached the site plans (sheet C-2 through C-4) overlaid on an aerial photo showing impacts to the banks of the Squamscott River along with photographs of the project area. All impacts will be contained within the Limit of Work area as shown in the plans.

Coordination is underway with Kim. Wildlife friendly erosion control products are to be used, and a photo and notes pertaining to the identification of black racers have been added in a prominent location to the plan set.

Let me know if you have any questions or if there is any additional information I can provide to you at this time.

Thanks,
Jake

From: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Sent: Sunday, June 27, 2021 1:40 PM
To: Jacob Shactman <jacob.shactman@wright-pierce.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Subject: NHB review: NHB21-1968

Attached, please find the review we have completed. If your review memo includes potential impacts to plants or natural communities please contact me for further information. If your project had potential impacts to wildlife, please contact NH Fish and Game at the phone number listed on the review.

Best,
Jessica

Jessica Bouchard
Environmental Reviewer / Ecological Information Specialist

NH Natural Heritage Bureau
DNCR - Forests & Lands
172 Pembroke Rd
Concord, NH 03301
603-271-2834

Jacob Shactman

From: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Sent: Tuesday, June 29, 2021 8:54 AM
To: Jacob Shactman
Cc: Britt Eckstrom; Kevin Garvey
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

Hi Jacob,

You are all set with the NHFG Nongame and Endangered Species Review of NHB21-1968 then.

Thanks,

Kim Tuttle
Wildlife Biologist
NH Fish and Game
11 Hazen Drive
Concord, NH 03301
603-271-6544

From: Jacob Shactman <jacob.shactman@wright-pierce.com>
Sent: Monday, June 28, 2021 2:46 PM
To: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Cc: Britt Eckstrom <britt.eckstrom@wright-pierce.com>; Kevin Garvey <kevin.garvey@wright-pierce.com>
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Kim,

Correct – there are no proposed direct impacts to the Squamscott River below the HOTL.

Thanks,
Jake

From: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Sent: Monday, June 28, 2021 11:54 AM
To: Jacob Shactman <jacob.shactman@wright-pierce.com>
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

Hi Jake,

If there are no impacts to the Squamscott River or its tributaries associated with the directional drill or any other aspects of this job, we do not need to consult with our Marine Division for potential impacts to American eel. The plan sheet changes incorporating the black racer photo and note and the wildlife friendly erosion control matting (EC-7Y Coir Mat) and compostable SiltSoxx Natural look good.

Regards,

Kim Tuttle
Wildlife Biologist
NH Fish and Game
11 Hazen Drive
Concord, NH 03301
603-271-6544

From: Jacob Shactman <jacob.shactman@wright-pierce.com>
Sent: Monday, June 28, 2021 11:24 AM
To: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Cc: Britt Eckstrom <britt.eckstrom@wright-pierce.com>; Kevin Garvey <kevin.garvey@wright-pierce.com>
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

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Hi Kim,

The new NHB has been processed (NHB21-1968, attached). Sheet C-1 is also attached showing the black racer photo and notes as required. Wildlife friendly erosion control matting (EC-7Y Coir Mat) and compostable SiltSoxx Natural will be used where necessary.

Please let me know if any additional information is needed for this review.

Thanks,
Jake

From: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Sent: Monday, June 14, 2021 12:02 PM
To: Jacob Shactman <jacob.shactman@wright-pierce.com>
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

Hi Jake,

Ok- once the new NHB is processed, I will send all the info over to Marine for their review of eels. To protect northern black racer, avoid the use of welded plastic or 'biodegradable plastic' netting or thread (e.g. polypropylene) in erosion control matting, if needed. There are numerous documented cases of snakes, including northern black racer and other wildlife being trapped and killed in erosion control matting with synthetic netting and thread. The use of erosion control berm, Filtrexx Degradable Woven Silt Sock, or several 'wildlife friendly' options such as woven organic material (e.g. coco or jute matting such as North American Green SC150BN or equivalent) are readily available.

The following note should be prominently added to the plans along with a photo of northern black racer that you may copy from the attached flyer:

All observations of northern black racer snakes encountered from the end of September through the month of April must be immediately reported to the NHFG Department (Melissa Doperalski 603-479-1129 (cell) or Brendan Clifford 603-944-0885) as this indicates a potential hibernaculum in the area. Please attempt to photograph this species if possible.

Please inform NHFG reviewers if your project will require or may require an Alteration of Terrain Permit. Be advised that as of June 2, 2020, DES has adopted a new rule; [Env-Wq 1503.19 intro and \(h\)](#), pertaining to the criteria for issuance of AoT permits specific to RSA 212-A:9, III threatened and endangered wildlife species.; Please refer to the NHDES webpage, <https://www.des.nh.gov/land/land-development>, for more information on permit requirements pertaining to threatened and endangered wildlife species and their critical habitats.

***NEW: Please submit AoT-related documents for NHFG review, AoT review inquiries or wildlife biologist questions to NHFGreview@wildlife.nh.gov. If project related: Include the NHB datacheck results letter number (i.e. NHBxx-xxxx) in the email subject line at a minimum. Not including this number will affect our response time and delays of our review. Additional information can include project name and AoT application number. Please include the NHB number in the title of the assessment along with a date (year,month,day).**

Thanks,

Kim Tuttle
Wildlife Biologist
NH Fish and Game
11 Hazen Drive
Concord, NH 03301
603-271-6544

From: Jacob Shactman <jacob.shactman@wright-pierce.com>
Sent: Monday, June 14, 2021 11:12 AM
To: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Cc: Britt Eckstrom <britt.eckstrom@wright-pierce.com>
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Kim,

There has not been any previous correspondence with NH Fish and Game that I am aware of.

Thanks,
Jake

From: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Sent: Monday, June 14, 2021 11:04 AM
To: Jacob Shactman <jacob.shactman@wright-pierce.com>
Cc: Britt Eckstrom <britt.eckstrom@wright-pierce.com>
Subject: RE: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

Hello Jake,

Do you have any previous correspondence from NH Fish and Game on the previous review (NHB20-1887) for reference? I do not have any records of any previous correspondence on this project.

Thanks,

Kim Tuttle
Wildlife Biologist
NH Fish and Game
11 Hazen Drive
Concord, NH 03301
603-271-6544

From: Jacob Shactman <jacob.shactman@wright-pierce.com>
Sent: Monday, June 14, 2021 9:26 AM
To: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>
Cc: Lamb, Amy <Amy.Lamb@dncr.nh.gov>; Britt Eckstrom <britt.eckstrom@wright-pierce.com>
Subject: Exeter Sewer Siphon - NHB20-1887/NHB21-1968

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Good morning Kim,

I am reaching out in regards to potential wildlife concerns for the Exeter River Sewer Siphon Project.

The active NHB Review is NHB 20-1887 (attached), however, we have recently submitted a new review for this project as it is expiring 6/26/20. The new review is NHB21-1968, which is currently processing.

The existing sewer siphon pipelines are near failure and are inadequately sized to meet the Town's growing needs. The proposed three-barrel sewer siphon will be horizontal directionally drilled beneath the Squamscott River, with impacts occurring on either side of the river for entry/exit pits and reconnection to the existing sewer system.

A draft plan set is also attached for reference.

Please feel free to reach out if you have any questions or wildlife concerns on this project.

Thanks,
Jake

Jake Shactman
Wright-Pierce | Project Engineer
direct 603.570.7115 | **office** 603.430.3728



14

Conservation Commission & LAC
Correspondence

The Exeter Conservation Commission and Exeter-Squamscott River LAC (ESRLAC) will be sent a copy of this application when it is submitted to the NHDES Wetlands Bureau for project review. Comments received from the Conservation Commission and ESRLAC will be addressed in the project design as necessary and will be forwarded to NHDES Wetlands Bureau. A follow-up meeting will be scheduled with ESRLAC member to review and discuss the application. Previous correspondence with the ESRLAC is attached.

Jacob Shactman

From: Theresa Walker <theresawalker@comcast.net>
Sent: Wednesday, May 27, 2020 3:50 PM
To: Christopher Norton; meservew@cdm.com
Cc: riversprogram@des.nh.gov
Subject: RE: Squamscott River LAC Project Notification

Mr. Norton – Thank you for your email to ESRLAC. Can you please email me the Shoreland Permit Application and Wetlands Permit Application when they are completed? I will then schedule a Zoom meeting with ESRLAC members and you to review and discuss both applications. In the meantime, I will forward your project notification to ESRLAC. Thank you, Theresa Walker, 603-534-3913

From: Christopher Norton <christopher.norton@wright-pierce.com>
Sent: Wednesday, May 27, 2020 2:48 PM
To: meservew@cdm.com; theresawalker@comcast.net
Cc: riversprogram@des.nh.gov
Subject: Squamscott River LAC Project Notification

May 27, 2020

Exeter-Squamscott River LAC Chair
William Meserve
c/o Theresa Walker, RPC
156 Water Street
Exeter, NH 03833

Good Afternoon,

Wright-Pierce is currently working the Town of Exeter with plans that include improving capacity of two parallel 8-inch inverted sewage siphon pipes that cross underneath a portion of the Squamscott River, between Jady Hill Avenue and Swasey Parkway.

An engineering analysis of the sewage siphon pipes identified minor capacity concerns during normal dry weather flows and identified the siphons are undersized for new connections or during extreme wet weather events. This analysis has historically been confirmed through sanitary sewer overflows (SSOs) immediately upstream of the two siphon pipes at Duck Point located at the bottom of Jady Hill Avenue. Increasing sewer siphon pipe capacity will reduce the risk of SSOs and allow for improvements to sewer infrastructure, located upstream of the siphon pipes.

The sewer siphon improvements will consist of constructing a third sewer siphon barrel under the Squamscott river, between Swasey Parkway and Jady Hill Avenue. Pre-construction site work for this portion of the project scope will consist of performing subsurface geotechnical investigations along the alignment of the proposed siphon pipe. Maximum area of temporary and permanent disturbance anticipated on this portion of the project is approximately 7.9 acres. A portion of this area may require tree removal, as needed, to allow for construction in the approximately 1.3 acre area between Swasey Parkway and the Squamscott River bank. Similarly, <1 acre of the project area adjacent to Clemson Pond may also require tree removal, as needed, to allow for construction between Jady Hill Avenue and the Squamscott River bank.

The attached figure is provided to illustrate the sewer siphon improvement portion of the project area. Shoreland permitting is anticipated as the sewer siphon improvement work will occur within 250 feet of the Squamscott River

bank. Wetland permitting is also anticipated and temporary impacts to wetlands within the project area will be minimized with design and use of best management practices. Prior to construction, any wetlands within the project area will be identified and delineated.

The project is currently in preliminary design and construction scheduling is to be determined at a later date.

We request your review of this information and any provided feedback is welcome to help us plan this project ahead. Let me know if additional information is required to assist with your review of the project.

Sincerely,

Chris Norton

Christopher Norton, PE
Wright-Pierce | Wastewater Engineer II
Direct 603.606.4422



Visit our website for industry insights: www.wright-pierce.com

15

Avoidance and Minimization



AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management Wetlands Bureau



[Check the Status of your Application](#)

RSA/Rule: RSA 482-A/ Env-Wt 311.07(c)

This checklist can be used in lieu of the written narrative required by Env-Wt 311.07(a) to demonstrate compliance with requirements for Avoidance and Minimization (A/M), pursuant to RSA 482-A:1 and Env-Wt 311.07(c).

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in [Attachment A: Minor and Major Projects \(NHDES-W-06-013\)](#)).

The following definitions and abbreviations apply to this worksheet:

- "A/M BMPs" stands for [Wetlands Best Management Practice Techniques for Avoidance and Minimization](#) dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION		
APPLICANT LAST NAME, FIRST NAME, M.I.: Town of Exeter		
PROJECT STREET ADDRESS: Swasey Parkway/Jady Hill Ave	PROJECT TOWN: Exeter	
TAX MAP/LOT NUMBER: 64-36, 64-45, 64-86		
SECTION 2 - PRIMARY PURPOSE OF THE PROJECT		
Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If you answered "no" to this question, describe the purpose of the "non-access" project type you have proposed: <div style="background-color: #cccccc; padding: 5px; border: 1px solid black;"> The purpose of the project is to replace the existing sewer siphons with a new three-barrel sewer siphon beneath the Squamscott River. </div>		

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

SECTION 3 - A/M PROJECT DESIGN TECHNIQUES		
Check the appropriate boxes below in order to demonstrate that these items have been considered in the planning of the project. Use N/A (not applicable) for each technique that is not applicable to your project.		
Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

A/M BMPs	The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
SECTION 4 - NON-TIDAL SHORELINE STRUCTURES		
Env-Wt 313.03(c)(1)	The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(2)	The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(3)	The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(4)	The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(5)	The non-tidal shoreline structure has been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(6)	The non-tidal shoreline structure has been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A

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Coastal Resources Worksheet



COASTAL RESOURCE WORKSHEET

Water Division/Land Resources Management Wetlands Bureau



[Check the Status of your Application](#)

RSA/Rule: RSA 482-A/ Env-Wt 600

APPLICANT LAST NAME, FIRST NAME, M.I.: **Town of Exeter**

This worksheet may be used to present the information required for projects in coastal areas, in addition to the information required for Lower-Scrutiny Approvals, Expedited Permits, and Standard Permits under Env-Wt 603.01.

Please refer to Env-Wt 605.03 for impacts requiring compensatory mitigation.

SECTION 1 - REQUIRED INFORMATION (Env-Wt 603.02; Env-Wt 603.06; Env-Wt 603.09)

The following information is required for projects in coastal areas.

Describe the purpose of the proposed project, including the overall goal of the project, the core project purpose consisting of a concise description of the facilities and work that could impact jurisdictional areas, and the intended project outcome. Specifically identify all natural resource assets in the area proposed to be impacted and include maps created through a data screening in accordance with Env-Wt 603.03 (refer to Section 2) and Env-Wt 603.04 (refer to Section 3) as attachments.

The purpose of the proposed project is to replace the Town of Exeter's sewer siphon beneath the Squamscott River. The existing two barrel siphon is in near failing condition and undersized to meet the future, growing capacity requirements in the Town of Exeter.

The goal of this project is to improve the capacity of the sewer system and replace aging infrastructure with potential of failure. The proposed three barrel sewer siphon will be directionally drilled beneath the Squamscott River, minimizing overall disturbance and impacts to jurisdictional resource areas.

Natural resource assets in the area include the Tidal Buffer Zone (TBZ) and the Shoreland Protection Area. The impacts within the TBZ and Shoreland Protection area are all previously developed. Impacts will primarily be temporary, with the exception of the siphon inlet and outlet structures and associated SMH's to reconnect the siphon to the existing sewer system. The Squamscott River in Exeter is also classified as an impaired water.

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095

www.des.nh.gov

For standard permit projects, provide:

- A Coastal Functional Assessment (CFA) report in accordance with Env-Wt 603.04 (refer to Section 3).
- A vulnerability assessment in accordance with Env-Wt 603.05 (refer to Section 4).

Explain all recommended methods and other considerations to protect the natural resource assets during and as a result of project construction in accordance with Env-Wt 311.07, Env-Wt 313, and Env-Wt 603.04.

The proposed three-barrel sewer siphon upgrade was designed to minimize impacts to the natural resource assets to the maximum extent practicable. All trenches, test pits, and temporary disturbances will be restored to match the existing conditions. Erosion and sediment control measures will be installed in accordance with the NH Erosion & Sediment Control Handbook. An Avoidance and Minimization Checklist and Coastal Functional Assessment is attached. The results of this were taken into consideration to minimize impacts of the proposed project. The proposed project is necessary to avoid failure which would result in sewage flows directly into the Squamscott River. Construction impacts will be minimized to the maximum extent practicable and in accordance with the NHDNC Best Management Practices manual: Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire.

See additional detail in the Project Narrative included as Section 4.

Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.

A description of how the project will meet standard conditions and approval criteria is provided in the Project Narrative include as Section 4.

Provide a project design narrative that includes the following:

- A discussion of how the proposed project:
 - Uses best management practices and standard conditions in Env-Wt 307;
 - Meets all avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
 - Meets approval criteria in Env-Wt 313.01;
 - Meets evaluation criteria in Env-Wt 313.01(c);
 - Meets CFA requirements in Env-Wt 603.04; and
 - Considers sea-level rise and potential flooding evaluated pursuant to Env-Wt 603.05;
- A construction sequence, erosion/siltation control methods to be used, and a dewatering plan; and
- A discussion of how the completed project will be maintained and managed.

The completed project includes public sewer infrastructure that will be maintained by the Town of Exeter Department of Public Works.

- Provide design plans that meet the requirements of Env-Wt 603.07 (refer to Section 5);
- Provide water depth supporting information required by Env-Wt 603.08 (refer to Section 6); and
- For any major project that proposes to construct a structure in tidal waters/wetlands or to extend an existing structure seaward, provide a statement from the Pease Development Authority Division of Ports and Harbors (DP&H) chief harbormaster, or designee, for the subject location relative to the proposed structure's impact on navigation. If the proposed structure might impede existing public passage along the subject shoreline on foot or by non-motorized watercraft, the applicant shall explain how the impediments have been minimized to the greatest extent practicable.



SECTION 2 - DATA SCREENING (Env-Wt 603.03, in addition to Env-Wt 306.05)

Please use the Wetland Permit Planning Tool, or any other database or source, to indicate the presence of:

- Existing salt marsh and salt marsh migration pathways;
- Eelgrass beds;
- Documented shellfish sites;
- Projected sea-level rise; and
- 100-year floodplain.

Conduct data screening as described to identify documented essential fish habitat, and tides and currents that may be impacted by the proposed project, by using the following links:

- [National Oceanic and Atmospheric Administration \(NOAA\) Tides & Currents](#); and
- [NOAA Essential Fish Habitat Mapper](#).
- Verify or correct the information collected from the data screenings by conducting an on-site assessment of the subject property in accordance with Env-Wt 406 and Env-Wt 603.04.

SECTION 3 - COASTAL FUNCTIONAL ASSESSMENT/ AVOIDANCE AND MINIMIZATION (Env-Wt 603.04; Env-Wt 605.01; Env-Wt 605.02; Env-Wt 605.03)

Projects in coastal areas shall:

- Not impair the navigation, recreation, or commerce of the general public; and
- Minimize alterations in prevailing currents.

An applicant for a permit for work in or adjacent to tidal waters/wetlands or the tidal buffer zone shall demonstrate that the following have been avoided or minimized as required by Env-Wt 313.04:

- Adverse impacts to beach or tidal flat sediment replenishment;
- Adverse impacts to the movement of sediments along a shore;
- Adverse impacts on a tidal wetland's ability to dissipate wave energy and storm surge; and
- Adverse impacts of project runoff on salinity levels in tidal environments.

For standard permit applications submitted for minor or major projects:

- Attach a CFA based on the data screening information and on-site evaluation required by Env-Wt 603.03. The CFA for tidal wetlands or tidal waters shall be:
 - Performed by a qualified coastal professional; and
 - Completed using one of the following methods:
 - a. The US Army Corps of Engineers (USACE) Highway Methodology Workbook, dated 1993, together with the USACE New England District *Highway Methodology Workbook Supplement*, dated 1999; or
 - b. An alternative scientifically-supported method with cited reference and the reasons for the alternative method substantiated.

For any project that would impact tidal wetlands, tidal waters, or associated sand dunes, the applicant shall:

- Use the results of the CFA to select the location of the proposed project having the least impact to tidal wetlands, tidal waters, or associated sand dunes;
- Design the proposed project to have the least impact to tidal wetlands, tidal waters, or associated sand dunes;
- Where impact to wetland and other coastal resource functions is unavoidable, limit the project impacts to the least valuable functions, avoiding and minimizing impact to the highest and most valuable functions; and
- Include on-site minimization measures and construction management practices to protect coastal resource areas.

Projects in coastal areas shall use results of this CFA to:

- Minimize adverse impacts to finfish, shellfish, crustacean, and wildlife;
- Minimize disturbances to groundwater and surface water flow;
- Avoid impacts that could adversely affect fish habitat, wildlife habitat, or both; and
- Avoid impacts that might cause erosion to shoreline properties.

SECTION 4 - VULNERABILITY ASSESSMENT (Env-Wt 603.05)

Refer to the New Hampshire Coastal Flood Risk Summary Part 1: Science and New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections or other best available science to:

Determine the time period over which the project is designed to serve.

The proposed sewer project is designed to accommodate flows anticipated for the projected 50-year build-out of the project service area.

Identify the project's relative risk tolerance to flooding and potential damage or loss likely to result from flooding to buildings, infrastructure, salt marshes, sand dunes and other valuable coastal resource areas.

The proposed system will have a high risk tolerance to flooding since it involves buried infrastructure and low potential for potential damage or loss likely to result from flooding.

Reference the projected sea-level rise (SLR) scenario that most closely matches the end of the project design life and the project's tolerance to risk or loss.

The anticipated 2070 sea-level rise (SLR) at this location is approximately 2-feet, based on RCP 4.5, project timeframe, and tolerance for flood risk, per Table 3A in the New Hampshire Coastal Flood Risk Summary Part II: Guidance.

Identify areas of the proposed project site subject to flooding from SLR.

The proposed infrastructure associated with this project has a very low sensitivity to inundation. Inundation maps are included as Attachment 17.

Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.

Flood maps derived from the WPPT are included as Attachment 17.

Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans.

Water tight manhole covers and/or hatches are to be used. The proposed project is not anticipated to be impacted by SLR as it has an overall low sensitivity to inundation.

Where there are conflicts between the project's purpose and the vulnerability assessment results, schedule a pre-application meeting with the department to evaluate design alternatives, engineering approaches, and use of the best available science.

Pre-application meeting date held:

SECTION 5 - DESIGN PLANS (Env-Wt 603.07, in addition to Env-Wt 311)

Submit design plans for the project in both plan and elevation views that clearly depict and identify all required elements.

The plan view shall depict the following:

- The engineering scale used, which shall be no larger than one inch equals 50 feet;
- The location of tidal datum lines depicted as lines with the associated elevation noted, based on North American Vertical Datum of 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum_options.html, as described in Section 6.
- An imaginary extension of property boundary lines into the waterbody and a 20-foot setback from those property line extensions;
- The location of all special aquatic sites at or within 100 feet of the subject property;
- Existing bank contours;
- The name and license number, if applicable, of each individual responsible for the plan, including:
 - a. The agent for tidal docking structures who determined elevations represented on plans; and
 - b. The qualified coastal professional who completed the CFA report and located the identified resources on the plan;
- The location and dimensions of all existing and proposed structures and landscape features on the property;
- Tidal datum(s) with associated elevations noted, based on NAVD 88; and
- Location of all special aquatic sites within 100-feet of the property.

The elevation view shall depict the following:

- The nature and slope of the shoreline;
- The location and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, ramps, floats, and dolphins; and
- Water depths depicted as a line with associated elevation at highest observable tide, mean high tide, and mean low tide, and the date and tide height when the depths were measured. Refer to Section 6 for more instructions regarding water depth supporting information.

See specific design and plan requirements for certain types of coastal projects:

- Overwater structures (Env-Wt 606).
- Dredging activities (Env-Wt 607).
- Tidal beach maintenance (Env-Wt 608).
- Tidal shoreline stabilization (Env-Wt 609).
- Protected tidal zone (Env-Wt 610).
- Sand Dunes (Env-Wt 611).

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NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095

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SECTION 6 - WATER DEPTH SUPPORTING INFORMATION REQUIRED (Env-Wt 603.08)

Using current predicted NOAA tidal datum for the location, and tying field measurements to NAVD 88, field observations of at least three tide events, including at least one minus tide event, shall be located to document the range of the tide in the proposed location showing the following levels:

- Mean lower low water;
- Mean low water;
- Mean high water;
- Mean tide level;
- Mean higher high water;
- Highest observable tide line; and
- Predicted sea-level rise as identified in the vulnerability assessment in Env-Wt 603.05.

The following data shall be presented in the application project narrative to support how water depths were determined:

- The date, time of day, and weather conditions when water depths were recorded; and
- The name and license number of the licensed land surveyor who conducted the field measurements.

For tidal stream crossing projects, provide:

- Water depth information to show how the tier 4 stream crossing is designed to meet Env-Wt 904.07(c) and (d).

For repair, rehabilitation or replacement of tier 4 stream crossings:

- Demonstrate how the requirements of Env-Wt 904.09 are met.

SECTION 7 - GENERAL CRITERIA FOR TIDAL BEACHES, TIDAL SHORELINE, AND SAND DUNES (Env-Wt 604.01)

Any person proposing a project in or on a tidal beach, tidal shoreline, or sand dune, or any combination thereof, shall evaluate the proposed project based on:

- The standard conditions in Env-Wt 307;
- The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- The approval criteria in Env-Wt 313.01;
- The evaluation criteria in Env-Wt 313.05;
- The project specific criteria in Env-Wt 600;
- The CFA required by Env-Wt 603.04; and
- The vulnerability assessment required by Env-Wt 603.05.

New permanent impacts to sand dunes that provide coastal storm surge protection for protected species or habitat shall not be allowed except:

- To protect public safety; and
- Only if constructed by a state agency, coastal resiliency project, or for a federal homeland security project.

Projects in or on a tidal beach, tidal shoreline, or sand dune shall support integrated shoreline management that:

- Optimizes the natural function of the shoreline, including protection or restoration of habitat, water quality, and self-sustaining stability to flooding and storm surge; and
- Protects upland infrastructure from coastal hazards with a preference for living shorelines over hardened shoreline practices.

SECTION 8 - GENERAL CRITERIA FOR TIDAL BUFFER ZONES (Env-Wt 604.02)

The 100-foot statutory limit on the extent of the tidal buffer zone shall be measured horizontally. Any person proposing a project in or on an undeveloped tidal buffer zone shall evaluate the proposed project based on:

- The standard conditions in Env-Wt 307;
- The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- The approval criteria in Env-Wt 313.01;
- The evaluation criteria in Env-Wt 313.05;
- The project specific criteria in Env-Wt 600;
- The CFA required by Env-Wt 603.04; and
- The vulnerability assessment required by Env-Wt 603.05.

Projects in or on a tidal buffer zone shall preserve the self-sustaining ability of the buffer area to:

- Provide habitat values;
- Protect tidal environments from potential sources of pollution;
- Provide stability of the coastal shoreline; and
- Maintain existing buffers intact where the lot has disturbed area defined under RSA 483-B:4, IV.

SECTION 9 - GENERAL CRITERIA FOR TIDAL WATERS/WETLANDS (Env-Wt 604.03)

Except as allowed under Env-Wt 606, permanent new impacts to tidal wetlands shall be allowed only to protect public safety or homeland security. Evaluation of impacts to tidal wetlands and tidal waters shall be based on:

- The standard conditions in Env-Wt 307;
- The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- The approval criteria in Env-Wt 313.01;
- The evaluation criteria in Env-Wt 313.05;
- The project specific criteria in Env-Wt 600;
- The CFA required by Env-Wt 603.04; and
- The vulnerability assessment required by Env-Wt 603.05.

Projects in tidal surface waters or tidal wetlands shall:

- Optimize the natural function of the tidal wetland, including protection or restoration of habitat, water quality, and self-sustaining stability to storm surge;
- Be designed with a preference for living shorelines over hardened stabilization practices; and
- Be limited to public infrastructure or restoration projects that are in the interest of the general public, including a road, a bridge, energy infrastructure, or a project that addresses predicted sea-level rise and coastal flood risk.

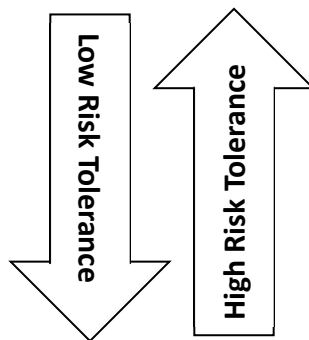
SECTION 10 – GUIDANCE

Your application must follow the New Hampshire Coastal Risk and Hazards Commission’s Guiding Principles or other best available science. Below are some of these guidance principles:

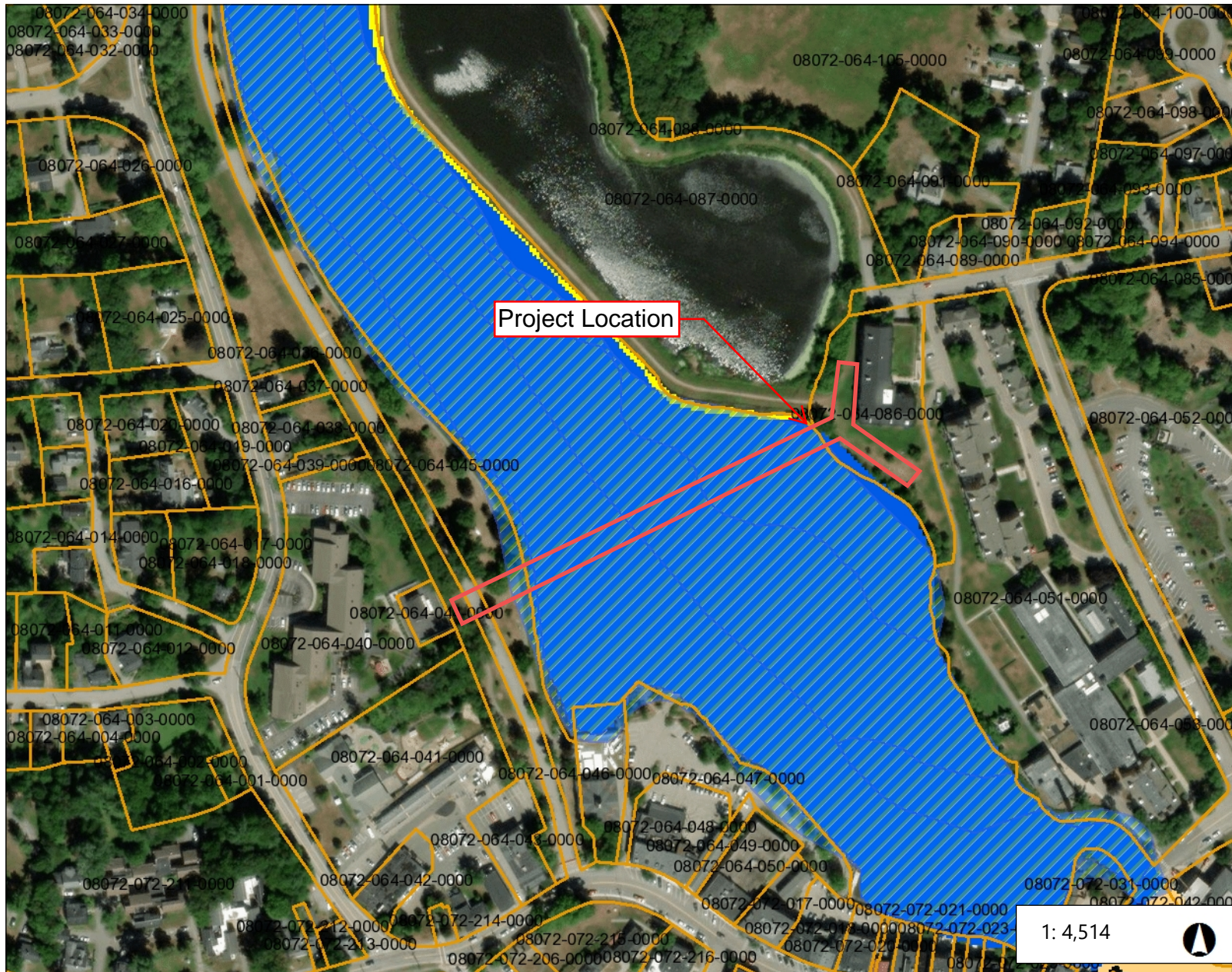
- Incorporate science-based coastal flood risk projections into planning;
- Apply risk tolerance* to assessment, planning, design, and construction;
- Protect natural resources and public access;
- Create a bold vision, start immediately, and respond incrementally and opportunistically as projected coastal flood risks increase over time; and
- Consider the full suite of actions including effectiveness and consequences of actions.

*Risk tolerance is a project’s willingness to accept a higher or lower probability of flooding impacts. The diagram below gives examples of project with lower and higher risk tolerance:

Critical infrastructures, historic sites, essential ecosystems, and high value assets typically have lower risk tolerance, and thus should be planned, designed, and constructed using higher coastal flood risk projections.



Sheds, pathways, and small docks typically have higher risk tolerance and thus may be planned, designed, and constructed using less protective coastal flood risk projections.



Legend

- Parcel Polygons**
 - Parcel Polygons
 - Attributes for Additional Lines
- Parcel Lines**
- Flood Plain Wetlands Adjacent**
- Prime Wetlands with 100 ft Bul**
- Prime Wetlands**
- Peatlands**
- Sand Dunes**
 - backdune
 - foredune
 - interdune
 - other
- Tidal Waters / Tidal Wetlands**
 - Tidal wetland
 - Transitional salt marsh
 - Salt marsh
 - Mud flat
 - Tidal water
- World Imagery**
 - Low Resolution 15m Imagery
 - High Resolution 60cm Imagery
 - High Resolution 30cm Imagery
 - Citations


Notes
Squamscott River Siphon Upgrades

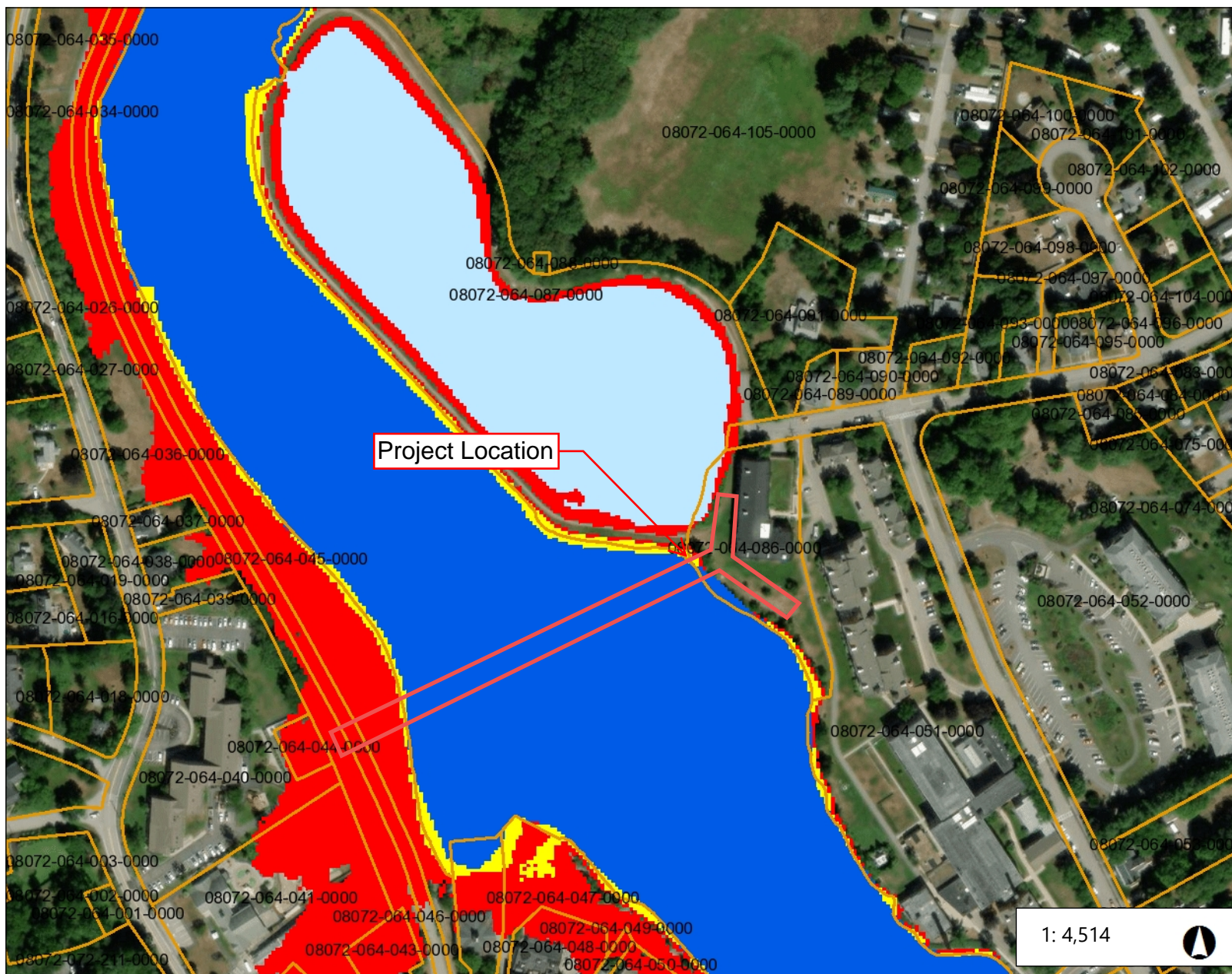


WGS_1984_Web_Mercator_Auxiliary_Sphere
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THIS MAP IS NOT TO BE USED FOR NAVIGATION

1:4,514 



Legend

Parcel Polygons

-  Parcel Polygons
-  Attributes for Additional Lines

Parcel Lines

Predicted Marsh Migration 205

-  Freshwater wetland
-  Tidal wetland
-  Transitional salt marsh
-  Salt marsh
-  Mud flat
-  Inland open water
-  Tidal water

World Imagery

- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

Notes

0.1 0 0.07 0.1 Miles

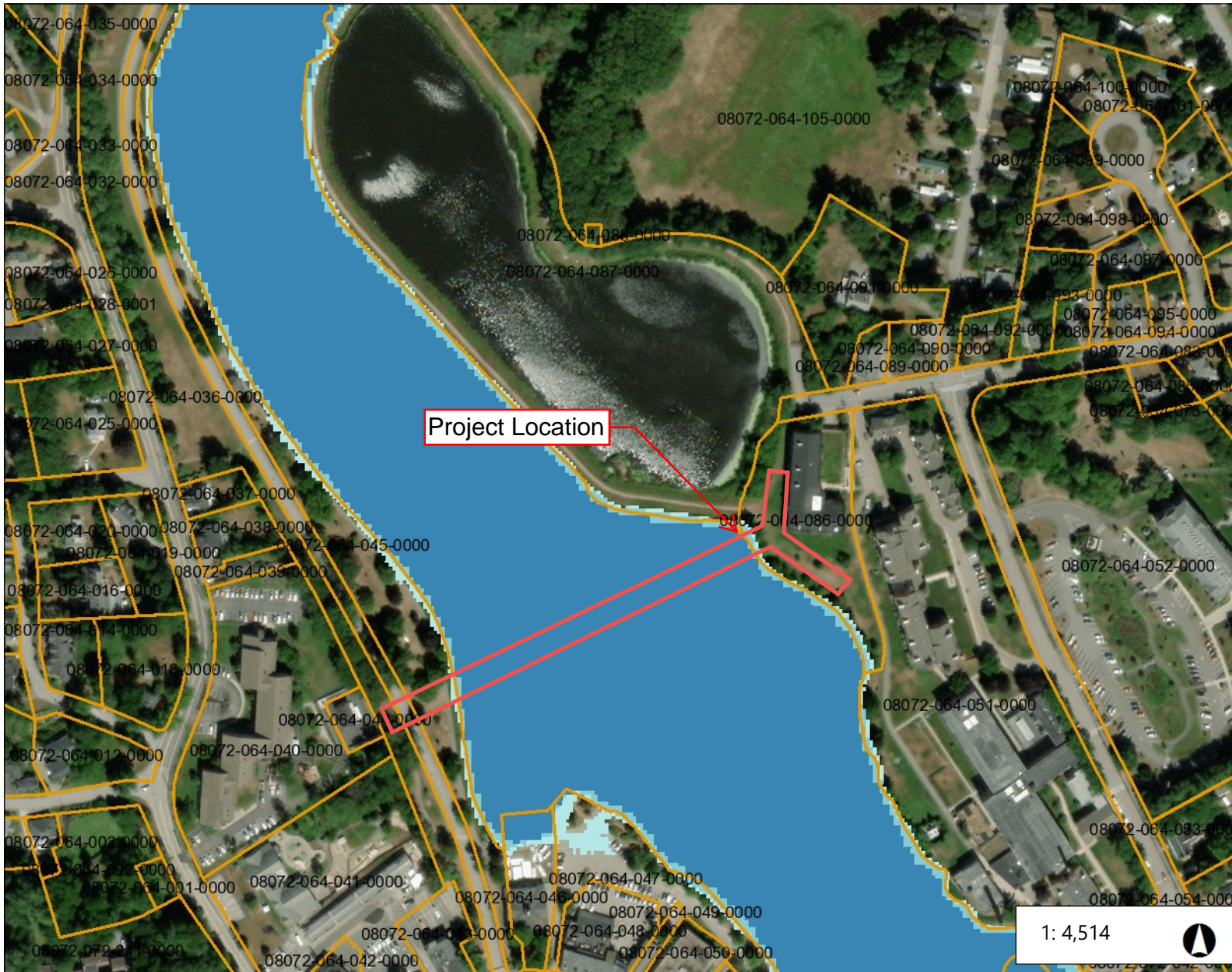
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1:4,514











Legend

- Parcel Polygons**
-  Parcel Polygons
 -  Attributes for Additional Lines

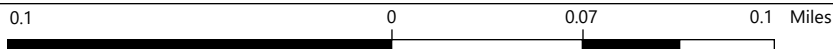
Parcel Lines

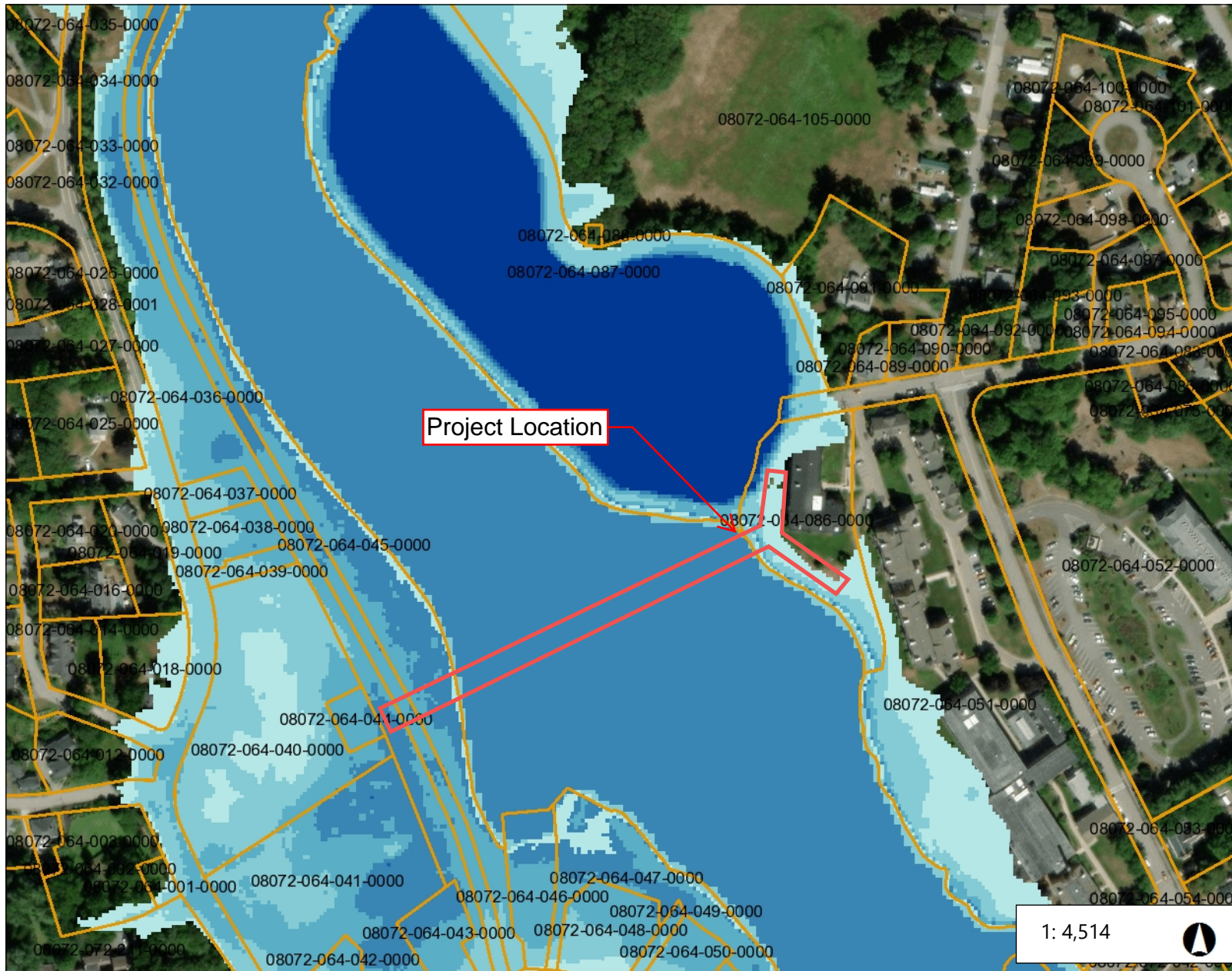
MHHW + 2-ft SLR

-  0 - 2
-  2 - 4
-  4 - 6
-  6 - 8
-  8 - 10
-  10 +

- World Imagery**
- Low Resolution 15m Imagery
 - High Resolution 60cm Imagery
 - High Resolution 30cm Imagery
 - Citations

Notes

















Legend

- Parcel Polygons**
-  Parcel Polygons
 -  Attributes for Additional Lines


Parcel Lines

- MHHW + 2-ft SLR**
-  0 - 2
 -  2 - 4
 -  4 - 6
 -  6 - 8
 -  8 - 10
 -  10 +

MHHW + 1% Flood + 2-ft SLR

-  0 - 2
-  2 - 4
-  4 - 6
-  6 - 8
-  8 - 10
-  10 +

- World Imagery**
- Low Resolution 15m Imagery
 - High Resolution 60cm Imagery
 - High Resolution 30cm Imagery
 - Citations

1:4,514 

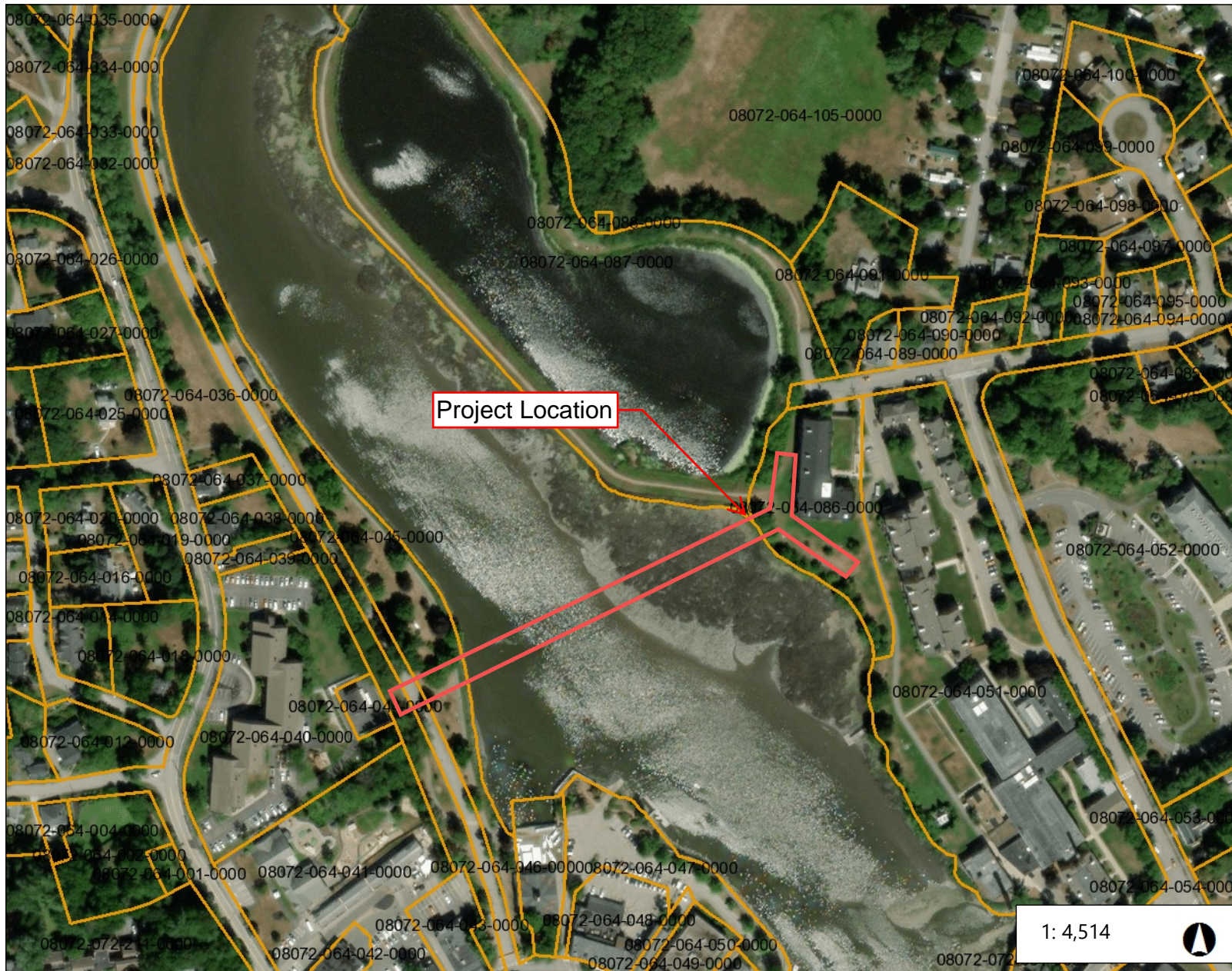


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Notes



Legend

- Parcel Polygons**
 -  Parcel Polygons
 -  Attributes for Additional Lines
- Parcel Lines**
 -  Parcel Lines
- Oyster Restoration Sites**
 -  Oyster Restoration Sites
- Aquaculture Sites - 2015**
 -  Aquaculture Sites - 2015
- Eelgrass**
 -  Eelgrass 2017
 -  Eelgrass 2016
 -  Eelgrass 2006
 -  Eelgrass 1996
 -  Eelgrass 1986
- World Imagery**
 -  Low Resolution 15m Imagery
 -  High Resolution 60cm Imagery
 -  High Resolution 30cm Imagery
 -  Citations

Project Location

1:4,514



0.1 0 0.07 0.1 Miles

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Notes

Attachment A - Minor and Major Projects



STANDARD DREDGE AND FILL
WETLANDS PERMIT APPLICATION
ATTACHMENT A: MINOR AND MAJOR PROJECTS



Water Division/Land Resources Management
Wetlands Bureau

[Check the Status of your Application](#)

RSA/ Rule: RSA 482-A/ Env-Wt 311.10; Env-Wt 313.01(a)(1); Env-Wt 313.03

APPLICANT'S NAME: **Town of Exeter**

TOWN NAME: **Exeter, NH**

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the [Avoidance and Minimization Narrative](#) or [Checklist](#) that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

PART I: AVOIDANCE AND MINIMIZATION

In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#).

SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1))

Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.

THE PROPOSED SEWER SIPHON UPGRADES HAVE BEEN DESIGNED TO MINIMIZE THE FOOTPRINT OF DISTURBANCE TO THE JURISDICTIONAL AREAS. THE PROPOSED IMPACTS ARE LOCATED WITHIN A PREVIOUSLY DISTURBED AREA WITHIN THE TIDAL BUFFER ZONE.

SECTION I.II - MARSHEs (Env-Wt 313.03(b)(2))

Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.

There are no proposed direct impacts to tidal or non tidal marshes.

SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))

Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

The proposed project will not impact the hydrologic connectivity between adjacent wetland or stream systems.

SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))

Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.

Proposed impacts within the Tidal Buffer Zone (TBZ) have been minimized to the maximum extent practical. Impacts will be minimized through the use of best management practices during construction.

SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5))

Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.

The proposed project will not permanently impact public commerce, navigation, or recreation. Temporary construction disruptions will occur on Swasey Parkway and by Exeter Mills. Pedestrians will be required to keep out of the limit of work while construction equipment and crews are mobilized. One entrance to the walking path around Clemson Pond will be closed to pedestrians during construction (i.e. path will be a dead end).

SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))

Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.

The proposed project does not involve impacts to floodplain wetlands.

SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES
(Env-Wt 313.03(b)(7))

Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.

There are no natural riverine forested wetland systems or scrub-shrub marsh complexes affected by the proposed project.

SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8))

Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

The proposed project is located adjacent to a tidal river, thus the project will not impact drinking water supplies or groundwater aquifers within or adjacent to the project area.

SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))

Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.

The proposed project will not impact stream channels or the ability of such channels to handle runoff.

SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1))

Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.

The proposed project does not involve shoreline structures over surface waters.

SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2))

Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.

The proposed project does not involve shoreline structures over surface waters.

SECTION I.XII - SHORELINE STRUCTURES – ABUTTING PROPERTIES (Env-Wt 313.03(c)(3))

Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.

The proposed project does not involve shoreline structures over surface waters.

SECTION I.XIII - SHORELINE STRUCTURES – COMMERCE AND RECREATION (Env-Wt 313.03(c)(4))

Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.

The proposed project does not involve shoreline structures over surface waters.

SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5))

Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.

The proposed project does not involve shoreline structures over surface waters.

SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-Wt 313.03(c)(6))

Describe how the structures have been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.

The proposed project does not involve shoreline structures over surface waters.

PART II: FUNCTIONAL ASSESSMENT
<p>REQUIREMENTS</p> <p>Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).</p>
<p>FUNCTIONAL ASSESSMENT METHOD USED:</p> <p>Waiver requested</p>
<p>NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: [REDACTED]</p>
<p>DATE OF ASSESSMENT: [REDACTED]</p>
<p>Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT:</p> <p><input type="checkbox"/></p>
<p>For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable:</p> <p><input type="checkbox"/></p> <p>Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.</p>

18

Mitigation



In consultation with NHDES and the US Army Corps of Engineers, payment to New Hampshire’s Aquatic Resource Mitigation (ARM) Fund was determined to be appropriate mitigation for the proposed permanent wetland impacts within the 75’ Salt Marsh Buffer. Calculation for payment into the In-Lieu Fee program based on the types and extent of impacts are as follows:

Impact Area	Permanent Impact (SF)	ARM Payment
Access Drive	880	\$5,235.55
Manholes	20	\$118.99
Total	900	\$5,354.54

The estimated in-lieu fee total based on the 2021 ARM Fund Calculator is \$5,354.54. This amount will be confirmed during the review process with NHDES and USACE, should design modifications or permit conditions result in changes in wetland impacts.

TOWN	Equalized Value per Acre B=437 T=43,532	NHDES AQUATIC RESOURCE MITIGATION FUND WETLAND PAYMENT CALCULATION ***INSERT AMOUNTS IN YELLOW CELLS***		
Acworth	1507			
Albany	916			
Alexandria	2808			
Allenstown	9380	1 Convert square feet of impact to acres:		
Alstead	2805	INSERT SQ FT OF IMPACT	Square feet of impact =	900.00
Alton	22495			43560.00
Amherst	31637		Acres of impact =	0.0207
Andover	4451			
Antrim	4259			
Ashland	14043	2 Determine acreage of wetland construction:		
Atkinson	43532	Forested wetlands:		0.0310
Auburn	21507	Tidal wetlands:		0.0620
Barnstead	8766	All other areas:		0.0310
Barrington	12457			
Bartlett	8797			
Bath	1723	3 Wetland construction cost:		
Bean's Grant	437	Forested wetlands:		\$3,112.98
Bean's Purchase	437	Tidal Wetlands:		\$6,225.96
Bedford	43532	All other areas:		\$3,112.98
Belmont	13067			
Bennington	4901			
Benton	437	4 Land acquisition cost (See land value table):		
Berlin	1572	INSERT LAND VALUE FROM TABLE WHICH APPEARS TO THE LEFT. (Insert the amount do not copy and paste.)	Town land value:	43532
Bethlehem	1050		Forested wetlands:	\$1,349.13
Boscawen	7298		Tidal wetlands:	\$2,698.26
Bow	19830		All other areas:	\$1,349.13
Bradford	4530			
Brentwood	20958	5 Construction + land costs:		
Bridgewater	16357	Forested wetland:		\$4,462.11
Bristol	14453	Tidal wetlands:		\$8,924.23
Brookfield	2748	All other areas:		\$4,462.11
Brookline	20745			
Cambridge	437	6 DES Administrative cost:		
Campton	4509	Forested wetlands:		\$892.42
Canaan	4705	Tidal wetlands:		\$1,784.85
Candia	11533	All other areas:		\$892.42
Canterbury	3903			
Carroll	2798	***** TOTAL ARM PAYMENT*****		
Center Harbor	34922	Forested wetlands:		\$5,354.54
Chandler's Purchase	437	Tidal wetlands:		\$10,709.07
Charlestown	2677	All other areas:		\$5,354.54
Chatham	597			
Chester	14851			
Chesterfield	7924			
Chichester	8962			
Claremont	4684			
Clarksville	506			
Colebrook	1536			
Columbia	521			
Concord	31115			
Conway	14244			
Cornish	2475			
Crawford's Purchase	437			
Croydon	1681			
Cutt's Grant	437			
Dalton	1472			
Danbury	2030			
Danville	20344			
Deerfield	8227			
Deering	5091			
Derry	43532			
Dix's Grant	437			
Dixville	437			
Dorchester	711			
Dover	43532			
Dublin	5435			

Jacob Shactman

From: Sommer, Lori <LORI.L.SOMMER@des.nh.gov>
Sent: Monday, July 19, 2021 8:05 AM
To: Jacob Shactman
Cc: Britt Eckstrom; Kevin Garvey
Subject: RE: Squamscott River Sewer Siphon Upgrades - Mitigation Fee

Hi Jake,

Thank you for taking the time to explain the project and review impacts. The calculation is correct for this work in the PRA. Thank you and good luck with your project.

Lori

From: Jacob Shactman <jacob.shactman@wright-pierce.com>
Sent: Friday, July 16, 2021 4:21 PM
To: Sommer, Lori <LORI.L.SOMMER@des.nh.gov>
Cc: Britt Eckstrom <britt.eckstrom@wright-pierce.com>; Kevin Garvey <kevin.garvey@wright-pierce.com>
Subject: Squamscott River Sewer Siphon Upgrades - Mitigation Fee

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Good afternoon Lori,

Thank you for taking the time to meet with us on Monday. I have attached the updated Wetland Impact Figure for the Squamscott Sewer Siphon Upgrades, which shows the permanent impacts proposed within the 75' Salt Marsh Buffer.

The proposed permanent impacts within the 75' Salt Marsh Buffer is 900 sq ft (total), which includes 880 sq ft for the access drive and 20 sq ft for the manholes covers (4) outside of the access drive.

Also attached is the ARM calculator, with inputs of 900 sq ft of impact and a town land value of 43,532. Based on this spreadsheet, it appears or in-lieu payment should be \$5,354.54. Could you please confirm this is correct?

Thanks,
Jake

Jake Shactman
Wright-Pierce | Project Engineer
direct 603.570.7115 | office 603.430.3728

WRIGHT-PIERCE 
Engineering a Better Environment

PROJECTS:	Squamscott River Sewer Siphon Upgrades	PROJ #:	20387A
LOCATION:	Microsoft Teams Call	DATE:	7/12/2021
PURPOSE:	Mitigation Pre-Application Meeting	TIME:	1:00 PM

A mitigation pre-application meeting was held by video conference on July 12, 2021. The following notes are a summary of the meeting agenda and discussion.

Attendees

Wright-Pierce: Kevin Garvey, Britt Eckstrom, Jake Shactman
Town of Exeter: Jennifer Mates, Kristen Murphy
NHDES: Eben Lewis, Lori Sommer
ACOE: Lindsey Lefebvre

1. Project Introduction

- a. Project location
 - i. Squamscott River - Downtown Exeter
- b. Need for the project
 - i. Original project scope was to inspect the existing sewer siphons and analyze options
 - ii. Existing siphons in poor condition (concerning for Town and W-P)
- c. Proposed project
 - i. Three new siphon pipes to convey sewer flow to Main Pump Station
 - ii. Horizontal Directional Drilling (HDD) chosen as preferred method
 1. Less invasive than open cut excavation

2. Permitting

- a. Proposed Wetlands impacts
 - i. Jurisdictional areas – previously disturbed TBZ
 - ii. Temporary impacts for utility trenches, HDD pits, laydown/equipment area, and test pits.
 - iii. Permanent impacts – MH covers and access drive extension
- b. Standard Dredge and Fill application
- c. ACOE will have the opportunity to review after DES
 - i. Lindsey to confirm whether a 408 permit will be needed (navigation channel)

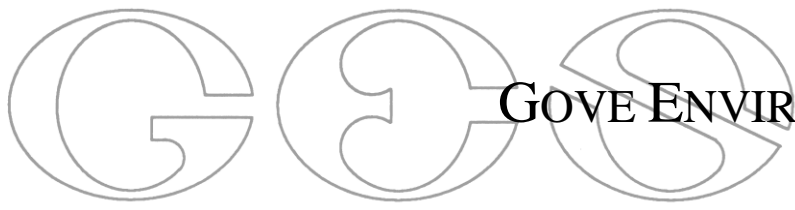
3. Mitigation Requirements

- a. Access drive will require mitigation even if it is subsurface, maintains the same elevation, and pervious

- b. In-Lieu fee is appropriate for mitigation
- c. After Eben finishes review and issues an approval letter, the Town has 120 days to write a check for the In-Lieu payment
 - i. Typical to wait 30 days to make the payment due to public review period



230 Commerce Way, Suite 302
Portsmouth, NH 03801
603.430.3728 | www.wright-pierce.com



GOVE ENVIRONMENTAL SERVICES, INC.
AGENT

NHDES WETLANDS BUREAU
EXPEDITED MINIMUM IMPACT
DREDGE & FILL APPLICATION

Hidden Meadow
Tamarind Lane,
Exeter, NH
August, 2021

DRAFT

Prepared By:

Gove Environmental Services, Inc.
8 Continental Dr Bldg 2, Unit H, Exeter, NH 03833-7526
Ph (603) 778 0644 / *Fax* (603) 778 0654
info@gesinc.biz / www.gesinc.biz

GES# 2018195

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- 1.0 NHDES Wetlands Bureau Dredge & Fill Application Forms
 - 1.1 Expedited Minimum Impact Wetlands Permit Application (NHDES-W-06-052)
 - 1.2 Avoidance and Minimization Written Narrative (NHDES-W-06-089)
 - 1.3 Army Corps of Engineers Appendix B
- 2.0 General Information
 - 2.1 Project Name, Plans, and Maps
 - 2.2 Technical Standards
 - 2.3 Site Description/Wetlands Overview
 - 2.4 Construction Sequence and Drainage Practices
- 3.0 Project Overview
 - 3.1 USGS Quad Sheet Locus Map
 - 3.2 Wildlife Action Plan
 - 3.3 Aerial Photography
 - 3.4 Existing Conditions Plan
 - 3.5 Site Plans
 - 3.6 Wetland Impact Plan
 - 3.7 Photolog of Impact Areas

APPENDICES

- Appendix I New Hampshire Natural Heritage Bureau Inquiry
- Appendix II New Hampshire Department of Historic Resources Inquiry
- Appendix III Tax Map, List of Abutters, Abutter Notification Letter, and Certified Mail Receipts

2.0 GENERAL INFORMATION

PREPARED BY (AGENT CONTACT): Brenden Walden

2.1 PROJECT NAME, PLANS, AND MAPS

PROJECT NAME: Hidden Meadow Condominium

SITE PLANS/MAPS: Existing Conditions Plan
Proposed Plan
8½"x11" USGS Quad Sheet Locus Map
8½"x11" Wildlife Action Plan
8½"x11" Aerial Imagery
11x17" Overview Plan
11x17" Wetland Impact Plan Detail
11x17" Project Site Tax Map

2.2 TECHNICAL STANDARDS

- 2.2.1 Gove Environmental Services, Inc. delineated the wetlands during the spring of 2019, utilizing the standards of the Corps of Engineers *Wetlands Delineation Manual*¹ and the NH DES Wetlands Bureau *Code of Administrative Rules*².
- 2.2.2 Wetland flags were surveyed by Land Surveying Services.
- 2.2.3 Wetlands were classified by GES utilizing the criteria of *Classification of Wetlands and Deepwater Habitats of the United States*³.
- 2.2.4 Dominant hydric soil conditions within the wetlands were identified by GES utilizing the criteria of *Field Indicators for Identifying Hydric Soils in New England*⁴.
- 2.2.5 Dominance of wetland vegetation was assessed by GES utilizing the *National List of Plant Species That Occur in Wetlands: Northeast (Region 1)*⁵.

¹ Environmental Laboratory. 2012. "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region." Version 2.0. Technical Report ERDC/EL TR-10-12.

² NH Code Admin. R. [Wt] Ch. 100-800.

³ Cowardin, L. M., 1979. *Classification of Wetlands and Deepwater Habitats in the United States*. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service.

⁴ New England Hydric Soils Technical Committee, Version 4. June 2020. "Field Indicators for Identifying Hydric Soils in New England."

⁵ Lichvar, R.W. & Kartesz, J.T. 2009. North American Digital Flora: National Wetland Plant List. 2.2.1.



Env-Wt 310.01
EXPEDITED MINIMUM IMPACT (EXP)
WETLANDS PERMIT APPLICATION
 Water Division/Land Resources Management
 Wetlands Bureau



[Check the Status of your Application](#)

RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: **Brian Griset**

TOWN NAME: **Exeter**

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; Env-Wt 603.03; Env-Wt 603.05)

Please use the [Wetland Permit Planning Tool \(WPPT\)](#), the Natural Heritage Bureau (NHB) [DataCheck Tool](#), the [Aquatic Restoration Mapper](#), or other sources to assist in identifying key features such as: [priority resource areas \(PRAs\)](#), [protected species or habitats](#), coastal areas, designated rivers, or designated prime wetlands.

Does the property contain a PRA? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04). 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Protected species or habitat? <ul style="list-style-type: none"> ○ If yes, species or habitat name(s): <input style="width: 100px;" type="text"/> ○ NHB Project ID #: NHB21-1021 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Bog? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Floodplain wetland contiguous to a tier 3 or higher watercourse? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Designated prime wetland or duly-established 100-foot buffer? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Name of Local River Management Advisory Committee (LAC): <input style="width: 100px;" type="text"/> • A copy of the application was sent to the LAC on Month: <input style="width: 50px;" type="text"/> Day: <input style="width: 50px;" type="text"/> Year: <input style="width: 50px;" type="text"/> 	
For dredging projects, is the subject property contaminated?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, list contaminant(s): <input style="width: 100px;" type="text"/> 	
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For stream crossing projects, provide watershed size (see Wetland Permit Planning Tool or Stream Stats): <input style="width: 100px;" type="text"/>	

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

SECTION 2 - ELIGIBILITY (Env-Wt 306.03; Env-Wt 310.01; Env-Wt 310.03)

You must confirm that your project meets **ALL** of the following statements to qualify for the EXP process:

- The project qualifies as minimum impact project (Env-Wt 306.03).
- The project does not include activities that are prohibited under RSA 482-A (Env-Wt 306.03(a)).
- The project does not include any work in a jurisdictional area that was started without first obtaining the applicable approval (Env-Wt 306.03(b)).
- No work has been done on the subject property pursuant to another EXP or a Statutory Permit-by-Notification (SPN) within 12 months of the date this EXP will be issued. Alternatively, if any work has been done on the subject property pursuant to another EXP or a SPN within 12 months of the date this EXP will be issued, then you are submitting information, including a plan, with this application demonstrating that:
 - The work proposed in this EXP application is wholly unrelated to and separate from the work already done under the EXP or SPN; and
 - The work proposed in this EXP application, when combined with work that has been done under previously issued EXPs or SPNs within the last 12 months, does not constitute a project for which a Standard Permit is required (Env-Wt 310.03(a)).
- If the project is located in a PRA, it also qualifies for an impact classification adjustment under Env-Wt 407.02 or a project-type exception (PTE) under Env-Wt 407.04 (Env-Wt 310.01(d)(6)).

My project meets all statements above. Proceed to Section 3.

My project does not meet all of the statements above. **Your project does not qualify for the EXP process. Your project either is not permissible or requires a Standard Permit.**

SECTION 3 - INFORMATION ON THE PROPOSED PROJECT (Env-Wt 310.01(c))

Identify the rule(s)/provision(s) which make the project a minimum impact project. Refer to the project list below and the [Expedited Minimum Impact \(EXP\) Project Classification Guidance Document](#).

- Aquatic Vegetation Control Projects (Env-Wt 510.08(a))
- Water Access Structure Construction Projects (Env-Wt 511.06(a))
- Beach Replenishment Projects (Env-Wt 511.07(a))
- Deck or Patio Repair Projects (Env-Wt 511.08(a))
- Breakwater Maintenance and Repair Projects (Env-Wt 512.07(b))
- Docking and Accessory Docking Structure Construction, Repair, and Replacement Projects (Env-Wt 513.24(a))
- Docking Structure Modification Projects (Env-Wt 513.25(a))
- Accessory Docking Structure Installation, Construction, Modification, Repair, and Replacement Projects (Env-Wt 513.26(a))
- Canopy Projects (Env-Wt 513.27(a))
- Bank/Shoreline Stabilization Construction Projects (Env-Wt 514.07(a))
- Dug-in Basins and Boathouse Construction or Modification Projects (Env-Wt 515.06(a), (b))
- Dug-in Basins and Boathouse Maintenance and Repair Projects (Env-Wt 515.07(a))
- Intake and Outflow Structure Construction, Maintenance and Repair Projects (Env-Wt 516.05; Env-Wt 516.06(b))
- Trail or Pathway Projects (Env-Wt 517.06(a); Env-Wt 517.06(d))
- Boardwalk Projects (Env-Wt 517.07(a); (Env-Wt 517.09))
- Dry Hydrants and Other Non-Docking Structure Projects (Env-Wt 518.07(a)(1), (b))
- Pond Construction, Maintenance, and Repair Projects (Env-Wt 519.08(a), (b); Env-Wt 519.09(a))
- Residential Utility Installation Projects (Env-Wt 521.06(a)(7))

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NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

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- Non-tidal Dredging Projects (Env-Wt 523.04(a))
- Residential, Commercial, and Industrial Development Projects (Env-Wt 524.06(b))
- Restoration/Enhancement Projects (Env-Wt 525.05)
- Dam Construction, Reconstruction, or Replacement Projects (Env-Wt 526.06(a))
- Dam Modification, Repair, or Maintenance Projects (Env-Wt 526.07(a))
- Pubic Highway Projects (Env-Wt 527.06; Env-Wt 527.07)
- Coastal Projects (Env-Wt 600)
- Stream Crossing Projects (Env-Wt 903.01(e))
- All Other Projects (Env-Wt 407.03)

Provide the project-specific information required by the rule(s)/provision(s). Refer to Chapters Env-Wt 400, Env-Wt 500, Env-Wt 600, and/or Env-Wt 900, as applicable, for project-specific application and design requirements.

The applicant is proposing a 16 unit condominium development on an existing lot. The propsoed wetland impacts are below 3,000 sf and there are no impacts to any LF of stream channel. The proposed project does not have any impacts to PRA's. There are no alternative designs that would be less impactful to jurisdictional areas on site as the impacts are necessary to gain access. **Please see applicable Standard Project Specific Worksheets for guidance.**

For projects located on waterbodies, provide the linear feet of shoreline frontage on the property: linear feet

Not applicable

Provide a brief description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached".

The applicant is proposing a 16 unit residential condominium development on the subject property. The proposed project will require permanant wetland impacts to build a roadway to access the buildable uplands on site. Direct wetland impacts will amount to 2,960 SF with 1,680 SF of impact to forested wetlands and 1,280 SF of wetland impact to an existing farm pond. The roadway will incorporate retaining walls to minimize the need for additional wetland impacts that would otherwise be needed for grading associated with the roadway.

Identify the type of jurisdictional resources to be impacted and the area of impact in square feet and/or linear feet:

PFO1E: 1,680 SF

POW/PSS1E : 1,280 SF

Not applicable)

SECTION 4 - PROJECT LOCATION (Env-Wt 310.01(b))

ADDRESS: Tamarind Way

TOWN/CITY: Exeter

TAX MAP/LOT NUMBER: Map 96 Lot 15-1

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Scaman Brook

N/A

LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 42.970806° North

-70.974751° West

SECTION 5 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 310.01(a))

If the applicant is a trust or a company, then the name of the trust or company should be written as the applicant's name.

NAME: Brian Griset

MAILING ADDRESS: 26 Cullen Way

TOWN/CITY: Exeter

STATE: NH

ZIP CODE: 03833

PHONE: 6036861139

EMAIL ADDRESS (OPTIONAL): grisetandsons@comcast.net

ELECTRONIC COMMUNICATION: By initialing here: , I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 6 - AUTHORIZED AGENT INFORMATION (Env-Wt 310.01(a))

If the agent is a company, then the name of the company should be written as the agent's name.

NAME: Brenden Walden / Gove Environmental Services, Inc.

MAILING ADDRESS: 8 Continetal Drive, Bldg 2, Unit H

TOWN/CITY: Exeter

STATE: NH

ZIP CODE: 03833

PHONE: 2077107863

EMAIL ADDRESS (OPTIONAL): bwalden@gesinc.biz

ELECTRONIC COMMUNICATION: By initialing here: BW, I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 7 - PROPERTY OWNER INFORMATION, IF DIFFERENT FROM APPLICANT (Env-Wt 310.01(a))

If the owner is a trust or a company, then the name of the trust or company should be written as the owner's name.

NAME: Adela J. Griset

MAILING ADDRESS: 26 Cullen Way

TOWN/CITY: Exeter STATE: NH ZIP CODE: 03833

PHONE: EMAIL ADDRESS (OPTIONAL):

ELECTRONIC COMMUNICATION: By initialing here: , I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 8 - APPLICATION FEE (RSA 482-A:3, I)

\$400 for minimum impact projects. Please make your check or money order payable to: "Treasurer - State of NH".

SECTION 9 - REQUIRED CERTIFICATIONS (Env-Wt 310.01(d))

Initial each box below to certify:

Initials: <input type="checkbox"/> BTG <input type="checkbox"/> AJG <input type="checkbox"/> BW	The proposed project meets the conditions and limits of the applicable minimum impact project rule.
Initials: <input type="checkbox"/> BTG <input type="checkbox"/> AJG <input type="checkbox"/> BW	All abutters have been notified.
Initials: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	If the project is to repair or replace a docking structure, the docking structure is an existing legal structure. <input checked="" type="checkbox"/> N/A
Initials: <input type="checkbox"/> BTG <input type="checkbox"/> AJG <input type="checkbox"/> BW	The proposal is the alternative with the least adverse impact to jurisdictional areas, as required by Env-Wt 310.01(d)(4).
Initials: <input type="checkbox"/> BTG <input type="checkbox"/> AJG <input type="checkbox"/> BW	The project is not an after-the-fact application.
Initials: <input type="checkbox"/> BTG <input type="checkbox"/> AJG <input type="checkbox"/> BW	The project is: <ul style="list-style-type: none"> • Not located in a PRA, or • Is located in a PRA but is subject to a classification adjustment under Env-Wt 407.02 or a project-type exception under Env-Wt 407.04.
Initials: <input type="checkbox"/> BTG <input type="checkbox"/> AJG <input type="checkbox"/> BW	The applicant is aware of the limits of the EXP and understands and will comply with all conditions in the EXP and all applicable conditions in Env-Wt 307.

Initials: BTG AJG BW	To the best of the signer’s knowledge and belief, all required notifications have been provided.
Initials: BTG AJG BW	The information submitted on or with the application is true, complete, and not misleading to the best of the signer’s knowledge and belief.
Initials: BTG AJG BW	The signer understands that: <ul style="list-style-type: none"> • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: <ol style="list-style-type: none"> 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. • The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. • The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.
Initials: BTG AJG BW	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 10 - REQUIRED SIGNATURES (Env-Wt 310.01(d))

SIGNATURE (OWNER)*:	PRINT NAME LEGIBLY:	DATE:

*Note: If the applicant is not the owner of the property, each property owner also shall sign and date the application provided that property owner signatures shall not be required for transportation projects adjacent to existing rights-of-way where an easement will be obtained prior to the start of construction (Env-Wt 311.11(d)). Check the following box if your project meets this exception: .

SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY:	DATE:
	Adela J. Griset	08/02/2021
SIGNATURE (AGENT, IF APPLICABLE):	PRINT NAME LEGIBLY:	DATE:
	Brian T. Griset	08/02/2021

SECTION 11 - CONSERVATION COMMISSION SIGNATURE (Env-Wt 310.01(h))**
 The signed statement from the Conservation Commission may be submitted electronically.

The signature below certifies that the municipal Conservation Commission or, if there is no conservation commission, the local governing body, has reviewed this application and the municipality waives its right to intervene on the project, per RSA 482-A:11.

AUTHORIZED COMMISSION SIGNATURE:	PRINT NAME LEGIBLY:	DATE:
	Brenden Walden	08/02/2021

SECTION 12 - LOCAL RIVER MANAGEMENT ADVISORY COMMITTEE SIGNATURE (Env-Wt 310.01(i))**		
The signature below certifies that the LAC waives its right to intervene per RSA 482-A:11: (<input checked="" type="checkbox"/> N/A This project is not within a Designated River Corridor)		
AUTHORIZED LAC REPRESENTATIVE SIGNATURE: _____	PRINT NAME LEGIBLY: _____	DATE: _____

**Note: If the application is administratively complete, except for the signed statement from the Conservation Commission and/or LAC, the application will be processed under the application processing times established in RSA 482-A:3, XIV (Env-Wt 310.02(h)). The applicant may also indicate that they are applying for a minimum impact application under standard processing timelines.

SECTION 14 - TOWN / CITY CLERK SIGNATURE (Env-Wt 310.01(f))	
As required by RSA 482-A:3, I(a)(1), I hereby certify that the municipality has received four copies of the application, including all attachments.	
TOWN/CITY CLERK SIGNATURE: _____	PRINT NAME LEGIBLY: _____
TOWN/CITY: _____	DATE: _____

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

Submit the single, original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page.

Keep this checklist for your reference; do not submit with your application.

APPLICATION CHECKLIST

Required for all applications:

- The completed, dated, signed and certified application (Env-Wt 310.01).
- Application fee of \$400, as determined in RSA 482-A:3, I (Env-Wt 310.01(e)). Make check or money order payable to "Treasurer – State of NH".
- [US Army Corps of Engineers \(ACE\) "Appendix B, New Hampshire General Permits \(GPs\), Required Information and Corps Secondary Impacts Checklist"](#) and its required attachments (Env-Wt 307.02). This includes the [US Fish and Wildlife Service IPAC review](#) and [Section 106 Historic/Archaeological Resource review](#).
- A copy of the town tax map(s) showing the location of the proposed project in relation to abutters (Env-Wt 310.01(b)(2)).
- A list of abutters' names and mailing addresses to cross-reference with the tax map (Env-Wt 310.01(b)(3)).
- A copy of the appropriate US Geological Survey map with the property and project clearly marked (Env-Wt 310.01(b)(4)).
- Photos that meet all of the following criteria:
 - Clearly show the area to be impacted,
 - Are mounted or printed no more than two per sheet on 8.5-inch x 11-inch paper, and
 - Are annotated to explain impact (Env-Wt 310.01(b)(6)).
- The results and identification number of the NHB DataCheck (Env-Wt 310.01(b)(8)). See [Wetlands Permitting: Protected Species and Habitat](#) Fact Sheet.
- An accurate drawing showing the precise location, with detailed dimensions clearly annotated to document existing site conditions and to show the proposed impacts to the jurisdictional areas (Env-Wt 310.01(c)(4)).
- An accurate drawing to show the impact of the proposed activity on jurisdictional areas, including the following (Env-Wt 310.01(c)(5)):
 - An overview of the property and proposed impact areas in relation to property lines,
 - The scale, if any, used on the drawing,
 - If the drawing is not to scale, the dimensions of all existing and proposed structures and all other relevant features necessary to clearly define the project,
 - A labeled north-pointing arrow to indicate orientation,
 - A legend that clearly indicates all symbols, line types, and shading used on the plan,
 - The location of the jurisdictional areas delineated in accordance with Env-Wt 400,
 - Proposed sequence of construction including pre-construction through post-construction activities and the relative timing and progression of all work,
 - The location and type of siltation and turbidity controls indicated graphically and labeled or annotated as necessary,
 - For any project using a temporary coffer dam and for any repair of a tier 3 stream crossing, the date, signature, and seal of the licensed professional engineer who prepared or had responsibility for the plan(s),
 - For restoration/enhancement projects, the information required to be shown on a map by Env-Wt 525,
 - For tidal minimum impact projects, the information required to be shown on a map by Env-Wt 600, and
 - For minimum impact stream crossing projects, the information required to be shown on a map by Env-Wt 900.
- The linear distance of the project from abutting property boundaries (Env-Wt 310.01(c)(7)).

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

Required for certain project type, as applicable:

- The type of dock construction (Env-Wt 310.01(c)(8)).
- The diameter of culvert(s) to be used for road or driveway crossings (Env-Wt 310.01(c)(8)).
- The additional information specified in Env-Wt 522 for minimum impact agricultural applications (Env-Wt 310.01(c)(8)).
- Plans for maintenance of retaining walls, as specified in Env-Wt 514 (if applicable; Env-Wt 310.01(c)(8)).
- Specifications and plans for maintenance of rip-rap, as required by Env-Wt 514 (Env-Wt 310.01(c)(8)).
- Any other project-specific plan or information required under Env-Wt 500 and as described in the project-specific worksheet (Env-Wt 310.01(c)(8)).
- Information required on the [Coastal Resource Worksheet](#) for coastal projects under Env-Wt 600.
- Prime Wetlands information required under Env-Wt 700.
- Information requested on the [Stream Crossing Worksheet](#) required by Env-Wt 900.



**EXPEDITED (EXP) MINIMUM IMPACT
WETLANDS PERMIT APPLICATION
REVIEW PROCESS**

**Water Division/Land Resources Management
Wetlands Bureau**



(Keep this sheet for your reference; do not submit it with your application)

In accordance with Env-Wt 310.02, the department must review an application for an expedited permit (EXP) for administrative completeness and compliance with applicable department rules within 30 calendar days of receipt if the application has been signed by:

- The municipal conservation commission or, if there is no conservation commission, the local governing body, certifying that the municipality waives its right to intervene on the project, which may be submitted electronically; and
- The LAC, if the project is within LAC jurisdiction, certifying that the LAC waives its right to intervene on the project. "LAC jurisdiction" means the authority conferred by RSA 483:8-a, III upon a local river management advisory committee relative to activities within a designated river or river corridor, provided that for the purpose of routine roadway maintenance activities conducted under an EXP, LAC jurisdiction is limited to activities in or within 250 feet of a tier 2 or tier 3 designated river that have a direct surface water connection to the designated river (Env-Wt 103.27).

Administrative Completeness Review:

If the application is administratively complete, complies with applicable requirements, and has the signature(s) mentioned above, the department will issue an EXP and post the information on [OneStop](#) within one business day of determining that the application was complete and in compliance with all applicable requirements.

If the application is lacking anything other than the signatures mentioned above and the project qualifies for an EXP, the department will send a written notice to the applicant that:

- Identifies each item that is missing; and
- Informs the applicant that in order to proceed under the EXP, the applicant must submit all necessary information within 20 days of the date of the notice or the application will be denied.

If the application was administratively complete except for one or both of the signatures required above, the department will send a written notice to the applicant that the application will be processed under the application processing times established in RSA 482-A:3, XIV.

If the applicant receives the above-mentioned notice and wishes to proceed under an EXP, the applicant must submit a revised application for an EXP that provides all of the required information within 20 days of the date of the notice. If the applicant does not submit all necessary information to the department within 20 days, the department will deny the EXP.

Technical Review:

If the information submitted as part of the application is not sufficient for the department to determine that the project meets the criteria for an EXP, the department shall send a request for more information, together with any written technical comments the department deems necessary, within 30 calendar days of receipt of the application. Such request and technical comments shall be sent by electronic means if the applicant or applicant's agent has indicated that doing so is acceptable.

If the project proposed in the EXP application does not comply with applicable requirements, the department will deny the application and notify the applicant in writing of the reason(s) for the denial.

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov



AVOIDANCE AND MINIMIZATION
WRITTEN NARRATIVE
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/ Rule: RSA 482-A/ Env-Wt 311.04(j); Env-Wt 311.07; Env-Wt 313.01(a)(1)b; Env-Wt 313.01(c)

APPLICANT'S NAME: Brian Griset

TOWN NAME: Exeter

An applicant for a standard permit shall submit with the permit application a written narrative that explains how all impacts to functions and values of all jurisdictional areas have been avoided and minimized to the maximum extent practicable. This attachment can be used to guide the narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to the permit application.

SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1))

Is the primary purpose of the proposed project to construct a water access structure?

There are no water access structures associated with this project

SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))

Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?

Yes

SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))*

For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs?

**Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.*

The proposed project meets all minimum impact criteria and does not impact any PRA's.

SECTION 4 - ALTERNATIVES (Env-Wt 311.07(b)(3))

Could alternative designs or techniques, such as different layouts, different construction sequencing, or alternative technologies be used to avoid impacts to jurisdictional areas or their functions and values as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#)?

The applicant has worked with the engineer to design the least impacting alternative by utilizing as much of an existing roadway as practicable as well as incorporating retaining walls along proposed wetland impacts to minimize any additional direct wetland impacts that would be necessary for roadway grading.

SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))**

How does the project conform to Env-Wt 311.10(c)?

***Except for projects solely limited to construction or modification of non-tidal shoreline structures only need to complete relevant sections of Attachment A.*

By accessing the buildable upland from the proposed Tamarind Lane location the applicant is minimizing the overall direct wetland impacts as access from Cullen Way would require extensive wetland impacts as well as bisecting the larger higher functioning wetland system which included Scamen Brook. By impacting the wetlands at the proposed locations it maintains the integrity of the functions of the larger wetland system on site.



**US Army Corps
of Engineers**®
New England District

**New Hampshire General Permits (GPs)
Appendix B - Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)**

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 5, regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm to determine if there is an impaired water in the vicinity of your work area.*	X	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/ . The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	N/A	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	Unknown	
2.7 What is the area of the proposed fill in wetlands?	2,960 SF	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	unknown	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index		X

3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: <ul style="list-style-type: none"> • PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html. 		X
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the GC 21?	N/A	
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		X
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?	N/A	
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	X	

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.

2.3 SITE DESCRIPTION/WETLANDS OVERVIEW

The subject property currently utilized as a single-family residential lot, located along both Tamarind way and a portion of the cul-de-sac on Cullen Way where the existing home has access. The ~14.5-acre property has a large wetland complex that includes Scamen Brook the flows across the property from east to west. The large wetland complex has several different classes incorporated throughout, including maintained wet meadow, scrub shrub, forested, riverine and ponded. Vegetation in these areas include, wetland grasses, sedges, cinnamon and sensitive fern, high bush blueberry, winterberry, speckled alder and red maple. Adjacent uplands consist of maintained field / lawn space, and forested uplands with vegetation consisting of grasses, Canada mayflower, white pine, and red oak.

2.4 CONSTRUCTION SEQUENCE

1. Cut and remove trees in construction areas as required or directed.
2. Construct and / or install temporary and permanent sediment erosion and detention control facilities as required. Erosion, sediment and detention control facilities shall be installed and stabilized prior to any earth moving operation and prior to directing runoff to them.
3. Clear, cut, grub and dispose of debris in approved facilities. Stumps and debris are to be removed from site and disposed of per state and local regulations.
4. Excavate and stockpile topsoil / loam. All areas shall be stabilized immediately after grading.
5. Construct temporary culverts as required or directed.
6. Construct the roadway and its associated drainage structures. All roadways, cut/fill slopes shall be stabilized and / or loamed and seeded within 72 hours of achieving finish grade as applicable.
7. Install pipe and construction associated appurtenances as required or directed. All disturbed areas shall be stabilized immediately after grading.
8. Begin permanent and temporary seeding and mulching. All cut and fill slopes and disturbed areas shall be seeded or mulched as required or directed.
9. Daily or as required, construct temporary berms, drainage check dams, ditches, sediment traps, etc. to prevent erosion on the site and prevent any siltation of abutting waters or property.
10. Inspect erosion controls weekly and after every ½' of rainfall. Maintain all erosion and sediment control measures during construction.
11. Complete permanent seeding and landscaping.
12. Remove temporary erosion control measures after seeding areas have established themselves and site improvements are complete. Smooth and revegetate all disturbed areas.
13. All swales and drainage structures will be constructed and stabilized prior to having runoff directed to them.
14. Finish paving all roadways.
15. Lot disturbance other than that shown on the approved plans shall not commence until the roadway has the crushed stone course to design elevation/required compaction and the associated drainage is complete and stable.

3.0 PROJECT OVERVIEW

The applicant is proposing a 16 unit residential condominium development on an existing lot. The proposed project will require wetland impacts to gain access from Tamarind Lane to the buildable uplands on the property. Wetland impacts will include 1,680 SF of impact to forested wetlands and 1,280 SF of wetland impact to an existing farm pond. Total direct wetland impacts will be 2,960 SF of impact. The roadway will incorporate retaining walls to minimize the need for additional wetland impacts that would otherwise be needed for grading associated with the roadway.

Letter of Authorization

As owners of 8 Tamarind Lane, Map 96 Lot 9, I, Patrick J. Flaherty, & I, Anne Flaherty, do hereby authorize the owners of Map 96 Lot 15, to perform work within 10 feet of our property as it applies to the New Hampshire Department of Environmental Services Wetlands Bureau Dredge and Fill Application for land owned by owners of Map 96 Lot 15 located in Exeter, NH.,

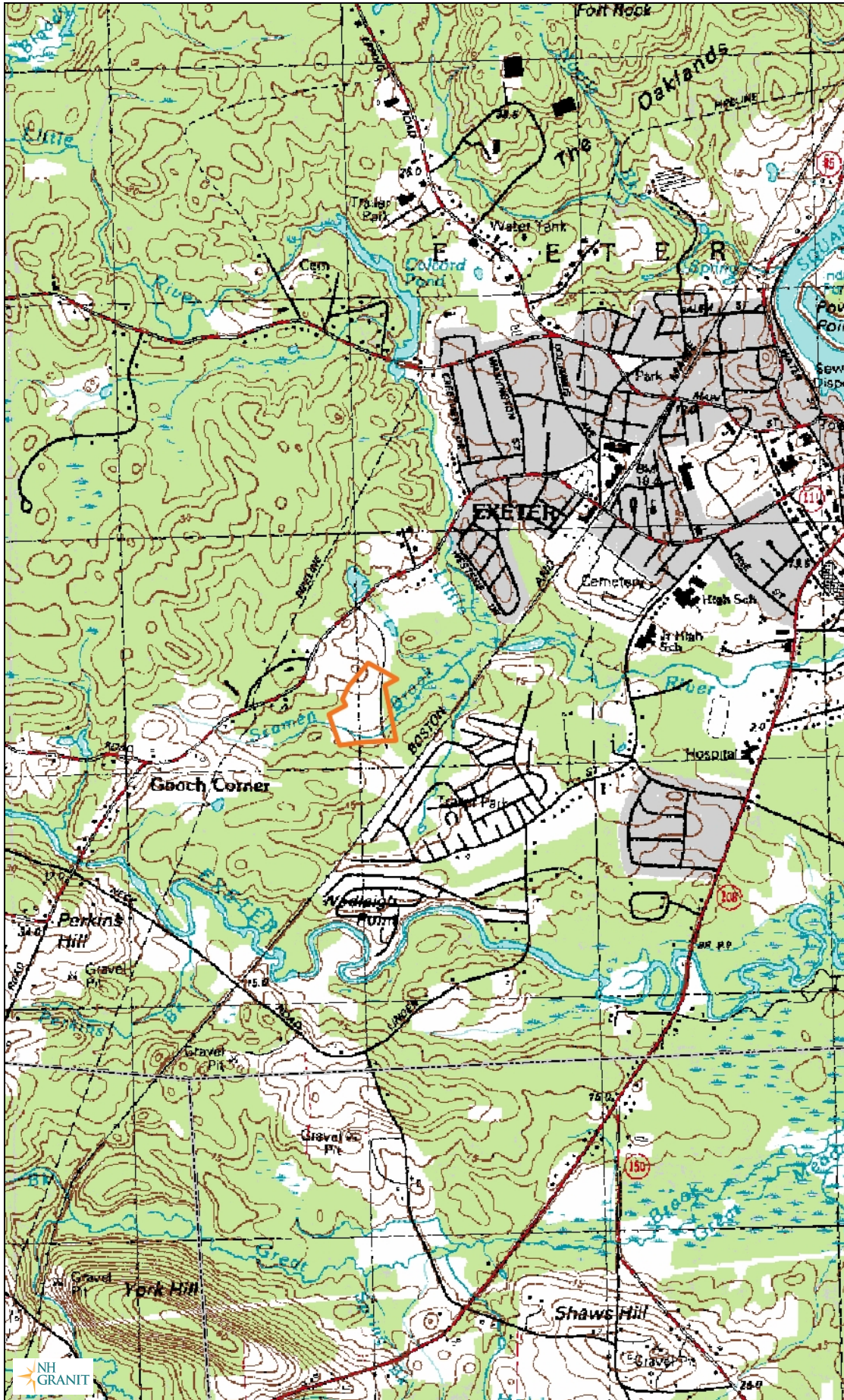
Patrick J. Flaherty 8/2/21
Patrick J. Flaherty Date

Anne Flaherty 8/2/21
Anne Flaherty Date

*Hidden Meadow, Tamarind Lane, Exeter, NH
Dredge and Fill Application for Minimum Impacts
August, 2021*

**1985 USGS QUAD SHEET LOCUS MAP
Scale 1:24,000**

USGS



Legend

- State
- County
- City/Town

Map Scale

1: 24,000

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Map Generated: 8/2/2021



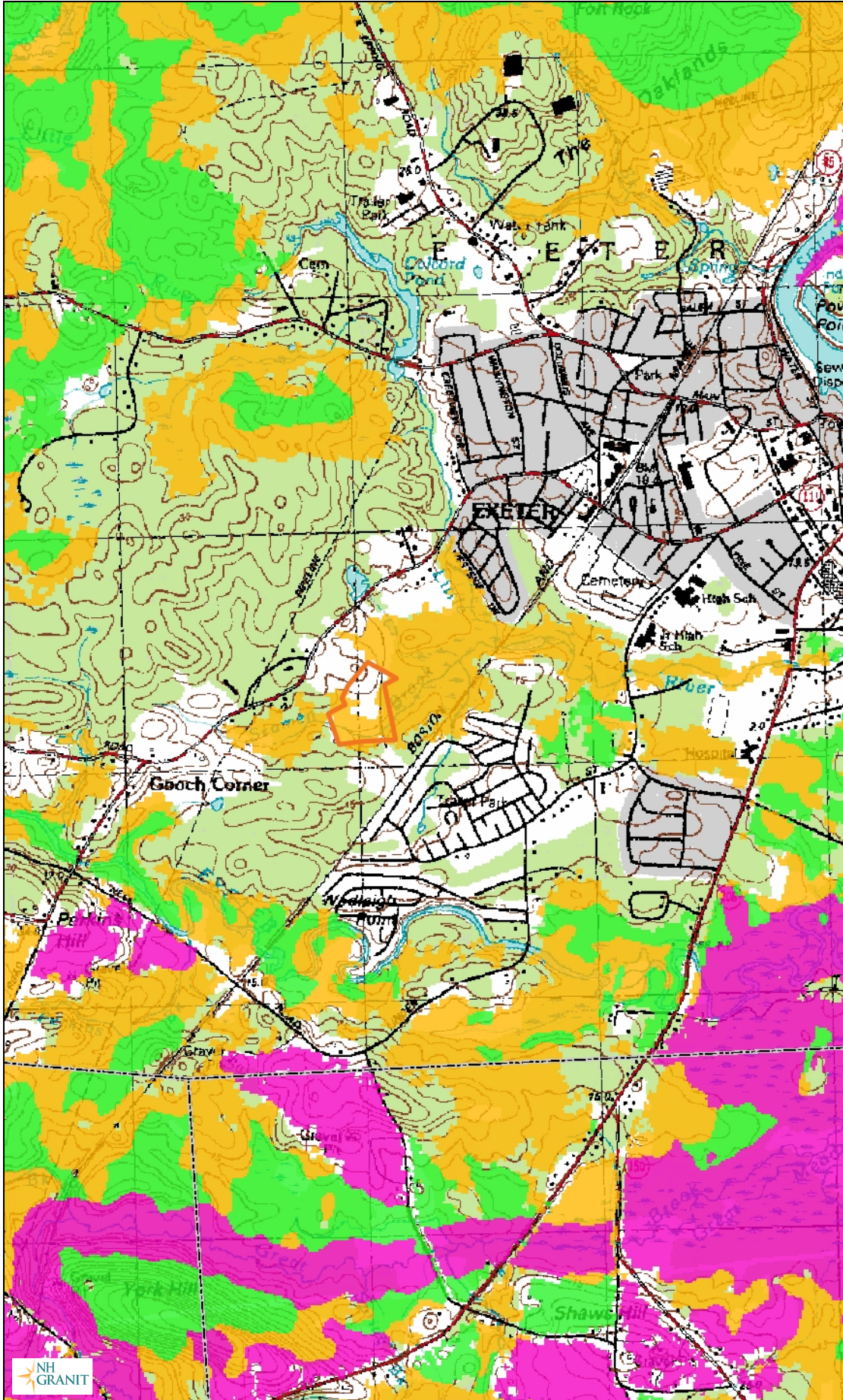
Notes



*Hidden Meadow, Tamarind Lane, Exeter, NH
Dredge and Fill Application for Minimum Impacts
August, 2021*

**Wildlife Action Plan
Scale 1:24,000**

Wildlife Action Plan



Legend

- State
- County
- City/Town
- WAP 2020: Highest Ranked Wildlife Habitat
 - 1 Highest Ranked Habitat in NH
 - 2 Highest Ranked Habitat in Region
 - 3 Supporting Landscape

Map Scale

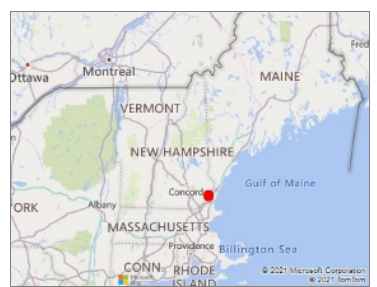
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Map Generated: 8/2/2021

Notes



Aerial Imagery

Aerial



Legend

- State
- County
- City/Town

Map Scale

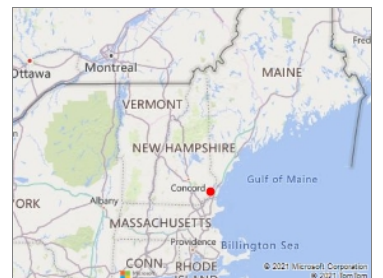
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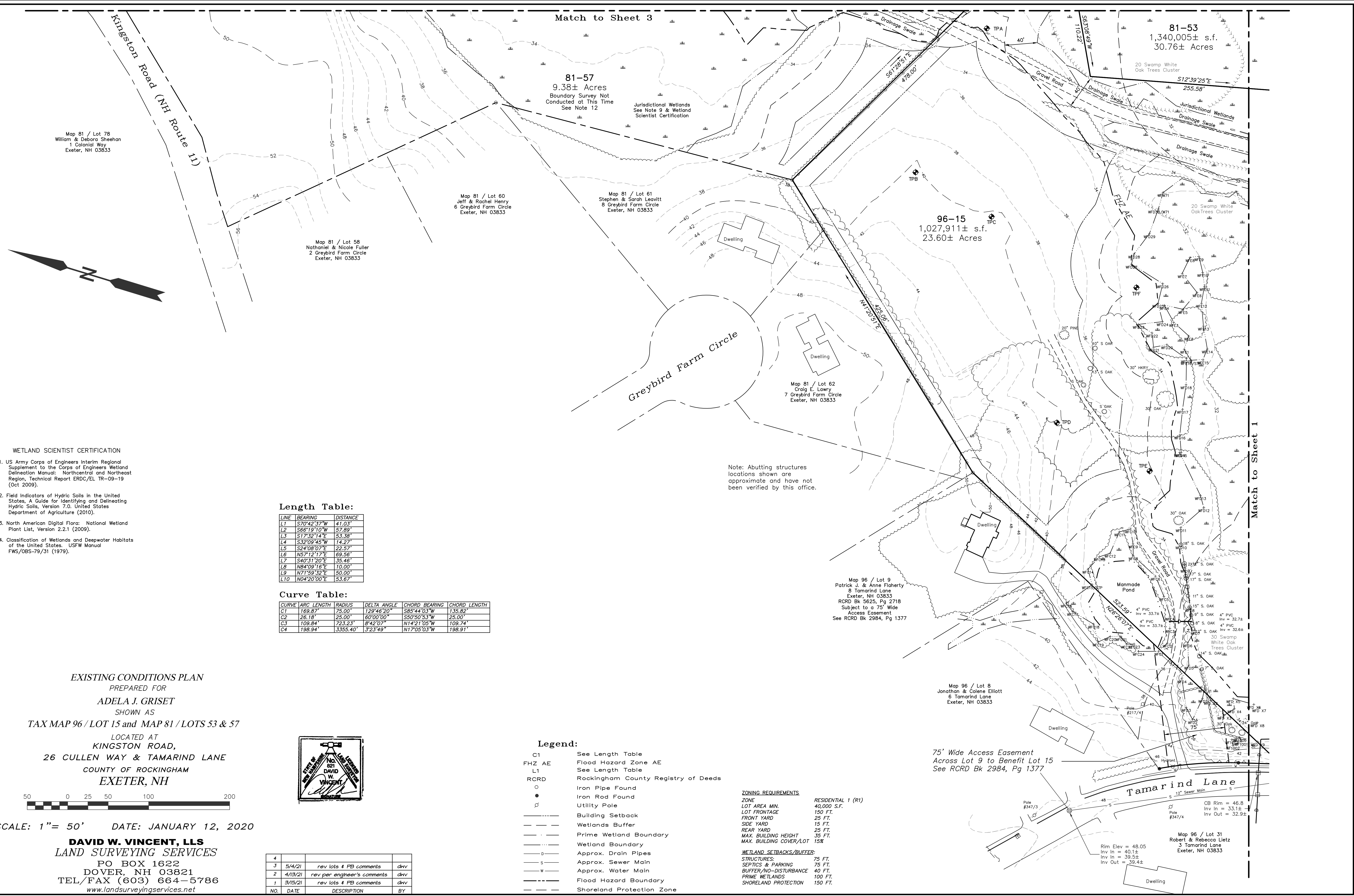
Map Generated: 8/2/2021



Notes



EXISTING CONDITIONS PLAN



- WETLAND SCIENTIST CERTIFICATION**
1. US Army Corps of Engineers Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Technical Report ERDC/EL TR-09-19 (Oct 2009).
 2. Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 7.0, United States Department of Agriculture (2010).
 3. North American Digital Flora: National Wetland Plant List, Version 2.2.1 (2009).
 4. Classification of Wetlands and Deepwater Habitats of the United States, USFWS Manual FWS/OBS-79/31 (1979).

Length Table:

LINE	BEARING	DISTANCE
L1	S70°42'37"W	41.03'
L2	S66°19'10"W	57.89'
L3	S17°32'14"E	53.38'
L4	S32°09'45"W	14.27'
L5	S24°08'07"E	22.57'
L6	N67°12'17"E	69.56'
L7	S40°31'20"E	35.46'
L8	N84°09'16"E	10.00'
L9	N71°59'32"E	50.00'
L10	N04°20'00"E	53.67'

Curve Table:

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	169.87'	75.00'	129°46'20"	S85°44'03"W	135.82'
C2	26.18'	25.00'	60°00'00"	S50°50'53"W	25.00'
C3	109.84'	723.23'	8°42'07"	N14°21'05"W	109.74'
C4	198.94'	3355.40'	3°23'49"	N17°05'03"W	198.91'

Note: Abutting structures locations shown are approximate and have not been verified by this office.

EXISTING CONDITIONS PLAN
 PREPARED FOR
ADELA J. GRISET
 SHOWN AS
TAX MAP 96 / LOT 15 and MAP 81 / LOTS 53 & 57
 LOCATED AT
KINGSTON ROAD,
26 CULLEN WAY & TAMARIND LANE
 COUNTY OF ROCKINGHAM
EXETER, NH



SCALE: 1" = 50' DATE: JANUARY 12, 2020

DAVID W. VINCENT, LLS
LAND SURVEYING SERVICES
 PO BOX 1622
 DOVER, NH 03821
 TEL/FAX (603) 664-5786
 www.landsurveyingservices.net

NO.	DATE	DESCRIPTION	BY
4			
3	5/4/21	rev lots & PB comments	dvw
2	4/13/21	rev per engineer's comments	dvw
1	3/15/21	rev lots & PB comments	dvw

- Legend:**
- C1 See Length Table
 - FHZ AE Flood Hazard Zone AE
 - L1 See Length Table
 - RCRD Rockingham County Registry of Deeds
 - Iron Pipe Found
 - Iron Rod Found
 - ⊕ Utility Pole
 - Building Setback
 - Wetlands Buffer
 - Prime Wetland Boundary
 - Wetland Boundary
 - Approx. Drain Pipes
 - Approx. Sewer Main
 - Approx. Water Main
 - Flood Hazard Boundary
 - Shoreland Protection Zone

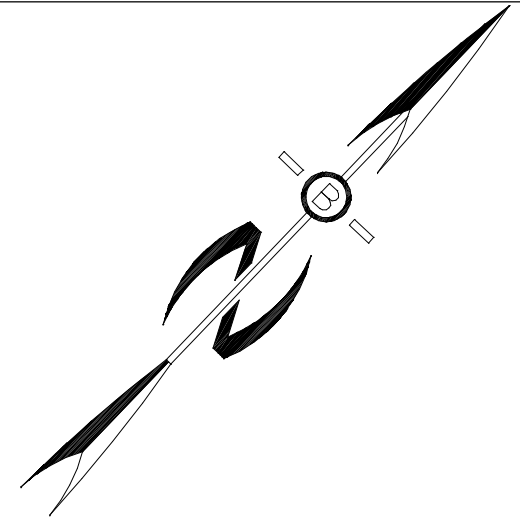
ZONING REQUIREMENTS
 ZONE: RESIDENTIAL 1 (R1)
 LOT AREA MIN. 40,000 S.F.
 LOT FRONTAGE 150 FT.
 FRONT YARD 25 FT.
 SIDE YARD 15 FT.
 REAR YARD 25 FT.
 MAX. BUILDING HEIGHT 35 FT.
 MAX. BUILDING COVER/LOT 15%

WETLAND SETBACKS/BUFFER:
 STRUCTURES: 75 FT.
 SEPTICS & PARKING 75 FT.
 BUFFER/NO-DISTURBANCE 40 FT.
 PRIME WETLANDS 100 FT.
 SHORELAND PROTECTION 150 FT.

75' Wide Access Easement
 Across Lot 9 to Benefit Lot 15
 See RCRD Bk 2984, Pg 1377

Map 96 / Lot 31
 Robert & Rebecca Lietz
 3 Tamarind Lane
 Exeter, NH 03833

SITE PLANS

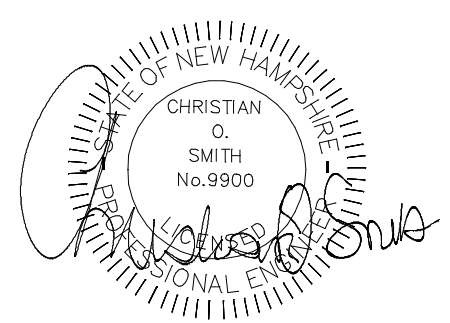


PREPARED FOR:
BRIAN GRISET
 26 CULLEN WAY
 EXETER, NH 03833

BEALS ASSOCIATES PLLC
 70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
 PHONE: 603-583-4860, FAX: 603-583-4863

LEGEND

	UTILITY POLE
	TEST PIT W/ NO.
	STONE WALL
	TREE LINE
	SHORELAND ZONE LINE
	150' SHORELAND SETBACK
	WETLAND BOUNDARY
	PRIME WETLAND BOUNDARY
	FLOOD ZONE BOUNDARY
	40' WETLAND SETBACK
	BUILDING SETBACK LINE
	ABUTTING PROPERTY LINE
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE

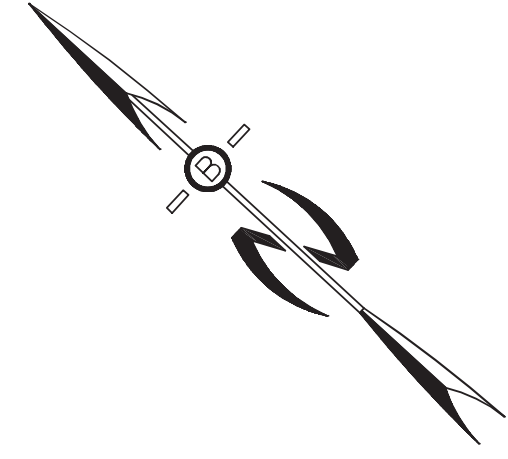


Map 96 Lot 15
 Adela J. Griset
 26 Cullen Way
 Exeter, NH 03833

Map 96 Lot 15
 Adela J. Griset
 26 Cullen Way
 Exeter, NH 03833

REVISIONS:		DATE:	
NHDES WETLANDS BUREAU PLAN			
PLAN FOR: RESIDENTIAL DEVELOPMENT TAMARIND LANE EXETER, NH			
DATE:	JULY, 2021	SCALE:	1"=60'
PROJ. NO.:	NH-1154.1	SHEET NO.:	1 OF 1

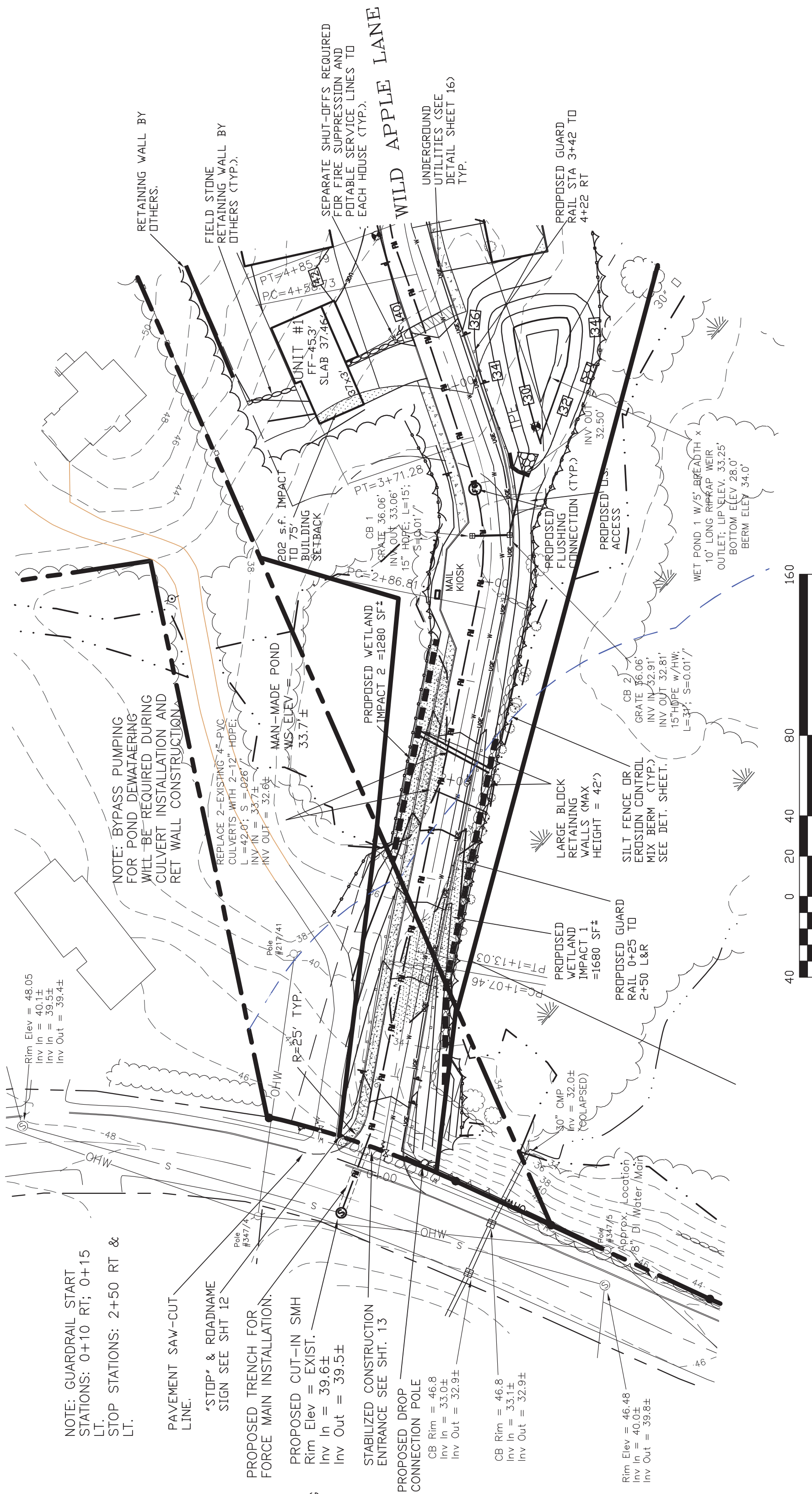
WETLAND IMPACT PLAN



PREPARED FOR:

BRIAN GRISET
26 CULLEN WAY
EXETER, NH 03833

BEALS ASSOCIATES PLLC
70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
PHONE: 603-583-4860, FAX: 603-583-4863



NOTE: GUARDRAIL START STATIONS: 0+10 RT; 0+15 LT. STOP STATIONS: 2+50 RT & 2+50 LT.

PAVEMENT SAW-CUT LINE.

STOP & ROADNAME SIGN SEE SHT 12

PROPOSED TRENCH FOR FORCE MAIN INSTALLATION:

PROPOSED CUT-IN SMH RIM ELEV 39.64±

STABILIZED CONSTRUCTION ENTRANCE SEE SHT. 13

PROPOSED DROP CONNECTION POLE

CB RIM = 46.5

CB RIM = 46.5

RIM ELEV = 46.48

RIM ELEV = 40.08

RIM ELEV = 39.64±

PROPOSED GUARD RAIL TO 2+50 L&R

PROPOSED 1680 SF±

PROPOSED 1680 SF±

PROPOSED 1680 SF±

PROPOSED 1680 SF±

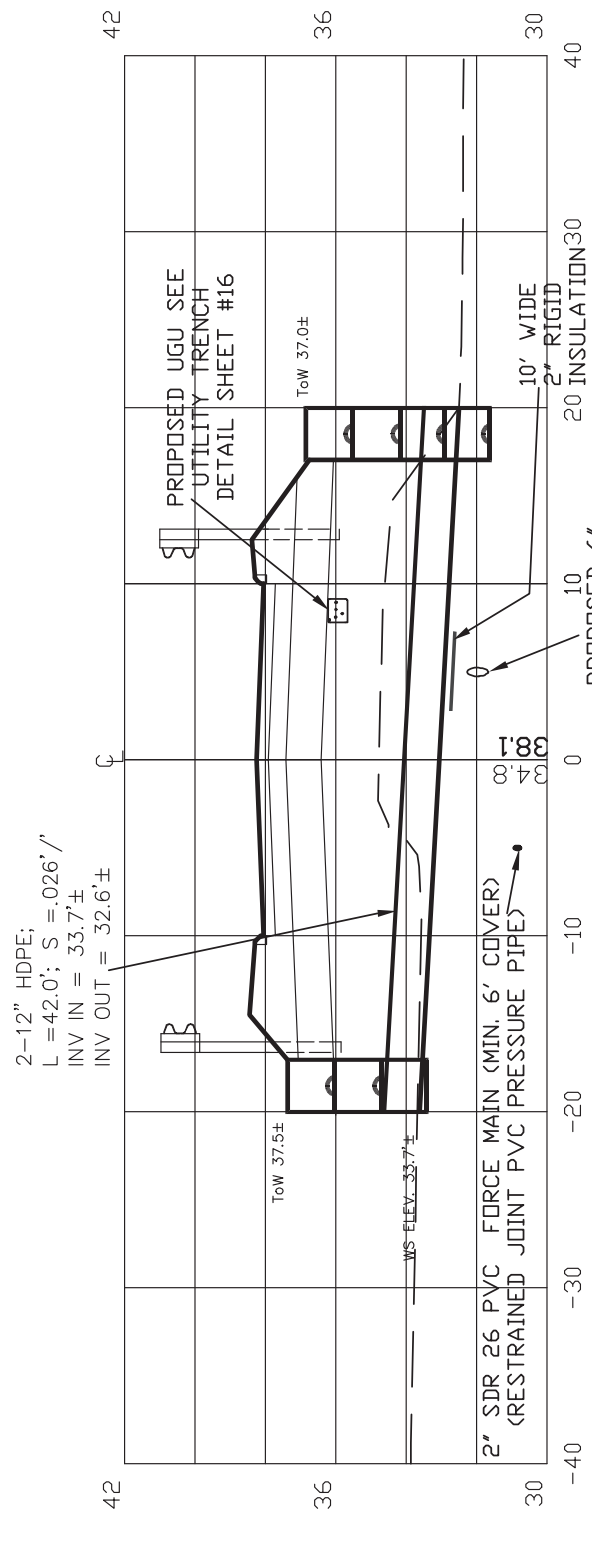
PROPOSED 1680 SF±

UTILITY NOTES

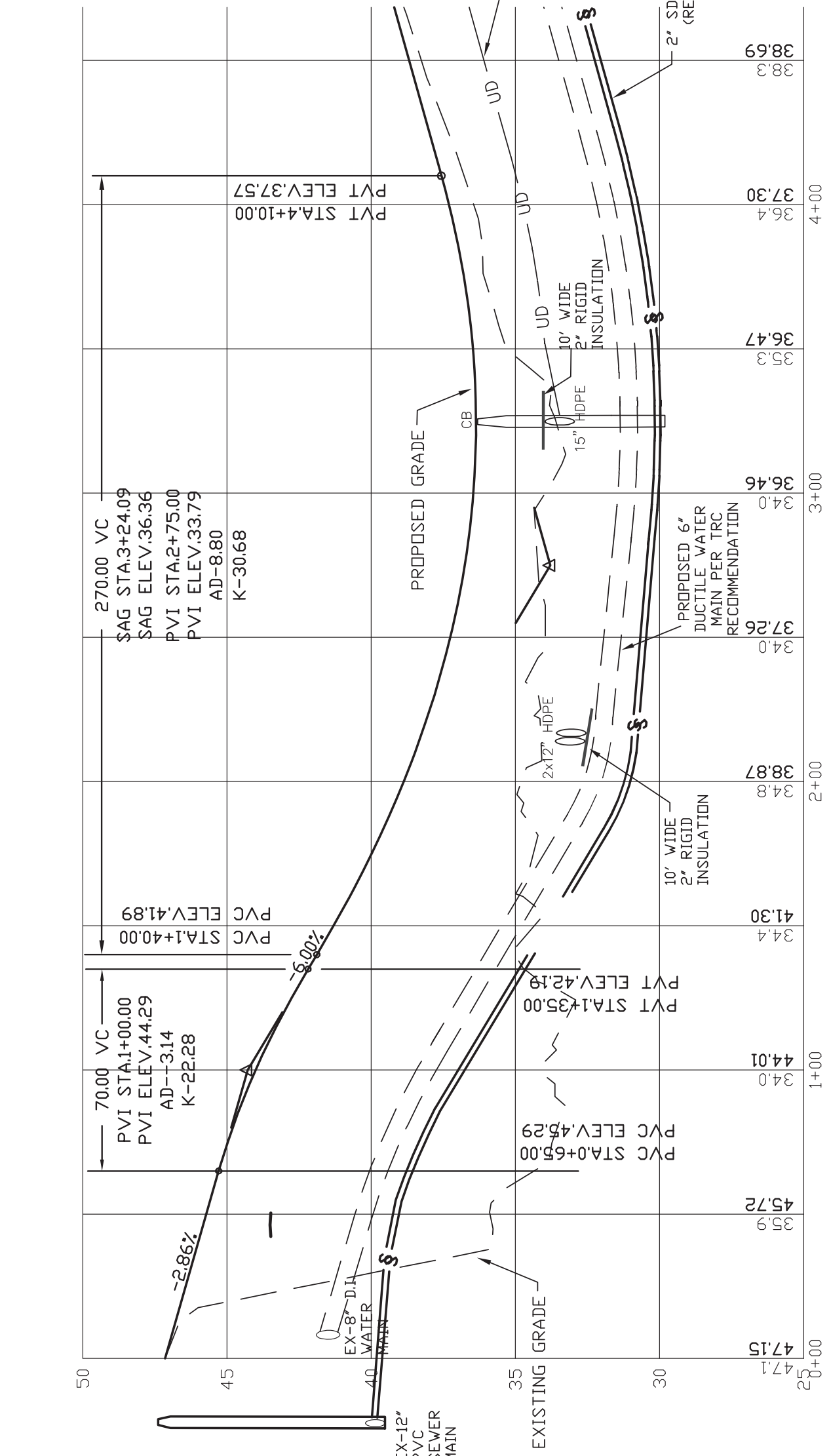
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- THE CONTRACTOR SHALL PROVIDE NOTICE TO ALL COMPANIES AND LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- THE SPECIFICATIONS FOR PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND SPECIFICATIONS FOR PROPER UTILITY CROSSING REQUIREMENTS.
- PRIOR TO THE CONSTRUCTION MEETING, THE CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANIES TO BE RELOCATED ON THIS SHEET ADDITIONAL INFORMATION THE CONTRACTOR NEEDS TO HAVE A COMPLETED SURVEY, PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO EXETER STANDARDS AND REGULATIONS, UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR (OSHA) RULES AND REGULATIONS.
- BUILDINGS ARE TO BE SERVICED BY UNDERGROUND UTILITIES.
- THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THE PROPERTY STANDARDS AND SPECIFICATIONS REQUIRED IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS.
- SEWER AND WATER INFRASTRUCTURE ON PRIVATE PROPERTY SHALL REMAIN PRIVATE. HOWEVER, THE TOWN ENGINEER SHALL HAVE ACCESS TO ALL EXISTING AND PROPOSED SEWER AND WATER MAINS FOR THE TOWN IN THE SITE'S DECLARATION OF CONDOMINIUM DOCUMENTS, AND IN ALL INDIVIDUAL DEEDS.
- AN AS-BUILT PLAN IS TO BE PREPARED AND SUBMITTED TO DEPARTMENT OF PUBLIC WORKS IN DIGITAL AND ANALOG FORMATS.
- THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT OF ALL CONNECTION FEES.
- FOR WATER MAIN AND SEWER LINE CROSSINGS REFER TO THE DETAIL ON SHEET 16 FOR MINIMUM VERTICAL AND HORIZONTAL SEPARATION.
- ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY CAP AND WITNESS AT END.
- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES AND MECHANICAL JOINTS.
- CONTRACTOR SHALL MINIMIZE DISRUPTION TO EXISTING WATER SERVICES AND ALL REQUIREMENTS OF EXETER (48 HOURS PRIOR - WRITTEN NOTICE OF DISRUPTION TO BE PROVIDED TO EACH AFFECTED USER BY HAND DELIVERY). TREE INSTALLATION MAY NEED TO BE CONDUCTED AT NIGHT AS DIRECTED BY EXETER WATER DEPT.
- WATER VALVES ARE TO BE OPERATED ONLY BY MUNICIPAL STAFF.

DRAINAGE NOTES

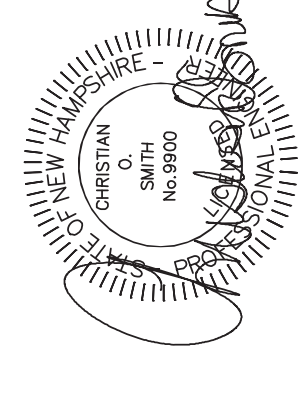
- ALL DRAINAGE STRUCTURES AND SWALES WILL BE BUILT AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
- SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.



CROSS SECTION
HORIZONTAL: 1"=10' VERTICAL: 1"=5'



PROFILE SCALES:
HORIZONTAL: 1"=40' VERTICAL: 1"=4'



PLAN AND PROFILE

PLAN FOR:
RESIDENTIAL DEVELOPMENT
TAMARIND LANE
EXETER, NH

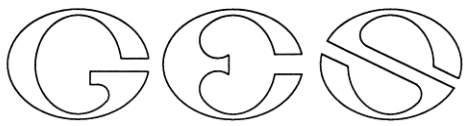
DATE: JAN. 2020 SCALE: 1" = 40'
PROJ. NO.: NH-1154-I SHEET NO. 11 OF 19



UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNKNOWN UTILITIES OR STRUCTURES THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION.

WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233). AND EXETER DPM (603) 773-6157

PHOTOLOG OF IMPACT AREAS



GOVE ENVIRONMENTAL SERVICES, INC.

Photo Log
Hidden Meadow, Exeter, NH
Taken: March 24, 2021



Photo #1: Looking to the east at the proposed access noting the wetland impact #1 on the right.



Photo #2: Looking again at wetland impact #1

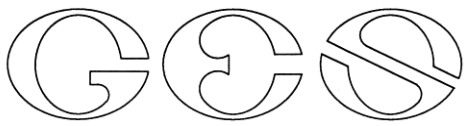
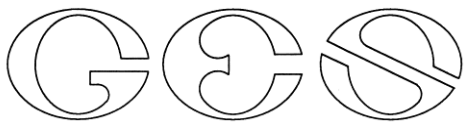


Photo #3: Looking to the west at wetland impact #1



Photo #4: Looking to the west at wetland impact #2 to the man- made pond and the outlet pipes that will be replaced.



GOVE ENVIRONMENTAL SERVICES, INC.



Photo #5: Looking at the maintained farm road and the vegetation along the bank of the man-made farm pond.



Photo #6: Looking at the maintained farm road that will be utilized for access.

**Appendix I
New Hampshire Natural Heritage Bureau Inquiry**

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

To: Brenden Walden
8 Continental Dr, Building 2, Unit H
Exeter, NH 03833

From: NH Natural Heritage Bureau

Date: 3/26/2021 (This letter is valid through 3/26/2022)

Re: Review by NH Natural Heritage Bureau of request dated 3/26/2021

Permit Types: Alteration of Terrain Permit
Wetland Standard Dredge & Fill - Minor
Wetland Standard Dredge & Fill - Minimum

NHB ID: NHB21-1021

Applicant: Brenden Walden

Location: Exeter
Tax Map: 96, Tax Lot: 15
Address: Tamarind Lane

Proj. Description: The applicant is proposing open space cluster subdivision on site with access from Tamarind Lane that will require direct wetland impacts to a forested wetland and a perennial pond on site. Those impacts combined are less than 3,000 sf.

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: NHB21-1021



Appendix II
New Hampshire Department of Historic Resources Inquiry

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources
State Historic Preservation Office
Attention: Review & Compliance
19 Pillsbury Street, Concord, NH 03301-3570

DHR Use Only	
R&C #	_____
Log In Date	___ / ___ / ___
Response Date	___ / ___ / ___
Sent Date	___ / ___ / ___

Request for Project Review by the New Hampshire Division of Historical Resources

- This is a new submittal
 This is additional information relating to DHR Review & Compliance (R&C) #:

GENERAL PROJECT INFORMATION

Project Title Hidden Meadow

Project Location 26 Cullen Way

City/Town Exeter Tax Map 96 Lot # 15

NH State Plane - Feet Geographic Coordinates: Easting 42.971026 Northing -70.973999
(See RPR Instructions and R&C FAQs for guidance.)

Lead Federal Agency and Contact (if applicable) ACOE
(Agency providing funds, licenses, or permits)
Permit Type and Permit or Job Reference # SPGP

State Agency and Contact (if applicable) NH DES

Permit Type and Permit or Job Reference # Dredge and Fill

APPLICANT INFORMATION

Applicant Name Brian Griset

Mailing Address 26 Cullen Way Phone Number

City Exeter State NH Zip 03833 Email grisetandsons@comcast.net

CONTACT PERSON TO RECEIVE RESPONSE

Name/Company Brenden Walden / Gove Environmental Services, Inc.

Mailing Address 8 Continental Drive, Bldg 2, Unit H Phone Number 2077107863

City Exeter State NH Zip 03833 Email bwalden@gesinc.biz

This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. Please refer to the Request for Project Review Instructions for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: www.nh.gov/nhdhr/review or contact the R&C Specialist at marika.labash@dncr.nh.gov or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

Project Boundaries and Description

- Attach the Project Mapping **using EMMIT or relevant portion of a 7.5' USGS Map.** (See RPR Instructions and R&C FAQs for guidance.)
- Attach a detailed narrative description of the proposed project.
- Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation.
- Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.)
- A DHR records search must be conducted to identify properties within or adjacent to the project area. Provide records search results via EMMIT or in **Table 1.** (Blank table forms are available on the DHR website.)
EMMIT or in-house records search conducted on 6/17/2021.

Architecture

Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? Yes No

If no, skip to Archaeology section. If yes, submit all of the following information:

Approximate age(s):

- Photographs of **each** resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.)
- If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.)

Archaeology

Does the proposed undertaking involve ground-disturbing activity? Yes No

If yes, submit all of the following information:

- Description of current and previous land use and disturbances.
- Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)

Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.

DHR Comment/Finding Recommendation *This Space for Division of Historical Resources Use Only*

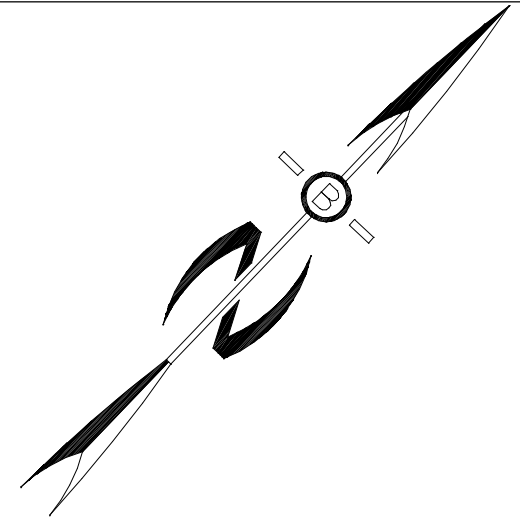
- Insufficient information to initiate review.** Additional information is needed in order to complete review.
- No Potential to cause Effects No Historic Properties Affected No Adverse Effect Adverse Effect

Comments: _____

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized Signature: _____ Date: _____

Appendix III
Tax Map, List of Abutters, Abutter Notification Letter, and Certified Mail Receipts

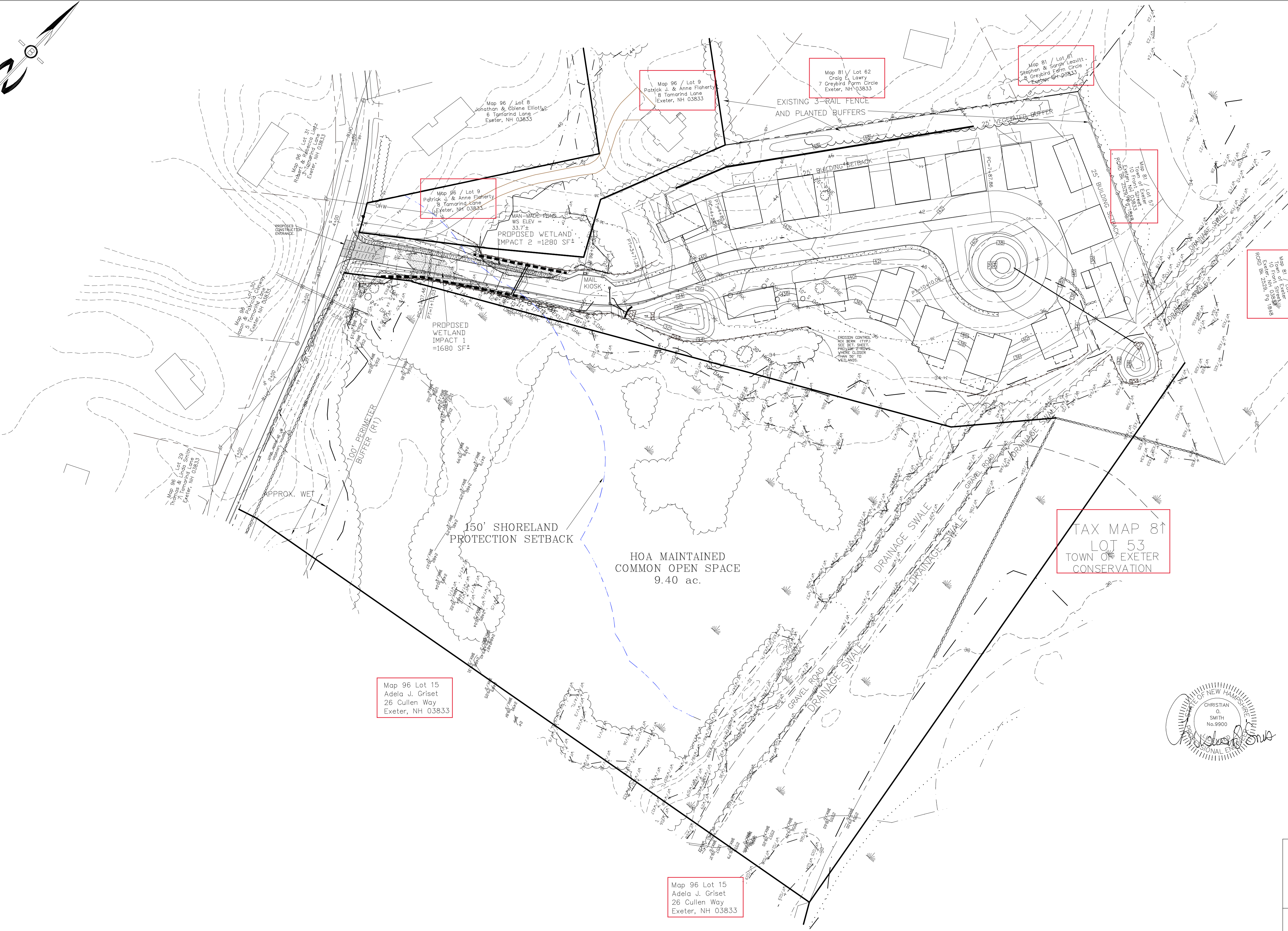


PREPARED FOR:
BRIAN GRISET
 26 CULLEN WAY
 EXETER, NH 03833

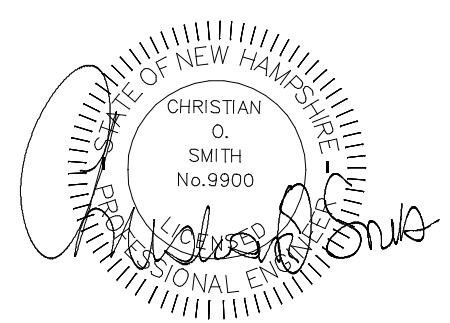
BEALS ASSOCIATES PLLC
 70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
 PHONE: 603-583-4860, FAX: 603-583-4863

LEGEND

	UTILITY POLE
	TEST PIT W/ NO.
	STONE WALL
	TREE LINE
	SHORELAND ZONE LINE
	150' SHORELAND SETBACK
	WETLAND BOUNDARY
	PRIME WETLAND BOUNDARY
	FLOOD ZONE BOUNDARY
	40' WETLAND SETBACK
	BUILDING SETBACK LINE
	ABUTTING PROPERTY LINE
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE



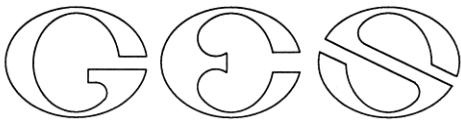
TAX MAP 81
 LOT 53
 TOWN OF EXETER
 CONSERVATION



Map 96 Lot 15
 Adela J. Griset
 26 Cullen Way
 Exeter, NH 03833

Map 96 Lot 15
 Adela J. Griset
 26 Cullen Way
 Exeter, NH 03833

REVISIONS:		DATE:
NHDES WETLANDS BUREAU PLAN		
PLAN FOR: RESIDENTIAL DEVELOPMENT TAMARIND LANE EXETER, NH		
DATE:	JULY, 2021	SCALE: 1"=60'
PROJ. NO.:	NH-1154.1	SHEET NO. 1 OF 1



GOVE ENVIRONMENTAL SERVICES, INC.

Subject Property:

Map 96 Lot 15
Brian & Adela Griset
26 Cullen Way
Exeter, NH, 03833

Abutters:

Map 81 Lot 53
Mendez Revocable Real Estate Trust
Bret L Neeper, Trustee
26 Cullen Way
Exeter, NH, 03833

Map 81 Lot 57
Town of Exeter
10 Front Street
Exeter, NH, 03833

Map 81 Lot 61
Stephen & Sara Leavitt
8 Greybird Farm Circle
Exeter, NH, 03833

Map 81 Lot 62
Craig E. Lawry
7 Greybird Farm Circle
Exeter, NH, 03833

Map 96 Lot 9
Patrick J. & Anne Flaherty
8 Tamarind Lane
Exeter, NH, 03833

August 3, 2021

«Name»

«Street»

«TownStateZip»

Re: Proposed Condominium Development
Subject: NH Department of Environmental Services Wetlands Bureau
Minimum Impact Dredge & Fill Application

Dear Abutter:

The purpose of this letter is to inform you that Brian Griset of Exeter, NH is applying to the NH Department of Environmental Services Wetlands Bureau, which requires this notice for a dredge and fill permit to impact areas under its jurisdiction. The applicant is proposing a project that will have 2,960 SF of direct wetland impacts. The wetland impacts associated with the proposed development are necessary for the applicant to gain access to the buildable upland area. The project is proposed on Tax map 96 Lot 15 on Tamarind Lane and Cullen Way, Exeter, NH.,

A copy of the application, including plans, will be made available for your review at the town offices and at the NH Department of Environmental Services Wetlands Bureau, 29 Hazen Drive in Concord.

If you have any questions that we might be able to answer, please do not hesitate to contact our office.

Sincerely,

Brenden Walden
GES, Inc.

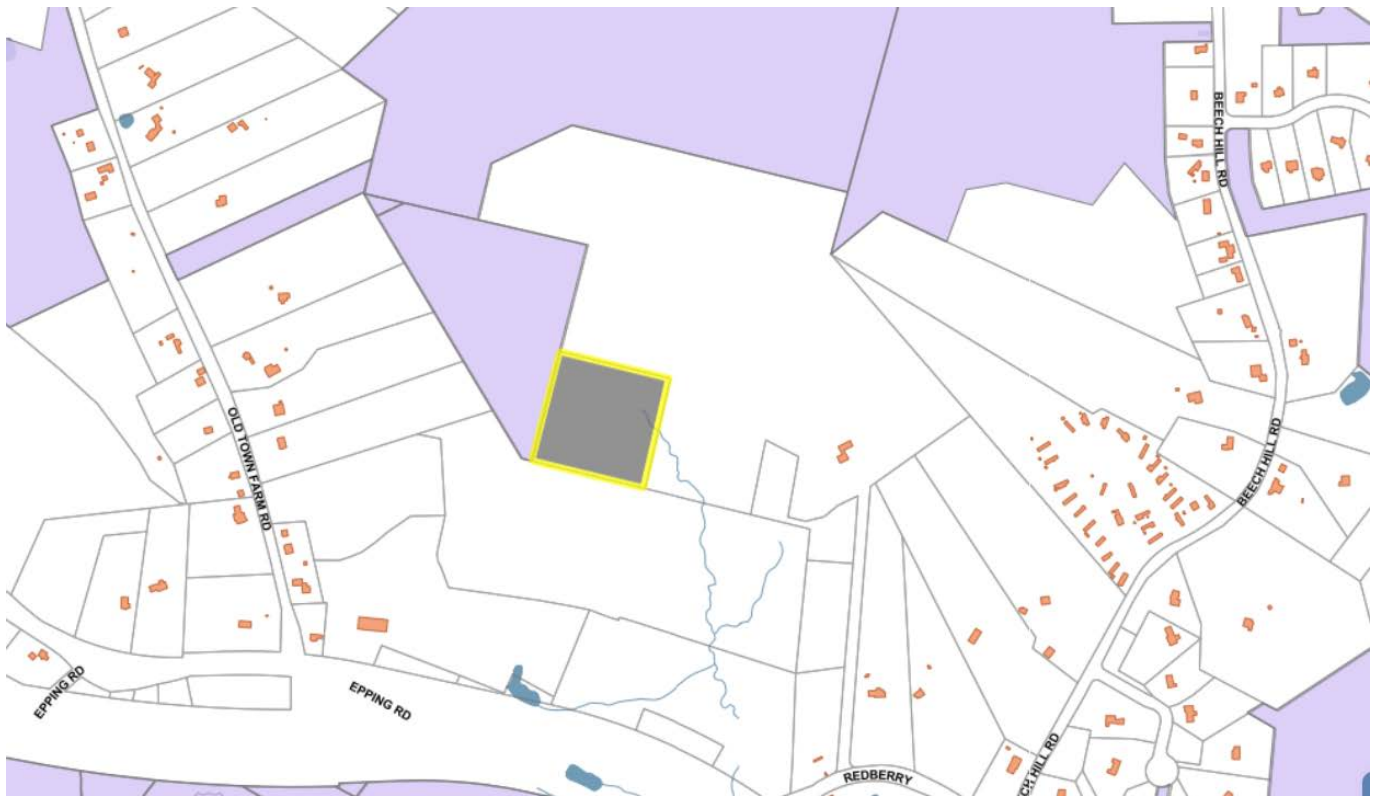
**TOWN OF EXETER
PLANNING DEPARTMENT MEMORANDUM**

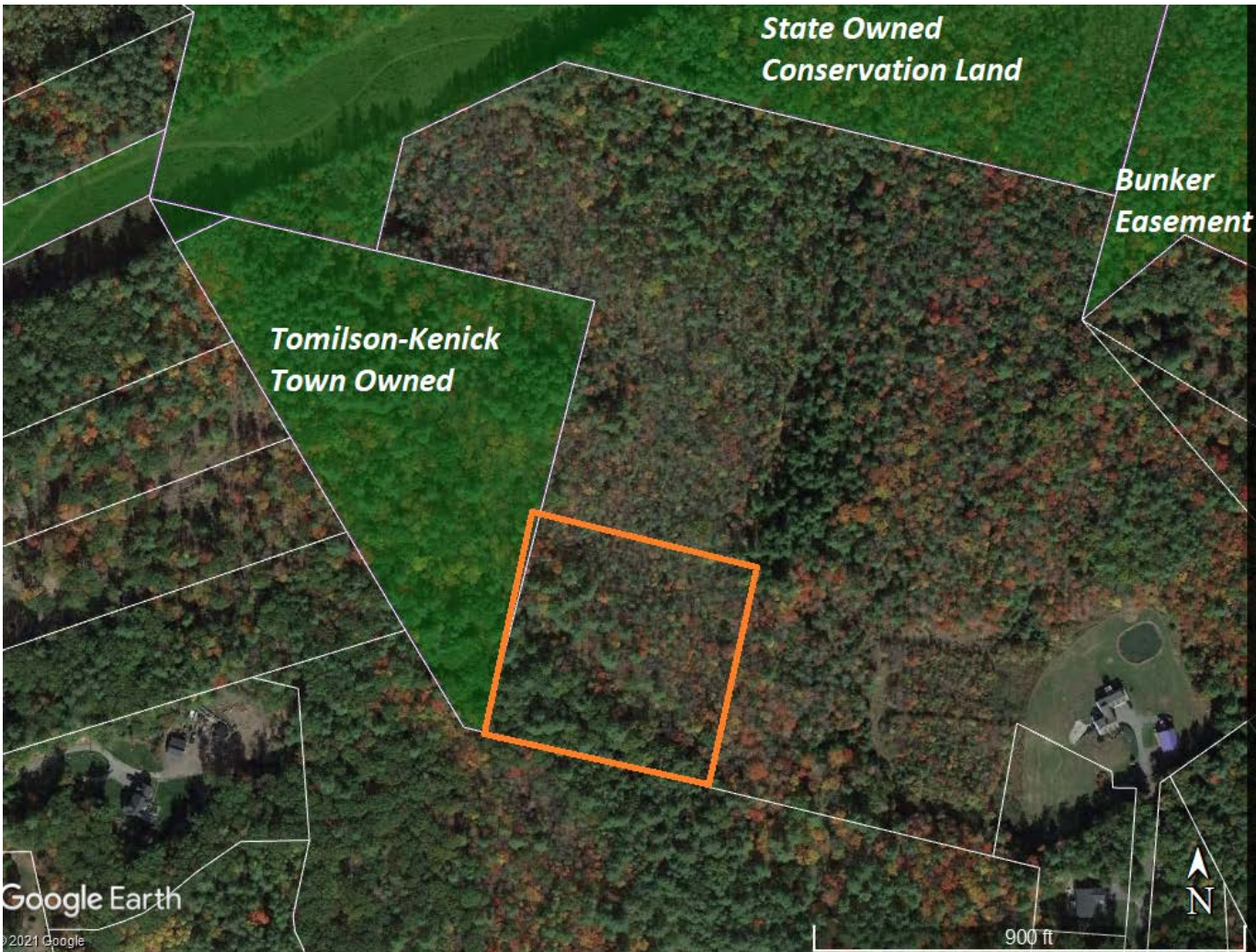
Date: August 4, 2021
To: Drew Koff, Chair, Exeter Conservation Commission
Lang Plumer, Chair, Exeter Planning Board
From: Kristen Murphy, Natural Resource Planner
Subject: Mary Bower Land, Beech Hill Road, Map 28, Lot 16

The family of Mary Bower (deceased) wished to donate a 5 acre parcel of undeveloped land to the Town for conservation purposes. In accordance with RSA 41:14-a, the Select Board must obtain a recommendation from the Conservation Commission and Planning Board prior to consideration of the acquisition of land.

I met with members of the Bower family in 2020 and have walked this property. The parcel (indicated in yellow below) is a land-locked wooded parcel that is a mix of upland and wetland. It abuts the existing town-owned conservation parcel Tomilson Kenick Land and would add to a regional corridor of protected lands (indicated in purple below) between Old Town Farm Road and Beech Hill Road.

I request your board consider making a recommendation to the Select Board in support of acquiring this land for conservation purposes.





Town of Exeter									
FY22 Preliminary Conservation Commissions Budget									
Org	Object	Description	2020 Actual	2021 Budget	2021 June Actual	2022 Preliminary Budget	2022 Budget vs. 2021 Budget \$ Increase/-(Decrease)	2022 Budget vs. 2021 Budget %-Difference	Explanation PLEASE UPDATE FOR 2022
Conservation Commission									
01461105	51200	CC- Sal/Wages PT	416	1,000	218	1,000	-	0.0%	Recording secretaries @ \$15/hr avg about 6 hr/mtg
01461105	51210	CC- Sal/Wages Temp	-	2,520	-	2,520	-	0.0%	Interns 2@12/hr, 15 hrs/wk for 7 wks
		Salaries Total	416	3,520	218	3,520	-	0.0%	
01461105	52200	CC- FICA	26	218	13	218	-	0.0%	Based on wages: 6.2%
01461105	52210	CC- Medicare	6	51	3	51	-	0.0%	Based on wages: 1.45%
		Benefits Total	32	269	17	269	-	0.0%	
01461105	55044	CC- Community Services	276	500	141		(500)	-100.0%	Covers outreach event costs: Anticipated for 2020 include \$250 Spring Tree, \$50 for 5 outreach events
01461105	55051	CC- Conservation Land Administration	1,323	1,550	52		(1,550)	-100.0%	Combination of Cons Land Admin and Trail Mgmt and Maintenance activities such as property monitoring and maintenance needs, bridge repair, kiosk map update.
01461105	55058	CC- Contract Services	428	1,000	-		(1,000)	-100.0%	Support for Raynes Improvements
01461105	55088	CC- Dues	1,000	1,000	700		(1,000)	-100.0%	For board to join related organizations: ESRLAC (\$150), NHACC (\$700), SELT (\$150)
01461105	55091	CC- Education/Training	210	250	-		(250)	-100.0%	Training for board members and/or natl resource planner (NHACC-3 members and other workshops)
01461105	55171	CC- Legal/Public Notices	-	50	93		(50)	-100.0%	Covers approx 1 legal notice typ in newspaper
01461105	55224	CC- Postage	-	20	-		(20)	-100.0%	Mailings to ConCom members (mostly elect distr)
01461105	55247	CC- Registry of Deeds	-	30	-		(30)	-100.0%	Fee for registry of deeds (typically printing plans, deeds)
01461105	55254	CC- Roadside Mowing	1,868	1,850	-		(1,850)	-100.0%	Mowing White, Perry, Irvine and 1/2 of Morrissette \$1,850
01461105	55293	CC- Supplies			100				
01461105	55304	CC- Trail Mgmt Maintenance					-		Moved to Conservation Land Administration
		General Expenses Total	5,104	6,250	1,086	-	(6,250)	-100.0%	
		Conservation Commission Total	5,552	10,039	1,320	3,789	(6,250)	-62.3%	

Exeter Conservation Commission
July 13, 2021
Virtual Meeting
Draft Minutes

Call to Order

1. Introduction of Members Present (by Roll Call)

Present at tonight's meeting were by roll call, Chair Andrew Koff, Dave Short, Treasurer, Alyson Eberhardt, Kristen Osterwood, Nick Campion, Julie Gilman Select Board Liaison, Conor Madison, Alternate, Bill Campbell, and Kristen Murphy, Natural Resource Planner.

Absent: Trevor Mattera, Donald Clement, Alternate

Mr. Koff called the meeting to order at 7:05 PM and indicated Alternate Conor Madison would be active and voting for this meeting.

2. Public Comment (7:00 PM)

Mr. Koff asked if there were any members of the public who wanted to speak to an item not on the agenda and being none closed public comment.

Action Items

1. Wetland Conditional Use Permit application for buffer impacts resulting from the construction of a private drive and associated utilities/drainage treatment structures to serve 11 proposed townhouse condominium dwelling units at 32 Charter Street (Map 82, Lot 36).

Christian Smith of Beals Associates presented the application on behalf of developer, Frank Catapano. The existing buildings, docks, debris and gravel within the prime wetland will be removed and restored less than 125' from the prime buffer setback prior to construction of the 11 townhouse condominiums and associated improvements. Roofs will have a 4' wide stone drip edge. There will be stormwater collection and treatment with an estimated 3,000 SF of impact. Exposed soils would be reseeded. Care would be taken not to spread invasives. There would be no lawns to be mowed and no recreational area for the development other than the small area behind the buildings. The units are two-bedroom and not age restricted.

Mr. Smith posted the plan showing an overlay of the field delineated by Mr. Gove and the GIS wetlands map and noted an area referred to as the "bump out" shown on the right, did not line up due to suspected infilling which changed the field delineation. Utilizing the GIS map there would be an additional 2,000 SF approximately of additional impact. Mr. Gove explained the difference and described the area he believed to be filled. DES has a mechanism to modify the boundary to match the

actual delineation, 703:05 and this would be part of the application filed with them. The applicant would ask that the recommendation concur with the boundary adjustment.

Ms. Murphy noted the analysis identified smartweed as an endangered plant species present at the site and felt there would be no impact.

Ms. Murphy suggested the Commission address support of the boundary change before reviewing the CUP criteria.

Mr. Koff questioned what was going in that area and Mr. Smith noted the infiltration basin due to it being the lowest level.

Mr. Koff asked if there were plans to excavate the filled area and Mr. Gove noted the fill could be removed if the Commission preferred they would take off approximately 18" of material. Ms. Eberhardt noted there would be a beneficial trade off. Ms. Osterwood recommended taking into consideration the drought and heavy rain patterns recently experienced that a shrub planting may be most likely to survive the two year success regulation and provide diversity with competing invasives on site. Mr. Koff agreed that improving the quality of water flowing in would be beneficial. Mr. Gove reminded this would change the impact numbers in the buffer.

MOTION: Mr. Koff motioned after reviewing the field-based wetland mapping and designated prime wetland boundary presented with this application the Commission support amending the prime wetland boundary to match field conditions. Mr. Madison seconded the motion. A vote was taken, all were in favor, the motion passed 7-0-0.

Mr. Koff reviewed the CUP criteria:

1. Permitted in the zone.
2. No alternative design which is less detrimental is feasible.
3. Impact of functions and values.
4. Maintenance.
5. Not create a hazard to individuals or public health, safety, welfare, loss to the wetland or contamination of groundwater or other reasons.
6. Increase to other wetland buffers elsewhere.
7. Temporary disturbance/restoration proposal.
8. All permits, NH DES etc.

#1. Mr. Smith noted the parcel was in the R-5 Multi-Family District.

#2. Mr. Smith noted there were several iterations presented to the Commission and this was the most suitable with the least amount of impact. Mr. Smith explained the decision to change from garden style apartments to townhouse condominiums to reduce parking impact.

#3. Mr. Koff noted there would never be zero impact and the trade off is cleaning up the site and reduction of impervious surface, treatment of runoff to the buffer. Mr. Gove noted enhancement of

functions and values based on the remediation they were doing by removing structures from the prime wetland. Adding shrubs to the “bump out” area would also be beneficial to wildlife and water quality and control of runoff.

Mr. Koff asked about curbing and Mr. Smith showed the Cape Cod berm design recommended by the TRC and how that would direct water flow from the parking lot via a common slope.

#4. Mr. Smith noted there would be minimum impact to the wetland and buffer. The design improves a fairly ugly situation. There would be HOA documents prohibiting cutting.

#5. Mr. Smith noted the area will be restored. There is old machinery, tractors, etc. in the WCD currently and the plan will improve what is there now. Impervious areas will be treated.

#6-7. Mr. Smith noted after restoration there will be pavement 50’ away and buildings outside the 100.’ Mr. Gove noted the embankment to the railroad track is part of it. He was surprised to find some natural soils, sand over clay but it appeared they were trying to make some uplands. Temporary disturbances will be restored following construction. Mr. Gove noted some blown trees will remain for wildlife habitat. DES will address management of invasive species. Ms. Eberhardt noted DES does not control the buffer. This could be a condition of approval along with shrubs and seeding. Invasives should be removed before they go to seed.

#8. Mr. Smith noted they will be applying for DES dredge and fill permits and will be back before the Commission for that. The development will be on Town water and sewer.

Mr. Smith noted they will appear at the Planning Board’s August 26th meeting. Mr. Gove noted there would be about 50 days minimum for DES dredge and fill.

Mr. Gove noted the Army Corp. manual specifies plantings be 10’ on center with 80% survival in two years.

Mr. Koff opened the hearing to the public for comments and questions at 7:23 PM and being none closed the hearing to the public for deliberations.

Mr. Koff discussed proposed conditions of approval with the applicant and Commission.

MOTION: Ms. Eberhardt motioned after reviewing the application the Commission recommends approval of the wetland conditional use permit with the following conditions:

1. The addition of trees and shrubs be planted in the 50’ buffer at the density dictated by the Army Corp. manual;
2. An invasive species control plan be provided for the area within the buffer; and
3. A monitoring and adaptive management plan provided for the restoration area.

Mr. Madison seconded the motion. A vote was taken, all were in favor, the motion passed 7-0-0.

2. Tree Ordinance

Eileen Flockhart appeared on behalf of the Tree Committee to present the proposed town ordinance to be adopted after public hearings with the Select Board. The final draft will be reviewed by legal counsel. Ms. Flockhart encourage the Commission to email her with any recommendations.

Ms. Flockhart noted the Committee looked at Tree City USA recommendations and those adopted by other towns to create the proposed ordinance. The Tree Warden is on the Committee. There are a lot of memorial trees and an education and awareness component concerning the value of protecting the trees and increasing biodiversity. The Committee would evaluate trees on Town properties and ROW and make recommendations concerning trees on other properties that posed danger to the public which would generate a letter to the homeowner. Trees falling into the river are one example of who is responsible. A list of appropriate trees would be developed. One example is trees growing up into the asphalt on sidewalks. Utility cuts were discussed and how the utility will be involved with the Committee.

Ms. Flockhart and Mr. Short discussed the inventory of trees on Town-owned property and the importance of keeping that updated and the public educated as to why a dead or diseased tree may need to be removed.

Mr. Campbell asked about Conservation properties and Ms. Murphy explained how the 50' buffer offers protection between ROW and private lands.

Ms. Flockhart noted the ordinance would be a Town ordinance not a zoning ordinance.

3. NHACC Member Survey

Ms. Murphy reviewed the survey questions with the Commission which questioned how often the Town relies upon publications, advice and website offerings from the NHACC as well as attendance at annual meetings. Mr. Koff noted all of the offerings have been equally useful over the past year.

Ms. Murphy noted the survey asked the Commission to chose three topics to review and any recent associations with other commissions and projects over the past three years including partnership with SELT in monitoring easement acquisitions and the Land Use Change Tax percentage. Ms. Eberhardt noted working with Tree City USA, Mr. Campbell noted the L-CHIP application at Raynes Farm and Mr. Koff noted the Commission has been reviewing wetland applications and working with developers.

4. Snowhounds Trail Use Permission Form

Mr. Koff noted Tim Shepard is looking to renew the Snowhounds permission forms and he has no issue and has received no complaints concerning their use of the trails.

MOTION: Mr. Koff motioned after reviewing the request the Commission authorize the chair to sign in support o renewing the trail use agreement as requested. Mr. Short seconded the motion. A vote was taken, all were in favor, the motion passed 7-0-0.

5. Sky Watch Event at Raynes Farm (10/2 7:30 PM with 10/16 cloud date)

Ms. Murphy reported the Sky Watch Event at Raynes Farm is scheduled for October 2nd at 7:30 PM with an October 16th cloud date. There will be one speaker from the NH Astronomical Association and members on hand with their telescopes. She is looking for members willing to assist with parking and setting up the barn for the event. Mr. Campion noted he was available.

Mr. Campbell questioned how many people should attend given the parking capacity which could be about 50.

6. Approval of Minutes: June 8, 2021 Meeting

MOTION: Mr. Campbell motioned to approve the June 8, 2021 meeting minutes seconded by Mr. Short. A vote was taken, Mr. Campion abstained with the remainder in favor, the motion passed 6-0-0.

7. Other Business

Sergio Bonilla appeared before the Commission for input about a proposed seasonal dock located to be located at 48 Franklin Street, Tax Map #72-80 The structure would be anchored to the sloping shoreline. He is looking for feedback to be forwarded to the state. Mr. Koff indicated there is only a ten day window. Ms. Eberhardt noted she would have liked more time but it is the only opportunity to comment. Ms. Murphy noted it didn't sound like a design for the dock was done yet. Ms. Eberhardt questioned periods of tidal inundation and climate flood scenarios.

Ms. Murphy asked about the design of the dock. Mr. Campbell asked fi the dock is fixed. Ms. Osterwood agreed that anchoring points would be a concern as impacts shoreland vegetation.

MOTION: Mr. Koff motioned to send a comment letter to DES. Mr. Campbell seconded the motion. A vote was taken, all were in favor, the motion passed 7-0-0.

8. Next Meeting: Date Scheduled (8/10/21), Submission Deadline (7/30/21)

Adjournment

MOTION: Mr. Koff moved to adjourn at 9:39 PM seconded by Mr. Campbell. A vote was taken, all were in favor, the motion passed unanimously.

Respectfully submitted,

Daniel Hoijer, Recording Secretary