REGULAR MEETING
CONSERVATION COMMISSION

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
SCHOOL DEPARTMENT CONFERENCE ROOM

4:00 P.M. **January 14, 2026**

AGENDA

I. ELECTION OF OFFICERS

1. Chair

2. Vice Chair

II. APPROVAL OF MINUTES

1. December 10, 2025

III. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)

1. 50 Clough Drive
   Assessor's Map 206 Lot 20
   City of Portsmouth, Owner

2. 333 Borthwick Avenue
   Assessor's Map 240 Lot 2-1
   HCA Health Services of New Hampshire, Owner

IV. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

1. Dredge and Fill – Major Impact
   50 Clough Drive
   Assessor's Map 206 Lot 20
   City of Portsmouth, Owner

2. Dredge and Fill – Minimum Impact
   South of Goose Bay Drive
   Assessor's Map 305, Lot 3 and Assessor's Map 303, Lot 8
   Pease Development Authority, Owner

V. OTHER BUSINESS

1. Article 10 Discussion/Work Session

VI. ADJOURNMENT

**Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:*

https://us06web.zoom.us/webinar/register/WN_Xa4dhVDZTQmUmRUu21Ec7g

REGULAR MEETING
CONSERVATION COMMISSION

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
EILEEN DONDERO FOLEY COUNCIL CHAMBERS

4:00 P.M. **December 10, 2025**

MINUTES

MEMBERS PRESENT: Chair Samantha Collins; Vice Chair Barbara McMillan; Members: Jessica Blasko, Brian Gibb, Alice Carey, Alternates: Talia Sperduto, Oliver Chag

MEMBERS ABSENT: Stewart Sheppard, Lynn Vaccaro

STAFF PRESENT: Kate Homet; Environmental Planner

Chair Collins opened the meeting and introduced the draft November meeting minutes to be voted in and requested that T. Sperduto and O. Chag vote due to the absence of members S. Sheppard and L. Vaccaro.

I. APPROVAL OF MINUTES

1. November 13, 2025

Vice Chair McMillan made a motion to approve the minutes as presented. O. Chag seconded the motion. The motion passed unanimously (7-0).

II. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (OLD BUSINESS)

1. 65 Onyx Lane
   Assessor's Map 220 Lot 35
   Mariya Kontsepolskaya & Ralph Minderhoud, Owners

[1:17] Beth Murch, a representative of Groundworks LLC, came to present this application on behalf of the property owner. Ms. Murch described that the property owners had reached out to an engineer due to settling issues with their home and it was determined that work would need to be done to add additional support to the foundation and home to prevent additional settling. Ms. Murch described the distance of this work from the jurisdictional wetlands and the square footage and depth of soil disturbance needed to install push piers against the foundation.

[2:23] The Commissioners then asked questions about construction access, existing topography, proposed stormwater and erosion controls, soil stockpiling and proposed drainage.

[5:51] J. Blasko made a motion to recommend approval of the application with the following

condition:

1. During the site work, if rain is forecasted, excavation piles shall be covered to limit runoff impacts to the adjacent wetland.

A. Carey seconded the motion. The Commission discussed the project further and asked the applicant further questions. The Commission then voted unanimously to approve the motion (7-0).

III. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)

1. REQUEST TO POSTPONE
   2299 Lafayette Road
   Assessor's Map 272 Lot 4
   Rye Port Properties LLC, Owner

[12:42] Ms. Homet discussed the reasons for the applicant requesting to postpone. J. Blasko made a motion to postpone this application to the January meeting. T. Sperduto seconded the motion. The motion passed unanimously (7-0).

IV. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

1. Dredge and Fill – Major Impact
   0 & 12 Ruth Street
   Assessor's Map 143 Lots 9-1 and 16
   Trenton & Denise Sensiba, Owners

[13:49] Jay Aube of TF Moran came to present this application on behalf of the property owner, Kerry McCoole, who was also in attendance. Mr. Aube described the purpose of the NHDES application to install two new docking structures on the North Mill Pond on two separate parcels. He went on to describe the proposed construction and the location of the new structures.

T. Sperduto excused herself from deliberating on this application.

[15:13] The Commission then asked the applicant and homeowner questions about the depth of water at high tide, the purpose of the dock, access type, the number of docks, the use of the undeveloped lot, nearby public access to the pond, the lack of existing dock structures on the pond, the difference in ownership stated on the application versus the deed, construction and installment plans, the timeline for construction, different access alternatives to avoid wetland impacts, the demonstrated need for docking structures and the waivers that are being requested from NHDES.

[35:44] The Commission then went into discussion about the application with J. Blasko stating her appreciation for the effort and thoughtfulness that was put into the designs but noted that this was a difficult application to consider due to a dock being requested on a lot with an undetermined use, the prevalence of nearby public access points to the pond, potential salt marsh degradation. J. Blasko then stated that at this time she was not sure she could vote to recommend approval of this to NHDES.

[37:11] J. Blasko made a motion to recommend denial of this application to NHDES. B. Gibb seconded the motion. The Commissioners then stated their opinions on the application and noted aspects of the application that they disagreed with. This included:

• The need for the docks has not been adequately demonstrated:

- *There are multiple established public access points to North Mill Pond within close proximity to these properties where kayaks may be launched and other forms of recreation and enjoyment of the ecosystem can occur. These access points are currently used by nearby residents and abutters and one of the access points are just one lot away from the applicant. The use of designated access locations serves to consolidate recreational impacts to limited areas of the shoreline, thereby reducing disturbance and helping protect the integrity of the pond's fragile ecosystem as a whole.*
- *The use of the undeveloped lot is undetermined and the need for a dock on this lot is not defined. Additionally, the regulatory and permitting history associated with this lot, including inadequate road frontage and prior state-level restrictions, will likely make future development prohibitively difficult.*

• The installation and continued use of the docking structure would result in adverse impacts to the sensitive salt march and intertidal ecosystem.

- *These impacts include disturbance to mudflat and salt marsh habitats that function as important food sources and seasonal habitat for wildlife, including migratory bird species.*
- *This application does not demonstrate the alternative with the least adverse impact to the salt marsh and freshwater wetland system on site.*
- *The pond has a history of sediment contamination and the applicant has not demonstrated that contaminated sediments do not exist in the installation area and whether the dock installations will impact these sediments.*
- *No docking structures currently exist within this tidal wetland resource south of the Maplewood Avenue Bridge and this installation could set a precedent.*

• Construction of docks on North Mill Pond would provide limited functional benefit:

- *Boating access within this resource is inherently constrained by tidal fluctuation and shallow water depths, with extensive mudflats exposed during much of the tidal cycle. In addition, the recently replaced Maplewood Ave culvert does not allow for boats to pass through to and from larger waterbodies. The presence of historically contaminated sediments further limits the suitability of the pond for more intensive recreational use.*
- *North Mill Pond is not navigable for a substantial portion of the tidal cycle, and extending dock length—such as the proposed dock at 12 Ruth Street—is unlikely to meaningfully improve access to deeper water, as water depths do not increase appreciably beyond the existing shoreline conditions.*

- *Without a ramp and float, the docks do not provide access to the water.*

• This application does not demonstrate the least impacting alternative to the salt marsh and freshwater wetland system on site.

- *Using nearby boat access, or carrying kayaks and paddle boards across the salt marsh, would appear to be far less impacting than a permanent structure constructed with this tiddle salt marsh environment.*
- *The dock on 12 Ruth Street is not located over the narrowest area of salt marsh. While relocating the dock further to the south would impact the freshwater wetland, it would have less impact to the higher functioning salt marsh.*

• The applicant does not show temporary impacts in the tidal buffer zone for construction access and staging on the plan.

- *Due to a barge not being able to access the pond, the applicant stated dock construction will be performed in the shoreland.*

• The Conservation Commission and concerned abutters have expressed concern that dock construction in this area could create a precedent encouraging additional development within this sensitive ecosystem.

• The public comment received by abutters raised concerns over the demonstrated need for these structures, the impacts to the ecosystem, the precedence these structures would set, and other concerns. These comments are included with the letter of decision to NHDES.

A discussion continued between the applicant, property owner and Commission. The motion on the table was discussed and how the different voting outcomes could impact the decision. It was agreed that the comments that were listed by commissioners would be included as comments to reinforce their vote within their letter of decision sent to NHDES for this application. The motion passed unanimously (6-0) with T. Sperduto recusing.

2. Dredge and Fill – Major Impact
Marcy Street
Assessor's Map 104 Lot 3-3
City of Portsmouth, Owner

[51:39] Vincent Brigagliano of TF Moran and Peter Rice, Director of Public Works, came to present this application on behalf of the City. He noted that this application involved two main components, a riprap repair project and piling/pier repair project. He gave a background on the history of the work area and explained the needs for repairs and the construction needed to perform these repairs, along with the various wetland and buffer impacts needed and the proposed erosion controls.

[56:03] The Commission asked the applicant questions about the timing of this work, the materials to be used for the geotextile fabric, alternative fabric options, reuse or extension of the existing concrete blocks, how this project interacts with the master plan for the park and the

removal of existing materials and vegetation.

[1:00:25] J. Blasko made a motion to recommend approval of this application to NHDES as presented. B. Gibb seconded the motion. The motion passed unanimously (7-0).

V. OTHER BUSINESS

1. Work session date

Ms. Homet discussed the results of the poll for scheduling a date to work on edits to the Zoning Ordinance. It was decided that the Commission would discuss this under Other Business at the January meeting, time permitting. If more time is needed, the work session will be continued to the February regular meeting date under Other Business.

2. 2026 meeting calendar

Ms. Homet announced that she would be sending around a PDF calendar for 2026 that includes all of the scheduled meeting dates for the Commission.

She also announced that Commission member S. Sheppard would be absent from the December-March meetings due to a trip abroad.

VI. ADJOURNMENT

The meeting was adjourned at 5:09 p.m.

Memo

TO: Conservation Commission Members
FROM: Kate Homet, Environmental Planner/Sustainability Coordinator; Peter Britz, Director of Planning & Sustainability
DATE: January 9, 2026
SUBJ: January 14, 2026 Conservation Commission Meeting

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50 Clough Drive
City of Portsmouth, Owner
Assessor's Map 206 Lot 20

This application is for an upgrade to the Portsmouth Little Harbor Elementary School playgrounds to create compliance with universally accessible (UA) standards while incorporating nature-based play. The current impervious surfaces within the 100' wetland buffer on this lot includes approximately 22,252 s.f. of impact. To renovate and reconstruct the two playground areas at the school, this project proposes a temporary impact of 9,889 s.f. to the wetland buffer area with total proposed final permanent impact of 16,927 s.f. to the wetland buffer area for soil disturbance, asphalt work, landscaping, installation of an ADA-compliant surface, installation of new structures and grading work. This project is proposing landscaping enhancements including 11 new trees, 46 planted shrubs and herbaceous native plant species and 34 herbaceous species within a newly constructed rain garden. This project occurs within the wetland buffer of a prime tidal wetland.

1. *The land is reasonably suited to the use activity or alteration.*

   This lot is already a developed lot with existing playgrounds on site within the wetland buffer. This project proposes a decrease in impervious surfaces within the wetland buffer and is moving the main playground area further from the resource than the current structure.

2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*

   This project is within a previously developed buffer where playgrounds currently exist. This project proposes pulling some of the existing impacted areas further from the salt marsh and reducing the overall impervious area.

3. *There will be no adverse impact on the wetland functional values of the site or surrounding properties.*

   The proposed work should reduce impervious surface within the buffer, pull impacts further from the resource, introduce new native vegetation and start to treat existing stormwater. This project appears to reduce existing adverse impacts to the resource and buffer.

4. *Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*

   This project proposes a large addition of new vegetation and planted trees which will increase the existing vegetation within the buffer.

5. *The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*

   This project proposes a reduction in impacts overall to the buffer and in some areas, pulls impacts further from the salt marsh. This appears to be a less impactful alternative to the current playground structures and includes new plantings and stormwater treatment where none exist today.

6. *Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*

   It appears as though the vegetated buffer strip is only being disturbed within the main playground project for loaming and seeding. Additional plantings are encouraged in this area of the buffer to ensure protection of the adjacent resource.

Recommendation: Staff recommends **approval** of this application to the Planning Board with the following condition:

1. In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall permanently install wetland boundary markers, which may be purchased through the City of Portsmouth Planning & Sustainability Department. It is recommended that markers be placed along the 25' vegetative buffer at 50-foot intervals.

333 Borthwick Avenue
HCA Health Services of New Hampshire, Owner
Assessor's Map 240 Lot 2-1

This application is for the replacement of an ambulance garage door and the addition of a widened concrete sidewalk with a new overhead canopy at the Portsmouth Regional Hospital ambulance bay. A portion of this project lies within the 100' wetland buffer. The proposed impacts include approximately 730 s.f. of new impervious surfaces added to expand the sidewalk width.

1. *The land is reasonably suited to the use activity or alteration.*

   This lot is a previously disturbed lot with mostly impervious surfaces for transportation and pedestrian access to the hospital. This project is a safety improvement for patients of the hospital and would create a small increase in impervious surface where landscaping exists today.

2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*

   The location of proposed work is within the existing ambulance bay. There is no alternative location outside of the wetland buffer.

3. *There will be no adverse impact on the wetland functional values of the site or surrounding properties.*

   This project proposed an increase in impervious surfaces while also adding new downspouts to proposed canopy to capture additional stormwater runoff. In addition, applicant needs to demonstrate enhancements to offset the impacts of increased impervious surfaces.

4. *Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*

   It appears as though the expansion of impervious surfaces is proposed to occur within the existing landscaped area. This area does not show existing plantings to be removed.

5. *The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*

   This proposal creates an adverse impact by increasing impervious surfaces within the wetland buffer. For alternatives, the applicant should consider permeable surfaces within the wetland buffer and additional plantings along the resource to attempt to offset the proposed impacts.

6. *Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*

   It appears as though the vegetated buffer strip is not being impacted as part of this project. Applicant should consider plantings within this area of the buffer to protect the wetland resource.

Recommendation: Staff recommends **approval** of this application to the Planning Board with the following conditions:

1. According to Section 10.1017.24 of the City of Portsmouth Zoning Ordinance, a wetland buffer enhancement plan is required when the applicant does not demonstrate a net zero impact to impervious surfaces. According to 10.1017.4 (1) '*The wetland buffer enhancement plan shall include a combination*

new plantings, invasive species removal, habitat creation areas, improved site hydrology or protective easements provided offsite'.

2. According Section 10.1018.31, '*All new pavement installed in a wetland buffer shall be porous pavement.*' Applicant shall provide a plan showing all new pavement to be porous.

3. Applicant shall consider installing new plantings along the bank of the resource or in an alternate location on the site to help mitigate impacts from new impervious surfaces.

4. Applicant should provide information on how roof canopy runoff will exit downspout and enter the catchbasin.

Herrick, Devin

From: Ken Linchey <klinchey@sau52.org>
Sent: Monday, December 29, 2025 3:20 PM
To: Almeida, Antone
Cc: Herrick, Devin
Subject: Re: LHS - Wetland Application Submission

Yes, please proceed as we discussed over the phone.
Ken

Sincerely,
Ken Linchey CSFS, CSFM
Director of Buildings & Grounds/Maintenance
Portsmouth School Department
SAU 52 Office: 603-431-5080
Direct line: 603-610-4168 "This number has changed"
Cell: 603-617-0665
klinchey@sau52.org

On Mon, Dec 29, 2025 at 2:18 PM Almeida, Antone <Almeida.Antone@wseinc.com> wrote:

> Good afternoon Ken,
>
> I hope you had a great holiday. My apologies if you're still taking time off!
>
> We are seeking owner authorization to proceed with the Wetland Application submission. An email from you confirming that we may submit on your behalf as the authorized representative would be sufficient! Please let us know if this is possible.
>
> For the NHDES Forms, we will need you to sign, which we follow up soon. For the City permit, we just need an authorization email.
>
> Thank you very much,
>
> **Antone Almeida** (he/him)
> PROJECT MANAGER
> direct: 617-372-9156
> mobile: 860-917-4568
>
> Weston & Sampson
> 1 Washington Street, 10th Floor | Boston, MA 02108
> tel: 617-412-4480
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55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Wetland Conditional Use Permit Application

December 2025

Little Harbor School
Playground Renovations
50 Clough Street
Portsmouth NH

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

December 29, 2025

Portsmouth Conservation Commission
1 Junkins Ave, 3rd Floor
Portsmouth, NH 03801

Re: Wetland Conditional Use Permit Application Submission
Little Harbor School - Playground Renovations
50 Clough Street
Portsmouth NH

To Conservation Commission Chair:

On behalf of the City of Portsmouth, Weston & Sampson Engineers, Inc. is hereby enclosing one (1) copy of the Wetland Conditional Use Permit Application Submission for your review with regards to the proposed renovations to the playgrounds at the Little Harbor School. We are looking to be added to the next Conservation Commission Meeting agenda currently scheduled for January 14th, 2026.

Along with the required Wetland Conditional Use Permit Application Checklist, the following Attachments been included with this submission:

Attachment 1 Project Narrative
Attachment 2 Site Maps
Attachment 3 Wetland Delineation Report
Attachment 4 Draft NHDES Major Impact Wetlands Application
Attachment 5 Maintenance Plans
Attachment 6 Site Plans

We expect the NHDES Major Impact Wetlands Application to be submitted concurrently with the submission of the Wetland Conditional Use Permit Application Submission. However, the application has not yet been submitted so it has been marked as Draft and is not signed.

As this application is being submitted on behalf of the City of Portsmouth we understand that all application fees are to be waived.

If you have any questions regarding this submittal, please contact me at 978-573-5802.

Very truly yours,

WESTON & SAMPSON

Devin Herrick, CWS
Project Environmental Scientist

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: Devin Herrick - Weston & Sampso Date Submitted: 12/29/2025

Application # (in City's online permitting): _____

Site Address: 50 Clough Drive Map: 206 Lot: 20

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
✔	Complete application form submitted via the City's web-based permitting program	See City Online Filing
✔	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	See City Online Filing and Hard Copy

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	Attachment 3
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	Attachment 1, Section 4.2
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	Attachment 1, Section 4.7
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Attachment 1, Section 4.3

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Wetland buffer enhancement plan. **(10.1017.25)**	Plans, Sheet L600
☐	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	N/A
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	Plans
☐	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	N/A
☐	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	N/A
✔	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	Attachment 1, Section 4.5
✔	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	Attachment 5
✔	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	Attachment 1, Section 4.6
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	See Cover Letter
✔	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	Attachment 4

Applicant's Signature: _____ **Date:** 12/29/2025

ATTACHMENT 1

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1.0 BACKGROUND AND EXISTING CONDITIONS

The purpose of this project is to upgrade the City of Portsmouth Little Harbor Elementary School (LHS) Playground and The Portsmouth Early Education Program (PEEP) Playground to be universally accessible (UA) and nature base playgrounds. The term "universally accessible (UA) playground" is often used to describe a playground that offers children full use of all areas, regardless of ability. A UA playground will represent and support the diversity of our community, providing a platform for people to engage socially, physically, creatively and playfully without the need for adaptation or specialized design (based on the seven principles of universal design established by the Center for Universal Design at North Carolina State). A nature-based playground is a play area designed to mimic natural environments, incorporating elements like trees, rocks, logs, and sand features allowing children to engage in imaginative play through exploration and interaction with the natural landscape, promoting physical activity, creativity, and environmental awareness while minimizing the use of manufactured play equipment.

The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The playground pathways will feature accessible routes made from resilient solid surface material, not loose fill or aggregate. Playground design aligns with NH House Bill 467-FN Public Playground Accessibility, which aims to ensure that public playgrounds are accessible to all children, including those with disabilities. The bill requires that at least one public playground in each municipality be made accessible, promoting inclusivity and equal play opportunities for all children.

1.1 Existing Conditions

The Portsmouth Little Harbor Elementary School is located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20. The school is located along the tidal Piscataqua River.

The existing play facilities on the property are broken down into two playgrounds, the first is located on the east side of the school known as the “PEEP Playground” and the second is located on the west side of the school known as the “Little Harbor School Playground”. Both playgrounds will be renovated as part of this proposed project.

1.1.1 PEEP Playground

The existing PEEP Playground includes a play structure with additional loose play equipment, a wood chip base, lawn space and the entire playground is surrounded by a chain link fence. There is also an existing stone retaining wall which separates play area from parking lot which will be retained by the project.

Image 1.1: Google Street Earth Image of the Existing PEEP Playground.

1.1.2 Little Harbor School Playground

The existing Little Harbor School Playground includes a large play structure, monkey bars/climbing structure, a gaga pit, swing sets, a basketball court and associated asphalt play area. There is also a small ephemeral stream which originates from stormwater sheet flow off the existing basketball court. The ephemeral stream dissipates into the grassy play area before reaching the salt marsh.

Image 1.2: Google Street Earth Image of the Existing Little Harbor School Playground.

1.2 Wetland Resource Areas Delineated on Site

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) in Appendix C of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the Wetland Delineation Report in Appendix H and below in Figure 1.

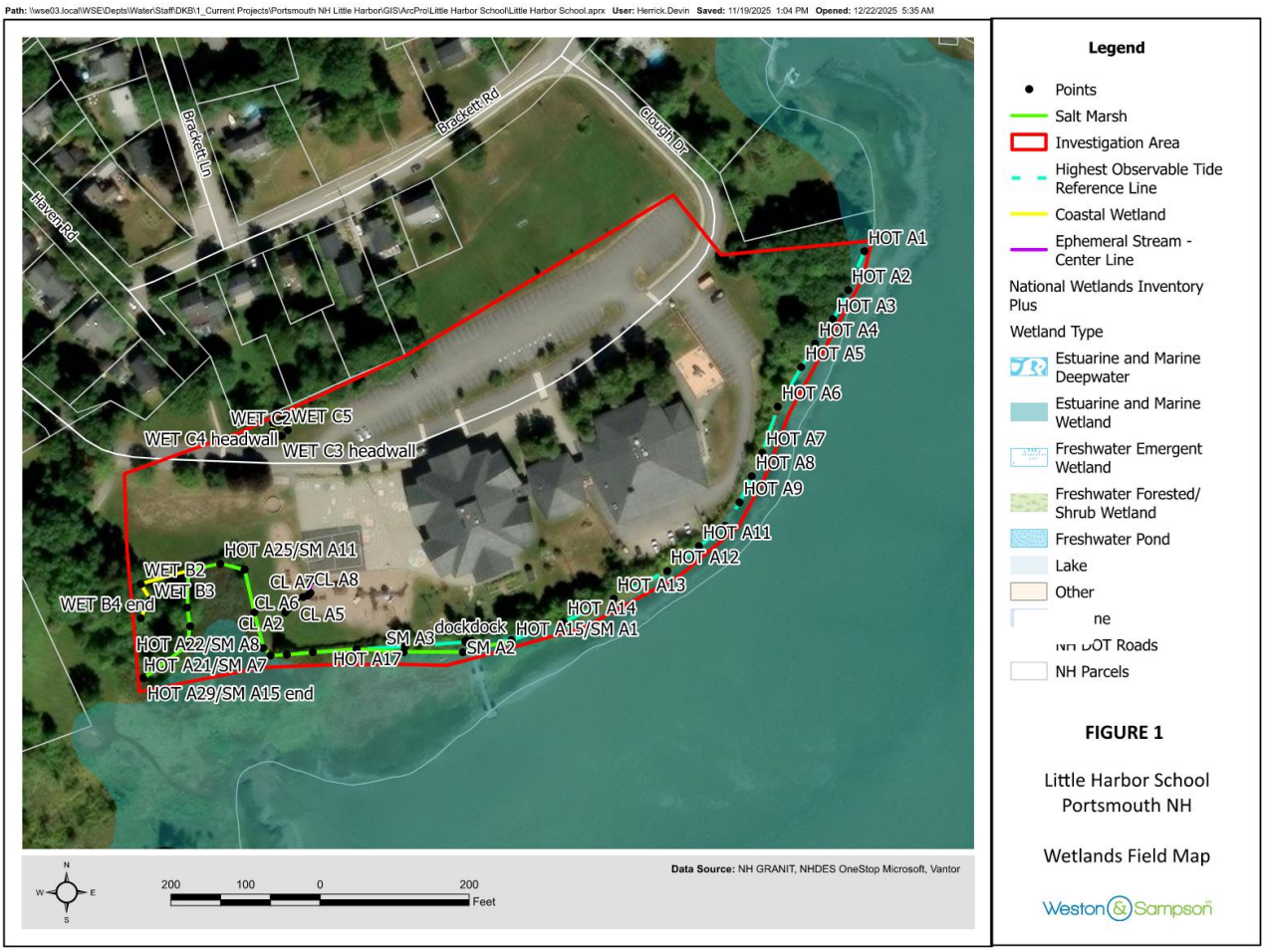


Figure 1: Wetlands Field Map

1.3 Applicability of Local Buffer Zones

Article 10 in the Portsmouth Zoning Ordinance has added additional protections in the form of buffer zones off of certain wetland resources. The City of Portsmouth has a 100-foot buffer adjacent to all of its wetlands (including most tidal areas) greater than 10,000 square feet or about a quarter of an acre. Per 10.1014.20 Wetland Buffers *"the required wetland buffer for a jurisdictional wetland or water body shall be defined as all land within 100 feet of the jurisdictional area." "Tidal wetland buffers shall be measured from the edges of tidal wetlands and highest observable tide lines."*. As such an applicable buffer zone has been added to the tidal salt marsh and associated non-tidal wetland (SM A and WET B lines from the delineation report and Figure 1 above), as well as along the Highest Observable Tide line associated with the Piscataqua River (HOT A line from the delineation report and Figure 1 above).

A smaller non-tidal wetland was identified near the parking lot of the school (WET C line from the delineation report and Figure 1 above). As this wetland is less than 10,000 SF in size the local buffer zone is not applicable. Similarly, in discussion with the local Environmental Planner, the local buffer zone was not applied to the ephemeral stream (CL A line from the delineation report and Figure 1 above). A single ephemeral stream was observed within the investigation area. Water originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the

vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

2.0 PROPOSED SCOPE OF WORK

The proposed scope will include the removal of existing playground equipment and installation of new play structures with associated landscape features in each of the two playgrounds on site.

2.1 PEEP Playground

The proposed PEEP playground improvements will include a variety of play elements designed for young children and group interaction. Planned equipment includes a play structure for 2-5 aged children, a group seesaw, acorn-shaped seating, and a wooden play bridge that will be level with the bonded rubber surfacing to ensure accessibility. A large sand play area is also proposed to encourage sensory and creative play.

In addition to the play equipment, several landscape and site enhancements are proposed in the PEEP playground to support both functionality and aesthetics. These include new plantings with boulder accents, picnic tables, and new fencing surrounding the play area. Concrete paving within the limits of the play area will serve multiple purposes, including a bag drop, walking paths, and an accessible area for replenishing sand; this space will also accommodate loose play items such as a play kitchen. New asphalt walking paths are proposed in generally the same configuration as existing conditions, with selective reductions in paved area to minimize impervious surfaces within the project limits. The landscape plan also includes the installation of seven new trees and approximately twenty new shrubs and herbaceous native species.

2.2 Little Harbor Playground

The proposed playground equipment improvements include the installation of two new swing sets and a large play structure with a climbing element. The equipment is currently planned to be installed over an engineered wood fiber base; however, the City is exploring the availability of funding to instead utilize a permeable poured-in-place or bonded rubber safety surfacing. This alternative would not alter the proposed limits of work. In addition, the existing gaga pit will be relocated to a new location, removing the majority of the structure from the 100-foot wetland buffer where it is currently situated. The relocated gaga pit will be constructed on a concrete foundation and filled with engineered wood fiber.

Proposed landscape and site improvements focus on environmental stewardship, safety, and improved site functionality. Stormwater collection will be formalized through the creation of a rain garden designed to allow student interaction with overland flow while maintaining sheet flow into the adjacent grassy area. The existing asphalt play area, including the basketball court, will be relocated farther from the wetland, resulting in a significant overall reduction in asphalt play surface. A concrete curb/mow strip will be installed around areas of engineered wood fiber to help contain the material. All existing trees on site will be retained, and additional site amenities will include a new timber guard rail and a bike rack.

New plantings will further enhance the landscape and ecological function of the site. The project includes the installation of eleven new trees, with species selected in accordance with the City of Portsmouth Street Tree Manual. A total of 46 new shrubs and herbaceous native plant species will be added throughout the site. The small mounds created for playground privacy and protection will receive Northeast Annual & Perennial Wildflower Mix. The rain garden located within the existing ephemeral stream will also receive additional plantings, including 34 herbaceous species, to support stormwater management and native habitat enhancement.

2.3 Construction Sequence

The following is the intended construction sequence of the project, subject to change based on contractor means and methods.

The proposed playground improvements are anticipated to be constructed over a 16-week period starting in the Spring of 2026, subject to permitting, weather, and material availability. Construction will begin with pre-construction activities, including final permit approvals, contractor mobilization, utility locating, and installation of erosion control measures, temporary fencing and signage to secure the work area. Surveying and layout will be completed to establish the locations of new play equipment, pathways, and landscape improvements.

Following mobilization, selective demolition and site clearing will occur. Existing playground equipment and portions of concrete and asphalt paving within the project limits will be removed as necessary. This work will be performed using a mini excavator, skid steer loader, concrete saws, and dump trucks to haul debris off-site or to designated recycling areas.

Once demolition is complete, earthwork and grading activities will commence. The site will be rough and fine graded to accommodate the new play areas, accessible routes, and revised path alignments. Excavation will be completed for poured-in-place surfacing, wood ship/sand containment, and equipment footings, followed by placement and compaction of aggregate base materials using compactors and small rollers to ensure stable subgrades.

Concrete footings and underground preparations will then be installed for the playground structures. Ready-mix concrete will be placed using concrete trucks and hand-finishing tools, with careful attention to accessibility requirements and level transitions between play elements and surfacing.

Concrete forms will be set, poured, finished, and cured to meet accessibility and durability standards. After concrete work is complete, new asphalt walking paths will be installed in generally the same configuration as existing conditions, with selective reductions in paved areas to minimize impervious surfaces. Asphalt placement will be performed using a small paver and roller.

Installation of playground equipment and surfacing will follow. The play structures will be installed, with equipment placed using small lifting equipment as needed. Play areas will be constructed, and poured-in-place surfacing will be installed throughout the play areas as described above, including flush transitions to ensure accessibility.

Following equipment installation, site furnishings and enclosures will be added. New perimeter fencing will be installed around the PEEP playground, other site accents will be placed, using small loaders and hand tools. Landscaping will then be completed, including the installation new trees, shrubs and native herbaceous species, along with soil preparation, mulching, and initial watering.

The project will conclude with final grading, site cleanup, and inspections. Once the site is stabilized. temporary erosion and sedimentation controls will be removed.

3.0 ENVIRONMENTAL CONSIDERATIONS – STANDARD DREDGE AND FILL WETLANDS PERMIT

As part of the proposed project there will be unavoidable impacts areas which fall under the jurisdiction of the NHDES Wetlands Bureau.

3.1 Ephemeral Stream

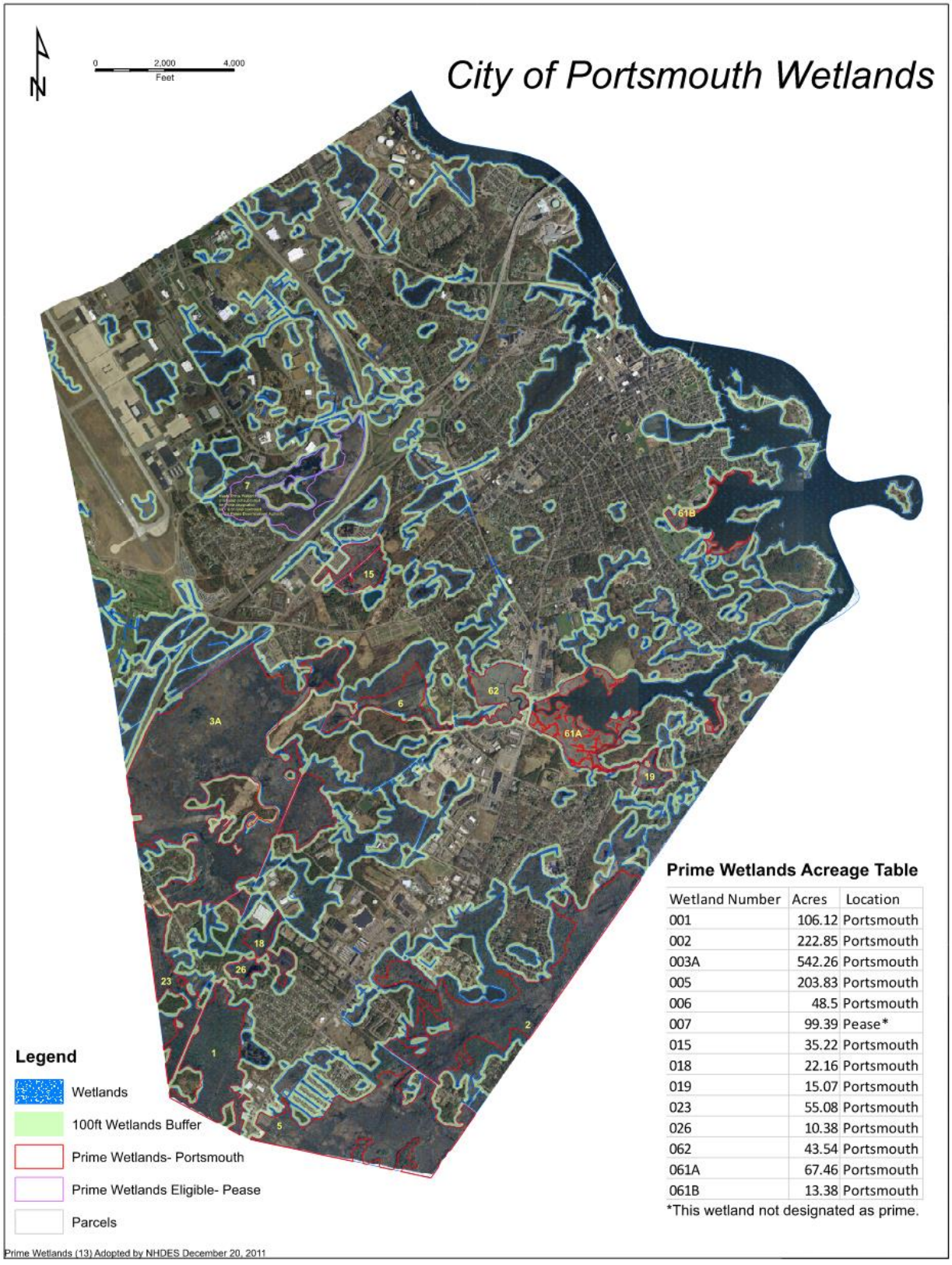
As described in the wetland delineation report (Appendix H), there is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Proposed impacts to the ephemeral stream will be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. This will result in 216 square feet (SF) and 44 linear feet (LF) of permanent impacts along the centerline of the ephemeral stream.

3.2 Duly Established 100-Foot Prime Wetland Buffer

Under RSA 482-A, prime wetlands are wetlands of substantial significance because of their size, unspoiled character, fragile condition or other relevant factors. Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. A prime wetland designated by the City of Portsmouth as wetland number 061B is located concurrently with the salt marsh delineated on site (see Image 1 below). The Prime Wetlands Designation Document for the City of Portsmouth was authored on January 25, 2011 and the Prime Wetland Map (see Image 1 below) was adopted by NHDES on December 20. 2011.

The proposed impacts to the Little Harbor School Playground will overlap with the Duly Established 100-Foot Prime Wetland Buffer associated with Prime Wetland Number 061B. Existing conditions in this area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer. These impact areas are located within the same footprint as the Previously Developed Tidal Buffer Zone (TBZ).



Prime Wetlands Acreage Table

Wetland Number	Acres	Location
001	106.12	Portsmouth
002	222.85	Portsmouth
003A	542.26	Portsmouth
005	203.83	Portsmouth
006	48.5	Portsmouth
007	99.39	Pease*
015	35.22	Portsmouth
018	22.16	Portsmouth
019	15.07	Portsmouth
023	55.08	Portsmouth
026	10.38	Portsmouth
062	43.54	Portsmouth
061A	67.46	Portsmouth
061B	13.38	Portsmouth

*This wetland not designated as prime.

Image 1: Portsmouth Prime Wetlands Map

3.3 Previously Developed Tidal Buffer Zone (TBZ)

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12.

Existing conditions in this Previously Developed TBZ area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh/highest observable tide line than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Previously Developed TBZ. These impact areas are located within the same footprint as the Duly Established 100-Foot Prime Wetland Buffer.

3.4 Total Impacts

The total amount of proposed impacts to jurisdictional area is 27,032 SF and 44 LF. Impacts are summarized in Table 1 below.

Table 1: NHDES Jurisdictional Impact Summary

Jurisdictional Area	Purpose	Permanent Impact	Temporary Impact
Ephemeral Stream	Rain garden	0 SF/0 LF	216 SF/44 LF
Duly-established 100-foot prime wetland buffer	Playground renovation	16,927 SF	9,889 SF
Previously-developed TBZ	Playground renovation	16,927 SF	9,889 SF
Total		**16,927 SF**	**10,105 SF/44 LF**

3.5 Project Classification

The proposed project is being submitted as a Major Impact Project based on the following criteria:

3.5.1 Previously Developed Tidal Buffer Zone

This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Previously Developed TBZ.

Per Env-Wt 610.17 (b) Project Classifications since the amount of impact area exceeds 10.000 SF the proposed project requires the submission as a Major Impact project.

3.5.2 100-Foot Prime Wetland Buffer Waiver

This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer.

Per Env-Wt 407.02 (a) "*a project that impacts a PRA and that does not qualify for a project-type exception (PTE) under Env-Wt 407.04 shall be classified as a major project regardless of the size of the impact*."

4.0 ENVIRONMENTAL CONSIDERATIONS - ZONING ARTICLE 10

The City of Portsmouth has a 100-foot buffer adjacent to all of its wetlands (including most tidal areas) greater than 10,000 square feet or about a quarter of an acre. New construction, ground disturbance and fill or removal of soil are not allowed in the Wetland buffer without a City Conditional Use Permit. The complete Wetlands Protection Ordinance can be found in Article 10 of the City's Zoning Ordinance Section 10.1010.

In Portsmouth, the first 25 feet from the edge of a wetland area is known as the Vegetated Buffer Strip. Within this area, cutting and clearing of vegetation is not permitted unless it is to remove invasive species by hand. Between 25 and 50 feet, the City has a Limited Cut Area. In this area, property owners may cut up to 50% of the trees that are greater than six inches in diameter dbh (the diameter of the tree at 4.5 feet up from the ground). The use of fertilizer is prohibited in both the vegetated buffer strip and limited cut area. Beyond the limited cut area, only low phosphate and slow release fertilizers are allowed in the wetland buffer.

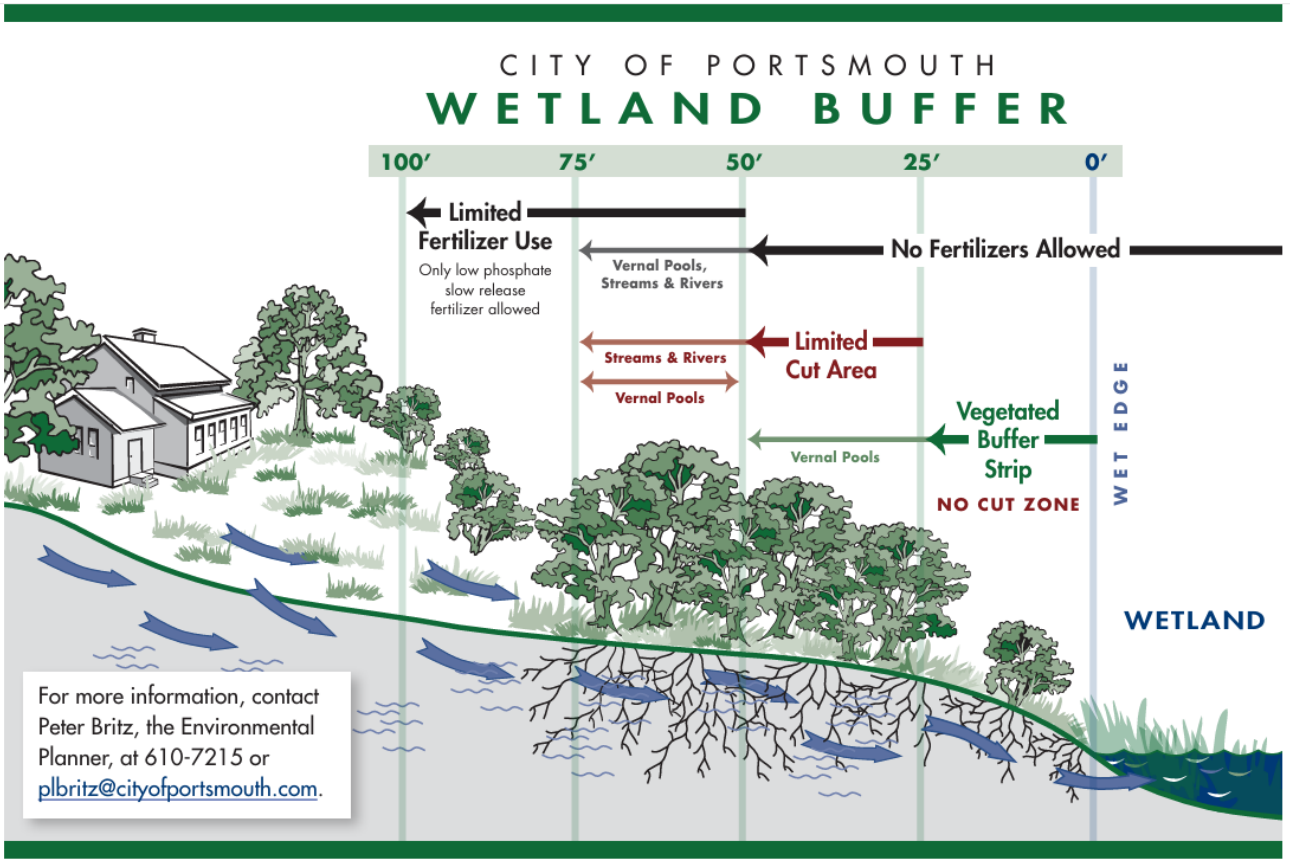


Image 2: City of Portsmouth Wetland Buffer

In the case of the Little Harbor School property, the local 100-foot wetland buffer is concurrent with the state's Previously Developed Tidal Buffer Zone and 100-Foot Prime Wetland Buffer Waiver.

Existing conditions in the 100-foot wetland buffer zone area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh/highest observable tide line than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Previously Developed TBZ. These impact areas are located within the same footprint as the Previously Developed Tidal Buffer Zone and 100-Foot Prime Wetland Buffer Waiver.

4.1 Total Impacts

The total amount of proposed impacts to jurisdictional area is 26,816 SF. Impacts are summarized in Table 2 below.

Table 2: Local Jurisdictional Impact Summary

Jurisdictional Area	Permanent Impact	Temporary Impact
0-25 feet – 25 foot Buffer Vegetated Buffer Strip	228 SF	1,193 SF
25-50 feet – 50 foot Buffer Limited Cut Area	2,983 SF	2,624 SF
50-100 feet – 100 foot Buffer	13,716 SF	6,071 SF
Total	**16,927 SF**	**9,889 SF**

4.2 Additional Information Zoning 10.1017.22

Per the City's Zoning 10.1017.22 (3) the following additional information is required:

More than 250 sq. ft. of alteration to the wetland buffer (regardless of the amount of alteration to the wetland): a description of the 100-foot buffer including vegetation type, the percent of the buffer with invasive species, and the percent of the buffer that is paved or developed.

The proposed project does include more than 250 feet of alteration to the wetland buffer zone. Within the buffer zone vegetation consists of landscaped lawn used as part of the school's play area. Vegetation consists of standard lawn species such as:

- Perennial ryegrass – *Lolium perenne*
- Fine fescue – *Festuca rubra*
- Red clover – *Trifolium pratense*
- White clover – *Trifolium repens*
- Common plantain – *Plantago major*

While there is a large amount of phragmites present within the salt marsh itself, the invasives are mostly confined to within the wetland. As a result, less than 1% of the wetland buffer is composed of invasives.

A breakdown of impervious area can be found in Section 4.3 below.

4.3 Impervious Surfaces

The proposed project seeks to move the existing impervious play surface further back from the wetlands as existing conditions. There is 150,595 SF of 100-foot wetland buffer zone present on the subject parcel.

Under existing conditions there are 22,252 SF (14.8%) of impervious area present within the 100-foot wetland buffer zone. Under proposed conditions there are 20,918 SF (13.9%)of impervious area present within the 100-foot wetland buffer zone. This represents a 1,334 SF decrease in impervious area.

4.4 Erosion Controls

Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

4.5 Maintenance Plans

Pervious technology will be utilized on the playground surfaces to allow for increased infiltration. See attached maintenance plan for impervious areas, Attachment 5. Additionally, the proposed project includes the installation of a rain garden. The rain garden located within the existing ephemeral stream will also receive additional plantings, including 34 herbaceous species, to support stormwater management and native habitat enhancement. A maintenance plan for the proposed plantings has been included in Attachment 5.

4.6 Permanent Wetland Boundary Markers

The Zoning Ordinance requires the placement of permanent wetland boundary markers along the buffer zone. Given that the buffer zone runs through an active play area associated with a school, placing permanent markers at this line would be impractical. The applicant is open to installing any required permanent wetland boundary markers and requests the Conservation Commission's assistance with understanding what may be appropriate given the use of this property.

4.7 Avoidance and Minimization Zoning 10.1017.23

Per the City's Zoning 10.1017.23 the following additional information is required:

The application shall describe the impact of the proposed project with specific reference to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way), and shall demonstrate that the proposed site alteration is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Ordinance.

The proposed project will not have any direct wetland impacts, only impacts to the 100-foot wetland buffer zone. The project has specifically avoided direct impacts to wetlands by keeping the limit of work contained to within the existing playground footprints. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the buffer zone for playground renovations. The proposed project seeks to reduce impacts to the buffer zone by pulling the impervious area further away from the wetlands than existing conditions.

ATTACHMENT 2

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

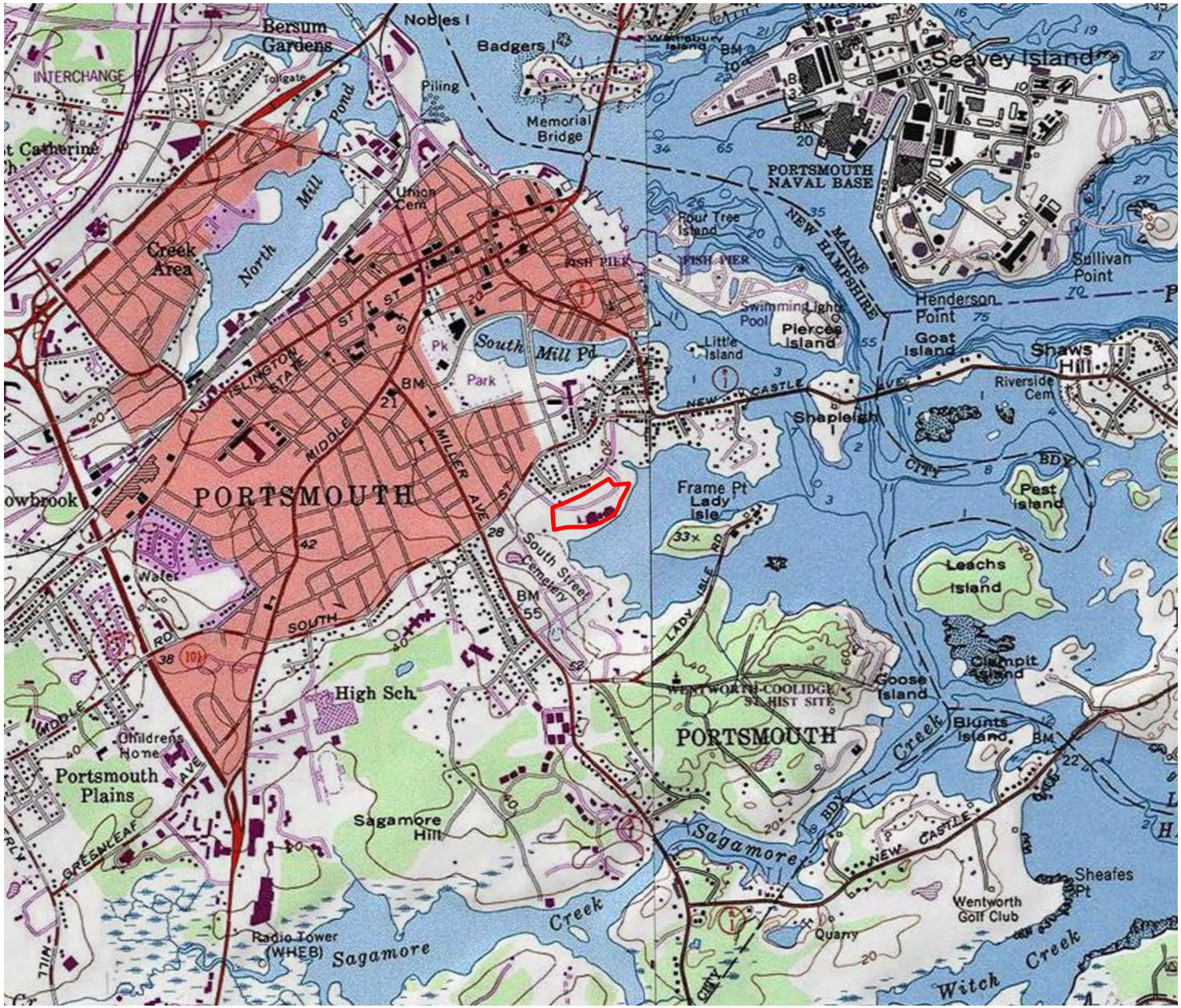
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson



Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:31 PM

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200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area

National Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:31 PM

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

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Feet

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area

NH Wildlife Action Plan 2020 - Habitat Land Cover

- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Map by NH DES OneStop Data Mapper_PRA

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ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Map by NH DES OneStop Data Mapper_Prime Wetlands

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ArcGIS World Geocoding Service
City/Town
Parcels
Prime Wetlands
Prime Wetlands with 100ft Buffer
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N
W E
S

200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

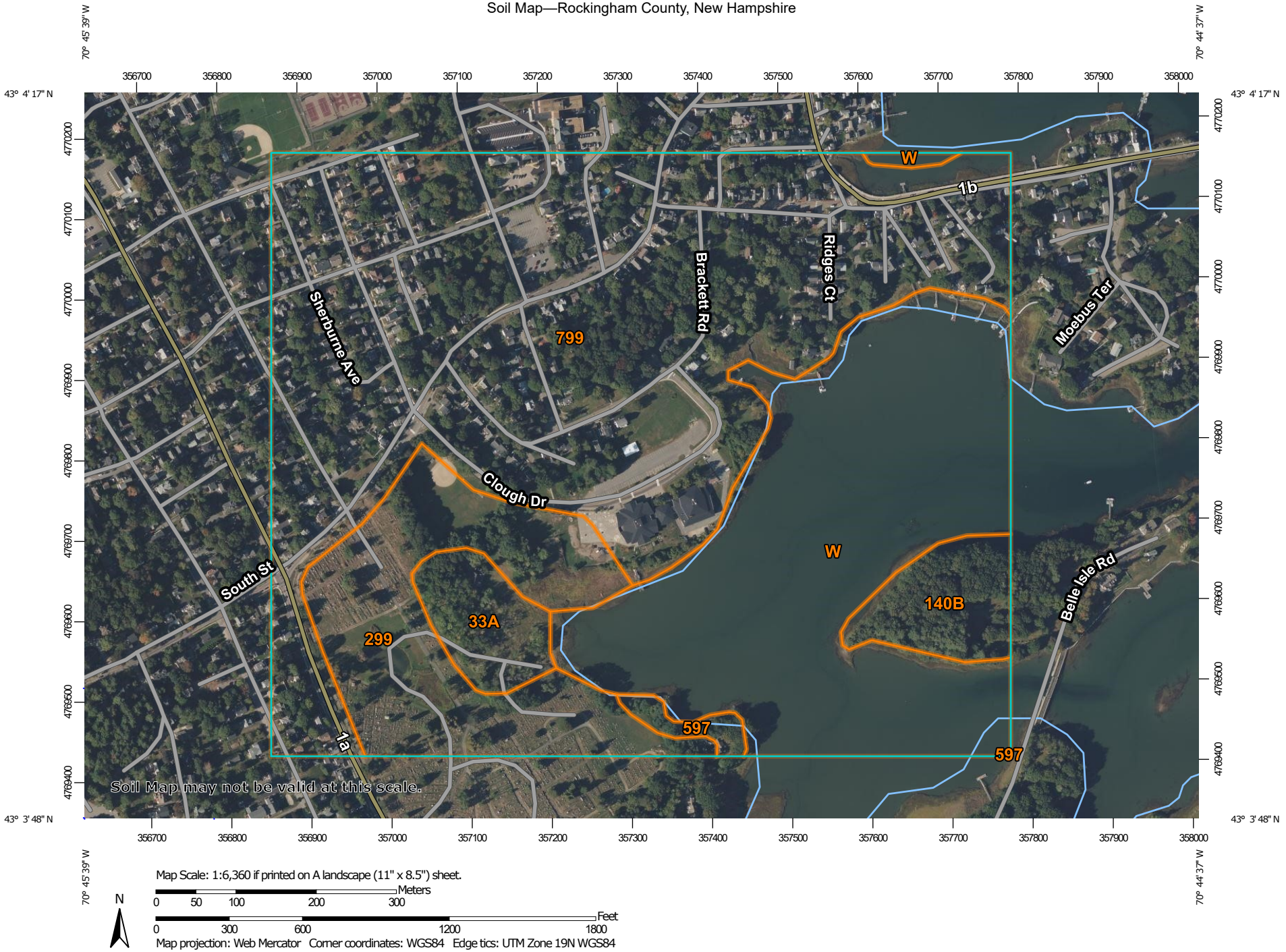
FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

Soil Map—Rockingham County, New Hampshire



Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 300 600 1200 1800

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

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

ATTACHMENT 3

Weston & Sampson SM

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Wetland Delineation Report

September & November 2025

Little Harbor School
50 Clough Street
Portsmouth NH

Wetland Delineation Conducted By:
Devin Herrick, CWS

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Figure 3 ..... FEMA FIRM Map
Figure 4 ..... Designated River Map
Figure 5.1 and 5.2 ..... Wildlife Action Plan Maps

APPENDICES

Appendix A ..... ACOE Wetland Determination Data Forms

Appendix B ..... Site Photographs

Appendix C ..... NHB Datacheck Forms

1.0 SITE DESCRIPTION

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

A Weston & Sampson NH Certified Wetland Scientist (CWS), trained in the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method), observed the following jurisdictional wetland resources at the site subject to (or potentially subject to) regulation under RSA 482-A Fill and Dredge in Wetlands:

- Tidal Surface Water
- Tidal Buffer Zone
- Tidal Wetland – Salt Marsh
- Non-Tidal Wetland
- Ephemeral Stream

Field data were recorded on US Army Corps of Engineers (ACOE) Wetland Determination Data Forms. See Appendix A for completed data forms and Appendix B for site photographs.

2.2 Wetland Delineation Methodology

A wetland delineation was conducted in accordance with New Hampshire Administrative Code Env-Wt 406 Delineation and Classification of Jurisdictional Areas utilizing the Federal Delineation Method. Per Env-Wt 103.02 "Federal Delineation Method" is defined as "the method in "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012".

The Federal Delineation Method identifies wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology. Pink flags with distinct flag numbers are left in the field to show wetland limits. Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations,

the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceeds 50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference and Env-Wt 301(c) as described above.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, and water stained leaves.

2.3 Tidal Surface Water

Per Env-Wt 602.58 Tidal surface water means “any surface water that is subject to the ebb and flow of the tide”. The Reference Line for coastal waters per RSA 483-B:4, XVII. Is “the highest observable tide line, which means a line defining the furthest landward limit of tidal flow, not including storm events, which can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks further flow of the tide.” Per Env-Wt 602.23 “Highest observable tide line (HOTL)” means “a line defining the farthest landward limit of tidal flow, not including storm events, that can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt-tolerant vegetation, or a physical barrier that blocks inland flow of the tide”

Based on the current mapping available from the United States Geological Survey (USGS) the tidal surface water identified within the investigation area is a part of Portsmouth Harbor/the Piscataqua River.

Wetland flags left in the field included:

- Highest Observable Tide (HOT)-A1 through HOT-A29 (HOT "A" Series)

These flags were placed based on a strand line of flotsam and debris, and/or the landward margin of salt-tolerant vegetation.

Tidal waters are considered to be "Surface Waters of the State" (RSA 485-A:2, XIV) and as such at the state level they are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A). Other local, state or federal regulations may apply to these areas.

Utilizing the New Hampshire hydrography dataset archived by the Geographically Referenced Analysis and Information Transfer System (GRANIT) the Piscataqua River identified within the investigation area is a seventh order stream. Since the Piscataqua River is a fourth order stream or higher is considered a "public water" per RSA 483-B:4, XVI and is subject to the Shoreland Water Quality Protection Act (RSA 483-B).

2.4 Developed Tidal Buffer Zone

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12 which indicates that developed upland "means an upland area on a lot within the tidal buffer zone or sand dune where:

(a) The natural soil and vegetation characteristics on more than 50% of the lot have been legally altered and have not returned to a natural state;

(b) If the lot is in a tidal buffer zone, developed lots abut at least 2 sides of the lot;

(c) If the lot is in a dune slack area, the lot is surrounded on 4 sides by developed lots or roadways;

(d) If the lot is in a dune, the back side of a fore dune is within the line of encroachment and the lot is

surrounded on 3 sides by developed lots or roadways; and

(e) At least one of the following is true:

(1) The lot has legally been filled or excavated in whole or in part, whether prior to jurisdiction or pursuant to a permit or other authorization;

(2) The lot contains at least one paved or graded area that is, has been, or will be used for vehicular

parking or traffic; or

(3) One or more residential or commercial buildings has been built on the lot.

The Little Harbor School property contains natural soil and vegetation characteristics on more than 50% of the lot that have been legally altered and have not returned to a natural state. Additionally, the lot is in a tidal buffer zone and developed lots abut at least 2 sides of the lot. As such, the investigation area is considered previously developed tidal buffer zone.

At the state level in NH, the tidal buffer zone is regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.5 Tidal Wetland – Salt Marsh

According to the "Life In New Hampshire Salt Marshes A Quick-Reference Field Guide" prepared by the New Hampshire Department of Environmental Services (NHDES) Coastal Program:

Salt marshes are important transitional habitat between the ocean and the land; they are estuaries where fresh and salt water mix. Salt marsh plants (halophytes) are salt tolerant and adapted to water levels that fluctuate with the tide. Tides carry in nutrients that stimulate plant growth in the marsh and carry out organic material that feeds fish and other coastal organisms. Over time, salt marshes accumulate organic material, forming into a dense layer called peat.

Low Marsh: The low marsh is located along the seaward edge of the salt marsh. It is usually flooded at every tide and exposed during low tide. It tends to occur as a narrow band along creeks and ditches, whereas the high marsh is more expansive and is flooded less frequently. The predominant plant species

found in the low marsh is the tall form of Spartina alterniflora (smooth cordgrass). This species can reach a height of six feet and is very tolerant of daily flooding and exposure.

High Marsh: The high marsh lies between the low marsh and the marsh's upland border. It can be very expansive in some areas, sometimes extending hundreds of yards inland from the low marsh area. Soils in the high marsh are mostly saturated, and the high marsh is generally flooded only during higher than average high tides. Plant diversity is low (usually less than 25 species), with the dominant species being the grasses and rushes such as Spartina patens (salt hay grass), Distichlis spicata (spike grass), Juncus geradii (black grass), and the short form of Spartina alterniflora. Other plant species commonly found in the high marsh are Aster tenufolius (perennial salt marsh aster), and Limonium nashii (sea lavender).

Env-Wt 602.22 High salt marsh means "a tidal marsh zone located above mean high water and inundated during periods of extreme high tide and storm surge associated with coastal storms".

Wetland flags left in the field included:

- Salt Marsh (SM)-A1 through SM-A15 (SM "A" Series)

These flags were placed based on the landward margin of salt-tolerant vegetation.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as E2EM1P, E – Estuarine, 2 – Intertidal, EM – Emergent, 1 – Persistent, P – Irregularly Flooded.

At the state level in NH, tidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.6 Non-Tidal Wetland

Per Env-Wt 103.47 "Non-tidal wetland" means a wetland that is not subject to periodic inundation by tidal waters. The limit of the nontidal wetlands were determined utilizing the Federal Delineation Method

by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions. Wetland flags left in the field included:

- WET-B1 through WET-B4 (WET "B" Series)
- WET-C1 through WET-C5 (WET "C" Series)

Dominant vegetation within the non-tidal wetlands included *Acer rubrum, Fraxinus pennsylvanica, Frangula alnus, Equisetum sylvaticum, Onoclea sensibilis, and Celastrus orbiculatus* species that generally thrive in wet conditions. Soils within the non-tidal wetland were composed of a silty loam with redoximorphic features. Other indicators of wetland hydrology included saturation, water stained leaves and oxidized rhizospheres.

Dominant vegetation in the adjacent upland areas included *Acer rubrum, Acer platanoides, Frangula alnus, Potentilla simplex, Onoclea sensibilis, and Celastrus orbiculatus*. Soils within the upland were composed of sandy loam with no evidence of mottling or hydrology within the top 12 inches.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as PFO1E, P – Palustrine, FO – Forested, 1 – Broad-Leaved Deciduous, E – Seasonally Flooded/Saturated.

At the state level in NH, nontidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.7 Ephemeral Stream

Env-Wt 102.64 "Ephemeral stream" means a watercourse that is located above the water table year-round and is not fed by groundwater, such that runoff from rainfall and snowmelt is the primary source of stream flow and so the stream has flowing water only during, and for a short duration after, precipitation or spring thaw events, but which has less flow than an intermittent stream and no evidence of riffles, meander bends, point bars, or braiding.

A single ephemeral stream was observed within the investigation area. Water originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Wetland flags left in the field included:

- Center Line CL-A1 through CL-A9 (CL "A" Series)

At the state level in NH, ephemeral streams are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.8 Other Protected Areas

Weston & Sampson created Environmental Resources Maps (see Figures 3-5) of the site to determine the presence of other protected areas. These areas included:

- Priority Resource Area (PRA)
- Designated River Segment/Corridor
- Prime Wetlands
- FEMA 100 Year Floodplain
- Wildlife Action Plan

Priority Resource Area (PRA)

Per Env-Wt 103.66 "Priority resource area (PRA) means "a jurisdictional area that:

(a) Has documented occurrences of protected species or habitat;

(b) Is a bog;

(c) Is a floodplain wetland contiguous to a tier 3 or higher watercourse;

(d) Is a designated prime wetlands;

(e) Is a duly-established 100-foot buffer of a designated prime wetlands;

(f) Is a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; or

(g) Is any combination of (a) through (f), above.

The Portsmouth Harbor/the Piscataqua River is a tidal water and would be considered a PRA. The investigation area includes a duly-established 100-foot buffer of a designated prime wetland which is also considered a PRA.

Designated River Segment/Corridor

The New Hampshire Rivers Management and Protection Program (RMPP) was established in 1988 with the passage of RSA 483 to protect certain rivers, called Designated Rivers, for their outstanding natural and cultural resources. The New Hampshire Department of Environmental Services RMPP maintains a NH Designated River Corridor Web Map viewer showing all of the jurisdictional designated river segments. The Designated River corridor is defined as the river and the land area located within a distance of 1,320 feet (1/4 mile) of the normal high water mark or to the landward extent of the 100 year floodplain of a designated river as designated by the Federal Emergency Management Agency, whichever distance is larger.

A map of the investigation area utilizing the NH Designated River Corridor Web Map viewer is shown in Figure 4. There are no designated river segments or corridors located within the investigation area.

Prime Wetlands

Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. The conservation commission, planning board, or governing body shall give written notice to the owner of the affected land and all abutters 30 days prior to the public hearing, before designating any property as prime wetlands.

The investigation area included a prime wetland designated by the City of Portsmouth as wetland number 061B.

FEMA 100 Year Floodplain

The Federal Emergency Management Agency (FEMA) has designated a series of zones which area defined according to varying levels of flood risk. Per FEMA a flood is any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. The 100-year floodplain is the zone with a 1% annual chance of flooding. FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site.

See Figure 3 for FIRM map. Based on FEMA flood maps the investigation area is partially located within the 100-year floodplain.

Wildlife Action Plan

In 2020 an update was completed of the New Hampshire Fish and Game Wildlife Action Plan. According to the NH Fish and Game the aim of the Wildlife Action Plan seeks to "identify species in greatest need of conservation, habitats that are at the greatest risk, as well as land uses and activities that present the greatest threats to wildlife and habitat." The NH Wildlife Action Plan includes three sets of mapping data available for use by stakeholders:

1. Habitat Land Cover Map: which shows where the different types of wildlife habitat are located throughout the state.
2. Highest Ranked Habitat by Ecological Condition Map: which shows where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.
3. Aquatic Habitats Map: which provides an assessment of surface water habitats.

After learning what habitat may be present within a proposed project area the Wildlife Action Plan informs stakeholders about strategies for managing and protecting wildlife. The data from these maps is available on the Geographically Referenced Analysis and Information Transfer System (GRANIT) viewer.

The investigation area was investigated on the GRANIT viewer and two maps were produced (Figures 5.1 and 5.2). According to the Habitat Land Cover data the investigation area is composed of Developed Impervious, Developed or Barren land, Grassland, Hemlock-hardwood-pine, and Salt marsh cover types. The Highest Ranked Habitat by Ecological Condition data indicates that portions of investigation area are located with highest ranking habitat.

Endangered and Rare Species/Habitat

The New Hampshire Natural Heritage Bureau (NHB) keeps records of known locations of rare species and natural communities. The NHB Datacheck Tool allows the user to outline the limits of the proposed project area in order to determine if there are any records of rare species and natural communities within the proposed project limits.

The approximate proposed project limits were mapped using the NHB Datacheck Tool. Initial NHB Data Check results indicate that there are Ecological Review records in the vicinity of the approximate proposed project limits (see Appendix C). Further consultation with NHDES will be needed to determine what rare species and/or natural communities were identified. This mapping is regularly updated and subject to change.

If any portion of the project involves a federal nexus (i.e. federal permitting, federal funding ect.) than additional information may be required from the U.S. Fish and Wildlife Service.

3.0 SUMMARY

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field.

Additional environmental mapping was conducted using NH Granit data layers and FEMA FIRM mapping. This additional mapping indicates that a prime wetland and a duly-established 100-foot buffer of a designated prime wetland are present on the site. Additionally portions of the site are located within the 100-year flood zone and Highest Ranked Habitat.

4.0 REFERENCES

United States Department of Agriculture, Natural Resources Conservation Service. *2018. Field Indicators of Hydric Soils in the United States, Version 8.2.* L. M. Vasilas, G. W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USACOE, January 1987, Corps of Engineers Wetlands Delineation Manuel, Wetlands Research Program Technical Report Y-87-1.

FEMA Flood Map Service Center, online at msc.fema.gov/portal Assessed on 11/19/2025.
Tiner, Jr., Ralph W., 2005, Field Guide to Nontidal Wetland Identification

New England Hydric Soils Technical Committee, 2019, Version 4, *Field Indicator of Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

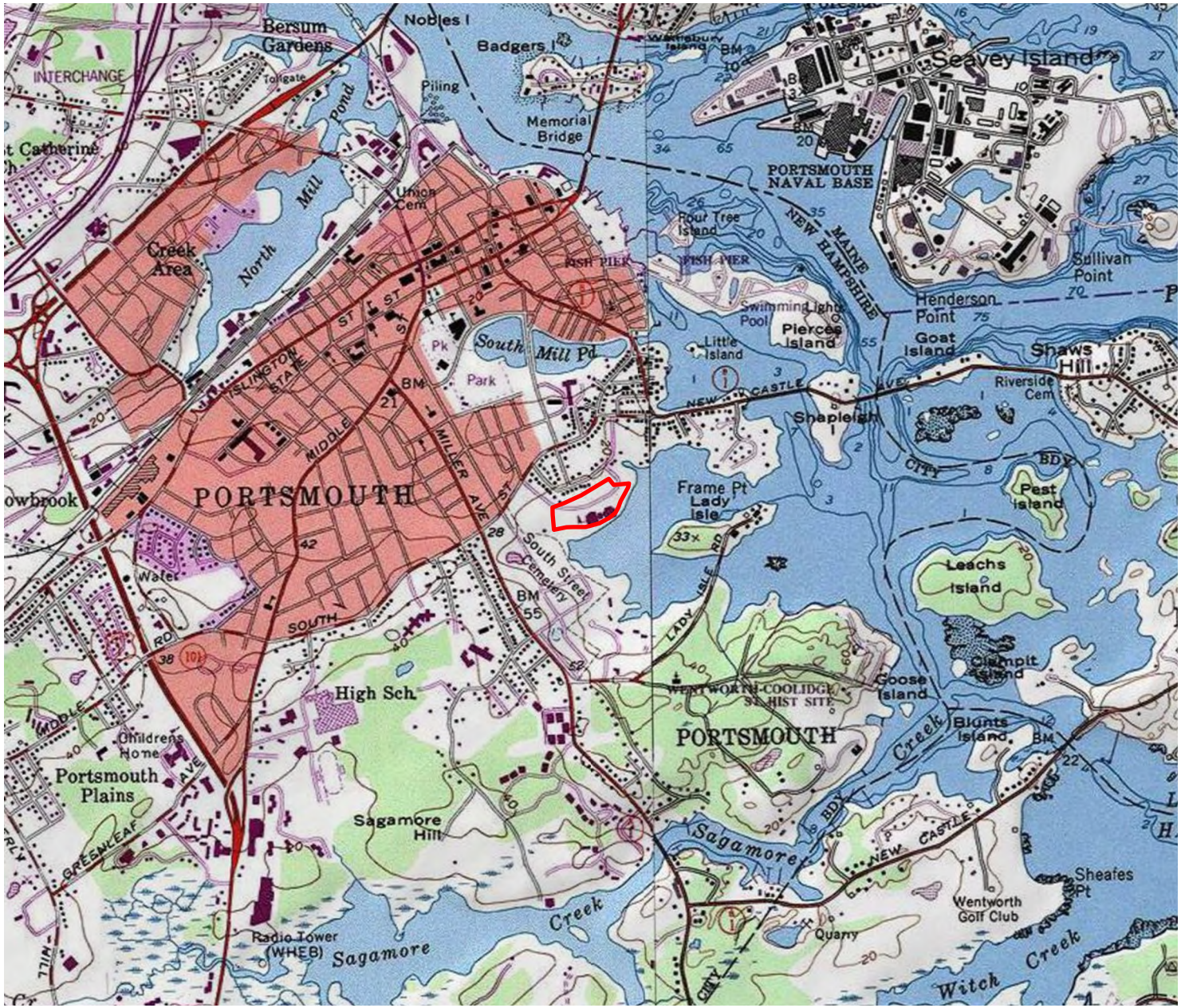
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson



Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:31 PM

N
W E
S

200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area

National Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:31 PM

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

N
W E
S

200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

N
W E
S

200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area

NH Wildlife Action Plan 2020 - Habitat Land Cover

- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Map by NH DES OneStop Data Mapper_PRA

11/19/2025, 12:50:13 PM

ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

ArcGIS World Geocoding Service
City/Town
Parcels
Prime Wetlands
Prime Wetlands with 100ft Buffer
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N
W E
S

200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

APPENDIX A

ACOE Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Little Harbor School City/County: Portmsouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Wetland

Investigator(s): Devin herrick, CWS Section, Township, Range:

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066306° Long: -70.754230° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	X Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)
X Saturation (A3)	___ Marl Deposits (B15)	___ Moss Trim Lines (B16)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Dry-Season Water Table (C2)
___ Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	___ Crayfish Burrows (C8)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	___ Saturation Visible on Aerial Imagery (C9)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	___ Stunted or Stressed Plants (D1)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	___ Geomorphic Position (D2)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)	___ Shallow Aquitard (D3)
___ Sparsely Vegetated Concave Surface (B8)		___ Microtopographic Relief (D4)
		X FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 10

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET B Wetland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2. *Frangula alnus*	10	Yes	FAC
3. *Acer rubrum*	5	No	FAC
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Equisetum sylvaticum*	25	Yes	FACW
2. *Onoclea sensibilis*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
Woody Vine Stratum (Plot size: 30)			
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	40	x 3 =	120
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	120 (A)		290 (B)

Prevalence Index = B/A = 2.42

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET B Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/2	100					Loamy/Clayey	
8-16	2.5YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
16-20	2.5YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Little Harbor School City/County: Portmsouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Upland

Investigator(s): Devin herrick, CWS Section, Township, Range:

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066548° Long: -70.754442° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ___	No X	**within a Wetland?** **Yes** ___ **No** X
Wetland Hydrology Present?	Yes ___	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET B Upland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	Yes	FAC
2. *Acer platanoides*	15	Yes	UPL
3. *Fraxinus pennsylvanica*	5	No	FACW
4. *Malus prunifolia*	5	No	UPL
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Frangula alnus*	25	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	25	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Potentilla simplex*	10	Yes	FACU
2. *Onoclea sensibilis*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	=Total Cover	
Woody Vine Stratum (Plot size: 30)			
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	35	x 3 =	105
FACU species	15	x 4 =	60
UPL species	20	x 5 =	100
Column Totals:	80 (A)		285 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET B Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Sandy	
10-16	10YR 4/3	100					Sandy	
16-20	10YR 4/4	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

APPENDIX B

Site Photographs

Photo 1: Little Harbor School Playground

Photo 2: PEEP Playground

Photo 3: Portsmouth Harbor/Piscataqua River

Photo 4: Highest Observable Tide Line

Photo 5: Salt Marsh

Photo 6: Non-Tidal Wetland

Photo 7: Ephemeral Stream

APPENDIX C

NHB Datacheck Forms

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

To: Devin Herrick, Weston & Sampson Engineering
55 Walkers Brook Drive
Reading, MA 01857
herrick.devin@wseinc.com

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc: NHFG Review, David Simmons

Date: 12/04/2025 (valid until 12/04/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: NHDES - Shoreland Standard Permit, NHDES - Wetlands Standard Dredge & Fill

DCT ID: DCT25-3222

Town: Portsmouth
Location: 50 CLOUGH DR

Project Description: The propose project includes the replacement of two playgrounds on the property of the Little Harbor School. All work will occur in uplands. To be completed by the end of 2026.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information it was determined that there are potential impacts. Please carefully read the comments below and consultation instructions on the following pages.

Plant and Exemplary Natural Community Comments: If all work is within existing disturbed areas of the playground footprints, then no ecological review for plants is needed. If work is proposed outside of the existing playground footprints, then please provide proposed plans and representative photos during the growing season of the proposed impact areas (or at the very least without snow cover).

Wildlife and Critical Habitat Comments: An ecological review is needed to further assess potential impacts to protected wildlife and critical habitat. Please refer to the Wildlife Ecological Review Instructions below for guidance on how to submit an ecological review request and information about when an ecological review is required vs recommended.

Plant and Exemplary Natural Community Ecological Review Instructions

Unless otherwise noted, an ecological review is required if plant and/or ENC records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules of a state agency

If a project is not legally required to obtain an ecological review but this letter contains plant and/or ENC records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 217-A.

To request an ecological review for plants and/or ENCs:

1. Email (preferred), mail, or hand-deliver any materials requested in the "Plant and Exemplary Natural Community Comments" section above to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with the plant/ENC ecological review process call 603-271-6261.

Wildlife and Critical Habitat Ecological Review Instructions

Requesting an Ecological Review by NHDES

An ecological review for wildlife will be completed by the NHDES Ecological Review Section if a NHDES permit, authorization, or approval is needed. *If you do not need any NHDES permits, authorizations, or approvals then please see the section regarding NHFG reviews conducted by the NH Fish and Game Department (NHFG) below.*

Unless otherwise noted, an ecological review by NHDES is required if wildlife/critical habitat records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules regarding the permit, approval, or written authorization pursuant to RSA 482-A, RSA 485-A, and RSA 236.

If a project requiring a NHDES permit, authorization, or approval is not legally required to obtain an ecological review, but this letter contains wildlife or critical habitat records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 212-A.

To request an ecological review for wildlife with DES:

1. Email (preferred), mail, or hand-deliver project information following the guidance of Fis1004.03(c) to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with wildlife ecological review process call 603-271-0467 or visit the wildlife environmental review page for guideline materials including a suggested checklist of materials to provide for ecological review.

Wildlife and Critical Habitat Review Instructions (continued)

Requesting a Wildlife Review by NHFG

Wildlife reviews to assess potential impacts to protected wildlife and critical habitat for any need outside of NHDES permits, authorizations, and approvals are completed by the New Hampshire Fish and Game Department, Nongame & Endangered Wildlife Program.

To request a wildlife review with NHFG:

1. Email (preferred), mail, or hand-deliver available project information to:

   New Hampshire Fish and Game Department
   Attn. Wildlife Division, Nongame Program
   11 Hazen Drive
   Concord, New Hampshire 03301
   nhfgreview@wildlife.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Wildlife Review" in the subject line of the request.

For help with the NHFG wildlife review process call 603-271-2461.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (iPaC) website for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or 603-223-2541).

Ecological Review Database records:
The following record(s) may be impacted by the proposed project. Please refer to this list when coordinating.

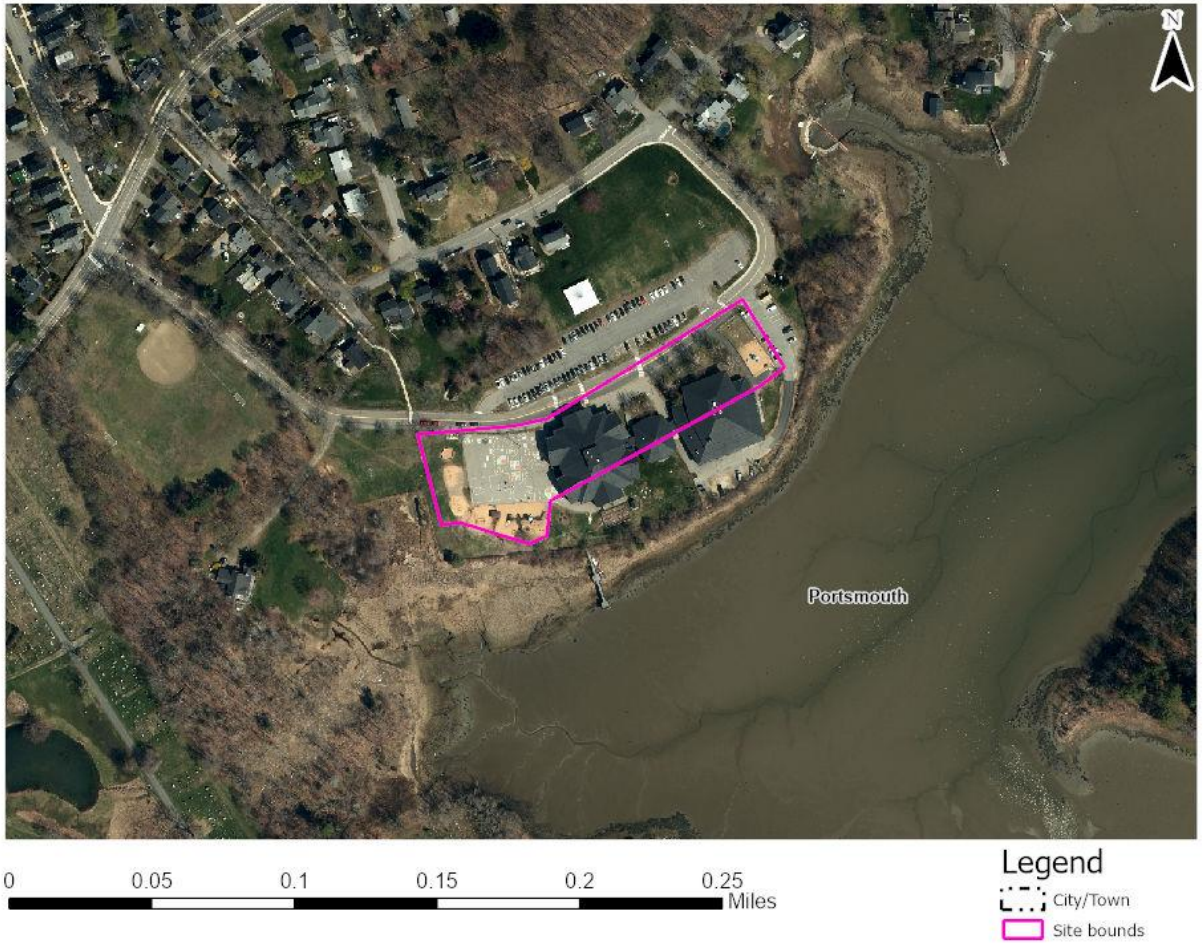
Plant species	**State[1]**	**Federal**	**Notes**
marsh elder (*Iva frutescens*)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
northern blazing star (*Liatris novae-angliae var. novae-angliae*)*	E	--	Threats to this highly imperilled species are development activities that eliminate its habitat and invasion of its open, grassy habitat by trees and shrubs.

Vertebrate species	**State[1]**	**Federal**	**Notes**
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see above).
Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).

[1]Codes: "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 25 or more years ago.

Disclaimer:
DataCheck Tool screening only includes documented and verified occurrences of protected species and exemplary natural communities. The list of protected species and habitat on this letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, surveys are the best way to determine what resources are present on site.

DCT25-3222



www.des.nh.gov
29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

ATTACHMENT 4

DRAFT

*Intention is to submit NHDES Wetlands Permit concurrently with Conservation Commission Review. Has not been submitted at time of submission of Conditional Use Permit.

Weston & Sampson

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Wetlands Major Impact Application

December 2025

Little Harbor School
Playground Renovations
50 Clough Street
Portsmouth NH

DRAFT

December 29, 2025

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

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

Re: Wetlands Major Impact Application Submission
Little Harbor School - Playground Renovations
50 Clough Street
Portsmouth NH

To whom it may concern:

On behalf of the City of Portsmouth, Weston & Sampson Engineers, Inc. is hereby enclosing one (1) copy of the Wetlands Major Impact application for your review with regards to the proposed renovations to the playgrounds at the Little Harbor School.

Along with the required NHDES forms and project narrative, additional information for this application is included in the following appendices:

Appendix A	Avoidance and Minimization
Appendix B	ACOE Secondary Impacts Checklist
Appendix C	Maps
Appendix D	NHB
Appendix E	Section 106 DHR
Appendix F	Abutters List and Notice
Appendix G	Photos
Appendix H	Wetland Delineation Report
Appendix I	Functional Assessment
Appendix J	Maintenance Plans
Appendix K	Request for Concurrent Processing
Appendix L	Plans

A check in the amount of $16,219.20 made payable to Treasurer – State of NH has also been included to cover the application fee.

If you have any questions regarding this submittal, please contact me at 978-573-5802.

Very truly yours,

WESTON & SAMPSON

Devin Herrick, CWS
Project Environmental Scientist

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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 name: City of Portsmouth - Ken Linchey		Town name: Portsmouth	
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 administrative 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 Land Resources Management Permit Planning Tool (LRMPPT), the DataCheck Tool, the Stream Crossing Initiative Data Viewer 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?	☒ Yes ☐ No
Does the property contain a PRA? If yes, provide the following information:	☒ Yes ☐ No
• Does the project qualify for an Impact Classification Adjustment (such as a New Hampshire Fish and Game Department (NHFG) agreement for a classification downgrade) or a Project-Type Exception (such as a Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	☐ Yes ☒ No
• Protected species or habitat?	☒ Yes ☐ No
• If yes, species or habitat name(s): Atlantic Sturgeon, Peregrine Falcon, Shortnose Sturgeon	
• DataCheck project ID number: DCT25-3222	
• Bog?	☐ Yes ☒ No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	☒ Yes ☐ No
• Designated prime wetland or duly-established 100-foot buffer?	☒ Yes ☐ No
• Sand dune, tidal wetland, tidal water or undeveloped tidal buffer zone?	☐ Yes ☐ No
Is the property within a designated river corridor? If yes, provide the following information:	☐ Yes ☒ No
• Name of Local River Management Advisory Committee (LAC):	
• A copy of the application was sent to the LAC on (mm/dd/yyyy):	
For dredging projects, is the subject property contaminated?	☐ Yes ☐ No
If yes, list contaminant: Not Applicable	
Is there potential to impact impaired waters, Class A waters or Outstanding Resource Waters?	☐ Yes ☒ No
For stream crossing projects, provide watershed size (see LRMPPT or Stream Stats):	

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SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))

Provide a description of the project and the purpose of the project, the need for the proposed impacts to jurisdictional areas, an outline of the scope of work to be performed, and whether impacts are temporary or permanent.

The purpose of this project is to upgrade the Portsmouth Little Harbor Elementary School playgrounds to be universally accessible (UA) and nature base playgrounds. As part of the proposed project there will be unavoidable impacts areas which fall under the jurisdiction of the NHDES Wetlands Bureau including an ephemeral stream, 100-foot prime wetland buffer, and previously developed tidal buffer zone. This proposed project proposes 16,927 square feet (SF) or permanent impact and 10,105 SF of temporary impact.

SECTION 3 - PROJECT LOCATION

Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.

Address: 50 Clough Drive

Town or city: Portsmouth

Tax map/block/lot/unit: 206/20

U.S. Geological Survey (USGS) topo map waterbody name:
☒ n/a

(Optional) Latitude / longitude in decimal degrees (to five decimal places): 43.06640°/-70.75320°

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: City of Portsmouth - Ken Linchey, Portsmouth School Department

Mailing address: 1 Junkins Avenue

Town or city: Portsmouth	State: NH	ZIP: 03801

Email address: klinchey@sau52.org	Phone: 603-610-4168

Electronic communication: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically:

SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c)) ☐ **N/A**

Last name, first name, middle initial: Herrick. Devin

Company name: Weston & Sampson Engineers

Mailing address: 55 Walkers Brook Drive, Suite 100

Town or city: Reading	State: MA	ZIP: 01867

Email address: herrick.devin@wseinc.com	Phone: 978-573-5802

Electronic communication: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically: DKH

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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. ☐ Same as applicant

Name: City of Portsmouth		
Mailing address: PO BOX 628		
Town or city: PORTSMOUTH	State: NH	ZIP: 03802
Email address: klinchey@sau52.org	Phone: 603-610-4168	

Electronic communication: By initialing here, 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):

See attached project description for for resource specific information Env-Wt 600.

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 (mm-dd-yyyy):	■ 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)

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

For each jurisdictional area that will be or 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; meaning work was started or completed without a permit).

For intermittent and ephemeral streams, LF of impact are 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/rivers, LF of impact are calculated by summing the lengths of disturbances to the channel and banks.

Permanent (PERM) impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials). Temporary (TEMP) impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERM. SF	PERM. LF	PERM. ATF	TEMP. SF	TEMP. LF	TEMP. ATF
Wetlands	Forested wetland			☐			☐
	Scrub-shrub wetland			☐			☐
	Emergent wetland			☐			☐
	Wet meadow			☐			☐
	Vernal pool			☐			☐
	Designated prime wetland			☐			☐
	Duly-established 100-foot prime wetland buffer	16,927 SF	N/A	☐	9,889 SF	N/A	☐
Surface Water	Intermittent / ephemeral stream	0	0	☐	216 SF	44 LF	☐
	Perennial stream or river			☐			☐
	Lake / pond			☐			☐
	Docking - lake / pond			☐			☐
	Docking - river			☐			☐
Banks	Bank - intermittent stream			☐			☐
	Bank - perennial stream / river			☐			☐
	Bank / shoreline - lake / pond			☐			☐
Tidal	Tidal waters			☐			☐
	Tidal marsh			☐			☐
	Sand dune			☐			☐
	Undeveloped tidal buffer zone (TBZ)			☐			☐
	Previously-developed TBZ	16,927 SF	N/A	☐	9,889 SF	N/A	☐
	Docking - tidal water			☐			☐
TOTAL		16,927 SF	N/A		10,105 SF	44 LF	

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SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)				
☐ Minimum impact: Flat fee of $600.				
☐ Non-enforcement related, publicly funded and supervised restoration projects, regardless of impact classification: flat fee of $600 (refer to RSA 482-A:3, 1(c) for restrictions).				
■ Minor or major impact fee: Calculate using the table below:				
Permanent and temporary (non-docking):	27,032	SF	× $0.60 =	$ 16,219.20
Seasonal docking structure:		SF	× $3.00 =	$
Permanent docking structure:		SF	× $6.00 =	$
Projects proposing shoreline structures (including docks): add $600.				$
Total				$ 16,219.20
The application fee for minor or major impact is the above calculated total or $600, whichever is greater.				$ 16,219.20

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: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 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 office of professional licensure and certification established by RSA 310.
Initials:	If the applicant is not the owner of the property, each property owner's 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:	Date:
Signature (applicant, if different from owner):	Print name legibly:	Date:
Signature (agent, if applicable):	Print name legibly:	Date:

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 or city indicated below.	
Town or city clerk signature:	Print name legibly:
Town or city:	Date:

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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. If not filing electronically, make check or money order payable to “Treasurer – State of NH.”

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1.0 BACKGROUND AND EXISTING CONDITIONS

The purpose of this project is to upgrade the City of Portsmouth Little Harbor Elementary School (LHS) Playground and The Portsmouth Early Education Program (PEEP) Playground to be universally accessible (UA) and nature base playgrounds. The term "universally accessible (UA) playground" is often used to describe a playground that offers children full use of all areas, regardless of ability. A UA playground will represent and support the diversity of our community, providing a platform for people to engage socially, physically, creatively and playfully without the need for adaptation or specialized design (based on the seven principles of universal design established by the Center for Universal Design at North Carolina State). A nature-based playground is a play area designed to mimic natural environments, incorporating elements like trees, rocks, logs, and sand features allowing children to engage in imaginative play through exploration and interaction with the natural landscape, promoting physical activity, creativity, and environmental awareness while minimizing the use of manufactured play equipment.

The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The playground pathways will feature accessible routes made from resilient solid surface material, not loose fill or aggregate. Playground design aligns with NH House Bill 467-FN Public Playground Accessibility, which aims to ensure that public playgrounds are accessible to all children, including those with disabilities. The bill requires that at least one public playground in each municipality be made accessible, promoting inclusivity and equal play opportunities for all children.

1.1 Existing Conditions

The Portsmouth Little Harbor Elementary School is located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20. The school is located along the tidal Piscataqua River.

The existing play facilities on the property are broken down into two playgrounds, the first is located on the east side of the school known as the “PEEP Playground” and the second is located on the west side of the school known as the “Little Harbor School Playground”. Both playgrounds will be renovated as part of this proposed project.

1.1.1 PEEP Playground

The existing PEEP Playground includes a play structure with additional loose play equipment, a wood chip base, lawn space and the entire playground is surrounded by a chain link fence. There is also an existing stone retaining wall which separates play area from parking lot which will be retained by the project.

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Image 1.1: Google Street Earth Image of the Existing PEEP Playground.

1.1.2 Little Harbor School Playground

The existing Little Harbor School Playground includes a large play structure, monkey bars/climbing structure, a gaga pit, swing sets, a basketball court and associated asphalt play area. There is also a small ephemeral stream which originates from stormwater sheet flow off the existing basketball court. The ephemeral stream dissipates into the grassy play area before reaching the salt marsh.

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Image 1.2: Google Street Earth Image of the Existing Little Harbor School Playground.

1.2 Wetland Resource Areas Delineated on Site

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) in Appendix C of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the Wetland Delineation Report in Appendix H and below in Figure 1.

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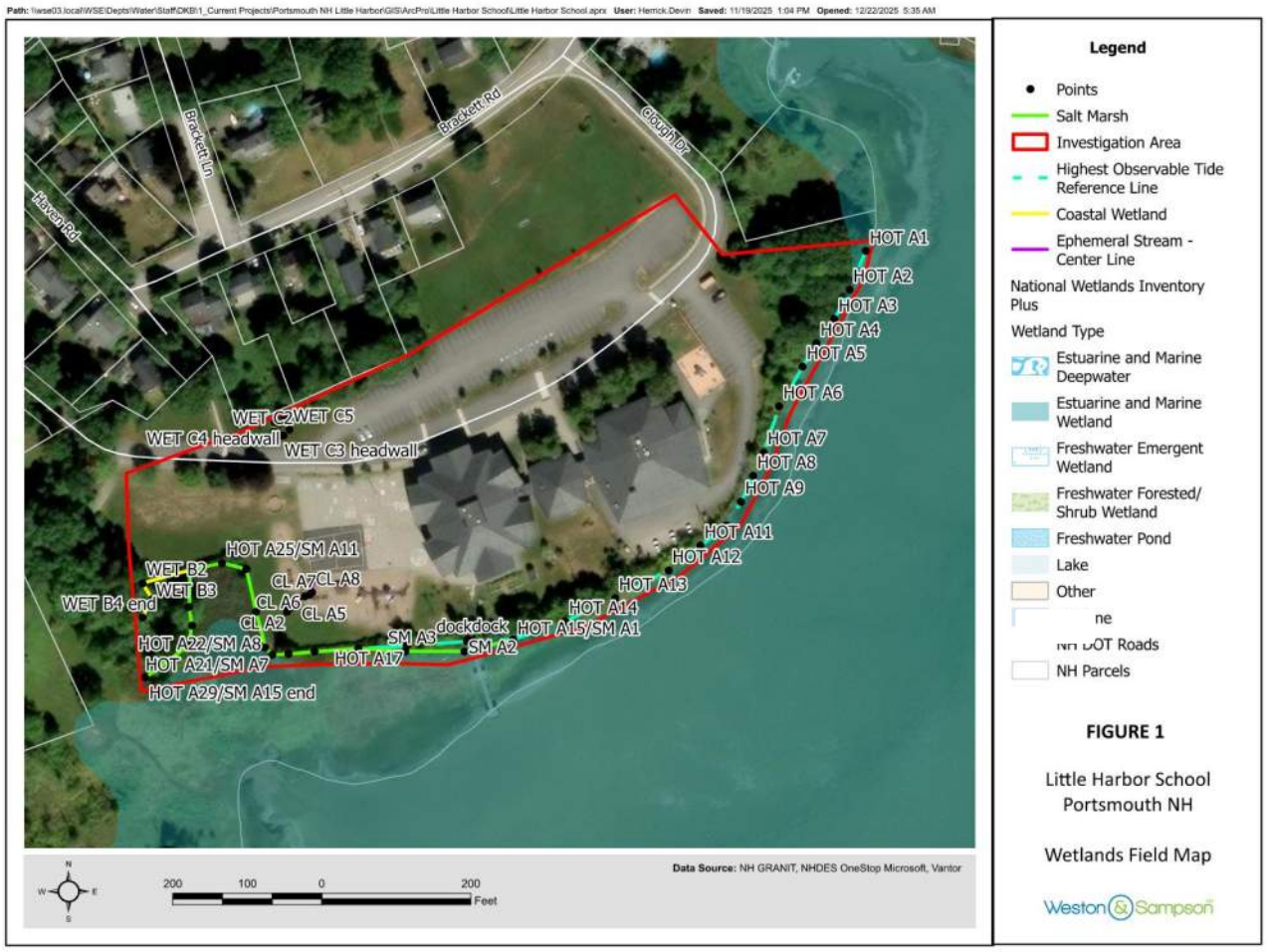

Figure 1: Wetlands Field Map

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2.0 PROPOSED SCOPE OF WORK

The proposed scope will include the removal of existing playground equipment and installation of new play structures with associated landscape features in each of the two playgrounds on site.

2.1 PEEP Playground

The proposed PEEP playground improvements will include a variety of play elements designed for young children and group interaction. Planned equipment includes a play structure for 2-5 aged children, a group seesaw, acorn-shaped seating, and a wooden play bridge that will be level with the bonded rubber surfacing to ensure accessibility. A large sand play area is also proposed to encourage sensory and creative play.

In addition to the play equipment, several landscape and site enhancements are proposed in the PEEP playground to support both functionality and aesthetics. These include new plantings with boulder accents, picnic tables, and new fencing surrounding the play area. Concrete paving within the limits of the play area will serve multiple purposes, including a bag drop, walking paths, and an accessible area for replenishing sand; this space will also accommodate loose play items such as a play kitchen. New asphalt walking paths are proposed in generally the same configuration as existing conditions, with selective reductions in paved area to minimize impervious surfaces within the project limits. The landscape plan also includes the installation of seven new trees and approximately twenty new shrubs and herbaceous native species.

2.2 Little Harbor Playground

The proposed playground equipment improvements include the installation of two new swing sets and a large play structure with a climbing element. The equipment is currently planned to be installed over an engineered wood fiber base; however, the City is exploring the availability of funding to instead utilize a permeable poured-in-place or bonded rubber safety surfacing. This alternative would not alter the proposed limits of work. In addition, the existing gaga pit will be relocated to a new location, removing the majority of the structure from the 100-foot wetland buffer where it is currently situated. The relocated gaga pit will be constructed on a concrete foundation and filled with engineered wood fiber.

Proposed landscape and site improvements focus on environmental stewardship, safety, and improved site functionality. Stormwater collection will be formalized through the creation of a rain garden designed to allow student interaction with overland flow while maintaining sheet flow into the adjacent grassy area. The existing asphalt play area, including the basketball court, will be relocated farther from the wetland, resulting in a significant overall reduction in asphalt play surface. A concrete curb/mow strip will be installed around areas of engineered wood fiber to help contain the material. All existing trees on site will be retained, and additional site amenities will include a new timber guard rail and a bike rack.

New plantings will further enhance the landscape and ecological function of the site. The project includes the installation of eleven new trees, with species selected in accordance with the City of Portsmouth Street Tree Manual. A total of 46 new shrubs and herbaceous native plant species will be added throughout the site. The small mounds created for playground privacy and protection will receive Northeast Annual & Perennial Wildflower Mix. The rain garden located within the existing ephemeral stream will also receive additional plantings, including 34 herbaceous species, to support stormwater management and native habitat enhancement.

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2.3 Construction Sequence

The following is the intended construction sequence of the project, subject to change based on contractor means and methods.

The proposed playground improvements are anticipated to be constructed over a 16-week period starting in the Spring of 2026, subject to permitting, weather, and material availability. Construction will begin with pre-construction activities, including final permit approvals, contractor mobilization, utility locating, and installation of erosion control measures, temporary fencing and signage to secure the work area. Surveying and layout will be completed to establish the locations of new play equipment, pathways, and landscape improvements.

Following mobilization, selective demolition and site clearing will occur. Existing playground equipment and portions of concrete and asphalt paving within the project limits will be removed as necessary. This work will be performed using a mini excavator, skid steer loader, concrete saws, and dump trucks to haul debris off-site or to designated recycling areas.

Once demolition is complete, earthwork and grading activities will commence. The site will be rough and fine graded to accommodate the new play areas, accessible routes, and revised path alignments. Excavation will be completed for poured-in-place surfacing, wood ship/sand containment, and equipment footings, followed by placement and compaction of aggregate base materials using compactors and small rollers to ensure stable subgrades.

Concrete footings and underground preparations will then be installed for the playground structures. Ready-mix concrete will be placed using concrete trucks and hand-finishing tools, with careful attention to accessibility requirements and level transitions between play elements and surfacing.

Concrete forms will be set, poured, finished, and cured to meet accessibility and durability standards. After concrete work is complete, new asphalt walking paths will be installed in generally the same configuration as existing conditions, with selective reductions in paved areas to minimize impervious surfaces. Asphalt placement will be performed using a small paver and roller.

Installation of playground equipment and surfacing will follow. The play structures will be installed, with equipment placed using small lifting equipment as needed. Play areas will be constructed, and poured-in-place surfacing will be installed throughout the play areas as described above, including flush transitions to ensure accessibility.

Following equipment installation, site furnishings and enclosures will be added. New perimeter fencing will be installed around the PEEP playground, other site accents will be placed, using small loaders and hand tools. Landscaping will then be completed, including the installation new trees, shrubs and native herbaceous species, along with soil preparation, mulching, and initial watering.

The project will conclude with final grading, site cleanup, and inspections. Once the site is stabilized. temporary erosion and sedimentation controls will be removed.

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3.0 ENVIRONMENTAL CONSIDERATIONS – STANDARD DREDGE AND FILL WETLANDS PERMIT

As part of the proposed project there will be unavoidable impacts areas which fall under the jurisdiction of the NHDES Wetlands Bureau.

3.1 Ephemeral Stream

As described in the wetland delineation report (Appendix H), there is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Proposed impacts to the ephemeral stream will be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. This will result in 216 square feet (SF) and 44 linear feet (LF) of permanent impacts along the centerline of the ephemeral stream.

3.2 Duly Established 100-Foot Prime Wetland Buffer

Under RSA 482-A, prime wetlands are wetlands of substantial significance because of their size, unspoiled character, fragile condition or other relevant factors. Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. A prime wetland designated by the City of Portsmouth as wetland number 061B is located concurrently with the salt marsh delineated on site (see Image 1 below). The Prime Wetlands Designation Document for the City of Portsmouth was authored on January 25, 2011 and the Prime Wetland Map (see Image 1 below) was adopted by NHDES on December 20. 2011.

The proposed impacts to the Little Harbor School Playground will overlap with the Duly Established 100-Foot Prime Wetland Buffer associated with Prime Wetland Number 061B. Existing conditions in this area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer. These impact areas are located within the same footprint as the Previously Developed Tidal Buffer Zone (TBZ).

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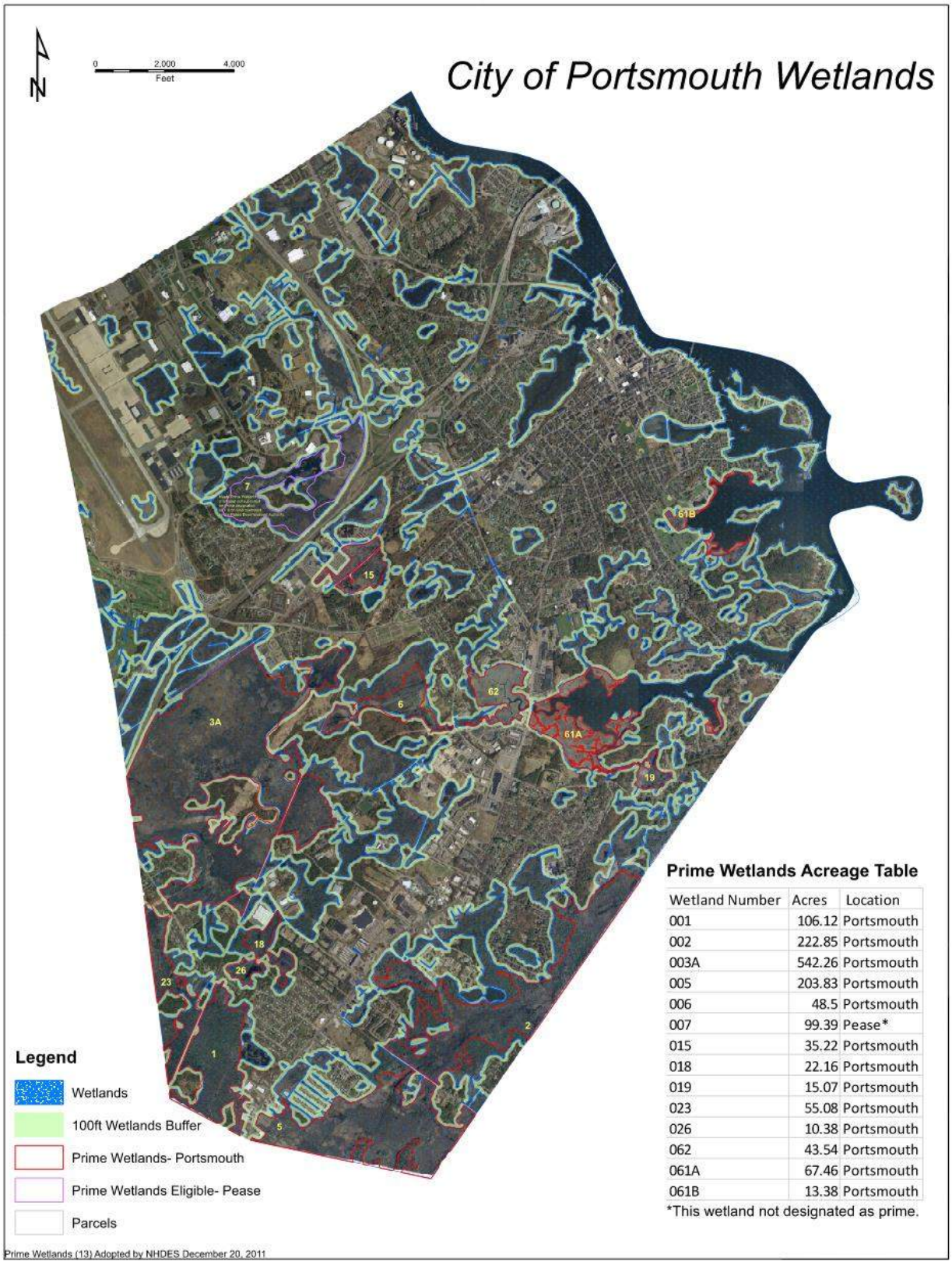

Prime Wetlands Acreage Table

Wetland Number	Acres	Location
001	106.12	Portsmouth
002	222.85	Portsmouth
003A	542.26	Portsmouth
005	203.83	Portsmouth
006	48.5	Portsmouth
007	99.39	Pease*
015	35.22	Portsmouth
018	22.16	Portsmouth
019	15.07	Portsmouth
023	55.08	Portsmouth
026	10.38	Portsmouth
062	43.54	Portsmouth
061A	67.46	Portsmouth
061B	13.38	Portsmouth

*This wetland not designated as prime.

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Image 1: Portsmouth Prime Wetlands Map

3.3 Previously Developed Tidal Buffer Zone (TBZ)

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12.

Existing conditions in this Previously Developed TBZ area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh/highest observable tide line than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Previously Developed TBZ. These impact areas are located within the same footprint as the Duly Established 100-Foot Prime Wetland Buffer.

3.4 Total Impacts

The total amount of proposed impacts to jurisdictional area is 27,032 SF and 44 LF. Impacts are summarized in Table 1 below.

Table 1: Jurisdictional Impact Summary

Jurisdictional Area	Purpose	Permanent Impact	Temporary Impact
Ephemeral Stream	Rain garden	0 SF/0 LF	216 SF/44 LF
Duly-established 100-foot prime wetland buffer	Playground renovation	16,927 SF	9,889 SF
Previously-developed TBZ	Playground renovation	16,927 SF	9,889 SF
Total		**16,927 SF**	**10,105 SF/44 LF**

3.5 Project Classification

The proposed project is being submitted as a Major Impact Project based on the following criteria:

3.5.1 Previously Developed Tidal Buffer Zone

This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Previously Developed TBZ.

Per Env-Wt 610.17 (b) Project Classifications since the amount of impact area exceeds 10.000 SF the proposed project requires the submission as a Major Impact project.

3.5.2 100-Foot Prime Wetland Buffer Waiver

This proposed project proposes 16,927 square feet (SF) or permanent impact and 9,889 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer.

Per Env-Wt 407.02 (a) "*a project that impacts a PRA and that does not qualify for a project-type exception (PTE) under Env-Wt 407.04 shall be classified as a major project regardless of the size of the impact*."

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3.6 Methods, Timing, and Manner

An explanation as to methods, timing, and manner as to how the project will meet standard permit conditions specified in Env-Wt 307 is provided below.

Env-Wt 307.02 Requirements for Coverage Under State General Permits.
The proposed project does not include work that is in areas under the jurisdiction of the U.S. Army Corps of Engineers (US ACE).

Env-Wt 307.03 Protection of Water Quality Required.
Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

Env-Wt 307.04 Protection of Fisheries and Breeding Areas Required.
No work shall produce suspended sediment in jurisdictional areas that provide value as bird migratory areas or fish and shellfish spawning or nursery areas.

Env-Wt 307.05 Protection Against Invasive Species Required.
Any heavy machinery on site shall be inspected for and cleaned of all vegetative matter by a method and in a location that prevents the spread of the vegetative matter to jurisdictional areas. To prevent the use of soil or seed stock containing nuisance or invasive species, the contractor responsible for work shall follow the Invasive Plant BMPs.

Env-Wt 307.06 Protection of Rare, Threatened or Endangered Species and Critical Habitat.
Consultation is occurring to ensure no impacts to the species identified as part of the Natural Heritage Bureau (NHB) Data Check.

Env-Wt 307.07 Consistency Required with Shoreland Water Quality Protection Act.
This project is subject to the *Shoreland Water Quality Protection Act* and the proposed project will be submitted concurrently.

Env-Wt 307.08 Protection of Designated Prime Wetlands and Duly-Established 100-Foot Buffers.
(a) Water quality and environmental minimization measures shall be in place to ensure that functions and values of prime wetlands and duly-established 100-foot buffers are protected.
Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

(b) Duly-established 100-foot buffers shall not be disturbed unless specifically authorized under RSA 482-A.
The proposed project is seeking authorization for the proposed alteration.

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Env-Wt 307.10 Dredging Activity Conditions.
The proposed project does not include any dredging.

Env-Wt 307.11 Filling Activity Conditions.
Any fill used on site shall be clean sand, gravel, rock, or other material that meets the project's specifications for its use; and does not contain any material that could contaminate surface or groundwater or otherwise adversely affect the ecosystem in which it is used.

Env-Wt 307.12 Restoring Temporary Impacts; Site Stabilization.
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. 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.

Env-Wt 307.13 Property Line Setbacks.
Dredging, filling, or construction activity within a jurisdictional area, that is covered by an LSA or for which a standard permit is required shall occur at least 10 feet from an abutting property line.

Env-Wt 307.14 Rock Removal.
No rock removal is proposed.

Env-Wt 307.15 Use of Heavy Equipment in Wetlands.
Heavy equipment shall not be operated in any jurisdictional area unless specifically authorized in the permit for the project.

Env-Wt 307.16 Adherence to Approved Plans Required.
For any project for which plans were submitted and an SPN, PBN, LSA, EXP, or standard permit was issued, all work on the project shall be done in accordance with the approved plans.

Env-Wt 307.17 Unpermitted Activities.
No work will be done without a permit in violation of RSA 482-A:3:

Env-Wt 307.18 Reports.
Monitoring will occur at the end of each growing season for two years following completion of the proposed project.

3.7 Mitigation

Per discussion with NHDES, mitigation is not required for impacts to the previously developed TBZ. The existing conditions include the presence of two playgrounds and proposed conditions will remain part of the play area for the Little Harbor School. The proposed project will seek to improve conditions by pulling impervious area further away from the wetlands than existing conditions and installing a rain garden to provide some stormwater treatment.

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3.8 Project Specific Criteria

Env-Wt 610.04 Plans and Other Information Required.
The following plans and other information shall be submitted with applications for work within the protected tidal zone:

(a) Existing and proposed contours at 2-foot intervals measured from the HOTL;
See project plans in Appendix L.

(b) If any portion of the subject parcel is located in a regulatory floodplain, the location of the 100-year flood boundary the zone, and water elevation as shown on the applicable FEMA Flood Insurance Rate Map;
See project plans in Appendix L

(c) All other applicable local and state setbacks;
See project plans in Appendix L

(d) The dimensions and locations of all:
- *(1) Existing and proposed structures;*
- *(2) Existing and proposed impervious areas;*
- *(3) Existing and proposed disturbed areas;*
- *(4) Areas to remain in an unaltered state;*
- *(5) Existing cleared areas, such as gardens, lawns, and paths; and*
- *(6) Proposed temporary impacts associated with completion of the project;*

See project plans in Appendix L

(e) Proposed methods of erosion and siltation controls, identified graphically and labeled on a plan, or otherwise annotated as needed for clarity;
See project plans in Appendix L

(f) A plan of any planting(s) proposed in the waterfront buffer, showing the proposed location(s) and Latin names and common names of proposed species;
See project plans in Appendix L

(g) If applicable, the location of an existing or proposed 6-foot-wide foot path to the waterbody or a temporary access path;
Not applicable.

(h) For any project proposing that the impervious area be at least 15% but not more than 20% within the protected tidal zone, a statement signed by the applicant certifying that the impervious area is not more than 20%;
Impervious area within the protected tidal zone is less than 15% of the lot. There is 150,595 SF of TBZ present on the subject parcel. Under existing conditions there are 22,252 SF (14.8%) of impervious area present within the TBZ. Under proposed conditions there are 20,918 SF (13.9%) of impervious area present within the TBZ. This represents a 1,334 SF decrease in impervious area.

(i) For any project proposing that the impervious area be greater than 20% within the protected tidal

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zone, plans for a stormwater management system that will infiltrate increased stormwater from development, provided that if impervious area is or is proposed to be greater than 30% the stormwater management systems shall be designed by a professional engineer;
Impervious area within the protected tidal zone is less than 20% on the lot.

(j) For any project involving pervious surfaces, a plan with specifications of how those surfaces will be maintained; and
See attached maintenance plan for impervious areas, Appendix J.

(k) All other relevant features necessary to clearly define both existing conditions and the proposed project.
See project plans in Appendix L.

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APPENDIX A

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NHDES-W-06-013

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: **City of Portsmouth** **TOWN NAME:** Portsmouth

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 project will not have any direct wetland impacts, only impacts to the previously developed tidal buffer zone. The project has specifically avoided direct impacts to wetlands by keeping the limit of work contained to within the existing playground footprints. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the TBZ for playground renovations. The proposed project seeks to reduce impacts to the TBZ by pulling the impervious area further away from the wetlands than existing conditions.

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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.

This proposed project will not have any impact to tidal or non-tidal marshes. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the TBZ for playground renovations. The proposed project seeks to reduce impacts to the TBZ by pulling the impervious area further away from the wetlands than existing conditions.

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

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

There is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Proposed impacts to the ephemeral stream will be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling.

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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.

This proposed project will not have any impact to tidal or non-tidal marshes. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the TBZ for playground renovations. The proposed project seeks to reduce impacts to the TBZ by pulling the impervious area further away from the wetlands than existing conditions.

Consultation is occurring to ensure no impacts to the species identified as part of the Natural Heritage Bureau (NHB) Data Check.

Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site 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 improve recreational opportunities at the school. The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The school propoerty does include a dock with water access however it is behind a locked gate and not publicly accessible. The proposed project will not have any impact on public commerce or navigation.

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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 inlcude any impacts to floodplain wetlands, the limit of work is located outside of the floodplain and will not cause any increase in water directed towards the floodplain.

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 will be no proposed impact to natural riverine forested wetland systems and scrub-shrub marsh complexes of high ecological integrity as part of this project.

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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 does not inlcude any impacts to wetlands which impact drinking water supply or groundwater aquifer levels.

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.

There is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Proposed impacts to the ephemeral stream will be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling.

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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 only surface water present within the limit of work is an ephemeral stream which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Proposed impacts to the ephemeral stream will be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling.

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 include any docking structures.

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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 will have no impact on any abutters or the use of their property.

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 will improve recreational opportunities at the school. The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The school propoerty does include a dock with water access however it is behind a locked gate and not publicly accessible. The proposed project will not have any impact on public commerce or navigation.

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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.

No new shoreline structures are proposed as part of this project.

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.

No new shoreline structures are proposed as part of this project.

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PART II: FUNCTIONAL ASSESSMENT

REQUIREMENTS

Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).

FUNCTIONAL ASSESSMENT METHOD USED:
US ACE Highway Methodology

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: DEVIN HERRICK

DATE OF ASSESSMENT: 12/28/2025

Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT:
☒

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:
☒

Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.

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APPENDIX B

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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?	0 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	

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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: • 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.
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APPENDIX C

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Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

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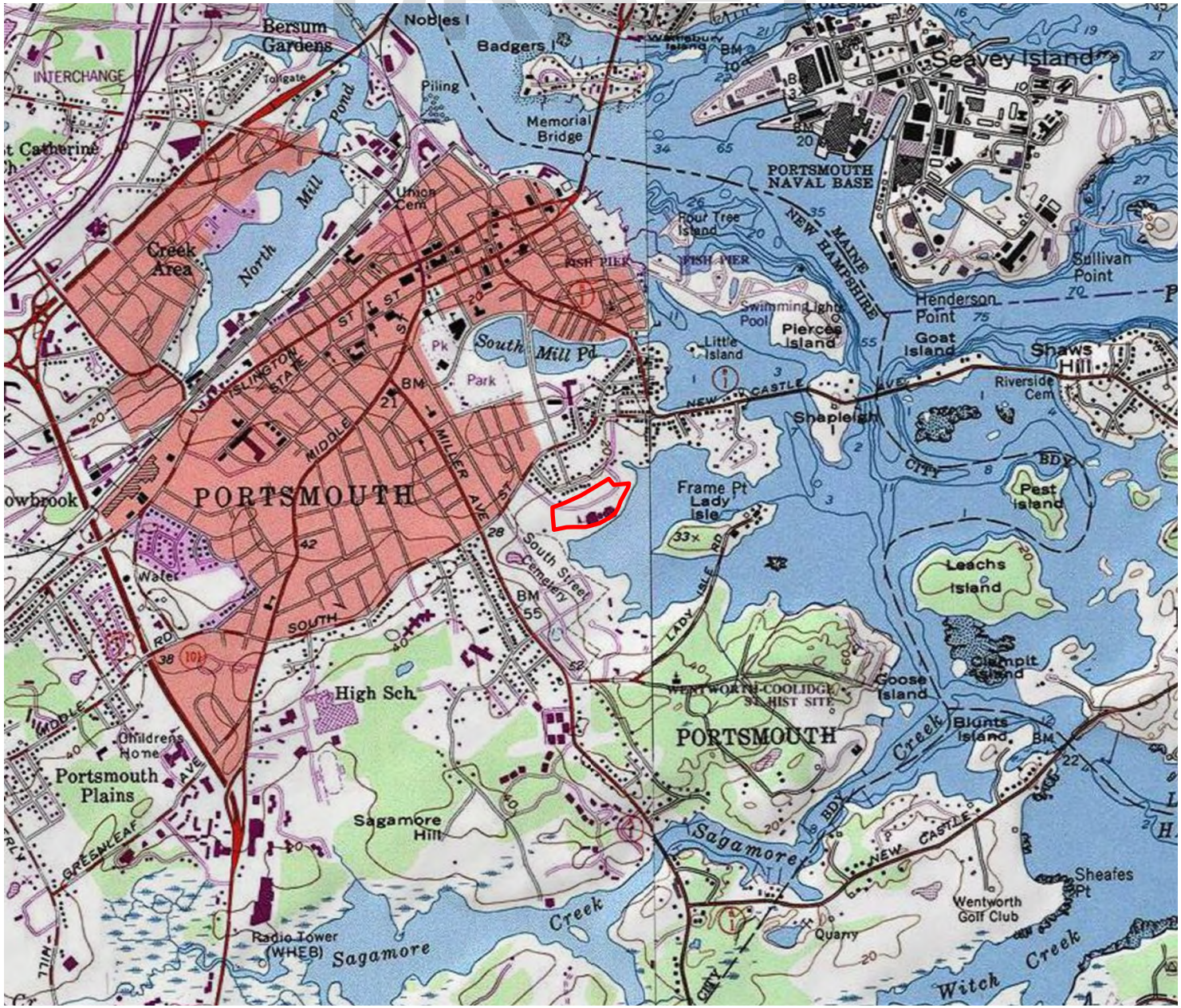

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

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Legend

- Investigation Area

National Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area

NH Wildlife Action Plan 2020 - Habitat Land Cover

- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

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Map by NH DES OneStop Data Mapper_PRA

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ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

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Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

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Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

ArcGIS World Geocoding Service
City/Town
Parcels

Prime Wetlands
Prime Wetlands with 100ft Buffer

NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N
W E
S

200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

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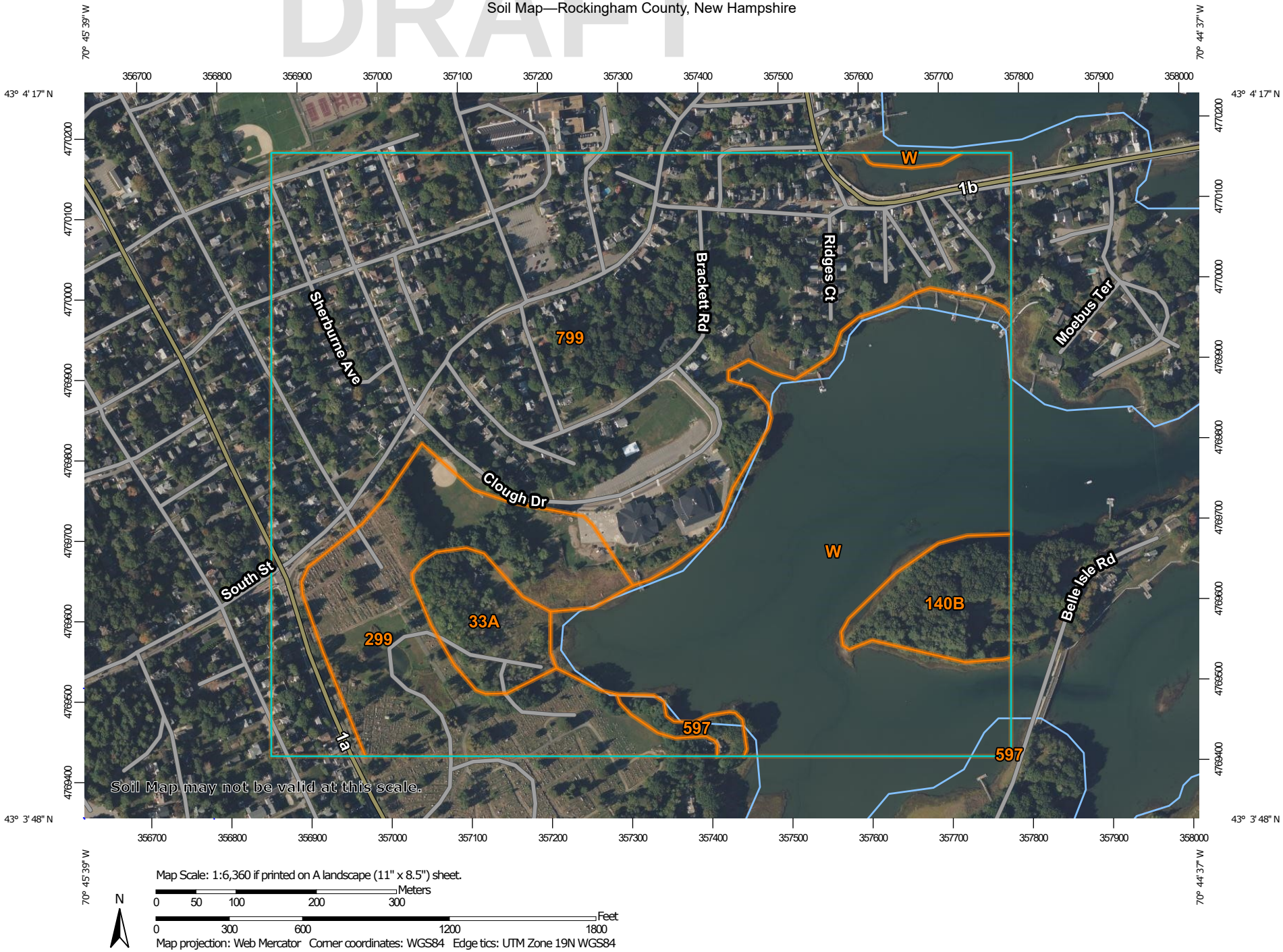
Soil Map—Rockingham County, New Hampshire



Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 50 100 200 300

Feet: 0 300 600 1200 1800

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

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MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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

DRAFT

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

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APPENDIX D

DRAFT

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

To: Devin Herrick, Weston & Sampson Engineering
55 Walkers Brook Drive
Reading, MA 01857
herrick.devin@wseinc.com

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc: NHFG Review, David Simmons

Date: 12/04/2025 (valid until 12/04/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: NHDES - Shoreland Standard Permit, NHDES - Wetlands Standard Dredge & Fill

DCT ID: DCT25-3222

Town: Portsmouth
Location: 50 CLOUGH DR

Project Description: The propose project includes the replacement of two playgrounds on the property of the Little Harbor School. All work will occur in uplands. To be completed by the end of 2026.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information it was determined that there are potential impacts. Please carefully read the comments below and consultation instructions on the following pages.

Plant and Exemplary Natural Community Comments: If all work is within existing disturbed areas of the playground footprints, then no ecological review for plants is needed. If work is proposed outside of the existing playground footprints, then please provide proposed plans and representative photos during the growing season of the proposed impact areas (or at the very least without snow cover).

Wildlife and Critical Habitat Comments: An ecological review is needed to further assess potential impacts to protected wildlife and critical habitat. Please refer to the Wildlife Ecological Review Instructions below for guidance on how to submit an ecological review request and information about when an ecological review is required vs recommended.

DRAFT

Plant and Exemplary Natural Community Ecological Review Instructions

Unless otherwise noted, an ecological review is required if plant and/or ENC records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules of a state agency

If a project is not legally required to obtain an ecological review but this letter contains plant and/or ENC records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 217-A.

To request an ecological review for plants and/or ENCs:

1. Email (preferred), mail, or hand-deliver any materials requested in the "Plant and Exemplary Natural Community Comments" section above to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with the plant/ENC ecological review process call 603-271-6261.

DRAFT

Wildlife and Critical Habitat Ecological Review Instructions

Requesting an Ecological Review by NHDES

An ecological review for wildlife will be completed by the NHDES Ecological Review Section if a NHDES permit, authorization, or approval is needed. *If you do not need any NHDES permits, authorizations, or approvals then please see the section regarding NHFG reviews conducted by the NH Fish and Game Department (NHFG) below.*

Unless otherwise noted, an ecological review by NHDES is required if wildlife/critical habitat records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules regarding the permit, approval, or written authorization pursuant to RSA 482-A, RSA 485-A, and RSA 236.

If a project requiring a NHDES permit, authorization, or approval is not legally required to obtain an ecological review, but this letter contains wildlife or critical habitat records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 212-A.

To request an ecological review for wildlife with DES:

1. Email (preferred), mail, or hand-deliver project information following the guidance of Fis1004.03(c) to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include “Ecological Review Request” in the subject line of the request.

For help with wildlife ecological review process call 603-271-0467 or visit the wildlife environmental review page for guideline materials including a suggested checklist of materials to provide for ecological review.

DRAFT

Wildlife and Critical Habitat Review Instructions (continued)

Requesting a Wildlife Review by NHFG

Wildlife reviews to assess potential impacts to protected wildlife and critical habitat for any need outside of NHDES permits, authorizations, and approvals are completed by the New Hampshire Fish and Game Department, Nongame & Endangered Wildlife Program.

To request a wildlife review with NHFG:

1. Email (preferred), mail, or hand-deliver available project information to:

   New Hampshire Fish and Game Department
   Attn. Wildlife Division, Nongame Program
   11 Hazen Drive
   Concord, New Hampshire 03301
   nhfgreview@wildlife.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Wildlife Review" in the subject line of the request.

For help with the NHFG wildlife review process call 603-271-2461.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (iPaC) website for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or 603-223-2541).

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Ecological Review Database records:
The following record(s) may be impacted by the proposed project. Please refer to this list when coordinating.

Plant species	State[1]	Federal	Notes
marsh elder (*Iva frutescens*)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
northern blazing star (*Liatris novae-angliae var. novae-angliae*)*	E	--	Threats to this highly imperilled species are development activities that eliminate its habitat and invasion of its open, grassy habitat by trees and shrubs.

Vertebrate species	State[1]	Federal	Notes
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see above).
Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).

[1]Codes: "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 25 or more years ago.

Disclaimer:
DataCheck Tool screening only includes documented and verified occurrences of protected species and exemplary natural communities. The list of protected species and habitat on this letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, surveys are the best way to determine what resources are present on site.

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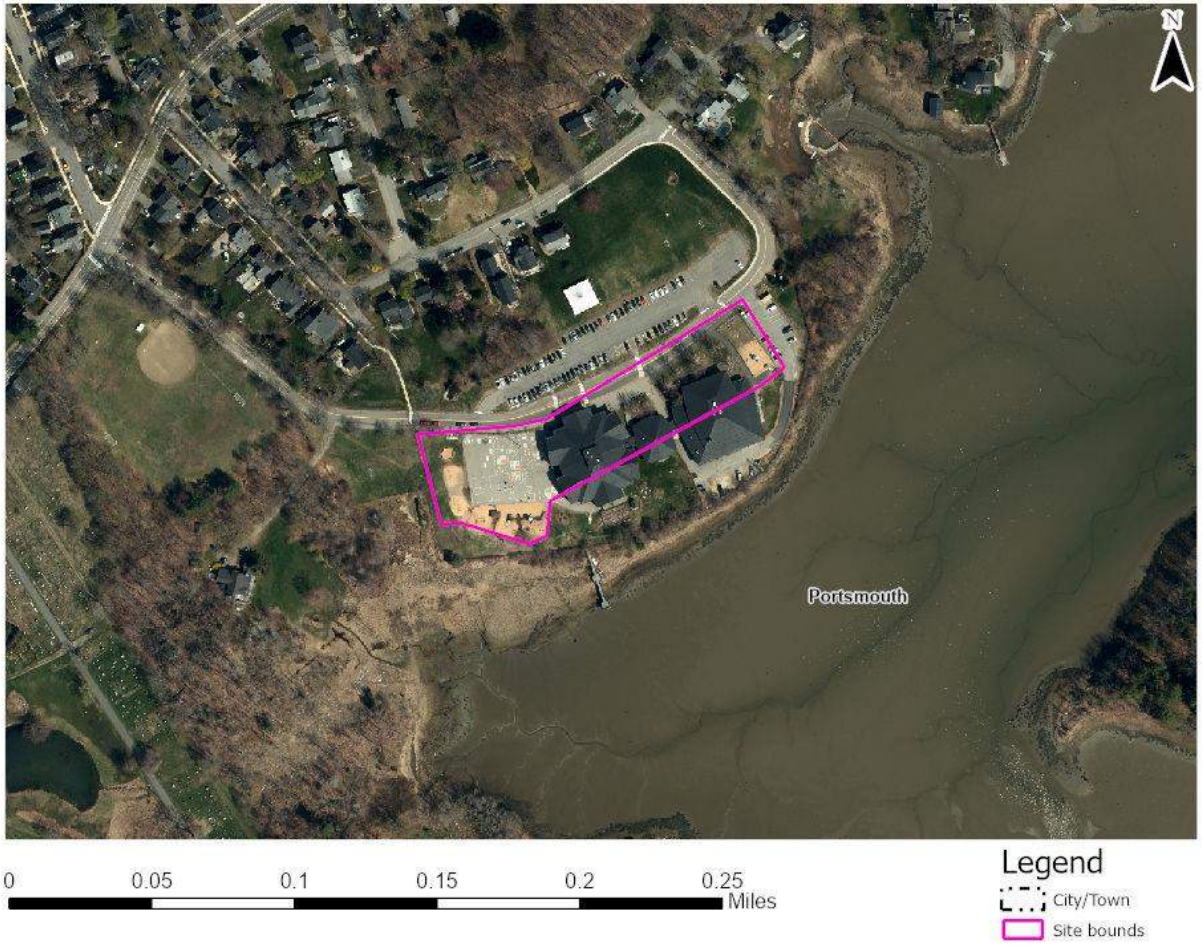
DCT25-3222



www.des.nh.gov
29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

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APPENDIX E

DRAFT

EMMIT+

Submission Record

Submission ID: 2463
Type: Initial

NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

The purpose of this project is to upgrade the Portsmouth Little Harbor Elementary School playgrounds to be universally accessible (UA) and nature base playgrounds. The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

Submission Information

Date Created
12/29/2025 11:03:11 AM

Date Submitted
12/29/2025 11:32:42 AM

Date Processed
Not Yet Processed

Project Information

Project Type
Review & Compliance

Project Name
Little Harbor School Playground Renovation

Project Description
The purpose of this project is to upgrade the Portsmouth Little Harbor Elementary School playgrounds to be universally accessible (UA) and nature base playgrounds. The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

Review and Compliance

Type
Federal Section 106 Review

Present Land Use
School

Past Land Use and Disturbances
Existing conditions include a school property with associated buildings, playgrounds, and

parking. According to tax card the school building was constructed in 1969. Playgrounds were constructed in 1990 and 2003 (less than 45 years old).

Project Includes Construction
Yes

Project Includes Demolition
Yes

Project Includes Disposition
No

Project Includes Refinancing
No

Project Includes Rehabilitation
Yes

Ground Disturbance
Yes

One or More Above Ground Resources 45 Years or Older
No

Project Address
50 Clough Drive, Portsmouth NH

Location Description
Little Harbor School

APE Description
Proposed site changes will be to the two playgrounds located on the school property, the PEEP playground northeast of the school and the Little Harbor Playground west of the school. The proposed limit of work will occur within the bounds of the existing playgrounds.

APE Justification
Neither playground is historic and is less than 45 years old.

APE Acreage
1.81

Agencies

Army Corps of Engineers (ACOE) - Primary: Yes, Program-Permit: None/None

Project Contacts

Devin Herrick - herrick.devin@wseinc.com

Towns

Portsmouth (Rockingham County)

Existing Resources within APE

DRAFT

None Available

Documents

1) NHDES Wetlands Plan Set - NHDES Wetlands Plan Set
2) Site Photos - Site Photos

Photos (0)

No Photos Available

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APPENDIX F

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Parcel 0206-0020
Abutters List – Wetlands

Abutters List

Env-Wt 102.03 "Abutter" means any person who holds title to abutting property or who owns flowage rights on abutting property.

Env-Wt 102.04 "Abutting property" means any property immediately contiguous to the property on which a project has occurred or is proposed, provided that:

(a) The term does not include any property that is separated by a public road from the property on which a project has occurred or is proposed, or that is more than ¼-mile from the limits of the work or proposed work;

(b) For any project located on the shoreline of a surface water body, the term includes any property within 100 feet of the shoreline impact in any direction;

(c) For any project that will impact a watercourse, the term includes any property within 100 feet
upstream or downstream of the impact area; and

(d) If an abutting property is owned in whole or in part by the person who undertook the work or is proposing to undertake the work, or is necessary to meet a frontage requirement, the term includes the next contiguous property, subject to the ¼-mile limitation.

Subject Property:
Map-Lot 0206-0020
Location 50 Clough Dr
Owner City of Portsmouth
Owner Address PO Box 628, Portsmouth, NH 03802

Abutters:

Property ID	Site Address	Owner Name	Owner Name 2	Owner Address	City	State	Zip
0206-0021-0000	68 BRACKETT RD	LACROCE EUGENE JR	LACROCE KIMBERLY	68 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0022-0000	64 BRACKETT RD	EDWARDS MICHAEL J & LEANNE A		64 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0023-0000	56 BRACKETT RD	SAYERS PATRICK J		56 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0024-0000	40 BRACKETT RD	MONTVILLE LAURA F LIVING TRUST	MONTVILLE LAURA F TRUSTEE	40 BRACKETT RD	PORTSMOUTH	NH	03801

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0206-0025-0000	26 BRACKETT RD	BACON FAMILY REVOCABLE TRUST	BACON ROBERT A & CAROLEE M TRUSTEES	26 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0026-0000	16 BRACKETT RD	ANDERSON NANCY B	ANDERSON JOHN W	16 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0027-0000	86 HAVEN RD	PARKER KERRIN J REVO TRUST OF 2012	PARKER KERRIN J TRUSTEE	86 HAVEN RD	PORTSMOUTH	NH	03801
0206-0028-0000	84 HAVEN RD	LAMOND FAMILY REV TRUST	LAMOND JAMES & CATHERINE TT	84 HAVEN RD	PORTSMOUTH	NH	03801
0206-0034-0000	100 CLOUGH DR	BANJO FAMILY REVOCABLE TRUST	RITZO CAROL B TRUSTEE	100 CLOUGH DR	PORTSMOUTH	NH	03801
0206-0033-0000	CLOUGH DR	CITY OF PORTSMOUTH	REC	PO BOX 628	PORTSMOUTH	NH	03802
0206-0018-0000		SUPRESSED PARCEL Per Assessor					
0206-0019-0000		SUPRESSED PARCEL Per Assessor					

DRAFT

Subject Parcel

/LWWOH +DUERU

3DUWLDO /HJHQG

6HH WKH FRYHU VKHHW IRU WKH FRPS

$ /RW RU ORW XQLW QXPEHU

DF3DUFHO DUHD LQ DFUHV DF RU

$GGUHVV QXPEHU

3DUFHO QXPEHU IURP D QHLJKE

3DUFHO OLQH GLPHQVLRQ

6WUHHW QDPH

3DUFHO 3DUFHO ERXQGDU\

3DUFHO 52: ERXQGDU\

:DWHU ERXQGDU\

6WUXFWXUH GDWD

3DUFHO FRYHUHG E\ WKLV PDS

3DUFHO IURP D QHLJKERULQJ P
VHH RWKHU PDS IRU FXUUHQW

)HHW

0HWHUV

7KLV PDS LV IRU DVVHVVPHQW S
LV QRW LQWHQGHG IRU OHJDO GH
3DUFHOV DUH PDSSHG DV RI $SU
%XLOGLQJ IRRWSULQWV DUH
UHSUHVHQW FXUUHQW VWUXFWXU
6WUHHWV DSSHDULQJ RQ WKLV P
XQEXLOW VWUHHWV
/RW QXPEHUV WDNH SUHFHGHQF
QXPEHUV $GGUHVV QXPEHUV VK
PD\ QRW UHSUHVHQW SRVWHG RU

1HDUE\ 7D[0DSV

0DS /RFDWLRQ

3RUWVPRXWK 1HZ +

7D[0DS

DRAFT

ABUTTER NOTIFICATION
OF
NHDES WETLANDS PERMIT APPLICATION

Via Certified Mail

DATE

RE: NHDES Wetlands Permit Application
Little Harbor School Playground Renovation
50 Clough Drive, Portsmouth NH
Tax Map: 206 Lot 020

Dear Abutter:

This letter is to inform you that a Wetlands Permit Application will be filed with the NH Department of Environmental Services (DES) Wetland Bureau for a Wetlands Permit associated with the above referenced project for the renovation of two playgrounds at the Little Harbor School. Under state law RSA 482-A:3 I (d)(1), I am required to notify you via certified mail about the application, which proposes work abutting your property at the following address:

50 Clough Drive, Portsmouth NH 03801 (Lot 206-020)

Once it is filed, the permit application, including plans that show the proposed project will be available for viewing at the Town Clerk's Office in Newport or at the NHDES offices by scheduling a file review by calling (603) 271-2919.

If you have questions, you may contact Devin Herrick with Weston & Sampson Engineers at the contact information provided below.

Sincerely,

Devin Herrick, CWS
Technical Specialist
Weston & Sampson
55 Walkers Brook Drive, Suite 100
Reading, MA 01867 (HQ)
tel: 978-532-1900 ext. 2117

cc: NHDES Wetlands Bureau

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APPENDIX G

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Photo 1: Little Harbor School Playground

Photo 2: PEEP Playground

DRAFT

Photo 3: Portsmouth Harbor/Piscataqua River

Photo 4: Highest Observable Tide Line

DRAFT

Photo 5: Salt Marsh

Photo 6: Non-Tidal Wetland

DRAFT

Photo 7: Ephemeral Stream

Photo Key

DRAFT

APPENDIX H

DRAFT

Weston & Sampson

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Wetland Delineation Report

September & November 2025

Little Harbor School
50 Clough Street
Portsmouth NH

Wetland Delineation Conducted By:
Devin Herrick, CWS

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Figure 2 ..... USGS Topographic Map
Figure 3 ..... FEMA FIRM Map
Figure 4 ..... Designated River Map
Figure 5.1 and 5.2 ..... Wildlife Action Plan Maps

APPENDICES

Appendix A ..... ACOE Wetland Determination Data Forms

Appendix B ..... Site Photographs

Appendix C ..... NHB Datacheck Forms

1.0 SITE DESCRIPTION

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

A Weston & Sampson NH Certified Wetland Scientist (CWS), trained in the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method), observed the following jurisdictional wetland resources at the site subject to (or potentially subject to) regulation under RSA 482-A Fill and Dredge in Wetlands:

- Tidal Surface Water
- Tidal Buffer Zone
- Tidal Wetland – Salt Marsh
- Non-Tidal Wetland
- Ephemeral Stream

Field data were recorded on US Army Corps of Engineers (ACOE) Wetland Determination Data Forms. See Appendix A for completed data forms and Appendix B for site photographs.

2.2 Wetland Delineation Methodology

A wetland delineation was conducted in accordance with New Hampshire Administrative Code Env-Wt 406 Delineation and Classification of Jurisdictional Areas utilizing the Federal Delineation Method. Per Env-Wt 103.02 "Federal Delineation Method" is defined as "the method in "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012".

The Federal Delineation Method identifies wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology. Pink flags with distinct flag numbers are left in the field to show wetland limits. Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations,

the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceeds 50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference and Env-Wt 301(c) as described above.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, and water stained leaves.

2.3 Tidal Surface Water

Per Env-Wt 602.58 Tidal surface water means “any surface water that is subject to the ebb and flow of the tide”. The Reference Line for coastal waters per RSA 483-B:4, XVII. Is “the highest observable tide line, which means a line defining the furthest landward limit of tidal flow, not including storm events, which can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks further flow of the tide.” Per Env-Wt 602.23 “Highest observable tide line (HOTL)” means “a line defining the farthest landward limit of tidal flow, not including storm events, that can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt-tolerant vegetation, or a physical barrier that blocks inland flow of the tide”

Based on the current mapping available from the United States Geological Survey (USGS) the tidal surface water identified within the investigation area is a part of Portsmouth Harbor/the Piscataqua River.

Wetland flags left in the field included:

- Highest Observable Tide (HOT)-A1 through HOT-A29 (HOT "A" Series)

These flags were placed based on a strand line of flotsam and debris, and/or the landward margin of salt-tolerant vegetation.

Tidal waters are considered to be "Surface Waters of the State" (RSA 485-A:2, XIV) and as such at the state level they are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A). Other local, state or federal regulations may apply to these areas.

Utilizing the New Hampshire hydrography dataset archived by the Geographically Referenced Analysis and Information Transfer System (GRANIT) the Piscataqua River identified within the investigation area is a seventh order stream. Since the Piscataqua River is a fourth order stream or higher is considered a "public water" per RSA 483-B:4, XVI and is subject to the Shoreland Water Quality Protection Act (RSA 483-B).

2.4 Developed Tidal Buffer Zone

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12 which indicates that developed upland "means an upland area on a lot within the tidal buffer zone or sand dune where:

(a) The natural soil and vegetation characteristics on more than 50% of the lot have been legally altered and have not returned to a natural state;
(b) If the lot is in a tidal buffer zone, developed lots abut at least 2 sides of the lot;
(c) If the lot is in a dune slack area, the lot is surrounded on 4 sides by developed lots or roadways;
(d) If the lot is in a dune, the back side of a fore dune is within the line of encroachment and the lot is

surrounded on 3 sides by developed lots or roadways; and

(e) At least one of the following is true:

(1) The lot has legally been filled or excavated in whole or in part, whether prior to jurisdiction or pursuant to a permit or other authorization;

(2) The lot contains at least one paved or graded area that is, has been, or will be used for vehicular

parking or traffic; or

(3) One or more residential or commercial buildings has been built on the lot.

The Little Harbor School property contains natural soil and vegetation characteristics on more than 50% of the lot that have been legally altered and have not returned to a natural state. Additionally, the lot is in a tidal buffer zone and developed lots abut at least 2 sides of the lot. As such, the investigation area is considered previously developed tidal buffer zone.

At the state level in NH, the tidal buffer zone is regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.5 Tidal Wetland – Salt Marsh

According to the "Life In New Hampshire Salt Marshes A Quick-Reference Field Guide" prepared by the New Hampshire Department of Environmental Services (NHDES) Coastal Program:

Salt marshes are important transitional habitat between the ocean and the land; they are estuaries where fresh and salt water mix. Salt marsh plants (halophytes) are salt tolerant and adapted to water levels that fluctuate with the tide. Tides carry in nutrients that stimulate plant growth in the marsh and carry out organic material that feeds fish and other coastal organisms. Over time, salt marshes accumulate organic material, forming into a dense layer called peat.

Low Marsh: The low marsh is located along the seaward edge of the salt marsh. It is usually flooded at every tide and exposed during low tide. It tends to occur as a narrow band along creeks and ditches, whereas the high marsh is more expansive and is flooded less frequently. The predominant plant species

found in the low marsh is the tall form of Spartina alterniflora (smooth cordgrass). This species can reach a height of six feet and is very tolerant of daily flooding and exposure.

High Marsh: The high marsh lies between the low marsh and the marsh's upland border. It can be very expansive in some areas, sometimes extending hundreds of yards inland from the low marsh area. Soils in the high marsh are mostly saturated, and the high marsh is generally flooded only during higher than average high tides. Plant diversity is low (usually less than 25 species), with the dominant species being the grasses and rushes such as Spartina patens (salt hay grass), Distichlis spicata (spike grass), Juncus geradii (black grass), and the short form of Spartina alterniflora. Other plant species commonly found in the high marsh are Aster tenufolius (perennial salt marsh aster), and Limonium nashii (sea lavender).

Env-Wt 602.22 High salt marsh means "a tidal marsh zone located above mean high water and inundated during periods of extreme high tide and storm surge associated with coastal storms".

Wetland flags left in the field included:

- Salt Marsh (SM)-A1 through SM-A15 (SM "A" Series)

These flags were placed based on the landward margin of salt-tolerant vegetation.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as E2EM1P, E – Estuarine, 2 – Intertidal, EM – Emergent, 1 – Persistent, P – Irregularly Flooded.

At the state level in NH, tidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.6 Non-Tidal Wetland

Per Env-Wt 103.47 "Non-tidal wetland" means a wetland that is not subject to periodic inundation by tidal waters. The limit of the nontidal wetlands were determined utilizing the Federal Delineation Method

by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions. Wetland flags left in the field included:

- WET-B1 through WET-B4 (WET "B" Series)
- WET-C1 through WET-C5 (WET "C" Series)

Dominant vegetation within the non-tidal wetlands included *Acer rubrum, Fraxinus pennsylvanica, Frangula alnus, Equisetum sylvaticum, Onoclea sensibilis, and Celastrus orbiculatus* species that generally thrive in wet conditions. Soils within the non-tidal wetland were composed of a silty loam with redoximorphic features. Other indicators of wetland hydrology included saturation, water stained leaves and oxidized rhizospheres.

Dominant vegetation in the adjacent upland areas included *Acer rubrum, Acer platanoides, Frangula alnus, Potentilla simplex, Onoclea sensibilis, and Celastrus orbiculatus*. Soils within the upland were composed of sandy loam with no evidence of mottling or hydrology within the top 12 inches.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as PFO1E, P – Palustrine, FO – Forested, 1 – Broad-Leaved Deciduous, E – Seasonally Flooded/Saturated.

At the state level in NH, nontidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.7 Ephemeral Stream

Env-Wt 102.64 "Ephemeral stream" means a watercourse that is located above the water table year-round and is not fed by groundwater, such that runoff from rainfall and snowmelt is the primary source of stream flow and so the stream has flowing water only during, and for a short duration after, precipitation or spring thaw events, but which has less flow than an intermittent stream and no evidence of riffles, meander bends, point bars, or braiding.

A single ephemeral stream was observed within the investigation area. Water originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Wetland flags left in the field included:

- Center Line CL-A1 through CL-A9 (CL "A" Series)

At the state level in NH, ephemeral streams are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.8 Other Protected Areas

Weston & Sampson created Environmental Resources Maps (see Figures 3-5) of the site to determine the presence of other protected areas. These areas included:

- Priority Resource Area (PRA)
- Designated River Segment/Corridor
- Prime Wetlands
- FEMA 100 Year Floodplain
- Wildlife Action Plan

Priority Resource Area (PRA)

Per Env-Wt 103.66 "Priority resource area (PRA) means "a jurisdictional area that:

(a) Has documented occurrences of protected species or habitat;

(b) Is a bog;

(c) Is a floodplain wetland contiguous to a tier 3 or higher watercourse;

(d) Is a designated prime wetlands;

(e) Is a duly-established 100-foot buffer of a designated prime wetlands;

(f) Is a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; or

(g) Is any combination of (a) through (f), above.

The Portsmouth Harbor/the Piscataqua River is a tidal water and would be considered a PRA. The investigation area includes a duly-established 100-foot buffer of a designated prime wetland which is also considered a PRA.

Designated River Segment/Corridor

The New Hampshire Rivers Management and Protection Program (RMPP) was established in 1988 with the passage of RSA 483 to protect certain rivers, called Designated Rivers, for their outstanding natural and cultural resources. The New Hampshire Department of Environmental Services RMPP maintains a NH Designated River Corridor Web Map viewer showing all of the jurisdictional designated river segments. The Designated River corridor is defined as the river and the land area located within a distance of 1,320 feet (1/4 mile) of the normal high water mark or to the landward extent of the 100 year floodplain of a designated river as designated by the Federal Emergency Management Agency, whichever distance is larger.

A map of the investigation area utilizing the NH Designated River Corridor Web Map viewer is shown in Figure 4. There are no designated river segments or corridors located within the investigation area.

Prime Wetlands

Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. The conservation commission, planning board, or governing body shall give written notice to the owner of the affected land and all abutters 30 days prior to the public hearing, before designating any property as prime wetlands.

The investigation area included a prime wetland designated by the City of Portsmouth as wetland number 061B.

FEMA 100 Year Floodplain

The Federal Emergency Management Agency (FEMA) has designated a series of zones which area defined according to varying levels of flood risk. Per FEMA a flood is any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. The 100-year floodplain is the zone with a 1% annual chance of flooding. FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site.

See Figure 3 for FIRM map. Based on FEMA flood maps the investigation area is partially located within the 100-year floodplain.

Wildlife Action Plan

In 2020 an update was completed of the New Hampshire Fish and Game Wildlife Action Plan. According to the NH Fish and Game the aim of the Wildlife Action Plan seeks to "identify species in greatest need of conservation, habitats that are at the greatest risk, as well as land uses and activities that present the greatest threats to wildlife and habitat." The NH Wildlife Action Plan includes three sets of mapping data available for use by stakeholders:

1. Habitat Land Cover Map: which shows where the different types of wildlife habitat are located throughout the state.
2. Highest Ranked Habitat by Ecological Condition Map: which shows where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.
3. Aquatic Habitats Map: which provides an assessment of surface water habitats.

After learning what habitat may be present within a proposed project area the Wildlife Action Plan informs stakeholders about strategies for managing and protecting wildlife. The data from these maps is available on the Geographically Referenced Analysis and Information Transfer System (GRANIT) viewer.

The investigation area was investigated on the GRANIT viewer and two maps were produced (Figures 5.1 and 5.2). According to the Habitat Land Cover data the investigation area is composed of Developed Impervious, Developed or Barren land, Grassland, Hemlock-hardwood-pine, and Salt marsh cover types. The Highest Ranked Habitat by Ecological Condition data indicates that portions of investigation area are located with highest ranking habitat.

Endangered and Rare Species/Habitat

The New Hampshire Natural Heritage Bureau (NHB) keeps records of known locations of rare species and natural communities. The NHB Datacheck Tool allows the user to outline the limits of the proposed project area in order to determine if there are any records of rare species and natural communities within the proposed project limits.

The approximate proposed project limits were mapped using the NHB Datacheck Tool. Initial NHB Data Check results indicate that there are Ecological Review records in the vicinity of the approximate proposed project limits (see Appendix C). Further consultation with NHDES will be needed to determine what rare species and/or natural communities were identified. This mapping is regularly updated and subject to change.

If any portion of the project involves a federal nexus (i.e. federal permitting, federal funding ect.) than additional information may be required from the U.S. Fish and Wildlife Service.

3.0 SUMMARY

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field.

Additional environmental mapping was conducted using NH Granit data layers and FEMA FIRM mapping. This additional mapping indicates that a prime wetland and a duly-established 100-foot buffer of a designated prime wetland are present on the site. Additionally portions of the site are located within the 100-year flood zone and Highest Ranked Habitat.

4.0 REFERENCES

United States Department of Agriculture, Natural Resources Conservation Service. *2018. Field Indicators of Hydric Soils in the United States, Version 8.2.* L. M. Vasilas, G. W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USACOE, January 1987, Corps of Engineers Wetlands Delineation Manuel, Wetlands Research Program Technical Report Y-87-1.

FEMA Flood Map Service Center, online at msc.fema.gov/portal Assessed on 11/19/2025.
Tiner, Jr., Ralph W., 2005, Field Guide to Nontidal Wetland Identification

New England Hydric Soils Technical Committee, 2019, Version 4, *Field Indicator of Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

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Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:04 PM **Opened:** 12/22/2025 5:35 AM

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

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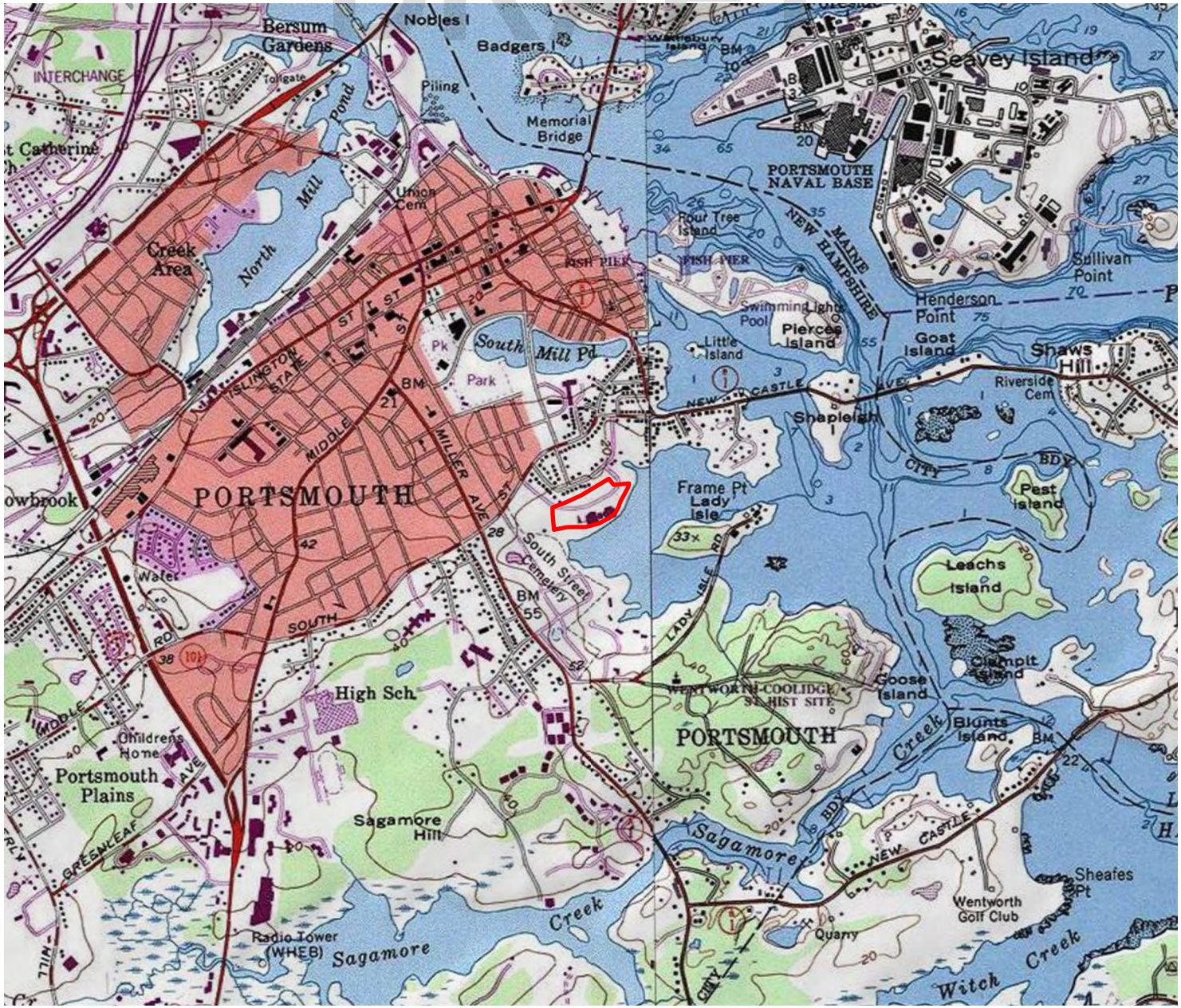

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area

National Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area

NH Wildlife Action Plan 2020 - Habitat Land Cover

- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

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Map by NH DES OneStop Data Mapper_PRA

11/19/2025, 12:50:13 PM

ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

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Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

DRAFT

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

ArcGIS World Geocoding Service
City/Town
Parcels

Prime Wetlands
Prime Wetlands with 100ft Buffer

NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

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Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.5

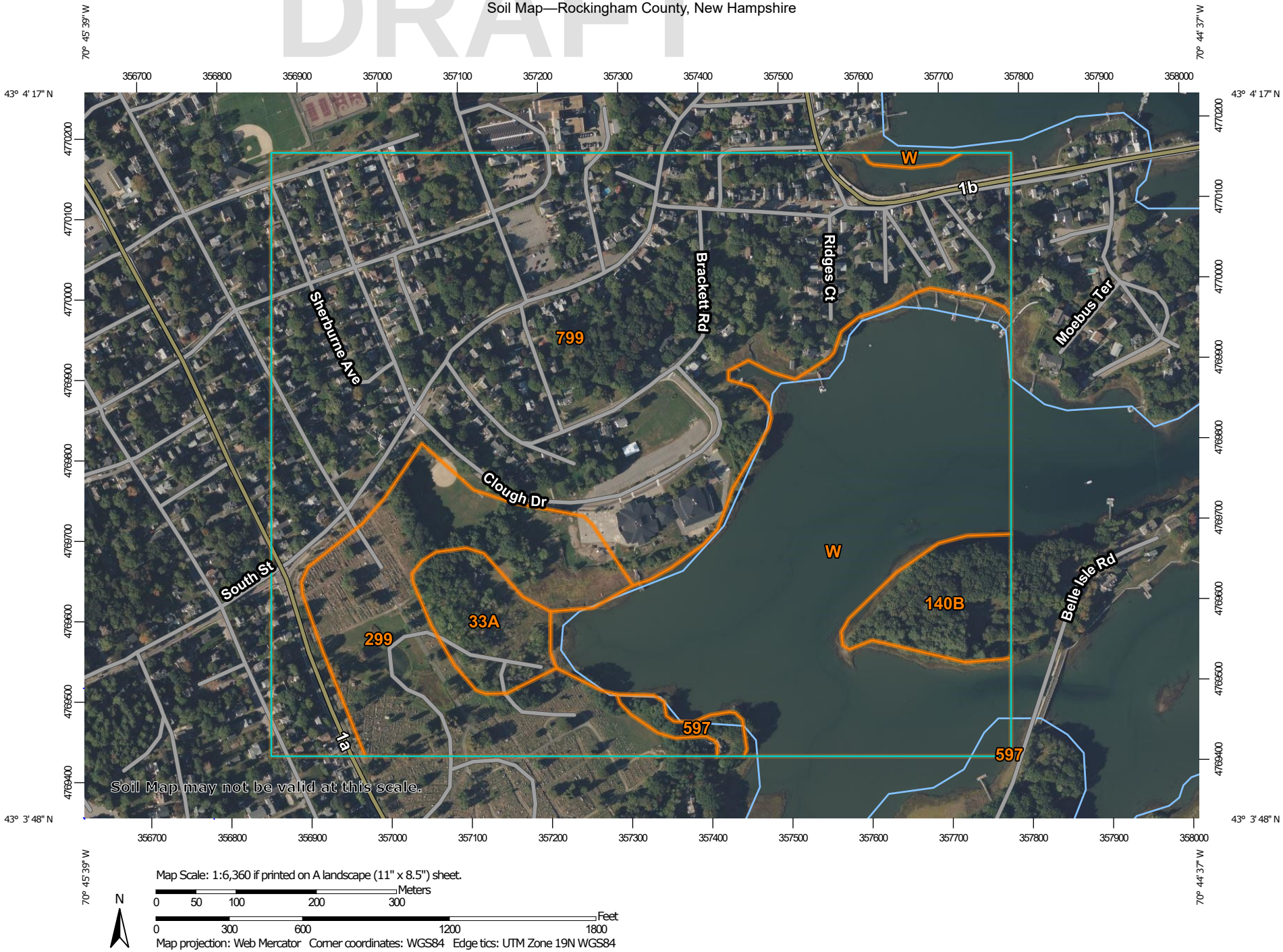
Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

DRAFT

Soil Map—Rockingham County, New Hampshire



Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 50 100 200 300

Feet: 0 300 600 1200 1800

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

DRAFT

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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

DRAFT

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

APPENDIX A

ACOE Data Forms

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U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Little Harbor School City/County: Portmsouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Wetland

Investigator(s): Devin herrick, CWS Section, Township, Range:

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066306° Long: -70.754230° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	X Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)
X Saturation (A3)	___ Marl Deposits (B15)	___ Moss Trim Lines (B16)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Dry-Season Water Table (C2)
___ Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	___ Crayfish Burrows (C8)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	___ Saturation Visible on Aerial Imagery (C9)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	___ Stunted or Stressed Plants (D1)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	___ Geomorphic Position (D2)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)	___ Shallow Aquitard (D3)
___ Sparsely Vegetated Concave Surface (B8)		___ Microtopographic Relief (D4)
		X FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 10

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

DRAFT

VEGETATION – Use scientific names of plants. Sampling Point: WET B Wetland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2. *Frangula alnus*	10	Yes	FAC
3. *Acer rubrum*	5	No	FAC
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Equisetum sylvaticum*	25	Yes	FACW
2. *Onoclea sensibilis*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
Woody Vine Stratum (Plot size: 30)			
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	40	x 3 =	120
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	120 (A)		290 (B)

Prevalence Index = B/A = 2.42

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

DRAFT

SOIL

Sampling Point: WET B Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/2	100					Loamy/Clayey	
8-16	2.5YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
16-20	2.5YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

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AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

DRAFT

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Little Harbor School City/County: Portmsouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Upland

Investigator(s): Devin herrick, CWS Section, Township, Range:

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066548° Long: -70.754442° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

DRAFT

VEGETATION – Use scientific names of plants.

Sampling Point: WET B Upland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	Yes	FAC
2. *Acer platanoides*	15	Yes	UPL
3. *Fraxinus pennsylvanica*	5	No	FACW
4. *Malus prunifolia*	5	No	UPL
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Frangula alnus*	25	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	25	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Potentilla simplex*	10	Yes	FACU
2. *Onoclea sensibilis*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	=Total Cover	
Woody Vine Stratum (Plot size: 30)			
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	35	x 3 =	105
FACU species	15	x 4 =	60
UPL species	20	x 5 =	100
Column Totals:	80 (A)		285 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

DRAFT

SOIL

Sampling Point: WET B Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Sandy	
10-16	10YR 4/3	100					Sandy	
16-20	10YR 4/4	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
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- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
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- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
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- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

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AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

APPENDIX B

Site Photographs

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Photo 1: Little Harbor School Playground

Photo 2: PEEP Playground

DRAFT

Photo 3: Portsmouth Harbor/Piscataqua River

Photo 4: Highest Observable Tide Line

DRAFT

Photo 5: Salt Marsh

Photo 6: Non-Tidal Wetland

DRAFT

Photo 7: Ephemeral Stream

APPENDIX C

NHB Datacheck Forms

DRAFT

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

To: Devin Herrick, Weston & Sampson Engineering
55 Walkers Brook Drive
Reading, MA 01857
herrick.devin@wseinc.com

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc: NHFG Review, David Simmons

Date: 12/04/2025 (valid until 12/04/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: NHDES - Shoreland Standard Permit, NHDES - Wetlands Standard Dredge & Fill

DCT ID: DCT25-3222

Town: Portsmouth
Location: 50 CLOUGH DR

Project Description: The propose project includes the replacement of two playgrounds on the property of the Little Harbor School. All work will occur in uplands. To be completed by the end of 2026.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information it was determined that there are potential impacts. Please carefully read the comments below and consultation instructions on the following pages.

Plant and Exemplary Natural Community Comments: If all work is within existing disturbed areas of the playground footprints, then no ecological review for plants is needed. If work is proposed outside of the existing playground footprints, then please provide proposed plans and representative photos during the growing season of the proposed impact areas (or at the very least without snow cover).

Wildlife and Critical Habitat Comments: An ecological review is needed to further assess potential impacts to protected wildlife and critical habitat. Please refer to the Wildlife Ecological Review Instructions below for guidance on how to submit an ecological review request and information about when an ecological review is required vs recommended.

DRAFT

Plant and Exemplary Natural Community Ecological Review Instructions

Unless otherwise noted, an ecological review is required if plant and/or ENC records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules of a state agency

If a project is not legally required to obtain an ecological review but this letter contains plant and/or ENC records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 217-A.

To request an ecological review for plants and/or ENCs:

1. Email (preferred), mail, or hand-deliver any materials requested in the "Plant and Exemplary Natural Community Comments" section above to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with the plant/ENC ecological review process call 603-271-6261.

DRAFT

Wildlife and Critical Habitat Ecological Review Instructions

Requesting an Ecological Review by NHDES

An ecological review for wildlife will be completed by the NHDES Ecological Review Section if a NHDES permit, authorization, or approval is needed. *If you do not need any NHDES permits, authorizations, or approvals then please see the section regarding NHFG reviews conducted by the NH Fish and Game Department (NHFG) below.*

Unless otherwise noted, an ecological review by NHDES is required if wildlife/critical habitat records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules regarding the permit, approval, or written authorization pursuant to RSA 482-A, RSA 485-A, and RSA 236.

If a project requiring a NHDES permit, authorization, or approval is not legally required to obtain an ecological review, but this letter contains wildlife or critical habitat records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 212-A.

To request an ecological review for wildlife with DES:

1. Email (preferred), mail, or hand-deliver project information following the guidance of Fis1004.03(c) to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include “Ecological Review Request” in the subject line of the request.

For help with wildlife ecological review process call 603-271-0467 or visit the wildlife environmental review page for guideline materials including a suggested checklist of materials to provide for ecological review.

DRAFT

Wildlife and Critical Habitat Review Instructions (continued)

Requesting a Wildlife Review by NHFG

Wildlife reviews to assess potential impacts to protected wildlife and critical habitat for any need outside of NHDES permits, authorizations, and approvals are completed by the New Hampshire Fish and Game Department, Nongame & Endangered Wildlife Program.

To request a wildlife review with NHFG:

1. Email (preferred), mail, or hand-deliver available project information to:

   New Hampshire Fish and Game Department
   Attn. Wildlife Division, Nongame Program
   11 Hazen Drive
   Concord, New Hampshire 03301
   nhfgreview@wildlife.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Wildlife Review" in the subject line of the request.

For help with the NHFG wildlife review process call 603-271-2461.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (iPaC) website for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or 603-223-2541).

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Ecological Review Database records:
The following record(s) may be impacted by the proposed project. Please refer to this list when coordinating.

Plant species	State[1]	Federal	Notes
marsh elder (*Iva frutescens*)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
northern blazing star (*Liatris novae-angliae var. novae-angliae*)*	E	--	Threats to this highly imperilled species are development activities that eliminate its habitat and invasion of its open, grassy habitat by trees and shrubs.

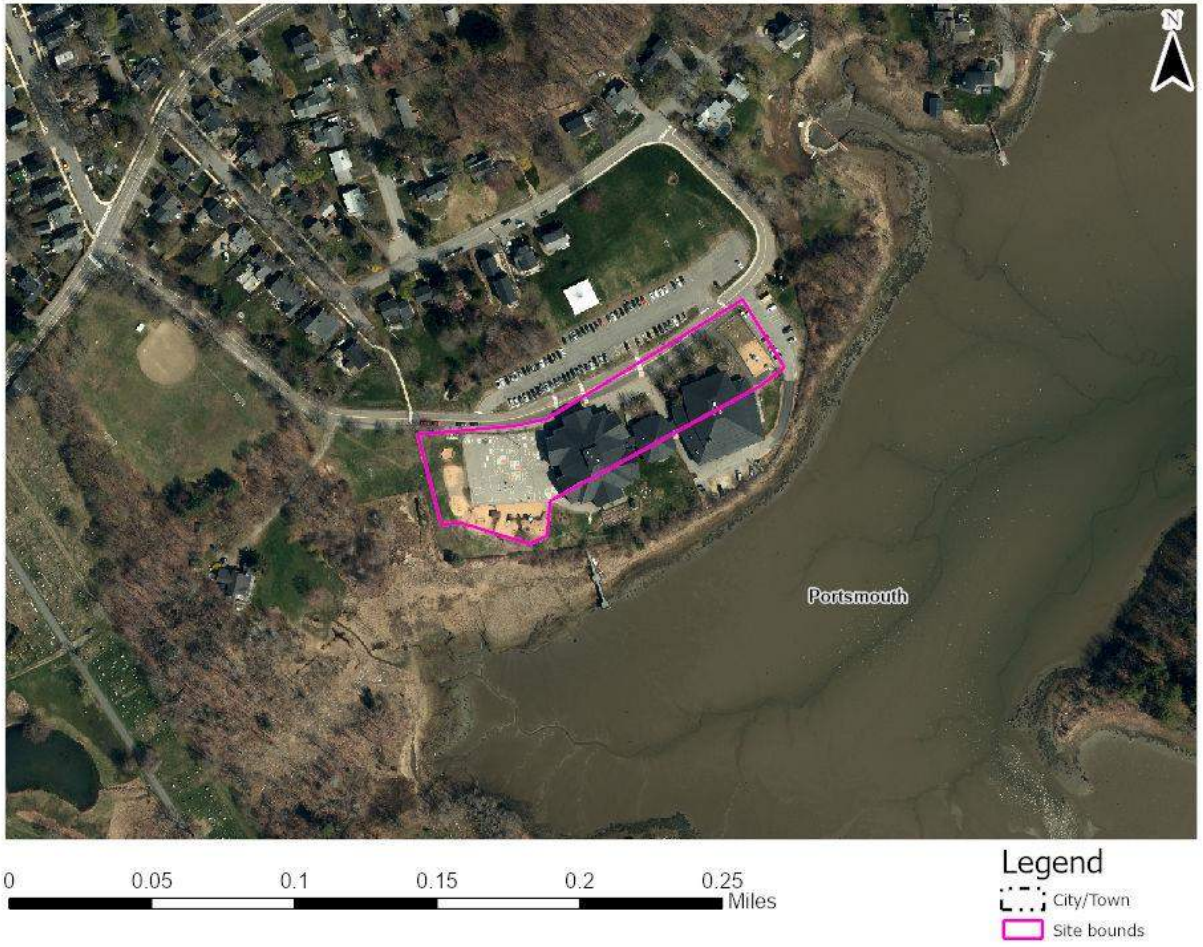
Vertebrate species	State[1]	Federal	Notes
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see above).
Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).

[1]Codes: "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 25 or more years ago.

Disclaimer:
DataCheck Tool screening only includes documented and verified occurrences of protected species and exemplary natural communities. The list of protected species and habitat on this letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, surveys are the best way to determine what resources are present on site.

DRAFT

DCT25-3222



www.des.nh.gov
29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

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APPENDIX I

DRAFT

Weston & Sampson

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Functional Assessment

November 2025

Little Harbor School

50 Clough Street
Portsmouth NH

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1.0 INTRODUCTION

In accordance with Env-Wt 603.04 Coastal Functional Assessment "*(a) For minor or major standard permit applications, the applicant shall submit a CFA report that is based on the data screening information and on-site evaluation required by Env-Wt 603.03"*. The proposed upgrade the Portsmouth Little Harbor Elementary School playgrounds in Portsmouth NH requires the submission of a major impact wetlands permit. As a result, a Certified Wetland Scientist (CWS) from Weston & Sampson completed a functional assessment in order to evaluate how the wetlands on site will be affected by the proposed alteration.

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2.0 SITE DESCRIPTION

The Portsmouth Little Harbor Elementary School is located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20. The school is located along the tidal Piscataqua River. An aerial locus map and USGS locus map are attached.

The existing play facilities on the property are broken down into two playgrounds, the first is located on the east side of the school known as the "PEEP Playground" and the second is located on the west side of the school known as the "Little Harbor School Playground". Both playgrounds will be renovated as part of this proposed project.

PEEP Playground

The existing PEEP Playground includes a play structure with additional loose play equipment, a wood chip base and the entire playground is surrounded by a chain link fence. There is also an existing stone retaining wall which separates play area from parking lot which will be retained by the project.

Image 1.1: Google Street Earth Image of the Existing PEEP Playground.

Little Harbor School Playground

The existing Little Harbor School Playground includes a large play structure, monkey bars/climbing structure, a gaga pit, a swing set, a basketball court and associated asphalt play area. There is also a small ephemeral stream which originates from stormwater sheet flow off the existing basketball court. The ephemeral stream dissipates into the grassy play area before reaching the salt marsh

Image 1.2: Google Street Earth Image of the Existing Little Harbor School Playground.

The Piscataqua River and an associated salt marsh are located immediately adjacent to the Little Harbor School. This complex has two wetland classification types based on the Cowardin Classification system:

E2EM1P:

> System **Estuarine (E)** : The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (Rhizophora mangle) and eastern oysters (Crassostrea virginica), are also included in the Estuarine System.

Subsystem **Intertidal (2)** : The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Emergent (EM)** : Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

Subclass **Persistent (1)** : Dominated by species that normally remain standing at least until the beginning of the next growing season. This subclass is found only in the Estuarine and Palustrine systems.

Water Regime **Irregularly Flooded (P)** : Tides flood the substrate less often than daily.

E2US3M:

System **Estuarine (E)** : The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (Rhizophora mangle) and eastern oysters (Crassostrea virginica), are also included in the Estuarine System.

Subsystem **Intertidal (2)** : The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Unconsolidated Shore (US)** : Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and; (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.

Subclass **Mud (3)** : The unconsolidated particles smaller than stones are predominantly silt and clay, although coarser sediments or organic material may be intermixed.

Water Regime **Irregularly Exposed (M)** : Tides expose the substrate less often than daily.

3.0 PROJECT SCOPE

The proposed scope will include the removal of existing playground equipment and installation of new play structures with associated landscape features in each of the two playgrounds on site.

PEEP Playground

The proposed PEEP playground improvements will include a variety of play elements designed for young children and group interaction. Planned equipment includes a play structure for small children, a group seesaw, acorn-shaped seating, and a wooden play bridge that will be level with the poured-in-place surfacing to ensure accessibility. A large sand play area is also proposed to encourage sensory and creative play.

In addition to the play equipment, several landscape and site enhancements are proposed in the PEEP playground to support both functionality and aesthetics. These include new plantings with boulder accents, picnic tables, and new fencing surrounding the play area. Concrete paving within the limits of the play area will serve multiple purposes, including a bag drop, walking paths, and an accessible area for replenishing sand; this space will also accommodate loose play items such as a play kitchen. New asphalt walking paths are proposed in generally the same configuration as existing conditions, with selective reductions in paved area to minimize impervious surfaces within the project limits. The landscape plan also includes the installation of seven new trees and approximately twenty new shrubs and herbaceous native species.

Little Harbor School Playground

The proposed playground equipment improvements include the installation of two new swing sets and a large play structure with a climbing element. The equipment is currently planned to be installed over an engineered wood fiber base; however, the City is exploring the availability of funding to instead utilize a permeable poured-in-place rubber safety surfacing. This alternative would not alter the proposed limits of work. In addition, the existing gaga pit will be relocated to a new location, removing the majority of the structure from the 100-foot wetland buffer where it is currently situated. The relocated gaga pit will be constructed on a concrete foundation and filled with engineered wood fiber.

Proposed landscape and site improvements focus on environmental stewardship, safety, and improved site functionality. Stormwater collection will be formalized through the creation of a rain garden designed to allow student interaction with overland flow while maintaining sheet flow into the adjacent grassy area. The existing asphalt play area, including the basketball court, will be relocated farther from the wetland, resulting in a significant overall reduction in asphalt play surface. A concrete curb will be installed around areas of engineered wood fiber to help contain the material. All existing trees on site will be retained, and additional site amenities will include a new timber guard rail and a bike rack.

New plantings will further enhance the landscape and ecological function of the site. The project includes the installation of nine new trees, with species selected in accordance with the City of Portsmouth Street Tree Manual. A total of 136 new shrubs and herbaceous native plant species will be added throughout the site. The rain garden located within the existing ephemeral stream will also receive additional plantings, including 34 herbaceous species, to support stormwater management and native habitat enhancement.

4.0 METHODOLOGY

Wetlands on site were evaluated using the Army Corps of Engineers Highway Methodology Workbook Supplement, Wetland Functions and Values, A Descriptive Approach (Highway Methodology). The approach outlined in the Highway Methodology includes a qualitative description of the physical characteristics of the wetlands, identifies the functions and values exhibited, and uses "best professional judgement" for the basis of the conclusions.

Within the Highway Methodology "Functions" are defined as:

> *Self-sustaining properties of a wetland ecosystem that exist in the absence of society. Functions result from both living and non-living components of a specific wetland. These include all processes necessary for the self-maintenance of the wetland ecosystem such as primary production and nutrient cycling. Therefore, functions relate to the ecological significance of wetland properties without regard to subjective human values.*

"Values" are defined as:

> *Benefits that derive from either one or more functions and the physical characteristics associated with a wetland. Most wetlands have corresponding societal value. This is recognized in various federal, state, and local wetland legislation that was enacted to protect these resources. The value of a particular wetland function, or combination thereof, is based on human judgment of the worth, merit, quality, or importance attributed to those functions.*

To utilize the Highway Methodology the workbook indicates that the "evaluator first determines if a wetland is suitable for particular functions and values and why. Then a determination is made if any functions and/or values are principal and why. Functions and values can be principal if they are an important physical component of a wetland ecosystem and/or are considered of special value to society, from a local, regional, and/or national perspective".

Within the Highway Methodology guidance document there are 13 functions and values. According to the workbook these functions and values "are considered by the Regulatory Branch for any Section 404 wetland permit (outlined further below in Section 4.0). These are not necessarily the only wetland functions and values possible, nor are they so precisely defined as to be unalterable. However, they do represent the best working "palette" of descriptors which can be used to paint an objective representation of the wetland resources associated with a proposed project".

A list of considerations/qualifiers for each function/value can be found within the Highway Methodology and is attached. Additional data sources including aerial photos, topographic maps, GIS data, and additional remote sensing data sources were utilized during desktop review to obtain information about the considerations/qualifiers. These considerations/qualifiers were utilized to determine the suitability of each function/value and to determine the principal functions/values of the wetland complex on site.

5.0 WETLAND FUNCTIONS AND VALUES ASSESSMENT

In accordance with The Highway Methodology described above, wetland functions and values have been qualitatively evaluated for the wetland complex on site. Notes outlining the aspects of the qualifiers/considerations for each of the 13 functions and values are discussed below (Sections 4.1 through 4.13).

The completed Wetland Function-Value Evaluation Form can be found in Appendix A and a summary of the suitable and principal functions-values for the wetland complex has been presented in the Wetland Functions and Values Summary Table (Section 4.14).

5.1 Groundwater Recharge/Discharge

This function considers the potential for the wetland to serve as a groundwater recharge and/or discharge area. It refers to the fundamental interaction between wetlands and aquifers, where there is potential for the wetland to contribute water to an aquifer (recharge) or to function as a groundwater discharge area.

The wetland complex on site is associated with a single perennial, tidal river called the Piscataqua River. The Piscataqua is 12 miles in length beginning at the confluence of the Salmon Falls River and Cocheco River and terminating in the Atlantic Ocean. According to NHDES One Stop wells do exist downstream of the Piscataqua River on New Castle Island. Soil mapping available for the area indicates that the soils in the proposed work area are composed Urban land-Canton complex and Udorthents, smoothed. Depth to restrictive layer in these soils is more than 80 inches. No piezometer data is available for the area. The Piscataqua River is an impaired water body suggesting lower water quality. The area is surrounded by development and industry which likely contributes to the impairment.

Suitability Conclusion: No. Given the tidal nature of this Piscataqua interaction with wetlands is high but interactions with aquifers is low. Low water quality.

5.2 Floodflow Alteration

This function considers the effectiveness of the wetland in reducing flood damage by attenuating floodwaters for prolonged periods following precipitation and snow melt events.

Area of the Piscataqua and adjacent salt marsh is small relative to its watershed. The Little Harbor School is located in the lower portion of the watershed. Effective flood storage above the proposed limit of work is limited due to extensive residential development and high amount of impervious area. Salt marsh adjacent to the Piscataqua contains hydric soils and is relatively flat. Evidence of variable water levels are present. Flood storage available within slat marsh during storm events. Wetland complex receives overland flow form adjacent uplands, although storage is short term due to tidal cycle.

Suitability Conclusion: Yes. The Piscataqua River does not provide long term attenuation, but it does serve to move floodwaters away from valuable properties. Floodflow Alteration is a principal function of the Piscataqua River and adjacent salt marsh on site.

5.3 Fish and Shellfish Habitat (Marine)

This function considers the effectiveness or importance of seasonal or permanent waterbodies associated with the wetlands in question for fish and shellfish habitat.

Presence of mudflats nearby but not located within proposed work area. Piscataqua river is suitable spawning habitat. Commercially or recreationally important species are present and suitable habitat exists. The Piscataqua supports prey for higher trophic level marine organisms and provides migratory habitat for anadromous fish. The Piscataqua River is Essential Fish Habitat.

Suitability Conclusion: Yes. Although no direct observation of fish or shellfish were made on site, the Piscataqua is Essential Fish Habitat and suitable for many species. Fish and Shellfish Habitat (Marine) is a principal function of the Piscataqua River on site.

5.4 Sediment/Toxicant Retention

This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.

Limited sources of excess sediment upstream including urban roadways. Toxicants in the watershed are present from urban development. Deepwater habitat is present in the Piscataqua but the water has high velocity. Fine grained organic soils are present. Water retention time is short due to high velocities and constant tidal fluctuations. According to NHDES One Stop wells do exist downstream of the Piscataqua River on New Castle Island. River edge is intermittently aerobic due to tidal fluctuations. Dense vegetation present in adjacent salt marsh.

Suitability Conclusion: Yes. The Piscataqua is not heavily vegetated and has high velocity flows. The adjacent salt marsh is vegetated and can provide trapping of sediments but area is small compared to the size of the river.

5.5 Nutrient Removal/Retention/Transformation

This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

The area of the wetland complex is small relative to the contributing watershed based on information available from USGS Stream Stats. Deep water habitat present but with limited opportunities for sediment trapping. Sources of excess nutrients upstream include urban development. Fine grained soils are present. Emergent vegetation is present in the salt marsh. Water moves quickly through the wetland due to tidal cycle. Presence of dense vegetation and thick organic material means plant uptake and/or attenuation in sediment is present

Suitability Conclusion: Yes. Deepwater habitat provides some ability to trap nutrients however this is limited due to high velocity. Presence of dense vegetation and thick organic material means plant uptake and/or attenuation in sediment is present, but area is small compared to the size of the river.

5.6 Production Export

This function evaluates the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

Salt marsh vegetation present which can accumulate and cause detritus development. Economically/commercially used fish found within the Piscataqua. Higher trophic level consumers are utilizing the river. Aquatic vegetation present but only a few species. High production levels occurring, however, no visible signs of export (assumes export is attenuated).

Suitability Conclusion: Yes. The Piscataqua River is able to produce food or usable products for humans or other living organisms.

5.7 Sediment/Shoreline Stabilization

This function considers the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.

A small salt marsh borders a large, tidally influenced river and provides shoreline stabilization despite periodic erosive pressures. The marsh exhibits a gentle topographic gradient toward the river, with localized erosion and siltation resulting from high flow velocities, open-water fetch, and recreational boating activity. The river's large watershed supplies upstream sediment and generates channelized flows during storm events. A wetland buffer greater than 10 feet wide parallels the shoreline, which is generally diffuse but includes limited areas of more defined, densely rooted banks. Dense emergent vegetation and low shrubs dominate the marsh, forming an energy-absorbing, resilient plant community that stabilizes sediments during minor flood events and reinforces the shoreline during higher-energy conditions.

Suitability Conclusion: Yes. In the area immediately adjacent to the limit of work, the salt marsh does provide a vegetative buffer which stabilizes sediments during minor flood events and reinforces the shoreline during higher-energy conditions. Sediment/Shoreline Stabilization is a principal function of the salt marsh bordering the Piscataqua River on site.

5.8 Wildlife Habitat

This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species are considered.

Adjacent urban land use has degraded the upland and cut off overland access to other potential wetlands. Wildlife food sources are present within the Piscataqua. Salt marsh with dense vegetation is present. High degree of species diversity is present within the river. This evaluation methodology is not well suited to looking at aquatic wildlife habitat. Although water quality within the river is poor the Piscataqua still provides valuable aquatic habitat.

Suitability Conclusion: Yes. Despite adjacent development, the Piscataqua River is a crucial aquatic habitat. Wildlife habitat is a principal function of the Piscataqua River on site.

5.9 Recreation

This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland. Non-consumptive opportunities do not consume or diminish these resources of the wetland.

This portion of the Piscataqua River is associated with the Little Harbor School. Fishing is available from the banks of the river. No hunting is permitting and hiking is not feasible due to urban location, however walking trails are present. The river is a valuable wildlife habitat despite poor water quality. Access to the water is present for boating via school dock however, this dock is closed to the general public. Watercourse is wide enough for powered and non-powered boating. Off road parking is available at the school however access to the school dock is not publicly available.

Suitability Conclusion: Yes. Publicly accessible park space with plentiful opportunities for recreation.

5.10 Educational/Scientific Value

This function considers the suitability of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

NHB report indicates that rare species/habitats have potential to be present on site or nearby. The adjacent urban development has caused disturbance to the Piscataqua River. The river is valuable wildlife habitat. Off road parking is available however dock access is not publicly available. Direct access to a perennial stream is present. Site is currently used for educational activities associated with the school.

Suitability Conclusion: Yes. Presence of school in close proximity to the wetland complex provides valuable educational value. Educational/Scientific Value is a principal function of the Piscataqua River on site.

5.11 Uniqueness/Heritage

This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values. These may include archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, its relative importance as a typical wetland class for this geographic location. These functions are clearly valuable wetland attributes relative to aspects of public health, recreation, and habitat diversity.

Dominated by deep and shallow marsh communities with areas of scrub-shrub transition, the salt marsh adjacent to the school exhibits a high degree of interspersion between emergent vegetation and open water, creating diverse habitat structure and visual interest. A well-vegetated stream corridor extends along both sides of the tidal channel, providing ecological connectivity and bank stability while supporting wildlife movement. Multiple wetland classes—including salt marsh and open water—are visible from surrounding uplands and primary viewing locations, where more than 200 feet of stream and over half an acre of open water can be observed. The wetland appears unpolluted and largely undisturbed, offering expansive views and frequent opportunities for wildlife observation. Its proximity to the school, with direct and safe access to the river, suitable off-road parking for buses, and absence

of known safety hazards making it a strong potential educational site. NHB report indicates that rare species/habitats have potential to be present on site or nearby.

Suitability Conclusion: Yes. Educational and recreational opportunities, and an unpolluted, visually accessible landscape. Uniqueness/Heritage is a principal function of the Piscataqua River on site.

5.12 Visual Quality/Aesthetics

This value relates to the visual and aesthetic qualities of the wetland.

Only perennial stream present on site. Highly developed upland contrast with views of the river

Suitability Conclusion: Yes. Perennial stream provides contrast to development. Adjacent upland development prevents principal function for visual quality/aesthetics.

5.13 Endangered Species Habitat

This function considers the suitability of the wetland or associated watersheds to support rare, threatened, or endangered species.

NHB report indicates that rare species/habitats have potential to be present on site or nearby.

Suitability Conclusion: Yes. NHB report indicates that rare species/habitats have potential to be present on site or nearby.

5.14 Conclusion

The following table provides a summary of the suitable and principal functions of the wetlands delineated on the Site.

Table 1. Wetland Functions and Values Summary	
Functions and Values	Wetland Complex
Groundwater Recharge/Discharge	N
Floodflow Alteration	S, P
Fish and Shellfish Habitat	S, P
Sediment/Toxicant Retention	S
Nutrient Removal	S
Production Export	S
Sediment/Shoreline Stabilization	S, P
Wildlife Habitat	S, P
Recreation	S
Education/Scientific Value	S, P
Uniqueness/Heritage	S, P
Visual Quality/Aesthetics	S
Endangered Species Habitat	S

Legend:

S = Suitable Function/Value

P = Principal Function/Value

N = Not Suitable

Based on the functional assessment provided, the suitable functions/values of the Piscataqua River on site include Floodflow Alteration, Fish and Shellfish Habitat, Sediment/Toxicant Retention, Nutrient Removal, Production Export, Sediment/Shoreline Stabilization, Wildlife Habitat, Recreation, Educational/Scientific Value, Uniqueness/Heritage, Visual Quality/Aesthetics, and Endangered Species Habitat. The principal functions/values of the Piscataqua River on site include Floodflow Alteration, Fish and Shellfish Habitat, Sediment/Shoreline Stabilization, Wildlife Habitat, Recreation, Educational/Scientific Value, and Uniqueness/Heritage.

5.15 Proposed Project Impact on Functions/Values

The proposed project will not have any impact on the functions/values of the adjacent salt marsh and Piscataqua River. The proposed project is located in the same footprint as the existing playgrounds and will pull impervious area further from the adjacent wetlands.

6.0 REFERENCES

Cowardin, 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Publication Number FWS/OBS-79/31; Cowardin, L.M., Carter, V., Golet, F.C., and LaRoe, E.T., 1979.

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APPENDIX A

Wetland Function-Value Evaluation Form

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Wetland Function-Value Evaluation Form

Total area of wetland 12 linear miles Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? No

Adjacent land use School and Residential Distance to nearest roadway or other development On Site

Dominant wetland systems present E2EM1P, E2US3M Contiguous undeveloped buffer zone present None

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Lower

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland Complex

Latitude 43.066345° Longitude -70.753125°

Prepared by: DKH Date 11/21/2025

Wetland Impact:
Type Previously Developed TBZ Area 27,032 SF

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	N	1,2,7,15		Wetland associated with tidal watercourse. Wells downstream. Water quality low.
Floodflow Alteration	Y	3,4,5,6,7,8,9,10,11,12,13,14,18	X	Piscataqua River and adjacent salt marsh do provide short term storage for water during storm events.
Fish and Shellfish Habitat	Y	1,2,3,4,5,6	X	Commercially or recreationally important species are present and suitable habitat exists.
Sediment/Toxicant Retention	Y	2,3,4,6,7,8,10,15,16		Perennial river with high velocities and tidal fluctuations. Vegetation present in salt marsh.
Nutrient Removal	Y	2,3,4,5,7,8,9,10		Deepwater habitat with upstream nutrient sources. Plant uptake and/or attenuation in sediment is present
Production Export	Y	1,3,4,5,6,10,12,14		Economically/commercially used fish found within the Piscataqua. Higher trophic level consumers are utilizing the river.
Sediment/Shoreline Stabilization	Y	1,2,3,4,6,7,8,9,10,11,13,15	X	The salt marsh does provide a vegetative buffer. High velocity flows are present.
Wildlife Habitat	Y	3,8,9,11,13,19,21	X	Although water quality within the river is poor the Piscataqua still provides valuable aquatic habitat.
Recreation	Y	2,5,7,8,9,10,12		Good watercourse for boating and fishing however access to the school dock is not publicly available.
Educational/Scientific Value	Y	1,2,3,5,8,9,10,11,14,16	X	Site is currently used for educational activities associated with the school. Dock not publicly available.
Uniqueness/Heritage	Y	2,5,6,7,8,9,10,11,12,13,14,16,17,19,22,24,27	X	Unique presence of school with opportunities for interaction with wetland. Highly aesthetic views of the waterfront.
Visual Quality/Aesthetics	Y	1,2,3,6,7,8,10,11,12		Perennial stream provides contrast to development. Adjacent upland development prevents principal function for visual quality/aesthetics.
ES Endangered Species Habitat	Y	1,2		NHB report indicates that rare species/habitats have potential to be present on site or nearby.
Other				

Notes:

* Refer to backup list of numbered considerations.

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APPENDIX B

Highway Methodology Considerations/Qualifiers

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Appendix A

Wetland evaluation supporting documentation; Reproducible forms.

Below is an example list of considerations that was used for a New Hampshire highway project. Considerations are flexible, based on best professional judgment and interdisciplinary team consensus. This example provides a comprehensive base, however, and may only need slight modifications for use in other projects.

GROUNDWATER RECHARGE/DISCHARGE— This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.

CONSIDERATIONS/QUALIFIERS

1. Public or private wells occur downstream of the wetland.
2. Potential exists for public or private wells downstream of the wetland.
3. Wetland is underlain by stratified drift.
4. Gravel or sandy soils present in or adjacent to the wetland.
5. Fragipan does not occur in the wetland.
6. Fragipan, impervious soils, or bedrock does occur in the wetland.
7. Wetland is associated with a perennial or intermittent watercourse.
8. Signs of groundwater recharge are present or piezometer data demonstrates recharge.
9. Wetland is associated with a watercourse but lacks a defined outlet or contains a constricted outlet.
10. Wetland contains only an outlet, no inlet.
11. Groundwater quality of stratified drift aquifer within or downstream of wetland meets drinking water standards.
12. Quality of water associated with the wetland is high.
13. Signs of groundwater discharge are present (e.g., springs).
14. Water temperature suggests it is a discharge site.
15. Wetland shows signs of variable water levels.
16. Piezometer data demonstrates discharge.
17. Other

FLOODFLOW ALTERATION (Storage & Desynchronization) — This function considers the effectiveness of the wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of floodwaters. It adds to the stability of the wetland ecological system or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.

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CONSIDERATIONS/QUALIFIERS

1. Area of this wetland is large relative to its watershed.
2. Wetland occurs in the upper portions of its watershed.
3. Effective flood storage is small or non-existent upslope of or above the wetland.
4. Wetland watershed contains a high percent of impervious surfaces.
5. Wetland contains hydric soils which are able to absorb and detain water.
6. Wetland exists in a relatively flat area that has flood storage potential.
7. Wetland has an intermittent outlet, ponded water, or signs are present of variable water level.
8. During flood events, this wetland can retain higher volumes of water than under normal or average rainfall conditions.
9. Wetland receives and retains overland or sheet flow runoff from surrounding uplands.
10. In the event of a large storm, this wetland may receive and detain excessive flood water from a nearby watercourse.
11. Valuable properties, structures, or resources are located in or near the floodplain downstream from the wetland.
12. The watershed has a history of economic loss due to flooding.
13. This wetland is associated with one or more watercourses.
14. This wetland watercourse is sinuous or diffuse.
15. This wetland outlet is constricted.
16. Channel flow velocity is affected by this wetland.
17. Land uses downstream are protected by this wetland.
18. This wetland contains a high density of vegetation.
19. Other

FISH AND SHELLFISH HABITAT (FRESHWATER) — This function considers the effectiveness of seasonal or permanent watercourses associated with the wetland in question for fish and shellfish habitat.

CONSIDERATIONS/QUALIFIERS

1. Forest land dominant in the watershed above this wetland.
2. Abundance of cover objects present.

STOP HERE IF THIS WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

3. Size of this wetland is able to support large fish/shellfish populations.
4. Wetland is part of a larger, contiguous watercourse.
5. Wetland has sufficient size and depth in open water areas so as not to freeze solid and retain some open water during winter.
6. Stream width (bank to bank) is more than 50 feet.
7. Quality of the watercourse associated with this wetland is able to support healthy fish/shellfish populations.
8. Streamside vegetation provides shade for the watercourse.
9. Spawning areas are present (submerged vegetation or gravel beds).
10. Food is available to fish/shellfish populations within this wetland.
11. Barrier(s) to anadromous fish (such as dams, including beaver dams, waterfalls, road crossing) are absent from the stream reach associated with this wetland.
12. Evidence of fish is present.
13. Wetland is stocked with fish.
14. The watercourse is persistent.
15. Man-made streams are absent.
16. Water velocities are not too excessive for fish usage.
17. Defined stream channel is present.
18. Other

Although the above example refers to freshwater wetlands, it can also be adapted for marine ecosystems. The following is an example provided by the National Marine Fisheries Service (NMFS) of an adaptation for the fish and shellfish function.

DRAFT

FISH AND SHELLFISH HABITAT (MARINE) — This function considers the effectiveness of wetlands, embayments, tidal flats, vegetated shallows, and other environments in supporting marine resources such as fish, shellfish, marine mammals, and sea turtles.

CONSIDERATIONS/QUALIFIERS

1. Special aquatic sites (tidal marsh, mud flats, eelgrass beds) are present.
2. Suitable spawning habitat is present at the site or in the area.
3. Commercially or recreationally important species are present or suitable habitat exists.
4. The wetland/waterway supports prey for higher trophic level marine organisms.
5. The waterway provides migratory habitat for anadromous fish.
6. Essential fish habitat, as defined by the 1996 amendments to the Magnuson-Stevens Fishery & Conservation Act, is present (consultation with NMFS may be necessary).
7. Other

SEDIMENT/TOXICANT/PATHOGEN RETENTION — This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.

CONSIDERATIONS/QUALIFIERS

1. Potential sources of excess sediment are in the watershed above the wetland.
2. Potential or known sources of toxicants are in the watershed above the wetland.
3. Opportunity for sediment trapping by slow moving water or deepwater habitat are present in this wetland.
4. Fine grained mineral or organic soils are present.
5. Long duration water retention time is present in this wetland.
6. Public or private water sources occur downstream.
7. The wetland edge is broad and intermittently aerobic.
8. The wetland is known to have existed for more than 50 years.
9. Drainage ditches have not been constructed in the wetland.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

10. Wetland is associated with an intermittent or perennial stream or a lake.
11. Channelized flows have visible velocity decreases in the wetland.
12. Effective floodwater storage in wetland is occurring. Areas of impounded open water are present.
13. No indicators of erosive forces are present. No high water velocities are present.
14. Diffuse water flows are present in the wetland.
15. Wetland has a high degree of water and vegetation interspersion.
16. Dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation by dense vegetation is present.
17. Other

NUTRIENT REMOVAL/RETENTION/TRANSFORMATION — This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

CONSIDERATIONS/QUALIFIERS

1. Wetland is large relative to the size of its watershed.
2. Deep water or open water habitat exists.
3. Overall potential for sediment trapping exists in the wetland.

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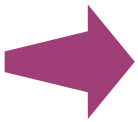
4. Potential sources of excess nutrients are present in the watershed above the wetland.
5. Wetland saturated for most of the season. Ponded water is present in the wetland.
6. Deep organic/sediment deposits are present.
7. Slowly drained fine grained mineral or organic soils are present.
8. Dense vegetation is present.
9. Emergent vegetation and/or dense woody stems are dominant.
10. Opportunity for nutrient attenuation exists.
11. Vegetation diversity/abundance sufficient to utilize nutrients.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

12. Waterflow through this wetland is diffuse.
13. Water retention/detention time in this wetland is increased by constricted outlet or thick vegetation.
14. Water moves slowly through this wetland.
15. Other

PRODUCTION EXPORT (Nutrient) — This function evaluates the effectiveness of the wetland to produce food or usable products for humans or other living organisms.



CONSIDERATIONS/QUALIFIERS

1. Wildlife food sources grow within this wetland.
2. Detritus development is present within this wetland
3. Economically or commercially used products found in this wetland.
4. Evidence of wildlife use found within this wetland.
5. Higher trophic level consumers are utilizing this wetland.
6. Fish or shellfish develop or occur in this wetland.
7. High vegetation density is present.
8. Wetland exhibits high degree of plant community structure/species diversity.
9. High aquatic vegetative diversity/abundance is present.
10. Nutrients exported in wetland watercourses (permanent outlet present).
11. “Flushing” of relatively large amounts of organic plant material occurs from this wetland.
12. Wetland contains flowering plants that are used by nectar-gathering insects.
13. Indications of export are present.
14. High production levels occurring, however, no visible signs of export (assumes export is attenuated).
15. Other

SEDIMENT/SHORELINE STABILIZATION — This function considers the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.

CONSIDERATIONS/QUALIFIERS

1. Indications of erosion or siltation are present.
2. Topographical gradient is present in wetland.
3. Potential sediment sources are present up-slope.
4. Potential sediment sources are present upstream.
5. No distinct shoreline or bank is evident between the waterbody and the wetland or upland.
6. A distinct step between the open waterbody or stream and the adjacent land exists (i.e., sharp bank) with dense roots throughout.
7. Wide wetland (>10’) borders watercourse, lake, or pond.
8. High flow velocities in the wetland.
9. The watershed is of sufficient size to produce channelized flow.
10. Open water fetch is present.
11. Boating activity is present.
12. Dense vegetation is bordering watercourse, lake, or pond.
13. High percentage of energy-absorbing emergents and/or shrubs border a watercourse, lake, or pond.
14. Vegetation is comprised of large trees and shrubs that withstand major flood events or erosive incidents and stabilize the shoreline on a large scale (feet).
15. Vegetation is comprised of a dense resilient herbaceous layer that stabilizes sediments and the shoreline on a small scale (inches) during minor flood events or potentially erosive events.
16. Other

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WILDLIFE HABITAT — This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered. Species lists of observed and potential animals should be included in the wetland assessment report.[1]

CONSIDERATIONS/QUALIFIERS

1. Wetland is not degraded by human activity.
2. Water quality of the watercourse, pond, or lake associated with this wetland meets or exceeds Class A or B standards.
3. Wetland is not fragmented by development.
4. Upland surrounding this wetland is undeveloped.
5. More than 40% of this wetland edge is bordered by upland wildlife habitat (e.g., brushland, woodland, active farmland, or idle land) at least 500 feet in width.
6. Wetland is contiguous with other wetland systems connected by a watercourse or lake.
7. Wildlife overland access to other wetlands is present.
8. Wildlife food sources are within this wetland or are nearby.
9. Wetland exhibits a high degree of interspersion of vegetation classes and/or open water.
10. Two or more islands or inclusions of upland within the wetland are present.
11. Dominant wetland class includes deep or shallow marsh or wooded swamp.
12. More than three acres of shallow permanent open water (less than 6.6 feet deep), including streams in or adjacent to wetland, are present.
13. Density of the wetland vegetation is high.
14. Wetland exhibits a high degree of plant species diversity.
15. Wetland exhibits a high degree of diversity in plant community structure (e.g., tree/shrub/vine/grasses/mosses)
16. Plant/animal indicator species are present. (List species for project)
17. Animal signs observed (tracks, scats, nesting areas, etc.)
18. Seasonal uses vary for wildlife and wetland appears to support varied population diversity/abundance during different seasons.
19. Wetland contains or has potential to contain a high population of insects.
20. Wetland contains or has potential to contain large amphibian populations.
21. Wetland has a high avian utilization or its potential.
22. Indications of less disturbance-tolerant species are present.
23. Signs of wildlife habitat enhancement are present (birdhouses, nesting boxes, food sources, etc.).
24. Other

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[1]In March 1995, a rapid wildlife habitat assessment method was completed by a University of Massachusetts research team with funding and oversight provided by the New England Transportation Consortium. The method is called WEThings (wetland habitat indicators for non-game species). It produces a list of potential wetland-dependent mammal, reptile, and amphibian species that may be present in the wetland. The output is based on observable habitat characteristics documented on the field data form. This method may be used to generate the wildlife species list recommended as backup information to the wetland evaluation form and to augment the considerations. Use of this method should first be coordinated with the Corps project manager. A computer program is also available to expedite this process.

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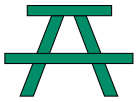

RECREATION (Consumptive and Non-Consumptive) — This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland. Non-consumptive opportunities do not consume or diminish these resources of the wetland.

CONSIDERATIONS/QUALIFIERS

1. Wetland is part of a recreation area, park, forest, or refuge.
2. Fishing is available within or from the wetland.
3. Hunting is permitted in the wetland.
4. Hiking occurs or has potential to occur within the wetland.
5. Wetland is a valuable wildlife habitat.
6. The watercourse, pond, or lake associated with the wetland is unpolluted.
7. High visual/aesthetic quality of this potential recreation site.
8. Access to water is available at this potential recreation site for boating, canoeing, or fishing.
9. The watercourse associated with this wetland is wide and deep enough to accommodate canoeing and/or non-powered boating.
10. Off-road public parking available at the potential recreation site.
11. Accessibility and travel ease is present at this site.
12. The wetland is within a short drive or safe walk from highly populated public and private areas.
13. Other

EDUCATIONAL/SCIENTIFIC VALUE — This value considers the suitability of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.

CONSIDERATIONS/QUALIFIERS

1. Wetland contains or is known to contain threatened, rare, or endangered species.
2. Little or no disturbance is occurring in this wetland.
3. Potential educational site contains a diversity of wetland classes which are accessible or potentially accessible.
4. Potential educational site is undisturbed and natural.
5. Wetland is considered to be a valuable wildlife habitat.
6. Wetland is located within a nature preserve or wildlife management area.
7. Signs of wildlife habitat enhancement present (bird houses, nesting boxes, food sources, etc.).
8. Off-road parking at potential educational site suitable for school bus access in or near wetland.
9. Potential educational site is within safe walking distance or a short drive to schools.
10. Potential educational site is within safe walking distance to other plant communities.
11. Direct access to perennial stream at potential educational site is available.
12. Direct access to pond or lake at potential educational site is available.
13. No known safety hazards exist within the potential educational site.
14. Public access to the potential educational site is controlled.
15. Handicap accessibility is available.
16. Site is currently used for educational or scientific purposes.
17. Other

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UNIQUENESS/HERITAGE — This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values. These may include archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, its relative importance as a typical wetland class for this geographic location. These functions are clearly valuable wetland attributes relative to aspects of public health, recreation, and habitat diversity.

CONSIDERATIONS/QUALIFIERS

1. Upland surrounding wetland is primarily urban.
2. Upland surrounding wetland is developing rapidly.
3. More than 3 acres of shallow permanent open water (less than 6.6 feet deep), including streams, occur in wetlands.
4. Three or more wetland classes are present.
5. Deep and/or shallow marsh or wooded swamp dominate.
6. High degree of interspersion of vegetation and/or open water occur in this wetland.
7. Well-vegetated stream corridor (15 feet on each side of the stream) occurs in this wetland.
8. Potential educational site is within a short drive or a safe walk from schools.
9. Off-road parking at potential educational site is suitable for school buses.
10. No known safety hazards exist within this potential educational site.
11. Direct access to perennial stream or lake exists at potential educational site.
12. Two or more wetland classes are visible from primary viewing locations.
13. Low-growing wetlands (marshes, scrub-shrub, bogs, open water) are visible from primary viewing locations.
14. Half an acre of open water or 200 feet of stream is visible from the primary viewing locations.
15. Large area of wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
16. General appearance of the wetland visible from primary viewing locations is unpolluted and/or undisturbed.
17. Overall view of the wetland is available from the surrounding upland.
18. Quality of the water associated with the wetland is high.
19. Opportunities for wildlife observations are available.
20. Historical buildings are found within the wetland.
21. Presence of pond or pond site and remains of a dam occur within the wetland.
22. Wetland is within 50 yards of the nearest perennial watercourse.
23. Visible stone or earthen foundations, berms, dams, standing structures, or associated features occur within the wetland.
24. Wetland contains critical habitat for a state- or federally-listed threatened or endangered species.
25. Wetland is known to be a study site for scientific research.
26. Wetland is a natural landmark or recognized by the state natural heritage inventory authority as an exemplary natural community.
27. Wetland has local significance because it serves several functional values.
28. Wetland has local significance because it has biological, geological, or other features that are locally rare or unique.
29. Wetland is known to contain an important archaeological site.
30. Wetland is hydrologically connected to a state or federally designated scenic river.
31. Wetland is located in an area experiencing a high wetland loss rate.
32. Other

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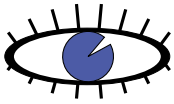
VISUAL QUALITY/AESTHETICS — This value considers the visual and aesthetic quality or usefulness of the wetland.



CONSIDERATIONS/QUALIFIERS

1. Multiple wetland classes are visible from primary viewing locations.
2. Emergent marsh and/or open water are visible from primary viewing locations.
3. A diversity of vegetative species is visible from primary viewing locations.
4. Wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
5. Land use surrounding the wetland is undeveloped as seen from primary viewing locations.
6. Visible surrounding land use form contrasts with wetland.
7. Wetland views absent of trash, debris, and signs of disturbance.
8. Wetland is considered to be a valuable wildlife habitat.
9. Wetland is easily accessed.
10. Low noise level at primary viewing locations.
11. Unpleasant odors absent at primary viewing locations.
12. Relatively unobstructed sight line exists through wetland.
13. Other

ENDANGERED SPECIES HABITAT — This value considers the suitability of the wetland to support threatened or endangered species.

ES

CONSIDERATIONS/QUALIFIERS

1. Wetland contains or is known to contain threatened or endangered species.
2. Wetland contains critical habitat for a state or federally listed threatened or endangered species.

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APPENDIX C

Supporting Maps and Figures

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

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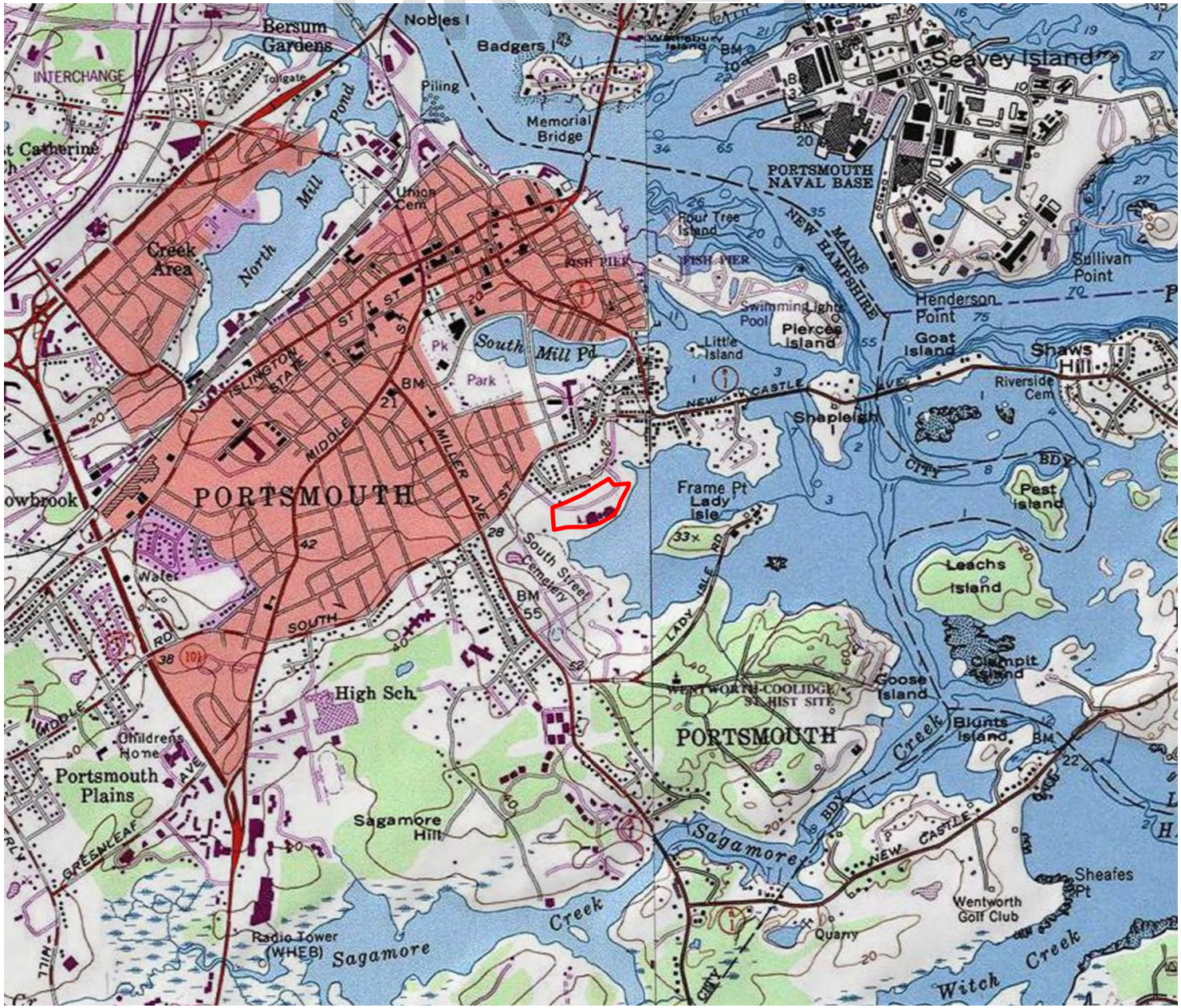

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area

National Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area

NH Wildlife Action Plan 2020 - Habitat Land Cover

- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

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Map by NH DES OneStop Data Mapper_PRA

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ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

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Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

DRAFT

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

ArcGIS World Geocoding Service
City/Town
Parcels

Prime Wetlands
Prime Wetlands with 100ft Buffer

NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

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Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.5

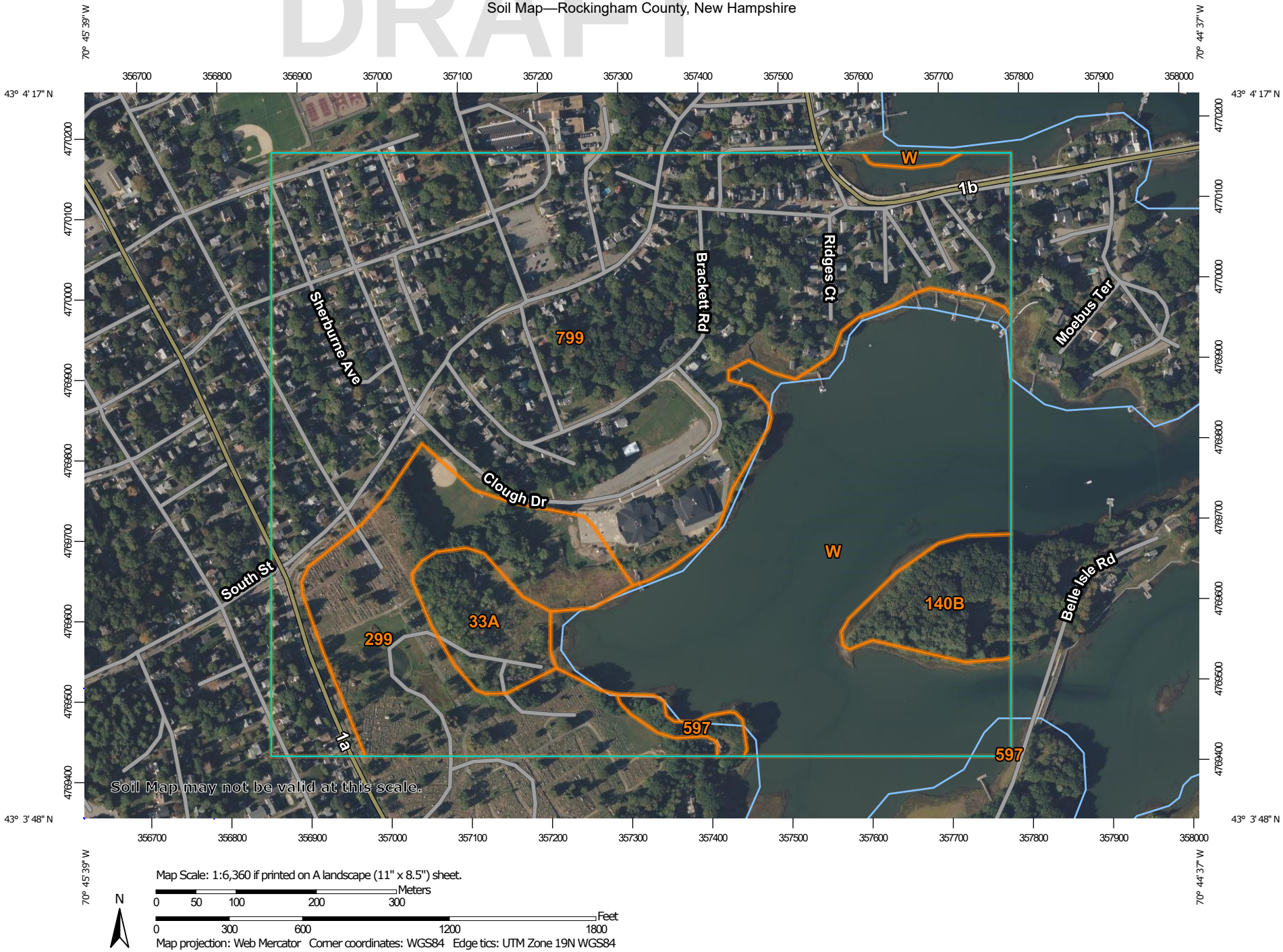
Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

DRAFT

Soil Map—Rockingham County, New Hampshire



Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 50 100 200 300

Feet: 0 300 600 1200 1800

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

DRAFT

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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

DRAFT

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

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APPENDIX J

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1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Bonded Rubber Outdoor Surfacing Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Routine Monthly Maintenance

Sweep, vacuum, blow, or hose off entire surface to remove any loose debris such as sand, dirt, leaves, tree sap, chewing gum, bird droppings, scuff marks, etc. Repeat as needed.

A pressure washer may be used in accordance with the equipment recommendations and technical guidelines as stated in this document. Please contact No Fault Surfaces for complete technical guidelines and equipment recommendations regarding pressure washers.

No Fault Surfaces
6750 Exchequer Drive
Baton Rouge, LA 70809
Technical Support at 800-232-7766

2. Isolated Stains

On heavily stained isolated spots, while surface is still damp from hosing, apply a sufficient amount for adequate coverage of full strength all-purpose cleaner; using a hand-held spray bottle, scrub thoroughly with a 10" medium basine bristle scrub brush. Repeat as needed on extremely tough stains.

3. General Area Cleaning

While surface is still damp from hosing, apply a mixture of full strength all purpose cleaner and water using a garden pump sprayer to a small area; be sure to follow directions for use on the cleaner you choose from your local supplier. Scrub using the basine 10" medium bristle scrub brush. Repeat as needed. Once the entire surface area has been cleaned, rinse thoroughly using a garden hose with nozzle attachment.

4. Inspection & Maintenance

1. Perform cleaning during early morning or late afternoon so that your cleaner will have time to react without evaporating.
2. Area to be cleaned must be slightly damp prior to applying cleansing solution.
3. Clean only a small area at a time making sure it is thoroughly scrubbed to eliminate the possibility of dirty spots and/or streaking caused by areas missed while scrubbing.
4. It shall be at the City of Portsmouth's discretion whether to remove stains on a less-than-annual basis. The City acknowledges that a stain may become more difficult or even impossible to remove if not addressed immediately. This procedure provides no guarantee of stain removal.

5. Recommended Equipment

1. Broom, Wet/Dry Shop Vac or Blower

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2. Garden hose with spray nozzle
3. One 1/2 gallon garden pump sprayer
4. Pressure washer recommended (1500 PSI maximum)
5. All purpose cleaner in hand-held spray bottle (i.e. Formula 409™)
6. Disposable rags
7. Disposable gloves
8. Cleaning & rinsing buckets
9. 10" medium bristle scrub brush
10. JOMAX® House Cleaner and Mildew Killer (manufactured by Zinsser)

6. Equipment to Avoid

1. Chlorine Bleach
2. Disinfectants
3. Gasoline
4. Diesel
5. Hydraulic and Lubricating Oils
6. Thinners
7. Mineral Spirits
8. Solvents (including Organic Solvents)
9. Heavily concentrated degreasers (i.e. Grease Lightning & Simple Green)
10. Steel or Hard Plastic Brush on Manual or Electric Cleaning Units

For any questions about this inspection & maintenance plan, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

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Engineered Wood Fiber (EWF) Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Purpose

This maintenance plan establishes procedures for the inspection, upkeep, and replacement of Engineered Wood Fiber (EWF) playground surfacing at school district playgrounds. The goal is to ensure safe play conditions, proper impact attenuation, effective drainage, and long-term performance of the playground surface. All maintenance activities shall be performed in accordance with manufacturer recommendations and applicable safety standards.

2. General Maintenance Requirements

Engineered Wood Fiber is a natural material that will settle and shift over time due to weather conditions and playground use. Regular inspection and maintenance are required to maintain proper surface depth, levelness, and drainage, particularly in high-use areas.

3. Routine Inspections and Maintenance

3.1 Weekly Inspections

- Inspect all playground surfacing weekly, with particular attention to high-traffic areas such as beneath swings, slide exits, and climbing equipment.
- Identify areas where EWF has been displaced, compacted, or worn thin.
- Redistribute material as needed to maintain uniform coverage and prevent exposed subsurface areas.
- Remove foreign objects, including fallen branches, toys, debris, or other materials that may become embedded in the surfacing and create potential hazards.
- Use rakes or shovels to move material from low-traffic areas to worn areas as needed.

3.2 Surface Leveling

- Rake the EWF regularly to maintain a level surface and the manufacturer's recommended depth.
- Level surfacing is essential to ensure consistent impact protection throughout the playground.
- Wear mats installed in high-use areas may reduce the frequency of raking; however, transitions between wear mats and surrounding EWF shall remain flush and even.

4. Entrances and Containment Edges

- At playground entrances and along containment borders, maintain the EWF surface so it remains within ¼ inch of the top of the border or adjacent surface.

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- Promptly address material displacement in these areas to prevent material loss and uneven conditions.

5. Surface Depth Verification and Restoration

5.1 Depth Measurement

- In the highest use areas and around equipment footings, periodically excavate to the subsurface or drainage layer to measure EWF depth.
- Ensure the surfacing depth meets or exceeds the required depth for the fall height of the playground equipment or the manufacturer's original recommended depth, whichever is greater.
- Add EWF as necessary, then level, moisten, and compact the material to restore proper performance.

5.2 Depth Monitoring

- Markings on equipment supports or containment borders are recommended to assist maintenance staff in visually confirming that required surface depth is being maintained over time.

6. Drainage and Performance Monitoring

- Inspect the playground surface regularly to ensure there is no standing water.
- Verify that the subsurface drainage system is functioning properly, as adequate drainage is critical to the longevity and effectiveness of EWF surfacing.
- Address drainage issues promptly to prevent premature material breakdown.

7. Periodic Top-Off and Material Management

- Depending on climate, drainage conditions, and frequency of use, EWF surfacing may require topping off with new material approximately every two (2) to five (5) years.
- To evaluate the need for additional material, rake the surface evenly and measure depth at multiple locations, focusing on high-traffic areas.
- If average depth is less than the recommended requirement, additional EWF shall be added to restore the surface to proper thickness.

8. Full Replacement Considerations

- Determine the number of inches the surfacing is below the required depth to calculate the amount of new material needed.
- In conditions where EWF remains consistently saturated or waterlogged, partial or complete removal and replacement of the material may be required.
- As a natural wood fiber product, EWF will gradually decompose over time. Once decomposition reduces impact attenuation performance, the material must be replaced to maintain safe playground conditions.

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9. Questions, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

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Weston & Sampson

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Rain Garden Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Rain Garden Information

Rain Gardens are designed to remove pollutants from stormwater runoff and reduce runoff volume through infiltration. **Maintenance is required** and is extremely important. Sediment and debris must be removed regularly to maintain correct rain garden function.

This document serves as guidance to developing an inspection and maintenance plan.

2. Rain Garden Inspection & Maintenance

The City of Portsmouth or their designee is responsible for completing inspections and conducting maintenance.

At a minimum, rain gardens must be inspected in the **spring** and **fall** of each year *(one inspection a month recommended).* Personnel should be aware of the maintenance plan. It is recommended to consult with the designer and builder to understand the inspection and maintenance needs.

This Maintenance Plan for the location listed above is submitted by the City of Portsmouth to comply with the City's Stormwater Management Code Requirements. Inspection and maintenance records are required to be kept on file for five (5) years and submitted to the City by October 1st of each year. This plan will be attached to the required recorded maintenance agreement.

3. Inspection & Maintenance Checklist (Must be completed in Spring & Fall)

	Clean Rain Garden. Remove any sediment, trash and debris.
	Remove any dead vegetation, trim live vegetation if needed and remove weeds.
	Repair inlet erosion/damage. Inspect bottom of the garden and remove any sediment.
	Loosen, aerate or replace soils to ensure water infiltrates, must infiltrate within 48 hours.
	Paved surfaces draining to garden swept and kept free of sediment and debris.
	Wood mulch replaced or added to keep 3" depth.
	Replace dead plants/vegetation. Water as needed.
	Erosion will be repaired.
	Photos taken.

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For any questions about this inspection & maintenance plan, please contact:

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Boston, MA 02108
617-412-4480

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APPENDIX K

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Env-Wt 313.05 Processing of Related Wetlands and Shoreland Permit Applications.

(a) For the projects listed in (d), below, that require both an EXP or standard permit under RSA 482-A and a shoreland permit under RSA 483-B, the applicant may file the individual permit applications for the project concurrently, with a written request to process the applications together.

Per Env-Wt 313.05 Weston & Sampson Engineers, Inc. on behalf of the City of Portsmouth are requesting concurrent processing for the Wetlands and Shoreland submissions for the proposed Little Harbor School Playground Renovations project.

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APPENDIX L

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SEE ATTACHED FULL SIZE PLANS

ATTACHMENT 5

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Bonded Rubber Outdoor Surfacing Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

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9. Questions, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

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	Loosen, aerate or replace soils to ensure water infiltrates, must infiltrate within 48 hours.
	Paved surfaces draining to garden swept and kept free of sediment and debris.
	Wood mulch replaced or added to keep 3" depth.
	Replace dead plants/vegetation. Water as needed.
	Erosion will be repaired.
	Photos taken.

For any questions about this inspection & maintenance plan, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

ATTACHMENT 6

LITTLE HARBOUR ELEMENTARY SCHOOL & PORTSMOUTH EARLY EDUCATION PROGRAM (PEEP) PLAYGROUND IMPROVEMENTS

50 CLOUGH DRIVE, PORTSMOUTH, NH 03801

811 Know what's below. Call before you dig. www.cbyd.com

OWNER:
CITY OF PORTSMOUTH

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE 03801

PREPARED FOR:
KEN LINCHEY, CSFS, CSFM

DIRECTOR OF BUILDINGS & GROUNDS
PORTSMOUTH SCHOOL DEPARTMENT
1 JUNKINS AVENUE, SUITE 402
PORTSMOUTH, NH 03801

DESIGN TEAM:

LANDSCAPE ARCHITECT/ENGINEER:
WESTON & SAMPSON ENGINEERS, INC.
1 WASHINGTON STREET, 10TH FLOOR
BOSTON, MASSACHUSETTS 02108

SURVEYOR
SURVEY & MAPPING, LLC (SAM)
(DOUCET SURVEY)
102 KENT PLACE
NEWMARKET, NH 03857

PLAYGROUND REPRESENTATIVE A
M.E. O'BRIEN & SONS, INC.
17 TROTTER DRIVE
MEDWAY, MA 02053

PLAYGROUND REPRESENTATIVE B
ULTIPLAY
43 MAIN STREET
BLACKSTONE, MA 01569

LOCATION MAP
NOT TO SCALE

LITTLE HARBOUR SCHOOL PLAYGROUND

PEEP PLAYGROUND

- FOR ILLUSTRATIVE PURPOSES ONLY RENDERINGS MAY BE OUTDATED -

DECEMBER 19, 2025

Prepared By

Weston & Sampson Engineers, Inc.
1 Washington Street, 10th Floor
Boston, MA 02108
978.532.1900 800.SAMPSON
www.westonandsampson.com

- FOR PERMITTING ONLY -
NOT FOR CONSTRUCTION

SHEET INDEX

L001 ..... GENERAL NOTES
L002 ..... INDEX PLAN
L100-L101 ..... EXISTING CONDITIONS PLAN
L200-L201 ..... SITE PREPARATION & DEMOLITION PLAN
L300-L302 ..... MATERIALS PLAN
L400-L401 ..... LAYOUT PLAN
L500-L501 ..... GRADING PLAN
L600-L601 ..... PLANTING PLAN
L900-L905 ..... DETAILS

ADD ALTERNATES

ADD ALTERNATE #1: PEEP LAWN EXPANSION
PROVIDE AND INSTALL NEW BLACK VINYL COATED CHAIN LINK FENCING, INCLUDING ALL POSTS, FOOTINGS, HARDWARE, AND INCIDENTALS. PROVIDE AND INSTALL TWO (2) PROPOSED TREES, INCLUDING EXCAVATION, BACKFILL, SOIL AMENDMENTS, AND STAKING AS REQUIRED. ADD ALTERNATE INCLUDES SODDED/SEEDED LAWN AREAS, INCLUDING TOPSOIL PREPARATION, GRADING, AND ESTABLISHMENT.

ADD ALTERNATE #2: LHS PLAYGROUND - INCLUSIVE MERRY-GO-ROUND
PROVIDE AND INSTALL ONE (1) LANDSCAPE STRUCTURES WE-GO-ROUND, INCLUDING ALL ASSOCIATED FOUNDATIONS, ANCHORING, HARDWARE, AND INCIDENTALS, IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS AND APPLICABLE SAFETY STANDARDS. ADD ALTERNATE INCLUDES BONDED RUBBER SURFACING WITHIN THE REQUIRED USE AND FALL ZONES, INCLUDING BASE PREPARATION, DRAINAGE, AND EDGE TRANSITIONS.

ADD ALTERNATE #3: LHS PLAYGROUND - POURED-IN-PLACE RUBBER SAFETY SURFACING AT LARGE STRUCTURE
PROVIDE AND INSTALL POURED-IN-PLACE (PIP) RUBBER SURFACING UNDER THE LARGE PLAY STRUCTURE IN LIEU OF ENGINEERED WOOD FIBER AND BONDED RUBBER SURFACING SHOWN IN THE BASE BID. ADD ALTERNATE INCLUDES ALL REQUIRED BASE PREPARATION, DRAINAGE, CONCRETE CURB EDGE RESTRAINTS, AND TRANSITIONS, AND SHALL MEET APPLICABLE ASTM AND CPSC SAFETY STANDARDS. REMOVE ENGINEERED WOOD FIBER AND BONDED RUBBER FROM THE BASE BID SCOPE ASSOCIATED WITH THE LARGE PLAY STRUCTURE.

ADD ALTERNATE #4: LHS PLAYGROUND - ENTRY ARCHWAY
PROVIDE AND INSTALL ONE (1) COMPOSITE WOOD PLAYGROUND ENTRY ARCHWAY, INCLUDING ALL STRUCTURAL MEMBERS, CONNECTIONS, FOOTINGS, HARDWARE, AND INCIDENTALS, IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS AND APPLICABLE CODES. ADD ALTERNATE INCLUDES FOUNDATIONS, SETTING, AND FINAL ALIGNMENT. COORDINATE LOCATION, DIMENSIONS, AND FINISH WITH THE OVERALL PLAYGROUND DESIGN AND ADJACENT SITE IMPROVEMENTS.

ADD ALTERNATE #5: LHS PLAYGROUND - WALL BALL FENCE
PROVIDE AND INSTALL VINYL-COATED GALVANIZED STEEL CHAIN LINK FENCING AT THE WALL-BALL AREA, INCLUDING ALL POSTS, RAILS, TENSION WIRE, FABRIC, FITTINGS, AND CONCRETE FOUNDATIONS. FENCING SHALL BE 9-GAUGE FABRIC WITH 2" MESH, BLACK VINYL COATED. POSTS AND RAILS SHALL BE SCHEDULE 40 STEEL, WITH TOP RAIL AND BOTTOM TENSION WIRE. FENCE HEIGHT SHALL BE 10' HT. AS INDICATED ON THE PLANS. INCLUDE ALL LABOR, MATERIALS, AND INCIDENTAL WORK REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.

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p:\MA\portsmouth, city\p25005.city_harbour elementary school\05cmu\civil\000 COVER SHEET.dwg Amelia.Ashton 12/19/2025 9:33 AM

GENERAL NOTES

1. PROPERTY LINES, SITE SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON THE GROUND SURVEY PERFORMED BY SURVEYING & MAPPING, LLC ON SEPTEMBER 19, 2025 USING NAD 1983 NEW HAMPSHIRE FEET COORDINATE SYSTEM.
2. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
3. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES. CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT (888) 344-7233 NO LESS THAN 72 HOURS, (EXCLUSIVE OF WEEKENDS AND HOLIDAYS), PRIOR TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE CITY OF PORTSMOUTH.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
7. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING. ITEMS ENCOUNTERED IN AREAS OF EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
8. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
9. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
10. ALL WORK SHOWN ON THE PLANS AS BOLD SHALL REPRESENT PROPOSED WORK. THE TERM "PROPOSED (PROP.)" INDICATES WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND SALVAGE (R&S)", OR REMOVE, RELOCATE AND SALVAGE, (R,R&S).
11. ALL KNOWN EXISTING STATE, COUNTY AND CITY LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
13. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
14. FILLING OF EXCAVATED AREAS SHALL NOT TAKE PLACE WITHOUT THE PRESENCE OR PERMISSION OF THE OWNER.
15. EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE DRIP LINE OF TREES TO REMAIN. NO GUYS SHALL BE ATTACHED TO ANY TREE TO REMAIN. WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ERECT TEMPORARY BARRIERS FOR THE PROTECTION OF EXISTING TREES DURING CONSTRUCTION.
16. TREES AND SHRUBS WITHIN THE LIMITS OF WORK SHALL BE REMOVED ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT OR AS NOTED ON THE PLANS.
17. NO FILLING SHALL OCCUR AROUND EXISTING TREES TO REMAIN WITHOUT THE APPROVAL OF THE OWNER OR OWNER REPRESENTATIVE.
18. THE CONTRACTOR SHALL REMOVE ALL SURFACE VEGETATION PRIOR TO GRADING THE SITE. TREES AND STUMPS SHALL BE REMOVED AND DISPOSED COMPLETE BY CONTRACTOR. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS (INCLUDING SILT FENCE, STRAW WATTLES, OR SILT SOCKS) SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE PROJECT WHICH COST SHALL BE INCIDENTAL TO THE PROJECT.
19.
20. ALL UNSUITABLE UNCONTAMINATED EXCESS SOIL FROM CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. REMOVAL ACTIVITIES SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST TO THE CITY. SUITABLE SOIL EXCAVATION AS PART OF THE PROJECT MUST MEET ONE OR MORE OF THE MATERIAL REQUIREMENTS SPECIFIED. ON-SITE FILL MATERIALS, WHICH DO NOT CONFORM TO THE SPECIFICATIONS, SHALL NOT BE USED BELOW ANY STRUCTURES. IF THE CONTRACTOR PROPOSES TO USE THE EXISTING FILL ON SITE BELOW PAVEMENT AREAS, HE MUST DEMONSTRATE THAT THE FILL MEETS THE REQUIREMENTS PER THE SPECIFICATIONS. ALL EXCAVATED FILL MATERIAL WHICH DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT NO ADDITIONAL COST.
21. CONTRACTOR IS RESPONSIBLE FOR STAKING CONSTRUCTION BASELINES IN FIELD WITH A NEW HAMPSHIRE REGISTERED PROFESSIONAL LAND SURVEYOR. NO CONSTRUCTION WILL BE PERFORMED WITHOUT THE PROPOSED BASELINES AND LAYOUTS APPROVED BY THE ENGINEER.
22. NO FILL SHALL CONTAIN HAZARDOUS MATERIALS.
23. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AROUND PERIMETER OF WORK AREA (LIMIT OF WORK). FENCE SHALL NOT IMPEDE TRAVEL WAYS.
24. ANY QUANTITIES SHOWN ON PLANS ARE FOR COMPARATIVE BIDDING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT SITE TO VERIFY ALL QUANTITIES AND CONDITIONS PRIOR TO SUBMITTING BID.
25. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. REMOVE ALL SOIL, SEDIMENT, DEBRIS AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.
26. CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE AND IN AREAS APPROVED BY OWNER. ANY OTHER AREAS THAT THE CONTRACTOR MAY WISH TO USE FOR STAGING MUST BE COORDINATED WITH THE OWNER.
27. THE CONTRACTOR SHALL KEEP ALL STREETS, PARKING LOTS AND WALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
28. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
29. CONTRACTOR SHALL DEWATER AS NECESSARY TO PERFORM THE PROPOSED WORK. CONTRACTOR SHALL BE AWARE OF PERCHED GROUNDWATER.
30. THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION AND AGREED UPON WITH THE LANDSCAPE ARCHITECT.
31. DEEP SUMP CATCH BASINS AND STORMWATER BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND SHALL FOLLOW THE OPERATION AND MAINTENANCE PLAN THEREAFTER.
32. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7 AM TO 6 PM.
33. ANY BOULDERS 3 CY OR SMALLER SHALL BE CONSIDERED UNDOCUMENTED FILL AND SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE CITY.
34. WORK ON SATURDAYS SHALL ONLY BE CONDUCTED IF PRIOR WRITTEN PERMISSION IS PROVIDED BY THE CITY OF PORTSMOUTH.
35. NO TRUCKS LEFT IDLING ON CITY STREETS DURING CONSTRUCTION. CONSTRUCTION TRAFFIC AT NO TIME SHALL IMPEDE FLOW OF RESIDENT TRAFFIC.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PUT INTO PLACE PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION. REFER TO PLANS FOR APPROXIMATE LOCATION OF EROSION AND SEDIMENT CONTROL. REFER TO SPECS AND DETAILS FOR TYPE OF EROSION AND SEDIMENT CONTROL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF ALL CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL MEET ALL OF THE NEW HAMPSHIRE D.E.S. REGULATIONS FOR SEDIMENT AND EROSION CONTROL.
4. EXCAVATED MATERIAL STOCKPILED ON THE SITE SHALL BE SURROUNDED BY A RING OF UNBROKEN SEDIMENT AND EROSION CONTROL FENCE. THE LIMITS OF ALL GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMIT OF CONTRACT SHALL REMAIN TOTALLY UNDISTURBED UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.
5. ALL CATCH BASINS AND DRAIN GRATES WITHIN LIMIT OF CONTRACT SHALL BE PROTECTED WITH SILT SACKS DURING THE ENTIRE DURATION OF CONSTRUCTION.
6. EROSION CONTROL BARRIERS TO BE INSTALLED AT THE TOE OF SLOPES. SEE GRADING & DRAINAGE PLANS, NOTES, DETAILS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY OWNER.
8. ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC/PRIVATE ROADS.

DEMOLITION & SITE PREPARATION NOTES

1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE REMOVE AND SALVAGE (R&S), ALL SITE FEATURES CALLED FOR REMOVAL (REM) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC, TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO ADDITIONAL COST TO THE OWNER.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN. OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.
7. 'STRIP AND REMOVE TURF' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH, REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.
8. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. LOAM / TOP SOIL DESIGNATED FOR REUSE AS GENERAL FILL SHALL BE BLENDED WITH SUITABLE BORROW MATERIAL AS SPECIFIED.
11. THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AFTER CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.

LAYOUT & MATERIALS NOTES

1. REFER TO EXISTING CONDITIONS PLANS FOR SURVEY INFORMATION (SHEET L100-L101).
2. COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES OPERATIONS ENCOMPASSED BY THIS CONTRACT. SET, PROTECT AND REPLACE REFERENCE STAKES AS NECESSARY OR AS REQUIRED BY THE OWNER'S REPRESENTATIVE.
3. ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED "BY OTHERS" OR "UNDER SEPARATE CONTRACT".
4. TO FACILITATE LAYOUT OF PROPOSED SITE FEATURES AND FACILITIES, LAYOUT INFORMATION FOR CERTAIN FUTURE WORK, WHICH IS NOT INCLUDED WITHIN THE SCOPE OF THIS CONTRACT HAS BEEN PROVIDED ON THE LAYOUT AND MATERIALS PLAN FOR INFORMATION ONLY. SOME ITEMS ARE "NOT IN CONTRACT" (NIC) AND SHOWN FOR REFERENCE ONLY.
5. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. THE LAYOUT OF ALL NEW PATHWAYS / WALKWAYS AND THE GRADING OF ALL SLOPES AND CROSS SLOPES SHALL CONFORM TO THE NEW HAMPSHIRE RULES AND REGULATIONS FOR HANDICAP ACCESS CMR 521, AND THE AMERICANS WITH DISABILITIES ACT (ADA), TITLE 3. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE REQUIRED.
7. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
8. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS DIRECTED, AT NO ADDITIONAL COST TO THE OWNER. ALL LAYOUT SHALL BE PERFORMED BY A MA. REGISTERED PROFESSIONAL LAND SURVEYOR.
9. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES. ALL BITUMINOUS CONCRETE SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. ALL PATHWAY WIDTHS SHALL BE AS NOTED ON THE LAYOUT AND MATERIALS PLAN.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES.
12. THE DEPTH OF LOAM BORROW FOR ALL PROPOSED LAWN AREAS SHALL BE 6" MINIMUM. ALL DISTURBED AREAS SHALL BE RESTORED WITH LOAM AND SEED UNLESS OTHERWISE NOTED.
13. REFER TO DETAIL DRAWINGS FOR CONSTRUCTION DETAILS.
14. SURVEY CONTROL POINTS AND COORDINATES ARE INDICATED ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OR CREATE HIS OWN PROTECTED CONTROL POINTS FROM THIS INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL LAYOUT POINTS ARE CONSISTENT WITH CONTROL INFORMATION. RESETTING OF DAMAGED OR MISSING LAYOUT MARKERS AS NECESSARY IS AT NO ADDITIONAL COST TO THE OWNER.

GRADING, UTILITIES & DRAINAGE NOTES

1. ALL WORK RELATING TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND/OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORK.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
3. ALL GRADING IS TO BE SMOOTH AND CONTINUOUS WHERE PROPOSED SURFACES MEET EXISTING SURFACES, ELIMINATE ROUGH SPOTS AND ABRUPT GRADE CHANGES AND MEET LINE AND GRADE OF EXISTING CONDITIONS WITH NEW IMPROVEMENTS.
4. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE (1.5% MINIMUM) AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
5. CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
6. MINIMUM CROSS SLOPE ON ALL WALKWAYS WILL BE 1:100 OR 1.5% TO PROVIDE POSITIVE DRAINAGE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.
7. ALL UTILITY GRATES, COVERS OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES. ALL UTILITY GRATES WITHIN PLAYING FIELDS OR INDICATED TO BE "BURIED" SHALL BE 4" BELOW FINISH GRADE AND COVERED WITH FINISH MATERIAL INDICATED ON PLANS.
8. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS, PUBLIC/PRIVATE STREETS AND WORK AREAS. CLEAN BASINS REGULARLY AS NEEDED AND AT THE END OF THE PROJECT.
9. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
10. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
11. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
12. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
13. SEE EARTHWORK SECTION OF SPECIFICATIONS FOR SPECIFIC EXCAVATION AND FILLING PROCEDURES.
14. FOR STRUCTURE REMODELING (REMOD), CONSTRUCTION METHODS SHALL FOLLOW STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS LATEST EDITION.

ABBREVIATIONS

GENERAL

PROP	PROPOSED
ADJ	ADJUST
BIT. CONC.	BITUMINOUS CONCRETE
CEM. CONC.	CEMENT CONCRETE
B	BASELINE
N.T.S.	NOT TO SCALE
BVCL	BLACK VINYL CHAIN LINK
B.M.	BENCH MARK
ABAN	ABANDON
MB	MAIL BOX
GRAN. CURB	GRANITE CURB
EXIST. (OR EX.)	EXISTING
FDN	FOUNDATION
F.L. (OR F)	FLOW LINE
P	PROPERTY LINE
PVMT	PAVEMENT
P.W.W.	PAVED WATERWAY
RC	REINFORCED CONCRETE
REM	REMOVE
REMOD	REMODEL
RET	RETAIN
R.O.W.	RIGHT-OF-WAY
R&S	REMOVE AND SALVAGE
R,R&S	REMOVE, RELOCATE AND SALVAGE
R&D	REMOVE AND DISPOSE
SB	STONE BOUND
NIC	NOT IN CONTRACT
H.C.	HANDICAP
WCR	WHEELCHAIR RAMP
FF	FINISHED FLOOR
HMA	HOT MIX ASPHALT
G.C.	GENERAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
SWEL	SOLID WHITE EDGE LINE
BWLL	BROKEN WHITE LANE LINE
SYEL	SOLID YELLOW EDGE LINE
SB/DH	STONE BOUND/ DRILL HOLE
CLF	CHAIN LINK FENCE
TEMP.	TEMPORARY
TYP.	TYPICAL
EQ	EQUIPMENT
H.C.	HANDICAP
EOP	EDGE OF PAVEMENT
PROT	PROTECT
CTE	CONNECT TO EXISTING
RL	ROOF LEADER
L.O.W.	LIMIT OF WORK
VIF	VERIFY IN FIELD
BVW	BORDERING VEGETATED WETLAND

UTILITIES

GICI	GUTTER INLET W/ CURB INLET
CBCI	CATCH BASIN W/ CURB INLET
CB	CATCH BASIN
C.I.T.	CHANGE IN TYPE
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
CI	CURB INLET
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
DI	DRAIN INLET
GI	GUTTER INLET
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
HYD	HYDRANT
INV. ELEV.	INVERT ELEVATION
UP	UTILITY POLE
SMH	SEWER MANHOLE
WG	WATER GATE
DS	DOWN SPOUT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
DMH	DRAIN MANHOLE
LB	LEACHING BASIN
LG	LEACHING GALLEY
CI	CAST IRON
OCS	OUTLET CONTROL STRUCTURE
OGT	OIL AND GRIT TRAP
VC	VITRIFIED CLAY PIPE
LP	LIGHT POLE
OHW	OVERHEAD WIRE
UPLP	UTILITY POLE WITH LIGHT
SWTU	STORM WATER TREATMENT UNIT
HH	HANDHOLE
GW	GARAGE WASTE
CO	CLEANOUT
LC	LEACHING CHAMBER
GV	GATE VALVE
CU	CONNECTION UNKNOWN

ALIGNMENT/GRADING

BW	BOTTOM OF WALL
BC	BOTTOM OF CURB
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
ELEV	ELEVATION
CC	CENTER OF CURVE
H.P.	HIGH POINT
L.P.	LOW POINT
R	RADIUS OF CURVATURE
STA	STATION
S.S.D.	STOPPING SIGHT DISTANCE
TC	TOP OF CURB
TW	TOP OF WALL

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson

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GENERAL NOTES

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PEEP PLAYGROUND.
SEE PAGES L101, L201, L302, L401, L501, L601

LITTLE HARBOUR ELEMENTARY SCHOOL

LITTLE HARBOUR ELEMENTARY SCHOOL PAYGROUND. SEE PAGES L100, L200, L300, L301, L400, L500, L600

PROPERTY LINE

TAX MAP 206, LOT 20

TAX MAP 206, LOT 22

TAX MAP 206, LOT 23

TAX MAP 206, LOT 25

TAX MAP 206, LOT 26

TAX MAP 206, LOT 27

TAX MAP 206, LOT 21

100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE

LIMITED CUT AREA (50' OFFSET)

VEGETATED BUFFER STRIP (25' OFFSET)

COASTAL WETLAND

HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE

EPHEMERAL STREAM

100-YEAR FLOODPLAIN ZONE AE

PISCATAQUA RIVER

OHW

MHW

SCALE: 1"=30'

0 15' 30' 60'

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CITY OF PORTSMOUTH

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INDEX PLAN

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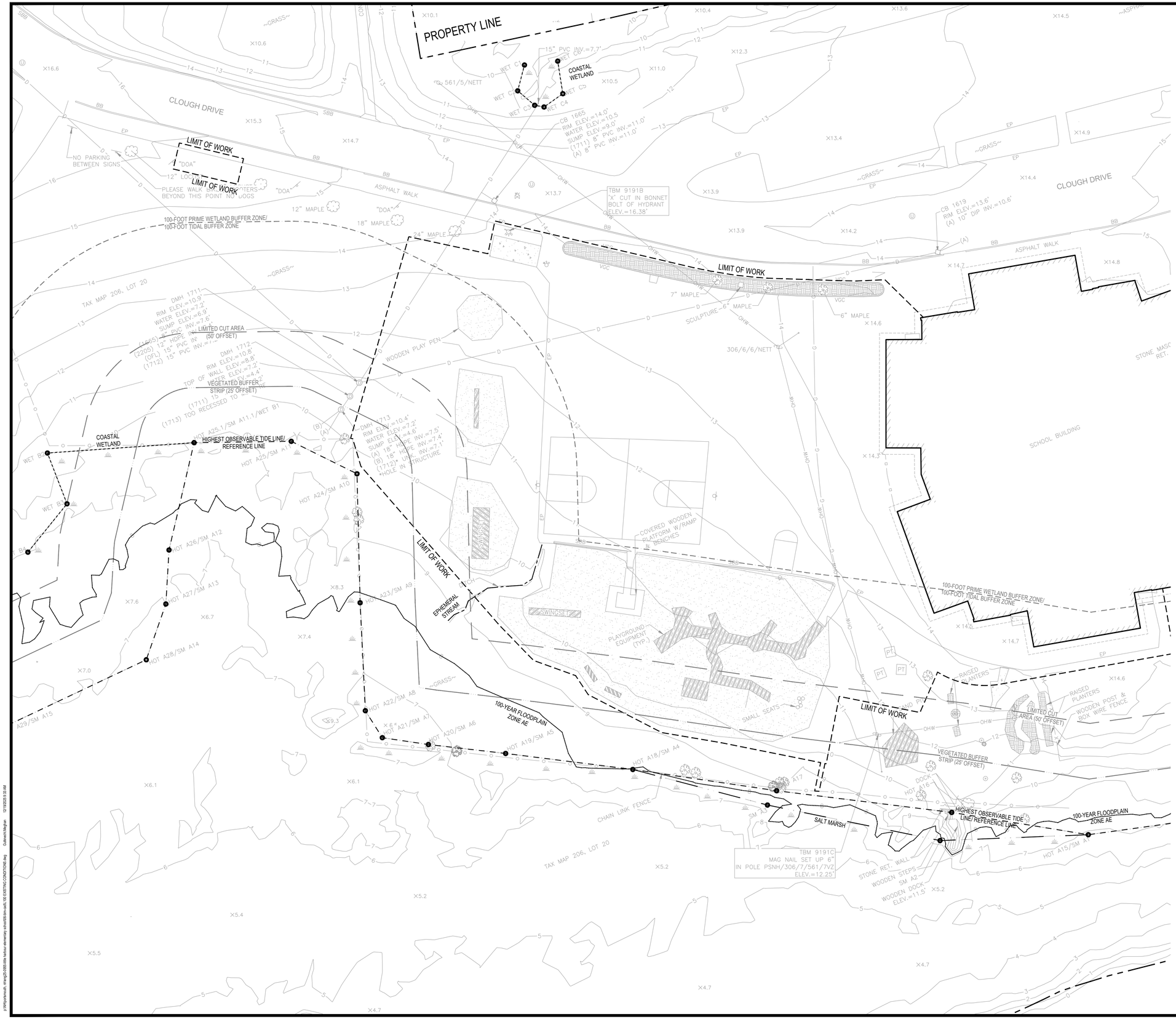

LEGEND

- LIMIT OF WORK
- APPROXIMATE LOT LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- COASTAL WETLAND LINE
- SALT MARSH LINE
- EPHEMERAL STREAM
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- APPROXIMATE ABUTTERS LOT LINE
- 100 MAJOR CONTOUR LINE
- 98 MINOR CONTOUR LINE
- EDGE OF PAVEMENT
- RETAINING WALL
- CHAIN LINK FENCE
- STOCKADE FENCE
- WIRE FENCE
- HANDRAIL
- OHW OVERHEAD WIRE
- DRAIN LINE
- GAS LINE
- WETLAND AREA
- CONCRETE
- LANDSCAPED AREA
- WOOD CHIPS
- BRICK
- PLAYGROUND EQUIPMENT
- X 100.0 SPOT GRADE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- LIGHT POLE W/ARM
- DRAIN MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- WATER GATE VALVE
- WATER SHUTOFF VALVE
- MANHOLE
- SIGN
- POST
- DECIDUOUS TREE 10" DIA. OR GREATER
- DECIDUOUS TREE LESS THAN 10" DIA.
- CONIFEROUS SHRUB
- DECIDUOUS BUSH
- MONITORING WELL LOCATION
- + A–1 WETLAND FLAG
- BENCH
- BASKETBALL HOOP
- BB BITUMINOUS BERM
- BW BOTTOM OF WALL ELEVATION
- CONC. CONCRETE
- DIP DUCTILE IRON PIPE
- "DOA" DROP OFF AREA SIGN
- EP EDGE OF PAVEMENT
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- PVC POLYVINYL CHLORIDE PIPE
- PT PICNIC TABLE
- RET. WALL RETAINING WALL
- SBB SLOPED BITUMINOUS BERM
- SGC SLOPED GRANITE CURB
- SWL SINGLE WHITE LINE
- TH THRESHOLD ELEVATION
- TW TOP OF WALL ELEVATION
- TYP. TYPICAL
- VGC VERTICAL GRANITE CURB
- (X) INVERT I.D. CONNECTION UNKNOWN
- HOT HIGHEST OBSERVABLE TIDE
- WET COASTAL WETLAND
- SM SALT MARSH

0 10' 20' 40'

SCALE: 1"=20'

STATE OF NEW HAMPSHIRE
DEVIN KELTY BATCHELDER
No. 3400
CERTIFIED WETLAND SCIENTIST
12/29/2025

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
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LEGEND

- LIMIT OF WORK
- APPROXIMATE LOT LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
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- OHW OVERHEAD WIRE
- D DRAIN LINE
- G GAS LINE
- WETLAND AREA
- CONCRETE
- LANDSCAPED AREA
- WOOD CHIPS
- BRICK
- PLAYGROUND EQUIPMENT
- ×100.0 SPOT GRADE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- LIGHT POLE W/ARM
- DRAIN MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- WATER GATE VALVE
- WATER SHUTOFF VALVE
- MANHOLE
- SIGN
- POST
- DECIDUOUS TREE 10" DIA. OR GREATER
- DECIDUOUS TREE LESS THAN 10" DIA.
- CONIFEROUS SHRUB
- DECIDUOUS BUSH
- MONITORING WELL LOCATION
- ⚑ A–1 WETLAND FLAG
- BENCH
- BASKETBALL HOOP
- BB BITUMINOUS BERM
- BW BOTTOM OF WALL ELEVATION
- CONC. CONCRETE
- DIP DUCTILE IRON PIPE
- "DOA" DROP OFF AREA SIGN
- EP EDGE OF PAVEMENT
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- PVC POLYVINYL CHLORIDE PIPE
- PT PICNIC TABLE
- RET. WALL RETAINING WALL
- SBB SLOPED BITUMINOUS BERM
- SGC SLOPED GRANITE CURB
- SWL SINGLE WHITE LINE
- TH THRESHOLD ELEVATION
- TW TOP OF WALL ELEVATION
- TYP. TYPICAL
- VGC VERTICAL GRANITE CURB
- (X) INVERT I.D. CONNECTION UNKNOWN
- HOT HIGHEST OBSERVABLE TIDE
- WET COASTAL WETLAND
- SM SALT MARSH

Project:

CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

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STATE OF NEW HAMPSHIRE
DEVIN KELTY BATCHELDER
No. 3901
CERTIFIED WETLAND SCIENTIST
12/29/2025

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Drawing Title:

EXISTING CONDITIONS PLAN

Sheet Number:

L101

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p:\little\portsmouth - drives\25-0955-little harbour elementary school\50clough\cad\L101 EXISTING CONDITIONS.dwg Gutkowski,Meghan 12/19/2025 9:37 AM

CONSTRUCTION ENTRANCE, TYP. 4 / L900

INLET CONTROL 3 / L900

PROTECT EX. ASPHALT TO REMAIN

R&R EX. QUARIUS DUNHAM MONUMENT FOR RELOCATION

TREE PROTECTION, TYP. 1 / L900

GRUB PLANTING BEDS AND REMOVE EX. PLANT MATERIAL

R&D EX. GRANITE CURB, TYP.

R&D EX. CONCRETE, COMPLETE, TYP.

R&S BIKE RACK

R&R EX. GAGA PIT FOR RELOCATION

STRIP AND STOCKPILE LAWN, TYP.

TEMPORARY CONSTRUCTION FENCE

SAWCUT ASPHALT, TYP.

PROTECT EX. STORAGE CABINET TO REMAIN

R&D ASPHALT, COMPLETE, TYP.

MILL AND OVERLAY ASPHALT

R&R BASKETBALL GOALS, TYP.

R&S EX. PLAY EQUIPMENT

R&D EX. GRAVEL, TYP.

R&D EX. GRAVEL, TYP.

R&D EX. SWING SET

R&D SLOPED BITUMINOUS BERM

R&D EX. TABLES

TREE PROTECTION, TYP. 1 / L900

R&S EXISTING SWING SET

R&D COVERED WOOD PLATFORM WITH RAMP AND BENCHES

R&D EX. GRAVEL, TYP.

R&D EX. BENCH

EROSION CONTROL 2 / L900

R&D EX. PLAY EQUIPMENT

R&D EX. PLAY EQUIPMENT

R&D EX. SEATING

LIMIT OF WORK

100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE

LIMITED CUT AREA (50' OFFSET)

VEGETATED BUFFER STRIP (25' OFFSET)

EPHEMERAL STREAM

100-YEAR FLOODPLAIN ZONE AE

HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE

SALT MARSH

CHAIN LINK FENCE

WOODEN PLAY PEN

ASPHALT WALK

TBM 9191B
"X" CUT IN BONNET BOLT OF HYDRANT
ELEV.=16.38'

TBM 9191C
MAG NAIL SET UP 6" IN POLE PSNH/3067//561/TV2
ELEV.=12.25'

WOODEN STEPS

WOODEN DOCK
ELEV.=11.5'

STONE RET. WALL

STONE MASONRY RET. WALL

RAISED PLANTERS

WOODEN POST & BOX WIRE FENCE

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- SALT MARSH LINE
- EPHEMERAL STREAM
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- 6' HT. CONSTRUCTION FENCE
- R&S EXISTING CURB
- R&D EXISTING FENCE AND FOOTINGS
- SAW CUT
- EROSION CONTROL
- CONSTRUCTION ENTRANCE — 4 / L900
- R&D EX. ASPHALT, COMPLETE, TYP.
- R&D EX. CONCRETE, COMPLETE, TYP.
- STRIP AND STOCKPILE TOPSOIL, TYP.
- R&D GRAVEL/ENGINEERED WOOD FIBER, TYP.
- GRUB PLANTING BEDS AND REMOVE EXISTING PLANT MATERIAL, TYP.
- MILL + OVERLAY EX. ASPHALT, TYP.
- R&D SITE AMENITIES, TYP.
- R&F EXISTING TREE, COMPLETE, GRIND STUMP 24" BELOW GRADE.
- TREE PROTECTION, TYP. — 1 / L900
- PROTECT EX. SITE FEATURE, TYP.
- INLET SEDIMENT CONTROLS TYP. — 2 / L900

TYP.	TYPICAL
EX.	EXISTING
R&D	REMOVE AND DEMOLISH
R&S	REMOVE AND STOCKPILE
R&R	REMOVE AND RELOCATE

NOTES

EXISTING ITEMS TO BE SALVAGED ON-SITE. CONFIRM WITH LANDSCAPE ARCHITECT PRIOR TO ANY PLAY ELEMENT REMOVAL.

- (2) BASKETBALL GOALS
- QUARIUS DUNHAM MEMORIAL
- GAGA PIT
- SNAKE MONKEY BARS
- BLUE SWING SET

EXISTING ITEMS TO BE SALVAGED AT CITY OF PORTSMOUTH YARD. CONFIRM WITH LANDSCAPE ARCHITECT PRIOR TO ANY PLAY ELEMENT REMOVAL.

- BIKE RACK

0 10' 20' 40'

SCALE: 1"=20'

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

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SITE PREPARATION & DEMOLITION PLAN

Sheet Number:
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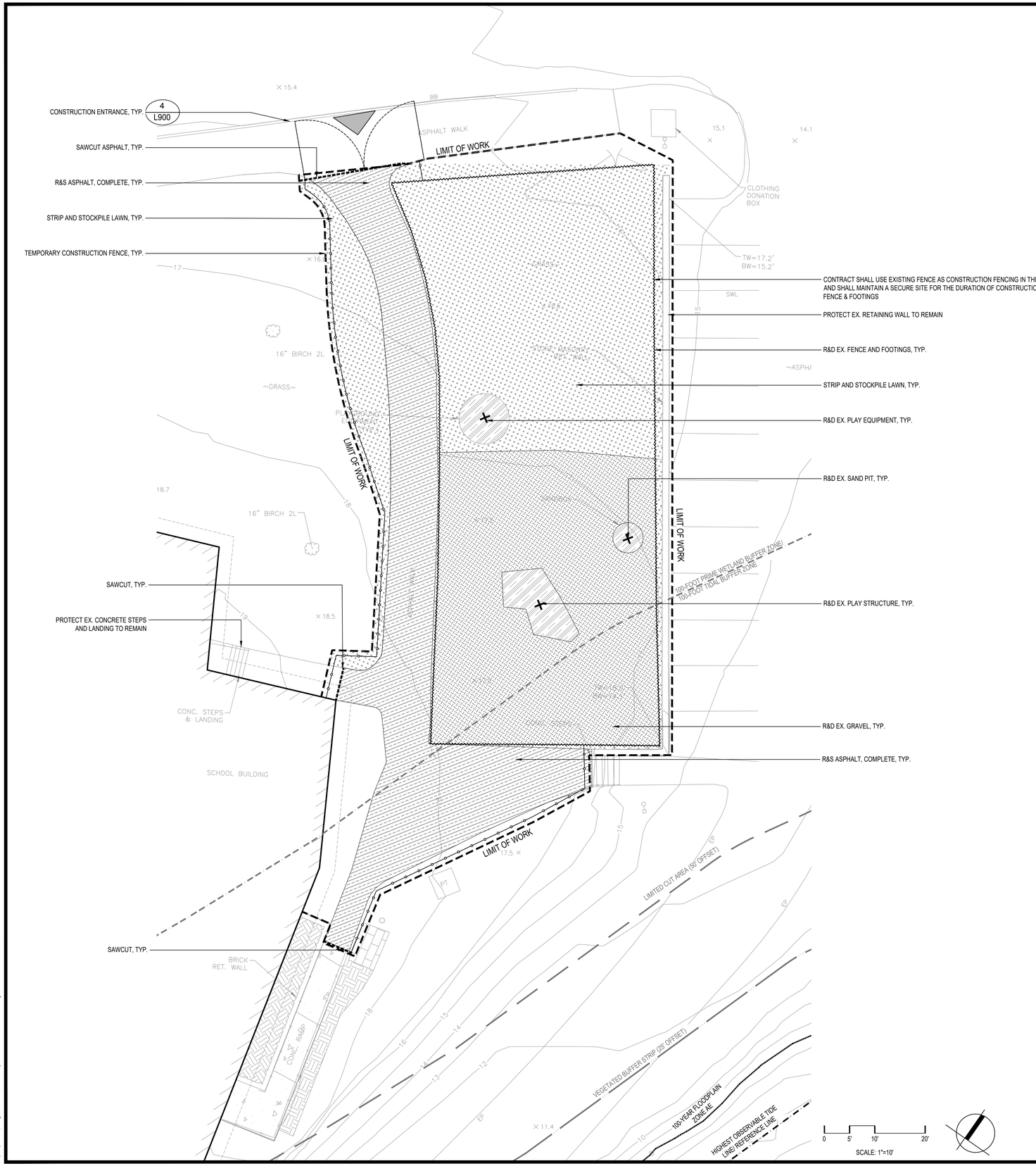

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- 6' HT. CONSTRUCTION FENCE
- R&D EXISTING CAPE COD BERM
- R&D EXISTING FENCE AND FOOTINGS
- SAW CUT
- CONSTRUCTION ENTRANCE — 4 / L900
- R&D EX. ASPHALT, COMPLETE, TYP.
- R&D EX. CONCRETE, COMPLETE, TYP.
- STRIP AND STOCKPILE TOPSOIL, TYP.
- R&D GRAVEL EX., TYP.
- R&D SITE AMENITIES, TYP.
- TREE PROTECTION, TYP. — 1 / L900
- PROTECT EX. SITE FEATURE, TYP.
- INLET SEDIMENT CONTROLS TYP. — 2 / L900

TYP.	TYPICAL
EX.	EXISTING
R&D	REMOVE AND DEMOLISH
R&S	REMOVE AND STOCKPILE
R&R	REMOVE AND RELOCATE

NOTES

EXISTING ITEMS TO BE SALVAGED ON-SITE. CONFIRM WITH LANDSCAPE ARCHITECT PRIOR TO ANY PLAY ELEMENT REMOVAL.

- "COMMUNITY PLAYTHINGS" - PLAY STORAGE / CABINET
- (2) WOODEN PICNIC TABLE AND BENCH SET
- WOODEN PRETEND KITCHEN
- WOODEN SITTING BENCHES
- (2) WOODEN TUNNELS
- "LAKESHORE" LOG BUILDER SET
- WOOD HEXAGON STORAGE AND COVER
- WOOD "COMMUNITY" BRIDGE

Project:
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SITE PREPARATION & DEMOLITION PLAN

Sheet Number:
L201

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LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- SALT MARSH LINE
- EPHEMERAL STREAM
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- MILL + OVERLAY ASPHALT - PEDESTRIAN GRADE, TYP.
- CAST-IN-PLACE CONCRETE PAVEMENT (1 / L902)
- PLANTED AREA, REFER TO PLANTING PLAN
- BIKE RACK IN CONCRETE, TYP. (2 / L903)

CAST-IN-PLACE CONCRETE TO MEET EX. ASPHALT

CAST-IN-PLACE CONCRETE PAVEMENT, TYP. (1 / L902)

BIKE RACK IN CONCRETE, TYP. (2 / L903)

SEE ENLARGEMENT ON L301

CLOUGH DRIVE

LITTLE HARBOUR SCHOOL

LIMIT OF WORK

100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE

LIMITED CUT AREA (50' OFFSET)

VEGETATED BUFFER STRIP (25' OFFSET)

COASTAL WETLAND

HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE

EPHEMERAL STREAM

100-YEAR FLOODPLAIN ZONE AE

MILL & OVERLAID ASPHALT. SUPPLEMENT ASPHALT WHERE NEEDED

WOODEN POST & BOX WIRE FENCE

STONE MASONRY RET. WALL

ASPHALT WALK

PARKING

WEEN SIGNS

PLEASE WALK DOGS BEYOND THIS POINT NO DOGS

12" MAPLE

18" MAPLE

24" MAPLE

OHW

SBB

EP

BB

~GRASS~

0 10' 20' 40'

SCALE: 1"=20'

Project:

CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

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MATERIALS PLAN

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L300

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CLOUGH DRIVE

LITTLE HARBOUR SCHOOL

ADD. ALT. #4
PLAYGROUND ENTRY ARCHWAY AND FOOTINGS

WOOD GUARDRAIL, TYP. 4 / L904

REINSTALL QUARIUS DUNHAM MEMORIAL

TRANSITION CONCRETE CURB, TYP.

BASKETBALL POST FOOTING 3 / L903

BASKETBALL COURT LAYOUT 6 / L905

HOPSCOTCH PLAY MARKING 5 / L905

CONCRETE MOW CURB , TYP. 5 / L904

ENGINEERED WOOD FIBER SAFETY SURFACING, TYP. 5 / L902

PLAY STRUCTURE E, REFER TO SPECIFICATIONS

ENGINEERED WOOD FIBER SAFETY SURFACING AT BONDED RUBBER SURFACING, TYP.

BONDED RUBBER SURFACING 8 / L902

MILL AND OVERLAID ASPHALT

WOOD PLATFORM, TYP. REFER TO SPECIFICATIONS. 4 / L903

LANDSCAPE BOULDER, TYP. 6 / L902

CONCRETE WEIR

BONDED RUBBER SAFETY SURFACING 8 / L902

PLAY STRUCTURE D, REFER TO SPECIFICATIONS

ENGINEERED WOOD FIBER SAFETY SURFACING 5 / L902

ADD ALTERNATE #3
INCORPORATE POURED-IN-PLACE RUBBER SAFETY SURFACING AT LARGE STRUCTURE

3 / L902 STEEL EDGER AT PLANTING AREAS, TYP.

EXISTING OVERHEAD WIRES TO REMAIN

ASPHALT PLAY MARKINGS, REFER TO SPECIFICATIONS

ADD. ALT. #5
WALL BALL FENCE

3 / L902 STEEL EDGER AT PLANTING AREAS, TYP.

PLAY STRUCTURE C, REFER TO SPECIFICATIONS

5 / L902 ENGINEERED WOOD FIBER SAFETY SURFACING, TYP.

5 / L904 CONCRETE MOW CURB, TYP.

PLANTING AREA, SEE SHEET L600.

1 / L902 CAST-IN-PLACE CONCRETE PAVEMENT, TYP.

BASE BID: REINSTALL EX. GAGA BALL PIT. PROVIDE ENGINEERED WOOD FIBER INSIDE OF WALLS. 2' W CONCRETE EDGE SURROUNDING, AS SHOWN.
ADD ALT #2: PLACE GAGA PIT IN LAWN. INCORPORATE INCLUSIVE MERRY-GO-ROUND STRUCTURE AND POURED-IN-PLACE RUBBER SAFETY SURFACING

LIMITED CUT AREA (50' OFFSET)

100-FOOT PRIME WETLAND BUFFER ZONE

EPHEMERAL STREAM

OHW

TR

LEGEND

- LIMIT OF WORK
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- CONCRETE MOW STRIP — 5 / L904
- GUARDRAIL, TYP. — 4 / L904
- MILL + OVERLAY ASPHALT - PEDESTRIAN GRADE, TYP.
- CAST-IN-PLACE CONCRETE PAVEMENT — 1 / L902
- ENGINEERED WOOD FIBER SAFETY SURFACING, TYP. — 5 / L902
- BONDED RUBBER SURFACING — 8 / L902
- PLANTED AREA, REFER TO PLANTING PLAN

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

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MATERIALS PLAN

Sheet Number:
L301

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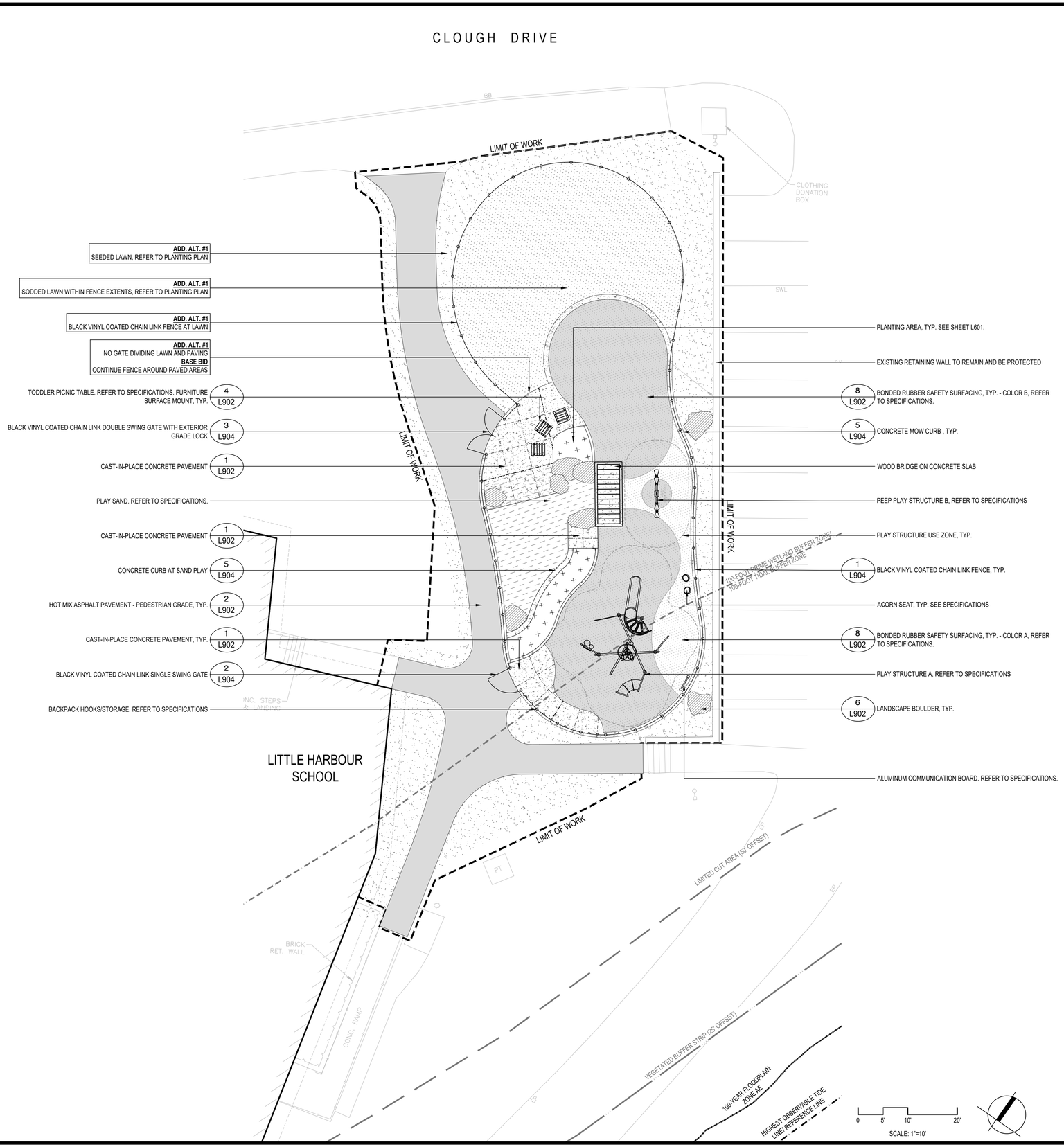

LEGEND

- LIMIT OF WORK
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- HOT MIX ASPHALT PAVEMENT - PEDESTRIAN GRADE, TYP. — 2 L902
- CAST-IN-PLACE CONCRETE PAVEMENT (A / B) — 1 L902
- BONDED RUBBER SAFETY SURFACING, 2 COLORS TYP. (A / B) — 8 L902
- PLANTED AREA, REFER TO PLANTING PLAN
- PLAY SAND, REFER TO SPECIFICATIONS
- SEEDED LAWN, REFER TO PLANTING PLAN
- SODDED LAWN, REFER TO PLANTING PLAN

Project:
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LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- SALT MARSH LINE
- EPHEMERAL STREAM
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- CENTER LAYOUT LINE
- TYP. DIMENSION (26'-4")
- R174' TYP. RADIUS DIMENSION
- ALIGN
- POINT OF BEGINNING, TYP.
- EQ EQUAL DIMENSIONS

CLOUGH DRIVE

LIMIT OF WORK

100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE

LIMITED CUT AREA (50' OFFSET)

VEGETATED BUFFER STRIP (25' OFFSET)

COASTAL WETLAND

HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE

EPHEMERAL STREAM

100-YEAR FLOODPLAIN ZONE AE

SALT MARSH

CHAIN LINK FENCE

TAX MAP 206, LOT 20

MAP 206, LOT 20

SCHOOL BUILDING

STONE MASONRY RET. WALL

WOODEN POST & BOX WIRE FENCE

ASPHALT WALK

~GRASS~

OHW

BB

EP

SBB

HOT A25.1/SM A11.1/WET B1

HOT A25/SM A11

HOT A24/SM A10

HOT A26/SM A12

HOT A27/SM A13

HOT A28/SM A14

HOT A23/SM A9

HOT A22/SM A8

HOT A21/SM A7

HOT A20/SM A6

HOT A19/SM A5

HOT A18/SM A4

HOT A17

HOT A16

HOT A15/SM A1

SM A3

SM A2

WOODEN STEPS

WOODEN DOCK ELEV.=11.5'

STONE RET. WALL

WET C1 WET C2 WET C3 WET C4

PLEASE WALK BAREFOOTERS BEYOND THIS POINT NO DOGS

"DOA"

"DOA"

RKING
EN SIGNS

30'-7"

17'-5"

30'-7"

10'

EQ EQ

5'-6"

18' CLR

42'

±25'

20' CLEAR FIRE LANE

5'-6"

34'

18'

10'

35'-7"

25'-6"

37'

74'

43'-1"

9'-6"

9'-6"

R7'-6"

R7'-6"

9'-7"

15'

12'

24'

31'-11"

21'-5"

R2'

R2'

8'-3"

R9'-6"

R18'-6"

R23'

R17'-6"

R19'-6"

2'

24'

9'-11" TYP.

R3'

20' CLEAR FIRE LANE

5'-6"

100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE

BB

9'

6'

R50'

8'

8'

9'

EP

C2

0 10' 20' 40'

SCALE: 1"=20'

Project:

CITY OF PORTSMOUTH

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LAYOUT PLAN

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L400

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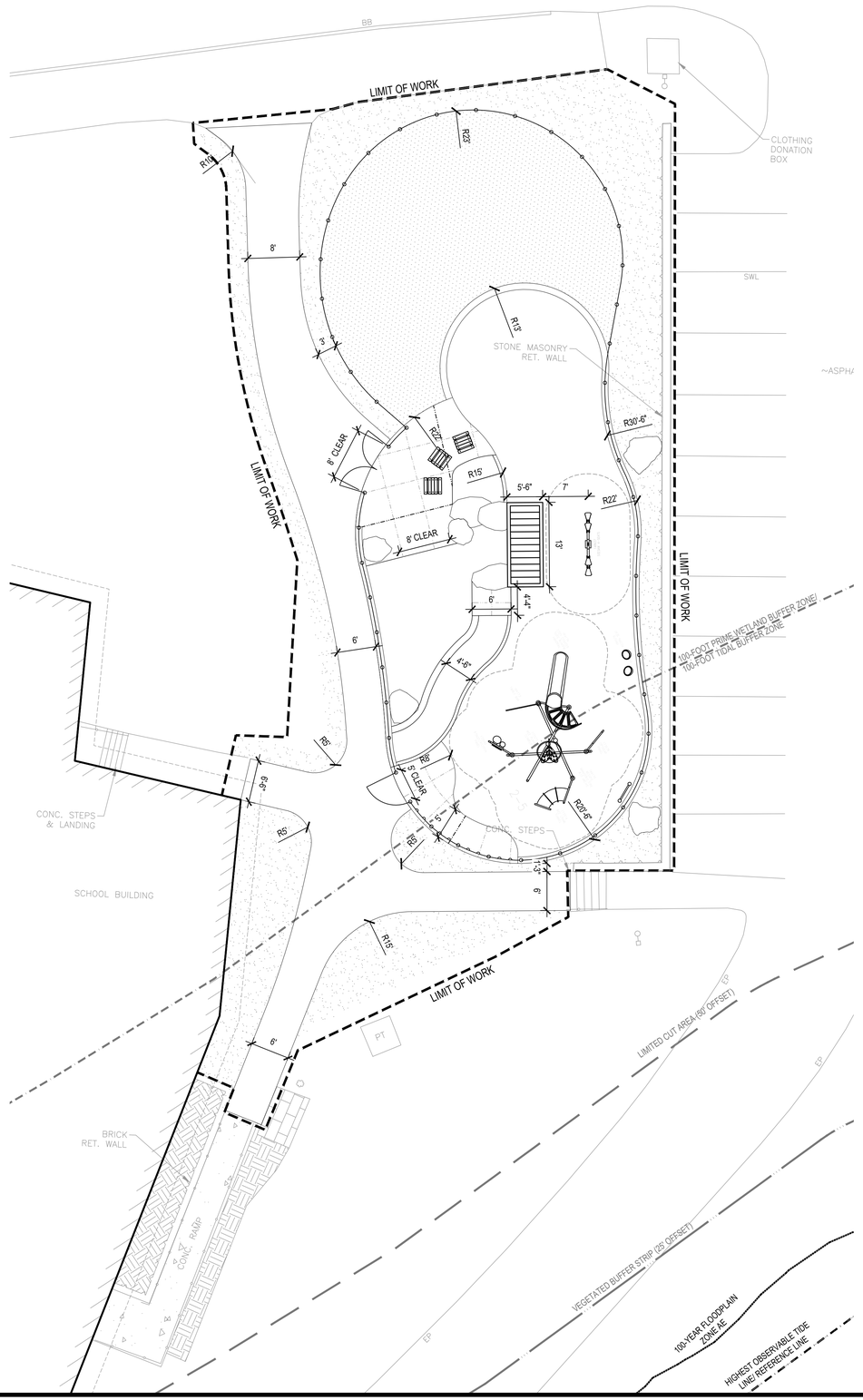

LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- CENTER LAYOUT LINE
- TYP. DIMENSION (26'-4")
- R174' TYP. RADIUS DIMENSION
- ALIGN
- POINT OF BEGINNING, TYP.
- EQ EQUAL DIMENSIONS

0 5' 10' 20'

SCALE: 1"=10'

Project:

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Date:	DECEMBER 19, 2025
Drawn By:	MG, JZ
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:

LAYOUT PLAN

Sheet Number:

L401

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LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- TOP & BOTTOM OF CURB
- TOP & BOTTOM OF WALL
- SLOPE ARROW
- TB — TOP OF BOULDER
- BB — BOTTOM OF BOULDER
- TC — TOP OF CURB
- BC — BOTTOM OF CURB
- ME — MATCH EXISTING GRADE, FLUSH
- TF — TOP OF FENCE
- BF — BOTTOM OF FENCE

SCALE: 1"=20'

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson

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1 Washington Street, 10th Floor
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Revisions:

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Drawing Title:
GRADING PLAN

Sheet Number:
L500

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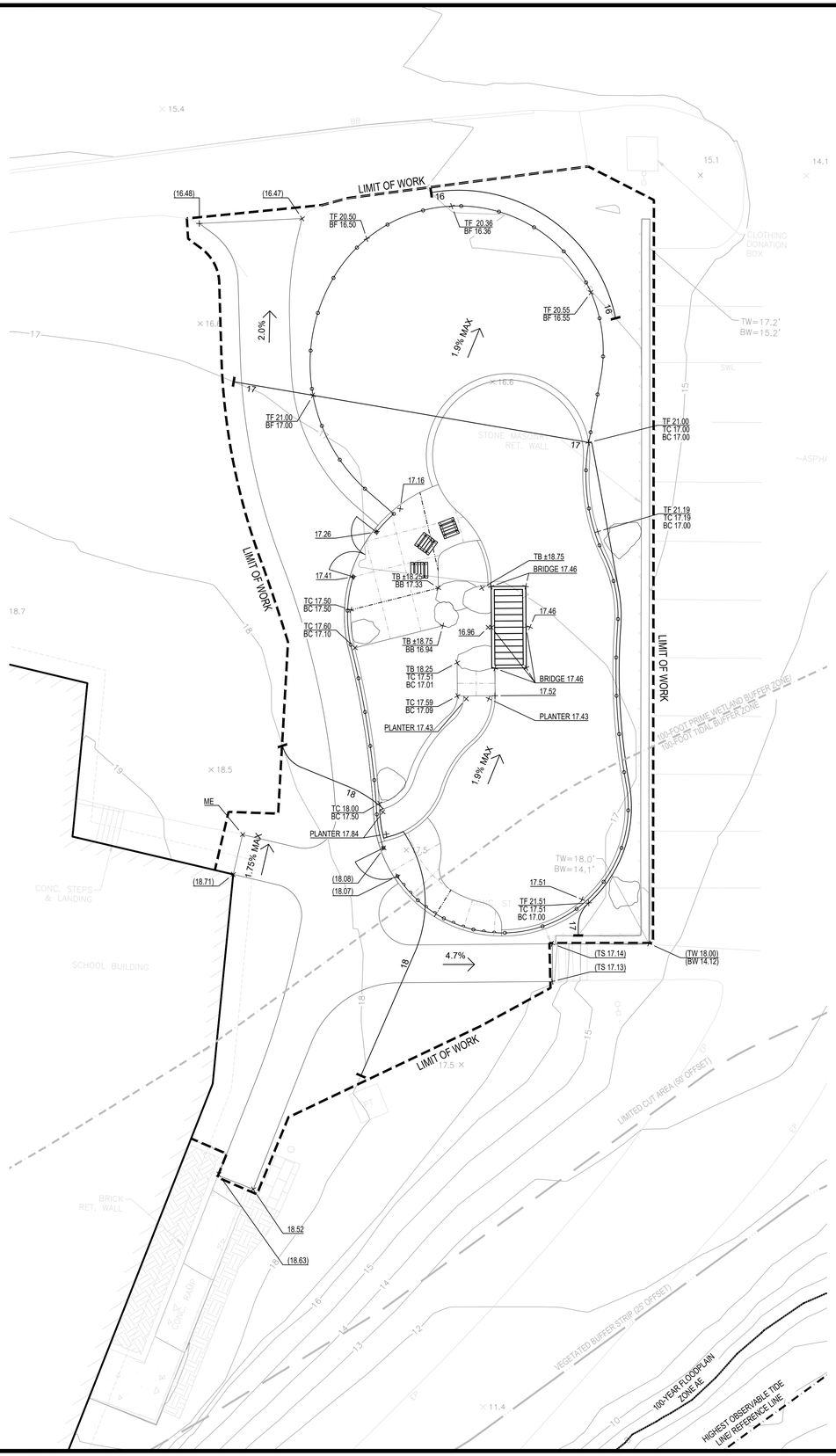

LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- 2 — PROPOSED MINOR CONTOUR
- 10 — PROPOSED MAJOR CONTOUR
- 2 — EXISTING MINOR CONTOUR
- 10 — EXISTING MAJOR CONTOUR
- × 50.00 — EXISTING SPOT ELEVATION
- + 50.00 — PROPOSED SPOT ELEVATION
- TC 50.50 / BC 50.00 — TOP & BOTTOM OF CURB
- TW 50.50 / BW 50.00 — TOP & BOTTOM OF WALL
- 20% — SLOPE ARROW
- TB — TOP OF BOULDER
- BB — BOTTOM OF BOULDER
- TC — TOP OF CURB
- BC — BOTTOM OF CURB
- ME — MATCH EXISTING GRADE, FLUSH
- TF — TOP OF FENCE
- BF — BOTTOM OF FENCE

0 5' 10' 20'

SCALE: 1"=10'

Project:

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Drawing Title:

GRADING PLAN

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L501

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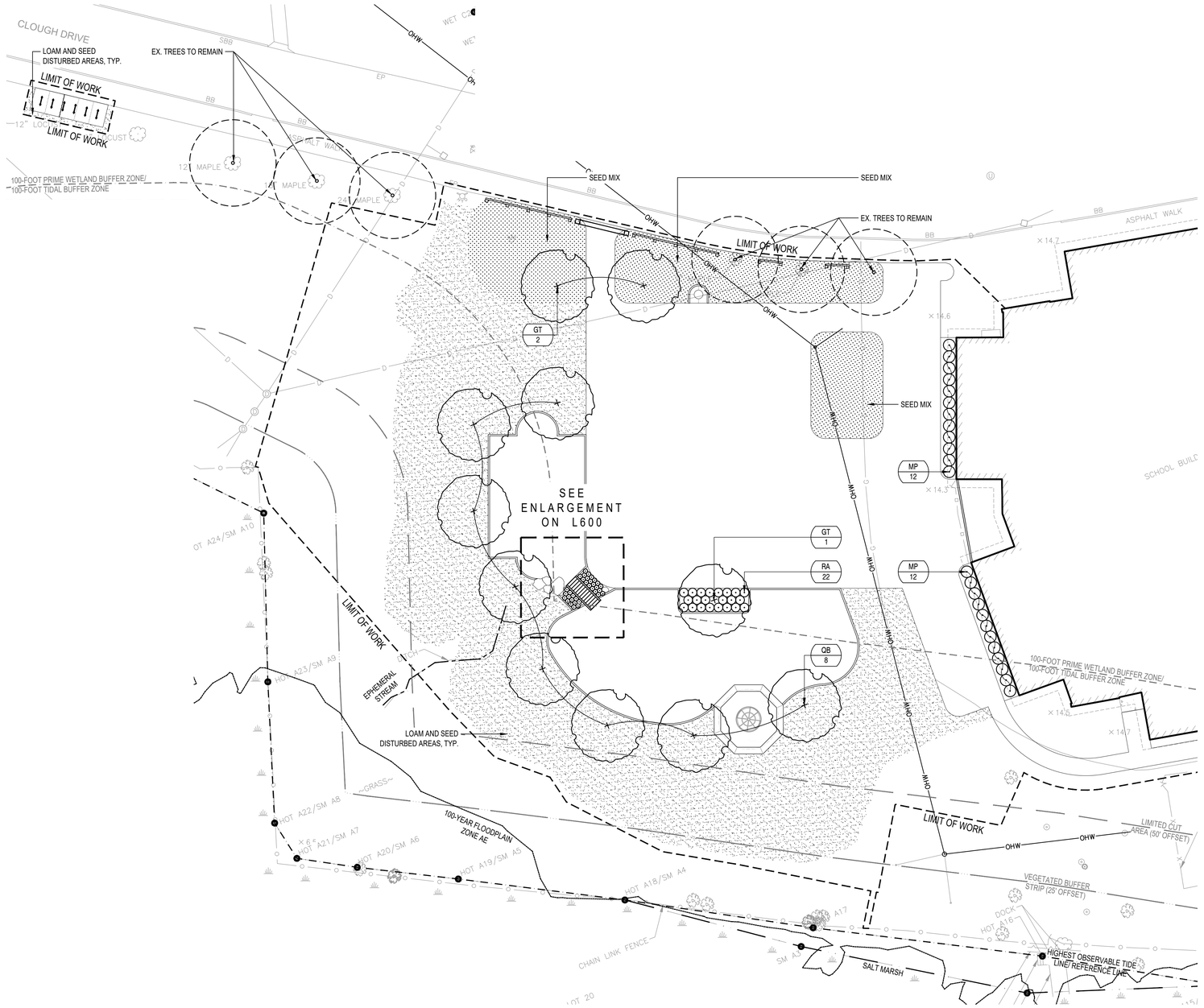
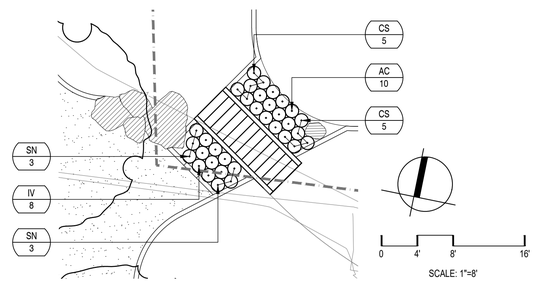


LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- SALT MARSH LINE
- EPHEMERAL STREAM
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- LOAM AND SEED., TYP. — 1 / L901
- PROPOSED SHRUB PLANTINGS, TYP. — 3 / L901
- PROPOSED TREE PLANTINGS, TYP. — 5 / L901
- EX. TREE

PLANT SCHEDULE - LHS PLAYGROUND					
TREES					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	3	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5'-3' CAL. B&B	WELL- BRANCHED
QB	8	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5'-3' CAL. B&B	WELL- BRANCHED
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
MP	24	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
RA	22	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	48" O.C. SPACING
SEED MIX					
ABRV.	QTY	NAME			NOTES
N/A	1 LB	NORTHEAST ANNUAL & PERENNIAL WILDFLOWER MIX - ERNMX-168			SEED MIX



PLANT SCHEDULE - LHS PLAYGROUND					
BIORETENTION PLANTER					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
AC	10	ANEMONE CANADENSIS	WINDFLOWER	#2 POT	18" O.C. SPACING
CS	10	CAREX STRICTA	TUSSOCK SEDGE	#2 POT	18" O.C. SPACING
IV	8	IRIS VERSICOLOR	BLUEFLAG IRIS	#2 POT	18" O.C. SPACING
SN	6	SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	#2 POT	18" O.C. SPACING

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Drawing Title:
PLANTING PLAN

Sheet Number:
L600

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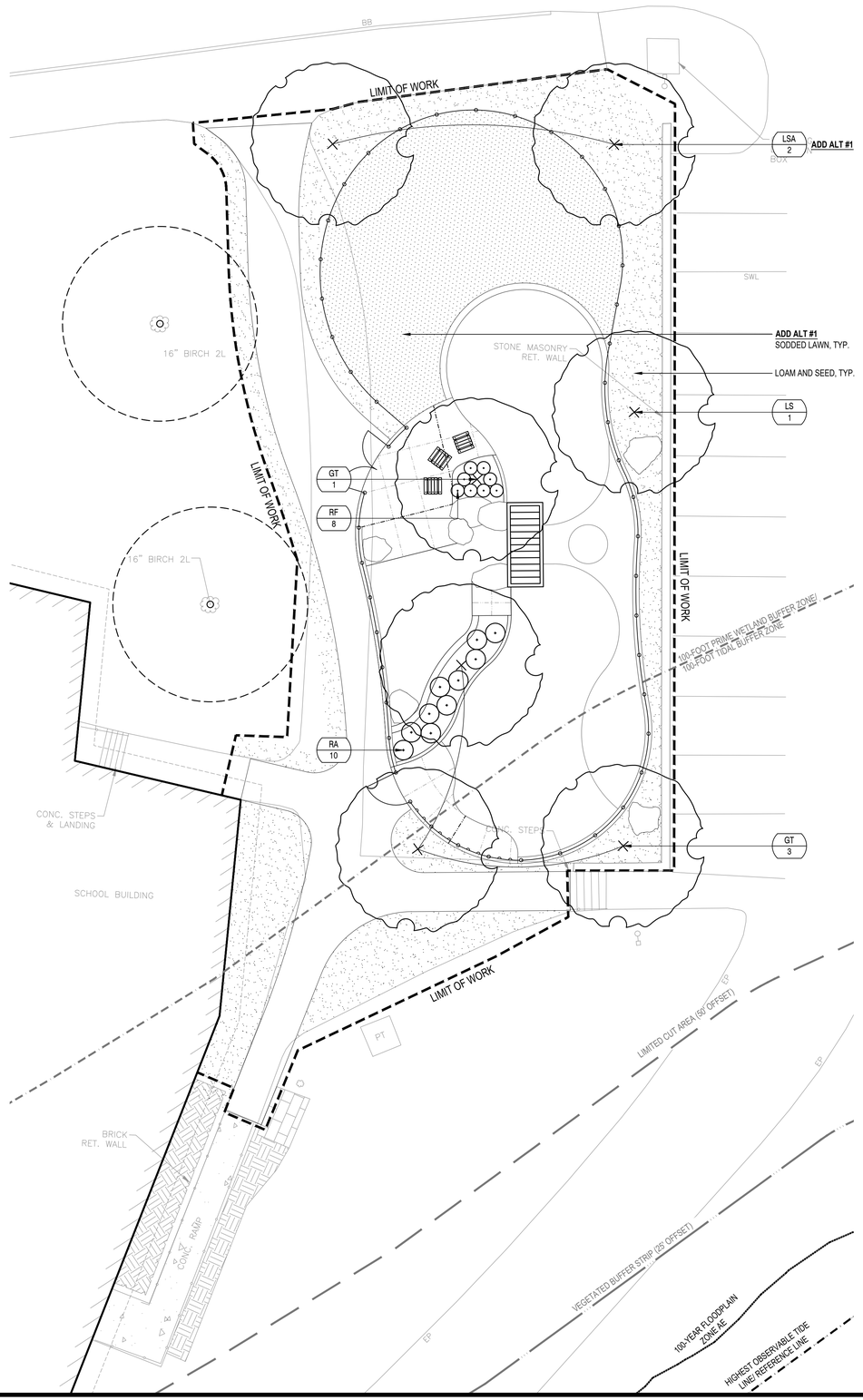

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- LOAM AND SEED., TYP. — 1 / L901
- SODDED LAWN., TYP.
- PROPOSED SHRUB PLANTINGS, TYP. — 3 / L901
- PROPOSED TREE PLANTINGS, TYP. — 5 / L901
- EX. TREE

PLANT SCHEDULE - PEEP PLAYGROUND					
TREES					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	4	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	3"-3.5" CAL. B&B	WELL- BRANCHED
LS	1	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SWEETGUM	3"-3.5" CAL. B&B	WELL- BRANCHED
LSA	2	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SWEETGUM	3"-3.5" CAL. B&B	WELL- BRANCHED, ADD ALT #1
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
RA	10	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 POT	36" O.C. SPACING
RF	8	RUDBECKIA FULGIDA	ORANGE CONEFLOWER	#2 POT	24" O.C. SPACING

0 5' 10' 20'

SCALE: 1"=10'

Project:
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LITTLE HARBOUR
ELEMENTARY SCHOOL

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PLANTING PLAN

Sheet Number:
L601

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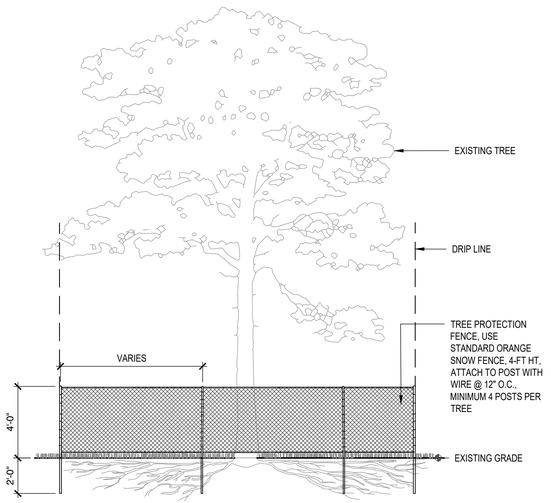
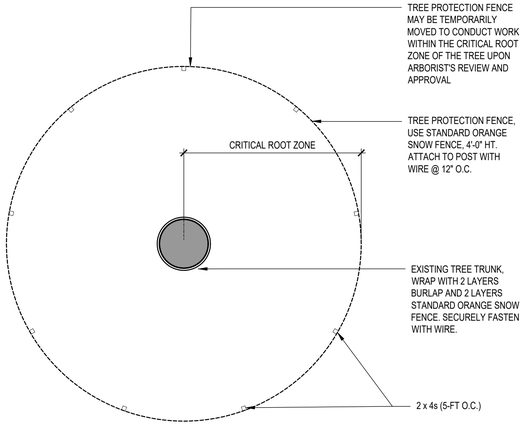
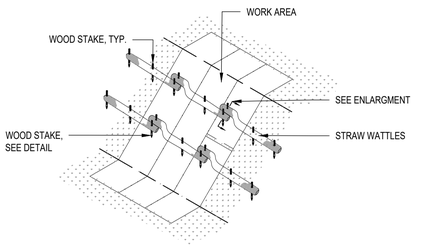


CRITICAL ROOT ZONE TO BE PROTECTED. ALL WORK NECESSARY WITHIN THE CRITICAL ROOT ZONE SHALL BE PERFORMED BY HAND.

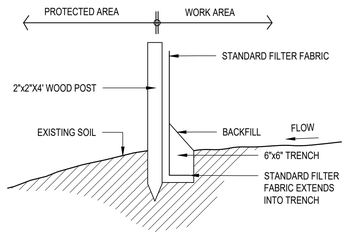


NOTES:
1. WHERE SPACE IS AVAILABLE, TREE PROTECTION FENCE TO BE PLACED A MINIMUM OF 10' FROM BASE OF TREE PLUS AN ADDITIONAL 1' FOR EACH ADDITIONAL DBH FOR TREES GREATER THAN 10" DBH (DIA. AT BREAST HT.)
2. ALL WORK DONE WITHIN TREE PROTECTION FENCE IS TO BE DONE BY HAND AND LIGHT EQUIPMENT.
3. ROOTS EXPOSED DURING EXCAVATION SHALL BE NEATLY CUT AND COVERED WITH SOIL IMMEDIATELY.
4. FOR TREES THAT OCCUR IN GROUPS PROVIDE TREE PROTECTION FENCE AROUND ENTIRE AREA. SEE PLAN FOR LOCATIONS.
5. MAINTAIN FENCE PROTECTION IN SOUND CONDITION UNTIL FENCE COMPLETION
6. A CERTIFIED ARBORIST SHALL DELINEATE LIMIT OF TREE PROTECTION FENCE AS THEY RELATE TO THE LIMITS OF THE CRITICAL ROOT ZONE.

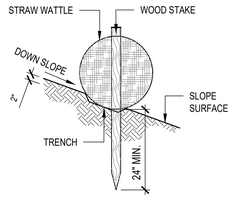
1 TREE PROTECTION
SCALE: N.T.S.

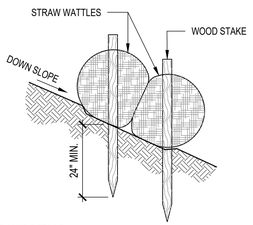


STRAW WATTLE LAYOUT ON SLOPE

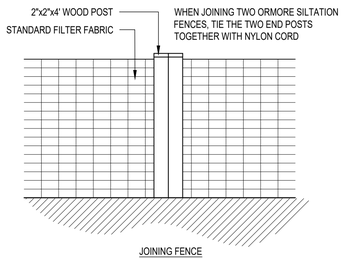


SLOPE DETAIL





STRAW WATTLE STAKING DETAILS



JOINING FENCE

2 EROSION CONTROL
SCALE: N.T.S.

INSTALLATION IN PAVED AREAS

INSTALLATION IN GRASS AREAS

3 INLET SEDIMENT CONTROL
SCALE: N.T.S.

NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR CLEARING OF ALL VEGETATION, ROOTS AND ALL OBSTRUCTIONS IN PREPARATION FOR GRADING AND COMPACTING PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC AND CRUSHED STONE.
2. CONTRACTOR RESPONSIBLE FOR DAILY INSPECTIONS AND ALL NECESSARY MAINTENANCE OF ENTRANCE.
3. CONTRACTOR RESPONSIBLE FOR REMOVAL OF SEDIMENTS OR ANY OTHER MATERIALS TRACKED ONTO COMMONWEALTH AVENUE, KENMORE STREET AND CHARLESGATE WEST STREETS, AS WELL AS MAINTENANCE OF EROSION CONTROL MEASURES.

4 CONSTRUCTION ENTRANCE
SCALE: N.T.S.

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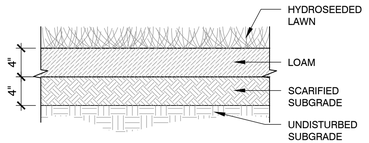
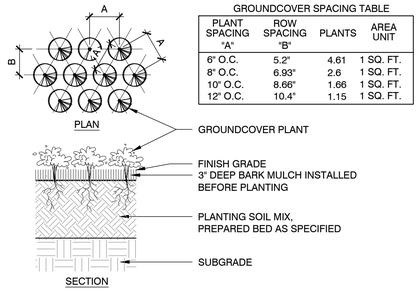


1 LOAM AND SEED
SCALE: N.T.S.

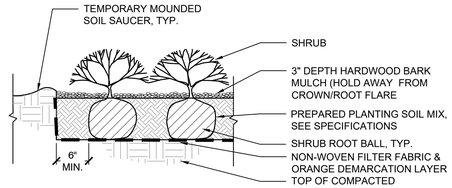


GROUNDCOVER SPACING TABLE

PLANT SPACING "A"	ROW SPACING "B"	PLANTS	AREA UNIT
6" O.C.	5.2"	4.61	1 SQ. FT.
8" O.C.	6.93"	2.6	1 SQ. FT.
10" O.C.	8.66"	1.66	1 SQ. FT.
12" O.C.	10.4"	1.15	1 SQ. FT.

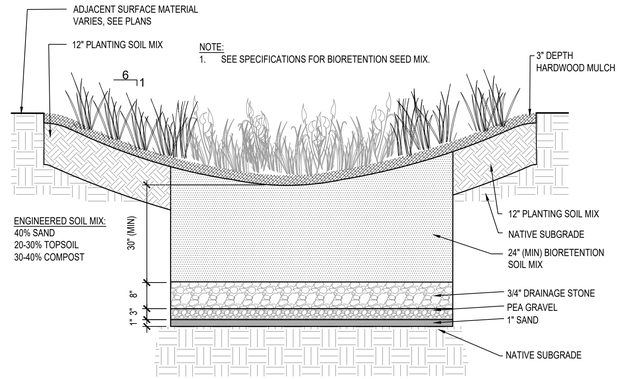
NOTES:
1. ALL GROUNDCOVER TO BE PLANTED IN TRIANGULAR PATTERN. SEE DETAIL PLAN AND GROUNDCOVER SPACING TABLE.
2. JUTE EROSION CONTROL MAT TO BE USED ON ALL SLOPES GREATER THAN 3:1

2 GROUNDCOVER PLANTING
SCALE: N.T.S.

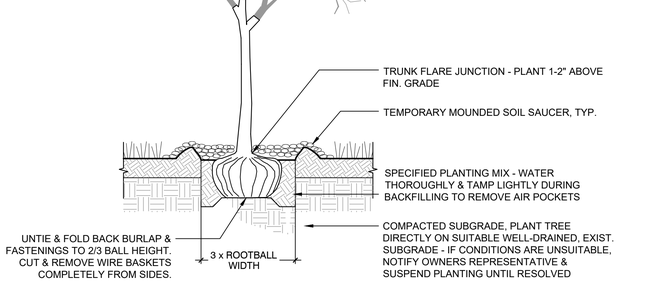


NOTE:
1. ALL MULCH MUST BE DARK IN COLOR. PROVIDE SAMPLE PRIOR TO INSTALLATION TO BE APPROVED BY OWNER'S REPRESENTATIVE.

3 SHRUB PLANTING
SCALE: N.T.S.



4 RAIN GARDEN
SCALE: N.T.S.



5 TREE PLANTING
SCALE: N.T.S.

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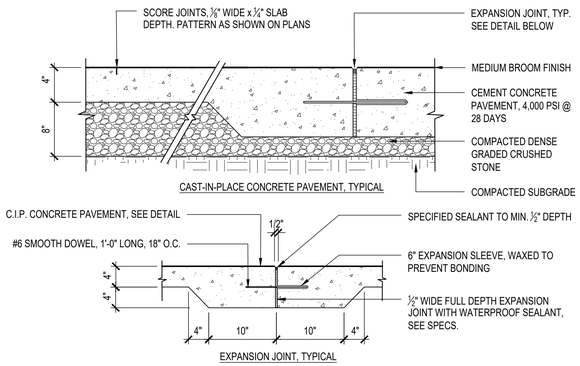


CAST-IN-PLACE CONCRETE PAVEMENT, TYPICAL

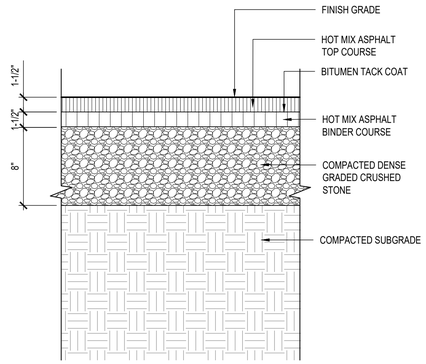
EXPANSION JOINT, TYPICAL

EXPANSION JOINT INSTALLATION NOTES:

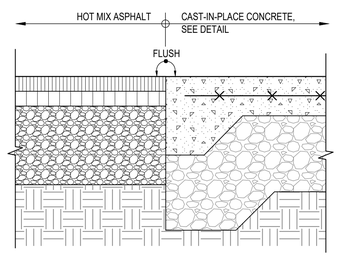
1. DOWEL IS TYPICAL AT ALL EXPANSION JOINTS (18" O.C.) WITHIN CONCRETE PAVING AND BETWEEN NEW CONCRETE PAVING AND EXISTING CONCRETE PAVING TO REMAIN.
2. DELETE EXPANSION SLEEVE AND DOWEL WHERE JOINT ABUTS WALL, CURBS, OR OTHER VERTICAL SURFACES, UNLESS OTHERWISE NOTED.
3. EXPANSION JOINTS MAX. 25'-0" O.C. UNLESS SHOWN OTHERWISE.
4. EXPANSIONS JOINTS SHALL BE PLACED WHERE NEW CEMENT CONCRETE PAVEMENT MEETS EXISTING PAVEMENT OR WALLS TO REMAIN.
5. ALL EXPANSION JOINTS SHALL BE SAW CUT.

1 CAST-IN-PLACE CONCRETE PAVEMENT AND EXPANSION JOINT

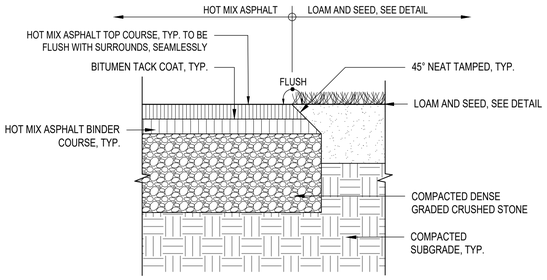
SCALE: N.T.S.



HOT MIX ASPHALT PAVEMENT



HOT MIX ASPHALT AT CAST-IN-PLACE CONCRETE PAVEMENT

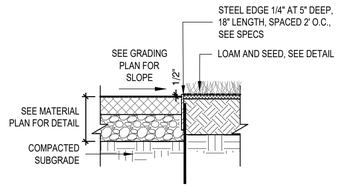


HOT MIX ASPHALT AT LAWN

NOTES:
1. CONTRACTOR TO PROVIDE SMOOTH TRANSITION WHERE NEW PAVEMENT ABUTS EXISTING PAVEMENT, TYP.
2. DENSE GRADED CRUSHED STONE TO COMPRISE OF 12" MINIMUM DEPTH.
3. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES AND SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. PROVIDE INFRARED TREATMENT AT ALL EDGES BETWEEN NEW AND EXISTING PAVEMENT.

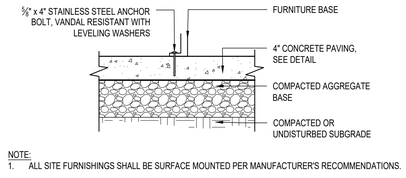
2 HOT MIX ASPHALT PAVEMENT - PEDESTRIAN

SCALE: N.T.S.



3 STEEL EDGER AT PLANTING AREAS

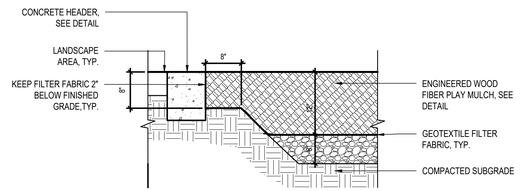
SCALE: N.T.S.



NOTE:
1. ALL SITE FURNISHINGS SHALL BE SURFACE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS.

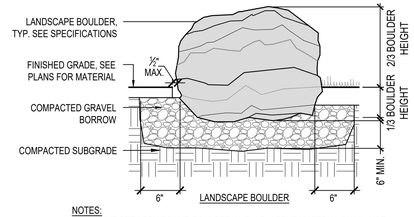
4 FURNITURE SURFACE MOUNT

SCALE: N.T.S.



5 ENGINEERED WOOD FIBER SAFETY SURFACING

SCALE: N.T.S.

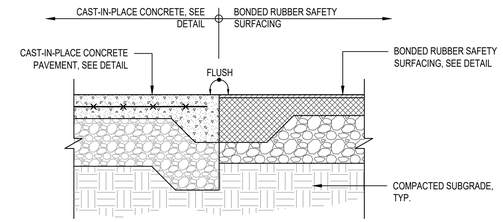


LANDSCAPE BOULDER

NOTES:
1. JOINT BETWEEN ROUND BOULDER AND ADJACENT MATERIAL SHALL NOT EXCEED ½" AND BE FILLED WITH MORTAR.

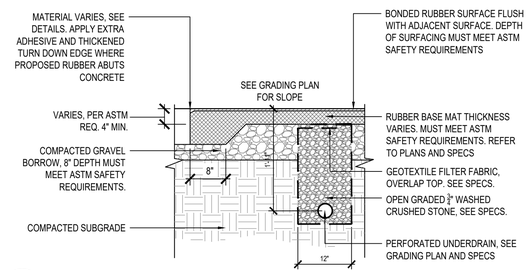
6 LANDSCAPE BOULDER

SCALE: N.T.S.



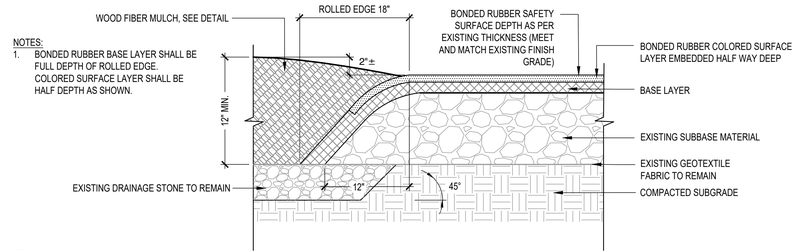
7 BONDED RUBBER SAFETY SURFACING AT CAST-IN-PLACE CONCRETE

SCALE: N.T.S.



8 BONDED RUBBER SAFETY SURFACING

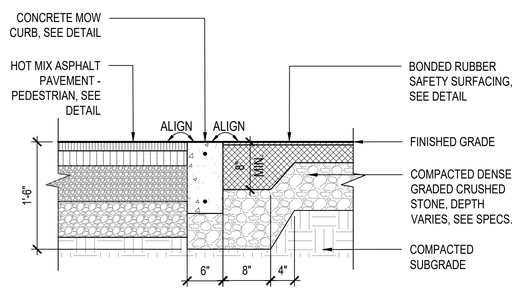
SCALE: N.T.S.



NOTES:
1. BONDED RUBBER BASE LAYER SHALL BE FULL DEPTH OF ROLLED EDGE. COLORED SURFACE LAYER SHALL BE HALF DEPTH AS SHOWN.

9 ENGINEERED WOOD FIBER SAFETY SURFACING AT BONDED RUBBER

SCALE: N.T.S.



10 BONDED RUBBER AT ASPHALT

SCALE: N.T.S.

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Project:
CITY OF PORTSMOUTH
LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson
Weston & Sampson Engineers, Inc.
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Date:	DECEMBER 19, 2025
Drawn By:	MG, JZ
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
DETAILS

Sheet Number:
L902

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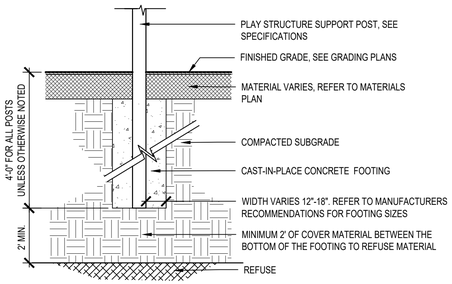
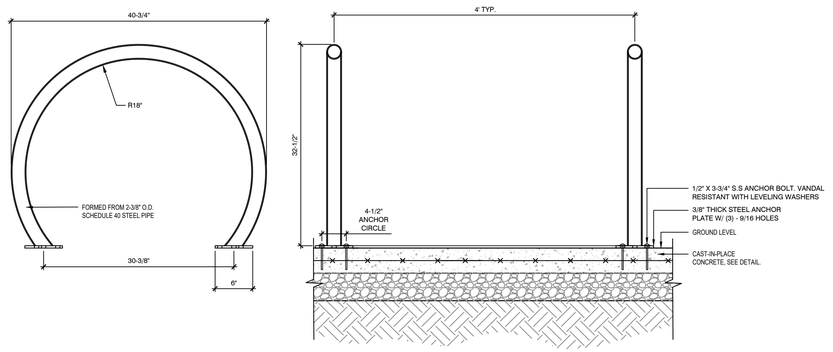


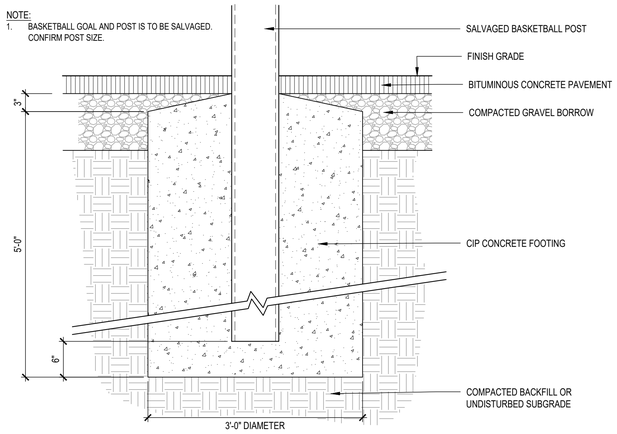
NOTE:
1. FOOTINGS SHALL BE REQUIRED FOR ALL POSTS AND GROUND CONNECTIONS, SEE PLANS.
2. EXCEPT AS NOTED, EXCAVATION AREAS THAT ARE FIELD VERIFIED TO BE GREATER THAN 2' FROM TOP OF SUBGRADE TO REFUSE, THE HDPE GEOMEMBRANE MAY BE OMITTED

1 PLAY STRUCTURE FOOTING
SCALE: N.T.S.



2 BIKE RACK SURFACE MOUNTED ON CONCRETE
SCALE: N.T.S.

NOTE:
1. BASKETBALL GOAL AND POST IS TO BE SALVAGED. CONFIRM POST SIZE.



3 BASKETBALL POST FOOTING
SCALE: N.T.S.

4 TYPICAL BOARDWALK SECTION AT SUPPORT
SCALE: N.T.S.

Project:
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W&S File No.:	----

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DETAILS

Sheet Number:
L903

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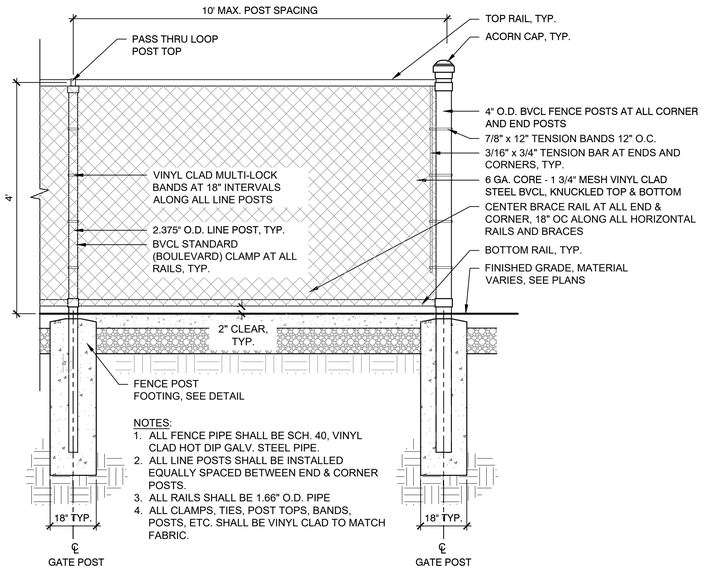
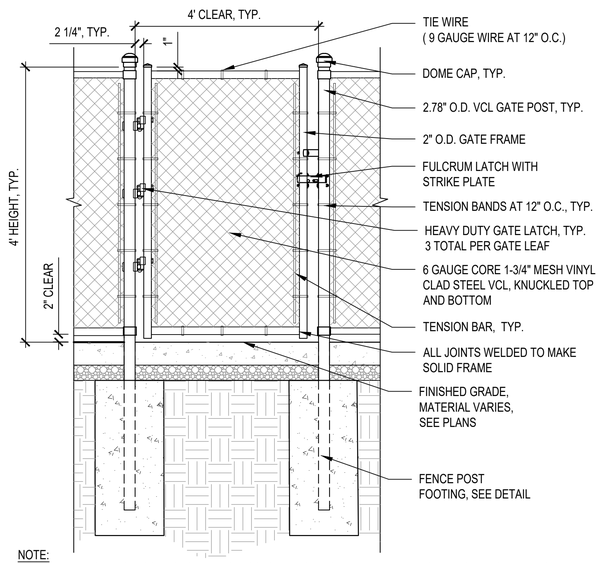


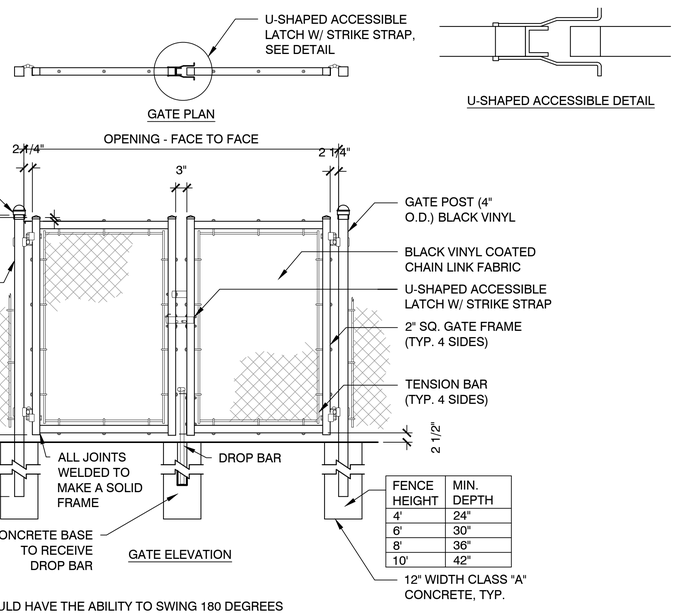
NOTES:
1. ALL FENCE PIPE SHALL BE SCH. 40, VINYL CLAD HOT DIP GALV. STEEL PIPE.
2. ALL LINE POSTS SHALL BE INSTALLED EQUALLY SPACED BETWEEN END & CORNER POSTS.
3. ALL RAILS SHALL BE 1.66" O.D. PIPE
4. ALL CLAMPS, TIES, POST TOPS, BANDS, POSTS, ETC. SHALL BE VINYL CLAD TO MATCH FABRIC.

1 4' HT. BLACK VINYL CHAIN LINK FENCE
SCALE: N.T.S.



NOTE:
1. ALL CLAMPS, TIES, POST TOPS, BANDS, POSTS, RAILS, ETC. SHALL BE VINYL CLAD TO MATCH FABRIC.
2. CONTRACTOR SHALL GRADE AS REQUIRED (BELOW GATE) TO ALLOW FOR FULL OPENING/CLOSING OF GATE.
3. SEE FRAMING SCHEDULE FOR SIZING.

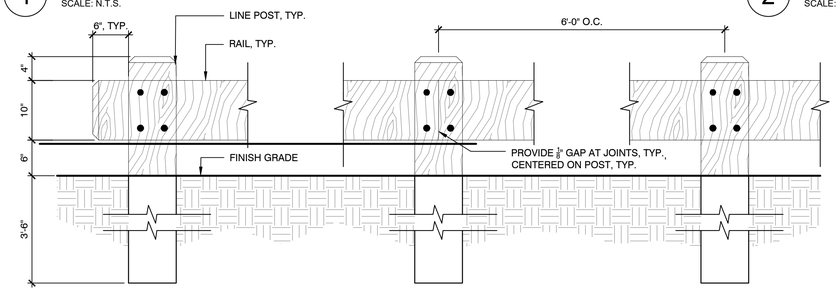
2 4' HT. CHAIN LINK SINGLE SWING GATE
SCALE: N.T.S.



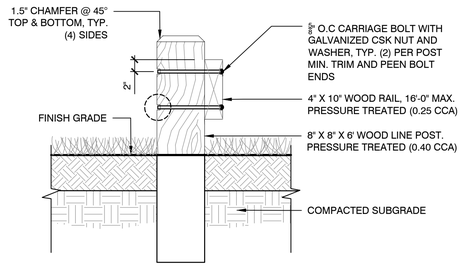
FENCE HEIGHT	MIN. DEPTH
4'	24"
6'	30"
8'	36"
10'	42"

NOTES:
1. GATES SHOULD HAVE THE ABILITY TO SWING 180 DEGREES
2. EXTERIOR GRADE PADLOCK SHALL BE INCLUDED, SEE SPECIFICATIONS

3 4' HT. CHAIN LINK DOUBLE SWING GATE
SCALE: N.T.S.



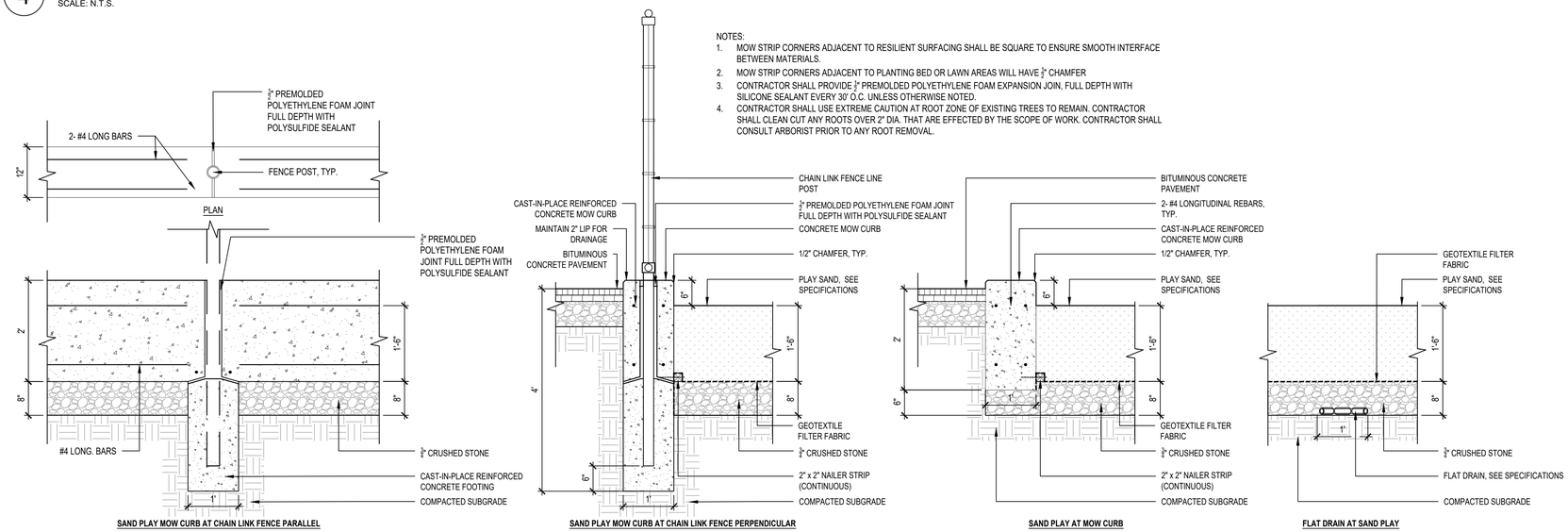
TYPICAL RAILING ELEVATION



TYPICAL RAILING SECTION

4 WOOD GUARDRAIL
SCALE: N.T.S.

NOTES:
1. MOW STRIP CORNERS ADJACENT TO RESILIENT SURFACING SHALL BE SQUARE TO ENSURE SMOOTH INTERFACE BETWEEN MATERIALS.
2. MOW STRIP CORNERS ADJACENT TO PLANTING BED OR LAWN AREAS WILL HAVE ¾" CHAMFER
3. CONTRACTOR SHALL PROVIDE ¾" PREMOLDED POLYETHYLENE FOAM EXPANSION JOIN, FULL DEPTH WITH SILICONE SEALANT EVERY 30' O.C. UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL USE EXTREME CAUTION AT ROOT ZONE OF EXISTING TREES TO REMAIN. CONTRACTOR SHALL CLEAN CUT ANY ROOTS OVER 2" DIA. THAT ARE EFFECTED BY THE SCOPE OF WORK. CONTRACTOR SHALL CONSULT ARBORIST PRIOR TO ANY ROOT REMOVAL.



5 CONCRETE MOW CURB
SCALE: N.T.S.

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Approved By:	BK
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L904

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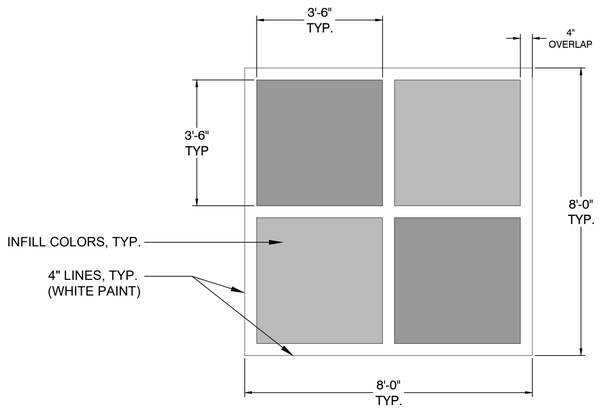
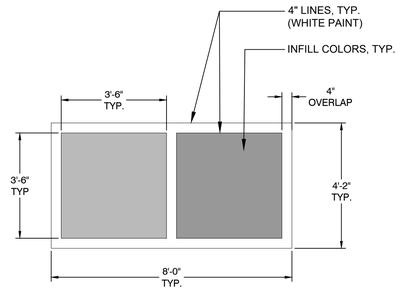


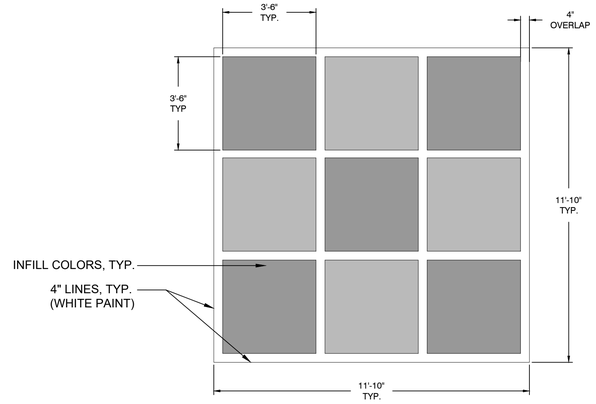
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

1 FOUR-SQUARE
SCALE: N.T.S.



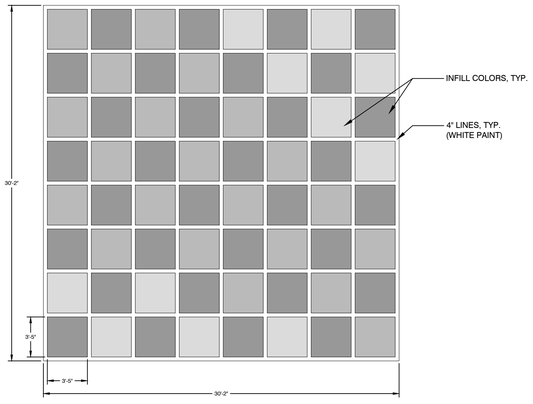
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

2 TWO-SQUARE
SCALE: N.T.S.



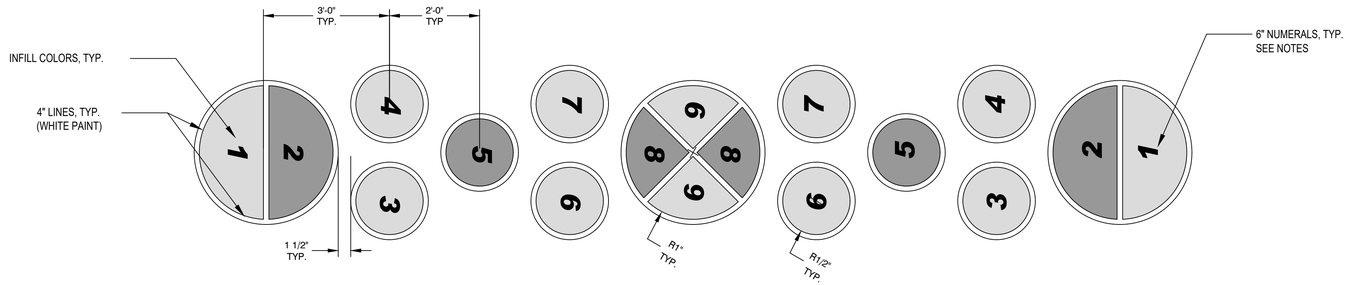
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

3 NINE-SQUARE
SCALE: N.T.S.



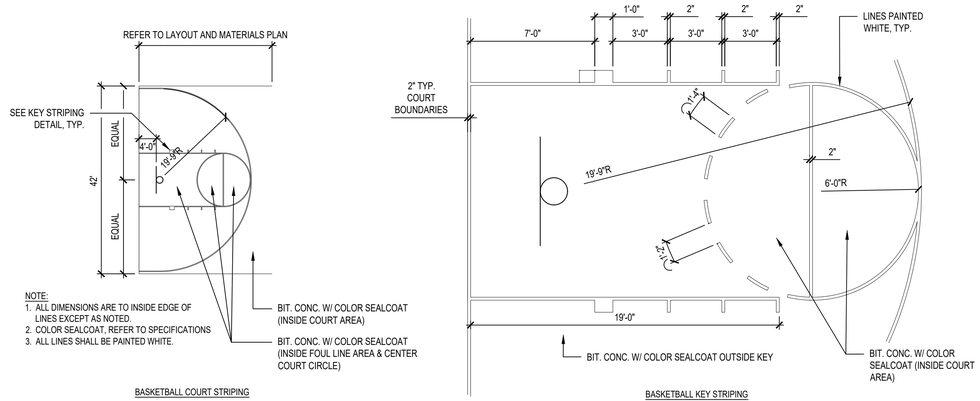
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

4 CHESS CHECKERS
SCALE: N.T.S.

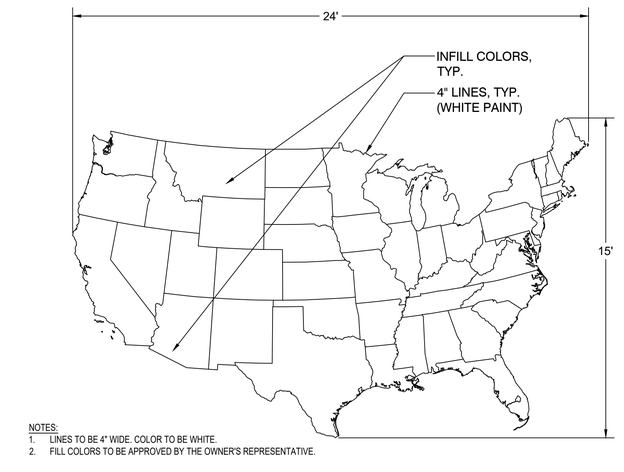


NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.
3. NUMBERS TO BE 6" TALL- FONT TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

5 HOPSCOTCH
SCALE: N.T.S.



6 BASKETBALL COURT LAYOUT
SCALE: N.T.S.



NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

7 US MAP GAME
SCALE: N.T.S.

p:\NH\portsmouth - dlr\gis\25955\little harbour elementary school\05-cad\L905 DETAILS.dwg Almeida, Andrew 2/19/2025 9:37 AM

Project:
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LITTLE HARBOUR
ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

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W&S Project No.:	ENG25-0955
W&S File No.:	----

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Sheet Number:
L905

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December 26, 2025

Attn: Peter Britz
City of Portsmouth Conservation Commission
1 Junkins Ave, 3rd Floor
Portsmouth, NH 03801

TRANSMITTAL

Project Name: Portsmouth Regional Hospital Ambulance - Bay and Canopy
Project No.: 20250276

We are sending the following:

☒	Letter	☒	Drawings	☐	Contract
☐	Change Order	☐	Computer Disk	☐	Specifications
☐	Other				

Via:

☒	Mail	☐	Courier	☐	Overnight

Purpose:

☐	Approval	☐	Your Use	☐	Your Records
☒	Review & Comment	☒	As Requested	☐	Bids Due

DESCRIPTION	SETS
Project Narrative	1
Wetland Delineation Report by Grove Environmental Services, Inc.	1
Full Size (22X34) Drawing Set	1
Signed Application Checklist	1
Signed Authorization Letter	1
City GIS Parcel Summary	1

Remarks: This hard copy set goes along with the electronic submittal.

Chris Akers
615.476.4764

Portsmouth Regional Hospital

December 19, 2025

Catalyst Design Group
5100 Tennessee Ave
Nashville, TN 37209

RE: Agent Authorization

To Whom It May Concern:

Be advised that I am the Chief Executive Officer of the Portsmouth Regional Hospital located at 333 Borthwick Ave, Portsmouth, NH 03801. I am an authorized agent to the owners of HCA Health Services of New Hampshire, Inc. dba Portsmouth Regional Hospital. As the authorized agent, I hereby authorize and empower:

Catalyst Design Group to act as agent/ representative to communicate and submit required information as necessary in obtaining site-related approvals and permits for the proposed Ambulance Bay and Canopy project located at 333 Borthwick Ave, Portsmouth, NH 03801.

Sean Patterson

333 Borthwick Avenue
Portsmouth, NH 03801
Phone: 436-5110
1-800-685-8282
www.portsmouthhospital.com

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: HCA Health Services of New Hampshire, Inc. dba Portsmouth Regional Hospital Date Submitted: 12/29/2025

Application # (in City's online permitting): _____

Site Address: 333 Borthwick Ave, Portsmouth, NH 03801 Map: 240 Lot: 0002-0001

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
✔	Complete application form submitted via the City's web-based permitting program	See attached
✔	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	See attached

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	C1.0 Site Survey
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	N/A, proposed additional impervious area is +/-240 SF
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	C3.0 Site Demo, Layout, Grading and Utility Plan
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	N/A, proposed additional impervious area is +/-240 SF

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Wetland buffer enhancement plan. **(10.1017.25)**	N/A, proposed additional impervious area is +/-240 SF
✔	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	N/A
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	N/A, proposed additional impervious area is +/-240 SF
✔	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	N/A
✔	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	C3.0 Site Demo, Layout, Grading and Utility Plan
✔	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	N/A, replacing existing damaged pavement
✔	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	N/A
✔	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	C3.0 Site Demo, Layout, Grading and Utility Plan
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	See attached project narrative
✔	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	N/A

Applicant's Signature: Sean Patterson **Date:** 12/22/25

December 26, 2025

City of Portsmouth Conservation Commission

Re: Portsmouth Regional Hospital – Ambulance Bay and Canopy
Project Narrative
Portsmouth, NH

The existing Portsmouth Regional Hospital is located at 333 Borthwick Ave, Portsmouth, NH 03801 (Map 240, Lot 2-1). The medical campus is located on the east side of Blue Star Turnpike (I-95), the west side of Borthwick Avenue, and can be accessed via multiple entrances from Borthwick Avenue.

The scope of the proposed **Ambulance Bay and Canopy** project consists of an ambulance garage door replacement and the addition of a widened concrete sidewalk with a new overhead canopy for patients to be transported from ambulances (when backed up under the new canopy) to an existing hospital door … all located on the southeast corner of the existing hospital building.

No new building area is proposed with this project. The proposed sitework is anticipated to consist of minimal asphalt, concrete sidewalk, utility, and landscape removal and replacement, along with the installation of a new overhead canopy with structural foundations and columns to support the new canopy.

A portion of the proposed project scope is located an existing 100-ft wetland buffer that is offset from the existing wetlands located on the outside of the existing rear hospital loop drive. No work is proposed within the wetlands, and only +/- 730 SF of area is proposed to be disturbed within the wetland buffer. Only +/- 240 SF of additional impervious area (due to widening an existing sidewalk) is proposed with the project scope.

Please note, the overall wetland data has been calculated with older design drawings by others. Only the wetland adjacent to the proposed project was previously delineated and flagged by Gove Environmental Services, Inc., and surveyed by James Verra and Associates, Inc. Refer to attached previous letter and site survey. The wetland flagging will be updated on site by Gove Environmental Services, Inc. for this proposed project.

Wetlands and 100-foot buffer, Overall Site

- Subject Parcel: Map 240, Lot2-1 (±20.87 ac)
- Total wetland area onsite: approximately ±2.7 acres
- Total area of 100-foot wetland buffer onsite: approximately ±8.4 acres

Wetland and 100-foot buffer, Proposed Project Impact

- Area of inland wetland to be disturbed:
  - Permanent: 0 SF
  - Temporary: 0 SF
  - Total disturbance: 0 SF

- Area of 100-ft wetland buffer to be disturbed:
    - Permanent: ±240 sf (concrete sidewalk widening)
    - Temporary: ±730 sf (construction of widened concrete sidewalk, installation of wider ambulance roll-up door, and installation of new overhead canopy)

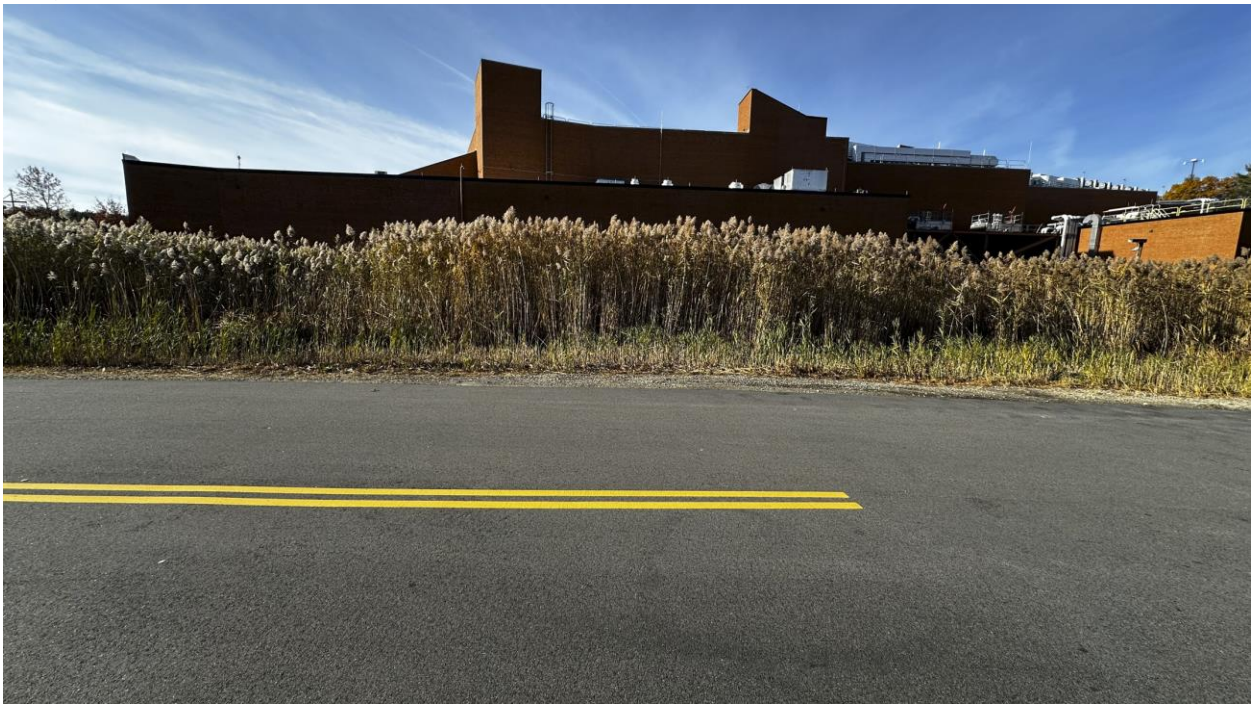
Views of existing project area conditions:

Existing ambulance garage roll-up doors. Left garage door to be replaced with wider door to match door to the right:

Existing sidewalk to be widened and a new overhead canopy to be installed:

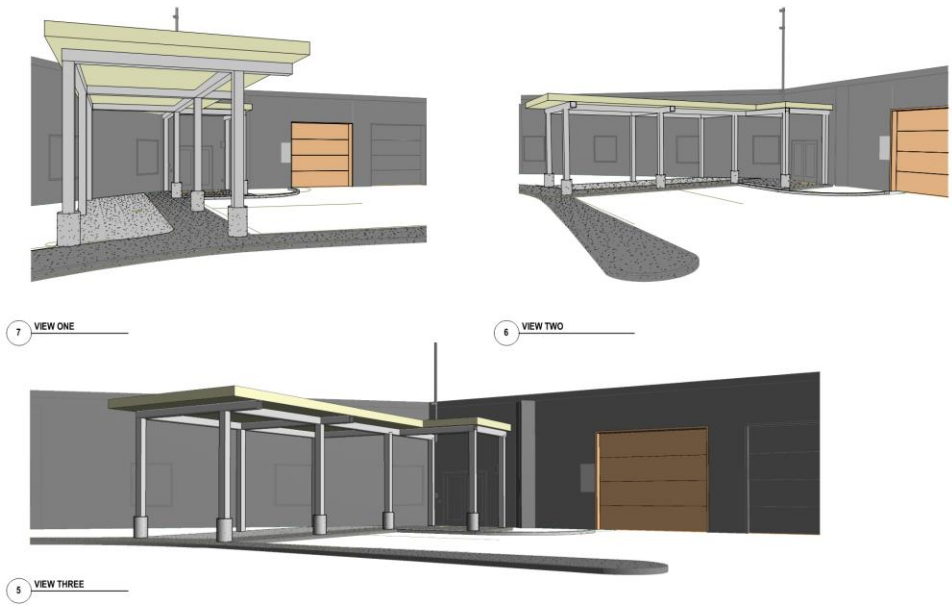
Existing sidewalk to be widened and a new overhead canopy to be installed:

Existing wetlands located along the outside of the rear hospital loop drive (+/-75' from proposed project area):



Existing wetlands located along the outside of the rear hospital loop drive (+/-’ 75 from proposed project area):

Views of proposed wider garage roll-up door, overhead canopy, and widened sidewalk:



GOVE ENVIRONMENTAL SERVICES, INC.

October 15, 2019

Portsmouth Regional Hospital

Subject: Wetland Delineation Report
Portsmouth Regional Hospital
333 Borthwick Ave, Portsmouth, NH

Dear Chris Akers,

Per your request, this letter is to verify that Gove Environmental Services, Inc., performed a site inspection to identify wetlands at Portsmouth Regional Hospital, 333 Borthwick Ave, Portsmouth, NH. Wetlands were evaluated utilizing the following standards:

1. *US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Technical Report ERDC/EL TR-12-1 (January 2012).
2. *Field Indicators for Identifying Hydric Soils in New England – Version 4, April 2019.* New England Hydric Soils Technical Committee.
3. *US Army Corps of Engineers National Wetland Plant List, 2018.*
4. *Classification of Wetlands and Deepwater Habitats of the United States.* USFW Manual FWS/OBS–79/31 (1979).

Brenden Walden performed the site inspection on 9/17/19. During the site inspection, two areas of wetland were identified on the Site. The wetland areas were demarcated with a series of pink "Wetland Delineation" flagging consecutively labeled:

1 Start – 15 Stop & A1-A22

The attached sketch plan depicts the general location of the flag series, which were used to identify the resource areas in the field. A general description of the wetlands is also provided

The wetland demarcated by the **1 Start – 15 Stop** series of flags, delineated a drainage area dominated by emergent vegetation, hydric soils on the wetland border consisted of NE-S1 & HTM-S hydric soil classifications, soil saturation and water staining were also observed. Bordering upland area consisted developed area and impervious surface.

The wetland demarcated by the **A1-A22** series of flags, delineated the wetland boundary for a detention basin vegetated with emergent vegetation. The wetland boundary consisted of NE-S with areas of HTM-S. Bordering upland areas consist of maintained lawn areas and impervious surface from surrounding development.

This concludes the wetland delineation report. If I can be of further assistance, please feel free to contact me at (603) 778-0644.

Sincerely,

Brenden Walden
Business Manager & Wetland Scientist
Gove Environmental Services, Inc.

Enc. Wetland Delineation Sketch

STATE OF NEW HAMPSHIRE
BRENDEN M. WALDEN
10/15/19
No. 297
CERTIFIED WETLAND SCIENTIST

8 Continental Dr Unit H, Exeter, NH 03833-7507
Ph (603) 778 0644 / *Fax* (603) 778 0654
www.gesinc.biz
info@gesinc.biz

15 Start
Al-Aza
15 Stop

Details

Property	
Location	333 BORTHWICK AVE
Map-Lot	0240-0002-0001
Vision Account Number	35555

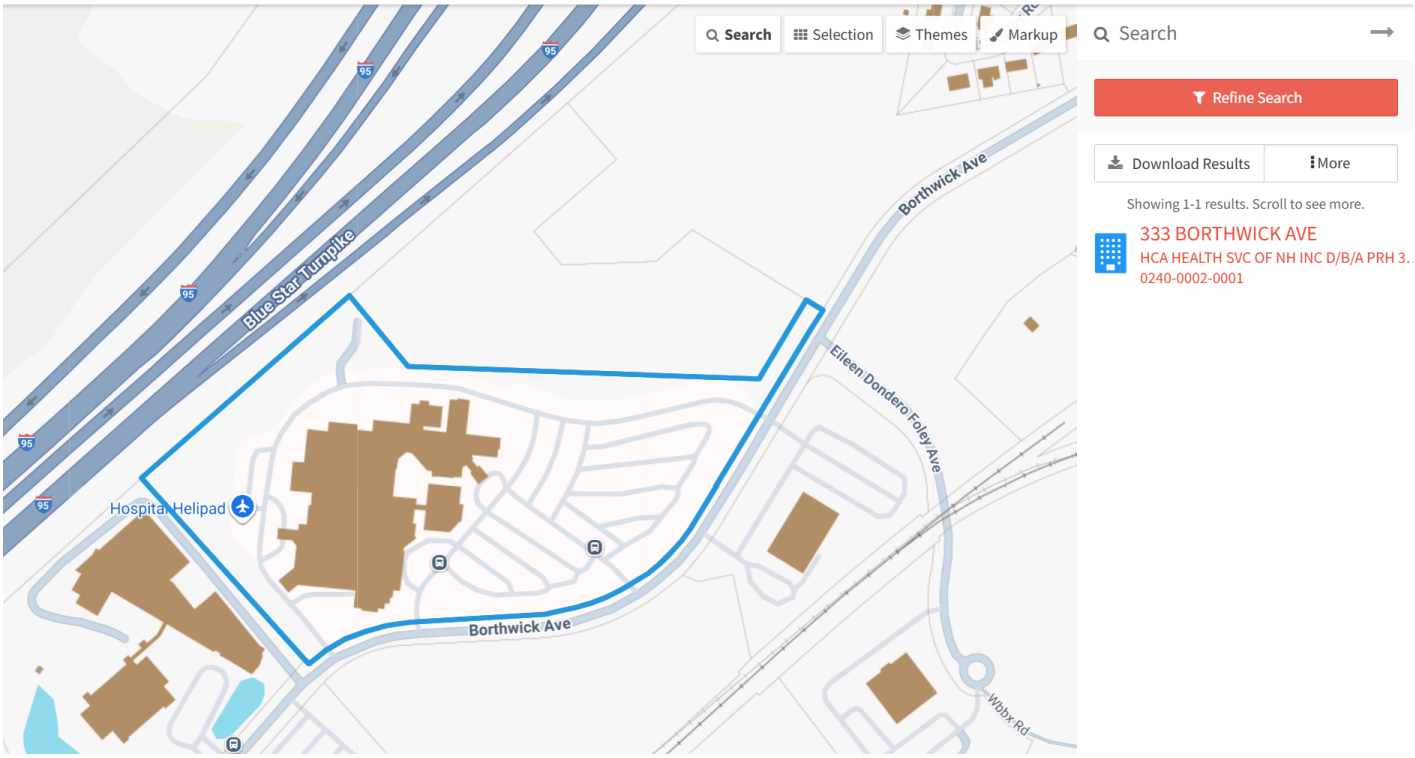
Ownership	
Owner	HCA HEALTH SVC OF NH INC D/B/A PRH 32902 C/O DUCHARME MCMILLEN & ASSOCIATES
Address	PO BOX 80610, INDIANAPOLIS, IN 46280

Valuation	
Total	$107,470,000
Last Sale	$0 on
Book/Page	2784/1340

Land	
Parcel Area (AC)	20.87

Zoning

Zoning
OR

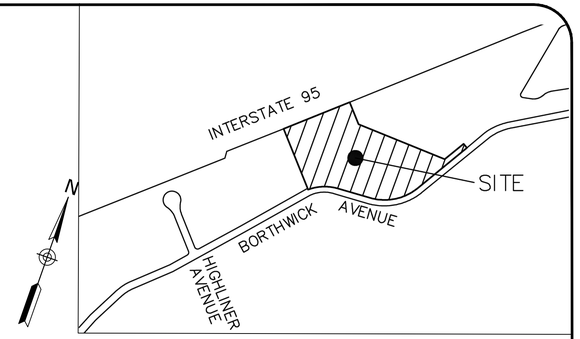


CONSTRUCTION DOCUMENTS

PORTSMOUTH REGIONAL HOSPITAL AMBULANCE BAY & CANOPY

PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

CATALYST PROJECT NO. 20250276
12/26/2025



VICINITY MAP
NOT TO SCALE

SITE DATA

LOT NUMBER:	0240-0002-0001	
TAX MAP:	240	
SITE ADDRESS:	333 BORTHWICK AVE PORTSMOUTH, NH 03801	
SITE ACREAGE:	20.87 AC. (909,097 SF)	
DISTURBED AREA:	0.01 AC. (764 SF)	
DISTURBED AREA IN WETLAND BUFFER:	±730 SF	
EXISTING ZONING:	OR	
PROPOSED USE:	HOSPITAL	
EXISTING BUILDING HEIGHT:	± 65'-4"	
ALLOWED MAX. BUILDING HEIGHT:	60'	
PROPOSED BUILDING ADDITION:	0'	
HOSPITAL BEDS:	EXISTING: 233	PROPOSED ADDITION: 0
HOSPITAL / MOB FOOTPRINT:	EXISTING: ±182,616 SF	PROPOSED ADDITION: 0 SF
HOSPITAL GROSS FLOOR AREA:	EXISTING: ±436,365 SF	PROPOSED ADDITION: 0 SF
ATTACHED MOB GROSS FLOOR AREA:	EXISTING: ± 46,665 SF	PROPOSED ADDITION: 0 SF

IMPERVIOUS SURFACE AREA

EXISTING IMPERVIOUS AREA:	
PARKING & DRIVEWAYS:	319,970 SF
OTHER IMPERVIOUS AREA:	19,506 SF
TOTAL:	339,476 SF
PROPOSED IMPERVIOUS AREA ADDED:	240 SF
TOTAL RESULTING IMPERVIOUS AREA:	339,716 SF

SETBACKS

PRINCIPAL FRONT YARD:	REQUIRED: 50 FT	PROVIDED: 83 FT
REAR YARD:	REQUIRED: 50 FT	PROVIDED: 157 FT
RIGHT SIDE YARD:	REQUIRED: 75 FT	PROVIDED: 388 FT
LEFT SIDE YARD:	REQUIRED: 75 FT	PROVIDED: 83 FT

MIN. OPEN SPACE ON A LOT

REQUIRED:	30%
PROPOSED:	±39.0%

MAX. FLOOR-AREA-RATIO (FAR)

REQUIRED:	30%
PROPOSED:	±20.1%

PARKING SUMMARY

EXISTING PARKING PROVIDED:	±1,277 SPACES

OWNER:	PORTSMOUTH REGIONAL HOSPITAL
ADDRESS:	333 BORTHWICK AVE PORTSMOUTH, NH 03801
PHONE NO.:	603-436-5110
CONTACT NAME:	JAKE ENCE, VICE PRESIDENT OF OPERATIONS
CONTACT E-MAIL ADDRESS:	jacob.ence@hcahealthcare.com
PROJECT REPRESENTATIVE:	CATALYST DESIGN GROUP
ADDRESS:	5100 TENNESSEE AVENUE NASHVILLE, TN 37221
PHONE NO.:	615-622-7200
CONTACT NAME:	CHRIS AKERS, PROJECT MANAGER
CONTACT E-MAIL ADDRESS:	cakers@catalyst-dg.com

RECORDED DOCUMENTS: DEED BOOK 2784 PAGE 1340

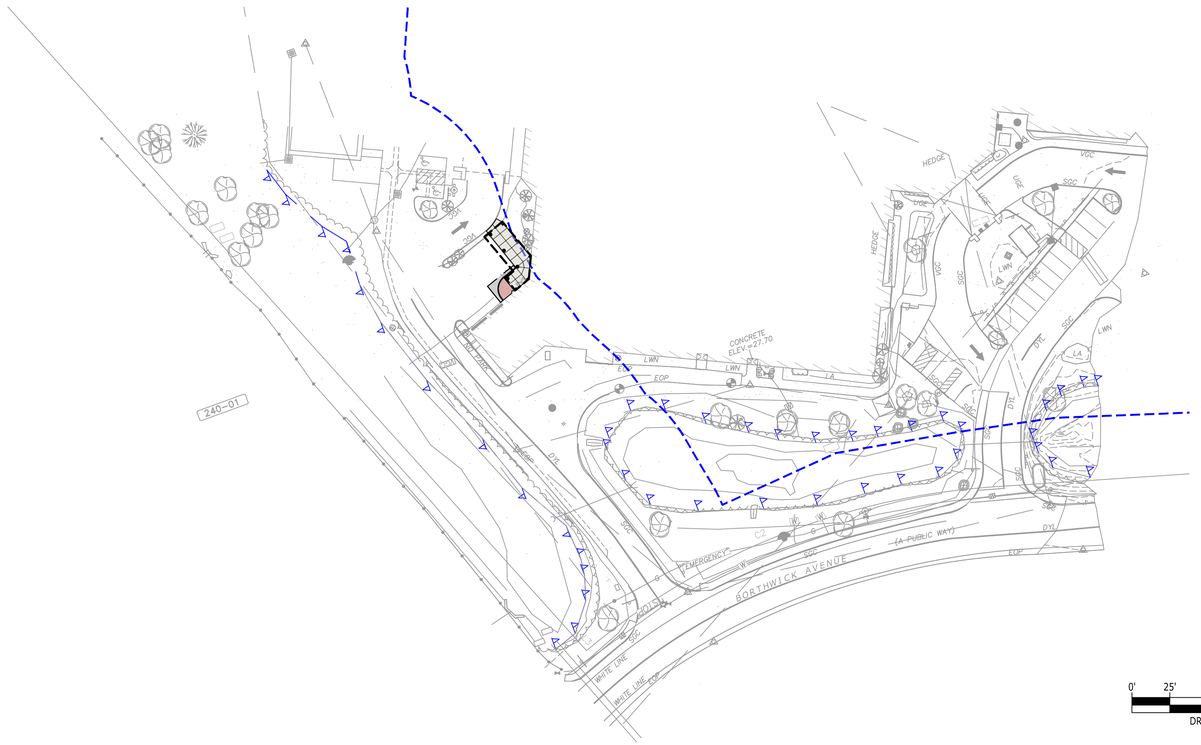
FEMA PANEL:
THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO COMMUNITY PANEL NO. 33015C0260F, JANUARY 29, 2021, COMMUNITY NAME: CITY OF PORTSMOUTH.

ABUTTERS:

ADDRESS:	255 BORTHWICK AVE PORTSMOUTH, NH 03801
LOT NUMBER:	0240-0001-0000
TAX MAP:	240
OWNER:	LIBERTY MUTUAL INSURANCE CO
ADDRESS:	BORTHWICK AVE PORTSMOUTH, NH 03801
LOT NUMBER:	0240-0002-2001
TAX MAP:	240
OWNER:	CITY OF PORTSMOUTH DPW
ADDRESS:	330 BORTHWICK AVE PORTSMOUTH, NH 03801
LOT NUMBER:	0240-0002-2200
TAX MAP:	240
OWNER:	330 PORTSMOUTH LLC
ADDRESS:	BORTHWICK AVE PORTSMOUTH, NH 03801
LOT NUMBER:	0240-0002-1001
TAX MAP:	240
OWNER:	CITY OF PORTSMOUTH DPW

RESOURCE LIST

NATURAL GAS:	NORTHERN UTILITIES, INC JEFF INGLISH 325 WEST ROAD PORTSMOUTH, NH 03801 PHONE: (603) 436-0310
ELECTRIC:	PUBLIC SERVICES OF NH/ EVERSOURCE WAYNE BROOKS 1700 LAFAYETTE ROAD PORTSMOUTH, NH 03801 PHONE: (800) 662-7764
TELEPHONE/ CABLE:	CONSOLIDATED COMMUNICATIONS 1575 GREENLOAD ROAD GREENLAND, NH 03840 PHONE: (800) 240-5019
WATER/ SANITARY SEWER:	PORTSMOUTH DEPT OF PUBLIC WORKS MIKE JENKINS 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801 PHONE: (603) 427-1530



SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS
C2.0	GENERAL NOTES
C3.0	DEMO, LAYOUT, GRADING & UTILITY PLAN
C4.0	SITE DETAILS

ARCHITECT

JSA

273 CORPORATE DR STE 100
PORTSMOUTH, NH 03801
603-436-2551

PREPARED FOR

Portsmouth Regional Hospital

333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110

STATE OF NEW HAMPSHIRE
ROBERT ANDREW WISEMAN
LICENSED PROFESSIONAL ENGINEER
12/26/2025

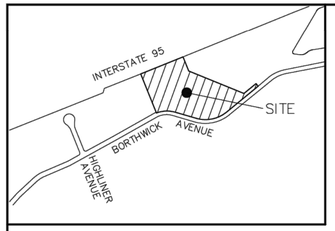
CIVIL ENGINEER/LANDSCAPE ARCHITECT

Catalyst DESIGN GROUP

5100 TENNESSEE AVENUE, NASHVILLE, TN 37209
(615) 622-7200 | WWW.CATALYST-DG.COM

COVER SHEET

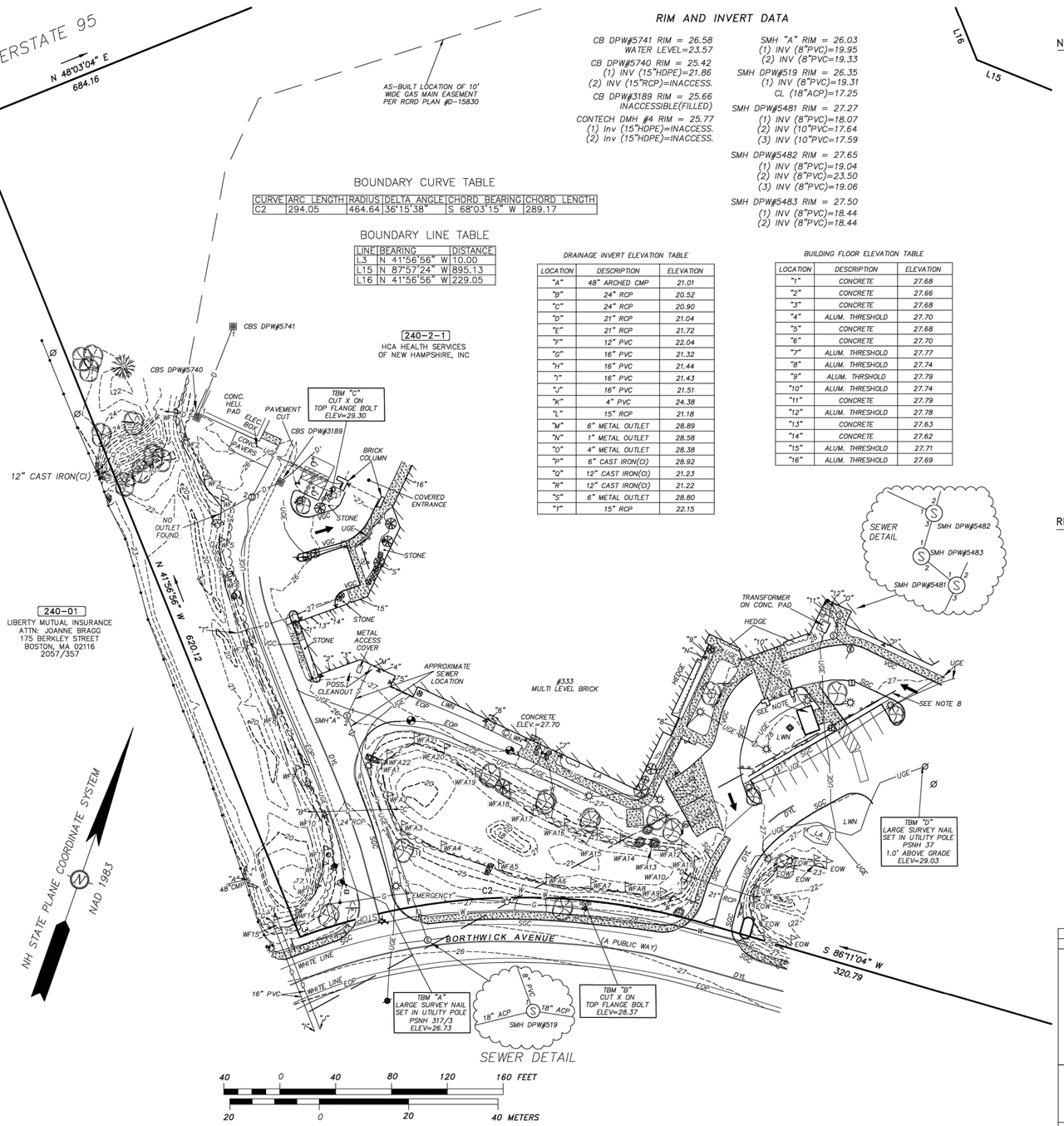
C0.0



LOCUS
(N.T.S.)

LEGEND:

- IRON ROD (AS NOTED)
- SURVEY NAIL (AS NOTED)
- CHAIN LINK FENCE
- UTILITY POLE
- UTILITY POLE W/TRANSFORMER
- GUY
- LIGHT POLE
- DIRECTED WALL LIGHT
- —OHW— OVERHEAD WIRES
- —OHE— OVERHEAD ELECTRIC
- —OHC— OVERHEAD COMMUNIUCATION WIRES
- —UGC— UNDERGROUND COMMUNICATIONS
- —UGE— UNDERGROUND ELECTRIC
- RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
- 240-02-01 TAX SHEET / LOT NO.
- EOP EDGE OF PAVEMENT
- LA LANDSCAPED AREA
- RWS STONE RETAINING WALL
- VGC VERTICAL FACED GRANITE CURB
- SGC SLOPED FACED GRANITE CURB
- PSNH PUBLIC SERVICE CO. OF NH
- HANDICAP SPACE
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- BOLLARD
- SIGN
- DOUBLE POST SIGN
- ELECTRICAL CONDUIT
- ELECTRICAL PANEL
- ELECTRICAL BOX
- ELECTRIC METER
- GAS VALVE
- — W — WATER *LINE*
- — S — SEWER *LINE*
- —D— DRAIN LINE
- — G — GAS LINE
- *BRUSH LINE*
- CONIFEROUS TREE
- DECIDUOUS TREE
- TREE LINE
- CONIFEROUS SHRUB
- DECIDUOUS SHRUB
- TREE STUMP
- MONITORING WELL
- WATER GATE VALVE
- WATER SHUT OFF VALVE
- WATER METER PIT
- HYDRANT
- FIRE CONNECTION
- POST INDICATOR VALVE
- RIP RAP
- CEMENT CONCRETE PAD
- BORING
- CABLE TV VAULT
- DYL DOUBLE YELLOW LINE
- STONE RETAINING WALL



BOUNDARY CURVE TABLE

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C2	294.05	464.64	36°15'38"	S 68°03'15" W	289.17

BOUNDARY LINE TABLE

LINE	BEARING	DISTANCE
L3	N 41°56'56" W	10.00
L15	N 87°57'24" W	895.13
L16	N 41°56'56" W	229.05

RIM AND INVERT DATA

CB DPW#5741 RIM = 26.58
WATER LEVEL=23.57

CB DPW#5740 RIM = 25.42
(1) INV (15"HDPE)=21.86
(2) INV (15"RCP)=INACCESS.

CB DPW#3189 RIM = 25.66
INACCESSIBLE(FILLED)

CONTECH DMH #4 RIM = 25.77
(1) Inv (15"HDPE)=INACCESS.
(2) Inv (15"HDPE)=INACCESS.

SMH "A" RIM = 26.03
(1) INV (8"PVC)=19.95
(2) INV (8"PVC=19.33

SMH DPW#519 RIM = 26.35
(1) INV (8"PVC)=19.31
CL (18"ACP)=17.25

SMH DPW#5481 RIM = 27.27
(1) INV (8"PVC)=18.07
(2) INV (10"PVC=17.64
(3) INV (10"PVC=17.59

SMH DPW#5482 RIM = 27.65
(1) INV (8"PVC)=19.04
(2) INV (8"PVC)=23.50
(3) INV (8"PVC)=19.06

SMH DPW#5483 RIM = 27.50
(1) INV (8"PVC)=18.44
(2) INV (8"PVC)=18.44

DRAINAGE INVERT ELEVATION TABLE

LOCATION	DESCRIPTION	ELEVATION
"A"	48" ARCHED CMP	21.01
"B"	24" RCP	20.52
"C"	24" RCP	20.90
"D"	21" RCP	21.04
"E"	21" RCP	21.72
"F"	12" PVC	22.04
"G"	16" PVC	21.32
"H"	16" PVC	21.44
"I"	16" PVC	21.43
"J"	16" PVC	21.51
"K"	4" PVC	24.38
"L"	15" RCP	21.18
"M"	6" METAL OUTLET	28.89
"N"	1" METAL OUTLET	28.58
"O"	4" METAL OUTLET	28.38
"P"	6" CAST IRON(CI)	28.92
"Q"	12" CAST IRON(CI)	21.23
"R"	12" CAST IRON(CI)	21.22
"S"	6" METAL OUTLET	28.80
"T"	15" RCP	22.15

BUILDING FLOOR ELEVATION TABLE

LOCATION	DESCRIPTION	ELEVATION
"1"	CONCRETE	27.68
"2"	CONCRETE	27.66
"3"	CONCRETE	27.68
"4"	ALUM. THRESHOLD	27.70
"5"	CONCRETE	27.68
"6"	CONCRETE	27.70
"7"	ALUM. THRESHOLD	27.77
"8"	ALUM. THRESHOLD	27.74
"9"	ALUM. THRSHOLD	27.79
"10"	ALUM. THRESHOLD	27.74
"11"	CONCRETE	27.79
"12"	ALUM. THRESHOLD	27.78
"13"	CONCRETE	27.63
"14"	CONCRETE	27.62
"15"	ALUM. THRESHOLD	27.71
"16"	ALUM. THRESHOLD	27.69

NOTES:

1. OWNER OF RECORD.....HCA HEALTH SERVICES OF NH., D/B/A PRH 32902
C/O DUCHARME MCMILLEN & ASSOCIATES
ADDRESS.....PO BOX 80610, INDIANAPOLIS, IN 46280
DEED REFERENCE.....2784/1340
TAX SHEET / LOT.....240-02-01
PARCEL AREA.....846,664 S.F 19.44 ACRES
2. ZONED:.....OFFICE/RESEARCH (OR) FRONT YARD SETBACK....50'
MINIMUM LOT AREA..3 ACRES SIDE YARD SETBACK.....75'
FRONTAGE.....300' REAR YARD SETBACK.....50'
3. THE RELATIVE ERROR OF CLOSURE WAS LESS THAN 1 FOOT IN 15,000 FEET.
4. *THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.*
5. *HORIZONTAL DATUM: NAD 1983 ESTABLISHED BY SURVEY GRADE GPS OBSERVATION AND NGS "OPUS" SOLUTION. REFERENCE FRAME: NAD83 (2011)(EPOCH: 2010.0000), US SURVEY FOOT.*
VERTICAL DATUM: NAVD 1988. PRIMARY BENCHMARK: CITY OF PORTSMOUTH "ALBA"
6. *ENGINEER OR CONTRACTOR TO VERIFY SITE BENCHMARKS BY LEVELING BETWEEN 2 BENCHMARKS PRIOR TO THE ESTABLISHMENT OF ANY GRADES OR ELEVATIONS. DISCREPANCIES ARE TO BE REPORTED TO JAMES VERRA AND ASSOCIATES, INC..*
7. *THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260E, EFFECTIVE DATE MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.*
8. *LIMIT OF 300' EVERSOURCE ELECTRIC EASEMENT.*
9. *BRICK GENERATOR ENCLOSURE. TOP OF CONCRETE ELEV.=27.20*
10. *THE DELINEATION OF THE WETLANDS SHOWN HEREON WAS BY BRENDEN WALDEN NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #297, GOVE ENVIRONMENTAL SERVICES, LLC., 8 CONTINENTAL DRIVE, UNIT H, EXETER, NH 03833.*
11. *THE SUBSURFACE UTILITIES SHOWN HEREON WERE IDENTIFIED BY WADE HANSEN, GROUND PENETRATING RADAR SYSTEMS, INC., 5217 MONROE STREET, SUITE A, TOLEDO, OHIO 43623.*
12. *AN EXISTING UNITIL GAS LINE SOUTHWESTERLY OF THE HOSPITAL IN THE VICINITY OF THE LIBERTY MUTUAL PARCEL & A 6" CLDI WATER LINE IN THE SAME AREA WERE NOT FIELD LOCATED BY GROUND PENETRATING RADAR SYSTEMS, INC.*

REFERENCE PLANS:

1. *GAS LINE AS-BUILT EASEMENT AND CONSERVATION PLAN, PREPARED FOR HOSPITAL CORPROATION OF AMERICA, PORTSMOUTH, NH, DATED 10/31/85. RCRD PLAN #D-15830.*
2. *SCHILLER S/S-OCEAN ROAD S/S, 115 KV TRANSMISSION LINE #U181, MILE 4, PLANR-6775-A, DATED 7/10/2009, BY NORTHEAST UTILITIES, NOT RECORDED.*
3. *SUBDIVISION OF LAND, FRANETAL REALTY TRUST COMPAMY, OPTIONED TO LIBERTY MUTUAL INSURANCE COMPANY, PORTSMOUTH, NEW HAMPSHIRE, REVISED TO 2/19/71 RCRD PLAN #2190.*

PURSUANT TO RSA 676:18,III AND RSA 672:14

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

James Verra — 11-19-2019
JAMES VERRA — DATE

STATE OF NEW HAMPSHIRE — No. 825 JAMES VERRA — LICENSED LAND SURVEYOR — SIGNATURE

REV. NO.	DATE	DESCRIPTION	APPR'D
0	11-08-2019	FOR REVIEW & COMMENT	JV

LIMITED EXISTING CONDITIONS PLAN
333 BORTHWICK AVENUE
PORTSMOUTH, NEW HAMPSHIRE
ASSESSOR'S PARCEL #240-002-001
for
HCA HEALTH SERVICES OF NEW HAMPSHIRE

JAMES VERRA and ASSOCIATES, INC.
101 SHATTUCK WAY
SUITE 8
NEWINGTON, N.H., 03801-7876
603-436-3557

GTD — PROJECT JV
GTD — DRAWN BY

COPYRIGHT ©2019 by JAMES VERRA and ASSOCIATES, INC.

DATE:	11-19-2019
JOB NO:	23834
SCALE:	1" = 40'
DWG NAME:	23834
PLAN NO:	23834
SHEET:	1 of 1

Catalyst DESIGN GROUP
5100 TENNESSEE AVENUE, NASHVILLE, TN 37209
(615) 622-7200 | WWW.CATALYST-DG.COM

PORTSMOUTH REGIONAL HOSPITAL
333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110

CONSTRUCTION DOCUMENTS
PORTSMOUTH REGIONAL HOSPITAL
AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION

DRAWING TITLE
EXISTING CONDITIONS

PROJECT NUMBER
20250276

DRAWING NUMBER
C1.0

P:\2025\20250276_JSA - HCA PRH - Ambulance Bay and Canopy\dwg\Construction\20250276_EXI.dwg-C1.0 EXISTING CONDITIONS Dec 26, 2025 anderson

PROJECT NOTES

1. SUBJECT PROPERTY SHOWN ON TAX MAP 240, AS PARCEL 0240-0002-0001 OF THE ROCKINGHAM COUNTY, NEW HAMPSHIRE, TAX MAPS.
2. SITE EXISTING CONDITIONS ARE TAKEN FROM SURVEY BY JAMES VERRA & ASSOCIATES, INC. DATED NOVEMBER 8, 2019. CATALYST DESIGN GROUP SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF OR OMISSIONS FROM THE EXISTING CONDITIONS OR ERRORS RESULTING THEREFROM.
3. CATALYST DESIGN GROUP RECOMMENDS THAT CONSTRUCTION STAKING SERVICES BE PROVIDED BY A SURVEYOR LICENSED IN THE STATE OF THE PROJECT.
4. THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS PRIOR TO CONSTRUCTION AND INFORM THE ENGINEER OF ANY INCONSISTENCIES BETWEEN OBSERVED SITE CONDITIONS AND THE SURVEY OR EXISTING CONDITIONS PLAN.
5. DIMENSIONS PROVIDED ON THE PLAN ARE TAKEN TO THE FACE OF CURBS, EDGE OF CONCRETE OR EDGE OF BUILDING, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS PRIOR TO INITIATING CONSTRUCTION AND SHALL ADHERE TO PERMIT REQUIREMENTS AS WORK PROCEEDS.
7. SITE CONTROL SHALL BE BASED OFF THE REFERENCE POINT(S) AND SURVEY DATUM PROVIDED. SEE THE ARCHITECTURAL PLANS FOR LAYOUT CONTROL OF BUILDING ADDITIONS.
8. THE CONTRACTOR SHALL SUBMIT A REQUEST FOR UTILITY LOCATION (811) AND HAVE THE UTILITIES MARKED BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE FAMILIAR WITH UTILITY LOCATIONS, PROTECT UTILITIES WHICH REMAIN IN SERVICE, AND REPAIR ANY DAMAGE TO UTILITY SYSTEMS PER THE UTILITY PROVIDER REQUIREMENTS.
9. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO PUBLIC ROADWAYS, CURBS AND SIDEWALKS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR GOVERNING AGENCIES AT THE CONTRACTOR'S EXPENSE.
11. IN EASEMENTS AND RIGHTS-OF-WAY, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
12. PRIVATE ASPHALT PAVEMENT SECTIONS AND MATERIALS SHALL BE PER STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND GEOTECHNICAL REPORT RECOMMENDATIONS.
13. THE CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS AND PRECAUTIONS.
14. UNLESS OTHERWISE NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH LOCAL/STATE SPECIFICATIONS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE DEVIATION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND MAINTAINING AS-BUILT INFORMATION AS CONSTRUCTION PROGRESSES AND/OR AT THE COMPLETION OF APPLICABLE SCOPES OF WORK. PROVIDE AS-BUILT DATA IN A USEABLE FORMAT TO THE OWNER AND ENGINEER FOR THEIR RECORDS AND FOR SUBMITTAL TO GOVERNING AUTHORITIES, WHERE REQUIRED. ESTABLISH AND CONFIRM APPLICABLE AS-BUILT REQUIREMENTS FOR ALL SCOPE ITEMS PRIOR TO CONSTRUCTION BASED ON OWNER'S REQUIREMENTS, JURISDICTIONAL STANDARDS, AND THE PROJECT SPECIFICATIONS. AS-BUILT DATA SHALL BE COLLECTED BY A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF NEW HAMPSHIRE, WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.
16. ALL JURISDICTIONAL SPECIFICATIONS, DOCUMENTS, AND DETAILS REFERENCED SHALL BE THE LATEST REVISION IN EFFECT AT THE TIME OF PERMIT APPROVAL.
17. CONTRACTOR SHALL REPAIR ALL OFF-SITE CONSTRUCTION OR STAGING AREAS TO EQUAL AND/OR BETTER CONDITION THAN AT THE START OF CONSTRUCTION.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL REQUEST UTILITY LOCATIONS (811) AND VERIFY LOCATIONS OF ALL OTHER PRIVATE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE AND REPAIR PER PROVIDER REQUIREMENTS AT THE CONTRACTOR'S EXPENSE IF DAMAGED. COORDINATE ALL WORK AROUND EXISTING UTILITIES WITH CORRESPONDING PROVIDER.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION REQUIRED TO ACCOMPLISH THE PROPOSED WORK.
3. THE CONTRACTOR SHALL PROTECT PROPERTY BOUNDARY PINS AND SURVEY CONTROL POINTS FROM DAMAGE.
4. THE CONTRACTOR SHALL COMPLY WITH EROSION PREVENTION AND SEDIMENT CONTROL REQUIREMENTS AND INSTALL NECESSARY EPSC MEASURES AND CONSTRUCTION ENTRANCE/EXIT PRIOR TO DISTURBING EXISTING VEGETATION. THE CONTRACTOR SHALL USE WATER SPRINKLING OR OTHER MEASURES TO CONTROL DUST AND OTHER AIRBORNE DEBRIS RESULTING FROM DEMOLITION.
5. TREE PROTECTION MEASURES SPECIFIED IN THESE PLANS SHALL BE INSTALLED PRIOR TO BEGINNING DEMOLITION OPERATIONS.
6. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR DEMOLITION AND TREE REMOVAL PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR MAY BE REQUIRED TO PHASE DEMOLITION TO MAINTAIN EXISTING UTILITY SERVICES, PROPER DRAINAGE, OR ACCESS TO THE SITE OR ADJOINING SITES. THE CONTRACTOR SHALL MINIMIZE THE DISRUPTION OF EXISTING ACTIVE UTILITIES AND TRAFFIC PATTERNS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE AND PROVIDE A DEMOLITION PHASING SCHEDULE WHERE REQUESTED.
8. WHERE ACTIVE UTILITIES OR STORM SEWERS ARE PROPOSED FOR RELOCATION, THESE FEATURES SHOULD NOT BE DEMOLISHED UNTIL NEW OR RELOCATED LINES HAVE BEEN INSTALLED AND ARE OPERATIONAL.
9. THE CONTRACTOR SHALL INCLUDE IN THEIR COST ANY ISOLATION VALVES OR TEMPORARY MEASURES REQUIRED TO ACCOMPLISH RELOCATIONS AND DEMOLITION OF UTILITIES.
10. PAVEMENTS, SIDEWALKS, CURBS, AND OTHER HARD SURFACES SHALL BE EVENLY SAW CUT AT THE LIMITS OF REMOVAL TO PROVIDE A CLEAN EDGE. COORDINATE LIMITS OF REMOVAL WITH PROPOSED CONSTRUCTION INCLUDING GRADING, UTILITY INSTALLATION, PROPOSED LAYOUT, ETC.
11. EXISTING SITE FEATURES NOTED AS BEING ABANDONED MAY BE ABANDONED IN PLACE IF THE ITEMS ARE LOCATED MORE THAN 24" BELOW FINAL SUBGRADES (TO TOP OF PIPE OR OTHER FEATURE) AND NOT LOCATED WITHIN PROPOSED BUILDING FOOTPRINTS OR BELOW PROPOSED RETAINING WALLS. ENDS OF ABANDONED PIPES SHALL BE SEALED WITH CONCRETE.
12. ALL DEMOLISHED MATERIALS SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S COST UNLESS NOTED TO BE PROVIDED TO THE OWNER.
13. CAVITIES LEFT BY DEMOLITION SHALL BE PROPERLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
14. WHERE EXISTING IRRIGATION LINES ARE LOCATED WITHIN THE AREA OF CONSTRUCTION, THEY SHALL BE PROTECTED OR RE-ROUTED AND CONNECTED TO MAINTAIN OPERATION IN LANDSCAPE AREAS WHICH REMAIN DURING CONSTRUCTION. COORDINATE TEMPORARY MEASURES WITH DESIGN OF NEW SYSTEM AND REMOVE TEMPORARY MEASURES WHEN NO LONGER NEEDED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR ALL ON-SITE AND OFF-SITE DEWATERING OPERATIONS AND SHALL OBTAIN PERMITS THROUGH THE NECESSARY LOCAL AND STATE AGENCIES AS NEEDED.
16. IF AN EXISTING WELL IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INFORM THE ENGINEER AND ABANDON/REMOVE ANY EXISTING WELLS PER LOCAL/STATE STANDARDS.

ADA ACCESSIBILITY NOTES

1. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY ARE TO BE CONSTRUCTED PER LOCAL AUTHORITY'S STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS. WHERE THERE ARE NO LOCAL STANDARDS, THE CONTRACTOR SHALL CONSTRUCT CURB RAMPS COMPLYING WITH THE CURRENT VERSION OF THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), PUBLISHED BY THE UNITED STATES ACCESS BOARD.
2. PRIVATE CURB RAMPS ON THE SITE OUTSIDE OF THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO AMERICANS WITH DISABILITIES ACT (ADA) AND/OR FAIR HOUSING ACT (FHA) STANDARDS, WHERE APPLICABLE.
3. BEFORE PLACING PAVEMENT OR SIDEWALKS, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND/OR FHA) EXIST TO AND FROM ACCESSIBLE DOORS, ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. MAXIMUM GRADES WITHIN ACCESSIBLE PARKING AND ACCESS AISLES SHALL BE 2% IN ANY DIRECTION. WITHIN ACCESSIBLE PATHS, MAXIMUM SLOPES FOR SIDEWALKS SHALL BE LONGITUDINALLY MAXIMUM 5% AND FOR RAMPS SHALL BE LONGITUDINALLY MAXIMUM 8.33% (1:12). CROSS SLOPES SHALL BE MAXIMUM 2%. TURNING SPACES (5'x5' MIN.) SHALL BE MAXIMUM 2% SLOPE IN ANY DIRECTION.
4. CURB RAMPS SHALL HAVE A LANDING AT THE TOP MATCHING THE WIDTH OF THE RAMP AND A MINIMUM DEPTH OF 48". RAMPS SHALL HAVE A 5' X 5' LANDING AT THE TOP AND BOTTOM OF THE RAMP. ALL CURB/ACCESSIBLE RAMP DESIGNS SHALL CONFORM TO ADA STANDARDS OR LOCAL BUILDING CODE STANDARDS, WHICHEVER IS MORE RESTRICTIVE.
5. THE CONTRACTOR SHALL FIELD VERIFY SLOPE MEASUREMENTS ON FINISHED GRADE, SUBGRADE, AND FORMWORK PRIOR TO PLACING PAVEMENT TO VERIFY CONFORMANCE TO ADA SLOPES. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES. WHEN REQUESTED BY THE OWNER, THE ENGINEER WILL MEASURE FINISHED SLOPES IN ACCESSIBLE SPACES AND ALONG ACCESSIBLE ROUTES USING A 2' DIGITAL SLOPE LEVEL.
6. WHERE CONSTRUCTION IS TAKING PLACE WITHIN AN EXISTING DEVELOPMENT OR FACILITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AN ACCESSIBLE PATH PER ADA AND/OR FHA STANDARDS THROUGHOUT THE CONSTRUCTION PROCESS AS NEEDED.

TREE PROTECTION NOTES

1. INSTALL TREE PROTECTION PRIOR TO DEMOLITION OR EARTH MOVING OPERATIONS IN ACCORDANCE WITH THE DETAILS AND NOTES PROVIDED IN THESE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL STAKE THE LIMITS OF CONSTRUCTION TO ENSURE TREE PROTECTION MEASURES ARE INSTALLED IN THE PROPER LOCATIONS.
3. TREE PROTECTION MEASURES SHALL CONSIST OF 48" TALL CHAIN LINK FENCE WITH STEEL TEE POSTS OR ORANGE CONSTRUCTION BARRICADE FENCE. PRIOR TO CONSTRUCTION, TREE PROTECTION FENCE INSTALLATION SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE AND GOVERNING AUTHORITY IF REQUIRED.
4. ANY GRADING OR EXCAVATION WITHIN THE PROTECTED ROOT ZONE SHALL BE ACCOMPLISHED BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE DAMAGE.
5. ROOTS EXPOSED DURING CONSTRUCTION OPERATIONS SHALL BE PRUNED FLUSH WITH THE GROUND AND COVERED WITH BACKFILL AS SOON AS POSSIBLE. IF EARTHWORK OPERATIONS WILL DELAY THE PLACEMENT OF BACKFILL, THE ROOTS SHALL BE TEMPORARILY COVERED WITH MULCH AND WATERED UNTIL BACKFILL OPERATIONS CAN BE ACCOMPLISHED.
6. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN THE DRIP LINE OF TREES TO BE PRESERVED.
7. WHEN GRADING OR TRENCHING OPERATIONS ARE REQUIRED WITHIN THE DRIP LINE OF A TREE TO BE PRESERVED, THE ROOTS SHALL FIRST BE CUT USING A "DITCH WITCH" OR SIMILAR EQUIPMENT TO PROVIDE A CLEAN CUT AT THE LIMIT OF DISTURBANCE PRIOR TO USE OF OTHER GRADING MACHINERY. ONCE THE ROOTS HAVE BEEN CUT AS NOTED ALL EQUIPMENT SHALL BE RESTRICTED FROM ENTERING THE AREA BETWEEN THE CUT LINE AND TREE TRUNK. TRENCHES SHALL BE BACKFILLED AND TAMPED TO MINIMIZE SETTLEMENT.
8. BARRICADES SHALL BE INSTALLED WITHIN THE LIMITS OF PROPOSED PAVEMENTS WHEN EXTENDING UNDER THE DRIP LINE OF TREES TO BE PRESERVED UNTIL OPERATIONS TO CONSTRUCT THE PAVED AREAS ARE INITIATED. THEN THE BARRICADES CAN BE RELOCATED TO PROVIDE THE MINIMUM AREA NECESSARY FOR CONSTRUCTION OF THE PROPOSED WORK AND SHALL REMAIN IN PLACE UNTIL ALL WORK IS COMPLETE.
9. PROVIDE WATERING OF SPECIMEN TREES DURING CONSTRUCTION DURING PERIODS OF DROUGHT EXCEEDING SEVEN DAYS. EVENLY DISTRIBUTE WATER OVER THE ENTIRE ROOT ZONE.
10. ROOT ZONE AREAS OF TREES THAT HAVE BEEN COMPACTED DUE TO CONSTRUCTION ACTIVITIES SHALL BE AERATED AT THE DIRECTION OF A QUALIFIED ARBORIST.
11. HOSE DOWN FOLIAGE OF SPECIMEN TREES SUBJECT TO HEAVY ACCUMULATION OF DUST FROM CONSTRUCTION ACTIVITIES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE GRASS TO LESS THAN 12" IN HEIGHT WITHIN THE AREAS OF TREE PROTECTION DURING THE CONSTRUCTION PERIOD. DO NOT USE HERBICIDES TO CONTROL VEGETATION WITHIN THE TREE PROTECTION AREA.
13. REMOVAL OF TREE PROTECTION FENCING SHALL NOT OCCUR UNTIL APPROVED BY THE GOVERNING AUTHORITY WHERE REQUIRED, OR THE OWNER'S REPRESENTATIVE. ALL REMNANTS OF THE FENCING SHALL BE REMOVED AND RESTORATION OF THE AREAS SHALL BE COMPLETED.

EROSION CONTROL NOTES

1. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES SHALL BE INSTALLED PER LOCAL AND STATE REQUIREMENTS PRIOR TO ANY EARTH MOVING ACTIVITIES.
2. PROVIDE CONSTRUCTION ENTRANCE/EXIT AS DETAILED ON THE PLANS AND PER LOCAL REQUIREMENTS. MAINTAIN ENTRANCE/EXIT THROUGHOUT CONSTRUCTION AND MAINTAIN THE PUBLIC ROADWAY FREE OF TRACKED MUD AND DIRT.
3. EPSC MEASURES SHALL BE INSTALLED AND INSPECTED BY LOCAL OFFICIALS (IF REQUIRED) PRIOR TO BEGINNING EARTH MOVING OPERATIONS. EPSC MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
4. LOCATION OF DIVERSION DITCHES, SILT FENCE, AND OTHER MEASURES MAY BE SLIGHTLY ADJUSTED IN THE FIELD TO AVOID TREES AND OTHER EXISTING FEATURES.
5. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE REQUIREMENTS OUTLINED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) DEVELOPED FOR THE SITE, AS WELL AS LOCAL AND STATE REQUIREMENTS. THE CONTRACTOR SHALL ALSO PROVIDE THE CERTIFIED EROSION CONTROL INSPECTOR AND CONTINUAL MAINTENANCE OF THE EPSC MEASURES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
6. AS THE WORK PROGRESSES THE LOCATION AND TYPE OF MEASURES MAY REQUIRE ADJUSTMENTS. TEMPORARY MEASURES MAY BE REQUIRED IN CERTAIN AREAS THAT CAN BE REMOVED DURING THE WORK DAY AND RE-ESTABLISHED WHEN WORK CEASES FOR THE DAY OR PRIOR TO A DAYTIME RAIN EVENT.
7. SEDIMENT SHALL BE REMOVED FROM EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WHEN THE DESIGN CAPACITIES HAVE BEEN REDUCED BY 50% OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE OR GOVERNING AGENCY. PROPERLY DISPOSE OF ACCUMULATED SEDIMENT.
8. THE CONTRACTOR SHALL PROVIDE A RAIN GAUGE AT THE SITE AND DOCUMENT RAINFALL EVENTS DURING THE CONSTRUCTION PERIOD.
9. THE CONTRACTOR SHALL MAINTAIN THE FOLLOWING RECORDS AT THE SITE: DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON PORTIONS OF THE SITE; DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS; AND RAINFALL EVENTS.
10. EXISTING SITE VEGETATION SHALL REMAIN IN PLACE AS LONG AS POSSIBLE AND SHALL NOT BE REMOVED MORE THAN 10 DAYS PRIOR TO THE DATE AT WHICH EARTH MOVING OPERATIONS ARE TO BEGIN UNLESS TEMPORARY COVER IS INSTALLED. DO NOT REMOVE VEGETATION OR TREES UNLESS NECESSARY FOR GRADING OR OTHER PROJECT PURPOSES.
11. THE CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE LENGTH OF TIME SITE SOILS ARE EXPOSED TO EROSION. PROVIDE TEMPORARY COVER AS NECESSARY.
12. EPSC MEASURES SHALL BE REMOVED ONCE PERMANENT VEGETATION IS ESTABLISHED AND WHEN DEEMED NO LONGER NEEDED BY THE OWNER'S REPRESENTATIVE OR GOVERNING AGENCY.

AS-BUILT REQUIREMENTS

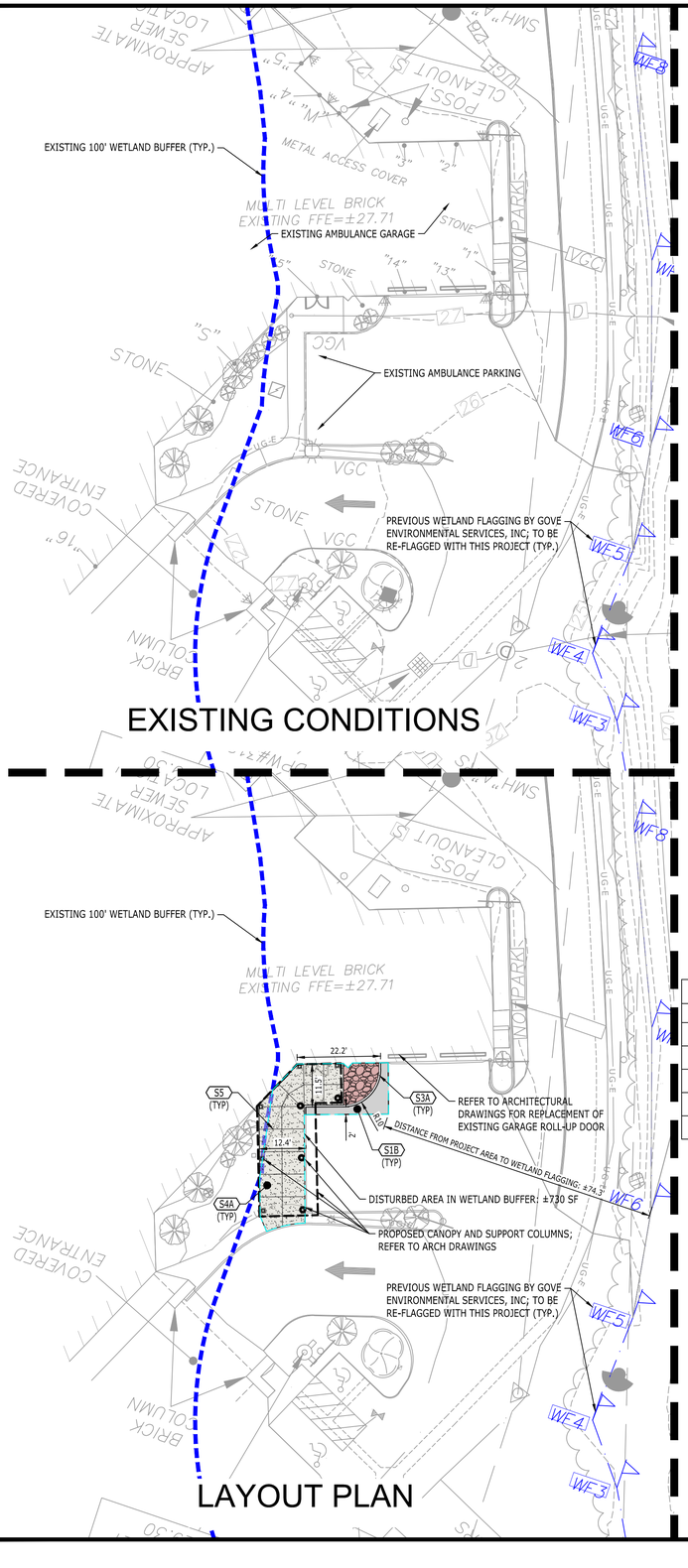
1. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED SURVEYOR IN THE STATE OF NEW HAMPSHIRE TO PROVIDE AS-BUILT SURVEY DATA FOR PUBLIC UTILITIES AND PUBLIC/PRIVATE STORMWATER MANAGEMENT INFRASTRUCTURE.
2. AS-BUILT SURVEYS FOR STORMWATER INFRASTRUCTURE SHOULD PROVIDE THE FOLLOWING ITEMS, AT A MINIMUM:
   - 2.1. SPOT ELEVATIONS OF THE EXCAVATED BIORETENTION AND/OR PERMEABLE PAVER SUBGRADE PRIOR TO BACKFILLING WITH SPECIALTY SOIL AND GRAVEL LAYERS.
   - 2.2. SPOT ELEVATIONS OF SUBGRADE FOR UNDERGROUND DETENTION SYSTEMS.
   - 2.3. SPOT ELEVATIONS AND CONTOUR ELEVATIONS NOT TO EXCEED 1' MAX. INTERVAL FOR ALL PERMANENT STORMWATER QUALITY AREAS, DETENTION PONDS, AND ASSOCIATED EMBANKMENTS TO ENSURE PROPER SIZING OF THESE FEATURES.
   - 2.4. SIZE, MATERIAL, ELEVATION INFORMATION FOR ALL STORMWATER PIPES AND STRUCTURES WITHIN THE PUBLIC RIGHT OF WAY.
   - 2.5. SIZE, MATERIAL, ELEVATION INFORMATION FOR ALL PRIVATE STORMWATER QUALITY FEATURES, DETENTION STRUCTURES AND INFRASTRUCTURE DOWNSTREAM OF THESE FEATURES.
   - 2.6. DETAILED INFORMATION FOR ALL OUTLET CONTROL STRUCTURES WITHIN DETENTION PONDS, WATER QUALITY FEATURES, OR UNDERGROUND DETENTION SYSTEMS, INCLUDING ELEVATION AND SIZE INFORMATION FOR ORIFICES, PERFORATED RISERS, WEIRS, TOP OF CASTING, AND INVERTS ASSOCIATED WITH THE STRUCTURE.
   - 2.7. ALL OTHER AS-BUILT INFORMATION REQUIRED BY THE JURISDICTIONAL AUTHORITY OR NOTED ELSEWHERE IN THE PLANS.
3. THE CONTRACTOR SHALL REVIEW LOCAL AUTHORITY'S AS-BUILT REQUIREMENTS AND/OR CONTACT ENGINEER TO CONFIRM AS-BUILT INFORMATION. PHOTOGRAPHIC EVIDENCE OF PROPER INSTALLATION OF STORMWATER MANAGEMENT AND WATER QUALITY INFRASTRUCTURE AND/OR VIDEO INSPECTIONS OF STORMWATER PIPES MAY BE REQUIRED. THE CONTRACTOR SHALL CAPTURE AND RETAIN PHOTOGRAPHIC DOCUMENTATION OF KEY INSTALLATION MILESTONES AS NEEDED. FAILURE TO PROVIDE NECESSARY PHOTOGRAPHIC DOCUMENTATION PRIOR TO BACKFILLING MAY CAUSE DELAYS AND MAY REQUIRE SITE INVESTIGATION THAT COULD INCLUDE RE-EXCAVATION OF COMPLETED INFRASTRUCTURE AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL RETAIN AND PROVIDE RECEIPTS FOR ANY FABRICATED STORMWATER MANAGEMENT INFRASTRUCTURE SUCH AS PROPRIETARY WATER QUALITY UNITS, UNDERGROUND DETENTION STRUCTURES, PERMEABLE PAVERS, OR SPECIALTY SOIL MEDIA (WITH APPLICABLE TESTING IF REQUIRED).
5. REFER TO THE STANDARDS OF THE GOVERNING AUTHORITY OR UTILITY DISTRICT FOR AS-BUILT REQUIREMENTS FOR PUBLIC UTILITY INFRASTRUCTURE, INCLUDING METERS AND UTILITY TAPS, WHERE APPLICABLE. SUBMIT AS-BUILT DATA DIRECTLY TO THE LOCAL AUTHORITY AND/OR TO THE ENGINEER FOR REVIEW, AS APPLICABLE.

STORM SEWER NOTES

1. PUBLIC STORMWATER PIPES, STRUCTURES, AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARD SPECIFICATIONS AND DETAILS. PRIVATE STORMWATER INFRASTRUCTURE SHALL BE CONSTRUCTED PER THE STANDARDS FOUND IN THESE PLANS AND SPECIFICATIONS. PROPRIETARY STORMWATER DETENTION AND WATER QUALITY FEATURES AND PLASTIC PIPES SHALL BE INSTALLED PER THE MANUFACTURER'S PUBLISHED GUIDANCE.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND FABRICATED DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.
3. STORM SEWER PIPE MATERIALS:
   - 3.1. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III, WALL TYPE 'B' CONFORMING TO ASTM C76 UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C443 RUBBER GASKETS OR MASTIC SEAL CONFORMING TO ASTM C990. RCP SHALL BE INSTALLED PER THE RECOMMENDATIONS OF ASTM C1479.
     - 3.1.1. CLASS IV RCP PIPE IS REQUIRED FOR FILL HEIGHTS OVER 13' OR WHERE NOTED BY THE ENGINEER.
   - 3.2. HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE DUAL-WALL WITH CORRUGATED EXTERIOR AND SMOOTH INTERIOR. HDPE PIPE SHALL CONFORM TO ASTM F2648 OR AASHTO M252/M294 WITH GASKETED SOIL TIGHT JOINTS CONFORMING TO ASTM F477. THERMOPLASTIC PIPING SHALL BE INSTALLED PER ASTM D2321.
   - 3.3. HIGH-PERFORMANCE POLYPROPYLENE (HP) PIPE SHALL BE DUAL-WALL WITH CORRUGATED EXTERIOR AND SMOOTH INTERIOR, CONFORMING TO ASTM F2881 AND AASHTO M330 WITH GASKETED SOIL TIGHT JOINTS CONFORMING TO ASTM F477. THERMOPLASTIC PIPING SHALL BE INSTALLED PER ASTM D2321.
   - 3.4. POLYVINYL CHLORIDE PIPE (PVC) SHALL BE SDR 35 PER ASTM D3034. JOINTS SHALL BE ELASTOMERIC GASKETED, BELL AND SPIGOT, PUSH-ON TYPE PROVIDING A WATER TIGHT SEAL PER ASTM D3212. THERMOPLASTIC PIPING SHALL BE INSTALLED PER ASTM D2321.
4. ALL PIPES SHALL BE INSTALLED, AT A MINIMUM, WITH SOIL TIGHT JOINTS AND CONNECTIONS TO TERMINAL STRUCTURES. COMPLY WITH MANUFACTURER'S SPECIFICATIONS FOR WATER TIGHT INSTALLATIONS WHERE INDICATED ON DRAWINGS.
5. PIPE BEDDING, BACKFILL, AND COMPACTION REQUIREMENTS WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS SHALL BE IN ACCORDANCE WITH LOCAL AND STATE DEPARTMENT OF TRANSPORTATION DETAILS AND SPECIFICATIONS.
6. PIPES UNDER EXISTING PAVEMENT AREAS SHALL BE COMPLETELY BACKFILLED WITH CRUSHED STONE OR PER LOCAL AUTHORITY STANDARD REQUIREMENTS. PAVEMENT SECTIONS SHALL MEET OR EXCEED EXISTING CONDITIONS WITH A SMOOTH TRANSITION.
7. STORM SEWER STRUCTURE MATERIALS:
   - 7.1. STORM INLETS AND MANHOLES SHALL BE PRECAST IN COMPLIANCE WITH THE LOCAL/STATE JURISDICTIONAL AUTHORITY'S STANDARD DETAILS AND SPECIFICATIONS, AND MEET OR EXCEED SPECIFICATIONS OF ASTM C478 AND C913. STRUCTURES SHALL BE TRAFFIC RATED PER H-20 LOADING REQUIREMENTS.
   - 7.2. REFER TO STRUCTURE TABLE FOR CASTING FRAME AND GRATE TYPES. FRAMES AND GRATES TO BE PROVIDED IN ACCORDANCE WITH THE LOCAL/STATE JURISDICTIONAL AUTHORITY'S STANDARD DETAILS AND SPECIFICATIONS AND INSTALLED PER MANUFACTURES RECOMMENDATIONS.
   - 7.3. PIPE CONNECTIONS TO STRUCTURES:
     - 7.3.1. NON-SHRINK GROUT PER ASTM C1107.
     - 7.3.2. WHERE REQUIRED, FLEXIBLE, WATERTIGHT GASKETS SHALL COMPLY WITH ASTM C923.
   - 7.4. FRAMES AND GRATES:
     - 7.4.1. MATERIAL: GRAY IRON CLASS 35 PER ASTM A48 UNLESS OTHERWISE INDICATED.
8. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER PIPE DIAMETERS OR CASTING SIZES.
9. DRAINAGE STRUCTURE SIZES SHOWN IN THE PLANS ARE SCHEMATIC IN NATURE AND MAY VARY BASED ON CONNECTING PIPE SIZES OR ANGLES. FINAL STRUCTURE SIZES WILL BE DETERMINED BY THE PRECASTER BASED ON NATIONAL CONCRETE PIPE ASSOCIATION (NCPA) STANDARDS OR THE MANUFACTURER'S REQUIREMENTS.
10. TOP OF GRATE ELEVATIONS FOR DRAINAGE STRUCTURES SHALL BE PROVIDED PER THE DETAILS AND STRUCTURE TABLES.
11. CONTRACTOR SHALL PLACE STRUCTURES BASED ON THE ACTUAL DIMENSIONS OF ORDERED STRUCTURES AND GRATES TO ALIGN WITH PROPOSED OR EXISTING CURB LINES. DRAINAGE STRUCTURES SHOULD NOT BE INSTALLED BASED SOLELY ON STRUCTURE OR PIPE CENTERLINES.
12. STORM SEWERS SHALL BE CONSTRUCTED STARTING AT THE DOWNSTREAM DISCHARGE OR CONNECTION POINT AND THEN WORKING UPSTREAM. IN EXCEPTIONAL CASES WHERE SITE CONDITIONS OR SCHEDULE CONSTRAINTS REQUIRE CONSTRUCTION IN A DIFFERENT ORDER, THE CONTRACTOR SHALL TAKE SPECIAL CARE TO CONFIRM THAT THE ELEVATION OF THE DOWNSTREAM DISCHARGE OR CONNECTION CONFORMS TO THE PLANS AND THAT MINIMUM SLOPES CAN BE ACHIEVED.
13. COORDINATE THE LOCATION OF SITE DRAINAGE SYSTEMS WITH THE BUILDING ARCHITECTURE AND PLUMBING PLANS FOR COLLECTION OF ROOF DRAINS AND DOWNSPOUTS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
14. ADJUST THE CASTINGS OF ALL EXISTING AND NEW STRUCTURES TO MATCH PROPOSED FINISH GRADE, ENSURING POSITIVE DRAINAGE IS MAINTAINED. SLOPE TOPS OF CASTINGS TO MATCH SLOPES OF SURROUNDING PAVEMENTS AND CURBS.

SITE UTILITY NOTES

1. THE CONTRACTOR SHALL REQUEST UTILITY LOCATIONS (811) AND VERIFY LOCATIONS OF ALL OTHER PRIVATE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE AND REPAIR PER PROVIDER REQUIREMENTS AT THE CONTRACTOR'S EXPENSE IF DAMAGED. COORDINATE ALL WORK AROUND EXISTING UTILITIES WITH CORRESPONDING PROVIDER.
2. THE CONTRACTOR SHALL COORDINATE WITH THE OWNERS OF EACH UTILITY AND VERIFY THE SCOPE OF INSTALLATIONS OR RELOCATIONS THAT WILL BE REQUIRED AND THE IMPACT EACH COULD HAVE ON THE PROJECT SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEQUENCING OF INSTALLATION OF UTILITIES TO AVOID CONFLICTING HORIZONTAL AND VERTICAL LOCATIONS.
3. ALL PUBLIC WATER AND SEWER MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE TO THE GOVERNING AUTHORITY'S REQUIREMENTS AND SPECIFICATIONS. LIKEWISE, IF THE GOVERNING AUTHORITY HAS MATERIAL REQUIREMENTS FOR PRIVATE (SITE) UTILITIES, CONSTRUCT SITE UTILITIES IN ACCORDANCE WITH APPLICABLE PUBLIC UTILITY SPECIFICATIONS. OTHERWISE, THE FOLLOWING MINIMUM STANDARDS SHALL BE MET:
   - 3.1. PRIVATE GRAVITY SANITARY SEWER MATERIALS:
     - 3.1.1. POLYVINYL CHLORIDE PIPE (PVC) 4" AND GREATER SHALL BE SDR 35 PER ASTM D3034.
       - 3.1.1.1. JOINTS: ELASTOMERIC GASKETED, BELL AND SPIGOT, PUSH-ON TYPE PROVIDING A WATER TIGHT SEAL PER ASTM D3212.
     - 3.1.2. DUCTILE IRON PIPE (DIP) SHALL BE PRESSURE CLASS 350 COMPLYING WITH AWWA C150/C151
       - 3.1.2.1. JOINTS AND FITTINGS: PUSH-ON JOINTS CONFORMING TO AWWA C110/C111. SAME LINING AND COATING AS CONNECTING PIPES..
       - 3.1.2.



EXISTING CONDITIONS

BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY JAMES VERRA & ASSOCIATES, INC., DATED NOVEMBER 8, 2019. CATALYST DESIGN GROUP AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.

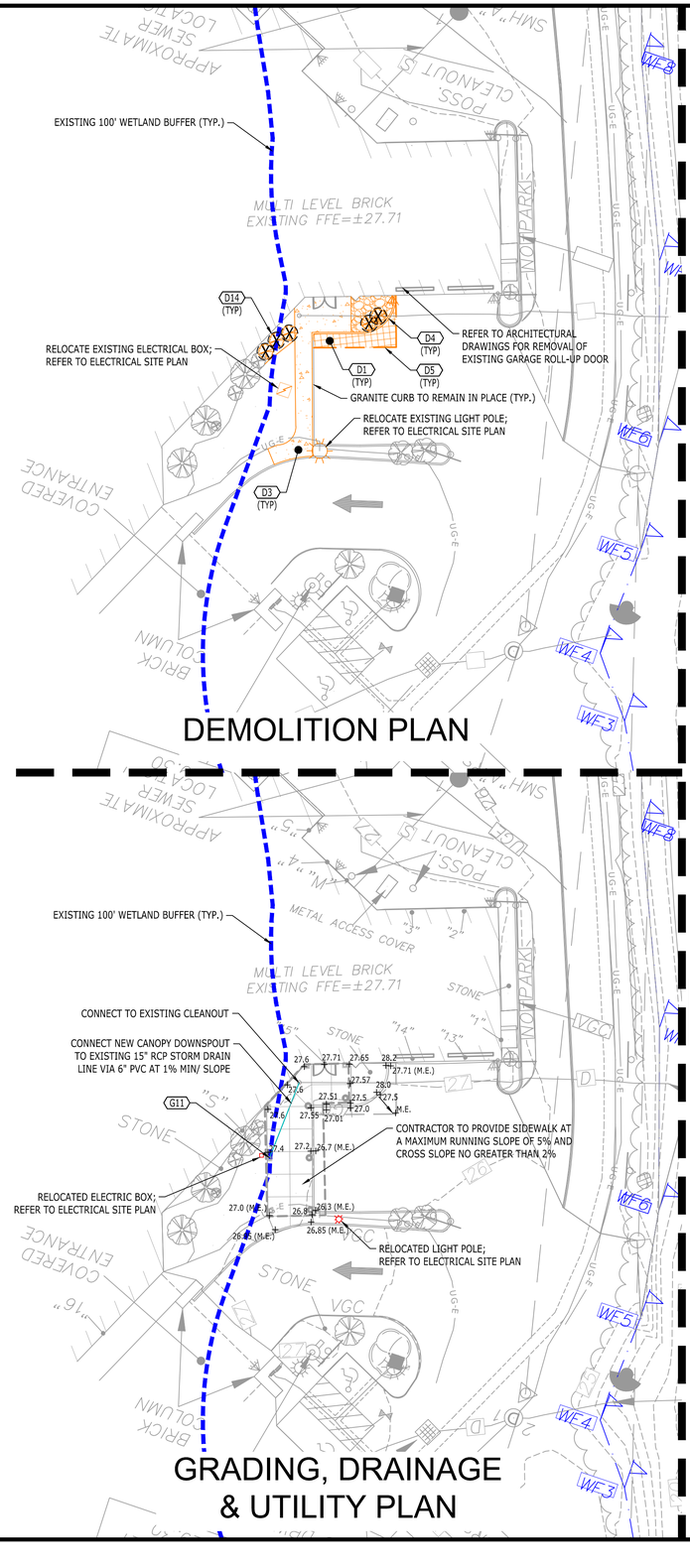
LAYOUT PLAN

LEGEND	
CONCRETE PAVEMENT	
CONCRETE SIDEWALK	
HEAVY DUTY PAVEMENT	
RIVER ROCK	
GRANITE CURB	

SITE LAYOUT KEYNOTES		
CODE	DESCRIPTION	DET #/SHT #
S1B	ASPHALT PAVEMENT - HEAVY DUTY	1 / C4.0
S2	CONCRETE PAVEMENT	
S3A	GRANITE POST CURB	3 / C4.0
S4A	CONCRETE SIDEWALK	2 / C4.0
S5	SIDEWALK JOINTS	4 / C4.0

NOTE

ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS



DEMOLITION PLAN

LEGEND	
BUILDING TO BE REMOVED	
CONCRETE TO REMOVE	
ASPHALT PAVEMENT TO REMOVE	
REMOVE AND REUSE EXISTING RIVER ROCK	
SHRUBS TO BE REMOVED	X

DEMOLITION KEYNOTES	
CODE	DESCRIPTION
D1	REMOVE EXISTING ASPHALT PAVEMENT
D2	REMOVE EXISTING CONCRETE PAVEMENT
D3	REMOVE EXISTING CONCRETE SIDEWALK
D4	REMOVE AND REUSE EXISTING GRANITE CURB
D5	EVENLY SAWCUT
D6	REMOVE EXISTING BUILDING/STRUCTURE
D7	REMOVE EXISTING DRAINAGE STRUCTURE
D8	REMOVE EXISTING STORM LINE
D9	REMOVE EXISTING WATERLINE & APPURTENANCES
D10	REMOVE EXISTING SANITARY SEWER LINE
D11	REMOVE EXISTING UTILITY LINE & APPURTENANCES
D12	EXISTING UTILITY LINE TO BE ABANDONED IN PLACE
D13	EXISTING HYDRANT TO BE RELOCATED
D14	REMOVE EXISTING SHRUB
D15	REMOVE EXISTING SIGN

GRADING, DRAINAGE & UTILITY PLAN

LEGEND	
STORM PIPE	UG-E
SPOT ELEVATION	+0.00
PROPOSED CONTOUR ELEV.	90
UNDERGROUND ELECTRIC	UG-E

GRADING & DRAINAGE KEYNOTES		
CODE	DESCRIPTION	DET #/SHT #
G11	BUILDING DOWNSPOUT CONNECTION	5 / C4.0

811 Know what's below. Call before you dig.

0' 10' 20' 40' 60'
DRAWING SCALE

Catalyst DESIGN GROUP
5100 TENNESSEE AVENUE, NASHVILLE, TN 37209
(615) 622-7200 | WWW.CATALYST-DG.COM

PORTSMOUTH REGIONAL HOSPITAL
333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110

ROBERT ANDREW WISEMAN No. 13840 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
12/26/2025

NO.	DATE	DESCRIPTION

CONSTRUCTION DOCUMENTS
PORTSMOUTH REGIONAL HOSPITAL
AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

DRAWING TITLE
DEMO, LAYOUT, GRADING & UTILITY PLAN

PROJECT NUMBER
20250276

DRAWING NUMBER
C3.0

P:\2025\20250276_JSA - HCA PRH - Ambulance Bay and Canopy\dwg\Construction\20250276_UTL.dwg-C3.0 DEMO LAYOUT GRADING & UTILITY PLAN Dec 26, 2025 randerson

7 RESERVED

NOT TO SCALE

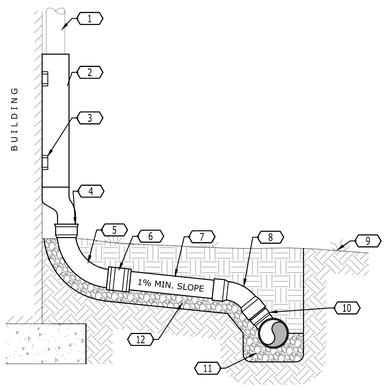
8 RESERVED

NOT TO SCALE

9 RESERVED

NOT TO SCALE

KEYNOTES	
CODE	DESCRIPTION
1	DOWNSPOUT
2	CAST IRON DOWNSPOUT SHOE NEENAH R-4929-O12 OR APPROVED EQUAL, WITH ADAPTER IF REQUIRED.
3	BOLT DOWNSPOUT SHOE TO BUILDING
4	MAKE JOINT WITH OAKUM AND HOT LEAD. CONCRETE WILL NOT BE ALLOWED.
5	6" CAST IRON BEND
6	6" NEOPRENE COMPRESSION CONNECTOR
7	6" PVC ROOF LEADER
8	6" PVC 1/8 BEND
9	FINISH GRADE
10	SANITARY WYE IN EXIST. STORM LINE
11	CAREFULLY AND THOROUGHLY COMPACT PIPE BEDDING UNDER FITTING
12	PIPE BEDDING

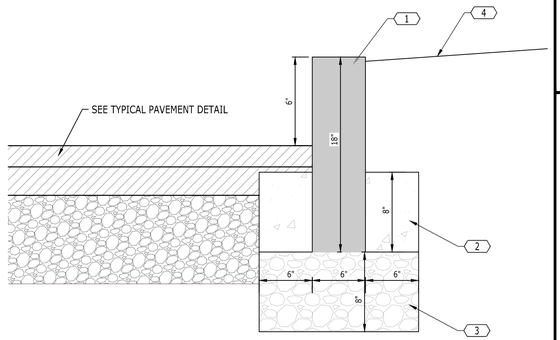


5 DOWNSPOUT COLLECTOR

NOT TO SCALE

KEYNOTES	
CODE	DESCRIPTION
1	VERTICAL GRANITE CURB WITH 6" REVEAL
2	3,000 PSI (MIN) CONCRETE FULL LENGTH EACH SIDE
3	3/4" CRUSHED STONE
4	PROPOSED FINISH GRADE (REFER TO GRADING PLAN)

CURB RADIUS TABLE	
RADIUS	MAX LENGTH
<20'	USE CURVED CURB
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
>60'	10'



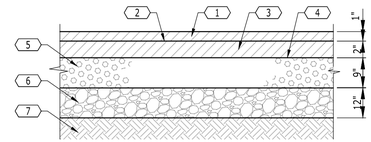
NOTE:
1. ADJOINING STONES SHALL HAVE THE SAME LENGTH.
2. JOINTS BETWEEN STONES SHALL HAVE A MAX SPACING OF 1/2" AND SHALL BE MORTARED.

3 6" VERTICAL GRANITE CURB @ PAVEMENT

NOT TO SCALE

KEYNOTES	
CODE	DESCRIPTION
1	ASPHALTIC WEARING COURSE
2	TACK COAT AT 0.10 GAL./S.Y.
3	ASPHALTIC BINDER COURSE
4	PRIME COAT AT 0.30 GAL./S.Y.
5	CRUSHED GRAVEL BASE (NHDOT ITEM NO 304.3)
6	GRAVEL BORROW SUBBASE (NHDOT ITEM NO 304.2)
7	STABLE/ COMPACTED SUBGRADE

NOTE:
1. FOR REPAIR OR REPACEMENT OF EXISTING PAVEMENTS, USE THE PAVEMENT SECTIONS SHOWN OR MATCH THE EXISTING SECTION, WHICHEVER IS GREATER.
2. PAVEMENT SECTION PER GEOTECH ENGINEER REPORT PREPARED BY HALEY & ALDRICH, INC., DATED APRIL 2022. FINAL PAVEMENT SECTION TO BE DETERMINED BY ONSITE GEOTECH BASED UPON EXISTING SOIL CONDITIONS.
3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH NH-DOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.

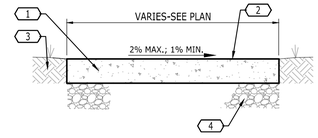


HEAVY DUTY PAVEMENT

1 ASPHALT PAVEMENT

NOT TO SCALE

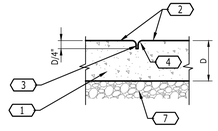
KEYNOTES	
CODE	DESCRIPTION
1	3500 PSI CONCRETE, 4" THICK WITH FIBERFORCE 350 FIBER REINFORCEMENT AT A DOSING RATE OF 1.0 LBS/CY.; BROOM FINISH; CROSS SLOPE 2% MAX., 1% MIN.
2	PROVIDE CONTRACTION AND EXPANSION JOINTS AT SPECIFIED INTERVALS. SEE SIDEWALK JOINTING DETAILS AND PROJECT SPECIFICATIONS.
3	TOPSOIL; PLACE WITHIN ½" OF WALKWAY SURFACE
4	6" COMPACTED CRUSHED GRAVEL (NHDOT 304.3)



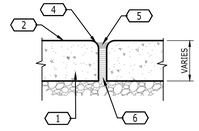
2 CONCRETE SIDEWALK

NOT TO SCALE

KEYNOTES	
CODE	DESCRIPTION
1	CONCRETE SIDEWALK
2	BROOM FINISH
3	¼" HAND-GROOVED JOINT
4	TOOLED EDGE; ¼" RADIUS (TYP.)
5	¼" DEPTH POLYURETHANE SEALANT (SIKAFLEX 2c-SL); RECESS ¼" FROM SURFACE.
6	½" PREMOLDED EXPANSION JOINT MATERIAL
7	MINERAL AGGREGATE BASE (TYP.)



CONTRACTION JOINT



EXPANSION JOINT

NOTES:

1. PROVIDE SIDEWALK JOINTS AS FOLLOWS:
   - **1.1. CONTRACTION (CONTROL) JOINTS**
     - 1.1.1. AT 5' MAX. INTERVALS IN TRANSVERSE DIRECTION;
     - 1.1.2. ALONG LONGITUDINAL CENTERLINE OF THE SIDEWALK (FOR SIDEWALKS 6' OR WIDER);
     - 1.1.3. ALIGNING WITH CONTRACTION JOINTS IN ADJOINING CONCRETE PAVEMENT OR CURB.
   - **1.2. EXPANSION JOINTS**
     - 1.2.1. AT 25' MAX. INTERVALS;
     - 1.2.2. AT INTERFACE WITH BUILDINGS, FOUNDATIONS, OR RETAINING WALLS;
     - 1.2.3. BETWEEN SIDEWALK AND SEPARATE CONCRETE CURB;
     - 1.2.4. AT PERIMETER OF DRAINAGE OR UTILITY CASTINGS WITHIN OR ABUTTING THE SIDEWALK;
     - 1.2.5. AT INTERFACE WITH STAIRS, RAMPS, OR CURB RAMPS;
     - 1.2.6. AT INTERFACE WITH INTERSECTING CONCRETE SIDEWALKS;
     - 1.2.7. AT ANY OTHER RIGID OBSTRUCTION, OR AS DIRECTED BY THE ENGINEER;
     - 1.2.8. ALIGNING WITH EXPANSION JOINTS IN ADJOINING CONCRETE PAVEMENT OR CURB.
2. PROVIDE JOINTING AT INTERVALS AS NOTED HEREIN, ON THE PLANS, AND/OR IN THE SPECIFICATIONS. JOINTING INTERVALS MAY BE REDUCED BASED ON SITE GEOMETRY, LOCATION OF OBSTRUCTIONS, ALIGNMENT WITH CURB/SIDEWALK JOINTING, AND OTHER FACTORS. INDIVIDUAL PANELS SHALL NOT EXCEED A LENGTH-TO-WIDTH RATIO OF 1.5 TO 1.
3. SEALED JOINTS SHALL BE FREE FROM DUST AND DEBRIS PRIOR TO APPLYING SEALANT.
4. SUBMIT ALTERNATE SEALANT PRODUCTS TO THE ENGINEER FOR REVIEW PRIOR TO APPLICATION. EXPANSION JOINT CAPS (PLASTIC OR OTHERWISE) SHALL NOT BE CONSIDERED A SUBSTITUTE FOR ELASTOMERIC SEALANT.

4 SIDEWALK JOINTS

NOT TO SCALE

Catalyst DESIGN GROUP
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PORTSMOUTH, NH 03801
603-436-5110

STATE OF NEW HAMPSHIRE
ROBERT ANDREW WISEMAN
18[illegible]
LICENSED PROFESSIONAL ENGINEER
12/19/2025

CONSTRUCTION DOCUMENTS
PORTSMOUTH REGIONAL HOSPITAL
AMBULANCE BAY & CANOPY
333 BORTHWICK AVE
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION

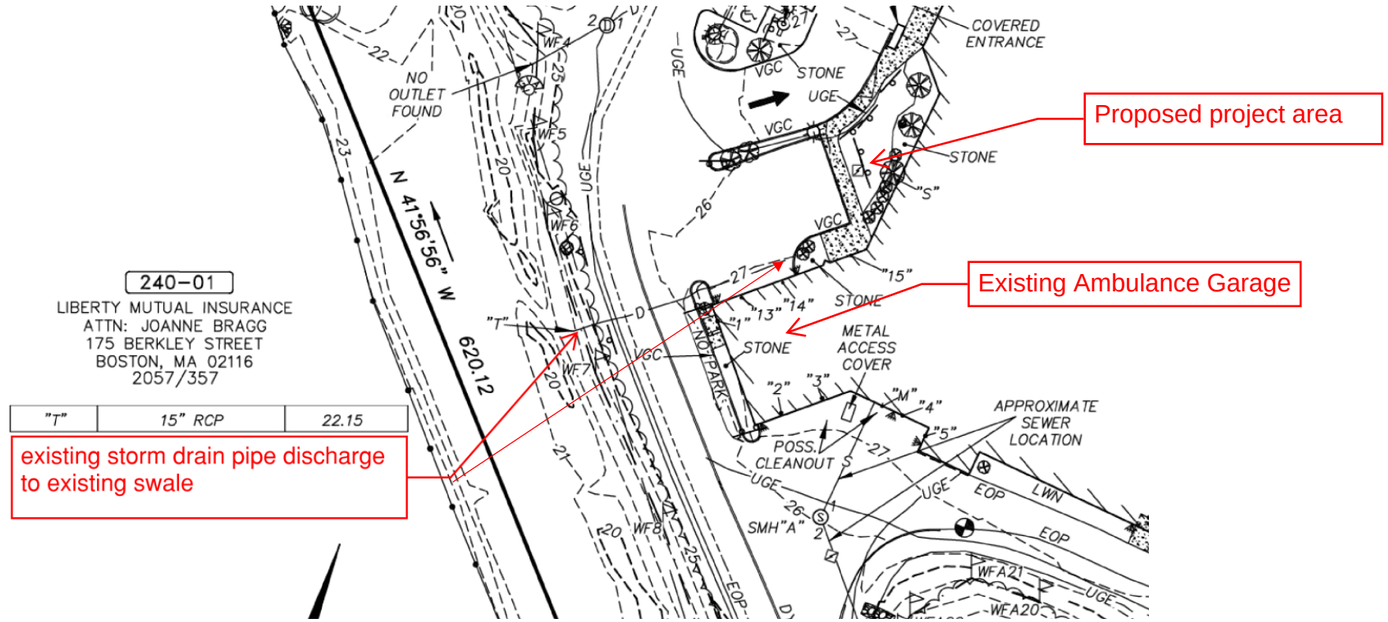
DRAWING TITLE
SITE DETAILS

PROJECT NUMBER
20250276

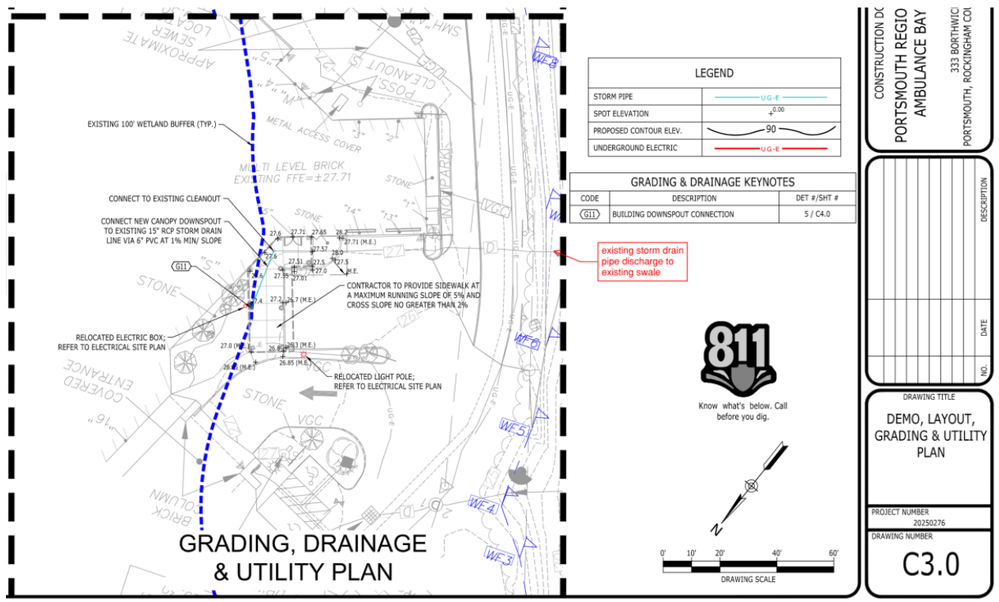
DRAWING NUMBER
C4.0

P:\2025\20250276_JSA - HCA PRH - Ambulance Bay and Canopy\dwg\Construction\20250276_DET.dwg-C4.0 SITE DETAILS Dec 26, 2025 randerson

from C1.0 Existing Conditions / Site Survey



from C3.0 Demo/Layout/ Grading/ Utility Plan



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5350 TENNESSEE AVENUE, CHATTANOOGA, TN 37409
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PORTSMOUTH REGIONAL HOSPITAL
333 BORTHWICK AVE
PORTSMOUTH, NH 03801
603-436-5110

Drainage Exhibit

www.vhb.com

January 2026

Ref: 53206.00

Kelli Barnaby
Portsmouth City Clerk
1 Junkins Avenue
Portsmouth, NH 03801

Re: NHDES Standard Dredge and Fill Wetlands Permit Application
Hodgson Brook Maintenance Dredge, Portsmouth, New Hampshire

Dear Ms. Barnaby:

On behalf of Lonza Biologics, Inc. (the Applicant), and in consultation with the Pease Development Authority (PDA), VHB is submitting the enclosed NH Department of Environmental Services' (NHDES) Standard Dredge and Fill Wetlands Permit application for the proposed maintenance dredge of a portion of Hodgson Brook. In response to concerns from the PDA and the City of Portsmouth, along with frequent flooding of Goose Bay Drive, the Applicant proposes to remove accumulated sediment to restore the hydraulic capacity of Hodgson Brook. The upstream limits of the proposed work will begin at the inlet of the Goose Bay Drive stream crossing culvert that connects the stream to an existing constructed plunge pool north of Goose Bay Drive and the downstream limits of the proposed work will extend to the outlet end east of Corporate Drive.

This reach of Hodgson Brook was previously dredged in 2011 under NHDES Wetlands Bureau File No. 2011-00322. This project was discussed with Eben Lewis on January 15, 2025, at which time Mr. Lewis concurred with the proposed work and noted that the project could be permitted as a maintenance dredge.

This Project proposes a total of approximately 8,165 square feet (sq ft) and 1,218 linear feet (lin ft) of wetland and stream impacts, approximately 6,854 sq ft of permanent impact from the proposed dredging and approximately 1,311 sq ft of temporary impact from the proposed erosion controls and temporary water diversion. The extent of proposed natural resource impacts was minimized to the maximum extent practicable while accomplishing the project objectives. Erosion control measures may be installed around the limits of disturbance as determined necessary based on site conditions at the time of construction to protect the surrounding habitat areas during construction. All temporary impacts will be stabilized upon completion of the proposed work.

Please sign in Section 16 so that the original signature may be included in the NHDES submission. In accordance with the procedure for submitting a Standard Dredge and Fill Wetlands Permit application to NHDES in RSA 482-A:3(I)(a)(1), we are submitting one hard copy and one digital copy of the application for internal distribution to the local governing body, planning board, and conservation commission. You must also retain a copy of the permit application package to be made accessible to the public.

Engineers | Scientists | Planners | Designers

2 Bedford Farms Drive
Suite 200
Bedford, New Hampshire 03110
P 603.391.3900
F 603.518.7495

Please do not hesitate to contact me at pwalker@vhb.com or (603) 391-3942 or Nicole Martin at nmartin@vhb.com or (603) 391-3889 if you have questions.

Sincerely,

Peter J. Walker
Director, Environmental Services

Hodgson Brook Maintenance Dredge

Portsmouth, New Hampshire

PREPARED FOR

Lonza Biologics, Inc.
101 International Drive
Portsmouth, NH 03801

PREPARED BY

2 Bedford Farms Drive, Suite 200
Bedford, NH 03110
603.391.3900

January 2026

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Figure 1: USGS Site Location

Figure 2: Aerial Overview

Figure 3: NHF&G WAP Habitat Types

Figure 4: Delineated Natural Resources Overview

Figure 5: NHDES OneStop Data Mapper

Appendices

Appendix A ..... Project Plans

Appendix B ..... Representative Site Photographs

Appendix C ..... Wetland Function-Value Evaluation Forms

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STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

Water Division / Land Resources Management

Check the Status of your Application

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

APPLICANT'S NAME: Lonza Biologics Inc **TOWN NAME:** Portsmouth

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?	(●) Yes ( ) No
Does the property contain a PRA? If yes, provide the following information:	( ) Yes (●) No
• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHFG) 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.	( ) Yes (●) No
• Protected species or habitat? ○ If yes, species or habitat name(s): 3 plants (see letter) ○ NHB Project ID #: DCT25-2507	(●) Yes ( ) No
• Bog?	( ) Yes (●) No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	( ) Yes (●) No
• Designated prime wetland or duly-established 100-foot buffer?	( ) Yes (●) No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	( ) Yes (●) No
Is the property within a Designated River corridor? If yes, provide the following information: • Name of Local River Management Advisory Committee (LAC): Not applicable • A copy of the application was sent to the LAC on Month: Day: Year:	( ) Yes (●) No

For dredging projects, is the subject property contaminated? • If yes, list contaminant: See Section 2.5 of the Application Narrative for details.	(●) Yes ( ) No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	(●) Yes ( ) No
For stream crossing projects, provide watershed size (see WPPT or Stream Stats):	Not applicable.

SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))

Provide a description of the project and the purpose of the project, the need for the proposed impacts to jurisdictional areas, an outline of the scope of work to be performed, and whether impacts are temporary or permanent.

Lonza Biologics (the Applicant) proposes a total of approximately 8,165 square feet (sq ft) and 1,218 linear feet (lin ft) of wetland and stream impacts, approximately 6,854 sq ft of permanent impact (4,600 sq ft / 1,086 lin ft to the stream and 2,254 sq ft to the bordering wetlands) from the proposed dredging and approximately 1,311 sq ft of temporary impact (306 sq ft / 132 lin ft to the stream and 1,005 sq ft to the bordering wetlands) from the proposed erosion controls and temporary water diversion.

This project is being proposed in response to concerns from the Pease Development Authority (PDA) and the City of Portsmouth, along with frequent flooding of Goose Bay Drive, the Applicant proposes to remove accumulated sediment since the last maintenance dredge within the subject portion of Hodgson Brook. The upstream limits of the proposed work will begin at the inlet of the Goose Bay Drive stream crossing culvert that connects the stream to an existing constructed plunge pool north of Goose Bay Drive and the downstream limits of the proposed work will extend to the outlet end east of Corporate Drive.

The current area that is proposed to be dredged was previously dredged in 2011 and permitted as NHDES File No. 2011-00322. The extent of proposed natural resource impacts was minimized to the maximum extent practicable while accomplishing the project objectives. Erosion control measures may be installed around the limits of disturbance as determined necessary based on site conditions at the time of construction to protect the surrounding habitat areas during construction. All temporary impacts will be stabilized upon completion of the proposed work.

SECTION 3 - PROJECT LOCATION

Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.

ADDRESS:	South of Goose Bay Drive
TOWN/CITY:	Portsmouth
TAX MAP/BLOCK/LOT/UNIT:	Tax Map 305, Lot 3 and Tax Map 303, Lot 8
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: ☐ N/A	Hodgson Brook
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	43.08371, -70.79910

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: Lonza Biologics Inc c/o Kristopher Tiernan		
MAILING ADDRESS: 101 International Drive		
TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: kristopher.tiernan@lonza.com		
FAX:	PHONE: 603-928-9046	
ELECTRONIC COMMUNICATION: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c)) ☐ N/A		
LAST NAME, FIRST NAME, M.I.: Walker, Peter, J.		
COMPANY NAME: VHB		
MAILING ADDRESS: 2 Bedford Farms Drive, Suite 200		
TOWN/CITY: Bedford	STATE: NH	ZIP CODE: 03110
EMAIL ADDRESS: pwalker@vhb.com		
FAX:	PHONE: 603-391-3942	
ELECTRONIC COMMUNICATION: By initialing here, 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. ☐ Same as applicant		
NAME: Pease Development Authority (PDA) c/o Paul Brean		
MAILING ADDRESS: 55 International Drive		
TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: p.brean@peasedev.org		
FAX:	PHONE: 603-433-6088	
ELECTRONIC COMMUNICATION: By initialing here, 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):

All jurisdictional areas were delineated and classified by a VHB NH Certified Wetland Scientist in accordance with the requirements of Env-Wt 400. The project complies with the non-tidal dredging criteria outlined in Env-Wt 523. Env-Wt 600, Env-Wt 700, and Env-Wt 900 are not applicable to the proposed project, as there are no coastal lands / tidal waters / tidal wetlands near the project area, no prime wetlands, nor any new stream crossings or work proposed to existing stream crossings. See the Application Narrative which details the project's compliance with the rules.

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: Day: Year:

(■ 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/rivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

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

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

	JURISDICTIONAL AREA	PERM. SF	PERM. LF	PERM. ATF	TEMP. SF	TEMP. LF	TEMP. ATF
Wetlands	Forested Wetland			☐			☐
	Scrub-shrub Wetland	739		☐	515		☐
	Emergent Wetland	1,515		☐	490		☐
	Wet Meadow			☐			☐
	Vernal Pool			☐			☐
	Designated Prime Wetland			☐			☐
	Duly-established 100-foot Prime Wetland Buffer			☐			☐
Surface	Intermittent / Ephemeral Stream			☐			☐
	Perennial Stream or River	3,876	362	☐	218	44	☐
	Lake / Pond			☐			☐
	Docking - Lake / Pond			☐			☐
	Docking - River			☐			☐
Banks	Bank - Intermittent Stream			☐			☐
	Bank - Perennial Stream / River	724	724	☐	88	88	☐
	Bank / Shoreline - Lake / Pond			☐			☐
Tidal	Tidal Waters			☐			☐
	Tidal Marsh			☐			☐
	Sand Dune			☐			☐
	Undeveloped Tidal Buffer Zone (TBZ)			☐			☐
	Previously-developed TBZ			☐			☐
	Docking - Tidal Water			☐			☐
	TOTAL	6,854	1,086		1,311	132	

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

☒ **MINIMUM IMPACT FEE**: Flat fee of $400.

☐ **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).

☐ **MINOR OR MAJOR IMPACT FEE:** Calculate using the table below:

$0.60 (per recent update, effective 7/1/25)

Permanent and temporary (non-docking): N/A	SF	× ~~$0.40~~ =	$ 0
Seasonal docking structure: 0	SF	× $2.00 =	$ 0
Permanent docking structure: 0	SF	× $4.00 =	$ 0
Projects proposing shoreline structures (including docks) add $400 =			$ 0
		Total =	$ 400
The application fee for minor or major impact is the above calculated total or $400, whichever is greater =			$ 400

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: KD	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: KD	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: KD	The signer understands that: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 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.
Initials: KD	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: Paul Brean (PDA)	DATE: 12/23/2025
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): KD	PRINT NAME LEGIBLY: Kristopher Tiernan (Lonza)	DATE: 1/2/2026
SIGNATURE (AGENT, IF APPLICABLE):	PRINT NAME LEGIBLY: Peter J. Walker (VHB)	DATE: 12/15/25

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: Kelli J Barnaby	PRINT NAME LEGIBLY: Kelli Barnaby
TOWN/CITY: Portsmouth Portsmouth	DATE: 1/8/26

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”.

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.: Lonza Biologics, Inc. c/o Tiernan, Kristopher	
PROJECT STREET ADDRESS: South of Goose Bay Drive	PROJECT TOWN: Portsmouth
TAX MAP/LOT NUMBER: Tax Map 305, Lot 3 and Tax Map 303, Lot 8	

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.	☐ Yes ☒ No

If you answered "no" to this question, describe the purpose of the "non-access" project type you have proposed:

The primary purpose of this project is not to construct a water-access structure, rather it is to perform a maintenance dredge within a previously permitted maintenance dredge portion of Hodgson Brook (Reach A) to remove accumulated sediment to improve its hydraulic capacity and reduce the likelihood of localized flooding events.

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.	☐ Check ☒ 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.	☐ Check ☒ 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. **The proposed work is specific to Reach A of Hodgson Brook - selecting an alternative site location is not applicable to this project.**	☐ Check ☒ 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.	☐ Check ☒ 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.	☒ Check ☐ 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.	☒ Check ☐ 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.	☒ Check ☐ 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.	☐ Check ☒ N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	☐ Check ☒ N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	☐ Check ☒ 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.	☐ Check ☒ N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	☐ Check ☒ N/A

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.	☐ Check ☒ N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage. **This project does not propose to replace any of the existing culvert stream crossings. This project only proposes to remove accumulated sediment.**	☐ Check ☒ N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	☐ Check ☒ 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.	☒ Check ☐ 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.	☐ Check ☒ 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.	☐ Check ☒ 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.	☐ Check ☒ 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.	☐ Check ☒ 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.	☐ Check ☒ 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.	☐ Check ☒ N/A

Application Narrative

1

Introduction

On behalf of Lonza Biologics, Inc. ("the Applicant"), in coordination with the Pease Development Authority (PDA), VHB has prepared this Wetlands Permit Application pursuant to the New Hampshire Revised Statutes Annotated (RSA) Chapter 482-A, Fill and Dredge in Wetlands, and Wetland Bureau Code of Administrative Rules, Chapters Env-Wt 100 through Env-Wt 900, as applicable.

In response to concerns from the Pease Development Authority (PDA) and the City of Portsmouth, along with frequent flooding of Goose Bay Drive, the Applicant proposes to remove accumulated sediment to restore the hydraulic capacity of the subject portion of Hodgson Brook ("the Project"). The upstream limits of the proposed work will begin at the inlet of the Goose Bay Drive stream crossing culvert that connects the stream to an existing constructed plunge pool north of Goose Bay Drive and the downstream limits of the proposed work will extend to the outlet end east of Corporate Drive ("the Site"). See **Figure 1: USGS Site Location** and **Figure 2: Aerial Overview** for the project location.

This project is being submitted as a Minimum Impact Standard Dredge and Fill Wetlands Permit Application per Env-Wt 523.04(a) for maintenance dredging associated with a previous maintenance dredge project (within the previously permitted dredge area). The area that is proposed to be dredged was previously dredged in 2011 and permitted under NHDES File No. 2011-00322; this project proposes a similar maintenance dredge.

2

Site Description and Existing Conditions

Hodgson Brook (or "the Brook") flows through Pease Tradeport in Portsmouth, New Hampshire and portions of the Brook were straightened by the Air Force as part of the development of the former Pease Air Force Base greater than 50 years ago. There is significant disturbance throughout the Brook and the watershed based on the 2018 analysis from Streamworks, PLLC. Streamworks completed a proposed design for Hodgson Brook at the adjacent Iron Rail Parcel at Pease Tradeport north of Goose Bay Drive. They daylit a section of the Brook that was previously conveyed with a 4.5-foot diameter culvert and established a more natural riffle-pool sequence along the channel while promoting floodplain connectivity and a vegetated riparian buffer. The objective of this Project is to remove sediment that has accumulated within the Brook since the previous maintenance dredge.

On a broad scale, the Site is in the southeastern portion of the state near the Maine state line between the Great Bay and Piscataqua River. The Portsmouth International Airport is located about ¾ mile southwest of the Site and the Spaulding Turnpike (NH Route 4) is located about 700 feet northeast of the Site. The entire area is zoned as a business/commercial zone, and the surrounding businesses include the Pease wastewater treatment plant, Portsmouth police department, Lonza Biologics, and a Wentworth-Douglass medical facility. Given the abundance of surrounding development around the subject stream, along with plans for additional nearby development in the near future, ensuring the stream is functioning appropriately and has the hydraulic compacity to handle stormwater runoff is an important consideration.

2.1 Natural Resource Desktop Review

The following information is based on a review of the NHDES Land Resources Management Permit Planning Tool (LRMPPT).

- Priority Resource Areas (PRAs): There are no PRAs within or near the Site. The closest PRA (a prime wetland and peatland) is mapped north of Newington Street over a half mile away from the Site.
- Designated Rivers: There are no Designated Rivers or associated quarter mile buffers that intersect or abut the Site. Therefore, no coordination with a Local River Advisory Committee is required.
- Conservation Lands/ARM Funded Sites: There are no conservation lands or Aquatic Resource Mitigation (ARM) Funded Sites within the vicinity of the Site.
- Impaired Waters: The Site is located within watersheds with chloride impairments (NHRIV600031001-04 and NHRIV600031001-05). The Site is also located within the quarter mile buffer of impaired surface waters (NHRIV600031001-05), as Upper Hodgson Brook is impaired for benthic-macroinvertebrate bioassessments, chloride, dissolved oxygen saturation, *Escherichia coli*, and dissolved oxygen concentration. The proposed work will not contribute to or worsen these impairments.
- Floodplains: There is no Federal Emergency Management Agency (FEMA) mapping within or near the Site. Consequently, there are no FEMA regulated floodways or floodplains.
- Wildlife Habitat: The NH Fish & Game Department (NHF&G) has developed the New Hampshire Wildlife Action Plan (WAP) to assist with conserving and protecting wildlife species and habitat types throughout the State. The WAP identifies ranked habitat tiers that recognize the highest quality habitats in the state. Habitat tiers were created by the NHF&G Department using biological data, landscape data, and human influence information. Habitat tiers are separated into three rankings, which are 1) *Highest Ranked Habitat in the State*, 2) *Highest Ranked Habitat in Biological Region*, and 3) *Supporting Landscape*. There are no ranked habitats within or near the Site. The closest ranked habitat (*Supporting Landscape*) is mapped north of Newington Street over a half mile away from the Site.

  NHF&G-mapped habitat types intersecting and surrounding the Site primarily consist of Developed Impervious or Developed/Barren Land, with some small patches of Open Water that surround the Site. See **Figure 3: NHF&G WAP Habitat Types.**
- Shoreland Jurisdiction: This Project does not involve ground disturbance within 250 feet of nearby surface waters subject to the Shoreland Water Quality Protection Act. Therefore, a NHDES Shoreland Permit Application or Permit by Notification is not required.
- Coastal Layers: No coastal data occurs within the Site. These resources are prevalent within the Great Bay and Piscataqua River.

2.2 Delineated Natural Resources

Jurisdictional wetlands and surface waters within the Site were delineated by VHB Senior Environmental Scientist, Kristopher Wilkes (NH CWS #288), on June 11, 2025. Wetland delineations were performed in accordance with the technical criteria contained in the *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*, the *1987 Corps Wetland Delineation Manual*, the *Northcentral and Northeast Regional Wetland Plant List*, the *USDA Field Indicators of Hydric Soils in the United States (Version 9.0)*, and the *Field Indicators for Identifying Hydric Soils in New England (NEIWPCC, Version 4, 2018)*. Surface water delineations were performed in accordance with definitions in the NHDES Rules (Env-Wt 102.15) and NH Statutes (NH RSA 483-B:4 (XI-e)). The limits of delineated wetlands and surface waters were marked in the field by affixing sequentially numbered pink and blue flagging tape, respectively, to vegetation. Resource flags were located in the field utilizing a hand-held GPS unit capable of sub-meter accuracy. Wetlands and streams were classified using the US Fish and Wildlife Service's methodology *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979, revised 1985). Additionally, function and value assessments of the delineated resources within the Site were conducted in accordance with *The Highway Methodology Workbook Supplement*, published by the U.S. Army Corps of Engineers, 1999.

The delineation field work included three wetlands and Hodgson Brook as depicted on **Figure 4: Delineated Natural Resources Overview** and the **Existing Conditions Survey (Sheet Sv-1)** included as part of the **Project Plans** in **Appendix A**, and are described below. **Representative Site Photographs** of these features are provided in **Appendix B.**

2.2.1 Wetlands

Wetland 1 (Flag Series WF1)

Wetland 1 is located south of Goose Bay Drive and directly borders Hodgson Brook along both of its banks. Wetland 1 also continues westerly from the culvert outlet conveying Hodgson Brook underneath Goose Bay Drive. Along the northern side of Hodgson Brook, Wetland 1 represents a narrow bordering wetland primarily situated between the toe of slope associated with the road embankment of Goose Bay Drive and the delineated northern bank of the brook. Along the southern side of Hodgson Brook, Wetland 1 is much wider extending south away from the brook into a depressional area located between Hodgson Brook, Corporate Drive, and a parking lot associated with existing development located immediately to the southwest. Wetland 1 is classified as Palustrine, Emergent, Persistent, Seasonally Flooded (PEM1C). The wider portion of Wetland 1 located south of Hodgson Brook does not appear to be mowed/maintained like adjacent landscaped areas. Remnant ruts were observed in some areas of the wetland. Dominant vegetation includes purple loosestrife (*Lythrum salicaria*), soft rush (*Juncus effusus*), dark green bulrush (*Scirpus atrovirens*), sensitive fern (*Onoclea sensibilis*), rough avens (*Geum laciniatum*), species of dogwood (*Cornus* spp.), narrowleaf cattail (*Typha angustifolia*), yellow fruited sedge (*Carex annectens*), broom sedge (*Carex scoparia*), ryegrass (*Lolium* spp.), Timothy grass (*Phleum pratense*), rough-stemmed goldenrod (*Solidago rugosa*), fringed sedge (*Carex crinita*), fox sedge (*Carex vulpinoidea*), bladder sedge (*Carex intumescens*), narrowleaf goldenrod (*Euthamia graminifolia*), a species of Iris (*Iris* spp.), a species of milkweed (*Asclepias* spp.), reed canary grass (*Phalaris arundinacea*), jewelweed (*Impatiens capensis*), elderberry (*Sambucus nigra*), birds foot trefoil (*Lotus corniculatus*), slender leafy spurge (*Euphorbia virgata*), and a species of bedstraw (*Galium* spp.).

Soils sampled within Wetland 1 met the depleted matrix (F3) and Redox Dark Surface (F6) hydric soil indicators, with redox at or near the surface. Some areas exhibited a dark soil matrix with redox, while other areas exhibited a depleted matrix with redox. Observed indicators of wetland hydrology include water-stained leaves (B9), saturation visible on aerial imagery (C9), and geomorphic position (D2). Wetland hydrology is directly influenced by Hodgson Brook as well as an existing 12-inch plastic corrugated pipe culvert located along the wetland's southern perimeter that conveys drainage into the wetland from surrounding developed areas.

Wetland 2 (Flag Series WF2)

Wetland 2 (W-2) borders Hodgson Brook in a depressional area north of Goose Bay Drive as the brook flows into a constructed plunge pool before it is conveyed underneath Goose Bay Drive via the existing triple 30-inch corrugated metal pipes (CMPs). Wetland 2 is classified as a combination of Palustrine, Scrub-Shrub, Broad-leaved Deciduous and Palustrine, Emergent, Persistent, Seasonally Flooded (PSS1/EM1C) cover types. Wetland 2 is located on the opposite side of Goose Bay Drive and is outside of the proposed Site. Therefore, it is not subject to this permit application. It exhibits similar characteristics to Wetland 1 in terms of vegetative structure, soils and hydrology.

Wetland 3 (Flag Series WF3)

Wetland 3 (W-3) borders Hodgson Brook beginning at the existing concrete box culvert outlet underneath Corporate Drive. Along the northern side of the brook, Wetland 3 begins to widen as it extends away from Corporate Drive and extends easterly. Along the southern side of the brook, Wetland 3 remains relatively narrow and is primarily situated between the toe of slope associated with the road embankment of Corporate Drive and the delineated southern bank of the brook. Wetland 3 is classified as Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PSS1C) and contains dense woody vegetation, especially along the banks of Hodgson Brook. Vegetative species mimic those observed in Wetland 1 with the addition of speckled alder (*Alnus incana*), glossy buckthorn (*Frangula alnus*) and multiflora rose (*Rosa multiflora*). Soils sampled met the hydric soils indicators of depleted matrix (F3) and Redox Dark Surface (F6). Observed indicators of wetland hydrology include water-stained leaves (B9), saturation visible on aerial imagery (C9), geomorphic position (D2), and drainage patterns (B10). Wetland hydrology is directly influenced by Hodgson Brook as well as runoff from Corporate Drive and other adjacent developed areas.

2.2.2 Surface Waters

Hodgson Brook

Hodgson Brook flows into the Site from the north as it is conveyed underneath Goose Bay Drive via triple 30-inch CMPs. At the culvert outlet, existing drainage from the southwest is conveyed into the brook and the channel makes a sharp easterly turn as it flows through Wetland 1 towards Corporate Drive, paralleling Goose Bay Drive. The brook is then conveyed underneath Corporate Drive via an existing 72-inch wide by 40-inch-high concrete box culvert. The box culvert was observed to be partially filled with sediment at the time of delineation.

Beyond the limits of the Site, Hodgson Brook flows southwest into North Mill Pond before discharging into the Piscataqua River near its outlet to the Atlantic Ocean.

Hodgson Brook through the Site is classified as Riverine, Lower Perennial, Unconsolidated Bottom, Mud, Excavated (R2UB3x). Channel width varies from 3-6 feet with water depth varying between 3 and 18

inches; flow was moderate at the time of the delineation. The banks of the brook are generally incised throughout the project reach with an average bank height of 1-2 feet. Sedimentation within the bed of the brook was evident at the time of delineation. The banks of Hodgson Brook are densely vegetated with broad-leaved cattail, elderberry, purple loosestrife, reed canary grass, milkweed, a species of dogwood, jewelweed, rough-stemmed goldenrod, oriental bittersweet (*Celastrus orbiculatis*), multi-flora rose, soft rush, sensitive fern, and various sedges.

2.2.3 Functional Assessment

Functions and values for natural resources proposed to be impacted (Wetland 1, Wetland 3 and Hodgson Brook) were assessed using data collected in the field by VHB Environmental Scientist, Kristopher Wilkes (NH CWS #288), in accordance with the *U.S. Army Corps of Engineers New England District - The Highway Methodology Workbook Supplement: Wetland Functions and Values - A Descriptive Approach* (1999). Thirteen wetland functions and values are recognized under the USACE methodology. Additionally, a fourteenth (Ecological Integrity) is called out in NHDES rules and evaluated through the *University of New Hampshire Cooperate Extension's Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire* (December 2015). Function and values are as follows:

- Groundwater Recharge/Discharge (GW)
- Floodflow Alteration (FA)
- Fish and Shellfish Habitat (FS)
- Sediment/Toxicant Pathogen Retention (SR)
- Nutrient Removal/Retention (NR)
- Production Export (PE)
- Sediment/Shoreline Stabilization (SS)
- Wildlife Habitat (WH)
- Recreation (RE)
- Educational/Scientific Value (ED)
- Uniqueness/Heritage (UH)
- Visual Quality/Aesthetics (VQ)
- Threatened or Endangered Species Habitat (ES)
- Ecological Integrity (EI) (***NHDES Rule Requirement**)

The USACE Highway Methodology provides a list of considerations and qualifiers that are used to assess the occurrence of each function or value, followed by a subjective determination of Principal Functions and Values, with documentation of supporting rationale on standard forms. Refer to the **Wetland Function-Value Evaluation Forms** provided in **Appendix C**.

The NH Method evaluates twelve wetland functions, including Ecological Integrity, through a series of datasheets that result in assigned average scores for each function.

In accordance with the USACE Highway Methodology practices, functions are either assigned a P for Principal Function provided by the wetland, an X for function provided by the wetland, or left blank to indicate that the function is not provided by the wetland. The results of these assessments are displayed in **Table 1** below.

Table 1 Wetland Functions and Values

Wetland ID	Approximate Total Wetland Area (acres)[1]	Cowardin Class	GW	FA	FS	SR	NR	PE	SS	WH	RE	ED	UH	VQ	ES
Wetland 1	0.82 AC	PEM1C	X	P	P	P	P	X	P	X	-	-	-	-	-
Wetland 3	0.02 AC	PSS1C	X	P	P	P	P	X	P	P	-	-	-	-	-
Hodgson Brook	0.11 AC	R2UB3x	P	P	P	P	P	X	X	X	-	-	-	-	-

1 Wetland area represents the delineated extent of the wetland with respect to the project area.

The NH Method evaluates twelve wetland functions, including Ecological Integrity, through a series of datasheets that result in assigned average scores for each function. Average scores for Ecological Integrity for each resource are further outlined in **Table 2** below.

Table 2 NH Method Ecological Integrity Score

Wetland ID	Wetland 1	Wetland 3	Hodgson Brook
Q1 – Land Use	1	1	1
Q2 – Prior Fill	10	10	1
Q3 – Agricultural Use	10	10	10
Q4 – Logging Activity	10	10	10
Q5 – Human Activity in the Wetland	10	10	5
Q6 – Invasive Species	1	1	1
Q7 – Constructed Crossings	1	5	1
Q8 – Adjacent Human Activity	1	1	1
Q9 – Adjacent Impervious Surface	1	1	1
Q10 – Human-made Structure that Regulates Water Flow	5	5	1
Average Score	**5.0**	**5.4**	**3.2**

2.3 Rare, Threatened, and Endangered Species

The following is a discussion of rare, threatened, and endangered species identified within the vicinity of the Site by the NH Department of Environmental Services (NHDES) DataCheck tool and US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) system.

NHDES Ecological Reviews

A search for the occurrence of rare plant, animal, or natural communities associated with this Project was completed using the NHDES online DataCheck tool. The DataCheck Results Letter (DCT25-2507) dated September 9, 2025, identified the potential presence of three plant species within the vicinity of

the Site: bulbous bitter-cress (*Cardamine bulbosa*) – state endangered, great bur-reed (*Sparganium eurycarpum var. eurycarpum*) – state threatened, and smooth black sedge (*Carex nigra*) – state endangered.

Since no fauna species were identified, consultation with the NH Fish and Game Department (NHF&G) is not required for this project.

Through consultation with the NHDES Ecological Review Section (Maddie Severance, ERS), potentially suitable habitat for the smooth black sedge and great bur-reed is present within the Site. Consequently, a plant survey is required in advance of construction to complete this consultation. The ideal timeframe to conduct this survey is mid-July through late August, but this work may be performed as early as the last week in June if it is completed by a qualified botanist. Upon completion of the survey, the results must be documented and shared with the ERS so that they may provide the final conservation measures for the project. The ERS also provided some potential best management practices (BMPs) and a Transplant Plan to expedite a review turnaround if the subject plants were identified onsite during the survey to minimize any construction delays (especially since the goal is to complete this work within the nontidal work window of July 5 – Oct 1, as specified in the USACE NHGP if this time-of-year (TOY) work window is determined by the USACE to be applicable to this Project; see **Section 3.2** of this **Application Narrative** below for more details on construction timing). The ERS also provided permit conditions that NHDES can use to issue the wetlands permit approval to avoid a regulatory delay.

Through this consultation, ERS confirmed that the proposed tree/woody vegetation clearing within the wetland east of Corporate Drive (Wetland 3) may occur prior to completion of the plant survey, as long as the appropriate BMPs are followed. These BMPs include staging equipment in uplands, no removal of stumps or roots (prior to the proposed dredge in those locations), etc. to avoid and minimize impacts to the herbaceous vegetation in advance of completing the rare plant survey. This will allow that clearing to occur within the bat inactive season, as detailed below.

See **Appendix D** for documentation.

US Fish and Wildlife Service

The Site was reviewed for the presence of federally listed or proposed, threatened, or endangered species, designated critical habitat, or other natural resources concerning the USFWS IPaC System. Results dated November 18, 2025, indicate the potential presence of the federally endangered northern long-eared bat (*Myotis septentrionalis*), proposed endangered tricolored bat (*Perimyotis subflavus*), and proposed threatened monarch butterfly (*Danaus plexippus*) within the vicinity of the Site.

The USFWS has proposed to list the monarch butterfly as threatened under the Endangered Species Act (ESA). A final determination about listing the monarch butterfly is anticipated soon. If the monarch butterfly is listed as threatened, consultation with USFWS may be required for any proposed impacts to monarch butterfly habitat and avoidance and minimization measures may need to be incorporated into the Project. The IPaC Species Lists states that the Site does not overlap critical habitat for the monarch butterfly.

Similarly, the proposed listing status of the tricolored bat also does not provide protection under the ESA, however, the final listing decision for tricolored bat is expected to occur soon. Consultation for both the northern long-eared bat and tricolored bat was conducted using the *Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key* in IPaC. Since the proposed woody vegetation clearing will

be confined to scrub-shrub vegetation (no trees suitable for bat roosting will be cleared), the determination is *no effect*. See **Appendix E** for documentation. This consultation should be updated once the tricolored bat is officially listed.

The US Army Corps of Engineers will make the ultimate determination of the potential impacts of this Project on the identified federal species during their review of this application and prior to the issuance of their permit approval.

2.4 Hydraulics

VHB analyzed the hydraulic capacity of Hodgson Brook within the Site from the Goose Bay Drive stream crossing to the Corporate Drive crossing under both existing and proposed conditions utilizing HydroCAD software, version 10.20. VHB compared the streamflow estimates from the 2018 Streamworks, PLLC analysis to the USGS StreamStats Regression equation results for the watershed area to the Hodgson Brook culvert beneath Corporate Drive and determined that the streamflow results were similar. Therefore, VHB utilized the 2018 Streamworks analysis 50-year design flow as the input to the hydraulic analysis.

The existing 72-inch wide by 40-inch-high concrete box culvert was observed to be partially filled with approximately 12 inches of sediment at the time of survey. VHB analyzed the Corporate Drive culvert under existing conditions and determined that the culvert could pass the 50-year design storm with approximately 0.5-feet of freeboard between the headwater elevation and the pipe crown.

VHB developed the proposed channel dimensions for the channel dredging based on the approximately 4-feet wide by 2-feet deep channel dredge dimensions provided by the 2011 Standard Dredge and Fill Wetlands Permit completed by Swamp Inc. and achieving a constant 0.3% streambed slope from the outlet of the Goose Bay Drive crossing to the Corporate Drive culvert including dredging of the 12 inches of sediment buildup within the culvert itself. VHB confirmed that the channel dimensions improved hydraulic performance by increasing the hydraulic capacity of the channel and the existing corporate drive culvert by analyzing the proposed conditions in HydroCAD. Model results indicated that the proposed dredging improved freeboard to 1.5-feet below the pipe crown at the 50-year design storm.

At the request of the PDA and City of Portsmouth, the proposed design also includes energy dissipation features lined with simulated streambed material at the outlet of the Goose Bay Drive and Corporate Drive culverts. These energy dissipation features are intended to maintain stable stream channel grades for the profile of the proposed channel dredge and provide stabilization and scour protection at the culvert outlets. Details for the energy dissipation features, typical stream channel section, and specification for the proposed streambed material are provided on Sheet C5.0 of the **Project Plans** provided in **Appendix A.** The River Channel Grading Plan and Profile are provided on Sheet C2.0 of the **Project Plans**.

2.5 Contamination Analysis

VHB conducted a review of the New Hampshire Department of Environmental Services (NHDES) OneStop online environmental database and Environmental Protection Agency (EPA) documentation to identify contaminant sources with the potential to impact environmental media within the Site.

Specifically, the NHDES OneStop database was queried to select State-regulated sites (e.g., remediation sites, hazardous waste generators, petroleum storage tank sites, etc.) located within 500 feet of the estimated project limits of construction (i.e., study area). See **Figure 5: NHDES OneStop Data Mapper**. Based on VHB's review, the following nearby properties of concern were identified in the vicinity of the Site:

- **Pease Air Force Base Superfund Site, Encompassing the Site**: The Site is located within the boundaries of the EPA Superfund Site associated with Pease Air Force Base. The Pease Air Force Base officially closed in April 1991 under the Defense Base Realignment and Closure Act of 1988; however, wastes generated by the United States Air Force have impacted soil, groundwater, surface water, and sediment across the former base. Although the Site is located outside of a zone of active remediation, residual contamination associated with the base may be present. According to the October 2025 Tier II Baseline Ecological Risk Assessment Work Plan, concentrations of perfluorooctane sulfonic acid (PFOS) were detected in a surface water sample collected on the Tradeport Property at 0.04 microgram per liter (ug/L). NHDES does not have established surface water quality standards for Per- and Polyfluoroalkyl Substances (PFAS).
- **Lonza Biologics, Master ID 13665, Abutting the Site to the Northwest**: The abutting property is listed in the Hazardous Waste Generator, aboveground storage tank (AST), drinking water treatment system, and hazardous waste project databases. The property is an active Large Quantity Generator under EPA ID NHD500014998 for the generation of wastes associated with pharmaceutical manufacturing. Eight diesel ASTs are present at the property.

  In September 2022, chlordane and arsenic-impacted soils associated with the historical application of pesticides were excavated and consolidated into a capped area at NHDES Master ID Site 13665. According to the March 2024 Supplemental Soil Sampling and Closure Report, excavations associated with Hodgson Brook restoration were outside of the areas with elevated concentrations of chlordane and/or arsenic; however, dewatering during the Hodgson Brook restoration required a Temporary Discharge Permit due to the presence of PFAS. A Supplemental Soil Sampling and Closure Report was submitted to NHDES in March 2024 documenting the consolidation of contaminated soils within capped areas at the property.
- **Pease Wastewater Treatment Plant, Master ID 61281, Abutting the Site to the East**: This property, located downstream of the maintenance dredge Site, is listed in the Hazardous Waste Generator and Initial Response Spill Site databases. The property was formerly associated with a conditionally exempt small quantity generator. According to the Initial Response Spill database, a release of an unknown quantity of petroleum product occurred at the property resulting in a persistent sheen within a drainage area along the entrance to the wastewater treatment facility in April 2006. Response actions included the removal of oil-impacted soils from the drainage area, and the spill was listed as closed. Note, the drainage area where petroleum sheening was observed is associated with a downstream reach of Hodgson Brook.
- **Brackett School, Master ID 4862, Abutting the Site to the Southeast**: The property is listed in the underground storage tank (UST) and leaking underground storage tank (LUST) databases. A 10,000-gallon heating oil UST was removed from the property in August 1994. A release was identified, and response actions included the removal of approximately 410 tons of petroleum-impacted soil and 5,000 gallons of petroleum-impacted groundwater. A Certificate of No Further Action was issued by NHDES in June 1997, and no additional response actions were required.

In addition to the nearby environmental listings discussed above, one sediment sample was collected from the Site in February 2010 associated with a 2011 Wetlands Permit Application associated with a previous dredge project. The soil analytical results were below the applicable NHDES Soil Remediation Standards (SRS). Low levels of polycyclic aromatic hydrocarbons (PAHs) including fluoranthene, phenanthrene, pyrene, chrysene, and benzo[b]fluoranthene as well as select metals (i.e., arsenic, barium, chromium, and lead) were detected. VHB was unable to confirm the location of the sediment sample collected during the February 2010 sampling event.

Based on the location of the Site within the EPA Superfund Site Boundary associated with Pease Air Force Base and the proximity of nearby documented releases, there is the potential for impacted sediment and surface water to be generated as part of the Project that would require management during construction. Consultations with representatives at Pease Development Authority (PDA) indicate that dredge spoils can be disposed of at the former Jones School property off Northwood Road located less than a mile south of the Site. Consultation with NHDES may be required to determine proper management protocols including the potential implementation of a Soil and Groundwater Management Plan (SGMP) and/or Temporary Discharge Permit due to the presence of PFAS in groundwater and surface water.

2.6 Property Ownership and Abutters

The proposed Project will be contained within Tax Map 305, Lot 3 (south of Goose Bay Drive and Corporate Drive) at 114 Corporate Drive currently leased by Pioneer New Hampshire, LLC, Tax Map 303, Lot 8 (east of Corporate Drive) at 121 Corporate Drive currently leased by Wentworth-Douglass Hospital, and a bit on Tax Map 303, Lot 7 (north of Goose Bay Drive) at 34 Harvest Way currently leased by Lonza Biologics Inc (the Applicant); all three parcels are owned by the PDA. Property lines are included in the **Project Plans** provided in **Appendix A.**

Abutter Notification

Env-Wt 306.06 requires abutter notifications prior to filing a wetlands permit application. Pursuant to Env-Wt 102.03 "Abutter" means any person who holds title to abutting property or who owns flowage rights on abutting property. PDA holds title to all the parcels that the project work is proposed within and that abut the proposed work area.

In accordance with the definition of an "abutting property" provided in Env-Wt 102.04, that term does not apply to any property that is separated by a public road from the property on which the project is proposed (such as US Route 4/Spaulding Turnpike in this case). Additionally, abutting properties that are greater than a quarter mile away from the proposed work do not need to be notified. See the attachment in **Appendix F** for the approximate limits of the PDA development, the proposed work, and a quarter mile buffer around the proposed work.

Based on the above information, no abutter notifications are required for this Project.

3

Project Description and Best Management Practices

VHB understands that previous projects upstream in 2023 and 2024 may have influenced the current state of Hodgson Brook and that the channel geometry is likely undersized based on stakeholder historic observations. Consequently, at the request of the PDA and City, Lonza is proposing a maintenance dredge to remove excess sediment from the Brook, including the removal of approximately one foot of sediment within the existing culvert under Corporate Drive. Additionally, energy dissipation features (sometimes referred to as preformed scour holes or plunge pools) are proposed to be excavated at the outlet end of the existing box culvert east of Corporate Drive and at the upstream limits of the proposed work where the culvert from the constructed plunge pool conveys the streamflow beneath Goose Bay Drive. These features will be lined with simulated streambed material consisting of a mix of cobble, gravel, and sand that will provide stabilization and scour protection while also mimicking the natural stream bed. A detail for the energy dissipation features and specification for the proposed streambed material are provided on Sheet C5.0 of the **Project Plans** provided in **Appendix A.** The purpose of these energy dissipation features are to provide a stable pre-defined pool at the culvert outlet to dissipate energy from high velocity water flows to reduce the potential for scour within the channel bed in those locations and downstream erosion. This work will not only benefit the stream resource, but it will restore its capacity to handle stormwater runoff from the surrounding developed areas and reduce the frequency of localized flooding events caused by excessive sediment deposition within the stream channel that reduces its hydraulic capacity. The stream channel alignment will not be modified.

The current area that is proposed to be dredged was previously dredged in 2011 and permitted under NHDES File No. 2011-00322. A meeting was also held with Eben Lewis (NHDES) on January 15, 2025, to discuss this Project. Mr. Lewis concurred with the proposed work and noted that the Project could be permitted as a maintenance dredge.

The work will occur in two phases in the "dry" during low flow conditions behind cofferdams with a bypass flume to temporarily divert stream flow around the work area. The dredged material will be temporarily stored on site, dewatered/allowed to dry out, and then transported to an upland offsite disposal storage location (detailed in **Section 6.2** of this **Application Narrative** below). Wildlife-friendly erosion controls (such as fabric incased silt sock) will be used throughout construction to protect the stream and wetlands. See the **Project Plans** provided in **Appendix A** for detailed information.

3.1 Best Management Practices

Prior to the start of construction, the selected contractor shall be responsible for the installation of wildlife friendly erosion and sediment perimeter controls in accordance with permitting plans and details, NHDES permit conditions, and the New Hampshire Stormwater Manual (February 2025). Additional temporary erosion control BMPs will be implemented as needed throughout the duration of construction to prevent off-site tracking and waterborne loss of earth sediment and debris. The specific measures proposed as part of the Project are depicted on the Erosion and Sediment Control Plan included in the **Project Plans** in **Appendix A**.

All equipment and material laydown/temporary staging areas required during construction will be confined to uplands well outside the jurisdictional limits of existing delineated natural resources on-site. Designated stockpiling/storage locations will be established at the commencement of construction and will be contained using appropriate wildlife friendly perimeter controls. Soils to be stockpiled or other areas to remain exposed for a period of more than 30 days shall be temporarily seeded and mulched. Additionally, perimeter controls (silt fence) shall be installed surrounding soil stockpiles.

Erosion controls will be inspected daily by the contractor to ensure that the controls are maintained and are properly functioning throughout the duration of construction. Upon completion of construction and establishment of permanent site stabilization, erosion control measures will be removed.

3.2 Construction Details

Site Preparation

All existing landscaped trees between Goose Bay Drive and the stream will be maintained, but some woody vegetation clearing east of Corporate Drive will be necessary to accommodate the proposed dredging; the proposed clearing limits along with the surveyed tree line are depicted on the **Project Plans** in **Appendix A**. The approximate area of clearing is 2,300 square feet, as measured on the plans. Since the proposed woody vegetation clearing is all scrub-shrub vegetation and contains no trees that are suitable for bat roosting, the winter tree clearing TOY restriction of November 1 through April 14 should not applicable to this Project. This vegetation clearing will not result in wetland impacts. Equipment will be staged in uplands and will reach into/over the wetland to conduct the clearing (cutting vegetation at or near ground level) and no ground disturbance or stumping is proposed.

Construction Sequence

Following the vegetation removal site preparation and the rare plant survey detailed in **Section 2.3** of this **Application Narrative** above, the proposed construction will occur in two separate phases, detailed

below. See the Construction Sequence sheet provided in the **Project Plans** in **Appendix A** for more information.

Phase 1 will include the proposed dredging from just upstream of the Corporate Drive box culvert to the downstream project limits. A sandbag cofferdam will be installed within the channel just upstream of the inlet end of the concrete box culvert, along with a second sandbag cofferdam at the downstream limits of the proposed dredging work. A bypass flume will divert stream flow from behind the upstream cofferdam northeast to below the downstream cofferdam over Corporate Drive.

Phase 2 will include the proposed dredging along most of the stream reach parallel to and southeast of Goose Bay Drive from the outlet of the Goose Bay Drive culverts to the upstream limits of Phase 1. Two sandbag cofferdams will be installed at the upstream limits of Phase 2. The first will be at the headwall of the existing Goose Bay Drive triple 30-inch CMPs, the second will be within the wetland area just south and upstream of the proposed dredging work near the outlet of the existing triple 30-inch CMPs, and the third sandbag cofferdam will be just upstream of the inlet end of the concrete box culvert near Corporate Drive (this will likely be the same cofferdam from Phase 1). A bypass flume will divert stream flow from the existing plunge pool at the inlet of the Goose Bay Drive triple 30-inch CMPs to below the downstream cofferdam near Corporate Drive.

Each bypass flume will be sized to accommodate a two-year flow of 7 cubic feet per second (cfs).

Construction Timing and Project Schedule

The woody vegetation clearing will occur prior to the proposed dredging work. We got approval from NHDES ERS to perform that clearing in advance of the rare plant survey (if necessary) as long as BMPs are followed to minimize impacts to the ground and herbaceous vegetation to avoid harm to any rare species, if present. The proposed dredging (or cofferdam installation/removal work) may occur during low flow conditions between July 5 – October 1, 2026, in accordance with the US Army Corps of Engineers (USACE) New Hampshire General Permit Condition #20, following completion of the rare plant survey and follow up NHDES Ecological Reviews consultation detailed in **Section 2.3** of this **Application Narrative** above. However, the above-mentioned TOY window may not be applicable to the proposed Project since Hodgson Brook is not known to provide habitat for cold water fish species (according to the NHF&G Wildlife Action Plan layers on the NHDES LRMPPT Mapper). We propose that the above-mentioned TOY restriction should not be applicable to this Project; the USACE will note this in their permit approval for the Project. The rare plant survey must be completed to finalize the conservation measures in advance of construction commencement; the earliest this survey may be conducted by a qualified botanist is during the last week of June 2026.

3.3 Invasive Plant Species Management

Several invasive plants are known to occur within the Site based on observations made by VHB. Species include glossy buckthorn, multiflora rose, purple loosestrife, and oriental bittersweet. Invasive species management during construction will adhere to guidance provided in NHDOT's *Best Management Practices for Roadside Invasive Plants Manual* (2008) and *Best Management Practices for the Control of Invasive and Noxious Plant Species* (2018).

Only clean equipment that is free of plant material and debris shall be delivered to the Site and utilized during construction. All machinery entering and leaving any area containing invasive plants will be

inspected for foreign plant matter (i.e., stems, flowers, and roots) and soil embedded in the tracks or wheels. If foreign plant matter or soil is present, the operator shall remove the plant material and soil from the machine using hand tools to minimize the spread of invasive species from one area to another.

3.4 Operations and Maintenance

At the request of PDA, an Operations and Maintenance (O&M) Plan was developed to manage the routine mowing within Wetland 1 south of Goose Bay Drive (which is conditionally authorized by rule in Env-Wt 309.02(a)). This O&M Plan also details proposed routine maintenance of the upstream constructed plunge pool which may be consistent with the intent of Env-Wt 308.01(b) regarding activities that are allowed by statute without a permit to maintain and preserve the usefulness of a man-made feature. The proposed maintenance would reduce sediment loading to downstream portions of Hodgson Brook and North Mill Pond. The **O&M Plan** is provided in **Appendix G**.

4

Impact Analysis and Avoidance & Minimization

Impact Analysis

This Project proposes a total of approximately **8,165 square feet (sq ft) and 1,218 linear feet (lin ft)** of natural resource impacts, approximately 6,854 sq ft of permanent impact (4,600 sq ft / 1,086 lin ft to the stream and 2,254 sq ft to the bordering wetlands) from the proposed dredging and approximately 1,311 sq ft of temporary impact (306 sq ft / 132 lin ft to the stream and 1,005 sq ft to the bordering wetlands) from the proposed erosion controls and temporary water diversion. Since the delineated bank (top-of-bank, TOB) and bed (ordinary high water, OHW) lines are superimposed on the plans as TOB/OHW lines, the bank impacts were approximated using a bank height of one foot.

The proposed permanent impacts will be the result of the channel dredging to remove the accumulated sediment, along with the creation of a preformed scour hole at the outlet end of the existing box culvert east of Corporate Drive.

The proposed temporary impacts will be the result of the temporary water diversion around the Phase 1 and 2 work areas during construction. Post-construction, all temporarily disturbed areas will be restored back to existing conditions, including the removal of the cofferdams, restoration of natural stream flow within the channel, and seeding and stabilization of any bare soil areas with a native wetland seed mix, such as the New England Wetmix from New England Wetland Plants (or approved equivalent).

This is a minimum impact project per Env-Wt 523.04(a) for maintenance dredging associated with a previous maintenance dredge project and no impacts to any PRAs are proposed. Consequently, this Project does not trigger mitigation, assuming no threatened or endangered species are found (Eben Lewis, NHDES Wetlands Bureau, virtual meeting, January 15, 2025).

Based on the wetland delineation, the existing plunge pool located northwest of Goose Bay Drive was determined to not be a jurisdictional feature given its extensive constructed condition with riprap and lack of natural stream geomorphology (it resembles a detention basin).

Avoidance & Minimization

The proposed Project has been carefully designed to minimize wetland impacts in accordance with Env-Wt 311.07 and Env-Wt 313.03 while still accomplishing the identified objectives and completing the proposed maintenance dredge. Since the subject stream feature to be dredged is jurisdictional and is bordered by palustrine wetlands on either side, avoidance of natural resource impacts was not practical. Some design considerations that contributed to impact minimization include:

- Maintaining the existing stream channel alignment. By containing the proposed excavation work within the existing channel, the overall impacts associated with this Project were reduced. It would have been more impactful to realign the stream channel to establish a more natural channel geometry with curves, as opposed to its artificially straightened condition. But that was not considered to be necessary for this Project to accomplish the objectives of accumulated sediment removal and improving the hydraulic capacity of this stream reach.
- Preserving the existing infrastructure. The existing three 30-inch CMPs that connect the stream to the constructed plunge pool beneath Goose Bay Drive and the existing 72-inch wide by 40-inch-high concrete box culvert that conveys the stream below Corporate Drive are not proposed to be replaced. Although the existing box culvert is a hydraulic constriction point for the stream, removal of the approximately one foot of sediment that has accumulated within it will improve the hydraulics of this stream reach compared to the existing conditions without the need for a complete culvert replacement at this time.
- Minimized the excavation volume. Except for the construction of the proposed energy dissipation features, no new streambed material is proposed to be brought to the Site to backfill the excavated areas. This means that outside of the energy dissipation features, there is no need to excavate below the desired post-construction elevation which minimizes the total amount of excavation required.

5

Federal Agency and Local Coordination

US Army Corps of Engineers

The proposed work will result in wetland and stream impacts subject to US Army Corps of Engineers (USACE) Section 404 jurisdiction through New Hampshire General Permit No. NAE-2022-00849. It is expected that this Project will qualify for a pre-construction notification (PCN) approval under General Permit 7 for dredging, since the proposed dredging impacts exceed the 3,000 sq ft threshold for self-verification. As such, Appendix B – Corps Secondary Impacts Checklist has been completed and included as **Appendix H** of this application.

The USACE New Hampshire General Permit Condition #20 states that work in nontidal waters must occur between July 5 – October 1. However, it is our understanding that the intent of this TOY work window is to protect cold water fisheries and Hodgson Brook is not known to provide habitat for cold water fish species (according to the NHF&G Wildlife Action Plan layers on the NHDES LRMPPT Mapper). Therefore, we propose that the above-mentioned TOY restriction should not be applicable to this Project. We request that the USACE waives this requirement and specify this in the approved permit.

It should be noted that the USACE Nationwide Permits will be reissued in March 2026. The USACE New England District plans to implement the Nationwide Permits in New England in place of the Regional General Permits. When implemented, those conditions will be reviewed to see if there are any changes that may affect this Project (such as the TOY restrictions and work windows).

NH Division of Historical Resources

A Request for Project Review (RPR) will be submitted to the NH Division of Historical Resources (NHDHR) to initiate Section 106 consultation under the National Historic Preservation Act (16 U.S.C. 470)] and with federal Advisory Council on Historic Preservation regulations, Protection of Historic Properties (36 CFR Part 800). The RPR submitted in February 2011 (as part of the 2011 wetlands permit application) resulted in a determination of *No Historic Properties Affected*. Therefore, we expect a similar determination to be made for this Project.

Portsmouth Conservation Commission

In accordance with Env-Wt 311.06(h) and RSA 482-A:3(I)(a)(1), the Conservation Commission will receive a complete copy of this application concurrent with the NHDES submission to provide them with the opportunity to review and comment. We will provide any comments received from the Conservation Commission along with our responses to the NHDES Wetlands Bureau when we receive them, if applicable.

6

Project-Specific Requirements (Env-Wt 523)

Since the Project involves dredging within a non-tidal jurisdictional area, the standards outlined in New Hampshire Administrative Rule Env-Wt 523 titled "Non-Tidal Dredging" must be addressed.

6.1 Env-Wt 523.02 Criteria for Approval of Dredging Projects

In addition to meeting the requirements established in Env-Wt 300, the department shall approve a dredging project only if the dredging project is:

(a) Necessary to maintain an existing navigable passageway, fire pond, or infrastructure facility;
The proposed maintenance dredge is necessary to maintain and restore the functionality of Hodgson Brook. Portions of the Brook within the Site were straightened by the Air Force as part of the development of the former Pease Air Force Base greater than 50 years ago. Therefore, the subject portion of the stream is a constructed drainage ditch that conveys jurisdictional stream flows. The accumulated sediment has reduced the hydraulic capacity of the channel and increased instances of overtopping and flooding of Goose Bay Drive. This Project proposes a maintenance dredge to remove that accumulated sediment to restore the hydraulic capacity of Hodgson Brook.

(b) Part of a previously-constructed maintenance dredge project that is not abandoned or an active man-made pond; or
The current area that is proposed to be dredged was previously dredged in 2011 and permitted as NHDES File No. 2011-00322. This Project proposes a similar maintenance dredge within the previously permitted area.

(c) Part of an approved project for a dug-in boathouse.
Not applicable.

6.2 Env-Wt 523.03 Application Requirements for Dredging Projects

The project-specific information required by Env-Wt 310.01(c)(1) or Env-Wt 311.03(b)(11), as applicable, for a dredge project shall be as follows:

(a) A description of the material and area to be dredged, including:

(1) The volume of material to be dredged, in cubic yards for projects in public waters;
600 CY

(2) The square footage of the area to be dredged for non-public waters or wetlands;
7,500 sq ft

(3) The type of material to be dredged; and
Sand and Silt

(4) Whether any invasive species are present;
Several invasive plants are known to occur within the Site based on observations made by VHB. Species include glossy buckthorn, multiflora rose, purple loosestrife, and oriental bittersweet. No submerged aquatic invasives are known to be present. See Section 3.3 of this Application Narrative for the proposed BMPs.

(b) The erosion and sediment control measures proposed to be used;
Cofferdams will be installed upstream and downstream of the proposed work areas with stream flow temporarily diverted using a bypass flume or pump around system. Additionally, land-based erosion controls (i.e., silt fence or silt sock) will be used along the work limits as necessary to prevent sediment-laden runoff from entering the bordering areas. See Sheet C3.0 of the Project Plans provided in Appendix A for details.

(c) The methods proposed to dewater the dredged material;
The dredged material would be excavated from the channel and either placed in a dewatering area lined with appropriate erosion controls, or live loaded into the waiting bed of standard 10-wheel dump trucks. The dump trucks would be stationed over the adjacent impervious roadway, surrounded by installed silt sock, while the dewatering occurs. The contractor will be required to manage dewatering in a manner to prevent any turbidity or sedimentation of the area outside of the work zone.

(d) The location at which dewatering will occur;
Directly adjacent to the work zone.

(e) The equipment proposed to perform the dredging;
Equipment to be used will be at the discretion of the selected contractor. Based on the easy to access to the work zone, a standard excavator is expected to be the preferred method.

(f) The proposed disposal site;

All excavated soil will be disposed of in a location owned by the Pease Development Authority. The current proposed location is the former Jones School property off Northwood Road located less than a mile south of the Site. That property is owned by PDA and has been routinely disturbed and used for material storage with bordering perimeter controls (see photos below).

Google Street View (dated Sept 2011)

NearMap Imagery (dated April 28, 2025)

(g) Identification of all known potential sources of soil or water contamination;

See the discussion provided in Section 2.5 of this Application Narrative above.

(h) If potential sources are documented in (g), above, the method of sampling for contaminants and a plan to manage contaminated materials;

No soil sampling for contaminants is currently proposed. The excavated soil will be stored on PDA-owned land, per typical PDA procedures.

(i) A description of how dredged material will be contained during the dredging process; and

Cofferdams will be installed upstream and downstream of the proposed work areas to contain the dredged material during the dredging process, with stream flow temporarily diverted using a pump around or bypass flume. See Sheet C3.0 of the Project Plans provided in Appendix A for details.

(j) An explanation of the timing of the project and how such timing helps minimize impacts on aquatic resources.

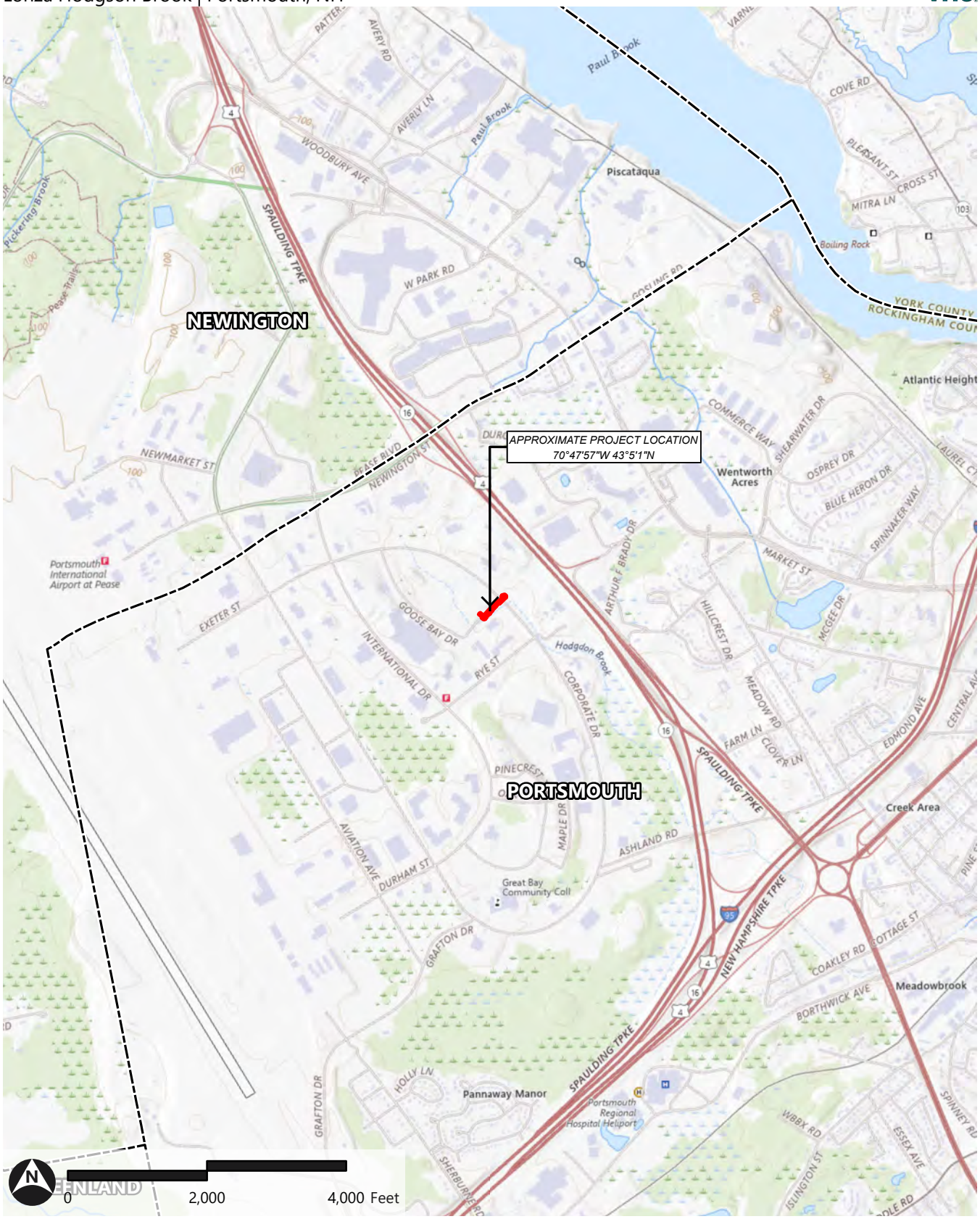
This work is expected to occur in 2026 during low flow periods to minimize impacts on aquatic resources. See Section 3.2 of this Application Narrative above for more details on the proposed construction timing.

6.3 Env-Wt 523.04 Classification of Dredging Projects

In accordance with Env-Wt 523.04(a), this Project is classified as a minimum impact project as it is a maintenance dredge associated with a previously constructed maintenance dredge project (within the previously permitted dredge area).

Figure 1: USGS Site Location

Lonza Hodgson Brook | Portsmouth, NH



Path: \\vhb.com\gis\proj\Bedford\53206.00 Hodgson Brook Design P\Project\Lonza Hodgson Brook\Lonza Hodgson Brook.aprx (ndevdikar; 11/21/2025)

Source: NH GRANIT, VHB

Figure 2: Aerial Overview

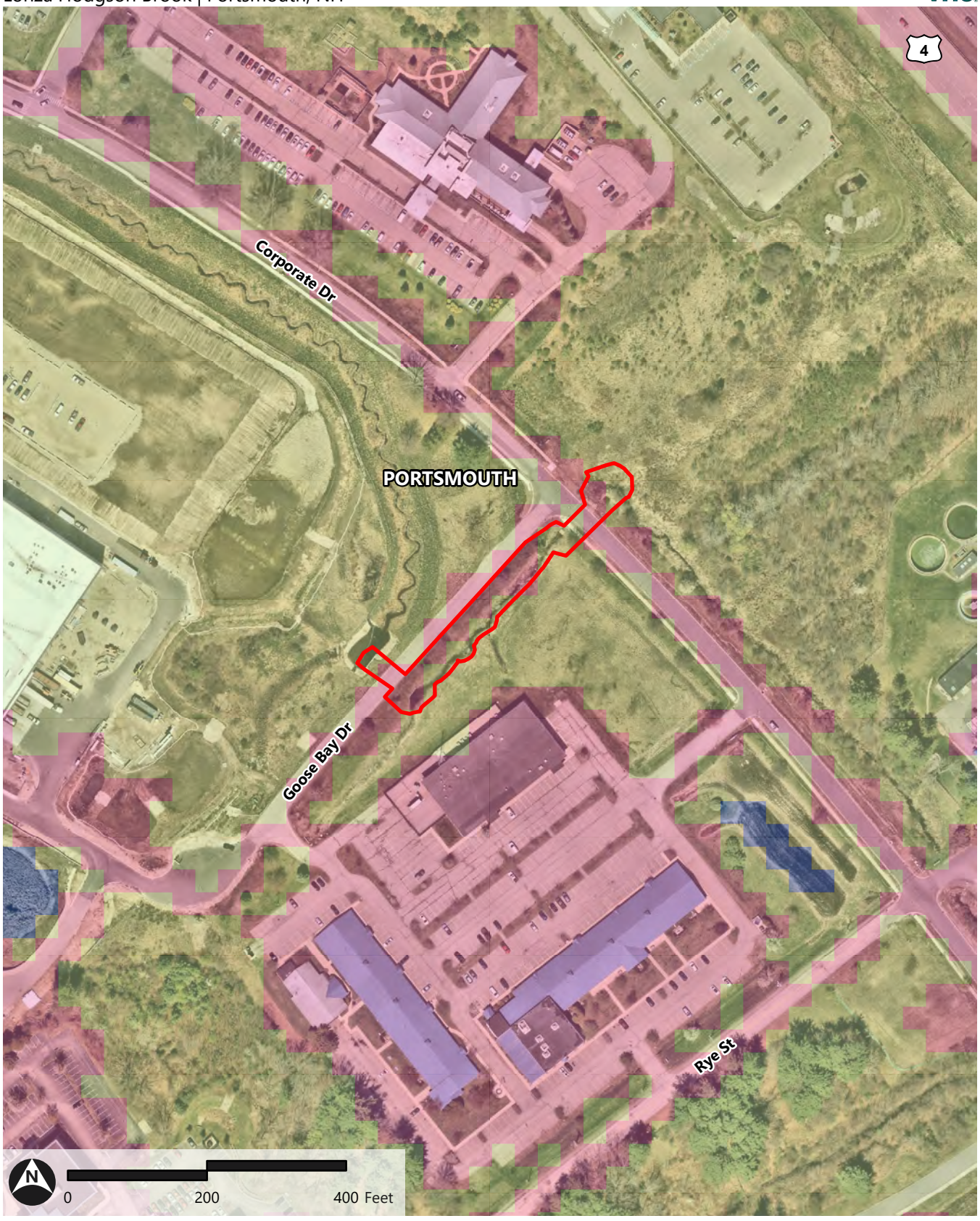
Lonza Hodgson Brook | Portsmouth, NH

Path: \\vhb.com\gis\proj\Bedford\53206.00 Hodgson Brook Design P\Project\Lonza Hodgson Brook\Lonza Hodgson Brook.aprx (ndevdikar, 11/18/2025)

Source: NH GRANIT, VHB

Figure 3: NHF&G WAP Habitat Types

Lonza Hodgson Brook | Portsmouth, NH



Project Area

Wildlife Action Plan Habitat Type

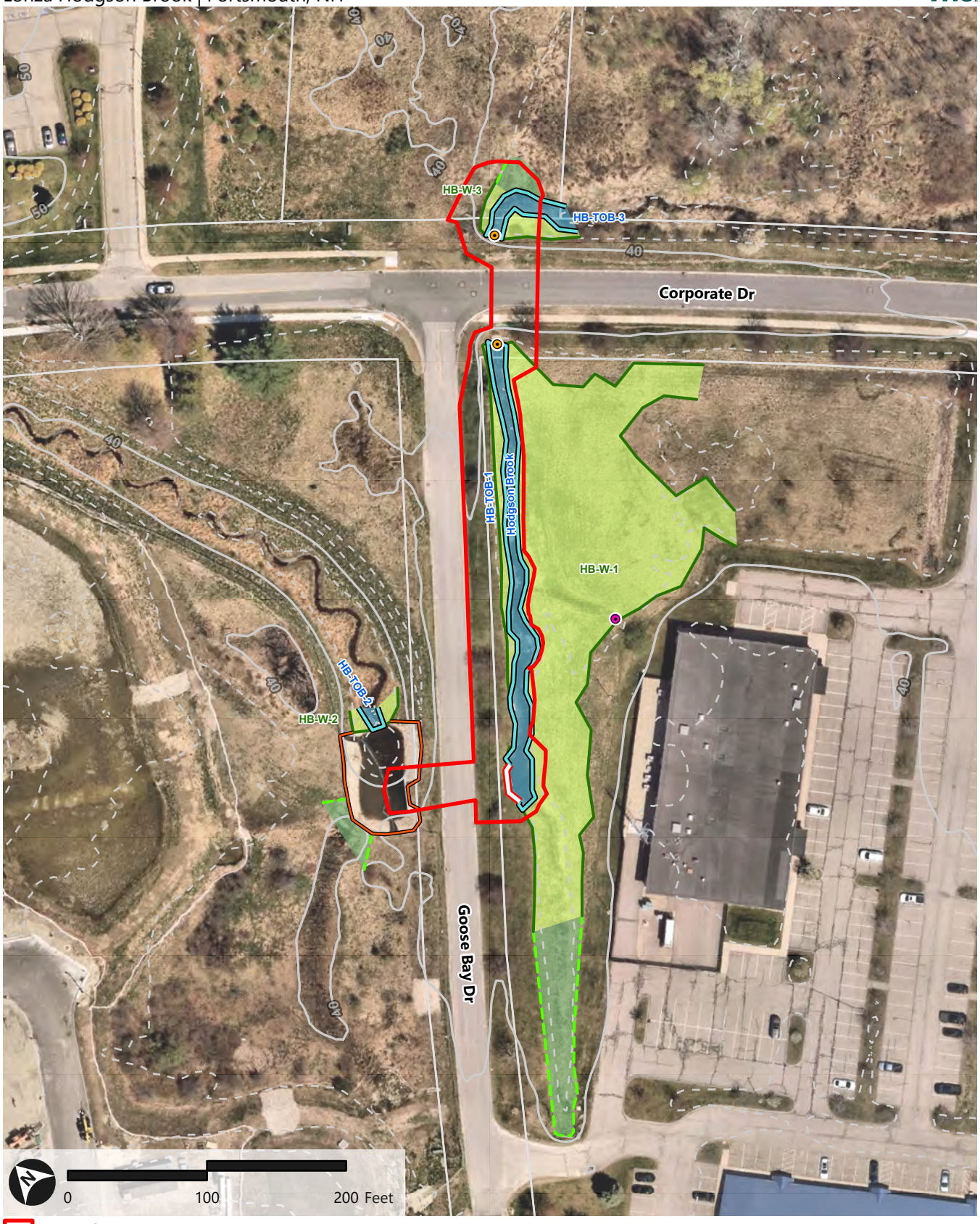
- Developed Impervious
- Developed or Barren land
- Open water

Source: NH GRANIT, VHB

Path: \\vhb.com\gis\proj\Bedford\53206.00 Hodgson Brook Design P\Project\Lonza Hodgson Brook\Lonza Hodgson Brook.aprx (ndevdikar, 11/18/2025)

Figure 4: Delineated Natural Resources Overview

Lonza Hodgson Brook | Portsmouth, NH



Source: NH GRANIT, VHB

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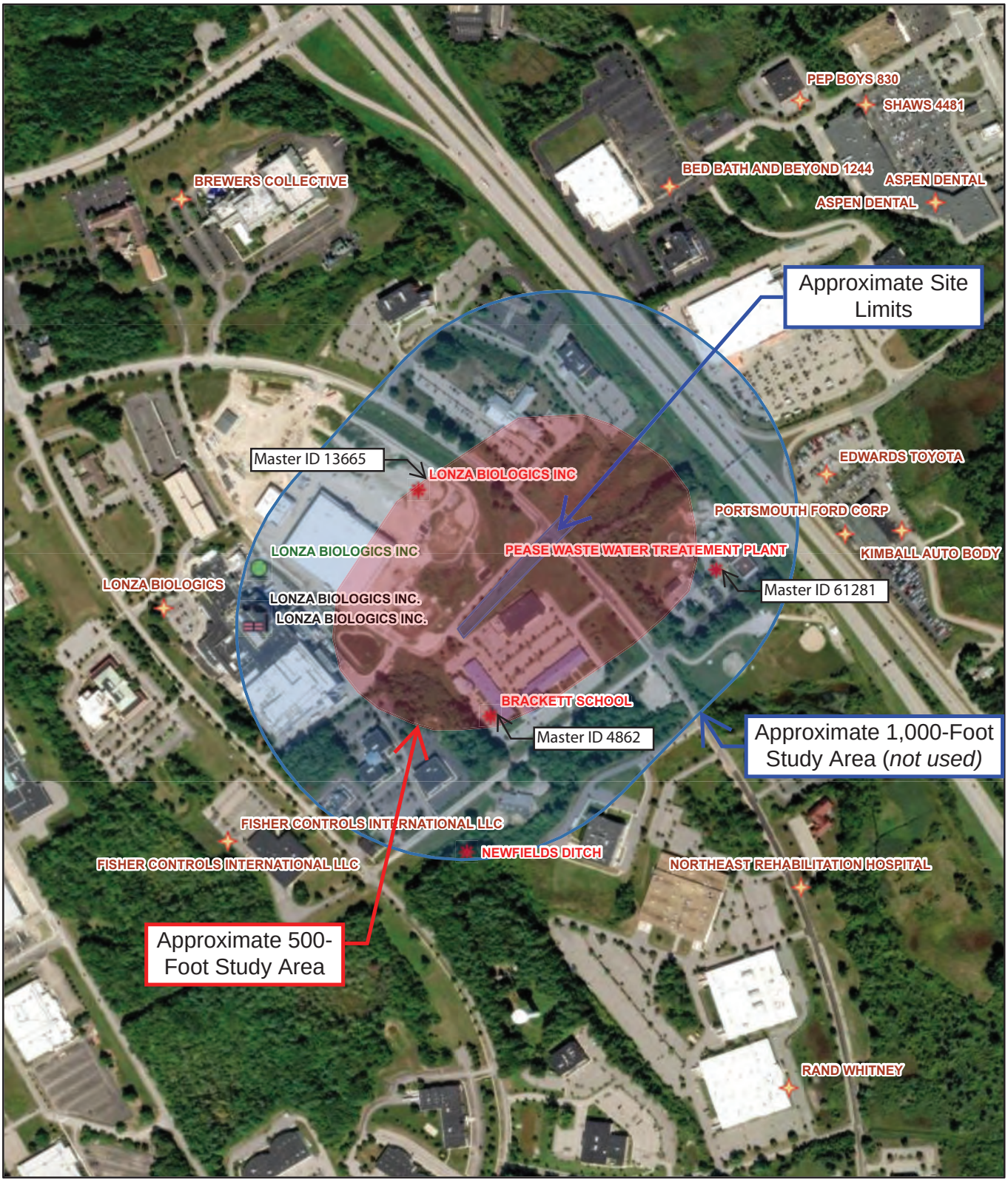
Figure 5: NH DES OneStop Data Mapper
Hodgson Brook Maintenance Dredge



9/23/2025, 1:37:37 PM

1:9,914

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

- Aboveground Storage Tank Sites
- Air Facility Systems
- Hazardous Waste Generators
- Remediation Sites
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations
- 2.4m Resolution Metadata

Maxar

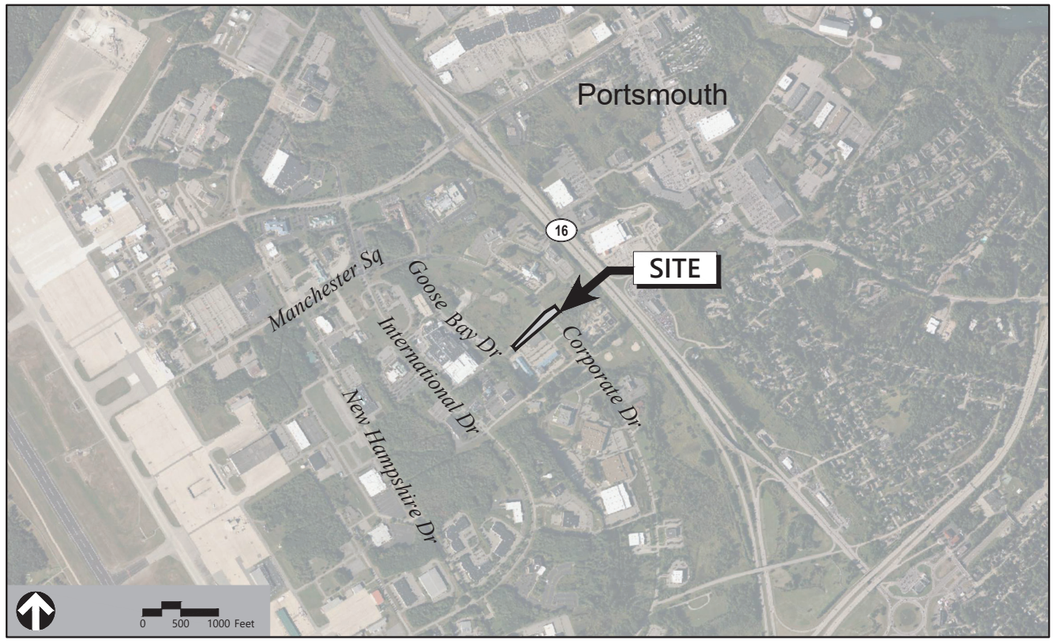
Appendix A: Project Plans

Site Plans

Issued for	Permitting
Date Issued	DECEMBER 5, 2025
Latest Issue	DECEMBER 5, 2025

Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire



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STATE OF NEW HAMPSHIRE
KRISTOPHER P. WILKES
No. 288
CERTIFIED WETLAND SCIENTIST

Owner

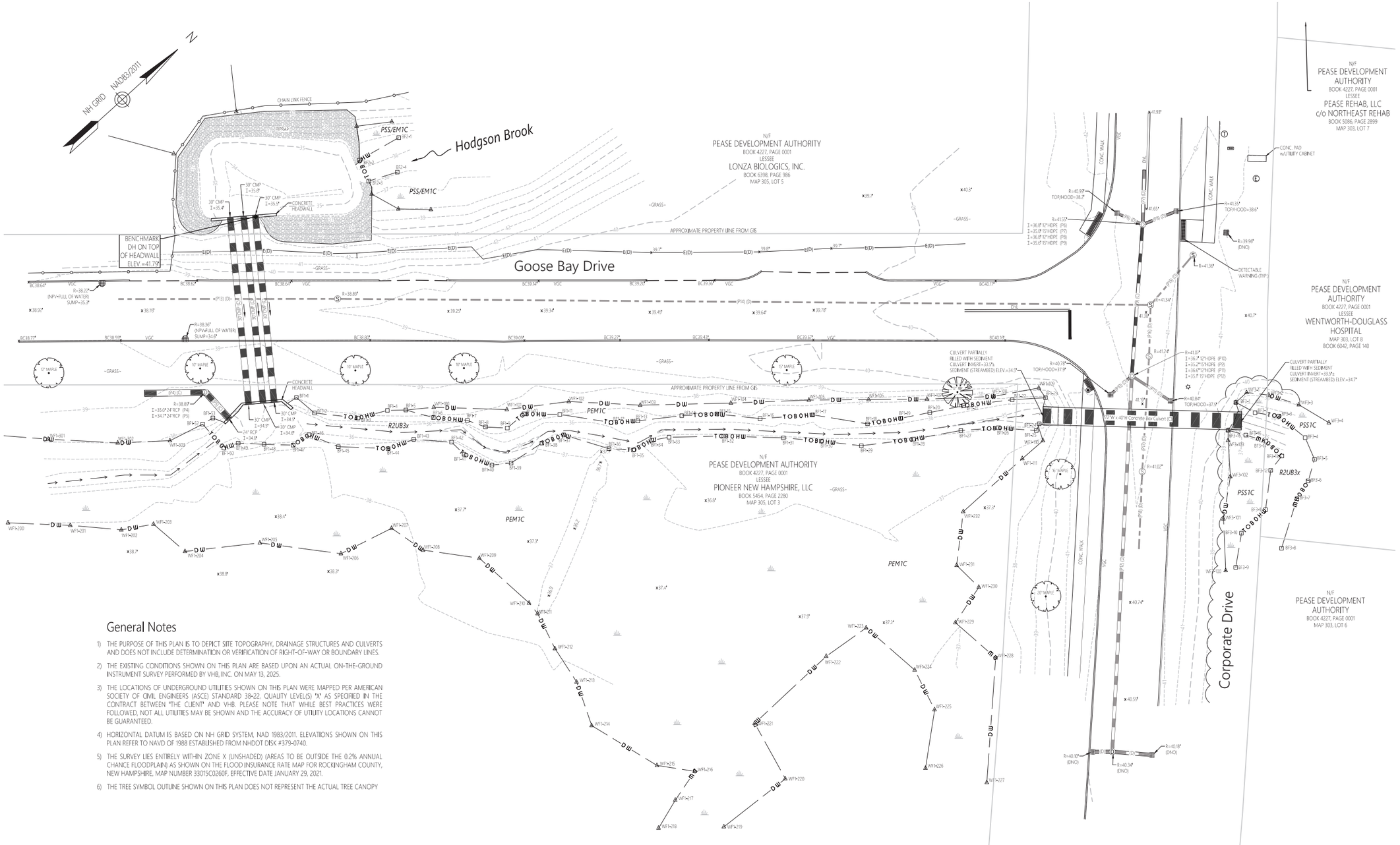
Lonza Biologics Inc.
101 International Drive
Portsmouth, NH 03801-2833

Sheet Index

No.	Drawing Title	Latest Issue
Sv-1	Existing Conditions Plan of Land	12/5/2025
C1.0	Legend and General Notes	12/5/2025
C2.0	River Channel Grading Plan and Profile	12/5/2025
C3.0	Construction Sequence, Erosion & Sediment Control, and Water Management Plan	12/5/2025
C4.0	Wetland Impact Plan	12/5/2025
C5.0	Details	12/5/2025

\\VHB.COM\GBL\PRO\BEDFORD\53206.00 HODGSON BROOK DESIGN P\05_WORK\CAD\EVPLANSET\53206.00-COV 5 December 2025

VHB Project : 53206.00
Issued for : Permitting



General Notes

1) THE PURPOSE OF THIS PLAN IS TO DEPICT SITE TOPOGRAPHY, DRAINAGE STRUCTURES AND CULVERTS AND DOES NOT INCLUDE DETERMINATION OR VERIFICATION OF RIGHT-OF-WAY OR BOUNDARY LINES.
2) THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB, INC. ON MAY 13, 2025.
3) THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN WERE MAPPED PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 38-22, QUALITY LEVEL(S) "X" AS SPECIFIED IN THE CONTRACT BETWEEN "THE CLIENT" AND VHB. PLEASE NOTE THAT WHILE BEST PRACTICES WERE FOLLOWED, NOT ALL UTILITIES MAY BE SHOWN AND THE ACCURACY OF UTILITY LOCATIONS CANNOT BE GUARANTEED.
4) HORIZONTAL DATUM IS BASED ON NH GRID SYSTEM, NAD 1983/2011. ELEVATIONS SHOWN ON THIS PLAN REFER TO NAVD OF 1988 ESTABLISHED FROM NHDOT DISK #379-0740.
5) THE SURVEY LIES ENTIRELY WITHIN ZONE X (UNSHADED) (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260F, EFFECTIVE DATE JANUARY 29, 2021.
6) THE TREE SYMBOL OUTLINE SHOWN ON THIS PLAN DOES NOT REPRESENT THE ACTUAL TREE CANOPY

Survey Endorsement

TO THE BEST OF PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THIS SURVEY WAS PREPARED; FROM PLANS AND DEEDS OF RECORD, WAS MADE FROM A FIELD SURVEY SUPERVISED BY ME, AND IN ORDINARY STANDARD OF CARE EXERCISED IN A STANDARD PROPERTY SURVEY OUTLINED IN NH LAN 503.

DATE LICENSED LAND SURVEYOR

Wetland Classification Codes

CODE	CODE DESCRIPTION
PEM1C	PALUSTRINE, EMERGENT, PERSISTENT, SEASONALLY FLOODED
PSS1C	PALUSTRINE, SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED
PSS/EM1C	PALUSTRINE, SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS / EMERGENT, PERSISTENT, SEASONALLY FLOODED
R2UB3x	RIVERINE, LOWER PERENNIAL, UNCONSOLIDATED BOTTOM, MUD, PERMANENTLY FLOODED, EXCAVATED

20 0 20 40
SCALE IN FEET

Wetland Notes

1) THE WETLANDS DEPICTED WERE DELINEATED BY KRIS WILKES CERTIFIED WETLAND SCIENTIST (NH CWS #288) ON JUNE 11, 2025 AND REFERENCE JURISDICTIONAL WETLANDS AND SURFACE WATERS WITHIN THE PROJECT SITE. THE WETLAND DELINEATION WAS PERFORMED IN ACCORDANCE WITH THE PROCEDURES AND STANDARDS OUTLINED IN THE *1987 CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0 (JANUARY 2012)*, SUPPLIMENTED WITH *FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN THE UNITED STATES, VERSION 8.2*, PUBLISHED BY THE NATURAL RESOURCE CONSERVATION SERVICE AND THE *FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4.0*, PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION. DOMINANT WETLAND VEGETATION WAS ASSESSED USING THE *NORTHCENTRAL AND NORTHEAST REGIONAL WETLAND PLANT LIST* PUBLISHED BY THE U.S. ARMY CORPS OF ENGINEERS. WETLANDS AND SURFACE WATERS WERE CLASSIFIED USING THE USFWS METHODOLOGY *CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES (COWARDIN ET AL. 1979, REVISED 1985).*

STATE OF NEW HAMPSHIRE KRISTOPHER P. WILKES No. 288 CERTIFIED WETLAND SCIENTIST

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Legend

- DRAIN MANHOLE
- CATCH BASIN
- 'D' SHAPED CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- TELEPHONE HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- STREET SIGN
- LIGHT POLE
- DNO DID NOT OPEN
- CNO COULD NOT OPEN
- NPV NO PIPES VISIBLE
- DYL DOUBLE YELLOW LINE
- DWL DASHED WHITE LINE
- SYL SINGLE YELLOW LINE
- DECIDUOUS TREE WITH SIZE
- CONIFEROUS TREE WITH SIZE
- EOP EDGE OF PAVEMENT
- CC CONCRETE CURB
- VGC VERTICAL GRANITE CURB
- SGE SLOPED GRANITE EDGE
- GUARDRAIL
- CHAIN LINK FENCE
- (PS1) (C) DRAINAGE LINE w/PIPE NUMBER & ASCE SUE LEVEL CLASSIFICATION
- (P41) (C) SEWER LINE w/PIPE NUMBER & ASCE SUE LEVEL CLASSIFICATION
- OHW OVERHEAD WIRE
- E UNDERGROUND ELECTRIC
- T TELEPHONE LINE
- G GAS LINE
- W WATER LINE
- TREE LINE
- TOB TOP OF BANK & ORDINARY HIGH WATER
- DW DELINEATED WETLAND BOUNDARY

Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire

No.	Revision	Date	Appvd.

Designed by | Checked by
Issued for | Date

August 20, 2025

Drawing Title
Existing Conditions Survey

Drawing Number
Sv-1

Sheet 1 of 1

Project Number
53206.00

Legend

Exist.	Prop.	
		PROPERTY LINE
		LIMIT OF WORK
10+00	10+00	RIGHT-OF-WAY/PROPERTY LINE BASELINE
		CONSTRUCTION LAYOUT
		APPROXIMATE RIGHT-OF-WAY
		GIS PARCEL LINES
DW WF1-100		DELINEATED WETLAND
OHW		ORDINARY HIGH WATER
TOB BF1-100		TOP OF BANK
TOBOHW		TOP OF BANK & ORDINARY HIGH WATER
		GRAVEL ROAD
EOP		EDGE OF PAVEMENT
BC	BC	BITUMINOUS CURB
CC	CC	CONCRETE CURB
CC	PCC	PRECAST CONC. CURB
SGE	SGE	SLOPED GRAN. EDGING
VGC	VGC	VERT. GRAN. CURB
		LIMIT OF CURB TYPE
		BUILDING
		BOLLARD
		BOLLARD W/LIGHT
		SIGN
		DOUBLE SIGN
		TREE
		FLOOD LIGHT
		MARSH
		STEEL GUARDRAIL
		WOOD GUARDRAIL
		FENCE
		TREE LINE
		LIMITS OF TREE CLEARING
		CONSTRUCTION FENCE
		TREE PROTECTION FENCE
		SPLIT RAIL FENCE
		WIRE FENCE
		STONE WALL
		RETAINING WALL
		STREAM / POND / WATER COURSE
		COFFERDAM/SAND BAGS
		DEMOLITION
		SILT FENCE
		SILT SOCK / STRAW WATTLE
4	4	MINOR CONTOUR
20	20	MAJOR CONTOUR

Exist.	Prop.	
		CONCRETE
		COBBLE STREAMBED MATERIAL
		ROUGHENED BEDROCK CHANNEL
		LOAM AND SEED
		RIPRAP
		CONSTRUCTION ENTRANCE
132.75 × 45.0 TW × 38.5 BW ×	132.75 × 45.0 TW × 38.5 BW ×	SPOT ELEVATION TOP & BOTTOM OF WALL ELEVATION
B-1		BEDROCK PROBE
#28		SEDIMENT PROBE
F.F.E=45.27'		FINISHED FLOOR ELEVATION
UD	UD	UNDERDRAIN
12"D	12"D	DRAIN
6"RD	6"RD	ROOF DRAIN
12"S	12"S	SEWER
OW	OW	OVERHEAD WIRE
6"W	6"W	WATER
3"G	G	GAS
T	T	TELEPHONE
CATV	CATV	CABLE TV
E	E	UNDERGROUND ELECTRIC
		CATCH BASIN
		DOUBLE CATCH BASIN
		GUTTER INLET
		DRAIN MANHOLE
		PLUG OR CAP
CO	CO	CLEANOUT
		FLARED END SECTION
		HEADWALL
S	S	SEWER MANHOLE
WV	WV	WATER VALVE & BOX
HYD	HYD	FIRE HYDRANT
		WATER GATE
		MONITORING WELL
W		WELL
E	DMH	ELECTRIC MANHOLE
		LIGHT POLE
T	TMH	TELEPHONE MANHOLE
T	T	TRANSFORMER PAD
		UTILITY POLE
		GUY POLE
		GUY WIRE & ANCHOR
HH	HH	HAND HOLE
		GAS GATE

Abbreviations

General

ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BF	BANKFULL
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CNO	COULD NOT OPEN
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EOW	EDGE OF WATER
EX	EXISTING
EXIST	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
FP100	100 YEAR FLOODPLAIN
FW	REGULATORY FLOODWAY
GRAN	GRANITE
LSA	LANDSCAPE AREA
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NPV	NO PIPE VISIBLE
NTS	NOT TO SCALE
OHW	ORDINARY HIGH WATER
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SQ	SQUARE
TBM	BENCHMARK
TOB	TOP OF BANK
TRC	TRUSLOW RESOURCE CONSULTING LLC
TS	TOP OF SLOPE
TYP	TYPICAL
WB50	50 FOOT WETLAND BUFFER
WF	WETLAND FLAG
WSE	WATER SURFACE ELEVATION

Utility

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Notes

General

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (811 OR 1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
4. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
5. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
6. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
7. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
8. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
9. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
10. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.

Utilities

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
4. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A LICENSED LAND SURVEYOR (LLS).
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

Water Control & Diversion Notes

1. COFFERDAMS ARE REQUIRED UPSTREAM AND DOWNSTREAM OF THE WORK AREA TO CONTROL THE INFLOW AND ADEQUATELY DEWATER THE EXCAVATION. STEEL SHEETING MAY BE REQUIRED DEPENDING ON THE AVERAGE WATER LEVELS AT THE TIME OF CONSTRUCTION AND THE CONTRACTOR'S METHOD OF DEWATERING.
2. CONTROL OF WATER WITHIN THE COFFERDAMS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT DISTURBANCE OF THE BEARING SOIL. PUMPING AREAS SHALL BE LOCATED OUTSIDE THE CULVERT AND WINGWALLS SUPPORT LIMITS AND PROPERLY FILTERED TO PREVENT THE PUMPING OF FINES.
3. ALL MEANS AND METHODS ASSOCIATED WITH HANDLING WATER DURING CONSTRUCTION SHALL BE LOCATED WITHIN THE LIMITS OF WORK SHOWN ON THE WETLANDS PERMIT APPROVED FOR THE PROJECT.
4. IT SHOULD BE NOTED THAT IN SOME LOCATIONS PRE-EXCAVATION OF COBBLES AND BOULDERS MAY BE REQUIRED PRIOR TO PLACING STEEL SHEETING. DURING EXCAVATION THE CONTRACTOR SHALL DISTURB THE AREA AS LITTLE AS POSSIBLE AND USE NECESSARY PRECAUTIONS TO MINIMIZE THE IMPACTS TO THE STREAM.
5. THE CONTRACTOR SHOULD BE PREPARED TO PERFORM ANY SUBSURFACE INVESTIGATIONS NEEDED FOR THE COFFERDAM DESIGN. ALL COSTS ASSOCIATED WITH THE COMPLETION OF SUBSURFACE INVESTIGATIONS, THE REDESIGN, OR THE REINSTALLATION OF COFFERDAMS DUE TO SUBSURFACE CONDITIONS ENCOUNTERED DURING THE COFFERDAM INSTALLATION THAT ARE DIFFERENT FROM WHAT THE COFFERDAM DESIGNER ASSUMED AND/OR INTERPRETED FROM THE AVAILABLE SUBSURFACE INFORMATION, SHALL BE SUBSIDIARY TO THE ASSOCIATED COFFERDAM ITEM.
6. THE WATER DIVERSION STRUCTURE ITEM IS INCLUDED IN THE CONTRACT FOR THE PURPOSE OF DIVERTING ANY SURFACE WATER ABOVE NORMAL HIGH WATER AWAY FROM THE CHANNEL DREDGING EXCAVATIONS. THE WATER DIVERSION STRUCTURE SHALL BE CONSTRUCTED AND MAINTAINED IN A MANNER THAT MEETS THE REQUIREMENTS OF SECTION 503 OF THE 2016 NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ALL APPLICABLE CONTRACT AND ENVIRONMENTAL REQUIREMENTS.

Dredged Material Handling Notes

1. ALL DREDGED MATERIAL SHALL BE PLACED WITHIN UPLAND AREA ON PEASE DEVELOPMENT AUTHORITY PROPERTY OUTSIDE THE JURISDICTION OF THE NHDES WETLANDS BUREAU.

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Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire

No.	Revision	Date	Apprvd

Designed by BJM | Checked by AHF

Issued for: Permitting

Date: December 5, 2025

Not Approved for Construction

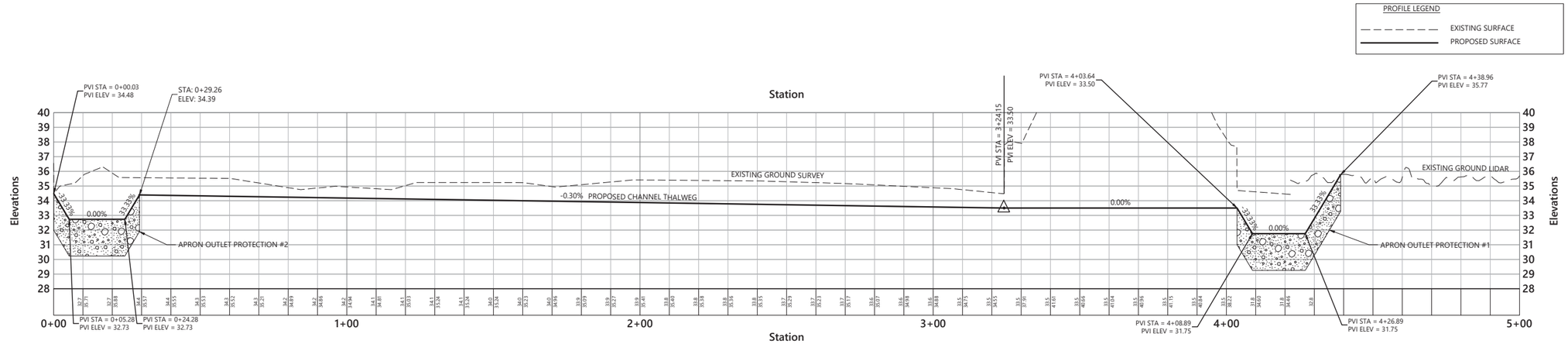
Drawing Title: Legend and Notes

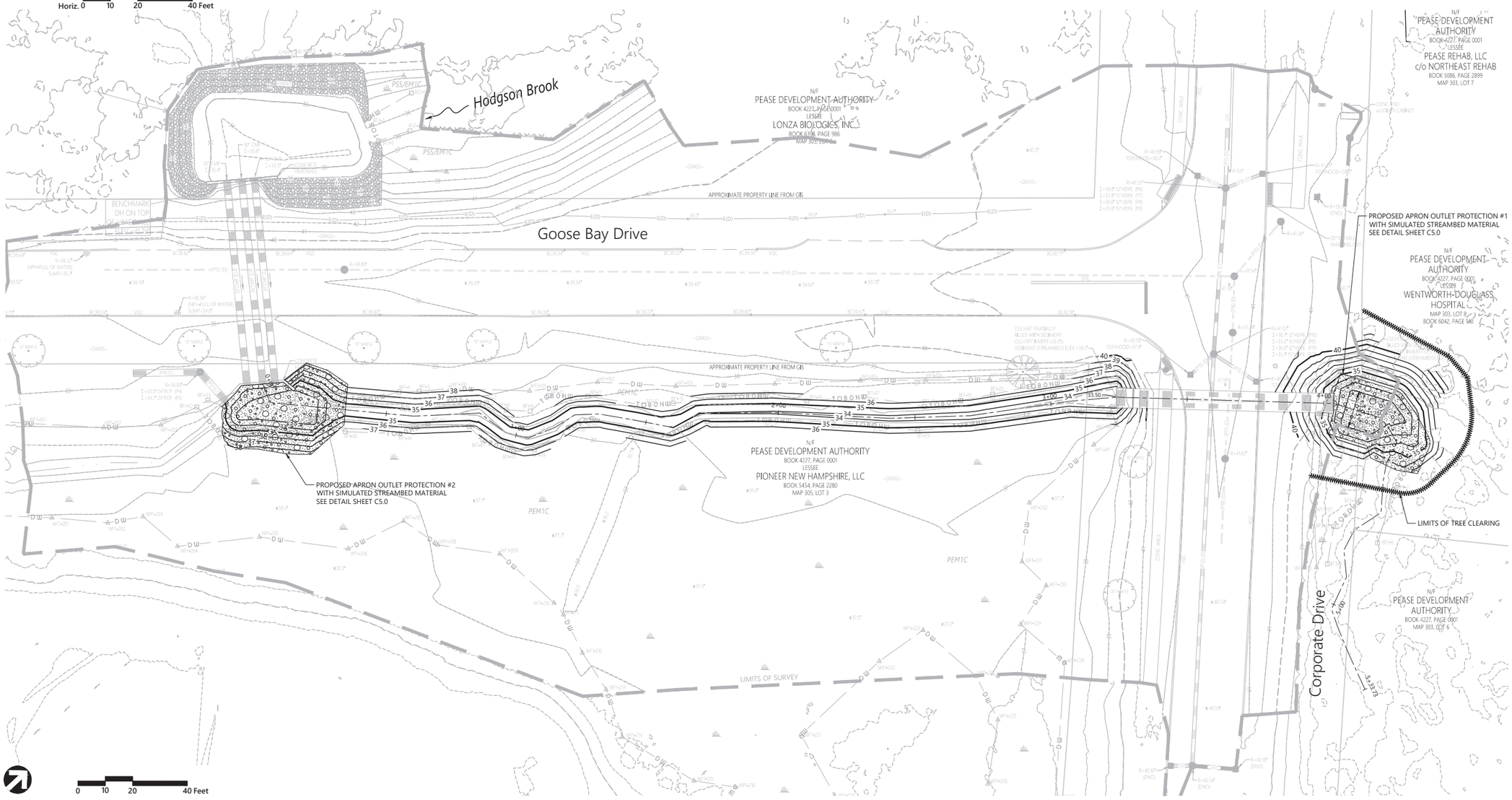
Drawing Number: C1.0

Sheet 1 of 5

Project Number: 53206.00

Saved Friday, December 5, 2025 8:52:26 AM BMILLER Plotted Friday, December 5, 2025 9:06:08 AM Ben Miller





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Notes:

1. THE EXISTING CONDITIONS TOPOGRAPHY SHOWN OUTSIDE THE LIMITS OF SURVEY ARE BASED ON PUBLICLY AVAILABLE LIDAR MAPPING.

Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire

No.	Revision	Date	Appvd.

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Drawing Title
River Channel Grading Plan and Profile

Drawing Number
C2.0

Sheet 2 of 5

Project Number
53206.00

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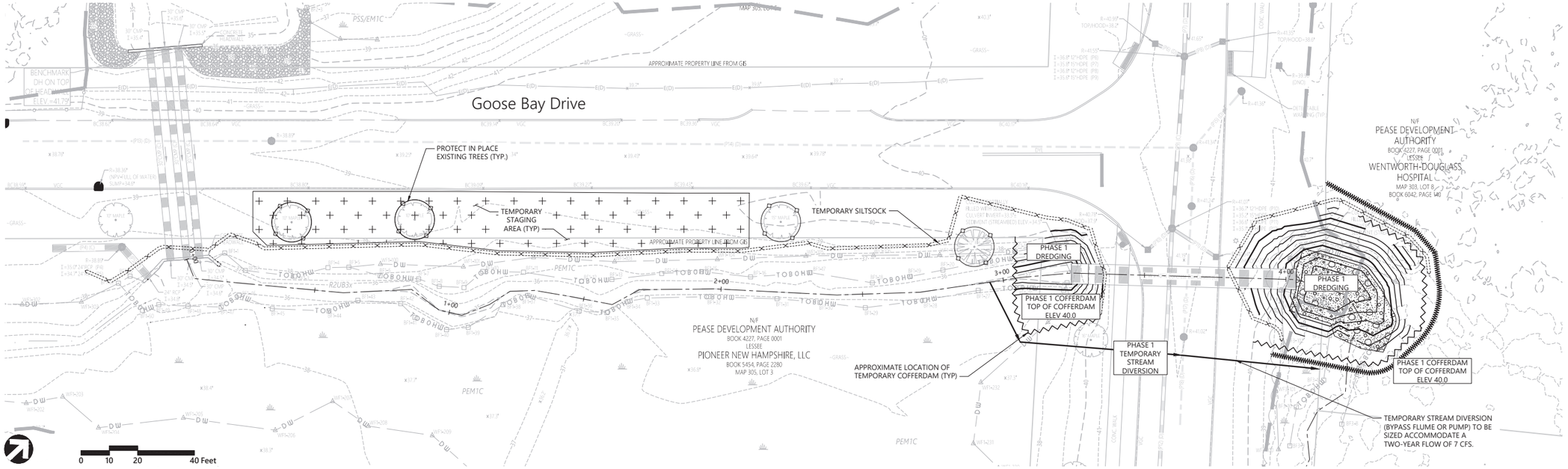
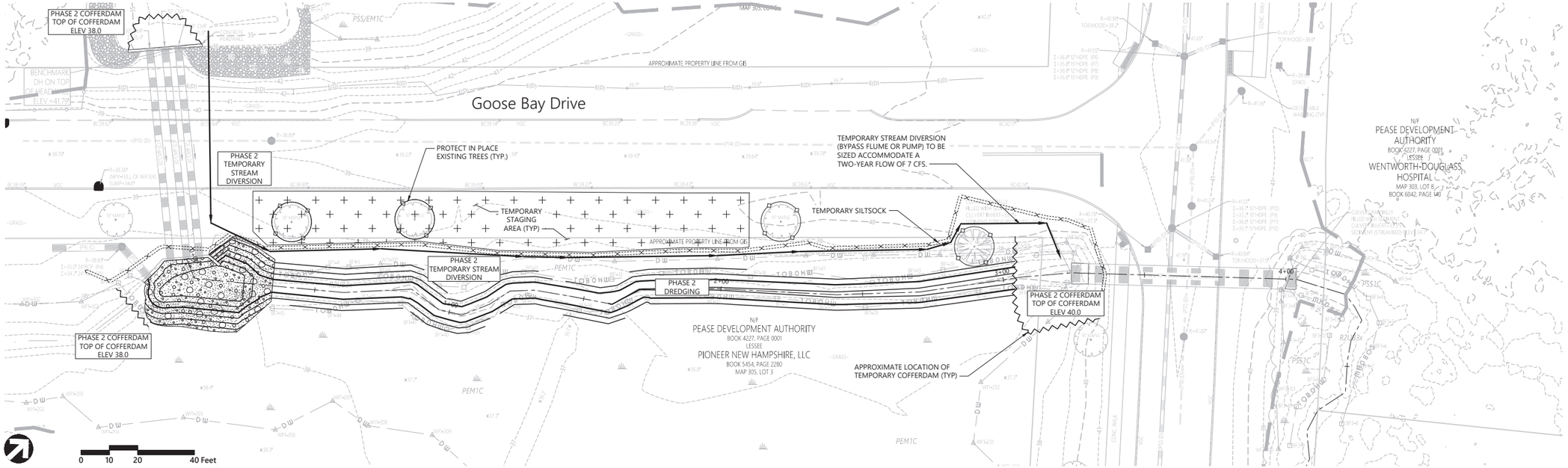


PHASE 1



PHASE 2

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CONSTRUCTION SEQUENCE:

1. CONTRACTOR TO BEGIN CHANNEL DREDGING WORK IN PHASES, MOVING UPSTREAM TO DOWNSTREAM. PROVIDED PLAN ILLUSTRATES CONSTRUCTION IN TWO PHASES. CONTRACTOR TO PROVIDE A CONTROL OF WATER PLAN; FINAL NUMBER OF PHASES IS AT THE CONTRACTOR'S DISCRETION.
2. DREDGE SEDIMENT AND GRADE PROPOSED CHANNEL. INSTALL COFFERDAM AND TEMPORARY STREAM DIVERSION FOR EACH PHASE PRIOR TO DREDGING WORK.
3. REMOVE ALL COFFERDAMS AND STREAM DIVERSIONS. RESTORE AREA AT THESE LOCATIONS.

Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire

No.	Revision	Date	Appvd.

Designed by: BJM
Checked by: AHF
Issued for: Permitting
Date: December 5, 2025

Not Approved for Construction

Drawing Title
Construction Sequence, Erosion & Sediment Control, & Water Management Plan

Drawing Number
C3.0

Sheet 3 of 5

Project Number
53206.00

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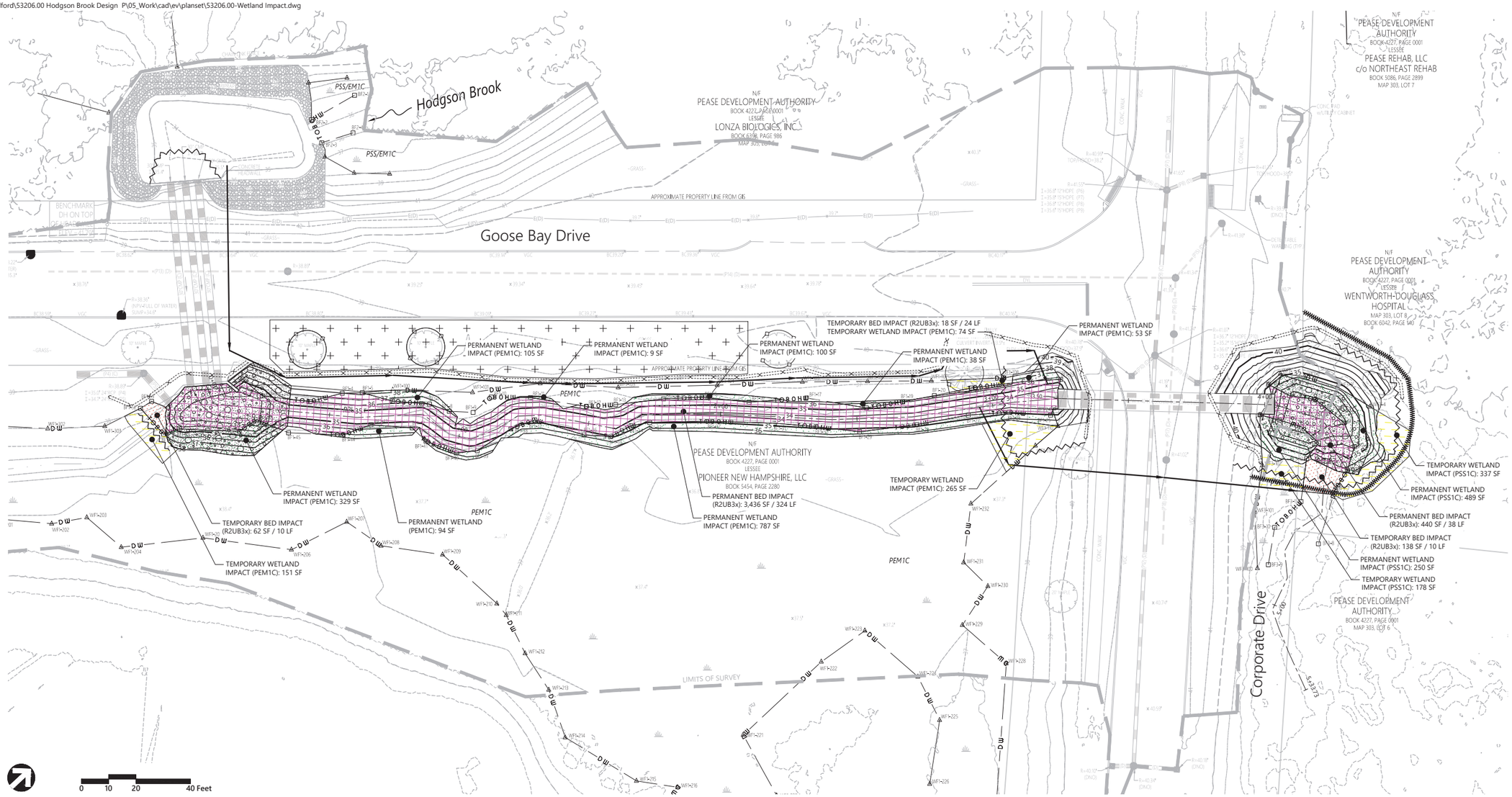

Wetland Impact Summary

Wetland Classification	Permanent			Temporary			Purpose
	Bed	Bank	Wetland	Bed	Bank	Wetland	
PEM1C			1,515 SF			490 SF	PERMANENT IMPACTS ASSOCIATED WITH CHANNEL DREDGING AND PREFORMED SCOUR HOLE. TEMPORARY IMPACTS ASSOCIATED WITH TEMPORARY WATER DIVERSION.
R2UB3x	3,876 SF / 362 LF	724 SF* / 724 LF		218 SF / 44 LF	88 SF* / 88 LF		PERMANENT IMPACTS ASSOCIATED WITH CHANNEL DREDGING AND PREFORMED SCOUR HOLE. TEMPORARY IMPACTS ASSOCIATED WITH TEMPORARY WATER DIVERSION. *ASSUME 1-FOOT BANK HEIGHT.
PSS1C			739 SF			515 SF	PERMANENT IMPACTS ASSOCIATED WITH CHANNEL DREDGING AND PREFORMED SCOUR HOLE. TEMPORARY IMPACTS ASSOCIATED WITH TEMPORARY WATER DIVERSION.
Totals	3,876 SF / 362 LF	724 SF / 724 LF	2,254 SF	218 SF / 44 LF	88 SF / 88 LF	1005 SF	

RSA 482-A Impacts

Wetland and River Impacts (SF)

PERMANENT STREAM IMPACTS:	4,600 SF
PERMANENT WETLAND IMPACTS:	2,254 SF
TOTAL PERMANENT IMPACTS:	6,854 SF
TEMPORARY STREAM IMPACTS:	306 SF
TEMPORARY WETLAND IMPACTS:	1005 SF
TOTAL TEMPORARY IMPACTS:	1,311 SF
TOTAL PROJECT IMPACTS =	8,165 SF

Wetland and River Impacts (LF)

PERMANENT STREAM IMPACTS:	1,086 LF
TEMPORARY STREAM IMPACTS:	132 LF
TOTAL PROJECT IMPACTS:	1,218 LF

Legend

- DW — DELINEATED WETLAND
- TOBOHW — TOP OF BANK & ORDINARY HIGH WATER
- WF1~101 / BF1~100 — WETLAND DESIGNATION NUMBER
- PEM1C — WETLAND DESIGNATION NUMBER
- PERMANENT BED IMPACT
- PERMANENT WETLAND IMPACT
- TEMPORARY BED IMPACT
- TEMPORARY WETLAND IMPACT

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STATE OF NEW HAMPSHIRE KRISTOPHER P. WILKES No. 288 CERTIFIED WETLAND SCIENTIST

Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire

No.	Revision	Date	Appvd.

Designed by BJM — Checked by AHF

Issued for: Permitting — Date: December 5, 2025

Not Approved for Construction

Drawing Title: Wetland Impact Plan

Drawing Number: C4.0

Sheet 4 of 5

Project Number: 53206.00

Saved Thursday, November 20, 2025 9:27:40 AM BMILLER Plotted Friday, December 5, 2025 10:09:02 AM Ben Miller

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PERCENT PASSING	SIZE (IN)
99	2.6 to 3.7
95	2.5 to 3.6
84	2.3 to 3.4
50	1.7 to 2.6
30	0.6 to 0.8
16	0.14 to 0.21
5	0.01 to 0.016

NOTES:

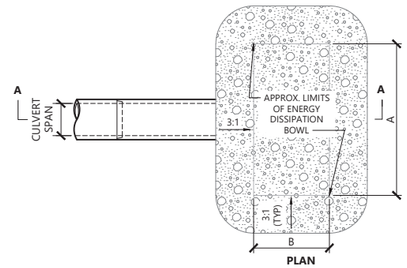
1. CONTRACTOR SHALL ADD UP TO 10% SAND TO GRAVEL-COBBLE BED MIX TO FILL VOIDS.

Streambed Material Specification

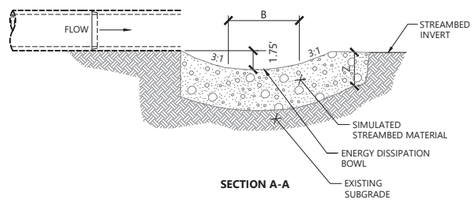
08/23

N.T.S. Source: VHB EV_1100

ID	CULVERT SPAN (S)	Z	A	B
APRON OUTLET PROTECTION #1	6 FT	2.5 FT	12 FT	18 FT
APRON OUTLET PROTECTION #2	VARIES	2.5 FT	VARIES. SEE PLAN	18 FT



PLAN

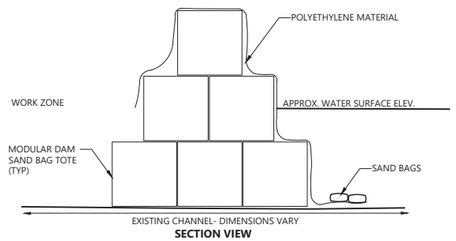


SECTION A-A

Apron Outlet Protection

1/16

N.T.S. Source: VHB REV LD_133



SECTION VIEW

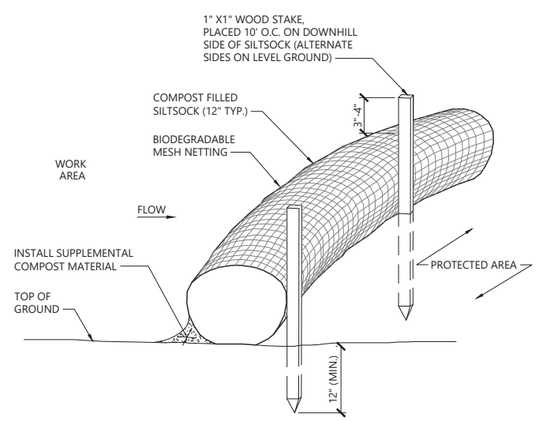
NOTES:

1. CONTRACTOR TO DESIGN AND INSTALL COFFER DAM TO CONTROL OVERTOPPING FLOWS AND PREVENT EROSION OR DAMAGE TO SURROUNDING LAND

Coffer Dam (Sand Bags)

08/23

N.T.S. Source: VHB EV_1103



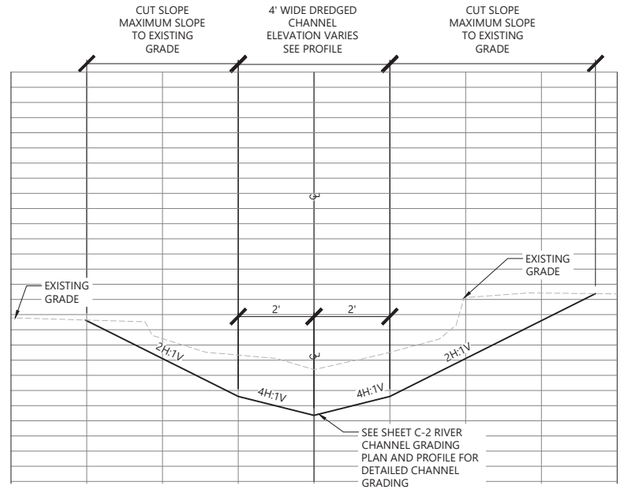
NOTES

1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL.
2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. UPON SITE STABILIZATION, COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Siltsock - Erosion Control Barrier

10/20

N.T.S. Source: VHB LD_658



Typical Stream Channel Section

08/23

N.T.S. Source: VHB EV_1102

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Hodgson Brook

Goose Bay Drive
Portsmouth, New Hampshire

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Issued for Permitting Date December 5, 2025

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Drawing Title
Details

Drawing Number
C5.0

Sheet 5 of 5

Project Number
53206.00

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Appendix B: Representative Site Photographs

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 1

Photo Date: 06/11/2025

Orientation: NE

Description:

View northeast at outlet side of the concrete headwall and triple 30” CMP pipes conveying Hodgson Brook underneath Goosebay Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 2

Photo Date: 06/11/2025

Orientation: SW

Description:

View southwest at the upper (western) limits of delineated Wetland 1 and associated drainage flowing towards the culvert headwall depicted in Photo 1.

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PHOTOGRAPHIC LOG

Photo No: 3

Photo Date: 06/02/2025

Orientation: E

Description:

View east from the outlet side of the existing culvert headwall looking downstream at Hodgson Brook and bordering Wetland 1.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 4

Photo Date: 06/11/2025

Orientation: W

Description:

View west (upstream) along Hodgson Brook towards the outlet of the existing culvert headwall depicted in Photo 1.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 5

Photo Date: 06/11/2025

Orientation: E

Description:

View east (downstream) along the channel of Hodgson Brook with bordering Wetland 1 on either side. Goosebay Drive depicted in photo left.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 6

Photo Date: 06/11/2025

Orientation: W

Description:

View west at the narrow area of Wetland 1 situated between the toe of slope associated with the road embankment of Goose Bay Drive and the delineated northern bank of the Hodgson Brook.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 7

Photo Date: 06/11/2025

Orientation: W

Description:

View west (upstream) along the channel of Hodgson Brook with bordering Wetland 1 on either side. Photo represents the channel approximately mid-way between the culvert outlet under Goosebay Drive and the culvert inlet under Corporate Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 8

Photo Date: 06/11/2025

Orientation: E

Description:

View east (downstream) along the channel of Hodgson Brook with bordering Wetland 1 on either side. Photo represents the channel approximately mid-way between the culvert outlet under Goosebay Drive and the culvert inlet under Corporate Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 9

Photo Date: 06/11/2025

Orientation: E

Description:

View east towards the inlet of the existing 72-inch wide by 40-inch-high concrete box culvert conveying Hodgson Brook underneath Corporate Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 10

Photo Date: 06/11/2025

Orientation: W

Description:

View west from above the existing box culvert conveying Hodgson Brook underneath Corporate Drive. Photo depicts the channel of Hodsgon Brook and bordering Wetland 1 on either side. Goosebay Drive is depicted in photo right.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 11

Photo Date: 06/11/2025

Orientation: NW

Description:

View northwest at at the wider section of Wetland 1 extending southerly away from Hodsgon Brook in a depressional area located between Hodgson Brook, Corporate Drive, and a parking lot associated with existing development located immediately to the southwest.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 12

Photo Date: 06/11/2025

Orientation: E

Description:

View east at the wider segment of Wetland 1 located in a depressional area bordering Hodgson Brook to the south.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 13

Photo Date: 06/11/2025

Orientation: NW

Description:

View northwest at Wetland 1 along it's southwestern perimeter. Hogdson Brook and Goosebay Drive are depicted in the photo background.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 14

Photo Date: 06/11/2025

Orientation: E

Description:

View east at Wetland 1 bordering Hodgson Brook to the south.

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PHOTOGRAPHIC LOG

Photo No: 15

Photo Date: 06/11/2025

Orientation: W

Description:

View at the upper western end of Wetland 1 bordering Hodgson Brook to the south.

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PHOTOGRAPHIC LOG

Photo No: 16

Photo Date: 06/11/2025

Orientation: E

Description:

View east at the far delineated western extent of Wetland 1, upstream of the culvert outlet headwall of Hodgson Brook located under Goosebay Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 17

Photo Date: 06/11/2025

Orientation: NE

Description:

View northeast at the densely vegetated outlet of the existing 72-inch wide by 40-inch-high concrete box culvert conveying Hodgson Brook underneath Corporate Drive.

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PHOTOGRAPHIC LOG

Photo No: 18

Photo Date: 06/11/2025

Orientation: N

Description:

View north at Wetland 3 surrounding the culvert outlet of Hodgson Brook to the east of Corporate Drive.

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PHOTOGRAPHIC LOG

Photo No: 19

Photo Date: 06/11/2025

Orientation: SW

Description:

View southwest at Wetland 3, looking towards the culvert outlet of Hodsgon Brook underneath Corporate Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 20

Photo Date: 06/11/2025

Orientation: S

Description:

View south (downstream) at the channel of Hodgson Brook as it flows away (south) from Corporate Drive. Photo is taken from the eastern bank.

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PHOTOGRAPHIC LOG

Photo No: 21

Photo Date: 06/11/2025

Orientation: S

Description:

View south (downstream) at the channel of Hodgson Brook as it flows away (south) from Corporate Drive. Photo is taken from the western bank.

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PHOTOGRAPHIC LOG

Photo No: 22

Photo Date: 06/11/2025

Orientation: N

Description:

View north from the western bank of Hodgson Brook downstream of Corporate Drive. Photo also Wetland 3 bordering Hodgson Brook located downslope of Corporate Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 23

Photo Date: 06/11/2025

Orientation: SW

Description:

View southwest of the existing constructed plunge pool northwest of Goose Bay Drive.

Engineers | Scientists | Planners | Designers

PHOTOGRAPHIC LOG

Photo No: 24

Photo Date: 06/11/2025

Orientation: SE

Description:

View southeast of the upstream end of the culvert that conveys stream flows beneath Goose Bay Drive.

Appendix C: Wetland Function-Value Evaluation Forms

Wetland Function-Value Evaluation Form

Total area of wetland N/A Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Roads, Commercial Development, Landscaped Distance to nearest roadway or other development Approx. 25'

Dominant wetland systems present R2UB3x Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Low

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Hodgson Brook

Latitude 43.08337 Longitude 70.79953

Prepared by: KW Date June 12, 2025

Wetland Impact:
Type Stream Area See Plans

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	2,5,7,8,9,15	X	Stream flow primarily influenced by run-off from surrounding developed areas. Some opportunity for groundwater recharge through stream bed.
Floodflow Alteration	Y	3,4,5,6,7,8,9,11,15	X	Stream is surrounded by commercial development/urban environment. Receives, conveys and detains flow from surrounding developed areas. Has storage ability
Fish and Shellfish Habitat	Y	3,5,7,8,10,11,16,17	X	Documented poor macroinvertebrate health; able to support fish populations. Documented fish community type: warmwater.
Sediment/Toxicant Retention	Y	1,2,3,4,10,11,12,16	X	Large % of developed land within stream's watershed. Slow moving with densely vegetated banks through project reach. Sediment deposits observed in channel
Nutrient Removal	Y	3, 4, 6, 7, 8, 9, 10, 11, 13, 14	X	Stream characteristics through project reach allow for nutrient retention. Stream documented with high specific conductance, pH, and nutrients.
Production Export	Y	1, 6,7,10		Stream contains densely vegetated banks.
Sediment/Shoreline Stabilization	Y	1, 3, 4, 5, 7,12,15		Stream has a shallow banks (1-2 feet) and in some areas banks are less defined. Adjacent wetlands contribute to stabilization of this watercourse.
Wildlife Habitat	Y	6, 8, 13,19, 21		Stream flows through urban/commercial areas so contributes to wildlife habitat and food sources, but stream is highly degraded.
Recreation	N			Stream is small through an urban environment and does not provide opportunity for recreational opportunities.
Educational/Scientific Value	N			Stream is heavily impacted and not suitable as an educational site.
Uniqueness/Heritage	N			Stream is heavily impacted by surrounding environment and does not contain unique/documented traits.
Visual Quality/Aesthetics	N			Stream is degraded and within an highly developed landscape.
ES Endangered Species Habitat	N			
Other				

Notes:

* Refer to backup list of numbered considerations.

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code:__Hodgson Brook__Evaluation Date:_6/12/2025_ Evaluator:_**Kris Wilkes**

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	Hodgson Brook is surrounded by a highly developed landscape of commercial development	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	Evidence of human disturbance/ alteration of the brook's channel and surrounding areas is present.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within or adjacent Hodgson Brook.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	No recent logging activity was observed within or adjacent to Hodgson Brook.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Hodgson Brook is heavily impacted by surrounding development.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Invasive species were observed bordering Hodgson Brook. See wetlands application for species.	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	Goose Bay Drive, Corporate Drive, and parking lots associated with existing commercial development are located directly adjacent and within 500ft of the brook.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Hodgson Brook is surrounded by existing commercial buildings, parking lots and associated roadways.	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	Roadway and parking lots are located within 500 feet of Hodgson Brook.	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	Existing culverts convey Hodgson Brook underneath Corporate Drive and Goose Bay Drive.	a. No human made structures present **upstream of, or in** the wetland. b. One or more human made structures present **upstream of, or** in the wetland but hydrologic modification is slight c. One or more human made structures present **upstream of, or** in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY
(Add scores for each question and divide by 10) **3.2**

Wetland Function-Value Evaluation Form

Total area of wetland 0.82 AC Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Roads, Commercial Development, Landscaped Areas Distance to nearest roadway or other development Approx. 20'

Dominant wetland systems present PEM1C Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Low

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland 1

Latitude 43.08357 Longitude 70.79913

Prepared by: KW Date 6/12/2025

Wetland Impact:
Type Permanent and Temporary Area See Plans

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	5,7,9,15		Wetland is associated with a watercourse and indicated variable water levels. Some recharge opportunity available.
Floodflow Alteration	Y	3,4,5,6,7,8,9,10,11,13,15,16,18	X	Wetland directly borders Hodgson Brook in a depressional area. Decent flood storage capacity.
Fish and Shellfish Habitat	Y	4,8,10,11,12,14,16,17	X	Wetland is directly contiguous to Hodgson Brook which supports fish populations.
Sediment/Toxicant Retention	Y	1,2,4,5,6,10,11,16	X	Wetland directly borders Hodgson Brook, evidence of sedimentation is present. Surrounding area is highly developed.
Nutrient Removal	Y	3,4,7,8,9,10,11,13,14	X	Wetland directly borders Hodgson Brook, dense vegetation present. Surrounding area is highly developed.
Production Export	Y	1,6,7,10,12		Densely vegetated wetland bordering perennial stream. However, not particularly large or diverse.
Sediment/Shoreline Stabilization	Y	1,2,3,4,5,7,12,13,15	X	Densely vegetated wetland borders Hodgson Brook. Wetland widens out along the southern bank..
Wildlife Habitat	Y	6,8,10,13,19, 21		Limited wildlife habitat value due to landscape position (surrounding by highly developed areas).
Recreation	N			Wetland's size and location does not provide for recreational opportunities.
Educational/Scientific Value	N			Wetland size, location and characteristics do not make it suitable for an educational site.
Uniqueness/Heritage	N	1,7,11,17,22		Located within a highly developed landscape on private property. Wetland not unique; exhibits common characteristics.
Visual Quality/Aesthetics	N			Wetland is not aesthetically unique and located on private property.
ES Endangered Species Habitat	N			
Other				

Notes:

* Refer to backup list of numbered considerations.

Name/Code:__Wetland 1_____ Evaluation Date:___6/12/2025_____ Evaluator:_**Kris Wilkes**_____

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	Wetland is surrounded by a highly developed landscape of commercial development	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	No fill was observed within the wetland boundary, some remnant ruts were evident.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within or adjacent to the wetland.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	No logging activity was observed within or adjacent to the wetland.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Wetland does not appear to be consistently mowed, however some former ruts were observed.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Invasive species were observed within the wetland. See wetland application for list of species.	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	The wetland is surrounded by roadway (Goose Bay Drive, Corporate Drive, and parking lots associated with existing commercial development.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Several buildings and an associated parking lot is located within 500 feet of the wetland edge. Roadways border the wetland to the north, east and south.	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	Roadway and parking lots are located within 500 feet of the wetland edge.	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	An existing culvert conveys drainage along the southern perimeter of the wetland conveys. Wetland 1 borders Hodgson Brook which is culverted at both ends through the project area.	a. No human made structures present **upstream of, or in** the wetland. b. One or more human made structures present **upstream of, or** in the wetland but hydrologic modification is slight c. One or more human made structures present **upstream of, or** in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY
(Add scores for each question and divide by 10) **5.0**

Wetland Function-Value Evaluation Form

Total area of wetland 0.02 AC Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Roads, Commercial Development, Landscaped Areas Distance to nearest roadway or other development Approx. 20'

Dominant wetland systems present PSS1C Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Low

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland 3

Latitude 43.08413 Longitude 70.79843

Prepared by: KW Date 6/12/2025

Wetland Impact:
Type Permanent and Temporary Area See Plans

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	5,7,9,15		Wetland is associated with a watercourse and indicates variable water levels. Some recharge opportunity available but limited due to size.
Floodflow Alteration	Y	3,4,5,6,7,8,9,10,11,13,15,16,18	X	Wetland directly borders Hodgson Brook in a depressional area. A little more limited in terms of capacity than Wetland 1.
Fish and Shellfish Habitat	Y	4,8,10,11,12,14,16,17	X	Wetland contiguous to Hodgson Brook which supports fish populations.
Sediment/Toxicant Retention	Y	1,2,4,5,6,10,11,16	X	Wetland contiguous to Hodgson Brook and located downslope of developed areas. Evidence of sedimentation present.
Nutrient Removal	Y	3,4,7,8,9,10,11,13,14	X	Wetland directly borders Hodgson Brook, dense scrub-shrub vegetation present. Surrounding area is highly developed.
Production Export	Y	1,6,7,10,12		Densely vegetated wetland bordering Hodgson Brook. Not particularly diverse and no aquatic veg.
Sediment/Shoreline Stabilization	Y	1,2,3,4,5,7,12,13,15	X	Densely vegetated scrub-shrub wetland borders Hodgson Brook.
Wildlife Habitat	Y	6,8,10,13,19, 21	X	Wetland surrounded by highly developed areas, however less isolated and larger than Wetland 1.
Recreation	N			Wetland's location does not provide for recreational opportunities.
Educational/Scientific Value	N			Wetland's location and characteristics do not make it suitable for an educational site.
Uniqueness/Heritage	N	1,7,11,17,22		Located within a highly developed landscape on private property. Wetland not unique; exhibits common characteristics.
Visual Quality/Aesthetics	N			Wetland is not aesthetically unique and located on private property.
ES Endangered Species Habitat	N			
Other				

Notes:

* Refer to backup list of numbered considerations.

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code:__Wetland 3__Evaluation Date:_6/12/2025_ Evaluator:_**Kris Wilkes**

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	Wetland is surrounded by a highly developed landscape of commercial development	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	No fill was observed within the wetland boundary, however wetland is large beyond study area.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within or adjacent to the wetland.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	No logging activity was observed within or adjacent to the wetland.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Wetland does not appear to be consistently mowed, no debris or trash noted.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Invasive species were observed within the wetland. See wetland application for list of species.	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	Goose Bay Drive, Corporate Drive, and parking lots associated with existing commercial development are located within 500ft.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Waste water treatment plant and several other buildings and associated roadways and parking lots are located within 500 feet of the wetland edge.	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	Roadway and parking lots are located within 500 feet of the wetland edge.	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	An existing culvert conveys Hodgson Brook underneath Corporate Drive. Wetland 3 borders Hodgson Brook. Other culverts likely present conveying drainage into the wetland under Corporate Drive further south.	a. No human made structures present **upstream of, or in** the wetland. b. One or more human made structures present **upstream of, or** in the wetland but hydrologic modification is slight c. One or more human made structures present **upstream of, or** in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY
(Add scores for each question and divide by 10) **5.4**

Appendix D: NHDES Ecological Reviews Documentation

DataCheck Results Letter
For NHDES Ecological Review

To: Nicole Martin, VHB, Inc.
2 Bedford Farms Drive Suite 200
Bedford, NH 03110
nmartin@vhb.com

From: Ecological Review Section
NH Department of Environmental Services
Main Contact: Maddie Severance - EcologicalReviews@des.nh.gov

cc:

Date: 09/09/2025 (valid until 09/09/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: MUNICIPAL POR - Portsmouth Conditional Use Permit, NHDES - Wetlands Standard Dredge & Fill, USACE - General Permit

DCT ID: DCT25-2507

Town: Portsmouth
Location: South of southernmost Goose Bay Drive and Corporate Drive intersection

Project Description: The applicant proposes to remove accumulated sediment that may be the result of the adjacent construction activities and increase the hydraulic capacity of Reach A of Hodgson Brook (as done previously in 2011 and permitted as NHDES File No. 2011-00322). The work will occur in two phases in dry conditions behind cofferdams with a bypass flume to temporarily divert stream flow around the work area. Dredged soil will be distributed in upland areas and stabilized post-construction. Wildlife-friendly erosion controls will be used throughout construction to protect the stream and wetlands.

Next Steps for Applicant:

NHDES's Ecological Review Section has searched the Natural Heritage Bureau's (NHB) database of rare species and exemplary natural communities. Please carefully read the comments below and the consultation requirements on the following page.

Plant and Natural Community Comments: Please send proposed plans and photos of the proposed impact areas during the growing season.

Wildlife Comments: No comments at this time.

Plant and Natural Community Consultation

If this DataCheck letter includes records of rare plants and/or natural communities/systems, please contact the Ecological Review Section and provide any requested supplementary materials by emailing EcologicalReviews@des.nh.gov.

If this DataCheck letter DOES NOT include any records of rare plants and/or natural communities/systems, no further consultation with the Ecological Review Section regarding rare plants and/or natural communities/systems is required.

Wildlife Consultation

If this DataCheck letter DOES NOT include ANY wildlife species records, then, based on the information submitted, no further consultation with the NH Fish and Game Department (NHFG) pursuant to Fis 1004 is required.

If this DataCheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to https://www.wildlife.nh.gov/wildlife-and-habitat/nongame-and-endangered-species/environmental-review. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail, and must include the DataCheck results letter number and "Fis 1004 consultation request" in the subject line.

If the DataCheck response letter does not include a threatened or endangered wildlife species but includes other wildlife species (e.g., Species of Special Concern), consultation under Fis 1004 is not required; however, some species are protected under other state laws or rules, so coordination with NH Fish & Game is highly recommended or may be required for certain permits. While some permitting processes are exempt from required consultation under Fis 1004 (e.g., *statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule*), coordination with NH Fish & Game may still be required under the rules governing those specific permitting processes, and it is recommended you contact the applicable permitting agency. For projects not requiring consultation under Fis 1004, but where additional coordination with NH Fish and Game is requested, please email NHFGreview@wildlife.nh.gov, and include the DataCheck results letter number and "review request" in the email subject line.
Contact NH Fish & Game at (603) 271-0467 with questions.

Federal ESA Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included on the NH DataCheck Letter. For compliance with the federal Endangered Species Act (ESA), please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation website (https://ipac.ecosphere.fws.gov/; IPaC) for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit, or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations, etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov; 603-223-2541).

NHB Database Records:
The following record(s) have been documented in the vicinity of the proposed project. Please refer to this list when coordinating.

Plant species	State[1]	Federal	Notes
bulbous bitter-cress (*Cardamine bulbosa*)*	E	--	This species occurs in forested swamps, low floodplain forest, and moist thickets.. Threats to the plants include canopy removal and destruction (draining) of its habitat.
great bur-reed (*Sparganium eurycarpum var. eurycarpum*)	T	--	
smooth black sedge (*Carex nigra*)	E	--	The largest threat to this species is loss of habitat.

[1]Codes: "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 20 or more years ago.

Disclaimer: NHB's database can only tell you of known occurrences that have been reported to NHFG/NHB. Known occurrences are based on information gathered by qualified biologists or members of the public, reported to our offices, and verified by NHB/NHFG.
However, many areas have never been surveyed, or have only been surveyed for certain species.
Surveys are recommended to determine what species/natural communities are present onsite.

DataCheck Results Letter
For NHDES Ecological Review

Please note: Effective June 10th, 2025, DataCheck letters will no longer include specific locations of rare species and exemplary natural communities. Changes to the map have been made to reflect this update.

Important: The list of rare species and exemplary natural communities that may be impacted by the project is included. Please refer to that list when coordinating.

DCT25-2507

From:	DES: Ecological Reviews
To:	Nicole Martin
Cc:	Annique Fleurock; Ben Miller; Lewis, Eben
Subject:	[External] Proposed permit conditions regarding protected plants under DCT25-2507_Dredging of Hodgson Brook [Filed 08 Oct 2025 12:52]
Date:	Wednesday, October 8, 2025 12:25:22 PM
Attachments:	Potential BMPs and transplant plan for Hodgson Brook Dredge (DCT25-2507).pdf

Hi Nicole,

Thank you for the phone call last week.

During the call you explained two situations that impact the time of year when work can occur which conflicts with my provided survey recommendations.

The first time of year restriction is to complete tree clearing in the scrub shrub wetland north of corporate drive between November 1st and April 14th to meet the Northern long eared bat window. Because of this restriction, surveys cannot be completed as recommended. This wetland has a much lower likelihood of supporting the rare plants as the habitat is less suitable compared to the rest of the project area.

Based on the information provided during the phone call, the work would be limited to the clearing of trees and woody vegetation, no stumps or roots will be removed, and the equipment will likely be staged in the uplands using an arm to reach over and remove the necessary vegetation. If work is completed in this way, herbaceous wetland vegetation is unlikely to be impacted, and if there are impacts they would likely be minor and/or temporary. Because there is already a low likelihood for the rare plants to occur in this wetland, and the work should minimally impact the herbaceous wetland plants, I feel comfortable with the tree clearing moving forward prior to surveys. **Please ensure as the work plan is finalized that impacts to wetland vegetation are avoided and minimized to the greatest extent possible by staging equipment in the upland, utilize wetland matting if necessary, and remove trees and woody vegetation in a way that does not incidentally remove the surrounding herbaceous vegetation.**

The other time of year restriction requires the rest of the work be completed under the USACE nontidal work window which begins in July. As you indicated in the phone call you plan to begin work at the beginning of this window-I assume to make sure you can get the work completed before the window ends. Although the ideal survey time frame for these species begins mid-July, I spoke with the State Botanist to determine the earliest he would feel comfortable with surveys being completed by an experienced botanist. The earliest smooth black sedge and great bur-reed can be surveyed for by an experienced botanist is the very end of June. Because of this, I will provide updated

recommendations with information about completing surveys during this time frame. **Because the survey window is right before/during the time work is proposed to begin, I will provide my updated survey recommendations within permit conditions so you can move forward with obtaining permits now in order to avoid delays between the surveys and start of work.** Also attached to this email are potential avoidance BMPs and transplant plan to prepare you for what avoidance and minimization conservation measures may be provided based on the results of the survey. By proactively providing this information it will further reduce the turnaround time between surveys and the start of work and allow your team to prepare for potential outcomes.

Please see below for proposed permit conditions regarding the Wetlands Standard Dredge & Fill permit to remove accumulated sediment of Hodgson Brook:

1. Surveys for smooth black sedge and great bur-reed shall be completed in wetlands proposed to be impacted prior to the commencement of work, excluding the tree and woody vegetation clearing north of Corporate Drive.
2. Surveys shall occur no earlier than the last week in June, and shall occur as close to or after July 15th as possible to best ensure accurate results.
3. Surveys shall be completed by a botanist with multiple years of experience surveying for wetland plants and keying out plants in the field, including sedges.
4. Once surveys are complete please contact the DES Ecological Review Section with the results.
    a. If the target protected plants are found please document plants with GPS, fill out a rare plant reporting form (simple or detailed), and provide diagnostic photos of the plants.
    b. If the target protected plants are not found, please put together a brief survey report/memo that includes the date of the survey, name of surveyor, map and photos of survey area, and a list of the dominant species observed.
    c. For any species potentially confused with the protected plants, these species shall be keyed out, and the diagnostic information used to determine the species ID shall be included in the provided report. If any species cannot be confidently differentiated from the protected plants, the consultant shall document information about that species and contact the Ecological Review Section either proposing to treat the plant as if its protected or return during the appropriate survey window to re-identify the plant.
5. Work shall not commence until the DES Ecological Review Section receives the materials outlined in condition [insert number for the above condition] and

provides conservation measures for avoidance and minimization. The DES Ecological Review Section will aim to provide these conservation measures within approximately a week of receiving the requested materials as to not delay work.

I have copied Eben Lewis on this email so he is aware of these proposed permit conditions when you submit your permit application.

If there are any questions or concerns please let me know.

Thank you,

Madeline (Maddie) Severance (*she/her/hers*)
Environmental Reviewer
Ecological Review Section
Land Resources Management Program
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
(603)-271-6261 (note the new number)
EcologicalReviews@des.nh.gov
DataCheck Tool

NHDES would greatly appreciate your feedback and wants to hear from you. Please take a moment to fill out our short (5-question) NHDES Customer Service Satisfaction Survey.

Please note as of July 29, 2025, the email ecologicalreviews@des.nh.gov is the primary contact for DataCheck Tool questions and rare plant and exemplary natural community coordination. Please do not email nhbreview@dncr.nh.gov going forward, NHDES Ecological Review staff will not be monitoring this inbox and if you email this inbox your review may be delayed.
Please note as of July 1, 2025, processing DataCheck Tool requests and conducting ecological reviews for threatened and endangered species is the responsibility of the NH Department of Environmental Services. Existing rare species consultation processes and contacts will remain the same. The DataCheck Fee has also increased to $50 for all users. Payment is only required if given a notice of "potential impacts" when submitting a project, or if you choose to send maps by email or mail rather than using the mapping tool. These changes are part of the state budget for FY2026-27 passed by the Legislature. Our goal is to keep you informed and supported through this change and we welcome any questions or feedback.

From: DES: Ecological Reviews <EcologicalReviews@des.nh.gov>
Sent: Monday, September 29, 2025 1:41 PM
To: Nicole Martin <nmartin@vhb.com>
Cc: Annique Fleurock <afleurock@vhb.com>; Ben Miller <bmiller@vhb.com>
Subject: RE: [External] NHDES Ecological Review: DCT25-2507

Hi Nicole,

Thank you for sending plans and photos of the proposed impact areas.

Based on the provided information, smooth black sedge (*Carex nigra*) and great bur-reed (*Sparganium eurycarpum*) may occur within the proposed project area as they are both known to occur nearby (smooth black sedge specifically occurs just on the other side of Goose Bay Drive), and suitable habitat appears to occur within the proposed impact areas. I would not expect bulbous bitter-cress (*Cardamine bulbosa*) to occur within the proposed project area based on the habitat and its distance from the site.

I am not concerned about the direct impacts to the stream channel/bed of Hodgson Brook however I am concerned about both permanent and temporary impacts to the PEM1C and PSS1C wetlands, and the vegetated banks of Hodgson Brook (R2U3Bx wetland).

In order to avoid and minimize impacts to smooth black sedge and great bur-reed, please refer to the following survey recommendations:

- Survey for smooth black sedge and great bur-reed from mid-July to late August.
- Survey within suitable habitat of wetlands proposed to be temporarily and permanently impacted.
    - Smooth black sedge primarily occurs in semi-open to open, graminoid dominated wetlands and has been known to occur in wet meadows, shrub wetlands, openings in forested seeps, fields, salt marshes, and ditches.
    - Great bur-reed occurs along and within shallow, still or slow-moving water, and in brackish swamps.
- Surveys should be completed by a qualified botanist (see NHB's recommended qualifications).
- Once surveys are complete please contact me with the results
    - If the target rare plants **are found** please document plants with GPS, fill out a rare plant reporting form (simple or detailed), and provide diagnostic photos of the plants.
    - If the target rare plants **are not found**, please put together a brief survey report/memo that includes the date of the survey, name of surveyor, map and photos of survey area, and a list of the dominant species observed.

Please let me know if you have any questions about these survey recommendations.

Best,

Madeline (Maddie) Severance (*she/her/hers*)
Environmental Reviewer
Ecological Review Section
Land Resources Management Program
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
(603)-271-6261 (note the new number)
EcologicalReviews@des.nh.gov
DataCheck Tool

NHDES would greatly appreciate your feedback and wants to hear from you. Please take a moment to fill out our short (5-question) NHDES Customer Service Satisfaction Survey.

Please note as of July 29, 2025, the email ecologicalreviews@des.nh.gov is the primary contact for DataCheck Tool questions and rare plant and exemplary natural community coordination. Please do not email nhbreview@dncr.nh.gov going forward, NHDES Ecological Review staff will not be monitoring this inbox and if you email this inbox your review may be delayed.
Please note as of July 1, 2025, processing DataCheck Tool requests and conducting ecological reviews for threatened and endangered species is the responsibility of the NH Department of Environmental Services. Existing rare species consultation processes and contacts will remain the same. The DataCheck Fee has also increased to $50 for all users. Payment is only required if given a notice of "potential impacts" when submitting a project, or if you choose to send maps by email or mail rather than using the mapping tool. These changes are part of the state budget for FY2026-27 passed by the Legislature. Our goal is to keep you informed and supported through this change and we welcome any questions or feedback.

From: Nicole Martin <nmartin@vhb.com>
Sent: Wednesday, September 24, 2025 8:21 AM
To: DES: Ecological Reviews <EcologicalReviews@des.nh.gov>
Cc: Annique Fleurock <afleurock@vhb.com>; Ben Miller <bmiller@vhb.com>
Subject: RE: [External] NHDES Ecological Review: DCT25-2507

EXTERNAL EMAIL WARNING! This email originated outside of the New Hampshire Executive Branch

network. Do not open attachments or click on links unless you recognize the sender and are expecting the email. Do not enter your username and password on sites that you have reached through an email link. Forward suspicious and unexpected messages by clicking the Phish Alert button in your Outlook and if you did click or enter credentials by mistake, report it immediately to helpdesk@doit.nh.gov!

Hello,

As requested, please see the attached:

- DRAFT plans (one change that is currently in progress is the removal of the soil stockpiles – those will be relocated to an offsite upland location),
- Site photographs (during the growing season), and
- A Delineated Natural Resource Overview Figure.

Let us know if you have any questions during your review.
Thank you,

Nicole Martin, CWS
Environmental Scientist
P 603.391.3889
www.vhb.com

From: DES: Ecological Reviews <EcologicalReviews@des.nh.gov>
Sent: Tuesday, September 9, 2025 3:55 PM
To: Nicole Martin <nmartin@vhb.com>
Subject: [External] NHDES Ecological Review: DCT25-2507 [Filed 10 Sep 2025 08:39]

Please note as of July 29, 2025, the email ecologicalreviews@des.nh.gov is the primary contact for DataCheck Tool questions and rare plant and exemplary natural community coordination. Please do not email nhbreview@dncr.nh.gov going forward, NHDES Ecological Review staff will not be monitoring this inbox and if you email this inbox your review may be delayed.

Attached, please find the NHDES Ecological Review Section's report on whether the proposed project could impact rare species and exemplary natural communities. This report is based on the NH Natural Heritage Bureau database.

If you received a comment on the DataCheck Letter about a rare plant or exemplary natural community, please reply to this email with any documents, photos, or information requested or contact Maddie Severance with any questions: (603) 271-6261.

If you received a comment on the DataCheck Letter about a rare wildlife species, please follow the consultation requirements listed on the DataCheck Letter and coordinate with NHFGreview@wildlife.nh.gov or call Hayley Gray: (603) 271-0467.

If you have any further questions or problems with the attachments, contact me by replying to this email or calling: (603) 271-7972.

Best,
Ryan

Ryan Esch (he/him)
Ecological Information Specialist
Ecological Review Section
Land Resources Management Program
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
603-271-7972

Effective July 1, 2025, processing DataCheck Tool requests and conducting ecological reviews for threatened and endangered species will be the responsibility of the NH Department of Environmental Services. This change is part of the state budget for FY2026-27 passed by the Legislature. Existing rare species consultation processes and contacts will remain the same. Our goal is to keep you informed and supported through this change and we welcome any questions or feedback.

Avoidance

- If protected plants are proposed to be directly impacted by work, shift or reduce the scope of work to avoid the areas where the plants are present and flag/fence off plants to avoid incidental impacts.
- If protected plants are directly adjacent to the dredging area and may be impacted by machinery, work by hand or use more precise machinery in these areas in order to avoid disturbing the plants.
- If machinery will be staged in the wetlands, flag/fence off the protected plants and avoid staging machinery on top of protected plants

Minimization

- If machinery will be staged on top of protected plants, utilize wetland matting and remove the matting as soon as possible.
- If dewatering will impact protected plants, dewater for as little time as possible and look into methods that allow dewatering for work to occur without impacting the area where the protected plants occur.
- If direct impacts to protected plants are proposed and cannot be avoided, a transplant may be the only remaining option (see below).

Potential Transplant Protocol

The following steps outline a potential transplanting protocol for great bur-reed (*Sparganium eurycarpum*) and smooth black sedge (*Carex nigra*) if they are determined to occur within the proposed project area and cannot be avoided.

- Transplanting should ideally occur in August to allow plants to set seed, however based on time constraints it is understood if this is not possible. If possible complete work outside of the protected plant areas first to allow for the transplant to occur as close to August as possible.
- Transplanting should occur in the early morning preferably on an overcast day to avoid transplanting in the direct sun.
- Prior to transplanting, flag the plants to be transplanted and document with GPS.
- Prior to transplanting, select a transplant receiving site outside of the proposed impact areas but near the original population location with similar habitat features including cover, species composition, and hydrology. Avoid areas with invasive species.

- Prior to transplanting, prepare the chosen receiving site by digging appropriately sized holes with hand tools to match the plugs of soil that will be removed. Spacing of the plants should aim to mimic the natural spacing wherever possible, avoid overcrowding plants.
- Excavate the protected species, transplanting clumps of species together wherever possible. Roots should be kept intact and undisturbed as much as possible, excavating to a depth of approximately 6-12 inches with 10-inch diameter around the plants or as large as needed to capture the root system.
- Move plants immediately from the impact area to the transplant receiving area. When plants are relocated to the prepared transplanting area they should be upright and the same dept as they were originally growing.
- Gently backfill the transplanting area and gently tamp down the soil to remove air pockets. The soil should match the grade of the existing soil surface.
- Flag the transplanting area so the limits are clearly identified and no incidental impacts occur.
- A botanist/environmental monitor should be on site throughout the transplant to ensure the transplant occurs according to the plan.
- Within 60 days of the transplant, provide a report to the Ecological Review Section containing the following information:
    - The date and time of the survey and name of personnel on site.
    - The approximate number of plants relocated and to where.
    - Photos of the existing population, the transplant site prior to transplanting, and the transplant site post transplanting.
    - GPS coordinates and/or a map of the existing population and the transplant location.
    - Description of the existing population habitat and the transplant location habitat.
    - Other notes about the transplant or other notable features of the site
- Complete post-transplant monitoring the two growing seasons following the transplant between Mid-July to late August and include a report with the following information:
    - A completed rare plant reporting form
    - Photos of the population
    - Any notable habitat/population features and assessment of health of population
    - GPS coordinates and or map of the population

From:	DES: Ecological Reviews
To:	Nicole Martin
Subject:	RE: [External] Proposed permit conditions regarding protected plants under DCT25-2507_Dredging of Hodgson Brook
Date:	Thursday, November 20, 2025 11:14:05 AM
Attachments:	image001.png image002.png

Hi Nicole,

Thank you for providing information about the slight change in project area. The expansion across Goose Bay Drive is minimal enough that it is not necessary to submit a new DataCheck Letter as it wouldn't change the outcome of the review.

My only recommendation is to expand my previously provided survey recommendations to these proposed impact areas if suitable habitat for the target protected species is present. Since I did not specify exact areas to survey in my permit conditions they should be applicable to this additional area without needing any adjustments.

Best,

Madeline (Maddie) Severance (*she/her/hers*)
Environmental Reviewer
Ecological Review Section
Land Resources Management Program
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
(603)-271-6261 (note the new number)
EcologicalReviews@des.nh.gov
DataCheck Tool

NHDES would greatly appreciate your feedback and wants to hear from you. Please take a moment to fill out our short (5-question) NHDES Customer Service Satisfaction Survey.

Please note as of July 29, 2025, the email ecologicalreviews@des.nh.gov is the primary contact for DataCheck Tool questions and rare plant and exemplary natural community coordination. Please do not email nhbreview@dncr.nh.gov going forward, NHDES Ecological Review staff will not be monitoring this inbox and if you email this inbox your review may be delayed.
Please note as of July 1, 2025, processing DataCheck Tool requests and conducting ecological reviews for threatened and endangered species is the responsibility of the NH Department of Environmental Services. Existing rare species consultation processes and contacts will remain the same. The DataCheck Fee has also increased to $50 for all users. Payment is only required if given a notice of "potential impacts" when submitting a project, or if you choose to send maps by email or

mail rather than using the mapping tool. These changes are part of the state budget for FY2026-27 passed by the Legislature. Our goal is to keep you informed and supported through this change and we welcome any questions or feedback.

From: Nicole Martin <nmartin@vhb.com>
Sent: Tuesday, November 18, 2025 10:17 AM
To: DES: Ecological Reviews <ecologicalreviews@des.nh.gov>
Subject: RE: [External] Proposed permit conditions regarding protected plants under DCT25-2507_Dredging of Hodgson Brook

EXTERNAL EMAIL WARNING! This email originated outside of the New Hampshire Executive Branch network. Do not open attachments or click on links unless you recognize the sender and are expecting the email. Do not enter your username and password on sites that you have reached through an email link. Forward suspicious and unexpected messages by clicking the Phish Alert button in your Outlook and if you did click or enter credentials by mistake, report it immediately to helpdesk@doit.nh.gov!

Hello Maddie,

I wanted to let you know that the proposed limits of work for this project have been refined slightly as we finalize the design and approach our wetlands permit application submission. See the screenshots below, where the transparent yellow polygon is the current proposed work limits and the pink outline is what we submitted with our original DataCheck request. The limits have been shorted a bit along Goose Bay Drive and will now extend across Goose Bay Drive into the existing constructed plunge pool/basin that is surrounded with riprap stone. The purpose of that work limit expansion is to allow for the placement of a temporary cofferdam in that basin to better facilitate the proposed dredging work that we previously consulted on. No additional impact is proposed within natural vegetated areas northwest of Goose Bay Drive.

I do not believe that this minor update will result in any change to your proposed permit conditions for this project. Could you please confirm that for us?

DCT25-2507

Don't hesitate to reach out with any questions.
Thank you,

Nicole Martin, CWS
Environmental Scientist

P 603.391.3889

www.vhb.com

Appendix E: USFWS IPaC Species List and Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: 11/18/2025 14:39:08 UTC
Project Code: 2025-0143345
Project Name: Lonza Hodgson Brook

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:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

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. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

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 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. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (**Updated 4/12/2023**) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines 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 Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. 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:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) 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. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

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 3301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2025-0143345
Project Name: Lonza Hodgson Brook
Project Type: Terrestrial Sources of Water Creation/Improvement
Project Description: The applicant proposes to remove accumulated sediment that may be the result of the adjacent construction activities and increase the hydraulic capacity of Reach A of Hodgson Brook (as done previously in 2011 and permitted as NHDES File No. 2011-00322). The work will occur in two phases in dry conditions behind cofferdams with a bypass flume to temporarily divert stream flow around the work area. Dredged soil will be distributed in upland areas and stabilized post-construction. Wildlife-friendly erosion controls will be used throughout construction to protect the stream and wetlands.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.08375425,-70.79903421530713,14z

Counties: Rockingham County, New Hampshire

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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 Fisheries[1], 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.

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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 *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: VHB, Inc.
Name: Nicole Martin
Address: 2 Bedford Farms Drive
Address Line 2: Suite 200
City: Bedford
State: NH
Zip: 03110
Email nmartin@vhb.com
Phone: 6033913900

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: 11/24/2025 16:44:31 UTC
Project code: 2025-0143345
Project Name: Lonza Hodgson Brook

Federal Nexus: yes
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Record of project representative's no effect determination for 'Lonza Hodgson Brook'

Dear Nicole Martin:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on November 24, 2025, for 'Lonza Hodgson Brook' (here forward, Project). This project has been assigned Project Code 2025-0143345 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat and/or Tricolored Bat

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

Species	Listing Status	Determination
Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered	No effect

Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	No effect

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Proposed Threatened

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions

occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2025-0143345 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Lonza Hodgson Brook

2. Description

The following description was provided for the project 'Lonza Hodgson Brook':

> The applicant proposes to remove accumulated sediment that may be the result of the adjacent construction activities and increase the hydraulic capacity of Reach A of Hodgson Brook (as done previously in 2011 and permitted as NHDES File No. 2011-00322). The work will occur in two phases in dry conditions behind cofferdams with a bypass flume to temporarily divert stream flow around the work area. Dredged soil will be distributed in upland areas and stabilized post-construction. Wildlife-friendly erosion controls will be used throughout construction to protect the stream and wetlands.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.08375425,-70.79903421530713,14z

DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

   Automatically answered
   No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

   Automatically answered
   No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

   No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Note for projects in Pennsylvania: Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer ‘yes’ to this question.

   Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

    Automatically answered

    No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

    No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

    No

13. Will the action cause effects to a covered bridge?

    No

14. Are trees present within 1000 feet of the action area?

    Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    Yes

15. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

    No

16. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

    No

17. Will the action cause construction of one or more new roads open to the public?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

    No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    No

20. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

    Note: For information regarding NSF/ANSI 60 please visit https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects

    No

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

    No

22. Will the action include drilling or blasting?

    No

23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

    No

24. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

    No

25. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

    Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

    Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    No

26. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

    Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    No

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

    No

28. Will the proposed action result in the use of prescribed fire?

    Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

    No

29. Does the action area intersect the northern long-eared bat species list area?

    Automatically answered
    Yes

30. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

    Automatically answered
    No

31. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

    Automatically answered
    No

32. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

    Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

    Note: A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

    Automatically answered
    No

33. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
If unsure, answer "Yes."

    Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    Yes

34. Does the action area intersect the tricolored bat species list area?

    Automatically answered
    Yes

35. Is the action area located within 0.5-mile of radius of an entrance/opening to any known tricolored bat hibernacula or winter roost?

    Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

    Automatically answered
    No

36. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

    Automatically answered
    No

37. Has a presence/probable absence bat survey targeting the tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines been conducted within the project area?

    No

38. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?
(If unsure, answer ""Yes."")

    Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (Tillandsia usneoides), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines.

    Yes

39. Do you have any documents that you want to include with this submission?

    No

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: VHB, Inc.
Name: Nicole Martin
Address: 2 Bedford Farms Drive
Address Line 2: Suite 200
City: Bedford
State: NH
Zip: 03110
Email nmartin@vhb.com
Phone: 6033913900

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Appendix F: Abutter Information

Pease Development Authority (PDA) Overview
Hodgson Brook Maintenance Dredge Abutters

Legend

- State
- County
- City/Town
- World Imagery
- Low Resolution 15m Imager
- High Resolution 60cm Image
- High Resolution 30cm Image
- Citations
- 19m Resolution Metadata

Map Scale

1: 51,953

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Map Generated: 11/20/2025

Notes

Yellow Polygon = approximate limits of the PDA Development.
Blue Polygon = proposed project area.
Red Polygon = quarter mile buffer.

Appendix G: Operations and Maintenance Plan

Memorandum

To: Mike Mates and Jared Sheehan
Pease Development Authority

Date: December 15, 2025

Project #: R053206.000

From: Nicole Martin, CWS
Peter J. Walker

Re: Hodgson Brook Maintenance
Operations and Maintenance Plan

At the request of the Pease Development Authority (PDA), this Operations and Maintenance (O&M) Plan was developed to manage the routine mowing within Wetland 1 south of Goose Bay Drive, as well as to propose routine maintenance of the upstream constructed plunge pool.

Mowing

Existing Conditions: The current tenant of the parcel south of Goose Bay Drive (Tax Map 305, Lot 3) mows the herbaceous vegetation between their building/parking lot and the adjacent roadways (Goose Bay Drive and Corporate Drive). Delineated Wetland 1 is located within that area. This mowing activity is permitted without a permit, as long as the wetland is not rutted in the process in accordance with Env-Wt 309.02(a). However, PDA has observed instances where cut vegetation within the open meadow blows into Hodgson Brook and accumulates in front of the 72-inch-wide by 40-inch-tall concrete box culvert that conveys the stream flows beneath Corporate Drive.

Proposed Conditions: Since vegetation accumulation at the culvert inlet may contribute to sediment accumulation in the upstream reach through decreased flow velocities along with increased flood risk, PDA seeks to establish a 25-foot buffer along Hodgson Brook where no disturbance or mowing will be allowed.

- Buffer Establishment: To establish this buffer, a qualified person will measure and mark the 25-foot buffer from the top of bank.
    - Signage: Permanent signage should then be installed at regular intervals (such as every 50 feet) along the buffer perimeter to prevent inadvertent encroachment during future mowing. Signage would contain the following language or similar: "Stream buffer. No mowing beyond this point."
    - Tenant Education: The current and future tenants of that parcel will need to be informed of the 25-foot buffer and other conditions of this O&M plan.
- Time of Year Restrictions: Mowing outside of the 25-foot buffer should not occur during the springtime when conditions are most wet or immediately following a rain event to minimize the potential for rutting or other damage to the underlying wetland. Soil conditions must be dry in order to mow.
- Frequency: The mowing frequency can be determined by the tenant, but biweekly to monthly mowing is suggested during the growing season. However, mowing may occur less frequently during particularly dry times of year (such as during a drought) when vegetation growth rates are reduced.

Responsible Parties:

- Buffer Establishment: PDA will be responsible for marking the buffer and developing signage.
- Mowing: The current (and future) tenant will be responsible for conducting the mowing in accordance with the guidance outlined in this O&M Plan.
- Monitoring: PDA will be responsible for monitoring the mowing activities to ensure compliance with this O&M Plan. Monitoring will be informal and consist of periodic drive by inspections. If any compliance issues are observed, PDA would be responsible for the follow-up coordination with the tenant to discuss and rectify any issues.

Upstream Plunge Pool

Plunge Pool Overview: A plunge pool will be constructed at the upstream end of the project limits south of Goose Bay Drive at the outlet of 30-inch corrugated metal pipes that convey the stream flow beneath Goose Bay Drive. This feature will be lined with simulated streambed material consisting of a mix of cobble, gravel, and sand that will provide stabilization and scour protection. Since water velocities will decrease within the plunge pool, along with the history of sediment accumulation within this stream reach, sediment accumulation is expected to occur within that plunge pool over time.

Proposed Conditions: PDA will routinely maintain the constructed upstream plunge pool to remove the accumulated sediment to minimize excess downstream sediment transport, to maintain the intended functionality of the plunge pool, and to potentially avoid (or further postpone) the need for another full maintenance dredge of this reach of Hodgson Brook.

Maintenance Details: This proposed routine maintenance may be consistent with the intent of Env-Wt 308.01(b) regarding activities that are allowed by statute without a permit to maintain and preserve the usefulness of a man-made feature. The proposed maintenance would reduce sediment loading to downstream portions of Hodgson Brook and North Mill Pond.

- Dredging: The maintenance will consist of dredging accumulated sediment with a small excavator that would be staged in adjacent uplands to restore the original design depth and geometry of the plunge pool. This activity is consistent with the definition of "maintenance" in Env-Wt 103.34 as a routine activity to ensure the plunge pool remains intact and functional for its intended purpose. No impacts to jurisdictional areas beyond the limits of the plunge pool would occur.
- Erosion Controls: Since the scope of this work is small, it would be conducted in wet conditions during annual low flow periods (typically July 5 – October 1) behind a turbidity curtain. The turbidity curtain would be installed across the channel just downstream of the plunge pool to isolate the work area and contain the temporary turbidity that may result from the maintenance dredging. The turbidity curtain would be installed before the maintenance is conducted and be left in place afterwards until any suspended sediment behind it has settled out of the water column. Once the water is clear behind the curtain, it will be removed. The turbidity curtain is not expected to be in place for longer than one day to accommodate this proposed work.
- Frequency: This work would be conducted on an as needed basis depending on how quickly sediment accumulates in the plunge pool, but not to exceed once every 2 to 5 years.
- Dredged Material Disposal: All excavated soil will be disposed of in a location owned by PDA (outside of state or federal natural resource jurisdictional areas).

Reporting: After each maintenance event, PDA will prepare a simple 1-page letter report to be provided to the applicable NHDES Regional Wetlands Reviewer to document the maintenance activity within one month of the maintenance. The report will include a description of the conditions that warrant the maintenance activity, details of the maintenance conducted, and a summary of the post-maintenance conditions. A pre- and post-maintenance photo of the plunge pool will be included.

Responsible Party: PDA will be responsible for determining when this work needs to occur, conducting the proposed work (or securing a qualified contractor), ensuring the proposed work is conducted in accordance with this O&M Plan, and documenting the work for reporting to NHDES.

Appendix H: USACE Appendix B Checklist and Supporting Notes

US Army Corps of Engineers ®
New England District

Appendix B
New Hampshire General Permits
Required Information and USACE Section 404Checklist

USACE Section 404 Checklist

1. Attach any explanations to this checklist. Lack of information could delay a USACE 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 3 for information on single and complete projects.
4. Contact USACE at (978) 318-8832 with any questions.
5. The information requested below is generally required in the NHDES Wetland Application. See page 61 for NHDES references and Admin Rules as they relate to the information below.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See the following to determine if there is an impaired water in the vicinity of your work area. * https://nhdes-surface-water-quality-assessment-site-nhdes.hub.arcgis.com/ https://www.des.nh.gov/water/rivers-and-lakes/water-quality-assessment https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx	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 tidal SAS, prime wetlands, or priority resource areas? 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://www4.des.state.nh.us/NHB-DataCheck/.		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?	6,854 sq ft	
2.8 What % of the overall project sire will be previously and proposed filled wetlands?	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://www4.des.state.nh.us/NHB-DataCheck/. USFWS IPAC website: https://ipac.ecosphere.fws.gov/	X	

Area of proposed permanent dredge/ fill impacts.

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: • 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 31?	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 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 37 GC 14(d) of the GP document**	X	
6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact)	Yes	No
Projects with greater than 1 acre of permanent impact must include the following: • Functional assessment for aquatic resources in the project area. • On and off-site alternative analysis. • Provide additional information and description for how the below criteria are met.		N/A
6.1 Will there be complete loss of aquatic resources on site?		
6.2 Have the impacts to the aquatic resources been avoided and minimized to the greatest extent practicable?		
6.3 Will all aquatic resource function be lost?		
6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)?		
6.5 Is there an on-site alternative with less impact?		
6.6 Is there an off-site alternative with less impact?		
6.7 Will there be a loss to a resource dependent species?		
6.8 Are indirect impacts greater than 1 acre within and adjacent to the project area?		
6.9 Does the proposed mitigation replace aquatic resource function for direct, indirect, and cumulative impacts?		

*Although this checklist utilizes state information, its submittal to USACE is a federal requirement.
** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.

1.1 The Site is located within watersheds with chloride impairments (NHRIV600031001-04 and NHRIV600031001-05). The Site is also located within the quarter mile buffer of impaired surface waters (NHRIV600031001-05), as Upper Hodgson Brook is impaired for benthic-macroinvertebrate bioassessments, chloride, dissolved oxygen saturation, *Escherichia coli*, and dissolved oxygen concentration. The proposed work will not contribute to or worsen these impairments.

2.1-2.4 This project involves a maintenance dredge within Hodgson Brook in an area that was previously permitted as a maintenance dredge in 2011. There will be no impacts to tidal SAS, prime wetlands, or other priority resource areas (PRAs). This project does not propose to modify or replace any of the existing culverted stream crossings within the project footprint. Minor woody vegetation clearing is proposed northeast of Corporate Drive at the culvert outlet to accommodate the proposed dredging; the proposed clearing limits along with the surveyed tree line are depicted on the **Project Plans** in ***Appendix A***. The approximate area of clearing is 2,300 square feet, as measured on the plans.

3.1 A search for the occurrence of rare plant, animal, or natural communities associated with this Project was completed using the NHDES online DataCheck tool. The DataCheck Results Letter (DCT25-2507) dated September 9, 2025 (provided in ***Appendix D***), identified the potential presence of three plant species within the vicinity of the Site: bulbous bitter-cress (*Cardamine bulbosa*) – state endangered, great bur-reed (*Sparganium eurycarpum var. eurycarpum*) – state threatened, and smooth black sedge (*Carex nigra*) – state endangered. Since no fauna species were identified, consultation with the NH Fish and Game Department (NHF&G) is not required for this project.

Through consultation with the NHDES Ecological Review Section (Maddie Severance, ERS), potentially suitable habitat for the smooth black sedge and great bur-reed is present within the Site. Consequently, a plant survey is required in advance of construction to complete this consultation. The ideal timeframe to conduct this survey is mid-July through late August, but this work may be performed as early as the last week in June if it is completed by a qualified botanist. Upon completion of the survey, the results must be documented and shared with the ERS so that they may provide the final conservation measures for the project. The ERS also provided some potential best management practices (BMPs) and a Transplant Plan to expedite a review turnaround if the subject plants were identified onsite during the survey to minimize any construction delays. The ERS also provided permit conditions that NHDES can use to issue the wetlands permit approval to avoid a regulatory delay.

Through this consultation, it was confirmed that the proposed woody vegetation clearing within the wetland north of Corporate Drive (Wetland 3) may occur prior to completion of the plant survey, as long as the appropriate BMPs are followed. These BMPs include staging equipment in uplands, no removal of stumps or roots (prior to the proposed dredge in those locations), etc. to avoid and minimize impacts to the herbaceous vegetation in advance of completing the rare plant survey. This will allow that clearing to occur within the bat inactive season.

The Site was reviewed for the presence of federally listed or proposed, threatened, or endangered species, designated critical habitat, or other natural resources concerning the USFWS IPaC System. Results dated November 18, 2025, indicate the potential presence of the federally endangered northern long-eared bat (*Myotis septentrionalis*), proposed endangered tricolored bat (*Perimyotis subflavus*), and proposed threatened monarch butterfly (*Danaus plexippus*) within the vicinity of the Site. The Site does not overlap critical habitat for the monarch butterfly, and the proposed listing status does not provide current protection under the Endangered Species Act.

Consultation for both the northern long-eared bat and tricolored bat was conducted using the *Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key* in IPaC. Since the proposed woody

vegetation clearing will be confined to scrub-shrub vegetation (no trees suitable for bat roosting will be cleared), the determination is *no effect*. See ***Appendix E*** for documentation.

The US Army Corps of Engineers will make the ultimate determination of the potential impacts of this Project on the identified federal species during their review of this application and prior to the issuance of their permit approval.

3.2 The NH Fish & Game Department (NHF&G) has developed the New Hampshire Wildlife Action Plan (WAP) to assist with conserving and protecting wildlife species and habitat types throughout the State. The WAP identifies ranked habitat tiers that recognize the highest quality habitats in the state. Habitat tiers were created by the NHF&G Department using biological data, landscape data, and human influence information. Habitat tiers are separated into three rankings, which are 1) *Highest Ranked Habitat in the State*, 2) *Highest Ranked Habitat in Biological Region*, and 3) *Supporting Landscape*. There are no ranked habitats within or near the Site. The closest ranked habitat (*Supporting Landscape*) is mapped north of Newington Street over a half mile away from the Site.

4.1 There is no Federal Emergency Management Agency (FEMA) mapping within or near the Site. Consequently, there are no FEMA regulated floodways or floodplains.

5.0 A Request for Project Review (RPR) will be submitted to the NH Division of Historical Resources (NHDHR) to initiate Section 106 consultation under the National Historic Preservation Act (16 U.S.C. 470)] and with federal Advisory Council on Historic Preservation regulations, Protection of Historic Properties (36 CFR Part 800). The RPR submitted in February 2011 (as part of the 2011 wetlands permit application) resulted in a determination of No Historic Properties Affected. Therefore, we expect a similar determination to be made for this Project.

<u>Time-of-Year (TOY) Work Window Waiver Request</u>

The USACE New Hampshire General Permit Condition #20 states that work in nontidal waters must occur between July 5 – October 1. However, it is our understanding that the intent of this TOY work window is to protect cold water fisheries and Hodgson Brook is not known to provide habitat for cold water fish species (according to the NHF&G Wildlife Action Plan layers on the NHDES LRMPPT Mapper). Therefore, we propose that the above-mentioned TOY restriction should not be applicable to this Project. We request that the USACE waives this requirement and specify this in the approved permit.

RECEIVED
DEC 09 2025
By

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENVIRONMENTAL SERVICES
WETLANDS COUNCIL

Docket No. 24-06 WtC

APPEAL OF SAGAMORE LANDING CONDOMINIUM ASSOCIATION
AND DAVID AND MARGARET WITHAM
NHDES Wetlands Permit No. 2018 03677

Assented-to Motion Regarding Scheduling of Council Hearing

NOW COME David and Margaret Witham and Sagamore Landing Condominium Association ("Appellants"), through undersigned counsel, Sheehan Phinney Bass and Green, PA, and requests that any Council hearing in this matter be scheduled for the April 2026 Council meeting, saying in support as follows:

1. At the Prehearing Conference on November 20, 2025, the Parties and the Hearing Officer discussed the schedule for a hearing before the Council, in the event a hearing is necessary following the Hearing Officer's resolution of the outstanding legal issues.

2. The Parties have conferred and the April 14, 2026 Council meeting works for all parties and witnesses.

3. Appellants request that the hearing in this Appeal, if one is necessary, take place during the April 14, 2026 Council meeting.

4. The State and the Intervenors assent to this request.

WHEREFORE, Appellants respectfully request the Council:

A. Schedule any necessary hearing in this matter during the Council's April 2026 meeting;

B. Grant such other and further relief as is just.

Respectfully submitted,

Appellants, Sagamore Landing Condominium Assoc. & David and Margaret Witham

Dated: December 5, 2025

By: _____

John Mark Turner (NH Bar #15610)
Nicolas H.U. Harris (NH Bar #278783)
1000 Elm Street, PO Box 3701
Manchester, NH 03105
(603) 627-8143
(603) 627-8237
jturner@sheehan.com
nharris@sheehan.com

CERTIFICATION

I hereby certify that on this date, a copy of the foregoing was sent via e-mail or first class mailed pursuant to Ec-Wet 201.03 to counsel and parties of record listed below:

James J. Steinkrauss, Esq. (via email at jjs@rathlaw.com)
(Counsel for the Intervenors – the Dickinsons)
Rath, Young and Pignatellic, P.C.
One Capital Plaza
Concord, NH 03302
(603) 226-2600

Keely Lovato, Esq. (via email at keely.lovato@doj.nh.gov)
(Counsel for the New Hampshire Department of Environmental Protection)
Office of the Attorney General
Environmental Protection Bureau
1 Granite Place South
Concord, NH 03301
(603) 271-3679

Portsmouth Municipal Clerk (via first class mail)
1 Junkins Avenue
Portsmouth, NH 03801

Portsmouth Conservation Commission (via first class mail)
1 Junkins Avenue
Portsmouth, NH 03801

David and Margaret Witham (through counsel via email at *jturner@sheehan.com*)
238 Walker Bungalow Road
Portsmouth, NH 03801

Mary Ann Tilton, Wetlands Assistant Bureau Administrator (via email at *keely.lovato@doj.nh.gov*)
NH Department of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Rene Pelletier, Director of Water Division (via email at *keely.lovato@doj.nh.gov*)
Wetlands Bureau Administrator
NH Department of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Michelle A. Doucette, Appeals Clerk (via email at *appeals@des.nh.gov*)
New Hampshire Department of Justice
C/O New Hampshire Wetlands Council
1 Granite Place South
Concord, NH 03301

Sagamore Landing Condominium Assoc. (through counsel via email to *jturner@sheehan.com*)
c/o Danielle Megliola
284 Walker Bungalow Road
Portsmouth, NH 03801

Martin & Cristina Kurowski (via first class mail)
212 Walker Bungalow Road
Portsmouth, NH 03801

Dated: December 5, 2025

By: _____
John-Mark Turner

From:	Lewis, Eben
To:	JGMORRIS63@GMAIL.COM
Cc:	eweinrieb; Kate E. Homet
Subject:	NHDES Wetlands Bureau File 2023-03138, 60 Pleasant Point Drive, Portsmouth Tax Map 207 Lot 13
Date:	Monday, December 29, 2025 10:22:05 AM
Attachments:	image001.png image002.png image003.png 2025-12-29-PERMIT_WETLAND-2025252347.pdf

---

Good morning,

I've attached the approved amendment request. Feel free to reach out with any questions.

Best,
~Eben

Eben M. Lewis, Southeast Region Supervisor, Wetlands Bureau, Land Resources Management, Water Division, NH Department of Environmental Services, 222 International Drive, Suite 175, Portsmouth, NH 03801Phone: (603) 559-1515
Email: eben.lewis@des.nh.gov

NHDES would greatly appreciate your feedback and wants to hear from you. Please take a moment to fill out our short (5-question) NHDES Customer Service Satisfaction Survey.

December 29, 2025

120-0 WILD ROSE LANE LLC
209 WATER STREET
NEWBURYPORT MA 01950

Re: NHDES Wetlands Bureau File 2023-03138, 60 Pleasant Point Drive, Portsmouth Tax Map 207 Lot 13

Dear Applicant:

The New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau approved the above-referenced Wetlands Permit Amendment Request. Enclosed please find Amended Wetlands Permit 2023-03138 to: Retain an additional 320 square feet (SF) and impact a total of 31,300 SF of previously developed upland tidal buffer zone to replace an existing single-family residence with a new single-family residence and associated improvements, including construction of a pool, pervious patios, replace two sets of existing wooden stairs over the bank, and construction of a living shoreline to stabilize an eroding tidal bank. The permittee shall notify the department in writing at least one week prior to commencing any work under this permit and shall file a notice of completion of work and certificate of compliance with the department within 10 working days of completion of the work authorized by this permit.

This permit is not valid unless signed by the permittee and the principal contractor, if any, who will build or install the project. Prior to start of construction, a copy of this permit shall be posted in a secure manner in a prominent place at the site of the approved project**.** It shall remain posted until the project is completed. Transfer of this permit to a new owner shall require notification to, and approval of, the NHDES. **This permit does not convey any property right, nor does it preclude the need to meet any other applicable state, federal, or municipal legal requirements.**

In accordance with RSA 482-A:10, RSA 21-O:14, and Rules Ec-Wet 100-200, **any person aggrieved by this decision may file a Notice of Appeal directly with the NH Wetlands Council (Council) within 30 days of the decision date, December 29, 2025.** Every ground claiming the decision is unlawful or unreasonable must be fully set forth in the Notice of Appeal. Only the grounds set forth in the Notice of Appeal are considered by the Council. Information about the Council, including Council Rules, is available at https://www.nhec.nh.gov/wetlands-council/about. For appeal related issues, contact the Council Appeals Clerk at (603) 271-3650.

This approval is based on the following findings:
1. This project is classified as a major project per Rule Env-Wt 610.17(a)(1), for any dredging, filling, or construction activity, or any combination thereof, that is proposed to occur within 100 feet of the Highest Observable Tide Line (HOTL), and that is proposed to alter any tidal shoreline bank, tidal flat, wetlands, surface water, or undeveloped uplands.
2. The impacts within the protected shoreland associated with this project are approved under NHDES Shoreland Permit 2024-03139.
3. Per Rule Env-Wt 311.01(b), the applicant coordinated with the NH Fish and Game Department (NHF&G) and the Natural Heritage Bureau (NHB) to determine how to avoid and minimize project-related impacts on rare or protected animal species and habitat, and on protected plants or exemplary natural communities.
4. Per Rule Env-Wt 314.07(a) and subject to Env-Wt 314.07(b), the permittee has requested an amendment to the issued permit, and provided notice to all who received notice of the original application prior to filing the amended application to NHDES.
5. The Portsmouth Conservation Commission (PCC) provided comments on the amendment request on November 25, 2025. In summary, the PCC hired third party engineers to review the after-the-fact impacts.

If you have any questions, please contact me at Eben.Lewis@des.nh.gov or (603) 559-1515.

Sincerely,

Eben M. Lewis
Southeast Region Supervisor, Wetlands Bureau
Land Resources Management, Water Division

Enclosure

ec: Eric Weinrieb, Altus Engineering, Inc.
Portsmouth Conservation Commission

WETLANDS PERMIT 2023-03138 PAGE 1 OF 3
NOTE CONDITIONS

PERMITTEE:	**120-0 WILD ROSE LANE LLC** **209 WATER STREET** **NEWBURYPORT MA 01950**
PROJECT LOCATION:	**60 PLEASANT POINT DRIVE, PORTSMOUTH TAX MAP 207 LOT 13**
WATERBODY:	**PISCATAQUA RIVER**
APPROVAL DATE:	**DECEMBER 29, 2025** **EXPIRATION DATE: NOVEMBER 04, 2029**

The New Hampshire Department of Environmental Services' (NHDES) review of permit application 2023-03138 has found that it is consistent with RSA 482-A. NHDES hereby issues this Wetlands Permit authorizing the impacts described provided the Conditions imposed are met. To validate this Permit, the Permittee and the Principal Contractor are required to sign below.

PERMIT DESCRIPTION: Retain an additional 320 square feet (SF) and impact a total of 31,300 SF of previously developed upland tidal buffer zone to replace an existing single-family residence with a new single-family residence and associated improvements, including construction of a pool, pervious patios, replace two sets of existing wooden stairs over the bank, and construction of a living shoreline to stabilize an eroding tidal bank.

THIS PERMIT IS SUBJECT TO THE FOLLOWING PROJECT-SPECIFIC CONDITIONS:

1. All work shall be done in accordance with plans by Altus Engineering, Inc. dated December 1, 2025 and received by the NH Department of Environmental Services (NHDES) on December 1, 2025.
2. In accordance with Env-Wt 314.02(b) and (c), the permit shall be recorded at the Rockingham County Registry of Deeds. Any limitations or conditions in the permit so recorded shall run with the land beyond the expiration of the permit. The permittee shall provide the department with a copy of the permit stamped by the registry with the book and page and date of receipt.
3. In accordance with Env-Wt 609.10(b)(4), all work shall be done at low tide when the work area is fully exposed.
4. In accordance with Env-Wt 307.07, all development activities associated with any project shall be conducted in compliance with applicable requirements of RSA 483-B and Env-Wq 1400 during and after construction.
5. All pervious technologies used shall be installed and maintained to effectively absorb and infiltrate stormwater as required per RSA 483-B:6, II and Rule Env-Wq 1406.15(c) in order to ensure compliance with RSA 483-B:9, V(g).
6. No activity shall be conducted in such a way as to cause or contribute to any violation of surface water quality standards per Env-Wt 307.03(a).
7. All work including management of soil stockpiles, shall be conducted so as to minimize erosion, minimize sediment transfer to surface waters or wetlands, and minimize turbidity in surface waters and wetlands per Env-Wt 307.03(b).
8. In accordance with Env-Wt 307.03(g)(1), the person in charge of construction equipment shall inspect such equipment for leaking fuel, oil, and hydraulic fluid each day prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
9. In accordance with Env-Wt 307.03(g)(3) and (4), the person in charge of construction equipment shall maintain oil spill kits and diesel fuel spill kits, as applicable to the type(s) and amount(s) of oil and diesel fuel used, on site so as to be readily accessible at all times during construction; and train each equipment operator in the use of the spill kits.
10. In accordance with Env-Wt 307.03(g)(2), the person in charge of construction equipment shall repair any leaks prior to using the equipment in an area where such fluids could reach groundwater, surface waters, or wetlands.
11. In accordance with Env-Wt 307.03(h), equipment shall be staged and refueled outside of jurisdictional areas (unless allowed) and in accordance with Env-Wt 307.15.

12. In accordance with Env-Wt 307.03(c)(3), water quality control measures shall be installed prior to start of work and in accordance with the manufacturer's recommended specifications.
13. In accordance with Env-Wt 307.03(c)(1), water quality control measures shall be selected and implemented based on the size and nature of the project and the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to jurisdictional areas.
14. In accordance with Env-Wt 307.03(c)(2), water quality control measures shall be comprised of wildlife-friendly erosion control materials.
15. In accordance with Env-Wt 307.03(c)(5), water quality control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during and after construction.
16. In accordance with Env-Wt 307.03(c)(6), water quality control measures shall remain in place until all disturbed surfaces are stabilized to a condition in which soils on the site will not experience accelerated or unnatural erosion by achieving and maintaining a minimum of 85% vegetative cover using an erosion control seed mix, whether applied in a blanket or otherwise, that is certified by its manufacturer as not containing any invasive species; or placing and maintaining a minimum of 3 inches of non-erosive material such as stone.
17. In accordance with Env-Wt 307.03(c)(7), temporary water quality control methods shall be removed upon completion of work when compliance with Env-Wt 307.03(c)(6) is achieved.
18. In accordance with Env-Wt 307.05(e), to prevent the use of soil or seed stock containing nuisance or invasive species, the contractor responsible for work shall follow Best Management Practices for the Control of Invasive and Noxious Plant Species (Invasive Plant BMPs).
19. In accordance with Env-Wt 307.11(a), fill shall be clean sand, gravel, rock, or other material that meets the project's specifications for its use; and does not contain any material that could contaminate surface or groundwater or otherwise adversely affect the ecosystem in which it is used.
20. In accordance with Env-Wt 307.12(e), wetland soils from areas vegetated with purple loosestrife or other state-listed invasive plant species shall not be used in the area being restored.
21. In accordance with Env-Wt 307.12(d), mulch used within an area being restored shall be natural straw or equivalent non-toxic, non-seed-bearing organic material.
22. In accordance with Env-Wt 307.12(g), impact areas restored by seeding or plantings shall not be deemed successful if the area is invaded by nuisance species such as common reed or purple loosestrife during the first full growing season following the completion of construction; and a remediation plan shall be submitted to the department that proposes measures to be taken to eradicate nuisance species during this same period.
23. In accordance with Env-Wt 307.12(f), if any 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.
24. In accordance with Env-Wt 307.03(e), all exposed soils and other fills shall be permanently stabilized within 3 days following final grading.
25. In accordance with Env-Wt 307.12(i), 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 such that post-construction soil layering and vegetation schemes are as close as practicable to pre-construction conditions.
26. Within 60 days of completion of construction, the applicant shall submit a post-construction monitoring report to the department prepared by a professional engineer, certified wetland scientist, or qualified professional, as applicable. The monitoring report shall include date(s) of inspections, photos showing the extent of jurisdictional impacts, areas of restoration, progress of any plantings, and contain narratives, exhibits, and photographs, as necessary to report the status of the project area and restored jurisdictional area in accordance with Env-Wt 514.05(h) and Env-Wt 301.18(c).

ANY INDIVIDUAL CONDUCTING WORK UNDER THIS PERMIT IS ADVISED OF THE FOLLOWING:

1. This permit does not preclude the need to meet any other applicable state, federal, or municipal legal requirements.
2. The permit holder is responsible for reading, and ensuring compliance with, the applicable general conditions established in Env-Wt 307.
3. This permit does not in any way authorize the take of threatened or endangered species, as defined by RSA 212-A:2, or of any protected species or exemplary natural communities, as defined in RSA 217-A:3.
4. This approval does not convey any property right. The permittee is responsible for ensuring that they have the legal authority to access the subject lands and conduct the impacts described.

APPROVED:

Eben M. Lewis
Southeast Region Supervisor, Wetlands Bureau
Land Resources Management, Water Division

THE SIGNATURES BELOW ARE REQUIRED TO VALIDATE THIS PERMIT (Env-Wt 314.01).

_____ PERMITTEE SIGNATURE (required)

_____ PRINCIPAL CONTRACTOR SIGNATURE (required)