

**REGULAR MEETING  
CONSERVATION COMMISSION  
1 JUNKINS AVENUE  
PORTSMOUTH, NEW HAMPSHIRE  
EILEEN DONDERO FOLEY COUNCIL CHAMBERS**

**3:30 P.M.**

**June 14, 2023**

**AGENDA**

**I. APPROVAL OF MINUTES**

1. May 10, 2023

**II. CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)**

1. 325 Little Harbor Road  
ADL 325 Little Harbor Road Trust, owner  
Stephen H. Roberts. Esq. Trustee, co-owner  
Assessor Map 205, Lot 2
2. 380 Greenleaf Avenue  
Tanner Family Revocable Trust  
Mark and Allison J. Tanner Trustees, owners  
Assessor Map 243, Lot 63

**III. STATE WETLANDS BUREAU APPLICATIONS (NEW BUSINESS)**

1. 325 Little Harbor Road  
ADL 325 Little Harbor Road Trust, owner  
Roberts Stephen H. Esq. Trustee, co-owner  
Assessor Map 205, Lot 2

**IV. WORK SESSIONS**

1. 505 Route 1 Bypass  
Giri Portsmouth 505, Inc., owner  
Assessor Map 234, Lot 5
2. 60 Pleasant Point Drive  
120-0 Wild Rose Lane, LLC, owner  
Assessor Map 207, Lot 13

**V. OTHER BUSINESS**

1. Article 10 Proposed Changes

**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:*

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**REGULAR MEETING  
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EILEEN DONDERO FOLEY COUNCIL CHAMBERS**

**3:30 P.M.**

**May 10, 2023**

**MINUTES**

**MEMBERS PRESENT:** Chair Samantha Collins; Vice Chair Barbara McMillan; Members; Allison Tanner, Jessica Blasko, Thaddeus Jankowski, Lynn Vaccaro, and Alternates; Abigail Gindele and Brian Gibb

**MEMBERS ABSENT:** Stewart Sheppard

**ALSO PRESENT:** Peter Britz, Environmental Planner/Sustainability Coordinator; Kate Homet, Associate Environmental Planner

[6:14] The meeting began at 3:31 p.m.

**I. APPROVAL OF MINUTES**

1. April 12, 2023

[6:34] Ms. Tanner noted one edit on page 7, Mr. Gibb had noted that there were 10 conditions when there were actually only 6. Also, Ms. Tanner noted that ‘Great Bog’ should be capitalized on page 12.

[7:50] Ms. Tanner made a motion to approve the minutes from the April meeting with the stipulated changes. Ms. Gindele seconded the motion. The motion passed unanimously.

[8:21] Chair Collins introduced an item not on the agenda. She introduced Susan Morrell, the City Attorney, to give a rundown on when to recuse yourself.

[8:40] Ms. Morrell noted that applicants coming before boards want to be treated fairly and appropriately. She noted that City guidance has it that you should recuse yourself and not participate if you have a direct pecuniary or personal interest in the outcome. She noted that a standard for the City is that if you have any hesitation about recusal, you should recuse yourself. There is no set City rule about whether the recused member should stay in their seat or leave the room. If a recused board member joins the public and speaks to the application during the public hearing that would be considered introducing bias. The best course would be to sit quietly and

not participate.

## II. CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)

1. Utility Structure Replacement  
Eversource Energy, Owner  
Gosling Road to Echo Avenue & Between Borthwick Avenue and Ocean Road  
(Substation)

[20:05] Jeremy Degler from Tighe & Bond came to present this application. He gave a brief description of the project which includes replacing wooden utility poles with steel poles and redoing some static wire work within wetlands and wetland buffers. This will include 208,734 s.f. of temporary wetland impacts. Outside of the wetlands there will be approximately 3,310 s.f. of impacts to Pickering Brook. Within the wetland buffer there will be approximately 78,642 s.f. of impact. Construction will start in September and finish by December, with plans for checking the stabilization and plantings again in the Spring for recovery success. An alteration of terrain permit and a statutory permit by notification will be filed after the Conditional Use Permit.

[23:12] Ms. Tanner asked for a definition of what the parallel lines were on page 34 of the packet. Mr. Seckler responded it was a wellhead protection area. She asked if there was any reporting on raptor nests in the area and on the existing poles to which Mr. Seckler responded that there currently were not any. Their process for checking includes sending a drone up to check for nests and eggs done in coordination with the state for the migratory bird act.

Ms. Tanner commented on the wetland assessments as they were characterized as not being great wildlife habitats, which she disagreed with. Additionally, she would like to see the climate impacts of green space included in this assessment.

[25:24] Chair Collins asked what the life expectancy would be for the new steel poles. Ashley Friend from Eversource said the new poles would have an average lifespan from 50 to 70 years.

[26:23] Chair Collins asked about the yellow hatched areas on page 31 in the packet which Ms. Friend responded would be the access areas to the structures and there are multiple listed in the permit in case of emergency so that they could have extra options. With the goal to use the least impactful access point before resorting to having to use more impactful ones.

[28:59] Vice Chair McMillan asked about potential fill for grading at some of the steeper access points and potentially which of these sites would not be fully restored due to leaving fill in for grading. Ms. Friend responded that there would be no benefit for leaving a road in the access points for the future and they are planning to restore these grades to what existed prior to their work. They plan to loam and seed these regraded access sites once the grades are put back into existing conditions with the possibility for future access to be re-opened in a similar manner. Vice Chair McMillan followed up with her concern about potential invasive species being contained in any stockpiled loam to which Ms. Friend responded that no loam would be moved to different sites and the mats would be cleaned off before moving.

[34:06] Ms. Vaccaro asked about the disposal of the drilled material and whether they could use some of that material to backfill holes. Mr. Degler responded that that is what they intend to do, and the disposed material will be whatever is leftover that they couldn't use.

[35:33] Ms. Vaccaro asked if they had a procedure for ground nesting birds. Mr. Degler noted that they typically do enough site visits beforehand to know where nests are and work around them to avoid disturbance.

[36:28] Vice Chair McMillan made a motion to recommend approval. Ms. Blasko seconded the motion. Vice Chair McMillan made a comment about the quality of the wildlife habitat and how the improvements of their best management practices can really help improve the quality of wildlife and corridors in those areas.

[37:38] The motion passed unanimously.

### **III. STATE WETLANDS BUREAU APPLICATIONS (OLD BUSINESS)**

- A. Standard Dredge and Fill  
105 Bartlett Street  
Clipper Traders, LLC, Portsmouth Lumber & Hardware, LLC, Iron Horse Properties, LLC, Owners  
Assessor Map 157, Lots 1 and 2, Map 164, Lots 1, 2, and 4-2

[37:59] Ms. Gindele announced that she would be recusing herself.

[38:45] Patrick Crimmins of Tighe & Bond and Vicky Martel from Woodburn Associates came to present this application. Mr. Crimmins gave a brief overview of the project which had gone through previous approvals from the board before but may not have been seen by more recent board members. They are moving forward with their NH State Dredge & Fill application which needs a recommendation from the Conservation Commission. He noted that this plan includes all of the previously approved impacts. This project would bring in public open space, some of which would be deeded to the City and some of which would become a public park. There are many stormwater and buffer improvements on-site where none currently exist. The project proposes three multifamily buildings with 152 units, repaving, landscape improvements and pedestrian improvements. They have removed all proposed buildings out of the 50 ft wetland buffer area. Within the buffer, the community greenway will be constructed as part of the project. Which will be porous asphalt. The project has already received an alteration of terrain approval as well as a shoreland permit from NHDES. They have a total impact of 209 s.f of proposed impact into the tidal wetland buffer from their proposed stormwater outfalls. He went on to give greater detail on the proposed impacts of the project that had been previously approved and the proposed payments into the ARM Fund for impacts.

[49:56] Ms. Martel presented on the proposed landscaping that has changed since their last application including selective removal of invasive species, the reseeded of disturbed buffer areas, and additional buffer plantings to be added due to the new proposed outfall impacts.

[1:03:45] Vice Chair McMillan asked about the potential for proposed developments in the future to the north of the site. Mr. Crimmins noted that he could not speak to what could happen in the future but that the current applicant has no intention to develop that section.

[1:04:34] Ms. Tanner asked about the risk of sea level rise and flood risk for the parking garage. Mr. Crimmins responded that they are placing flood proofing in the proposed garage which entails sealing off the foundation with a membrane that protects it from water.

[1:06:05] Ms. Tanner noted that there are no buildings in the area that are near the proposed height and brought up concern for migratory birds that could fly into the windows. Mr. Crimmins responded that they are building to heights that are allowed by the City's zoning code.

[1:07:12] Ms. Tanner requested that the applicant describe how the sump pumps in the catch permits are meeting the NH Fish and Game requirements. Mr. Crimmins responded that there will be pretreatment units in them and the sumps themselves will be eliminated. The treatment occurs in a pretreatment unit before it goes into the full unit. Mr. Crimmins would be happy to add in a stipulation that they adhere to NHB recommendations.

[1:09:14] Vice Chair McMillan asked if there were any notes to not use any plastics in their erosion control. Mr. Crimmins responded that they could place that in their plan notes.

[1:09:50] Chair Collins asked for confirmation that the trail would not be lit. Mr. Crimmins responded that it was the intention to not have that lit but ultimately would be the City's decision.

[1:10:12] Vice Chair McMillan asked about signage for dogs along the trail. Mr. Crimmins responded that it would be a City community space easement and they could work out signage for the area based on a requirement for having all dogs leashed in the area.

[1:12:58] Ms. Vaccaro asked about any impacts to the salt marshes in the area. Mr. Crimmins responded that the only impacts would be from one of the outfalls which would only have a slow flow of treated water that trickles through riprap before reaching the marsh.

[1:14:12] Ms. Vaccaro asked why they chose a medium risk tolerance for their sea level rise projections on page 95 of the packet. Mr. Crimmins responded that it is probably a question for their wetland scientist, the proposed first floors and slabs were above current flood elevation levels.

[1:15:45] Ms. Blasko asked if there had been any conversations previously about bank stabilization plans other than the seed mix. Mr. Crimmins responded that the City will have the easement for those areas and will have the responsibility for stabilization work.

[1:16:57] Vice Chair McMillan noted concern for the seed mix to be planted and the lack of shrubs which could benefit wildlife as it does not reflect the buffer habitat that is desired. Ms. Martel responded that the entire 50-foot buffer will be preserved, and the seeding will only

happen in areas that are disturbed. She also mentioned that not every proposed plant and shrub was called out on the landscaping plan.

[1:19:22] Additionally, the mowing line for the property manager is depicted on the plan which will help preserve the non-lawn greenspace which will only be mowed annually. Vice Chair McMillan asked if the mowing line would be marked with signage, to which Mr. Crimmins responded that it would be obvious due to the change in seed mixes.

[1:22:25] Vice Chair McMillan asked them to place signage that indicated a 'no-mow' area. Ms. Martel responded that they could place signage along the mowing line that indicates both the 'no-mow' area and the leashed dog requirement.

## PUBLIC HEARING

[1:24:10] Elizabeth Bratter of 159 McDonough Street came to speak to this application. She noted that there was an error with the owner listed for Map Lot #164-4 was owned by the Portsmouth Hardware Lumber but is actually owned by the railroad company. In Section I of the Standard Dredge and Fill application, the question for potential to impair waters was not answered, to which Ms. Bratter believed they should answer yes due to the impairment of the North Mill Pond. She asked that the Commission ask the development team to go back to their February application presentation. An outfall pipe location had changed from the previous application to this one, which had less impacts to the buffer. Ms. Bratter would prefer the applicant come back with their February alternative proposal and go back through the Technical Advisory Committee and the Commission.

## DISCUSSION AND DECISION OF THE BOARD

[1:28:42] Chair Collins asked Mr. Crimmins to address the outfall changes that had occurred from the last submission. Mr. Crimmins noted that this new proposal has a longer buried pipeline but has increased plantings with the same outfall design.

[1:33:05] Ms. Tanner made a motion to recommend approval with the following stipulations:

1. Additional signage shall be included that requires keeping dogs on leashes, demarcates wetland boundary areas and no-mow areas.
2. The applicant shall ensure New Hampshire Fish and Game wildlife protection requirements are followed including the fertilizer, sumps, catch basins, etc.
3. No plastics are used in any of the erosion control materials.
4. Dark sky-friendly lighting will be used.

[1:35:40] Ms. Blasko seconded the motion.

[1:35:48] Vice Chair McMillan mentioned to the applicant that it would be nice to let future residents of the building know about bird friendly windows.

[1:36:23] Mr. Jankowski noted that he would be voting against this application because he did not believe that it met the six criteria for a wetland conditional use permit.

[1:36:46] Ms. Vaccaro asked if there were any conversations around affordable housing for this project. Mr. Britz noted that it would be under the purview of the Planning Board but there were not any affordable units included in this proposal.

[1:37:29] The Commission voted with Mr. Gibb substituting in for Ms. Gindele. The motion passed 6-1 with Mr. Jankowski voting against and Ms. Gindele recused.

#### **IV. STATE WETLANDS BUREAU APPLICATIONS (NEW BUSINESS)**

1. Minimum Impact  
39 Holmes Court  
Stephen & Kathryn Singlar, Owners  
Assessor Map 101, Lot 13

[1:38:40] Erik Saari from Altus Engineering came to present this application for both 39 and 43 Holmes Court for shoreland permit applications. He described the two locations and their individual proposals with total impacts into the wetland buffer being 260 s.f for 39 Holmes Court with the addition of a heat pump and crushed stone around it for infiltration.

[1:40:59] Mr. Jankowski asked what the use was for 39 Holmes Court, to which Mr. Saari replied that the current use was for long-term tenants.

[1:41:36] Ms. Tanner made a motion to recommend approval of the application for 39 Holmes Court. Ms. Blasko seconded the motion. The motion passed unanimously.

2. Major Impact  
43 Holmes Court  
Stephen & Kathryn Singlar, Owners  
Assessor Map 101, Lot 14

[1:42:17] Mr. Saari described the project as a tear-down and rebuild. The property has a dock and has already gone through the Zoning Board and the Historic District Commission with approvals. The proposal is a similar square footage to the previous home and will have a net reduction in impervious surfaces of about 961 s.f and the replacement of walkways and the replacement of a patio with a deck, the proposed amount of impacts to the buffer is 4,650 s.f. Mr. Saari has talked with the applicant about a landscaping plan and will have that done when the landscaper is available.

[1:44:30] Chair Collins asked what was happening right over the deck in terms of infiltration of rainwater. Mr. Saari responded that it will be infiltrated underneath the deck within the crushed stone. Chair Collins asked if there was a stoop area that was not indicated in the impervious impacts. Mr. Saari noted that it was covered by the roof overhang, but he would look into it further to provide details.



[1:45:48] Mr. Tanner asked where the snow was stored.

Mr. Saari responded that he believed the owner currently pushes it onto the grassy area and that they are not able to plow in that location, so it is either shoveled or snow blown. Mr. Saari noted that Holmes Court is a City street up until 39 Holmes Court and then it becomes private.

[1:46:43] Ms. Tanner asked if the planting plan would include plants around the entire periphery including facing the water.

Mr. Saari replied that he would be recommending something similar to the future landscape architect for their planting plan.

[1:48:01] Vice Chair McMillan requested that a maintenance manual be recommended to NHDES to be put into the deed.

[1:49:23] Ms. Gindele asked what the age of the house was. Mr. Saari responded that it is around 250 years old, with some mechanicals failing, rotting occurring and low ceilings.

Ms. Gindele noted that no elevations were given. Mr. Saari responded that it will still be two stories and they will have to raise the elevation of the home. The requirement is 10 feet, which is 2 feet above the base flood elevation, but they plan to raise it to 13 feet.

[1:51:33] Ms. Vaccaro asked what they were planning to put in their basement. Mr. Saari responded that they could not add any mechanicals. Mr. Britz noted that they could not actually build a basement under the 10 feet threshold unless it was considered a flow-through basement.

[1:52:33] Ms. Tanner made a motion to recommend approval:

1. The pervious paver maintenance plan shall be recorded at the registry of deeds with the property.
2. Plantings shall be placed around the periphery of the property that borders the waterfront.

Vice Chair McMillan seconded the motion. The motion passed unanimously.

## **V. OTHER BUSINESS**

1. 365 Little Harbor Road

Vice Chair McMillan recused herself from this business.

[1:54:00] Marc Jacobs, a soil and wetland scientist, came to represent the Doleac family who has a restoration plan in place for their property. In 2021, their landscaper was supposed to be pruning a shrubbery area on their property and instead removed all the vegetation on a portion of the shore. The property owner had reached out to Mr. Jacobs and requested that he help them

reach out to NHDES for recommendation to rectify the situation. Mr. Britz and David Price from NHDES met Mr. Jacobs on the property in 2021 and recommended that no after the fact permit be required but instead a restoration plan be submitted to NHDES.

The previous vegetation had been lilac bushes that had become diseased and there are currently invasives such as Asian bittersweet in the area. The restoration plan proposes two red maples are placed where black locusts exist currently, along with vegetation such as juniper and forsythia. There has been no soil removal or disturbance as no roots were removed.

[2:00:00] Ms. Tanner asked why this had taken so long to come before them to which Mr. Jacobs responded that it was in part due to scheduling issues. Ms. Tanner also inquired why more natives were not going in. Mr. Jacobs noted that it was already proposed to be tightly planted with the current proposed species.

[2:01:42] Mr. Britz mentioned that in this case there was a robust planting plan and the plan was to improve what had once been there and it was worth mentioning that the owner had come forward on their own. He supported the plan and wanted to make sure the Commission had a chance to provide input and make a decision as well.

[2:03:01] Ms. Blasko asked if there was a Japanese knotweed problem to which Mr. Jacobs responded that there was not any knotweed on this property. Mr. Jacobs responded that if they had to use herbicides, which they were trying to prevent doing, they would do cut and dab applications as a last resort if invasives were difficult to remove.

[2:04:14] Ms. Blasko encouraged the applicant to follow the NOFA land care standards which Mr. Jacobs noted that he would encourage the owner to follow.

[2:05:32] The Commission made a joint decision to let the property owner proceed with the restoration plan without seeking an after the fact permit.

[2:06:47] Ms. Tanner brought up the Sustainability Fair that had recently occurred and passed along what some community members had mentioned to her in terms of their thanks for the volunteers that make up the Commission.

[2:07:47] Ms. Blasko announced that there would more than likely be more sustainability fairs in the future as the feedback was very positive.

[2:08:32] Mr. Britz brought up that the committee working on recommended land use changes for Article 10 had made some edits which would be gone over during an upcoming work session with the Commission which would then go to the Planning Board and then the Land Use Committee. A poll will be sent out soon to see availability of the Commission members to come to a work session.

[2:10:03] Ms. Blasko wondered if it was possible to somehow give new property owners or potential buyers a warning that their properties are within buffers or wetlands. Mr. Britz noted that they didn't have anything like that in place other than the mailings to properties that they

were within the wetland and buffer.

[2:12:14] Vice Chair McMillan mentioned that NHDES had worked with the Association of Realtors in the past to provide prospective homebuyers with information about wetlands and buffer locations. Ms. Vaccaro mentioned that she would be interested in doing something along those lines in Portsmouth and noted that the town of Hampton mails notices to all new property owners that are within the wetland buffer.

[2:13:38] Ms. Tanner made a motion to adjourn. Ms. Gindele seconded the motion. The motion passed unanimously.

## **VI. ADJOURNMENT**

The meeting adjourned at 5:39 p.m.

*\*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:*

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# Memo

TO: Conservation Commission Members  
FROM: Peter Britz, Environmental Planner  
Kate Homet, Associate Environmental Planner  
DATE: June 9, 2023  
SUBJ: June 14, 2023 Conservation Commission Meeting

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**Site Address**  
**325 Little Harbor Road**  
**ADL 325 Little Harbor Road Trust, owner**  
**Stephen H. Roberts. Esq. Trustee, co-owner**  
**Assessor Map 205, Lot 2**  
**(LU-23-81)**

## Description:

This project proposes the construction of a new bridge for access to Lady Isle aka Belle Isle, with the demolition of the existing bridge proposed for after construction is complete. This project is required as heavy maintenance and construction vehicles need to access Lady Isle, and under the current bridge there are signs of degradation and failure. The proposed work will occur on private land and will cross over the Piscataqua River, putting this project within the City's wetland and buffer boundaries, as well as the tidal and shoreline buffers. This project proposes permanent impacts within the wetland buffer of 36,358 square feet and 3,443 square feet of permanent impacts within the tidal wetland. Re-grading and fill is needed to accommodate elevating the new bridge to a higher elevation to adapt to sea level rise. Restoration of existing salt marsh and Marsh Elder (*Iva frutescens*) species is also proposed.

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

The proposed site has an existing bridge connecting the mainland to Lady Isle, where a safe method of transport is needed to get residents, contractors, guests, etc. to the property and back from the mainland. The proposed project would construct a new bridge spanning a tidal water way connecting the island to the mainland with a higher elevation to increase resiliency to sea level rise, a lifespan of approximately 75 years, and an increased passage size to allow for improved tidal flow over what currently exists.

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

The existing and proposed bridge are within the City tidal wetlands and tidal buffer zone as well as State tidal wetlands and tidal buffer zone. To provide access to the Island any reconstruction, rehab work or new construction of the bridge must occur in these wetland and buffer areas.

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

Applicant has performed a study of the habitat underneath the current bridge and has deemed it not highly valuable. Surrounding impacts to salt marsh and Marsh Elder (*Iva frutescens*) habitats will be minimized

through the introduction of new plantings of salt marsh habitat (both low and high marsh) and replanting of existing Marsh Elder (*Iva frutescens*) in a more protected area.

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

This proposal will require regrading and filling the current private drive to increase the height of the road and proposed bridge. Additionally, the new location of the bridge will impact areas of existing vegetation. All impacted vegetation will be remediated through a restoration plan of new plantings on site.

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

Given the nature of the project, replacing the bridge in its current location would continue to cause scouring of the channel under the bridge and would impact the function of the waterway. Placement of the bridge further east would cause unwanted impacts to well-established salt marsh. The proposed placement on the west side of the existing bridge shows the least adverse impacts to the tidal waterway and salt marsh.

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

Applicant is proposing planting low and high marsh areas along the shoreline along with native buffer species between the shoreline/marsh and the road.

**Recommendation:** Staff recommends approval of this application with the following stipulation:

1. In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall install permanent wetland boundary markers during project construction. These can be purchased through the City of Portsmouth Planning and Sustainability Department.
2. Applicant shall provide a monitoring report detailing the success of the planting plan one year after project completion and demonstrate compliance with the NHDES monitoring requirements when complete.

**Site Address**  
**380 Greenleaf Avenue**  
**Tanner Family Revocable Trust**  
**Mark and Allison J. Tanner Trustees, owners**  
**Assessor Map 243, Lot 63**  
**(LU-23-62)**

Description:

This application proposes the construction of a new 20 x 20' one-story garage on a residential property with various additions of native buffer plantings and areas of stormwater improvement to mitigate any impervious impacts from the garage. This property consists of a large wetland system and is also completely within the 100' wetland buffer. The applicant is proposing to remove 885 square feet of impervious asphalt and place the garage on a portion of the area where impervious asphalt currently exists. The applicant is proposing a 2' drip edge of crushed stone around the perimeter of the garage and 484 square feet of pervious pavers leading up to the garage where asphalt currently exists. Additional planting beds are proposed in areas of existing asphalt.

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

The applicant is proposing to build the garage on an area of already disturbed and impervious land within the buffer. The overall project will be reducing the amount of impervious surface on the property and will be infiltrating stormwater and further buffering the wetland through planting beds.

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

The entirety of this property is either within the wetland or the wetland buffer. There is no alternative location to build and the applicant is proposing to build in an existing disturbed area to minimize further impact to the buffer.

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

The applicant is proposing an overall reduction in impervious area to the site. This proposal will increase the number of plantings in the buffer while also helping to infiltrate and slow stormwater on the property due to added crushed stone drip edges.

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

The applicant is proposing no disturbance to the natural vegetative state on the property. The existing asphalt will be removed, and a garage and pervious pavers will be placed. Additional plantings will add to the vegetated buffer.

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

While the entire parcel is within wetland and buffer boundaries, the applicant is proposing to build in an area that is already impervious and will be significantly reducing existing impervious area while offsetting impacts with additional plantings, stormwater controls and pervious pavers.

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

The applicant is not proposing to disturb any area within the first 25' of the wetland boundary. Disturbances within the buffer will be offset with the removal of asphalt, the addition of native buffer plantings and stormwater controls.

**Recommendation:** Staff recommends approval of this application as presented.

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Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

Project # 47099.01

NH Wetlands Bureau

***Standard Dredge & Fill  
Wetlands Permit Application  
for  
ADL 325 Little Harbor Road Trust***

***Replace an Existing Residential Bridge with a New  
Bridge and Tidal Area Restoration Project***

***325 Little Harbor Road, Lady Isle, Portsmouth, NH***

***Rockingham County***

**May 24, 2023**

**TFMoran, Inc.**

170 Commerce Way – Suite 102  
Portsmouth, NH 03801  
(603) 431-2222



# SECTION 1



NHDES-W-06-012



## STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

Water Division/Land Resources Management  
Wetlands Bureau



[Check the Status of your Application](#)

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

**APPLICANT'S NAME:** ADL 325 Little Harbor Road Trust **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](#).

<b>SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))</b> Please use the <a href="#">Wetland Permit Planning Tool (WPPT)</a> , the Natural Heritage Bureau (NHB) <a href="#">DataCheck Tool</a> , the <a href="#">Aquatic Restoration Mapper</a> , or other sources to assist in identifying key features such as: <a href="#">priority resource areas (PRAs)</a> , <a href="#">protected species or habitats</a> , coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the property contain a PRA? If yes, provide the following information:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&amp;G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Protected species or habitat?                         <ul style="list-style-type: none"> <li>○ If yes, species or habitat name(s): <u>Marsh elder, Eel grass beds, Atlantic Sturgeon, Shortnose Sturgeon</u></li> <li>○ NHB Project ID #: <u>NHB23-0723</u></li> </ul> </li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Bog?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Floodplain wetland contiguous to a tier 3 or higher watercourse?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Designated prime wetland or duly-established 100-foot buffer?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Name of Local River Management Advisory Committee (LAC): <u>N/A</u></li> </ul>	

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• A copy of the application was sent to the LAC on Month: <input type="text"/> Day: <input type="text"/> Year: <input type="text"/>	
For dredging projects, is the subject property contaminated? • If yes, list contaminant: N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For stream crossing projects, provide watershed size (see <a href="#">WPPT</a> or Stream Stats): N/A	
<b>SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))</b>	
Provide a <b>brief</b> description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.	
Permanently impact 36,342 SF of Tidal Waters, 3,443 SF of Tidal Marsh and 26,298 SF of the Developed Upland Tidal Buffer Zone for the purpose replacing an existing failing bridge with a new bridge on wooden piles that spans the tidal resource area. The existing causeways within public waters will be removed, salt marsh area will be restored, and the developed upland buffer will be enhanced with native vegetation. This project also proposes to connect Lady Isle to municipal utilities.	
<b>SECTION 3 - PROJECT LOCATION</b>	
Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.	
ADDRESS: 325 Little Harbor Road	
TOWN/CITY: Portsmouth, NH	
TAX MAP/BLOCK/LOT/UNIT: Tax Map: 205, Lot: 2 & Tax Map 204, Lot: 5	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Piscataqua River <input type="checkbox"/> N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 43.065188° North	

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70.745992° West

**SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))**

If the applicant is a trust or a company, then complete with the trust or company information.

NAME: ADL 325 Little Harbor Road Trust

MAILING ADDRESS: C/o Stephen H. Roberts, ESQ, 127 Parrott Ave

TOWN/CITY: Portsmouth

EMAIL ADDRESS: sroberts@hpgrlaw.com

STATE: NH

ZIP CODE: 03801

FAX:           

PHONE: private

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.: Aube, Jason, R.

COMPANY NAME: TFMoran, Inc.

MAILING ADDRESS: 170 Commerce Way, Suite 102

TOWN/CITY: Portsmouth

EMAIL ADDRESS: jaube@tfmoran.com

STATE: NH

ZIP CODE: 03801

FAX:           

PHONE: 603-431-2222

ELECTRONIC COMMUNICATION: By initialing here JRA, 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:           

MAILING ADDRESS:           

TOWN/CITY:           

EMAIL ADDRESS:           

STATE:           

ZIP CODE:           

FAX:           

PHONE:           

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

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**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):  
Please see attached supplemental information entitled, "SECTION 7 - Resource Specific Criteria."

**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: 01 Day: 17 Year: 2023

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

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

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Scrub-shrub Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Emergent Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Wet Meadow			<input type="checkbox"/>			<input type="checkbox"/>
	Vernal Pool			<input type="checkbox"/>			<input type="checkbox"/>
	Designated Prime Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Duly-established 100-foot Prime Wetland Buffer			<input type="checkbox"/>			<input type="checkbox"/>
Surface Water	Intermittent / Ephemeral Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Perennial Stream or River			<input type="checkbox"/>			<input type="checkbox"/>
	Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - River			<input type="checkbox"/>			<input type="checkbox"/>
Banks	Bank - Intermittent Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Bank - Perennial Stream / River			<input type="checkbox"/>			<input type="checkbox"/>
	Bank / Shoreline - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
Tidal	Tidal Waters	36,342		<input type="checkbox"/>			<input type="checkbox"/>
	Tidal Marsh	3,443		<input type="checkbox"/>			<input type="checkbox"/>
	Sand Dune			<input type="checkbox"/>			<input type="checkbox"/>
	Undeveloped Tidal Buffer Zone (TBZ)			<input type="checkbox"/>			<input type="checkbox"/>
	Previously-developed TBZ	26,298		<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Tidal Water			<input type="checkbox"/>			<input checked="" type="checkbox"/>
<b>TOTAL</b>		<b>66,083</b>					<input checked="" type="checkbox"/>

**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:

Permanent and temporary (non-docking):	66,083 SF	× \$0.40 =	\$ 26,433.20
Seasonal docking structure:	SF	× \$2.00 =	\$
Permanent docking structure:	SF	× \$4.00 =	\$
Projects proposing shoreline structures (including docks) add \$400 =			\$
<b>Total =</b>			<b>\$ 26,433.20</b>
<b>The application fee for minor or major impact is the above calculated total or \$400, whichever is greater = \$ 26,433.20</b>			

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**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: Ja SR	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: Ja SR	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: Ja SR	The signer understands that: <ul style="list-style-type: none"> <li>The submission of false, incomplete, or misleading information constitutes grounds for NHDES to:                         <ol style="list-style-type: none"> <li>Deny the application.</li> <li>Revoke any approval that is granted based on the information.</li> <li>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.</li> </ol> </li> <li>The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641.</li> <li>The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.</li> </ul>
Initials: Ja SR	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): <i>Stephen Roberts</i>	PRINT NAME LEGIBLY: Stephen H. Roberts	DATE: 5/23/23
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY:	DATE:
SIGNATURE (AGENT, IF APPLICABLE): <i>Jason Aube</i>	PRINT NAME LEGIBLY: Jason Aube of TFMoran, Inc.	DATE: 5/19/2023

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

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

TOWN/CITY CLERK SIGNATURE: <i>Kelli L. Barnaby</i>	PRINT NAME LEGIBLY: Kelli L. Barnaby
TOWN/CITY: Portsmouth	DATE: May 24, 2023

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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. Make check or money order payable to "Treasurer – State of NH".

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

### APPLICATION CHECKLIST

Unless specified, all items below are required. Failure to provide the required items will delay a decision on your project and may result in denial of your application. Please reference statute RSA 482-A, Fill and Dredge in Wetlands, and the [Wetland Rules Env-Wt 100-900](#).

- The completed, dated, signed, and certified application (Env-Wt 311.03(b)(1)).
- Correct fee as determined in RSA 482-A:3, l(b) or (c), subject to any cap established by RSA 482-A:3, X (Env-Wt 311.03(b)(2)). Make check or money order payable to "Treasurer – State of NH".
- The Required Planning actions required by Env-Wt 311.01(a)-(c) and Env-Wt 311.03(b)(3).
- [US Army Corps of Engineers \(ACE\) "Appendix B, New Hampshire General Permits \(GPs\), Required Information and Corps Secondary Impacts Checklist"](#) and its required attachments (Env-Wt 307.02). This includes the [US Fish and Wildlife Service IPAC review](#) and [Section 106 Historic/Archaeological Resource review](#).
- Project plans described in Env-Wt 311.05 (Env-Wt 311.03(b)(4)).
- Maps, or electronic shape files and meta data, and other attachments specified in Env-Wt 311.06 (Env-Wt 311.03(b)(5)).
- Explanation of the methods, timing, and manner as to how the project will meet standard permit conditions required in [Env-Wt 307](#) (Env-Wt 311.03(b)(7)).
- If applicable, the information regarding proposed compensatory mitigation specified in Env-Wt 311.08 and Chapter Env-Wt 800 - [Permittee Responsible Mitigation Project Worksheet](#), unless not required under Env-Wt 313.04 (Env-Wt 311.03(b)(8); Env-Wt 311.08; Env-Wt 313.04).
- Any additional information specific to the **type of resource** as specified in Env-Wt 311.09 (Env-Wt 311.03(b)(9); Env-Wt 311.04(j)).
- Project specific information required by Env-Wt 500, Env-Wt 600, and Env-Wt 900 (Env-Wt 311.03(b)(11)).
- A list containing the name, mailing address and tax map/lot number of each abutter to the subject property (Env-Wt 311.03(b)(12)).
- Copies of certified postal receipts or other proof of receipt of the notices that are required by RSA 482-A:3, l(d) (Env-Wt 311.03(b)(13)).
- Project design considerations required by Env-Wt 313 (Env-Wt 311.04(j)).
- Town tax map showing the subject property, the location of the project on the property, and the location of properties of abutters with each lot labeled with the name and mailing address of the abutter (Env-Wt 311.06(a)).
- Dated and labeled color photographs that:
  - (1) Clearly depict:
    - a. All jurisdictional areas, including but not limited to portions of wetland, shoreline, or surface water where impacts have or are proposed to occur.
    - b. All existing shoreline structures.
  - (2) Are mounted or printed no more than 2 per sheet on 8.5 x 11 inch sheets (Env-Wt 311.06(b)).
- A copy of the appropriate US Geological Survey map or updated data based on LiDAR at a scale of one inch equals 2,000 feet showing the location of the subject property and proposed project (Env-Wt 311.06(c)).
- A narrative that describes the work sequence, including pre-construction through post-construction, and the relative timing and progression of all work (Env-Wt 311.06(d)).

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- For all projects in the protected tidal zone, a copy of the recorded deed with book and page numbers for the property (Env-Wt 311.06(e)).
- If the applicant is not the owner in fee of the subject property, documentation of the applicant's legal interest in the subject property, provided that for utility projects in a utility corridor, such documentation may comprise a list that:
  - (1) Identifies the county registry of deeds and book and page numbers of all of the easements or other recorded instruments that provide the necessary legal interest; and
  - (2) Has been certified as complete and accurate by a knowledgeable representative of the applicant (Env-Wt 311.06(f)).
- The NHB memo containing the NHB identification number and results as well as any written follow-up communications such as additional memos or email communications with either NHB or NHF&G (Env-Wt 311.06(g)). See [Wetlands Permitting: Protected Species and Habitat Fact Sheet](#).
- A statement of whether the applicant has received comments from the local conservation commission and, if so, how the applicant has addressed the comments (Env-Wt 311.06(h)).
- For projects in LAC jurisdiction, a statement of whether the applicant has received comments from the LAC and, if so, how the applicant has addressed the comments (Env-Wt 311.06(i)).
- If the applicant is also seeking to be covered by the state general permits, a statement of whether comments have been received from any federal agency and, if so, how the applicant has addressed the comments (Env-Wt 311.06(j)).
- [Avoidance and Minimization Written Narrative](#) or the [Avoidance and Minimization Checklist](#), or your own avoidance and minimization narrative (Env-Wt 311.07).
- For after-the-fact applications: information required by Env-Wt 311.12.
- [Coastal Resource Worksheet](#) for coastal projects as required under Env-Wt 600.
- Prime Wetlands information required under Env-Wt 700. See [WPPT](#) for prime wetland mapping.

**Required Attachments for Minor and Major Projects**

- [Attachment A: Minor and Major Projects](#) (Env-Wt 313.03).
- [Functional Assessment Worksheet](#) or others means of documenting the results of actions required by Env-Wt 311.10 as part of an application preparation for a standard permit (Env-Wt 311.03(b)(3); Env-Wt 311.03(b)(10)). See [Functional Assessments for Wetlands and Other Aquatic Resources Fact Sheet](#). For shoreline structures, see shoreline structures exemption in Env-Wt 311.03(b)(10)).

**Optional Materials**

- [Stream Crossing Worksheet](#) which summarizes the requirements for stream crossings under Env-Wt 900.
- Request for [concurrent processing of related shoreland / wetlands permit applications](#) (Env-Wt 313.05).





Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



## NHDES Wetlands Permit Application

### SECTION 7 – Resource Specific Criteria

#### Env-Wt 300 – Permits and Other Authorizations – Conditions Applicable to All Work in Jurisdictional Areas

**Env-Wt 307.07** – All project activities will be conducted in compliance with the applicable requirements of RSA 483-B and Env-Wq 1400 during and after construction. A NHDES Shoreland Permit Application will be submitted to demonstrate this project meets the minimum standards of RSA 483-B:9, V.

**Env-Wt 307.11** – Permanent fill associated with removing the existing causeways and restoring the areas of saltmarsh within the vicinity of the project will consist of clean materials and will not exceed the limits specified in the design plans. Additionally, filled areas will not direct flows onto adjacent or downstream properties, and will not impact the restoration of wetlands and surface waters post-construction. This project will result in significant decreases in the velocity of the ebb and flow of the tide within the project area.

**Env-Wt 307.13(d)** – This project proposes impacts within 10-feet of an adjacent property, and we have obtained consent of the affected abutter to such impacts – see the attached “Abutter’s Consent Letter.”

**Env-Wt 311.05 (a)(5)** – The names and professional license numbers of each individual responsible for the design plan can be found on the design plan.

**Env-Wt 311.05 (a)(13)** – The location(s) of all jurisdictional areas delineated can be found within the design plan and on the Wetlands Classification Plan.

**Env-Wt 311.05 (a)(14)** – The name and professional license number of the individual responsible for the delineation of jurisdictional areas can be found on the design plan.

**Env-Wt 311.05 (b)** – The design plan associated with the Wetland Permit Application is accompanied by an Existing Conditions Plan that has been prepared and stamped by a Certified Wetlands Scientist.

**Env-Wt 311.05 (b)(5)** – The dates, means and methods of all delineation(s) can be found in the “Coastal Functional Assessment” located within Section-2 of the permit application and within the notes on the Existing Conditions Plan.

**Env-Wt 313.03(c)(3)** – This project does not involve the construction or modification of a non-tidal shoreline structure. In addition, it proposes no adverse impacts to abutting properties and the ability of abutters to use and enjoy their properties – we have notified all Abutters of both permanent and temporary impacts via certified mail.



## Env-Wt 400 – Delineating, Classifying Jurisdictional Areas and Project Classification

This project is located within a portion of *Tidal Waters*, *Tidal Wetlands*, and the *Upland Tidal Buffer Zone* of the back channel of the Piscataqua River. The *Highest Observable Tide Line (HOTL)* was delineated, and it is depicted on the design plans attached to this permit application. Neighboring freshwater wetlands and salt marsh areas are depicted on the plans as well. Due to the proposed impacts within Tidal Waters and Wetlands, which are both *Priority Resource Areas (PRAs)*, this project is classified as a *Major Impact Project*.

## Env-Wt 500 – Project Specific Requirements

This project is located in a coastal area and therefore, these rules are not applicable to this project.

## Env-Wt 600 – Project Specific Requirements – Coastal Lands and Tidal Waters/ Wetlands

**Env-Wt 603.02 (a)** – This project proposes to impact *Tidal Waters*, *Tidal Wetlands*, and the *Previously Developed Upland Tidal Buffer Zone* for the purpose of replacing an existing outdated bridge with a new bridge that spans the resource, creating new bridge approaches, and removing existing causeways to restore natural tidal flows and facilitate the passage of aquatic organisms. New connections to municipal utilities will be installed and salt marsh area and the developed upland will be restored with native vegetation.

**Env-Wt 603.02 (b)** – The natural resource assets proposed to be impacted by this project are the Tidal Waters, Tidal Wetlands, and the Previously Developed Upland Tidal Buffer Zone. On-site observations and the NHDES Wetlands Permit Planning Tool (WPPT) were used to determine the presence of these natural resource assets. Supplemental screening maps using NH GRANIT GIS data layers are included with this permit application.

**Env- Wt 603.02 (c)(1)** – The “Coastal Functional Assessment (CFA)” is attached to this permit application. In accordance with Env-Wt 602.07, the Coastal Functional Assessment is an evaluation of the jurisdictional coastal natural resource area proposed to be impacted by this project. This project proposes to impact the Estuarine Tidal Wetland on site. In addition to the functional assessment, an “Ecological Integrity Assessment” was completed for this resource. Additional functional assessments accompany the Prime Wetland Waiver Request.

**Env- Wt 603.02 (c)(2)** – A “Coastal Vulnerability Assessment” is attached to this permit application.

**Env- Wt 603.02 (d)** – The “Avoidance and Minimization Written Narrative” has been included with this permit application.

**Env- Wt 603.02 (e)(1)** – This project meets all relevant standard conditions of Env-Wt 307. This is demonstrated within the “Standard Conditions Narrative” located within Section-1 of the “Coastal Resource Worksheet.”





**Env- Wt 603.02 (e)(2)** – This project meets all approval criteria under Env-Wt 313.01, and this is demonstrated within the “Approval Criteria Narrative” located within Section-1 of the “Coastal Resource Worksheet.”

**Env- Wt 603.02 (f)(1)** – As required by Env-Wt 603.06, the “Project Design Narrative” is provided within Section-1 of the “Coastal Resource Worksheet.”

**Env- Wt 603.02 (f)(2)** – The design plans associated with this project meet all the requirements of Env-Wt 603.07.

**Env- Wt 603.02 (f)(3)** – The *Water Depth Supporting Information* is depicted on the design plans and the Vulnerability Assessment plans.

**Env-Wt 603.02 (f)(4)** – A statement from the *Pease Development Authority Division of Ports and Harbors (“DP&H”) Chief Harbormaster* relative to how the proposed structures will not become navigational hazards is attached to this permit application. A statement from the U.S. Coast Guard is included as well.

**Env-Wt 603.03 (a)(1)** – The data screening was determined using the NHDES Wetlands Permit Planning Tool (WPPT) and GIS data layers available at NH GRANIT. GIS screening maps are included with this permit application.

**Env-Wt 603.03 (a)(2)** – No impacts are proposed to shellfish sites, eelgrass beds, or sand dunes. A few small fringe saltmarsh areas exist within the vicinity of the project site but, although some impacts are proposed to this area, as a result of the proposed salt marsh restoration efforts, this project will result in no net loss of salt marsh area.

**Env-Wt 603.03 (a)(3)** – We have coordinated with the *National Oceanic Atmospheric Administration (NOAA) Marine Fisheries* and concluded that this project is not likely to adversely affect (NLAA) any species listed as threatened or endangered by the National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA) of 1973, as amended. The “EFH Mapper Report” has been included with this permit application. Natural tidal flows and currents will not be impacted.

**Env-Wt 603.03 (a)(4)** – On-site assessments were conducted on March 24<sup>th</sup> and confirmed the proposed impacts will occur within the *Tidal Waters, Wetlands, and the Previously Developed Upland Tidal Buffer Zone* on site.

**Env-Wt 603.03 (a)(5)** – The projected sea level rise and location relative to the 100-Year Floodplain Map is depicted on the design plans as well as within the Coastal Vulnerability Assessment.

**Env-Wt 603.04** – The “Coastal Functional Assessment (CFA)” is attached to this permit application form. In accordance with Env-Wt 602.07, the Coastal Functional Assessment is an evaluation of the jurisdictional coastal natural resource area proposed to be impacted by this project. This project proposes to impact the Estuarine Tidal Wetland on site. In addition to the functional assessment, an “Ecological Integrity Assessment” was completed for this resource.

**Env-Wt 603.05** – The “Coastal Vulnerability Assessment” is attached to this permit application form.



**Env-Wt 603.06 (a)** –The “Project Design Narrative” is provided within Section-1 of the “Coastal Resource Worksheet.”

**Env-Wt 603.06 (b)** – The proposed erosion/ siltation control methods are specified on the design plans as well as within the attached “Work Sequence Narrative.”

**Env-Wt 603.06 (c)** – Once the project is completed, and the site is deemed stable, the erosion controls will be removed. In addition, the saltmarsh areas in the vicinity of the project site will be restored with native plantings and topsoil additions (in areas with insufficient topsoil to support native plantings). The native plantings will be monitored to ensure successful establishment and growth.

**Env-Wt 603.07** – The attached design plans meet all the criteria relative to this design plan rule.

**Env-Wt 603.08** – The *Water Depth Supporting Information* is depicted on the design plans and within the Vulnerability Assessment plans.

**Env-Wt 603.09** – A statement regarding navigation and passage from the *Pease Development Authority Division of Ports and Harbors (“DP&H”) Chief Harbormaster* has been attached to this permit application. This project proposes no adverse impacts to navigation and passage.

**Env-Wt 604.01** – This project proposes no impacts to *Tidal Beaches* or sand dunes. It will impact a portion of *Tidal Shoreline* – but it meets all of the General Criteria for Tidal Shorelines and has been evaluated for the standard conditions in Env-Wt 307, the avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03, the approval criteria in Env-Wt 313.01, the evaluation criteria in Env-Wt 313.05, and the project specific criteria in Env-Wt 600. This permit application also contains the Coastal Functional Assessment (CFA) required by Env-Wt 603.04 and the Vulnerability Assessment required by Env-Wt 603.05.

**Env-Wt 604.02** - This project meets all of the General Criteria for *Tidal Buffer Zones* and has been evaluated for the standard conditions in Env-Wt 307, the Avoidance and Minimization Requirements in Env 311.07 and Env-Wt 313.03, the approval criteria in Env-Wt 313.01, the evaluation criteria in Env-Wt 313.05, the project specific criteria in Env-Wt 600, the Coastal Functional Assessment (CFA) required by Env-Wt 603.04, and the Vulnerability Assessment required by Env-Wt 603.05.

**Env-Wt 604.03** – This project meets all criteria of Env-Wt 604.03. Permanent impacts are proposed to tidal waters and wetlands, but they are proposed for the purpose of public safety. The existing bridge is old, outdated, and in need of replacement. This project will replace this bridge with an updated and more structurally sound bridge that will better accommodate tidal flows and currents. Further, the impacts of this project have been evaluated for the standard conditions in Env-Wt 307, the avoidance and minimization requirements in Env-Wt 311.07 and 313.03, the approval criteria in Env-Wt 313.01, the evaluation criteria in Env-Wt 313.05, and the project specific criteria in Env-Wt 600. This permit application includes the Coastal Functional Assessment (CFA) required by Env-Wt 603.04 and the Vulnerability Assessment required by Env-Wt 603.05. Lastly, this project will optimize the natural function of the wetland, including restoration of habitat, water quality, and stability to storm surge.

**Env-Wt 605.01** – This project will not impact finfish, shellfish, crustacea or wildlife. No groundwater or surface water will be impacted, and no impacts will cause erosion on adjacent shoreline properties. The



project will have no adverse impact on navigation, recreation, or commerce of the general-public and will not impact prevailing tidal flows or currents.

**Env-Wt 605.02** – This project proposes no adverse impacts to beach or tidal flat sediment replenishment, movement of sediments along the shore, dissipation of wave energy and storm surge, runoff, or salinity levels. This project will result in the natural distribution of sediments over an area that has unnaturally been scoured away from accelerated tidal flows caused by a tidal restriction.

**Env-Wt 605.03** – Compensatory mitigation is not required for this project. This project does propose permanent impacts to tidal waters and wetlands, but it also consists of removing two tidal restrictions (the existing causeways). As a result, hydraulic capacity will be increased, and the passage of aquatic organisms will be better facilitated. In addition, natural tidal flows will be restored, and over time, the original geomorphology of the wetlands on site will be restored. Further, this project does not propose a new bridge, but rather the replacement of an existing bridge.

**Env-Wt 610.03** – The applicant has considered the standards described in FEMA P-55, Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Residential Buildings in Coastal Areas, 4th Edition (2011). The applicant has performed *Coastal Hazard Analysis* through the preparation of the attached *Coastal Vulnerability Assessment*. This project falls within FEMA Flood Zone-AE and Flood Zone-X. This project will receive oversight from the City of Portsmouth Planning Board and the Conservation Commission.

#### **Env-Wt 700 – Prime Wetlands**

This project proposes impacts to a *Duly-Established 100-foot Prime Wetland Buffer*, and therefore, we have submitted a Prime Wetland Waiver Request with this permit application.

#### **Env-Wt 800 – Compensatory Mitigation**

This project is self-mitigating. This project proposes to remove two existing causeways from public waters which will result in significant improvements to hydraulic capacity, passage of aquatic organisms, and the natural tidal flows and geomorphology of the area. Under Env-Wt 605.03 (b)(9), these improvements exempt this project from requiring compensatory mitigation. This project also proposes to restore salt marsh area and restore the upland buffers with native vegetation.

#### **Env-Wt 900 – Stream Crossings**

This project proposes no stream crossings. This project only proposes to cross a tidal area, and therefore, these administrative rules are not applicable to this project.







**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:** ADL 325 Little Harbor Road Trust **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.

There is no practicable alternative that would have a less adverse impact on NHDES Wetlands Bureau jurisdictional areas. Through the removal of the two existing causeways within public waters and the construction of new timber bridge that spans the sensitive resource on piles, this project results in significant increases in hydraulic capacity and aquatic organism passage. This project also proposes to restore salt marsh area and the upland tidal buffer zone with native vegetaion.

**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.

While this project proposes some impacts to fringe salt marsh areas, this project proposes to mitigate these losses by converting the areas currently occupied by causeways into salt marsh.

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

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

As a result of removing the causeways from public waters, there will be greater connectivity between resources. Removal of the causeways results in increases in hydraulic capacity and opens aquatic organism pathways. Removal of the causeways increases the overall ecological integrity of the area.

**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.

There will be no loss of vernal pools, protected species, and habitat/reproduction areas as a result of this project. We have coordinated with NOAA Marine Fisheries, the U.S. Fish and Wildlife Service, NH Natural Heritage Bureau (NHB), and the NH Fish and Game Department. We have made arrangements with the NHB to transplant and monitor 8 marsh elder plants within the project area.

**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.

We have coordinated with the U.S. Coast Guard and the Pease Development Authority and they have concurred this project poses no impacts to public commerce, navigation, or recreation. During construction, neighboring property owners will not be precluded from accessing their properties by recreational boats.

**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.

N/A - There are no floodplain wetlands on this site.

**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.

N/A - This project has no impact to forested wetland systems or scrub-shrub marsh complexes.



**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.

N/A - This project is not adjacent to any drinking water supplies or groundwater aquifers.

**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.

N/A - This project proposes no impacts to stream channels.

**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.

As highlighted within the attached "Section-7 Resource Specific Information", this project has been designed to meet all NHDES Administrative Rules relative to Coastal Land and Tidal Waters/ Wetlands, more particularly, Env-Wt 600.

**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.

N/A - This project proposes no docking structures.

**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 project will have no adverse impact on the abutting properties. The abutting property owner has provided consent to the impacts occurring on their property. The abutting property owner has signed the NHDES Wetlands Permit Application as well.

**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.

N/A No shoreline structures are proposed.

**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.

N/A - No shoreline structures are proposed.

**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.

N/A - No shoreline structures are proposed.

**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:**

This project is considered a "Major" project, and therefore, in accordance with Env-Wt 311.03, (b)(10), we have provided a Functional Assessment of the "wetland" on the property. In this instance, the "wetland" is the neighboring fringe salt marsh and mud flat areas adjacent to the project site. The Army Corps of Engineers Highway Methodology (Sept. 1999) was used to perform the Functional Assessment of this Wetland.

**NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT:** JASON AUBE, CERTIFIED WETLANDS SCIENTIST

**DATE OF ASSESSMENT:** 5/1/2023 & 5/18/2023

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.





## PROTECTED TIDAL ZONE PROJECT-SPECIFIC WORKSHEET FOR STANDARD APPLICATION



Water Division/Land Resources Management  
Wetlands Bureau  
[Check the Status of your Application](#)

**RSA/Rule:** RSA 482-A/ Env-Wt 610

This worksheet summarizes the criteria and requirements for a Standard Permit for impact in the "Protected Tidal Zone", one of the six specific project types in tidal area described in Chapter Env-Wt 600. In addition to the project-specific criteria and requirements on this worksheet, all Standard Applications must meet the criteria and requirements listed in the Standard Application form (NHDES-W-06-012) and the Coastal Resource Worksheet.

### SECTION 1 - APPLICATION REQUIREMENTS FOR PROTECTED TIDAL ZONE AND REQUIRED ATTACHMENTS (Env-Wt 610.04)

The following plans and other information shall be submitted with applications for work within the protected tidal zone:

- Existing and proposed contours at 2-foot intervals measured from the Highest Observable Tide Line (HOTL);
- If any portion of the subject parcel is located in a regulatory floodplain, the location of the 100-year flood boundary zone, and water elevation as shown on the applicable Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map;
- All of applicable local and state setbacks;
- The dimensions and locations of all:
  - Existing and proposed structures;
  - Existing and proposed impervious areas;
  - Existing and proposed disturbed areas;
  - Areas to remain in an unaltered state;
  - Existing cleared areas, such as gardens, lawns, and paths; and
  - Proposed temporary impacts associated with the completion of the project;
- Proposed methods of erosions and siltation controls, identified graphically and labeled on a plan, or otherwise annotated as needed for clarity;
- A plan of any planting(s) proposed in the waterfront buffer, showing the proposed locations(s) and Latin names or common names of proposed species;
- If applicable, the location of an existing or proposed 6-foot wide foot path to the waterbody or a temporary access path;
- 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%
- For any project proposing that impervious area be greater than 20% within the protected tidal 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;
- For any project involving pervious surfaces, a plan with specifications of how those surfaces will be maintained; and
- All other relevant features necessary to clearly define both existing conditions and the proposed project.

<b>SECTION 2 - APPROVAL CRITERIA (Env-Wt 313.01)</b>
<input checked="" type="checkbox"/> An application for structure construction within the protected tidal zone shall comply with Env-Wt 313.01.
<b>SECTION 3 - DESIGN &amp; CONSTRUCTION REQUIREMENTS (Env-Wt 610.03)</b>
The construction of structures within the protected tidal zone shall comply with:
<input checked="" type="checkbox"/> The standards described in FEMA P-55, Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing and Maintaining Residential Buildings in Coastal Areas, 4 <sup>th</sup> edition (2011); and
<input checked="" type="checkbox"/> Local resiliency planning ordinances.
<b>SECTION 4 - PROTECTED TIDAL ZONE RESTRICTIONS (Env-Wt 610.05- 610.13)</b>
<input checked="" type="checkbox"/> The restrictions identified in RSA 483-B:9, II shall apply to the protected tidal zone;
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9, V(a) related to the maintenance of a waterfront buffer shall apply to the protected tidal zone within 50 feet of the HOTL;
<input checked="" type="checkbox"/> Accessory structures in the waterfront buffer shall comply with the applicable provisions of Env-Wq 1400;
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9, V(b) related to the maintenance of a woodland buffer shall apply to the protected tidal zone within 150 feet of the HOTL;
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9, V(c) related to individual sewage disposal systems shall apply to the protected tidal zone;
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9, V(d) related to erosion and siltation shall apply to the protected tidal zone;
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9, V(e) related to minimum lots and residential development shall apply to the protected tidal zone;
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9, V(f) related to minimum lots and non-residential development shall apply to the protected tidal zone; and
<input checked="" type="checkbox"/> The provisions of RSA 483-B:9 V(g) related to impervious surfaces shall apply to the protected tidal zone.
<b>SECTION 5 - PROJECT CLASSIFICATION (Env-Wt 610.17)</b>
<b><i>(a) A major project shall be:</i></b>
(1) Any dredging, filling, or construction activity, or any combination thereof, that is proposed to:
a. Occur within 100 feet of the HOTL; and
b. Alter any tidal shoreline bank, tidal flat, wetlands, surface water, or undeveloped uplands; or
(2) A project that would be major based on an aggregation of projects under Env-Wt 400.
<b><i>(b) A minor project shall be any dredging, filling, or construction activity, or any combination thereof, that:</i></b>
(1) Involves work within 75 feet of a saltmarsh in the developed upland tidal buffer;
(2) Is not a major project; and
(3) Will disturb 3,000 square feet (SF) or more but less than 10,000 SF in the developed upland tidal buffer.
<b><i>(c) A minimum impact project shall be any dredging, filling, or construction activity, or any combination thereof, that:</i></b>
(1) Is in a previously developed upland area;
(2) Is within 100 feet of the HOTL; and
(3) Will disturb less than 3,000 SF.





**PRIME WETLAND WAIVER  
FORESTRY & OTHER ACTIVITIES**  
Water Division/Land Resources Management  
Wetlands Bureau



**RSA/Rule:** RSA 482-A:11/ Env-Wt 706

**APPLICANT LAST NAME, FIRST NAME, M.I.:** ADL 325 Little Harbor Road Trust

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

As provided in RSA 482-A:11, IV(b)(1), to be eligible for the [Forestry Statutory Permit-by-Notification \(Forestry SPN\)](#), a property owner must obtain a waiver to perform any forest management work and related activities in the forested portion of a designated **prime wetland\*** or **duly-established 100-foot buffer†** from the department. *For a waiver request for Forestry Activities within a designated prime wetland or duly-established 100-foot buffer, please complete Part I of this form.*

As provided in RSA 482-A:11, IV(c), a property owner may request a waiver from the department to perform work not addressed above within a portion of any **duly-established 100-foot buffer†** of a prime wetland on his or her property. Please note that waivers for such activities may only be requested for work within a duly-established 100-foot buffer, not for work within prime wetlands. *For a waiver request for Activities Other than Forest Management within a duly-established 100-foot buffer, please complete Part II of this form.*

A waiver request for work in a prime wetland or duly-established 100-foot buffer must be submitted to the department at the same time as a notification for an SPN or other application, as applicable.

\*Prime Wetlands: Any contiguous areas falling within the jurisdictional definitions of RSA 482-A:2, X and RSA 482-A:4 that, because of their size, unspoiled character, fragile condition, or other relevant factors, make them of substantial significance (482-A:15, I-a).

†Duly-Established 100-foot Buffer: The buffer recognized in RSA 482-A:11, IV for prime wetlands designated on or after September 11, 2009 but before August 17, 2012 (Env-Wt 102.63).

**PART I: WAIVER REQUEST FOR FORESTRY ACTIVITIES**

**SECTION 1 - REQUESTED WAIVER AND FILING FEE (Env-Wt 706.02(b)(3))**

Check or money order for the applicable filing fee payable to "Treasurer – State of NH" (RSA 482-A:3, I(c)).

- \$200 for a project that would otherwise qualify for a Forestry SPN if it was not located in or near a designated prime wetland or duly-established 100-foot buffer.
- \$500 for a minor impact project that does not otherwise qualify as minimum or major impact project.
- \$1,250 for a major impact project classified regardless of prime wetlands designation.

[irm@des.nh.gov](mailto:irm@des.nh.gov) or (603) 271-2147

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

[www.des.nh.gov](http://www.des.nh.gov)

**SECTION 2 - PROPOSED WORK (Env-Wt 706.02(b); RSA 482-A:11, IV(b)(1))**

Provide a brief written description of the work to be performed.

N/A

**SECTION 3 - PRIME WETLANDS VALUES (Env-Wt 706.02(b); RSA 482-A:11, IV(b)(1))**

Provide a list of the prime wetlands values as identified by the municipality when the prime wetland or duly-established 100-foot buffer was designated. Demonstrate that the project will not create a significant net loss of these wetland values.

N/A

**SECTION 4 - REQUIRED ATTACHMENTS (Env-Wt 706.02; RSA 482-A:11, IV(b)(1))**

- A sketch of the property depicting the best approximate location of each prime wetlands/buffer in which work is proposed and the location of proposed work, including access roads.
- A copy of the notice of intent to cut, if applicable.
- Other information to demonstrate that there will be no significant net loss of wetland values identified by the municipality when the prime wetland/buffer was designated.
- Written comments from the conservation commission or local governing authority as applicable, stating that:
  - The members have no objections to the requested waiver.
  - The members have no objections to a waiver if the conditions specified in the comments are met.OR
  - The members object to the waiver for the reason(s) stated in the comments.

**SECTION 5 - ADDITIONAL INSTRUCTIONS (Env-Wt 706.02; RSA 482-A:11, IV(b)(3))**

- At the time the applicant submits the waiver request to the department, the applicant also shall submit, *via certified mail*, a copy of the waiver request and all supporting documentation to the local governing body, the planning board, if any, and the conservation commission, if any, of the municipalities in which any prime wetlands/buffers associated with the application are located.
- If a prime wetland/buffer associated with the application extends into an abutting property, the property owner requesting the waiver shall provide a copy of the waiver request and all supporting documentation to the owner of that abutting property. The applicant shall send the notice required *by certified mail*.

[irm@des.nh.gov](mailto:irm@des.nh.gov) or (603) 271-2147

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

[www.des.nh.gov](http://www.des.nh.gov)

Please note:

- As provided in RSA 482-A:11, IV(b)(3), the department shall not issue a waiver for forestry activities prior to 14 days after receipt of the waiver request, provided however that a municipal conservation commission may request an extension on such waiver issuance, not to exceed 14 days, which the department shall grant if requested.
- As provided by RSA 482-A:11, IV(b)(2), the department shall not issue a waiver unless the department determines that there will be no significant net loss of wetland values as identified by the local conservation commission/local governing authority or in RSA 482-A:1.
- If the department determines that the criteria for issuing a waiver are met, the waiver shall be issued as part of the Forestry SPN or permit, as applicable.
- If the department is unable to determine, based on the information submitted, that the proposed work will not cause a significant net loss of wetland values, the department shall notify the applicant of what additional information is needed and establish a deadline in consultation with the applicant for the submission of the additional information.
- If the department determines that the project would not cause a significant net loss of wetland values if certain conditions were met, the department shall place such conditions on the waiver as are necessary to protect the prime wetland resource.
- Any waiver issued shall be valid for the term of the permit or SPN with which it is associated, but may be extended.

**PART II: WAIVER REQUEST FOR ACTIVITIES OTHER THAN FOREST MANAGEMENT**

**SECTION 1 - REQUESTED WAIVER AND FILING FEE (Env-Wt 706.04(b)(5))**

Check or money order for the applicable filing fee payable to "Treasurer – State of NH" (RSA 482-A:3, I(c)).

- \$200 for projects that would otherwise qualify as a minimum impact project if it was not located in a designated prime wetlands buffer.
- \$500 for a minor impact project that does not otherwise qualify as minimum or major impact project.
- \$1,250 for a major impact projects.

**SECTION 2 - PROPOSED WORK (Env-Wt 706.04(b)(2))**

Provide a written description of the work to be performed.

The property owner is proposing to replace an existing failing bridge with a new wooden bridge that spans the entire intertidal resource on wooden piles. The property owner is also proposing to remove the existing concrete and earthen causeways that currently restrict tidal flows and impede aquatic organism passage. Areas currently occupied with the causeways will be restored to salt marsh and the developed upland tidal buffer zone will be restored with native vegetation. The island will also be connected to municipal utilities eliminating the use of an on-site septic system.

**SECTION 3 - PRIME WETLANDS VALUES (Env-Wt 706.04(b))**

Provide a list of the prime wetlands values identified by the municipality when the prime wetlands associated with the buffer was designated. Demonstrate that the project will not create a significant net loss of these wetland values. There are a number of discrepancies within the City of Portsmouth Prime Wetland Analysis Report that make this task very difficult to complete. Little Harbor Cove Salt Marsh Prime Wetland ID number "061B" is only .90 acres but, it's listed as being 13.38 acres and 5-acres within the report. In one area of the report, it identifies the subject Prime Wetland as being Palustrine Emergent Persistent (PEM1) but, it's an Estaurine environment and this correction is reflected within the report. Field soil plots were performed near the Belle Isle Bridge but, this test site is over 1/2 mile away. Most notably, at the time of designation, when evalauting candidates for designation as Prime Wetlands, NHDES Wetlands Bureau Administrative Rule Env-Wt 701.02 (c) specifically prescribed the use of certain methodologies to evaluate wetland functional values but, within the "Methodologies" section of the City of Portsmouth Prime Wetland Analysis Report (Section-2, page 3-4), it gives no mention of the methodologies used. The report also indicates that Prime Wetland "061B" was not evaluated in the "GES" study but, there is no explanation within this report that describes what the "GES" study is.

The Portsmouth Prime Wetland Designation Data form only indicates the primary functions of the Prime Wetland to be Wildlife Habitat and Education and Scientific Value because it is "directly adjacent to the Little Harbor School. This, too, is a discrepancy because this wetland is immediately adjacent to private properties and it does not provide any opportunity for educational value to the public. On page-5 of the report the justification for this wetland being designated as a "Prime Wetland" is its uniqueness to the City of Portsmouth, rare species habitat, and critical fisheries habitat.

As demonstrated within the original Functional Assessment included with this permit application, including the Ecological Integrity Assessment, this project poses no threat to tidal resources. This project will result in significant increases to hydraulic capacity, aquatic organims passage and the overall ecological integrity of the area. Through clear and compelling impact analysis, this project will not create a significant net loss of the values listed within the City of Portsmouth Prime Wetland Analysis Report, the functions and values listed in the Functions and Values assessment submitted with original permit application or the values set forth within RSA 482-A:1

**SECTION 4 - REQUIRED ATTACHMENTS (Env-Wt 706.04)**

- A sketch of the property depicting the best approximate location of the duly-established 100-foot buffer in which work is proposed and the location of proposed work, including access roads.
- Other information to demonstrate that there will be no significant net loss of wetland values identified by the municipality when the prime wetlands associated with the buffer was designated.

**SECTION 5 - ADDITIONAL INSTRUCTIONS (Env-Wt 706.04; RSA 482-A:11, IV(c))**

- At the time the applicant submits the waiver request to the department, the applicant also shall notify, **by certified mail**, the local governing body, the planning board, if any, and the conservation commission, if any, of the municipalities in which the waiver is being sought that the waiver is being requested.
- If the buffer associated with the application extends onto an abutting property, the property owner requesting the waiver shall provide notice that the waiver is being requested to the owner of that abutting property.

Please note:

- As provided in Env-Wt 706.05, the department shall not issue a waiver under Env-Wt 706.01(b) prior to 14 days after receipt of the waiver request, provided however that a municipal conservation commission may request an extension on such waiver issuance, not to exceed 14 days, which the department shall grant if and as requested.

[lrn@des.nh.gov](mailto:lrn@des.nh.gov) or (603) 271-2147

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

[www.des.nh.gov](http://www.des.nh.gov)

The *Ecological integrity* of the intertidal resource was assessed using the *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire (June 1993)* and data from the NH Fish and Game Wildlife Action Plan (WAP).

The City of Portsmouth Prime Wetland Analysis Report, January, 2011, prepared by West Environmental Services, which was used to assess wetland resources for the purpose of *Prime Wetlands Designation* under RSA 482-A:15, was referenced as well.

## Values set forth in RSA 482-A:1 and Impact Analysis

### 1. Sources of Nutrients for Finfish, Crustacea, Shellfish and Wildlife of Significant Value

The neighboring wetland resources provide embayments, tidal flats, vegetated shallows, and other environments in support of fish, shellfish, and marine mammals. Anadromous fish, including the striped bass (*Morone saxatilis*), are known to seasonally utilize the area to forage on sea worms/ nereids (*Echiurus echiurus*), sand eels (*Ammodytes marinus*), Silversides (*Menidia menidia*) and Green Crabs (*Carcinus maenas*) during high tide. Although shellfishing is prohibited in this area, various species of mollusks exist. This tidal marsh is highly productive and evidence of multiple trophic levels utilizing this area was observed.

There are no eel grass beds within the vicinity of the project. The NH Wildlife Action Plan (WAP) identifies the resource area as High-Ranking Wildlife Habitat in NH. The NH Natural Heritage Bureau (NHB) screened the project and has agreed to allow us to transplant the sensitive marsh elder plants that are currently located within the proposed impact areas.

### Impact Analysis

While some impacts are proposed to an existing fringe saltmarsh, this project will result in significant increases in hydraulic capacity and aquatic organism passage. As a result of the proposed salt marsh restoration, there will be no net loss of salt marsh resources. The proposed enhancement of the developed upland tidal buffer zone with native vegetation, discontinuing the use of an on-site septic system and connecting the island to municipal sewer all result in significant environmental improvements, and therefore, this project *will not* adversely affect the value of areas of sources of nutrients for finfish, crustacea, shellfish and wildlife of significant value.

### 2. Habitats and Reproduction Areas for Plants & Fish and Wildlife of Importance

The neighboring resource includes a braided network of flats, channels and fragmented *Spartina* spp. plains which provide a unique habitat for a number of species, including plants. There are no eel grass beds within the area. The NH Wildlife Action Plan (WAP) identifies the wetland as Highest Ranked Wildlife Habitat in NH. The NH Natural Heritage Bureau (NHB) screened the project and has agreed to allow us to transplant the sensitive marsh elder plants that are currently located within the proposed impact areas.



### Impact Analysis

While some impacts are proposed to an existing fringe saltmarsh, this project will result in significant increases in hydraulic capacity and aquatic organism passage. As a result of the proposed salt marsh restoration, there will be no net loss of salt marsh resources. The proposed enhancement of the developed upland tidal buffer zone with native vegetation, discontinuing the use of an on-site septic system and connecting the island to municipal sewer all result in significant environmental improvements, and therefore, this project *will not* adversely affect the value of habitats and reproduction areas for plants and fish and wildlife of importance.

### 3. Commerce, Recreation and Aesthetic Enjoyment of the Public

The neighboring resource includes a braided network of flats, channels and *Spartina* spp. plains which are unique to New Hampshire and, aesthetically, are quite beautiful during all tidal periods.

### Impact Analysis

While some impacts are proposed to an existing fringe saltmarsh, this project will result in significant increases in hydraulic capacity and aquatic organism passage. Removal of the causeway will result in significant aesthetic improvements to the area. As a result of the proposed salt marsh restoration, there will be no net loss of salt marsh resources. The proposed enhancement of the developed upland tidal buffer zone with native vegetation, discontinuing the use of an on-site septic system and connecting the island to municipal sewer all result in significant environmental improvements, and therefore, this project *will not* adversely affect the value of commerce, recreation, and aesthetic enjoyment of the public.

### 4. Adequate Groundwater Levels

The neighboring wetland does not serve as a groundwater recharge and/or discharge site.

### Impact Analysis

No direct impacts are proposed to the wetland resources. This project will not be detrimental to adequate groundwater levels.

### 5. Stream Channels and Their Ability to Handle the Runoff of Waters

While the neighboring resource includes a braided network of flats and channels, there are no stream channels.

### Impact Analysis

While some impacts are proposed to an existing fringe saltmarsh, this project will result in significant increases in hydraulic capacity and aquatic organism passage. As a result of the proposed salt marsh restoration, there will be no net loss of salt marsh resources. The proposed enhancement of the developed upland tidal buffer zone with native vegetation, discontinuing the use of an on-site septic system and connecting the island to municipal sewer all result in significant environmental



improvements, and therefore, this project *will not* adversely affect stream channels and their ability to handle the runoff of waters.

## **6. Absorption of Flood Waters and Silt**

The neighboring resource is effective in reducing flood damage by retaining flood waters for prolonged periods of time. During storm events and tidal surges, this wetland serves this function by providing floodwater storage capacity and this aides in protecting the neighboring community. The neighboring wetland also serves to trap sediments, toxicants, and pathogens within runoff.

### **Impact Analysis**

While some impacts are proposed to an existing fringe saltmarsh, this project will result in significant increases in hydraulic capacity and aquatic organism passage. As a result of the proposed salt marsh restoration, there will be no net loss of salt marsh resources. The proposed enhancement of the developed upland tidal buffer zone with native vegetation, discontinuing the use of an on-site septic system and connecting the island to municipal sewer all result in significant environmental improvements, and therefore, this project *will not* adversely affect the value of Absorption of Flood Waters and Silt.

## **7. Interests of the General Public**

This project will result in eliminating a major tidal restriction within the back channel of the Piscataqua River. This project will result in increased hydraulic capacity within tidal crossing and enhanced aquatic organism passage, and therefore, this project is clearly within the best interest of the general public.

### **Impact Analysis**

While some impacts are proposed to an existing fringe saltmarsh, this project will result in significant increases in hydraulic capacity and aquatic organism passage. As a result of the proposed salt marsh restoration, there will be no net loss of salt marsh resources. The proposed enhancement of the developed upland tidal buffer zone with native vegetation, discontinuing the use of an on-site septic system and connecting the island to municipal sewer all result in significant environmental improvements, and therefore, this project *will not* adversely affect the interests of the general public.

### **Summary**

The intertidal area adjacent to the project area serves many functions including flood-flow storage capacity, fish and shellfish habitat, sediment and toxicant retention, nutrient removal, resource export, sediment and shoreline stabilization, wildlife habitat, visual quality/ aesthetics, endangered species habitat, and therefore, it is considered a high value, high functioning resource of the State of New Hampshire. Although the subject Prime Wetland is less than 2-acres in size and no specific methodologies were used to evaluate this wetland at the time it was nominated to be a Prime Wetland and as required by NHDE Wetlands Bureau Administrative Rule Env-Wt 701.02 (c), this area, coupled with the adjacent fragmented salt marsh complex, was rightfully elected to become a Prime Wetland under RSA 482-A:14.



In summary, the environmental benefits associated with this project far outweigh the subtle impacts that must occur to the Duly-Established 100-foot Prime Wetland Buffer, and therefore, in accordance with NHDES Wetlands Bureau Administrative Rule Env-Wt 704.02 and RSA 482-A:11, IV(a), this project will not result in the *significant net loss* of the values set forth in RSA 482-A:1.

**TFMoran, Inc.**  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      [www.tfmoran.com](http://www.tfmoran.com)



**TFMoran, Inc. Seacoast Division**  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222



## References

ACOE Army Corps of Engineers Highway Methodology (September 1999, NAEPP-360-1-30a).

Ammann, A.P. and A.L. Stone. 1993. *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire*.

Cowardin, L.M., V. carter, F.C Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deep-Water Habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

New Hampshire Fish and Game Department Wildlife Action Plan (WAP).

The City of Portsmouth Prime Wetland Analysis Report, January, 2011.

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# CITY OF PORTSMOUTH

Community Development Department  
(603) 610-7232

Planning Department  
(603) 610-7216

Ms. Dori Wiggin, East Region Supervisor  
DES Wetlands Bureau, Pease District Office  
222 International Drive, Suite 175  
Portsmouth, NH 03801

January 25, 2011

**Subject: City of Portsmouth Prime Wetlands Designation**

Dear Ms. Wiggin:

Enclosed with this letter please find the Citywide Prime Wetland assessment and mapping that was recently completed and voted upon by the City Council. This effort was initiated in 2003 with the Completion of the Citywide Wetlands Inventory where all wetlands in the City were mapped and those wetlands meeting Prime Wetland Criteria were identified and reviewed. A follow-up study was begun in 2006 to study in greater detail the wetlands identified as Prime Wetlands and include additional wetlands which met the criteria. As part of this effort all of the wetlands in the City of Portsmouth, including those wetlands on the Pease Tradeport were investigated to determine which ones were most suitable for Prime Wetland designation under RSA 482 A:15

After a thorough review of all the potentially eligible prime wetlands was complete both the Conservation Commission (at their April 11, 2007 meeting) and the Planning Board (at their September 20, 2007 meeting) voted in favor of designating prime wetlands as listed in West Environmental Services report. On April 21, 2008 the City Council, at the recommendation of the Conservation Commission authorized funding for detailed mapping be completed in order to finalize the Prime Wetlands effort and to prepare a submission to the state. As part of this effort all of the wetlands reviewed for Prime Wetland status in the City of Portsmouth, including the wetland within the Pease Development Authority (PDA) had a final field visit where detailed mapping was completed and entered into the City's GIS.

For submission with this letter is a set of 14 wetlands, which have been chosen as the most significant wetlands in the City. At their meeting on July 19, 2010, the Portsmouth City Council held a public hearing, then voted in favor of forwarding the recommendations for the selected wetlands as Prime Wetlands to NHDES. One of these wetlands is within the PDA boundary. The wetland within the boundary of the PDA is labeled as wetland 7 for the purposes of this analysis. The Conservation Commission, Planning Board and the City Council voted to request that the Pease Development Authority adopt the recommendation that Wetland 007 (as shown on attached map) be designated a Prime wetland. A letter has been sent from the City to the PDA regarding wetland 007. If the PDA is interested in pursuing this designation this will be pursued as a separate action.

The submittal you have before you includes the following information for your review:

1 Junkins Avenue  
Portsmouth, New Hampshire 03801  
Fax (603) 427-1593

- City of Portsmouth Prime Wetland Analysis Report Completed in January 2010 by the City of Portsmouth and West Environmental Services Inc.
- Action sheet from Portsmouth City Council July 19, 2010 meeting where the City Council held a Public Hearing and took Action to approve designation of selected prime wetlands.
- Citywide map of prime wetlands in accordance with Env-Wt 702.02 format.

If you have questions or need additional information please do not hesitate to contact me at 610-7215 or [plbritz@cityofportsmouth.com](mailto:plbritz@cityofportsmouth.com).

Sincerely



Peter Britz  
Environmental Planner/Sustainability Coordinator

Cc: John P. Bohenko, City Manager

# **CITY OF PORTSMOUTH PRIME WETLAND ANALYSIS REPORT**

Prepared for:  
New Hampshire Department of Environmental Services  
Portsmouth Regional Office  
Pease International Tradeport  
222 International Drive, Suite 175  
Portsmouth, NH 03801

Prepared by:



and

The City of Portsmouth  
Planning Department



January 2011

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**Appendix A:** Field forms for Prime Wetlands Proposed and Those Eliminated from Consideration.

**Appendix B:** City Council Action Sheet from July 19, 2010 City Council Meeting with approval to adopt Prime Wetlands.

**Map:** Map of Proposed Prime Wetlands

## 1. Introduction

West Environmental, Inc. (WEI) has prepared this report to provide documentation to support the designation of prime wetlands in the City of Portsmouth, New Hampshire. Initially the 2003 City Wide Wetlands Inventory (CWWI) identified potential prime wetland candidates. WEI used this 2003 mapping as a starting point to field verify the identified wetlands. WEI then included additional wetlands which met the criteria for Prime Wetlands. The verification and identification of new wetland areas was conducted in 2006 with funding assistance from the Piscataqua Region Estuaries Partnership (then New Hampshire Estuaries Project) under their Community Technical Assistance Program. This additional research and evaluation insured that individual wetlands met the requirements of RSA 482-A:15 and Chapter Wt 700 of the NHDES Wetlands Bureau Administrative Rules. WEI worked closely with the Portsmouth Conservation Commission and Planning Department staff to review the technical criteria for Prime Wetland Designation and the results of the CWWI. After review and expansion of the potential prime wetlands a mapping effort was funded in 2007 by the City of Portsmouth at the recommendation of the Conservation Commission to accurately map the wetland boundaries of all potential prime wetlands. This report represents the analysis and approval of the final wetlands to be selected by the Portsmouth Conservation Commission, Portsmouth Planning Board and Portsmouth City Council for designation as Prime Wetlands in the City of Portsmouth.

RSA 482-A:15 defines "Prime Wetlands" as jurisdictional wetlands that "because of their size, unspoiled character, fragile condition or other relevant factors, make them of substantial significance." Env-Wt 701.04 Selection of Designated Prime Wetlands states "Selection of Prime Wetlands shall be based on the ranking of relative function values" and shall meet the following minimum criteria:

- 1) The wetland shall have the presence of hydric soils, hydrophytic vegetation, and wetlands hydrology; and
- 2) At least 50% of the prime wetland shall have very poorly drained soils and the remaining soils shall be poorly drained soils.

The Prime Wetlands Candidates identified in Section 3 of this report meet all qualifications for Prime Wetland status.

## 2. Methodology

Twenty-one wetlands were determined to have the potential to "qualify" for Prime Wetland Designation in the CWWI. WEI identified six additional wetlands that could qualify for this designation resulting in a total of 27 wetlands evaluated. A Portsmouth specific Prime Wetland Data Form was created to evaluate prime wetland status of these wetlands. This form includes the following information necessary for Prime Wetland Designation:

- Soils verification
- Changes in wetland classification since 2002

- Wetland boundary verification
- Land use changes within the wetland buffer
- Potential water quality impacts
- Invasive species
- Information on rare plants and wildlife
- Wildlife habitat
- Educational / scientific values
- Restoration potential
- Results of functional analysis
- Justification for Prime Wetland Designation

Completed data forms are in Section 7 of this report. Each of the 27 wetlands was field inspected to verify the wetland boundaries, functional analysis, values assessments, and other important considerations relating to Prime Wetland Designation. Significant inaccuracies in the wetland boundaries were identified during the field verification process. Some of these boundary corrections required changes in the results of the functional analysis and therefore the previous wetland ranking.

The six new potential prime wetlands were evaluated in comparison to the 21 original qualifying wetlands. A final ranking of the 27 wetlands found significant break between the Prime Wetland Candidates and the remaining qualifying wetlands. Two of the wetlands were combined based on identifying a connection in the field.

### 3. Prime Wetland Candidates

The table below lists thirteen proposed prime wetland candidates, which represent the largest and highest functioning wetlands within the city. These wetlands total 1,860 acres: 1,736 acres of freshwater wetlands and 124 acres of tidal marsh. Eleven of the thirteen wetlands are over 40 acres in size. The salt marsh prime wetland candidates include the upper Sagamore creek marsh (062) the main Sagamore Creek marsh (061A) and the Little Harbor cove salt marshes (061B). The upper Sagamore Creek salt marsh totals 44 acres. The main Sagamore Creek marsh has four components including Tucker's cove marsh totaling 67 acres. The Little Harbor cove salt marsh complex is also made up of four separate components totaling 13 acres. In addition to their top 13 ranking, the proposed prime wetlands comprise the most diverse and critical wetland wildlife habitat in Portsmouth. These systems also are adjacent to some of the only remaining undisturbed upland habitat within the City boundaries. Together, they will provide crucial links between habitats in the form of undisturbed wildlife corridors.

<u>ID</u>	<u>Size (in acres)</u>	<u>Rank</u>	<u>Justification</u>
001	106.12	7	<ul style="list-style-type: none"> <li>▪ Adjacent to Berry's Brook wetland complex</li> <li>▪ Atlantic White Cedar stands</li> <li>▪ 6<sup>th</sup> largest wetland</li> </ul>
002	222.85	2	<ul style="list-style-type: none"> <li>▪ Berry's Brook wetland complex</li> <li>▪ 2<sup>nd</sup> largest wetland</li> <li>▪ Rare species habitat</li> </ul>
003A	542.26	1	<ul style="list-style-type: none"> <li>▪ Great Bog</li> <li>▪ Largest wetland</li> <li>▪ Rare species habitat</li> </ul>

005	203.83	3	<ul style="list-style-type: none"> <li>▪ Berry's Brook wetland complex</li> <li>▪ 3<sup>rd</sup> largest wetland</li> <li>▪ Rare species habitat</li> </ul>
006	48.5	8	<ul style="list-style-type: none"> <li>▪ 7<sup>th</sup> largest wetland</li> <li>▪ Unique wet meadow complex</li> <li>▪ Headwaters of Sagamore Creek</li> </ul>
007	99.39	6	<ul style="list-style-type: none"> <li>▪ 4<sup>th</sup> largest wetland</li> <li>▪ High level of diversity</li> <li>▪ Headwaters to Hodgson Brook</li> </ul>
015	35.22	11	<ul style="list-style-type: none"> <li>▪ High value freshwater marsh habitat</li> <li>▪ Abuts natural forestland</li> <li>▪ High potential for wetland restoration</li> </ul>
018 & 026	32.54*	10	<ul style="list-style-type: none"> <li>▪ Unique open water habitat</li> <li>▪ Diverse wetland complex</li> <li>▪ Potential rare species habitat</li> </ul>
019	15.07	12	<ul style="list-style-type: none"> <li>▪ Tributary to Sagamore Creek</li> <li>▪ Undisturbed wetland system w/natural buffers</li> <li>▪ High value freshwater marsh habitat</li> </ul>
023	55.08	9	<ul style="list-style-type: none"> <li>▪ 8<sup>th</sup> largest wetland</li> <li>▪ Atlantic White Cedar stands</li> <li>▪ Adjacent Packers Bog in Greenland</li> </ul>
061A	67.46	4	<ul style="list-style-type: none"> <li>▪ Largest salt marsh</li> <li>▪ Rare species habitat</li> <li>▪ Critical fisheries habitat</li> </ul>
061B	13.38	13	<ul style="list-style-type: none"> <li>▪ One of only two salt marsh complexes</li> <li>▪ Rare species habitat</li> <li>▪ Critical fisheries habitat</li> </ul>
062	43.54	5	<ul style="list-style-type: none"> <li>▪ 2<sup>nd</sup> largest salt marsh</li> <li>▪ Rare species habitat</li> <li>▪ Critical fisheries habitat</li> </ul>

## 5. Wetlands Eliminated From Consideration

<u>ID</u>	<u>Size (in acres)</u>	<u>Rank</u>	<u>Justification</u>
003B	18.65	22	<ul style="list-style-type: none"> <li>▪ Directly abuts highway on 3 sides</li> <li>▪ Invasive species</li> <li>▪ No connection to upland habitat</li> </ul>
004	50.46	14	<ul style="list-style-type: none"> <li>▪ Does not qualify due to lack of very poorly drained soils</li> </ul>
013A	39.97	18	<ul style="list-style-type: none"> <li>▪ Historical wetland impacts</li> <li>▪ Incorrectly mapped and 60% of original size</li> <li>▪ Disconnected and culverted</li> </ul>
013B	5.17	20	<ul style="list-style-type: none"> <li>▪ Historical wetland impacts</li> <li>▪ Water quality degradation observed</li> <li>▪ Invasive species</li> <li>▪ Small size (5 acres)</li> </ul>
014	19.87	16	<ul style="list-style-type: none"> <li>▪ Historical wetland impacts</li> <li>▪ Surrounded by development</li> <li>▪ Water quality degradation observed</li> <li>▪ No connection to upland habitat</li> </ul>
016	50.72	15	<ul style="list-style-type: none"> <li>▪ Does not qualify due to lack of very poorly drained soils</li> </ul>
022	19.65	19	<ul style="list-style-type: none"> <li>▪ Incorrectly mapped and 70% of original size</li> <li>▪ Surrounded by development</li> </ul>

\* (22.16+10.38)



			<ul style="list-style-type: none"> <li>▪ Historical wetland impacts</li> </ul>
029	21.88	17	<ul style="list-style-type: none"> <li>▪ Incorrectly mapped and 50% of original size</li> <li>▪ Surrounded by development</li> <li>▪ Historical wetland impacts</li> </ul>
031	15.09	21	<ul style="list-style-type: none"> <li>▪ Surrounded by development</li> <li>▪ Water quality degradation observed</li> <li>▪ No connection to upland habitat</li> </ul>
038	4.96	24 (tied)	<ul style="list-style-type: none"> <li>▪ Small size</li> <li>▪ Not recommended for consideration by CWWI</li> <li>▪ Lacks diversity</li> </ul>
044	4.56	24 (tied)	<ul style="list-style-type: none"> <li>▪ Small size</li> <li>▪ Not recommended for consideration by CWWI</li> <li>▪ Lacks diversity</li> </ul>
050	5.78	23	<ul style="list-style-type: none"> <li>▪ Very small size</li> <li>▪ Surrounded by development</li> </ul>
117	2.51	26	<ul style="list-style-type: none"> <li>▪ Small size</li> <li>▪ Not recommended for consideration by CWWI</li> <li>▪ Lacks diversity</li> </ul>

**5. Orthophoto Map of Proposed Prime Wetlands**  
See attached map.

**Appendix A**

**Field Forms for Prime Wetlands Proposed  
And  
Those Eliminated from Consideration**

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 001


Date: September 2006

Size: ~~110~~ 106.12 acres

Estimated Percent of Very Poorly Drained Soils: 85%

Field Soils Verification Plots: Plot A along railroad bed

Classification(s) in 2002 Wetland Mapping: PFO1E/SS1E

Classification Change since 2002: Only hydrology descriptive to be added 

Boundary Verification

Changes to boundary: Yes, along eastern boundary 2+ acres of upland

Inlet Streams: Yes, mostly drainage ditches from adjacent development

Outlet Streams: Yes, Berry's Brook to the south, minimal culverting under railroad bed to the west

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: New subdivision to the east

Potential Water Quality Impacts: Runoff from commercial development off of Weatherstone Street

Natural Heritage Elements Present: Atlantic White Cedar stands

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 50% / Commercial 20% / Woodland 30%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, aquatic habitat present

Does this Wetland Rate High in Educational/Scientific Value? Yes, 7<sup>th</sup> in GES study

Does this wetland provide open vistas? Minimal

Is this wetland connected to open space land? Yes, in Greenland

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: ranks 5<sup>th</sup> in GES study for most functions

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Atlantic White Cedar swamp connected to Packer Bog in Greenland

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 002

Date: September 2006

Size: ~~400±~~ <sup>222.85</sup> acres

Est. Percent of Very Poorly Drained Soils: 60% with boundary adjustment

Field Soils Verification Plots: Plot 002A off Lang Road

Classification(s) in 2002 Wetland Mapping: PFO4E/PFO1E/SS1E

Classification Change since 2002: Yes - PEM1/SS1E

Boundary Verification

Changes to boundary: Yes, extensive changes along western & eastern boundaries 10 acres of upland

Inlet Streams: Yes, Berry's Brook from south and runoff from adjacent development west

Outlet Streams: Yes, Berry's Brook to the north

Ecological Integrity

Recent Impacts since 2002: Minimal

Recent Buffer Development since 2002: Minimal

Potential Water Quality Impacts: Stormwater runoff

Natural Heritage Elements Present: Possible spotted turtle habitat

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 70% / Fields 10% / Woodland 20%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, ranked 2<sup>nd</sup>

Does this Wetland Rate High in Educational/Scientific Value? Yes, ranked 2<sup>nd</sup>

Does this wetland provide open vistas? Yes, ranked 1<sup>st</sup> although Sagamore Creek should rank higher

Is this wetland connected to open space land? Yes, in central portion

Potential Restoration Opportunity

Type of impact to wetland:

Approximate area of restoration:

Prime Wetland?

Functional Analysis: ranks 2<sup>nd</sup> in GES for most functions

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: 2<sup>nd</sup> largest wetland, connected to Berry's Brook & Prime Wetlands, maintains vegetated buffers in many locations

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 003A

Date: September 2006

Size: ~~573~~ <sup>542.26</sup> acres

Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: Plot 003A-A off of railroad bed

Classification(s) in 2002 Wetland Mapping: PFO1E/SS1E

Classification Change since 2002: PEM1E & PSS1E – correction, not change

Boundary Verification

Changes to boundary: Minimal only along northern tip of Griffin Avenue

Inlet Streams: Yes, from west

Outlet Streams: Yes, to the west under Interstate 95 into Pickering Brook

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, Griffin Ave / Ocean Ave

Potential Water Quality Impacts: Yes, from Interstate 95

Natural Heritage Elements Present: NE Cottontail, Atlantic White Cedar, heavy fruited sedge, tufted loosestrife

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 10% / Forest 30% / Commercial 40% / Field 10%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, 1st

Does this Wetland Rate High in Educational/Scientific Value? Yes, 1st

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes

Potential Restoration Opportunity

Type of impact to wetland: Invasive species

Approximate area of restoration: Interstate 95

Prime Wetland?

Functional Analysis: Ranked 1<sup>st</sup> in GES stuffy for most functions & values

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Great Bog is one of the largest contiguous wetlands in Coastal NH and is home for rare plants and wildlife

WEST ENVIRONMENTAL 

**West Environmental, Inc.**

**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 005

Date: September 2006

Size: ~~250~~<sup>203.83</sup> acres

Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: Plot 005-A off Lang Road

Classification(s) in 2002 Wetland Mapping: PFO1/SS1E & PEM1/FO1E

Classification Change since 2002: No

Boundary Verification

Changes to boundary: Yes, elimination of areas adjacent to Route 1 and along southern boundary

Inlet Streams: Yes, Berry's Brook from south

Outlet Streams: Yes, Berry's Brook to the north

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Minor along western boundary

Potential Water Quality Impacts: Stormwater runoff

Natural Heritage Elements Present: Possible spotted turtle habitat

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 60% / Commercial 10% / Woodland 30%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, ranked 3<sup>rd</sup>

Does this Wetland Rate High in Educational/Scientific Value? Yes, ranked 4<sup>th</sup>

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes, in Rye to the south

Potential Restoration Opportunity

Type of impact to wetland: Fill along southwest boundary adjacent to commercial development on Route 1; phragmites invasion off of Dolphin Drive

Approximate area of restoration: 0.5 acres

Prime Wetland?

Functional Analysis: Ranks 3<sup>rd</sup> in GES study for most functions & values

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Combined w/ Wetland 002, this is the largest wetland in the city. This wetland ranked 3<sup>rd</sup> in GES study for the most functions and values and will help to protect Berry's Brook

WEST ENVIRONMENTAL 

West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 006

Date: September 2006

Size: <sup>48.5</sup>~~88~~ acres Estimated Percent of Very Poorly Drained Soils: 60%

Field Soils Verification Plots: 006-A along railroad bed

Classification(s) in 2002 Wetland Mapping: PFO1/SS1E

Classification Change since 2002: PEM1E and PEM1Ed

Boundary Verification Changes to boundary: Yes, northern portion eliminated

Inlet Streams: Yes, headwaters to Sagamore Creek

Outlet Streams: Yes, Sagamore Creek drains under Peverly Hill Road

Ecological Integrity

Recent Impacts since 2002: None

Recent Buffer Development since 2002: Minor along Banfield Road

Potential Water Quality Impacts: None

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 10% / Woodland 70% /  
Fields 20%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes

Potential Restoration Opportunity

Type of impact to wetland: None

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: 6 out of 7 principal functions present

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Diverse wetland with uncommon wet meadow component and intact natural buffers, headwaters to Sagamore Creek.

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 007

Date: September 2006

Size: <sup>99.39</sup>  
~~145~~ acres

Estimated Percent of Very Poorly Drained Soils: 60%

Field Soils Verification Plots: 007-A along access road

Classification(s) in 2002 Wetland Mapping: PFO1 – PFO1/SS1E

Classification Change since 2002: PEM1/SS1E

Boundary Verification

Changes to boundary: Extensive – eliminated / adjust  
northern boundary

Inlet Streams: Yes, Grafton Ditch

Outlet Streams: Yes, tributary to Hogden Brook drains southeast under Interstate 95

Ecological Integrity

Recent Impacts since 2002: Yes, along northcentral boundary

Recent Buffer Development since 2002: Yes, commercial buildings along northern  
boundary

Potential Water Quality Impacts: Yes, from stormwater runoff – commercial development  
and Interstate 95

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 30% / Woodland 30% /  
Commercial 30% / Fields 10%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: Water quality impacts to Grafton Ditch from Pease Tradeport

Approximate area of restoration: 0.5 acres along 1,000 linear feet of stream

Prime Wetland?

Functional Analysis: 7 out of 7 principal functions present

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Top five sized wetlands in city, diverse wildlife habitat, headwaters to  
Hogden Brook



West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 15

Date: September 2006

Size: ~~26~~<sup>35.22</sup> acres

Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: Plot 15-A along the railroad tracks

Classification(s) in 2002 Wetland Mapping: PEM1Bb

Classification Change since 2002: No

Boundary Verification Changes to boundary: Yes, minor fingers

Inlet Streams: No

Outlet Streams: Yes, to the south

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Significant untreated stormwater runoff

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 10% / Commercial 50% /  
Woodland 40%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, ranks 9<sup>th</sup>

Does this Wetland Rate High in Educational/Scientific Value? Yes, ranks 8<sup>th</sup>

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes, part of well head protection area

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: Several acres

Prime Wetland?

Functional Analysis: Ranks in top ten in most categories of GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Maintains vegetated buffers on two sides with mature forest habitat; portions  
of marsh are diverse and healthy

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 18 & 26

Date: September 2006

Size: ~~22.16~~ + ~~10.38~~ = 32.54  
~~31~~ & ~~11~~ = 42 acres Estimated Percent of Very Poorly Drained Soils: 80%

Field Soils Verification Plots: Plot 18-A along the railroad bed

Classification(s) in 2002 Wetland Mapping: PEM/SS1E and PUBH/PFO1E

Classification Change since 2002: No, but beaver are active

Boundary Verification Changes to boundary: Yes, minor in southeastern corner

Inlet Streams: Yes, from wetland 26

Outlet Streams: Yes, to the north

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Yes, from large commercial development to the north

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 40% / Commercial 40% /  
Woodland 20%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, ranks 10<sup>th</sup>

Does this Wetland Rate High in Educational/Scientific Value? Yes, ranks 5<sup>th</sup>

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: several acres

Prime Wetland?

Functional Analysis: Combined wetlands rank in top ten in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Pond habitat relatively rare for the city; diverse wetland with vegetated  
buffers still present

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 19

Date: September 2006

Size: ~~16~~ 15.07 acres

Estimated Percent of Very Poorly Drained Soils: 70%

Field Soils Verification Plots: No

Classification(s) in 2002 Wetland Mapping: PSS1E/FO1E

Classification Change since 2002: No

Boundary Verification Changes to boundary: Yes, minor along eastern boundary

Inlet Streams: Yes, drainages

Outlet Streams: Yes, to Sagamore Creek (Wetland 61A)

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, at Tuckers Cove development to the east

Potential Water Quality Impacts: Minimal

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 60% / Woodland 40%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes, ranks 7<sup>th</sup>

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes, part of Urban Forestry Center

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranks high in finfish habitat and education potential in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Maintains vegetated buffers and has uncommon wet meadow habitat,  
tributary to Sagamore Creek Estuary

West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 23

Date: September 2006

Size: <sup>55.08</sup>  
~~71~~ acres

Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: 023-A along railroad bed

Classification(s) in 2002 Wetland Mapping: PFO4E & PFO1E

Classification Change since 2002: No

Boundary Verification Changes to boundary: Yes, along northern boundary

Inlet Streams: No

Outlet Streams: Connected to Packer Bog

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, along northern boundary

Potential Water Quality Impacts: Yes, from stormwater runoff

Natural Heritage Elements Present: Atlantic White Cedar stands

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 30% / Woodland 70%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes, ranked 6<sup>th</sup>

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes, Packer Bog in Greenland

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranks 6<sup>th</sup> in GES study for most functions and values

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Contiguous to Packer Bog in Greenland; extensive stands of Atlantic White Cedar

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 61A

Date: September 2006

Size: ~~120~~<sup>67.46</sup> acres

Estimated Percent of Very Poorly Drained Soils: 100%

Field Soils Verification Plots: Plot A along Route 1

Classification(s) in 2002 Wetland Mapping: PEM1 (wrong)

Classification Change since 2002: E2EM1P – not a change, but a correction

Boundary Verification

Changes to boundary: Yes, mudflats were eliminated because they are not vegetated wetlands

Inlet Streams: Yes, Sagamore Creek

Outlet Streams: Tidal estuary

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: New subdivision Tucker's Cove

Potential Water Quality Impacts: Runoff from Route 1 and associated commercial development

Natural Heritage Elements Present: Artic / common terns feeding habitat

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 30% / Commercial 20% / Woodland 50%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, fisheries and tidal marsh habitat

Does this Wetland Rate High in Educational/Scientific Value? Yes, 3<sup>rd</sup> in GES study

Does this wetland provide open vistas? One of the highest ranking for visual aesthetic quality

Is this wetland connected to open space land? Yes

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: ranks 4<sup>th</sup> in GES study for most functions and values

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Most important estuary / salt marsh in Portsmouth

West Environmental Inc.  
Portsmouth Vegetated Tidal Marsh Evaluation

Date: September 2006

Wetland ID: 61A

Wetland Size: 120 acres

Wetland Classification: E2EM1P

Type of Marsh System:

**Coastal/Back Barrier Marsh**

Marsh derives most of its sediments from sea water	yes	no
No major tidal rivers flow into this marsh	___	<u>X</u>
Marsh located adjacent to Atlantic coast	___	___
Dominated by <i>Spartina patens</i>	___	___

**Estuarine Marsh**

Marsh derives majority of sediment from freshwater X \_\_\_  
Associated with major tidal river and/or bay \_\_\_ \_\_\_

**Meadow Marsh**

Contains more than 50% high marsh \_\_\_ X  
Dominated by *Spartina patens* \_\_\_ X

**Fringe Marshes**

Exposed to wind and wave energy X \_\_\_  
Located along river and bay shoreline X \_\_\_  
Minimal high marsh X \_\_\_  
Gentle grade from open water to upland \_\_\_ X  
Dominated by *Spartina alterniflora* X \_\_\_

Ecological Integrity:

Land use within 500 foot zone of influence

20% Residential 10% Roads 5% Parking Lots 10% Freshwater wetlands 55% Forested

X Invasive plants present

X <5% invasive species

\_\_\_ 5% - 20% dominated by invasive species

\_\_\_ > 20% dominated by invasive species

Does restriction restrict seawater into wetland? NO

Does restriction detain freshwater from entering wetland? NO

Does restriction affect flow? NO

\_\_\_ NO Tidal Restrictions present

X Is wetland ditched

\_\_\_ grid pattern

X linear pattern

X Buffer present

Shoreline Anchoring:

Type of marsh system

X estuarine fringe

(receives more erosive energy force).

\_\_\_ estuarine meadow

\_\_\_ coastal/back-barrier

Wetland morphology

\_\_\_ no distinct bank between

wetland and upland/freshwater wetland

X distinct vegetated bank present

\_\_\_ distinct non-vegetated bank present

Finfish & Shellfish Habitat:

X Shellfish beds present

X Ecological impacts present

X Diverse wetland system

X Wetland connection to freshwater wetland or stream

X Wetland used for feeding, breeding, protection, or migration

X Fisheries habitat present

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 61B 1 through 11

Date: September 2006

Size: ~~5~~<sup>13.38</sup> acres Estimated Percent of Very Poorly Drained Soils: 100%

Field Soils Verification Plots: Plot A near Bell Island Bridge

Classification(s) in 2002 Wetland Mapping: PEM1 (wrong)

Classification Change since 2002: E2EM1P – not a change, but a correction

Boundary Verification Changes to boundary: Yes, mudflats were eliminated because they are not vegetated wetlands

Inlet Streams: Yes, from Curriers Cove

Outlet Streams: Tidal estuary

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Some house lots

Potential Water Quality Impacts: Runoff from adjacent development

Natural Heritage Elements Present: Artic / common terns feeding habitat

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 60% / School 20% /  
Woodland 20%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, fisheries and tidal marsh habitat

Does this Wetland Rate High in Educational/Scientific Value? Yes, directly adjacent to Little Harbour School

Does this wetland provide open vistas? One of the higher ranking for visual aesthetic quality

Is this wetland connected to open space land? Yes, cemetery

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Not ranked in GES study, but very high valued tidal marsh habitat

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Important estuary / salt marsh in Portsmouth

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 62

Date: September 2006

Size: ~~110~~ <sup>43.54</sup> acres

Estimated Percent of Very Poorly Drained Soils: 85%

Field Soils Verification Plots: Plot A along railroad bed

Classification(s) in 2002 Wetland Mapping: PEM1 (wrong)

Classification Change since 2002: E2EM1P – not a change, but a correction

Boundary Verification Changes to boundary: No

Inlet Streams: Yes, Sagamore Creek

Outlet Streams: Creek flows under Route 1

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Commercial re-development

Potential Water Quality Impacts: Runoff from commercial development surrounding wetland

Natural Heritage Elements Present: Artic / common terns feeding habitat

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 50% / Commercial 20% /  
Woodland 30%

Is Wildlife Habitat a Principal Function of this Wetland? Yes, fisheries and salt marsh habitat

Does this Wetland Rate High in Educational/Scientific Value? Yes, but not in GES study

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: ranks 7<sup>th</sup> in GES study for most functions and values

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: Yes

Justification: Part of largest salt marsh system in Portsmouth



**West Environmental Inc.**  
**Portsmouth Vegetated Tidal Marsh Evaluation**

Date: September 2006

Wetland ID: 62

Wetland Size: 44 acres

Wetland Classification: E2EM1P

**Type of Marsh System:**

**Coastal/Back Barrier Marsh**

	yes	no
Marsh derives most of its sediments from sea water	___	<u>X</u>
No major tidal rivers flow into this marsh	___	<u>X</u>
Marsh located adjacent to Atlantic coast	___	<u>X</u>
Dominated by <i>Spartina patens</i>	___	<u>X</u>

**Estuarine Marsh**

Marsh derives majority of sediment from freshwater	<u>X</u>	___
Associated with major tidal river and/or bay	<u>X</u>	___

**Meadow Marsh**

Contains more than 50% high marsh	___	___
Dominated by <i>Spartina patens</i>	___	___

**Fringe Marshes**

Exposed to wind and wave energy	<u>X</u>	___
Located along river and bay shoreline	<u>X</u>	___
Minimal high marsh	<u>X</u>	___
Gentle grade from open water to upland	<u>X</u>	___
Dominated by <i>Spartina alterniflora</i>	<u>X</u>	___

**Ecological Integrity:**

**Land use within 500 foot zone of influence**

30% Residential   10% Roads   30% Parking Lots   10% Freshwater wetlands   20% Forested

<u>X</u> Invasive plants present	<u>YES</u> Tidal Restrictions present
<u>X</u> <5% invasive species	
___ 5% - 20% dominated by invasive species	<u>X</u> Is wetland ditched
___ > 20% dominated by invasive species	___ grid pattern
Does restriction restrict seawater into wetland? <u>NO</u>	<u>X</u> linear pattern
Does restriction detain freshwater from entering wetland? <u>NO</u>	
Does restriction affect flow? <u>Yes, minor</u>	___ Buffer present

**Shoreline Anchoring:**

Type of marsh system	Wetland morphology
<u>X</u> estuarine fringe	___ no distinct bank between
(receives more erosive energy force)	wetland and upland/freshwater wetland
___ estuarine meadow	<u>X</u> distinct vegetated bank present
___ coastal/back-barrier	___ distinct non-vegetated bank present

**Finfish & Shellfish Habitat:**

X Shellfish beds present  
X Ecological impacts present  
X Diverse wetland system  
X Wetland connection to freshwater wetland or stream  
X Wetland used for feeding, breeding, protection, or migration  
X Fisheries habitat present

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 003B

Date: September 2006

Size: <sup>18.65</sup>  
~~19~~ acres

Estimated Percent of Very Poorly Drained Soils: 75%

Field Soils Verification Plots: Plot 003B-A along railroad tracks

Classification(s) in 2002 Wetland Mapping: PFO1E/SS1 & PEM1E/SS1E

Classification Change since 2002: Some die back of canopy - PF05

Boundary Verification Changes to boundary: No

Inlet Streams: No, just runoff

Outlet Streams: Drainage into 003A

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, Griffin Ave

Potential Water Quality Impacts: Yes, from Interstate 95

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Highway 65% / Wetland across RR 25%  
/ Commercial 10%

Is Wildlife Habitat a Principal Function of this Wetland? No

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: 20%

Prime Wetland?

Functional Analysis: Ranks relatively low

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Fragmented wetland surrounded by highway off ramp and railroad bed with  
invasive species present

West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 004

Date: September 2006

Size: ~~51~~<sup>50.46</sup> acres Estimated Percent of Very Poorly Drained Soils: 25%

Field Soils Verification Plots: Off Girl Scout trail

Classification(s) in 2002 Wetland Mapping: N/A

Classification Change since 2002: PFO1/4E

Boundary Verification Changes to boundary: N/A

Inlet Streams: Yes, from southwest

Outlet Streams: Yes, to northeast under Banfield Road

Ecological Integrity

Recent Impacts since 2002: None

Recent Buffer Development since 2002: Minor along Banfield Road

Potential Water Quality Impacts: Yes, from Banfield Road runoff

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Commercial 20% / Woodland 80%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes, with Scout property

Does this wetland provide open vistas? Limited

Is this wetland connected to open space land? Yes

Potential Restoration Opportunity

Type of impact to wetland: None

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: 6 out of 7 principal functions

Does this wetland qualify as prime? No

Prime Wetland Recommendation: No

Justification: Does not qualify

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 13A

Date: September 2006

Size: ~~25~~<sup>39.97</sup> acres in two areas      Estimated Percent of Very Poorly Drained Soils: 60%

Field Soils Verification Plots: Plot 13A-A behind high school

Classification(s) in 2002 Wetland Mapping: PFO1/SS1E

Classification Change since 2002: Some areas of emergent wetland

Boundary Verification      Changes to boundary: Extensive changes eliminating 30%  
of wetland area and separating them  
into two areas

Inlet Streams: Yes, from north

Outlet Streams: Through culvert to Wetland 13B

Ecological Integrity

Recent Impacts since 2002: Additional upgrades to high school

Recent Buffer Development since 2002: High school additions

Potential Water Quality Impacts: Stormwater runoff

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: High school 40% / Residential 50% /  
Woodland 10%

Is Wildlife Habitat a Principal Function of this Wetland? No

Does this Wetland Rate High in Educational/Scientific Value? It has the opportunity with  
its proximity to the high  
school

Does this wetland provide open vistas? No

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation from stormwater runoff

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranking is inaccurate because of size discrepancy; it actually ranks lower  
than GES study indicates

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Fragmented disturbed wetland system with degraded wildlife habitat

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 13B

Date: September 2006

Size: <sup>5.17</sup>  
~~5.2~~ acres

Estimated Percent of Very Poorly Drained Soils: 80%

Field Soils Verification Plots: Plot 13B-A next to ball fields

Classification(s) in 2002 Wetland Mapping: P SS1/ FO1E

Classification Change since 2002: No

Boundary Verification Changes to boundary: No

Inlet Streams: Yes, from Wetland 13A

Outlet Streams: Yes, to Sagamore Creek (Wetland 61A)

Ecological Integrity

Recent Impacts since 2002: None

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Yes, runoff from adjacent ball fields could contain fertilizers

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 25% / Commercial 25% /  
High school 25% / Woodland 25%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? No, but it has the opportunity

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes, Sagamore Creek (?)

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: Area adjacent high school

Prime Wetland?

Functional Analysis: Ranks low in GES study, very small size

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Small size, adjacent development, invasive species and historic disturbance

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 14

Date: September 2006

Size: <sup>1987</sup> 20 acres

Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: Plot 14-A adjacent to hospital parking lot

Classification(s) in 2002 Wetland Mapping: PEM1E

Classification Change since 2002: PSS1E could be added

Boundary Verification

Changes to boundary: Yes, entire southern finger should be eliminated

Inlet Streams: No

Outlet Streams: No

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Yes, from Interstate 95

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 10% / Commercial 50% /  
Highway 25% / Wetland 15%

Is Wildlife Habitat a Principal Function of this Wetland? No

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Yes

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation from stormwater runoff

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranked low in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Surrounded by development with no buffers on three sides and invasive species

West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 16

Date: September 2006

Size: ~~50~~ 50.72 acres

Estimated Percent of Very Poorly Drained Soils: 20%

Field Soils Verification Plots: 016-A off Campus Drive

Classification(s) in 2002 Wetland Mapping: PFO1/SS1E

Classification Change since 2002: No

Boundary Verification

Changes to boundary: Yes, southeast finger eliminated

Inlet Streams: No

Outlet Streams: Yes, to north / piped

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, Water Country parking lot upgrades and Banfield Road development

Potential Water Quality Impacts: Stormwater runoff from adjacent development

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 10% / Woodland 20% / Commercial 60% / Sandpit 10%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes, Community Campus

Does this wetland provide open vistas? No

Is this wetland connected to open space land? Yes, recreation land

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: 5 out of 7 principal functions present

Does this wetland qualify as prime? No

Prime Wetland Recommendation: No

Justification: Does not qualify

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 22

Date: September 2006

Size: <sup>19.65</sup>  
22 acres

Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: Along Jones Avenue

Classification(s) in 2002 Wetland Mapping: PEM1E & PSS1E/FO1E

Classification Change since 2002: No

Boundary Verification

Changes to boundary: Yes, minor along northern boundary

Inlet Streams: No

Outlet Streams: Yes, under Jones Avenue to Wetland 13A

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, along southern boundary

Potential Water Quality Impacts: Yes, from stormwater runoff

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 80% / Woodland 20%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? Yes, a few

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranks low in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Surrounded by development with limited vegetated buffers



**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 29

Date: September 2006

Size: ~~12~~ <sup>21.88</sup> acres Estimated Percent of Very Poorly Drained Soils: 75%

Field Soils Verification Plots: 029-A

Classification(s) in 2002 Wetland Mapping: PSS1/FO1E

Classification Change since 2002: PEM1E

Boundary Verification Changes to boundary: Major change to western portion which is all upland

Inlet Streams: No

Outlet Streams: Yes, under Jones Avenue

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Yes, new development on southern boundary of wetland

Potential Water Quality Impacts: Minor from residential development

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 80% / Woodland 20%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? Yes

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: None

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: 1 out of 7 in GES Study / WEI found 5 out of 7 functions present

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Surrounded by development with minimal vegetated buffers

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 31

Date: September 2006

Size: <sup>15.09</sup> 15 acres Estimated Percent of Very Poorly Drained Soils: 90%

Field Soils Verification Plots: 031-A off Sherburne Street

Classification(s) in 2002 Wetland Mapping: PFO1/SS1E/EM1E

Classification Change since 2002: No

Boundary Verification Changes to boundary: Minor

Inlet Streams: No

Outlet Streams: Yes, under Essex Ave to the east

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Yes, from apartment complex

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 100%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: 2 out of 7 in GES Study / WEI found 4 out of 7 functions present

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Surrounded by development with minimal vegetated buffers

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 38

Date: September 2006

Size: <sup>4.96</sup>  
~~8~~ acres

Estimated Percent of Very Poorly Drained Soils: 50%

Field Soils Verification Plots: No

Classification(s) in 2002 Wetland Mapping: PFO4E

Classification Change since 2002: No

Boundary Verification Changes to boundary: No

Inlet Streams: No

Outlet Streams: No

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Yes, from stormwater runoff

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 70% / Woodland 30%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? No

Is this wetland connected to open space land? No – surrounded by development

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranked low in GES Study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Very small (5 acres), surrounded by development, no diverse or unique habitat

West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 44

Date: September 2006

Size: <sup>4.56</sup>  
~~4.6~~ acres

Estimated Percent of Very Poorly Drained Soils: 80%

Field Soils Verification Plots: No

Classification(s) in 2002 Wetland Mapping: PFO1E/SS1E

Classification Change since 2002: No

Boundary Verification Changes to boundary: No

Inlet Streams: Part of a larger wetland in Rye

Outlet Streams: N/A

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: No

Natural Heritage Elements Present: Unknown

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 35% / Woodland 25% / Golf course 40%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? Yes

Is this wetland connected to open space land? Unknown

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranked low in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Most of this wetland is in Rye and the city cannot designate wetlands outside of Portsmouth

**West Environmental, Inc.**  
**Portsmouth Prime Wetland Designation Data Form**

Wetland ID: 50

Date: September 2006

Size: ~~5.78~~ 5.8 acres Estimated Percent of Very Poorly Drained Soils: less than 50%

Field Soils Verification Plots: No

Classification(s) in 2002 Wetland Mapping: PFO1E/SS1E with an area of PEM1E

Classification Change since 2002: No

Boundary Verification Changes to boundary: No

Inlet Streams: Yes, from south

Outlet Streams: Yes, from north

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: No

Potential Water Quality Impacts: Yes, surrounded by development

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 50% / Woodland 20% /  
Commercial 30%

Is Wildlife Habitat a Principal Function of this Wetland? Yes

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? No

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: Water quality degradation

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranked low in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Very small (6 acres) surrounded by commercial / residential development  
with minimal vegetated buffers, water quality degradation present

**WEST**   
**ENVIRONMENTAL**

West Environmental, Inc.  
Portsmouth Prime Wetland Designation Data Form

Wetland ID: 117

Date: September 2006

Size: ~~2.5~~<sup>2.51</sup> acres

Estimated Percent of Very Poorly Drained Soils: 50%

Field Soils Verification Plots: No

Classification(s) in 2002 Wetland Mapping: PFO1E/SS1E

Classification Change since 2002: Emergent area established

Boundary Verification Changes to boundary: No

Inlet Streams: Yes, from south

Outlet Streams: Yes, from north under Gosport Road

Ecological Integrity

Recent Impacts since 2002: No

Recent Buffer Development since 2002: Residential subdivision

Potential Water Quality Impacts: Yes, from stormwater runoff

Natural Heritage Elements Present: No

Urban Quality of Life

Dominant Land Use within 1500 feet of wetland: Residential 80% / Woodland 20%

Is Wildlife Habitat a Principal Function of this Wetland? No

Does this Wetland Rate High in Educational/Scientific Value? No

Does this wetland provide open vistas? No

Is this wetland connected to open space land? No

Potential Restoration Opportunity

Type of impact to wetland: No

Approximate area of restoration: N/A

Prime Wetland?

Functional Analysis: Ranked lowest in GES study

Does this wetland qualify as prime? Yes

Prime Wetland Recommendation: No

Justification: Surrounded by residential development with minimal vegetated buffers; not diverse or unique

**Appendix B**

**City Council Action Sheet**

**From July 10, 2010 Portsmouth City Council Meeting**

**With Approval to Adopt Prime Wetlands As Described**

TO: JOHN P. BOHENKO, CITY MANAGER  
FROM: VALERIE A. FRENCH, DEPUTY CITY CLERK  
RE: ACTIONS TAKEN BY THE PORTSMOUTH CITY COUNCIL MEETING HELD ON JULY 19, 2010, EILEEN DONDERO FOLEY COUNCIL CHAMBERS, MUNICIPAL COMPLEX, ONE JUNKINS AVENUE, PORTSMOUTH, NEW HAMPSHIRE  
PRESENT: MAYOR FERRINI, ASSISTANT MAYOR NOVELLINE CLAYBURGH, COUNCILORS HEJTMANEK, SPEAR, DWYER\*, COVIELLO AND SMITH  
ABSENT: COUNCILORS LISTER AND KENNEDY

\*Councilor Dwyer participated via conference call, therefore all votes were taken by roll call in compliance with the Right-to-know RSA.

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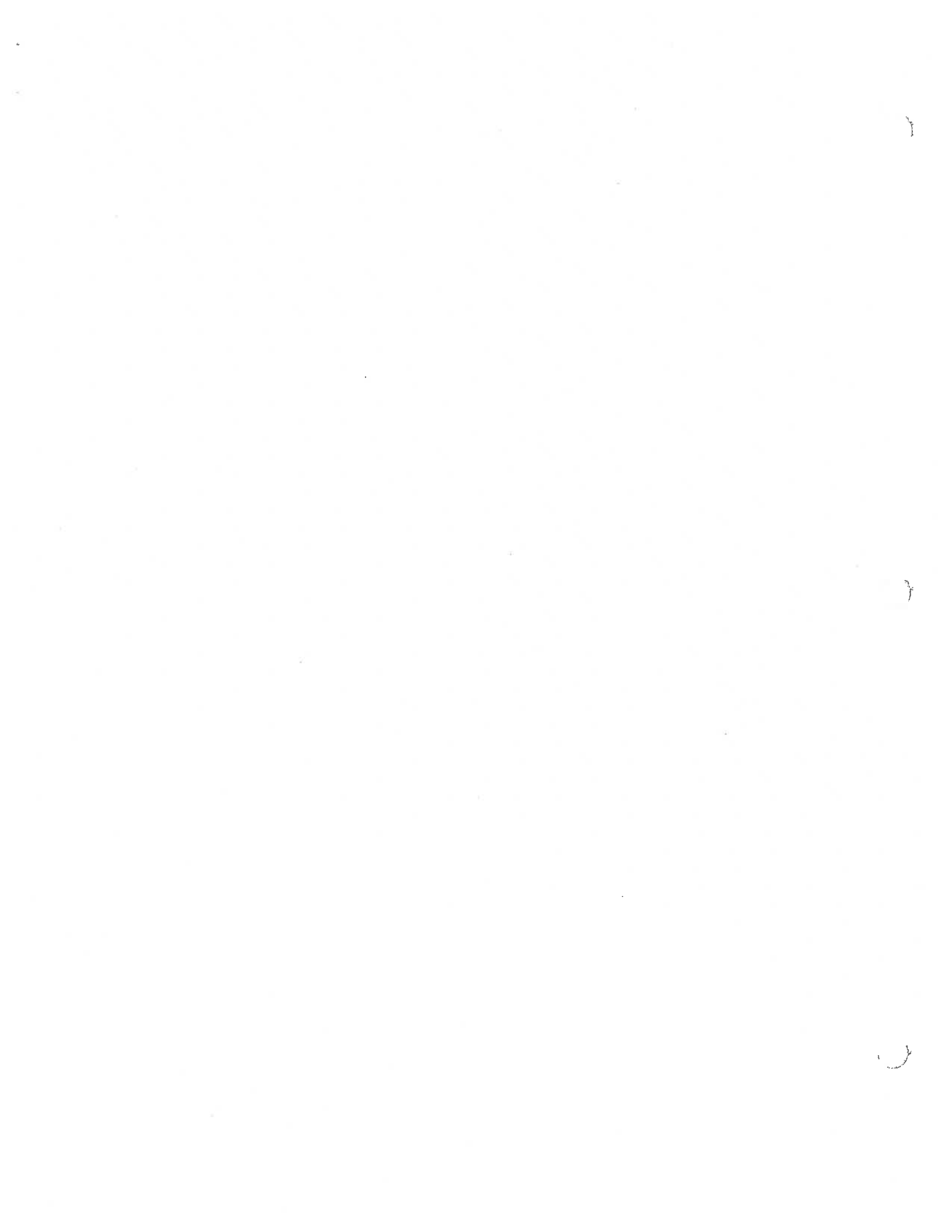
1. At 6:00 p.m., an Anticipated "Non-Meeting" with Counsel was held regarding Negotiations – RSA 91-A:2, I (b-c).
2. Acceptance of Minutes – June 21, 2010 – Voted on a 7-0 roll call to approve and accept the minutes of the June 21, 2010 City Council meeting.
3. Public Comment Session – There were 6 speakers: Karina Quintans (Downtown Portsmouth Zero Waste Project); Martin Cameron and Bill St. Laurent (WWI Monuments); Al Lapanne and Bill St. Laurent (Opening Sherburne Gate); Al Silva (Projecting Sign at 19 Congress Street); and Mary Lou McElwain (Red Ginger Sidewalk Obstruction)
4. Public Hearing – Pursuant to RSA 482-A:15 II on the Designation of Prime Wetlands in Accordance with the Report Prepared for the Conservation Commission by West Environmental in February 2007 – Held a public hearing. One speaker, Philip Stokel.
5. Acceptance of Conservation License Plate Grant – Voted on a 7-0 roll call to authorize the City Manager to accept and expend a \$10,000.00 grant from the State of New Hampshire Division of Historical Resources Conservation License Plate Grant Program for the Morton-Benedict House Roof Project.
6. Acceptance of Donations to the Coalition Legal Fund - Voted on a 7-0 roll call to approve and accept the donations, as listed, to be placed in the Coalition Legal Fund.
  - Town of Carroll - \$1,000.00
  - Town of Moultonborough - \$5,000.00
  - Town of Tuftonboro - \$5,000.00
7. Voted on a 7-0 roll call to suspend the rules to take up Item X.A.1. – Prime Wetlands Designation.
8. Prime Wetlands Designation – Moved to adopt prime wetlands as designated on the Proposed Prime Wetland map with the exception of wetland 007 located on the Pease Tradeport and to authorize the City Manager to forward all necessary supporting documentation to the NH Department of Environmental Services for their review. Motion to table this matter for a report back from Planning Department failed on a 2-5 roll call vote. Main motion passed on a 6-1 roll call vote, Councilor Smith opposed.



9. Prime Wetlands Designation - Voted on a 7-0 roll call to authorize the City Manager to send a letter to the Pease Development Authority to ask them to seek State designation of wetland 007 as a Prime Wetland.
10. Consent Agenda – Voted on a 7-0 roll call to adopt the Consent Agenda.
  - A. Letter from James Heinz and Rochelle Jones requesting permission to hold a softball game fundraiser for firefighter Sarah Fox on Sunday, August 22, 2010 at 2:00 p.m. at Alumni Field (***Anticipated action – move to refer to the City Manager with power***)
11. Letter from Cindi Blanchette, Portsmouth City Soccer Club, requesting permission to hang banners at Leary field during soccer season from mid August through November (Same conditions as last year) – Voted on a 7-0 roll call to refer to the City Manager with power.
12. Letter from Richard Adams requesting that the City Council reconsider its action regarding the WW I monuments. – Voted on a 6-1 roll call to accept and place the letter on file. Councilor Spear voted opposed.
13. Petition requesting to open the back gate on Sherburne Road for a trial period during construction of the bridge over Interstate 95 – Voted on a 7-0 roll call to refer to the Traffic and Safety Committee for a report back.
14. Letter from Thans Lapanne requesting to change the name of the portion of Sherburne Road on the Tradeport – Voted on a 7-0 roll call to refer to the Planning board for a report back.
15. Request for License Agreement RE: 51 Islington Street, LLC – Voted on a 6-0 roll call to authorize the City Manager to enter into a license agreement with 51 Islington Street LLC to facilitate construction activities. Councilor Coviello abstained from voting on the matter.
16. Request for a License from Jeff Casler, owner of the Second Time Around, for property located at 19 Congress Street to install a projecting sign – Vote on a 7-0 roll call to accept the recommendation of the Planning Board with the aforementioned stipulations and approve the request of Jeff Casler, owner of Second Time Around, to install a projecting sign on a new bracket at 19 Congress Street and further authorize the City Manager to execute a License Agreement for this request.
  - 1) The license shall be approved by the Legal Department as to content and form;
  - 2) Any removal or relocation of the projecting sign, for any reason, will be done at no cost to the City; and
  - 3) Any disturbance of a sidewalk, street or other public infrastructure resulting from the installation, relocation or removal of the projecting sign, for any reason, shall be restored at no cost to the City and shall be subject to review and acceptance by the Department of Public Works.

17. Approval of Downtown Portsmouth Zero Waste Project – Voted on a 7-0 roll call to authorize the City Manager to proceed with the placement of recycling containers in downtown Portsmouth, as presented at the work session and the map location.
18. Report Back Re: Red Ginger, LLC, 261 South Street – Voted on a 7-0 roll call to approve the extension of the Sidewalk Obstruction License for the Red Ginger, 261 South Street for the remainder of the year at which time it is renewable annually.
19. Request to Establish a Work Session with Recreation Board Re: Recreation Needs Study – Voted on a 7-0 roll call to establish a work session with the Recreation Board regarding the Recreation Needs Study on Tuesday, September 7, 2010 at 6:00 p.m.
20. Representatives to the Rockingham Metropolitan Planning Organization (MPO) Technical Advisory (TAC) – Voted on a 7-0 roll call to designate Steve Parkinson, Public Works Director, Dave Allen, Deputy Public Works Director (alternate) and Rick Taintor, Planning Director (alternate) to act as the City's representatives to the Rockingham Metropolitan Planning Organization (MPO) Technical Advisory Committee (TAC) for the July 2010 – June 30, 2013 term
21. Appointment to be Voted – Elissa Hill Stone – Appointment as an Alternate to the Conservation Commission – Voted on a 7-0 roll call to appoint Elissa Hill Stone as an alternate to the Conservation Commission with term to expire 04/01/2013.
22. Acceptance of Resignation – Susanne Delaney – Economic Development Commission – Voted on a 7-0 roll call to accept the resignation of Susanne Delaney from the Economic Development Commission with regret and a letter of appreciation.
23. Report Back from School Board Re: Final Budget Adjustments – Voted on a 7-0 roll call to place on file the list of final adjustments made by the Portsmouth School Board to the FY2010 Budget.
24. Letter from First Lady Michelle Obama Re: Preserve America Community Designation – Voted on a 7-0 roll call to place Letter from First Lady Michelle Obama regarding Preserve American Community Designation on file.
25. Mayor's Report – Request from African Burying Ground Committee to make a presentation before the Council. – Mayor Ferrini submitted into the record a letter from Vernis Jackson, Chair, African Burying Ground Committee, requesting to make a presentation to the City Council with a suggested date of September 20, 2010.
26. Parking Committee Action Sheet and Minutes of the July 8, 2010 meeting. – Voted on a 7-0 roll call to approve and accept the action sheet and minutes of the July 8, 2010 Parking Committee meeting.
27. Adjournment - At 8:35 p.m., voted on a 7-0 roll call to adjourn.

Respectfully submitted by:  
Valerie A. French, Deputy City Clerk I





Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



## Other Information to Demonstrate No Significant Loss of Wetlands Values

Env-Wq 706.04(b)(4)

### Introduction

This *Functional Assessment and Impact Analysis* was conducted to support a *NHDES Prime Wetland Waiver Request*. This project proposes to impact the intertidal zone and *Developed Upland Tidal Buffer Zone* which is also within a *Duly Established 100-Foot Prime Wetland Buffer*. Under NHDES Wetlands Bureau Administrative Rule Env-Wt 706.04, we are required to demonstrate this project will not result in the *significant net loss* of the wetland values identified by the municipality when the prime wetlands associated with the buffer was designated. This supplemental document assesses the additional values not highlighted within the initial Functions and Values Assessment included with the original permit application and the Functional Assessment and Impact Analysis of the wetland values set forth in RSA 482-A:1, as required by NHDES Wetlands Bureau Administrative Rule Env-Wt 704.02 and RSA 482-A:11, IV(a).

The impacts associated with this project are necessary to replace an existing failing bridge with a new bridge, remove exiting causeways within public waters that act as a significant tidal restriction, connect the island to municipal utilities, restore areas currently occupied by the causeways with salt marsh, restore the developed upland tidal buffer zone with native vegetation, and connect the island to municipal utilities.

The jurisdictional areas adjacent to the project site are predominantly Estuarine, Intertidal, Unconsolidated Shore, Cobble-Gravel (E2US1) and Estuarine, Intertidal, Unconsolidated Shore, Mud (E2US3). Isolated narrow bands of fringe salt marsh exist along the neighboring shorelines (E2EM1).

The upland area adjacent to the wetland is an approximately 12-acre island. The island consists of a single residential property that previously utilized some areas for equestrian purposes. The mainland consists of wooded areas with intermittent pockets of forested freshwater wetlands. No impacts are proposed to the freshwater wetlands. While the bulk of the areas to be impacted are previously developed, open areas, the NH Fish and Game Wildlife Action Plan (WAP) identifies the habitat adjacent to the area to be impacted as salt marsh and hemlock hardwood pine. The WAP indicates the Tidal Wetland resources are of the *Highest Ranked Habitat in NH*.

### Methods

The wetland boundaries, more particularly, the *Highest Observable Tide Line* (HOTL), was delineated using the methods prescribed by NHDES Administrative Rule Env-Wt 602.23. The wetlands boundaries, including the limits of the 100-foot tidal buffer zone, are depicted on the attached site plans.

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
170 Commerce Way—Suite 102, Portsmouth, NH 03801  
T(603) 431-2222

The wetlands were classified based on the Classification of Wetlands and Deepwater Habitats of the United States, adapted from Cowardin, Carter, Golet and LaRoe (1979), August 2013, FGDC-STD-004-2013.)

The Functional Assessment was conducted by performing field visits on June 6, 2022 and June 10, 2022. The wetlands were assessed using the *Army Corps of Engineers Highway Methodology* (September 1999, NAEPP-360-1-30a).

The *Ecological integrity* of the wetlands was assessed using the *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire (June 1993)* and data from the NH Fish and Game Wildlife Action Plan (WAP).

The City of Portsmouth Prime Wetland Analysis Report, January 2011, prepared by West Environmental, Inc. Services, which was used to assess wetland resources for the purpose of *Prime Wetlands Designation* under RSA 482-A:15, was referenced as well.

## Additional Wetland Values Identified by the City of Portsmouth

### 1. Urban Quality of Life

This value evaluates the potential for the wetland to enhance the quality of urban life by providing wildlife habitat and other natural values in an urban setting.

#### Impact Analysis

Although the project is not occurring in an urban setting, the Prime Wetland *does* enhance the quality of life for the local residential community. While some impacts are proposed within the Prime Wetland Buffer, as a result of the salt marsh restoration, there will be no net loss of salt marsh area. This project proposes significant environmental improvements, and therefore, it will have no adverse impacts on the "Urban Quality of Life" value.

### 2. Open Vistas

This value evaluates the overall aesthetic quality and the ability of the wetland to provide scenic views.

#### Impact Analysis

While some impacts are proposed within the Prime Wetland Buffer, salt marsh restoration is proposed so there will be no net loss of salt marsh area. Removal of the existing unsightly causeways will significantly improve the open vistas. This project proposes significant environmental improvements and improvements to the existing vistas, and therefore, it will have no adverse impacts on the "Open Vistas" value.

### Summary

In summary, the environmental benefits associated with this project far outweigh the subtle impacts that must occur to the Duly-Established 100-foot Prime Wetland Buffer, and therefore, in accordance with



NHDES Wetlands Bureau Administrative Rule Env-Wt 704.02 and RSA 482-A:11, IV(a), this project will not result in the *significant net loss* of the additional wetland functions and values identified by the City of Portsmouth when this wetland was nominated to become a prime wetland.

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      [www.tfmoran.com](http://www.tfmoran.com)



TFMoran, Inc. Seacoast Division  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222

## References

ACOE Army Corps of Engineers Highway Methodology (September 1999, NAEEP-360-1-30a).

Ammann, A.P. and A.L. Stone. 1993. *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire*.

Cowardin, L.M., V. carter, F.C Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deep-Water Habitats of the United States*. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Method for Comparative Evaluation of Nontidal Wetlands in New Hampshire (1991), (NH Method).

New Hampshire Fish and Game Department Wildlife Action Plan (WAP).

The City of Portsmouth Prime Wetland Analysis Report, January, 2011.

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Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



**ABUTTER NOTIFICATION FOR  
PRIME WETLAND BUFFER WAIVER REQUEST**

**VIA CERTIFIED MAIL**

May 22, 2023

Lisa M. Oakes  
315 Little Harbor Road  
Portsmouth, NH 03801

Project # 47099.01

**RE: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
325 Little Harbor Road, Portsmouth, Tax Map: 204, Lot: 5**

Dear Abutter:

This letter is to inform you that a Prime Wetland Buffer Waiver Request will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A:11, IV(c) impacts proposed within a Duly Established 100-Foot Prime Wetland Buffer require a waiver from NHDES. Because your property, too, is within the Duly Established 100-Foot Prime Wetland Buffer, we are required to notify of this waiver request. The application, including the plans that depict the proposed impact areas, are available for viewing at the City of Portsmouth Clerk's Office.

Sincerely,  
**TFMoran, Inc.**

Jay Aube, CWS  
Environmental Permitting Specialist

cc: NHDES Wetlands Bureau

JRA/ ah

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48 Constitution Drive, Bedford, NH 03110  
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170 Commerce Way–Suite 102, Portsmouth, NH 03801  
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Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



**ABUTTER NOTIFICATION FOR  
PRIME WETLAND BUFFER WAIVER REQUEST**

**VIA CERTIFIED MAIL**

May 22, 2023

Lisa A. Grondahl Revocable Trust  
304 Maplewood Ave  
Portsmouth, NH 03801

Project # 47099.01

**RE: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
325 Little Harbor Road, Portsmouth, Tax Map: 204, Lot: 5**

Dear Abutter:

This letter is to inform you that a Prime Wetland Buffer Waiver Request will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A:11, IV(c) impacts proposed within a Duly Established 100-Foot Prime Wetland Buffer require a waiver from NHDES. Because your property, too, is within the Duly Established 100-Foot Prime Wetland Buffer, we are required to notify of this waiver request. The application, including the plans that depict the proposed impact areas, are available for viewing at the City of Portsmouth Clerk's Office.

Sincerely,  
**TFMoran, Inc.**

Jay Aube, CWS  
Environmental Permitting Specialist

cc: NHDES Wetlands Bureau

JRA/ ah

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Civil Engineers  
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Landscape Architects  
Scientists



**ABUTTER NOTIFICATION FOR  
PRIME WETLAND BUFFER WAIVER REQUEST**

**VIA CERTIFIED MAIL**

May 22, 2023

City of Portsmouth Conservation Commission  
1 Junkins Ave  
Portsmouth, NH 03801

Project # 47099.01

**RE: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
325 Little Harbor Road, Portsmouth, Tax Map: 204, Lot: 5**

Dear Abutter:

This letter is to inform you that a Prime Wetland Buffer Waiver Request will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A:11, IV(c) impacts proposed within a Duly Established 100-Foot Prime Wetland Buffer require a waiver from NHDES.

Because your property, too, is within the Duly Established 100-Foot Prime Wetland Buffer, we are required to notify of this waiver request. The application, including the plans that depict the proposed impact areas, are available for viewing at the City of Portsmouth Clerk's Office.

Sincerely,  
**TFMoran, Inc.**

Jay Aube, CWS  
Environmental Permitting Specialist

cc: NHDES Wetlands Bureau

JRA/ ah

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488 www.tfmoran.com



TFMoran, Inc. Seacoast Division  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



**GOVERNING BODY NOTIFICATION FOR  
PRIME WETLAND BUFFER WAIVER REQUEST**

**VIA CERTIFIED MAIL**

May 22, 2023

City of Portsmouth  
1 Junkins Avenue  
Portsmouth, NH 03801

TFM Project # 47099.01

**RE: NHDES Wetlands Permit Application, 325 Little Harbor Road, Portsmouth, Tax Map/ Lot:  
204/5**

To Whom It May Be Concerned:

This letter is to inform you that a Prime Wetland Buffer Waiver Request will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A:11, IV(c) impacts proposed within a Duly Established 100-Foot Prime Wetland Buffer require a waiver from NHDES.

Should you require additional information, please contact me anytime.

Sincerely,

**TFMoran, Inc.**

Jay Aube, CWS  
Environmental Scientist

cc: NHDES Wetlands Bureau

JRA/sdr

**VIA CERTIFIED MAIL**

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488 www.tfmoran.com



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170 Commerce Way—Suite 102, Portsmouth, NH 03801  
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Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



**GOVERNING BODY NOTIFICATION FOR  
PRIME WETLAND BUFFER WAIVER REQUEST**

May 22, 2023

City of Portsmouth  
Planning Board  
1 Junkins Avenue  
Portsmouth, NH 03801

TFM Project # 47099.01

**RE: NHDES Wetlands Permit Application, 325 Little Harbor Road, Portsmouth, Tax Map/ Lot:  
205/2 & 204/5**

To Whom It May Be Concerned:

This letter is to inform you that a Prime Wetland Buffer Waiver Request will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A:11, IV(c) impacts proposed within a Duly Established 100-Foot Prime Wetland Buffer require a waiver from NHDES.

Should you require additional information, please contact me anytime.

Sincerely,  
**TFMoran, Inc.**

Jay Aube, CWS  
Environmental Permitting Specialist

cc: NHDES Wetlands Bureau

JRA/sdr



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Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



**GOVERNING BODY NOTIFICATION FOR  
PRIME WETLAND BUFFER WAIVER REQUEST**

May 22, 2023

City of Portsmouth  
Conservation Commission  
1 Junkins Avenue  
Portsmouth, NH 03801

TFM Project # 47099.01

**RE: NHDES Wetlands Permit Application, 325 Little Harbor Road, Portsmouth, Tax Map/ Lot:  
205/2 & 204/5**

To Whom It May Be Concerned:

This letter is to inform you that a Prime Wetland Buffer Waiver Request will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A:11, IV(c) impacts proposed within a Duly Established 100-Foot Prime Wetland Buffer require a waiver from NHDES.

Should you require additional information, please contact me anytime.

Sincerely,  
**TFMoran, Inc.**

Jay Aube, CWS  
Environmental Permitting Specialist

cc: NHDES Wetlands Bureau

JRA/sdr





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



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

**APPLICANT'S NAME:** ADL 325 Little Harbor Road Trust      **TOWN NAME:** Portsmouth

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

<p><b>SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1))</b> Is the primary purpose of the proposed project to construct a water access structure?</p> <p>N/A - No, the primary purpose of this project is to replace an existing failing bridge with a new bridge, restore the tidal resource area, and connect the island to municipal utilities.</p>
<p><b>SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))</b> Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?</p> <p><u>No but, the new wooden pile supported bridge will be constructed within tidal waters and mud flats.</u></p>
<p><b>SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))*</b> For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs?</p> <p><i>*Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.</i></p> <p><u>There is no other access way to the island that would be less impactful than constructing a bridge adjacent to the existing bridge.</u></p>

[irm@des.nh.gov](mailto:irm@des.nh.gov) or (603) 271-2147

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

[www.des.nh.gov](http://www.des.nh.gov)

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

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

There are no alternative designs, techniques or layouts that would aid in minimizing impacts to jurisdictional areas. Designing a bridge on wood piles that spans the resource and removes large concrete causeways within public waters that currently restrict tidal flows and impede aquatic organisms passage is the best design possible. This project also proposes to restore salt marsh area and the Previously Developed Upland Tidal Buffer Zone with native vegetation.

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

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

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

A Coastal Functional Assessment (CFA) was performed to assess the "wetland" within the vicinity of the proposed impacts. In this instance, the "wetland" is the neighboring fringe salt marsh areas. We assessed the tidal mud flat areas as well. The Coastal Functional Assessment concluded these are exceptional resources that had qualifers for a significant number of key functions and values. The project does not, however, pose any threat or harm to the functions and values of these resource. This project will significantly enhance the overall value and ecological integrity within this area of NH's seacoast.





Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



## WORK SEQUENCE NARRATIVE FOR LAND-BASED IMPACTS

### Env-Wt 311.06 (d)

- 1.) At least 48-hours prior to commencing the construction activities, the property owner will notify NHDES via the *Initiation of Construction Notification Form*.
- 2.) Prior to construction, silt socks barrier will be installed at the limits of the approved impact area.
- 3.) Once installed, a *Certified Professional in Erosion and Sediment Controls* (CPESC) will inspect the erosion and siltation control devices.
- 4.) The erosion and siltation control devices will be monitored, inspected, and adjusted as required throughout the duration of the project as required.
- 5.) Construction equipment will be inspected daily for leaking fuel, oil, and hydraulic fluid, and, if necessary, repairs will be made immediately.
- 6.) Contractors responsible for operating construction equipment will have adequate oil spill kits on site and readily accessible during construction and they will be trained in deploying this equipment should it be required.
- 7.) Construction activities will occur as described within the construction details on the approved plans and as conditioned by NHDES.
- 8.) Upon project completion, exposed soils will be seeded and watered as needed.
- 9.) Upon completing the project, the property owner, or their agent, will notify NHDES via the *Completion of Construction Notice and Certificate of Compliance Form*.
- 10.) Once the site is stable, the erosion and siltation control devices will be removed.







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## WORK SEQUENCE NARRATIVE FOR PROPOSED BRIDGE Env-Wt 311.06 (d)

- 1.) At least 48-hours prior to commencing the construction activities, the property owner will notify NHDES via the *Initiation of Construction Notification Form*.
- 2.) Prior to construction, silt sock barriers will be installed at the limits of the approved impact areas.
- 3.) Turbidity curtains will be installed around the perimeter of the proposed new bridge approach impact areas.
- 4.) Once installed, a *Certified Professional in Erosion and Sediment Controls* (CPESC) will inspect the erosion and siltation control devices.
- 5.) The erosion and siltation control devices will be monitored, inspected, and adjusted as required throughout the duration of the project as required.
- 6.) To the greatest extent possible, bridge approach construction will be conducted during low tide.
- 7.) Construction equipment will be inspected daily for leaking fuel, oil, and hydraulic fluid, and, if necessary, repairs will be made immediately.
- 8.) Contractors responsible for operating construction equipment will have adequate oil spill kits on site and readily accessible during construction and they will be trained in deploying this equipment should it be required.
- 9.) Construction activities will occur as described within the construction details on the approved plans, as conditioned by NHDES, and those provided by the bridge designer, York Bridge Concepts (YBC), included with this work sequence narrative.
- 10.) Upon project completion, exposed soil adjacent to the new bridge approaches will be seeded and watered as needed.
- 11.) Upon completing the project, the property owner, or their agent, will notify NHDES via the *Completion of Construction Notice and Certificate of Compliance Form*.
- 12.) Once the site is stable, the erosion and siltation control devices will be removed.





May 15, 2023

**RE: Lady Isle Timber Bridge Work Sequence**

Note that all below timeframes are weather-pending.

**1. Mobilization & site set up – 2-3 days**

1. YBC receives deliveries of material and equipment and sets up staging area.
2. Piling is coated with acrylic polymer coating prior to installation
3. Installation and maintenance of silt fence, floating turbidity barrier, or other BMPs is in place prior to YBC arrival

**2. Build first abutment – 1-1.5 weeks**

1. Prior to YBC arrival, client to install fill material to prevent water from prohibiting abutment construction
2. Starting on the mainland side of the crossing, YBC drives piling for first abutment and builds up headwall and wingwalls to elevation.
3. Minor excavation will occur at the base of the abutment to ensure that abutment is at least 2' below existing grade.
4. Piling is vibrated to refusal using NPK C8-C vibratory compactor attached to boom of a 200 series excavator.
5. After wall construction, client to bring in temporary backfill material to enable YBC equipment access to the top of the bridge.
6. After wall construction, client to install riprap prior to framing of first bridge span

**3. Build Substructure from Bridge Deck – 3-4 weeks**

1. YBC access the top of the bridge with excavator and drive pre-coated piling for the next bent.
  - a. This method introduces very minor impact to the crossing as machinery remains on top of the structure throughout construction.
2. Piling will be cut to elevation and pile cap installed from scaffolding temporarily installed to the bridge
3. Pile wrap & X-brace will be installed from a small, site-built raft. See the attached drawing plans for raft assembly
4. Bridge framing and structural deck is installed from top of bridge
5. Excavator is moved onto the newly built span, and the process is repeated for the first 10 spans.

**4. Build second abutment – 1-1.5 weeks**

1. YBC will move equipment and material to the island side of the crossing via existing bridge
2. Starting from the island side of the crossing, YBC drives piling for second abutment and builds up headwall and wingwalls to elevation.
3. Minor excavation will occur at the base of the abutment to ensure that abutment is at least 2' below existing grade.
4. Piling is vibrated to refusal using NPK C8-C vibratory compactor attached to boom of a 200 series excavator.
5. After wall construction, client to bring in temporary backfill material to enable YBC equipment access to the top of the bridge.
6. After wall construction, client to install riprap prior to framing of first bridge span

**5. Build substructure from Bridge Deck – 3-4 weeks**

1. 10 bridge spans are built from island side in the same manner as the 10 spans above from mainland side

**6. Build center freespan – 1 week**

1. Glulam beams are placed for the center freespan via excavator located on top of the bridge deck
2. YBC installs framing and decking to the center span from the newly installed bridge deck

**7. Build Curb & Guiderail System – 5-6 weeks**

1. Curb and guiderail system is installed from the bridge deck

**8. Apply Coatings – 2 weeks**

1. Acrylic-polymer paint is applied to abutments via paint sprayer
  - a. Some touch up painting of the substructure may be required.
2. 3-coat translucent protective oil system is applied to outside stringers, curb, and guiderail system

**9. Install weardeck – 2-3 weeks**

1. Hardwood weardeck is installed

**10. Cleanup and demobilization – 2-3 days**

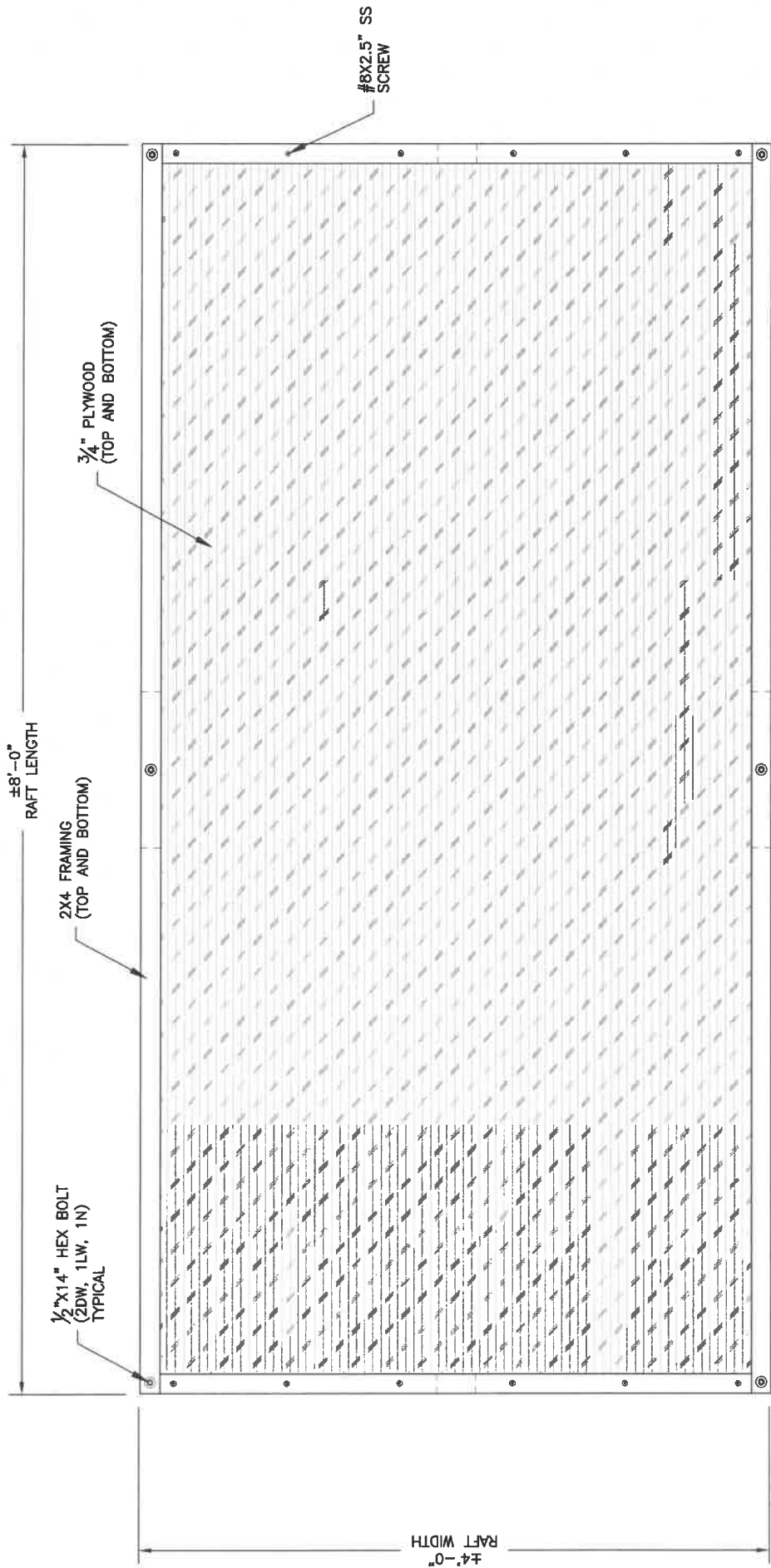
1. YBC cleans up site and demobilizes equipment

Sincerely,

**York Bridge Concepts, Inc**

**Brian Kennedy**

**Director of Construction Services**



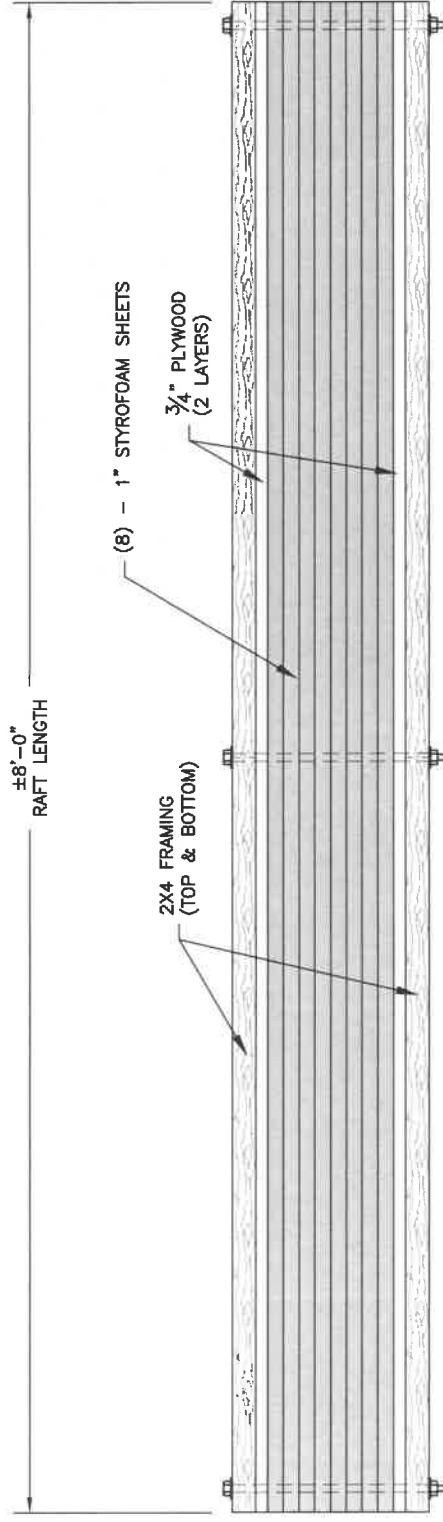
1 DETAIL - RAFT PLAN VIEW  
SCALE: NONE

 <b>YORK</b> <b>BRIDGE CONCEPTS</b> THE PREMIER TIMBER BRIDGE COMPANY		DETAILS RAFT - PLAN VIEW <small>DESIGNED LUNING</small>	
		DATE/REV: September 4, 2015	DRAWN BY: NA

**STYROFOAM RAFT DETAIL**

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2024 Inc. 02/16/24  
 1-800-254-6179  
 Fax: 610-335-8



±8'-0"  
RAFT LENGTH

(8) - 1" STYROFOAM SHEETS

3/4" PLYWOOD  
(2 LAYERS)

2X4 FRAMING  
(TOP & BOTTOM)

1/2" X 14" HEX BOLT  
(2DW, 1LW, 1N)

1 DETAIL - RAFT PROFILE VIEW  
SCALE: NONE

**YORK**

**BRIDGE CONCEPTS**

THE PREMIER TIMBER BRIDGE COMPANY

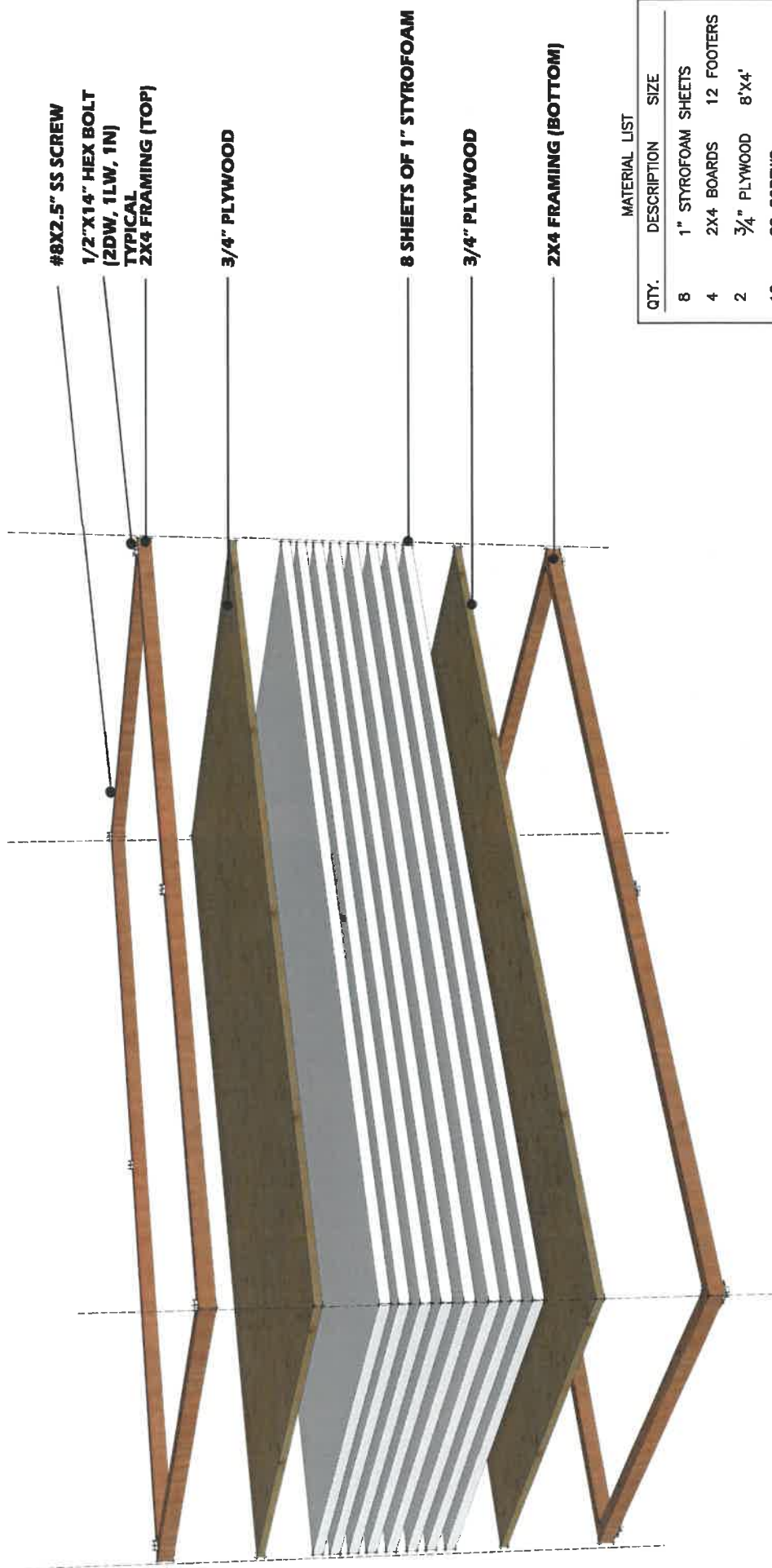
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2024 Inuvialuk Ave  
Inuvialuk, AK 99501  
Tel: (907) 333-8100 Fax: (907) 333-8101

DETAILS  
RAFT PROFILE VIEW

DESIGNED DRAWING

DATE/REV:	DRAWN BY:	PROJECT NUMBER:	SHEET NUMBER:
September 4, 2015	NA	NA	DETAILS





#8X2.5" SS SCREW  
 1/2"X14" HEX BOLT  
 (2DW, 1LW, 1N)  
 TYPICAL  
 2X4 FRAMING (TOP)

3/4" PLYWOOD

8 SHEETS OF 1" STYROFOAM

3/4" PLYWOOD

2X4 FRAMING (BOTTOM)

MATERIAL LIST

QTY.	DESCRIPTION	SIZE
8	1" STYROFOAM SHEETS	
4	2X4 BOARDS	12 FOOTERS
2	3/4" PLYWOOD	8'X4'
12	SS SCREWS	#8X2.5"
6	HEX BOLT	1/2"X14"

1 DETAIL - RAFT 3D  
 SCALE: NONE

DETAILS  
 RAFT 3D

DOORID L0000

STYROFOAM RAFT DETAIL

DATE/TIME	DRAWN BY	PROJECT NUMBER	SHEET NUMBER
September 8, 2015	NA	NA	DETAILS

**YORK**  
**BRIDGE CONCEPTS**  
 THE PREMIER TIMBER BRIDGE COMPANY

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 2014 kowalski inc  
 300.226.6178  
 300.226.6178





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Scientists



## WORK SEQUENCE NARRATIVE FOR CAUSEWAY REMOVAL

### Env-Wt 311.06 (d)

- 1.) At least 48-hours prior to commencing the construction activities, the property owner will notify NHDES via the *Initiation of Construction Notification Form*.
- 2.) Prior to construction, silt sock barriers will be installed at the limits of the approved upland impact areas.
- 3.) Turbidity curtains will be installed around the perimeter of the causeways at a distance that will allow for work to occur without being interfered with.
- 4.) Once installed, a *Certified Professional in Erosion and Sediment Controls* (CPESC) will inspect the erosion and siltation control devices.
- 5.) The erosion and siltation control devices will be monitored, inspected, and adjusted as required throughout the duration of the project as required.
- 6.) This work is *only* to occur during the approved construction window of November 15<sup>th</sup> and March 15<sup>th</sup>.
- 7.) To the greatest extent possible, the excavation work necessary to remove the existing causeways will occur at low tide.
- 8.) Excavation will begin at the end of the causeway and work landward. Large concrete structures will be removed to an elevation of 2-feet below the neighboring mud flats so that, with time, natural sediment migration will cover these structures.
- 9.) During low tide, to the greatest extent practicable, the mud flat areas will be regraded to mimic the natural contours of the surrounding area.
- 10.) Construction equipment will be inspected daily for leaking fuel, oil, and hydraulic fluid, and, if necessary, repairs will be made immediately.
- 11.) Contractors responsible for operating construction equipment will have adequate oil spill kits on site and readily accessible during construction and they will be trained in deploying this equipment should it be required.
- 12.) Construction activities will occur as described within the construction details on the approved plans, as conditioned by NHDES.
- 13.) Upon project completion, silt-sox will remain in place until the growing season.
- 14.) Once the growing season arrives, exposed upland soils will be loamed and seeded and the Developed Upland Tidal Buffer Zone will be restored with native vegetation according to the Developed Upland Restoration Plan.
- 15.) Upon completing the causeway removal and tidal area regrading, and after 6-months of natural sediment migration and tidal exposure, if the natural tidal hydrodynamics have returned, the salt marsh restoration will commence as detailed within the Salt Marsh Restoration Work Sequence Narrative.



- 16.) Within 1-week of completing the salt marsh restoration, a report, with photographs, will be submitted to NHDES to document the salt marsh restoration was completed. Monitoring reports will be submitted to NHDES annually for 2-years to document the success of the salt marsh restoration.
- 17.) Upon completing the project, the property owner, or their agent, will notify NHDES via the *Completion of Construction Notice and Certificate of Compliance Form*.
- 18.) Once the site is stable, the erosion and siltation control devices will be removed.





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Traffic Engineers  
Land Surveyors  
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Scientists



## SALT MARSH RESTORATION WORK SEQUENCE NARRATIVE

1. Upon completing the causeway removal and intertidal area regrading, and after 6-months of natural sediment migration and tidal exposure, the salt marsh restoration will commence provided the natural tidal hydrodynamics have returned and the site is sufficiently stable. If more time is required to achieve hydrodynamic stability, the salt marsh restoration will commence at the beginning of the next growing season.
2. Each fringe salt marsh area to be restored includes *Low Marsh* and *High Marsh* areas. Low Marsh exists between Mean Low Water (MLW) and Mean High Water (MHW). High Marsh exists between Mean High Water (MHW) and the landward limit of extreme high tides. These areas will be planted according to inundation frequency and soil structure, saturation, and chemistry requirements.
3. To the greatest extent possible, the soil's organic content and grain size will match that of the neighboring fringe salt marsh areas. During the causeway removal process, materials and soil will be distributed to the restoration areas so this can be achieved. *Spartina spp.* will be used for restoration as these species are hardy and well adapted to sandy, low nutrient soils.
4. Restoration activities will commence at low tide. Low Marsh zones will be planted with vegetation mats. Mats of Smooth Cordgrass (*Spartina alterniflora*) will be planted in accordance with the restoration plans. Spacing and distribution of the vegetation mats are depicted on the Salt Marsh Restoration Plan.
5. High Marsh zones will be planted primarily with vegetation mats of Saltmeadow Cordgrass (*Spartina patens*). Vegetation mats of Saltgrass (*Distichlis spicata*) and Black Grass (*Juncus gerardii*) may be incorporated, to increase diversity. If they are incorporated, Saltgrass and Black Grass mats will be distributed in a random, mixed fashion to achieve a more natural condition.
6. Within 1-week of completing the salt marsh restoration, a monitoring report will be submitted to NHDES. Annually, for two years, subsequent monitoring reports will be submitted to NHDES to document the success of the restoration.
7. If, after 2-growing seasons, a planting success rate of at least 75% is not achieved, additional plantings will occur until this planting success rate is achieved.





## **SECTION 2**







**COASTAL RESOURCE WORKSHEET**  
 Water Division/Land Resources Management  
 Wetlands Bureau  
[Check the Status of your Application](#)



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

**APPLICANT LAST NAME, FIRST NAME, M.I.:** ADL 325 Little Harbor Road Trust

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

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

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

The following information is required for projects in coastal areas.

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

The purpose of this project is to replace an existing, outdated bridge that connects the subject property to the mainland with an updated, more structurally-sound bridge that spans the entire tidal resource on wooden piles. As this bridge is replaced, the property will be connected to municipal utilities as well. This project also proposes to remove two existing concrete and earthen causeways and doing so will result in opening an existing tidal restriction so that hydraulic capacity and aquatic organism passage can be improved.

This project proposes impacts to Tidal Waters, Mudflats and the Previously Developed Upland Tidal Buffer Zone. No impacts are proposed to sand dunes or eelgrass beds. While a fringe saltmarsh area will be impacted, this project also proposes to restore salt marsh within the areas that are currently occupied by the causeways. The existing bridge approaches and shoulders will be regraded to match the existing contours and restored with native vegetation.

The timing of the project and the particulars of the bridge construction and restoration activities are explained within the Work Sequence Narratives.

We have coordinated with the New Hampshire Natural Heritage Bureau (NHB), New Hampshire Fish and Game Department, the National Oceanic and Atmospheric Administration (NOAA), the Environmental Protection Agency (EPA), the U.S. Coast Guard, and the Pease Development Authority.

[irm@des.nh.gov](mailto:irm@des.nh.gov) or (603) 271-2147

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

[www.des.nh.gov](http://www.des.nh.gov)

For standard permit projects, provide:

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

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

**To best avoid impacts to sensitive resources and species, to the greatest extent practicable, the bridge construction and causeway removal will only occur at low tide. Erosion, sedimentation and turbidity controls will be installed prior to construction and monitored and adjusted as required throughout the duration of the project. These barriers will be monitored throughout construction and adjusted as needed, as well as removed once the site has been deemed stabilized. Any disturbed soils will be reseeded with native, salt-tolerant vegetation. The saltmarsh areas within the vicinity of the project site will not be impacted, but they will be restored after the bridge has been replaced. Topsoil will be added to areas with depleted topsoil, and native grasses, shrubs and trees will be planted.**

**Details relative to Avoidance and Minimization, as required by Env-Wt 311.07, are provided within the attached, "Avoidance and Minimization Narrative."**

**This project meets all criteria established within Env-Wt 313 relative to Approving Standard Applications and is demonstrated further below.**

**As required by Env-Wt 603.04, we have included a Wetlands Functional Assessment with this permit application to demonstrate the functions and values of the fringe salt marsh and intertidal zone.**

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

**Relevant Standard Conditions Narrative: This project proposal meets all relevant standards conditions of Env-Wt 307. To ensure water quality is protected, adequate levels of erosion and sediment controls will be installed, monitored, and adjusted as required throughout the duration of the project. Construction equipment will be inspected for leaks daily. If applicable, oil spill kits will be kept on site, and operators will be trained in using them. This project proposal meets all relevant minimum standards of RSA 483-B:9-V and this is demonstrated within the NHDES Shorland Permit Application submitted with this permit application.**

**Approval Criteria Narrative: This project proposal meets all relevant criteria for approving standard permit applications. This is demonstrated through following attached documents: Coastal Functional Assessment, Avoidance and Minimization Narrative, Coastal Resource Worksheet, and the supplemental document entitled, "Section 7- Resource Specific Criteria."**

Provide a project design narrative that includes the following:

A discussion of how the proposed project:

- Uses best management practices and standard conditions in Env-Wt 307;
- Meets all avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- Meets approval criteria in Env-Wt 313.01;
- Meets evaluation criteria in Env-Wt 313.01(c);
- Meets CFA requirements in Env-Wt 603.04; and
- Considers sea-level rise and potential flooding evaluated pursuant to Env-Wt 603.05;

A construction sequence, erosion/siltation control methods to be used, and a dewatering plan; and

A discussion of how the completed project will be maintained and managed.

**The erosion controls will be removed once the site has been deemed stabilized. The native plantings will be monitored for successful establishment and growth. Additional details relative to post-construction maintenance can be found in the attached Work Sequence Narratives.**

Provide design plans that meet the requirements of Env-Wt 603.07 (refer to Section 5);

Provide water depth supporting information required by Env-Wt 603.08 (refer to Section 6); and

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

**A statement from the Pease Development Authority Division of Ports and Harbors Chief Harbormaster is included with this permit application. No impacts are proposed that would threaten or impede upon public passage or navigation for commercial or recreational purposes.**

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

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

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

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

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

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

Projects in coastal areas shall:

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

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

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

For standard permit applications submitted for minor or major projects:

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

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

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

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

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

**SECTION 4 - VULNERABILITY ASSESSMENT (Env-Wt 603.05)**

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

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

Please see the attached Coastal Vulnerability Assessment.

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

Please see the attached Coastal Vulnerability Assessment.

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

Please see the attached Coastal Vulnerability Assessment.

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

Please see the attached Coastal Vulnerability Assessment.

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

Please see the attached Coastal Vulnerability Assessment.

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

Please see the attached Coastal Vulnerability Assessment.

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

Pre-application meeting date held: **No conflict exists.**

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

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

The plan view shall depict the following:

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

The elevation view shall depict the following:

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

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

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

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

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

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

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

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

For tidal stream crossing projects, provide:

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

Projects in tidal surface waters or tidal wetlands shall:

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

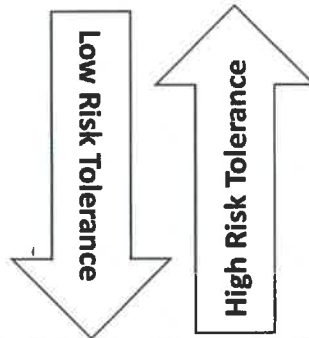
**SECTION 10 – GUIDANCE**

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

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

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

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



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

# Interpreting the Results of the U.S. Army Corps of Engineers Wetland Function- Value Evaluation Form



**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.

## 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.

**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.

4. Potential sources of excess nutrients are present in the watershed above the wetland.
5. Wetland saturated for most of the season. Pondered 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

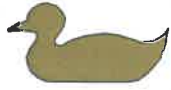
1. Wildlife food sources grow within this wetland.
2. Detritus development is present within this wetland.
3. Economically or commercially used products found in this wetland.
4. Evidence of wildlife use found within this wetland.
5. Higher trophic level consumers are utilizing this wetland.
6. Fish 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



**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.<sup>1</sup>

#### 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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<sup>1</sup>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.

**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





**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

**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.

# Wetland Function-Value Evaluation Form













Total area of wetland ~30 acres Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? No

Adjacent land use Residential, some undeveloped buffer Distance to nearest roadway or other development 0 feet, within ROW

Dominant wetland systems present E2US1/3, E2EM1 Contiguous undeveloped buffer zone present Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Lowest reach

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Function/Value	Suitability		Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
	Y / N	Y / N			
 Groundwater Recharge/Discharge	N		4,5,6,15	N	<b>No aquifer interface, tidal/ estuarine.</b>
 Floodflow Alteration	Y		1,3,4,5,6,7,8,9,10,18Y	Y	Wetlands capable of retaining flood waters from neighboring residential area.
 Fish and Shellfish Habitat	Y		1,3,4,5	Y	<b>Shellfish and recreational fish species present.</b>
 Sediment/Toxicant Retention	Y		1,2,3,4,6,7,10,13,15Y	Y	Marsh can trap sediment and compounds from adjacent impervious areas.
 Nutrient Removal	Y		3,6,8,9,10,11	Y	salt marsh species able to remove and transform compounds.
 Production Export	Y		1,2,3,4,5,6,8,9,10,13Y	Y	<b>Estuarine environment, highly productive.</b>
 Sediment/Shoreline Stabilization	Y		1,3,5,6,8,10,11,14Y	Y	<b>Shoreline is moderately stable.</b>
 Wildlife Habitat	Y		7,8,10,12,16,17,18,19,20,21Y	Y	Evidence of wildlife present. T & E species utilize this area.
 Recreation	Y		2,5,7,9	N	Private property, can access by boat/ kayak.
 Educational/Scientific Value	Y		1,5	N	Private property, no public access.
 Uniqueness/Heritage	Y		4,6,24	N	<b>Private property, no public access.</b>
 Visual Quality/Aesthetics	Y		1,2,3,8,12	N	Private property, visible from boat/ kayak and local school observation deck.
<b>ES</b> Endangered Species Habitat	Y		1,2	Y	Surgeon and Sea Turtles may utilize the area but it is not suitable for reproduction. Endangered Marsh elder on the shoreline.
<b>Other</b> Ecological Integrity	Y			Y	<b>Ecologically, an exceptional resource for all trophic levels.</b>

Wetland I.D. Belle-Isle Bridge

Latitude 43.064431 Longitude -70.746319

Prepared by: Jay Aube Date 5/5/2023

Wetland Impact:  
Type Deegee/ Fill Area SF

Evaluation based on:  
Office yes Field yes

Corps manual wetland delineation completed? Y N/A N

Notes: Ecological Integrity Score = .78 of possible 1.0

\* Refer to backup list of numbered considerations.





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Structural Engineers  
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Land Surveyors  
Landscape Architects  
Scientists



# Narrative on Coastal Functional Assessment

## Introduction

This *Coastal Functional Assessment* was conducted to support a NHDES Wetlands Permit Application to impact the Developed Upland Tidal Buffer Zone and the Intertidal Zone to replace an existing failing bridge with a new wooden bridge that spans the entire tidal resource on wooden piles. This project also proposes to remove the existing causeways from public waters and connect the residential island to municipal utilities. After the causeways are removed, the salt marsh area will be restored and the existing bridge approaches will be regraded and planted with native vegetation.

The jurisdictional areas adjacent to the project site are predominantly Estuarine, Intertidal, Unconsolidated Shore, Cobble-Gravel (E2US1) and Estuarine, Intertidal, Unconsolidated Shore, Mud (E2US3). Isolated narrow bands of fringe salt marsh exist along the neighboring shorelines (E2EM1).

The upland area adjacent to the wetland is an approximately 12-acre island. The island consists of a single residential property that previously utilized some areas for equestrian purposes. The mainland consists of wooded area with intermittent forested freshwater wetlands. No impacts are proposed to the freshwater wetlands. While the bulk of areas to be impacted are previously developed, open areas, the NH Fish and Game Wildlife Action Plan (WAP) identifies the habitat adjacent to the area to be impacted as salt marsh and hemlock hardwood pine. The WAP indicates the Tidal Wetland resources are of the *Highest Ranked Habitat in NH*.

## Methods

The wetland boundaries, more particularly, the *Highest Observable Tide Line* (HOTL), was delineated using the methods prescribed by NHDES Administrative Rule Env-Wt 602.23. The wetlands boundaries, including the limits of the 100-foot tidal buffer zone, are depicted on the attached site plans. The wetlands were classified based on the Classification of Wetlands and Deepwater Habitats of the United States, adapted from Cowardin, Carter, Golet and LaRoe (1979), August 2013, FGDC-STD-004-2013.)

The Coastal Functional Assessment (CFA) was conducted by performing field visits on May 1, 2023 and May 15, 2023. The wetlands were assessed using the *Army Corps of Engineers Highway Methodology* (September 1999, NAEPP-360-1-30a).

The *Ecological integrity* of the wetlands was assessed using the *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire* (June 1993) and data from the NH Fish and Game Wildlife Action Plan (WAP).



## Results:

### Groundwater Recharge/ Discharge

This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge site. More particularly, this function refers to the interaction between wetlands and aquifers. Given there are no aquifers in the area and the wetland is estuarine, this wetland *does not* provide this function.

### Floodflow Alteration

This function analyzes the effectiveness of the wetland in reducing flood damage by retaining flood waters for prolonged periods of time. During storm events and tidal surges, this wetland serves this function by providing floodwater storage capacity and this aides in protecting the neighboring community.

### Fish and Shellfish Habitat

This function considers a wetland's ability to provide embayments, tidal flats, vegetated shallows, and other environments in support of fish, shellfish, marine mammals. Consultation with the National Oceanic and Atmospheric Association (NOAA) Marine Fisheries section indicates the area is considered *Essential Fish Habitat* (EFH) for the Atlantic Sturgeon (*Acipenser oxyrinchus*), Shortnose Sturgeon (*Acipenser brevirostrum*) and four (4) species of sea turtles. Anadromous fish, including the striped bass (*Morone saxatilis*), are known to seasonally utilize the area to forage on sea worms/ nereids (*Echiurus echiurus*), sand eels (*Ammodytes marinus*), Silversides (*Menidia menidia*) and Green Crabs (*Carcinus maenas*) during high tide.

The existing tidal restriction created by the causeway increases tidal velocities and has artificially created a micro-niche habitat with a rock and rubble substrate. Species identified in this area include Common Periwinkle (*Littorina littorea*), Smooth Periwinkle, (*Littorina obtusata*), Rough Periwinkle (*Littorina saxatilis*), Acorn Barnacles (*Semi balanua balanoides*), Blue Mussel (*Mytilus edulis*), Eastern Oyster (*Crassostrea virginica*), Softshell Clam (*Mya arenaria*), Atlantic Surf Clam (*Spisula solidissima*), Iris Moss (*Chondurus crispus*), Red Algae species, (Rhodophyta), Rockweed (*Ascophyllum nodosum*), Bladder Wrack (*Fucus vesiculosus*), Sugar Kelp (*Saccharina latissimi*), Sea felt (*Pylaiella littoralis*), Doubled Ribbon Weed (*Ulva linza*) and other green algae Chlorophyta species.

There is no eel grass within the area. The NH Wildlife Action Plan (WAP) identifies the wetland as Highest Ranked Wildlife Habitat in NH. Fish and Shellfish Habitat is considered a principal function of this wetland.

### Sediment/ Toxicant Retention

This function considers the effectiveness of a wetland to act as a trap for sediments, toxicants, and pathogens within runoff. This wetland function had a significant level of qualifiers based on the periodic, tidally influenced, slow moving waters. Additionally, the immediate uplands that surround the wetland are well vegetated. The neighboring residential community and island property areas are contributors of



sediments and toxicants. This wetland acts to filter and trap these sediments and toxicants, and therefore, it is a principal function of this wetland.

### Nutrient Removal/ Retention/ Transformation

This function recognizes a wetland's ability to serve as a trap for nutrients in runoff from surrounding uplands or contiguous wetlands. The adjacent residential neighborhood is likely a contributor of phosphorous and nitrogen. Due to the high level of saturation and presence of deep organic/ sediment deposits, this wetland acts to absorb nutrients and it transfers them to other trophic levels, and therefore, nutrient removal/ retention/ transformation is a principal function of this wetland

### Production Export

This function considers the wetland's ability to export resources to other areas. For example, rosette terns utilize the area to forage for silversides and transport the nutrients off-site. As evidenced by the *Fish and Shellfish Habitat* function above, this tidal marsh area is highly productive. Evidence of multiple trophic levels utilizing this area was observed, and therefore, production export is a principal function of this wetland.

### Sediment/ Shoreline Stabilization

This function relates to a wetland's effectiveness to stabilize shorelines and prevent erosion. The shoreline is well anchored by mature trees and saplings. Some vegetation along the shoreline and their root systems anchor the shoreline, and therefore, sediment/ shoreline stabilization is a principal function of this wetland.

### Wildlife Habitat

This function considers a wetland's ability to provide wildlife habitat. According to the NH Wildlife Action Plan (WAP), this wetland is considered Highest Ranked Habitat in NH. Consultation with National Oceanic and Atmospheric Association (NOAA) Marine Fisheries indicates the area may be used by Atlantic and Shortnose Sturgeon. Wildlife Habitat is a principal function of this wetland.

### Recreation

This function considers the effectiveness of the wetland to provide recreational opportunities such as canoeing, boating, fishing, and other passive recreational activities. Although the area cannot be directly accessed by the abutting private properties, the area is accessible from other public boat launches. The area is frequented by kayakers and recreational anglers. Due to the lack of direct access, recreation is not considered a primary principal function of this wetland.

### Education/ Scientific Value

This value considers the effectiveness of the wetland to serve as an "outdoor classroom." The area does not offer direct public access, and therefore, education/ scientific value is not a key function of this wetland.



## Uniqueness/ Heritage

This value relates to the effectiveness of a wetland to produce certain *special values* such as archeological sites, unusual aesthetic quality, historical events, and unique plants. Given NH has a relatively small coastal shoreline, this area is certainly unique to NH. Although the proposed impact area is not within any known archaeological sites, the surrounding area was once inhabited by Native Americans. Additionally, the threatened plant species, Marsh Elder (*Iva Frutescens*), is near the impacts area. Unfortunately, the site cannot be accessed by the public, and therefore, Uniqueness/ Heritage is not a principal function of this wetland.

## Visual Quality/ Aesthetics

This value considers the wetland's overall visual quality and aesthetics. The area surrounding the wetland is private property. While the area can be accessed by boat and kayak, due to the lack of access, visual quality/ aesthetics is not considered a key function of this wetland.

## Endangered Species Habitat

Endangered species habitat relates to the effectiveness of the wetland to support endangered species habitat. Consultation with the National Oceanic and Atmospheric Association (NOAA) Marine Fisheries indicates the area is considered *Essential Fish Habitat* (EFH) for the Atlantic Sturgeon (*Acipenser oxyrinchus*), Shortnose Sturgeon (*Acipenser brevirostrum*). This wetland *does not* provide the key features necessary for spawning (salinity level, substrate, and cover) and therefore, is not considered critical habitat (CH). The Roseate Tern (*Sterna dougallit*) forages on small fish within this wetland during high tide. The threatened species, Marsh Elder (*Iva Frutescens*), is present on the bank of the salt marsh but, they (8-plants) will be transplanted during the growing season before this project begins. Endangered Species Habitat is considered a key function of this wetland.

## Ecological Integrity

*Ecological Integrity* is a measure of the extent to which natural ecosystems and their buffers have been altered. For the most part, aside from residential docking structures, the tidal resource has not undergone a tremendous amount of alteration. A large portion of the Zone of Influence is a residential neighborhood which likely contributes to untreated stormwater runoff to the resource. The Ecological Integrity Score of Resource is .78 out of a possible 1.0. Ecological Integrity is a principal function of this resource.

## Summary

This wetland serves many functions including floodflow storage capacity, fish and shellfish habitat, sediment and toxicant retention, nutrient removal, resource export, sediment and shoreline stabilization, wildlife habitat, endangered species habitat and ecological integrity and therefore, it is considered a high value, high functioning resource of the State of New Hampshire.

A low impact vibratory system will be used to install the new piles and, to the greatest extent practicable, this work will occur during low tide.





To minimize impacts to wildlife species that utilize this resource, the project will adhere to the time of year restrictions and will remove causeways from public waters between December 15<sup>th</sup> and March 15<sup>th</sup>.

In summary, as result of incorporating the aforementioned conservation measures and as a result of removing the existing tidal restriction, the natural hydraulic capacity and aquatic organism pathways will be restored and this significantly enhances the functions and values of this resource. The proposed salt marsh and upland tidal buffer zone restoration will significantly enhance the neighboring resources as well. While this project proposes to remove an unnaturally occurring micro-niche habitat, doing so poses no threat or harm to threatened or endangered species. This project may temporarily affect, but is unlikely to adversely affect the principal functions and values of this resource and will result in significant increases in the functions and values of this resource.

## References

ACOE *Army Corps of Engineers Highway Methodology* (September 1999, NAEEP-360-1-30a).

Cowardin, L.M., V. carter, F.C Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deep-Water Habitats of the United States*. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Ammann, A.P. and A.L. Stone. 1993. *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire*.







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## Ecological Integrity of the Tidal Wetland

### Methods

Tidal marshes are among the most productive and most disturbed ecosystems. Undeveloped, undisturbed natural buffers are critical to supporting the health of aquatic ecosystems. Natural buffers protect tidal resources by anchoring and stabilizing the shoreline, reducing erosion, and absorbing nutrients and contaminants found in stormwater. *Ecological Integrity* is a measure of the extent to which natural ecosystems and their buffers have been altered.

The ecological integrity of the tidal wetland was assessed using the *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire (June 1993)* and data from the NH Fish and Game Wildlife Action Plan (WAP).



**Figure 1.** Overview of the tidal resource area, depicting the existing causeways that act as a tidal restriction. It is worth noting, however, that these causeways will be removed as part of the proposed project.



# Ecological Integrity of the Tidal Wetland

EU= Evaluation Unit (the Tidal Wetland)

Percent of wetland plant community dominated by invasive plant species	Score
Less than 5% of EU dominated by invasive species	1.0
5% to 20% of EU dominated by invasive species	.5
More than 20% of the EU dominated by invasive species	.1
Number of Tidal Restrictions	
No Tidal Restrictions	1.0
One Tidal Restriction between the EU and free tidal flow	.5
More than one Tidal Restriction between the EU and free tidal flow	.1
Type of Tidal Restriction	
No restriction affecting tidal flow	1.0
Flow through bridge appears adequate	.5
Flow through bridge appears inadequate and/ or flow restricted by culvert(s)	.1
Ditching on the Surface of the EU	
No ditching within the EU	1.0
Ditches present in linear pattern	.5
Ditches present in grid pattern	.1
Dominant Land Use in the 500-Foot Zone of Influence Surrounding the EU	
Forested, Fields, Open Water or Open Space	1.0
Agriculture or Rural Residential	.5
Commercial, Industrial, High Density Residential or Heavily used Highways	.1



<b>Ratio of the Number of Occupied Buildings within the EU or within the Zone of Influence Surrounding the EU</b>	
Less than 0.1 Buildings/ acre.	1.0
From 0.1 to 0.5 Buildings/ acre.	.5
More than 0.5 Buildings/ acre.	.1
<b>Percent of the EU/ Upland Border which has a buffer of woodland or idle land at least 500-feet in width.</b>	
More than 70%	1.0
From 30% to 70%	.5
Less than 30%	.1
<b>Square footage of roads, driveways, and parking lots within 150-feet of the EU.</b>	
Ratio less than 1,500 square feet/ acre	1.0
Ration between 1,500 square feet to 6,000 square feet/ acre	.5
Ratio greater than 6,000 square feet/ acre	.1
SCORE = 1.0+.1+.1+1.0+1.0+1.0+.5+.5 = 6.2                      6.2/8 = 0.775	<b>.78</b>

**Summary:**

The tidal wetland adjacent to the project area is composed largely of mudflats and contains a few small areas of saltmarsh. Less than 5% of the tidal wetland is dominated with invasive species, namely with Glossy Buckthorn (*Frangula alnus*). A tidal restriction is present in the form of two causeways (see Figure 1). There are no ditches within the area that alter how the resource drains. The dominant land use within the 500-foot zone of influence surrounding the EU is open water with forested buffer zones. The ratio of the occupied buildings within the zone of influence is less than 0.1 buildings per acre. The previous development of the existing bridge (to be replaced) removed some of the woodland buffer, but a decent portion of the woodland buffer remains. The impervious area within 150-feet of the tidal wetland is around 5,000-6,000 square feet per acre. The existing bridge and causeways contribute most of this impervious area.

In summary, the tidal wetland has undergone some degradation by anthropogenic sources. Tidal flows have been restricted, and portions of the woodland buffer have been previously cleared for bridge development. The bridge itself adds significant impervious area within the vicinity of the EU. It certainly contributes stormwater runoff and associated pollutants to the resource.



## References

Ammann, A.P. and A.L. Stone. 1993. *Method for Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire*.

NH Fish and Game Department Wildlife Action Plan (WAP).

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# Coastal Vulnerability Assessment

Env-Wt 603.05

## Introduction

TFMoran recognizes rising seas pose a significant threat to New Hampshire's coastal communities, ecosystems, and cultural resources (STAP, 2014). This *Coastal Vulnerability Assessment (CVA)* was prepared to accompany the associated NHDES Wetlands Permit Application seeking approval to impact Tidal Waters, Mud Flats, and the Upland Tidal Buffer Zone for the purpose of removing two existing causeways from public waters and constructing a new timber bridge and bridge approaches. This project will result in significantly increasing the hydraulic capacity and aquatic organism passage within a Tier-4 Tidal Crossing. This project also proposes to connect the property to municipal utilities thereby eliminating the need to install an on-site septic system.

## Methodology

This Coastal Vulnerability Assessment (CVA) was conducted using the *NH Coastal Flood Risk Science and Technical Advisory Panel (STAP) Report, Sea-Level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends* as prescribed by NHDES Wetlands Administrative Rule Env-Wt 603.05. Additionally, the New Hampshire Coastal Flood Risk Summary, Part II: Guidance for Using Scientific Projections (NHCFRSTAP, 2020) prepared by the New Hampshire Coastal Flood Risk Science and Technical Advisory Panel was referenced to demonstrate this site's vulnerability to sea level rise. Moreover, the Rockingham Planning Commission (RPC) Tides to Storms - Preparing for New Hampshire's Future Coast, City of Portsmouth Vulnerability Assessment (RPC, 2015) was consulted. Site visits and field observations were performed by Coastal Professional and Certified Wetlands Scientist (CWS) Jason Aube, on March 1, 2023, and March 17, 2023.

## Step 1.1 – Project Goal and Project Type

The goal of this project is to replace an outdated existing bridge with a new, more structurally sound, bridge to access a residential island and connect the island to municipal utilities. The beneficiary is the private property owner and the State of NH. The State of NH is also a beneficiary as this project proposes to remove fill from the public waters that will result in significantly increasing the hydraulic capacity and aquatic organism passage within a *Tier-4* Tidal Crossing. The State of NH also benefits by having the residential island connected to municipal sewer rather than using an on-site, in ground, septic system.

## Step 1.2 – Project Area

The project area is located on 325 Little Harbor Road, Portsmouth, NH, Tax Map: 205, Lot: 2, also known as Belle Isle or Lady Isle.



**Step 1.3 – Time Period Over Which the Project is Designed to Serve**

This project will be designed to serve to at least the year 2100.

**Step 2.1 – Risk Tolerance to Flooding and Potential Damage or Loss**

This project proposes to construct a new bridge that will have infrastructure designed to withstand the daily ebb and flow of tidal waters, and therefore, it has a relatively low sensitivity to inundation. Additionally, this area of the coast is not exposed to highly erosive tidal energy forces. However, the proposed bridge is relatively high cost and moderately modifiable and, if damaged, has some implications in terms of public safety, and therefore, this project is classified as having a **medium to low tolerance for flood risk**.

<b>Risk Tolerance</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Very Low</b>
<b>Description</b>	A project that is able to tolerate a high level of flood risk	A project that is able to tolerate a medium level of flood risk	A project that is only able to tolerate a low level of flood risk	A project that is only able to tolerate a very low level of flood risk
<b>Possible Project Characteristics</b>	Low value or cost	Medium value or cost	High value or cost	Extremely high value or cost
<b>Risk tolerance depends on the combination and importance of the project characteristics</b>	Easy to modify	Moderately modifiable	Difficult to Modify	Extremely difficult to modify
	Little to no implications on public function and/ or safety	Moderate implications for public function and/ or safety	Critical to public function and/ or safety	High risk of public harm if project fails
	Low sensitivity to inundation	Moderate sensitivity to inundation	High Sensitivity to inundation	Extremely high sensitivity to inundation

Table 1: Framework for determining projected tolerance for flood risk.

**Step 2.2 – Project Specific Considerations**

This project poses no threat to public access to important services. The project area is on an island of private property and, if damaged, poses no threat to the access of public services. Only those on the island may be limited to important public services.

**Step 3.1 Relative Sea Level Rise (RSLR) Estimates For the Project**

When considering projected relative sea level rise (RSLR) for this project, four different global greenhouse gas scenarios (Representative Concentration Pathways (RCPs)) were considered. We elected to use the recommended intermediate RCP 4.5 scenario because, according to the data, this is the more likely scenario whereby greenhouse emissions peak in 2040 and decline until 2080. Using this RCP also allows us to project sea level rise beyond the year 2100.





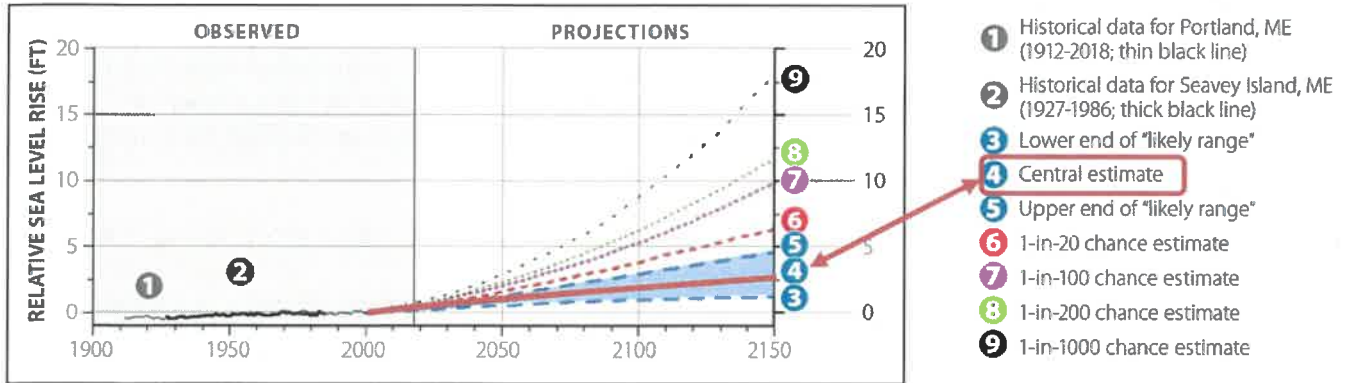


Figure 1: Greenhouse gas concentration scenario Representative Concentration Pathway RCP 4.5 used for RSLR estimates.

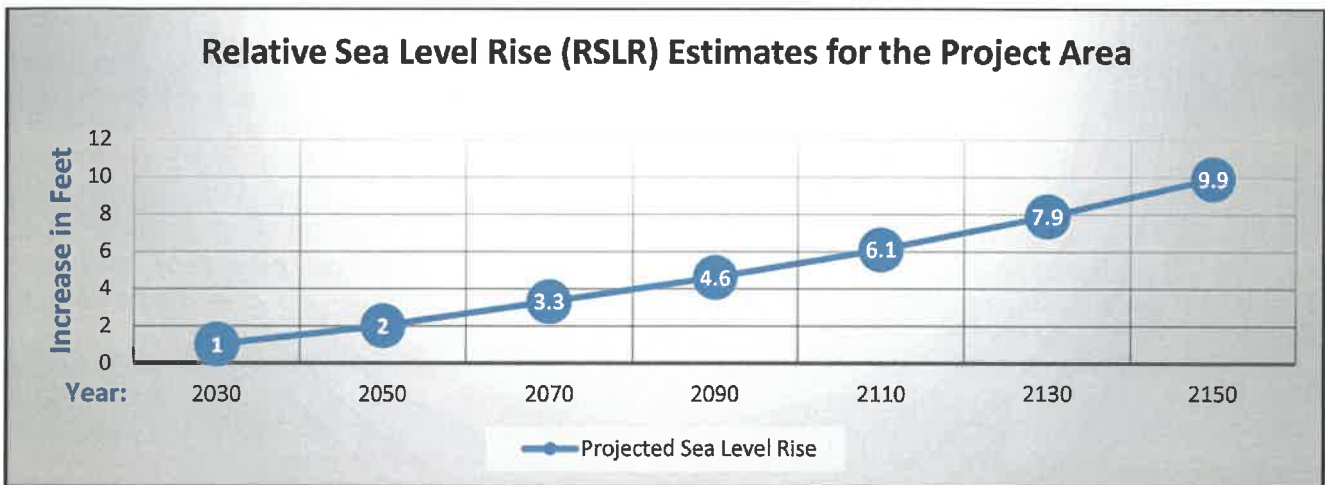


Figure 2: Incremental Relative Sea Level Rise for the project area based on Representative Concentration Pathway (RCP) 4.5 and a LOW tolerance for flood risk.

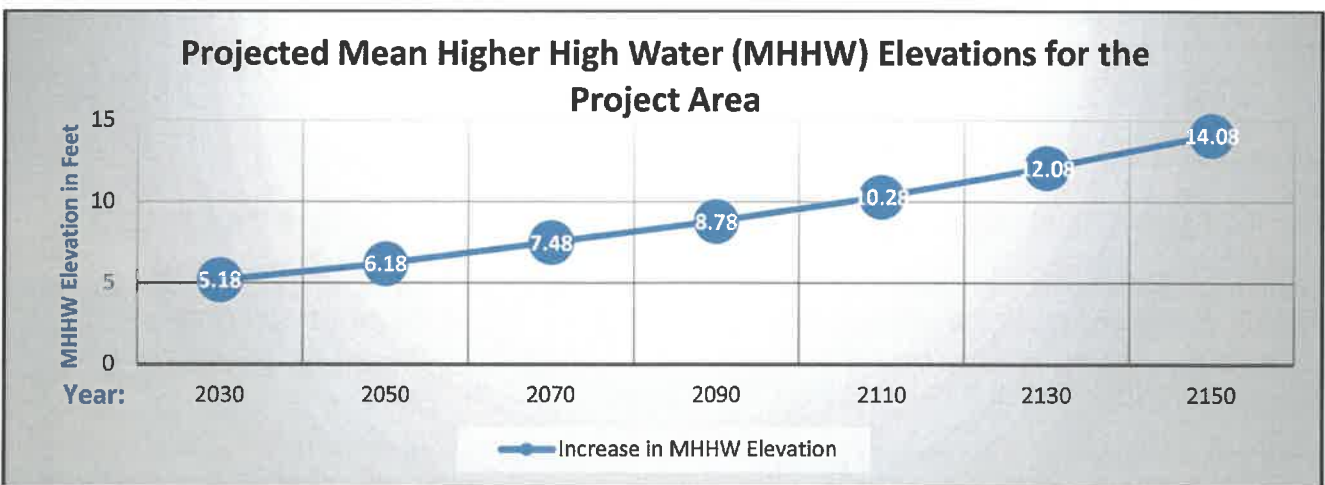


Figure 3: Incremental Relative Sea Level Rise for the project area based on Representative Concentration Pathway (RCP) 4.5, a LOW Tolerance for flood risk, and the current Mean Higher High Water (MHHW) elevation of 4.18 feet determined by the National Oceanic and Atmospheric Association (NOAA) Seavey Island, Maine Station 8419870 using NAVD 88 datum.



### Step 3.2 Assess Relative Sea Level Rise (RSLR) Impacts to the Project

The projected depth and extent of waterflow will have very little impact on the proposed bridge. The bridge's piles are designed to withstand constant exposure to tidal waters. We have, however, increased the height of the bridge deck from approximately 9.9-feet to 13.3-feet so that it will be less vulnerable to anticipated sea level rise and water inundation.

The surrounding infrastructure will not affect the project area. As a result of removing the existing causeways, the hydraulic capacity will be increased and this, in turn, will aid in decreasing erosive tidal forces. Increases in sediment deposition will have no bearing on this project. Erosive forces associated with sea level rise will not adversely impact the proposed bridge.

### Step 4.1 Identify and Assess Relative Sea Level Rise (RSLR) Adjusted for Coastal Storms/ Design Flood Elevation (DFE)

Naturally, bridge infrastructure is designed to be exposed to marine waters and sediments. This section of the Vulnerability Assessment is not applicable to marine structures. We have, however, increased the deck of the proposed bridge by approximately 3.4-feet so that the bridge is less susceptible to anticipated sea level rise.

The projected *Highest Astronomical Tide* (HAT) in the year 2100 is estimated to be at elevation 11.22-feet. When considering an additional 2-feet of storm surge, the height of the proposed deck at elevation 13.3-feet will remain above water during the *Highest Astronomical Tide* in the year 2100. Please see the Vulnerability Assessment Plan.

	HIGH TOLERANCE FOR FLOOD RISK	MEDIUM TOLERANCE FOR FLOOD RISK	LOW TOLERANCE FOR FLOOD RISK	VERY LOW TOLERANCE FOR FLOOD RISK
IF PROJECT AREA IS LOCATED IN:	<b>RSLR-ADJUSTED DESIGN FLOOD ELEVATION (DFE) =</b>			
A, AO, OR AE ZONE* NOT IDENTIFIED AS COASTAL A ZONE**	[BFE] + RSLR	[BFE + (required freeboard ≥ 1 ft)] + RSLR	[BFE + (required freeboard ≥ 1 ft)] + RSLR	Whichever is greater: [BFE + (required freeboard ≥ 2ft)] + RSLR OR 0.2% annual chance flood elevation + RSLR
VE ZONE*** AND COASTAL A ZONE			[BFE + (required freeboard ≥ 2 ft)] + RSLR	

Figure 4: Recommended approach to determining *Design Flood Elevation* (DFE) based on flood risk tolerance.

### Step 4.2 Assess Relative Sea Level Rise-Adjusted Coastal Storm Impacts to the Project

The base of the proposed bridge will be constructed at elevation 13.3-feet so that the cumulative impacts of storm events and projected sea level rise will not adversely impact the proposed bridge.

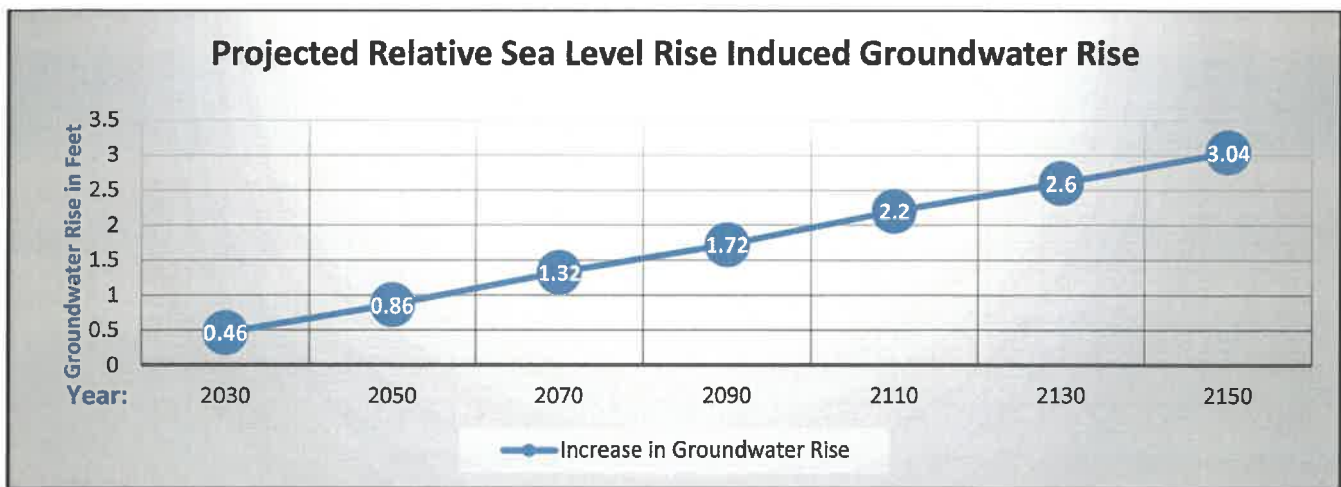
### Step 5.1 Identify Relative Sea Level Rise Induced Groundwater Rise

Mean groundwater rise is projected to be 66% of relative sea level rise (RSLR) between 0 to 0.6 miles from coastal areas (Knot, Jacobs, et al.) Relative Sea Level Rise Induced Groundwater Rise will not adversely impact the proposed bridge and the associated infrastructure. The pilings are designed to be submerged within water and saturated marine soils until at least the year 2100.



	<b>PREFERRED APPROACH</b> (MAPPED COASTAL COMMUNITY)	<b>ALTERNATE APPROACH</b> (UNMAPPED COASTAL COMMUNITY)
	<b>IF PROJECT AREA IS LOCATED IN A MAPPED COASTAL COMMUNITY:</b>	<b>IF PROJECT AREA IS LOCATED WITHIN 3 MILES OF TIDAL SHORELINE IN AN UNMAPPED COASTAL COMMUNITY:</b>
<b>RSLR-INDUCED GROUNDWATER RISE =</b>	Refer to Sea-Level Rise Mapper <sup>38</sup> to estimate RSLR-induced groundwater rise	Commit to manage = (RSLR) x (0.33) Be prepared to manage = (RSLR) x (0.66)
<b>DEPTH TO RSLR-ADJUSTED GROUNDWATER =</b>	(Present-day depth to groundwater) - (RSLR-induced groundwater rise)	

**Figure 5:** The approach selected for determining sea level rise induced groundwater rise at the project site.



**Figure 6:** Incremental groundwater rise for the project area based on representative concentration pathway (RCP) 4.5.

**Step 5.2 Estimate Depth to Present-Day and Future Groundwater for the Project Area**

This section of the Vulnerability Assessment is not applicable to this project as the proposed bridge pilings will be continually submerged and exposed to water and marine sediments.

**Step 5.3 Assess Relative Sea Level Rise-Induced Groundwater Rise Impacts**

This section of the Vulnerability Assessment is not applicable to this project as the proposed bridge pilings will be continually submerged and exposed to water and marine sediments.

**Step 6.1 Account for Projected Increases in Extreme Precipitation**

Under representative concentration pathway (RCP) 4.5, by the end of the century, the amount of precipitation falling on the wettest day of the year is projected to increase by 8-15% (NHCFRSTAP, 2020). This project has a medium to low tolerance for flood risk, and therefore, we have elected to account for a 20% increase in extreme precipitation estimates.



	HIGH TOLERANCE FOR FLOOD RISK	MEDIUM TOLERANCE FOR FLOOD RISK	LOW TOLERANCE FOR FLOOD RISK	VERY LOW TOLERANCE FOR FLOOD RISK
<b>PROJECTED EXTREME PRECIPITATION ESTIMATE =</b>	<b>(Best available precipitation data) x (1.15)</b>		<b>(Best available precipitation data) x (&gt;1.15)</b>	

Figure 8: The approach for calculating projected extreme precipitation estimates based on the project’s tolerance for flood risk.

## Extreme Precipitation Tables

### Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point	
Smoothing	Yes
State	New Hampshire
Location	New Hampshire, United States
Latitude	43.065 degrees North
Longitude	70.746 degrees West
Elevation	0 feet
Date/Time	Thu Mar 16 2023 16:29:22 GMT-0400 (Eastern Daylight Time)

### Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.82	1.04	1yr	0.70	0.98	1.21	1.56	2.05	2.66	2.93	1yr	2.36	2.82	3.23	3.95	4.56	1yr
2yr	0.32	0.50	0.62	0.82	1.02	1.30	2yr	0.88	1.18	1.52	1.94	2.49	3.21	3.58	2yr	2.85	3.44	3.95	4.69	5.34	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.44	3.15	4.07	4.59	5yr	3.61	4.41	5.05	5.95	6.71	5yr
10yr	0.41	0.65	0.82	1.12	1.46	1.90	10yr	1.26	1.73	2.24	2.90	3.76	4.87	5.54	10yr	4.31	5.33	6.10	7.12	7.99	10yr
25yr	0.48	0.76	0.97	1.34	1.78	2.35	25yr	1.54	2.15	2.79	3.64	4.75	6.18	7.11	25yr	5.47	6.84	7.83	9.05	10.07	25yr
50yr	0.54	0.86	1.11	1.55	2.08	2.77	50yr	1.80	2.54	3.30	4.34	5.68	7.40	8.60	50yr	6.55	8.27	9.45	10.84	11.99	50yr
100yr	0.60	0.97	1.25	1.78	2.43	3.27	100yr	2.10	2.99	3.92	5.18	6.79	8.86	10.39	100yr	7.85	10.00	11.42	13.00	14.29	100yr
200yr	0.68	1.11	1.44	2.06	2.85	3.86	200yr	2.46	3.53	4.64	6.16	8.11	10.62	12.57	200yr	9.40	12.09	13.81	15.59	17.04	200yr
500yr	0.81	1.33	1.73	2.51	3.50	4.80	500yr	3.02	4.41	5.80	7.74	10.25	13.50	16.17	500yr	11.95	15.54	17.75	19.83	21.52	500yr

Figure 9: Extreme precipitation data from the Northeast Regional Climate Center for the project area.

Increase in extreme precipitation estimates by 20%			
Storm Event	24-hour precipitation total	Increase x 20%	Projected 24-hour precipitation
1 Year	2.66 inches	x 1.20	3.19 inches
2 Year	3.21 inches	x 1.20	3.85 inches
10 Year	4.87 inches	x 1.20	5.84 inches
50 Year	7.40 inches	x 1.20	8.88 inches

Table 2: Increase in precipitation during predicted 24-hours storm events.

## Step 6.2 Assess Projected Extreme Precipitation Impacts to the Project

Extreme precipitation events will not have an impact on this project.



### Step 7.1 Assess Cumulative Risk and Evaluate Adaption Options

Collectively, the compounded impacts of relative sea level rise, coastal storms, relative sea level rise induced groundwater rise and extreme precipitation will not adversely impact the proposed underground infrastructure.

### Step 7.2 Identify and Evaluate Adaptation Options to Mitigate Coastal Flood Risk

The proposed bridge and associated approaches have a relatively medium to low tolerance for flood risk, and therefore, to the greatest extent practicable, this project proposes to raise the elevation of the bridge so that flood waters can be avoided.

	NO ACTION	AVOID	ACCOMMODATE	RESIST	RELOCATE
<i>IN OTHER WORDS, RECOGNIZE RISK AND...</i>	<i>Don't change anything*</i>	<i>Prioritize investment out of the water's way</i>	<i>Live with the water</i>	<i>Keep the water out</i>	<i>Move assets or facilitate migration</i>
<b>COASTAL FLOOD RISK IS:</b>	Very Low to Low	Very Low	Moderate	High	High
<b>TOLERANCE FOR FLOOD RISK IS:</b>	High	Medium to Very Low	Medium	Low to Very Low	Low to Very Low

Figure 10: Adaption adoptions available to manage coastal flood risk.

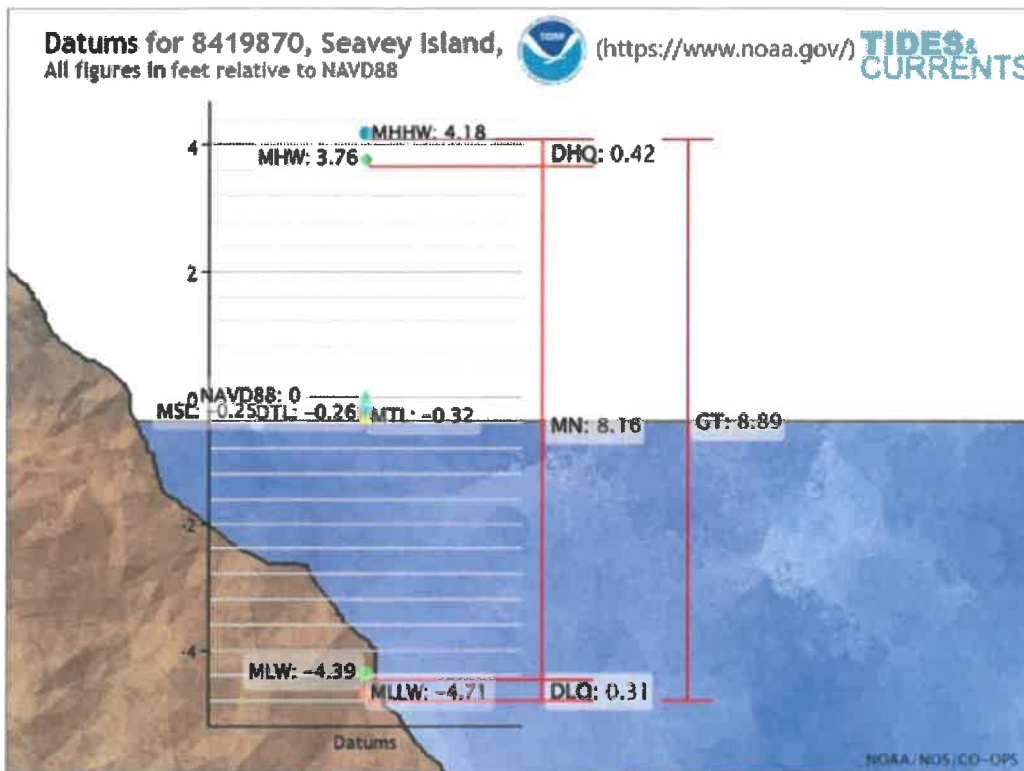


Figure 11: National Oceanic and Atmospheric Association (NOAA) Seavey Island, Maine Station 8419870 tidal datum.



## References

Extreme Precipitation in New York & New England, Version 1.12. Managed by the Northeast Regional Climate Center. <http://precip.eas.cornell.edu/>

Knott, J.F., Jacobs, J., Daniel, J.S., & Kirshen, P. Journal of Coastal Research. Modeling Groundwater Rise Caused by Sea-Level Rise in Coastal New Hampshire. 2018.

NHCFRSTAP (NH Coastal Flood Risk Science and Technical Advisory Panel). New Hampshire Coastal Flood Risk Summary, Part II: Guidance four Using Scientific Projections. Report Published by the University of New Hampshire, Durham. March, 2020.

NOAA (National Oceanic Atmospheric Association). NOAA Tides and Currents – Datums for Seavey Island, Maine – Site# 8419870. Site viewed on February 10, 2020. <https://tidesandcurrents.noaa.gov/datums.html?datum=NAVD88&units=0&epoch=0&id=8419870&name=Seavey+Island&state=ME>

RPC (Rockingham Planning Commission). Tides to Storms, Preparing for New Hampshire's Future Coast, City of Portsmouth Vulnerability Assessment. September, 2015.

SLRM (Sea Level Rise Mapping New Hampshire Open Coast, Piscataqua River, and Great Bay for the University of New Hampshire – Submitted by AECOM). December, 2013.

STAP (Science and Technical Advisory Panel, NH Coastal Risks and Hazards Commission). Sea-level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Project Future Trends). August, 2014.





Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



# GIS Data Screening

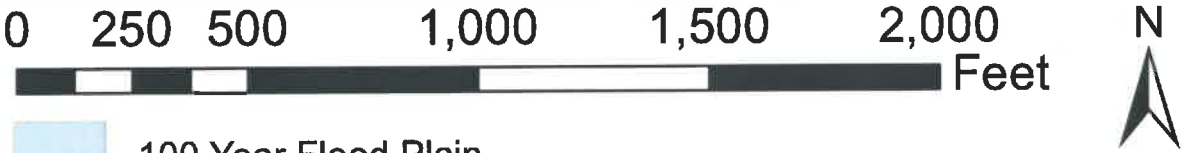
Env-Wt 603.03

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      [www.tfmoran.com](http://www.tfmoran.com)



TFMoran, Inc. Seacoast Division  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222

# 100 - Year Flood Plain



 100 Year Flood Plain

























Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists





## 2020-WAP-Habitats

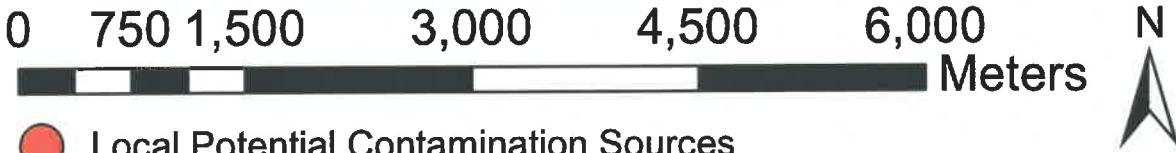
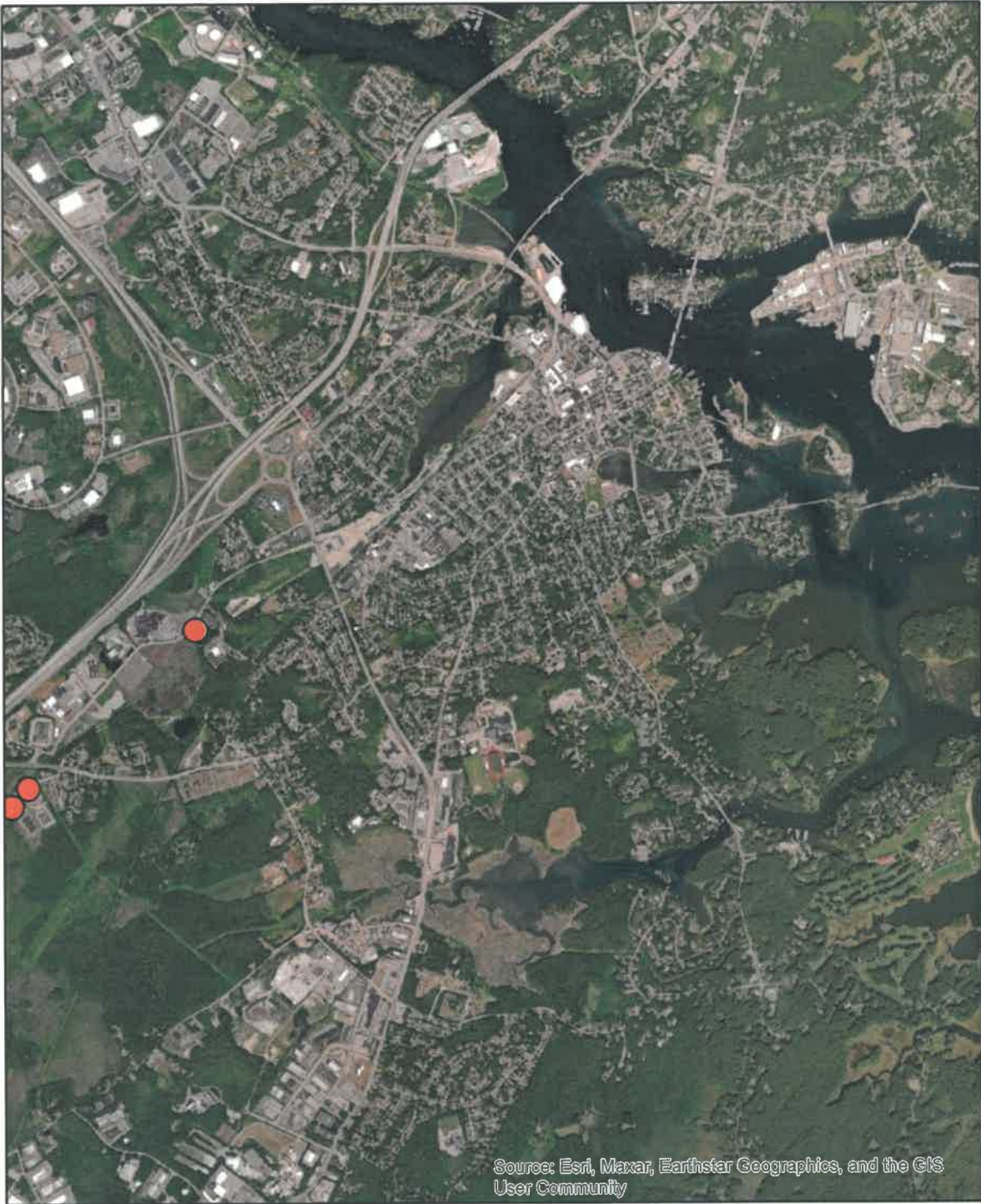
### WAP\_HAB

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

## 2020 Wildlife Action Plan (WAP) Habitat Types



# Local Potential Contamination Sources



Local Potential Contamination Sources

**TFM**  
Since 1968

- Civil Engineers
- Structural Engineers
- Traffic Engineers
- Land Surveyors
- Landscape Architects
- Scientists

The logo for TFM (The Firm) is a blue square with the letters "TFM" in white, bold, sans-serif font. Below the logo, the text "Since 1968" is written in a smaller, italicized font. To the right of the logo is a list of services provided by the firm, including Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, and Scientists.

# Known Eel Grass Beds



 eelgrass2021



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

# Impaired Waterbodies



0 250 500 1,000 1,500 2,000 Feet

 Impaired Waterbodies



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

# Prime Wetlands



0 500 1,000 2,000 3,000 4,000 Feet

 Prime Wetlands



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

# Saltmarsh Area



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

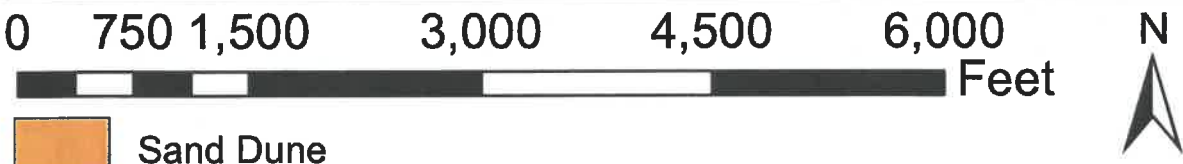


 Saltmarsh



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Structural Engineers  
Traffic Engineers  
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Landscape Architects  
Scientists

# Sand Dunes






 Sand Dune

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- Scientists

# NH Fish and Game Wildlife Action Plan (WAP) Habitat Tiers



-  1 Highest Ranked Habitat in New Hampshire
-  2 Highest Ranked Habitat in Biological Region
-  3 Supporting Landscapes



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



## **SECTION 3**



**From:** [Croot, Gary T CIV \(USA\)](#)  
**To:** [Jason Aube](#)  
**Subject:** RE: 325 Little Harbor Road, Portsmouth, NH - bridge replacement/ tidal area restoration [Filed 31 Mar 2023 14:43]  
**Date:** Friday, March 31, 2023 10:44:28 AM  
**Attachments:** [AA Ltr Belle Isle Bridge 1996 Jan 06.pdf](#)

---

Jason,

When the bridge was constructed in 1996, the Coast Guard issued an Advance Approval letter which I have attached. The Advance Approval asserts that no CG Bridge Permit will be required. All of the other aspects of the letter remain in effect.

Also note that any waterside construction vessels such as workboats or barges must comply with lighting requirements of the Inland Navigation Rules, as well as pollution prevention and response requirements.

Please let me know if you have any questions regarding Coast Guard requirements for this bridge replacement.

Gary Croot  
Bridge Management Specialist  
First Coast Guard District  
Boston, MA

**From:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>  
**Sent:** Thursday, March 30, 2023 3:46 PM  
**To:** Croot, Gary T CIV (USA) <[Gary.T.Croot@uscg.mil](mailto:Gary.T.Croot@uscg.mil)>  
**Cc:** Lefebvre, Lindsey E CIV USARMY CENAE (USA) <[Lindsey.E.Lefebvre@usace.army.mil](mailto:Lindsey.E.Lefebvre@usace.army.mil)>  
**Subject:** [Non-DoD Source] RE: 325 Little Harbor Road, Portsmouth, NH - bridge replacement/ tidal area restoration

Hi Gary,

We're in the midst of preparing a NH Department of Environmental Services wetlands permit application to construct a new bridge adjacent to the existing bridge that accesses Lady Isle/ Belle Isle in Portsmouth, NH. Once the new bridge is constructed, the old bridge, including the existing causeways, will be removed from public waters. In anticipation of future sea-level rise, the deck of the proposed bridge will be elevated by 3.4-feet and this will allow (for a period of time) more room for the passage of recreational boats/ kayaks at higher tides. We do anticipate that, during the restoration activities, recreational boat traffic within this area will be impeded but, private property owners inland of the proposed impacts will still be able to access ocean waters via the most northerly side of Lady Isle. We anticipate the restoration activities associated with the removal of the causeways and associated fill will be between November 15<sup>th</sup> and March 15<sup>th</sup>.

As part of the coordination required for this permitting process, Lindsey Lefebvre, from the US Army Corps of Engineers, asked us to reach out to you. I have attached a general project overview, plans, and drone photos of the project area.

Should you have any questions or require additional information, please contact me anytime.

**Jay Aube, CWS**

*Project Manager*

*Certified Wetland Scientist*

**TFMoran Seacoast Division**

**170 Commerce Way - Suite 102, Portsmouth, NH 03801**

**Tel: (603) 431-2222 Fax: (603) 431-0910**

**Cell: (603) 988-2615**

---

**From:** Lefebvre, Lindsey E CIV USARMY CENAE (USA) <[Lindsey.E.Lefebvre@usace.army.mil](mailto:Lindsey.E.Lefebvre@usace.army.mil)>

**Sent:** Friday, March 17, 2023 1:03 PM

**To:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>

**Subject:** RE: 325 Little Harbor Road, Portsmouth, NH - bridge replacement/ tidal area restoration

Hi Jay,

Our NOAA contact is Kaitlyn Shaw: [kaitlyn.shaw@noaa.gov](mailto:kaitlyn.shaw@noaa.gov)

Coast Guard: [Gary.T.Croot@uscg.mil](mailto:Gary.T.Croot@uscg.mil)

Let me know if you have any additional questions.

Lindsey Lefebvre  
US Army Corps of Engineers  
New England District  
Regulatory Division  
696 Virginia Rd  
Concord, MA 01742  
(o) (978)-318-8295  
(c) (978)-471-0741

---

**From:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>

**Sent:** Tuesday, March 14, 2023 4:53 PM

**To:** Lefebvre, Lindsey E CIV USARMY CENAE (USA) <[Lindsey.E.Lefebvre@usace.army.mil](mailto:Lindsey.E.Lefebvre@usace.army.mil)>

**Subject:** [Non-DoD Source] 325 Little Harbor Road, Portsmouth, NH - bridge replacement/ tidal area restoration

Hi Lindsey,

Per NOAA's recommendations, we'd like to engage with them sooner than later on this project. Do you have a good point of contact at NOAA? I have included the Essential Fish Habitat Mapper report.

Also, we'd like to reach out to the U.S. Coast Guard – any suggestions?

If you recall, this project proposes to replace an existing bridge with a new bridge on piles. The existing causeways will be removed from public waters. Contact me anytime if you have more suggestions.

**Jay Aube, CWS**

*Project Manager*

*Certified Wetland Scientist*

**TFMoran Seacoast Division**

**170 Commerce Way - Suite 102, Portsmouth, NH 03801**

**Tel: (603) 431-2222 Fax: (603) 431-0910**

**Cell: (603) 988-2615**



16211/NV-343

JAN 06 1996

Mr. Herbert A. Horgan, Jr.  
Belle Isle Partners Trust  
69 Algonquin Road  
Chestnut Hill, MA 02167

Re: Advance Approval determination  
for proposed replacement of the  
Belle Isle (Lady Isle) bridge  
across the Back Channel  
(Portsmouth Harbor), NH

Dear Mr. Horgan:

We have completed review of your bridge permit application for approval of the referenced bridge replacement across the Portsmouth Harbor Back Channel at Portsmouth, New Hampshire.

Based on our review of the documentation provided by Emanuel Engineering, and the fact that no objections were received as a result of Public Notice 1-891 dated 25 November 1996, we have determined that a formal Coast Guard bridge permit will not be required for this project. The project will be placed in the Advance Approval category as per 33 CFR 115.70. Future bridge projects along the same waterway will have to be investigated for their environmental impact before they may be considered for Advance Approval.

This office has prepared a Categorical Exclusion for this project, a copy of which is available upon request.

Coast Guard approval does not relieve the applicant of the responsibility to ensure compliance with any applicable federal, state or local requirements for the proposed project.

Although this project will not require a bridge permit, other areas of Coast Guard jurisdiction apply. The following stipulations must be met:

a. The requirement to display permanent navigation lights at this bridge in accordance with 33 CFR 118 is waived. This waiver may be rescinded at anytime in the future should nighttime navigation through this bridge be increased to a level determined by the District Commander to warrant lighting (generally four or more passages per week between the hours of sunset and sunrise).

b. Upon completion of construction, the bridge owner shall submit "as built" drawings showing clearances through the bridge and sufficient data to permit this office to prepare a completion report. This report is used for Coast Guard and other mariner publications.

c. Any spillage of oil or oil based products during construction must be promptly reported to the Coast Guard by calling 1-800-424-8802.

If you have any questions, please call this office at the above telephone number.

Sincerely,

**Gary Kassof**  
**Chief, Bridge Branch**  
**First Coast Guard District**  
**By Direction Of The District Commander**

Copy: USCG Station Portsmouth Harbor  
Corps of Engineers, New England Division (File #199502561)  
Fred S. Emanuel, P. E.

SMART/es/27DEC96/BRIDGE.CARRET/AA.FORMAT.BELLE.ISLE





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New England District

## Appendix B

### **Regional General Permits (GPs) Required Information and Corps Secondary Impacts Checklist**

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

#### **All Projects:**

- Corps application form ([ENG Form 4345](#)) as appropriate.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible black and white (no color) plans no larger than 11”x17” with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
- Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don’t use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
- Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
- Show project limits with existing and proposed conditions.
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- Delineation of all waterways and wetlands on the project site,:
- Use Federal delineation methods and include Corps wetland delineation data sheets. See GC 2 and [www.nero.noaa.gov/hcd](http://www.nero.noaa.gov/hcd) for eelgrass survey guidance.
- GP 3, Moorings, contains eelgrass survey requirements for the placement of moorings.
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.



**US Army Corps  
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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.

<b>1. Impaired Waters</b>	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See <a href="http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm">http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm</a> to determine if there is an impaired water in the vicinity of your work area.*	X	
<b>2. Wetlands</b>	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 <a href="https://www2.des.state.nh.us/nhb_datacheck/">https://www2.des.state.nh.us/nhb_datacheck/</a> . The book <a href="#">Natural Community Systems of New Hampshire</a> 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? <small>New tidal crossing will improve hydraulic capacity and aquatic organism passage</small>	X	
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?	5,020	
2.7 What is the area of the proposed fill in wetlands?	5,300	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site? <small>5.57% increase but, in area that does not restrict tidal flows as currently existing.</small>		
<b>3. Wildlife</b>	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: <a href="https://www2.des.state.nh.us/nhb_datacheck/">https://www2.des.state.nh.us/nhb_datacheck/</a> USFWS IPAC website: <a href="https://ecos.fws.gov/ipac/location/index">https://ecos.fws.gov/ipac/location/index</a>	X	



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

March 13, 2023

Project Code: 2023-0055303

Project Name: 325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration

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 3/8/2023 - 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 ECOS-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 3/8/2023)** The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule will go into effect on **March 31, 2023**. After that date, the current 4(d) rule for NLEB will be invalid, and the 4(d) determination key will no longer be available. New compliance tools will be available in March 2023, and information will be posted in this section on our website and on the northern long-eared bat species page, so please check this site often for updates.

Depending on the type of effects a project has on NLEB, 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 may result in incidental take of NLEB after the new listing goes into effect, this will need to be addressed in an updated consultation that includes an Incidental Take Statement. Many of these situations will be addressed through the new compliance tools. If your project may require re-initiation of consultation, please wait for information on the new tools to appear on this site or contact our office for additional guidance.

#### *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, intentional or unintentional, 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 03301-5094  
(603) 223-2541

## PROJECT SUMMARY

Project Code: 2023-0055303  
Project Name: 325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration  
Project Type: Bridge - Replacement  
Project Description: Impact approximately 20,000 square feet for the purpose of replacing an existing bridge to a residential island with a new bridge. This project proposes to remove fill from public water so that the hydraulic capacity and aquatic organism passage can be improved.

### Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.064841400000006,-70.74616735916936,14z>



Counties: Rockingham County, New Hampshire

## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

### MAMMALS

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

### BIRDS

NAME	STATUS
Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Roseate Tern <i>Sterna dougallii dougallii</i> Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2083">https://ecos.fws.gov/ecp/species/2083</a>	Endangered

### INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

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**CRITICAL HABITATS**

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

## **IPAC USER CONTACT INFORMATION**

Agency: TFMoran, Inc.  
Name: Jay Aube  
Address: 170 Commerce Way  
City: Suite 102  
State: NH  
Zip: 03801  
Email: jaube@tfmoran.com  
Phone: 6034312222

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

March 14, 2023

Project code: 2023-0055303

Project Name: 325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration

IPaC Record Locator: 695-123608113

Federal Nexus: yes

Federal Action Agency (if applicable): Army Corps of Engineers

**Subject:** Record of project representative's no effect determination for '325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration'

Dear Jay Aube:

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 March 14, 2023, for '325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration' (here forward, Project). This project has been assigned Project Code 2023-0055303 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 the 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 Rangewide Determination Key (Dkey), invalidates this letter.

### **Determination for the Northern Long-Eared Bat**

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. 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 for the northern long-eared 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* Candidate
- Red Knot *Calidris canutus rufa* Threatened
- Roseate Tern *Sterna dougallii dougallii* Endangered

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**

Based upon your IPaC submission, your project has reached the determination of "No Effect" on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. 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 2023-0055303 associated with this Project.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration

**2. Description**

The following description was provided for the project '325 Little Harbor Road - Bridge Replacement and Tidal Area Restoration':

Impact approximately 20,000 square feet for the purpose of replacing an existing bridge to a residential island with a new bridge. This project proposes to remove fill from public water so that the hydraulic capacity and aquatic organism passage can be improved.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.064841400000006,-70.74616735916936,14z>



## DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). 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 the northern long-eared bat 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. Does any component of the action involve construction or operation of wind turbines?

**Note:** For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

3. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

4. 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

5. 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

6. 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

7. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

**Note:** Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

Yes

## **PROJECT QUESTIONNAIRE**

Will all project activities be completed by April 1, 2024?

*No*

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## **IPAC USER CONTACT INFORMATION**

Agency: TFMoran, Inc.  
Name: Jay Aube  
Address: 170 Commerce Way  
City: Suite 102  
State: NH  
Zip: 03801  
Email: jaube@tfmoran.com  
Phone: 6034312222

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Army Corps of Engineers

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**From:** "Kyra Higgins"  
**To:** "Brochi, Jean" <Brochi.Jean@epa.gov>  
**Date:** 4/13/2023 1:58:08 PM  
**Subject:** RE: Question about Butternut Translucent Oil Coating/Finish for Lady Isle Bridge

Great, thank you so much for letting me know.  
Have a great rest of your week,  
My best,

-Kyra Higgins

**From:** Brochi, Jean <Brochi.Jean@epa.gov>  
**Sent:** Thursday, April 13, 2023 1:40 PM  
**To:** Kyra Higgins <khiggins@tfmoran.com>  
**Cc:** Jason Aube <jaube@tfmoran.com>  
**Subject:** RE: Question about Butternut Translucent Oil Coating/Finish for Lady Isle Bridge

Hi Kyra,  
Thank you for your response. Your questions were very thorough and my questions were about the oil and toxicity and application which has been addressed.

No further questions. Thank you very much. Jean

**From:** Kyra Higgins <khiggins@tfmoran.com >  
**Sent:** Thursday, April 13, 2023 1:04 PM  
**To:** Brochi, Jean <Brochi.Jean@epa.gov >  
**Cc:** Jason Aube <jaube@tfmoran.com >  
**Subject:** FW: Question about Butternut Translucent Oil Coating/Finish for Lady Isle Bridge

Good afternoon Jean,

I hope that you are well! My name is Kyra Higgins, and I'm a new Environmental Permitting Specialist at TFMoran in Portsmouth. I wanted to reach out and forward these emails to you – as they address your concerns about the Lady Isle bridge replacement project. I understand that, in a pre-application meeting, you expressed concerns about the toxicity of the Butternut Translucent Oil finish to be applied to the piles. I've corresponded with Brian Kennedy from York Bridge Concepts and he clarified that this finish is not associated with the Butternut tree – butternut is only the color of the finish. Further, this finish will be a non-toxic acrylic coating on the piles. Please let me know if you have further questions – you can call me at 603-431-2222 anytime from 8 AM to 5 PM.

Thank you,

-Kyra Higgins

**From:** Brian Kennedy <bkenedy@ybc.com >  
**Sent:** Friday, March 24, 2023 4:25 PM  
**To:** Kyra Higgins <khiggins@tfmoran.com >  
**Cc:** Jim Youngblood <jim@youngbloodbuilders.com >; Ajay Sujamani <ajay@ybc.com >; Drew Dancey <ddancey@ybc.com >; Katarina Lovell <klovell@ybc.com >  
**Subject:** RE: Question about Butternut Translucent Oil Coating/Finish for Lady Isle Bridge [Filed 24 Mar 2023 16:34]

Hello Kyra, I think there is some confusion, as butternut is simply the tint color of the stain. It is not associated with the butternut tree.

Additionally, the oil stain is not applied to the piling, it will be an acrylic coating on the piling. We will draft up the color palette for the bridge and send with our next drawing submittal.

Thank you.

**Brian Kennedy, Director of Construction Services**  
**YORK BRIDGE CONCEPTS, INC.™**  
[bkenedy@ybc.com](mailto:bkenedy@ybc.com)  
[www.YBC.com](http://www.YBC.com)  
2423 Brunello Trace ~ Lutz, FL 33558

notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

**From:** Kyra Higgins <[khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)>   
**Sent:** Friday, March 24, 2023 4:09 PM   
**To:** Brian Kennedy <[bkennedy@ybc.com](mailto:bkennedy@ybc.com)>   
**Subject:** Question about Butternut Translucent Oil Coating/Finish for Lady Isle Bridge

Good afternoon Brian,

I hope that you are well! My name is Kyra Higgins, and I'm a new Environmental Permitter at TFMoran in Portsmouth. I'm not working directly on the Lady Isle Bridge project, but I'm doing some review of the bridge materials for the EPA, and I was hoping I could ask you some questions.

The EPA is wondering about the environmental impacts of the Butternut Translucent Oil that will be applied to the piles of the bridge. They're concerned about the toxic chemical that Butternut produces (from what I understand it can be toxic towards certain terrestrial/aquatic plants and wildlife) and how this chemical might be incorporated into the Oil Finish. I'm wondering if you can provide me with some insight on how the Butternut Translucent Oil is manufactured? More specifically, what parts of the Butternut tree are utilized for the oil? Also, when the Butternut Oil is applied to the piles, how much time are the piles given to dry / how long before they are installed in the water?

Let me know, and I really appreciate your help.

Thank you,

Sincerely,

-Kyra Higgins

Kyra Higgins  
*Environmental Permitting Specialist*



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

**TFMoran Seacoast Division**  
170 Commerce Way - Suite 102, Portsmouth, NH 03801  
Tel: (603) 431-2222 Fax: (603) 431-0910  
E-Mail: [khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)  
[www.tfmoran.com](http://www.tfmoran.com)

## EFH Mapper Report

### EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

[Greater Atlantic Regional Office](#)  
[Atlantic Highly Migratory Species Management Division](#)

### Query Results

Degrees, Minutes, Seconds: Latitude = 43° 3' 53" N, Longitude = 71° 15' 14" W  
 Decimal Degrees: Latitude = 43.065, Longitude = -70.746



The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

### \*\*\* WARNING \*\*\*

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

### EFH

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Atlantic Sea Scallop	ALL	New England	Amendment 14 to the Atlantic Sea Scallop FMP
		Atlantic Wolffish	ALL	New England	Amendment 14 to the Northeast Multispecies FMP
		Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
		Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
		Atlantic Herring	Juvenile Adult Larvae	New England	Amendment 3 to the Atlantic Herring FMP
		Atlantic Cod	Larvae Adult Eggs	New England	Amendment 14 to the Northeast Multispecies FMP

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Pollock	Juvenile Eggs Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
		Red Hake	Adult Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Winter Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Smooth Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		White Hake	Adult Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Thorny Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Bluefin Tuna	Adult	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
		Atlantic Mackerel	Eggs Larvae Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid, & Butterfish Amendment 11
		Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
		Atlantic Butterfish	Adult	Mid-Atlantic	Atlantic Mackerel, Squid, & Butterfish Amendment 11

### Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

### HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

### EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

**Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.**

**\*\*For links to all EFH text descriptions see the complete data inventory: [open data inventory](#) -->**

**Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.**

**\*\*For links to all EFH text descriptions see the complete data inventory: [open data inventory ->](#)**

**All spatial data is currently available for the Mid-Atlantic and New England councils,**

**Secretarial EFH,**

Bigeye Sand Tiger Shark,

Bigeye Sixgill Shark,

Caribbean Sharpnose Shark,

Galapagos Shark,

Narrowtooth Shark,

Sevengill Shark,

Sixgill Shark,

Smooth Hammerhead Shark,

Smalltail Shark





# Memo

## NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.  
Maps and NHB record pages are confidential and should be redacted from public documents.

**To:** Jay Aube  
170 Commerce Way - Suite 102  
Portsmouth, NH 03801

**From:** NHB Review, NH Natural Heritage Bureau

**Date:** 3/23/2023 (valid until 03/23/2024)

**Re:** Review by NH Natural Heritage Bureau

**Permits:** MUNICIPAL POR - Portsmouth, NHDES - Shoreland Standard Permit, NHDES - Wetland Standard Dredge & Fill - Major, USACE - General Permit

**NHB ID:** NHB23-0723      **Town:** Portsmouth      **Location:** 325 Little Harbor Road

**Description:** Impact approximately 35,000 square feet for the purpose of replacing a failing bridge with a new bridge, restoring tidal resources (removing two causeways from public waters), and connecting a residential island to municipal utilities.

**cc:** NHFG Review

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

**Comments NHB:** Please contact NHB regarding recommendations for marsh elder surveys. Please ensure proper erosion and sediment controls are used to avoid impacts to the nearby exemplary eelgrass bed natural community.  
**F&G:** Please refer to NHFG consultation requirements below.

Natural Community	State <sup>1</sup>	Federal	Notes
Eelgrass bed	--	--	
Plant species	State <sup>1</sup>	Federal	Notes
marsh elder ( <i>Iva frutescens</i> )	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.

Department of Natural and Cultural Resources  
Division of Forests and Lands  
(603) 271-2214 fax: 271-6488

DNCR/NHB  
172 Pembroke Rd.  
Concord, NH 03301

## Memo

### NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.  
Maps and NHB record pages are confidential and should be redacted from public documents.

Vertebrate species	State <sup>1</sup>	Federal	Notes
Atlantic Sturgeon ( <i>Acipenser oxyrinchus oxyrinchus</i> )	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Shortnose Sturgeon ( <i>Acipenser brevirostrum</i> )	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

<sup>1</sup>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 more than 20 years ago.

*For all animal reviews, refer to 'IMPORTANT: NHFG Consultation' section below.*

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

#### **IMPORTANT: NHFG Consultation**

If this NHB 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 pursuant to Fis 1004 is required.

If this NHB 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://wildlife.state.nh.us/wildlife/environmental-review.html>. All requests for consultation and submittals should be sent via email to [NHFGreview@wildlife.nh.gov](mailto:NHFGreview@wildlife.nh.gov) or can be sent by mail, and **must include the NHB DataCheck results letter number and "Fis 1004 consultation request" in the subject line.**

If the NHB 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](mailto:NHFGreview@wildlife.nh.gov), and include the NHB DataCheck results letter number and "review request" in the email subject line.

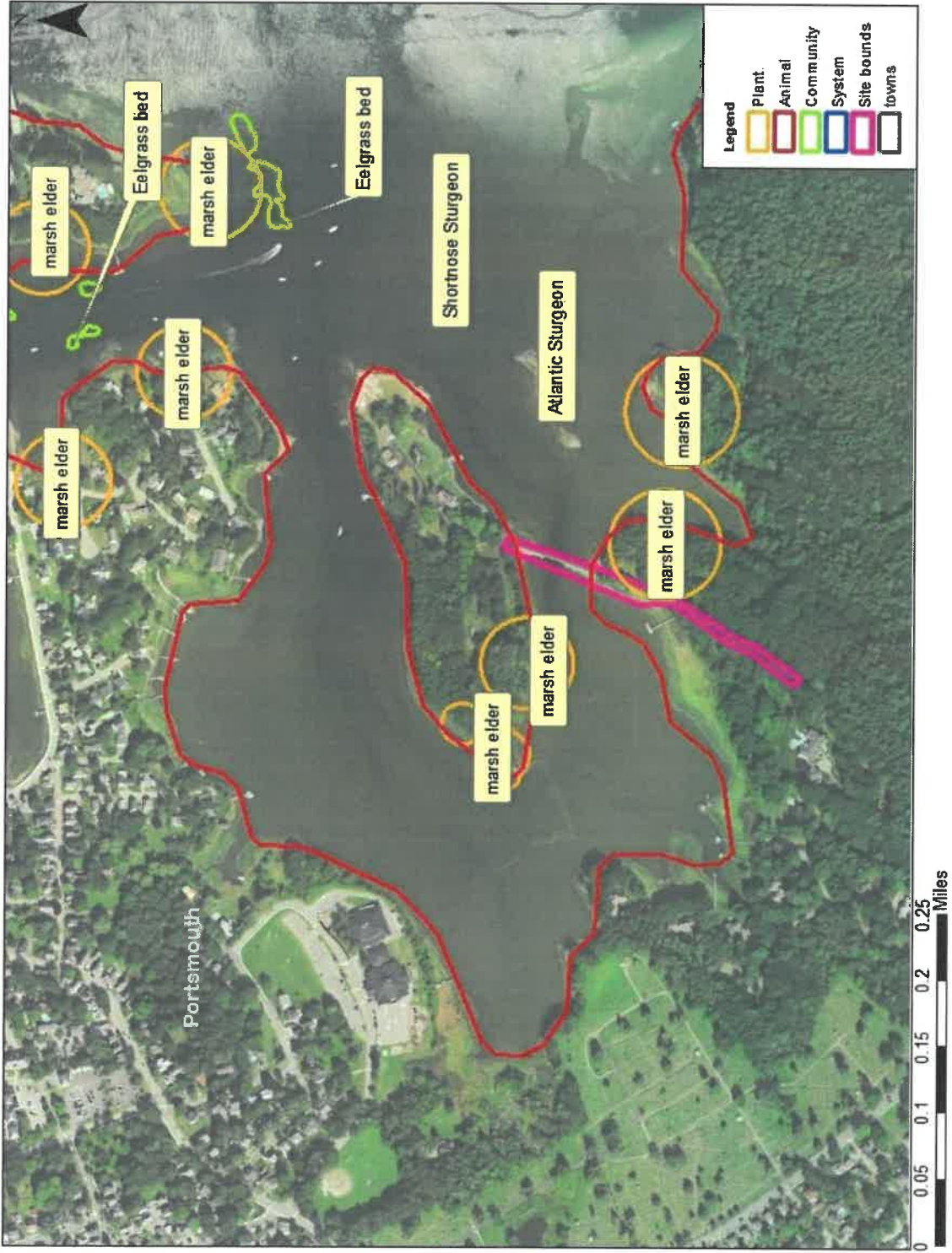
Contact NH Fish & Game at (603) 271-0467 with questions.

Department of Natural and Cultural Resources  
Division of Forests and Lands  
(603) 271-2214 fax: 271-6488

DNCR/NHB  
172 Pembroke Rd.  
Concord, NH 03301

**CONFIDENTIAL – NH Dept. of Environmental Services review**

**NHB23-0723**



Management --  
Comments:

**Location**

---

Survey Site Name: Little Harbor, back channel  
Managed By: Little Harbor Trust

County: Rockingham  
Town(s): Portsmouth  
Size: 61.4 acres

Elevation:

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

Directions: 2021: Lady Isle: Shoreline along western end of Lady Isle. 2017: Leachs Island: Island in New Castle only accessible by boat. Plants observed on south shore of island. 2016: Peirce Island: Along the southern shore of Peirce Island, along the edge of a small cove west of the wastewater treatment facility. Shaws Hill: Take Laurel Lane off New Castle Avenue, bear left onto driveway right-of-way servicing 51A and 51B Laurel Lane. At end of right-of-way, 51B will be located on the right. Tidal Pool: Along Sagamore Creek shoreline on Creek Farm Reservation property in Portsmouth. In the vicinity of Rte. 1B which encircles the Little Harbor back channel from Portsmouth to New Castle and Rye. Many of the sites are visible only by boat.

**Dates documented**

---

First reported: 1953

Last reported: 2021-02-10



## New Hampshire Natural Heritage Bureau - Animal Record

### Shortnose Sturgeon (*Acipenser brevirostrum*)

#### Legal Status

Federal: Listed Endangered  
State: Listed Endangered

#### Conservation Status

Global: Rare or uncommon  
State: Critically imperiled due to rarity or vulnerability

#### Description at this Location

Conservation Rank: Not ranked  
Comments on Rank: --

Detailed Description: 2016: 2 individuals, 1 female and 1 sex unknown, detected in Portsmouth Harbor and the lower Piscataqua River. 2015: 3 females and 2 other individuals, sex unknown detected in Portsmouth Harbor. 2014: 1 female detected moving from Portsmouth Harbor up the Piscataqua River to the mouth of the Cocheco River. 2012: 1 female detected in Little Bay. 2011: 1 female detected in Little Bay. 2010: 1 female detected in Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.  
General Comments: --  
Management: --  
Comments:

#### Location

Survey Site Name: Piscataqua River  
Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres

Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

#### Dates documented

First reported: 2010-11-03

Last reported: 2016-10-20

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

**From:** [Snyder, Kimberly](#)  
**To:** [Jason Aube](#)  
**Cc:** [Kyra Higgins](#); [Vincent Brigagliano](#); [FGC: NHFG review](#); [Dionne, Michael](#)  
**Subject:** RE: New Bridge and Tidal Area Restoration Project - Lady Isle, Portsmouth  
**Date:** Monday, May 8, 2023 3:10:31 PM

---

Jay,  
Thank you for this assessment.

Mike Dionne and I have looked over this and we have no further questions or concerns with the assessment. We agree that restoration to a mud flat and tidal marsh habitat would be a benefit to this site and the species using it.

We do not expect impacts to the Atlantic or Shortnose sturgeon from this project, however we would prefer that the work occur during the normal dredge window (Nov 15<sup>th</sup>-Mar 15<sup>th</sup>). If this will not be possible, please contact us for BMPs to avoid sedimentation.

Kim S.  
Program Planner  
Nongame and Endangered Wildlife Program  
New Hampshire Fish and Game Department  
[Kimberly.C.Snyder@wildlife.nh.gov](mailto:Kimberly.C.Snyder@wildlife.nh.gov)  
Phone: 603-271-0467

**From:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>  
**Sent:** Friday, May 5, 2023 11:00 AM  
**To:** Snyder, Kimberly <[kimberly.C.Snyder@wildlife.nh.gov](mailto:kimberly.C.Snyder@wildlife.nh.gov)>  
**Cc:** Kyra Higgins <[khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)>; Vincent Brigagliano <[vbrigagliano@tfmoran.com](mailto:vbrigagliano@tfmoran.com)>  
**Subject:** New Bridge and Tidal Area Restoration Project - Lady Isle, Portsmouth

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

Hi Kim,

We'd like to take a moment to bring you up to speed with a bridge replacement project that will be occurring in Portsmouth. The property owner is proposing to remove the causeways associated with the existing bridge (which are within public waters) and construct a new timber bridge that spans the entire tidal resource. In a pre-application meeting in February, Mike Dionne expressed concerns about the unnaturally created, micro-niche habitat below the existing bridge. The existing causeways restrict tidal flows and increase the velocity of tidal flows, and this, in turn, scours the area below the bridge and creates an unnatural micro-niche habitat. Mike requested we perform a wildlife assessment of the area below the bridge for his review. Unfortunately, we have just learned that Mike has taken a new position within Fish and Game and he hasn't had an opportunity to review this document.

Attached to this email is the relevant NH Natural Heritage Bureau (NHB) Report associated with this project and the wildlife assessment. Our plan is to restore this tidal area by removing the existing causeways to an elevation 2-feet below the elevation of the adjacent mud flats so that this area, with time, can naturally and gradually, return to its original mud flat habitat condition. We are also proposing to restore the salt marsh and restore the upland buffer of the island and the mainland with native vegetation. Lindsey Lefebvre, of the U.S. Army Corps of Engineers and Kaitlyn Shaw, of NOAA Fisheries, concur with this restoration approach. We will have a final restoration plan prepared for your review shortly.

Our relative new hires Kyra Higgins and Vince Brigagliano, each from UNH and copied on this reply, prepared the attached wildlife assessment. If you have any questions, they can be reached anytime.

Respectfully,

**Jay Aube, CWS**

*Project Manager*

*Certified Wetland Scientist*

**TFMoran Seacoast Division**

**170 Commerce Way - Suite 102, Portsmouth, NH 03801**

**Tel: (603) 431-2222 Fax: (603) 431-0910**

**Cell: (603) 988-2615**



**From:** [DNCR: NHB Review](#)  
**To:** [Jason Aube](#)  
**Subject:** RE: Marsh Eleder - 325 Little Harbor Road, Portsmouth - NHB23-0723  
**Date:** Monday, May 22, 2023 7:44:40 AM

---

Jay,

Based on my review of the materials, there is no anticipated impact to eel grass beds for this project.

Best.

Ashley Litwinenko  
**Environmental Reviewer**  
**Natural Heritage Bureau (NHB)**  
Division of Forests & Lands - DNCR  
172 Pembroke Rd., Concord, NH 03301  
Phone: 603-271-2834  
[Datacheck Tool](#)  
[NHB Botany information](#)

---

**From:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>  
**Sent:** Friday, May 19, 2023 7:24 PM  
**To:** DNCR: NHB Review <[nhbreview@dnrc.nh.gov](mailto:nhbreview@dnrc.nh.gov)>  
**Cc:** Severance, Madeline <[Madeline.P.Severance@dnrc.nh.gov](mailto:Madeline.P.Severance@dnrc.nh.gov)>  
**Subject:** RE: Marsh Eleder - 325 Little Harbor Road, Portsmouth - NHB23-0723

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

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Hi Ashley/ Maddie:

Do you also concur that this project will pose no threat to known eel grass beds? The water depth at the project site is too shallow to support this habitat. I have attached an eel grass map for your reference.

**Jay Aube, CWS**  
*Project Manager*  
*Certified Wetland Scientist*  
**TFMoran Seacoast Division**  
170 Commerce Way - Suite 102, Portsmouth, NH 03801  
Tel: (603) 431-2222 Fax: (603) 431-0910  
Cell: (603) 988-2615

---

**From:** DNCR: NHB Review <[nhbreview@dnrc.nh.gov](mailto:nhbreview@dnrc.nh.gov)>  
**Sent:** Thursday, May 11, 2023 1:04 PM  
**To:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>  
**Cc:** Kyra Higgins <[khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)>; Vincent Brigagliano <[vbrigagliano@tfmoran.com](mailto:vbrigagliano@tfmoran.com)>  
**Subject:** RE: Marsh Eleder - 325 Little Harbor Road, Portsmouth - NHB23-0723

Hi Jay,

Thank you for sending these documents and information over. Maddie forwarded me your email because I'll be providing next steps for this review, as I've taken over Environmental Review follow-up from Jessica Bouchard.

Transplanting will be an acceptable approach for the marsh elder (*Iva frutescens*) occurrences being threatened by the proposed bridge construction. Reading your recommendations, it sounds like there is a good basis for transplanting marsh elder, and NHB is aware you are very familiar with this state-threatened species. NHB would like to ask that TF Moran provide a draft transplant protocol for us to review and provide comments on if needed. If you could please put the information you have provided in a more detailed document for NHB to look over prior to transplanting following the below information as a guide.

**NHB recommendations for long-term establishment of transplants:**

**1. Transplant location:**

- a. Suitable habitat: Saline marshes, most commonly near limit of high tide.
- b. In an area that is not expected to be developed in the future.
- c. Include a map showing existing locations and proposed transplant location.
- d. Please provide reasoning for proposed relocation site.

**2. Transplant timing:**

- a. Flowers early-August to end of October (expect annual variability). Seed is expected early November, and seed collection could occur early November until mid-November.
- b. Please provide suggested timing for transplanting to occur.
- c. Transplanting preferably to occur on a cloudy day, early morning, or evening. Avoid transplanting in the hottest part of the day.

**Post-transplant recommendations:**

**1. Protection during construction:**

- a. Surround with orange construction fencing to protect during construction/ if in a high traffic area.

**2. Monitoring:**

- a. Short-term monitoring immediately following transplanting to prevent drying out and aid establishment.
- b. Long-term monitoring of transplants should occur annually for three years, during spring bloom/seed development timeframe.

**NHB Long-term monitoring:**

**1. Rare Plant Monitoring Report Guidelines**

- a. This report should be prepared and sent to NHB on an annual basis, for three consecutive years to assess transplanting success.
- b. Images of the original population prior to transplanting. Photos should also be taken during removal and after transplanting. Photos should also be taken every year during monitoring.

- c. Map showing transplant areas in relation to original population site.
- d. Use GPS or flagging to find the population each monitoring year. If project work is actively occurring or transplants are in a high traffic area, use flagging or fencing to protect the population.
- e. Providing information about changes in the population is helpful to understand its viability.
- f. Fill out a rare plant reporting form once the plants are transplanted:  
<https://www.nh.gov/nhdf/reports/rare-plant-list.htm>

Please let me know if you have any questions.

Thank you!

Ashley Litwinenko  
**Environmental Reviewer**  
**Natural Heritage Bureau (NHB)**  
Division of Forests & Lands - DNCR  
172 Pembroke Rd., Concord, NH 03301  
Phone: 603-271-2834  
[Datacheck Tool](#)  
[NHB Botany information](#)

---

**From:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>  
**Sent:** Thursday, May 11, 2023 9:34 AM  
**To:** Severance, Madeline <[Madeline.P.Severance@dncr.nh.gov](mailto:Madeline.P.Severance@dncr.nh.gov)>  
**Cc:** Bouchard, Jessica <[Jessica.R.Bouchard@dncr.nh.gov](mailto:Jessica.R.Bouchard@dncr.nh.gov)>; Kyra Higgins <[khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)>;  
Vincent Brigagliano <[vbrigagliano@tfmoran.com](mailto:vbrigagliano@tfmoran.com)>  
**Subject:** RE: Marsh Elder - 325 Little Harbor Road, Portsmouth - NHB23-0723

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

Hi Maddie,

More marsh elder to discuss! I've reviewed this project with Jessica in the past - so I copied her as well.

Lady Isle/ Belle Isle is currently served by a deteriorating bridge that rests on two large causeways within public waters. These causeways act to unnaturally restrict tidal flows and they're an impediment to aquatic organism passage. The plan is to construct a new bridge on wooden piles adjacent to the existing bridge that spans the entire resource. We also plan to remove the existing causeways from public waters and restore this tidal area (salt marsh restoration and upland tidal buffer zone restoration.) NH Fish and Game, the Army Corp of Engineers and NOAA Fisheries are all on board with our efforts to restore the tidal area in this manner.

In order to construct the new bridge, we must construct two new bridge approaches. Unfortunately, these bridge approaches will impact marsh elder in two locations (plan attached.) These marsh elder

locations are not formally documented by the NHB. There are, however, many known and well-established clusters of marsh elder within the vicinity of our project. We'd like your permission to relocate the existing marsh elder plants to an area of the island adjacent to an existing, healthy established stand of marsh elder.

During the transplanting, we'll be certain to extract the plants in a manner that retains their entire root systems. We'll ensure that transplant holes are dug prior to transplanting and that each hole can adequately accommodate the proposed planting. We'll water each transplant hole prior to planting and they'll be located at or near the Highest Observable Tide Line (HOTL) – similar to the adjacent healthy stand of marsh elder. We'll monitor the success of the transplanting and water as required.

I have attached a plan that depicts the locations of the newly identified marsh elder species as well as a drone image that nicely demonstrates the areas where the causeways will be removed and the area where we're proposing to transplant the marsh elder.

We're excited to attempt this and we're eager to receive your feedback.

Respectfully,

**Jay Aube, CWS**

*Project Manager*

*Certified Wetland Scientist*

**TFMoran Seacoast Division**

**170 Commerce Way - Suite 102, Portsmouth, NH 03801**

**Tel: (603) 431-2222 Fax: (603) 431-0910**

**Cell: (603) 988-2615**

---

**From:** Severance, Madeline <[Madeline.P.Severance@dncr.nh.gov](mailto:Madeline.P.Severance@dncr.nh.gov)>

**Sent:** Friday, March 24, 2023 12:42 PM

**To:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>

**Cc:** Bouchard, Jessica <[Jessica.R.Bouchard@dncr.nh.gov](mailto:Jessica.R.Bouchard@dncr.nh.gov)>; Kyra Higgins <[khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)>;

Vincent Brigagliano <[vbrigagliano@tfmoran.com](mailto:vbrigagliano@tfmoran.com)>

**Subject:** RE: Marsh Eleder - 70 Pleasant Point Dr, Portsmouth - NHB22-1430

Hi Jay,

The snow has mostly melted but there's more in the forecast! I am definitely ready for warmer weather.

Thank you for flagging the marsh elder in order to ensure its protection during work, and welcome Kyra and Vincent, I look forward to working with you in the future.

Enjoy your weekend,

Maddie

Maddie Severance (she/her/hers)  
Assistant Ecological Information Specialist  
New Hampshire Natural Heritage Bureau (NHB)  
Division of Forests & Lands  
NH Dept. of Natural & Cultural Resources  
172 Pembroke Rd  
Concord, NH 03301  
(603)-271-0687 (office)

[NHB DataCheck Tool](#)

---

**From:** Jason Aube <[jaube@tfmoran.com](mailto:jaube@tfmoran.com)>  
**Sent:** Friday, March 24, 2023 12:20 PM  
**To:** Severance, Madeline <[Madeline.P.Severance@dncr.nh.gov](mailto:Madeline.P.Severance@dncr.nh.gov)>  
**Cc:** Bouchard, Jessica <[Jessica.R.Bouchard@dncr.nh.gov](mailto:Jessica.R.Bouchard@dncr.nh.gov)>; Kyra Higgins <[khiggins@tfmoran.com](mailto:khiggins@tfmoran.com)>;  
Vincent Brigagliano <[vbrigagliano@tfmoran.com](mailto:vbrigagliano@tfmoran.com)>  
**Subject:** Marsh Eleder - 70 Pleasant Point Dr, Portsmouth - NHB22-1430

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

Hi Maddy/ Jessica,

I hope you had a great winter – I suspect it’s still closer to winter up there!

I had an opportunity to get out and re-stake and surround the Marsh elder on this site with *caution tape* this morning. It was great opportunity to train our new staff members Vincent and Kyra, each copied on this email, how to identify Marsh Elder during the non-growing season.

Best,

**Jay Aube**  
Certified Wetland Scientist (CWS)  
**TFMoran, Inc.**



May 11, 2023

NH Department of Environmental Service  
Coastal Division  
Pease Field Office  
222 International Drive, Suite 175  
Portsmouth, NH 03801

Attn: Kristin Duclos

Re: Lady Isle Bridge

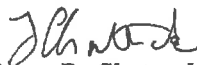
Dear Kristin,

We reviewed plans for the replacement of an existing bridge with site improvements on the Piscataqua River back channel in Portsmouth on property at

325 Little Harbor Road  
Portsmouth, NH  
Map 205 Lot 2

We examined the proposed site and found that the project will have no negative effect on navigation in the channel.

Sincerely,



Tracy R. Shattuck  
Chief Harbor Master

Cc: Duncan Mellor  
Civilworks New England/Haight Engineering  
181 Watson Road  
Dover, New Hampshire 03821



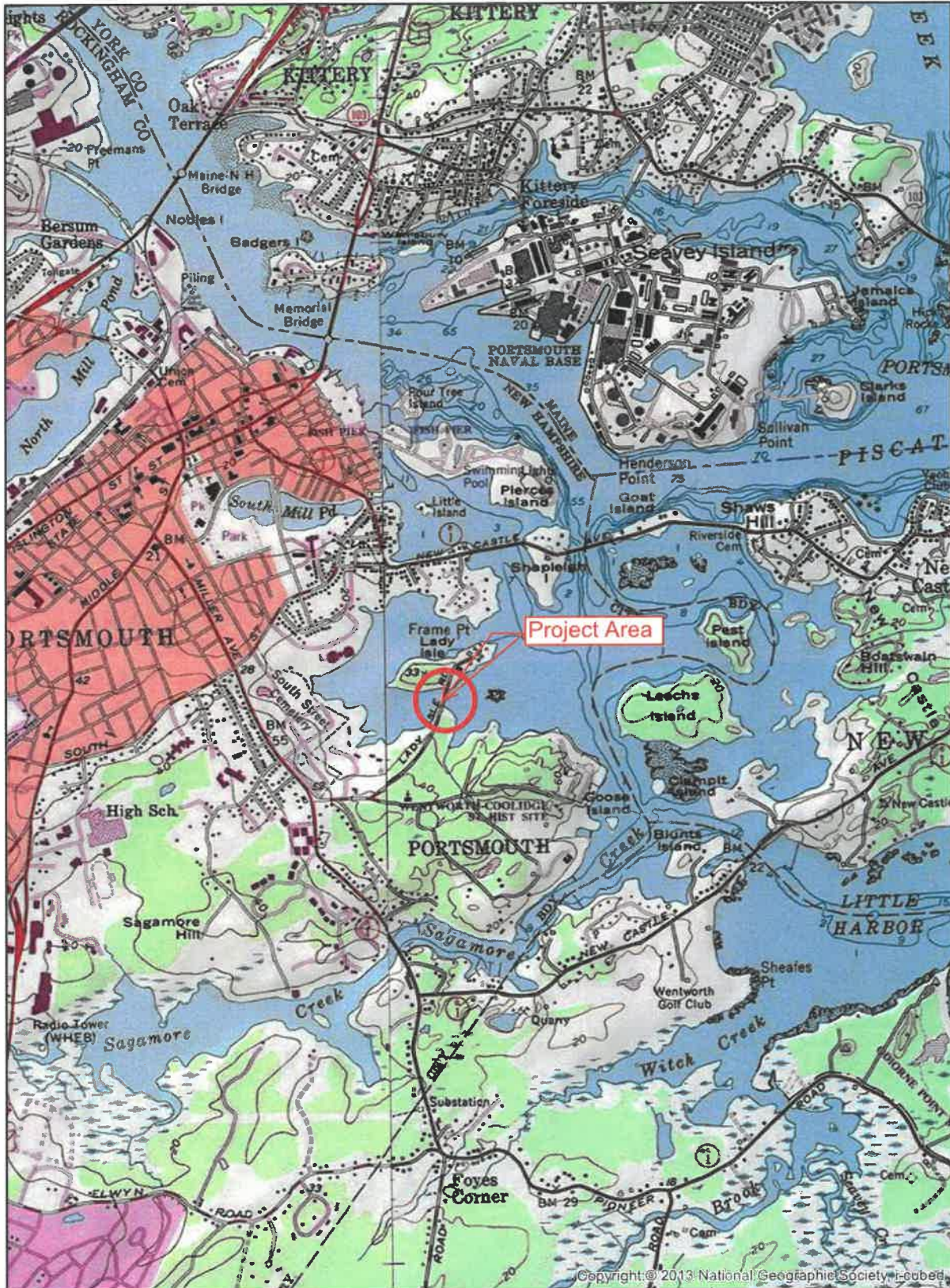


## **SECTION 4**



# USGS MAP

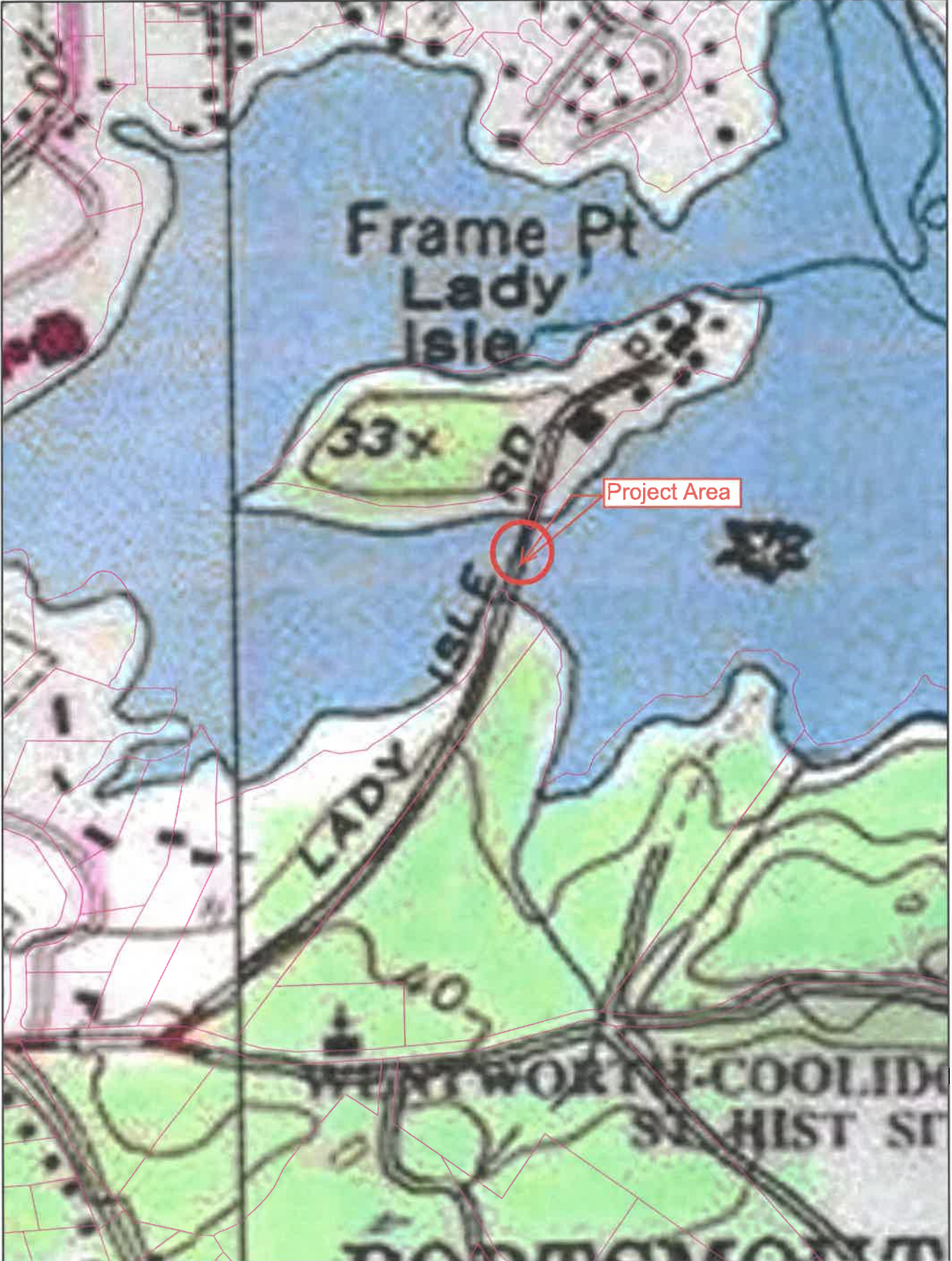
## Scale 1:24,000





# USGS MAP

## Scale 1:5,000



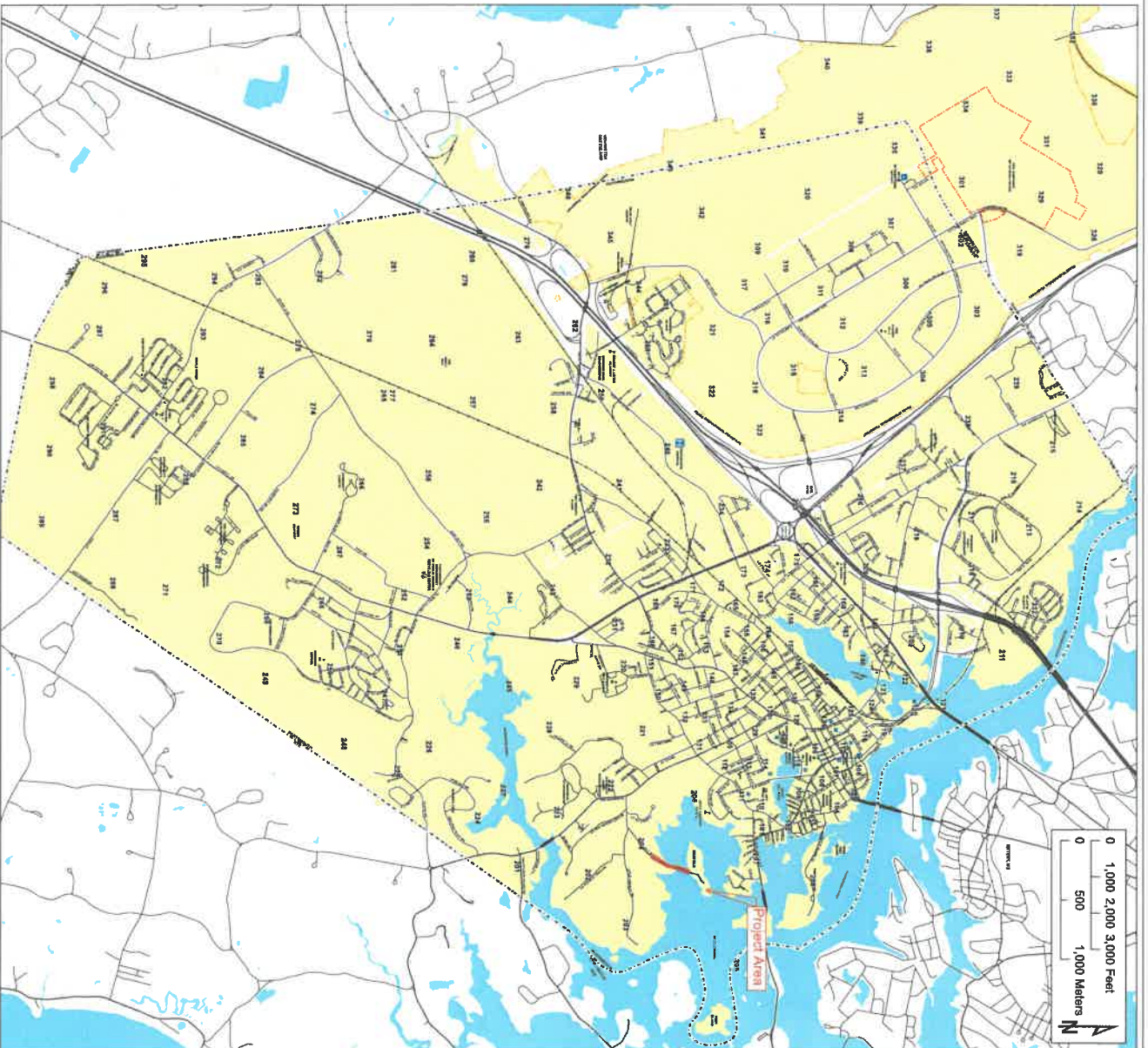




# City of Portsmouth 2019 Rural Tax Maps

Maps 201-298

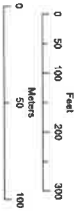
Tax Map Legend	
126A	Lot or Leachin Number
250x6	Parcel Area in Acres
72	Address Number
25-19	Parcel Number from a Neighboring Map
*	Parcel Line Dimension
SIMS AVE	Street Name
Placentiaqua River	Water Body
CE	Cemetery
Parcel Assigned to the Current Map	
Parcel from Anchor Map (please refer to the appropriate map)	
Water	
Parcel in Current Use	
Line Between Parcels	
Line Between Parcel and Right of Way	
Line Between Parcel and Water	
City Line	
New Hampshire Air National Guard (NH-ANG) Boundary	
Pears International Tradeport Boundary	
Structure (2005 data)	
Swimming Pool (2005 data)	
Railroad Track	



**Partial Legend**

See the cover sheet for the complete legend.

- 75A** Lot or lot unit number
- 75B** Parcel area in acres (ac) or square feet (sq ft)
- Address number**
- Parcel number** Parcel number from a neighboring map or Parcel file description
- 31MS AVE** Street name
- Parcel/road boundary**
- Parcel/own boundary**
- Water boundary**
- Structure (2005 data)**
- Parcel owned by the map**
- Parcel from a neighboring map (see other map for correct status)**

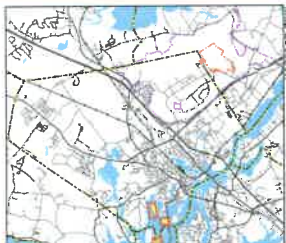


This map is for assessment purposes only. It does not constitute a warranty of accuracy. Parcels are mapped as of April 1, 2005. Building footprints are 2005 data and may not represent current structures. Lot numbers shown on this map may be paper map lot numbers. Address numbers shown on this map may not represent current or legal addresses.

**Nearby Tax Maps**

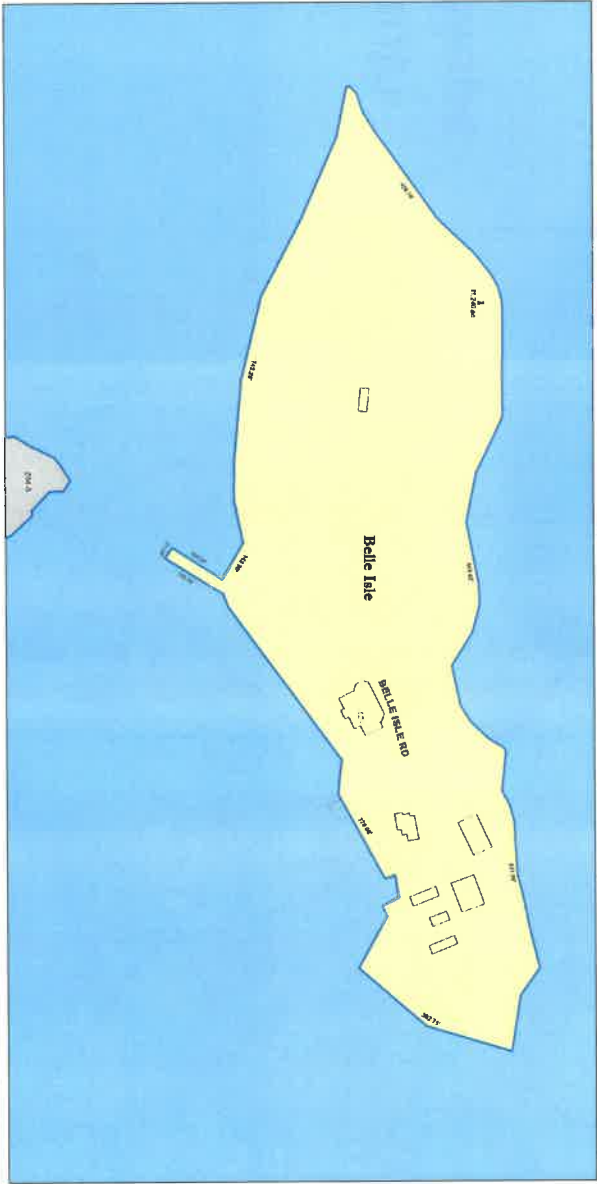
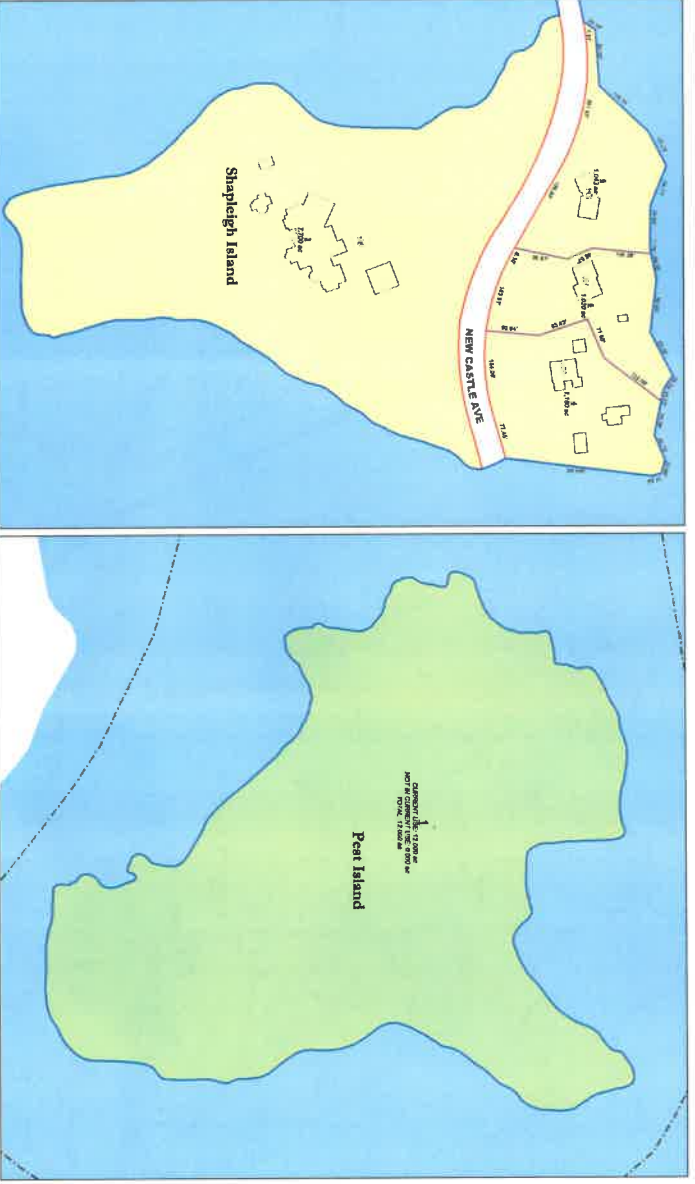


Map Location

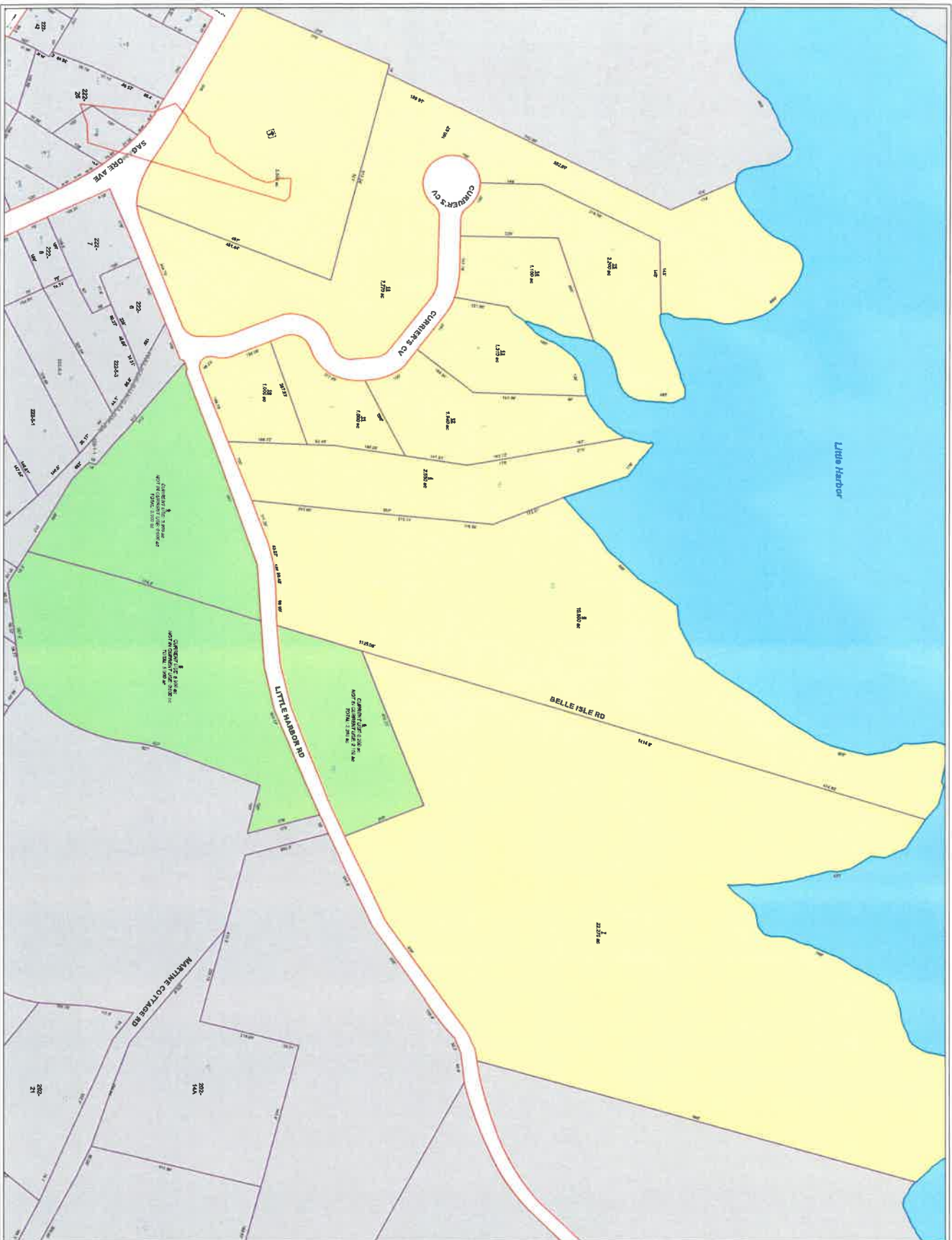


Portsmouth, New Hampshire  
2020

**Tax Map 2020**







**Parcel Legend**

- See the cover sheet for the complete legend.
- 7-56** Lot of parcel number
- 2-56** Parcel area in acres (ac) or square feet (ft<sup>2</sup>)
- Address number**
- 22-07** Parcel covered from a neighboring map
- 22-07** Parcel from an extension
- SHRS AVE** Street name
- Property boundary**
- Neighborhood boundary**
- Water boundary**
- Structure (light blue)**
- Parcel covered by this map**
- Parcel from a neighboring map (see cover map for context areas)**



This map is for assessment purposes only. It is not intended for legal description or conveyance. Parcels are mapped as of April 1. Boundary footprints are shown and may not. Streets appearing on this map may be paper (likely) streets. Lots numbers may precede owner address. Lots numbers may precede owner address. Lots may not represent posted or legal addresses.

**Neighb. Tax Maps**



**Main Location**



**Portsmouth, New Hampshire  
2022  
Tax Map 2024**





Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists

**NEW  
 HAMPSHIRE  
 200**

**325 Little Harbor Road, Portsmouth  
 Lady Isle / Belle Isle Bridge Project  
 Photo Exhibit**



**Photo 1.** A view of the existing bridge approach (on the opposite side of Lady Isle) to be replaced as well as a portion of the upland on site.



**Photo 2.** A view of the existing bridge to be replaced, the causeways to be removed, and the area in which new utility connections will be constructed. The tidal wetland (comprised largely of mudflats) and the upland tidal buffer zones can be seen as well. A few of the saltmarsh areas to be restored reside on either side of the bridge in the vicinity of the causeways.





**Photo 3.** Another view of the bridge and causeways as well as the subject property. The tidal wetland and portions of the buffer zones can still be seen. A portion of saltmarsh can be seen along the edge of the bridge and road leading to the property.



**Photo 4.** An aerial view of the bridge, causeways, property, tidal resources, and saltmarsh areas.

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
170 Commerce Way—Suite 102, Portsmouth, NH 03801  
T(603) 431-2222



**Photo 5.** A final view of the bridge approach on Lady Isle to be replaced as well as a portion of upland.

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222










## **SECTION 5**





LCHIP ROA429347 25.00  
RECORDING 22.00  
SURCHARGE 2.00



Return to:   
Hoefle, Phoenix, Gormley & Roberts, P.A.  
127 Parrott Avenue  
Portsmouth, NH 03801

**WARRANTY DEED**

KNOW ALL MEN BY THESE PRESENTS, that **Stephen H. Roberts, Esq., Trustee of The ADL Portsmouth Residence Trust**, u/d/t October 30, 2017 with a business address of 127 Parrott Avenue, Portsmouth, New Hampshire 03801, for consideration, grants to **Stephen H. Roberts, Esq., Trustee of the ADL 325 Little Harbor Road Trust**, u/d/t October 31, 2018 with a business address of 127 Parrott Avenue, Portsmouth, New Hampshire 03801, with warranty covenants, the following described premises:

A certain tract or parcel of land, with the buildings thereon, situated on the northerly side of Little Harbor Road, in Portsmouth in the County of Rockingham and State of New Hampshire, bounded and described as follows:

A certain tract of land, situated in said Portsmouth, and being the island heretofore known as Marston's Island, anciently know as Salter's Island and before that Jackson's Island, now known as "Belle Isle," together with all the buildings thereon, also the bridge, together with its approaches, piling, planks, rails and other appurtenances connecting said Island with the lot of land first herein conveyed (other land formerly of said Michael R. Clark), together with such rights of way, if any from New Castle Avenue, in, upon, over and across the land formerly of John J. Pickering, or any others, from New Castle Avenue to Frame Point and from said Frame Point to said New Castle Avenue, as may be appurtenant.

TOGETHER WITH THE BENEFIT OF the following permanent access, building restrictions, and waterline easements reserved to the current and/or future owner(s) of the above described "Belle Isle" as set forth in a certain Easement and Restriction Deed granted from Michael R. Clark to Michael R. Clark, dated September 12, 2005 and recorded in the Rockingham County Registry of Deeds at Book 4548, Page 2823 and Corrective Easement and Restriction Deed recorded at Book 4551, Page 327. Said permanent easements are identified on plan of land entitled, "Subdivision Plan for Michael R. Clark, Little Harbor Road, Portsmouth, NH," dated July 30, 2004, by Doucet Survey, Inc., 76 Exeter Street, P.O. Box 163, Newmarket, NH, 03857-0163, revised through August 10, 2005 and recorded in the Rockingham County Registry of Deeds as Plan #D-33062. Said permanent easements are more particularly bounded and described in accordance with said Plan as follows:

(i) A permanent easement for vehicular and pedestrian travel, access, maintenance, repair and replacement, over the area identified as Tax Map 205, Lot 2 on said Plan, which easement is identified on said plan as "Proposed 25 Foot Wide Access Easement" and "Existing Paved Driveway" and more particularly bounded and described as follows:

Beginning at a railroad spike set on Lot 1 on said plan, at Little Harbor Road, 29.36 feet southeasterly of the southwesterly most corner of Proposed Lot 1; thence turning and running N 54 degrees 01' 55" E, a distance of 37.11 feet to a drill hole set; thence turning and running along a curve to the right, length 151.50 feet, radius 487.50 feet, delta 17 degrees 48' 20", tangent 76.36 chord direction N 62 degrees 56' 05"E, on a chord of 150.89 feet to a drill hole set; thence turning and running N 71 degrees 50' 15" E, distance of 159.08 feet to a 5/8" rebar set, up to 4" to the boundary of Lot 2 on said plan; thence turning and running N 71 degrees 50' 15" E, a distance of 296.12 feet to a 5/8" rebar set up 2"; thence turning and running along a curve to the left a length of 247.7 feet, radius 737.50 feet, delta 19 degrees 14' 38", tangent 125.03, chord direction N 62 degrees 12' 56" E, on a chord of 246.54 feet to a 5/8" rebar set; thence turning and running N 52 degrees 35' 37" E, a distance of 198.23 feet to a 5/8" rebar set up 2"; thence turning and running along a curve to the left length 192.61 feet, radius 1487.50 feet, delta 07 degrees 25' 14", tangent 96.46, chord direction N 48 degrees 53' 00" E, chord length 192.51 feet to a point, thence turning and running S 37 degrees 28' 00" E, a distance of 25.20 feet to a point; thence turning and running along a curve to the right, length 192.62, radius 152.150, delta 07 degrees 17' 50" W, chord direction S 48 degrees 56' 42" W, chord length 192.50 feet to a drill hole set in a 10" diameter boulder; thence turning and running S 52 degrees 35' 37" W, a distance of 198.23 feet to a 5/8" rebar set up 2"; thence turning and running along a curve to the right, length 256.10 feet, radius 762.50 feet, delta 19 degrees 14' 38", tangent 129.27, chord direction S 62 degrees 12' 56" W, chord length 254.90 feet to a 5/8" rebar set up 1", thence turning and running S 71 degrees 50' 15" W, a distance of 352.38 feet to a 5/8" rebar set up 1", the common lot line between Proposed Lot 1 and Proposed Lot 2; thence turning and running S 71 degrees 50' 15" W, a distance of 102.82 feet to a 5/8" rebar set up 2"; thence turning and running along a curve to the left, length 143.73 feet, radius 462.50 feet, delta 17 degrees 48' 20", tangent 72.45 feet, chord direction S 62 degrees 56' 05" W, chord length 143.15 feet to a 5/8" rebar set up 1"; thence turning and running S 54 degrees 01' 55" W, a distance of 17.27 feet to a railroad spike set at Little Harbor Road; thence turning and running N 74 degrees 24' 17" W, a distance of 31.92 feet to a railroad spike set and the point of beginning.

(ii) A permanent easement identified on said plan as "easement area" 54,600 square feet, 1.38 acres (Not Buildable). The term "not buildable" as used herein, refers only to buildings and shall not preclude the owner of "Belle Isle" from installing and maintaining landscaping, fences, walkways, gates and the like as permitted by law. The current and/or future owner of "Belle Isle" shall also have the exclusive use for vehicular and pedestrian access to "Belle Isle" over the "easement area" so described, said area more particularly described as follows:

Beginning at a 5/8" rebar set up 3" at the southwesterly corner of the easement area so described, thence running N 37 degrees 28' 00" W, a distance of 12.25 feet to a point; thence turning and running N 37 degrees 28' 00" W, a distance of 25.20 feet to a point; thence turning and running N 37 degrees 28' 00" W, a distance of 12.55 feet to a 5/8" rebar set up 8"; thence turning and running N 39 degrees 19' 45" E, a distance of 233.36 feet to a 5/8" rebar set up 5" at the bank of the Piscataqua River; thence turning and running along the bank of the river along a tie line

N 75 degrees 16' 04" E, a distance of 268.60 feet to a 5/8" rebar set up 1"; thence turning and running S 52 degrees 35' 37" W, a distance of 474.94 feet to a 5/8" rebar set up 3" at the point of beginning.

(iii) A permanent easement for the installation, operation, maintenance, repair and replacement of the existing waterline running from Little Harbor Road to and along the "Proposed 25 foot wide Access Easement" described on said Plan to the "Belle Isle" lot. Said easement is 16 feet in width, 8 feet on each side of the centerline of the waterline. The owner of "Belle Isle" shall be responsible for the maintenance and plowing of the primary driveway identified as "Existing Paved Driveway" on said plan; provided, however, that if the owner of "Belle Isle" does not maintain and plow said driveway, the owners of Proposed Lot 1 and/or Proposed Lot 2, shall be entitled to plow and maintain that portion of said driveway as necessary to gain access to their respective lots, all without recourse to the owner of "Belle Isle". For that portion of the foregoing easement that burdens Lot 1 as shown on the Plan, see Easement Deed from Lisa A. Grondahl, Trustee of the Lisa A. Grondahl Revocable Trust of 2006 to Michael R. Clark dated August 14, 2015 and recorded in the Rockingham County Registry of Deeds at Book 5648, Page 2721.

Meaning and intending to describe and convey the premises conveyed to Stephen H. Roberts, Esq., Trustee of The ADL Portsmouth Residence Trust, u/d/t October 30, 2017 by virtue of a Warranty Deed from Anthony DiLorenzo, dated October 30, 2017 and recorded in the Rockingham County Registry of Deeds in Book 5867, Page 2492.

**THIS IS A NON-CONTRACTUAL TRANSFER AND IS EXEMPT FROM TRANSFER TAXES UNDER RSA 78-B:2, IX.**

**Trustee's Certificate**

The undersigned **Stephen H. Roberts, Esq., Trustee of The ADL Portsmouth Residence Trust, u/d/t October 30, 2017**, hereby states pursuant to RSA 564-A:7, that said Trustee has full and absolute power in said Trust Agreement to execute, sign and deliver a deed for any real estate or other property held in said Trust, and no purchaser or third party shall be bound to inquire whether the Trustee has said power or is properly exercising said power or to see to the proceeds paid for any conveyance.

**Stephen H. Roberts, Esq., Trustee of The ADL Portsmouth Residence Trust, u/d/t October 30, 2017**, certifies that the Trust is in full force and effect, that he is empowered to act as Trustee on the date of this certificate, and that the Trust has not been revoked or amended.

The Trustee further certifies that the undersigned is the Trustee of said Trust, and that the undersigned has received all written authorizations from beneficiaries, if any, required by the terms of said Trust.

This is not homestead property of the Grantor.

WITNESS my hand and seal this 1st day of November, 2018.



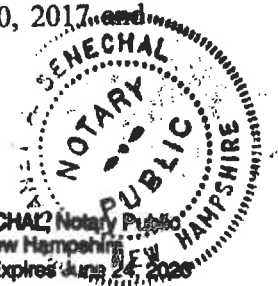
Stephen H. Roberts, Esq., Trustee of The  
ADL Portsmouth Residence Trust, u/d/t  
October 30, 2017

STATE OF NEW HAMPSHIRE  
COUNTY OF ROCKINGHAM

Dated this 1st day of November, 2018, personally appeared the above named Stephen H. Roberts, Esq., Trustee of The ADL Portsmouth Residence Trust, u/d/t October 30, 2017, and acknowledged the execution of the foregoing to be his free act and deed, before me.



Notary Public  
My commission expires



JANET A. SENECHAL, Notary Public  
State of New Hampshire  
My Commission Expires June 24, 2020



Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists

# Abutters List

**Dilorenzo - Lady Isle Bridge Replacement Project**  
**325 Little Harbor Road, Portsmouth, NH 03801**

May 16, 2023  
 47099.01

Assessors Map		Abutter Name	Mailing Address
Map	Lot		
204	4	LISA M. OAKES	315 LITTLE HARBOR ROAD PORTSMOUTH, NH 03801
204	5	LISA A. GRONDAHL REVOCABLE TRUST	304 MAPLEWOOD AVE PORTSMOUTH, NH 03801
204	7	CITY OF PORTSMOUTH CONSERVATION COMMISSION	1 JUNKINS AVE PORTSMOUTH, NH 03801
Civil Engineers / Surveyor		TFMoran, Inc.	170 Commerce Way - Suite 102 Portsmouth, NH 03801
Environmental / Wetlands Scientist		Kyra Higgins	170 Commerce Way - Suite 102 Portsmouth, NH 03801
Architect		York Bridge Concepts	3423 Brunello Trce Lutz, FL 33558







Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists



**ABUTTER NOTIFICATION FOR  
 NHDES WETLANDS PERMIT APPLICATION**

**VIA CERTIFIED MAIL**

May 16<sup>th</sup>, 2023

Lisa M. Oakes  
 315 Little Harbor Road  
 Portsmouth, NH 03801

Project # 47099.01

**Re: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
 325 Little Harbor Road, Portsmouth, Tax Map: 205, Lot: 2**

Dear Abutter:

This letter is to inform you that a Wetlands Permit Application will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A, impacts within 100-feet of the Highest Observable Tide Line (HOTL) of Tidal Waterbodies require a NHDES Wetlands Permit and, under RSA 482-A:3, we are required to notify you about this permit application via certified mail.

Once the permit application is filed, a copy of the complete permit application, including the design plans that depict the proposed impact areas, will be available for viewing at the Town of Portsmouth Clerk's Office.

Should you have any questions or require additional information about this project, please do not hesitate to contact me at (603) 431-2222, anytime from 8:00 A.M. to 5:00 P.M., Monday through Friday.

Sincerely,  
**TFMoran, Inc.**

Kyra Higgins, KRH  
*Environmental Permitting Specialist*

cc: NHDES Wetlands Bureau

JRA/krh

TFMoran, Inc.  
 48 Constitution Drive, Bedford, NH 03110  
 T(603) 472-4488 www.tfmoran.com



TFMoran, Inc. Seacoast Division  
 170 Commerce Way–Suite 102, Portsmouth, NH 03801  
 T(603) 431-2222



Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists



**ABUTTER NOTIFICATION FOR  
 NHDES WETLANDS PERMIT APPLICATION**

**VIA CERTIFIED MAIL**

May 16<sup>th</sup>, 2023

Lisa A. Grondahl Revocable Trust  
 304 Maplewood Ave  
 Portsmouth, NH 03801

Project # 47099.01

**Re: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
 325 Little Harbor Road, Portsmouth, Tax Map: 205, Lot: 2**

Dear Abutter:

This letter is to inform you that a Wetlands Permit Application will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A, impacts within 100-feet of the Highest Observable Tide Line (HOTL) of Tidal Waterbodies require a NHDES Wetlands Permit and, under RSA 482-A:3, we are required to notify you about this permit application via certified mail.

This project proposes to construct a timber pile bridge as well as new bridge approaches. In addition, it proposes to replace the existing utility connections and connect the subject property to municipal utilities. It also proposes to remove the existing causeways and restore the tidal resource. As a result of these improvements, permanent impacts will occur on your property. We are required to provide your written consent of the aforementioned impacts to NHDES, and thus, we respectfully request that you co-sign the Wetlands Permit Application for this project. We have attached design plans to this letter for your review, and the full application materials will be available for your review shortly.

Once the permit application is filed, a copy of the complete permit application will also be available at the Town of Portsmouth Clerk's Office. Should you have any questions about this project, please do not hesitate to contact me at (603) 431-2222, anytime from 8:00 A.M. to 5:00 P.M., Monday through Friday.

Sincerely,  
**TFMoran, Inc.**

Kyra Higgins, Environmental Permitting Specialist

cc: NHDES Wetlands Bureau

TFMoran, Inc.  
 48 Constitution Drive, Bedford, NH 03110  
 T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
 170 Commerce Way–Suite 102, Portsmouth, NH 03801  
 T(603) 431-2222



Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists



**ABUTTER NOTIFICATION FOR  
 NHDES WETLANDS PERMIT APPLICATION**

**VIA CERTIFIED MAIL**

May 16<sup>th</sup>, 2023

City of Portsmouth Conservation Commission  
 1 Junkins Ave  
 Portsmouth, NH 03801

Project # 47099.01

**Re: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
 325 Little Harbor Road, Portsmouth, Tax Map: 205, Lot: 2**

Dear Abutter:

This letter is to inform you that a Wetlands Permit Application will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A, impacts within 100-feet of the Highest Observable Tide Line (HOTL) of Tidal Waterbodies require a NHDES Wetlands Permit and, under RSA 482-A:3, we are required to notify you about this permit application via certified mail.

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Sincerely,  
**TFMoran, Inc.**

Kyra Higgins, KRH

*Environmental Permitting Specialist*

cc: NHDES Wetlands Bureau

JRA/krh

TFMoran, Inc.  
 48 Constitution Drive, Bedford, NH 03110  
 T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
 170 Commerce Way–Suite 102, Portsmouth, NH 03801  
 T(603) 431-2222







7021 2720 0001 3467 9397

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<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	.60 = \$8.10
Total Postage	\$	



Sent To	LISA M. OAKES
Street and	315 LITTLE HARBOR ROAD
City, State	PORTSMOUTH, NH 03801
PS Form	Instructions

7021 2720 0001 3467 9380

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<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$	3.35
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	.60 = \$8.10
Total Postage	\$	



Sent To	CITY OF PORTSMOUTH CONSERVATION COMMISSION
Street	1 JUNKINS AVE
City	PORTSMOUTH, NH 03801
PS Form	Instructions





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Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$



Sent To	Lisa A. Grandahl Revocable
Street and Apt. No., or PO Box No.	304 Maplewood Avenue
City, State, ZIP+4®	Dorsetsmouth, VT 03801

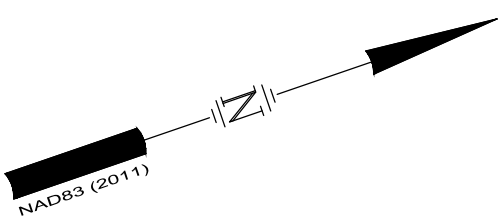
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for instructions

7021 2720 0001 3467 9359



## **SECTION 6**





May 23, 2023 - 3:01pm F:\MISC Projects\47099-01 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Road\Design\PRODUCTION DWGS BRIDGE\47099-01 - Wetland Classification.dwg

**NOTES**

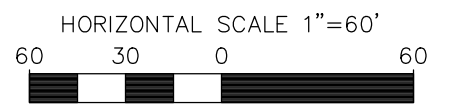
1. QUALIFIED COSTAL PROFESSIONAL, JASON R. AUBE (CWS #313), USING THE PUBLISHED DATA COMPLETED THE WETLAND FUNCTIONAL ASSESSMENT AND WETLAND CLASSIFICATION.

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48 Constitution Drive, Bedford, N.H. 03110

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This plan is not effective unless signed by a duly authorized officer of Thomas F. Moran, Inc.

WETLAND CLASSIFICATION			
PF01	PALUSTRINE FORESTED BROAD-LEAVED DECIDUOUS	E2US3M	ESTUARINE INTERTIDAL UNCONSOLIDATED SHORE MUD IRREGULARLY FLOODED
E2EM1P	ESTUARINE INTERTIDAL EMERGENT PERSISTENT IRREGULARLY FLOODED	E2RS1/2N	ESTUARINE INTERTIDAL ROCKY SHORE BEDROCK EUHALINE/EUSALINE REGULARLY FLOODED



REV	DATE	DESCRIPTION	DR	CK

**BRIDGE PERMITTING PLANS**

TAX MAP 205 LOT 2  
**WETLAND CLASSIFICATION PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

**1"=120' (11"x17")**  
**SCALE: 1"=60' (22"x34")** **MAY 24, 2023**

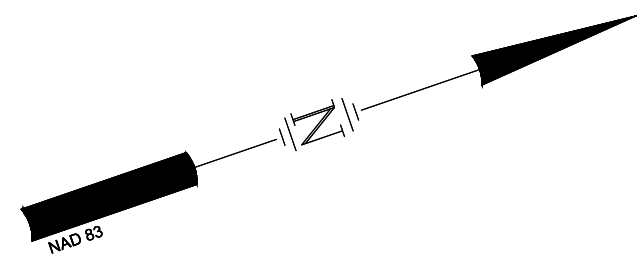
Seacoast Division

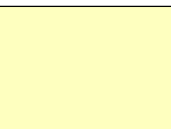




**TFM**

Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

170 Commerce Way, Suite 102  
Portsmouth, NH 03801  
Phone (603) 431-2222  
Fax (603) 431-0910  
www.tfmoran.com

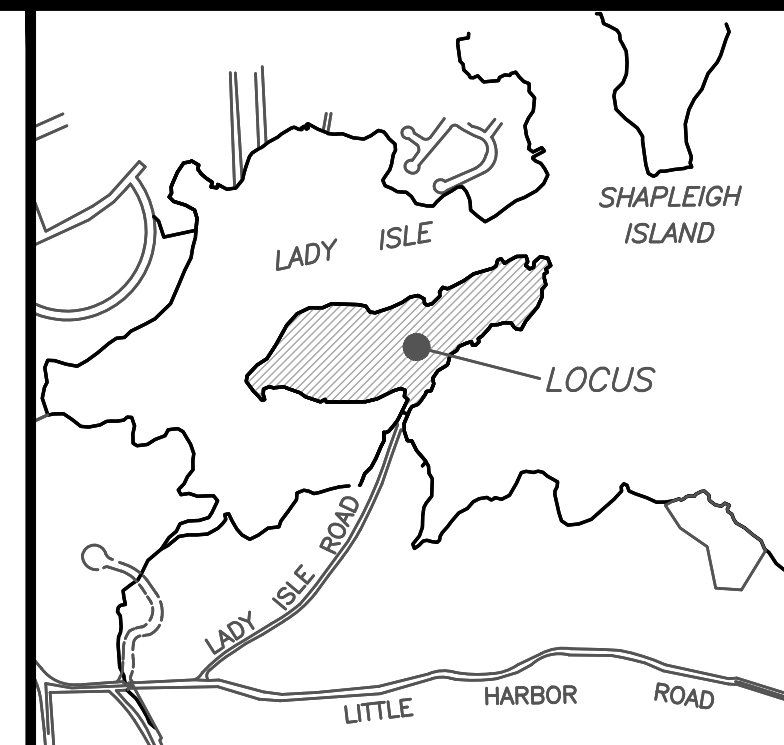
47099.01	DR JKC	FB	—	BR-01
CK JCC	CADFILE	47099-01_WETLAND CLASSIFICATION		



IMPACT AREA	
	PROPOSED PERMANENT IMPACTS WITHIN THE DEVELOPED UPLAND TIDAL BUFFER ZONE 26,298 S.F.
	PROPOSED PERMANENT IMPACTS BELOW HOTL (SEE BELOW) 39,785 S.F.
	PROPOSED PERMANENT IMPACTS FOR THE PURPOSE OF RESTORING THE TIDAL AREA 23,737 S.F.
	PROPOSED PERMANENT IMPACTS FOR THE PURPOSE OF ADDING MATERIAL TO CONSTRUCT THE NEW SOUTH BRIDGE APPROACH 12,605 S.F.
	PROPOSED SALT MARSH IMPACTS FOR THE PURPOSE OF ADDING MATERIAL TO CONSTRUCT THE NEW SOUTH BRIDGE APPROACH 3,443 S.F.

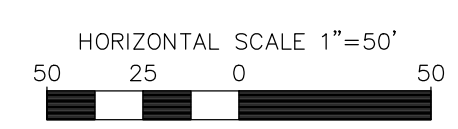
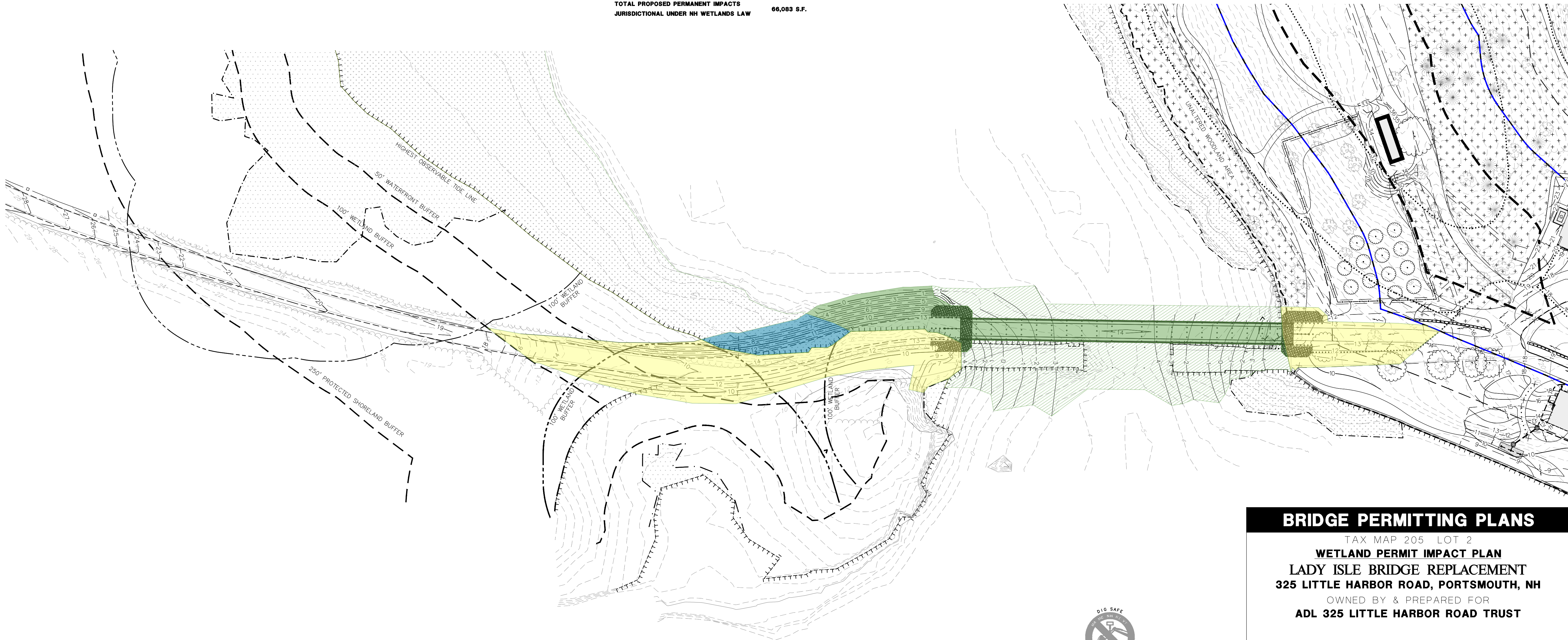
TIDAL ELEVATIONS	
MHHW	4.18
MHW	3.76
MTL	-0.32
MLW	-4.39
MLLW	-4.71

TIDAL ELEVATIONS ARE BASED ON NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) STATION 8423998, SEAVEY ISLAND, ME AND AS USED WITHIN THE TOWN OF PORTSMOUTH VULNERABILITY ASSESSMENT PREPARED BY THE ROCKINGHAM PLANNING COMMISSION, SEPTEMBER, 2015 AND INCLUDED WITH THE NHDES WETLANDS PERMIT APPLICATION. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



LOCATION PLAN

**TOTAL PROPOSED PERMANENT IMPACTS JURISDICTIONAL UNDER NH WETLANDS LAW 66,083 S.F.**



REV	DATE	DESCRIPTION	DR	CK

**BRIDGE PERMITTING PLANS**  
 TAX MAP 205 LOT 2  
**WETLAND PERMIT IMPACT PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

**1"=100' (11"x17")**  
**SCALE: 1"=50' (22"x34")** **MAY 24, 2023**

Seacoast Division  
**TFM**  
 Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists

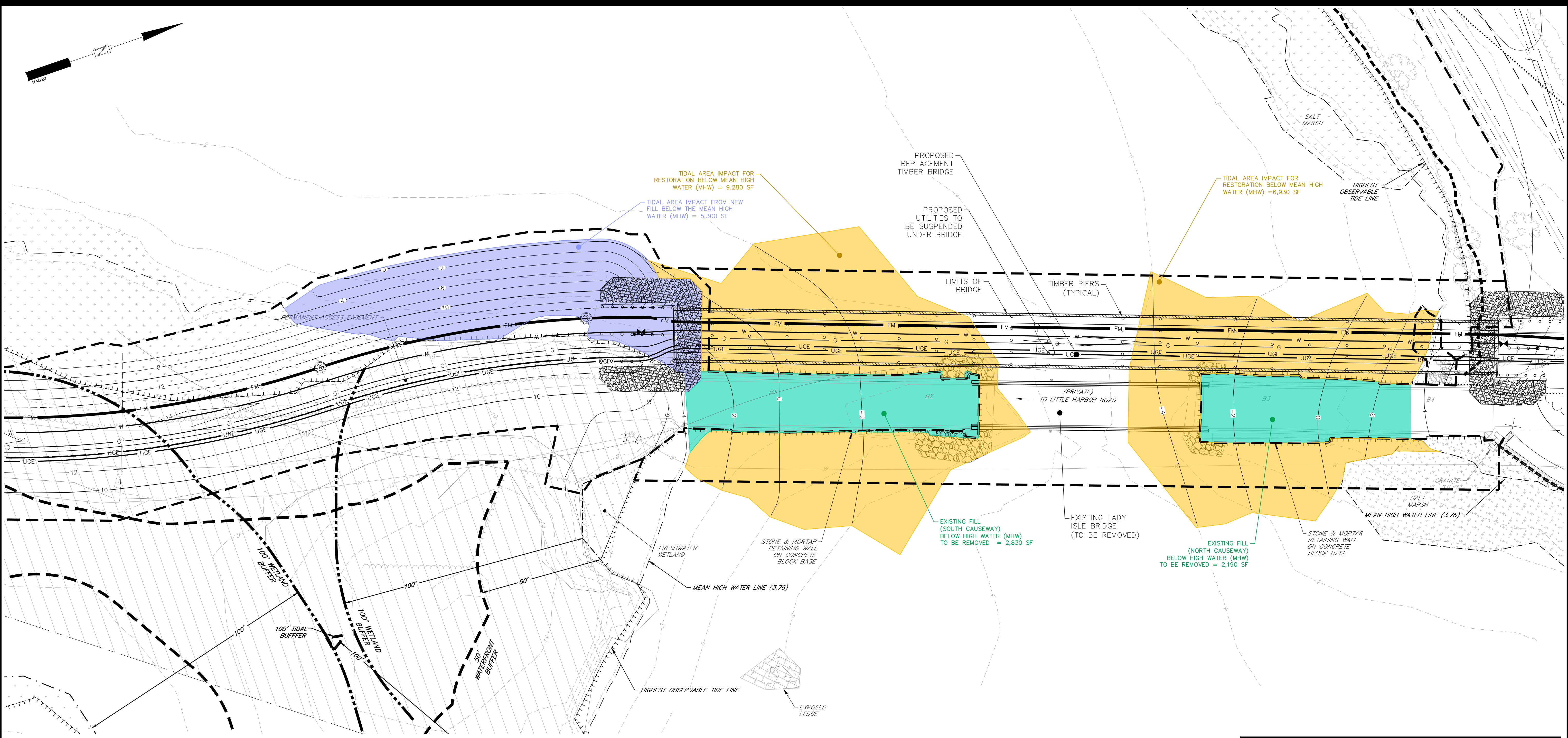
170 Commerce Way, Suite 102  
 Portsmouth, NH 03801  
 Phone (603) 431-2222  
 Fax (603) 431-0910  
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F 47099.01	DR JKC	FB	-	BR-02
CK JCC	CADFILE	47099-01_WETLAND PERMIT PLAN		

May 23, 2023 - 3:02pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Bridge\47099-01 Wetland Permit Plan.dwg

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May 23, 2023 - 3:03pm F:\MISC Projects\47099-01 - Portsmouth Rd & Gosport Rd - Little Harbor Rd\Design\PRODUCTION DWGS BRIDGE\47099-01\_Bridge Tidal Impact Plan.dwg



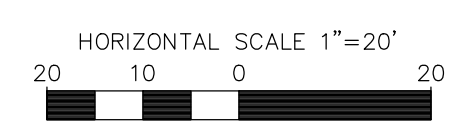
**LEGEND**

- GAS LINE
- WATER LINE
- UNDERGROUND UTILITIES LINE
- SEWER - FORCE MAINE
- SEWER MANHOLE
- SALT WATER MARSH
- FRESH WATER WETLAND
- RIPRAP ABUTMENTS
- EDGE OF WOODS
- HIGHEST OBSERVABLE TIDE LINE (HOTL)
- MEAN HIGH WATER LINE (MHW)

TIDAL AREA IMPACTS BELOW MEAN HIGH WATER (MHW)	
DESCRIPTION	AREA (SF)
NEW FILL FOR BRIDGE ABUTMENT	5,300
FILL REMOVAL OF EXISTING CAUSEWAYS	5,020
<b>NET INCREASE IN FILL BELOW MHW</b>	<b>280</b>

TIDAL AREA RESTORATION BELOW MEAN HIGH WATER (MHW)	
DESCRIPTION	AREA (SF)
REMOVAL OF EXISTING FILL (SOUTH CAUSEWAY)	2,830
REMOVAL OF EXISTING FILL (NORTH CAUSEWAY)	2,190
<b>FILL REMOVAL OF EXISTING CAUSEWAYS (TOTAL)</b>	<b>5,020</b>
GRADING TO MATCH EXISTING GRADES	16,210
<b>TOTAL RESTORATION</b>	<b>21,230</b>

NOTE:  
THE MEAN HIGH WATER (MHW) ELEVATION OF 3.76 FEET WAS DETERMINED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ASSOCIATION (NOAA) 'SEAVEY' ISLAND, MAINE TIDAL STATION 8419870 USING NAVD 88 DATUM.



REV	DATE	DESCRIPTION	DR	CK

**BRIDGE PERMITTING PLANS**

TAX MAP 205 LOT 2  
**ARMY CORP OF ENGINEERS IMPACT PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

**1"=40' (11"x17')**  
**SCALE: 1"=20' (22"x34')** **MAY 24, 2023**

Seacoast Division

Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

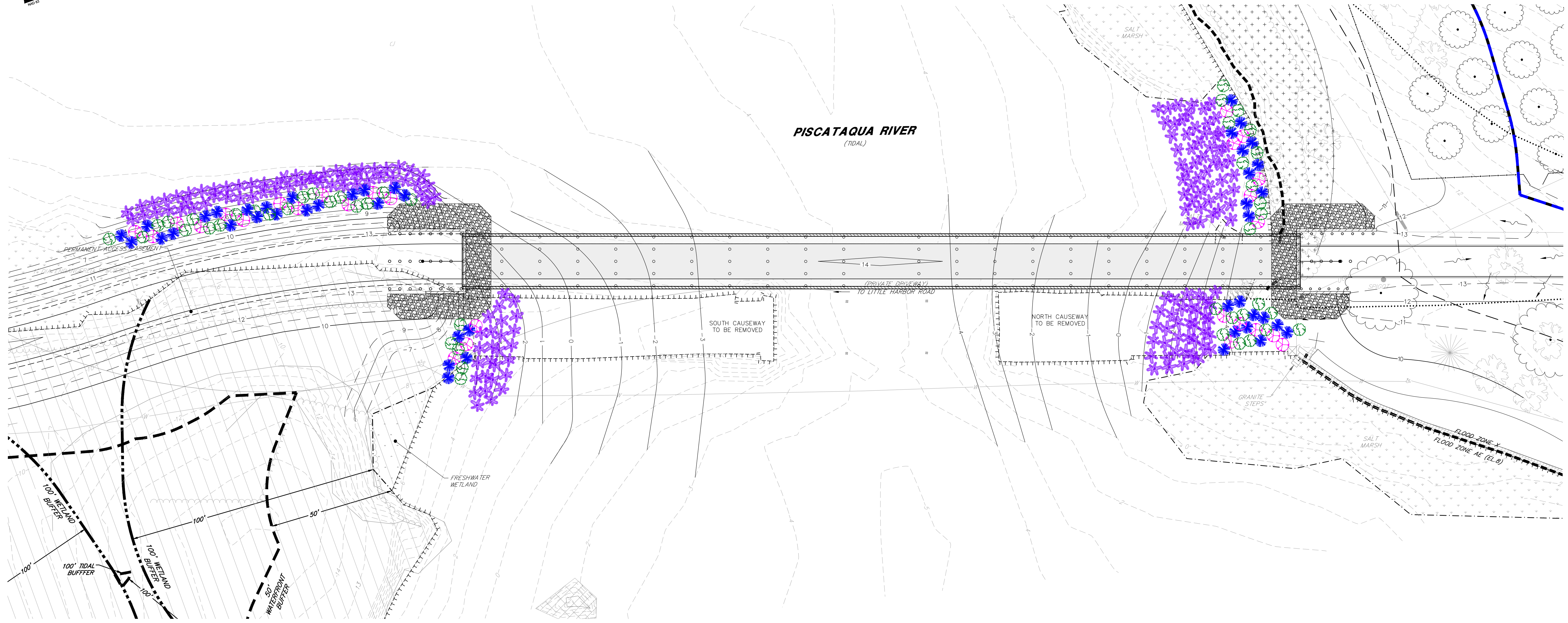
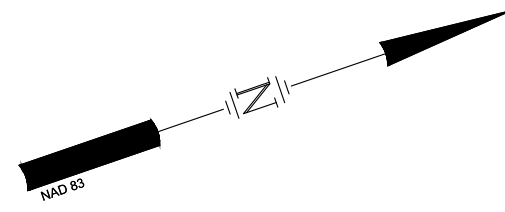
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Portsmouth, NH 03801  
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Fax (603) 431-0910  
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47099.01	DR JKC	FB	-	BR-03
	CK JCC	CADFILE	47099-01_BRIDGE TIDAL IMPACT PLAN	




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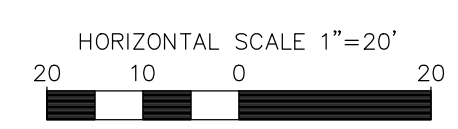
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PLANTING LEGEND - LOW MARSH		
SYMBOL	PLANT TYPE	QUANTITY
	SMOOTH CORDGRASS (SPARTINA ALTERNIFLORA)	173

PLANTING LEGEND - HIGH MARSH		
SYMBOL	PLANT TYPE	QUANTITY
	SALTMEADOW CORDGRASS (SPARTINA PATENS)	46
	SALTGRASS (DISTICHLIS SPICATA)	45
	BLACK GRASS (JUNCUS GERARDII)	27



REV	DATE	DESCRIPTION	DR	CK

**BRIDGE PERMITTING PLANS**

TAX MAP 205 LOT 2  
**TIDAL AREA RESTORATION PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

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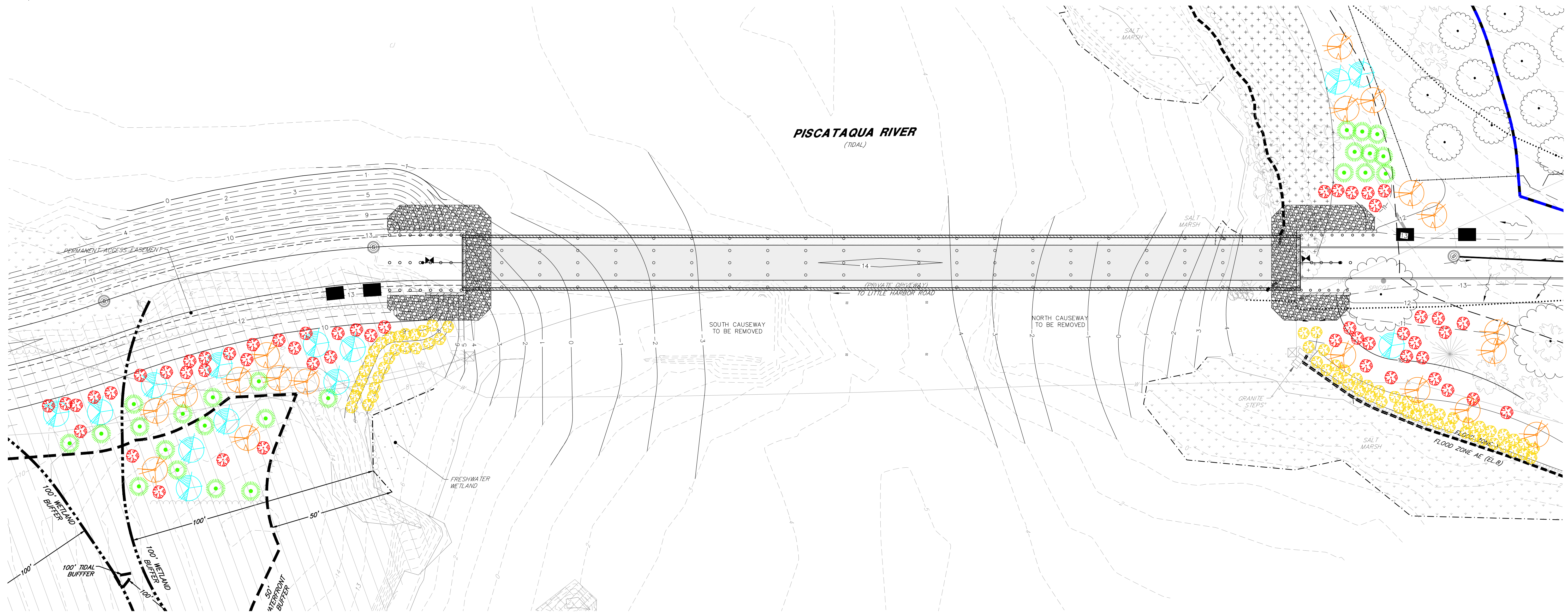
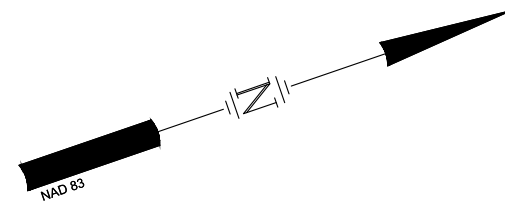
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	CK JCC	CADFILE	47099-01_BRIDGE RESTORATION PLAN						BR-04

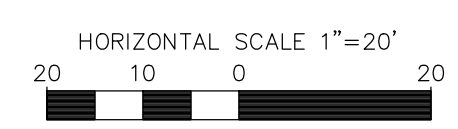
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PLANTING LEGEND			
SYMBOL	PLANT TYPE	QUANTITY	SIZE
	HIGH BUSH BLUEBERRY	69	1 GALLON
	EASTERN HEMLOCK	13	2"
	RED OAK	19	2"
	WHITE BIRCH	52	2"
	WHITE PINE	24	2"



REV	DATE	DESCRIPTION	DR	CK

### BRIDGE PERMITTING PLANS

TAX MAP 205 LOT 2  
**DEVELOPED UPLAND RESTORATION PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
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**SCALE: 1"=20' (22"x34")** **MAY 24, 2023**

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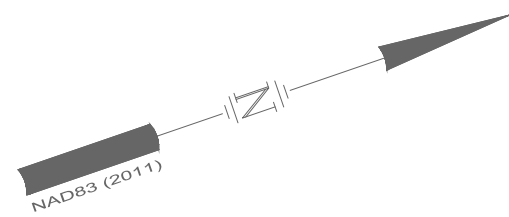
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	CK JCC	CADFILE	47099-01_BRIDGE RESTORATION PLAN

BR-05

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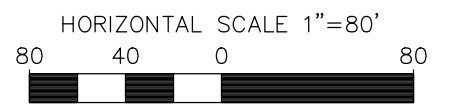
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LEGEND	
	PRIME WETLAND
	PRIME WETLAND BUFFER



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**BRIDGE PERMITTING PLANS**  
 TAX MAP 205 LOT 2  
**PRIME WETLAND BUFFER IMPACT PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
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**1"=160' (11"x17")**  
**SCALE: 1"=80' (22"x34")**

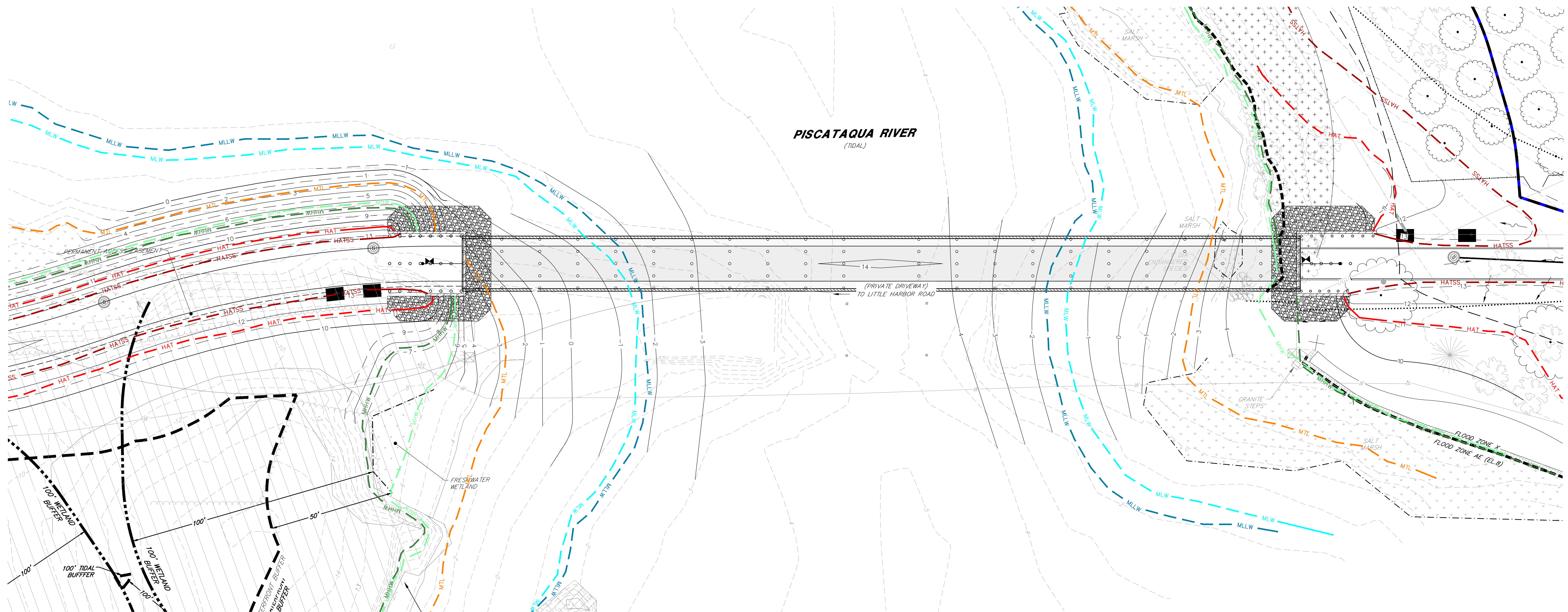
**MAY 24, 2023**

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Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists	170 Commerce Way, Suite 102 Portsmouth, NH 03801 Phone (603) 431-2222 Fax (603) 431-0910 www.tfmoran.com
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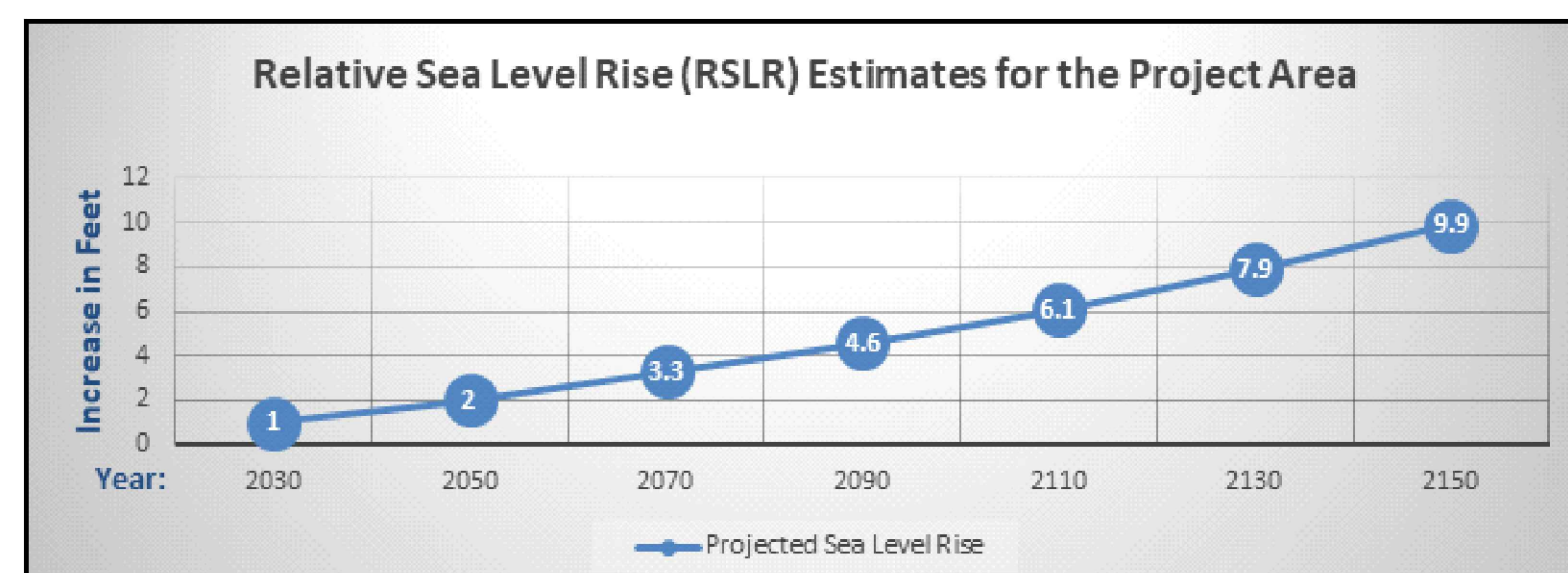
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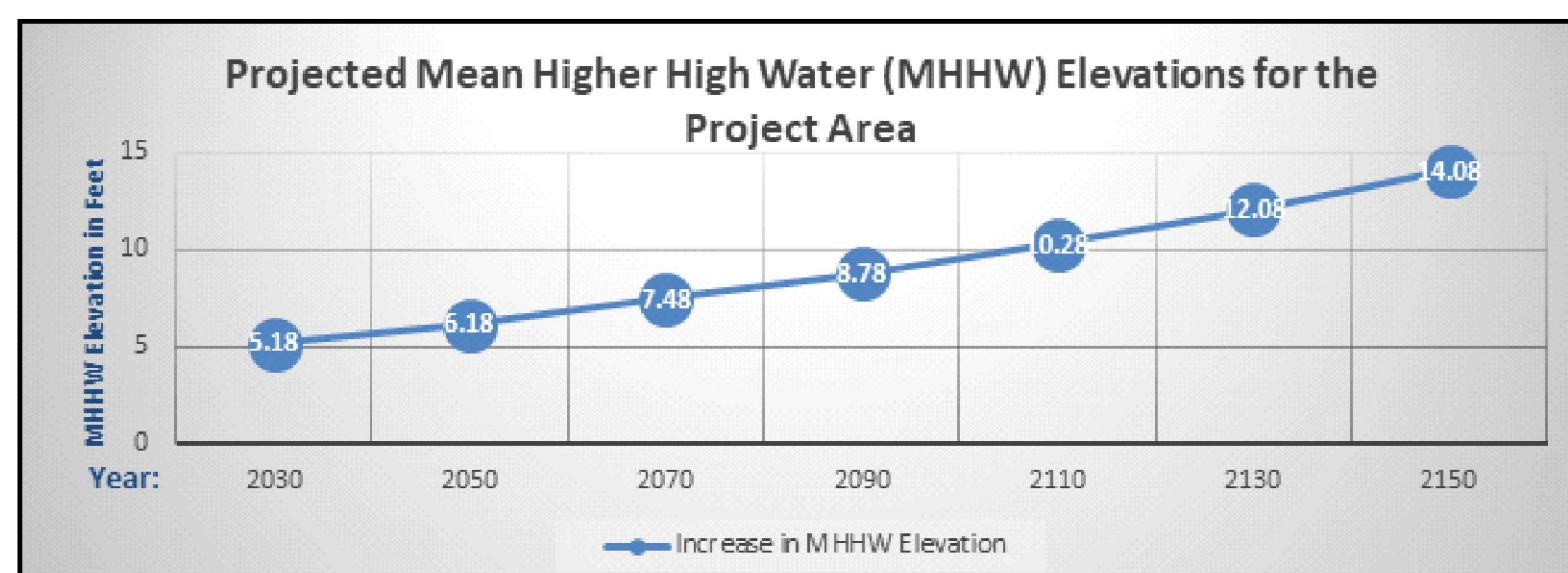


TIDAL ELEVATIONS			
	2022	2100(PROJECTED)	
HAT + SS		13.22	--- HATSS
HAT		11.22	--- HAT
MHHW	4.18	7.13	--- MHHW
MHW	3.76	6.71	--- MHW
MTL	-0.32	2.63	--- MTL
MLW	-4.39	-1.44	--- MLW
MLLW	-4.71	-1.76	--- MLLW

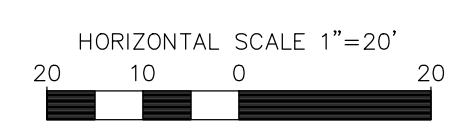
TIDAL ELEVATIONS ARE BASED ON NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) STATION 8423898, SEAVEY ISLAND, ME AND AS USED WITHIN THE TOWN OF HAMPTON VULNERABILITY ASSESSMENT PREPARED BY THE ROCKINGHAM PLANNING COMMISSION, SEPTEMBER, 2015 AND INCLUDED WITH THE NHDES WETLANDS PERMIT APPLICATION. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



INCREMENTAL RELATIVE SEA LEVEL RISE FOR THE PROJECT AREA BASED ON REPRESENTATIVE CONCENTRATION PATHWAY (RCP) 4.5 AND A LOW TOLERANCE FOR FLOOD RISK



INCREMENTAL RELATIVE SEA LEVEL RISE FOR THE PROJECT AREA BASED ON REPRESENTATIVE CONCENTRATION PATHWAY (RCP) 4.5 AND A LOW TOLERANCE FOR FLOOD RISK, AND THE CURRENT MEAN HIGHER HIGH (MHHW) ELEVATION OF 4.18 FEET DETERMINED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ASSOCIATION (NOAA) SEAVEY ISLAND, MAINE STATION 8419870 USING NAVD88 DATUM



REV	DATE	DESCRIPTION	DR	CK

**BRIDGE PERMITTING PLANS**  
 TAX MAP 205 LOT 2  
**VULNERABILITY ASSESSMENT PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

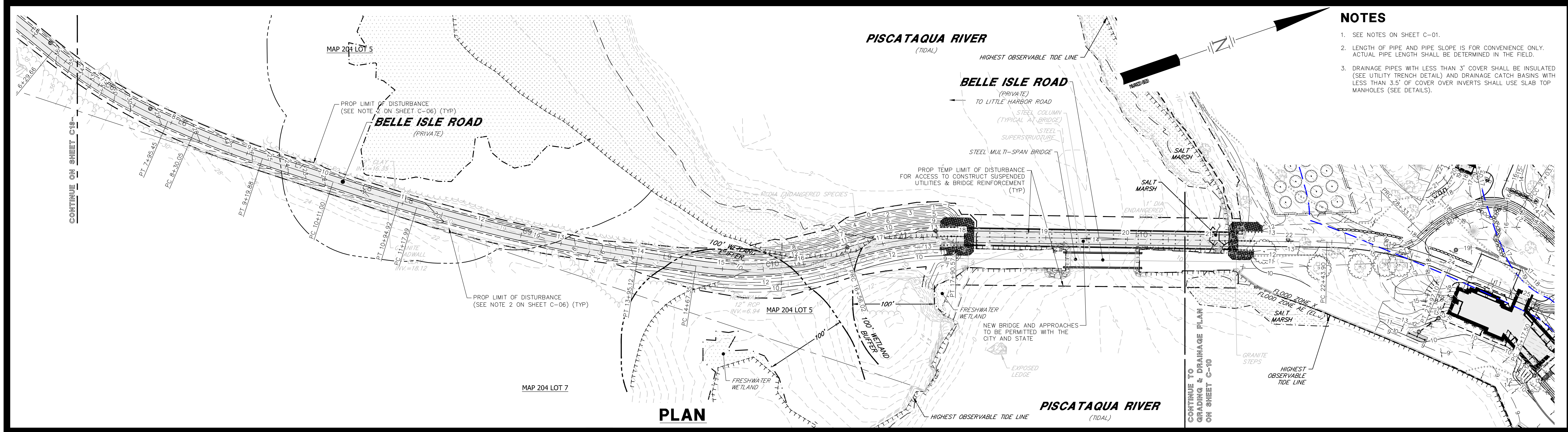
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**SCALE: 1"=20' (22"x34")** **MAY 24, 2023**

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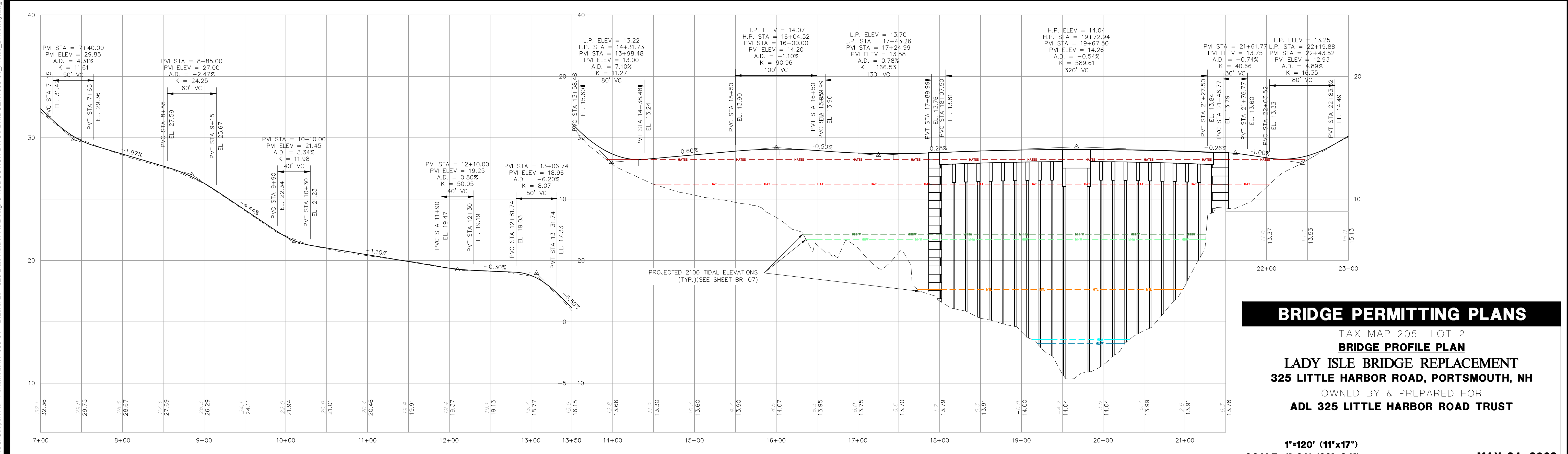
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F 47099.01 DR JKC FB  
 CK JCC CADFILE 47099-01\_VULNERABILITY BR-07



- NOTES**
- SEE NOTES ON SHEET C-01.
  - LENGTH OF PIPE AND PIPE SLOPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
  - DRAINAGE PIPES WITH LESS THAN 3' COVER SHALL BE INSULATED (SEE UTILITY TRENCH DETAIL) AND DRAINAGE CATCH BASINS WITH LESS THAN 3.5' OF COVER OVER INVERTS SHALL USE SLAB TOP MANHOLES (SEE DETAILS).

**PLAN**

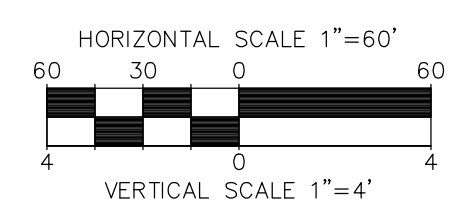


**BELLE ISLE ROAD PROFILE**

**BRIDGE PERMITTING PLANS**  
 TAX MAP 205 LOT 2  
**BRIDGE PROFILE PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
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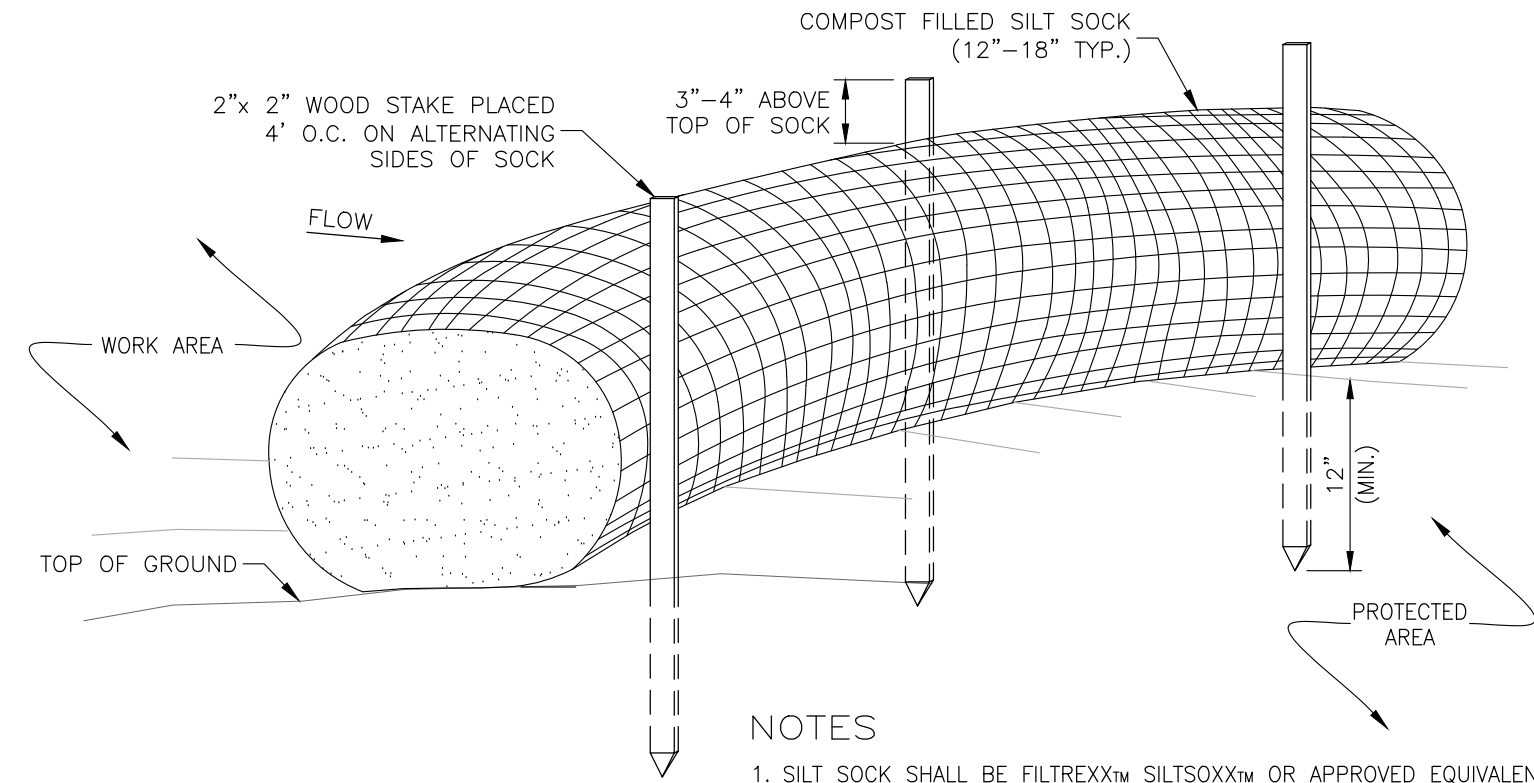
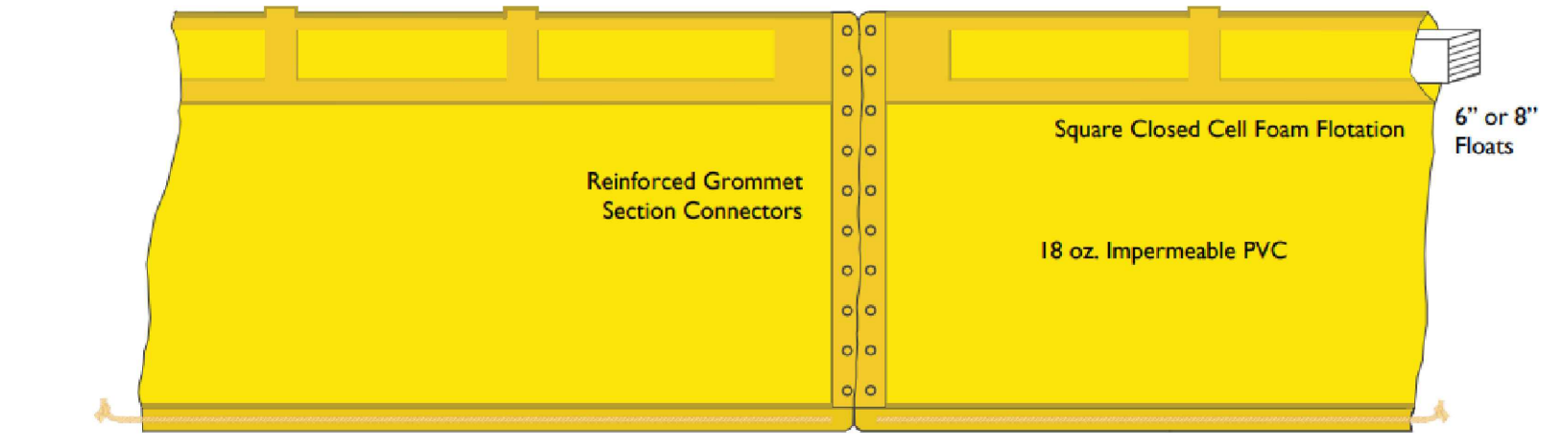
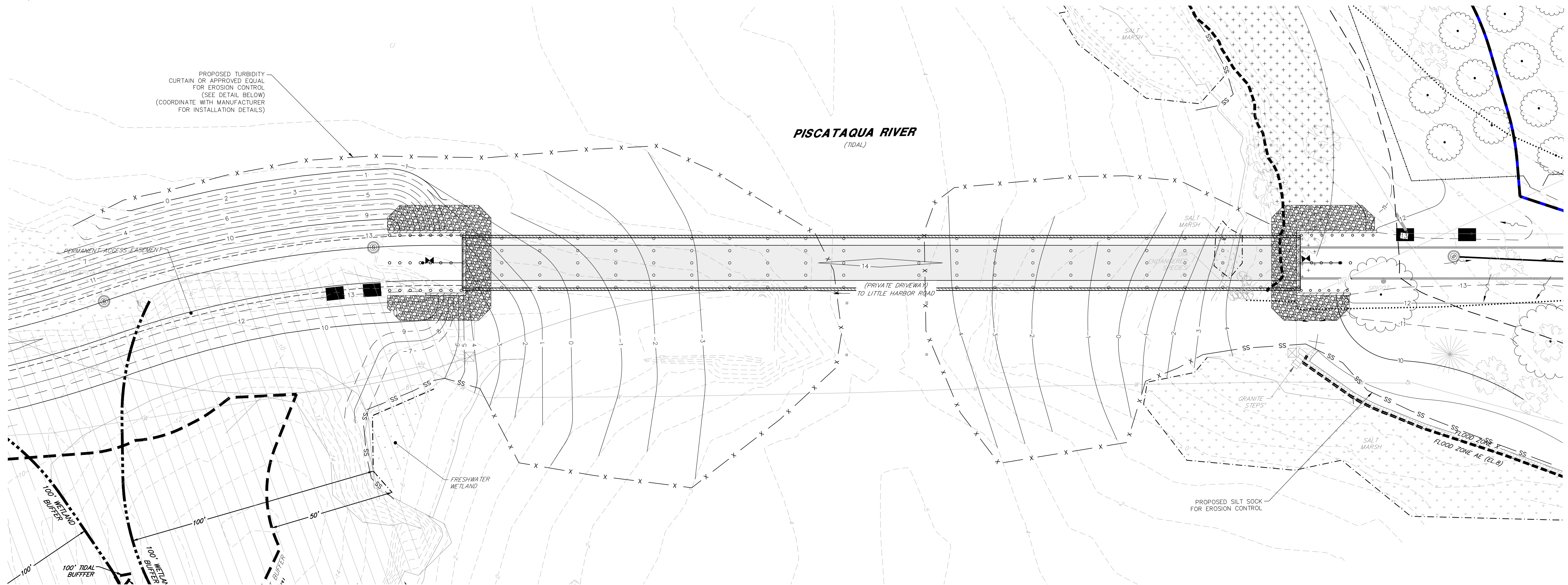
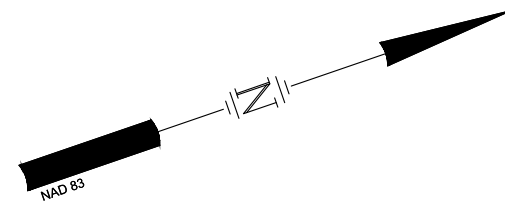
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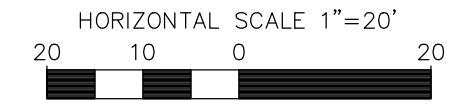
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 CK JCC CADFILE 47099-01\_PROFILE\_DRIVEWAY BR-08

May 23, 2023 - 3:09pm F:\MISC Projects\47099 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Road Bridge\47099-01\_Profile\_Driveway.dwg



- NOTES**
1. SILT SOCK SHALL BE FILTREXX<sup>TM</sup> SILT SOCK<sup>TM</sup> OR APPROVED EQUIVALENT.
  2. SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL REQUIREMENTS.
  3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.
  4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.

**SILT SOCK** NOT TO SCALE



REV	DATE	DESCRIPTION	DR	CK

**GEI WORKS** 772-646-0597  
www.GEIWorks.com  
info@geiworks.com

**Type 1 DOT Turbidity Curtain**

Scale:	Drawing:	Revision:	Date:	By:
Not to Scale			01/04/2018	MK

Drawing is for illustrative purposes only. Not to scale.  
Copyright © GEI Works 2018  
Natural forces such as current, wind, waves, and location affect your product and may require engineering, additional anchoring, and customization.

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**BRIDGE PERMITTING PLANS**  
TAX MAP 205 LOT 2  
**EROSION AND SEDIMENT CONTROL PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

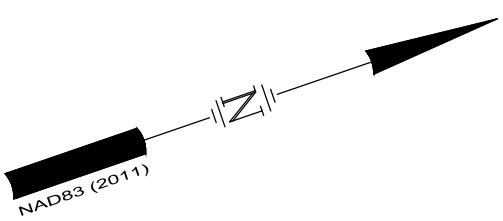
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**SCALE: 1"=20' (22"x34")** **MAY 24, 2023**

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	CK JCC	CADFILE	47099-01_EROSION	BR-09

May 23, 2023 - 3:04pm F:\MISC Projects\47099 - Portsmouth Rd - Gosport Rd - Little Harbor Rd\Design\PRODUCTION DWGS BRIDGE\47099-01\_Erosion.dwg



May 23, 2023 - 3:01pm F:\MISC Projects\47099-01 - Little Harbor Rd & Gosport Rd - Portsmouth\47099-01 - DiLorenzo - 325 Little Harbor Road\Design\PRODUCTION DWGS BRIDGE\47099-01 - Wetland Classification.dwg

**NOTES**

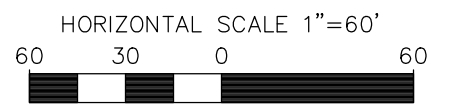
1. QUALIFIED COSTAL PROFESSIONAL, JASON R. AUBE (CWS #313), USING THE PUBLISHED DATA COMPLETED THE WETLAND FUNCTIONAL ASSESSMENT AND WETLAND CLASSIFICATION.

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WETLAND CLASSIFICATION			
PF01	PALUSTRINE FORESTED BROAD-LEAVED DECIDUOUS	E2US3M	ESTUARINE INTERTIDAL UNCONSOLIDATED SHORE MUD IRREGULARLY FLOODED
E2EM1P	ESTUARINE INTERTIDAL EMERGENT PERSISTENT IRREGULARLY FLOODED	E2RS1/2N	ESTUARINE INTERTIDAL ROCKY SHORE BEDROCK EUHALINE/EUSALINE REGULARLY FLOODED



REV	DATE	DESCRIPTION	DR	CK

**BRIDGE PERMITTING PLANS**

TAX MAP 205 LOT 2  
**WETLAND CLASSIFICATION PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
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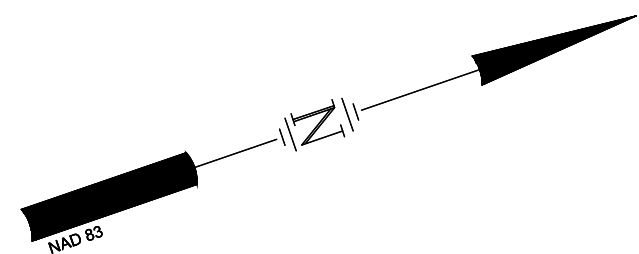
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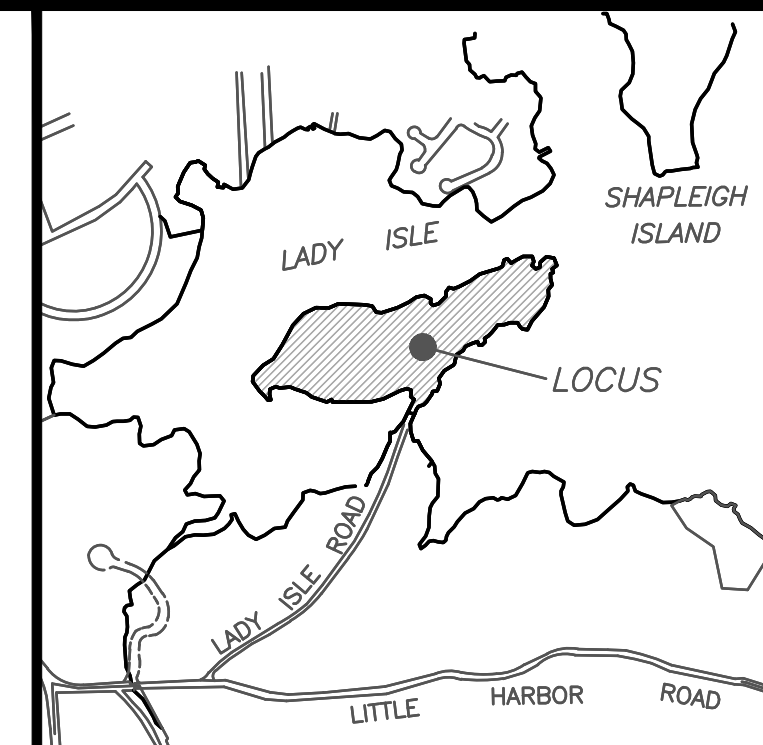
47099.01	DR JKC	FB	—	BR-01
CK JCC	CADFILE	47099-01_WETLAND CLASSIFICATION		



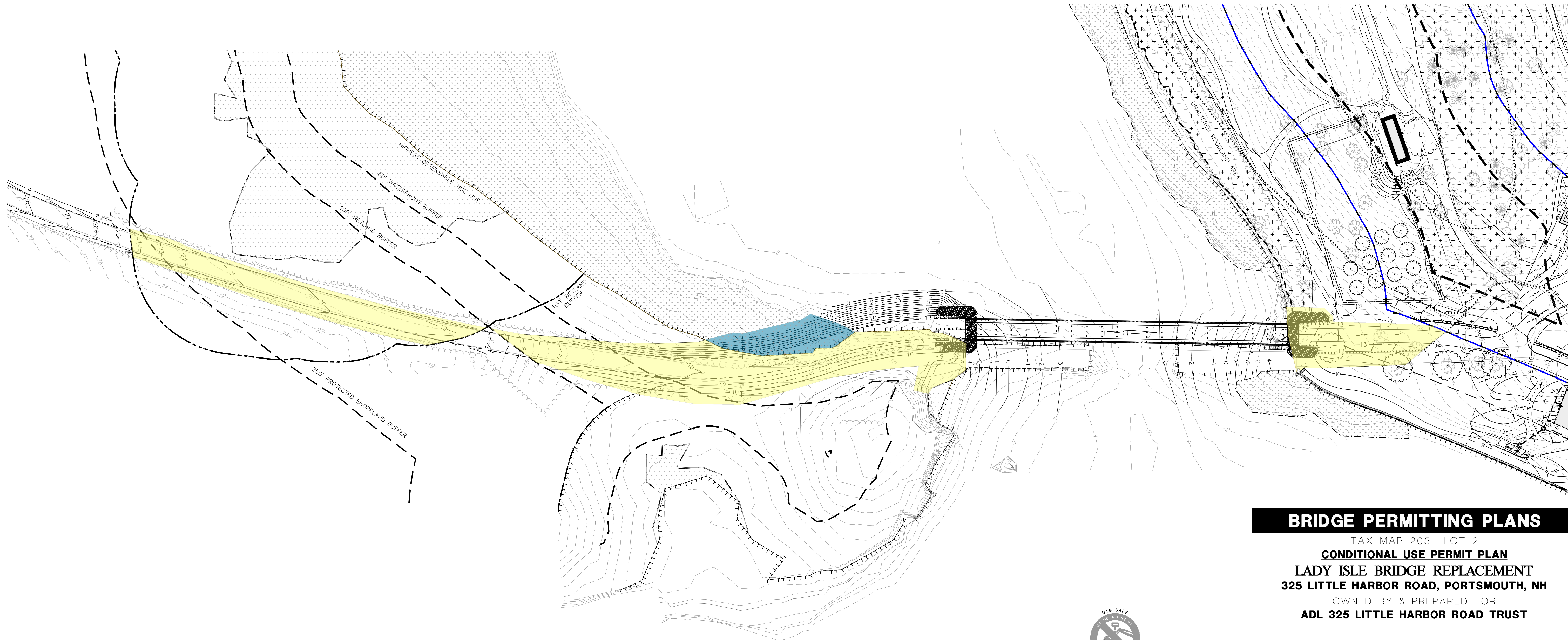
IMPACT AREA	IMPACT AREA
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> PROPOSED PERMANENT IMPACTS WITHIN THE DEVELOPED UPLAND WETLAND BUFFER ZONE	36,358 S.F.
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> PROPOSED PERMANENT IMPACTS WITHIN TIDAL WETLAND AREA	3,443 S.F.

TIDAL ELEVATIONS	
MHW	4.18
MHW	3.76
MTL	-0.32
MLW	-4.39
MLW	-4.71

TIDAL ELEVATIONS ARE BASED ON NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) STATION 8423898, SEAVEY ISLAND, ME AND AS USED WITHIN THE TOWN OF PORTSMOUTH VULNERABILITY ASSESSMENT PREPARED BY THE ROCKINGHAM PLANNING COMMISSION, SEPTEMBER, 2015 AND INCLUDED WITH THE NHDES WETLANDS PERMIT APPLICATION. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



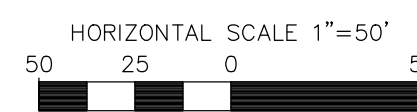
**LOCATION PLAN**



**BRIDGE PERMITTING PLANS**

TAX MAP 205 LOT 2  
**CONDITIONAL USE PERMIT PLAN**  
**LADY ISLE BRIDGE REPLACEMENT**  
**325 LITTLE HARBOR ROAD, PORTSMOUTH, NH**  
 OWNED BY & PREPARED FOR  
**ADL 325 LITTLE HARBOR ROAD TRUST**

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FILE: 47099.01	DR: JKC	FB: -	
	CK: JCC	CADFILE: 47099-01_CUP	

CUP-01

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**Conditional Use Permit Information**  
**Detached, single-story, 2-car garage**

**Location:**

380 Greenleaf Avenue  
Portsmouth, NH 03801  
603-431-4147  
inventivetechnologies@comcast.net

**Applicant/Owner:**

Tanner Family Revocable trust  
Allison and Mark Tanner trustees  
603-431-4147  
inventivetechnologies@comcast.net

**Narrative:**

This home was constructed in 1979, 15 years before wetland buffer restrictions existed. This home is occupied by the original owners. The total size of this lot is approximately 1.14 acres or 49,658.4 square feet. It is comprised of a wetland area of approximately 20,683 square feet and a buffer area of approximately 29,388 square feet. The entire buffer area on this lot has been cultivated with perennials, trees and shrubs. There is a very large oak tree under which the buffer area is mostly moss with some grass. There are a limited number of glossy buckthorn invasive species that border a perennial stream running through the property. The total size of the jurisdictional wetland of the lot and surrounding areas is approx. 815,130.7 square feet or 18.71 acres.

We would like to construct a detached, single story, 20 x 20 foot, 2 car garage on a paved area of the driveway. The total impervious area of the paved driveway is currently 1285 square feet, and extends as close as 25 feet from the wetland. The distance of the proposed garage to the closest edge of the wetland is 45 feet, 20 feet further from the wetland. The entire paved area has no slope (it's flat) and is proposed to be removed, leaving only the 400 square foot garage footprint that would be impervious. This reduces the impervious area by 885 square feet. Drainage from the garage roof will be infiltrated through a 2 foot drip edge of crushed stone around the perimeter of the garage. A 484 square foot area at the entrance to the garage will be pervious pavers.

Erosion control (silt sock or fence) will be in place during construction. No trees or shrubs will be disturbed for this garage. Some grass will be removed for the drip edge. After removal of the pavement to the north of the garage, the planting bed will be extended to the drip edge. Only organic low nitrogen/phosphate fertilizer is ever used on this property, and no pesticides/herbicides are applied. Wetland boundary markers have been installed.





Approximate size of the wetland and buffer

Size calculations courtesy of Kate Homet

# 380 Greenleaf Avenue



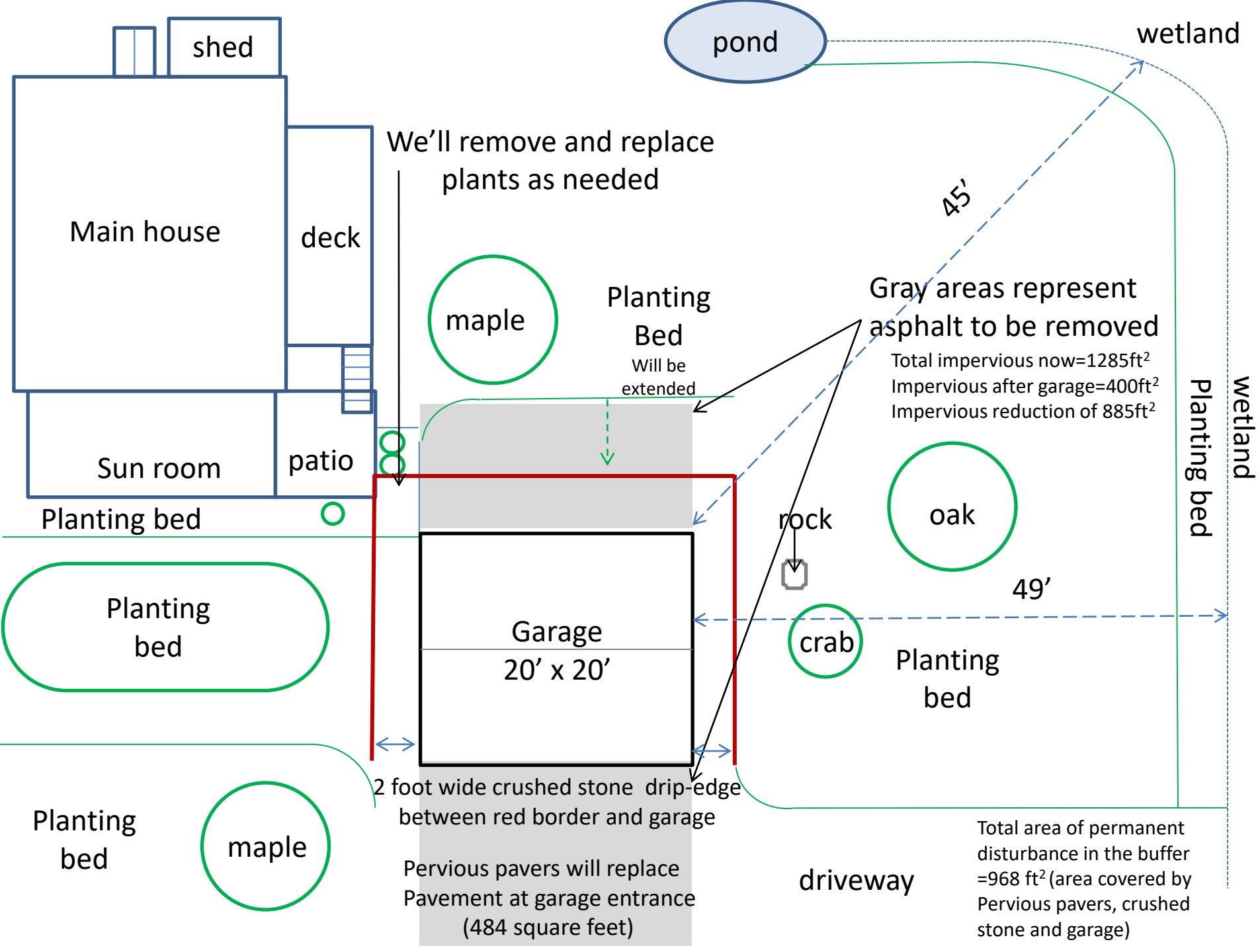
1" = 119,939.15884738601 ft



**MAP FOR REFERENCE ONLY  
NOT A LEGAL DOCUMENT**

City of Portsmouth, NH makes no claims, and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.  
 Geometry updated 09/21/2022  
 Data updated 3/9/2022

Print map scale is approximate.  
 Critical layout or measurement activities should not be done using this resource.



pond

wetland

Main house

deck

Sun room

patio

We'll remove and replace plants as needed

maple

Planting Bed

Will be extended

Gray areas represent asphalt to be removed

Total impervious now=1285ft<sup>2</sup>  
 Impervious after garage=400ft<sup>2</sup>  
 Impervious reduction of 885ft<sup>2</sup>

45'

oak

49'

rock

crab

Planting bed

Planting bed

Planting bed

Garage 20' x 20'

driveway

2 foot wide crushed stone drip-edge between red border and garage

Pervious pavers will replace Pavement at garage entrance (484 square feet)

Planting bed

maple

Total area of permanent disturbance in the buffer =968 ft<sup>2</sup> (area covered by Pervious pavers, crushed stone and garage)

Planting bed

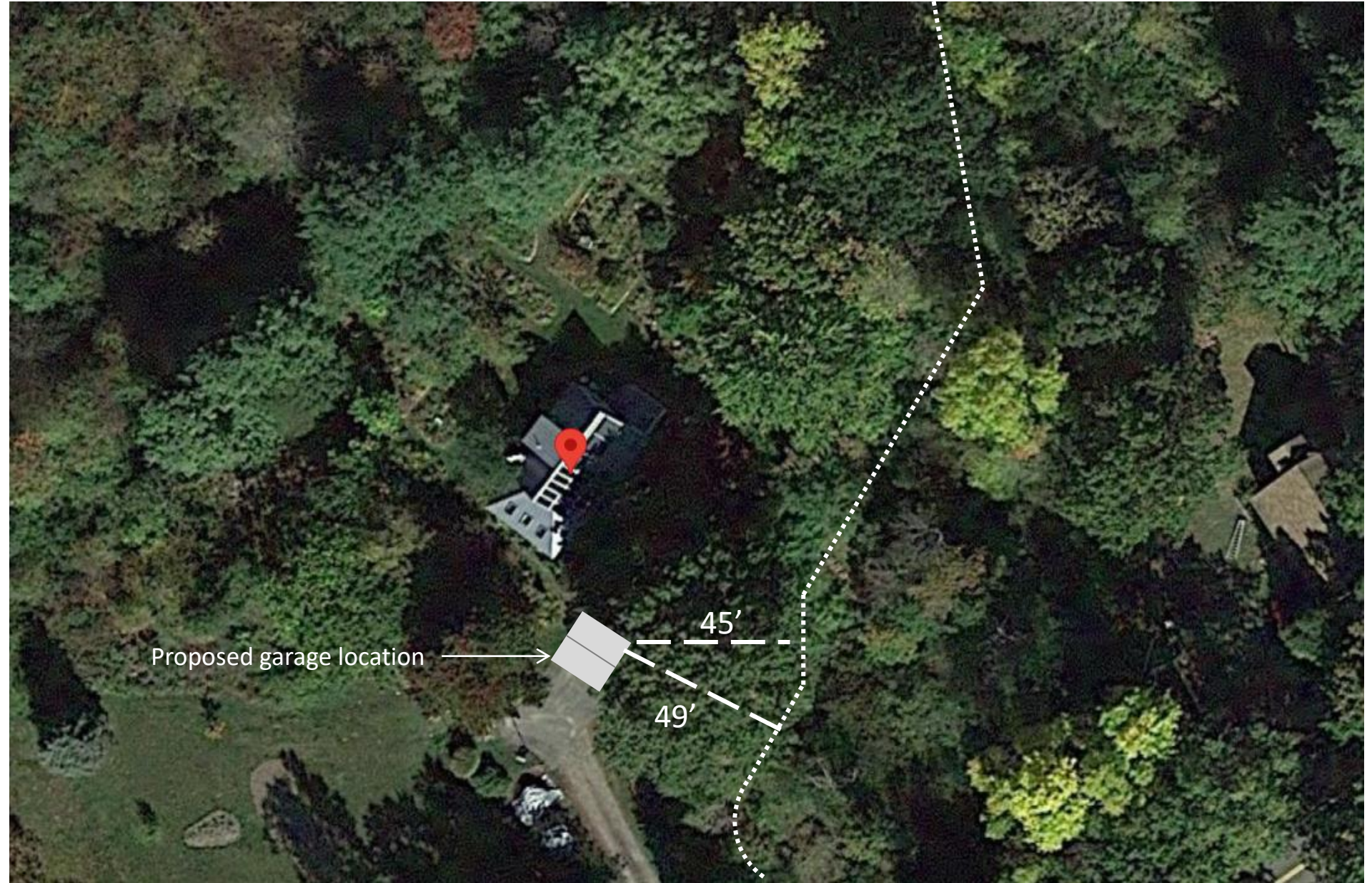
wetland

Proposed garage location



45'

49'





Front View (click to enlarge)

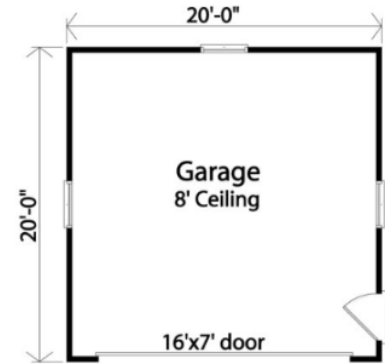


### JustGaragePlans Original

With JustGaragePlans Original Designs, you get competitive pricing and you are working directly with the designer of the plan. We have been a trusted source of quality garage plans for over 20 years.

### Plan 2413

Add to Cart  
Add to Favorites



### Plan Features

- Front-entry
- Two car

### Plan Details

Square Footage	Total: 0
Levels:	1
Width:	20-0
Depth:	20-0
Approx. Height:	14-0
Exterior Wall:	2x4
Foundation:	Footing and Foundation Wall
Roof Framing:	Truss
Roof Pitch:	5-12 Main
Ceiling Height:	1st Floor: 8-0

Order This Plan

### Common Garage Plan Questions

#### Can I modify a garage plan?

Some of the designers are willing to make changes to their plans for an additional charge. For those designers that do not make changes to their plans, we have a third party designer that will.

[Learn more about plan modification](#)

#### Do these plans include everything I need to obtain a building permit?

These plans include almost everything you need to obtain a building permit. Your general contractor will be able to assist you with the additional material that needs to be gathered and submitted for permits. If you are serving as your own general contractor we suggest you contact the Building Department in the city or county in which you wish to build. They will be able to provide you with a list of what they require in addition to the architectural drawings (blueprints).

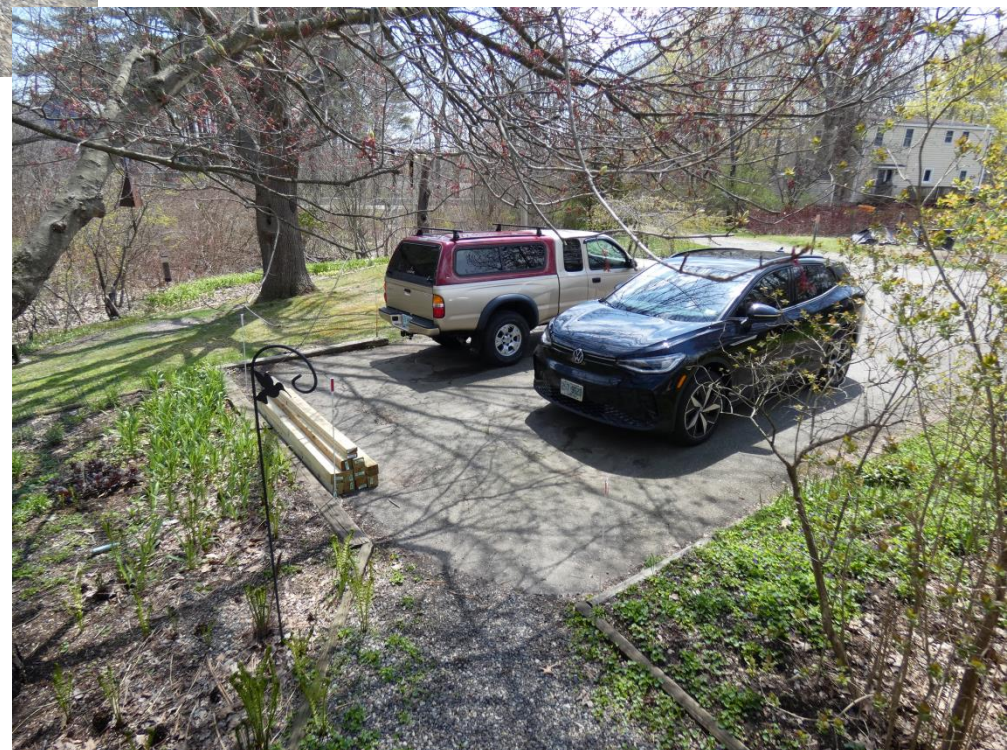
See All FAQs

This garage plan is proposed to be ordered if conditional use permit is received.



View looking north ↑

View looking south ↓



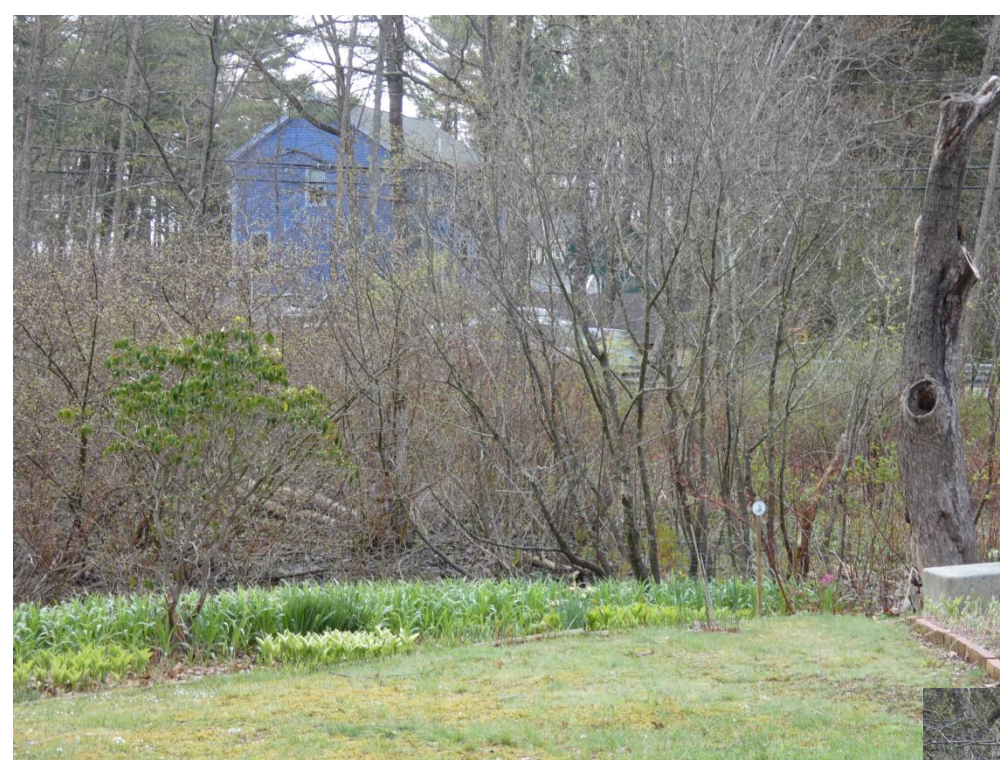


View looking west & over paved area for garage placement



View looking east toward wetland & garage placement on current pavement





View east toward wetland, planting bed & native plants ↑

View northeast toward wetland, native plants ↓





G-5088-01  
June 1, 2023

Ms. Samantha Collins, Chair  
City of Portsmouth Conservation Commission  
1 Junkins Avenue  
Portsmouth, New Hampshire 03801

Re: **Request for Conservation Commission Work Session  
505 U.S. Route 1 Bypass - Proposed Redevelopment**

Dear Chair Collins:

On behalf of Giri Hotel Management (owner/applicant) we are pleased to submit the following information to support a request for a Work Session with the Conservation Commission for the above referenced project:

- Conceptual Site Plan, dated May 2, 2023;
- Conceptual Aerial Overlay Exhibit, dated May 2, 2023;

The proposed project is located at 505 U.S. Route 1 Bypass which is identified as Map 234 Lot 5 on the City of Portsmouth Tax Maps and currently consists of a 56-room motel with associated parking. This parcel of land is located in the General Business district and is bound to the north by Coakley Road, the east by U.S. Route 1 Bypass and south & west by Hodgson Brook.

The proposed project consists of the demolition of the existing motel and the construction of a 5-story, 122-key hotel (Cambria) with first floor parking and a 1-story fast food restaurant/coffee shop with an accessory drive-through (Starbucks). The project will include associated site improvements such parking, pedestrian access, utilities, stormwater management, lighting and landscaping.

As currently conceptually designed, this project would require a Conditional Use Permit (CUP) for improvements within the 100-foot wetland buffer. In addition, the project will require relief from the Zoning Board of Adjustment (ZBA) for efforts to pull buildings and pavement closer to the roads and further away from Hodgson Brook than the existing condition. As such, we are seeking to meet with the Conservation Commission for a Work Session to obtain initial feedback on the concept in advance of formally submitting the various land-use applications that will be required for this project.

This property has unique site constraints in that it is a corner lot bound by two streets to the front and Hodgson Brook to the rear. The project team feels the relief that would be sought for this concept will be reasonable requests given the site's existing condition and the significant environmental benefit the project will provide for Hodgson Brook.

The proposed parking and buildings have been situated in a manner such that all impervious surfaces will be removed within at 25-feet of Hodgson Brook and all buildings will be removed within at 150-feet of Hodgson Brook. The project will require a CUP from the Planning Board for a reduction in the parking requirement through use of a parking demand analysis. Per the City of Portsmouth zoning, this concept would require 177 parking spaces. Utilizing data from the the Institute of Transportation Engineers (ITE) Parking Generation Manual for a preliminary parking demand analysis, the average peak parking demand for this conceptual program is 111 spaces where 115 are provided in this concept. This reduction in the parking



required will not only eliminate unnecessary impervious surface but also will be beneficial for the implementation of buffer improvements along Hodgson Brook.

Overall, this concept will reduce impervious surface within the 100-foot buffer by approximately 12,500 SF and will enhance water quality with the addition of stormwater treatment practices that do not currently exist on the site. In addition to removing pavement that goes right up to the edge of the brook, the concept identifies opportunities for buffer enhancement along the brook.

On behalf of the applicant, we respectfully request to be placed on the June 14, 2023, Conservation Commission meeting agenda for a Work Session. Based on coordination with the Planning Department, we understand the commission will be performing site walks on June 7, 2023, and have confirmed a site walk on that day for this project in advance of the June 14 meeting.

If you have any questions or need any additional information, please contact me by phone at (603) 433-8818 or by email at [pmcrimmins@tighebond.com](mailto:pmcrimmins@tighebond.com).

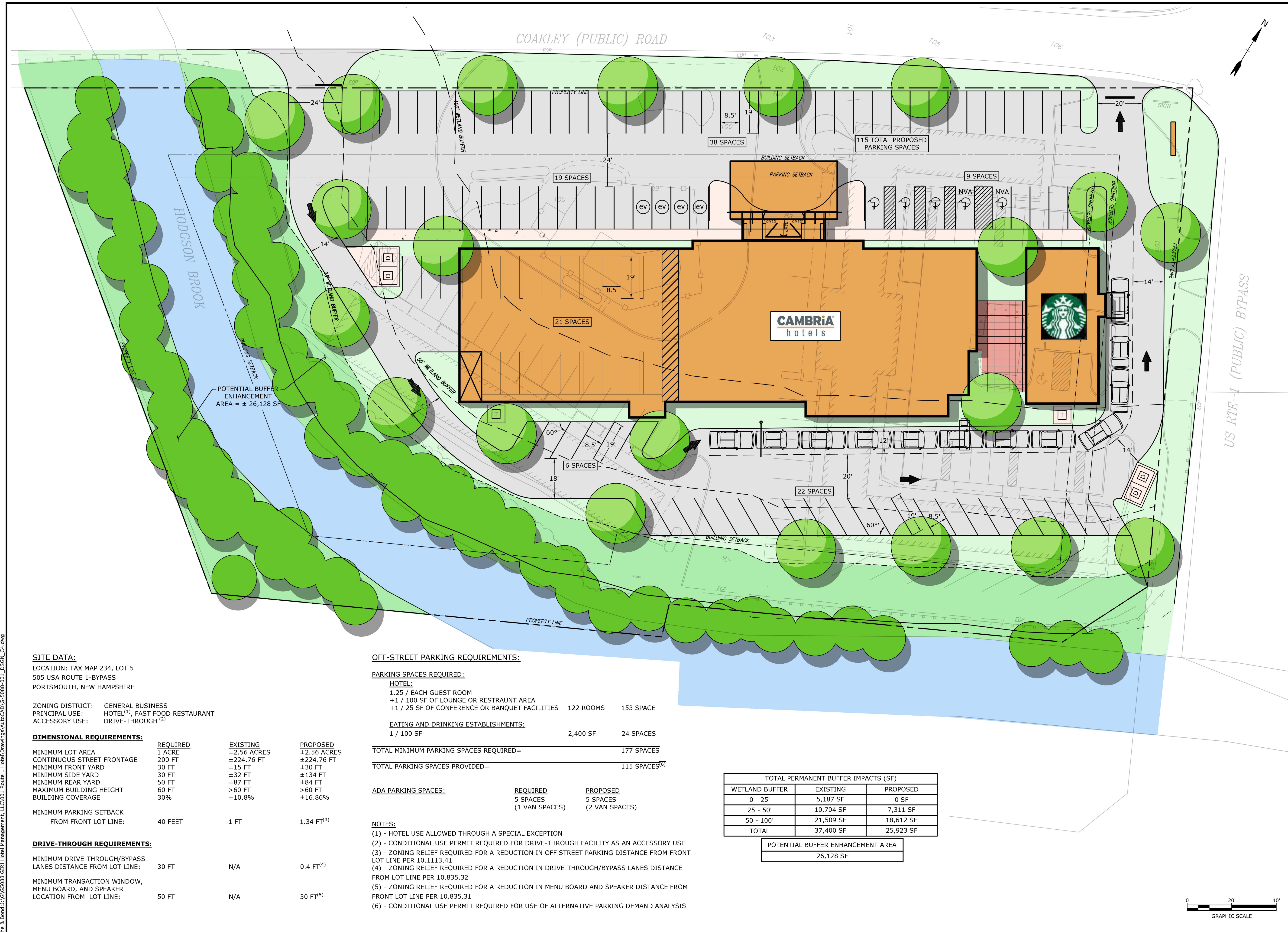
Sincerely,

**TIGHE & BOND, INC.**

A handwritten signature in blue ink, appearing to read 'P. M. Crimmins', with a horizontal line extending to the right.

Patrick M. Crimmins, PE  
Vice President

Copy: Giri Hotel Management  
Bosen & Associates



THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR PROGRESS REVIEW ONLY. IT IS NOT INTENDED FOR BIDDING OR CONSTRUCTION PURPOSES.

**CAMBRIA HOTEL**

GIRI HOTEL MANAGEMENT, LLC

505 USA ROUTE 1-BYPASS  
PORTSMOUTH, NH

**SITE DATA:**  
LOCATION: TAX MAP 234, LOT 5  
505 USA ROUTE 1-BYPASS  
PORTSMOUTH, NEW HAMPSHIRE

ZONING DISTRICT: GENERAL BUSINESS  
PRINCIPAL USE: HOTEL<sup>(1)</sup>, FAST FOOD RESTAURANT  
ACCESSORY USE: DRIVE-THROUGH<sup>(2)</sup>

**DIMENSIONAL REQUIREMENTS:**

	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	1 ACRE	±2.56 ACRES	±2.56 ACRES
CONTINUOUS STREET FRONTAGE	200 FT	±224.76 FT	±224.76 FT
MINIMUM FRONT YARD	30 FT	±15 FT	±30 FT
MINIMUM SIDE YARD	30 FT	±32 FT	±134 FT
MINIMUM REAR YARD	50 FT	±87 FT	±84 FT
MAXIMUM BUILDING HEIGHT	60 FT	>60 FT	>60 FT
BUILDING COVERAGE	30%	±10.8%	±16.86%
MINIMUM PARKING SETBACK FROM FRONT LOT LINE:	40 FEET	1 FT	1.34 FT <sup>(3)</sup>

**DRIVE-THROUGH REQUIREMENTS:**

MINIMUM DRIVE-THROUGH/BYPASS LANES DISTANCE FROM LOT LINE:	30 FT	N/A	0.4 FT <sup>(4)</sup>
MINIMUM TRANSACTION WINDOW, MENU BOARD, AND SPEAKER LOCATION FROM LOT LINE:	50 FT	N/A	30 FT <sup>(5)</sup>

**OFF-STREET PARKING REQUIREMENTS:**

**PARKING SPACES REQUIRED:**

HOTEL:	
1.25 / EACH GUEST ROOM	122 ROOMS
+1 / 100 SF OF LOUNGE OR RESTAURANT AREA	153 SPACE
+1 / 25 SF OF CONFERENCE OR BANQUET FACILITIES	
<b>TOTAL MINIMUM PARKING SPACES REQUIRED=</b>	<b>177 SPACES</b>

**EATING AND DRINKING ESTABLISHMENTS:**

1 / 100 SF	2,400 SF	24 SPACES
<b>TOTAL PARKING SPACES PROVIDED=</b>		<b>115 SPACES<sup>(6)</sup></b>

**ADA PARKING SPACES:**

REQUIRED	PROPOSED
5 SPACES (1 VAN SPACES)	5 SPACES (2 VAN SPACES)

- NOTES:**
- (1) - HOTEL USE ALLOWED THROUGH A SPECIAL EXCEPTION
  - (2) - CONDITIONAL USE PERMIT REQUIRED FOR DRIVE-THROUGH FACILITY AS AN ACCESSORY USE
  - (3) - ZONING RELIEF REQUIRED FOR A REDUCTION IN OFF STREET PARKING DISTANCE FROM FRONT LOT LINE PER 10.1113.41
  - (4) - ZONING RELIEF REQUIRED FOR A REDUCTION IN DRIVE-THROUGH/BYPASS LANES DISTANCE FROM LOT LINE PER 10.835.32
  - (5) - ZONING RELIEF REQUIRED FOR A REDUCTION IN MENU BOARD AND SPEAKER DISTANCE FROM FRONT LOT LINE PER 10.835.31
  - (6) - CONDITIONAL USE PERMIT REQUIRED FOR USE OF ALTERNATIVE PARKING DEMAND ANALYSIS

**TOTAL PERMANENT BUFFER IMPACTS (SF)**

WETLAND BUFFER	EXISTING	PROPOSED
0 - 25'	5,187 SF	0 SF
25 - 50'	10,704 SF	7,311 SF
50 - 100'	21,509 SF	18,612 SF
<b>TOTAL</b>	<b>37,400 SF</b>	<b>25,923 SF</b>

POTENTIAL BUFFER ENHANCEMENT AREA  
26,128 SF



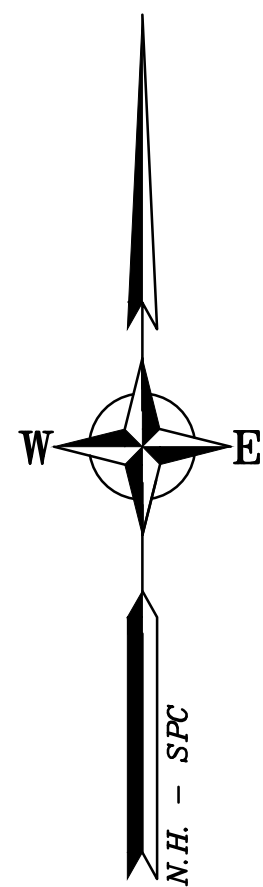
Last Saved: 5/2/2023 2:49pm By: NW/icox  
Printed On: May 02, 2023 2:49pm  
Tighe & Bond | 603.882.8282 | GIRI Hotel Management, LLC | 001 Route 1 Hotel Drawings\AutoCAD\G-5088-001\_DSGN\_C4.dwg

MARK	DATE	DESCRIPTION
PROJECT NO:	G5088-001	
DATE:	05/02/2023	
FILE:	G-5088-001_DSGN_C4.dwg	
DRAWN BY:	NHW/CJK	
DESIGNED/CHECKED BY:	NAH	
APPROVED BY:	PMC	

CONCEPTUAL SITE PLAN

SCALE: AS SHOWN





**ZONING DATA PER CITY OF PORTSMOUTH ZONING ORDINANCE  
(LAST AMENDED DECEMBER 16, 2019):**

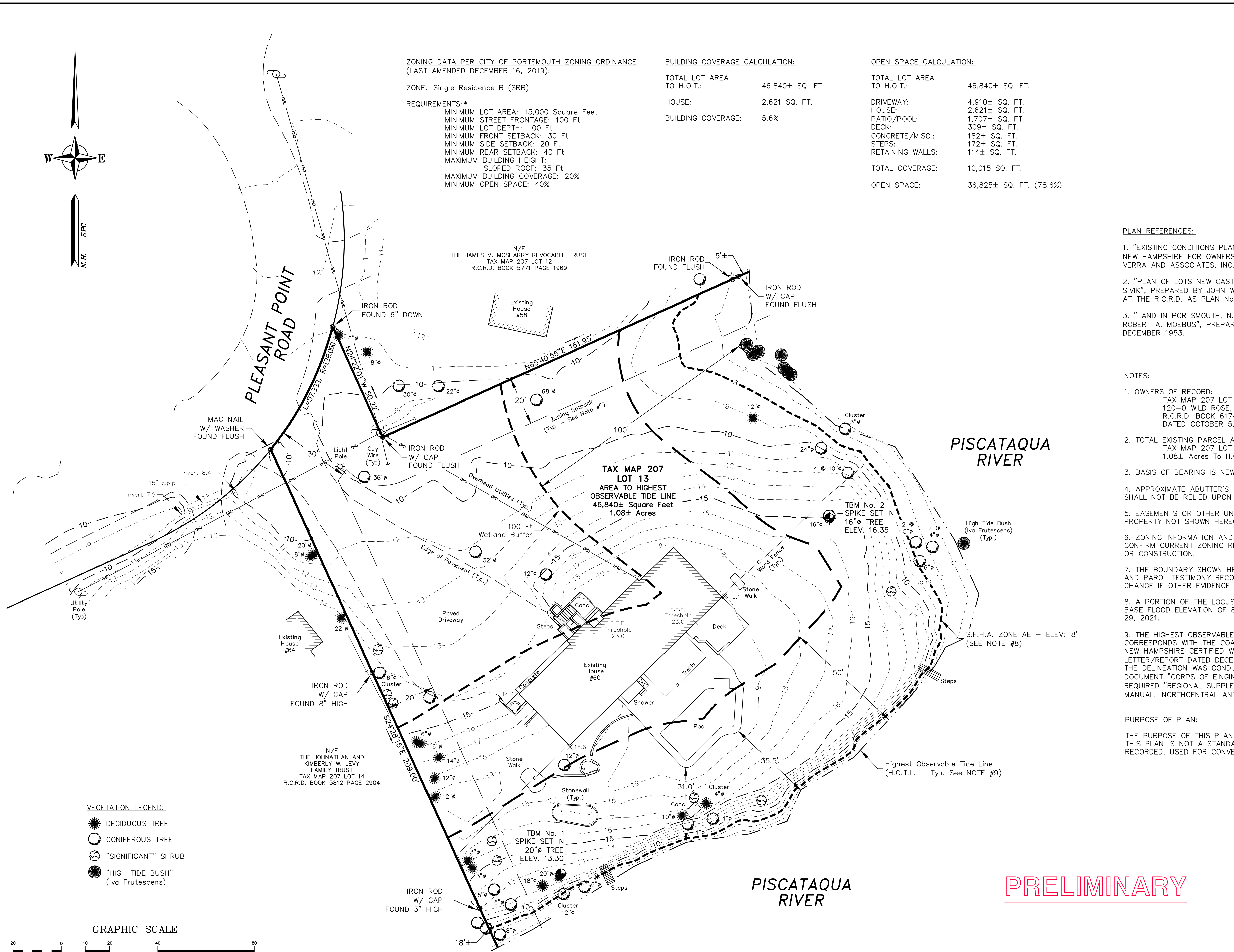
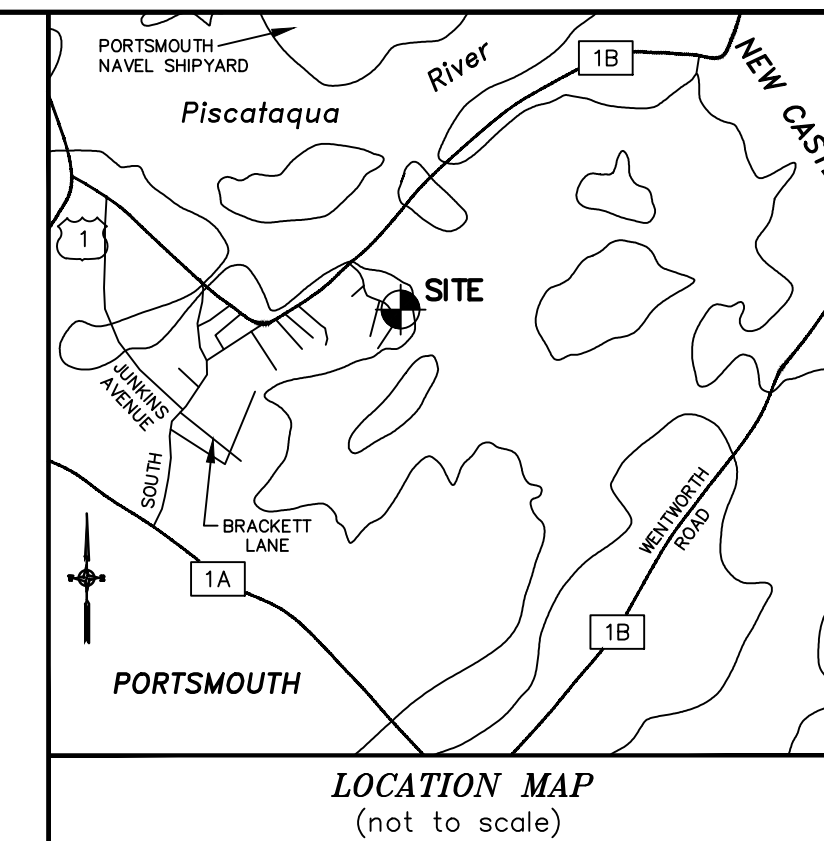
ZONE: Single Residence B (SRB)  
 REQUIREMENTS: \*  
 MINIMUM LOT AREA: 15,000 Square Feet  
 MINIMUM STREET FRONTAGE: 100 Ft  
 MINIMUM LOT DEPTH: 100 Ft  
 MINIMUM FRONT SETBACK: 30 Ft  
 MINIMUM SIDE SETBACK: 20 Ft  
 MINIMUM REAR SETBACK: 40 Ft  
 MAXIMUM BUILDING HEIGHT:  
     SLOPED ROOF: 35 Ft  
 MAXIMUM BUILDING COVERAGE: 20%  
 MINIMUM OPEN SPACE: 40%

**BUILDING COVERAGE CALCULATION:**

TOTAL LOT AREA TO H.O.T.: 46,840± SQ. FT.  
 HOUSE: 2,621 SQ. FT.  
 BUILDING COVERAGE: 5.6%

**OPEN SPACE CALCULATION:**

TOTAL LOT AREA TO H.O.T.: 46,840± SQ. FT.  
 DRIVEWAY: 4,910± SQ. FT.  
 HOUSE: 2,621± SQ. FT.  
 PATIO/POOL: 1,707± SQ. FT.  
 DECK: 309± SQ. FT.  
 CONCRETE/MISC.: 182± SQ. FT.  
 STEPS: 172± SQ. FT.  
 RETAINING WALLS: 114± SQ. FT.  
 TOTAL COVERAGE: 10,015 SQ. FT.  
 OPEN SPACE: 36,825± SQ. FT. (78.6%)



**PLAN REFERENCES:**

- "EXISTING CONDITIONS PLAN PLEASANT POINT DRIVE ASSESSOR'S PARCEL 207-014 PORTSMOUTH, NEW HAMPSHIRE FOR OWNERS JOAN S. WALDRON KIMBERLY WALDRON LEVY", PREPARED BY JAMES VERRA AND ASSOCIATES, INC., DATED JULY 11, 2005.
- "PLAN OF LOTS NEW CASTLE AVENUE PORTSMOUTH, N.H. FOR ROBERT A. MOEBUS & HENRY C. SIVK", PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, DATED OCTOBER 1952, AND RECORDED AT THE R.C.R.D. AS PLAN No. 02160-B.
- "LAND IN PORTSMOUTH, N.H. ROBERT A. MOEBUS TO HENRY C. SIVK AND HENRY C. SIVK TO ROBERT A. MOEBUS", PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, DATED JUNE 1951, REVISED DECEMBER 1953.

**NOTES:**

- OWNERS OF RECORD:  
TAX MAP 207 LOT 13  
120-0 WILD ROSE, LLC  
R.C.R.D. BOOK 6174 PAGE 1450  
DATED OCTOBER 5, 2020
- TOTAL EXISTING PARCEL AREA:  
TAX MAP 207 LOT 13  
1.08± Acres To H.O.T.L.
- BASIS OF BEARING IS NEW HAMPSHIRE SPC.
- APPROXIMATE ABUTTER'S LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE RELIED UPON AS BOUNDARY INFORMATION.
- EASEMENTS OR OTHER UNWRITTEN RIGHTS MAY EXIST THAT ENCUMBER OR BENEFIT THE PROPERTY NOT SHOWN HEREON.
- ZONING INFORMATION AND SETBACKS SHOWN HEREON ARE FOR REFERENCE PURPOSES. CONFIRM CURRENT ZONING REQUIREMENTS WITH THE CITY OF PORTSMOUTH PRIOR TO DESIGN OR CONSTRUCTION.
- THE BOUNDARY SHOWN HEREON IS DETERMINED FROM WRITTEN RECORDS, FIELD EVIDENCE AND PAROL TESTIMONY RECOVERED AT THE TIME OF SURVEY AND MAY BE SUBJECT TO CHANGE IF OTHER EVIDENCE BECOMES AVAILABLE.
- A PORTION OF THE LOCUS PARCEL FALLS WITHIN SPECIAL FLOOD HAZARD AREA AE, WITH A BASE FLOOD ELEVATION OF 8 FT. PER FEMA FIRM MAP No. 33015C0278F, REVISED JANUARY 29, 2021.
- THE HIGHEST OBSERVABLE TIDE LINE (HOTL) OF THE PISCATAQUA RIVER, WHICH CORRESPONDS WITH THE COASTAL WETLAND BOUNDARY, WAS DELINEATED BY JOSEPH W. NOEL, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #086 ON DECEMBER 11, 2020. REFER TO LETTER/REPORT DATED DECEMBER 15, 2020 FOR MORE INFORMATION. THE DELINEATION WAS CONDUCTED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS DOCUMENT "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL", (1987), ALONG WITH THE REQUIRED "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION", (VERSION 2, JANUARY 2021).

**PURPOSE OF PLAN:**

THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS FOR DESIGN PURPOSES. THIS PLAN IS NOT A STANDARD BOUNDARY SURVEY AND IS NOT INTENDED TO BE RECORDED, USED FOR CONVEYANCE, OR ANY OTHER TITLE PURPOSE.

**VEGETATION LEGEND:**

- DECIDUOUS TREE
- CONIFEROUS TREE
- "SIGNIFICANT" SHRUB
- "HIGH TIDE BUSH" (Iva Frutescens)

**GRAPHIC SCALE**



( IN FEET )  
1 inch = 20 ft.  
VERTICAL DATUM - NGVD29

**PRELIMINARY**

**EXISTING CONDITIONS PLAN**  
FOR PROPERTY AT  
**60 Pleasant Point Drive**  
Portsmouth, Rockingham County, New Hampshire  
OWNED BY  
**120-0 Wild Rose Lane, LLC**  
c/o Altus Engineering, Att. Erik Saari, V.P.  
133 Court Street, Portsmouth, New Hampshire 03801

North  
  
**EASTERLY**  
**SURVEYING, Inc.**  
SURVEYORS IN N.H. & MAINE 191 STATE ROAD, SUITE #1  
(207) 439-6333 KITTERY, MAINE 03904

SCALE: 1" = 20'	PROJECT NO. 20770	DATE: 02/04/21	SHEET: 1 OF 1	DRAWN BY: A.H.P.	CHECKED BY: P.L.A.
DRAWING No: 20770 EXISTING CONDITIONS					
FIELD BOOK No: "Portsmouth #17"					
<b>Tax Map 207 Lot 13</b>					

REV.	DATE	STATUS	BY	CHKD	APPD.
A	4/2/21	ADDED ADDITIONAL TREES & ABUTTER BUILDINGS	A.H.P.	P.L.A.	P.L.A.



# PROGRESS

# PROGRESS

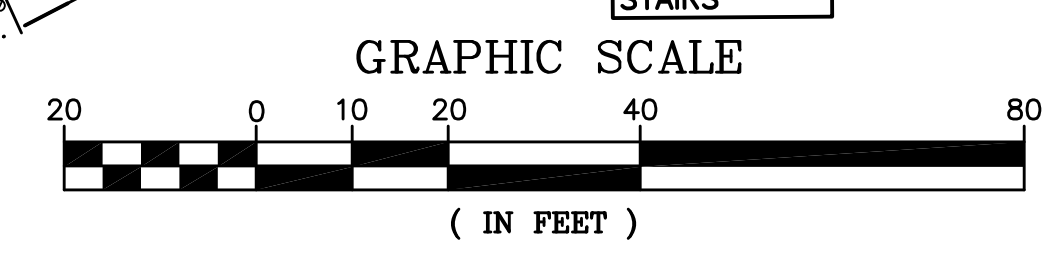
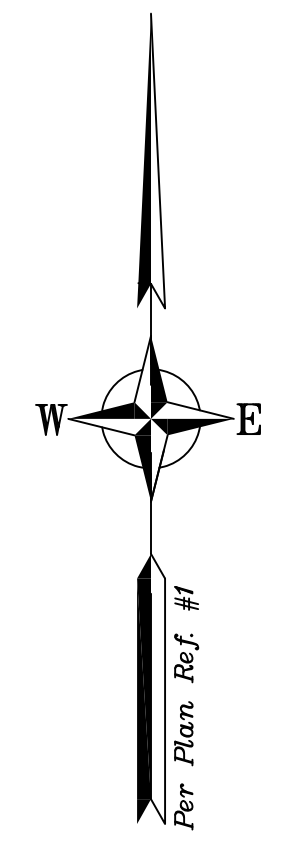
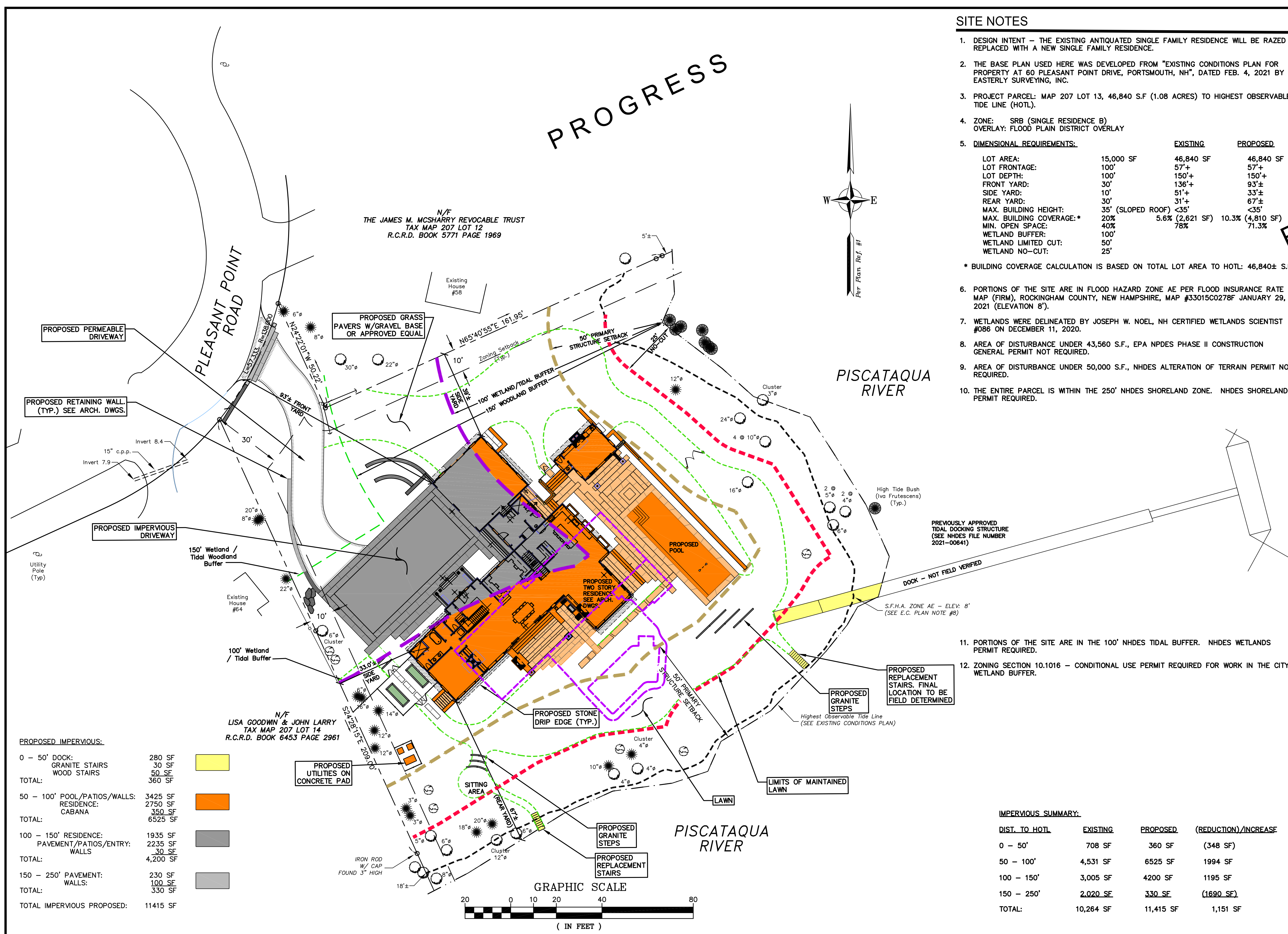
### SITE NOTES

- DESIGN INTENT – THE EXISTING ANTIQUATED SINGLE FAMILY RESIDENCE WILL BE RAZED & REPLACED WITH A NEW SINGLE FAMILY RESIDENCE.
- THE BASE PLAN USED HERE WAS DEVELOPED FROM "EXISTING CONDITIONS PLAN FOR PROPERTY AT 60 PLEASANT POINT DRIVE, PORTSMOUTH, NH", DATED FEB. 4, 2021 BY EASTERLY SURVEYING, INC.
- PROJECT PARCEL: MAP 207 LOT 13, 46,840 S.F (1.08 ACRES) TO HIGHEST OBSERVABLE TIDE LINE (HOTL).
- ZONE: SRB (SINGLE RESIDENCE B)  
OVERLAY: FLOOD PLAIN DISTRICT OVERLAY
- DIMENSIONAL REQUIREMENTS:
 

	EXISTING	PROPOSED
LOT AREA:	15,000 SF	46,840 SF
LOT FRONTAGE:	100'	57'+
LOT DEPTH:	100'	150'+
FRONT YARD:	30'	136'+
SIDE YARD:	10'	51'+
REAR YARD:	30'	31'+
MAX. BUILDING HEIGHT:	35' (SLOPED ROOF)	<35'
MAX. BUILDING COVERAGE:*	20%	5.6% (2,621 SF)
MIN. OPEN SPACE:	40%	78%
WETLAND BUFFER:	100'	10.3% (4,810 SF)
WETLAND LIMITED CUT:	50'	71.3%
WETLAND NO-CUT:	25'	

\* BUILDING COVERAGE CALCULATION IS BASED ON TOTAL LOT AREA TO HOTL: 46,840± S.F.
- PORTIONS OF THE SITE ARE IN FLOOD HAZARD ZONE AE PER FLOOD INSURANCE RATE MAP (FIRM), ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP #33015C0278F JANUARY 29, 2021 (ELEVATION 8').
- WETLANDS WERE DELINEATED BY JOSEPH W. NOEL, NH CERTIFIED WETLANDS SCIENTIST #086 ON DECEMBER 11, 2020.
- AREA OF DISTURBANCE UNDER 43,560 S.F., EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT NOT REQUIRED.
- AREA OF DISTURBANCE UNDER 50,000 S.F., NHDES ALTERATION OF TERRAIN PERMIT NOT REQUIRED.
- THE ENTIRE PARCEL IS WITHIN THE 250' NHDES SHORELAND ZONE. NHDES SHORELAND PERMIT REQUIRED.

- PORTIONS OF THE SITE ARE IN THE 100' NHDES TIDAL BUFFER. NHDES WETLANDS PERMIT REQUIRED.
- ZONING SECTION 10.1016 – CONDITIONAL USE PERMIT REQUIRED FOR WORK IN THE CITY WETLAND BUFFER.



**PROPOSED IMPERVIOUS:**

0 - 50' DOCK:	280 SF
GRANITE STAIRS	30 SF
WOOD STAIRS	50 SF
TOTAL:	360 SF
50 - 100' POOL/PATIOS/WALLS:	3425 SF
RESIDENCE:	2750 SF
CABANA	350 SF
TOTAL:	6525 SF
100 - 150' RESIDENCE:	1935 SF
PAVEMENT/PATIOS/ENTRY:	2235 SF
WALLS	30 SF
TOTAL:	4,200 SF
150 - 250' PAVEMENT:	230 SF
WALLS:	100 SF
TOTAL:	330 SF
TOTAL IMPERVIOUS PROPOSED:	11415 SF

**IMPERVIOUS SUMMARY:**

DIST. TO HOTL	EXISTING	PROPOSED	(REDUCTION)/INCREASE
0 - 50'	708 SF	360 SF	(348 SF)
50 - 100'	4,531 SF	6525 SF	1994 SF
100 - 150'	3,005 SF	4200 SF	1195 SF
150 - 250'	2,020 SF	330 SF	(1690 SF)
TOTAL:	10,264 SF	11,415 SF	1,151 SF

NOT FOR CONSTRUCTION

ISSUED FOR: REVIEW

ISSUE DATE: JUNE 6, 2023

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EDW	06/06/23

DRAWN BY: RLH

APPROVED BY: EDW

DRAWING FILE: 5138SITE-2023.dwg

SCALE:  
(22"x34") 1" = 20'  
(11"x17") 1" = 40'

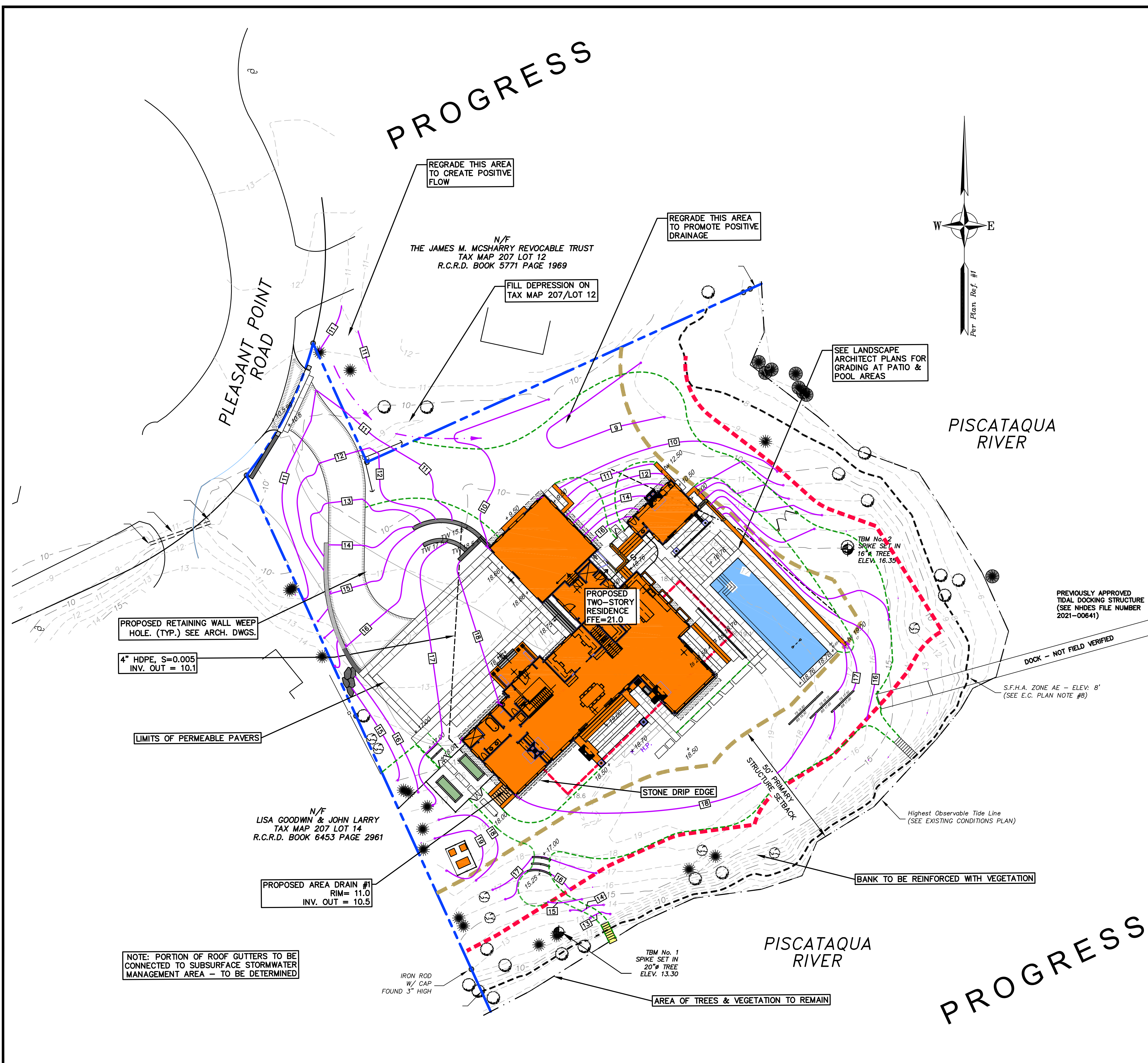
OWNER:  
120-0 WILD ROSE LANE, LLC  
209 WATER STREET  
NEWBURYPORT, MA 01950

APPLICANT:  
120-0 WILD ROSE LANE, LLC  
209 WATER STREET  
NEWBURYPORT, MA 01950

PROJECT:  
JOHN & MICHELLE MORRIS RESIDENCE  
TAX MAP 207, LOT 13  
60 PLEASANT POINT DRIVE  
PORTSMOUTH, NH

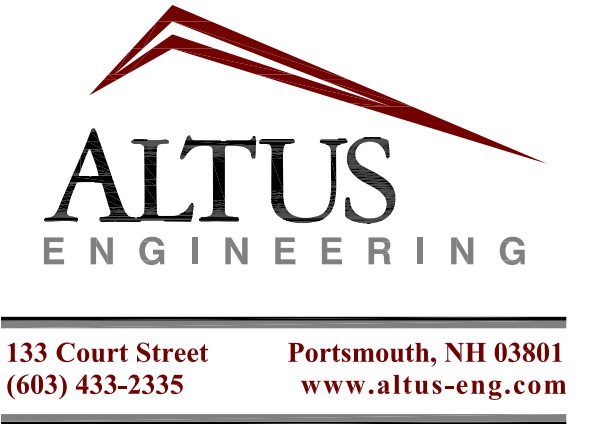
TITLE:  
SITE PLAN

SHEET NUMBER:  
C - 2



**STORMWATER MANAGEMENT NOTES**

- DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
- CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION.
- UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBM) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
- PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING STORMWATER AND UTILITY LINES. PRESERVE AND PROTECT LINES TO BE RETAINED.
- TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.
- PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
- IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
- ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED.
- IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
- ALL CPP PIPE SHALL BE ADS N-12 OR APPROVED EQUAL.
- TOTAL AREA OF PROJECT DISTURBANCE IS ±30,000 S.F. (<1 ACRE THEREFORE NOT SUBJECT TO EPA NPDES PHASE II. CONTRACTOR SHALL BE RESPONSIBLE FOR REQUIRED INSPECTIONS.
- NO EARTHWORK, STUMPING OR GRUBBING SHALL COMMENCE UNTIL ALL APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND THE SITE IS STABILIZED.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH IN THE NHDES NH STORMWATER MANUALS, VOL. 1-3, DATED DECEMBER 2008 AS AMENDED.
- CONTRACTOR SHALL CONTROL DUST BY SPRAYING WATER, SWEEPING PAVED SURFACES, PROVIDING TEMPORARY VEGETATION, AND/OR MULCHING EXPOSED AREAS AND STOCKPILES.
- THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT EROSION, PREVENT SEDIMENT FROM LEAVING THE SITE AND/OR ENTERING WETLANDS AND ENSURE PERMANENT SOIL STABILIZATION.
- ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIODEGRADABLE.
- ALL SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF COMPACTED LOAM, LIMESTONE, ORGANIC FERTILIZER, SEED, AND MULCH USING APPROPRIATE SOIL STABILIZATION TECHNIQUES OR AS INDICATED ON THE LANDSCAPE ARCHITECTURAL PLANS.
- UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT AND ALL TEMPORARY EROSION AND SEDIMENT CONTROLS REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.
- THE ENGINEER OF RECORD SHALL SUBMIT A WRITTEN REPORT WITH PHOTOGRAPHS AND ENGINEERS STAMP CERTIFYING THAT THE STORMWATER INFRASTRUCTURE WAS CONSTRUCTED TO THE APPROVED PLANS AND WILL MEET THE DESIGN PERFORMANCE.
- THE RESIDENCE SHALL BE CONSTRUCTED WITH STONE DRIP EDGES, WHERE APPROPRIATE. DRIP EDGE UNDERDRAINS SHALL BE DIRECTED TO A STORMWATER PIPE OR DAYLIGHT IN AN AREA OUTSIDE THE CITY 100 FOOT WETLANDS BUFFER.



**PROGRESS**

NOT FOR CONSTRUCTION

ISSUED FOR: REVIEW

ISSUE DATE: MAY 17, 2023

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EDW	05/17/23

DRAWN BY: RLH  
 APPROVED BY: EDW  
 DRAWING FILE: 5138SITE.dwg

SCALE:  
 (22"x34") 1" = 20'  
 (11"x17") 1" = 40'

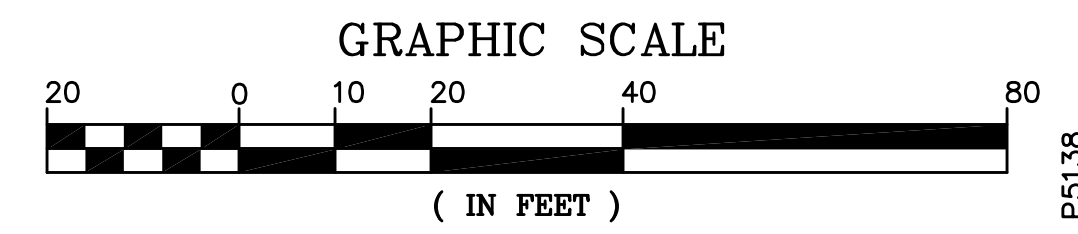
OWNER:  
 120-0 WILD ROSE LANE, LLC  
 209 WATER STREET  
 NEWBURYPORT, MA 01950

APPLICANT:  
 120-0 WILD ROSE LANE, LLC  
 209 WATER STREET  
 NEWBURYPORT, MA 01950

PROJECT:  
 JOHN & MICHELLE MORRIS RESIDENCE  
 TAX MAP 207, LOT 13  
 60 PLEASANT POINT DRIVE  
 PORTSMOUTH, NH

TITLE:  
 PRELIMINARY GRADING PLAN

SHEET NUMBER:  
 C - 3



**PROGRESS**



ID	Qty	Latin Name	Common Name	Scheduled Size
<b>TREES</b>				
AGA	8	Amelanchier x grandiflora 'Autumn	Autumn Brilliance Serviceberry	10-12' B&B
CC	3	Cercis canadensis	Redbud	4-4.5' cal. B&B
CVW	3	Crataegus viridis 'Winter King'	Winter King Hawthorne	4-4.5' cal. B&B
HD	3	Hamamelis x intermedia 'Diane'	Diane Witchhazel	3-4' ht. B&B
IO	3	Ilex opaca	American Holly	10-12' B&B
JV	12	Juniperus virginiana	Eastern Red Cedar	8-10' B&B
PA	5	Picea abies	Norway Spruce	10-12' ht. B&B
PA2	3	Picea abies	Norway Spruce	10-12' ht. B&B
PO	1	Picea orientalis	Oriental Spruce	10-12' ht. B&B
TP	3	Thuja plicata 'Green Giant'	Green Giant Arborvitae	10-12' ht. B&B
<b>SHRUBS</b>				
AAB	15	Aronia arbutifolia 'Brilliantissima'	Red Chokeberry	#7 cont.
CL	58	Clethra alnifolia	Summersweet	3-4' ht. B&B
CP	216	Comptonia peregrina	Sweetfern	#3 cont.
FMA	13	Fothergilla x intermedia 'Mount Air'	Mount Airy Fothergilla	3-4' ht. B&B
HPE	6	Hydrangea anomala petiolaris	Climbing Hydrangea	#3 cont.
HAA	43	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	#5 cont.
HLL	18	Hydrangea paniculata 'Little Lime'	Little Lime Hydrangea	2.5-3' ht. B&B
HOA	7	Hydrangea quercifolia 'Alice'	Alice Oakleaf Hydrangea	3-3.5' ht. B&B
HQP	27	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oakleaf Hydrangea	2-2.5' ht. B&B
HS	3	Hydrangea serrata 'Bluebird'	Bluebird Lacecap Hydrangea	#5 cont.
IGS	103	Ilex glabra 'Shamrock'	Dwarf Inkberry	3.5-4' ht. B&B
IVR	8	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	2-3' ht. B&B
IVS	2	Ilex verticillata 'Southern Gentle'	Southern Gentleman Winterberry	#2 cont.
LB	1	Lindera benzoin	Spicebush	3-4' ht. B&B
MG	41	Myrica gale	Sweetgale	#3 cont.
MP	19	Myrica pensylvanica	Northern Bayberry	3-3.5' ht. B&B
PM	9	Prunus maritima	Beach Plum	3-4' ht. B&B
RCW	11	Rhododendron 'Cunningham's Wh'	Cunningham's White Rhododendron	2.5-3' ht. B&B
RM	8	Rhododendron maximum	Rosebay Rhododendron	5-6' ht. B&B
<b>PERENNIALS</b>				
ARA	8	Actaea racemosa	Snakeroot	#1 cont.
AMO	22	Alchemilla mollis	Lady's Mantle	#1 cont.
ADL	204	Astilbe 'Delft Lace'	Delft Lace Astilbe	#1 cont.
ABV	193	Astilbe 'Bridal Veil'	Bidal Veil Astilbe	#1 cont.
CPIV	153	Carex pensylvanica	Oak Sedge	#1 cont.
DPUJ	171	Dianthus barbatus 'Punctiloba'	Hay-Scented Fern	#1 cont.
GRZ	35	Geranium 'Rozanne'	Rozanne Cranesbill	#1 cont.
LIP	32	Lavandula intermedia 'Phenomen'	Phenomenal Lavender	#1 cont.
MST	23	Matteuccia struthiopteris	Ostrich Fern	#1 cont.
NWL	24	Nepeta x faassenii 'Walker's Low'	Walker's Low Catmint	#1 cont.
PVS	3	Panicum virgatum 'Shenandoah'	Shenandoah Red Switchgrass	#2 cont.
PAH	103	Pennisetum alopecuroides 'Hamel'	Dwarf Fountain Grass	#2 cont.
PAT	45	Perovskia atriplicifolia	Russian Sage	#2 cont.
SSC	14	Schizachyrium scoparium 'Carousel'	Carousel Little Bluestem	#2 cont.
SH	8	Sporobolus heterolepis	Prairie Dropseed	#2 cont.

RESTORATION PLANT LIST	
SHRUBS	
Scientific Name	Common Name
Rosa virginiana	Virginia Rose
Prunus maritima	Beach Plum
Ilex glabra	Inkberry
Myrica pensylvanica	Bayberry
Viburnum dentatum	Arrowwood Viburnum
Comptonia peregrina	Sweetfern
Arcosaphylos uva-ursi	Bearberry
Grasses (Seed)	
Scientific Name	Common Name
Panicum amarum	Atlantic Coastal Panic Grass
Panicum virgatum	Switch Grass
Eragrostis spectabilis	Purple Love Grass
Juncus gerardii	Salt Meadow Rush
Sporobolus heterolepis	Prairie Dropseed
Ammophila breviligulata	American Beachgrass
Bouteloua gracilis	Blue Gramma
Schizachyrium scoparium	Little bluestem
Festuca rubra	Red Fescue
Plugs and Containers	
Scientific Name	Common Name
Amorpha canescens	Lead Plant
Amsonia Spp.	Blue Star
Aquilegia canadensis	Eastern Columbine
Asclepias tuberosa	Butterfly Milkweed
Baptisia australis	Blue False Indigo
Eurybia spectabilis	Eastern Showy Aster
Heuchera americana	American Alumroot
Liatris aspera	Button Blazing Star
Penstemon digitalis	Bear-Tongue
Solidago sempervirens	Seaside Goldenrod
Waldsteinia fragarioides	Barren Strawberry

**NOTE:**  
RESTORATION PLANT PALETTE IS NOT FINALIZED BUT WILL ONLY INCLUDE PLANTS FROM THIS LIST.



PLANTING LEGEND:	
---	PROPERTY LINE / LIMIT OF WORK
---	BUILDING SETBACK
---	APPROXIMATE LIMIT OF WORK
L.O.W.	
[Light Green Box]	LAWN
[Dark Green Box]	PLANT BED
[Circle with dot]	EXISTING DECIDUOUS TREE TO REMAIN AND BE PROTECTED
[Circle with star]	EXISTING EVERGREEN TREE TO REMAIN AND BE PROTECTED
[Circle with 'XX']	PROPOSED DECIDUOUS TREE PLANTING
[Circle with star]	PROPOSED EVERGREEN TREE PLANTING
[Small Circle]	PROPOSED SHRUB PLANTING
[Small Circle]	PROPOSED PERENNIAL PLANTING
[Green Box]	BANK RESTORATION PLANTING ZONE

## Morris Residence

60 Pleasant Point Drive  
Portsmouth, NH

- General Notes:
- Existing conditions and topographic data are from a site plan of land dated 9 February 2021, prepared by Atlas Engineering, INC., 133 Court Street, Portsmouth, NH 03801 - Tel: (603) 433.2335
  - Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02108 / 360 Fore Street, Portland, ME 04101 - Tel: (617) 905.2246

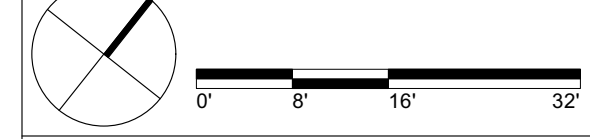
- Planting Notes:
- The contractor shall supply all plant material in quantities sufficient to complete the planting shown on all drawings.
  - All plant material shall conform to the guidelines established by "The American Standard for Nursery Stock" published by The American Association of Nurserymen, latest edition.
  - All plant material shall be warranted for 1 year after substantial completion.
  - All plants shall be balled and burlap unless otherwise noted on the plant list/ schedule.
  - All plants shall be approved by Landscape Designer prior to their installation at the site.
  - Contractor shall stake all plant locations in the field. Obtain approval of Landscape Designer before starting plant installations.
  - Plants to be transplanted shall be flagged and exact planting locations staked in the field.
  - All areas disturbed by construction shall be restored to a pre-construction state unless otherwise noted by landscape architect or plans.

MATTHEW  
CUNNINGHAM  
LANDSCAPE  
DESIGN LLC  
matthew-cunningham.com

411 Main Street, Stoneham, MA 02180  
360 Fore Street, Portland, ME 04101  
617.905.2246 p | 617.321.4014 f

REVISIONS:		
#	DATE	DESCRIPTION

SCALE: 1/16"= 1'-0" DATE: 11 May 2023



SHEET TITLE

## Planting Plan

SHEET NUMBER

# L3.0

NOT FOR CONSTRUCTION

**Morris Residence**

60 Pleasant Point Drive  
Portsmouth, NH

**General Notes:**

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- Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02108 / 366 Fore Street, Portland, ME 04101 - Tel: (617) 905.2246

**Grading Notes:**

- The contractor shall verify all existing grades in the field and report any discrepancies immediately to the Landscape Designer.
- Grade surfaces to assure positive drainage from all structures and to prevent ponding of surface drainage.
- Provide vertical curves or roundings at abrupt changes in grade unless otherwise noted. Blend new earthwork smoothly into existing.
- Maintain existing grades at existing plant material.
- All fill material is subject to approval by Landscape Designer.
- Flitch evenly between spot grades. All paved areas must pitch to drain at a minimum of 1/8" per foot. Any discrepancies not allowing this to occur shall be reported to the Landscape Designer prior to continuing work.
- Once grading operations are completed, all disturbed areas within or outside of the limits of work shall be stabilized by fine grading and seeding or mulching as directed by Landscape Designer.
- All erosion control measures are to be constructed to meet field conditions at the time of construction and prior to any grading or disturbance of existing material on balance of site. Slopes 3:1 and greater shall be stabilized with biodegradable erosion control netting.
- Drain locations are diagrammatic. Adjust final layout of drains in field with Landscape Designer.



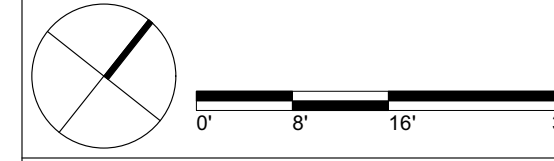
**MATTHEW CUNNINGHAM LANDSCAPE DESIGN LLC**  
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411 Main Street, Stoneham, MA 02180  
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**REVISIONS:**

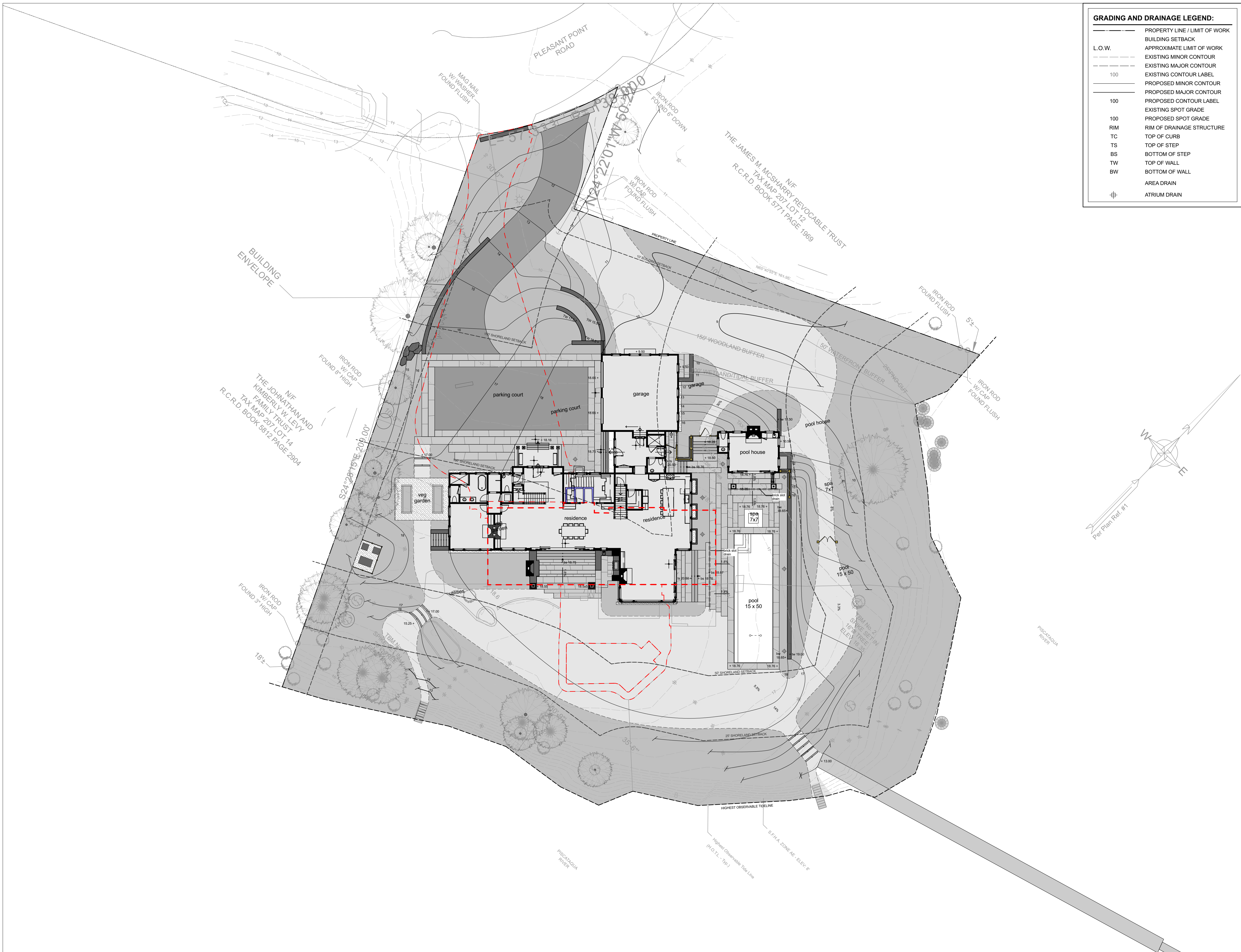
#:	DATE:	DESCRIPTION:

SCALE: 1/16"= 1'-0"      DATE: 6 June 2023



**Existing Conditions Overlay Plan**

SHEET NUMBER  
**L0.2**  
NOT FOR CONSTRUCTION



**GRADING AND DRAINAGE LEGEND:**

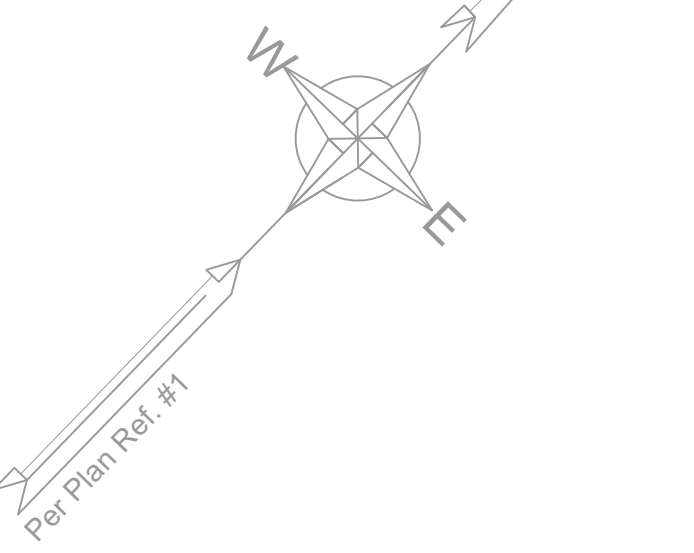
---	PROPERTY LINE / LIMIT OF WORK
---	BUILDING SETBACK
L.O.W.	APPROXIMATE LIMIT OF WORK
---	EXISTING MINOR CONTOUR
---	EXISTING MAJOR CONTOUR
100	EXISTING CONTOUR LABEL
---	PROPOSED MINOR CONTOUR
---	PROPOSED MAJOR CONTOUR
100	PROPOSED CONTOUR LABEL
---	EXISTING SPOT GRADE
100	PROPOSED SPOT GRADE
RIM	RIM OF DRAINAGE STRUCTURE
TC	TOP OF CURB
TS	TOP OF STEP
BS	BOTTOM OF STEP
TW	TOP OF WALL
BW	BOTTOM OF WALL
---	AREA DRAIN
+	ATRIUM DRAIN

**Morris Residence**

60 Pleasant Point Drive  
Portsmouth, NH

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  - Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02108 / 366 Fore Street, Portland, ME 04101 - Tel: (617) 905.2246

- Grading Notes:
- The contractor shall verify all existing grades in the field and report any discrepancies immediately to the Landscape Designer.
  - Grade surfaces to assure positive drainage from all structures and to prevent ponding of surface drainage.
  - Provide vertical curves or roundings at abrupt changes in grade unless otherwise noted. Blend new earthwork smoothly into existing.
  - Maintain existing grades at existing plant material.
  - All fill material is subject to approval by Landscape Designer.
  - Flitch evenly between spot grades. All paved areas must pitch to drain at a minimum of 1/8" per foot. Any discrepancies not allowing this to occur shall be reported to the Landscape Designer prior to continuing work.
  - Once grading operations are completed, all disturbed areas within or outside of the limits of work shall be stabilized by fine grading and seeding or mulching as directed by Landscape Designer.
  - All erosion control measures are to be constructed to meet field conditions at the time of construction and prior to any grading or disturbance of existing material on balance of site. Slopes 3:1 and greater shall be stabilized with biodegradable erosion control netting.
  - Drain locations are diagrammatic. Adjust final layout of drains in field with Landscape Designer.



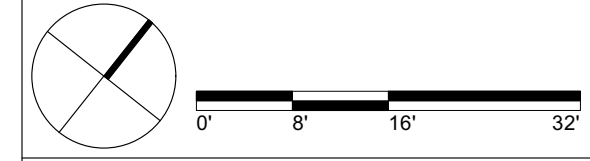
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matthew-cunningham.com

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366 Fore Street, Portland, ME 04101  
617.905.2246 p | 617.321.4014 f

REVISIONS:

#:	DATE:	DESCRIPTION:

SCALE: 1/16"= 1'-0"      DATE: 6 June 2023



SHEET TITLE  
**Grading Plan**

SHEET NUMBER  
**L0.2**  
NOT FOR CONSTRUCTION

PLANTING SCHEDULE				
ID	Qty	Latin Name	Common Name	Scheduled Size
<b>TREES</b>				
AGA	8	Amelanchier x grandiflora 'Autumn	Autumn Brilliance Serviceberry	10-12' B&B
CC	3	Cercis canadensis	Redbud	4-4.5" cal. B&B
CVW	3	Crataegus viridis 'Winter King'	Winter King Hawthorne	4-4.5" cal. B&B
HD	3	Hamamelis x intermedia 'Diane'	Diane Witchhazel	3-4' ht. B&B
IO	3	Ilex opaca	American Holly	10-12' B&B
JV	12	Juniperus virginiana	Eastern Red Cedar	8-10' B&B
PA	5	Picea abies	Norway Spruce	10-12' ht. B&B
PA2	3	Picea abies	Norway Spruce	10-12' ht. B&B
PO	1	Picea orientalis	Oriental Spruce	10-12' ht. B&B
TP	3	Thuja plicata 'Green Giant'	Green Giant Arborvitae	10-12' ht. B&B
<b>SHRUBS</b>				
AAB	15	Aronia arbutifolia 'Brilliantissima'	Red Chokeberry	#7 cont.
CL	54	Clethra alnifolia	Summersweet	3-4' ht. B&B
CP	205	Comptonia peregrina	Sweetfern	#3 cont.
FMA	12	Fothergilla x intermedia 'Mount Air	Mount Airy Fothergilla	3-4' ht. B&B
HPE	6	Hydrangea anomala petiolaris	Climbing Hydrangea	#3 cont.
HAA	43	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	#5 cont.
HLL	18	Hydrangea paniculata 'Little Lime'	Little Lime Hydrangea	2.5-3' ht. B&B
HQA	7	Hydrangea quercifolia 'Alice'	Alice Oakleaf Hydrangea	3-3.5' ht. B&B
HQP	27	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oakleaf Hydrangea	2-2.5' ht. B&B
HS	3	Hydrangea serrata 'Bluebird'	Bluebird Lacecap Hydrangea	#5 cont.
IGS	103	Ilex glabra 'Shamrock'	Dwarf Inkberry	3.5-4' ht. B&B
IVR	9	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	2-3' ht. B&B
IVS	2	Ilex verticillata 'Southern Gentlema	Southern Gentleman Winterberry	#2 cont.
LB	1	Lindera benzoin	Spicebush	3-4' ht. B&B
MG	59	Myrica gale	Sweetgale	#3 cont.
MP	44	Myrica pensylvanica	Northern Bayberry	3-3.5' ht. B&B
PM	12	Prunus maritima	Beach Plum	3-4' ht. B&B
RCW	11	Rhododendron 'Cunningham's Wh	Cunningham's White Rhododendron	2.5-3' ht. B&B
RM	8	Rhododendron maximum	Rosebay Rhododendron	5-6' ht. B&B
<b>PERENNIALS</b>				
ARA	8	Actaea racemosa	Snakeroot	#1 cont.
AMO	22	Alchemilla mollis	Lady's Mantle	#1 cont.
ADL	204	Astilbe 'Delft Lace'	Delft Lace Astilbe	#1 cont.
ABV	193	Astilbe 'Bridal Veil'	Bidal Veil Astilbe	#1 cont.
CPN	153	Carex pensylvanica	Oak Sedge	#1 cont.
DPU	176	Dennstaedtia punctiloba	Hay-Scented Fern	#1 cont.
GRZ	36	Geranium 'Rozanne'	Rozanne Cranesbill	#1 cont.
LIP	31	Lavandula intermedia 'Phenomena	Phenomenal Lavender	#1 cont.
MST	23	Matteuccia struthiopteris	Ostrich Fern	#1 cont.
NWL	24	Nepeta x faassenii 'Walker's Low'	Walker's Low Catmint	#1 cont.
PAH	103	Pennisetum alopecuroides 'Hamel'	Dwarf Fountain Grass	#2 cont.
PAT	45	Perovskia atriplicifolia	Russian Sage	#2 cont.
SSC	3	Schizachyrium scoparium 'Carousel	Carousel Little Bluestem	#2 cont.
SH	8	Sporobolus heterolepis	Prairie Dropseed	#2 cont.

RESTORATION PLANT LIST	
Scientific Name	Common Name
<b>SHRUBS</b>	
Rosa virginiana	Virginia Rose
Prunus maritima	Beach Plum
Ilex glabra	Inkberry
Myrica pensylvanica	Bayberry
Viburnum dentatum	Arrowwood Viburnum
Comptonia peregrina	Sweetfern
Arctosaphylos uva-ursi	Bearberry
<b>GRASSES (SEED)</b>	
Panicum amarum	Atlantic Coastal Panic Grass
Panicum virgatum	Switch Grass
Eragrostis spectabilis	Purple Love Grass
Juncus gerardii	Salt Meadow Rush
Sporobolus heterolepis	Prairie Dropseed
Ammophila breviflora	American Beachgrass
Bouteloua gracilis	Blue Gramma
Schizachyrium scoparium	Little Bluestem
Festuca rubra	Red Fescue
<b>PLUGS AND CONTAINERS</b>	
Amorpha canescens	Lead Plant
Amsonia Spp.	Blue Star
Aquilegia canadensis	Eastern Columbine
Asclepias tuberosa	Butterfly Milkweed
Baptisia australis	Blue False Indigo
Eurybia spectabilis	Eastern Showy Aster
Heuchera americana	American Alumroot
Liatris aspera	Button Blazing Star
Penstemon digitalis	Bear-Tongue
Solidago sempervirens	Seaside Goldenrod
Waldsteinia fragarioides	Barren Strawberry

**NOTE:**  
RESTORATION PLANT PALETTE IS NOT FINALIZED BUT WILL ONLY INCLUDE PLANTS FROM THIS LIST. ALL PLANTS LISTED ARE NATIVE.



PLANTING LEGEND:	
---	PROPERTY LINE / LIMIT OF WORK
---	BUILDING SETBACK
---	APPROXIMATE LIMIT OF WORK
L.O.W.	
[Light Green Box]	LAWN
[Dark Green Box]	PLANT BED
[Circle with Dotted Pattern]	EXISTING DECIDUOUS TREE TO REMAIN AND BE PROTECTED
[Circle with Solid Pattern]	EXISTING EVERGREEN TREE TO REMAIN AND BE PROTECTED
[Circle with 'XX']	PROPOSED DECIDUOUS TREE PLANTING
[Circle with Solid Pattern]	PROPOSED EVERGREEN TREE PLANTING
[Small Circle with 'XX']	PROPOSED SHRUB PLANTING
[Small Circle with Number]	PROPOSED PERENNIAL PLANTING

## Morris Residence

60 Pleasant Point Drive  
Portsmouth, NH

**General Notes:**

- Existing conditions and topographic data are from a site plan of land dated 8 February 2021, prepared by Atlas Engineering, INC., 133 Court Street, Portsmouth, NH 03801 - Tel: (603) 433.2335
- Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02108 | 360 Fore Street, Portland, ME 04101 - Tel: (617) 905.2246

**Planting Notes:**

- The contractor shall supply all plant material in quantities sufficient to complete the planting shown on all drawings.
- All plant material shall conform to the guidelines established by "The American Standard for Nursery Stock" published by The American Association of Nurserymen, latest edition.
- All plant material shall be warranted for 1 year after substantial completion.
- All plants shall be balled and burlap unless otherwise noted on the plant list/ schedule.
- All plants shall be approved by Landscape Designer prior to their installation at the site.
- Contractor shall stake all plant locations in the field. Obtain approval of Landscape Designer before starting plant installations.
- Plants to be transplanted shall be flagged and exact planting locations staked in the field.
- All areas disturbed by construction shall be restored to a pre-construction state unless otherwise noted by landscape architect or plans.

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CUNNINGHAM  
LANDSCAPE  
DESIGN LLC  
matthew-cunningham.com

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360 Fore Street, Portland, ME 04101  
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REVISIONS:	
#:	DESCRIPTION:

SCALE: 1/16"= 1'-0" DATE: 6 June 2023

SHEET TITLE  
**Planting Plan**

SHEET NUMBER  
**L0.3**  
NOT FOR CONSTRUCTION



ITEM	EXISTING CONDITIONS	LANDSCAPE PLAN 1	LANDSCAPE PLAN 2 (REVISED PLAN 6/14/23)
LAWN	27,207 SF OF LAWN	12,063 SF OF LAWN	10,439 SF OF MICROCLOVER 'BLACK BEAUTY BLEND'
PLANT BED	11,361 SF (INCLUDES INVASIVES & NON-NATIVES)	20,837 SF (MAJORITY NATIVE PLANTING)	22,465 SF (MAJORITY NATIVE)
NATIVE RESTORATION PLANTING		12,423 SF (100% NATIVE PLANTING)	14,026 SF (100% NATIVE PLANTING)
DRIVEWAY	4,915 SF (100% IMPERVIOUS)	4,370 SF (1,690 SF PERVIOUS)	4,370 SF (1,690 SF PERVIOUS)
POOL	533 SF (CHLORINE)	750 SF (LOW CHEMICAL)	720 SF (LOW CHEMICAL)
PAVING	1466 SF	3430 SF	3130 SF

**Morris Residence**

60 Pleasant Point Drive  
Portsmouth, NH

General Notes:

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- Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02108 / 366 Fore Street, Portland, ME 04101 - Tel: (617) 905.2246
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- Contractor shall verify location of any existing utilities and services and provide protection during construction. Contractor shall directly coordinate with DIG Safe. Utilities damaged during construction shall be repaired at contractor's expense.
- Contractor shall contact and inform client and landscape designer to any unforeseen conditions which may affect the intended design as set forth in the drawings.
- Contractor shall secure any necessary permits required for the work from any state or local agencies, departments, utility companies or other authorities having jurisdiction and affected by the work.
- All work shall be in accordance with the New Hampshire State Building Code.
- Contractor shall leave site clean and orderly during all phases of the construction process. Remove from the site all excess materials, soils, debris, and equipment. Store materials only in an approved location.
- Do not scale drawings.
- All angles are assumed to be 90 degrees unless otherwise stated.

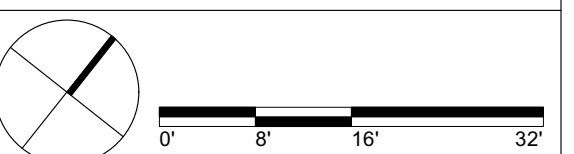
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REVISIONS:

#:	DATE:	DESCRIPTION:

SCALE: 1/16"= 1'-0" DATE: 6 June 2023



SHEET TITLE

Existing  
Conditions Plan

SHEET NUMBER

L0.0

NOT FOR CONSTRUCTION

Morris Residence

60 Pleasant Point Drive  
Portsmouth, NH

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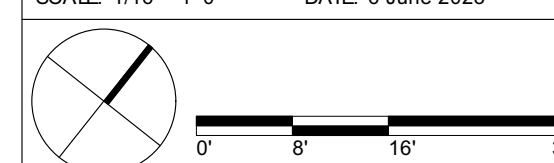
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REVISIONS:

#:	DATE:	DESCRIPTION:

SCALE: 1/16"= 1'-0" DATE: 6 June 2023



SHEET TITLE  
Illustrative  
Master Plan -1

SHEET NUMBER  
L0.1  
NOT FOR CONSTRUCTION

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  - Existing conditions supplemented from data collected by: Matthew Cunningham Landscape Design LLC, 411 Main Street, Stoneham, MA 02108 / 366 Fore Street, Portland, ME 04101 - Tel: (617) 905.2246
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  - All work shall be in accordance with the New Hampshire State Building Code.
  - Contractor shall leave site clean and orderly during all phases of the construction process. Remove from the site all excess materials, soils, debris, and equipment. Store materials only in an approved location.
  - Do not scale drawings.
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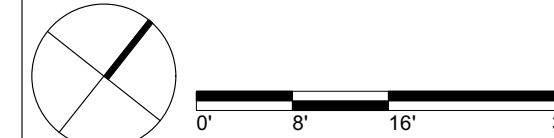
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REVISIONS:

#:	DATE:	DESCRIPTION:

SCALE: 1/16"= 1'-0" DATE: 6 June 2023



SHEET TITLE  
**Illustrative  
Master Plan - 2**

SHEET NUMBER  
**L0.1**  
NOT FOR CONSTRUCTION

## Article 10 Environmental Protection Standards

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Section 10.1010 Wetlands Protection

Section 10.1020 Earth Products Removal and Placement

### Section 10.1010 Wetlands Protection

For definitions, please refer to Article 15.

#### 10.1011 Purpose

The purposes of this Section are:

- (1) To maintain, and where possible improve, the quality of surface waters and ground water by controlling the rate and volume of stormwater runoff and preserving the ability of **wetlands** to filter pollution, trap sediment, retain and absorb chemicals and nutrients, and produce oxygen.
- (2) To prevent the destruction of, or significant changes to, **wetlands**, related water bodies and adjoining land which provide **flood** protection, and to protect **persons** and property against the hazards of **flood** inundation by assuring the continuation of the natural or existing flow patterns of streams and other water courses within the City.
- (3) To protect, and where possible improve, potential water supplies and aquifers and aquifer recharge areas.
- (4) To protect, and where possible improve, wildlife habitats and maintain ecological balance.
- (5) To protect, and where possible improve, unique or unusual natural areas and rare and endangered plant and animal species.
- (6) To protect, and where possible improve, shellfish and fisheries.
- (7) To prevent the expenditure of municipal funds for the purpose of providing and/or maintaining essential services and utilities which might be required as a result of misuse or abuse of **wetlands**.
- (8) To require the use of **best management practices** and **low impact development** in and **adjacent** to **wetland** areas.
- (9) To assist in protecting and improving the future of Portsmouth's resiliency with regard to climate change impacts and maintaining carbon neutrality.

#### 10.1012 Relationship to Other Regulations

- 10.1012.10 The provisions and criteria set forth in this Section are in addition to the provisions of applicable state and federal laws and regulations, other sections of this Zoning Ordinance, and other local ordinances and regulations.
- 10.1012.20 Where any provision of this Section conflicts with a state or federal law or regulation, another section of this Zoning Ordinance, or another local ordinance or regulation, the more restrictive provision shall apply.



- 10.1012.30 Nothing in this Section shall permit a **use** or activity which is contrary to any other provision of the Zoning Ordinance.
- 10.1012.40 Notwithstanding any other provisions of the Zoning Ordinance, the City of Portsmouth and its administrative and operating agencies and instrumentalities shall comply with the provisions of this Section.

### 10.1013 Jurisdictional Areas

The provisions of this Section 10.1010 apply to the following jurisdictional areas:

- 10.1013.10 Any **inland wetland**, other than a **vernal pool**, that is 10,000 square feet or more in area;
- 10.1013.20 Any **vernal pool** regardless of area.
- 10.1013.30 Any non-tidal perennial river or stream.
- 10.1013.40 The **tidal wetlands** of Sagamore Creek, Little Harbour, North Mill Pond, South Mill Pond and part of the Piscataqua River, defined as follows:
- (a) Sagamore Creek: Bounded by the easterly side of Peverly Hill Road and the southerly side of Greenleaf Avenue as these cross Sagamore Creek, and extending along the Creek to Little Harbour.
  - (b) Little Harbour: Extending along the Little Harbour shoreline from the municipal line with the Town of Rye to the southerly side of New Castle Avenue, and including Goose Island, Belle Island, Pest Island and that portion of Shapleigh Island lying south of New Castle Avenue.
  - (c) North Mill Pond: Extending along the entire shoreline of North Mill Pond between Bartlett Street and Market Street.
  - (d) South Mill Pond: Extending along the entire shoreline of South Mill Pond west of the tide gate at Pleasant Street.
  - (e) Piscataqua River: Extending along the shoreline of the Piscataqua River from the northwest side of the I-95 bridge up to and including the waterfront parcel fronting on Porpoise Way.

### 10.1014 Identification and Delineation of Wetlands and Wetland Buffers

#### 10.1014.10 Wetlands

- 10.1014.11 **Wetlands** shall be identified by use of the **Federal Manual** and/or **Field Indicators**, and shall be delineated by on-site inspection of soil types, vegetation, and hydrology by a **certified wetland scientist** at a time when conditions are favorable for such determination.
- 10.1014.12 A **created wetland** shall be considered a **wetland** for the purposes of this section.
- 10.1014.13 Any area which may have been a **wetland** but was filled prior to January 1, 1970 or pursuant to properly issued federal, state and local permits granted prior to the adoption of

this Ordinance shall be judged according to the conditions existing at the time an application for a **building permit** or subdivision is filed or submitted.

#### **10.1014.20 Wetland Buffers**

10.1014.21 The purpose of a **wetland buffer** is to reduce erosion and sedimentation into the **adjacent wetland, vernal pool** or water body, to aid in the control of nonpoint source pollution, to provide a vegetative cover for filtration of runoff, to protect wildlife habitat, and to help preserve ecological balance.

10.1014.22 The required **wetland buffer** for a jurisdictional **wetland** or water body shall be defined as all land within 100 feet of the jurisdictional area.

10.1014.23 **Wetland buffers**, including **no cut/vegetated buffer strips** and limited cut areas (See **Table 10.1018.21**), shall be parallel to and measured from the **reference line** for the applicable jurisdictional area on a horizontal plane.

- (1) **Inland wetland buffers** shall be measured from the edges of **inland wetlands** and surface water bodies.
- (2) **Tidal wetland buffers** shall be measured from the edges of **tidal wetlands** and **highest observable tide lines**.

#### **10.1015 Notification to Planning Director**

Notice shall be provided to the Planning Director prior to any construction, **demolition**, tree cutting, vegetation removal, or other **alteration** in a **wetland** or **wetland buffer**.

#### **10.1016 Permitted Uses**

10.1016.10 The following **uses**, activities and **alterations** are permitted in **wetlands** and **wetland buffers**:

- (1) Any **use** that does not involve the erection or construction of any **structure** or **impervious surface**, will not alter the natural surface configuration by the addition of fill or by dredging, will not result in site **alterations**, and is otherwise permitted by the Zoning Ordinance. Examples of such **uses** include forestry and tree farming, wildlife refuges, parks and recreational **uses**, conservation and nature trails, and **open spaces** as permitted or required by the Zoning Ordinance or Subdivision Regulations.
- (2) Improvements to existing public rights-of-way and **sidewalks**.
- (3) The construction of piers or docks, provided that all required local, state and federal approvals have been granted.
- (4) The construction of an addition or extension to a **one-family** or **two-family dwelling** that lawfully existed prior to the effective date of this Ordinance or was constructed subject to a validly issued conditional use permit, provided that:

- (a) The **footprint** area of the addition or extension, together with the area of all prior such additions and extensions, shall not exceed 25 percent of the area of the **footprint** of the principal heated **structure** existing prior to the effective date of this Ordinance or constructed pursuant to a validly issued conditional use permit (this 25 percent limit shall not be based on pre-existing attached or detached garages, sheds, decks, porches, breezeways, or similar **buildings** or **structures**);
  - (b) The addition or extension shall be no closer to a **wetland** or water body than the existing principal **structure**; and
  - (c) The addition or extension shall conform with all other provisions of the Zoning Ordinance and with all other applicable ordinances and regulations of the City of Portsmouth.
- (5) The use of motor vehicles, except for all-terrain vehicles, when necessary for any purpose permitted by this Ordinance.
  - (6) Emergency power generator outside the **wetland** and **no cut/vegetated buffer strip**, provided that the total **coverage** by equipment and any mounting pad shall not exceed ~~10~~12 square feet.
  - (7) **Uses**, activities and **alterations** that are consistent with a Wetland Protection Plan that has been approved by the Planning Board through the grant of a conditional use permit.
  - (8) Construction of fences outside the **no cut/vegetated buffer strip**, provided that any posts are no wider than 3” in any dimension, and that there are no footings and no ground disturbance beyond the installation of the posts.

10.1016.20 Any **use**, activity or **alteration** not specifically permitted by Section 10.1016.10 above is prohibited unless authorized by the Planning Board through the grant of a conditional use permit.

10.1016.30 When the Planning Director reasonably believes that an existing or proposed **use**, activity or **alteration** that is not specifically permitted by Section 10.1016.10 is located in a **wetland** or **wetland buffer**, and a conditional use permit has not been granted for such **use**, activity or **alteration**, the Planning Director may require a **wetland** delineation complying with Section 10.1014 in order to verify the location or absence of **wetlands** and determine whether the **use**, activity or **alteration** requires a conditional use permit.

## 10.1017 Conditional Uses

### 10.1017.10 General

The Planning Board is authorized to grant a conditional use permit for any **use** not specifically permitted in Section 10.1016.10, subject to the procedures and findings set forth herein.

### 10.1017.20 Application Requirements

10.1017.21 The application shall be in a form prescribed by the Planning Board, and shall include the following information:

- (1) Location and area of **lot** and proposed activities and **uses**;

- (2) Location and area of all jurisdictional areas (**vernal pool, inland wetland, tidal wetland**, river or stream) on the **lot** and within 250 feet of the **lot**;
- (3) Location and area of **wetland buffers** on the **lot**;
- (4) Description of proposed construction, **demolition**, fill, excavation, or any other **alteration** of the **wetland** or **wetland buffer**;
- (5) **Setbacks** of proposed **alterations** from property lines, jurisdictional areas and **wetland buffers**;
- (6) Location and area of **wetland** impact, new **impervious surface**, previously disturbed **upland**;
- (7) Location and description of existing trees to be removed, other **landscaping**, grade changes, fill extensions, rip rap, culverts, utilities;
- (8) Dimensions and **uses** of existing and proposed **buildings** and **structures**.
- (9) Any other information necessary to describe the proposed construction or **alteration**.
- (10) Provide a planting plan detailing species and proposed locations.

10.1017.22 Where the proposed project will involve the temporary or permanent alteration of more than 250 sq. ft. of **wetland** and/or **wetland buffer**, the application shall provide information about the affected **wetland** and **wetland buffer** as follows:

- (1) Up to 1,000 sq. ft. of **alteration** to the **wetland**: a **wetland** characterization that describes the type of **wetland** (e.g., emergent, scrub-shrub, forested), the percent of invasive species, and whether the **wetland** is seasonally flooded.
- (2) More than 1,000 sq. ft. of alteration to the **wetland**: a functions and values assessment equivalent to the model set forth in Appendix A of *The Highway Methodology Workbook Supplement – Wetland Functions and Values: A Descriptive Approach*, NAEPP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999, as amended.
- (3) 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.

10.1017.23 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.

10.1017.24 Where feasible, the application shall include removal of **impervious surfaces** at least equal in area to the area of **impervious surface** impact. The intent of this provision is that the project will not result in a net loss of pervious surface within a jurisdictional wetland buffer. If it is not feasible to remove **impervious surfaces** from the wetland buffer at least equal in area to the area of new **impervious surface** impact, the application shall include a

**wetland buffer** enhancement plan that describes how the wetland functions and values will be enhanced to offset the proposed impact.

- 10.1017.25 A **wetland buffer** enhancement plan shall be designed to enhance the functions of the jurisdictional **wetland** and/or **wetland buffer** on the lot, and to offset the impact of the proposed project.
- (1) The **wetland buffer** enhancement plan shall include a combination of new plantings, invasive species removal, habitat creation areas, improved site hydrology, or protective easements provided offsite.
  - (2) Where the **no cut**/vegetated buffer strip contains grass or non-native plantings, or is otherwise not intact, the first priority of the **wetland buffer** enhancement plan shall be to include revegetation of the vegetated buffer strip with native, low-maintenance shrubs and other woody vegetation.
- 10.1017.26 Where the proposed project involves a use, activity or alteration in a **tidal wetland** or **tidal wetland buffer**, the application shall include a **living shoreline** strategy to preserve the existing natural shoreline and/or encourage establishment of a **living shoreline** through restoration, as applicable. Said **living shoreline** strategy shall be implemented unless the Planning Board determines that it is not feasible.
- 10.1017.27 Where feasible, the application shall include: wildlife corridors and habitat protection measures including but not limited to: curb cuts, slant edge curbing, amphibian tunnels and space under fences to permit wildlife passage and the use of “bird friendly” windows.
- 10.10.17.28 Where feasible light and noise pollution should be reduced (includes temporary construction noise such as from blasting).
- 10.1017.30 Application Review Procedure**
- 10.1017.31 The application for a conditional use permit shall be submitted to the Planning Director.
- 10.1017.32 The Planning Director shall refer the application to the Conservation Commission for review and comment.
- 10.1017.33 The Planning Board or the Planning Director may require the findings of an independent New Hampshire **certified wetland scientist** or other additional special investigative studies, and may assess the owner reasonable fees to cover the costs of such studies and for the review of documents required by application.
- 10.1017.34 The Planning Board shall hold a public hearing on the application within 90 days of the initial submittal to the Planning Board, and shall issue a letter of decision within 10 days of the public hearing. The time requirements stated herein may be waived by the applicant.
- 10.1017.35 Public notice for public hearings shall be made in accordance with State law.
- 10.1017.36 The application process pursuant to this section may proceed prior to and/or run concurrent with the State and Federal permit processes, but the conditional use permit shall not become effective until the State and Federal permits are received.

## 10.1017.40 Conditional Use Approval

- 10.1017.41 The Planning Board shall grant a conditional use permit provided that it finds that all other restrictions of this Ordinance are met and that proposed **development** meets all the criteria set forth in section 10.1017.50 or 10.1017.60, as applicable.
- 10.1017.42 The Planning Board shall evaluate an application for a conditional use permit in accordance with *The Highway Methodology Workbook Supplement – Wetland Functions and Values: A Descriptive Approach*, NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999, as amended.
- 10.1017.43 The burden of proof that the criteria required for approval of the conditional use permit exist or are met shall be the responsibility of the applicant.
- 10.1017.44 Economic considerations alone are not sufficient reason for granting a conditional use permit.
- 10.1017.45 Where new **impervious surface** is proposed in a **wetland** or **wetland buffer**, the submission of a plan to compensate for such new **impervious surface** does not guarantee that a conditional use permit will be granted.
- 10.1017.46 Other property constraints such as setbacks, view corridors, utility easements, etc. are not justification for needing to site a project (or portion of a project) within the wetland buffer.

## 10.1017.50 Criteria for Approval

Any proposed **development**, other than installation of utilities within a right-of-way, shall comply with all of the following criteria:

- (1) The land is reasonably suited to the **use**, activity or **alteration**.
- (2) There is no alternative location outside the **wetland buffer** that is feasible and reasonable for the proposed **use**, activity or **alteration**.
- (3) There will be no adverse impact on the **wetland** functional values of the site or surrounding properties;
- (4) **Alteration** of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals. **The square footage removed of natural vegetation or managed woodland will be replanted with similar or more diverse groundcover (maintained lawn is not an acceptable groundcover), shrub, and/or trees as was existing within the same distance from the wetland that vegetation was removed where possible.**
- (5) The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.
- (6) Any area within the **no cut/vegetated buffer strip** will be returned to a natural state to the extent feasible.
- (7) **Wetland boundary markers will be permanently placed on-site to mark the wetland and wetland buffer as appropriate and assist in educating the community on sensitive wetlands. Wetland boundary markers are available for purchase through the City of Portsmouth Planning & Sustainability Department.**

(8) Northeast Organic Farmer's Association (NOFA) Standards for Organic Land Care will be followed.

#### **10.1017.60 Public and Private Utilities within Rights-of-Way in Wetlands and Wetland Buffers**

The installation of utilities (including power lines and pipelines) within a right-of-way in an **inland wetland** or **wetland buffer** shall comply with all of the following criteria instead of the criteria set forth in section 10.1017.50:

- (1) The proposed construction is in the public interest;
- (2) Design, construction, and maintenance methods will utilize **best management practices** to minimize any detrimental impact of such **use** upon the **wetland** and will include restoration of the site as nearly as possible to its original grade, condition and vegetated state;
- (3) No alternative feasible route exists which does not cross or alter a **wetland** or have a less detrimental impact on a **wetland**; and
- (4) **Alterations** of natural vegetation or managed woodland will occur only to the extent necessary to achieve construction goals.

#### **10.1017.70 Expiration and Extension**

10.1017.71 A conditional use permit shall expire one year after the date of approval by the Planning Board unless a **building permit** is issued prior to that date.

10.1017.72 The Planning Board may grant a one-year extension of a conditional use permit if the applicant submits a written request to the Planning Board prior to the expiration date. Any other extension may be granted only after a new public hearing on the reconsideration of the application.

#### **10.1017.80 Wetland Protection Plan**

10.1017.81 General

10.1017.811 The owner of a parcel that contains more than 5 acres and more than 5 residential **structures** may apply for a conditional use permit for pre-approval of multiple individual projects over a multi-year time frame by submitting a Wetland Protection Plan conforming to the requirements of this section.

10.1017.82 Submission Requirements and Procedures

10.1017.821 Plan Contents: A Wetland Protection Plan shall include the following information:

- (1) **Wetland** delineation, **wetland buffers** (100 feet), limited cut areas (50-100 feet) and **no cut/vegetated buffer strips** (50 ~~25~~-feet).

- (2) Existing **buildings, structures, streets, driveways** and other site improvements.
- (3) Calculations of existing **impervious surface** areas (total and within the **wetland buffer**). For a **manufactured housing park** these calculations shall be provided for each dwelling site and for the park as a whole.
- (4) Proposed protective measures (e.g., rain gardens, tree plantings, shrub plantings).
- (5) Calculations of areas of protective measures and proposed or potential future **impervious surfaces**.

10.1017.822 Initial Submission, Review and Approval Procedures: The initial Wetland Protection Plan shall be submitted to the Planning Department and shall be processed following the procedures for an application for a conditional use permit under Section 10.1017.30 and 10.1017.40.

10.1017.823 Effect of Plan Approval: The grant of a conditional use permit for a Wetland Protection Plan represents an overall pre-approval of impacts within the **wetland buffer** as described on the Plan, subject to the submission of individual site plans in connection with application for a **building permit** that represents a change or increase in **impervious surface** within the **wetland buffer**.

10.1017.824 Permit Site Plans:

- (1) Following the approval of a Wetland Protection Plan, each application for a **building permit** that proposes a relocation of or increase in **impervious surface** within the **wetland buffer** shall be accompanied by a permit site plan showing the specific **impervious surface** changes and the specific protective measures proposed as compensation. Said protective measures shall be completed prior to or concurrently with the proposed **impervious surface** impact for which they provide compensation.
- (2) The Planning Director may approve a permit site plan that is consistent with an approved Wetland Protection Plan.
- (3) If the Planning Director determines that a permit site plan proposes a significant change from the approved Wetland Protection Plan, the owner shall submit an application to the Conservation Commission and Planning Board for an amendment to the conditional use permit.

10.1017.825 Plan Updates: After every 10 **building permits** have been issued under an approved Wetland Protection Plan, whether authorized administratively or by conditional use permit, the owner shall submit an updated Wetland Protection Plan showing the new existing site conditions and including updated calculations. The updated Plan shall also serve as an application for administrative site plan approval for all site changes that have been made since the previously approved Plan or Plan amendment.

10.1017.83 Wetland Protection Plan Standards



10.1017.831 No net increase in **impervious surface** within the **wetland buffer**: **Buildings, structures** or other **impervious surfaces** may be constructed, expanded or relocated within the **wetland buffer** provided that (1) **No blasting is required**, (2) no new **impervious surface** shall be within **2550** feet of the **wetland** boundary, and (3) any new area converted to **impervious surface** shall be compensated for at a 1:1 ratio by the conversion of existing **impervious surface** within the **wetland buffer** to vegetated **open space** (~~lawn or~~ planted areas). Such compensatory **open space** does ~~not~~ need to be shown on the approved Wetland Protection Plan, ~~but~~ and shall be shown on the permit site plan submitted with the **building permit** application.

10.1017.832 Net increase in **impervious surface** within the **wetland buffer** with compensation: **Buildings, structures** or other **impervious surfaces** may be constructed, expanded or relocated within the **wetland buffer** provided that (1) no new **impervious surface** shall be within **2550** feet of the **wetland** boundary, and (2) the net increase in **impervious surface** shall be compensated for by protective measures that are shown on the approved Wetland Protection Plan at the following ratios:

Protective Measure	Ratio of protective measure area to net <b>impervious surface</b> area	
	25'-50' from <b>wetland</b>	50'-100' from <b>wetland</b>
Rain garden	3.0:1	2.0:1
Tree plantings	3.0:1	2.0:1
Shrub plantings	3.0:1	2.0:1

10.1017.833 Any increase in permanent **impervious surface** permitted through the provision of compensating protective measures shall also permit a temporary impact within the **wetland buffer** equal to two times the area of the permanent impact.

## 10.1018 Performance Standards

### 10.1018.10 Stormwater Management

All construction activities and **uses** of **buildings, structures**, and land within **wetlands** and **wetland buffers** shall be carried out so as to minimize the volume and rate of stormwater runoff, the amount of erosion, and the export of sediment from the site. All such activities shall be conducted in accordance with **Best Management Practices** for stormwater management 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.

## 10.1018.20 Vegetation Management

10.1018.21 The required **wetland buffer** includes two smaller areas where additional standards and criteria apply: a **no cut/vegetated buffer strip** and a limited cut area. The width of these areas shall be based on the type of jurisdictional area, as follows:

Jurisdictional Area	<b>No Cut/Vegetated Buffer Strip</b>	Limited Cut Area
<b>Vernal pool</b>	0' - 50'	50' - <del>75</del> 100'
<b>Inland wetland</b> , other than <b>vernal pool</b>	0' - <del>25</del> 50'	<del>25</del> 50' - <del>50</del> 100'
Non-tidal perennial stream or river	0' - <del>25</del> 50'	<del>25</del> 50' - <del>75</del> 100'
Inter-tidal area or <b>tidal wetland</b> as specified in section 10.1013.40	0' - <del>25</del> 50'	<del>25</del> 50' - <del>50</del> 100'

10.1018.22 If the **no cut/vegetated buffer strip** specified in Section 10.1018.21 contains an area that has a slope of 10% or more for at least 10 feet in a direction perpendicular to the edge of the jurisdictional area, the required width of the **no cut/vegetated buffer strip** shall be increased to ~~55~~100 feet from the edge of a **vernal pool** and to ~~40~~100 feet from the edge of any other **wetland**.

10.1018.23 Removal or cutting of vegetation:

- (1) Chemical control of vegetation is prohibited in all areas of a **wetland** or **wetland buffer**.
- (2) The removal or cutting of vegetation is prohibited in a **wetland** or **no cut/vegetated buffer strip**, except that non-chemical control of plants designated by the State of New Hampshire as "New Hampshire Prohibited Invasive Species" is permitted.
- (3) The removal of ~~any trees in the wetland and buffer is discouraged, and removal of trees greater than 6" diameter at breast height (dbh)~~ ~~more than 50% of trees greater than 6" diameter at breast height (dbh)~~ is prohibited in the **100' wetland buffer area unless a certified arborist labels a tree hazardous, which is subject to review by an independent third party.** ~~limited cut area.~~

10.1018.24 Fertilizers:

- (1) The use of any fertilizer is prohibited in a **wetland. buffer strip** or ~~limited cut area.~~
- (2) The use of fertilizers other than low phosphate and slow release nitrogen fertilizers **in compliance with NOFA standards** is prohibited in any part of a **wetland buffer**.

10.1018.25 Pesticides and herbicides:

The use of pesticides or herbicides is prohibited in a **wetland** or **wetland buffer**, except that application of pesticides by a public agency for public health purposes is permitted.

### **Section 10.1018.30 Porous Pavement in Wetland Buffer**

- 10.1018.31 All new pavement installed in a **wetland buffer** shall be porous pavement. The Planning Board may allow exceptions to this requirement where it can be demonstrated that the height of ground water, condition of soil, or other factors as described in the application are not appropriate for porous pavement.
- 10.1018.32 An application that proposes porous pavement in a **wetland buffer** shall include a pavement maintenance plan addressing erosion control, periodic removal of sediment and debris from the porous surfaces, snow management, and repairs.

### **10.1018.40 Wetland Boundary Markers**

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.

### **10.1018.50 Snow Removal and Management in Private Parking Lots and Roadways.**

An application with parking lots and/or roadways must designate and mark with signage in the field snow storage areas outside of the 50' wetland buffer. If snow storage areas outside of the buffer and not possible the snow must be transported off site. A Winter maintenance plan must be submitted and work must be performed by Green SnowPro certified companies.

## **Section 10.1020 Earth Products Removal and Placement**

### **10.1021 Applicability and Permit Requirements**

- 10.1021.10 The removal or placement of more than 100 cubic yards of sod, loam, sand, gravel or quarried stone at any premises in any 1 year shall require a permit from the Planning Board except when incidental to and in connection with the construction of a **building, street** or other activity authorized by this Ordinance.
- 10.1021.20 Any removal or placement of earth products shall comply with State law regardless of whether a permit from the Planning Board is required.

### **10.1022 Application Requirements**

- 10.1022.10 An application for a permit for earth products removal or placement shall be submitted to the Planning Board in a form specified by the Board.
- 10.1022.20 The application shall be accompanied by a plan of land, prepared and stamped by a registered land surveyor or civil engineer, showing the following information for the property where the proposed removal or placement of materials is to take place and for all land located within 100 feet of the property:
- (a) property lines;
  - (b) vegetative cover;
  - (c) all man-made features;
  - (d) existing topography by 4-foot contour intervals;
  - (e) proposed temporary and permanent drainage;

(f) proposed topography at 2-foot contours upon completion of the excavation project.

10.1022.30 The estimated quantity of material to be removed or placed and topsoil to be stripped, stockpiled and replaced shall be determined by average end area methods or as approved by the Department of Public Works.

### 10.1023 Criteria for Approval

The Planning Board shall grant a permit for earth products removal or placement only if a majority of the Board finds that the application complies with all of the following criteria:

10.1023.10 The application is complete and provides sufficient information upon which to base an action; and

10.1023.20 The proposed earth products removal or placement activity will not result in any hazard to the public or to **adjacent** properties; and

10.1023.30 The proposed earth products removal or placement activity will not create a safety hazard due to traffic or other cause; and

10.1023.40 The proposed earth products removal or placement activity will not result in a reduction in property values or a change in the character of a residential neighborhood.

### 10.1024 Conditions of Approval

10.1024.10 A permit for earth products removal or placement shall specify conditions pertaining to:

(a) Control of drainage so as to prevent any adverse impact on adjoining parcels during and after work;

(b) Disposition of boulders, vegetation, stumps and other debris including unused material and any **structures** used in connection with the operations;

(c) The construction of necessary fencing to protect against hazards;

(d) Vegetation to remain as a visual barrier;

(e) Hours of operation;

(f) Routes for transportation of materials and method of transportation so as to minimize impact on surrounding parcels;

(g) **Setbacks** of the proposed removal from public rights of way and property lines shall be specified;

(h) The finished level and grading; and

(i) The placing of topsoil for purposes of seeding and planting to prevent erosion or dust.

10.1024.20 A permit for earth products removal, except in a stone quarry, shall specify the following additional conditions for restoring the site upon completion of excavation:

- (a) The finished slope shall not exceed a grade of 1 foot vertical distance for each 2 feet of horizontal distance unless stabilized in a manner approved by the Planning Board, which may include the use of rip-rap or retaining walls.
- (b) Topsoil shall be placed on finished slopes to a depth of at least 6 inches and shall be seeded and planted with materials approved by the Planning Board and the Conservation Commission.

10.1024.30 A permit for earth products removal or placement shall require the provision of a security in a form and amount approved by the Planning Board, sufficient to guarantee completion of the work in accordance with the conditions in 10.1024.10 and 10.1024.20.

## 10.1025 Performance Standards

10.1025.10 Earth products removal and placement activities shall respect the existing elevations at all **lot lines** with abutting properties, and shall not raise or lower the finished grades at a side or **rear lot line** in such a way as to create any condition that may be detrimental or depreciating to abutting **lots** or **uses**.

10.1025.20 Any raising or lowering of finished grades or construction of drainage facilities, swales or retaining walls at a property line shall be subject to review and approval by the **Code Official**.

10.1025.30 Earth products removal and placement activities shall be designed and carried out so that stormwater either will be infiltrated on site or will flow to a public surface drainage system or existing natural drainage course, both during the activity and upon completion and final grading. Such activities shall utilize stormwater **Best Management Practices** as set forth in the Planning Board's Site Plan Review Regulations.

10.1025.40 No material used in the filling or raising of land within residential **lots** shall include any garbage, ash or organic material, or any material detrimental to the stability of the **structure**, as determined by the **Code Official**.

## 10.1026 Expansion of Pre-Existing Earth Products Removal Activities

Where an earth products removal operation legally existed on a **lot** prior to December 18, 1995, the extension of such activity beyond the required **yards** of the **lot**, or onto an **adjacent lot** in the same ownership, shall require a permit under this section and shall not be considered an extension of a **nonconforming use**.



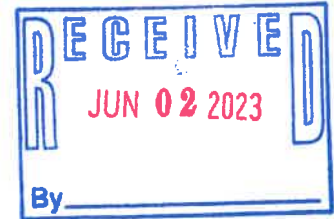
The State of New Hampshire  
**Department of Environmental Services**



Robert R. Scott, Commissioner

May 26, 2023

PORTSMOUTH MUNICIPAL CLERK/CONSERVATION COMMISSION  
1 JUNKINS AVE  
PORTSMOUTH NH 03801



**Re: Received Standard Dredge and Fill Wetlands Permit Application (RSA 482-A)**  
**NHDES File Number: 2023-01406**  
**Subject Property: 325 Little Harbor Rd, Portsmouth, Tax Map #204, Lot #5**

Dear Sir or Madam:

On May 26, 2023, the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau received the above-referenced Standard Dredge and Fill Wetlands Permit Application (Application). On May 26, 2023, NHDES determined the Application was administratively complete in accordance with RSA 482-A:3, XIV. *Please note this letter is **not** a permit or authorization to begin work.*

Pursuant to RSA 482-A:11, III, if notification by a local conservation commission, local river management advisory committee, or the New Hampshire Rivers Council pursuant to this paragraph is not received by the department within **14 days (June 7, 2023)** following the date the notice is filed with the municipal clerk, the department shall not suspend its normal action, but shall proceed as if no notification has been made. Please include the NHDES file number on the written notification.

Please provide a copy of this letter to all local level departments, boards, and commissions. Pursuant to current state laws and regulations, NHDES is not authorized to consider local zoning and regulatory issues pertaining to a project. These issues must be addressed at the local level.

If you have any questions, please contact the Wetlands Bureau at (603) 271-2147.

Sincerely,

Brandy Holmes  
Application Receipt Center, Wetlands Bureau  
Land Resources Management, Water Division

[www.des.nh.gov](http://www.des.nh.gov)

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095  
NHDES Main Line: (603) 271-3503 • Subsurface Fax: (603) 271-6683 • Wetlands Fax: (603) 271-6588  
TDD Access: Relay NH 1 (800) 735-2964





The State of New Hampshire  
**Department of Environmental Services**

Robert R. Scott, Commissioner



May 23, 2023



CITY OF PORTSMOUTH  
ATTN: BRIAN GOETZ, DEPUTY PUBLIC WORKS DIRECTOR  
680 PEVERLY HILL RD  
PORTSMOUTH NH 03801

**Re: Standard Dredge and Fill Wetlands Permit Application (RSA 482-A): Notice of Public Hearing Cover Letter**  
**NHDES File Number: 2020-02959**  
**Subject Property: 180 Piscataqua Rd, Durham, Tax Map #12, Lot #5-2**

Dear Mr. Goetz:

Pursuant to RSA 482-A:8, Env-Wt 202, and Env-C 205.03, the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau is holding a public hearing to receive public comments regarding NHDES application #2020-02959. The hearing is scheduled for June 1, 2023, commencing at 3:00pm. The hearing will be held at NHDES Pease Field Office, 222 International Drive, suite 175, Room A. Enclosed is a copy of the Notice of Public Hearing.

At the hearing, the applicant and/or applicant's agent will present details of the proposed project to replace a 6-mile cross-country drinking water transmission waterline that brings drinking water from the Madbury Water Treatment Plant to the Newington Booster Pump Station. The project will permanently impact 4,370 square feet within tidal waters to replace the existing subaqueous crossing of Little Bay from Durham and Newington. In addition, the project will temporarily impact a total of 78,460 square feet of jurisdictional area during construction, including 2,995 square feet within palustrine emergent wetlands, 26,595 square feet within the tidal buffer zone, 2,120 square feet within tidal marsh, and 46,750 square feet within tidal waters. Compensatory mitigation is proposed as a one-time payment into the Aquatic Resource Mitigation (ARM) Fund within the Salmon Falls / Piscataqua River Watershed account. The location of the project is from Piscataqua Rd, Town of Durham tax map 12, lot 5-2 and tax map 12, lot 8-2, across Little Bay, to Fox Point Rd, Town of Newington tax map 1, lot 1-1.

If you have any questions, please contact the reviewing inspector directly at [Stefanie.M.Tetreault@des.nh.gov](mailto:Stefanie.M.Tetreault@des.nh.gov) or (603) 271-0676.

Sincerely,

Stefanie M. Tetreault  
Inland Wetland Supervisor, Wetlands Bureau  
Land Resources Management, Water Division

Encl. Notice of Public Hearing  
cc: Wright-Pierce  
Portsmouth Municipal Clerk/Conservation Commission/Planning Board  
ec: Abutters/Interested Parties

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The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

**May 23, 2023**

**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF ENVIRONMENTAL SERVICES  
WATER DIVISION  
CONCORD, NEW HAMPSHIRE**

**NOTICE OF PUBLIC HEARING**

RSA 482-A:8, Env-Wt 202, Env-C 205.03

The New Hampshire Department of Environmental Services Wetlands Bureau (NHDES) is providing notice of a public hearing scheduled for June 1, 2023, commencing at 3:00 pm. The hearing will be held at the NHDES Pease Field Office, 222 International Drive, Suite 174, Room A, Portsmouth, NH.

The purpose of this public hearing is to receive public comments regarding NHDES application #2020-02959, submitted by the City of Portsmouth, requesting to replace a 6-mile cross-country drinking water transmission waterline that brings drinking water from the Madbury Water Treatment Plant to the Newington Booster Pump Station. The project will permanently impact 4,370 square feet within tidal waters to replace the existing subaqueous crossing of Little Bay from Durham to Newington. In addition, the project will temporarily impact a total of 78,460 square feet of jurisdictional area during construction, including 2,995 square feet within palustrine emergent wetlands, 26,595 square feet within the tidal buffer zone, 2,120 square feet within tidal marsh, and 46,750 square feet within tidal waters. Compensatory mitigation is proposed as a one-time payment into the Aquatic Resource Mitigation (ARM) Fund within the Salmon Falls / Piscataqua River Watershed account. The location of the project is from Piscataqua Rd, Town of Durham tax map 12, lot 5-2 and tax map 12, lot 8-2, across Little Bay, to Fox Point Rd, Town of Newington tax map 1, lot 1-1.

The public hearing will be digitally recorded and made part of NHDES application #2020-02959.

Members of the public may submit written comments to be included in this application hearing as follows:

- Email: [WetlandsApplicationPublicComments@des.nh.gov](mailto:WetlandsApplicationPublicComments@des.nh.gov),
- First-class mail: NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095, or
- Hand-delivered during this application hearing.

All written comments must include NHDES application #2020-02959, to ensure the written comments are included in the record of this application hearing.

Prior to the conclusion of the hearing, a party may request the record be left open for a specified length of time for the filing of information not available at the hearing. Otherwise, the record will be closed at the end of the hearing.

The file will be made available for review at the offices of NHDES, 29 Hazen Drive, Concord, NH during regular business hours of 8 a.m. to 4 p.m. To schedule an appointment to review the file, submit a request to: [filereview@des.nh.gov](mailto:filereview@des.nh.gov).

[www.des.nh.gov](http://www.des.nh.gov)

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The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

**WETLANDS AND NON-SITE SPECIFIC PERMIT 2021-01572**

**NOTE CONDITIONS**



**PERMITTEE:** CITY OF PORTSMOUTH  
 ERICH FIEDLER PE - CITY ENGINEER  
 680 PEVERLY HILL RD  
 PORTSMOUTH NH 03801

**PROJECT LOCATION:** 200 PEIRCE ISLAND RD, PORTSMOUTH  
 TAX MAP #208, LOT #1

**WATERBODY:** PISCATAQUA RIVER

**ORIGINAL APPROVAL DATE:** SEPTEMBER 02, 2021

**FIRST AMENDMENT APPROVAL DATE:** FEBRUARY 03, 2022

**SECOND AMENDMENT APPROVAL DATE:** MAY 23, 2023

**EXPIRATION DATE:** SEPTEMBER 02, 2026

Based upon review of permit application 2021-01572 in accordance with RSA 482-A and RSA 485-A:17, the New Hampshire Department of Environmental Services (NHDES) hereby issues this Wetlands and Non-Site Specific Permit. To validate this Permit, signatures of the Permittee and the Principal Contractor are required.

**PERMIT DESCRIPTION:**

Impact 12,951 square feet of previously developed upland tidal buffer zone and 2,150 square feet of undeveloped upland tidal buffer zone in order to improve resiliency of the access road to the Peirce Island Wastewater Treatment Facility (WWTF), upgrade an existing parking area, extend a public walking trail, and to replace and rehabilitate existing sewer and drinking water force mains. In addition, the project will temporarily impact 57,244 square feet of previously developed upland tidal buffer zone and 3,063 square feet of undeveloped upland tidal buffer zone for construction access and installation. Compensatory mitigation is provided for permanent impacts within the undeveloped upland tidal buffer zone as a 11,330 square foot buffer enhancement area to be planted.

**THIS PERMIT IS SUBJECT TO THE FOLLOWING PROJECT-SPECIFIC CONDITIONS:**

1. AMENDED: All work shall be done in accordance with the plans by AECOM and Altus Engineering, Inc., titled Force Main and Water Main Replacement (dated April 2021), Overview Plan (G-001) and Parking Improvements (C-001), Erosion Control Notes and Parking Improvement Details (C-003, C-004; dated April 13, 2021) and Proposed Walking Trail (C-002; dated April 2020), as received by the NH Department of Environmental Services (NHDES) on May 20, 2021; Overall Site Plan (00 G-003-P OSP) dated April 13, 2021 and revised through July 23, 2021, last received by NHDES on July 30, 2021; Compensatory Mitigation and Post-Construction Monitoring Plan (received by NHDES September 1, 2021); Parking Improvements (L-001) dated August 31, 2021 and received by NHDES on September 01, 2021; Piping Plan and Profile (00 C-105) dated August 2021 and received by NHDES on January 26, 2022; and, plan titled "NHDES Amended Wetlands Permit Plan" dated April 26, 2023 and received by NHDES on May 15, 2023, per Rule Env-Wt 307.16.
2. Prior to the start of construction, the contractor shall install fencing around protected plant species to prevent unintentional encroachment, in accordance with Env-Wt 311.06(g).
3. All work shall comply with all applicable conditions specified in Env-Wt 307.

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4. 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, per Rule Env-Wt 307.07.
5. 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 using the techniques described in Env-Wq 1505.02, Env-Wq 1505.04, Env-Wq 1506, and Env-Wq 1508; the applicable BMP manual; or a combination thereof, if the BMP manual provides less protection to jurisdictional areas than the provisions of Env-Wq 1500, per Rule Env-Wt 307.03(b).
6. 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, per Rule Env-Wt 307.03(c)(1).
7. 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, per Rule Env-Wt 307.03(g)(1).
8. Equipment shall be staged and refueled outside of jurisdictional areas (unless allowed) per Rule Env-Wt 307.15 and Env-Wt 307.03(h).

**MONITORING:**

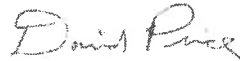
9. Within 60 days of completing a mitigation project that included enhancement, the applicant shall submit a signed letter specifying the date of completion and the anticipated dates of submittal of the annual monitoring reports plus a post - construction monitoring report documenting the conditions of the enhanced area in accordance with Env-Wt 807.03.
10. Compensatory mitigation project monitoring reports shall be submitted to the department annually, by December 1 of each monitoring year in accordance with the approved compensatory mitigation plan, Env- Wt 307.18(a) and Env-Wt 803.04.
11. Mitigation project monitoring shall span no fewer than 5 growing seasons for any mitigation project that includes plantings, in accordance with Env-Wt 803.04(b)(1).

**THIS PERMIT IS SUBJECT TO THE FOLLOWING GENERAL CONDITIONS:**

1. Pursuant to RSA 482-A:12, a copy of this permit shall be posted in a secure manner in a prominent place at the site of the approved project.
2. In accordance with Env-Wt 313.01(a)(5), and as required by RSA 482-A:11, II, work shall not infringe on the property rights or unreasonably affect the value or enjoyment of property of abutting owners.
3. In accordance with Env-Wt 314.01, a standard permit shall be signed by the permittee, and the principal contractor who will build or install the project prior to start of construction, and will not be valid until signed.
4. In accordance with Env-Wt 314.03(a), the permittee shall notify the department in writing at least one week prior to commencing any work under this permit.
5. In accordance with Env-Wt 314.08(a), the permittee shall file a completed notice of completion of work and certificate of compliance with the department within 10 working days of completing the work authorized by this permit.
6. In accordance with Env-Wt 314.06, transfer of this permit to a new owner shall require notification to, and approval of, the NHDES.
7. The permit holder shall ensure that work is done in a way that protects water quality per Env-Wt 307.03; protects fisheries and breeding areas per Env-Wt 307.04; protects against invasive species per Env-Wt 307.05; meets dredging activity conditions in Env-Wt 307.10; and meets filling activity conditions in Env-Wt 307.11.
8. This project has been screened for potential impact to known occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or only cursory surveys have been performed, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species. This permit does not authorize in any way 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.

9. In accordance with Env-Wt 307.06(a) through (c), no activity shall jeopardize the continued existence of a threatened or endangered species, a species proposed for listing as threatened or endangered, or a designated or proposed critical habitat under the Federal Endangered Species Act, 16 U.S.C. §1531 et seq.; State Endangered Species Conservation Act, RSA 212-A; or New Hampshire Native Plant Protection Act, RSA 217-A.
10. In accordance with Env-Wt 307.02, and in accordance with federal requirements, all work in areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE) shall comply with all conditions of the applicable state general permit.

APPROVED:



David Price  
East Region Supervisor, Wetlands Bureau  
Land Resources Management, Water Division

**THE SIGNATURES BELOW ARE REQUIRED TO VALIDATE THIS PERMIT (Env-Wt 314.01).**

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PERMITTEE SIGNATURE (required)

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PRINCIPAL CONTRACTOR SIGNATURE (required)





Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists



**ABUTTER NOTIFICATION FOR  
 NHDES WETLANDS PERMIT APPLICATION**

**VIA CERTIFIED MAIL**

May 16<sup>th</sup>, 2023

City of Portsmouth Conservation Commission  
 1 Junkins Ave  
 Portsmouth, NH 03801

Project # 47099.01

**Re: NHDES Wetlands Permit Application – Lady Isle Bridge Replacement Project  
 325 Little Harbor Road, Portsmouth, Tax Map: 205, Lot: 2**



Dear Abutter:

This letter is to inform you that a Wetlands Permit Application will be filed with the NH Department of Environmental Services (NHDES). Under NH Wetlands Law, RSA 482-A, impacts within 100-feet of the Highest Observable Tide Line (HOTL) of Tidal Waterbodies require a NHDES Wetlands Permit and, under RSA 482-A:3, we are required to notify you about this permit application via certified mail.

Once the permit application is filed, a copy of the complete permit application, including the design plans that depict the proposed impact areas, will be available for viewing at the Town of Portsmouth Clerk's Office.

Should you have any questions or require additional information about this project, please do not hesitate to contact me at (603) 431-2222, anytime from 8:00 A.M. to 5:00 P.M., Monday through Friday.

Sincerely,  
**TFMoran, Inc.**

Kyra Higgins, KRH

*Environmental Permitting Specialist*

cc: NHDES Wetlands Bureau

JRA/krh

TFMoran, Inc.  
 48 Constitution Drive, Bedford, NH 03110  
 T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
 170 Commerce Way--Suite 102, Portsmouth, NH 03801  
 T(603) 431-2222







The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

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**WETLANDS AND NON-SITE SPECIFIC PERMIT 2022-02197**

**NOTE CONDITIONS**

**PERMITTEE:** ESTHER'S MARINA LLC  
41 PICKERING AVE  
PORTSMOUTH NH 0380

**PROJECT LOCATION:** 41 PICKERING AVE, PORTSMOUTH  
TAX MAP #102, LOT #25

**WATERBODY:** PISCATAQUA RIVER

**APPROVAL DATE:** JANUARY 11, 2023



**EXPIRATION DATE: JANUARY 11, 2028**

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Based upon review of permit application 2022-02197 in accordance with RSA 482-A and RSA 485-A:17, the New Hampshire Department of Environmental Services (NHDES) hereby issues this Wetlands and Non-Site Specific Permit. To validate this Permit, signatures of the Permittee and the Principal Contractor are required.

**PERMIT DESCRIPTION:**

Impact 820 square feet (SF) of tidal wetland to expand an existing "T"- shaped commercial tidal docking structure by installing an additional 10 foot by 70 foot float with associated float stops to be accessed by a new 3 foot by 40 foot ramp all secured to existing piles. The modification will not increase the overall extension of the marina facility which currently extends a total of 182 feet seaward of the highest observable tide line on 215 feet of frontage along the Piscataqua River in Portsmouth.

Compensatory mitigation for the 820 SF of permanent impacts to tidal wetlands shall consist of a one-time payment of \$10,553.02 into the Aquatic Resource Mitigation (ARM) Fund, for mitigation of impacts within the Salmon Falls - Piscataqua Rivers Watershed service area.

**THIS PERMIT IS SUBJECT TO THE FOLLOWING PROJECT-SPECIFIC CONDITIONS:**

1. All work shall be done in accordance with the approved plans dated May 2021, and revised through December 7, 2022, by Ambit Engineering, Inc., and received by the NH Department of Environmental Services (NHDES) on December 12, 2022, in accordance with Env-Wt 307.16.
2. This permit shall not be effective until the permittee records this permit at the Rockingham County Registry of Deeds as required by RSA 482-A:3, VI. 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 NHDES with a copy of the permit stamped by the registry with the book and page and date of receipt, in accordance with New Hampshire Administrative Rule Env-Wt 314.02(b) and (c).
3. The permit is contingent on submittal of a check in the amount of \$10,553.02 to the Aquatic Resource Mitigation Fund, within the Salmon Falls - Piscataqua Rivers Watershed Account, by the applicant as calculated per Env-Wt 803.07 and RSA 482-A:30. No work is authorized under this approval until the ARM payment is received.
4. In accordance with Env-Wt 807.01(b), the payment shall be received by NHDES within 120 days from the approval decision or NHDES will deny the application.

[www.des.nh.gov](http://www.des.nh.gov)

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095

NHDES Main Line: (603) 271-3503 • Subsurface Fax: (603) 271-6683 • Wetlands Fax: (603) 271-6588

TDD Access: Relay NH 1 (800) 735-2964

5. Any work performed above the mean high water line (MHW) shall occur during low tide, to protect anadromous fish as required by Env-Wt 307.06.
6. Pile installation and any work performed below the MHW shall occur between November 15 and March 15, to protect anadromous fish as required by Env-Wt 307.06.
7. The ramp and float portions of commercial tidal dock shall be seasonal and removed from the water during the non-boating season, in accordance with Env-Wt 606.06(b).
8. Tidal docking installation shall be done by barge or upland to prevent the driving of construction equipment in or through tidal waters/wetlands or on the bottom of the inter-tidal zone, in accordance with Env-Wt 606.05(b).
9. Tidal docking construction shall be done in accordance with the standard conditions in Env-Wt 307.
10. Heavy equipment shall not be operated in any jurisdictional area unless specifically authorized by this permit, in accordance with Env-Wt 307.15(a).
11. In accordance with Env-Wt 307.03(h), equipment shall be staged and refueled outside of jurisdictional areas and in accordance with Env-Wt 307.15.
12. 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.
13. 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.
14. 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.

**THIS PERMIT IS SUBJECT TO THE FOLLOWING GENERAL CONDITIONS:**

1. Pursuant to RSA 482-A:12, a copy of this permit shall be posted in a secure manner in a prominent place at the site of the approved project.
2. In accordance with Env-Wt 313.01(a)(5), and as required by RSA 482-A:11, II, work shall not infringe on the property rights or unreasonably affect the value or enjoyment of property of abutting owners.
3. In accordance with Env-Wt 314.01, a standard permit shall be signed by the permittee, and the principal contractor who will build or install the project prior to start of construction, and will not be valid until signed.
4. In accordance with Env-Wt 314.03(a), the permittee shall notify the department in writing at least one week prior to commencing any work under this permit.
5. In accordance with Env-Wt 314.08(a), the permittee shall file a completed notice of completion of work and certificate of compliance with the department within 10 working days of completing the work authorized by this permit.
6. In accordance with Env-Wt 314.06, transfer of this permit to a new owner shall require notification to, and approval of, the NHDES.
7. The permit holder shall ensure that work is done in a way that protects water quality per Env-Wt 307.03; protects fisheries and breeding areas per Env-Wt 307.04; protects against invasive species per Env-Wt 307.05; meets dredging activity conditions in Env-Wt 307.10; and meets filling activity conditions in Env-Wt 307.11.
8. This project has been screened for potential impact to known occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or only cursory surveys have been performed, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species. This permit does not authorize in any way 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.

9. In accordance with Env-Wt 307.06(a) through (c), no activity shall jeopardize the continued existence of a threatened or endangered species, a species proposed for listing as threatened or endangered, or a designated or proposed critical habitat under the Federal Endangered Species Act, 16 U.S.C. §1531 et seq.; State Endangered Species Conservation Act, RSA 212-A; or New Hampshire Native Plant Protection Act, RSA 217-A.
10. In accordance with Env-Wt 307.02, and in accordance with federal requirements, all work in areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE) shall comply with all conditions of the applicable state general permit.

APPROVED:



Mary Ann Tilton  
Assistant Bureau Administrator, Wetlands Bureau  
Land Resources Management, Water Division

**THE SIGNATURES BELOW ARE REQUIRED TO VALIDATE THIS PERMIT (Env-Wt 314.01).**

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PERMITTEE SIGNATURE (required)

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PRINCIPAL CONTRACTOR SIGNATURE (required)

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*NEW HAMPSHIRE*  
*DEPARTMENT OF STATE*



*I, David M. Scarian, Secretary Of State, of the State of New Hampshire, do hereby certify that the Governor and Executive Council, at their meeting on March 8, 2023 approved ITEM #46 authorized Esther's Marina's request to perform work on Piscataqua River in Portsmouth.*



**In Testimony Whereof**, I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this eighth day of March, in the year of Our Lord, two thousand and twenty-three.

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

Secretary of State

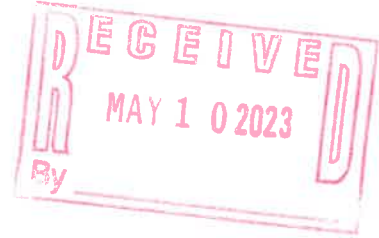


The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

May 05, 2023



PROCESS PIPELINE SERVICES  
C/O NOAH HANSON  
4 BROAD ST  
PLAINVILLE MA 02762

**Re: Disqualified Utility Statutory Permit-by-Notification (RSA 482-A)**  
**NHDES File Number: 2023-01007**  
**Project Location: Portsmouth, Right-of-Way**

Dear Applicant:

On April 17, 2023, the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau received the above-referenced Utility Statutory Permit-by-Notification (Utility SPN). On May 05, 2023, the NHDES determined the proposed activities do not meet the criteria for a Utility SPN established under RSA 482-A:3, XV and Rules Env-Wt 100-900. The reason(s) for this determination is/are:

This is classified as a minor impact project per Rule Env-Wt 521.06(b)(3), as the utility project exceeds the minimum impact criteria in Env-Wt 521.06(a)(2).

Accordingly, the proposed activities do not qualify for a Utility SPN. No work within RSA 482-A jurisdiction shall begin until a wetlands permit has been obtained and posted on site. If any work has been performed without a wetlands permit, the site shall be restored to pre-existing conditions.

If you have any questions, please contact me at [Jessica.L.Schulz@des.nh.gov](mailto:Jessica.L.Schulz@des.nh.gov) or (603) 271-4188.

Sincerely,

Jessica Schulz  
Wetlands Specialist, Wetlands Bureau  
Land Resources Management, Water Division

cc: Portsmouth Municipal Clerk/Conservation Commission

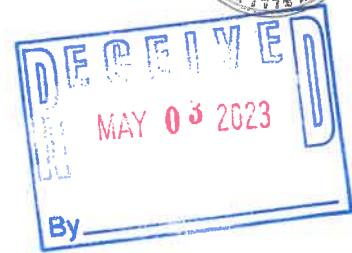




The State of New Hampshire  
**Department of Environmental Services**

**Robert R. Scott, Commissioner**

April 24, 2023



PROCESS PIPELINE SERVICES  
C/O NOAH HANSON  
4 BROAD ST  
PLAINVILLE MA 02762

**Re: Incomplete Utility Maintenance Statutory Permit-by-Notification (RSA 482-A)**  
**NHDES File Number: 2023-01007**  
**Project Location: Portsmouth, Right-of-Way**

Dear Applicant:

On April 17, 2023, the New Hampshire Department of Environmental Services (NHDES) received the above-referenced Utility Statutory Permit-by-Notification (Utility SPN). On April 24, 2023, the NHDES determined the Utility SPN was administratively incomplete as it did not include the information required under RSA 482-A:3, XV and Rules Env-Wt 100-900. The following information was missing:

- **Section 2- Project Description:** Provide additional information demonstrating that this project meets the applicable minimum impact criteria in Env-Wt 521.06(a), including a description of the location of the proposed work and all jurisdictional impacts.
  - Are new impacts proposed to jurisdictional areas?
  - Does the "new launcher barrel" proposed constitute a new utility asset?
  - Will the proposed project occur within an existing Right-of-Way?
  - NOTE: Per Env-Wt 521.06(b), a utility project shall be a minor impact project if the project establishes a new road, new utility corridor, or right-of-way, or new utility assets.
- **Section 5 – Utility Provider:** please clarify whether Process Pipeline Services or Unital Corp. will be functioning as the "utility provider" for this project. See RSA 482-A:3 XV(b)(1).

To proceed under this Utility SPN, submit the missing information to the NHDES to file an administratively complete Utility SPN that meets the requirements outlined in RSA 482-A:3, XV and Rules Env-Wt 100-900. Please include the NHDES file number 2023-01007 with your submission. If the project, as described, does not meet the requirements, please obtain a Wetlands Permit-by-Notification, an Expedited (EXP) Minimum Impact Wetlands Permit, or a Standard Dredge and Fill Wetlands Permit, as applicable.

If you have any questions, please contact me at [Jessica.L.Schulz@des.nh.gov](mailto:Jessica.L.Schulz@des.nh.gov) or (603) 271-4188.

Sincerely,

Jessica Schulz  
Wetlands Specialist, Wetlands Bureau  
Land Resources Management, Water Division

cc: Portsmouth Municipal Clerk/Conservation Commission



