The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

November 27, 2023

His Excellency, Governor Christopher T. Sununu
and The Honorable Council
State House
Concord, NH 03301

REQUESTED ACTION

Approve Xiao Hui Ye Revocable Trust's request to perform the following work on Piscataqua River in Dover pursuant to NH Department of Environmental Services (NHDES) Wetlands Bureau permit #2023-00482, and in accordance with RSA 482-A:3. No comments were submitted by the Dover Conservation Commission regarding the project as proposed.

Impact a total of 886 square feet (SF) of tidal and freshwater wetland, 736 SF permanent and 150 SF temporary, to modify and repair an existing tidal dock structure resulting in a new 4 foot wide by 6 foot long dock access stairway, in kind replacement of 50 feet of an existing 4 foot by 100 foot permanent pier, a 3 foot by 40 foot ramp to a 6 foot by 12 foot and 8 foot by 40 foot float in an "L" configuration. The overall length of this docking structure, seaward of the highest observable tide line is 160 feet, on 217 feet of frontage along the Piscataqua River in Dover.

NHDES imposed the following conditions as part of this approval:

1. All work shall be done in accordance with the approved plans dated January 22, 2023, and revised through September 17, 2023, by Matthew R. Cardin, and received by the NH Department of Environmental Services (NHDES) on September 18, 2023, in accordance with Env-Wt 307.16.
2. This permit shall not be effective until the permittee records this permit at the Strafford 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 ramp and float portions of residential tidal docks shall be seasonal and removed from the water during the non-boating season, in accordance with Env-Wt 606.06(b).
4. 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).
5. Tidal docking construction shall be done in accordance with the applicable standard conditions in Env-Wt 307.
6. In accordance with Env-Wt 307.11(k) and (l), swamp mats shall be properly installed, not dragged into position; and removed immediately upon the completion of work.

7. In accordance with Env-Wt 307.11(f), swamp mats and construction mats shall be deemed temporary fill for new authorizations only if they meet the requirements of Env-Wt 307.11(h)(1) and (2).
8. In accordance with Env-Wt 307.12(f), if any temporary impact area that is stabilized with seeding or plantings does not have at least 75% successful establishment of wetlands vegetation after 2 growing seasons, the area shall be replanted or reseeded, as applicable.
9. In accordance with Env-Wt 307.12(i), wetland areas where permanent impacts are not authorized shall be restored to their pre-impact conditions and elevation by replacing the removed soil and vegetation in their pre-construction location and elevation such that post-construction soil layering and vegetation schemes are as close as practicable to pre-construction conditions.
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.

EXPLANATION

NHDES approved this project on October 25, 2023. NHDES supported its decision with the following findings:

1. This project is classified as a major project per Rule Env-Wt 606.17(a)(1), for new overwater structure construction in tidal waters/wetlands.
2. On March 1, 2023, the Department received correspondence from the Natural Heritage Bureau (NHB) dated August 24, 2022, stating that "NHB had no further concerns about the proposed project as long as the exemplary natural community is not impacted."
3. On March 1, 2022, the Department received correspondence from the NH Fish and Game Department (NHF&G) dated December 20, 2022, stating that "[t]he NHFG Nongame and Endangered Species Program does not expect impacts to [the protected anadromous fish species] as a result of the proposed pier replacement and installation of a seasonal gangway and dock structure."
4. NHDES finds that the project as approved and conditioned will not have an unreasonable adverse impact on the value of such areas as sources of nutrients for finfish, crustacea, shellfish and wildlife of significant value, nor will it damage or destroy habitats and reproduction areas for plants, fish and wildlife of importance.
5. No comments were received by NHDES from the Dover Conservation Commission about this application.

6. On March 27, 2023, the applicant obtained a statement from the Pease Development Authority, Division of Ports and Harbors regarding the projects impact on navigation and passage stating, "[w]e examined the proposed site and found that the structure will have no negative effect on navigation in the channel," per Rule Env-Wt 603.09.
7. NHDES finds that the requirements for a public hearing, as established in RSA 482-A, do not apply as the project will not have a significant environmental impact, as defined in New Hampshire Administrative Rule Env-Wt 104.19, on the resources protected by RSA 482-A, and, is not of substantial public interest, as defined in New Hampshire Administrative Rule Env-Wt 104.32.
8. The Department finds that the project as proposed and conditioned meets the requirements of RSA 482-A and the Wetlands Program Code of Administrative Rules Chapters Env-Wt 100-1000. No waivers of RSA 482-A or the Wetlands Program Code of Administrative Rules Chapters Env-Wt 100-1000 were requested or approved under this permit action.

NHDES Wetlands Bureau permit #2023-00482 application documents are enclosed for review by the Governor and the Executive Council in consideration of this request and in accordance with RSA 482-A:3, II(a), as it is a major project located in New Hampshire public waters.

We respectfully request your approval of this item.

Robert R. Scott
Commissioner

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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: Xiao Hui Ye Revocable Trust **TOWN NAME:** Dover

RECEIVED Administrative MAR 01 2023 Only NHDES LAND RESOURCES MANAGEMENT	INCOMPLETE Administrative MAR 01 2023 Only	COMPLETE Administrative MAR 09 2023 Only	File No. 2023-00482 Check No. 1418 Amount 2309.00 Initials:

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

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))

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

Has the required planning been completed?	☒ Yes ☐ No
Does the property contain a PRA? If yes, provide the following information:	☒ Yes ☐ No
• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	☐ Yes ☒ No
• Protected species or habitat? o If yes, species or habitat name(s): o NHB Project ID #: 22-2246	☐ Yes ☒ No
• Bog?	☐ Yes ☒ No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	☐ Yes ☒ No
• Designated prime wetland or duly-established 100-foot buffer?	☐ Yes ☒ No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	☒ Yes ☐ No
Is the property within a Designated River corridor? If yes, provide the following information: • Name of Local River Management Advisory Committee (LAC): • A copy of the application was sent to the LAC on Month: Day: Year:	☐ Yes ☒ No

For dredging projects, is the subject property contaminated? • If yes, list contaminant:	☐ Yes ☐ No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	☒ Yes ☐ No
For stream crossing projects, provide watershed size (see WPPT or Stream Stats):	

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

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

The application is to maintain and expand the existing 100' pier, gangway and float at 196A Dover Point Road, Dover, NH by installing replacing the first 50 feet (landward) section of pier at a higher elevation to allow for a 1:1 width to height ration, replace the existing 30'x3' gangway way with a 40' x 3' gangway, and replace the 10' x 20' with a 6' x 12' inline float connected to a 8' x 40' float secured by (6) chains and anchors (helical) on the Piscataqua River. The portion of pier to be replaced will be supported by (3) bents containing two piles each. The float will be connected to the pier via the aluminum gangway. The seasonal float system will be supported by six helical anchors and chains extending from each corner of the float. All piles will consist of 12" diameter Class A, CCA treated timber piles.

The pier, seasonal gangway and float are to be installed via a barge during low tide cycles and via matted access along proposed dock alignment from the upland in order to install portions that can't be reached by barge staged outside of the salt marsh area.

Appropriate erosion controls will be installed on the upland side and turbidity curtains will be installed and maintained through the duration of construction.

SECTION 3 - PROJECT LOCATION

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

ADDRESS: 196A Dover Point Road	
TOWN/CITY: Dover	
TAX MAP/BLOCK/LOT/UNIT: Map L, Lot 89H	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Piscataqua River ☐ N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	° North ° 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: Xiao Hui Ye Revocable Trust		
MAILING ADDRESS: 196 A Dover Point Road		
TOWN/CITY: Dover	STATE: NH	ZIP CODE: 03820
EMAIL ADDRESS: Jessicayereo@gmail.com		
FAX:	PHONE: 617-839-6719	
ELECTRONIC COMMUNICATION: By initialing here: XHYRT, 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.: Cardin, Matthew R		
COMPANY NAME: Cardin Environmental Consulting and Permitting		
MAILING ADDRESS: 30 Old Post Road		
TOWN/CITY: Newington	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: matt@cardinenvironmental.com		
FAX:	PHONE: 603-988-6635	
ELECTRONIC COMMUNICATION: By initialing here MRC, 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:	STATE:	ZIP CODE:
EMAIL ADDRESS:		
FAX:	PHONE:	
ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.		

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

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

Please see attached narrative that includes Avoidance and Minimization Checklist, Coastal Functional Assessment, a Vulnerability Assessment, methods to protect and minimize impacts to natural resources during and as a result of constructing the project and design criteria, water depths, statement regarding impact to navigation and passage and appropriate data screening figures.

SECTION 8 - AVOIDANCE AND MINIMIZATION

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

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

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

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

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

Mitigation Pre-Application Meeting Date: Month: ☐ Day: ☐ Year: ☐

(☒ N/A - Mitigation is not required)

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

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

(☒ N/A – Compensatory mitigation is not required)

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

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

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

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

Permanent 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						
	Scrub-shrub Wetland						
	Emergent Wetland						
	Wet Meadow						
	Vernal Pool						
	Designated Prime Wetland						
	Duly-established 100-foot Prime Wetland Buffer						
Surface Water	Intermittent / Ephemeral Stream						
	Perennial Stream or River						
	Lake / Pond						
	Docking - Lake / Pond						
	Docking - River						
Banks	Bank - Intermittent Stream						
	Bank - Perennial Stream / River						
	Bank / Shoreline - Lake / Pond						
Tidal	Tidal Waters						
	Tidal Marsh	214					
	Sand Dune						
	Undeveloped Tidal Buffer Zone (TBZ)						
	Previously-developed TBZ						
	Docking - Tidal Water	712					
TOTAL		926					

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):	214 SF	× $0.40 =	$ 85.6
Seasonal docking structure:	512 SF	× $2.00 =	$ 1,024
Permanent docking structure:	200 SF	× $4.00 =	$ 800
Projects proposing shoreline structures (including docks) add $400 =			$ 400
		Total =	$ 2,309.6

The application fee for minor or major impact is the above calculated total or $400, whichever is greater =	$ 2,309.6

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: MRC	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: MRC	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: MRC	The signer understands that: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. • The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. • The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.
Initials: MRC	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

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

SIGNATURE (OWNER):	PRINT NAME LEGIBLY: Xiao Hui Ye, trustee for Xiao Hui Ye Revocable trust	DATE: 11/23/2023
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY:	DATE:
SIGNATURE (AGENT, IF APPLICABLE):	PRINT NAME LEGIBLY: Matt Cardin, CWS	DATE: 2/20/23

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

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

TOWN/CITY CLERK SIGNATURE:	PRINT NAME LEGIBLY: Susan Mistretta

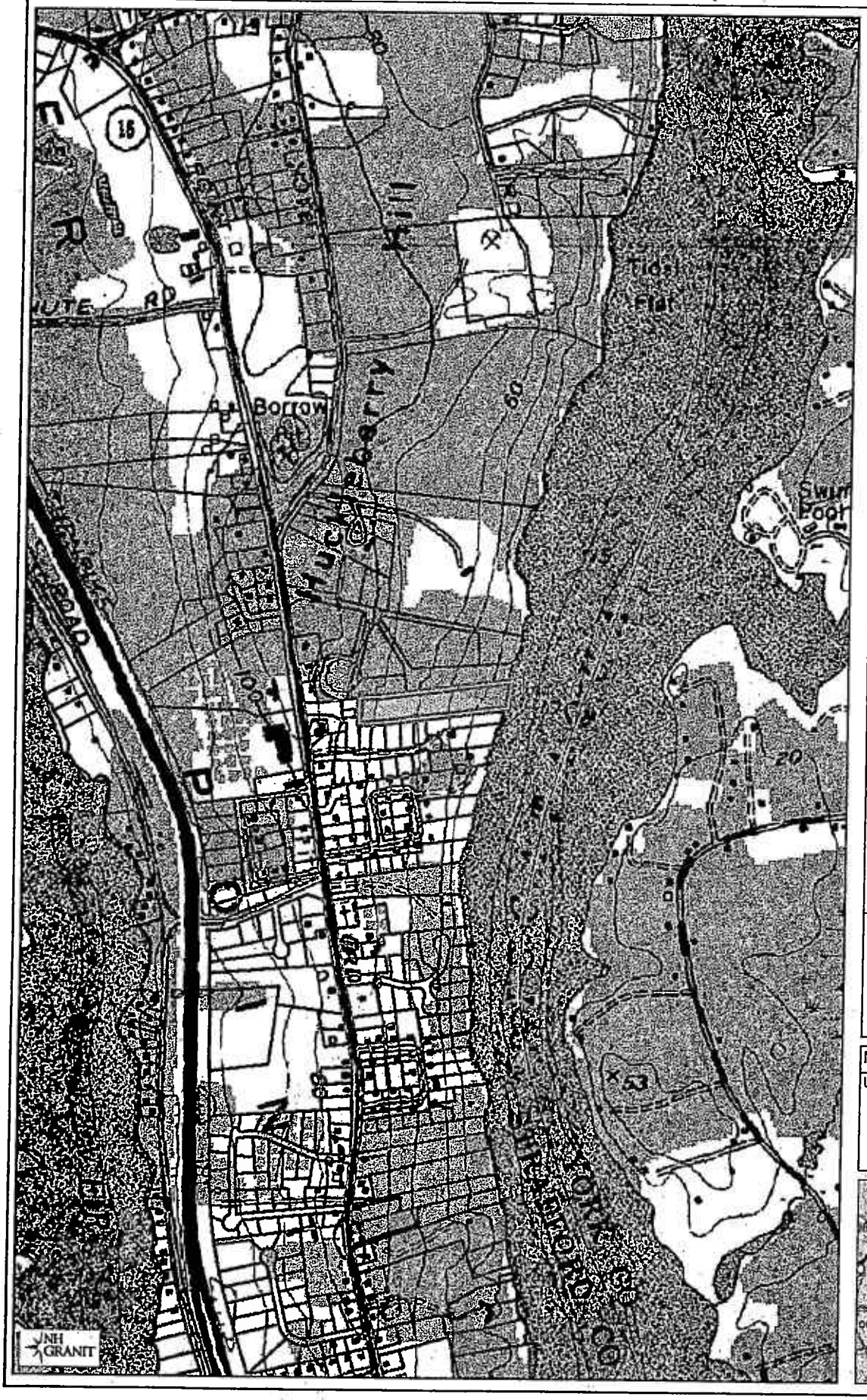
TOWN/CITY: Dover	DATE: 12/24/2022

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".

Map by NH GRANIT - 196A Dover Point Road, Dover, NH



Legend

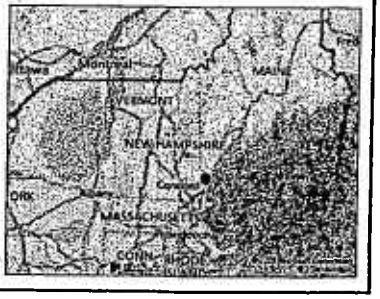
Parcels
- Parcel Polygons
- Attributes for Additional Lines

State
County
City/Town

Map Scale
1: 12,988

Map Generated: 2/19/2023

Notes
USGS 7.5' Quad



The State of New Hampshire

Department of Environmental Services

Robert R. Scott, Commissioner

This application contains confidential information from the NH Natural Heritage Bureau (NHB) Datacheck tool provided by the NH Department of Natural and Cultural Resources, NHB. This information is being withheld from disclosure to the public.

Please direct all questions regarding the confidential information to Pamela G. Monroe, Legal Unit Administrator, NH Department of Environmental Services, at: pamela.g.monroe@des.nh.gov, or (603) 271-3137.

Abutter List
Owner: Xiao Hui Jessica Ye
Site Location: 196A Dover Point Road, Dover, NH
Map I89 , Lot H0

Map	Lot	Name	Mailing Address	Street Address
L89	G12	Steven Titus		
L89	G10	Becker Family Rev. Trust		
L89	G8	Beaupre Andre and Karen Rev. Trust		
L89	G6	Alexander Mackiewicz, Ashley Mackiewicz		
L89	G4	Frank Getchell and Janet Maleksi Rev. Trust		
L89	G2	James and Amber Montecalvo		
L89	C0	Jonathan Lummus and Anne Shea Deirdre		
L89	B2	Brian Louis and Stephanie Stagger Richelieu		
L89	B4	James and Cynthia Hawse		

Property	Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
1	L0069-B00002	[redacted]	STAGGER BRIAN LOUIS &	STAGGER STEPHANIE RICHELIEU	[redacted]			
2	L0069-B00004		HAWSE JAMES H &	HAWSE CYNTHIA				
3	L0069-C00000		LUMMUS JONATHAN A	SHEA DEIRDRE ANNE				
4	L0069-G00002		MONTECALVO JAMES &	MONTECALVO AMBER				
5	L0069-G00004		GETCHELL FRANK & MALESKI JANET TRUSTEES	GETCHELL FRANK AND MALESKI JANET REV TRU				
6	L0069-G00006		MACKIEWICZ LEE ALEXANDER	MACKIEWICZ ASHLEY				
7	L0069-G00008		BEAUPRE ANDRE P & KAREN A TRUSTEES	BEAUPRE ANDRE AND KAREN REVOCABLE TRUSTS				
8	L0069-G00010		BECKER PAUL E & ANN MARIE CO-TRUSTEES	BECKER FAMILY REVOCABLE TRUST				
9	L0069-G00012		TITUS STEVEN					
10	L0069-H00000		YE XIAO HUI TRUSTEE	YE XIAO HUI REVOCABLE TRUST				

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CITY OF DOVER INC. 1855 TOWN SETTLED 1634

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AppGeo

EXISTING SITE PLAN

SCALE: 1" = 40'

VICINITY MAP

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2

PROPERTY BOUNDARY EXTENSION

EDGE OF LAWN

HIGHEST OBSERVABLE TIDE LINE

Distance to Navigational Channel - ~500'

Edge of Salt Marsh/ MTL (El. 0.73)

EXISTING 4' X 100' PIER, 3' X 30' GANGWAY 10/ X 20' FLOAT

Existing Access Path

DWELLING

EL. 8' (ZONE AE)

EDGE OF LAWN

Wetland Boundary

4.75'
-.00'
-3.00'
-.079
-2.75'
-3.54'
-4.85'
-6.03'
-7.89'
-7.91'
-8.29'

SALT MARSH (E2EM1)

Existing Shellfish Bed

MUD FLAT (E2US3)

MHHW (El. 3.38)

MHW (El. 3.01)

MLW (El. -3.73)

MLLW (El. -3.99)

PROPERTY BOUNDARY E

EDGE OF LAWN

1

STATE OF HAMPSHIRE
MATTHEW R. CARDIN
No. 284
CERTIFIED WETLAND SCIENTIST

Plans Prepared by
Matthew R. Cardin NH CWS #284

PROPERTY INFORMATION
TAX MAP I89, Lot H0
LOT AREA: 5.01 Acres
FRONTAGE: ~ 217' ON PISCATAQUA RIVER
ADJACENT PROPERTY OWNERS:
1. MAP L89, LOT G12 - STEVEN TITUS
2. MAP L89, LOT B4 - JAMES AND CYNTHIA HAWSE
NOTES:
1. Highest observable tide line verified by Matt Cardin, NH CWS #284 on January 27, 2022 per Env-Wt 602.23.
2. Water depth measurements portrayed in NAVD88 and determined by R. Alex Ross, LLS # 907

Prepared For:
JESSICA YE
196A DOVER POINT ROAD
DOVER, NH

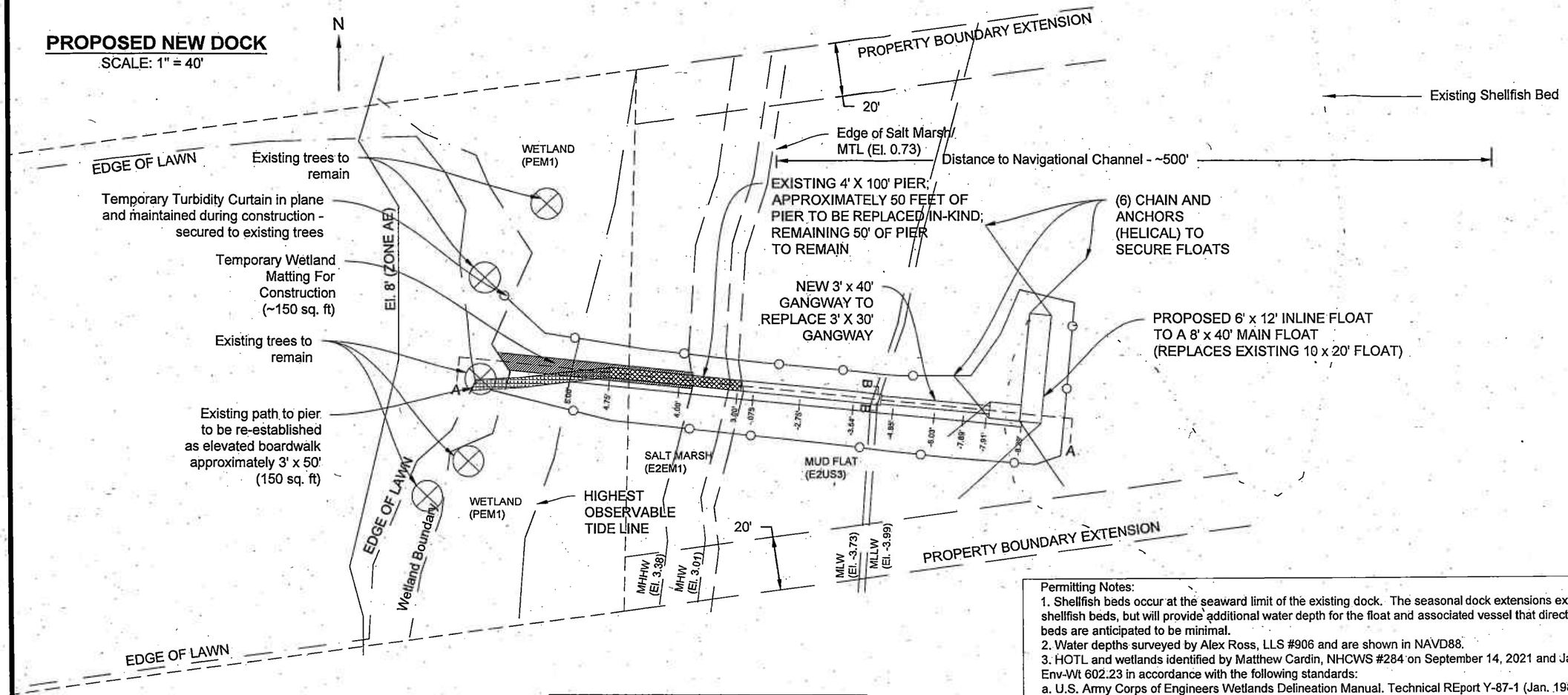
Prepared By:
Matthew Cardin, NH CWS

EXISTING CONDITIONS
ON: PISCATAQUA RIVER
TOWN: DOVER
SHEET: 1 of 3

PROPOSED: DOCK STRUCTURE REPLACEMENT W/CHANGES
AT: 196A DOVER POINT ROAD STATE: NH
DATE: JANUARY 22, 2023; REV1 JUNE 20, 2023

PROPOSED NEW DOCK

SCALE: 1" = 40'



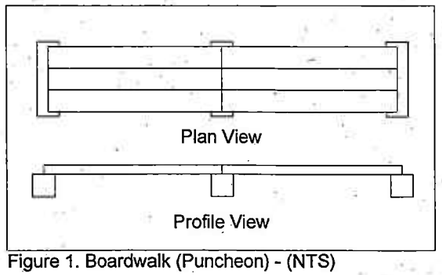


Figure 1. Boardwalk (Puncheon) - (NTS)

Plans Prepared by
Matthew R. Cardin NH CWS #284

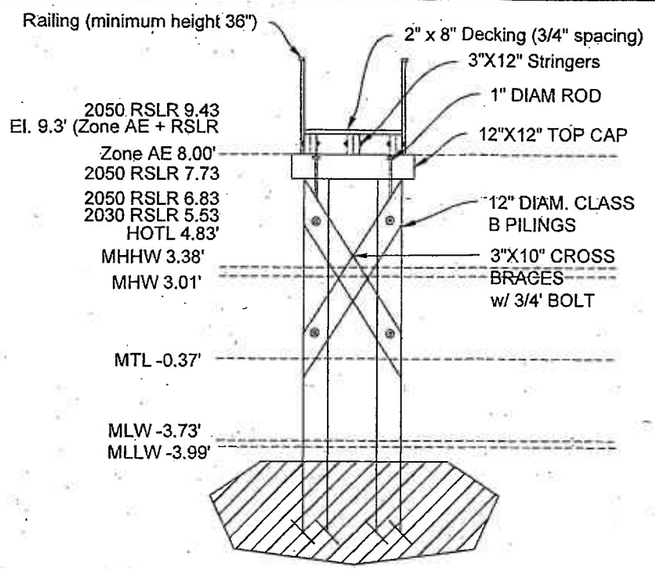
Permitting Notes:

1. Shellfish beds occur at the seaward limit of the existing dock. The seasonal dock extensions extend further into the shellfish beds, but will provide additional water depth for the float and associated vessel that direct impacts to the shellfish beds are anticipated to be minimal.
2. Water depths surveyed by Alex Ross, LLS #906 and are shown in NAVD88.
3. HOTL and wetlands identified by Matthew Cardin, NHCWS #284 on September 14, 2021 and January 27, 2022 per Env-Wt 602.23 in accordance with the following standards:
   a. U.S. Army Corps of Engineers Wetlands Delineation Manual. Technical REport Y-87-1 (Jan. 1987), and Regional Supplement to the Corps of Engineers Wetland Delineation Manual; Northcentral and Northeast REgion V. 2.0 January 2012.
   b. Field Indicators of Hydric Soils in the U.S., Version 8.2, USDA-NRCS, 2018 and Field Indicators for Identifying Hydric Soils in New England, Version 4, NEIWPCC Wetlands Work Group (2019).
   c. Classification of Wetlands and Deepwater Habitats of the United States , USFW Manual FWS/OBS-79/31 (1997).
4. Float and gangway to be seasonal structures and removed during winter months when use is not expected.
6. The first 50' of existing pier (from land) to be replaced in kind, and elevated to a minimum of 1:1 width to height ratio above wetlands.
7. The gangway to be replaced with a 40' x 3' gangway; floats to be reconfigured to an in-line 6' x 12' float connected to perpendicular 8' x 40' float. Floats to be secured by (6) chains and anchors (helical).
8. (5) existing trees within the wetland and vegetated buffer zone shall not be impacted during construction.
9. Engineering notes shown on Sheet 3 of 3.

Construction Notes & Sequence:

1. All materials with dock structure to be CCA treated lumber and galvanized hardware
2. Float and gangway are to be pre-assembled off-site. CCA treated lumber to be pre-treated prior to arrival at site.
3. Per NH Fish and Game and NOAA Fisheries there are no time of year restrictions.
4. Barge, push boat and skiff to be mobilized during high-tide and positioned alongside existing pier location up to, but not on or within the vegetated salt marsh area.
5. Sections of the pier piles unable to be reached from the barge to be installed with small duty equipment access from the upland. Temporary matting to be placed within the alignment of the pier to install piles as necessary and mats to be removed as soon as construction is completed.
6. All work to be done during low-tide intervals where there is no flowing water within the work area.
7. Temporary turbidity curtain to be placed around work area during high tide to once construction has temporarily stopped.
8. The pre-assembled float and gangway to be lifted from the barge via crane and placed into position and installed.

Prepared For: JESSICA YE 196A DOVER POINT ROAD DOVER, NH Prepared By: Matthew Cardin, NH CWS	PROPOSED PLANS ON: PISCATQUA RIVER TOWN: DOVER SHEET: 2 OF 3	PROPOSED: DOCK STRUCTURE REPLACEMENT W/CHANGES AT: 196A DOVER POINT ROAD STATE: NH DATE: JANUARY 22, 2023; REV1 JUNE 20, 2023



PROPOSED DOCK CROSS-SECTION B-B

SCALE: 1" = 6'

ENGINEERING, RESILIENCY AND BASIS OF ANALYSIS NOTES:

1. THE RESILIENCY RECOMMENDATION AND BASIS OF ANALYSIS BY CIVILWORKS NEW ENGLAND (CNE) FOR THIS PROJECT IS LIMITED TO THE RECOMMENDATIONS AND ANALYSIS IN THESE NOTES. THE CLIENT HAS PROVIDED THE SURVEY DATA AND FLOOD ELEVATIONS UPON WHICH CNE IS RELYING FOR THE ANALYSIS. CNE HAS NOT FIELD VERIFIED ANY SURVEY DATA AND CANNOT WARRANTY THE ACCURACY OF THE DATA PROVIDED.

2. BASIC WIND AND WAVE ANALYSIS HAS BEEN PERFORMED TO ESTABLISH PILE AND MOORING LATERAL TESTING LOADS DURING CONSTRUCTION OF THE NEW STRUCTURES TO PROVIDE A REASONABLE LEVEL OF CONFIDENCE THAT THE PROPOSED DOCK MOORINGS AND PIER PILES WILL BE ADEQUATE TO RESIST ENVIRONMENTAL LOADS FROM WIND AND WAVES AT THIS LOCATION WITH WATER LEVEL OF THE FEMA 100 YR FLOOD PLUS A SEA LEVEL RISE ALLOWANCE PROVIDED BY MATTHEW CARDIN, CWS, USING NHDES GUIDELINES.

3. BASIC WIND SPEED FOR THE SITE FOR THE FLOAT IS 84 MPH WITH LOAD FACTOR REMOVED PER ASCE 7-16 FOR RISK CATEGORY 1, 3 SECOND GUST. SURFACE ROUGHNESS C AND EXPOSURE C, GIVING A WIND PRESSURE OF 15.3 PSF.

4. BASIC WIND SPEED FOR THE SITE FOR THE PIER IS 90 MPH WITH LOAD FACTOR REMOVED PER ASCE 7-16 FOR RISK CATEGORY 2, 3 SECOND GUST. SURFACE ROUGHNESS C AND EXPOSURE C, GIVING A WIND PRESSURE OF 17.7 PSF.

5. WIND PRESSURE ON FLOAT: AS SEVERAL DAYS OF ADVANCED NOTICE IS ANTICIPATED AHEAD OF SUCH SEVERE WINDS, IT IS ASSUMED A DOCKED BOAT WOULD BE REMOVED FROM THE DOCK AND ONLY THE FLOAT WILL BE SUBJECT TO THE ENVIRONMENTAL LOADING. WITH A FLOAT FREEBOARD OF 1.2 FT AND 28 OR 40 FT LENGTH ON FOUR MOORINGS, THE WIND LOAD PERPENDICULAR TO SHORE IS ABOUT 730 POUNDS, AND PARALLEL TO SHORE ABOUT 510 POUNDS.

6. THE WIND PRESSURE ON THE PIER, HAS LATERAL WIND LOAD PER PILE BENT (TWO PILES) IS ABOUT 255 POUNDS.

7. NEW TIMBER PIER PILE STRENGTH WAS CHECKED FOR IMPACT OF A DRIFTING ICE FLOE WITH DIMENSIONS OF 20 FT BY 12 FT BY 1 FOOT DRAFT AND A DRIFT SPEED OF 0.5 FPS AND PILE BENDING STRESS WAS ACCEPTIBLE.

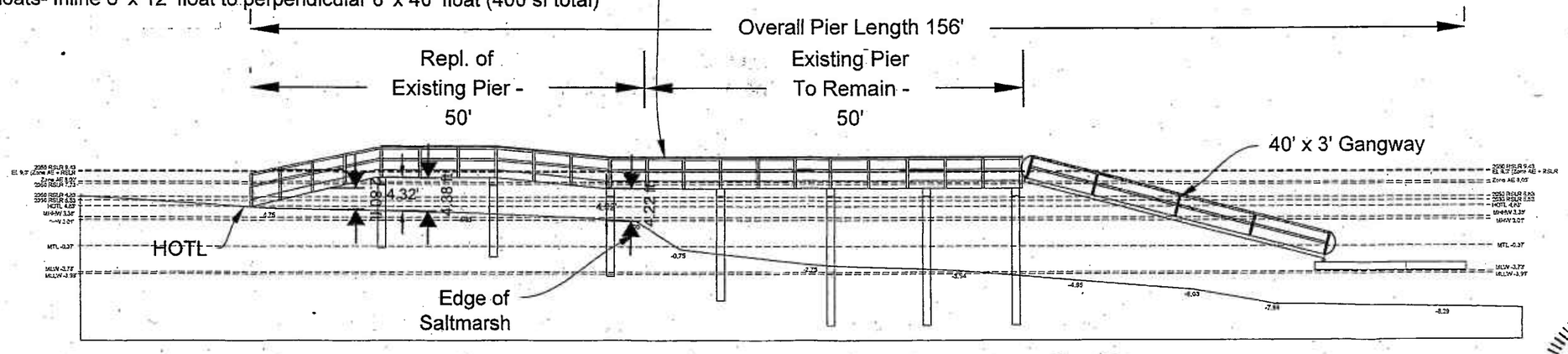
7. AVERAGE WIND WAVE FETCH (9 RADIALS AT 3 DEG) FROM SOUTH IS 4,800 FT AND 5,240 FT FROM THE NNE. THE BASIC WIND SPEED (ASCE 7-16) IS ADJUSTED FROM A 3 SECOND GUST TO A LONGER DURATION NEEDED TO BUILD FULLY DEVELOPED WIND WAVES, GIVES A SIGNIFICANT WAVE HEIGHT OF 1.9 FT WITH 2.1 SECOND PERIOD FOR THE FLOAT (CAT. 1) AND 2.1 FT WITH 2.1 SECOND PERIOD FOR THE PIER (CAT. 2). WITH AN AVERAGE FLOAT DRAFT OF 0.5 FT THE NON-BREAKING WAVE COULD DEVELOP 1,700 POUNDS OF LOAD PER FLOAT END, PARALLEL TO THE SHORELINE. THE LATERAL WAVE LOAD ON THE NEW PIER PILE BENTS IS 283 POUNDS USING A BREAKING WAVE (2 TO 3 FT WATER DEPTH). THE LATERAL WIND LOAD ON THE NEW PIER PILE BENTS IS 255 POUNDS.

8. THE RECOMMENDED LATERAL TEST LOAD PER FLOAT MOORING IS 1,800 POUNDS AXIAL TO PROVIDE A FACTOR OF SAFETY OF 1.5 (WAVE LOADS CONTROLLING). IT IS RECOMMENDED THAT THE FIELD LOAD TESTS BE OBSERVED BY A PROFESSIONAL ENGINEER FOR COMPLIANCE WITH THE ANALYSIS INTENT.

9. THE RECOMMENDED LATERAL TEST LOAD FOR THE NEW PIER PILE BENTS IS 380 POUNDS APPLIED AT DECK/CAP ELEVATION TO PROVIDE A FACTOR OF SAFETY OF 1.5 AND PROVE ADEQUATE PILE EMBEDMENT. IT IS RECOMMENDED THAT THE FIELD LOAD TESTS BE OBSERVED BY A PROFESSIONAL ENGINEER FOR COMPLIANCE WITH THE ANALYSIS INTENT.

10. IF NEW PILE EMBEDMENT CANNOT RESIST THESE TEST LOADS, IT IS RECOMMENDED THAT THE PILES BE DRIVEN DEEPER OR MOORINGS BE ADDED TO PROVIDE A TOTAL RESTRAINT OF 380 POUNDS PER BENT LATERAL PIER LOAD CAPACITY.

100' x 4' Existing Pier, Replace first 50' of existing pier ((8) 12" diam piles) approximately XX feet above existing height; decking to be .75" spaced decking, (3) 3" x 12" stringers and 12" x 12" top cap; Replace gangway w/ 40' x 3' gangway; Floats- Inline 6' x 12' float to perpendicular 8' x 40' float (400 sf total)



PROPOSED DOCK CROSS-SECTION A-A

SCALE: 1" = 16'

STATE OF NEW HAMPSHIRE MATTHEW R. CARDIN No. 284 CERTIFIED WETLAND SCIENTIST

PLANS PREPARED BY MATTHEW CARDIN NHCWS #284

STATE OF NEW HAMPSHIRE DUNCAN D. MELLOR No. 6324 LICENSED PROFESSIONAL ENGINEER

The attached PE Stamp is limited to analysis requested by NHDES Wetlands Bureau for vulnerability assessment of the proposed structure to not break free as a result of tidal forces up to and including the 100 year recurrence event. This PE stamp does not cover survey, site engineering, or structure design, which is being performed by others.

Prepared For:
JESSICA YE
196A DOVER POINT ROAD
DOVER, NH

Prepared By:
Matthew Cardin, NH CWS

PROPOSED PLANS
ON: PISCATQUA RIVER
TOWN: DOVER
SHEET: 3 OF 3

PROPOSED: DOCK STRUCTURE REPLACEMENT W/CHANGES
AT: 196A DOVER POINT ROAD STATE: NH
DATE: JANUARY 22, 2023; REV1 JUNE 20, 2023