

21 March 2024

Wetland Inspector New Hampshire Department of Environmental Services Wetlands Bureau 29 Hazen Drive / P.O. Box 95 Concord, New Hampshire 03302

Re: NHDES Major Impact Wetland Permit Application

Tax Map 207, Lot 2 333 New Castle Ave

Portsmouth, New Hampshire 03801

Dear Wetland Inspector:

This letter transmits a New Hampshire Department of Environmental Services (NHDES) Major Impact Wetland Permit Application request to permit 370 sq. ft. of permanent impact to tidal wetland and 48 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone for the removal of an existing tidal docking structure and the construction of a new tidal docking structure including a 4' x 12' accessway, a 4' by 20' fixed wood pier, a 3' x 30' gangway, and a 10' x 20' float (overall structure length 82') on 195+/- feet of frontage along the Piscataqua River..

Attached to this application you will find a "NH DES Permit Plan-C2" which depicts the existing lot, jurisdictional areas, abutting parcels, existing structures, proposed work, and permanent impact areas.

Per Env-Wt 306.05, Steven D. Riker, CWS from Haley Ward, Inc.. classified all jurisdictional areas and identified the predominant functions of all relevant resources. The Highest Observable Tide Line marks the reference line for the 100' TBZ, as well the beginning of Tidal Wetland on the attached plan set. Attached to this application is a Wetland Functions and Values Assessment and Coastal Vulnerability Assessment summarizing these functions; as this project is subject to the requirements of Env-Wt 603.04 and Env-Wt 603.05.

The proposed structure will be constructed on piles within the tidal wetland further reducing permanent impacts to the tidal wetland resource. The project will have no impact on the functions and values of the adjacent tidal wetland. The docking structure



Thomas P. & Kimberley S. Lyng | 03.21.24 | 3402.01 | Page 1



has been designed to allow the adjacent tidal resource to maintain its current functions and values. The docking structure will not contribute to additional storm water or pollution. It is anticipated that there will be no affect on any fish and wildlife species that currently use the site for food, cover, and/or habitat. The tidal docking structure will not impede tidal flow or alter hydrology, it will not deter use by wildlife species that currently use the wetland area, and it will not impede any migrational fish movement. The float and gangway will be temporary docking structures and will be removed during winter months as to not interfere with ice floe.

The docking structure has been designed to provide boating access utilizing the natural grade of the dock location. There is no grading of the shoreline required to construct the dock. There will be no construction activity that will disturb the area adjacent to the use. All work will be performed from a crane barge at low tide. Piles to be driven are above the Mean Low Water (MLW) line and there is no need for erosion control. There will be no water in this location during pile driving and therefore no temporary disturbance associated with construction. The barge floats into position and the piles are driven by the crane equipped with a vibratory hammer. This method eliminates any contact of construction equipment with the protected resource. Portions of the docking structure are pre-fabricated off site and transported to the site via crane barge.

The construction sequence for the proposed structure are as follows:

- Mobilization of a crane barge, push boat, work skiff, materials and prefabricated components such as the gangway and float to the site via the Piscataqua River.
- Mobilization of equipment trucks to the site.
- The barge will be positioned alongside the proposed location of the new dock and waterward of any emergent vegetation to minimize impacts.
- Installation of the sub structure will be performed from a crane barge or skiff to reduce the amount of foot traffic in the intertidal area.
- All work will be performed at low tide to minimize sedimentation.
- Piles will be driven by a vibratory hammer eliminating any excavation for installation of the pilings. Piles are driven to refusal.
- Piles are cut and beam caps are installed and the super structure of the pier is built. Materials are lifted from the barge and set into position by the crane.
- Once the pier is complete, the gangway and float are brought into position and installed.

The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable use of the property.



Per Env-Wt 603.02(b), attached to this application you will find a plan set which depicts the existing lot, jurisdictional areas, all natural resources in the area, abutting parcels, existing structures, and proposed structures. Also included in this application are maps created in accordance with Env-Wt 603.03 and Env-Wt 603.05.

In order to complete the application package for this project, the DES Wetlands Bureau rules in Chapter Env-Wt 306.05 (a)(2) has been evaluated and addressed below.

(2) a. Contains any documented occurrences of protected species or habitat for such species, using the NHB DataCheck tool;

Attached to this application are the results of the NHB review (NHB24-0615) and Haley Ward will coordinate with NHB and NHF & G regarding the protected species and comments will be forwarded to NH DES upon receipt.

(2) b. ls a bog;

Utilizing the NH DES WPPT, the subject property is not a bog, nor does it contain any portion of a bog.

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

  Utilizing the NH DES WPPT, the subject property does contain a floodplain wetland contiguous to a tier 3 or higher watercourse.
- (2) d. Does the property contain a designated prime wetlands or a duly established 100-foot buffer; or

The property does not contain a prime wetland or duly established 100 foot buffer.

(2) e. Does the property contain a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone;

The property does not contain a sand dune. The property does contain a tidal wetland and tidal waters.

The DES Wetlands Bureau rules in Chapter Env-Wt 306.05 (a)(4) and (a)(7) has been evaluated and addressed below.

(4) a. Is the subject property within LAC jurisdiction;

The property does not fall within an area of LAC jurisdiction.

(4) b. Does the subject property fall within or contain any areas that are subject to time of year restrictions under Env-Wt 307;

The property does not fall within or contain any areas that are subject to time of year restrictions.

(7) Does the project have potential to impact impaired waters, class A waters, or outstanding resource waters;

I do not believe the nature of the proposed project has the potential to impact an impaired water.



The DES Wetlands Bureau rules in Chapter Env-Wt 603.02 (e) & (f) have been evaluated and addressed below.

(e)(1) The project meets the standard conditions in Env-Wt 307;

The project meets the standard conditions in Env-Wt 307 as the proposed docking structure meets the standards of Env-Wq 1000, RSA 483-B and Env-Wq 1400. Sediment and erosion controls will also be used and maintained during the proposed construction ensuring protection of water quality on the site. Since the construction will be conducted during low tide conditions, it is not anticipated that there will be any impacts to fish or shellfish. Under Env-Wt 306.05 (a)(2)a. a NHB review has been performed to ensure there are no impacts to protected species or habitats of such species. The protection of Prime Wetlands or Duly-Established 100 foot buffers does not apply as none exist on or adjacent to the subject lot.

(e)(2) The project meets the approval criteria in Env-Wt 313.01;

The project meets the approval criteria in Env-Wt 313.01 as the project requires a functional assessment (attached), meets the avoidance and minimization requirements specified in Env-Wt 313.03, does not require compensatory mitigation, meets applicable conditions specified in Env-Wt 307 (above), meets project specific criteria listed in Env-Wt 600 (above), and the project is located entirely within the boundary of the applicant's property.

- (f)(1) The project design narrative as described in Env-Wt 603.06; The project design narrative is provided above.
- (f)(2) Design plans that meet the requirements of Env-Wt 603.07; The design plans meet the above standard.
- (f)(3) The water depth supporting information required by Env-Wt 603.08; The design plans provide water depth information.
- (f)(4) A statement regarding impact on navigation and passage required by Env-Wt 603.09.

The Permit Plan Set will be provided to the Pease Development Authority, Division of Ports and Harbors, for formal review and comment by the Harbormaster. That documentation will be provided to NH DES upon receipt.

In accordance with New Hampshire Administrative Rule Env-Wt 606.02(a) and 606.06(e), the marine contractor which will be constructing the proposed dock modification utilizes a vibratory hammer to install piles. The vibratory hammer uses vibration to install the pile in the marine sediment, instead of a standard hammer which uses a physical force to drive the pile, and subsequently a much greater noise impact. Using the vibratory hammer is the least impacting alternative to drive piles for dock construction.

Lastly, the proposed structure will use CCA (Chromated Copper Arsenate) treated lumber. The proposed piles will be CCA treated 12" diameter southern yellow pine. Attached to this application is a Safety Data Sheet for CCA treated wood. Per the data

Thomas P. & Kimberley S. Lyng | 03.21.24 | 3402.01 | Page 4



sheet, toxicity is limited to inhalation of wood dust originating from CCA treated lumber. Additionally, per the Safety Data Sheet, 12. Ecological Information (page 12) "The product is not classified as environmentally hazardous. However, this does exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment." The product is also insoluble in water. The marine contractor that will be constructing the proposed docking structure receives the timber piles and lumber pretreated. The marine contractor does not treat the lumber, and therefore there is no risk of spilling the treatment chemical in or near resource areas.

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,

Jacqueline Boudreau

Project Scientist

jboudreau@haleyward.com



#### To Whom It May Concern:

RE: State of New Hampshire DES Wetlands Bureau Standard Dredge and Fill Application for proposed tidal docking structure within the previously developed 100' Tidal Buffer Zone and jurisdictional wetlands for <u>Kimberley & Thomas Lyng of 333 New Castle Ave Portsmouth, NH 03801</u>

This letter is to inform the City of Portsmouth in accordance with State Law that the following entities:

Riverside Marine Construction, Inc. Haley Ward

Are authorized to represent me as my agent in the approval process. Please feel free to call me if there are any questions regarding this authorization.

Sincerely

Kimberley Lyng

Thomas Lyng

333 New Castle Ave Portsmouth, NH 03801



# STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION



File No.:

Check No.:

Amount:

Administrative

Use

Only

Water Division / Land Resources Management

Check the Status of your Application

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

Administrative

Use

Only

APPLICANT'S NAME: TOWN NAME:

Designated prime wetland or duly-established 100-foot buffer?

Name of Local River Management Advisory Committee (LAC):

A copy of the application was sent to the LAC on Month:

Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?

Is the property within a Designated River corridor? If yes, provide the following information:

Administrative

Use

Only

			Initials:
A person may request a waiver of adherence to the requirements of compliance with RSA 482-A. A perpursuant to RSA 482-A:26, III(b).	would not be in the best intere erson may also request a waiv	est of the public or the environn er of the standards for existing o	nent but is still in dwellings over water
SECTION 1 - REQUIRED PLANNI Please use the Wetland Permit Restoration Mapper, or other so protected species or habitats, co	Planning Tool (WPPT), the Nat ources to assist in identifying k	ural Heritage Bureau (NHB) <u>Dat</u> ey features such as: <u>Priority Res</u>	source Areas (PRAs),
Has the required planning been	completed?		Yes No
Does the property contain a PRA	A? If yes, provide the following	g information:	Yes No
Department (NHFG) and NH	HB agreement for a classification of the control of	stment (e.g. NH Fish and Game on downgrade) or a Project-Typ fication (SPN) project)? See Env-	II LYEST LING I
<ul> <li>Protected species or habita</li> <li>If yes, species or ha</li> <li>NHB Project ID #:</li> </ul>			Yes No
• Bog?			Yes No
Floodplain wetland contigu	ous to a tier 3 or higher water	course?	□Yes□No

Day:

Year:

Yes No

Yes No

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 <u>WPPT</u> or Stream Stats):	
SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))	
Provide a description of the project and the purpose of the project, the need for the proposed impacts to areas, an outline-of the scope of work to be performed, and whether impacts are temporary or permanents.	
SECTION 3 - PROJECT LOCATION	
Separate wetland permit applications must be submitted for each municipality within which wetland imp	oacts occur.
ADDRESS:	
TOWN/CITY:	
TAX MAP/BLOCK/LOT/UNIT:	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME:  N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INI If the applicant is a trust or a company, then complete v	•		
NAME:			
MAILING ADDRESS:			
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL ADDRESS:			
FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here, I her this application electronically.	eby authorize NHDES to cor	nmunicate all ma	tters relative to
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-	Wt 311.04(c))		
LAST NAME, FIRST NAME, M.I.:			
COMPANY NAME:			
MAILING ADDRESS:			
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL ADDRESS:			
FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here, I her this application electronically.	eby authorize NHDES to cor	nmunicate all ma	tters relative to
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFICE If the owner is a trust or a company, then complete with Same as applicant	•	_	)))
NAME:			
MAILING ADDRESS:			
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL ADDRESS:			
FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here, I her this application electronically.	eby authorize NHDES to cor	nmunicate all ma	tters relative to

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):
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 <u>Avoidance and Minimization Checklist</u> , the <u>Avoidance and Minimization Narrative</u> , 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).

Irm@des.nh.gov or (603) 271-2147 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095 des.nh.gov For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.

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

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

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

afte	r the project is completed.						
JURISDICTIONAL AREA		PERM.	PERM.	PERM.	TEMP.	TEMP.	TEMP.
JOK	ISDICTIONAL AREA	SF	LF	ATF	SF	LF	ATF
	Forested Wetland						
	Scrub-shrub Wetland						
qs	Emergent Wetland						
Wetlands	Wet Meadow						
	Vernal Pool						
	Designated Prime Wetland						
	Duly-established 100-foot Prime Wetland						
	Buffer						
	Intermittent / Ephemeral Stream						
Se	Perennial Stream or River						
Surface	Lake / Pond						
Su	Docking - Lake / Pond						
	Docking - River						
S	Bank - Intermittent Stream						
Banks	Bank - Perennial Stream / River						
B	Bank / Shoreline - Lake / Pond						
	Tidal Waters						
	Tidal Marsh						
Tidal	Sand Dune						
μĔ	Undeveloped Tidal Buffer Zone (TBZ)						
	Previously-developed TBZ						
	Docking - Tidal Water						
	TOTAL						
SEC	TION 12 - APPLICATION FEE (RSA 482-A:3, I)						
	MINIMUM IMPACT FEE: Flat fee of \$400.						
	NON-ENFORCEMENT RELATED, PUBLICLY-FUN	IDED AND SI	UPERVISE	RESTORAT	TION PROJEC	CTS, REGARD	LESS OF
	IMPACT CLASSIFICATION: Flat fee of \$400 (ref	er to RSA 48	2-A:3, 1(c)	for restricti	ions).		
	MINOR OR MAJOR IMPACT FEE: Calculate usin	ng the table I	below:				
	Permanent and temporal	ry (non-dock	king):	SF		× \$0.40 =	\$
Seasonal docking structure: SF × \$2.00 = \$				\$			
Permanent docking structure: SF × \$4.00 = \$				\$			
	Projects p	roposing sho	oreline str	uctures (inc	luding docks	) add \$400 =	\$
						Total =	\$
7	The application fee for minor or major impact is	s the above o	calculated	total or \$40	0, whicheve	r is greater =	\$

SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05) Indicate the project classification.						
☐ Minimum Impact Project       ☐ Minor Project         ☐ Major Project					Major Project	
SECTION 14	- REQUIRED CERTIFICATIONS	(Env-Wt 3	311.11)			
Initial each	box below to certify:					
Initials:	To the hest at the signer's knowledge and helief, all required notifications have been provided					
Initials:	The information submitted on on signer's knowledge and belief.	or with the	application is true	e, complete,	and not misleading to the	best of the
Initials:	<ul> <li>The signer understands that:</li> <li>The submission of false, incomplete, or misleading information constitutes grounds for NHDES to:</li> <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> </ul>					
Initials:						ertification by
SECTION 15	- REQUIRED SIGNATURES (En	v-Wt 311.	04(d); Env-Wt 31	1.11)		
SIGNATURE (OWNER):			PRINT NAME LEGIBLY:		DATE:	
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): PRINT NAME LEGIBLY: DATE:		DATE:				
SIGNATURE (	NATURE (AGENT, IF APPLICABLE): PRINT NAME LEGIBLY: DATE:			DATE:		
SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))						
As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.						
TOWN/CIT	Y CLERK SIGNATURE:			PRINT NAM	ME LEGIBLY:	
TOWN/CIT	Y:			DATE:		

#### **DIRECTIONS FOR TOWN/CITY CLERK:**

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

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

#### **DIRECTIONS FOR APPLICANT:**

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

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, I(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 <b>type of resource</b> 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, I(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:
<ul> <li>a. All jurisdictional areas, including but not limited to portions of wetland, shoreline, or surface water where impacts have or are proposed to occur.</li> </ul>
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)).

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 and recommendations from NHB as well as documentation of any consultation requests made to NHFG, communications and information related to the consultation, with the consultation results and recommendations from NHFG. (Env-Wt 311.06(g)). See <a href="Wetlands Permitting: Protected Species and Habitat Fact Sheet">Wetlands Permitting: Protected Species and Habitat Fact Sheet</a> .
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.
For non-tidal shoreline structure projects, the length of shoreline frontage per Env-Wt 311.09(b)(1)
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 <a href="Functional Assessments for Wetlands and Other Aquatic Resources Fact Sheet">Functional Assessments for Wetlands and Other Aquatic Resources Fact Sheet</a> . 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).



# 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: Thomas P. & Kimberley S. Lyng TOWN NAME: Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the <u>Avoidance and Minimization Narrative</u> or <u>Checklist</u> 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 <a href="Wetlands Best">Wetlands Best</a> Management Practice Techniques For Avoidance and Minimization.

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

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

THE PROJECT PROPOSES 370 SQ. FT. OF PERMANENT IMPACT TO TIDAL WETLAND AND 48 SQ. FT. OF PERMANENT IMPACT TO THE PREVIOUSLY DEVELOPED 100' TIDAL BUFFER ZONE FOR THE REMOVAL OF AN EXISTING TIDAL DOCKING STRUCTURE AND THE CONSTRUCTION OF A NEW TIDAL DOCKING STRUCTURE INCLUDING A 4' X 12' ACCESSWAY, A 4' BY 20' FIXED WOOD PIER, A 3' X 30' GANGWAY, AND A 10' X 20' FLOAT (OVERALL STRUCTURE LENGTH 82') ON 195+/- FEET OF FRONTAGE ALONG THE PISCATAQUA RIVER. SINCE THE PROPOSED TIDAL DOCK WILL SERVE TO PROVIDE A WATER DEPENDENT FUNCTION, PRACTICABLE ALTERNATIVES ALONG THE 195+/-FEET OF SHORELINE ARE SEVERELY REDUCED. THE PROPOSED LOCATION REPRESENTS THE LEAST IMPACTING ALTERNATIVE WHILE PROVIDING SAFE BOATING ACCESS TO THE PISCATAQUA RIVER.

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.
The proposed location represents the least impacting alternative as there are no impacts to salt marshes to construct the proposed dock.
SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))
Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

2020-05 Page 2 of 9

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.
The project does not propose any impacts to exemplary natural communities or vernal pools. Results per the NHB Review, are currently being proccessed and will be provided to NH DES upon receipt from the NHB. Locations of marsh elder along the shoreline have been identified and depicted on the plan set. The proposed dock does not impact any of the marsh elder populations. Coordination with NHB and NHF & G in regards to the above protected species is expected and comments from those departments will be forwarded to NH DES upon receipt.
SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5))  Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.
The proposed tidal docking structure has been designed to not impede recreation, public commerce, and navigation. The docking structure does not extend into any federal or local navigation channel.

2020-05 Page 3 of 9

SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))  Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.
The project does not propose any impacts to floodplain wetlands as the dock will be constructed on piles therefore providing no significant decrease in flood storage potential.
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.
The project does not propose impacts to riverine forested wetland systems and scrub shrub marsh complexes.

2020-05 Page 4 of 9

SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8))  Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.
The wetland resources associated with the project site are not hydrologically connected to a groundwater aquifer or drinking water supply.
SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))  Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.
The project does not propose any impacts to stream channels.

2020-05 Page 5 of 9

#### 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.

Since the proposed tidal dock will serve to provide a water dependent function, practicable alternatives along the 195+/-feet of shoreline are severely reduced. The proposed location represents the least impacting alternative while providing safe boating access to the Piscataqua River.

The proposed docking structure will be constructed on piles within the tidal wetland further reducing permanent impacts and construction surface area.

#### 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.

All work will be performed at low tide to minimize sedimentation. The proposed structure will be constructed on piles within the tidal wetland further reducing permanent impacts to the tidal wetland resource. Piles will be driven by a vibratory hammer eliminating any excavation for installation of the pilings, pilings are driven to refusal.

The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable and safe use of the property.

The docking structure has been designed to provide boating access utilizing the natural grade of the dock location. There is no grading of the shoreline required to construct the dock. There will be no construction activity that will disturb the area adjacent to the use. All work will be performed from a crane barge at low tide. Piles to be driven are above the Mean Low Water (MLW) line and there is no need for erosion control. There will be no water in this location during pile driving and therefore no temporary disturbance associated with construction. The barge floats into position and the piles are driven by the crane equipped with a vibratory hammer. This method eliminates any contact of construction equipment with the protected resource. Portions of the docking structure are pre-fabricated off site and transported to the site via crane barge.

# 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 docking structure has been designed to provide boating access utilizing the natural grade of the dock location, as well as for abutting properties to have access to their own docking structures. There is no grading of the shoreline required to construct the dock. There will be no construction activity that will disturb the area adjacent to the use. Abutting propoerties each have their own docks and access to usage of docks and passageways will not be affecting during construction or otherwise. SECTION I.XIII - SHORELINE STRUCTURES - COMMERCE AND RECREATION (Env-Wt 313.03(c)(4)) Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation. The proposed docking structure design complies with Env-Wt 606.03 and Env-Wt 606.06 which ensures that the public's right to navigation is preserved and the commerical and recreational navigation within the resource remains. Additionally, Plan Set will be provided to the Pease Development Authority, Division of Ports and Harbors, for formal review and comment by the Harbormaster. That documentation will be provided to NH DES upon receipt.

2020-05 Page 7 of 9

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

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

The construction activities have been designed to require no grading activities associated with the proposed dock construction which will have no impacts on water quality, aquatic vegetation and wildlife habitat.

The marine contractor which will be constructing the proposed dock modification, utilizes a vibratory hammer to install piles. The vibratory hammer uses vibration to install the pile in the marine sediment, instead of a standard hammer which uses a physical force to drive the pile. Using the vibratory hammer is the least impacting alternative to drive piles for dock construction.

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

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

The design of the proposed docking structure has been implemented without the need for any grading activies. Additionally, portions of the docking structure will be pre-built/pre-fabricated offsite and then transported to the site via a barge without the need to access points through the wetland or over a bank, ensuring shoreline stability.

All work will be performed from a crane barge at low tide. The barge floats into position and the piles are driven by the crane equipped with a vibratory hammer. This method eliminates any contact of construction equipment with the protected resource. Portions of the docking structure are pre-fabricated off site and transported to the site via crane barge.

#### 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:

Wetland functions and values were assessed using the Highway Methodology Workbook, Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers. 1999. The Highway Methodology Workbook Supplement, Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers. New England Division. 32pp. NAEEP-360-1-30a.

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: JACQUELINE M. BOUDREAU, PROJECT SCIENTIST

DATE OF ASSESSMENT: 11/02/2023

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.



#### 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.: Lyng, Thomas, P. & Kimberley

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 PROJECT PROPOSES 370 SQ. FT. OF PERMANENT IMPACT TO TIDAL WETLAND AND 48 SQ. FT. OF PERMANENT IMPACT TO THE PREVIOUSLY DEVELOPED 100' TIDAL BUFFER ZONE FOR THE REMOVAL OF AN EXISTING TIDAL DOCKING STRUCTURE AND THE CONSTRUCTION OF A NEW TIDAL DOCKING STRUCTURE INCLUDING A 4' X 12' ACCESSWAY, A 4' BY 20' FIXED WOOD PIER, A 3' X 30' GANGWAY, AND A 10' X 20' FLOAT (OVERALL STRUCTURE LENGTH 82') ON 195+/- FEET OF FRONTAGE ALONG THE PISCATAQUA RIVER. SINCE THE PROPOSED TIDAL DOCK WILL SERVE TO PROVIDE A WATER DEPENDENT FUNCTION, PRACTICABLE ALTERNATIVES ALONG THE 195+/-FEET OF SHORELINE ARE SEVERELY REDUCED. . The proposed structure has been placed to provide the intended function and provide safe navigation to and from the proposed float location.

2020-05

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.
A Coastal Functional Assessment and a Coastal Vulnerability Assessment is attached to this application per Env-Wt 603.04. An Avoidance & Minimization Form is attached to this application, and also described in the attached narrative letter per Env-Wt 311.07 and Env-Wt 313.
Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.
The project plan set, specifically the Details-Sheet D1 includes all notes demonstrating compliance with Env-Wt 307 and Env-Wt 313.01.

2020-05 Page 2 of 10

NHDES-W-06-079
Provide a project design narrative that includes the following:
A discussion of how the proposed project:
<ul> <li>Uses best management practices and standard conditions in Env-Wt 307;</li> <li>Meets all avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;</li> <li>Meets approval criteria in Env-Wt 313.01;</li> <li>Meets evaluation criteria in Env-Wt 313.01(c);</li> <li>Meets CFA requirements in Env-Wt 603.04; and</li> <li>Considers sea-level rise and potential flooding evaluated pursuant to Env-Wt 603.05;</li> </ul>
A construction sequence, erosion/siltation control methods to be used, and a dewatering plan; and
A discussion of how the completed project will be maintained and managed.
The completed project will result in a permanent fixed wood pier, with an attached gangway and associated float. The gangway and float are/will be seasonal structures and will be removed in the non-boating season. Other than removal and re-installation, there is no maintenance or management of the tidal docking structure over its expected life span, which is 50-100 years.
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.
Review and comment by the Pease Development Authority will be provided to NH DES upon receipt.

2020-05 Page 3 of 10

#### 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.

Page 4 of 10

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.
betermine the time period over which the project is designed to serve.
A Coastal Vulnerability Assessment is attached to this application.
A Coastal Vulnerability Assessment is attached to this appication.  Identify the project's relative risk tolerance to flooding and potential damage or loss likely to result from flooding to
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.
A Coastal Vulnerability Assessment is attached to this appication.  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.

2020-05 Page 5 of 10

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.
See attached CVA
Identify areas of the proposed project site subject to flooding from SLR.
See attached CVA
Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.
See attached CVA
Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans.
See attached CVA
Where there are conflicts between the project's purpose and the vulnerability assessment results, schedule a preapplication meeting with the department to evaluate design alternatives, engineering approaches, and use of the best
available science.
Pre-application meeting date held: N/A

2020-05 Page 6 of 10

#### 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.

elements. The plan view shall depict the following: The engineering scale used, which shall be no larger than one inch equals 50 feet; The location of tidal datum lines depicted as lines with the associated elevation noted, based on North American Vertical Datum of 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum options.html, as described in Section 6. An imaginary extension of property boundary lines into the waterbody and a 20-foot setback from those property line extensions; The location of all special aquatic sites at or within 100 feet of the subject property; Existing bank contours; The name and license number, if applicable, of each individual responsible for the plan, including: a. The agent for tidal docking structures who determined elevations represented on plans; and b. The qualified coastal professional who completed the CFA report and located the identified resources on the plan; The location and dimensions of all existing and proposed structures and landscape features on the property; Tidal datum(s) with associated elevations noted, based on NAVD 88; and  $\bowtie$  Location of all special aquatic sites within 100-feet of the property. The elevation view shall depict the following: The nature and slope of the shoreline; The location and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, ramps, floats, and dolphins; and Water depths depicted as a line with associated elevation at highest observable tide, mean high tide, and mean low tide, and the date and tide height when the depths were measured. Refer to Section 6 for more instructions regarding water depth supporting information. See specific design and plan requirements for certain types of coastal projects:

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

#### 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.

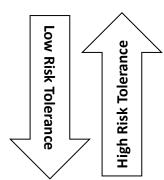
#### **SECTION 10 – GUIDANCE**

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.



# 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 LAST NAME, FIRST NAME, M.I.: Lyng, Thomas, P. & Kimberley S.

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 this narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed Avoidance and Minimization Checklist (NHDES-W-06-050) to the permit application.

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

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

Yes. The project proposes to construct a tidal docking structure for boating access.

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

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

No. This is not applicable.

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

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

Since the proposal includes the construction of a tidal docking structure, providing a water dependent function, this is not applicable.

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
2019-12-11

## 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 on the subject property or on other property that is reasonably available to the applicant as described in the *Wetlands Best Management Practice Techniques for Avoidance and Minimization*?

The project proposes 370 sq. ft. of permanent impact to tidal wetland and 48 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone for the removal of an existing tidal docking structure and the construction of a new tidal docking structure including a 4' x 12' accessway, a 4' by 20' fixed wood pier, a 3' x 30' gangway, and a 10' x 20' float (overall structure length 82') on 195+/- feet of frontage along the Piscataqua River. Since the proposed tidal dock will serve to provide a water dependent function, practicable alternatives along the 195+/-feet of shoreline are severely reduced. The proposed location represents the least impacting alternative while providing safe boating access to the Piscataqua River.

#### 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)? Please note that for a minimum impact project, the applicant may replace this explanation with a certification signed by a certified wetland scientist that the project is located and designed to minimize impacts to wetlands functions and values.

The proposed docking structure will be constructed on piles within the tidal wetland further reducing permanent impacts to the tidal wetland resource. The docking structure has been designed to allow the adjacent tidal resource to maintain its current functions and values. The tidal docking structure will not impede tidal flow or alter hydrology, it will not deter use by wildlife species that currently use the wetland area, and it will not impede any migrational fish movement. As a result, The project will have no impact on the functions and values of the adjacent tidal wetland. A Wetland Functions and Values Assessment is attached to this application.

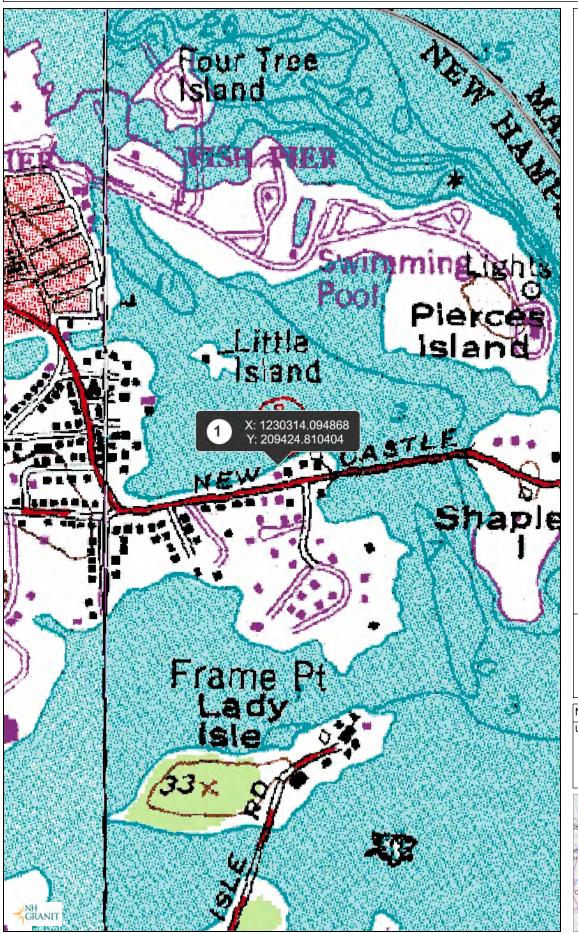
Irm@des.nh.gov or (603) 271-2147

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

www.des.nh.gov

Page 2 of 2

2019-12-11



## Legend

- State
- County
- ☐ City/Town

Map Scale

1: 6,494



© NH GRANIT, www.granit.unh.edu Map Generated: 2/29/2024

#### Notes

USGS Topo Map



## Tax Map Lyng



#### Property Information

Location Owner

Property ID 0207-0002-0000 333 NEW CASTLE AVE LYNG THOMAS P



#### 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 08/24/2023 Data updated 3/9/2022

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

# Ambit Engineering Abutter Research

Applicant/Owner(s)  Applicant/Owner(s)  Applicant/Owner(s)  Map Lot Deed Owner(s) First/Trust  207 2 5496/2709 Thomas  207 2 5496/2709 Thomas  Other Consultants  Abutters  Abutters  207 3 5941/1052 Sarah  207 3 5941/1052 Sarah		Owner(s) Last, Trustee Lyng	Job Name Lyng Town Ports Research by SDR	Name Lyng Town Portsmouth rch by SDR		1	
Fortsmouth, NH  Lot Deed 2 5496/2709 2 Lyng Lob# Lot Deed 3 5941/1052		er(s) Last, Trustee	Town Research by	Portsmouth SDR			
Consultants  Lot Deed  2 5496/2709  Consultants  Lot Deed  Lot Deed  3 5941/1052		er(s) Last, Trustee	Research by	SDR			
Consultants  ers  Lot Deed  2 5496/2709  8 10b #  Lot Deed  3 5941/1052		er(s) Last, Trustee					
Consultants    2   5496/2709			Mailing Address	City	State Zio	Street Address	
ers  Lot Deed  3 5941/1052	eering Civil Land Surveyors		333 Newcastle Avenue	smouth	NH 03801	П	
Consultants  ers  Lyng Job#  Lot Deed  3 5941/1052	sering Civil Land Surveyors						
ers  Lyng Job#  Lot Deed  3 5941/1052	and surveyors		200 Griffin Road, Unit #3	Portsmouth	NH 03801		
Job # Deed 5941/1052						1	
Lyng Job# Lot Deed 3 5941/1052						Í	
Lyng Job# Lot Deed 3 5941/1052							
Lyng Job#  Lot Deed  3 5941/1052						7	
Lyng Job#  Lot Deed  3 S941/1052							
Lot Deed 3 S941/1052							
3 5941/1052		Owner(s) Last, Trustee	Mailing Address	City	State Zip	Street Address	
	J Ma	J Mason Living Trust	363 New Castle Avenue	Portsmouth	NH 03801		
							ĺ
							1
							T
							1



21 March, 2024

Sarah J. Mason Living Trust 363 New Castle Ave Portsmouth, NH 03801

RE: New Hampshire DES Wetland Application for proposed existing tidal docking structure removal and re-construction of new tidal docking structure for Thomas P. Lyng, 333 New Castle Drive, Portsmouth, NH.

Dear Property Owner,

Under NH RSA 482-A this letter is to inform you in accordance with State Law that a NH DES Wetland Permit will be filed with the New Hampshire Department of Environmental Services (DES) Wetlands Bureau for a permit to **impact the 100' Tidal Buffer Zone** on behalf of your abutter, **Thomas P. Lyng.** This letter is sent to inform you as an abutter to the above-referenced property (according to local Municipal records) that **Thomas P. Lyng,** proposes a project that requires construction in the 100' Tidal Buffer Zone, a jurisdictional area.

Plans are on file at this office, <u>and once the application is filed</u>, plans that show the proposed project and wetland and other jurisdictional impacts will be available for viewing at the office of the **Portsmouth** clerk, **town offices** during their normal business hours, or <u>once received by DES</u>, at the offices of the DES Wetlands Bureau, (8 a.m. to 4 p.m.) (603) 271-2147. It is suggested that you <u>call ahead</u> to the appropriate office to ensure the application is available for review.

Please feel free to call if you have any questions or comments.

Sincerely,

Jacqueline Boudreau Project Scientist

jboudreau@haleyward.com

**CERTIFIED MAIL/Return Receipt Requested** 

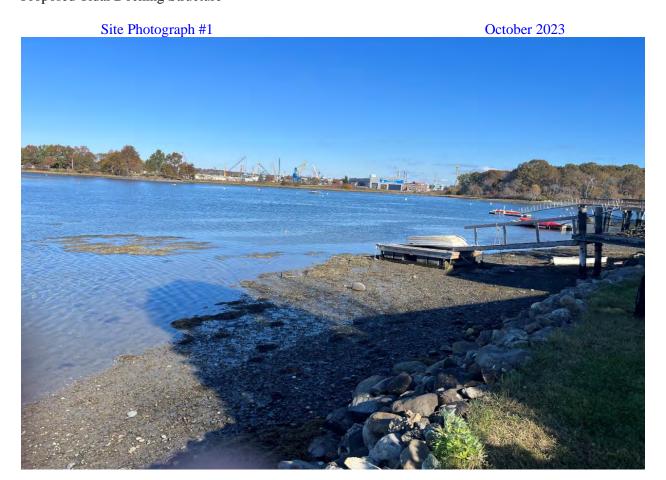


8 60	U.S. Postal Service <sup>™</sup> CERTIFIED MAIL® RECEIPT  Domestic Mail Only	×
831	For delivery information, visit our website at www.usps.com®	
5270 1015	Certified Mail Fee  \$ Extra Services & Fees (check box, add fee as appropriate)   Return Receipt (leardcopy) \$   Return Receipt (electronic) \$   Certified Mail Restricted Delivery \$   Adult Signature Regulred \$   Adult Signature Restricted Delivery \$   Postage	ş.i
9589 0710	STOTAL POSTAGE AND FEES  SENT TO SARCH J. MARCH LINION TRUST  Street and Apt. No., or PO Box No.  SOOD NEW CASTLE AVENUE  City, State, 219-49  FORTEMOUTH, NH O'SOOI  PS Form 3800, January 2023 PSN 7530-02000-90-7  See Reverse for Instructions	

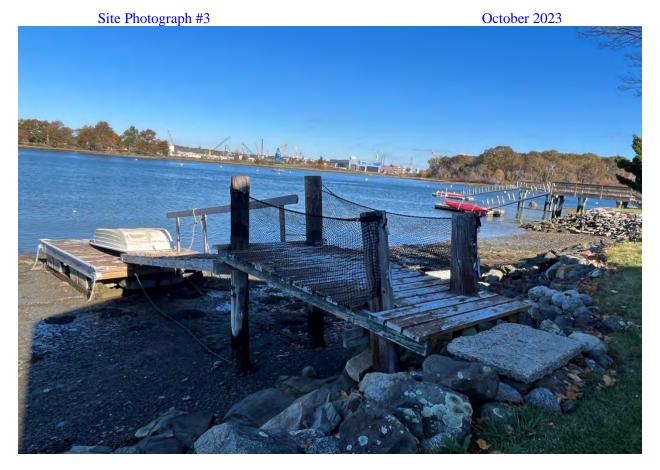
÷\*

NH DES-Wetlands Bureau Application 333 New Castle Ave, Portsmouth, NH 03801 Proposed Tidal Docking Structure

**SITE PHOTOGRAPHS** Portsmouth, NH















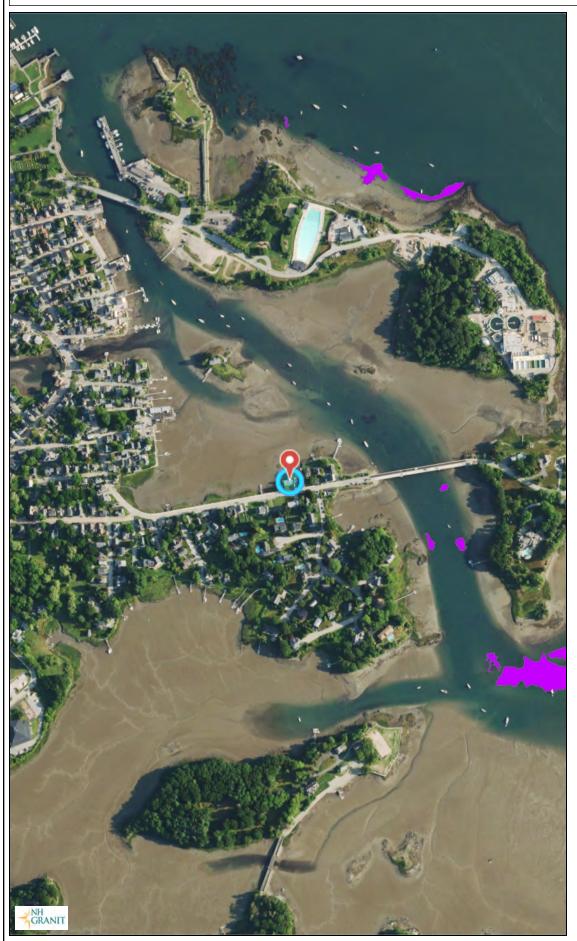












## Legend

2021 Coastal 2019 1-foot RGB

Map Scale 1: 6,494



© NH GRANIT, www.granit.unh.edu Map Generated: 1/23/2024

## Notes

Eelgrass 2021

333 New Castle Ave Portsmouth, NH 03801





## Legend

- State
- County
- ☐ City/Town

WAP 2020: Highest Ranked Wildlife Habitat

- 1 Highest Ranked Habitat in NH
   2 Highest Ranked Habitat in Regior
- 3 Supporting Landscape

Coastal 2019 1-foot RGB

Map Scale

1: 3,247

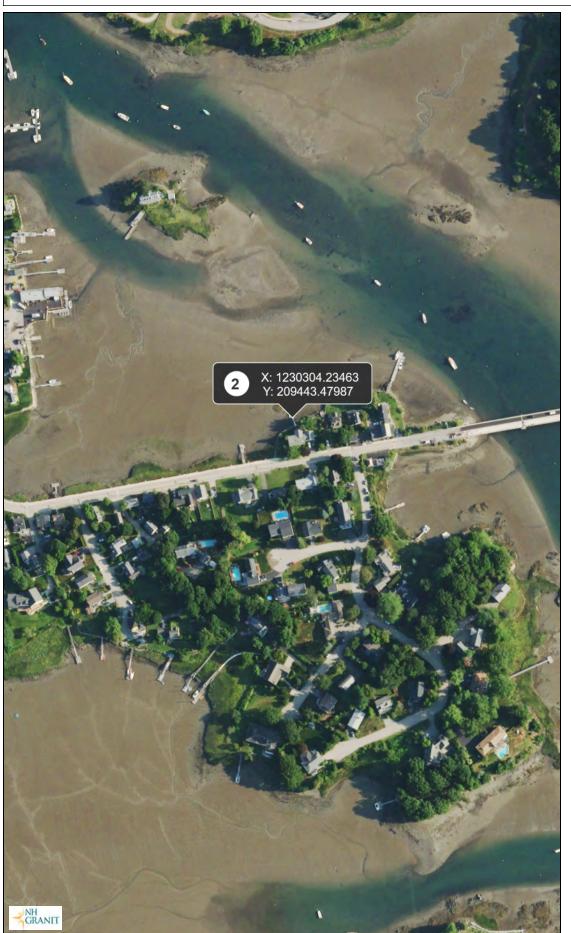


© NH GRANIT, www.granit.unh.edu Map Generated: 11/14/2023

#### Notes

Lyng 333 New Castle Ave Portsmouth, NH 03801





## Legend

Current Shellfish Beds

Blue Mussel

Oyster

Razor Clam
Softshell Clam

Surf Clam

Coastal 2019 1-foot RGB World Imagery

Low Resolution 15m Imager High Resolution 60cm Image High Resolution 30cm Image Citations

1.2m Resolution Metadata

Map Scale

1: 3,247



© NH GRANIT, www.granit.unh.edu Map Generated: 11/14/2023

#### Notes

333 New Castle Ave Portsmouth, NH 03801





#### NHB DataCheck Results Letter

NH Natural Heritage Bureau

Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

To: Jacqueline Boudreau

200 Griffin Rd Unit 3 Portsmouth, NH 03801 jboudreau@haleyward.com

From: NHB Review

NH Natural Heritage Bureau

Main Contact: Ashley Litwinenko - <a href="mailto:nhbreview@dncr.nh.gov">nhbreview@dncr.nh.gov</a>

cc: NHFG Review, Anthony Tur

Date: 03/07/2024 (valid until 03/07/2025)

Re: DataCheck Review by NH Natural Heritage Bureau and NH Fish & Game

Permits: NHDES - Wetland Standard Dredge & Fill - Major

NHB ID: NHB24-0615

Town: Portsmouth

Location: 333 New Castle Avenue

**Project Description:** The project proposes the removal of an existing tidal docking structure and the re-construction of a new tidal docking structure including a 4' x 5' accessway, a 4' by 20' fixed pier, a 3' x 30' gangway, and a 8' x 20' landing float and an 10' x 30' landing float (overall structure length 112.5') on 555+/- feet of frontage along the Piscataqua River-back channel.

## **Next Steps for Applicant:**

NHB's database has been searched for records of rare species and exemplary natural communities. Please carefully read the comments and consultation requirements below.

**NHB Comments:** Please send NHB proposed plans and representative photos during the growing season of the shoreline proposed to be impacted.

**NHFG Comments:** Please refer to NHFG consultation requirements below.

#### **NHB Consultation**

If this NHB DataCheck letter includes records of rare plants and/or natural communities/systems, please contact NHB and provide any requested supplementary materials by emailing <a href="mailto:nhbreview@dncr.nh.gov">nhbreview@dncr.nh.gov</a>.

If this NHB DataCheck letter DOES NOT include any records of rare plants and/or natural communities/systems, no further consultation with NHB is required.



#### NHB DataCheck Results Letter

NH Natural Heritage Bureau

Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

#### **NH Fish and Game Department Consultation**

If this NHB DataCheck letter DOES NOT include <u>ANY</u> 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 <a href="https://www.wildlife.nh.gov/wildlife-and-habitat/nongame-and-endangered-species/environmental-review">https://www.wildlife.nh.gov/wildlife-and-habitat/nongame-and-endangered-species/environmental-review</a>. All requests for consultation and submittals should be sent via email to <a href="https://www.wildlife.nh.gov">NHFGreview@wildlife.nh.gov</a> 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, 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.





#### WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS that we, **Donald W. Lane and Patricia A. Lane**, husband and wife, of 333 New Castle Avenue, Portsmouth, New Hampshire 03801, for consideration paid, do hereby grant to **Thomas P. Lyng and Kimberley S. Lyng**, of 319 Lincoln Avenue, Portsmouth, New Hampshire, with **Warranty Covenants**, **as Joint Tenants with Rights of Survivorship**, the following parcel of land:

A certain parcel of land with any buildings or other improvements thereon, located on the northerly side of New Castle Avenue, Portsmouth, New Hampshire, being depicted on a plan entitled "Lot Line Relocation/Boundary Line Agreement Plan, Tax Map 207 - Lots 2 & 3, Donald & Patricia Lane and the Estate of James H. Wicks, Sr., 333 and 363 New Castle Avenue, City of Portsmouth, County of Rockingham, State of New Hampshire; prepared by Ambit Engineering Inc., dated 12/19/2012, recorded at the Rockingham County Registry of Deeds as Plan 37556, said parcel being bounded and described as follows: Beginning at an iron rod set in the northerly sideline of New Castle Avenue thence running N 03° 20' 37" E a distance of 40.86 feet to an iron rod set; thence turning and running N 02E E 33' 07" E a distance of 48.00 feet to an iron rod set; thence continuing along the same course 8 feet, more or less to the mean high water line of the Piscataqua River Back Channel; thence running westerly along the mean high water line of the Piscataqua River Back Channel a distance of 254 feet, more or less, to a point at the northerly sideline of New Castle Avenue; thence turning and running S 85° 30' 00" E along the sideline of New Castle Avenue a distance of 26 feet more or less to a point; thence continuing along the same course and the sideline of New Castle Avenue a distance of 154.22 feet, more or less, to the point of beginning. Said parcel contains approximately 12,895 square feet of land, more or less. The above described parcel is further identified as Tax Parcel 207/2.

Meaning and intending to convey a portion of the property described in the deed from Patricia A. Lane to Donald W. Lane and Patricia A. Lane, recorded at the Rockingham County Registry of Deeds, at Book 4221, Page 91.

Dated this 21st day of November, 2013.

Donald W. Lane

Patricia a. Lane

State of New Hampshire County of Rockingham

Personally appeared Donald W. Lane and Patricia A. Lane and acknowledged that they executed the above Warranty Deed, this 21st day of November, 2013, before me

My Commission Expires: a/a/i7

## SAFETY DATA SHEET

#### 1. Identification

Product identifier

Other means of identification

SDS number

92-KPC

Recommended use

Preservative Treated Wood for various weather protected and exterior uses.

**Recommended restrictions** 

None known.

Manufacturer/Importer/Supplier/Distributor information Company Name

Koppers Performance Chemicals Inc.

**CCA Treated Wood** 

Address

1016 Everee Inn Rd., Griffin, GA 30224

Telephone number

770-233-4200

Contact person **Emergency Telephone**  Regulatory Manager, KPC Inc. CHEMTREC 1-800-424-9300

Number

E-mail

KPCmgrsds@koppers.com

## 2. Hazard(s) identification

Physical hazards

Not classified.

**Health hazards** 

Carcinogenicity (inhalation)

Category 1A

**OSHA** defined hazards

Combustible dust

Label elements



Signal word

Hazard statement

May cause cancer by inhalation. May form combustible dust concentrations in air.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Wear protective gloves/protective clothing/eye protection/face protection. Prevent dust accumulation to minimize explosion hazard. Observe good industrial hygiene

Response

If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use water fog, foam, carbon dioxide, dry chemical for extinction.

Collect spillage.

Storage

Store away from incompatible materials.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

## 3. Composition/information on ingredients

## **Mixtures**

Chemical name	CAS number	%
Arsenic Pentoxide	1303-28-2	<3
Copper Oxide	1317-39-1	<1.5
Trivalent Chromium	1308-38-9	<3.5
Wood	N/A	<85

**CCA Treated Wood** 

#### Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Components not listed are either non-hazardous or are below reportable limits.

Depending on the additives applied to the treating solution, this wood may also contain <1 % of mold inhibitors, <1% of a non-hazardous oil emulsion, and <% of a colorant.

#### 4. First-aid measures

**Inhalation** 

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals.

Skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation to the skin. Abrasive handling or rubbing of the treated wood may increase skin irritation. Some wood species, regardless of treatment, may cause dermatitis or allergic skin reactions in sensitized individuals. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact

Do not rub eye. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyelids wide apart. If irritation persists get medical attention.

Ingestion

General information

Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects. If one ounce of treated wood dust per 10 lbs. of body weight are ingested, acute arsenic

Indication of immediate medical attention and special treatment needed

intoxication is a possibility.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

## 5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder. Apply extinguishing media carefully to avoid creating airborne dust.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

protect themselves.

Specific hazards arising from the chemical

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. Depending on moisture content, and more importantly, particle diameter and airborne concentration, wood dust in a contained area may explode in the presence of an ignition source. Wood dust may similarly deflagrate (combustion without detonation like an explosion) if ignited in an open or loosely contained area. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts. Reference NFPA Standards- 654 and 664 for guidance. Toxic vapors from wood and preservative may be given off in a fire. Ash will contain free arsenic and chromium and may be toxic.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods
General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

May form combustible dust concentrations in air.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use only non-sparking tools. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Do not burn preserved wood. Do not use preserved wood as Mulch. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep away from heat, spark, open flames and other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

#### Occupational exposure limits

U.S. - OSHA Components

Components	Type	Value	Form
Wood Dust (CAS N/A)	PEL	5 mg/m3	Respirable dust.
•		15 mg/m3	Total fraction.
US. OSHA Table Z-1 Limits for Air Conf	taminants (29 CFR 1910.1000)		
Components	Туре	<b>V</b> alue	
Trivalent Chromium (CAS 1308-38-9) ACGIH	PEL	0.5 mg/m3	
Components	Туре	Value	Form
Wood Dust (CAS N/A)	TWA	1 mg/m3	Inhalable fraction.
US. ACGIH Threshold Limit Values			
Components	Туре	<b>V</b> alue	
Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)	TWA	0.01 mg/m3	
·····	TWA	0,5 mg/m3	
US. NIOSH: Pocket Guide to Chemical	Hazards		
Components	Туре	Value	Form
Arsenic Pentoxide (CAS 1303-28-2)	Ceiling	0.002 mg/m3	· · · · · · · · · · · · · · · · · · ·

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	Form	
Copper Oxide (CAS 1317-39-1)	TWA	1 mg/m3	Dust and mist.	
Trivalent Chromium (CAS 1308-38-9) Wood Dust (CAS N/A)	TWA	0.5 mg/m3		
	TWA	1 mg/m3	Dust.	

#### **Biological limit values**

#### **ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time	
Arsenic Pentoxide (CAS 1303-28-2)	35 μg/l	Inorganic arsenic, plus methylated metabolites, as As	Urine	*	

\* - For sampling details, please see the source document.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear dust-resistant safety goggles with side shields where there is danger of eye contact.

Skin protection

Hand protection

When handling wood, wear leather or fabric gloves.

Other

Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH–approved respirator if there is a potential for exposure to dust exceeding exposure limits (See 29 CRF 1910.134,

respiratory protection standard).

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations If wood dust contacts the skin, workers should wash the affected areas with soap and water. Clothing contaminated with wood dust should be removed, and provisions should be made for the safe removal of the chemical from the clothing. Persons laundering the clothes should be informed of the hazardous properties of wood dust. A worker who handles wood dust should thoroughly wash hands, forearms, and face with soap and water before eating, using tobacco products, using toilet facilities, applying cosmetics, or taking medication. Workers should not eat, drink, use tobacco products, apply cosmetics, or take medication in areas where wood dust is handled, or processed.

## 9. Physical and chemical properties

#### **Appearance**

Physical state

Solid,

Form

Solid.

Color

Yellow/green.

Odor

Wood odor.

Odor threshold

Not available.

pН

Not applicable.

Melting point/freezing point

Not available.

Initial boiling point and boiling

Not available.

range

Flash point

Not available.

**Evaporation rate** 

Not available.

Flammability (solid, gas)

Combustible solid.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not applicable.

Vapor density

Not applicable.

Relative density

Not available.

Solubility(ies)

Solubility (water)

Highly insoluble.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity

Not applicable.

Other information

Density

As wood.

## 10. Stability and reactivity

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous

No dangerous reaction known under conditions of normal use.

reactions Conditions to avoid

Keep away from heat, sparks and open flame. Minimize dust generation and accumulation.

Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition

products

Toxic vapors from wood and preservative may be given off in a fire. Ash will contain free arsenic

and chromium and may be toxic.

## 11. Toxicological information

Information on likely routes of exposure

Inhalation

Wood dust, treated or untreated, is irritating to the nose, throat and lungs. Prolonged or repeated inhalation of wood dusts may cause respiratory irritation, recurrent bronchitis and prolonged colds. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals. Prolonged exposure to wood dusts by inhalation has been reported to be associated

with nasal and paranasal cancer.

Skin contact

Handling may cause splinters. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation to the skin. Abrasive handling or rubbing of the treated wood may increase skin irritation. Some wood species, regardless of treatment, may cause dermatitis or allergic skin reactions in sensitized individuals.

Eve contact

Dust may irritate the eyes.

Ingestion

Not likely, due to the form of the product. However, ingestion of dusts generated during working operations may cause nausea and vomiting. If one ounce of treated wood dust per 10 lbs. of body weight are ingested, acute arsenic intoxication is a possibility. Certain species of wood and their dusts may contain natural toxins, which can have adverse effects in humans.

Symptoms related to the physical, chemical and toxicological characteristics Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects.

## Information on toxicological effects

Acute toxicity

Not expected to be acutely toxic.

Skin corrosion/irritation

Dust may irritate skin.

Serious eye damage/eye

Dust may irritate the eyes.

irritation

Respiratory or skin sensitization

**ACGIH Sensitization** 

Wood (CAS N/A)

Dermal sensitization Respiratory sensitization

Respiratory sensitization

Exposure to wood dusts can result in hypersensitivity,

Skin sensitization

Exposure to wood dust can result in the development of contact dermatitis. The primary irritant dermatitis resulting from skin contact with wood dusts consist of erythema, blistering, and

sometimes erosion and secondary infections occur.

Germ cell mutagenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a

mutagen by OSHA.

Carcinogenicity

May cause cancer by inhalation.

This classification is based on an increased incidence of nasal and paranasal cancers in people

exposed to wood dusts.

IARC Monographs. Overall Evaluation of Carcinogenicity

Arsenic Pentoxide (CAS 1303-28-2)

1 Carcinogenic to humans.

Trivalent Chromium (CAS 1308-38-9)

3 Not classifiable as to carcinogenicity to humans.

Wood (CAS N/A)

1 Carcinogenic to humans.

NTP Report on Carcinogens

Arsenic Pentoxide (CAS 1303-28-2)

Known To Be Human Carcinogen. Known To Be Human Carcinogen.

Wood Dust (CAS N/A)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Arsenic Pentoxide (CAS 1303-28-2)

Cancer

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** 

Not likely, due to the form of the product.

**Chronic effects** 

Chronic exposure to wood dusts can result in pneumonitis, and coughing, wheezing, fever and the other signs and symptoms associated with chronic bronchitis. Individuals with pre-existing disease in or a history of ailments involving the skin, kidney, liver, respiratory tract, eyes, or nervous system are at a greater than normal risk of developing adverse effects from woodworking operations with this product.

**Further information** 

The effects of industrial exposure to the chrome-copper-arsenic preservative used to treat CCA wood has been evaluated in three independent epidemiology studies. In each case the authors concluded that workers exposed on a daily basis to these preservatives were at no increased risk of death or disease as a result of their exposure.

Recreational exposure to children using CCA treated wood playground equipment has been evaluated. The results of this study indicate that the amount of arsenic transferred from the wood surface to the child is within the normal variation of total arsenic exposure to children and that the maximum risks of skin cancer associated with the exposure approximates the skin cancer risk from the sunlight experienced during play periods. Leaf, stem, and fruit of grape plants grown adjacent to CCA treated wood poles did not take up preservative components from the poles above background levels (limit of detection 0.2 and 0.05 ppm for chrome and arsenic,

respectively).

12. Ecological information

**Ecotoxicity** 

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential Mobility in soil No data available on bioaccumulation. The product is insoluble in water.

Mobility in general

The product is not volatile but may be spread by dust-raising handling.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

CCA Treated Wood

## 13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. DO NOT BURN! Ash may be toxic and a hazardous waste;

combustion vapors may be toxic. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

#### US RCRA Hazardous Waste P List: Reference

Arsenic Pentoxide (CAS 1303-28-2)

P011

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

## 14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

## 15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are listed on or exempt from the U.S. EPA TSCA Inventory List.

## TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Arsenic Pentoxide (CAS 1303-28-2)

Cancer Liver Skin

Respiratory irritation Nervous system Acute toxicity

## CERCLA Hazardous Substance List (40 CFR 302.4)

Arsenic Pentoxide (CAS 1303-28-2)

LISTED

Copper Oxide (CAS 1317-39-1)

LISTED

Trivalent Chromium (CAS 1308-38-9)

LISTED

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)	
Arsenic Pentoxide	1303-28-2	1		100	10000	

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Arsenic Pentoxide	1303-28-2	<3	
Copper Oxide	1317-39-1	<1.5	
Trivalent Chromium	1308-38-9	<3.5	

#### Other federal regulations

## Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Yes

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

#### US state regulations

#### US. Massachusetts RTK - Substance List

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)

## US. New Jersey Worker and Community Right-to-Know Act

Arsenic Pentoxide (CAS 1303-28-2) Copper Oxide (CAS 1317-39-1) Trivalent Chromium (CAS 1308-38-9)

Wood Dust (CAS N/A)

## US. Pennsylvania Worker and Community Right-to-Know Law

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)

Wood Dust (CAS N/A)

#### US, Rhode Island RTK

Arsenic Pentoxide (CAS 1303-28-2) Copper Oxide (CAS 1317-39-1) Trivalent Chromium (CAS 1308-38-9)

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

## US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Wood Dust (CAS N/A)

#### international Inventories

Country(s) or region Inventory name

On inventory (yes/no)\*

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date

05-April-2015

Revision date

01-June-2015

Version #

02

#### Further information

HMIS® is a registered trade and service mark of the NPCA. E - Safety Glasses, Gloves, Dust Respirator

PERCENTAGE OF HAZARDOUS INGREDIENTS COMPONENT %:

0.25 pcf

Arsenic Pentoxide 0.3%, Copper Oxide 0.15%, Chromium Trioxide 0.4%, Wood Dust\* 84.28% 0.4 pcf

Arsenic Pentoxide 0.4%, Copper Oxide 0.2%, Chromium Trioxide 0.6%, Wood Dust\* 83.98%

0.6 pcf Arsenic Pentoxide 0.6%, Copper Oxide 0.3%, Chromium Trioxide 0.9%, Wood Dust\* 83.47%

1.0 pcf

Arsenic Pentoxide 1.0%, Copper Oxide 0.6%, Chromium Trioxide 1.4%, Wood Dust\* 82.45% 2.5 pcf

Arsenic Pentoxide 2.6%, Copper Oxide 1.3%, Chromium Trioxide 3.3%, Wood Dust\* 78.88%

\* This represents the maximum amount of wood dust that could be generated if the wood was completely machined.

The above percentages are based on the applicable retention, a wood density of 32 pcf., and a moisture contact of 15%, the above values may vary due to the variability of treatment and the natural variability of wood.

HMIS® ratings

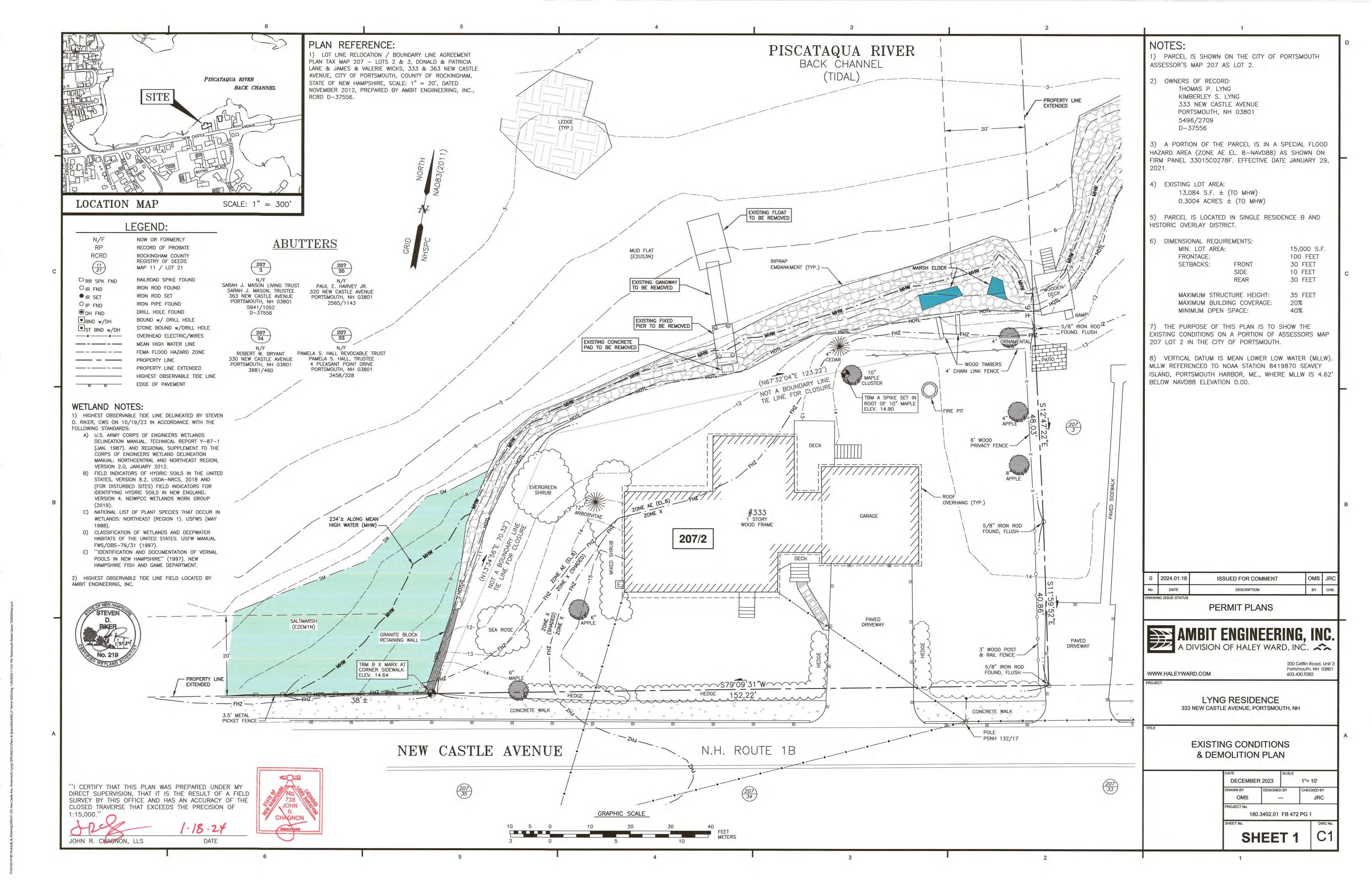
Health: 1\* Flammability: 1 Physical hazard: 0 Personal protection: E

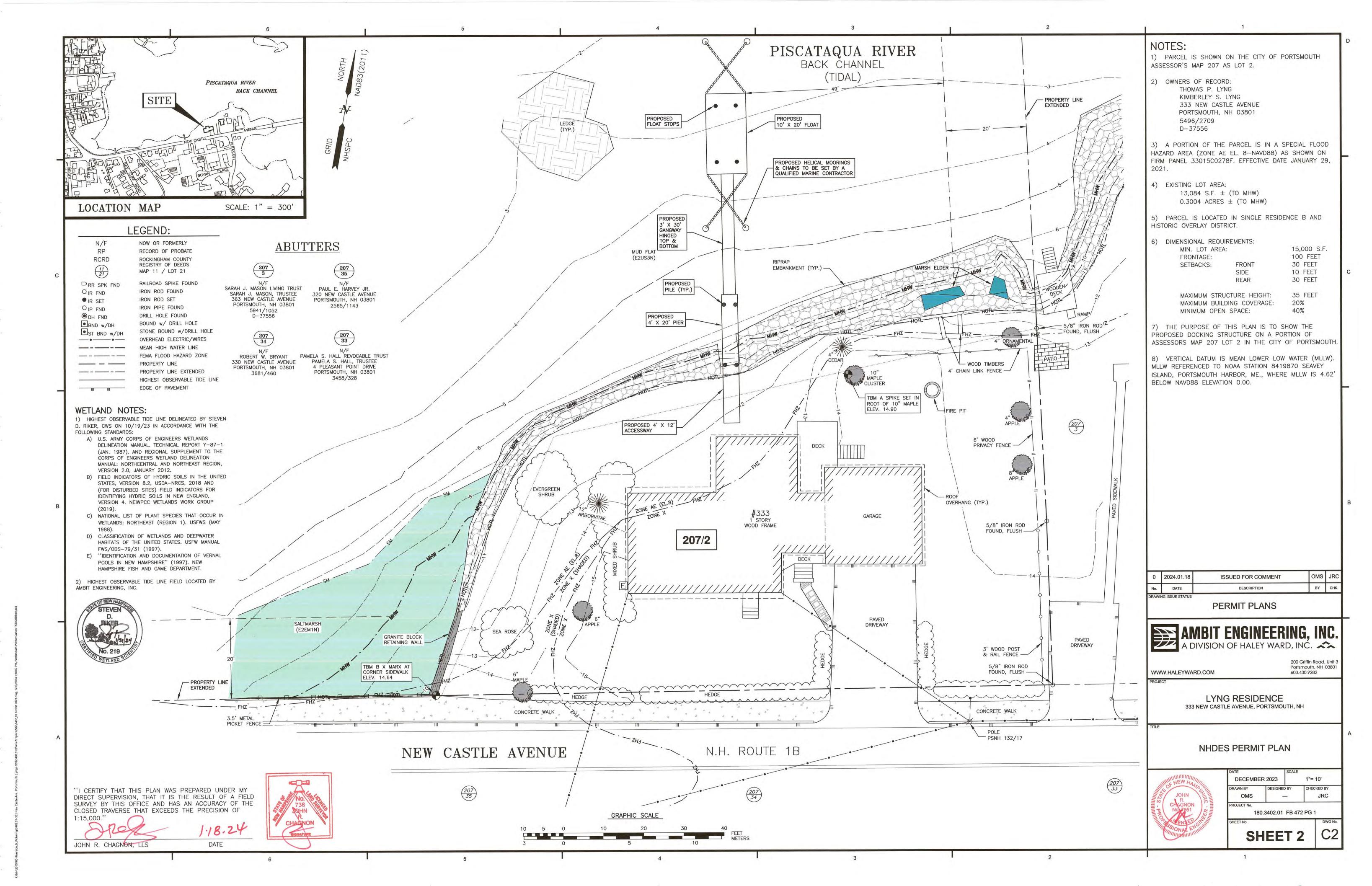
NFPA ratings



Disclaimer

Koppers Performance Chemicals Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.





# SEQUENCE OF CONSTRUCTION

- 1) MOBILIZATION OF A CRANE BARGE, PUSH BOAT, WORK SKIFF, MATERIALS AND PREFABRICATED COMPONENTS SUCH AS THE GANGWAY AND FLOAT TO THE SITE VIA APPROVED ACCESS. MOBILZATION OF EQUIPMENT TRUCKS TO THE SITE.
- THE BARGE WILL BE POSITIONED ALONGSIDE THE PROPOSED LOCATION OF THE NEW DOCK AND WATERWARD OF ANY EMERGENT VEGETATION TO MINIMIZE IMPACTS
- INSTALLATION OF THE SUB STRUCTURE WILL BE PERFORMED FROM A CRANE BARGE OR SKIFF TO REDUCE THE AMOUNT OF FOOT TRAFFIC IN THE INTERTIDAL AREA.
- ALL WORK WILL BE PERFORMED AT LOW TIDE TO MINIMIZE SEDIMENTATION.
- PILINGS WILL BE MECHANICALLY DRIVEN BY A CRANE ELIMINATING ANY EXCAVATION FOR INSTALLATION OF THE
- PILINGS ARE CUT AND BEAM CAPS ARE INSTALLED AND THE SUPER STRUCTURE OF THE PIER IS BUILT. MATERIALS ARE LIFTED FROM THE BARGE AND SET INTO POSITION BY THE CRANE.
- 8) ONCE THE PIER IS COMPLETE, THE GANGWAY AND FLOAT ARE BROUGHT INTO POSITION AND INSTALLED.

## DISCHARGES. AVOIDANCE, MINIMIZATION AND MITIGATION

DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE U.S. AND ANY SECONDARY IMPACTS SHALL BE AVOIDED AND MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE. PERMITTEES MAY ONLY FILL THOSE JURISDICTIONAL WETLANDS AND WATERWAYS THAT THE CORP AND NHDES AUTHORIZES TO BE FILLED AND IMPACT THOSE AREAS THAT THE CORPS AND AND NHDES AUTHORIZES AS SECONDARY IMPACTS. IF NOT SPECIFICALLY AUTHORIZED BY USACOE AND AND NHDES, ANY UNAUTHORIZED FILL OR SECONDARY IMPACT TO WETLANDS MAY BE CONSIDERED AS A VIOLATION OF THE

 UNLESS SPECIFICALLY AUTHORIZED USACOE AND AND NHDES, NO WORK SHALL DRAIN A WATER OF THE U.S. BY PROVIDING A CONDUIT FOR WATER ON OR BELOW THE SURFACE.

# HEAVY EQUIPMENT IN FRESH WATER WETLANDS

HEAVY EQUIPMENT OTHER THAN FIXED EQUIPMENT (DRILL RIGS, FIXED CRANES, ETC.) WORKING IN WETLANDS SHALL NOT BE STORED, MAINTAINED OR REPAIRED IN WETLANDS, UNLESS IT IS LESS ENVIRONMENTALLY DAMAGING OTHERWISE, AND AS MUCH AS POSSIBLE SHALL NOT BE OPERATED WITHIN THE INTERTIDAL ZONE. WHERE CONSTRUCTION REQUIRES HEAVY EQUIPMENT OPERATION IN WETLANDS, THE EQUIPMENT SHALL EITHER HAVE LOW GROUND PRESSURE (<3 PSI). OR SHALL NOT BE LOCATED DIRECTLY ON WETLAND SOILS AND VEGETATION; IT SHALL BE PLACED ON SWAMP MATS THAT ARE ADEQUATE TO SUPPORT THE EQUIPMENT IN SUCH A WAY AS TO MINIMIZE DISTURBANCE OF WETLAND SOIL AND VEGETATION. SWAMP MATS ARE TO BE PLACED IN THE WETLAND FROM THE UPLAND OR FROM EQUIPMENT POSITIONED ON SWAMP MATS IF WORKING WITHIN A WETLAND. DRAGGING SWAMP MATS INTO POSITION IS PROHIBITED. OTHER SUPPORT STRUCTURES THAT ARE LESS IMPACTING AND ARE CAPABLE OF SAFELY SUPPORTING EQUIPMENT MAY BE USED WITH WRITTEN CORPS AND NHDES AUTHORIZATION. SIMILARLY, NOT USING MATS DURING FROZEN, DRY OR OTHER CONDITIONS MAY BE ALLOWED WITH WRITTEN CORPS AND NHDES AUTHORIZATION. AN ADEQUATE SUPPLY OF SPILL CONTAINMENT EQUIPMENT SHALL BE MAINTAINED ON SITE. CORDUROY ROADS AND SWAMP/CONSTRUCTION MATS ARE CONSIDERED AS FILL WHETHER THEY'RE INSTALLED TEMPORARILY OR PERMANENTLY.

## TIME OF YEAR WORK WINDOW AND NOISE RESTRICTIONS

- I. PILES INSTALLED IN-THE-DRY DURING LOW WATER OR IN-WATER BETWEEN NOV. 15TH MARCH 15TH, OR
- II. MUST BE DRILLED AND PINNED TO LEDGE, OR
- III. VIBRATORY HAMMERS USED TO INSTALL ANY SIZE AND QUANTITY OF WOOD, CONCRETE OR STEEL PILES, OR IV. IMPACT HAMMERS LIMITED TO ONE HAMMER AND <50 PILES INSTALLED/DAY WITH THE FOLLOWING: WOOD PILES OF ANY SIZE. CONCRETE PILES ≤18-INCHES DIAMETER, STEEL PILES 12-INCHES DIAMETER IF THE HAMMER IS ≤3000 LBS. AND A WOOD CUSHION IS USED BETWEEN THE HAMMER AND STEEL PILE.

- I. IN-WATER NOISE LEVELS SHALL NOT >187dB SEL RE ΙμΡα OR 206dB PEAK RE ΙμΡα AT A DISTANCE >10M FROM THE PILE BEING INSTALLED, AND
- II. IN-WATER NOISE LEVELS >155dB PEAK RE IµPa SHALL NOT EXCEED 12 CONSECUTIVE HOURS ON ANY GIVEN DAY AND A 12 HOUR RECOVERY PERIOD (I.E., IN-WATER NOISE BELOW 155dB PEAK RE IµPa) MUST BE PROVIDED BETWEEN WORK DAYS.

# WORK SITE RESTORATION

- UPON COMPLETION OF CONSTRUCTION, ALL DISTURBED WETLAND AREAS SHALL BE PROPERLY STABILIZED. ANY SEED
- MIX SHALL CONTAIN ONLY PLANT SPECIES NATIVE TO NEW ENGLAND.
- 2. THE INTRODUCTION OR SPREAD OF INVASIVE PLANT SPECIES IN DISTURBED AREAS IS PROHIBITED. 3. IN AREAS OF AUTHORIZED TEMPORARY DISTURBANCE, IF TREES ARE CUT THEY SHALL BE CUT AT GROUND LEVEL AND NOT UPROOTED IN ORDER TO PREVENT DISRUPTION TO THE WETLAND SOIL STRUCTURE AND TO ALLOW STUMP SPROUTS TO REVEGETATE THE WORK AREA, UNLESS OTHERWISE AUTHORIZED.
- 4. WETLAND AREAS WHERE PERMANENT DISTURBANCE IS NOT AUTHORIZED SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND ELEVATION, WHICH UNDER NO CIRCUMSTANCES SHALL BE HIGHER THAN THE PRE-CONSTRUCTION ELEVATION. ORIGINAL CONDITION MEANS CAREFUL PROTECTION AND/OR REMOVAL OF EXISTING SOIL AND VEGETATION, AND REPLACEMENT BACK TO THE ORIGINAL LOCATION SUCH THAT THE ORIGINAL SOIL LAYERING AND VEGETATION SCHEMES ARE APPROXIMATELY THE SAME, UNLESS AUTHORIZED.

# SEDIMENTATION AND EROSION CONTROL

ADEQUATE SEDIMENTATION AND EROSION CONTROL MANAGEMENT MEASURES. PRACTICES AND DEVICES. SUCH AS PHASED CONSTRUCTION, VEGETATED FILTER STRIPS, GEOTEXTILE SILT FENCES, STORMWATER DETENTION AND INFILTRATION SYSTEMS, SEDIMENT DETENTION BASINS. OR OTHER DEVICES SHALL BE INSTALLED AND PROPERLY MAINTAINED TO REDUCE EROSION AND RETAIN SEDIMENT ON-SITE DURING AND AFTER CONSTRUCTION. THEY SHALL BE CAPABLE OF PREVENTING EROSION, OF COLLECTING SEDIMENT, SUSPENDED AND FLOATING MATERIALS, AND OF FILTERING FINE SEDIMENT. THE DISTURBED AREAS SHALL BE STABILIZED AND THESE DEVICES SHALL BE REMOVED UPON COMPLETION OF WORK. THE SEDIMENT COLLECTED BY THESE DEVICES SHALL BE REMOVED AND PLACED AT AN UPLAND LOCATION, IN A MANNER THAT WILL PREVENT ITS LATER EROSION INTO A WATERWAY OR WETLAND. ALL EXPOSED SOIL AND OTHER FILLS SHALL BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICABLE DATE.

# SPAWNING AREAS.

DISCHARGES OF DREDGED OR FILL MATERIAL, AND/OR SUSPENDED SEDIMENT PRODUCING ACTIVITIES IN FISH AND SHELLFISH SPAWNING OR NURSERY AREAS, OR AMPHIBIAN AND MIGRATORY BIRD BREEDING AREAS, DURING SPAWNING OR BREEDING SEASONS SHALL BE AVOIDED. IMPACTS TO THESE AREAS SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE DURING ALL TIMES OF THE YEAR. INFORMATION ON SPAWNING HABITAT FOR SPECIES MANAGED UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (I.E., EFH FOR

SPAWNING ADULTS) CAN BE OBTAINED FROM THE NMFS WEBSITE AT: WWW.NERO.NOAA.GOV/HCD.

ON INVASIVE SPECIES AT HTTP://WWW.NAE.USACE.ARMY.MIL/REGULATORY/ FOR CONTROL METHODS.

# STORAGE OF SEASONAL STRUCTURES

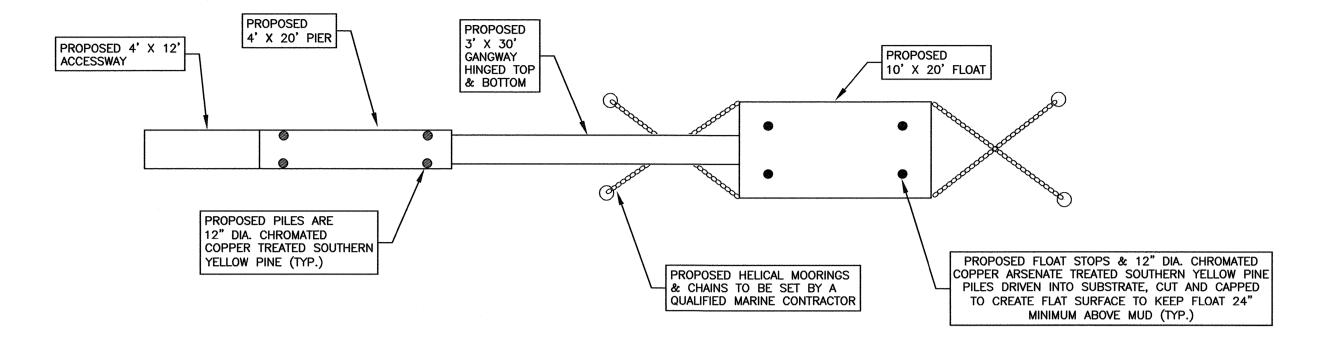
COASTAL STRUCTURES SUCH AS PIER SECTIONS, FLOATS, ETC., THAT ARE REMOVED FROM THE WATERWAY FOR A PORTION OF THE YEAR (OFTEN REFERRED TO AS SEASONAL STRUCTURES) SHALL BE STORED IN AN UPLAND LOCATION, LOCATED ABOVE HIGHEST OBSERVABLE TIDE LINE (HOTL) AND NOT IN TIDAL WETLANDS. THESE SEASONAL STRUCTURES MAY BE STORED ON THE FIXED, PILE-SUPPORTED PORTION OF THE STRUCTURE THAT IS SEAWARD OF HOTL. THIS IS INTENDED TO PREVENT STRUCTURES FROM BEING STORED ON THE MARSH SUBSTRATE AND THE SUBSTRATE SEAWARD OF MHW.

# ENVIRONMENTAL FUNCTIONS AND VALUES

THE PERMITTEE SHALL MAKE EVERY REASONABLE EFFORT TO 1) CARRY OUT THE CONSTRUCTION OR OPERATION OF THE WORK AUTHORIZED BY USACOE AND NHDES HEREIN IN A MANNER THAT MINIMIZES ADVERSE IMPACTS ON FISH, WILDLIFE AND NATURAL ENVIRONMENTAL VALUES, AND 2) PROHIBIT THE ESTABLISHMENT OR SPREAD OF PLANT SPECIES IDENTIFIED AS NON-NATIVE INVASIVE SPECIES BY ANY FEDERAL OR STATE AGENCY. SEE THE SECTION

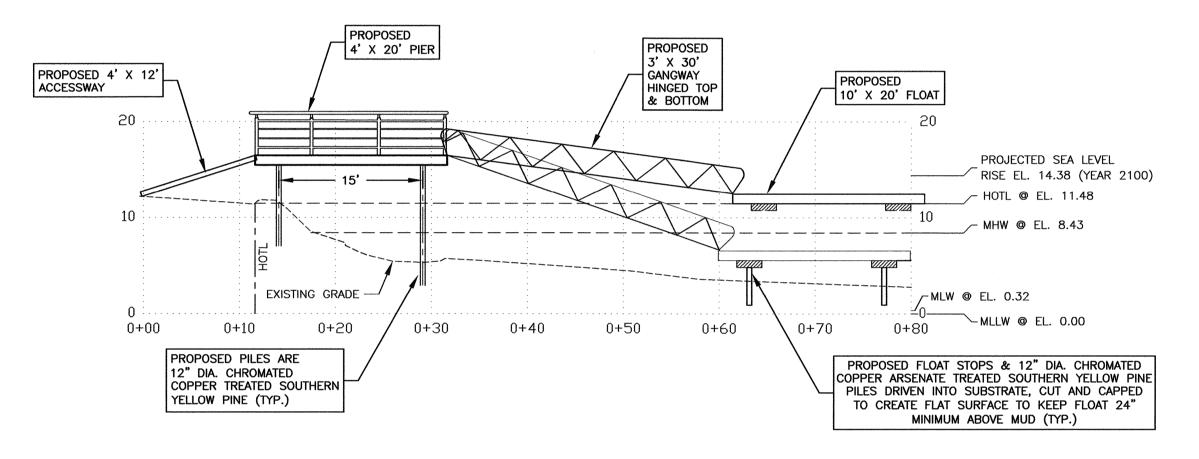
# <u>INSPECTIONS</u>

THE PERMITTEE SHALL ALLOW THE CORPS AND NHDES TO MAKE PERIODIC INSPECTIONS AT ANY TIME DEEMED NECESSARY IN ORDER TO ENSURE THAT THE WORK IS BEING OR HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. THE CORPS AND NHDES MAY ALSO REQUIRE POST-CONSTRUCTION ENGINEERING DRAWINGS FOR COMPLETED WORK, AND POST-DREDGING SURVEY DRAWINGS FOR ANY DREDGING WORK.



# PROPOSED DOCK PLAN

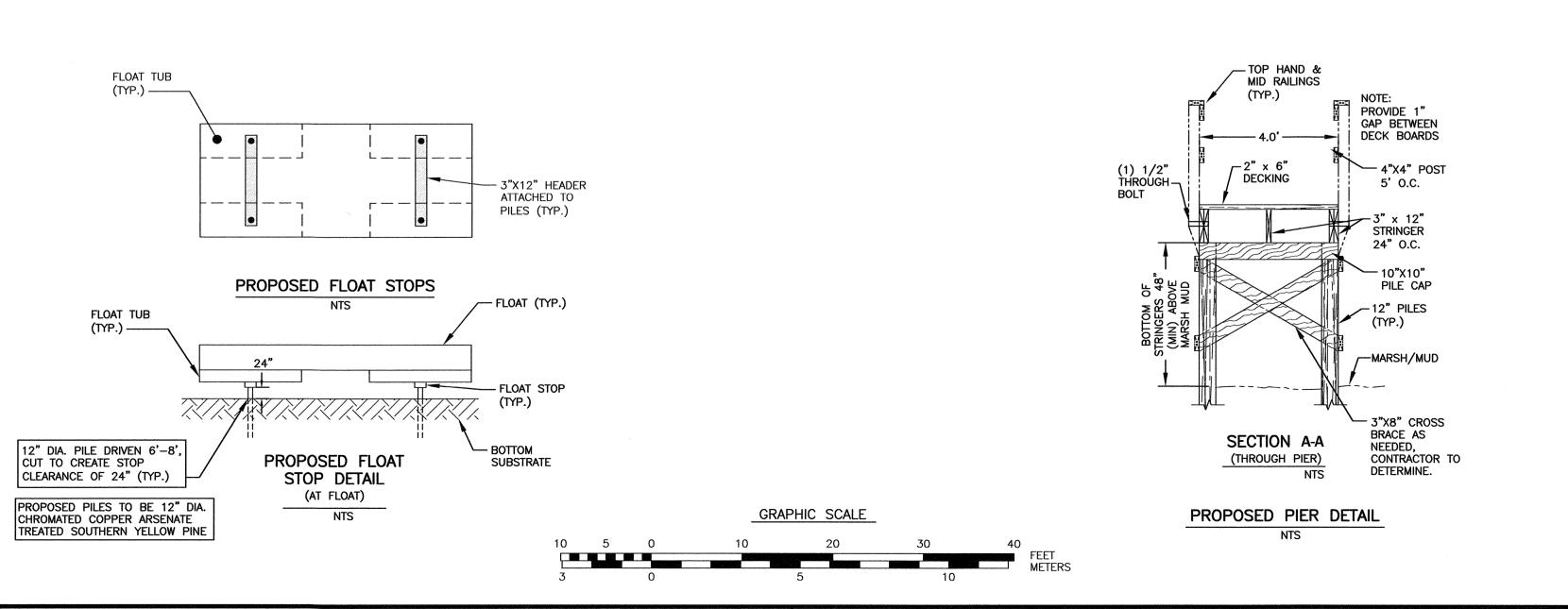
SCALE: 1" = 10'



# PROPOSED DOCK ELEVATION

SCALE: HORIZONTAL/VERTICAL-1" = 10"

# PROPOSED PIER, GANGWAY & FLOAT w/ PILES



- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 4) NUMBER OF PILES TO BE DRIVEN FOR DOCKING STRUCTURE NOT TO EXCEED 8 AS DEPICTED ON PROPOSED DOCK ELEVATION. ALSO NOTE TIME OF YEAR AND NOISE RESTRICTIONS FOR DRIVING OF PILES.

OMS JRC 2024.01.18 ISSUED FOR COMMENT DESCRIPTION DATE AWING ISSUE STATUS

PERMIT PLANS

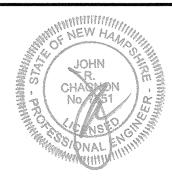


WWW.HALEYWARD.COM

200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

LYNG RESIDENCE 333 NEW CASTLE AVENUE, PORTSMOUTH, NH

DOCK DETAILS



DECEMBER 2023 AS SHOWN OMS **JRC** 180.3402.01 FB 472 PG 1

SHEET 3