



Bureau of Resource Protection - Wetlands

Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act (M.G.L. c.131 s.40) and the
Concord Wetlands Bylaw, Article 58 of the Bylaws of the Town of Concord

Seasonal Floating Dock



Submitted to:
Concord Natural Resources Commission
141 Keyes Rd
Concord, MA 01742

MassDEP Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Prepared for:
The Fenn School, Inc.
516 Monument Street
Concord, MA 01742

Prepared by:
Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754

June 16, 2020



Projects:\5590\Fenn School\NOI

PRINCIPALS

June 16, 2020

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Ms. Delia Kaye, Director
Concord Natural Resources Commission
141 Keyes Rd
Concord, MA 01742

**Subject: Notice of Intent for a Proposed Seasonal Floating Dock
767 Monument Street, Concord, Massachusetts
Fenn School - Applicant**

Dear Commission Members:

On behalf of the Fenn School, Inc. ("Fenn School" or "Applicant"), Epsilon Associates Inc. ("Epsilon") submits this Notice of Intent ("NOI") to the Concord Natural Resources Commission ("NRC" or the "Commission") for the above referenced project ("Project"). This NOI was prepared in accordance with the Massachusetts Wetland Protection Act (MGL c.131 s.40) (the "Act") and implementing Regulations (310 CMR 10.00); and the Town of Concord Wetlands By-Law, Article 43 of 2009 and the Wetlands By-Law Regulations.

We have included two copies of the complete NOI along with seven copies. We also are sending one electronic copy of the filing on a CD and via a ShareFile link to the Commission only.

As explained in the enclosed NOI, the floating dock is proposed to serve as canoe launch and platform for educational activities. Use of a floating dock avoids repeated pedestrian access over the Inland Bank to launch canoes. The proposed dock is a segmental dock system to allow easier dock installation each spring and removal in the fall. A mowed path from main campus is proposed to access the canoe launch area. To mitigate for the minimal work in wetland resource areas and buffer zone, Fenn School proposes to over seed approximately three acres of existing meadow with a pollinator seed mix to augment the pollinator habitat of the meadow.

978 897 7100

FAX 978 897 0099

3 Mill & Main Place, Suite 250
Maynard, MA 01754
www.epsilonassociates.com

Ms. Delia Kaye
Concord Natural Resources Commission
June 16, 2020

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This NOI is submitted for the Commission's review at the July 1, 2020 public meeting. We look forward to working with you on this important project. If you have any questions regarding this NOI please do not hesitate to contact me at (978) 897-7100 or via e-mail at ddunk@epsilonassociates.cpom.

Sincerely,
EPSILON ASSOCIATES, INC.



Dwight R. Dunk, LPD, PWS, BCES
Principal

encl. Notice of Intent

cc: MassDEP NERO
NHESP
D. Platt, Fenn School

Notice of Intent Application

Massachusetts Wetlands Protection Act

Seasonal Floating Dock Concord, MA

Prepared for:

The Fenn School, Inc.
516 Monument Street
Concord, MA 01742

Submitted to:

Concord Natural Resource Commission
Attn: Delia Kaye
141 Keyes Road
Concord, MA 01742

Prepared by:

Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, Massachusetts 01754

June 16, 2020

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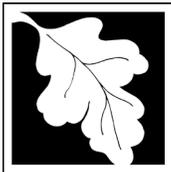
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Provided by MassDEP:
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A. General Information (continued)

6. General Project Description:

To install a seasonal floating dock in the Concord River and establish a mowed pedestrian footpath through upland meadow from the main campus to the canoe launch area.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

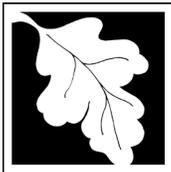
8. Property recorded at the Registry of Deeds for:

Middlesex South	
a. County	b. Certificate # (if registered land)
72289	127
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input checked="" type="checkbox"/> Bank	0 1. linear feet	2. linear feet
b. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	0 1. square feet	2. square feet
c. <input checked="" type="checkbox"/> Land Under Waterbodies and Waterways	<1 1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input checked="" type="checkbox"/> Bordering Land Subject to Flooding	101.6 - temporary / no loss 1. square feet 0 3. cubic feet of flood storage lost	0 s.f. 2. square feet 0 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input checked="" type="checkbox"/> Riverfront Area	Concord River - Inland 1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 100,000 s.f.
square feet

4. Proposed alteration of the Riverfront Area:

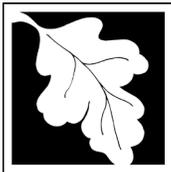
<u>1,160 sf</u>	<u>1,000 sf</u>	<u>160 sf</u>
a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	

4. Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

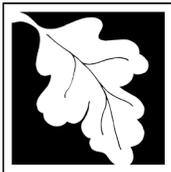
a. square feet of BVW

b. square feet of Salt Marsh

5. Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

August 1, 2017

b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:

(a) within wetland Resource Area	RFA - 1,160 sf / 0.18% (mowed path)
	percentage/acreage
(b) outside Resource Area	11,400 sf / 1.76%
	percentage/acreage

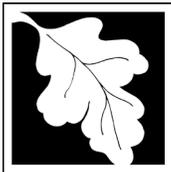
2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

- (a) Project description (including description of impacts outside of wetland resource area & buffer zone)
- (b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

(c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_fee_schedule.htm).
Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

(d) Vegetation cover type map of site

(e) Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

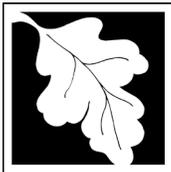
South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.



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C. Other Applicable Standards and Requirements (cont'd)

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

- 4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
 a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
 b. ACEC

- 5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
 a. Yes No
- 6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
 a. Yes No
- 7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
 a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
 - 1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 - 2. A portion of the site constitutes redevelopment
 - 3. Proprietary BMPs are included in the Stormwater Management System.
 b. No. Check why the project is exempt:
 - 1. Single-family house
 - 2. Emergency road repair
 - 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

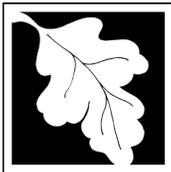
D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

- 1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
- 2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

See NOI Table of Contents

a. Plan Title

b. Prepared By

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

42345

2. Municipal Check Number

June 10, 2020

3. Check date

42344

4. State Check Number

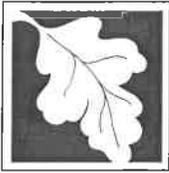
June 10, 2020

5. Check date

Epsilon Associates, Inc.

6. Payor name on check: First Name

7. Payor name on check: Last Name



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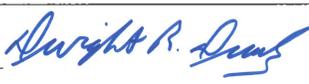
Concord

City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

	06/15/2020
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
	06/15/2020
5. Signature of Representative (if any)	6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Attachment A

Project Narrative

ATTACHMENT A – PROJECT NARRATIVE

1.0 Project Description

On behalf of the Fenn School, Inc. (“Fenn” or the “Applicant”), Epsilon Associates, Inc. (“Epsilon”) submits this Notice of Intent (“NOI”) to the Concord Natural Resources Commission (the “NRC” or “Commission”) to install a seasonal floating dock in the Concord River at 676 Monument Street in Concord, MA. This NOI was prepared in accordance with the Massachusetts Wetland Protection Act (MGL c.131 §40) (“WPA” or the “Act”) and implementing Regulations (310 CMR 10.00) (“Regulations”) and the Concord Wetlands Bylaw Article 58 of the Bylaws of the Town of Concord (“Wetland Bylaw”).

The Applicant seeks an Order of Conditions (“OOC”) from the Commission to install a season floating dock and maintain a mowed path through the meadow to access the canoe launch area for the main campus. This work will involve work in Land Under Waterbodies (“LUW”), Inland Bank (“Bank”), Riverfront Area (“RFA”), floodplain regulated as Bordering Land Subject to Flooding (“BLSF”), and 100-foot Buffer Zone to Bordering Vegetated Wetlands (“BVW”) and Bank.

As explained in further detail below, the purpose of this seasonal floating dock to is provide safe canoe access to the Concord River for students and faculty, and to serve as a platform for students to access the river for educational activities such as collecting water samples and observing aquatic life. Launching canoes from the dock protects the Bank from repeated damage caused by dragging canoes down the Bank and pedestrian access on the Bank. It is our opinion a seasonal installation and removal of the dock and access gangway is more protective of the Bank than repeated access down the bank throughout the boating season. Additionally, a mowed path from the main campus through the meadow to the canoe launch area will be established and maintained by regular mowing. This activity requires no physical alteration to ground surface.

Because the proposed seasonal floating dock requires locating the floating dock in the river and access over the Bank, there is no other feasible alternative or option which could avoid work in the Bylaw defined as the No Disturbance Zone. Therefore, we respectfully request a waiver to allow work in the No Disturbance Zones. Additionally, there is no other feasible alternative or option which could avoid work within the Town’s 50-foot No Build Zone. Therefore, the Applicant respectfully requests a waiver to allow work in the 50-foot No Build Zone.

2.0 Existing Conditions

The Project site is located along the Concord River at 676 Monument Street in Concord and is identified on the Town of Concord Assessor’s Parcels as Parcel 1362. See Attachment B, Figure 1 – USGS Locus Map and Figure 2 – Aerial Locus Map, and Figure 5 – Parcel Map. The topography of the site is generally flat with a gentle slope towards the Concord River and a steep Bank comprised of boulders and soils, see photos in Figure 6a-d – Site Photographs.

According to the applicable Federal Emergency Management Agency – Flood Insurance Rate Map for Middlesex County, Massachusetts, Community Panel #25017C0376F and #25017C0377F, the 100-year floodplain (1% chance flood in any given year) and regulated as BLSF extends to elevation 120 feet NAVD 1988. See Attachment B, Figure 4, FEMA FIRM Map.

2.1 Wetland Resource Areas

On-site wetland resource areas were previously reviewed and determined by the Commission via the Order of Resource Area Delineation (“ORAD”) [DEP File No. 137-1432] issued on May 4, 2018. Because this ORAD is still valid we are relying on the ORAD and referenced plan to determine the boundaries of all on-site wetland resource areas. The resource areas present on-site are identified below and were previously described in the Abbreviated Notice of Resource Areas Delineation (“ANRAD”) submitted to receive the ORAD.

The Concord River (or “River”) forms the southerly border of the Site, and several wetland resource areas are associated with the River including: LUW, Bank, BVW, RFA; and BLSF. The limits of previous reviewed and determined resource areas are depicted on the ORAD Plan located in Attachment F – ORAD and ORAD Plan. Each of these resource areas are briefly described below.

Land Under Waterbodies:

According to 310 CMR 10.56, LUW is the land beneath any creek, river, stream, pond or lake. Said land may be composed of organic muck or peat, fine sediments, rock, or bedrock. The upper boundary of land under water bodies is the mean annual low water level. LUW is likely to be significant to public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution and to protection of fisheries and wildlife habitat.

Land Under Waterbodies is the riverbed of the Concord River. The nearshore substrate consists of boulders, cobbles, sand and muck.

Inland Bank:

As defined in 310 CMR 10.54, an Inland Bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a bordering vegetated wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and upland. The upper boundary of Bank is the first observable break in slope or the mean annual flood level, whichever is lower. The lower boundary of an Inland Bank is the mean annual low flow level. Banks are likely to be significant to public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution and to protection of fisheries and wildlife habitat. A 100-foot buffer zone is associated with Inland Bank.

Inland Bank located on the property is associated with the Concord River and follows the first observable break in slope. The Bank is comprised of boulders and soil and mature trees along the top of Bank.

Bordering Vegetated Wetland:

According to 310 CMR 10.55, Bordering Vegetated Wetlands are freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. BVW's are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of BVW is the line within which 50 percent or more of the plant community consist of wetland indicator plants and saturated and inundated conditions exist. Bordering Vegetated Wetlands are likely to be significant to public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution and to protection of fisheries and wildlife habitat. A 100-foot buffer zone is associated with BVW.

Two areas of BVW on the project site are depicted on the ORAD plan and generally described as emergent or shrub-scrub plant communities. See Attachment F – ORAD and Plan.

Riverfront Area

According to 310 CMR 10.58, a Riverfront Area is the area of land between a river's mean annual high-water line and a parallel line measured horizontally. The riverfront area may include or overlap other resource areas or their buffer zones. The riverfront area does not have a buffer zone. Riverfront areas are likely to be significant to public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution and to protection of fisheries and wildlife habitat.

The RFA extends 200 feet horizontally from the mean annual high-water line of the Concord River. The RFA is comprised of old field and BVW communities.

Bordering Land Subject to Flooding:

Bordering Land Subject to Flooding ("BLSF") is defined in 310 CMR 10.57 as an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a BVW occurs, it extends from said wetland. The boundary of BLSF is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. Such areas are likely to be significant to flood control and storm damage prevention.

The 100-year flood hazard zone extends across the Project Site and is located within Flood Hazard Zone AE (El. 120 Feet NAVD 88).

2.2 Natural Heritage Priority & Estimated Habitat

The Project site and environs are mapped as Priority Habitat polygon number 1623 by the Massachusetts and Endangered Species Program (“NHESP”) and designated as both Priority Habitat and Estimated Habitat for State-Listed Rare Species. See Figure 3 – NHESP Map in Attachment B. As such this NOI is submitted as a Joint WPA and MESA Notice of Intent. There are no mapped Certified or Potential Vernal Pools on or proximate to the Project site.

2.3 Local Wetland Resource Areas and Waiver Request

The Town of Concord, Massachusetts Wetlands Bylaw (Article 58) (the “Bylaw”) regulates the following resource areas which are outlined in Section 2.1 through 2.5 of the Bylaw:

- ◆ Any freshwater wetland, marsh, wet meadow, bog, swamp, flat, bank, or beach bordering on any reservoir, lake, pond, perennial or intermittent stream, river, brook, or creek; and adjoining lands out to a distance of 100 feet known as the Buffer Zone;
- ◆ Any land under the aforementioned waterways and waterbodies;
- ◆ Any Certified Vernal Pool and adjoining lands out to a distance of 100 feet known as the Vernal Pool Habitat;
- ◆ Any perennial stream, river, brook, or creek; the land thereunder; and adjoining lands out to a distance of 200 feet known as the Riverfront Area; and;
- ◆ Any Land Subject to Flooding.

The Wetlands Bylaw Regulations designate the No Disturbance Zone as the first 25 feet of a Buffer Zone and the remaining 75 feet designated as Limited Disturbance Zone. As outlined in paragraph 4.1.1 of the Bylaw Regulations, the Applicant requests a waiver for the 25-Foot No Disturbance Zone. Additionally, there is no other feasible alternative or option which could avoid work within the Town’s 50-foot No Build Zone. Therefore, the Applicant respectfully request a waiver to allow work in the 50-foot No Build Zone.

Because the proposed seasonal floating dock requires locating the dock in the river and access across the Bank, there is no other feasible alternative or option which could avoid work the No Disturbance Zone and the 50-Foot No Build Zone. The dock installation will be designed to reduce altering the resource areas within these zones. In the existing conditions, the students and faculty have to physically traverse the RFA with the canoes to cross over and down the Inland Bank to the water, it is our opinion this repeated and routine activity will cause more damage to the Bank than the seasonal installation and removal of the gangway platform, and segmental floating dock and support posts. The Applicant seeks approval of the waiver request from the Commission, with pragmatic conditions to protect the interests of the Bylaw and the WPA.

3.0 Project Description

The proposed seasonal floating dock is needed to provide safe access to the Concord River for students to launch canoes and perform various educational activities. The proposed project includes the installation of the seasonal segmental floating dock and access gangway, and the establishment of a mowed pathway from the main campus to the canoe launch area. The segmental dock and gangway will be installed and removed seasonally, with only the gangway footing remaining permanently installed. The installation of the seasonal floating dock will require work in LUW, RFA and BLSF and the 100-foot Buffer zone to Bank. Installation of the gangway elevated above the Bank is not expected to alter Bank, and no work is proposed in BVW.

3.1 Seasonal Floating Dock and Gangway Access

The proposed dock is a 24-foot by 6-foot floating dock (comprised of smaller connected segments to form the dock) connected to the shore by one 20-foot by 5-foot access gangway to access the Concord River. The gangway footing will be installed on sono tubes to keep the gangway elevated above the ground surface. The gangway will be connected to the floating dock in the water (refer to Attachment H – Project Plans).

The floating dock will be constructed using three prefabricated 6-foot by 8-foot dock sections assembled together to form the larger dock (refer to Attachment H – Project Plans). The dock will be supported by four detachable galvanized steel support posts (approximately 2-inch diameter) augered into the river substrate for proper anchoring and support. The post supports will be sufficiently long to allow the floating dock to rise and fall with changing water levels. The floating dock and components will be installed in the Spring and then removed following the Autumn of each year.

The gangway is produced by the same dock manufacturer and is attached to the dock. The landward edge of the gangway will be installed on sono tubes. This layout is needed to stabilize the gangway and it also elevates the gangway above grade to avoid direct alteration of the land surface and Bank under the gangway. These sono tubes will be permanent, while the gangway will be installed and removed seasonally. The gangway includes handrails on both sides to provide adequate support and safety for the users.

The dock and gangway location were selected to avoid the need to cut any trees or other vegetation on the bank, while also maintaining a slope capable of supporting the movement of students, canoes, and other equipment

3.2 Pathway Access

Access from the main campus to the waterfront will be provided by a 10-foot wide mowed pathway through the old field at 676 Monument Avenue, see Figure 7 – Pollinator Meadow Plan. This layout is approximate and the final location and layout will be developed in consultation with NRC staff. Currently, the meadow is mowed periodically during the growing season to maintain it as meadow. Because this field is mowed periodically the more frequently mowed path will not

alter the portions of field in RFA, BLSF or Buffer Zone. This pathway will be maintained throughout the year, with weekly mowing to maintain a low cut turf for pedestrian access from the main campus to the canoe launch area.

3.3 Impacts by Wetland Resource Area

The seasonal floating dock and gangway access need to be located along the Concord River, and thus cannot avoid being located in and proximate to wetland resource areas. The installation and use will occur in wetland resource areas and 100-foot buffer zone.

Work in LUW is limited to installing the four dock support posts to hold the floating dock in place. The posts will occupy approximately 0.05 square feet of LUW (assumes 3-inch diameter support posts). The floating dock will occupy 144 sf of the water sheet and will not directly affect LUW.

Work in RFA, BLSF and Buffer Zone is limited to the installation of the 20-foot by 5-foot elevated gangway (100 sf). The gangway landing will be formed by installing two 12-inch sono tubes to stabilize the gangway and the gangway landing also elevates the gangway above grade to avoid direct alteration of the ground surface and Inland Bank under the gangway. The gangway will be suspended over 100 sf of RFA, BLSF and buffer zone, and it is elevated to avoid directly altering the ground surface. The gangway launch (two 12-inch diameter sono tubes) will occupy approximately 1.6 sf of RFA, BLSF and buffer zone. The dock location was selected to avoid the need to cut any trees or other vegetation on the Inland Bank.

Pedestrian pathway access will be provided by a mowed path through the old field at 676 Monument Street. Because this field is mowed periodically the path will not alter the portions of field in RFA, BLSF or Buffer Zone. Table 1 below quantifies impacts to wetland resource areas and buffer zone.

Table 1 Summary of Wetland Resource Area Impacts

Project Element	LUW (s.f.)	Bank (l.f.)	RFA (s.f.)	BLSF (s.f.)	BVW (s.f.)	Buffer Zone (s.f.)
Floating Dock	0.05	N.A.	N.A.	N.A.	N.A.	N.A.
Gangway Access	N.A.	N.A.	1.6 (sono tubes underneath gangway) 10 (gangway)	1.6	N.A.	1.6
Mowed Pathway	N.A.	N.A.	1,150	100	N.A.	150
Total Impacts	0.05	N.A.	1,160	101.6	N.A.	151.6

4.0 Alternatives Analysis

Three alternatives were considered:

1. No Build (or no action) Alternative,
2. Permanent Pile-Supported Structure, and
3. Seasonal Floating Dock.

These are summarized below.

4.1 No Build (or no action) Alternative

This alternative was considered; however, this would not meet the project purpose and need. In the current condition, students and faculty carry, and drag, the canoes down the Bank which could cause repeated damage to the Bank and LUW. This also presents a potential hazard for students and faculty who risk tripping or falling on the Bank or the uncompacted substrate of the River. Whereas this alternative does not meet the project purpose and need and could result in repeated alteration to Bank, and injury to students and faculty, it was rejected from further consideration.

4.2 Permanent Pile-Supported Structure

This alternative involves installing a permanent pile supported dock in the river at the property. This alternative meets the project purpose of providing canoe access to the river and a platform for educational activities while concurrently avoiding damage to the Bank and LUW when launching canoes and risk of injury to boaters. It would however include permanent installation of larger diameter piles in the river to support the dock to be sufficiently robust to withstand ice flows, floating debris (e.g. logs) and ice jacking. Further, the dock itself would need to be constructed at an elevation to keep it above the 100-year floodplain. Because of the permanence of the structure and potential for storm damage this alternative was rejected from further consideration.

4.3 Seasonal Floating Dock

The preferred alternative was selected because it meets the project purpose and need of allowing canoe access and educational opportunities, while avoiding potential damage to the Inland Bank and LUW when launching and removing the canoes, and it avoids risk of injury. This approach avoids installing a larger permanent structure in the river. The support posts will occupy less area of LUW than permanent piles would and reduces the potential for storm damage. For these reasons, the seasonal floating dock alternative is the preferred alternative.

5.0 Mitigation Measures

Mitigation options were discussed with the Director of the Concord Natural Resource Commission for this dock installation. Based on that pre-application meeting the Applicant proposes to optimize habitat for pollinators in approximately 1.3 acres of the existing meadow within a 50-foot zone around the perimeter of the two on-site BVWs. See Figure 7 – Pollinator. This mitigation will include overseeding these portions of the existing upland meadow with a pollinator seed mixture to augment the pollinator habitat quality of the meadow. Similar to the dock, the pollinator meadow areas provide an educational opportunity for Fenn School students. The Science Faculty have been working with students to document the flora in the meadow and fauna using the meadow. Science Faculty and students will be engaged in the meadow overseeding and documenting changes in plant species composition and use by wildlife in the overseeding zones .

The proposed seed mix is the Showy Northeast Native Wildflower Mix supplied by Ernst Conservation Seed (product ID: ERNMX-153-1) which is comprised of:

- 20.1% Echinacea purpurea (Purple Coneflower)
- 12.0% Coreopsis lanceolata (Lanceleaf Coreopsis)
- 12.0% Rudbeckia hirta, (Blackeyed Susan, Coastal Plain NC Ecotype)
- 10.0% Chamaecrista fasciculata, PA Ecotype (Partridge Pea, PA Ecotype)
- 7.0% Helianthus annuus, PA Ecotype (Oxeye Sunflower, PA Ecotype)
- 6.4% Tradescantia ohiensis, PA Ecotype (Ohio Spiderwort, PA Ecotype)
- 5.0% Liatris spicata (Marsh Blazing Star)
- 3.5% Aster oblongifolius, PA Ecotype (Aromatic Aster, PA Ecotype)
- 3.5% Aster prenanthoides, PA Ecotype (Zigzag Aster, PA Ecotype)
- 3.0% Zizia aurea, PA Ecotype (Golden Alexanders, PA Ecotype)
- 2.0% Aster laevis, NY Ecotype (Smooth Blue Aster, NY Ecotype)
- 2.0% Aster novae-angliae, PA Ecotype (New England Aster, PA Ecotype)
- 2.0% Baptisia australis, Southern WV Ecotype (Blue False Indigo, Southern WV Ecotype)
- 1.5% Asclepias tuberosa (Butterfly Milkweed)
- 1.5% Pycnanthemum tenuifolium (Narrowleaf Mountainmint)
- 1.5% Senna hebecarpa, VA & WV Ecotype (Wild Senna, VA & WV Ecotype)
- 1.2% Monarda fistulosa, Fort Indiantown Gap-PA Ecotype (Wild Bergamot, Fort Indiantown Gap-PA Ecotype)
- 1.1% Solidago nemoralis, PA Ecotype (Gray Goldenrod, PA Ecotype)
- 1.0% Eupatorium coelestinum, VA Ecotype (Mistflower, VA Ecotype)

- 1.0% *Geum canadense*, PA Ecotype (White Avens, PA Ecotype)
- 1.0% *Penstemon digitalis*, PA Ecotype (Tall White Beardtongue, PA Ecotype)
- 0.6% *Coreopsis tripteris*, PA Ecotype (Tall Coreopsis, PA Ecotype)
- 0.5% *Senna marilandica* (Maryland Senna)
- 0.2% *Oenothera fruticosa* var. *fruticosa* (Sundrops)
- 0.2% *Solidago odora*, PA Ecotype (Licorice Scented Goldenrod, PA Ecotype)
- 0.1% *Penstemon hirsutus* (Hairy Beardtongue)
- 0.1% *Rudbeckia fulgida* var. *fulgida*, Northern VA Ecotype (Orange Coneflower, Northern VA Ecotype)

This mix contains showy native forbs common in the Northeast. It provides wildlife food and shelter, especially for pollinator species. Mix formulations are subject to change without notice depending on the availability of seed sources in any given year. While the formula may change, the guiding philosophy and function of the mix is retained.

The pollinator meadow areas will be mowed once per year to prevent the establishment of trees and shrubs, thus maintaining it as a meadow. This yearly cut would be performed late-Autumn after the plants go to seed. See Attachment B, Figure 7 – Pollinator Meadow Plan which depicts the limits of pollinator meadow.

6.0 Compliance with the Wetland Protection Regulations

Following is a review of performance standards for the state wetland regulations that will be affected by the proposed project. The performance standards are presented in italics typeface and the response is presented in normal typeface.

6.1 Land Under Water

Alterations to LUW proposed by the applicant are associated with the installation of the seasonal floating dock. Performance standards for LUW are discussed at 310 CMR 10.56(4) which is excerpted below:

- a) *Where the presumption set forth in 310 CMR 10.56(3) is not overcome, any proposed work within Land under Water bodies and Waterways shall not impair the following:*
 1. *The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;*
 2. *Ground and surface water quality;*
 3. *The capacity of said land to provide breeding habitat, escape cover and food for fisheries; and*

4. *The capacity of said land to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures established under 310 CMR 10.60.*
5. *Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.56(4)(a) provide the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width. This presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirements of 310 CMR 10.56(a)4., the impact on Land under Water Bodies and Waterways caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures established under 310 CMR 10.60.*

The seasonal dock will float on the water sheet and will not alter the river substrate. The steel support posts will be augered into the river bottom and occupy less than 1 s.f. which may cause minimal and temporary sediment dispersion, but it is not anticipated to have effect on water quality. Therefore, the seasonal dock will not impact the carrying capacity, water quality, or the capacity of LUW to provide habitat for fisheries.

- b) *Notwithstanding the provisions of 310 CMR 10.56(4)(a), the issuing authority may issue an Order in accordance with M.G.L. c. 131, s.40 to maintain or improve boat channels within Land under Water Bodies and Waterways when said work is designed and carried out using the best practical measures so as to minimize adverse effects such as the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms or the destruction of fisheries habitat or nutrient source areas.*

This standard is not applicable, as the proposed work is not designed to maintain or improve boat channels.

- c) *Notwithstanding the provisions of 310 CMR 10.56(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.*

This Notice of Intent was filed a joint WPA / Massachusetts Endangered Species Act (“MESA”) filing and awaits comments from NHESP.

6.2 Inland Bank

There are no direct alterations to Inland Bank proposed, the gangway access will be elevated over Inland Bank, i.e. spanning the Inland Bank, to avoid altering the ground surface. No trees or vegetation will be cut or altered for installation of the gangway. Performance standards for this resource area are discussed at 310 CMR 10.54(4) which is excerpted below:

- a) *Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:*
1. *the physical stability of the Bank;*
 2. *the water carrying capacity of the existing channel within the Bank;*
 3. *ground water and surface water quality;*
 4. *the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;*
 5. *the capacity of the Bank to provide important wildlife habitat functions.*
6. *Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.54(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width. This presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirements of 310 CMR 10.56(a)4., the impact on Land under Water Bodies and Waterways caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures established under 310 CMR 10.60.*

The proposed gangway will be elevated above the Inland Bank, thus will not cause any disturbance to the underlying Inland Bank soil or topography. Therefore, the proposed gangway will not impair the Inland Bank stability or water carrying capacity. As proposed, none of the activities of the gangway will impair water quality aside from temporary sediment dispersion. Additionally, no vegetation is proposed to be cut or altered for the installation of the gangway. Thus, the proposed work will not affect the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries.

- b) *Notwithstanding the provisions of 310 CMR 10.54(4)(a), structures may be permitted in or on a Bank when required to prevent flood damage to facilities, buildings and roads constructed prior to the effective date of 310 CMR 10.51 through 10.60 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.51 through*

10.60 (April 1, 1983), including the renovation or reconstruction (but not substantial enlargement) of such facilities, buildings and roads, provided that the following requirements are met: 1. The proposed protective structure, renovation or reconstruction is designed and constructed using best practical measures so as to minimize adverse effects on the characteristics, and functions of the resource area; 2. The applicant demonstrates that there is no reasonable method of protecting, renovating or rebuilding the facility in question other than the one proposed.

This standard is not applicable.

- c) Notwithstanding the provisions of 310 CMR 10.54(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59.*

This Notice of Intent was filed a joint WPA / MESA filing and awaits comments from NHESP.

6.3 *Bordering Land Subject to Flooding*

Alterations to BLSF is limited to the installation of the seasonal floating dock and gangway access, as well as establishing and maintaining the mowed access pathway. Performance standards for this resource area are discussed at 310 CMR 10.57(4) which is excerpted below.

- a) Bordering Land Subject to Flooding.*

- 1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows. Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.*

Not applicable. The installation of the season floating dock, gangway and mowed pathway will cause no loss of flood storage volume; therefore, no compensatory flood storage is required.

- 2. Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.*

Not applicable. The installation of the seasonal floating dock, gangway access or mowed pathway located in BLSF will not restrict flows so as to cause an increase in flood stage or velocity.

3. *Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that *(cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effect.*

This Notice of Intent was filed a joint WPA / MESA filing and awaits comments from NHESP.

6.4 Riverfront Area

Alterations within the 200-foot RFA proposed by the applicant are associated with the installation of the seasonal floating dock and gangway access, as well as the mowed pathway. Performance standards for this resource area are discussed at 310 CMR 10.58(4)(d)(1) which is excerpted below:

1. Within 200 foot riverfront areas, the issuing authority may allow the alteration of up to 5000 square feet or 10% of the riverfront area within the lot, whichever is greater, on a lot recorded on or before October 6, 1997 or lots recorded after October 6, 1997 subject to the restrictions of 310 CMR 10.58(4)(c)2.b.vi., or up to 10% of the riverfront area within a lot recorded after October 6, 1997, provided that:

- a. *At a minimum, a 100 foot wide area of undisturbed vegetation is provided. This area shall extend from mean annual high-water along the river unless another location would better protect the interests identified in M.G.L. c. 131 s. 40. If there is not a 100 foot wide corridor of natural vegetation. Replication and compensatory storage required to meet other resource are performance standards are allowed within this area; structural stormwater management measures may be allowed only when there is no practicable alternative. Temporary impacts where necessary for installation of linear site-related utilities are allowed, provided the area is restored to its natural conditions. Proposed work which does not meet the requirement of 310 CMR 10.58(4)(d)1.a. may be allowed only if the applicant demonstrates a preponderance of evidence from a competent source that an area of undisturbed vegetation with an overall average width of 100 feet will provide equivalent protection of the riverfront area, or that a partial rebuttal of the presumptions of significance is sufficient to justify a lesser area of undisturbed vegetation;*

The gangway footing (two sono tubes) is the only permanent element in the 200-foot RFA and is proposed to install the seasonal gangway above the ground surface. The mowed pathway access, and weekly maintenance, will not alter the area from its existing conditions as it is already periodically mowed meadow.

- b. *Stormwater is managed according to standards established by the Department in its Stormwater Policy.*

This work will not result in: changes in runoff, new impervious cover, new drainage system, or drainage outfall and in our opinion is not subject to the Stormwater Standards. However a Stormwater Checklist is included attached hereto as Attachment E.

- c. *Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions. Work shall not result in an impairment of the capacity to provide vernal pool habitat identified by evidence from a competent source, but not yet certified. For work within an undeveloped riverfront area which exceeds 5,000 square feet, the issuing authority may require a wildlife habitat evaluation study under 310 CMR 10.60.*

This Notice of Intent was filed a joint WPA / MESA filing and awaits comments from NHESP.

- d. *Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.*

The proposed season floating dock will not impair groundwater or surface water quality.

6.5 Compliance with the Concord Wetland Protection Bylaw Regulations - No Disturbance Zone and Limited Disturbance Zone and 50-foot No Build Policy

The Wetlands Bylaw Regulations designate the No Disturbance Zone as the first 25 feet of a Buffer Zone and the remaining 75 feet designated as Limited Disturbance Zone. As outlined in paragraph 4.1.1 of the Wetland Bylaw Regulations, the Applicant requests a waiver for the 25-Foot No Disturbance Zone.

The Town of Concord prohibits any structures in the 50-foot No Build Zone except where there are exceptional circumstances, where no other practical alternative exists, and where satisfactory mitigation takes place to offset any alteration. As outlined in the 50-foot No Build Zone Policy, the Applicant requests a waiver for the 50-foot No Build Zone.

Because the proposed Project requires the installation of a seasonal floating dock to access the watershed of the Concord River, there is no other feasible alternative or option which could allow the proposed work to proceed. The seasonal dock was designed to reduce impact and adverse effects on the resource areas within the 25-foot No Disturbance Zone and avoids work in the 50-foot No build Zone. In the existing conditions, the students and faculty have to physically traverse across and down the Inland Bank to the water, it is our opinion this routine activity would cause more damage to the Bank and LUW than the seasonal installation of the dock and gangway. Additionally, the pathway was designed to avoid BVW but will be located within Buffer Zone, however, because the field is mowed periodically the path will not alter the portion of the field in the Buffer Zone from its existing condition.

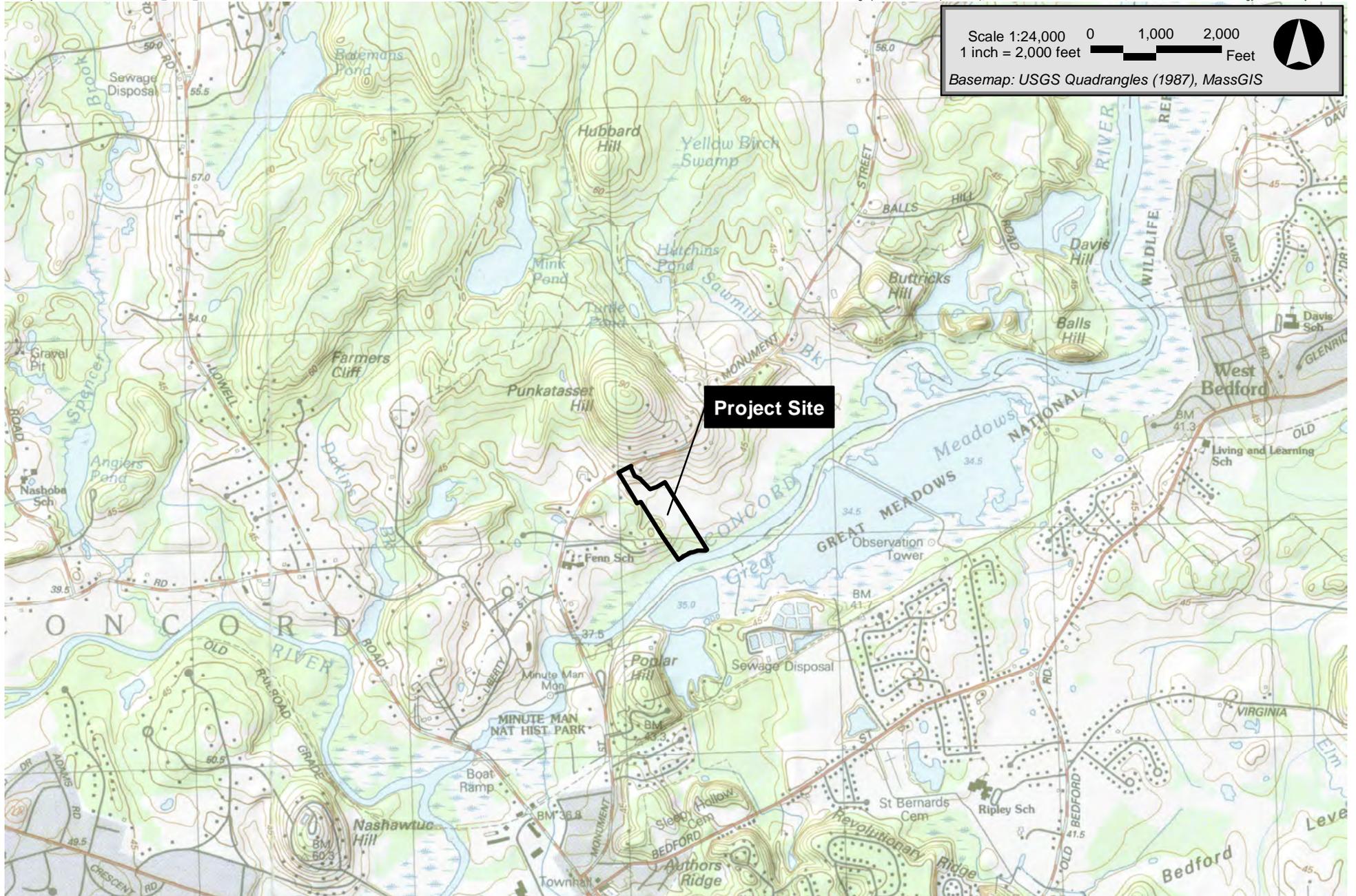
The Applicant seeks approval of the waiver request from the Commission, with pragmatic conditions to protect the interests of the Bylaw and the WPA.

7.0 Conclusion

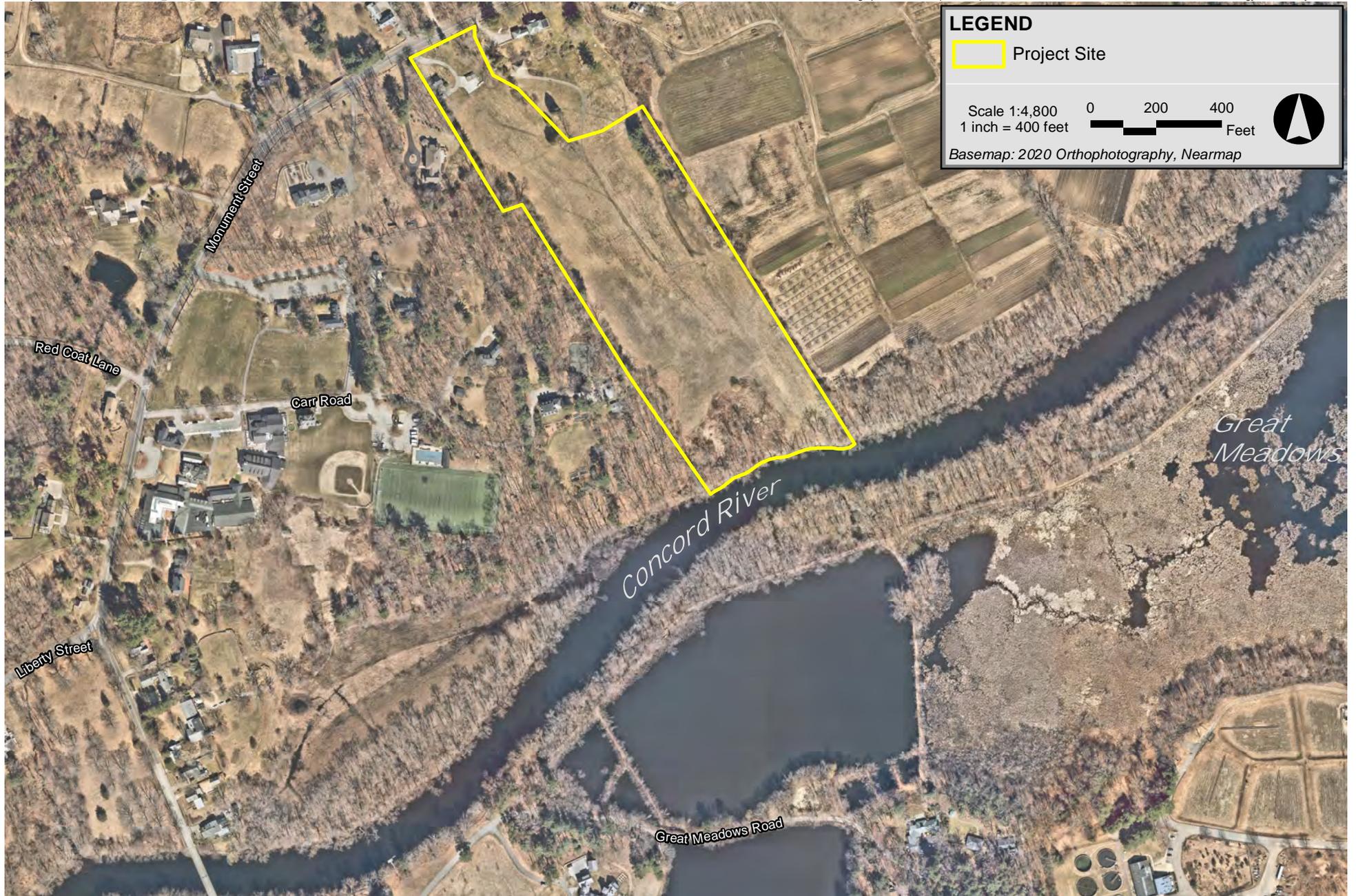
The proposed work will achieve the project purpose of providing safe canoe access to the Concord River for students and faculty, and to serve as a platform for students to access the river for education activities. The information contained in this NOI and the attached supporting material sufficiently describes the site, proposed work, impacts of said work on resources areas, proposes seeding to augment pollinator habitat to mitigate for the proposed work in resource areas, and documents compliance with WPA Regulations and the Concord Wetlands Protection Bylaw. The Applicants therefore respectfully request that the Concord Natural Resources Commission issue an Order of Conditions approving the Project with appropriate conditions to protect those interests identified in M.G.L. C. 131 §40 and the Concord Wetlands Protection Bylaw.

Attachment B

Figures



Fenn School Seasonal Float Concord, Massachusetts

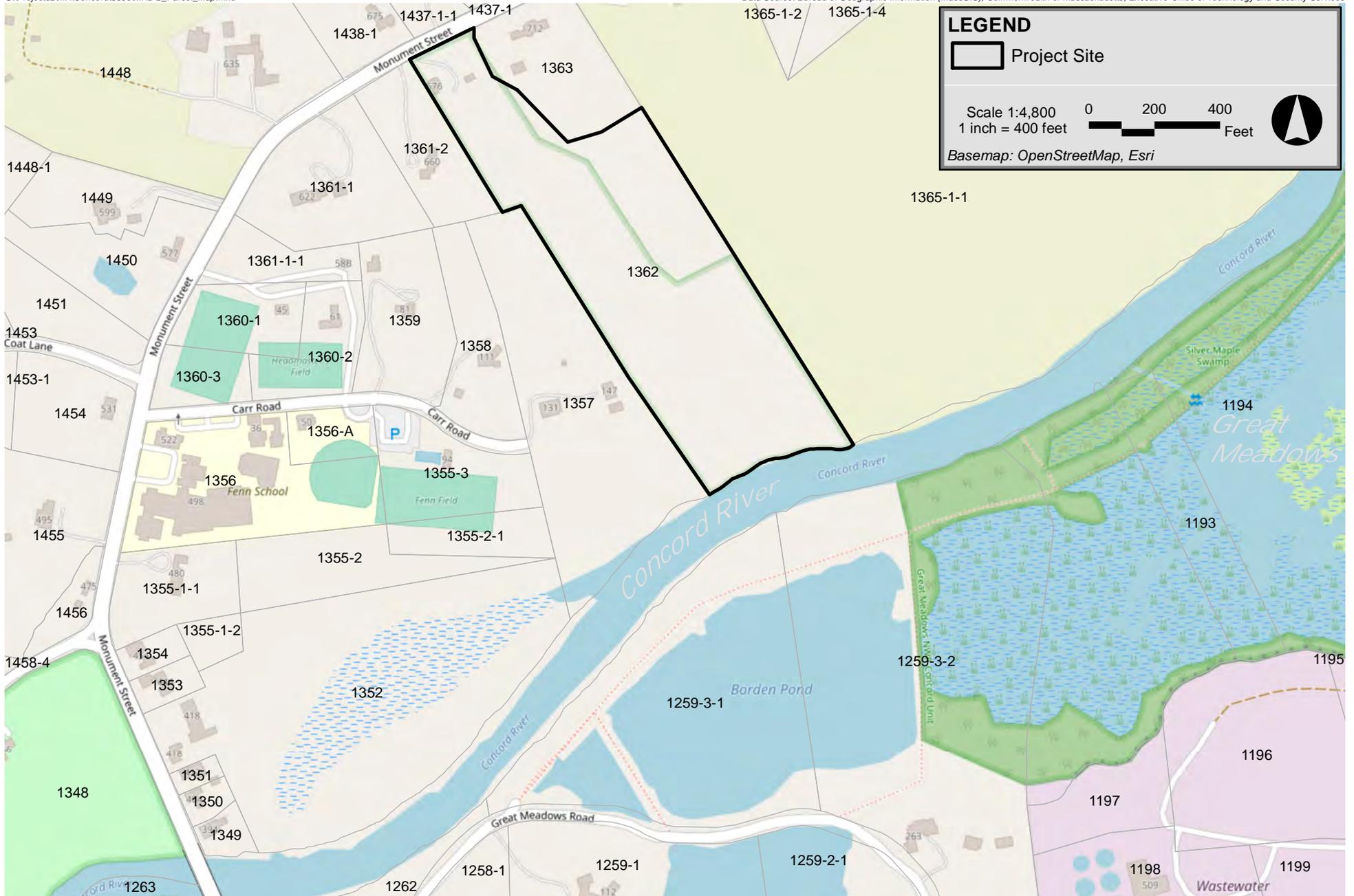


Fenn School Seasonal Float Concord, Massachusetts

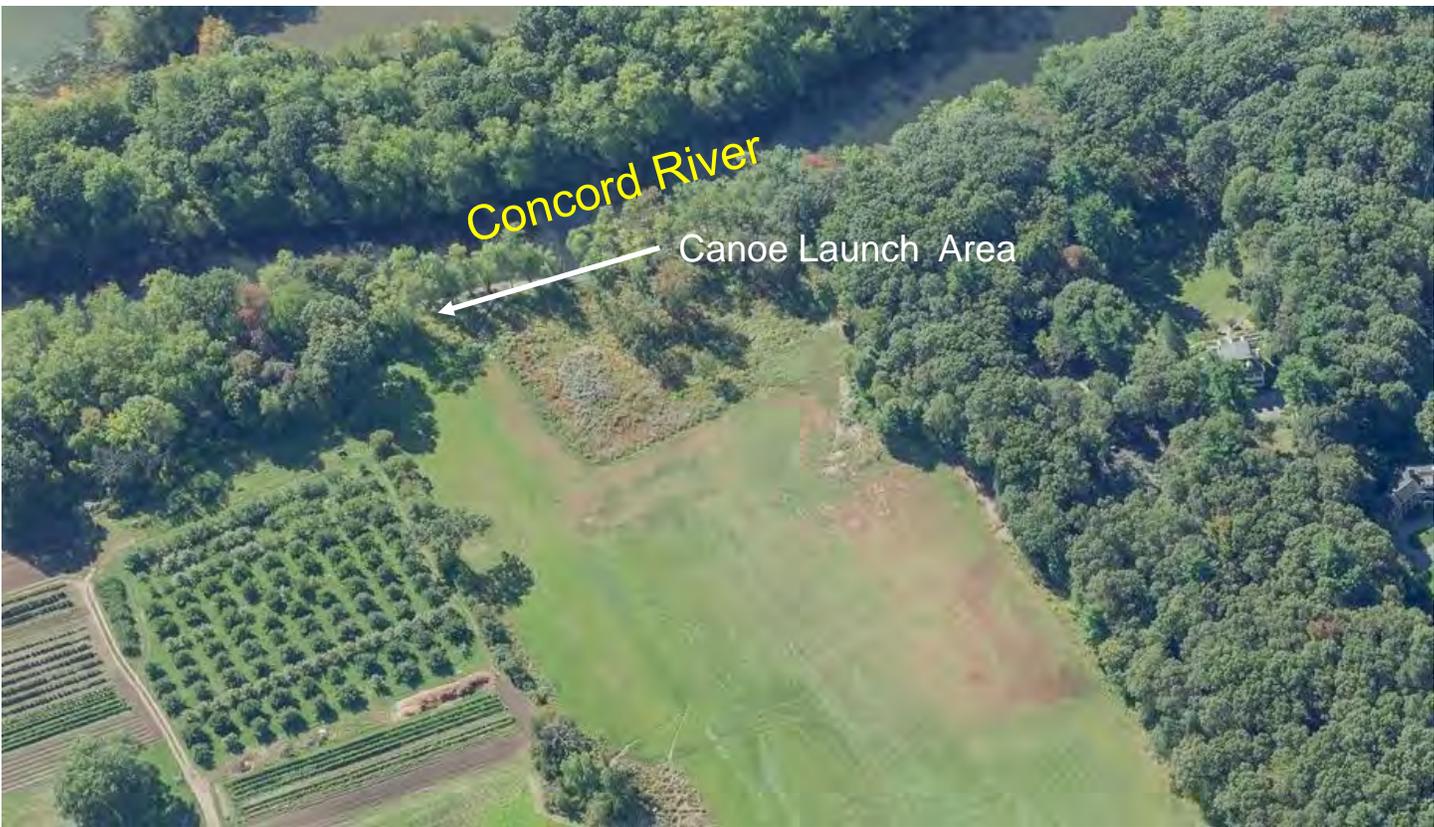


Note: NHESP Certified Vernal Pools are not visible in the current map extent.

Fenn School Seasonal Float Concord, Massachusetts



Fenn School Seasonal Float Concord, Massachusetts



Oblique aerial view facing south.



Oblique aerial view facing north.

Fenn School Seasonal Float Concord, Massachusetts



Photograph 1: View facing southwest (up river) of the Inland Bank along the Concord River proximate to the location of the proposed seasonal dock and gangway.



Photograph 2: View facing northwest of the canoe launch area and adjacent upland meadow.



Photograph 3: View facing easterly of the Inland Bank along the Concord River proximate to the location of the proposed seasonal dock and gangway.



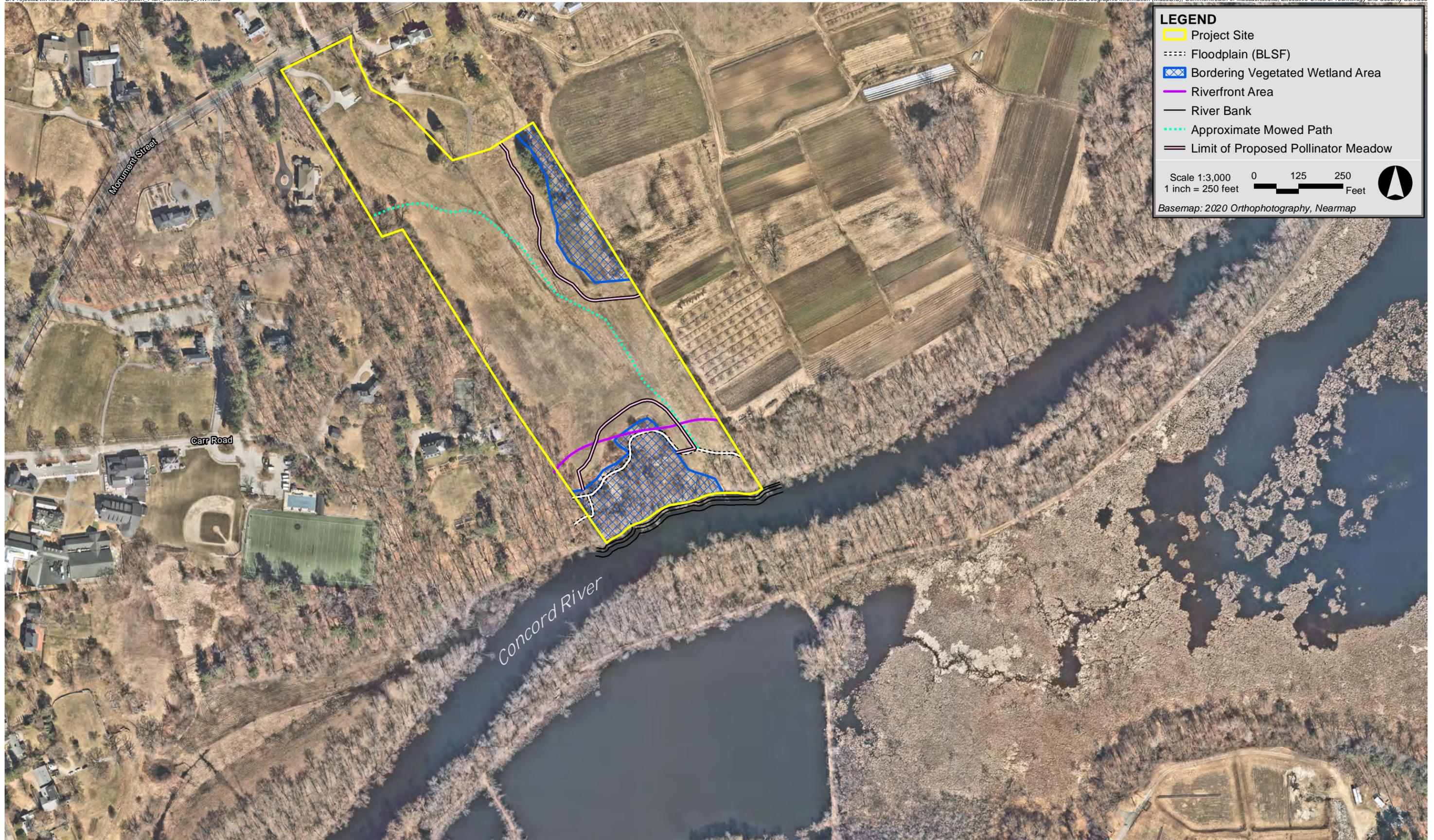
Photograph 4: A view looking southward towards the area of the proposed seasonal dock and gangway.



Photograph 5: A view facing northwest from the Concord River. Note the BVW to the left and mowed upland meadow throughout.



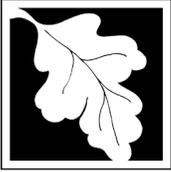
Photograph 6: A view of the mowed meadow facing southward towards the river.



Fenn School Seasonal Float Concord, Massachusetts

Attachment C

Filing Fee Information



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

676 Monument Street

a. Street Address

42345

c. Check number

Concord

b. City/Town

\$144.50

d. Fee amount

2. Applicant Mailing Address:

David

a. First Name

The Fenn School, Inc.

c. Organization

516 Monument Street

d. Mailing Address

Concord

e. City/Town

978-318-3524

h. Phone Number

978-371-5562

i. Fax Number

Platt

b. Last Name

MA

f. State

01742

g. Zip Code

dplatt@fenn.org

j. Email Address

3. Property Owner (if different):

a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

EPSILON ASSOCIATES, INC.
3 MILL & MAIN PLACE
STE 250
MAYNARD, MA 01754

Middlesex Savings Bank
CONCORD, MA 01742
53-7122/2113

42344

6/10/2020

PAY TO THE ORDER OF Commonwealth of Massachusetts

\$ **119.50

One Hundred Nineteen and 50/100***** DOLLARS

PROTECTED AGAINST FRAUD

Commonwealth of Massachusetts
P.O. Box 419272
Boston, MA 02441-9272

Robert Goff

⑈042344⑈ ⑆211371227⑆ 800205855⑈

EPSILON ASSOCIATES, INC.
3 MILL & MAIN PLACE
STE 250
MAYNARD, MA 01754

Middlesex Savings Bank
CONCORD, MA 01742
53-7122/2113

42345

6/10/2020

PAY TO THE ORDER OF Town of Concord

\$ **144.50

One Hundred Forty-Four and 50/100***** DOLLARS

PROTECTED AGAINST FRAUD

Town of Concord
Parking Clerk
Town House, P.O. Box 535
Concord, MA 01742

Robert Goff

⑈042345⑈ ⑆211371227⑆ 800205855⑈

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STE 250
MAYNARD, MA 01754

Middlesex Savings Bank
CONCORD, MA 01742
53-7122/2113

42346

6/10/2020

PAY TO THE ORDER OF Commonwealth of Massachusetts-NHESP

\$ **300.00

Three Hundred and 00/100***** DOLLARS

PROTECTED AGAINST FRAUD

Commonwealth of Massachusetts-NHESP



MEMO

Handwritten signature

⑈042346⑈ ⑆211371227⑆ 800205855⑈

EPSILON ASSOCIATES, INC.

Commonwealth of Massachusetts-NHESP

5200 · Direct Expenses:5295 · Other Billa Commonwealth of Massachusetts-NHESP - NOI App

6/10/2020

42346

300.00

Middlesex Savings Ch

300.00

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Details on Back Intuit® CheckLock™ Secure Check

Attachment D

Abutter Notification Information

Notification to Abutters Under the Massachusetts Wetlands Protection Act and the Concord Wetlands Bylaw

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, and Article 43 of the 2009 Annual Town Meeting, you are hereby notified of the following:

Applicant's Name: Fenn School

The applicant has filed a Notice of Intent with the Conservation Commission for the municipality of Concord seeking permission to remove, fill, dredge, or alter an area subject to protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40) and the Concord Wetlands Bylaw.

Address where activity is proposed: 676 Monument Street, Concord, MA

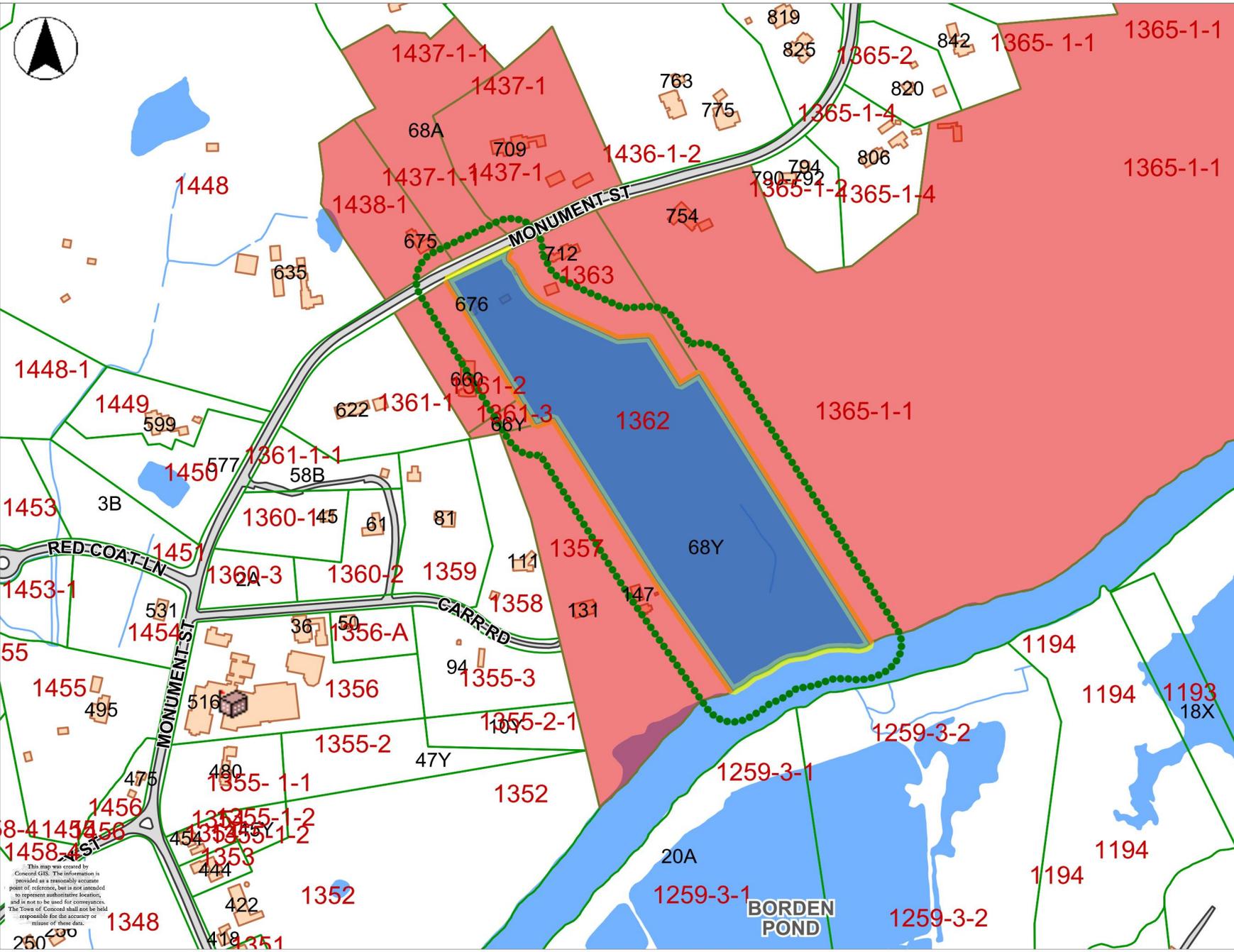
Brief description of proposed project: The Fenn School proposes to install a seasonal floating dock within the Concord River at its property at 676 Monument Street. The purpose of this seasonal floating dock is to provide safe canoe access to the Concord River for students and faculty, and to serve as a platform for students to access the river for educational activities. The Project includes the permanent installation of a gangway landing pad; and the seasonal installation and removal of the floating dock and associated gangway platform.

The Notice of Intent and project plans may be viewed on the Natural Resources Commission's webpage under Current Meeting Documents at <https://concordma.gov/2254/Current-Meeting-Documents>. You may also email nr@concordma.gov for more information or to obtain copies of the Notice of Intent.

A public hearing will be held on July 1, 2020. Due to the COVID-19 pandemic, all meetings will be conducted virtually. Information on how to participate via Zoom will be provided on the agenda at <https://concordma.gov/AgendaCenter/Natural-Resources-Commission-25>.

Notice of this public hearing will also be published at least five (5) days in advance of the meeting in the Concord Journal and posted at the Town House not less than forty-eight (48) hours in advance of the meeting.

You may also contact the Department of Environmental Protection, Northeast Region, at (978) 694-3200.



- Town Boundary - State Survey
- Landmarks
 - Community Center
 - Court House
 - Fire Station
 - Hospital
 - Library
 - Monument
 - Municipal Offices
 - Museum
 - National Park Service
 - Police Station
 - Post Office
 - School
 - Visitor Center
- Address Numbers
- Tax Map Parcel ID Labels
- Buildings (ft)
- Parcels FY20
- MBTA Commuter Rail Station
- MA Highways
 - Interstate
 - US Highway
 - Numbered Routes
- Railroad
- Streams
- Rivers & Ponds
- Street Centerlines
- Streets Area

This map was created by Concord GIS. The information is provided as a reasonably accurate point of reference, but is not intended to represent authoritative location, and is not to be used for convenience. The Town of Concord shall not be held responsible for the accuracy or misuse of these data.



Printed on 05/28/2020 at 12:47 PM

676 Monument St.

Abutters List for Parcel#1362, 676 Monument St., using a distance of 100 Ft.:

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_town	abutters_state	abutters_zip	abutters_location
1361-3	THE FENN SCHOOL		516 MONUMENT ST	CONCORD	MA	01742	66Y MONUMENT ST
1437-1-1	FISHMAN BETH ELLEN		695 MONUMENT ST	CONCORD	MA	01742	68A MONUMENT ST
1357	BEDELL SUSANNA E		131 CARR RD	CONCORD	MA	01742	131 CARR RD
1361-2	KIM GABRIEL	KIM IRENE	660 MONUMENT ST	CONCORD	MA	01742	660 MONUMENT ST
1362	THE FENN SCHOOL		516 MONUMENT ST	CONCORD	MA	01742	676 MONUMENT ST
1363	THE FENN SCHOOL		516 MONUMENT ST	CONCORD	MA	01742	712 MONUMENT ST
1365-1-1	HUTCHINS LAND CO LLC		754 MONUMENT ST	CONCORD	MA	01742	754 MONUMENT ST
1437-1	NEWTON JEFFREY T	NEWTON SARAH B	709 MONUMENT ST	CONCORD	MA	01742	709 MONUMENT ST
1438-1	PASQUINA LINCOLN W	PASQUINA MEGAN F	ONE CHARLES SOUTH APT #704	BOSTON	MA	02116	675 MONUMENT ST

Attachment E

Stormwater Checklist



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

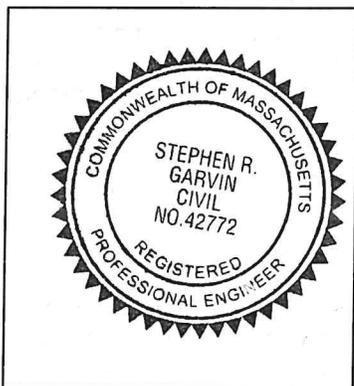
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



Stephen R. Garvin
Signature and Date

4/10/2020

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

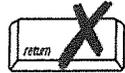
- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of "country drainage" versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation N.A. No increase in impervious cover proposed.

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge N.A. No reduction in pervious cover or recharge proposed.

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static Simple Dynamic Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

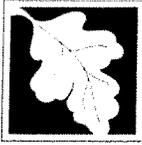
Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality N.A. Dock and mowed path have no effect on water quality.

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs) N.A.

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted *prior to* the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does *not* cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has *not* been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas N.A.

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable N.A.

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan N.A. No drainage system to maintain.

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges N.A.

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

**FENN SCHOOL SEASONAL DOCK
CONSTRUCTION PERIOD POLLUTION PREVENTION PLAN AND EROSION CONTROL
OPERATION AND MAINTENANCE PLAN
June 2020**

During the Construction Period the General Contractor shall be responsible for the following:

1. Erosion Control

No soil disturbing activities that will lead to soil erosion are proposed.

2. Site Access

Site access, for construction equipment will be from Monument Street as shown on the Site Plans. A construction entrance is not anticipated due to the minor construction scope of project

3. Construction Staging

Anticipated staging is limited to storing dock sections before placement. Staging shall occur in the maintained meadow area at least 25 feet from the top of Inland Bank

4. Site Work

No site grading is anticipating other than to secure the ramp at the upland threshold. Current topography and aesthetics will remain the same.

5. Slope Stabilization

No site clearing or soil disturbance – other than installing the sono tubes – is proposed. No installation period or long-term slope stabilization is needed or proposed.

6. Sediment Control

Straw Wattle: Straw wattle(s) shall be installed at the gangway footing when installing the sono tubes. Each roll shall be securely anchored in place by 2 stakes driven through the wattle.

After Construction the Fenn School (the Owner) shall be responsible for the following:

General Land Grading and Slopes Stabilization

All surfaces and slopes shall be checked bi-annually to see that vegetation is in good condition. Any rills or damage from erosion shall be reseeded to avoid further erosion.

Straw Waddle Controls

Straw wattles shall remain in place until the sono tubes are back filled and all loose soil is compacted around the tubes or removed off site.

Attachment F

ORAD and Plan



TOWN OF CONCORD
NATURAL RESOURCES COMMISSION
141 KEYES ROAD, CONCORD, MASSACHUSETTS 01742
TEL. (978) 318-3285 FAX (978) 318-3291

May 4, 2018

Mr. Richard Harrington
Stamski & McNary, Inc.
1000 Main Street
Acton, MA 01720

Dear Rich:

Enclosed please find a copy of the Order of Resource Area Delineation that was issued to Roger Urban, Hayfield Realty and signed by the Natural Resources Commission on May 2, 2018 for property at 676, 68Y, 712 and 70Y Monument Street in Concord (DEP File #137-1432). We wanted to provide you with a copy for your records.

Please note that because this is an Order for Resource Area Delineation only, there is no requirement to record this document at the Registry of Deeds.

If you should have any questions, please do not hesitate to call.

Sincerely,

Karen Bockoven
Administrative Assistant

Stamski and McNary, Inc.

MAY 08 2018

RECEIVED

[Faint, illegible text and stamps at the bottom of the page, likely from a receiving office or registry.]



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 4B - Order of Resource Area Delineation
 Massachusetts Wetlands Protection Act M.G.L. c. 131 S40

Provided by MassDEP:
 MassDEP File #:137-1432
 eDEP Transaction #:1013312
 City/Town:CONCORD

A. General Information

1. Conservation Commission CONCORD

2. This Issuance is for (Check one):

- a. Order of Resource Area Delineation
- b. Amended Order of Resource Area Delineation

3. Applicant Details

a. First Name	ROGER	b. Last Name	URBAN	
c. Organization	HAYFIELD REALTY TRUST			
d. Mailing Address	712 MONUMENT STREET			
e. City/Town	CONCORD	f. State	MA	g. ZIP 01742

4. Property Owner (if different from applicant):

a. First Name	ROGER & DYLAN	b. Last Name	URBAN	
c. Organization				
d. Mailing Address	712 MONUMENT STREET			
e. City/Town	CONCORD	f. State	MA	g. ZIP 01742

5. Project Location

a. Street Address	676, 68Y, 712, 70Y MONUMENT STREET			
b. City/Town	CONCORD	c. Zip	01742	
d. Assessors Map/Plat#	6H	e. Parcel/Lot#	1362, 1362-1, 1363, 1363-1	
f. Latitude	42.47736N	g. Longitude	71.34596W	

6. Dates

a. Date ANRAD Filed	4/18/2018	b. Date Public Hearing Closed	5/2/2018	c. Date Of Issuance	5/4/2018
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7. Final Approved Plans and Other Documents

Plan Title	Plan Prepared By	Plan Signed By	Plan Final Date	Plan Scale
RESOURCE AREA DELINEATION PLAN	STAMSKI AND MCNARY, INC.	JOSEPH MARCH, P.L.S.	MAY 2, 2018	1 INCH - 50 FEET

B. Order of Delineation

1. The Conservation Commission has determined the following (check whichever is applicable)

a. **Accurate:** The boundaries described on the referenced plan(s) above and in the Abbreviated Notice of Resource Area Delineation are accurately drawn for the following resource area(s):

- 1. Bordering Vegetated Wetlands
- 2. Other resource area(s), specifically
 - a. MEAN ANNUAL HIGH WATER LINE OF THE CONCORD RIVER

b. **Modified:** The boundaries described on the plan(s) referenced above, as modified by the Conservation Commission from the plans contained in the Abbreviated Notice of Resource Area Delineation, are accurately drawn from the following resource area(s):

- 1. Bordering Vegetated Wetlands
- 2. Other resource area(s), specifically



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
**WPA Form 4B - Order of Resource Area
Delineation**
Massachusetts Wetlands Protection Act M.G.L. c. 131 S40

Provided by MassDEP:
MassDEP File #:137-1432
eDEP Transaction #:1013312
City/Town:CONCORD

a.
c. **Inaccurate:** The boundaries described on the referenced plan(s) and in the Abbreviated Notice of Resource Area Delineation were found to be inaccurate and cannot be confirmed for the following resource area(s):

1. Bordering Vegetated Wetlands
2. Other resource area(s), specifically

a.
3. The boundaries were determined to be inaccurate because:

C. Findings

This Order of Resource Area Delineation determines that the boundaries of those resource areas noted above, have been delineated and approved by the Commission and are binding as to all decisions rendered pursuant to the Massachusetts Wetlands Protection Act (M.G.L. c.131, S 40) and its regulations (310 CMR 10.00). This Order does not, however, determine the boundaries of any resource area or Buffer Zone to any resource area not specifically noted above, regardless of whether such boundaries are contained on the plans attached to this Order or to the Abbreviated Notice of Resource Area Delineation. This Order must be signed by a majority of the Conservation Commission. The Order must be sent by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate DEP Regional Office (see <http://www.mass.gov/dep/about/region/findyour.htm>).

D. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Resource Area Delineation. When requested to issue a Superseding Order of Resource Area Delineation, the Department's review is limited to the objections to the resource area delineation(s) stated in the appeal request. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant. Any appellants seeking to appeal the Department's Superseding Order of Resource Area Delineation will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination. The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, S 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal bylaw or ordinance, and not on the Massachusetts Wetlands Protection Act or regulations, the Department of Environmental Protection has no appellate jurisdiction.



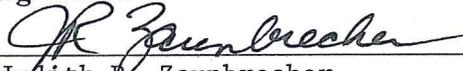
Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 4B - Order of Resource Area
Delineation
 Massachusetts Wetlands Protection Act M.G.L. c. 131 S40

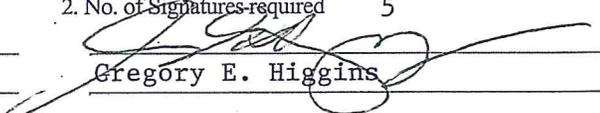
Provided by MassDEP:
 MassDEP File #:137-1432
 eDEP Transaction #:1013312
 City/Town:CONCORD

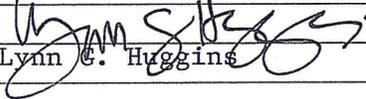
E. Signatures

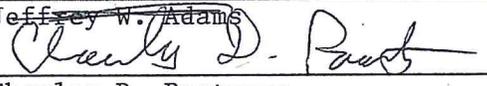
1. Date of Original Order 5/4/2018

2. No. of Signatures required 5


 Judith R. Zaunbrecher


 Gregory E. Higgins


 Lynn E. Higgins

~~Jeffrey W. Adams~~

 Charles D. Poutasse

This Order is valid for three years from the date of issuance.

If this Order constitutes an Amended Order of Resource Area Delineation, this Order does not extend the issuance date of the original Final Order, and the Amended Order will expire on the date of the Original Final Order unless extended in writing by the Department.

This Order is issued to the applicant and the property owner (if different) as follows:

3. By hand delivery on

4. By certified mail, return receipt requested on

a. Date _____

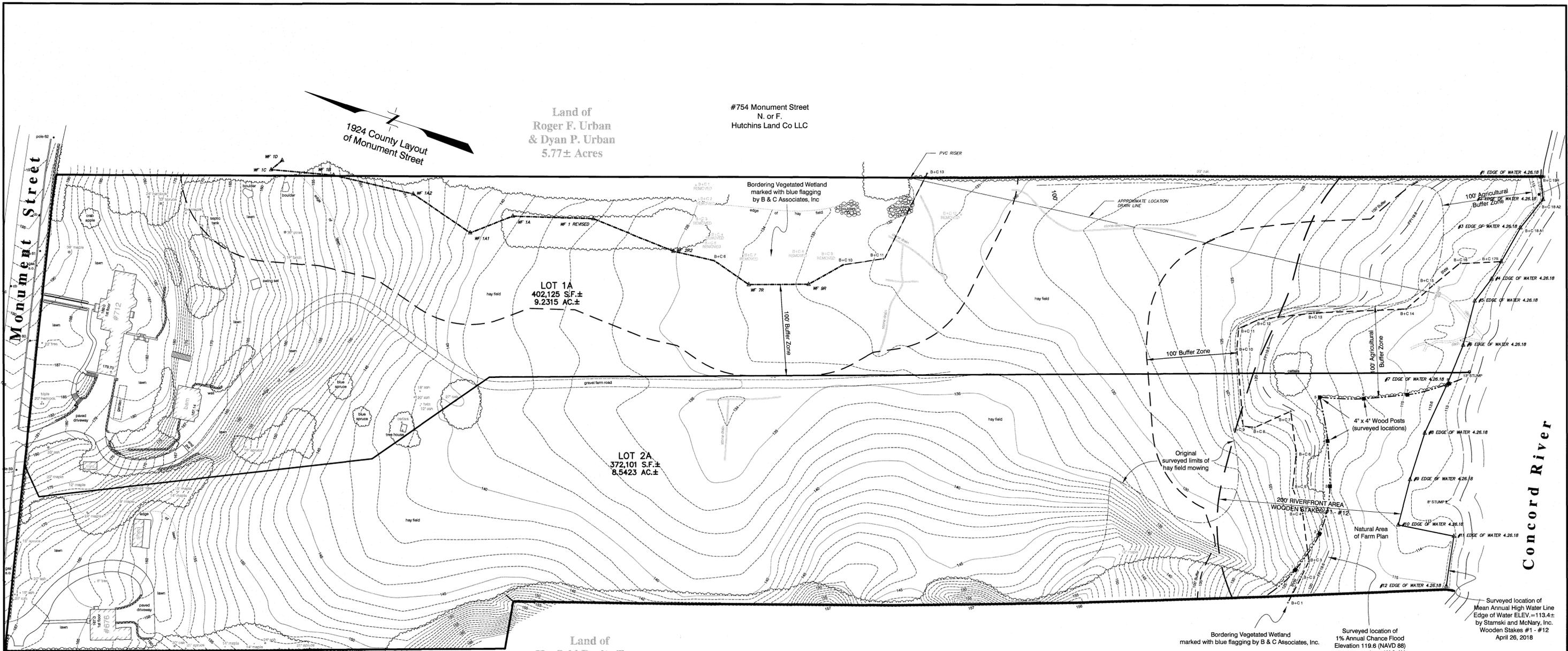
a. Date 5/4/2018

FINDINGS
676, 68Y, 712, and 70Y Monument Street, DEP File #137-1432
Applicant: Hayfield Realty Trust
ORAD Issued May 4, 2018

Findings:

1. The Natural Resources Commission (the Commission) has verified the following resource area boundaries as shown on the Abbreviated Notice of Resource Area Delineation Plan for Hayfield Realty Trust, Concord, MA prepared by Stamski and McNary Inc., and last revised May 2, 2018:
 - Bordering Vegetated Wetland flag numbers:
 - Field:
 - WF 1R, WF 1A, WF 1A1, WF 1A2, WF 1B through WF 1D, B+C 6, WF 2R2, B+C 6, B+C 7R, B+C 9R, B+C 10, B+C 11, B+C 13
 - River:
 - B+C 1 through B+C 16, B+C 17R, B+C 18A1, B+C 18A2, and B+C 19R
 - MAHW stakes:
 - #1 through #12

Note that there may be other resource areas present on the site which the Commission was not asked to verify. In addition, the Commission was unable to verify resource area boundary flags other than the ones approved in this ORAD. For this reason, the Commission reserves the right to review any future proposal for work on site to determine if there is a resource area or portion thereof not verified in this ORAD that may trigger the Commission's jurisdiction.



UTILITY NOTES:

- ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG SAFE TELEPHONE No. 1-888-344-7233.
- EXISTING CONDITIONS BASED ON INFORMATION FROM "PLAN OF EXISTING CONDITIONS" PREPARED BY PERLEY ENGINEERING LLC, DATED: DECEMBER 11, 2013

- LEGEND:**
- N/F NOW OR FORMERLY OVERHEAD WIRES
 - TREE
 - TREE LINE
 - UP UTILITY POLE
 - GG* GAS GATE
 - G GAS SERVICE (BURIED)
 - WG* WATER GATE
 - W WATER SERVICE (BURIED)
 - DMH DRAIN MANHOLE
 - D SUB-SURFACE DRAIN LINE
 - ss EXISTING CONTOUR
 - ss EXISTING CONTOUR
 - ☆ LIGHTPOLE
 - △ WETLAND FLAG
 - 99X9 SPOT ELEVATION
 - ○ ○ ○ STONE WALL
 - EDGE OF PAVEMENT

RECORD OWNERS

ROGER F. & DYAN P. URBAN
712 MONUMENT STREET
CONCORD, MA

ROGER URBAN, TRUSTEE
HAYFIELD REALTY TRUST
712 MONUMENT STREET
CONCORD, MA

ZONING DISTRICT

ZONING DISTRICT RAA

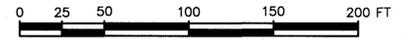
DATUM

N.A.V.D. OF 1988.

RESOURCE AREA DELINEATION PLAN
IN
CONCORD, MASSACHUSETTS
(MIDDLESEX COUNTY)

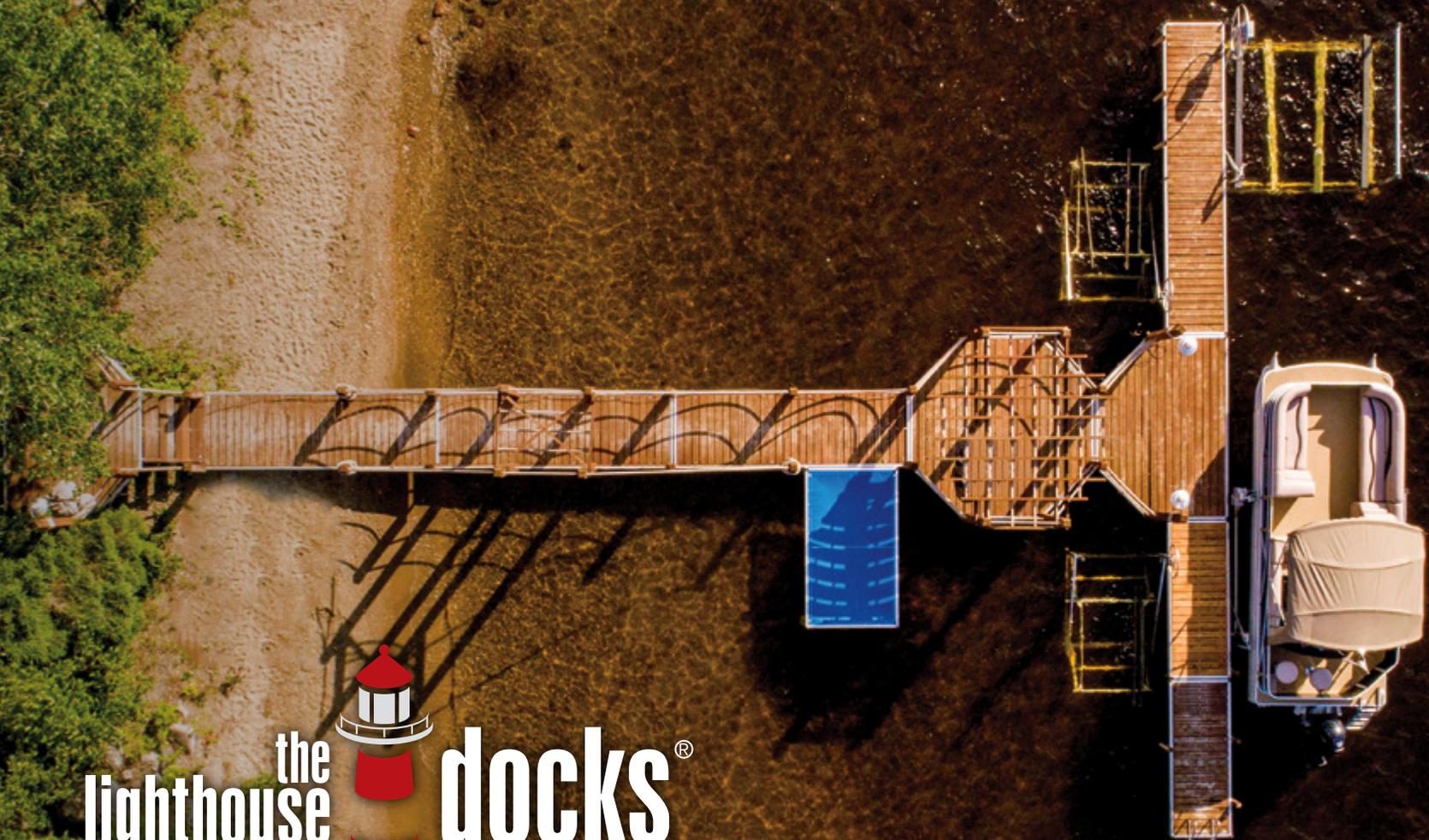
FOR: **HAYFIELD REALTY TRUST**
SCALE: 1"=50' APRIL 17, 2018
REV: APRIL 30, 2018
REV: MAY 2, 2018

STAMSKI AND McNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING - PLANNING - SURVEYING



Attachment G

Dock Manufacturer Information



Your Waterside Companion
since 1995

**Docks on posts or wheels,
Floating docks,
Boat lifts & Accessories**



The Lighthouse Docks designs and manufactures, in their Lac-Megantic plant (Quebec, Canada), gangways, docks on posts or on wheels, floating or semi-floating docks. All structures are made of high-quality aluminium with Western Red Cedar panels or reinforced polyurethane (Thruflow). We also offer a wide range of lifts for your boat, pontoon, personal watercraft or rowboat.

Our docks are not only built to be strong, lightweight and durable; they stand out from other brands by their ingenious designs and their elegance. Since your docks will be part of your view for many years, it's important that they match your home, waterfront shore and landscaping, and that they last for years. That's what The Lighthouse Docks offers you!

the
lighthouse
.com docks

the
lighthouse
docks®



Gangways

Ideal to start your dock configuration, the gangway (ramp) can be laid down directly on your grass, rocks or even the beach to have a smooth transition to your setup.



Available Standard Sizes

28" x 10'	3' x 10'	4' x 10'
28" x 15'	3' x 15'	4' x 15'

Custom sizes also available

Panel Options

Available with Western Red Cedar panels, either natural or dyed. Also available with Thruflow panels (*reinforced polyurethane – grey)

*Structure slightly wider than cedar panels



Natural



Dyed



Thruflow

Advantages

Wooden panels can be removed quickly for storage

Aluminium structure

Stainless steel hardware

Included

Aluminium structure, panels and gangway bracket to connect with your first dock

Gangway Bracket

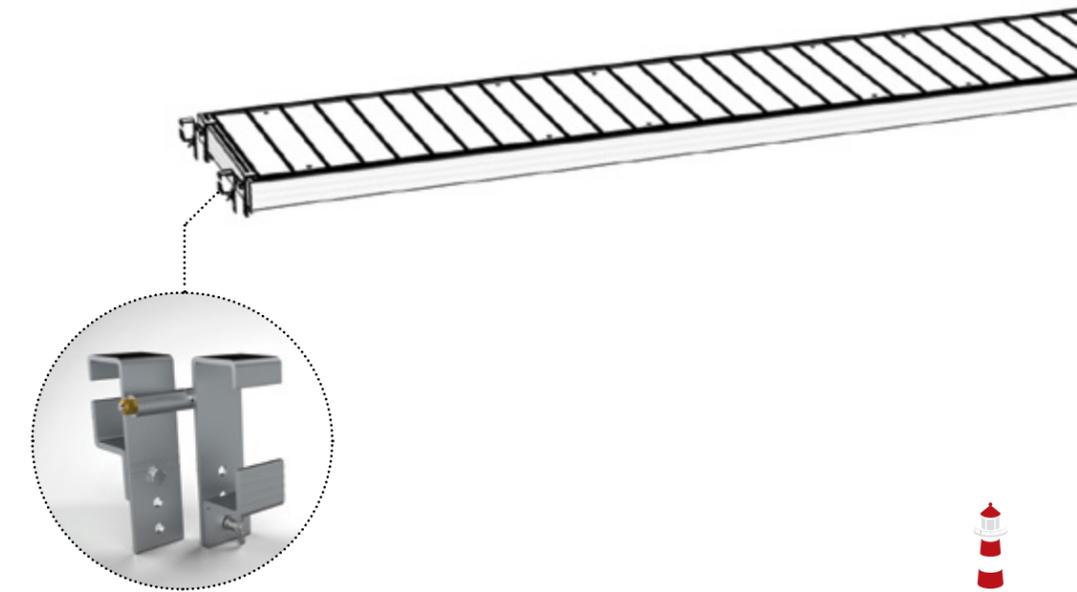
Allows you to connect your ramp to your first dock. May also be used for different configuration.

Aluminium manufacturing

Stainless bolts

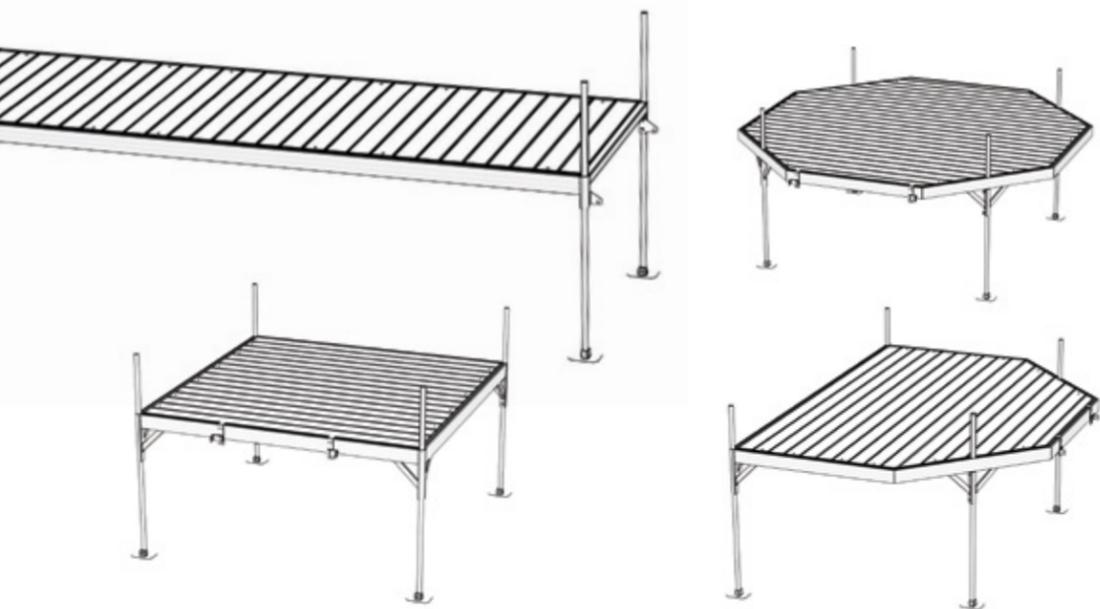
Easy to install

Sold in pairs



4

On-Post Docks



Rectangular

4' x 10'	4' x 15'	4' x 20'
5' x 10'	5' x 15'	5' x 20'
6' x 10'	6' x 15'	6' x 20'
8' x 10'	8' x 15'	8' x 20'

Octagonal

10' x 10'	9' x 12'
12' x 12'	(3/4 octagon)

Square

10' x 10'	12' x 12'
-----------	-----------

Welded aluminium structure

1 11/16" Galvanized post with vinyl cap

Stainless bolts and nuts

Removable wooden panels

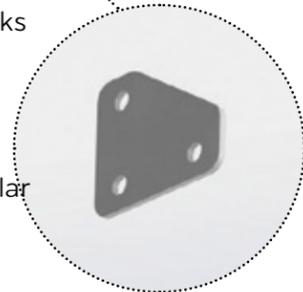
Joint Plate

To connect two same size docks

Aluminium manufacturing

Easy to install and remove

Included with all our rectangular on post docks



Octagonal Bracket

Allows you to connect the end of a dock to a platform or another dock (T or L configuration, for example)

Aluminium manufacturing

Easy to install and remove

Included with all our square or octagonal docks



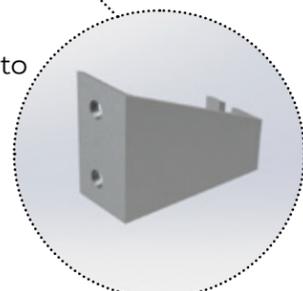
Side-by-Side Bracket

Allowing you to connect two docks in parallel side-by-side to create a bigger platform

Aluminium manufacturing

Easy to install and remove

Sold in pairs



- A Bolts underneath the dock** Much better exterior appearance, safer for your boat and people
- B Threaded extrusion instead of welded** Stronger
- C Railing on top** Accessories stripe (no drilling needed)
- D 5"x2" Structure** Very strong, attractive 5"x2" structure
- E Panels lock underneath** To secure your panels from the wind or waves – Easy to remove
- F 6"x 8" Curved bottom footpad** To facilitate installation and offer increased stability

Included

Aluminium structure, panels, 2 or 4 galvanized 6' posts depending on the dock sizes and the bracket to connect to your next dock.

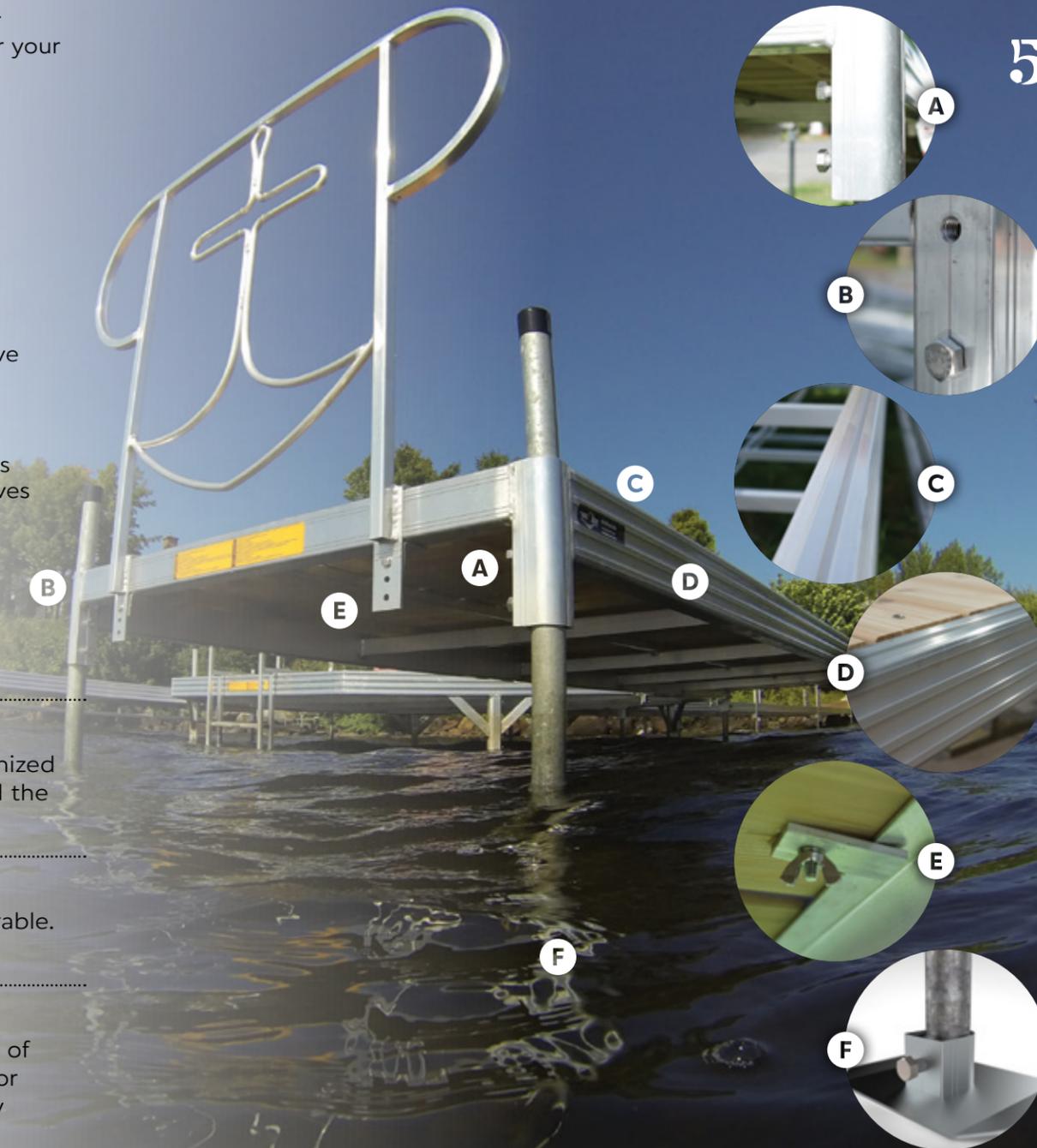
Advantages

Modular, lightweight, stable, safe and durable. Easy to install and store for winter.

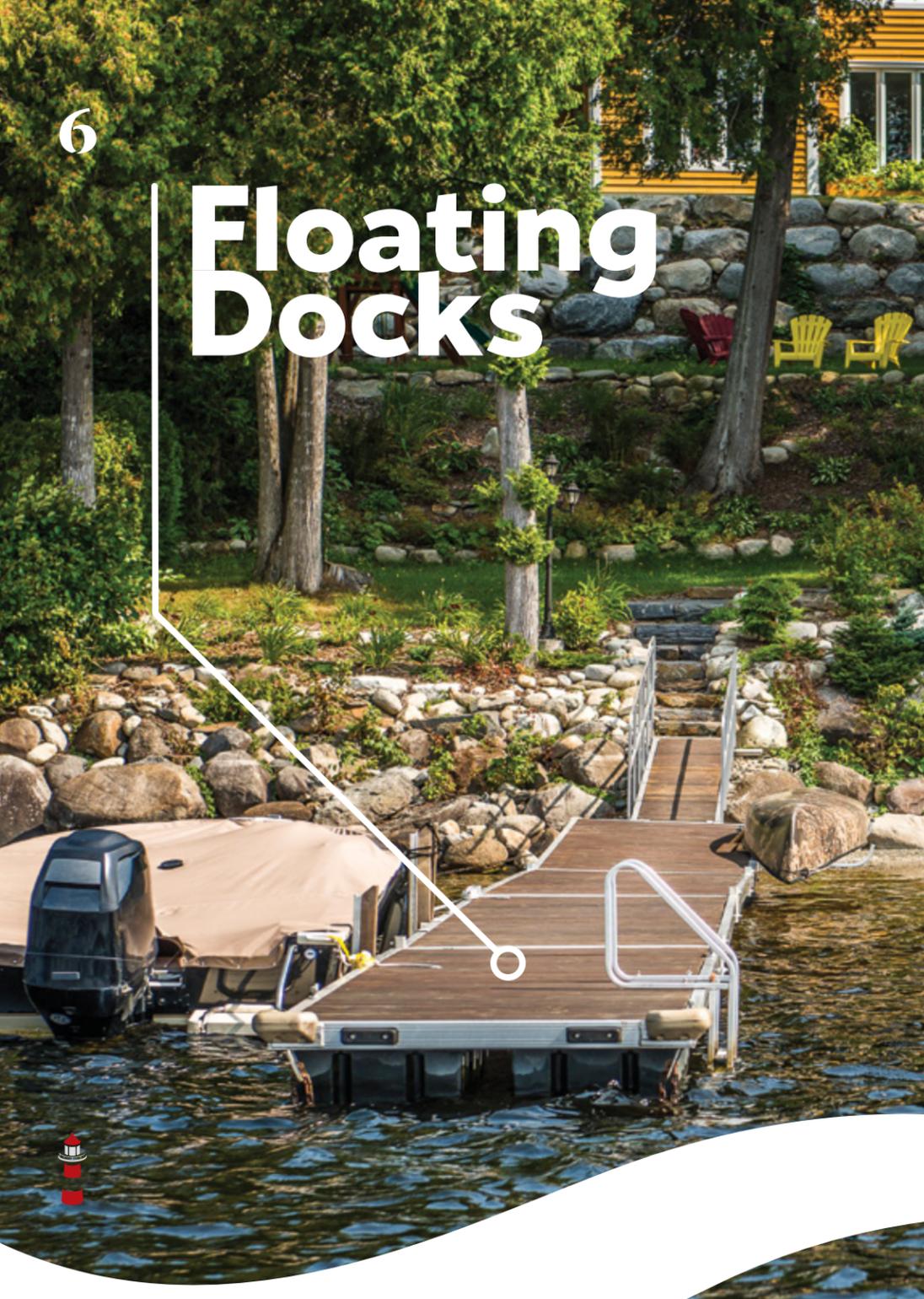
Advice

Need to be installed in less than 6' depth of water. On post docks are not built to moor a boat for extended hours or without any supervision.

5



Floating Docks



Rectangular

5' x 15'	6' x 15'	8' x 15'
5' x 20'	6' x 20'	8' x 15'

Octagonal

10' x 10'	12' x 12'
-----------	-----------

Square

8' x 8'	10' x 10'	12' x 12'
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Advice

There mainly three reasons to buy residential floating docks.

1. If the depth of the water is more than 6 feet.
2. If you are on the side of a lake, or a river, where the level of the water changes often during the season, they self-adjust to the level of the water.
3. If you want to moor your boat directly to the docks for extended periods.

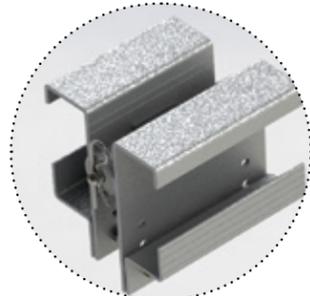
Depending on the wind, the water flow, the height of the waves, the bottom type of the lake and the weight of your boat, it is imperative to have appropriate weight chain connecting your floating dock to make sure it will stay in place.

Adjustable Floating Dock Bracket

Allows you to connect two floating docks together. Other configurations are possible because they are movable.

- Aluminium manufacturing
- Stainless steel hardware
- Teflon bushing

Easy to install and remove
Sold in pairs



Skating on a lake in Quebec is possible...

Even during summer!

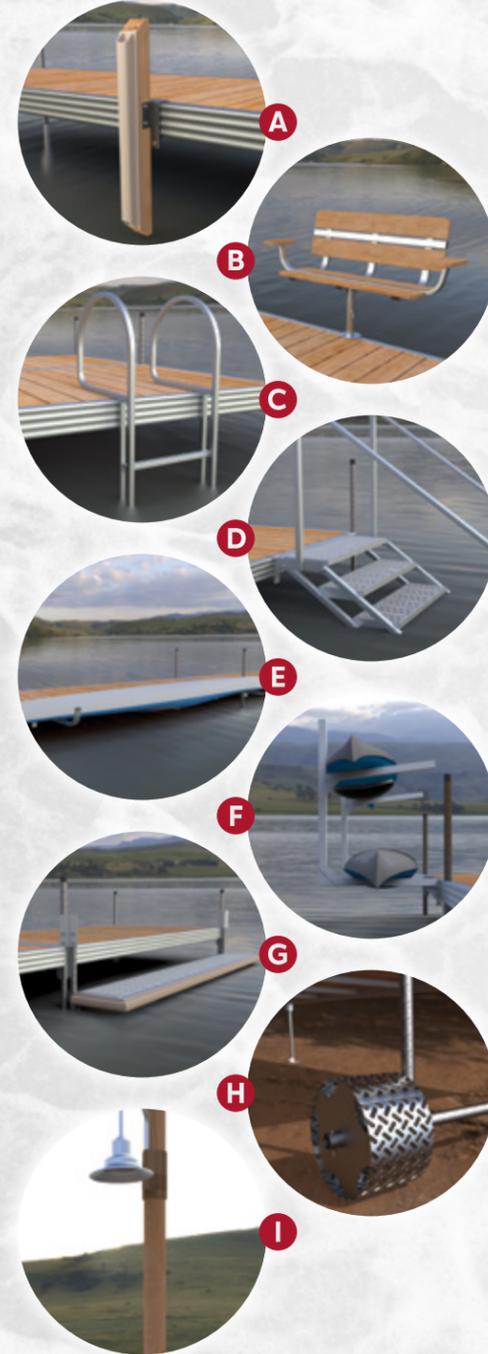


Yanni Gourde,
NHL – Tampa Bay Lightning

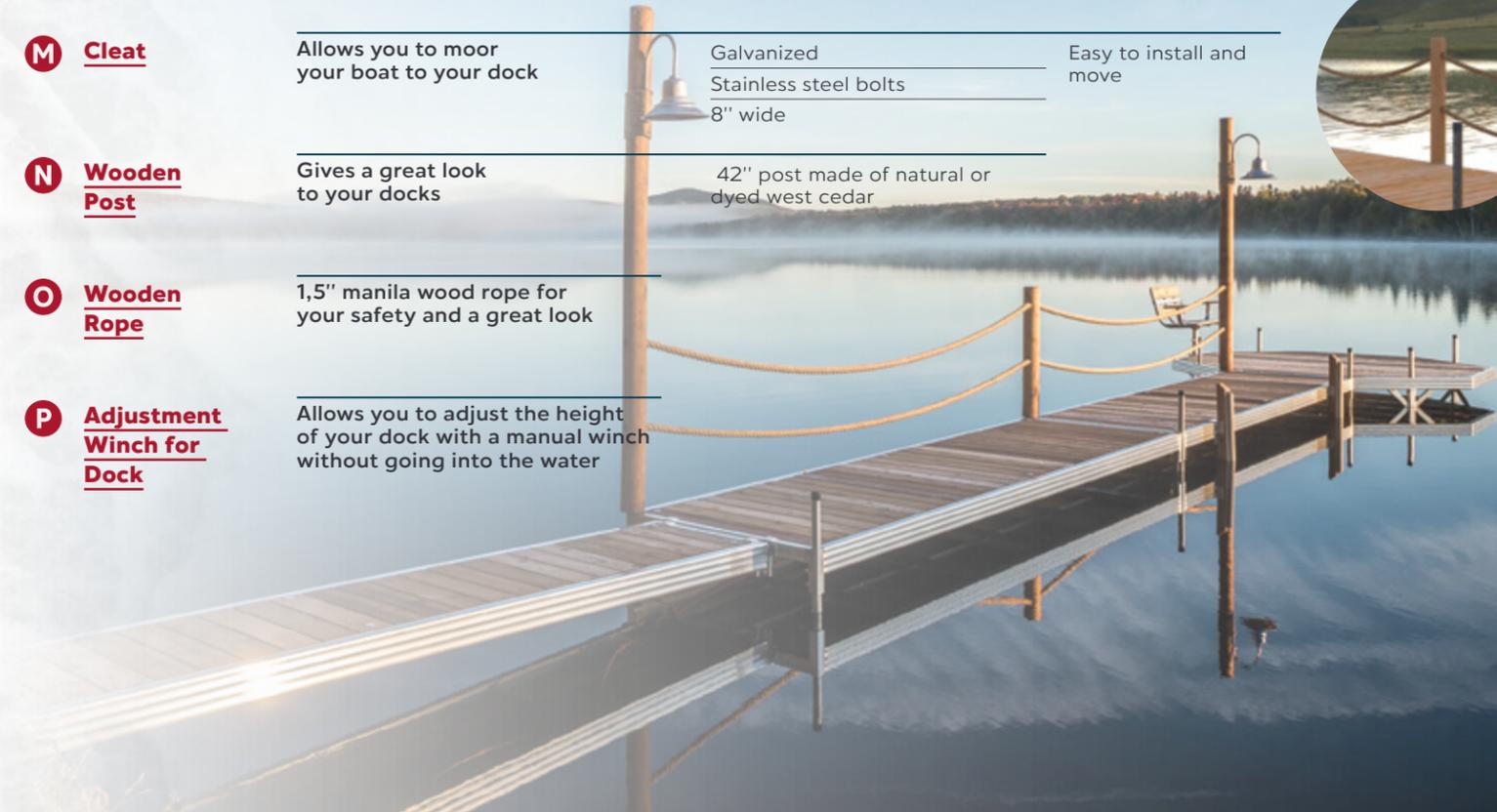
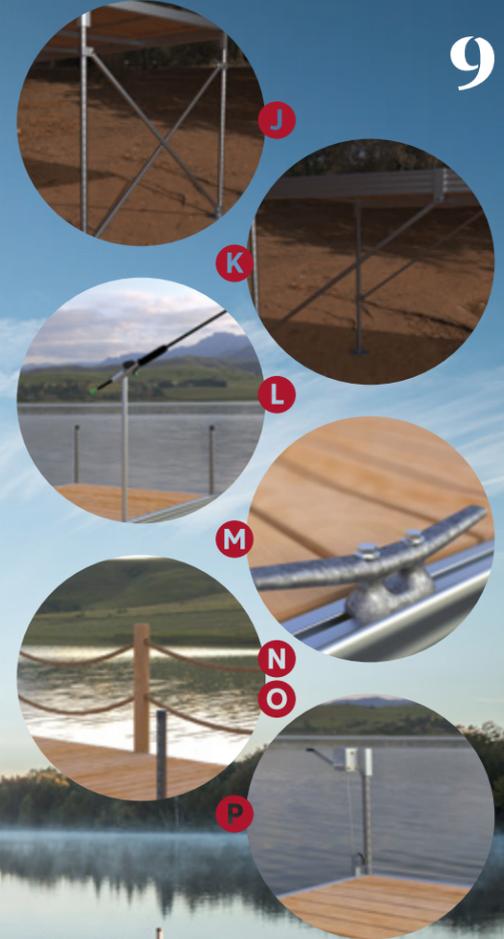
"It's always fun to skate...but it's even funnier to do it under the sun, on a lake, with a beach on the side! It's very cool."

Dock Accessories

A Vertical Bumper	Protect your boat when moored to your dock	Aluminium manufacturing Stainless steel bolts West cedar support Highly resistant bumper	Available with natural or dyed cedar
B Swivel Bench	Unique in the industry, 2 seater bench that allows you to make a 360° to follow the sunsets	Strong aluminium support Stainless steel bolts West cedar bench	Available with natural or dyed cedar
C Ladder	Allows you to get in or out of the water easily	Aluminium manufacturing Stainless steel bolts Curved steps to fit the shape of your foot	Available in 3 or 4 steps
D Adjustable Stair	Perfect to get in or out of the water easily and safely, settle where you want on your docks	Aluminium frame Reinforced polyurethane steps (Thruflow) Stainless steel bolts	Available with 4 or 7 steps, depending the depth of your water Adjustable angle for the feet
E Simple Kayak Rack	Quick and useful to store your kayak	Aluminium manufacturing Stainless steel bolts	Easy to install and move
F Double Kayak Rack	Quick and useful to store your kayaks	Aluminium manufacturing Stainless steel bolts	Easy to install and move
G Boarding Step	Provides you a 10' wide step near the water to facilitate boarding on the docks or in your boat (kayak for example)	Aluminium frame Reinforced polyurethane steps (Thruflow) Rubber protector Stainless steel bolts	To be install on 10' dock Can very well serve as bench



H Dock Wheels	Makes installation and storage of your docks a lot easier	Plastic or aluminium wheels Galvanized axle Stainless steel bolts	Available for all dock widths
I Lamp on Post	Gives a great look to your docks and provides light for your evenings	9' post made of natural or dyed west cedar Aluminium lampshade Works on 110 volts	Rounded post with 2 holes or without holes
J Deep Water Stabilizer	Helps stabilize the end of a dock on post or wheels in deep water	Aluminium manufacturing Stainless steel bolts	Available for all dock widths Sold in pair
K Lateral Stabilizer	Helps to laterally stabilize a dock on post or on wheels	Aluminium manufacturing Stainless steel bolts	Easy to install Sold in pair
L Fishing Rod Holder	Ideal for dock fishermen	Aluminium manufacturing Stainless steel bolts	Easy to install and move
M Cleat	Allows you to moor your boat to your dock	Galvanized Stainless steel bolts 8" wide	Easy to install and move
N Wooden Post	Gives a great look to your docks	42" post made of natural or dyed west cedar	
O Wooden Rope	1,5" manila wood rope for your safety and a great look		
P Adjustment Winch for Dock	Allows you to adjust the height of your dock with a manual winch without going into the water		



Rowboat Lift 600pds**A**

Weight : 200pds
 Inside width : 56"
 Bed length : 16'
 Extendable legs : 36"

- Plastic bunks included

Rowboat Lift on Rolls 1500pds

Weight : 205pds
 Inside width : 34"
 Bed length : 20'
 Extendable legs : 36"

- Rolls included

Cantilever PWC Lift 1000pds**B**

Weight : 130pds
 Inside width : 65"
 Bed length : 8'
 Vertical lift : 36"

- Carpet bunks included

Vertical PWC Lift 1200pds

Weight : 180pds
 Inside width : 63"
 Bed length : 8'
 Vertical lift : 48"

- Plastic bunks included

Cantilever PWC Lift 1500pds

Weight : 340pds
 Inside width : 89"
 Bed length : 10'
 Vertical lift : 36"

- Plastic bunks included

Cantilever Rowboat Lift 2000pds**A**

Weight : 350pds
 Inside width : 89"
 Bed length : 10'
 Vertical lift : 36"

- Plastic bunks included

Vertical Boat Lift 3500pds**C**

Weight : 436pds
 Inside width : 108"
 Bed length : 10'
 Vertical lift : 60"

- Carpet guide and plastic bunks included

Vertical Boat Lift 4500pds

Weight : 525pds
 Inside width : 120"
 Bed length : 10'
 Vertical lift : 60"

- Carpet guide and plastic bunks included

- Kevlar winch cable (high strength)

Vertical Boat Lift 5500pds

Weight : 595pds
 Inside width : 120"
 Bed length : 10'
 Vertical lift : 60"

- Carpet guide and plastic bunks included

- Kevlar winch cable (high strength)

Vertical Pontoon Lift 3500pds

Weight : 475pds
 Inside width : 120"
 Bed length : 11'
 Vertical lift : 60"

- Carpet guide and aluminium ladder included

Vertical Pontoon Lift 4500pds**D**

Weight : 564pds
 Inside width : 120"
 Bed length : 11'
 Vertical lift : 60"

- Carpet guide and aluminium ladder included

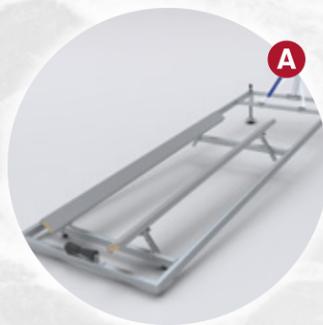
- Kevlar winch cable (high strength)

Vertical Pontoon Lift 5500pds

Weight : 634pds
 Inside width : 120"
 Bed length : 11'
 Vertical lift : 60"

- Carpet guide and aluminium ladder included

- Kevlar winch cable (high strength)

**Options**

Available on most of our lifts: sets of wheels, electronic or solar winch motor with or without remote, 100% acrylic protection roof.

- Get in touch with us for more information

Advice

To be able to choose the proper lift for your boat, you need to know the exact weight of it, including the engine and all added weight such as gas, oil, battery, accessories or anything else. If the weight is too close to the limit, we suggest you choose a model with a larger capacity.

During the installation of your lift, it is extremely important to ensure the lift is level by adjusting the legs to make sure that equal pressure is distributed across the cables.

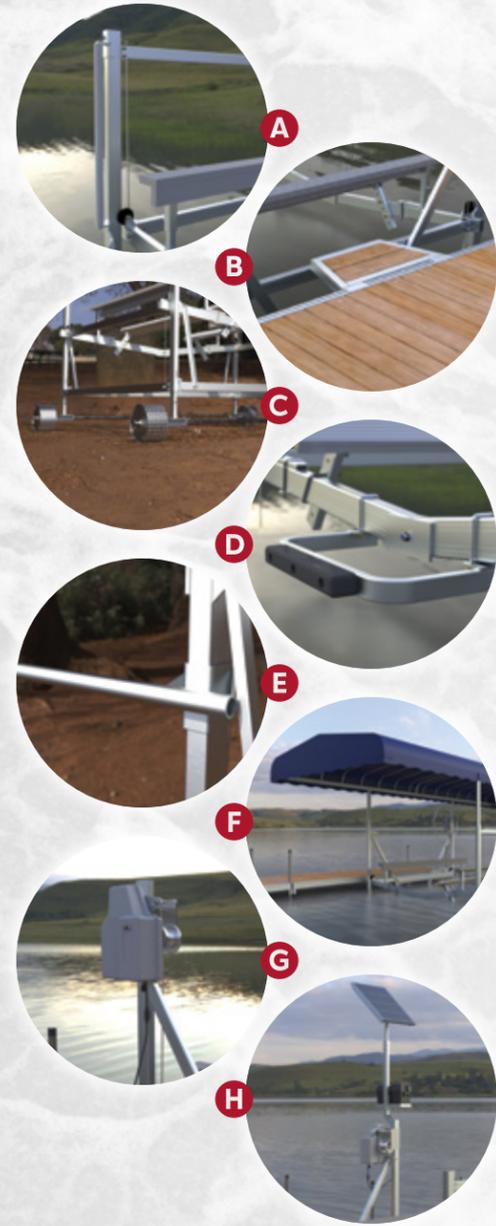
At the end of the season, it is highly recommended to remove your lift from the water and store it somewhere that ice cannot reach it. A boat lift that stays in the water during winter will not be covered under our warranty.

Lifts

All our lifts are made from A to Z at our factory in Lac-Mégantic, Quebec, Canada. They are designed with high grade aluminium to provide a durable, strong and lightweight structure. All the hardware is made of stainless steel to avoid any rust and be 100% weather-resistant to Mother Nature. It's the perfect product to extend the life of your boat.

Lift Accessories

A Entrance Roll	Allows you to redirect your boat towards the middle of your lift and so protect everything	Aluminium manufacturing and rigid PVC	Easy to install The height is adjustable
B Boat Walk	Allows you to reduce the gap between your dock and your lift, so it's safer	Aluminium manufacturing Stainless steel bolts	Available with natural or dyed west cedar Easy to install No drilling needed
C Wheels Set	Makes it easier to install or remove your lift from water	Reinforced aluminium wheels Galvanized axles Aluminium bracket Stainless steel bolts	Available for all our lifts Sold in pair (2 axles & 4 wheels)
D Motor Stop	Makes it easier to position your boat in your lift	Aluminium manufacturing and rubber Stainless steel bolts	Can be added on all our lifts Easy to install No drilling needed
E Transportation Handle	Facilitate the transportation of your lift	Aluminium manufacturing	Sold in pair
F Boat Lift Roof	Very useful to protect your boat against weather and ultraviolet rays	Aluminium structure with stainless steel bolts 100% acrylic heavy duty canvas	Available for all our lift 10 years warranty Many colours available
G Electric Lift Motor	Allows you to raise or lower your boat faster and effortlessly	Work with 110 volts Replace the existing manual winch	Available on our vertical lifts Available with remote
H Electric Lift Motor with Solar Panel	Allows you to have an electric motor even with difficult access, no needs of power extension cord, get you energy directly from the solar panel	Included: solar panel, frame, battery and the cover Aluminium frame with stainless steel bolts	Available on our vertical lifts Available with remote



The Lighthouse Docks includes a ten-year (10) warranty on all their soldering, and five-year (5) warranty on all aluminium structures of its docks and lifts. A two-year (2) warranty applies to the mechanical components as well as all accessories pertaining to the mechanical components. This guarantee applies to normal usage of our products. Damages may occur if caution is not taken, especially during bad weather with strong winds, by not taking the weight of the boat into account. In such situations, the boat should be anchored away from the dock or on its trailer out of the water. During the warranty period, The Lighthouse Docks will repair or replace the defective part without any charges. However, if The Lighthouse Docks considers that the warranty conditions have not been respected, repair and shipping fees will be invoiced to the purchaser.

Exclusions

Damages caused by abuse, accident, weight exceeding the maximum capacity, poor judgment, improper assembly or installation, improper use, negligence, inadequate storage;

All damages caused by a repair shop who's not authorized by The Lighthouse Docks;

Any modifications to the product;

Acts of Mother Nature (wind, waves, rain etc...);

Damages caused by ice;

Installation or removal fees.



The Lighthouse
Docks are proud to
offer you certified
products



certificationcwb

CSA W47.1

CSA W47.2



the
lighthouse.com docks

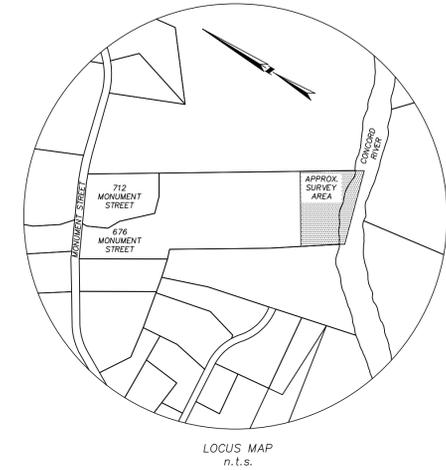
3965, rue du Québec-Central
Lac-Mégantic, QC G6B 2C8

Phone : 819 583-5451

Email : info@lighthousedocks.com

Attachment H

Project Plans



FOR PERMITTING
PURPOSES ONLY

FENN SCHOOL DOCK
676 MONUMENT STREET
CONCORD, MA

SEAL



REVISION

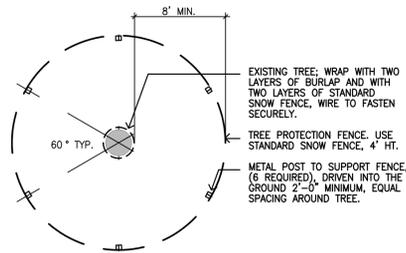
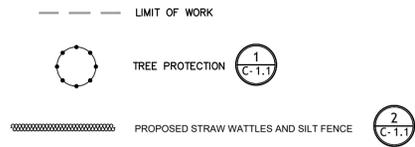
SITE PREPARATION,
EROSION CONTROL
AND DETAIL PLAN

JOB # 19094.00
DATE: 06/17/2020
SCALE: 1"=20'
DRAWN BY: DTB
APPROVED BY: SRG

C-1.1

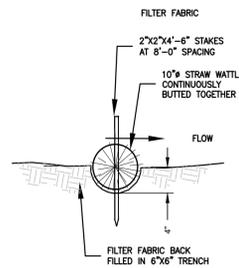
SHEET 1 OF 2

DEMOLITION LEGEND:



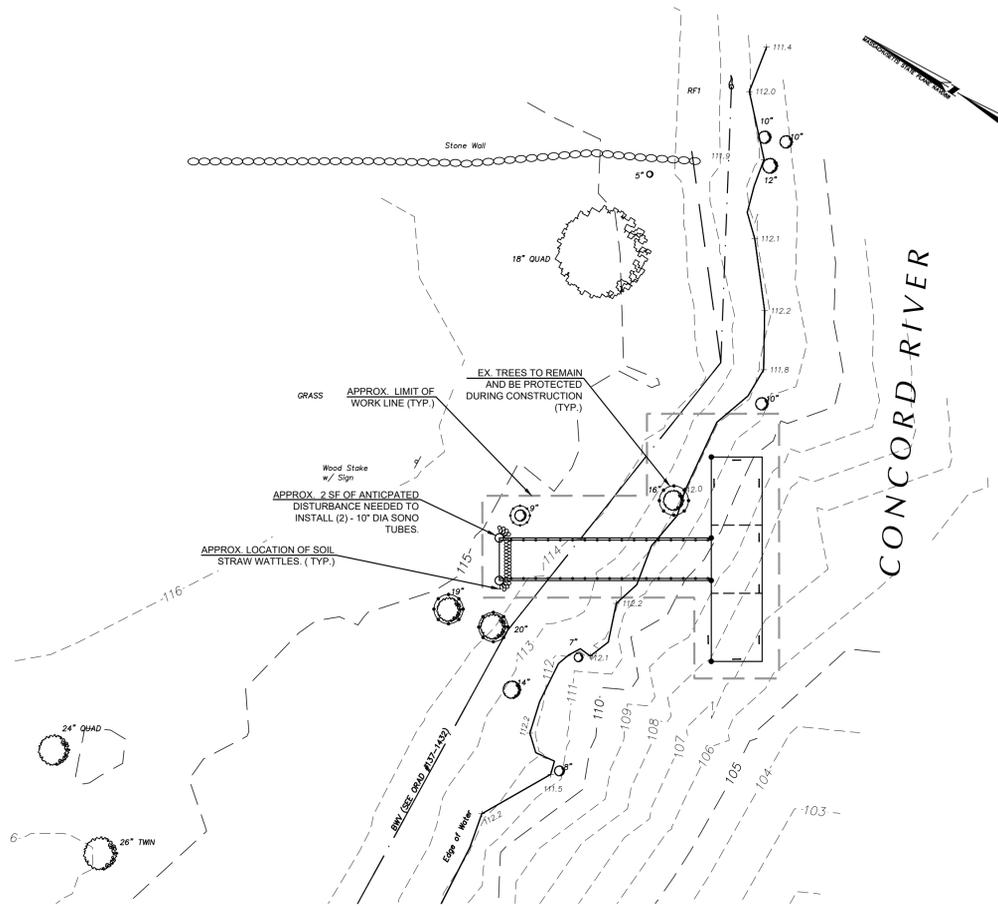
1 EXISTING TREE PROTECTION

SCALE: NTS

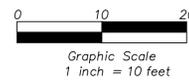


2 SILT FENCE WITH STRAW WATTLE

NTS



2 SITE PREPARATION, EROSION CONTROL AND DETAIL PLAN

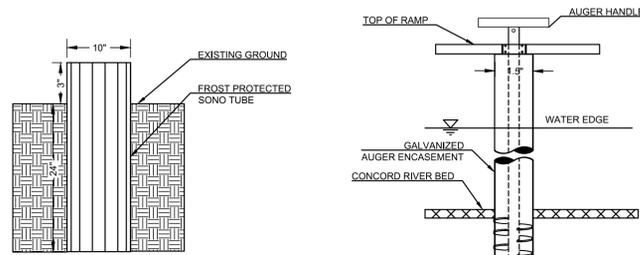


FOR PERMITTING
PURPOSES ONLY

FENN SCHOOL DOCK
676 MONUMENT STREET
CONCORD, MA

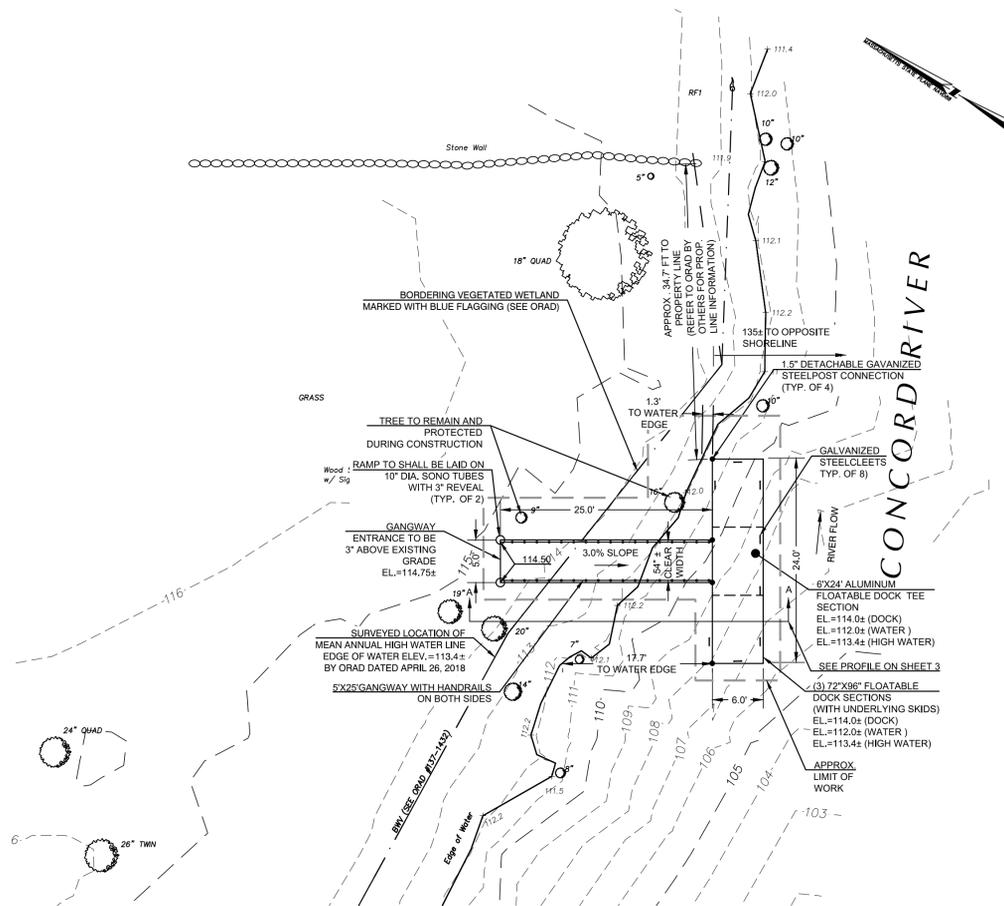
NOTES AND SPECIFICATIONS

1. ALL SURVEY INFORMATION OF EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO PROPERTY LINES, FENCES, PAVING, OVERHEAD WIRES, ETC. ARE BASED ON THE ON A SURVEY BY SAMIOTES CONSULTANTS INC. AS DEPICTED EXISTING SITE PLAN. ALL SUCH INFORMATION IS APPROXIMATE AND THE CONTRACTOR IS RESPONSIBLE TO SURVEY AND FIELD VERIFY SUCH INFORMATION PRIOR TO CONSTRUCTION. CONSTRUCTION DELAYS AND/OR OTHER DAMAGES RESULTING FROM DISCREPANCIES BETWEEN INFORMATION PROVIDED AND ACTUAL EXISTING CONDITIONS WILL BE AT NO ADDITIONAL COST TO THE OWNER.
2. THE CONTRACTOR SHALL NOTIFY AND COORDINATE ALL WORK WITH THE RESPECTIVE UTILITY COMPANIES 48 HOURS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL REGISTER WITH "DIG SAFE" AT (888) DIG-SAFE, 72 HOURS PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN "DIG SAFE" REGISTRATION AND "DIG SAFE" MARKINGS.
4. ALL WASTE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND MUNICIPAL REGULATIONS.
5. ALL WORK SHALL COMPLY WITH FEDERAL, STATE AND MUNICIPAL REGULATIONS AND STANDARDS.
6. THE CONTRACTOR SHALL HAVE THE PROPER LICENSES AS REQUIRED BY THE STATE AND ANY OTHER GOVERNING AGENCIES.
7. ADA AND MAAB COMPLIANCE
 - A. SPECIAL ATTENTION IS TO BE GIVEN TO COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB)
 - a. SLOPES: ALL WALKWAYS AS DEFINED BY SECTION 22.1 OF 521 CMR SHALL BE GRADED TO A MAXIMUM 4.5%. THE CROSS PITCH (PERPENDICULAR TO TRAVEL) FOR ALL WALKWAYS AND PATHS SHALL BE CONSTRUCTED AT 1.5%. THE SLOPE OF ALL RAMPS AND SIDE SLOPES OF HANDICAP CURB CUTS AS DEFINED BY SECTION 21.1 OF 521 CMR SHALL BE CONSTRUCTED AT 7% MAXIMUM. RAMPS AS DEFINED IN SECTION 24.1 OF 521 CMR SHALL BE CONSTRUCTED TO A MAXIMUM SLOPE OF 7%.
 - b. THE CONTRACTOR IS TO ASSUME THAT ALL GRADES IN PEDESTRIAN PATHS OF TRAVEL SHALL BE VERIFIED/CHECKED WITH A 2-FOOT ELECTRONIC "SMART LEVEL".
 - c. A 5'-0" MINIMUM LEVEL (1.5% SLOPE) AREA SHALL BE PROVIDED AT ALL FLUSH ENTRANCES TO BUILDINGS. PUDDLING OF WATER AT THE ENTRANCES WILL NOT BE ALLOWED.
 - B. THE ABOVE REQUIREMENTS SHALL SUPERSEDE THE GRADES SHOWN ON THE PLANS. IF THESE REQUIREMENTS CANNOT BE MET WITH THE GRADES SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR DIRECTION.
8. CONCRETE FOR SONO TUBE SHALL BE NON-REINFORCED. CONCRETE SHALL BE "CLASS D" IN ACCORDANCE WITH SECTION M.02.00 OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, MassDOT - HIGHWAY STANDARD SPECIFICATIONS LATEST EDITION, WITH 620 LBS. OF PORTLAND CEMENT, 6% ± 1% AIR ENTRAINMENT IN PLACE.

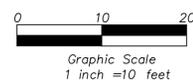


1 SONO TUBE DETAIL
SCALE: NTS

2 AUGER ENCASUREMENT DETAIL
SCALE: NTS



NOTE:
NO GRADING IS OCCURRING ON NATURAL
GRADES



SEAL



REVISION

NO.	DESCRIPTION

PROPOSED SITE
LAYOUT AND
GRADING PLAN

JOB # 19094.00
DATE: 06/17/2020
SCALE: 1"=20'
DRAWN BY: DTS
APPROVED BY: SRG

C-1.2

SHEET 2 OF 2