

ABBREVIATED NOTICE OF INTENT

Track Renovation Project Eaglebrook School, 279 Pine Nook Road Deerfield, Massachusetts



SUBMITTED TO:

Town of Deerfield
Conservation Commission
8 Conway Street
Deerfield Municipal Offices
South Deerfield, Massachusetts 01373

PREPARED FOR:

Eaglebrook School
271 Pine Nook Road
Deerfield, Massachusetts 01342

PREPARED BY:

Lucas Environmental, LLC
500A Washington Street
Quincy, Massachusetts 02169

IN ASSOCIATION WITH:

ProTerra Design Group, LLC
4 Bay Road, Building A, Suite 200
Hadley, Massachusetts 01035

REPORT DATE: April 13, 2023





500A Washington Street, Quincy, MA 02169

April 13, 2023

Town of Deerfield Conservation Commission
8 Conway Street
Deerfield Municipal Offices
South Deerfield, Massachusetts 01373

Re: Abbreviated Notice of Intent
Eaglebrook School Track Renovations Project
279 Pine Nook Road
Deerfield, Massachusetts

Members of the Deerfield Conservation Commission:

On behalf of the Eaglebrook School, the Applicant & Owner, and in association with ProTerra Design Group, LLC (ProTerra), Lucas Environmental, LLC (LE) is pleased to submit this Abbreviated Notice of Intent (NOI) to the Deerfield Conservation Commission for the proposed Track Renovations Project at the Eaglebrook School, located at 279 Pine Nook Road in Deerfield, Massachusetts. As currently designed, proposed work associated with the track renovations will minimally occur within the outer 100-Foot Buffer Zone to Bordering Vegetated Wetlands (BVW) and Inland Bank, within the limit of the existing track and field. This NOI is submitted in accordance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.).

Enclosed please find one original and one copy of the NOI, Limited Stormwater Hydrology Report, and Site Plans. The NOI application package includes the WPA Form 4, project narrative, figures, photographic documentation, abutter notification, filing fees, and Wetland Delineation Field Data Forms. The Site Plans and Limited Stormwater Hydrology Report are provided separately. A link to an electronic copy of the pdf file of the NOI application and supporting documentation will be provided concurrently with this submittal. We respectfully request that you place this matter on your agenda for the April 27, 2023 Public Hearing.

If you have any questions, please do not hesitate to contact me at 617.405.4140 or cml@lucasenviro.com. Thank you for your consideration in this matter.

Sincerely,
LUCAS ENVIRONMENTAL, LLC

Christopher M. Lucas, PWS, CWS, RPSS
Environmental Consultant/Wetland & Soil Scientist

cc: MassDEP – WERO
Eaglebrook School (electronic copy)
ProTerra Design Group, LLC (electronic copy)



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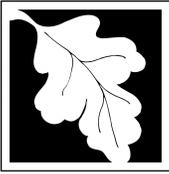
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SECTION I – FORMS



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 4 – Abbreviated Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP

Deerfield

Town

A. General Information

Important:

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



Note:

Before completing this form, consult your local Conservation Commission regarding any municipal bylaw or ordinance.

1. Applicant:

Eaglebrook School, Attn: Wes Smith

Name

wsmith@eaglebrook.org

E-Mail Address

271 Pine Nook Road

Street Address

Deerfield

City/Town

MA

State

01342

Zip Code

413.774.9166

Phone Number

Fax Number (if applicable)

2. Representative (if any):

Lucas Environmental, LLC

Firm

Christopher M. Lucas

Contact Name

cml@lucasenviro.com

E-Mail Address

500A Washington Street

Mailing Address

Quincy

City/Town

MA

State

02169

Zip Code

617.405.4140

Phone Number

617.405.4465

Fax Number (if applicable)

3. Property Owner (if different from applicant):

Allen Chase Foundation, Attn: Wes Smith

Name

P.O. Box 7

Mailing Address

Deerfield

City/Town

MA

State

01342

Zip Code

4. Total Fee:

\$1,050.00

(from NOI Wetland Fee Transmittal Form)

5. Project Location:

279 Pine Nook Road

Street Address

Deerfield

City/Town

Latitude and Longitude:

42° 32' 40.55"N

Latitude

72° 35' 44.68"W

Longitude

62

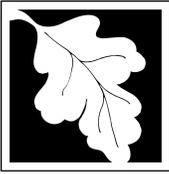
Assessors Map/Plat Number

3

Parcel /Lot Number

6. General Project Description:

The proposed project will include the renovation of the existing grass athletic field to a synthetic turf field with sand/rubber infill. A new drainage system will be installed as part of the stormwater management system. Work is located generally greater than 85 feet from the resource areas, other than one stone outlet protection at one discharge point in the Buffer Zone.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Deerfield

Town

A. General Information (cont.)

7. Registry of Deeds:

Franklin
County

2797
Book

119
Page

Certificate (if Registered Land)

B. Site and Activities Subject to Regulation

Complete any of the following sections that apply to the proposed work and project site.

1. Complete for proposed activities located, in whole or in part, in Buffer Zone.

a. Check all the following borders to the Buffer Zone:

Inland Resource Areas

- Inland Bank
 Bordering Vegetated Wetland (BVW)

Coastal Resource Areas

- Coastal Beach Barrier Beach
 Rocky Intertidal Shore Coastal Dune
 Salt Marsh Coastal Bank

b. Check all the methods used to delineate the Bordering Vegetated Wetland boundary:

- Final Order of Resource Area Delineation issued by Conservation Commission or DEP (attached)
 DEP BVW Field Data Form (attached)
 Final Determination of Applicability issued by Conservation Commission (attached)
 Other Method of Determining BVW boundary (attach documentation):
- 50% or more wetland indicator plants
 - Saturated/inundated conditions exist
 - Groundwater indicators
 - Direct observation
 - Hydric soil indicators
 - Credible evidence of conditions prior to disturbance.



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B. Site and Activities Subject to Regulation (cont.)

c. Describe, with reference to supporting plans and calculations where necessary, the size, type, and location of the proposed work and mitigating measures and designs to insure that the proposed work will not alter the resource area and Buffer Zone borders. Attach additional sheets, if necessary.

The proposed project will include the renovation of the existing grass athletic field to a synthetic turf field with sand/rubber infill. A new drainage system will be installed as part of the stormwater management system. No work is proposed to the existing rubber track surface surrounding the field. Work is located generally greater than 85 feet from the resource areas, other than one stone outlet protection at one discharge point in the Buffer Zone. See the Site Plans and Limited Stormwater Hydrology Report, prepared by ProTerra Design Group, LLC, dated April 13, 2023, for further details.

2. Complete for proposed activities located, in whole or in part, in Land Subject to Flooding.

a. Resource area description:

Bordering Land Subject to Flooding:

Isolated Land Subject to Flooding:

N/A

Volume of Flood Storage Lost (cubic feet)

Volume of Flood Storage Lost (cubic feet)

Volume of Flood Storage Compensation (cubic feet)

Volume of Flood Storage Compensation (cubic feet)

b. Describe, with reference to supporting plans and calculations where necessary the size, shape, location, and type of work, mitigating measures, and designs proposed to meet the performance standards set forth in 310 CMR 10.57(4) and 10.60. Attach additional sheets, if necessary.

3. Complete for proposed activities located, in whole or in part, in the Riverfront Area.

a. Name of Waterway (if available):

N/A



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B. Site and Activities Subject to Regulation (cont.)

b. Width of Riverfront Area (check one):

25 ft. - Designated Densely Developed Areas only

100 ft. - New agricultural projects only

200 ft. - All other projects

c. Describe how the Mean Annual High-Water Line was determined:

d. Distance of proposed activity closest to the Mean Annual High-Water Line:

Feet

e. Total area of Riverfront Area on the site of the proposed project:

Square Feet

f. Proposed alteration of the Riverfront Area:

Total Square Feet

Square Feet within 100 ft.

Square Feet between 100 ft. and 200 ft.

g. Indicate project purpose:

Single family house

Commercial development

Transportation

Residential subdivision

Industrial development

Other (describe):

h. Was the lot where the activity is proposed created prior to August 1, 1996?

Yes

No



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B. Site and Activities Subject to Regulation (cont.)

i. Describe how the project will meet all performance standards set forth in 310 CMR 10.58(4) for the Riverfront Area, including standards requiring consideration of alternative project design or location. Attach additional sheets, if necessary.

4. Is the project exempt from the DEP Stormwater Management Policy?

Yes If yes, explain why the project is exempt:

No If no, stormwater management measures are required. Applicants are encouraged to complete the Stormwater Management Form and submit it with this Abbreviated Notice of Intent.

5. a. Is any portion of the proposed project located within estimated habitat as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program?

Yes If yes, include proof of mailing or hand delivery of Abbreviated Notice of Intent to :

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581-3336

No

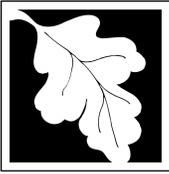
August 1, 2021

Date of Map

b. Is any portion of the proposed project in an Area of Critical Environmental Concern (ACEC)?

Yes If yes, provide name of ACEC (see the Area of Critical Concern list for ACEC locations):

No ACEC Name



Massachusetts Department of Environmental Protection
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Provided by DEP

Deerfield

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B. Site and Activities Subject to Regulation (cont.)

c. 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)?

Yes

No

6. If any activity within Land Subject to Flooding, the Riverfront Area, or Buffer Zone is exempt from performance standards in accordance with any provision of the wetlands regulations, 310 CMR 10.00, identify the appropriate exemption:

No work is proposed within a wetland resource area.

Exemption

C. Additional Information

Applicants must include the following with this Abbreviated Notice of Intent (ANOI):

- 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.
- Plans identifying the location of proposed activities relative to the boundaries of each affected resource area.
- Other material identifying and explaining the determination of resource area boundaries shown on plans (e.g., a DEP BVW Field Data Form).
- List the titles and final revision dates for all plans and other materials submitted with this ANOI.

D. Fees

The fees for work proposed under each Abbreviated Notice of Intent must be calculated and submitted to the Conservation Commission and DEP (see Instructions and NOI Wetland Fee Transmittal Form).

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:

65727

Check Number

Allen Chase Foundation, Eaglebrook School

Payor name on check

April 11, 2023

Check date

Applicant name on check



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 4 – Abbreviated Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP

Deerfield

Town

E. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Abbreviated 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 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.

Signature of Applicant

Date

Signature of Property Owner (If different)

Date

Signature of Representative (if any)

April 13, 2023

Date

For Conservation Commission:

Two copies of the completed Abbreviated Notice of Intent (Form 4), including supporting plans and documents; two copies of pages 1 and 2 of the NOI Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

For DEP:

Two copies of the completed Abbreviated Notice of Intent (Form 4), including supporting plans and documents; two copies of pages 1 and 2 of the NOI Wetland Fee Transmittal Form; and a **copy** of the state fee payment must be sent to the DEP Regional Office by certified mail or hand delivery.

Other:

If the applicant has checked the “yes” box in any part of Section B, Item 5, 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 Abbreviated Notice of Intent.



SECTION II – PROJECT NARRATIVE



PROJECT NARRATIVE

1.0 INTRODUCTION

On behalf of the Eaglebrook School, the Applicant & Owner, and in association with ProTerra Design Group, LLC (ProTerra), Lucas Environmental, LLC (LE) is pleased to submit this Abbreviated Notice of Intent (NOI) to the Deerfield Conservation Commission for the proposed renovations to the existing track and field to a synthetic turf field at the Eaglebrook School, located at 279 Pine Nook Road in Deerfield, Massachusetts.

As currently designed, proposed work associated with the track renovations will minimally occur within the outer 100-Foot Buffer Zone to Bordering Vegetated Wetlands (BVW) and Inland Bank within the limit of the existing track and field. This Abbreviated NOI is submitted in accordance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.).

This project narrative describes the existing conditions, wetland resource areas, proposed design, project impacts, and regulatory compliance for work within jurisdictional areas at the site. The proposed project is depicted on the enclosed Site Plans entitled “Track Renovation Project, Eaglebrook School, Pine Nook Road, Deerfield, MA,” prepared by ProTerra Design Group, LLC, dated April 13, 2023.

This project is exempt from the Deerfield General Bylaws per Section 155-3D Exemptions...(12), *stormwater discharges resulting from the activities subject to this bylaw that are wholly subject to jurisdiction under the Wetlands Protection Act and that demonstrate compliance with the Massachusetts Stormwater Management Standards as reflected in an Order of Conditions issued by the Conservation Commission.* A Request for a Determination of Applicability would be sufficient for this project; however, the Applicant has chosen to file this Abbreviated NOI in order for this local exemption to apply to the project.

2.0 EXISTING CONDITIONS

The project parcels consist of approximately 36 acres of developed and forested land identified as Parcel 62-3. The site is generally bounded by Pine Nook Road to the south, forested land to the west and north, and Rices Ferry Road to the east (See Figure 1 – USGS Map and Figure 2 – Aerial Map). The parcel contains the existing track and grass field for the Eaglebrook School. BVW consisting primarily of Palustrine Forested Wetland (PFO) is present to the east and west of the track and field. The wetlands are associated primarily with groundwater seepage slopes.

A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2021) under the Natural Heritage and Endangered Species Program (NHESP) indicates that the site is not located within Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species (See Figure 3 – NHESP Map). No Certified Vernal Pools under the jurisdiction of the Wetlands Protection Act Regulations (310 CMR 10.00 et seq.) or the Massachusetts Endangered Species Act (321 CMR 10.00 et seq.) occur at or in close proximity to the project site.

The site is not located within an Area of Critical Environmental Concern (ACEC), Outstanding Resource Water (ORW), or Watershed Protection Area.

Several private wells are located in proximity to the site with work proposed in MassDEP Wellhead Protection Areas for one of these wells. Work is proposed within the MassDEP Interim Wellhead Protection Area (IWPA) of “Cistern 07G” (Deerfield Fire District) . The “Well #6” (Eaglebrook School) IWPA is located south of the site.

According to the July 2, 1980, FEMA Flood Insurance Rate Map (FIRM) for Franklin County, Massachusetts, Map Panel Number 2501150008B, the site is mapped as Zone C, Area of Minimal Flooding. Therefore, Bordering Land Subject to Flooding (BLSF) is presumed not to be present within the project area.

3.0 WETLAND RESOURCE AREAS

A Professional Wetland Scientist (PWS) from LE conducted a site investigation on January 11, 2023, to investigate the presence of wetland resources in the vicinity of the proposed project. The wetland investigation was performed in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40) and regulations (310 CMR 10.00 *et seq.*); Section 404 of the Clean Water Act (33 U.S.C. 1344); Massachusetts Department of Environmental Protection (MassDEP) publication “Delineating Bordering Vegetated Wetlands” under the Massachusetts Wetlands Protection Act (1995); the U.S. Army Corp of Engineers (USACE) Wetland Delineation Manual (1987); and the Northcentral and Northeast Regional Supplement (2012). The site investigation was limited to wetland areas within 100 feet and perennial streams within 200 feet of the limits of proposed work (i.e., Study Area).

The following data sources were examined prior to the site investigation:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM);
- United States Geological Survey (USGS) Topographic Quadrangle and National Map;
- MassGIS MassDEP Wetland and Hydrography Datalayers;
- National Wetland Inventory (NWI) Maps;
- MassGIS Natural Heritage Atlas Datalayers; and
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey.

Jurisdictional wetland resource areas under the WPA identified within the Study Area include Inland Bank, and BVW. Under the WPA, wetlands within the Study Area are defined as follows. Photographic Documentation is included in Appendix A.

Since the delineation, MassDEP has released the Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands. No anticipated changes to the delineation are anticipated and the new BVW Determination Forms are included in Appendix D.

3.1 Inland Bank

Section 310 CMR 10.54 of the WPA defines a Bank as *the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland. The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low flow level.*

Bank is present within delineated portions of the wetland seeps and was not field delineated based upon the nature of the proposed work.

3.2 Bordering Vegetated Wetlands

Section 310 CMR 10.55 of the WPA defines BVW as *freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.* The delineated BVW are described below.

Wetland I – BVW

Wetland I is a BVW located to the west of the existing track and field. Portions of the wetland extend upgradient on the steep slope (seepage slope) where five separate seepages were delineated. The BVW boundary is delineated with pink survey tape numbered sequentially as noted below. State and federal boundaries are coincident.

- WFI-1 to 47;
- WFI-100 to 112;
- WFI-200 to 211;
- WFI-300 to 307; and
- WFI-400 to 410.

Common wetland vegetation within the seepages includes red maple (*Acer rubrum*), eastern hemlock (*Tsuga canadensis*), yellow birch (*Betula alleghaniensis*), ironwood (*Carpinus caroliniana*), gray birch (*Betula populifolia*), and cinnamon fern (*Osmunda cinnamomea*). Upland vegetation surrounding the wetland seeps consists of red oak (*Quercus rubra*), white oak (*Quercus alba*), black birch (*Betula lenta*), mountain laurel (*Kalmia latifolia*), multiflora rose (*Rosa multiflora*), and Christmas fern (*Polystichum acrostichoides*).

Wetland J – BVW

Wetland J is a small pocket wetland located to the east of the existing track and field. Originally thought to be isolated, this wetland is connected via the existing drainage system to the Wetland I-300 series to the west. There is an existing catch basin within Wetland J, that connects to an eight-inch corrugated plastic pipe (CPP). This pipe connects to a catch basin east of the existing track, which then conveys flow to a 10-inch CPP to another catch basin within the existing grass field. This catch basin is connected to another 10-inch CPP which discharges immediately upgradient of the WFI-300 series west of the track and field. As such, there is a direct hydrologic connection between Wetland I and J. No other connections were identified upon review of the existing drainage system.

The BVW boundary is delineated with pink survey tape numbered sequentially from WFJ-1 to WFJ-9. State and federal boundaries are coincident. Common vegetation within Wetland J includes red maple, eastern hemlock (*Tsuga canadensis*), ironwood (*Carpinus caroliniana*), black oak (*Quercus veluntina*), black birch (*Betula lenta*), mountain laurel (*Kalmia latifolia*), and princess pine (*Lycopodium obscurum*).

A site walk was conducted by Arthur Allen with EcoTec, Inc. and Joseph Orzel from LE on April 3, 2023 to review the wetland delineation associated with the Eaglebrook School proposed dining hall project (MassDEP File # WE 142-0234). Wetlands I and J were also reviewed at this time. Based upon EcoTec's review, three flags (WFI-304A, 304B, and 304C) were added to capture the limit of the intermittent stream flow between the existing culvert and the delineated WFI-300 series.

4.0 PROPOSED WORK

The proposed project will include the renovation of the existing grass athletic field to a synthetic turf field with sand/rubber infill. A new drainage system will be installed as part of the stormwater management system. No work is proposed to the existing rubber track surface surrounding the field. Work is located generally greater than 85 feet from the resource areas, other than one stone outlet protection at one discharge point in the Buffer Zone, upgradient of the WFI-200 series. The total disturbance proposed within the Buffer Zone is 2,178 square feet (0.05 acres). The total site disturbance, including work in the existing track and field upland areas, is 2.33 acres.

The two existing long/triple jump runways with sand landing pits will be removed. Two new goal posts are proposed for the field which is anticipated to be used for football, lacrosse, and soccer for the school. The new stormwater management system will tie into the existing drainage culverts, therefore new point source discharges will not be required. The proposed stormwater management system has been designed in accordance with the MassDEP Standards. See the Site Plans and Limited Stormwater Hydrology Report, prepared by ProTerra Design Group, LLC, dated April 13, 2023, for further details.

The proposed Stormwater Operation and Maintenance (O&M) Plan included in the Stormwater Management Report outlines procedures and time tables for the long-term operation and maintenance of the proposed site stormwater management system, including initial inspections upon completion of construction, and periodic monitoring of the system components in accordance with established practices and manufacturer's recommendations. The O&M Plan includes a list of responsible parties associated with inspections and maintenance.



PROJECT NARRATIVE

Erosion and sedimentation control BMPs have been incorporated into the project design in order to control runoff and prevent siltation to the wetland resource area during construction (See Site Plans). This will consist primarily of armored silt fence and/or silt sock around the track perimeter, and filter sacks and filter socks around catch basins. At the outset of the construction, the site limit of work will be staked, and erosion controls will be installed. In addition, silt fence will be used on the down-gradient sides of any material stockpile areas.

5.0 SUMMARY

The proposed project consists of the renovation of the existing athletic grass field to a synthetic turf field at the Eaglebrook School, located at 279 Pine Nook Road in Deerfield, Massachusetts. As currently designed, proposed work will minimally occur within the outer 100-Foot Buffer Zones to BVW and Inland Bank.

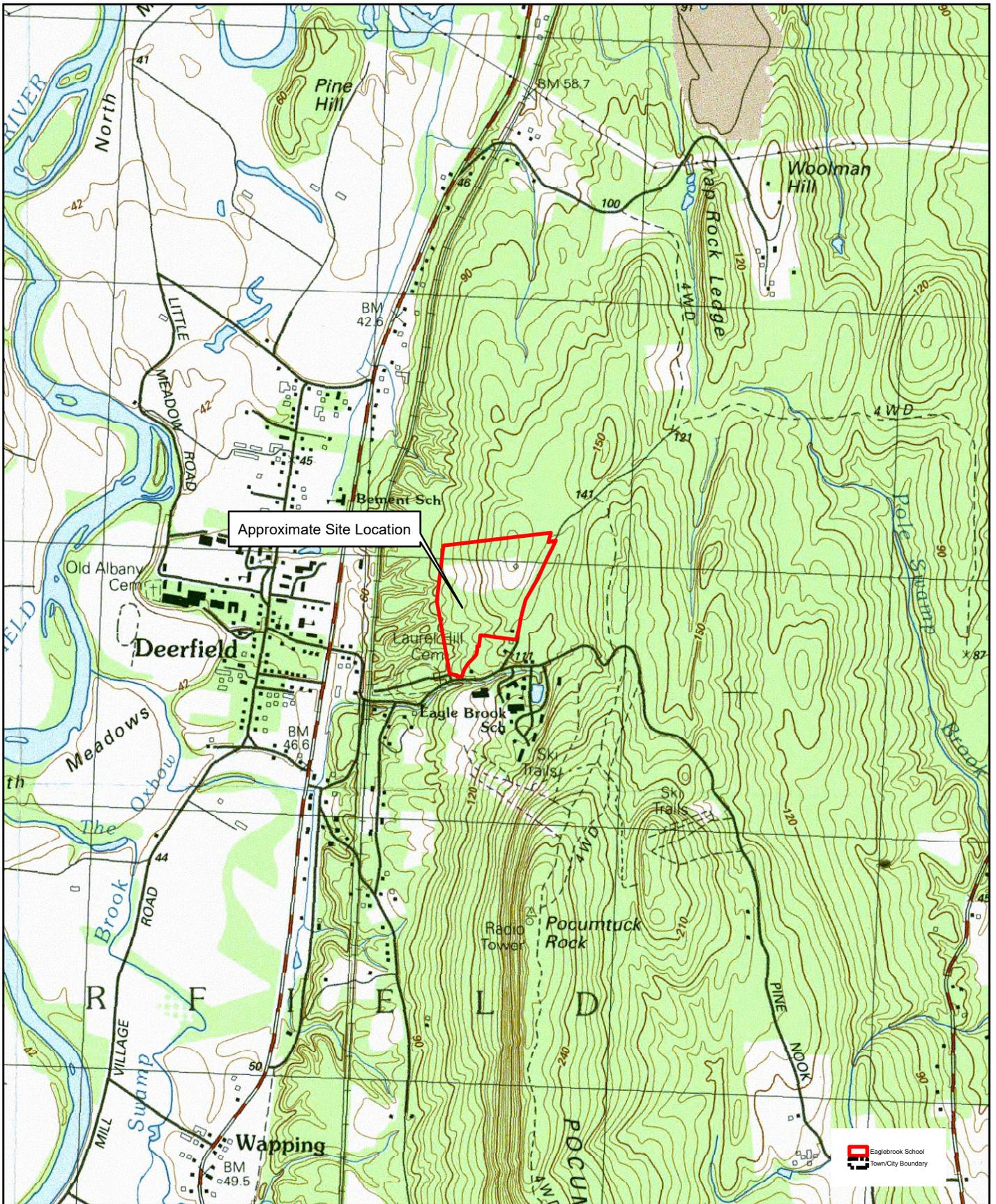
It is LE's opinion, based on our professional education, training, and familiarity with the project site, that the proposed work will not have any permanent adverse effect on any interests identified in the Wetlands Protection Act. The basis for our opinion is as follows:

- No work is proposed within any wetland resource areas.
- Work will be located at least 85 feet from the existing resource areas, and entirely within the existing athletic grass field within the limit of the rubber track.
- One stone outlet protection is proposed at one discharge point in the Buffer Zone, upgradient of the WFI-200 series, to reduce erosion.
- Erosion controls are proposed for the project to protect resource areas during construction.
- The project complies with the MassDEP Stormwater Management Standards.

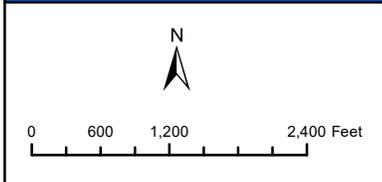
The proposed design achieves the goals of the Applicant, while being sensitive to adjacent regulated resource areas. Accordingly, the Applicant respectfully requests that the Conservation Commission consider a finding that the proposed design is adequately protective of the interests identified in the Wetlands Protection Act and issue an Order of Conditions approving the project as described in this Notice of Intent and as shown on the attached Site Plans.



SECTION III – FIGURES



Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs, USGS Topographic Quadrangle Images

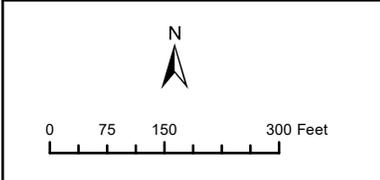


USGS Map
NOI - Track Renovation Project
Eaglebrook School
Deerfield, MA

FIGURE 1



Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 15cm (2021)



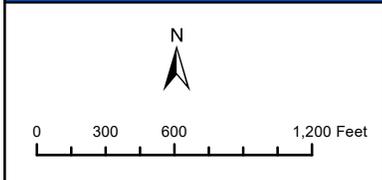
Aerial Map
NOI - Track Renovation Project
Eaglebrook School
Deerfield, MA

FIGURE 2

LUCAS
 ENVIRONMENTAL, LLC

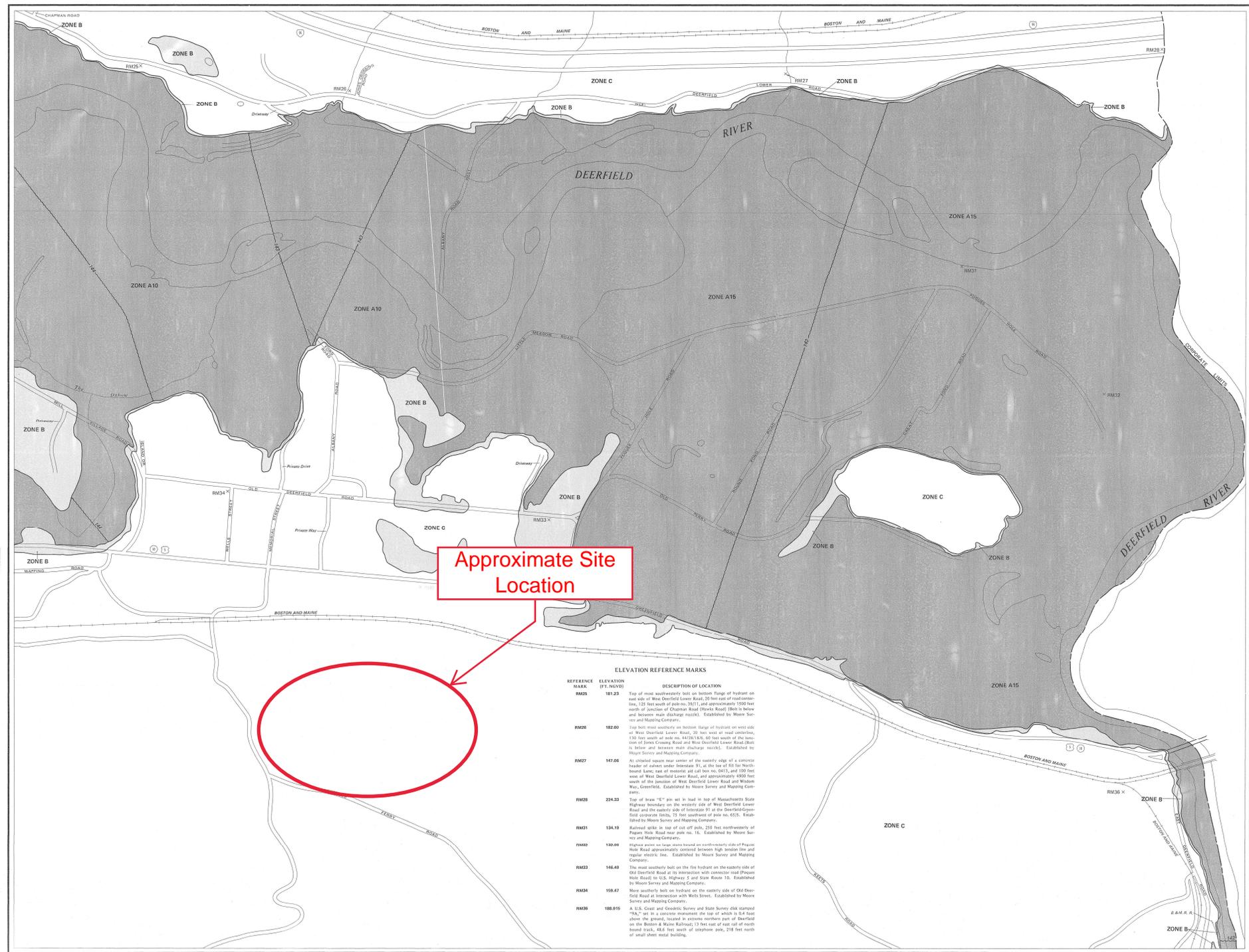


Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 15cm (2021)

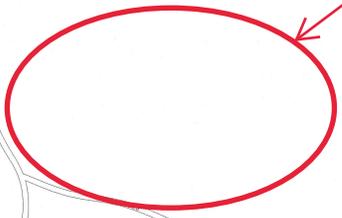


NHESP Map
NOI - Track Renovation Project
Eaglebrook School
Deerfield, MA





Approximate Site Location



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NAVD83)	DESCRIPTION OF LOCATION
RM25	181.23	Top of most westerly bolt on bottom flange of hydrant on east side of West Deerfield Lower Road, 25 feet east of road centerline, 125 feet south of pole no. 3911, and approximately 1500 feet south of junction of Chapman Road (Hess Road) (Bolt is below and between main discharge nocks). Established by Moore Survey and Mapping Company.
RM26	182.00	Top bolt most southerly on bottom flange of hydrant on west side of West Deerfield Lower Road, 25 feet east of road centerline, 150 feet south of pole no. 4428/1436, 60 feet south of the junction of Jones-Cooking Road and West Deerfield Lower Road (Bolt is below and between main discharge nocks). Established by Moore Survey and Mapping Company.
RM27	147.06	As unbolted square near center of the eastern edge of a concrete header or culvert under Interstate 91, at the top of 811 for North-bend Lane, east of entrance and cul box no. 2413, and 500 feet west of West Deerfield Lower Road, and approximately 4500 feet south of the junction of West Deerfield Lower Road and Boston Way, Greenfield. Established by Moore Survey and Mapping Company.
RM28	224.33	Top of brass "E" pin set in lead in top of Massachusetts State Highway boundary on the westerly side of West Deerfield Lower Road and the eastern side of Interstate 91 at the Deerfield-Greenfield connector limits, 75 feet southeast of pole no. 6526. Established by Moore Survey and Mapping Company.
RM31	134.19	Railroad spike in top of cut-off pile, 285 feet southwesterly of Pagans Hook Road near pole no. 18. Established by Moore Survey and Mapping Company.
RM32	132.00	Highest point on large stone located on northwesterly side of Pagans Hook Road approximately centered between high tension line and regular electric line. Established by Moore Survey and Mapping Company.
RM33	146.48	The most southerly bolt on the fire hydrant on the eastern side of Old Deerfield Road at its intersection with connector road (Pagans Hook Road) to U.S. Highway 2 and State Route 19. Established by Moore Survey and Mapping Company.
RM34	159.47	More southerly bolt on hydrant on the eastern side of Old Deerfield Road at intersection with Wells Street. Established by Moore Survey and Mapping Company.
RM36	188.915	A U.S. Coast and Geodetic Survey and State Survey disk stamped "RA," set in a concrete monument the top of which is 0.4 feet above the ground, located in extreme northern part of Deerfield on the Boston & Maine Railroad 13 feet east of rail cut of north bound track, 83.6 feet south of telephone pole, 21.8 feet north of small steel metal building.

KEY TO MAP

- 100-Year Flood Boundary
- 100-Year Flood Boundary
- Zone Designations With Date of Classification
- 100-Year Flood Boundary
- 300-Year Flood Boundary
- Rise Flood Elevation Line With Elevation In Feet**
- Rise Flood Elevation In Feet When Uniform Width Zone**
- Elevation Reference Mark
- Rise Mark
- **Referenced to the National Geodetic Vertical Datum of 1929

ZONE	EXPLANATION
A	Area of 100-year flood; base flood elevations and flood hazard factors determined.
A0	Area of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Area of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1A0	Area of 100-year flood; base flood elevations and flood hazard factors determined.
A1B0	Area of 100-year flood; base flood elevations and flood hazard factors determined.
B	Area between limits of the 100-year flood and 500-year flood or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile (all are subject to flooding from the base flood; Medium shading).
C	Area of minimal flooding (No shading).
D	Area of undetermined, but possible, flood hazards.
V	Area of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
VI V30	Area of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas may be in special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all historic features outside special flood hazard areas. For adjoining map panels, see separately printed Index to Map Panels.

INITIAL IDENTIFICATION:
SEPTEMBER 15, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
JULY 28, 1978

FLOOD INSURANCE RATE MAP EFFECTIVE:
JULY 2, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine what actual rates apply to insurance in the areas where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6276 or (800) 424-8872.

APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF DEERFIELD, MASSACHUSETTS
FRANKLIN COUNTY

PANEL 8 OF 12
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
250115 0005 B

EFFECTIVE DATE:
JULY 2, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

FIGURE 4



SECTION IV – APPENDICES



APPENDIX A

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPHIC DOCUMENTATION

DATE: January 11, 2023



Photograph 1: Typical view of the existing track and field, facing southeast.



Photograph 2: Typical view of the existing track and field, facing northeast.

PHOTOGRAPHIC DOCUMENTATION

DATE: January 11, 2023



Photograph 3: Typical view of Wetland I near flag WFI-15, facing upgradient.



Photograph 4: Typical view of Wetland I near flag WFI-108, facing upgradient.

PHOTOGRAPHIC DOCUMENTATION

DATE: January 11, 2023



Photograph 5: Typical view of Wetland I near flag WFI-211, facing upgradient.



Photograph 6: Typical view of Wetland I near flag WFI-304, facing upgradient.

PHOTOGRAPHIC DOCUMENTATION

DATE: January 11, 2023



Photograph 7: Typical view of Wetland I near flag WFI-407, facing upgradient.



Photograph 8: Typical view of Wetland J, facing the existing track and field.

ABUTTER INFORMATION



ABUTTER NOTIFICATION

Notification to Abutters

By Hand Delivery, Certified Mail (return receipt requested), or Certificates of Mailing

This is a notification required by law. You are receiving this notification because you have been identified as the owner of land abutting another parcel of land for which certain activities are proposed. Those activities require a permit under the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40).

In accordance with the second paragraph of the Massachusetts Wetlands Protection Act, Massachusetts General Laws Chapter 131, Section 40), and 310 CMR 10.05(4)(a) of the Wetlands Regulations, you are hereby notified of the following.

- A. An Abbreviated Notice of Intent was filed with the Deerfield Conservation Commission on April 13, 2023 seeking permission to remove, fill, dredge, or alter an area subject to protection under M.G.L. c. 131 §40. The following is a description of the proposed activity/activities:
Activities Proposed: **The proposed project will include the renovation of the existing grass athletic field to a synthetic turf field with sand/rubber infill. A new drainage system will be installed as part of the stormwater management system. No work is proposed to the existing rubber track surface surrounding the field. Work is located generally greater than 85 feet from the resource areas, other than one stone outlet protection at one discharge point in the Buffer Zone. The two existing long/triple jump runways with sand landing pits will be removed. Two new goal posts are proposed for the field which is anticipated to be used for football, lacrosse, and soccer for the school.**
- B. The name of the applicant is The Eaglebrook School
- C. The Address of the Land where the activity is proposed is 279 Pine Brook Road, Deerfield, MA
Parcel 62-3
- D. Copies of the Notice of Intent may be examined at the office of the Town of Deerfield
Conservation Commission, located at 8 Conway Street, South Deerfield, MA 01373
The regular business hours of the Commission are 9:00 AM to 4:00PM
on the following days of the week: Monday to Thursday
The Commission may be reached at 413.665.1400; Ext. 108
- E. Copies of the Notice of Intent may be obtained from either (check one) the Applicant or the Applicant's representative by calling this telephone number 617.405.4140
Name of Representative: Christopher M. Lucas, Lucas Environmental, LLC
An administrative fee may be applied for providing copies of the Abbreviated NOI and Plans.
- F. Information regarding the date, time, and location of the public hearing regarding the Abbreviated Notice of Intent may be obtained from the Deerfield Conservation Commission.

NOTE: Notice of the public hearing, including its date, time and place, will be published at least five (5) days in advance in the Greenfield Recorder

NOTE: To preserve your appeal rights you must submit comments/concerns in writing. Notification provided pursuant to the above requirement does not automatically confer standing to the recipient to request Departmental Action for the underlying matter. See 310 CMR 10.05(7)(a)4.

NOTE: You also may contact the nearest Department of Environmental Protection (MassDEP) Regional Office for more information about this application or the Wetlands Protection Act. Western Region: 413.784.1100.



100 foot Abutters List Report

Deerfield, MA
February 27, 2023

Subject Property:

Parcel Number: 62-3
CAMA Number: 62-3
Property Address: RICES FERRY RD

Mailing Address: ALLEN CHASE FOUNDATION
EAGLEBROOK SCHOOL
PO BOX 7
DEERFIELD, MA 01342

Abutters:

Parcel Number: 48-1
CAMA Number: 48-1
Property Address: RICES FERRY RD

Mailing Address: DEERFIELD FIRE DISTRICT
OLD MAIN ST
DEERFIELD, MA 01342

Parcel Number: 48-2
CAMA Number: 48-2
Property Address: RICES FERRY RD

Mailing Address: ALLEN CHASE FOUNDATION
EAGLEBROOK SCHOOL
PO BOX 7
DEERFIELD, MA 01342

Parcel Number: 61-54
CAMA Number: 61-54
Property Address: OFF PINE NOOK RD

Mailing Address: MAY CHARLES WILLIAM + MAY SCOTT
THOMAS
76 CLYDESDALE DR
PITTSFIELD, MA 01201

Parcel Number: 61-55
CAMA Number: 61-55
Property Address: OFF PINE NOOK RD

Mailing Address: VALESKI INVESTMENT TRUST VALESKI
CONRAD R TRUSTEE
8 WARD AVE
S DEERFIELD, MA 01373

Parcel Number: 61-56
CAMA Number: 61-56
Property Address: PINE NOOK RD

Mailing Address: TOWN OF DEERFIELD
8 CONWAY ST
SO DEERFIELD, MA 01373

Parcel Number: 62-1
CAMA Number: 62-1
Property Address: 3 RICES FERRY RD

Mailing Address: ALLEN CHASE FOUNDATION
EAGLEBROOK SCHOOL
PO BOX 7
DEERFIELD, MA 01342

Parcel Number: 62-13
CAMA Number: 62-13
Property Address: 283 PINE NOOK RD

Mailing Address: ALLEN CHASE FOUNDATION
EAGLEBROOK SCHOOL
PO BOX 7
DEERFIELD, MA 01342

Parcel Number: 62-2
CAMA Number: 62-2
Property Address: PINE NOOK RD

Mailing Address: DEERFIELD FIRE DISTRICT
OLD MAIN ST
DEERFIELD, MA 01342

Parcel Number: 62-4
CAMA Number: 62-4
Property Address: 278 PINE NOOK RD

Mailing Address: ALLEN CHASE FOUNDATION
EAGLEBROOK SCHOOL
PO BOX 7
DEERFIELD, MA 01342

Parcel Number: 62-5
CAMA Number: 62-5
Property Address: RICES FERRY RD

Mailing Address: DEERFIELD FIRE DISTRICT
OLD MAIN ST
DEERFIELD, MA 01342



www.cai-tech.com

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.



100 foot Abutters List Report

Deerfield, MA
February 27, 2023

Parcel Number: 69-50
CAMA Number: 69-50
Property Address: 11 COUNTY RD

Mailing Address: ALLEN CHASE FOUNDATION
EAGLEBROOK SCHOOL
PO BOX 7
DEERFIELD, MA 01342



www.cai-tech.com

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2/27/2023

Page 2 of 2

FILING FEE INFORMATION



CALCULATED FILING FEE STATEMENT

The proposed project is located at 279 Pine Nook Road in Deerfield, Massachusetts, and consists of the track renovations for the existing track and field. Proposed activities are included under Category 3(b) under the Wetlands Filing Fee Calculation Worksheet.

Category 3(b): *Construction of each building for any commercial, industrial, institutional, or apartment/condominium/townhouse-type development, any part of which is in a buffer zone or resource area. Any activities associated with the construction of said building, including associated site preparation, and construction of retention/detention basins, septic systems, parking lots, utilities, point source discharges, package sewage treatment plants, and roadways and driveways other than those roadways and driveways reviewable under 310 CMR 10.53(3)(e), shall not be subject to additional fees if all said activities are reviewed under a single Notice of Intent.* The fee is \$1,050.00 per activity under the WPA.

Wetlands Protection Act Fees:

Category 3(b) = \$1,050.00

State Share of WPA Filing Fee: $(\$1,050.00/2) - \$12.50 = \$512.50$

Town Share of WPA Filing Fee: $(\$1,050.00/2) + \$12.50 = \$537.50$

Check Payable to: Town of Deerfield for \$537.50

Check Payable to: Commonwealth of Massachusetts for \$512.50



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. Applicant:

<u>Wes</u>	<u>Smith</u>	<u>Eaglebrook School</u>
a. First Name	b. Last Name	c. Company
<u>271 Pine Nook Road</u>		
d. Mailing Address		
<u>Deerfield</u>	<u>MA</u>	<u>01342</u>
e. City/Town	f. State	g. Zip Code
<u>413.774.9166</u>		
h. Phone Number		

2. Property Owner (if different):

<u>Wes</u>	<u>Smith</u>	<u>Allen Chase Foundation</u>
a. First Name	b. Last Name	c. Company
<u>P.O. Box 7</u>		
d. Mailing Address		
<u>Deerfield</u>	<u>MA</u>	<u>01342</u>
e. City/Town	f. State	g. Zip Code
<u>413.774.9166</u>		
h. Phone Number		

3. Project Location:

<u>279 Pine Nook Road</u>	<u>Deerfield</u>
a. Street Address	b. City/Town

To calculate filing fees, refer to the category fee list and examples in the instructions for WPA Form 4 (Abbreviated Notice of Intent).

B. Fees

Notice of Intent (Form 3) or Abbreviated Notice of Intent (Form 4):

The fee should be calculated using the following six-step process and 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.

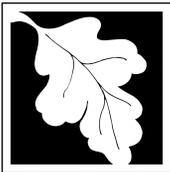
Step 2/Number of Activities: Identify the number of each type of activity.

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.



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

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 3(b)	1	\$1,050.00	\$1,050.00

Step 5/Total Project Fee: \$1,050.00

Step 6/Fee Payments:

Total Project Fee:	<u>\$1,050.00</u>
State share of filing fee:	<u>\$512.50</u>
City/Town share of filing fee:	<u>\$537.50</u>

a. Total fee from Step 5
 b. 1/2 total fee **less** \$12.50
 c. 1/2 total fee **plus** \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of pages 1 and 2 of this form; and the city/town fee payment.
- c.) **To DEP Regional Office** (see Instructions): Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of pages 1 and 2 of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

To: Commonwealth of Massachusetts

4/11/2023

EAGLEBROOK SCHOOL • Deerfield, Mass. 01342-0701

65727

INVOICE NO.	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	NET AMOUNT
Permit	4/11/2023	Lucas Environmental			
			Totals:	\$512.50 \$512.50	\$0.00 \$0.00
TOTALS					\$512.50 \$512.50

To: Commonwealth of Massachusetts

4/11/2023

EAGLEBROOK SCHOOL • Deerfield, Mass. 01342-0701

65727

INVOICE NO.	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	NET AMOUNT
Permit	4/11/2023	Lucas Environmental			
			Totals:	\$512.50 \$512.50	\$0.00 \$0.00
TOTALS					\$512.50 \$512.50



ALLEN-CHASE FOUNDATION
 EAGLEBROOK SCHOOL
 Deerfield, Massachusetts 01342-0701

PEOPLE'S UNITED BANK
 GREENFIELD, MASSACHUSETTS

51-7218
 2211

65727

CHECK DATE	CHECK NO.
4/11/2023	65727

CHECK AMOUNT
** 512.50

PAY **Five hundred twelve and 50/100 Dollars**

TO THE ORDER OF
 Commonwealth of Massachusetts

Eric M. Kelly
 AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

To: TOWN OF DEERFIELD

4/11/2023

EAGLEBROOK SCHOOL • Deerfield, Mass. 01342-0701

65728

INVOICE NO.	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	NET AMOUNT
Permits	4/11/2023	Lucas Environmental			
			Totals:	\$537.50 \$0.00	\$537.50 \$537.50
TOTALS					

To: TOWN OF DEERFIELD

4/11/2023

EAGLEBROOK SCHOOL • Deerfield, Mass. 01342-0701

65728

INVOICE NO.	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	NET AMOUNT
Permits	4/11/2023	Lucas Environmental			
			Totals:	\$537.50 \$0.00	\$537.50 \$537.50
TOTALS					



ALLEN-CHASE FOUNDATION
 EAGLEBROOK SCHOOL
 Deerfield, Massachusetts 01342-0701

PEOPLE'S UNITED BANK
 GREENFIELD, MASSACHUSETTS

51-7216
 2211

65728

CHECK DATE	CHECK NO.
4/11/2023	65728

CHECK AMOUNT
\$** 537.50

PAY **Five hundred thirty seven and 50/100 Dollars**

TO THE ORDER OF TOWN OF DEERFIELD
 8 Conway Street
 South Deerfield, MA 01373

Eric M. Kelly
 AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE



APPENDIX D

WETLAND DETERMINATION FORMS

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Eaglebrook School / Track Renovation Project City/Town: Deerfield, MA Sampling Date: January 11, 2023

Applicant/Owner: Eaglebrook School / Allen Chase Foundation Sampling Point or Zone: WFI-21/22 WET

Investigator(s): Joseph H. Orzel, PWS Latitude / Longitude: 42°32'35.98"N, 72°35'44.89"W

Soil Map Unit Name: Canton, Merrimac NWI or DEP Classification: PFO / BVW

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

Are Vegetation , Soil , or Hydrology significantly disturbed? (If yes, explain in Remarks)

Are Vegetation , Soil , or Hydrology naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydic Soils criterion met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetlands hydrology present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks, Photo Details, Flagging, etc.:			
Climatic conditions: most areas with no snow cover, other areas minimal (less than 1"), soil generally not frozen.			

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches) <u>1.00</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches) <u>4.00</u>
Saturation Present (including capillary fringe)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches) <u>0.00</u>
Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology <input type="checkbox"/> Water-stained leaves <input type="checkbox"/> Evidence of aquatic fauna <input type="checkbox"/> Iron deposits <input type="checkbox"/> Algal mats or crusts <input type="checkbox"/> Oxidized rhizospheres/pore linings <input type="checkbox"/> Thin muck surfaces <input type="checkbox"/> Plants with air-filled tissue (aerenchyma) <input type="checkbox"/> Plants with polymorphic leaves <input type="checkbox"/> Plants with floating leaves <input type="checkbox"/> Hydrogen sulfide odor	Indicators that can be Reliable with Proper Interpretation <input type="checkbox"/> Hydrological records <input checked="" type="checkbox"/> Free water in a soil test hole <input checked="" type="checkbox"/> Saturated soil <input type="checkbox"/> Water marks <input type="checkbox"/> Moss trim lines <input type="checkbox"/> Presence of reduced iron <input type="checkbox"/> Woody plants with adventitious roots <input type="checkbox"/> Trees with shallow root systems <input type="checkbox"/> Woody plants with enlarged lenticels	Indicators of the Influence of Water <input checked="" type="checkbox"/> Direct observation of inundation <input checked="" type="checkbox"/> Drainage patterns <input type="checkbox"/> Drift lines <input type="checkbox"/> Scoured areas <input type="checkbox"/> Sediment deposits <input type="checkbox"/> Surface soil cracks <input type="checkbox"/> Sparsely vegetated concave surface <input type="checkbox"/> Microtopographic relief <input checked="" type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	Eastern hemlock	Tsuga canadensis	FACU	20.0	Yes	Yes
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
			<u>20.0</u> = Total Cover			
<u>Shrub/Sapling Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	Eastern hemlock	Tsuga canadensis	FACU	5.0	Yes	Yes
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
			<u>5.0</u> = Total Cover			
<u>Herb Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
			<u>0.0</u> = Total Cover			

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name	Scientific name						
1.							
2.							
3.							
4.							
				0.0 = Total Cover			

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?	
	2	2	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	= 0.00
	FACW species		X 2	= 0.00
	FAC species		X 3	= 0.00
	FACU species		X 4	= 0.00
	UPL species		X 5	= 0.00
	Column Totals	(A) 0		(B) 0
Prevalence Index		B/A = 0.00		Is the Prevalence Index ≤ 3.0?
				Yes <input type="checkbox"/> No <input type="checkbox"/>
Wetland vegetation criterion met?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Definitions of Vegetation Strata

- Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Eaglebrook School / Track Renovation Project City/Town: Deerfield, MA Sampling Date: January 11, 2023

Applicant/Owner: Eaglebrook School / Allen Chase Foundation Sampling Point or Zone: WFI-21/22 UPL

Investigator(s): Joseph H. Orzel, PWS Latitude / Longitude: 42°32'35.98"N, 72°35'44.89"W

Soil Map Unit Name: Canton, Merrimac NWI or DEP Classification: PFO / BVW

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

Are Vegetation , Soil , or Hydrology significantly disturbed? (If yes, explain in Remarks)

Are Vegetation , Soil , or Hydrology naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydic Soils criterion met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetlands hydrology present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks, Photo Details, Flagging, etc.:
 Climatic conditions: most areas with no snow cover, other areas minimal (less than 1"), soil generally not frozen.

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)	_____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)	_____
Saturation Present (including capillary fringe)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)	_____

Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input type="checkbox"/> Water-stained leaves	<input type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input type="checkbox"/> Drainage patterns
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines
<input type="checkbox"/> Algal mats or crusts	<input type="checkbox"/> Water marks	<input type="checkbox"/> Scoured areas
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input type="checkbox"/> Sparsely vegetated concave surface
<input type="checkbox"/> Plants with polymorphic leaves	<input type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
<input type="checkbox"/> Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>30 ft radius</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Black birch	Betula lenta	FACU	30.0	Yes	No
2. Red maple	Acer rubrum	FAC	30.0	Yes	Yes
3. Black locust	Robinia pseudoacacia	FACU	20.0	Yes	No
4.					
5.					
6.					
7.					
8.					
9.					
			80.0 = Total Cover		
<u>Shrub/Sapling Stratum</u>		Plot size <u>15 ft radius</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Black birch	Betula lenta	FACU	10.0	Yes	No
2. Eastern hemlock	Tsuga canadensis	FACU	10.0	Yes	Yes
3. Eastern leatherwood	Dirca palustris	FAC	10.0	Yes	Yes
4.					
5.					
6.					
7.					
8.					
9.					
			30.0 = Total Cover		
<u>Herb Stratum</u>		Plot size <u>5 ft radius</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Mountain laurel	Kalmia latifolia	FACU	0.5	No	
2. Christmas fern	Polystichum acrostichoides	FACU	0.5	No	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			1.0 = Total Cover		

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size <u>30 ft radius</u>		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name		Scientific name					
1.	Oriental bittersweet	Celastrus orbiculatus		FACU	5.0	Yes	No
2.							
3.							
4.							
				5.0 = Total Cover			

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?	
	7	3	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	= 0.00
	FACW species		X 2	= 0.00
	FAC species		X 3	= 0.00
	FACU species		X 4	= 0.00
	UPL species		X 5	= 0.00
	Column Totals	(A) 0		(B) 0
Prevalence Index		B/A = 0.00		Is the Prevalence Index ≤ 3.0?
				Yes <input type="checkbox"/> No <input type="checkbox"/>
Wetland vegetation criterion met?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Definitions of Vegetation Strata

- Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Eaglebrook School / Track Renovation Project City/Town: Deerfield, MA Sampling Date: January 11, 2023

Applicant/Owner: Eaglebrook School / Allen Chase Foundation Sampling Point or Zone: WFJ-1 WET

Investigator(s): Joseph H. Orzel, PWS Latitude / Longitude: 42°32'38.50"N, 72°35'40.87"W

Soil Map Unit Name: Merrimac NWI or DEP Classification: PFO / BVW

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

Are Vegetation , Soil , or Hydrology significantly disturbed? (If yes, explain in Remarks)

Are Vegetation , Soil , or Hydrology naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydic Soils criterion met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetlands hydrology present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks, Photo Details, Flagging, etc.:
 Climatic conditions: most areas with no snow cover, other areas minimal (less than 1"), soil generally not frozen.

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)	_____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)	_____
Saturation Present (including capillary fringe)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)	_____

Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input type="checkbox"/> Water-stained leaves	<input type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input type="checkbox"/> Drainage patterns
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines
<input type="checkbox"/> Algal mats or crusts	<input type="checkbox"/> Water marks	<input type="checkbox"/> Scoured areas
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input checked="" type="checkbox"/> Sparsely vegetated concave surface
<input type="checkbox"/> Plants with polymorphic leaves	<input checked="" type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input checked="" type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
<input type="checkbox"/> Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Red maple	Acer rubrum	FAC	20.0	Yes	Yes
2. Eastern hemlock	Tsuga canadensis	FACU	20.0	Yes	Yes
3. Black birch	Betula lenta	FACU	20.0	Yes	No
4.					
5.					
6.					
7.					
8.					
9.					
			60.0 = Total Cover		
<u>Shrub/Sapling Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Black birch	Betula lenta	FACU	20.0	Yes	No
2. American hornbeam	Carpinus caroliniana	FAC	10.0	Yes	Yes
3. Eastern hemlock	Tsuga canadensis	FACU	5.0	No	Yes
4.					
5.					
6.					
7.					
8.					
9.					
			35.0 = Total Cover		
<u>Herb Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Mountain laurel	Kalmia latifolia	FACU	2.0	No	
2. Princess pine	Lycopodium obscurum	FACU	0.5	No	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			2.5 = Total Cover		

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name	Scientific name						
1.							
2.							
3.							
4.							
				0.0 = Total Cover			

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?	
	5	3	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	= 0.00
	FACW species		X 2	= 0.00
	FAC species		X 3	= 0.00
	FACU species		X 4	= 0.00
	UPL species		X 5	= 0.00
	Column Totals	(A) 0		(B) 0
Prevalence Index		B/A = 0.00		Is the Prevalence Index ≤ 3.0?
				Yes <input type="checkbox"/> No <input type="checkbox"/>
Wetland vegetation criterion met?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Definitions of Vegetation Strata

- Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Eaglebrook School / Track Renovation Project City/Town: Deerfield, MA Sampling Date: January 11, 2023

Applicant/Owner: Eaglebrook School / Allen Chase Foundation Sampling Point or Zone: WFJ-1 UPL

Investigator(s): Joseph H. Orzel, PWS Latitude / Longitude: 42°32'38.50"N, 72°35'40.87"W

Soil Map Unit Name: Merrimac NWI or DEP Classification: PFO / BVW

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

Are Vegetation , Soil , or Hydrology significantly disturbed? (If yes, explain in Remarks)

Are Vegetation , Soil , or Hydrology naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydic Soils criterion met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetlands hydrology present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks, Photo Details, Flagging, etc.:
 Climatic conditions: most areas with no snow cover, other areas minimal (less than 1"), soil generally not frozen.

HYDROLOGY

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input type="checkbox"/> Water-stained leaves	<input type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input type="checkbox"/> Drainage patterns
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines
<input type="checkbox"/> Algal mats or crusts	<input type="checkbox"/> Water marks	<input type="checkbox"/> Scoured areas
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input type="checkbox"/> Sparsely vegetated concave surface
<input type="checkbox"/> Plants with polymorphic leaves	<input type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
<input type="checkbox"/> Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>30 ft radius</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Black oak	Acer rubrum	UPL	50.0	Yes	No
2. Black birch	Betula lenta	FACU	20.0	Yes	No
3. White pine	Pinus strobus	FACU	10.0	No	No
4. Red maple	Acer rubrum	FAC	10.0	No	Yes
5.					
6.					
7.					
8.					
9.					
		90.0 = Total Cover			
<u>Shrub/Sapling Stratum</u>		Plot size <u>15 ft radius</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Black birch	Betula lenta	FACU	25.0	Yes	No
2. Mountain laurel	Kalmia latifolia	FACU	5.0	No	No
3.					
4.					
5.					
6.					
7.					
8.					
9.					
		30.0 = Total Cover			
<u>Herb Stratum</u>		Plot size <u>5 ft radius</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Mountain laurel	Kalmia latifolia	FACU	10.0	Yes	
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
		10.0 = Total Cover			

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size <u>irregular plot, narrow wetland area</u>		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name		Scientific name					
1.							
2.							
3.							
4.							
				0.0 = Total Cover			

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?	
	4	0	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	= 0.00
	FACW species		X 2	= 0.00
	FAC species		X 3	= 0.00
	FACU species		X 4	= 0.00
	UPL species		X 5	= 0.00
	Column Totals	(A) 0		(B) 0
Prevalence Index		B/A = 0.00		Is the Prevalence Index ≤ 3.0?
				Yes <input type="checkbox"/> No <input type="checkbox"/>
Wetland vegetation criterion met?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Definitions of Vegetation Strata

- Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

