REQUEST FOR DETERMINATION OF APPLICABILITY

Pare Project No. 17169.00

Pursuant to
The Massachusetts Wetlands Protection Act
and the
Town of Foxborough Wetlands Protection Bylaw

REVOLUTION SOCCER TRAINING CENTER
Foxborough, Massachusetts

Applicant:

Foxboro Realty Associates, LLC
c/o Daniel Krantz
1 Patriots Place
Foxborough, MA 02035

NOVEMBER 2023

PARE CORPORATION
ENGINEERS SCIENTISTS PLANNERS

PARE CORPORATION

November 6, 2023

Mr. Robert Boette, Chairman
Foxborough Conservation Commission
40 South Street
Foxborough, MA 02035

Re: **Request for Determination of Applicability**
Revolution Soccer Training Center
1776 Revolution Way
Foxborough, MA
(Pare Project No. 17169.00)

Dear Mr. Boette and Members of the Foxborough Conservation Commission:

On behalf of Foxboro Realty Associates, LLC (the Applicant) and pursuant to the Regulations of the Massachusetts Wetlands Protection Act 310 CMR 10.00 (referred to herein as the WPA Regulations) and Town of Foxborough Wetlands Protection Bylaw (referred to herein as the Bylaw), Pare Corporation (Pare) submits a Request for Determination of Applicability (RFD) to complete the previously permitted construction of the west soccer field at the Revolution Soccer Training Center, located at 1776 Revolution Way in Foxborough. Enclosed for your review are (1) original and seven (7) copies of an RFD for the above-referenced project, including the signed RFD Form, Figures, Site Photographs, updated Wetland Delineation Report, and Annotated Construction Plans showing the limits of currently proposed work. A $200.00 check is enclosed to cover the municipal RFD filing fee.

I. Background

An Order of Conditions (OOC) for the Revolution Soccer Training Center was issued on October 16, 2018 (DEP File No. 157-0579). Accounting for the 462-day tolling period approved under COVID 19 Order 42, "*Order Resuming State Permitting Deadlines and Continuing to Extend the Validity of Certain State Permits*" issued on July 2, 2020 ("COVID Order No. 42"), the OOC expired on January 21, 2023.

Most of the construction for the facility was completed in 2019 in substantial compliance with the OOC. Completed work included a new 2-story, 98' by 195' soccer training and office building; two natural turf soccer training fields adjacent to the building; a new maintenance/storage building; access road improvements, including two replacement stream crossings; parking areas; utility improvements; a stormwater management system; a new irrigation pond with associated irrigation pump house; landscaping improvements; several wetland impact mitigation projects, including Riverfront Area restoration, a wetland replication area, removal of three obsolete culverts, and restoration to an area of inadvertent wetland disturbance. Portions of the permitted work that were not completed include construction of a new synthetic turf soccer field and associated parking at the west side of the site, although site clearing and preparation activity for this portion of the project was initiated under the OOC. Additionally, the previously permitted pedestrian walkway/boardwalk connecting the Training Center with the western field was not constructed, and has since been removed from the scope of the project.

Currently, the Applicant proposes to move forward with construction of the west soccer field and associated parking and site improvements. During a site visit with the Conservation Commission Chairman Robert Boette and interim Conservation Agent John Thomas on October 27, 2023, it was recommended that the Applicant submit a PCOC for the completed work and a Request for Determination of Applicability (RFD) for the remaining work to be completed. A PCOC for the completed portions of the work has been submitted concurrently with this RFD submission and provides additional documentation of the completed work.

II. Existing Site Conditions

The site of the proposed west soccer field and associated parking area consists primarily of cleared, leveled land which was prepared for development under the OOC, and is currently being used for equipment staging. Sediment controls are present along the perimeter of the cleared area and are currently in good condition. The southernmost extent of the work area is located within the tree line, however this area is outside of the buffer zone and Riverfront Area. The remaining vegetated areas in the limits of work are primarily colonized by early successional forested and sapling/shrub dominated areas with high densities of invasive understory growth. The proposed limits of disturbance overlaid against the existing limits of clearing are shown on the attached Plan Sheet entitled "Limit of Work on Aerial", attached in Section 4.

Pare completed updated delineations of wetlands within the work area on October 25, 2023. These delineations have replaced the former 2017 delineations on the Project Plans, although the 2017 delineations remain shown outside the currently proposed Limits of work. The updated delineations are generally consistent with the former delineations and are shown on Figure 2 attached in Section 2 of this RFD, and on the Construction Plan Annotated with 2017 and 2023 Wetlands, attached in Section 4. Descriptions of the areas are provided in Section 3: Wetland Delineation Documentation and listed below:

- Flag series R: River Bank with associated 200-foot Riverfront Area
- Flag series E: Bordering Vegetated Wetland (BVW) with associated 100' Buffer Zone and municipal 25' No Alteration Zone
- Flag series C, D, F, and H: Isolated Freshwater Wetlands under the jurisdiction of the Foxborough Wetlands Protection Bylaw (>500 sf). None of these areas meet the flood volume requirements to qualify as Isolated Land Subject to Flooding (ILSF) under the WPA Regulations.
- Flag series A, B, and G: Non Jurisdictional Wetland areas (< 500 sf)
- Bordering Land Subject to Flooding (Zone A) along the stream corridor north of the site.

The 2023 delineations were generally consistent with the 2017 delineations, although minor deviations occurred in some locations. These changes will not result in increases to resource area impacts beyond what was already approved under the OOC. Note that two Isolated Freshwater Wetlands (designated as series 25 and 26) have already been filled as part of the site preparation activities authorized under the OOC.

III. Proposed Work

At this time, the Applicant proposes to move forward with construction of the west soccer field and associated parking and site improvements as shown on the attached Project Plans. The proposed work is consistent with the previously approved design. However, the approved pedestrian path/boardwalk connecting the west field with the training facility been removed from the project scope.

The work includes the following elements, as shown on the Annotated Construction Plans in Section 4:

- A new 255' x 390' synthetic turf field intended for use by the Revolution Academy. Chain-link fence and protective netting will be installed around the field's perimeter.
- Parking to the north of the field, including a bituminous pavement parking area (87 spaces) south of the access drive and an overflow gravel parking area (49 spaces).north of the access drive.
- Stormwater Management system and utility upgrades, as shown on the Plans.

Most of the work is to occur within previously disturbed areas on the site, and additional clearing is primarily confined to significantly disturbed early successional areas that were part of a former gravel mining operations. Spoil piles, debris, and dense invasive species are present throughout these areas.

It should be noted that the project plans show approximately 1,000 square feet of additional work area at the northwest corner of the site for construction of an overflow weir from the infiltration basin (referred to in the Stormwater Management Report as pond 201W.2P). The calculations for this basin are included in the most recent Stormwater Report prepared for the project dated September 20, 2018, which was submitted to the Commission. The revised grading required to make the basin operate as intended was not captured on the plans approved under the OOC, however was incorporated into the 2019 Construction Documents. The weir's finished condition will be entirely vegetated with upland seed mix. Calculations for this feature are summarized below:

- In the 2-year storm, the basin drains 100% via recharge and there is no overflow onto the weir.
- In the 10-year storm, the basin drains via recharge and there is also 0.6 cfs (0.71 fps) overflow onto the weir.
- In the 100-year storm, the basin drains via recharge and there is also 2.4 cfs (1.1 fps) overflow onto the weir.

Because the work is consistent with what was previously approved under the OOC and the most recently submitted Stormwater Management Report, no new Stormwater Management Report is submitted with this RFD. If the Commission requires additional copies of the approved Stormwater Management Report for the project, Pare can provide these upon request.

IV. Wetland Impacts and Regulatory Compliance

a. 200-foot Riverfront Area

The proposed project includes approximately 68,600 square feet of previously approved work within the 200' Riverfront Area, most of which was previously degraded by gravel mining operations. Most of the Riverfront Area within the LOD (63,200 square feet) has already been disturbed as part of the site preparation work completed under the OOC, which included clearing and leveling of the site. Approximately 5,400 square feet of additional vegetation removal remains to be completed at the northwest corner of the site.

Under the OOC, Riverfront Area restoration totaling approximately 79,258 square feet was approved along the south, east, and west sides of the river to offset disturbance to Riverfront Area. Most of the restoration work was completed during the construction of the Revolution Training Center in 2019 and included removal of debris and invasive species from degraded Riverfront Area and supplementing the plant community with plantings of native trees and shrubs. The only remaining areas of restoration to be completed are located along the north side of the proposed west soccer field and will be completed as part of the work proposed under this RFD.

Pare recently completed investigations of these areas in October 2023, which are documented in the "Interim Mitigation Monitoring Report" included in the PCOC. To summarize, Pare found that most of the restoration areas are now dominated by native species and well stabilized with vegetative cover in compliance with the OOC, however some areas of concentrated invasives are present along developed edges. Invasive species were tagged with blue flagging for removal during the Spring of 2024. Pare has recommended that supplemental native plantings be provided in portions of the restoration areas with sparsely vegetated understories, as well as in areas where substantial invasive vegetation removal is likely to expose the soils. Pare understands that the areas must be demonstrated successful to obtain a full COC for the project upon completion of the western field, and will continue to provide ongoing monitoring of these areas.

b. 100-foot Buffer Zone and 25' No Activity Zone

The proposed project includes previously approved work within disturbed portions of the 100' Buffer Zone. As with the Riverfront Area, most of the Buffer Zone within the LOD has already been cleared and graded as part of the site preparation work. Remaining clearing within the buffer zone consists of approximately 5,400 square feet associated with the stormwater basin at the northwest side of the site.

Two minor deviations in the E-series BVW edge have resulted in slight expansions in the 100-foot buffer; however, these areas have already been cleared and leveled. No new vegetation clearing activities will occur within the Buffer Zone under this RFD.

Disturbance within the municipal 25' No Activity Zone (NAZ) is limited to approximately 500 square feet for construction of the overflow weir. Improvements along the existing access drive over the recently replaced stream crossing will occur within previously cleared and graded. The previously permitted pedestrian walkway extending from the southeast end of the field, which included work in the 25' NAZ and a boardwalk wetland/intermittent stream crossing, has been removed from the scope of the project.

c. Isolated Freshwater Wetland (Bylaw jurisdiction only)

Two (2) isolated freshwater wetlands previously delineated within the work limits were already filled under the former OOC. One additional, minor area of fill totaling approximately 382 square feet will occur at the north end of the H-series Isolated Freshwater Wetland (formerly series 22). This area is jurisdictional under the Bylaw but does not qualify for protection under the WPA Regulations. The impact area is highly disturbed, characterized by irregular topography and dominated by invasive species, and has a marginal hydrology. Note that the 2023 delineation is slightly lower than the 2017 delineation in this location, resulting in a reduction in the previously calculated impact of 512 square feet.

The wetland replication work completed under the OOC included 12,032 square feet of fill and debris removal within a former wetland along either side of the intermittent stream channel immediately north of the Training Center Building. This work offset the site-wide fill of vegetated wetlands at a ratio of 2.3:1. Pare's recent investigations of this area during October and November of 2023 concluded that the area meets the standards for mitigation established in the OOC, with nearly 100% cover of native vegetation throughout, although minor corrective actions are recommended to address relatively minor invasive species encroachments in the area. Pare's findings are documented in the "Interim Mitigation Monitoring Report" included in the PCOC. Pare requests that the minor impacts to the isolated H-series wetland be accepted under the RFD given that successful mitigation for these impacts has already been established.

On behalf of the Applicant, Pare respectfully requests that the Foxborough Conservation Commission issue a Negative Determination of Applicability allowing for the remaining work to proceed as proposed. We look forward to discussing the PCOC and RFD with you at the public meeting on November 20, 2023. Thank you for your consideration of this request, and please feel free to contact me with questions.

Sincerely,

Lauren H. Gluck, P.W.S.
Pare Corporation

cc: DEP Southeast Regional Office
The Kraft Group
File

Z:\JOBS\17 Jobs\17169.00 Kraft - Soccer Field Planning MA\Permits\2023 Additional Field\RDA\RFD Cover Letter.docx

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SECTION 1

Administrative Documentation

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Foxborough Wetlands Protection Bylaw, Chapter 267

Foxborough

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.

1. ☐ **Applicant** *or* ☒ **Property Owner's Representative:**

Pare Corporation (Name / Firm)	Lauren Gluck, PWS (Representative Name *(if applicable)*)
10 Lincoln Road, Suite 210 (Mailing Address)	
Foxborough (City/Town)	MA (State) 02035 (Zip Code)
508-543-1755 (Phone Number)	LGluck@parecorp.com (Email Address)

2. ☒ **Property Owner** *(if different from Applicant)*:

Foxboro Realty Associates, LLC c/o Daniel Krantz (Name)	DKrantz@thrkraftgroup.com (E-Mail Address / Phone Number)
One Patriot Place (Mailing Address)	
Foxborough (City/Town)	MA (State) 02035 (Zip Code)

3. **Foxborough Wetlands Protection Bylaw filing fee** enclosed:

☐ Single Family House: $75 ☒ Industrial / Other: $200 ☐ Habitat Restoration / Scout Project: $0

B. Determinations

1. I request that Foxborough Conservation Commission make the following determination(s).

☐ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to the jurisdiction of the State Wetlands Protection Act.

☒ b. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.

☒ c. whether the **area and/or work** depicted on plan(s) referenced below is subject to the jurisdiction of the Foxborough Wetlands Protection Bylaw.

C. Project Description

1. a. **Project Location** *(use maps and plans to identify the location of the area subject to this request):*

1776 Revolution Way (Street Address)	Foxborough (Town)	010 (Assessors Map/Plat Number)	007-000 (Parcel/Lot Number)

b. **Area Description** *(i.e. back yard, lawn, wooded area, conservation area, industrial, etc.):*

Primarily cleared and graded land on the west side of the Revolution Soccer Training Center site.

c. **Plan and/or Map Reference**
(Hint: hand-draw your proposed project onto an Assessor's map, Google map or MassGIS aerial photo.)

"Foxboro Realty Associates, LLC - Soccer Training Facilities" (3 annotated Construction Plan sheets) (Title)	November 2023 (Date)
"Limit of Work on Aerial – Soccer Training Facilities" (Title)	November 2023 (Date)

C. Project Description *(continued)*

2. a. **Detailed Description of Proposed Work,** shown in the above plans:

   Construction of a synthetic turf soccer field, parking, and associated site improvements at the west side of the Revolution Training Center site. This work was previously approved under an Order of Conditions that has expired (DEP File No.157-579). Most of the site preparation has been completed and the project will have minimal resource area impacts. See attached cover letter.

   b. Identify provisions *(if any)* of the MA Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work.

   The project was previously approved under a since-expired OOC. Site preparation resulting in disturbance to the resource areas was completed under the OOC and no additional impacts are proposed beyond the scope of what was previously approved.

3. a. **Riverfront Requirements** *(if applicable)*

   If the proposed project is located within 200 feet of a river, indicate the *one* classification below that best describes the project:

   For lots recorded on or before 8/1996:

   ☐ Single family house on a lot recorded on or before 8/1/96

   ☐ Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96

   For lots recorded after 8/1/96:

   ☐ Single family house on a lot recorded after 8/1/96

   ☐ Expansion of an existing structure on a lot recorded after 8/1/96

   Other Projects:

   ☐ Municipal project

   ☐ District, county, state, or federal government project

   ☐ Public project where funds were appropriated prior to 8/7/96

   ☒ Residential subdivision; institutional, industrial, or commercial project

   ☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision

   ☐ New agriculture or aquaculture project

   ☐ Project required to evaluate off-site alternatives in more than one municipality for an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. ACOE or 401 Water Quality Certification from the MassDEP.

   b. Provide evidence *(e.g., record of date subdivision lot was recorded)* supporting one of the classifications above *(use additional paper and/or attach appropriate documents, if necessary).*

   Evidence:

D. Signatures and Submittal Requirements

Name and Address of Property Owner:

Foxboro Realty Associates LLC
Name

One Patriot Place	Foxborough	MA	02035
Mailing Address	City/Town	State	Zip Code

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate MassDEP Regional Office *(see below)* were sent a complete copy of this Request *(including all appropriate documentation)* simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

I also understand that notification of this Request will be placed in a local newspaper *(by the Conservation Office)* at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signatures:

Signature of Applicant	Date 11/2/23
Signature of Representative (if any)	Date 11/2/23

Tax Collector's Release and Signature: The above referenced applicant is applying for a permit from the Conservation Commission and is in good standing with respect to any taxes, fees, assessments, betterments or other municipal charges as recorded with the Foxborough Treasurer's Office.

Signature of Foxborough Tax Collector or Agent	Date

Submittal Requirements:

For the Conservation Commission:

One (1) original and seven (7) copies of this completed Request *(including all plans, other documentation, and Town filing fee payment),* by mail or hand delivery to:

Foxborough Conservation Commission
40 South Street
Foxborough, MA 01035

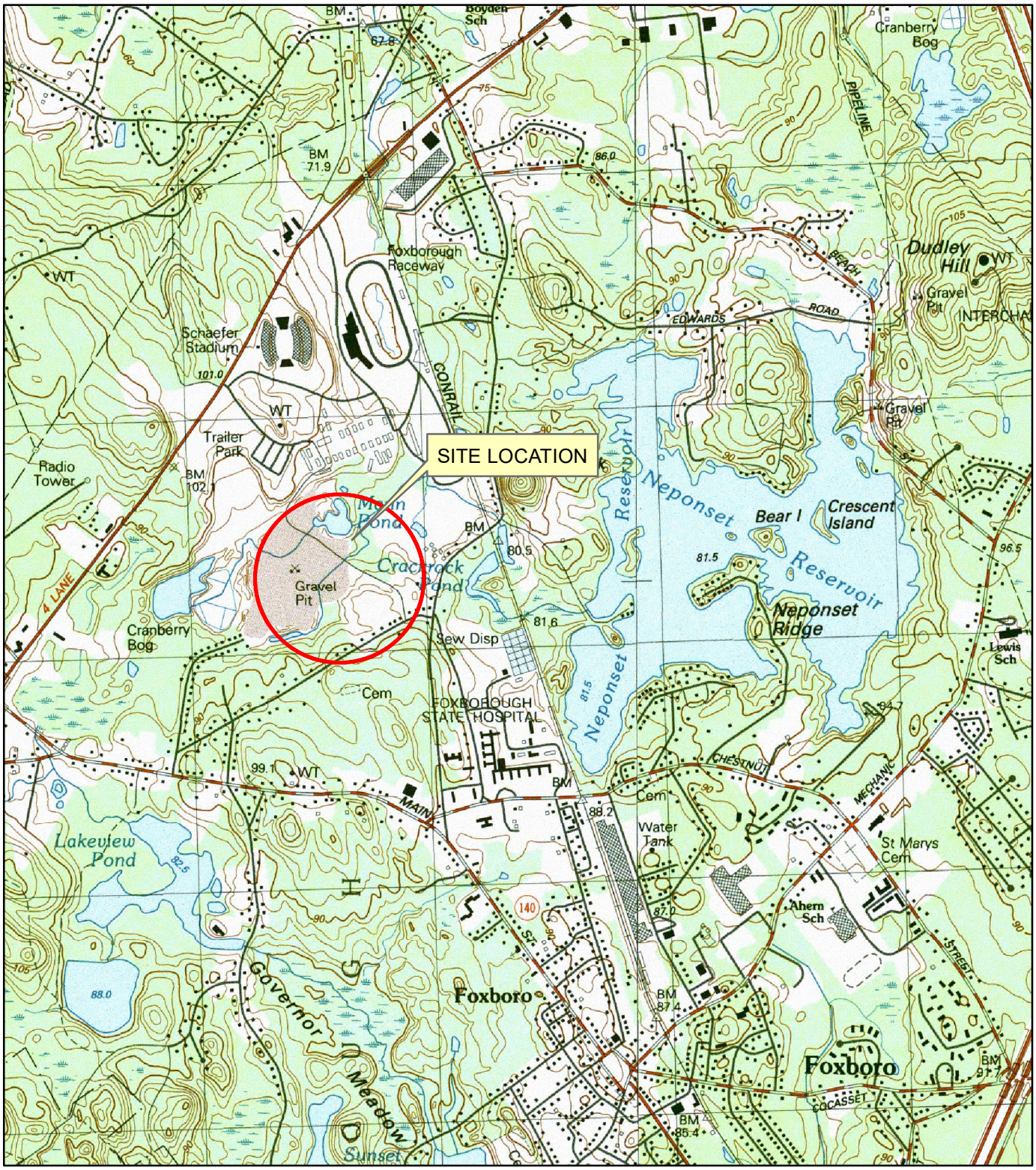
For MassDEP:

One (1) copy of the completed Request *(including all documentation; no State filing fee is required)* by certified mail or hand delivery to:

MassDEP, Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347

SECTION 2

Figures



MASS GIS

SITE LOCATION MAP

SCALE:1"= 2,000'

N
W E
S

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 17169.00 NOVEMBER 2023

FIGURE 1

REVOLUTION TRAINING CENTER
1776 REVOLUTION WAY
FOXBOROUGH, MA

N
W E
S

UTION WAY (FORMERLY KEITH ROAD)

R-SERIES PERENNIAL STREAM

WETLAND A (NON JURISDICTIONAL)

WETLAND B (NON JURISDICTIONAL)

WETLAND C (ISOLATED WETLAND)

WETLAND D (ISOLATED WETLAND)

WETLAND E (BVW)

RESTORED ISOLATED WETLAND (AREA 15)

REVOLUTION TRAINING CENTER

COMPLETED CULVERT REMOVALS

WETLAND G (NON JURISDICTIONAL)

WETLAND H (ISOLATED WETLAND)

WETLAND F (NON JURISDICTIONAL)

IRRIGATION POND

Legend

- Current Wetland Delineations (10-25-23)
- 25-ft No Alteration Zone
- 100-ft Buffer Zone
- 200-ft Riverfront Area
- Potential Vernal Pool (PVP)
- Wetland Replication
- 200' Riverfront Area Restoration
- Previous Wetland Delineations (2017)
- Isolated Wetlands Filled Under OOC

100 50 0 100 Feet

ANNOTATED AERIAL PHOTOGRAPH

REVOLUTION TRAINING CENTER
1776 REVOLUTION WAY
FOXBOROUGH, MA

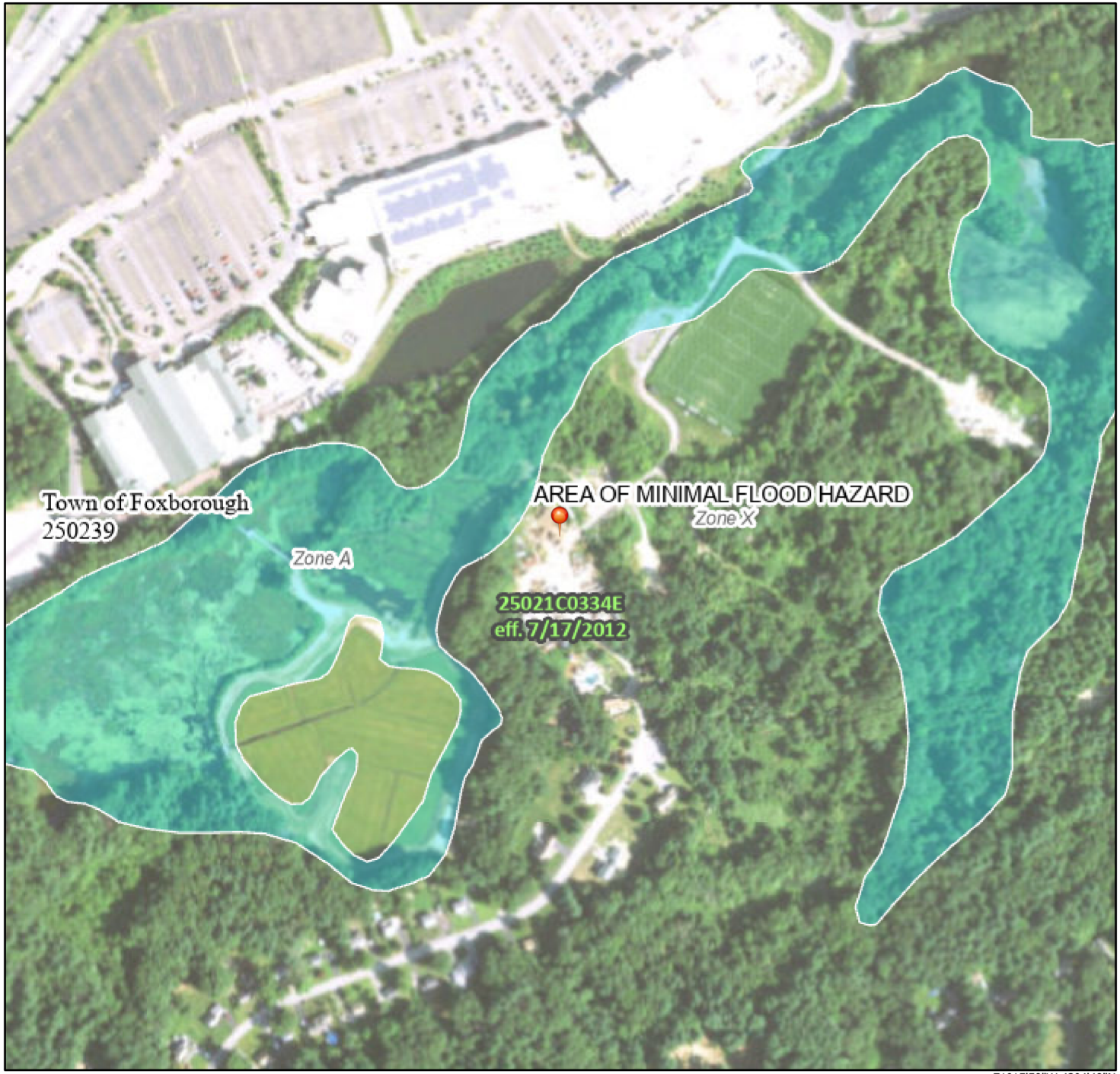
PARE PROJECT No. 17169.00
DATE: NOVEMBER 2023
SCALE: 1"=100'

FIGURE 2

National Flood Hazard Layer FIRMette

FIGURE 3

71°16'28"W 42°5'15"N



71°15'50"W 42°4'49"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/3/2023 at 5:03 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

SECTION 3

Wetland Delineation Report, dated November 2023

WETLAND FIELD REPORT

PROJECT TITLE: Revolution Training Center – West Field

PARE JOB NO.: 17169.00 **LOCATION:** Foxborough, Massachusetts

DELINEATION DATE: 10/25/23, 11/2/23 **WEATHER:** Sunny, 60 degrees

REPORT DATE: 11/2/2023 **PERFORMED BY:** Lauren Gluck, P.W.S.

DISCUSSIONS AND COMMENTS

Wetland resource areas in the vicinity of a proposed soccer field and associated site improvements at the Revolution Training Center were defined and delineated in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00, referred to as the WPA Regulations), and the methodology specified in the publications entitled Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act (Jackson, 2022) and The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeast Region (U.S. Army Corps of Engineers, 2012). Inspection and delineation of wetlands were completed on October 25, 2023 and November 2, 2023.

Pare completed site-wide delineations for the Revolution Training Center in 2017 in support of the Revolution Training Center project. Most of the approved construction for the project was completed in 2019 under an Order of Conditions which has recently expired (DEP File No. 157-0579). The synthetic turf soccer field and associated parking at the west end of the site were not constructed, however site preparation activities including clearing and grading were completed across most of the area under the OOC. Pare has completed new delineations during the fall of 2023 in support of the proposed construction of the west field and associated site improvements. Pare generally found that the new delineations are consistent with the 2017 delineations, with minor deviations.

According to the most recent available MassGIS data, no Areas of Critical Environmental Concern, Outstanding Resource Waters, certified vernal pools, or mapped rare species habitats are located on or in the vicinity of the site. According to MassGIS data layer pvp_pt.shp, one potential vernal pool (PVP) is located in the vicinity of the western field, which is within the interior of a wetland complex designated as Wetland E (formerly flag series 6).

Pink field flags were placed at appropriate intervals along the wetland/upland border. Primary parameters evaluated in wetland delineation included vegetation, indicators of wetland hydrology, and hydric soil indicators. Banks of a perennial stream bordering the site were delineated according to the first observable break in slope. Observed wetland hydrologic indicators and soils are described in the following sections and within the attached BVW Data Forms. Wetland resource areas within the vicinity of the site include the following: **Bordering Vegetated Wetland, Isolated Lands Subject to Flooding, Isolated Freshwater Wetlands, Land Under Water Bodies/Waterways, Bank, 200-foot Riverfront Area,** and **Bordering Land Subject to Flooding.** Wetland resource areas are discussed in the following sections.

WETLAND DESCRIPTIONS

Perennial Stream (Series R)

A stream channel originates within a wetland complex associated with Cranberry Bog Pond offsite to the northwest and flows in a northeasterly direction along the north side of the site. The stream crosses beneath Revolution Way (formerly Keith Road) before entering the west side of Mann Pond a short distance offsite to the east. The stream is shown as perennial on the USGS Topographic Quadrangle for the site, and therefore according to Rule 10.58 (2) of the Regulations, the stream is presumed to be a perennial river with an associated **200-foot Riverfront Area (RFA)**.

The edges of the stream are defined in section 10.54 (2) of the Regulations as **Bank**. Flag series R-1 to R-25 defines the south Bank of the stream, beginning a short distance northwest of the limit of work and extending southwest. The recently replaced culvert beneath the access road is located between flags R-13 and R-14. The series continues in a southwesterly direction, ending near the northeast limits of work. The Banks of the stream generally consist of well-defined, forested slopes with a variable understory of shrubs. Species of vegetation located along the Banks included, but was not limited to, the following:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
Red Oak	*Quercus rubra*	FACU
White Pine	*Pinus strobus*	FACU
Silky Dogwood	*Cornus amomum*	FACW
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Glossy Buckthorn	*Frangula alnus*	FAC
Tatarian Honeysuckle	*Lonicera tatarica*	FACU
Oriental Bittersweet	*Celastrus orbiculatus*	UPL

According to 10.56 (2) of the Regulations, land within perennial streams is classified as **Land Under Waterways (LUW)**. The delineated section of the stream has an unconsolidated rocky bottom. At the time of delineation, a majority of the stream bottom was unvegetated.

Bordering Vegetated Wetland (Wetland E; formerly series 6)

An area wetland bordering on an intermittent stream is located within the wooded area east of the proposed western soccer field. According to 310 CMR 10.55, the area meets the definition of a **Bordering Vegetated Wetlands (BVW),** and therefore has an associated **100-foot Buffer Zone** in addition to a **25-foot No Disturb Zone** under the Foxborough Wetland Protection Bylaw. Flag series E-1 to E-34 defines the western edge of the wetland, beginning at its northern end and ending a short distance offsite to the southeast.

The area consists of a forested wetland complex that occupies an irregular-shaped depression. The wetland is part of an interconnected series of areas associated with an intermittent stream system to the east. Most of the wetland edge consists of highly irregular slopes dominated by a mix of native and invasive species, indicative of prior disturbance. The wetland has a transitional hydrology, ranging from seasonally saturated areas along the wetland/upland border, to semipermanently flooded areas in the interior. The vegetation identified within the wetland included, but was not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
Red Oak	*Quercus rubra*	FACU
White Pine	*Pinus strobus*	FACU
Glossy Buckthorn	*Frangula alnus*	FAC
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Multiflora Rose	*Rosa multiflora*	FACU
Tatarian Honeysuckle	*Lonicera tatarica*	FACU
Silky Dogwood	*Cornus amomum*	FACW
Oriental Bittersweet	*Celastrus orbiculatus*	UPL
Greenbriar	*Smilax rotundifolia*	FAC
Cinnamon Fern	*Osmunda cinnamomea*	FACW
Sensitive Fern	*Onoclea sensibilis*	FACW
Royal Fern	*Osmunda regalis*	OBL
Tussock Sedge	*Carex stricta*	OBL

According to MassGIS data layer pvp_pt.shp, a potential vernal pool (PVP #7886) is located at a low spot in the wetland interior. Investigations completed during the permitting for the Revolution Training Center project found that the flooded area in the wetland interior supports vernal pool wildlife and appears to qualify for protection as a certifiable vernal pool. As such, the area has an associated **100-foot vernal pool buffer zone** under the Bylaw.

Isolated Wetlands

Numerous wetland depressions are located throughout the property that lack any apparent hydrologic connection to a waterbody or waterway. A majority of these areas appear to be the result of previous site disturbance in the former gravel pit, as indicated by spoil piles, irregular topography, and minimal topsoil. Within the site, seven of these areas were re-delineated due to their proximity to the proposed west soccer field construction. These areas all possess the wetland vegetation communities, hydric soils, and visual indicators of hydrology; however, none of these areas appear to meet the flood volume criteria of ¼ acre foot necessary to qualify as Isolated Lands Subject to Flooding (ILSF) under 10.57(2)(b) of the WPA Regulations. Four of the areas (Wetland C, D, F, and H) are greater than 500 square feet in size and meet the criteria of **Isolated Freshwater Wetlands** under the Bylaw. Three of these areas (Wetland A, B, and G) are therefore non-jurisdictional. Each of these areas are described below.

Wetland A (adjacent to former series 23) – Non-Jurisdictional

Flag series WF A-1 to WF A-6 defines the perimeter of a shallow, rounded depression located within a previously disturbed area within the 200-foot Riverfront Area of the R-series stream. The area was delineated according to the apparent limits of flooding, indicated by water stained leaves, and predominance of wetland vegetation. The depression has an approximate surface area of 319 square feet and therefore does not meet the size criteria of an Isolated Freshwater Wetland under the Bylaw. The area did not hold any standing water during the delineation, however water-stained leaves indicate that the area experiences a small amount of flooding. The area appears to exhibit a temporarily flooded hydrology, and primarily fed by surface runoff from the surrounding disturbed areas. The area is sparsely forested by a mixture of young trees with a dense understory of shrubs and climbing vines, including some invasive species. Vegetation identified within the area included the following species:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
White Pine	*Pinus strobus*	FACU
Eastern Cottonwood	*Populus deltoides*	FAC
Glossy Buckthorn	*Frangula alnus*	FAC
Multiflora Rose	*Rosa multiflora*	FACU
Common Rush	*Juncus effusus*	FACW

Wetland B (formerly series 24) - Non-Jurisdictional

Flag series WF B-1 to WF B-8 defines the perimeter of a shallow, rounded depression located within a previously disturbed area within the 200-foot Riverfront Area of the R-series stream, just adjacent to a gravel walkway. The area was delineated according to the apparent limits of flooding, indicated by water staining on the ground surface, and predominance of wetland vegetation. The depression has an approximate surface area of 483 square feet and therefore does not meet the size criteria of an Isolated Freshwater Wetland under the Bylaw. The area did not hold any standing water during the delineation, however water-stained leaves indicate that the area experiences a small amount of flooding. The area appears to exhibit a temporarily flooded hydrology, and primarily fed by surface runoff from the surrounding disturbed areas and walkway. The area is sparsely forested by a mixture of young trees with a dense understory of shrubs and climbing vines, including some invasive species. Vegetation identified within the area included the following species:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
White Pine	*Pinus strobus*	FACU
Wild Black Cherry	*Prunus serotina*	FACU
Glossy Buckthorn	*Frangula alnus*	FAC
Highbush Blueberry	*Vaccinium corymbosum*	FACW

Wetland C (formerly series 16) – Isolated Freshwater Wetland

Flag series WF C-1 to WF C-33 defines the perimeter of a confined depression located within the disturbed area immediately east of the proposed west soccer field site. Based on the 1978 aerial photograph of the area, it appears to have been cleared and excavated during the gravel mining activities onsite. Irregular topography and spoil piles within the surrounding area and a predominance of invasive species indicates the area was previously disturbed. The depression has an approximate surface area of 7,324 square feet (0.17 acres) and therefore meets the size criteria of an **Isolated Freshwater Wetland** under the Bylaw. However, the area only appears to flood to depths of several inches at maximum capacity, and therefore does not appear to meet the volume criteria of an ILSF.

The edges of the wetland are generally located along the toe of well-defined forested slopes. The western edge of the wetland is directly downslope of the recently completed site preparation for the soccer field. The wetland has a transitional hydrology, ranging from saturated areas at the north end, to seasonally flooded areas at the south end. The area appears to be fed by a combination of surface water and groundwater. The wetland is forested, with a dense understory of shrubs and climbing vines dominated by invasives. Vegetation identified within the wetland included, but was not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Gray Birch	*Betula populifolia*	FAC
Red Maple	*Acer rubrum*	FAC
White Pine	*Pinus strobus*	FACU
Glossy Buckthorn	*Frangula alnus*	FAC
Silky Dogwood	*Cornus amomum*	FACW
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Autumn Olive	*Elaeagnus umbellata*	UPL
Multiflora Rose	*Rosa multiflora*	FACU
Sensitive Fern	*Onoclea sensibilis*	FACW

Wetland D (formerly series 27) - Isolated Freshwater Wetland

Flag series WF D-1 to WF D-8 defines the south end of a shallow, oval-shaped depression located within a highly disturbed area between Wetland C and Wetland E. Based on the 1978 aerial photograph of the area, it appears to have been disturbed during the gravel mining activities onsite. The entire perimeter of the area was not flagged, however the previous delineation indicated that the depression has an approximate surface area of 3,040 square feet and therefore the area is assumed to meet the size criteria of an **Isolated Freshwater Wetland** under the Bylaw.

The area did not hold standing water at the time of delineation, however staining on the ground surface indicates that most of the area holds surface water for some portion of the year. The area appears to exhibit a seasonally flooded hydrology and is primarily groundwater fed. The entire area is forested, and a dense understory of shrubs dominated by Glossy Buckthorn and Silky Dogwood was observed throughout most of the area. Portions of the edges are overgrown with invasive shrubs and climbing vines. A ground cover of ferns was observed in some locations. Vegetation identified within the area included the following species:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
White Pine	*Pinus strobus*	FACU
Willow	*Salix spp.*	Assume FAC or wetter
Silky Dogwood	*Cornus amomum*	FACW
Glossy Buckthorn	*Frangula alnus*	FAC
Multiflora Rose	*Rosa multiflora*	FACU
Oriental Bittersweet	*Celastrus orbiculatus*	UPL
Foxgrape	*Vitis labrusca*	FACU
Sensitive Fern	*Onoclea sensibilis*	FACW

Wetland F (formerly series 19) – Isolated Freshwater Wetland

Flag series WF F-1 to WF F-8 defines the perimeter of a small, shallow forested depression located within the previously disturbed area the southeast of the development site, just downslope of the recently constructed irrigation basin. Based on the 1978 aerial photograph of the area, it appears to have been disturbed during the gravel mining activities onsite. Irregular topography and spoil piles within the surrounding area indicates the area was previously disturbed. The depression has an approximate surface area of 738 square feet and therefore meets the size criteria of an **Isolated Freshwater Wetland** under the Bylaw.

The edges of the wetland are generally located along the toe of abrupt forested slopes. The wetland has a seasonally flooded hydrology, and at the time of delineation the wetland soils were saturated to the surface. The area appears to be primarily groundwater fed as well as overflow from the irrigation basin in the event of overtopping. The area is forested by a mixture of deciduous trees and has a sparse understory of shrubs. No herbaceous ground cover was observed at the time of delineation. Vegetation identified within the wetland included, but was not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
Tupelo	*Nyssa sylvatica*	FAC
White Pine	*Pinus strobus*	FACU
Red Oak	*Quercus rubra*	FACU
Witch Hazel	*Hamamelis virginiana*	FACU

Wetland G (formerly series 21) – Non-Jurisdictional

Flag series WF G-1 to WF G-7 defines the perimeter of a small depression located within a highly disturbed wooded area to the south of the development site. Based on the 1978 aerial photograph of the area, it appears to have been disturbed during the gravel mining activities onsite. Irregular topography and spoil piles within the surrounding area indicates the area was previously disturbed. The area was delineated according to the apparent limits of flooding, indicated by water staining on the ground, and hydric soils. The depression has an approximate surface area of 419 square feet and therefore does not meet the size criteria of an Isolated Freshwater Wetland under the Bylaw.

The area appears to be seasonally flooded and primarily groundwater fed. The edges of the area are forested and had a sparse understory of shrubs dominated by Glossy Buckthorn and Witch Hazel. The interior of the area was mostly unvegetated, although it receives canopy cover from the surrounding wooded areas. Vegetation identified within the area included the following species:

Common Name	Scientific Name	Indicator Status
Red Maple	*Acer rubrum*	FAC
Tupelo	*Nyssa sylvatica*	FAC
White Pine	*Pinus strobus*	FACU
Red Oak	*Quercus rubra*	FACU
Glossy Buckthorn	*Frangula alnus*	FAC
Witch Hazel	*Hamamelis virginiana*	FACU
Oriental Bittersweet	*Celastrus orbiculatus*	UPL

Wetland H (formerly series 22) - Isolated Freshwater Wetland

Flag series WF H-1 to WF H-8 defines the northern boundary of a shallow, linear-shaped depression located within a highly disturbed area at the south limit of the development site. Based on the 1978 aerial photograph of the area, it appears to have been disturbed during the gravel mining activities onsite. Irregular topography and spoil piles within the surrounding area, lack of established topsoil, and a predominance of invasive vegetation indicates the area was previously disturbed. The entire perimeter of the area was not flagged, however the previous delineation indicated that the depression has an approximate surface area of 3,050 square feet and therefore meets the size criteria of an **Isolated Freshwater Wetland** under the Bylaw.

The area did not hold any standing water during the delineation, however water staining on the ground's surface indicates the area may hold several inches of temporarily to seasonal flooding. A majority of the area is dominated by a dense community of early-successional shrubs and climbing vines, including several invasive species. No herbaceous ground cover was observed at the time of delineation. The area contains a mixture of wetland and upland vegetation, however upland species are predominant in portions of the area. Vegetation identified within the area included the following species:

Common Name	Scientific Name	Indicator Status
Wild Black Cherry	*Prunus serotina*	FACU
Black Locust	*Robinia pseudoacacia*	UPL
Apple	*Malus spp.*	Assume FACU
Glossy Buckthorn	*Frangula alnus*	FAC
Japanese Knotweed	*Polygonum cuspidatum*	FACU
Silky Dogwood	*Cornus amomum*	FACW
Multiflora Rose	*Rosa multiflora*	FACU
Oriental Bittersweet	*Celastrus orbiculatus*	UPL

Bordering Land Subject to Flooding

According to the FEMA Flood Insurance Rate Map for the area (Map Number 25021C0334E, effective date July 7, 2012), an area of Zone A Floodplain crosses the north side of the site. The Floodplain is associated with the R-series stream and does not have a designated flood elevation. According to 10.57(2)(a) of the WPA Regulations, areas of floodplain located above the delineated Bank is defined as **Bordering Land Subject to Flooding**.

LHG

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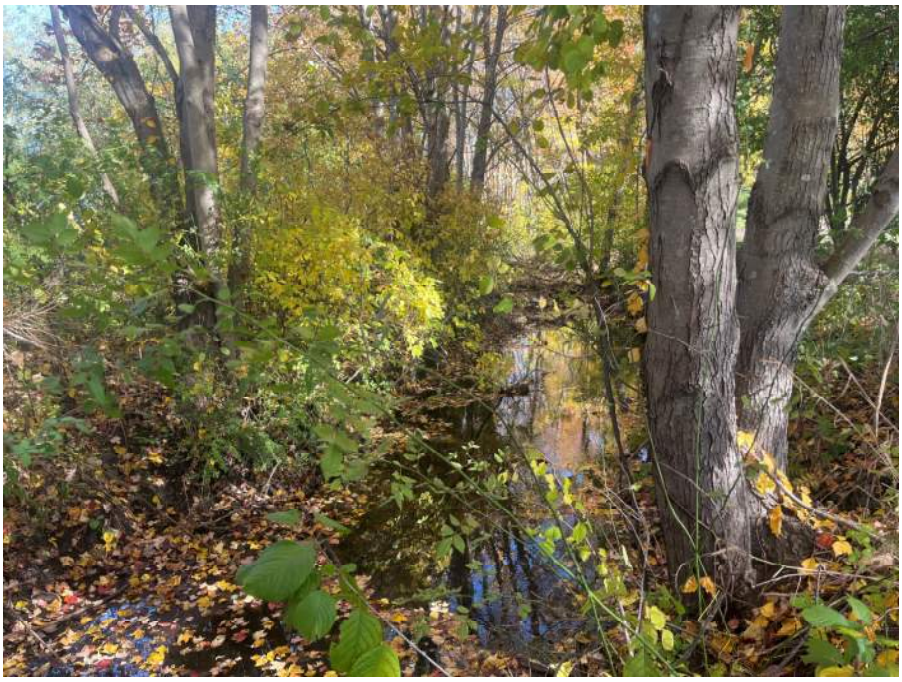


Photo 1: R-series perennial stream channel bordering north side of development site.

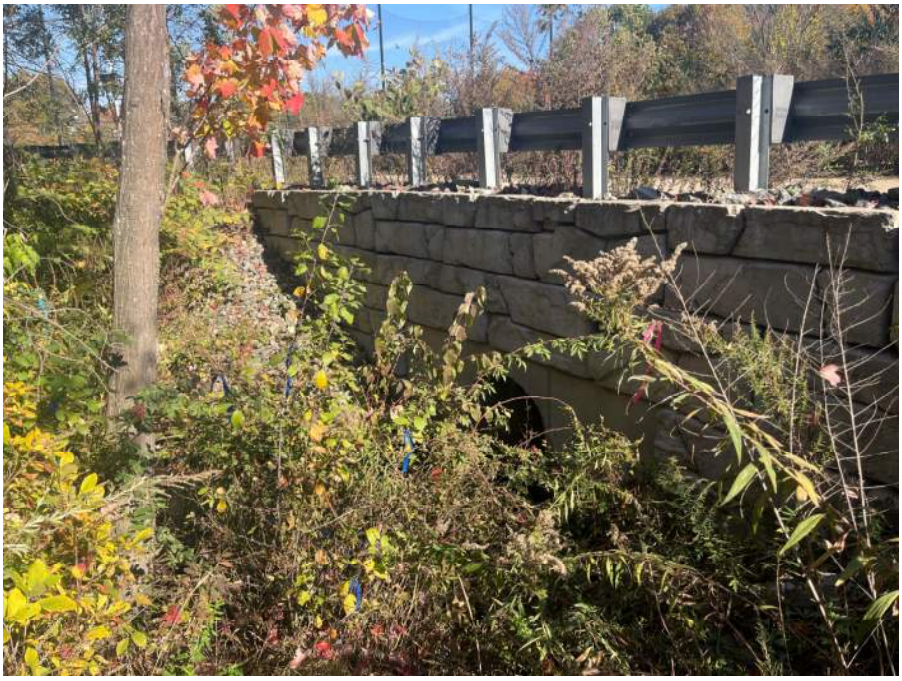


Photo 2: Recently replaced culvert passing R-series stream beneath access road.

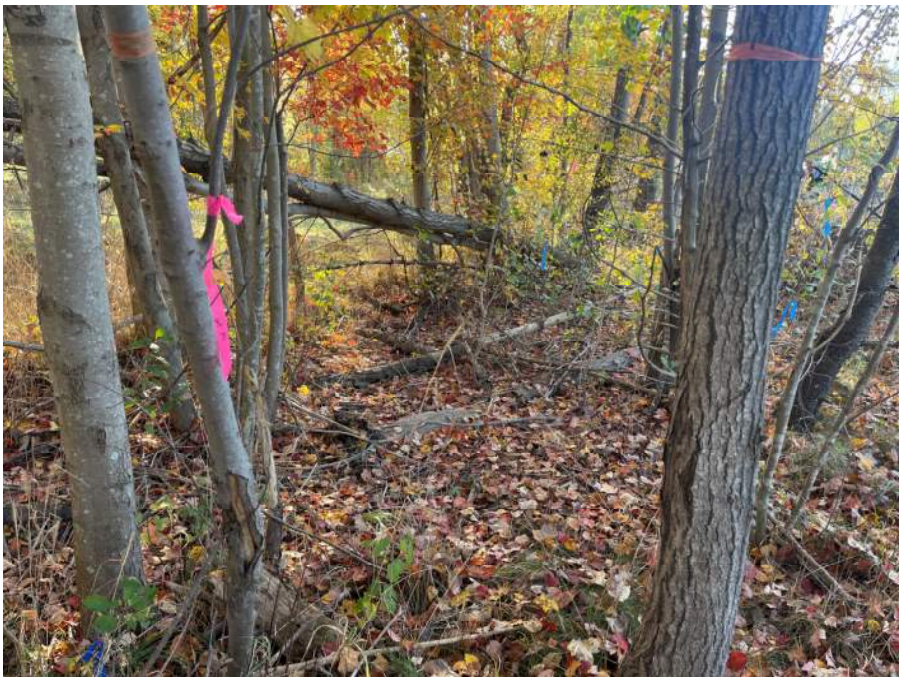


Photo 3: Non-jurisdictional isolated Wetland A to east of the proposed soccer field site.

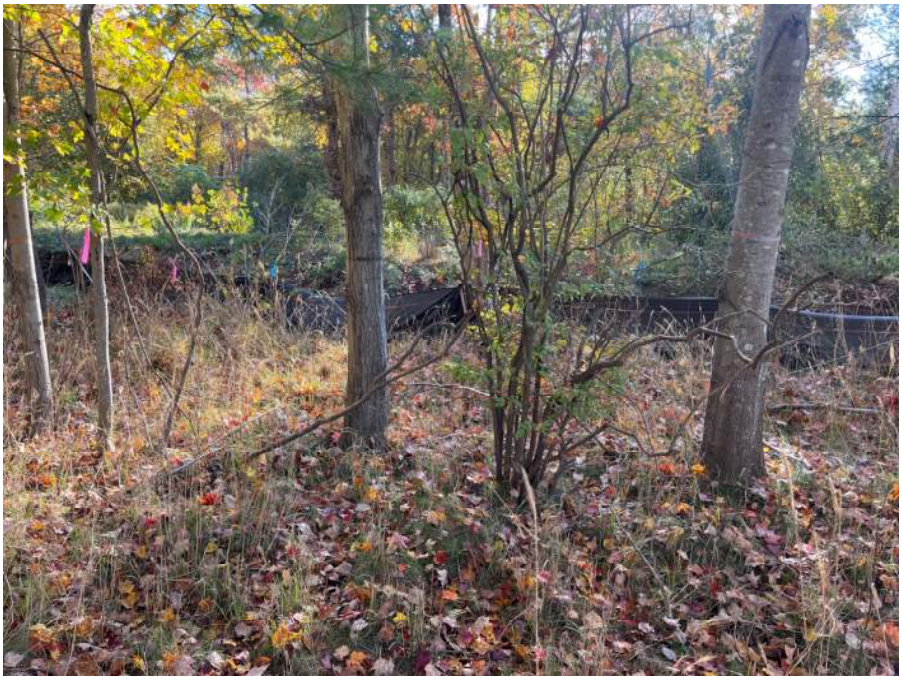


Photo 4: Non-jurisdictional isolated Wetland B to the northeast of the proposed soccer field site.

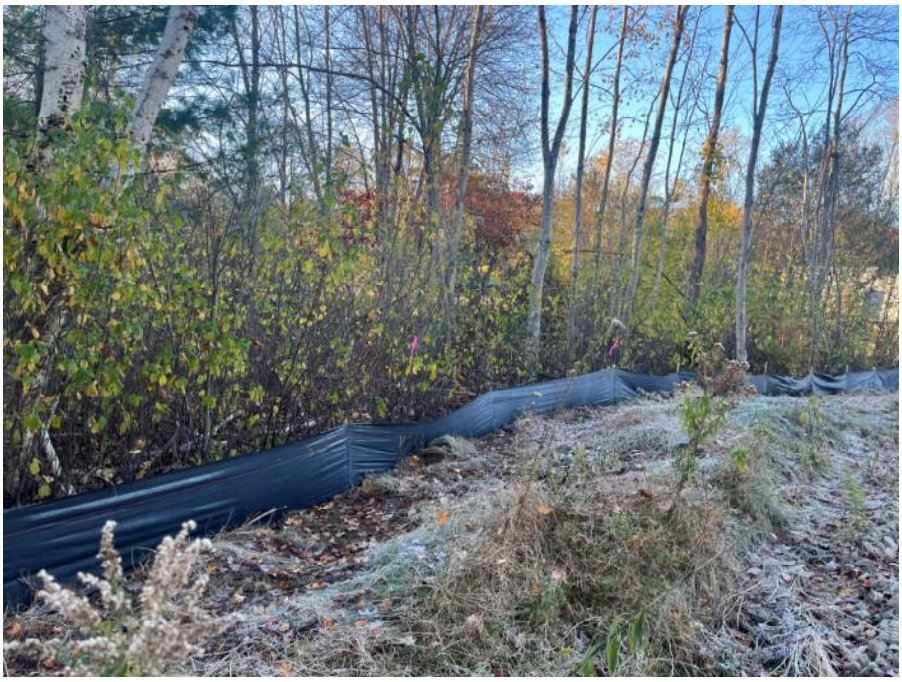


Photo 5: Wetland C edge along the limit of clearing completed under former OOC.

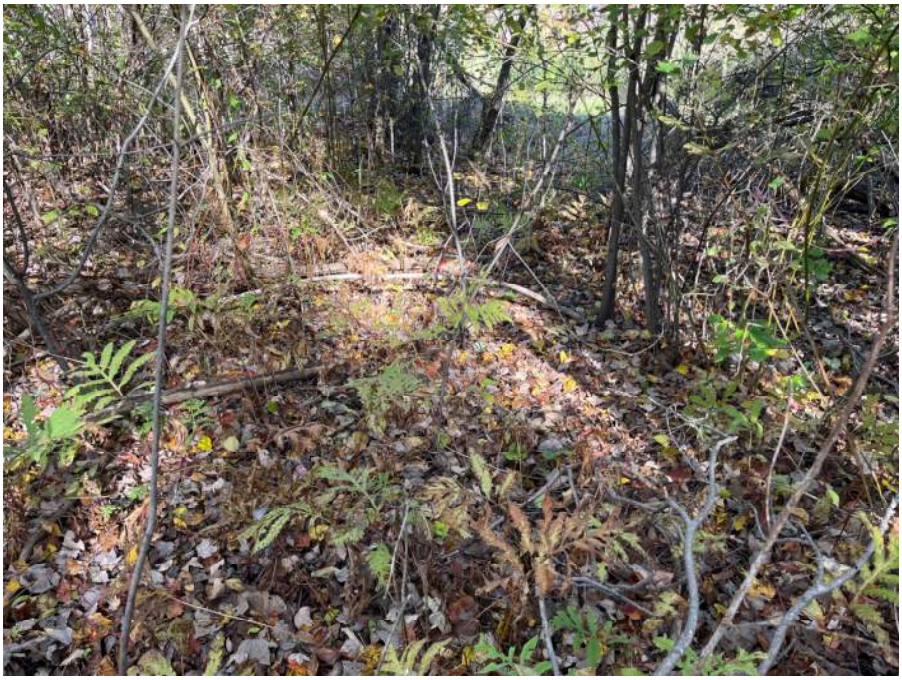


Photo 6: Typical view of Wetland C interior.

Photo 7: Typical view of Isolated Wetland D.

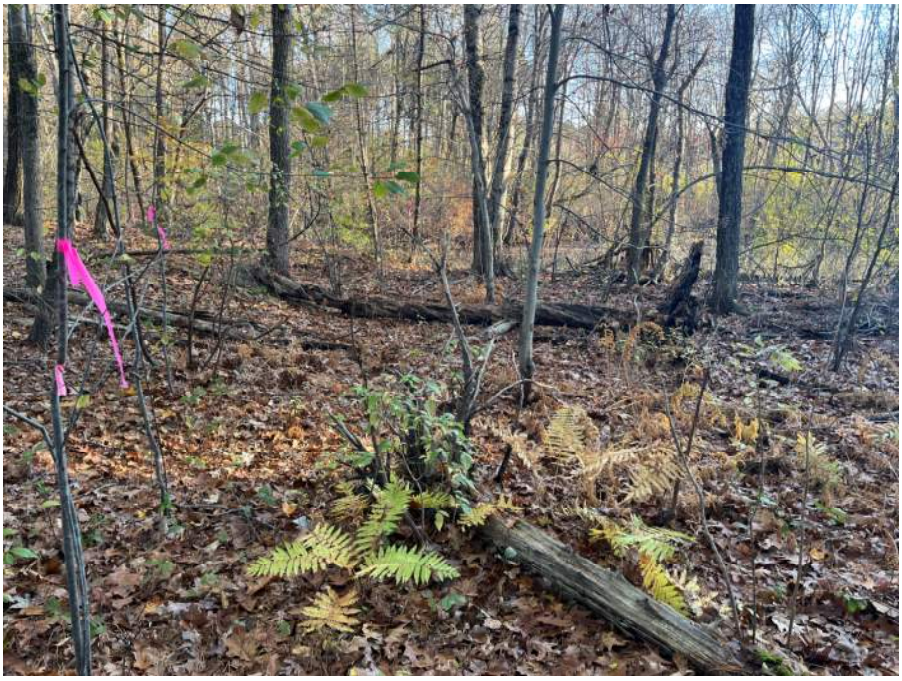


Photo 8: Wetland E BVW edge, facing downslope toward semipermanently flooded PVP in interior.

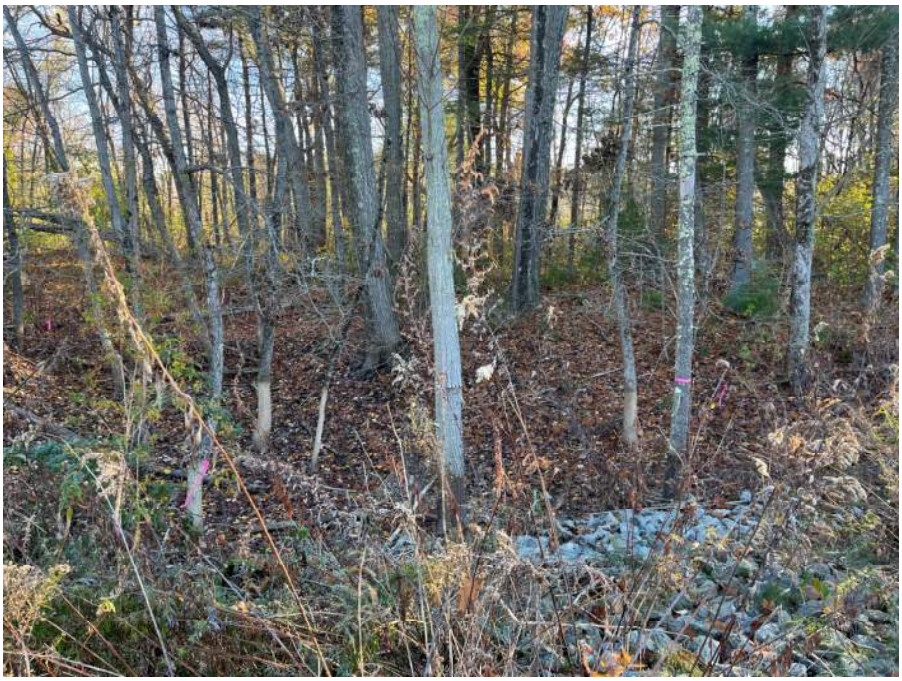


Photo 9: Wetland F, Isolated Freshwater Wetland, facing downslope from irrigation pond.

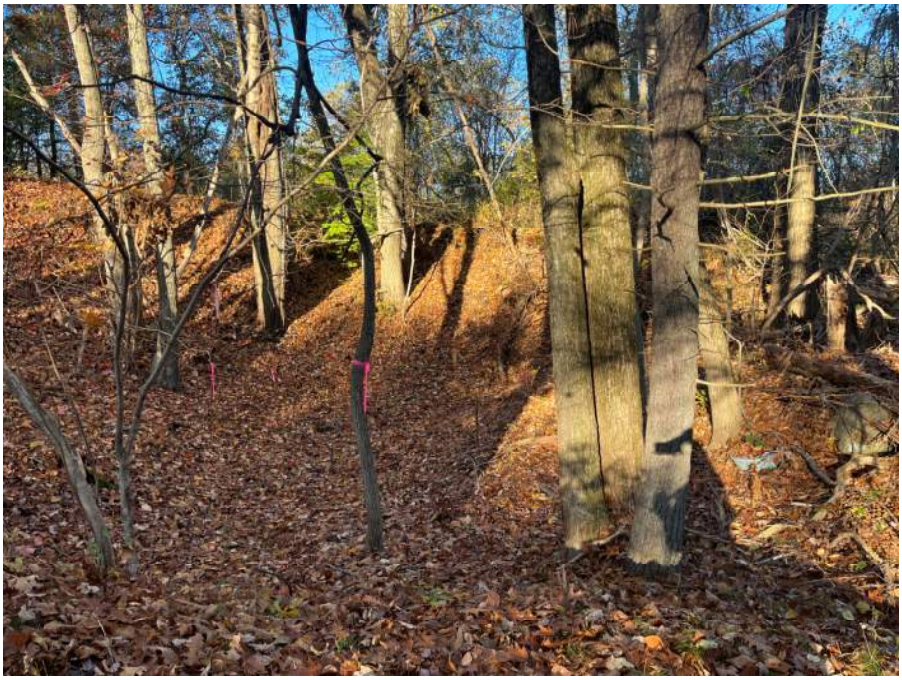


Photo 10: Non-jurisdictional isolated Wetland G at the south side of development area.

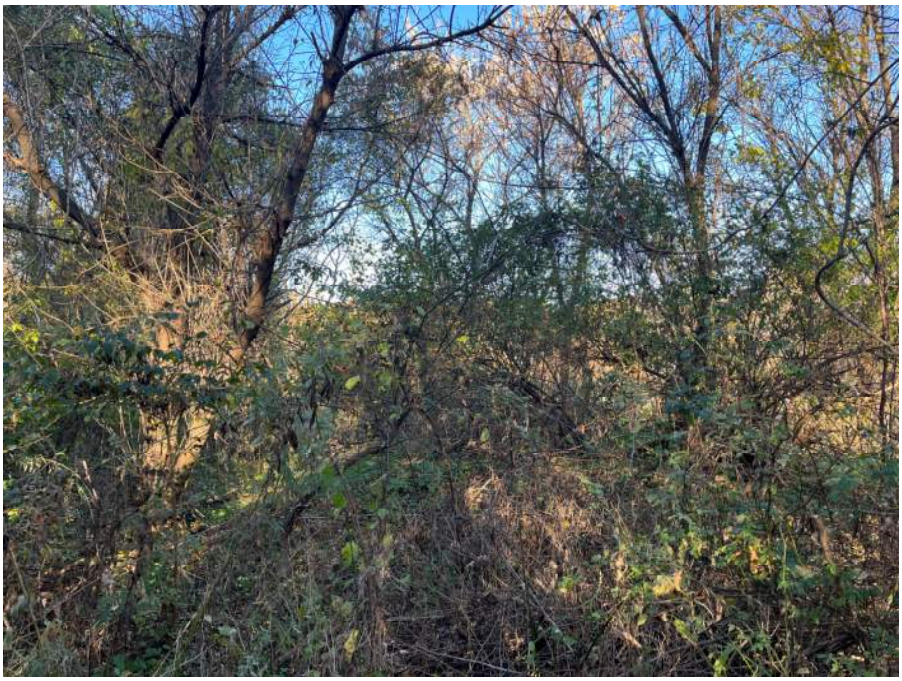


Photo 11: Isolated Freshwater Wetland H, facing downslope from north edge.

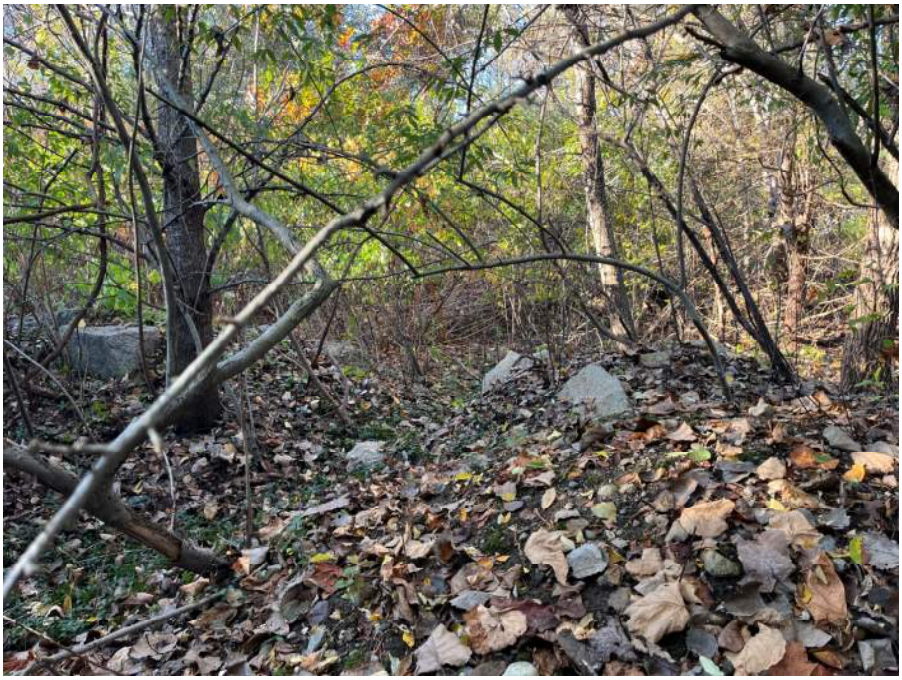


Photo 12: Typical view of upland wooded area within the proposed limits of clearing. This area primarily consists of early successional forest with dense invasive understory.

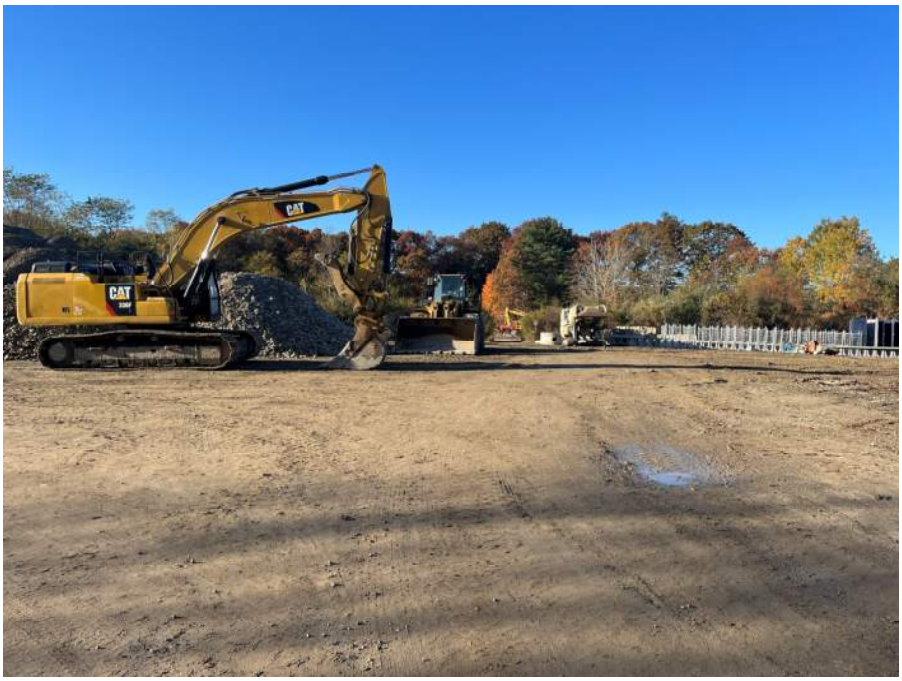


Photo 13: Central portion of development site, which has been cleared and graded under the former OOC.

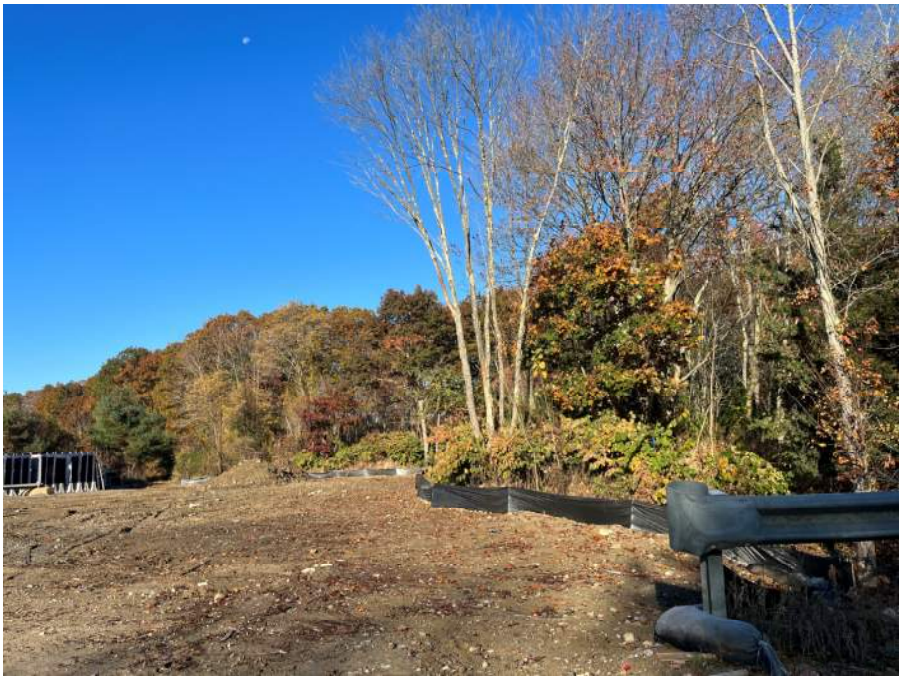


Photo 14: Eastern portion of prepared site. Silt fence along treeline has recently been replaced.

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Revolution Soccer Training Facility City/Town: Foxborough Sampling Date: 11/2/2023

Applicant/Owner: The Kraft Group Sampling Point or Zone: 5' downgradient E3

Investigator(s): Lauren Gluck, P.W.S. Latitude / Longitude: N42° 05' 01.62", W71° 15' 59.59"

Soil Map Unit Name: Scarboro and Birdsall soils, 0 to 3 percent slopes NWI or DEP Classification: PFO1E

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 [✔] No [ ]	**Is the Sampled Area within a Wetland?** **Yes [✔] No [ ]**
Hydric Soils criterion met?	Yes [✔] No [ ]	
Wetlands hydrology present?	Yes [✔] No [ ]	

Remarks, Photo Details, Flagging, etc.:

Site is located within a former gravel pit. Wetland edge and interior are disturbed with numerous invasive species.

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)_____
Water Table Present?	Yes [ ]	No [✔]	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes [✔]	No [ ]	Depth (inches) 10.00

Wetland Hydrology Indicators

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

Tree Stratum Plot size 30-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Red Maple	Acer rubrum	FAC	63.0	Yes	Yes
2. Red Oak	Quercus rubra	FACU	10.5	No	No
3.					
4.					
5.					
6.					
7.					
8.					
9.					

73.5 = Total Cover

Shrub/Sapling Stratum Plot size 15-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Glossy Buckthorn	Frangula alnus	FAC	38.0	Yes	Yes
2. Japanese Barberry	Berberis thunbergii	FACU	10.5	No	No
3. Highbush Blueberry	Vaccinium corymbosum	FACW	10.5	No	Yes
4.					
5.					
6.					
7.					
8.					
9.					

59.0 = Total Cover

Herb Stratum Plot size 5-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sensitive Fern	Onoclea sensibilis	FACW	20.5	Yes	Yes
2. Glossy Buckthorn	Frangula alnus	FAC	10.5	No	Yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

31.0 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 30-feet				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Oriental Bittersweet	Celastrus orbiculatus	UPL	20.5	Yes	No
2. Poison Ivy	Toxicodendron radicans	FAC	10.5	Yes	Yes
3. Multiflora Rose	Rosa multiflora	FACU	10.5	Yes	No
4.					
			41.5 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☐
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?
	6	4		Yes ☑ No ☐
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 ☐ No ☐
Wetland vegetation criterion met?		**Yes** ☑ **No** ☐		

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 %

Sampling Point 5' downgradient E3

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-12+"	10YR 2/1	100.00					SL	A

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☑ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☑ **No** ☐

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: N.E. Revolution Soccer Fields City/Town: Foxborough Sampling Date: 11/2/2023

Applicant/Owner: The Kraft Group Sampling Point or Zone: 5' upgradient E3

Investigator(s): Lauren Gluck, P.W.S. Latitude / Longitude: N42° 05' 01.62", W71° 15' 59.59"

Soil Map Unit Name: Scarboro and Birdsall soils, 0 to 3 percent slopes NWI or DEP Classification: N/A

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 [ ] No [✔]	**Is the Sampled Area within a Wetland?**	**Yes** [ ] **No** [✔]
Hydric Soils criterion met?	Yes [ ] No [✔]		
Wetlands hydrology present?	Yes [ ] No [✔]		

Remarks, Photo Details, Flagging, etc.:

Site is located within a former gravel pit. Wetland edge and uplands are disturbed with numerous invasive species.

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)_____
Water Table Present?	Yes [ ]	No [✔]	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes [ ]	No [✔]	Depth (inches)_____

Wetland Hydrology Indicators

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

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Red Maple	Acer rubrum	FAC	38.0	Yes	Yes
2. Red Oak	Quercus rubra	FACU	20.5	No	No
3.					
4.					
5.					
6.					
7.					
8.					
9.					

58.5 = Total Cover

Shrub/Sapling Stratum Plot size 15-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Glossy Buckthorn	Frangula alnus	FAC	20.5	Yes	Yes
2. Tartarian Honeysuckle	Lonicera tartarica	FACU	20.5	Yes	No
3. Wild Black Cherry	Prunus serotina	FACU	10.5	No	No
4. Red Oak	Quercus rubra	FACU	10.5	No	No
5. Highbush Blueberry	Vaccinium corymbosum	FACW	3.0	No	Yes
6.					
7.					
8.					
9.					

65.0 = Total Cover

Herb Stratum Plot size 5-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Red Oak	Quercus rubra	FACU	3.0	No	No
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

3.0 = Total Cover

VEGETATION – continued.

Woody Vine Stratum Plot size 30-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Oriental Bittersweet	Celastrus orbiculatus	UPL	38.0	Yes	No
2. Poison Ivy	Toxicodendron radicans	FAC	10.5	No	Yes
3.					
4.					
			48.5 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW? Yes ☐ No ☐

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	2	Yes ☑ No ☐

Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	3	X 2	= 6
	FAC species	69	X 3	= 207.00
	FACU species	62	X 4	= 248.00
	UPL species	38	X 5	= 190.00
	Column Totals	(A) 172		(B) 651
	Prevalence Index	B/A = 3.78		Is the Prevalence Index ≤ 3.0? Yes ☐ No ☑

Wetland vegetation criterion met? Yes ☐ No ☑

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 %

Sampling Point 5' upgradient E3

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-2"	10YR 3/1	100.00					SL	A
2+"	10YR 4/3	100.00					sandy gravel	B

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☐ **No** ☑

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: N.E. Revolution Soccer Fields City/Town: Foxborough Sampling Date: 11/2/2023

Applicant/Owner: The Kraft Group Sampling Point or Zone: 5' downgradient E18

Investigator(s): Lauren Gluck, P.W.S. Latitude / Longitude: N42° 05' 00.03", W71° 15' 59.28"

Soil Map Unit Name: Scarboro and Birdsall soils, 0 to 3 percent slopes NWI or DEP Classification: PFO1E

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 [✔] No [ ]	**Is the Sampled Area within a Wetland?** **Yes [✔] No [ ]**
Hydric Soils criterion met?	Yes [✔] No [ ]	
Wetlands hydrology present?	Yes [✔] No [ ]	

Remarks, Photo Details, Flagging, etc.:

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)_____
Water Table Present?	Yes [ ]	No [✔]	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes [ ]	No [✔]	Depth (inches)_____

Wetland Hydrology Indicators

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

Tree Stratum Plot size 30-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. White Pine	Pinus strobus	FACU	20.5	Yes	No
2. White Oak*	Quercus alba	FACU	20.5	Yes	Yes
3. Red Maple	Acer rubrum	FAC	20.5	Yes	Yes
4. Red Oak	Quercus rubra	FACU	10.5	No	No
5.					
6.					
7.					
8.					
9.					

*hydromorphic adaptation i.e., buttressing

72.0 = Total Cover

Shrub/Sapling Stratum Plot size 15-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	Clethra alnifolia	FAC	38.0	Yes	Yes
2. Glossy Buckthorn	Frangula alnus	FAC	20.5	Yes	Yes
3. Black Elderberry	Sambucus nigra	FACW	10.5	No	Yes
4.					
5.					
6.					
7.					
8.					
9.					

69.0 = Total Cover

Herb Stratum Plot size 5-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Cinnamon Fern	Osmunda cinnamomea	FACW	10.5	Yes	Yes
2. Sweet Pepperbush	Clethra alnifolia	FAC	10.5	Yes	Yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

21.0 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 30-feet				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Greenbrier	Smilax rotunidifolia	FAC	20.5	Yes	Yes
2. Oriental Bittersweet	Celastrus orbiculatus	UPL	10.5	Yes	No
3.					
4.					
			31.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☐
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?
	9	7		Yes ☑ No ☐
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 ☐ No ☐
Wetland vegetation criterion met?		**Yes** ☑	**No** ☐	

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 %

Sampling Point 5' downgradient E18

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
1-0"	10YR 2/1	100.00					SL	O
0-6"	10YR 2/1	100.00					SL	A
6+"	10YR 4/1	100.00					SL	B

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☑ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☑ **No** ☐

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: N.E. Revolution Soccer Fields City/Town: Foxborough Sampling Date: 11/2/2023

Applicant/Owner: The Kraft Group Sampling Point or Zone: 5' upgradient E18

Investigator(s): Lauren Gluck, P.W.S. Latitude / Longitude: N42° 05' 00.03", W71° 15' 59.28"

Soil Map Unit Name: Scarboro and Birdsall soils, 0 to 3 percent slopes NWI or DEP Classification: N/A

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 [ ] No [✔]	**Is the Sampled Area within a Wetland?**	**Yes** [ ] **No** [✔]
Hydric Soils criterion met?	Yes [ ] No [✔]		
Wetlands hydrology present?	Yes [ ] No [✔]		

Remarks, Photo Details, Flagging, etc.:

Site is located within a former gravel pit. Wetland edge and uplands are disturbed with numerous invasive species.

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)_____
Water Table Present?	Yes [ ]	No [✔]	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes [ ]	No [✔]	Depth (inches)_____

Wetland Hydrology Indicators

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

Tree Stratum Plot size 30-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. White Pine	Pinus strobus	FACU	38.0	Yes	No
2. Red Oak	Quercus rubra	FACU	38.0	Yes	No
3. White Oak	Quercus alba	FACU	10.5	No	No
4. Red Maple	Acer rubrum	FAC	10.5	No	Yes
5.					
6.					
7.					
8.					
9.					

97.0 = Total Cover

Shrub/Sapling Stratum Plot size 15-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	Clethra alnifolia	FAC	20.5	Yes	Yes
2. Glossy Buckthorn	Frangula alnus	FAC	10.5	Yes	Yes
3. Tartarian Honeysuckle	Lonicera tartarica	FACU	10.5	Yes	No
4. Wild Black Cherry	Prunus serotina	FACU	10.5	Yes	No
5.					
6.					
7.					
8.					
9.					

52.0 = Total Cover

Herb Stratum Plot size 5-feet

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Red Oak (seedling)	Quercus rubra	FACU	10.5	Yes	No
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

10.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 30-feet				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Greenbrier	Smilax rotundifolia	FAC	20.5	Yes	Yes
2. Oriental Bittersweet	Celastrus orbiculatus	UPL	20.5	Yes	No
3.					
4.					
			41.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☐
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?
	9	3		Yes ☐ No ☑
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 ☐ No ☐
Wetland vegetation criterion met?		**Yes** ☐ **No** ☑		

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 %

Sampling Point 5' upgradient E18

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
1-0"	10YR 2/2	100.00					SL	O
0-4"	10YR 2/2	100.00					SL	A
4+"	10YR 4/3	100.00					SL	B

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

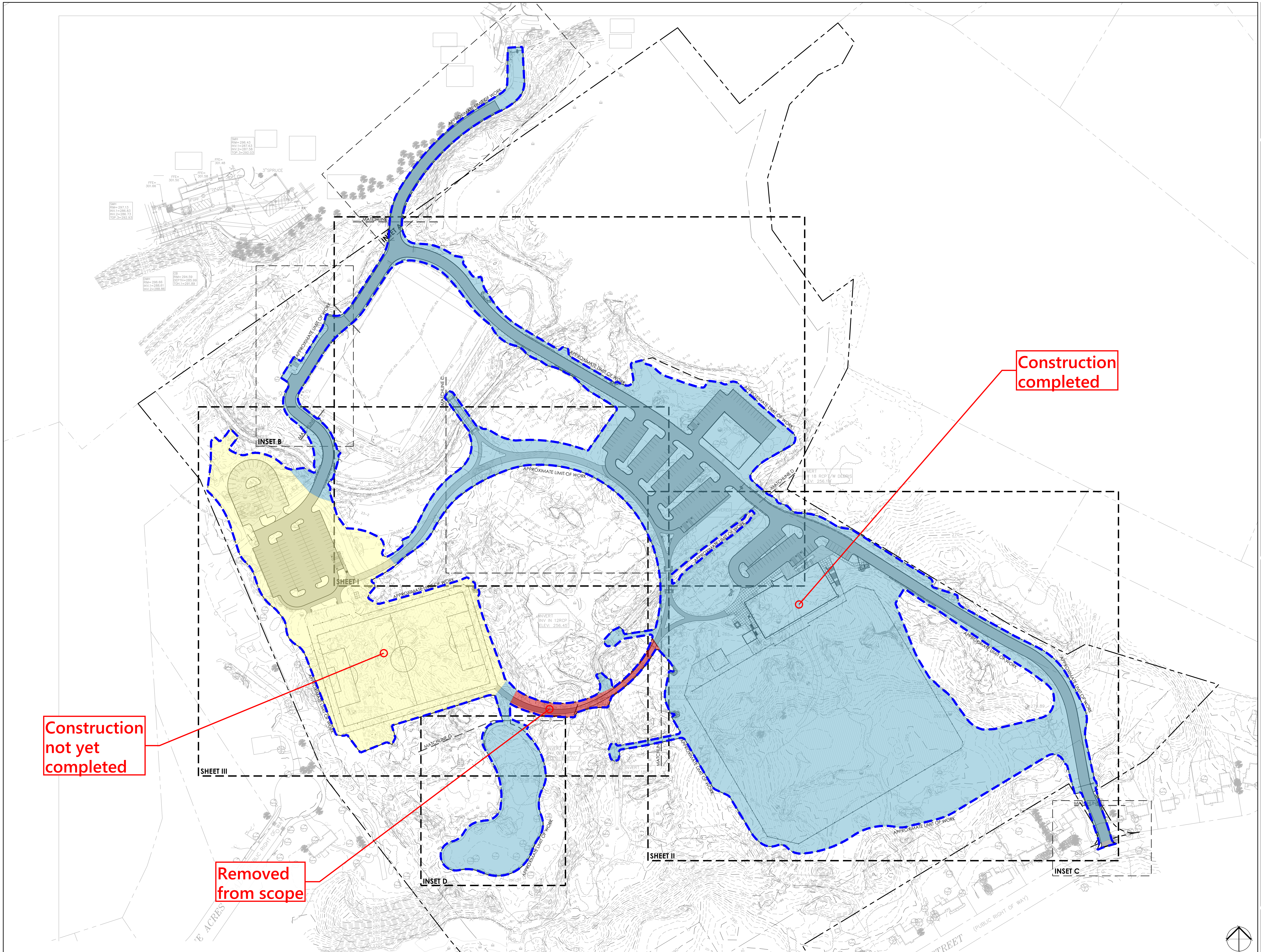
Remarks:

Hydric Soils criterion met? **Yes** ☐ **No** ☑

SECTION 4

Project Plans

Bound Separately



CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

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WSP

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Foxborough, Massachusetts

SOCCER TRAINING FACILITIES

REV.:

SEAL:

CONSTRUCTION DOCUMENTS-
OCTOBER 2018

KEY PLAN

SCALE:	1"=80'-0"
JOB NO:	17004.10
FILE:	17004.10-L0.1-KEY_PLAN.dwg
DRAWN:	KH/SRC
CHECKED:	EPM/MEB

SHEET NO:
L0.1

Construction completed

Construction not yet completed

Removed from scope

- 4 / L7.4 SIGNAGE POST AND PANELS - NO SALT ZONE (1)
- 1 / L7.4 WOODEN GUARDRAIL
- 3 / L7.1 BITUMINOUS CONCRETE PAVEMENT - TYPE B
- 2 / L6.1 CULVERT CROSSING NO.2 ENLARGEMENT
- 1 / L7.1 GRAVEL PAVEMENT
- 3 / L7.1 BITUMINOUS CONCRETE PAVEMENT - TYPE B
- 4 / L7.4 SIGNAGE POSTS AND PANELS - ACCESSIBLE (2)/VAN ACCESSIBLE PARKING (1)
- 1 / L7.1 GRAVEL PAVEMENT
- 4 / L7.4 SIGNAGE POST AND PANELS DO NOT ENTER (1)/NO TRESPASSING (1)
- SINGLE ARM SECURITY GATE; SECURITY GATE SYSTEM AND FINAL LOCATION TO BE CONFIRMED BY OWNER
- 3 / L7.1 BITUMINOUS CONCRETE PAVEMENT - TYPE A
- 14 / L7.1 CURB CUT - TYPE B
- 5 / L7.0 VERTICAL PRECAST CONCRETE CURB
- 5 / L7.0 CEMENT CONCRETE TURF ANCHOR
- 12 / L5.4 BOULDER RETAINING WALL, TYPICAL
- 6 / L7.2 20' HIGH PROTECTIVE NETTING SYSTEM IN CEMENT CONCRETE TURF ANCHOR, TYPICAL
- 7 / L7.2 30' HIGH PROTECTIVE NETTING SYSTEM IN CEMENT CONCRETE TURF ANCHOR, TYPICAL
- 3 / L6.1 ACADEMY FIELD ENTRANCE ENLARGEMENT
- 4 / L7.0 INFILLED SYNTHETIC TURF SYSTEM
- 8 / L7.0 CHAIN LINK FENCE DOUBLE GATE - 6' HIGH - 12' WIDE
- 8 / L7.0 6' HIGH CHAIN LINK FENCE - APPROXIMATELY 1,000 L.F.
- 4 / L6.1 BOARDWALK CROSSING ENLARGEMENT
- 3 / L7.1 BITUMINOUS CONCRETE PAVEMENT - TYPE A
- 5 / L7.3 BOARDWALK CROSSING - TYPE B

REFER TO L1.1

REFER TO L1.2

REFER TO INSET D

IRRIGATION POND, REFER TO GRADING AND UTILITY PLAN

APPROXIMATE LIMIT OF WORK

MAINTENANCE PATH

TEMPORARY ACCESS FOR STREAM CHANNEL RESTORATION WORK ONLY

INSET D

SCALE:1"=30'-0"

REFER TO SHEET N1.0 FOR ALL PLAN NOTES AND LEGENDS

CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

NORTH

SCALE: 1"=30'-0"
0 15 30 60 90

activitas
Planning / Landscape / Athletic Facilities
sixteen school street
dedham, massachusetts 02026-4310
telephone: (781) 326-2600
www.activitas.com

CONSULTANTS

CIVIL ENGINEER (SITE UTILITIES)
VHB

GEOTECHNICAL ENGINEER
SANBORN | HEAD AND ASSOCIATES

ELECTRICAL ENGINEER
ENGINEERING ADVANTAGE

ARCHITECT
POPULOUS

ENVIRONMENTAL
PARE CORPORATION

IRRIGATION
IRRIGATION CONSULTING, INC.

SURVEY
WSP

FOXBORO REALTY ASSOCIATES LLC

Foxborough, Massachusetts

SOCCER TRAINING FACILITIES

REV.

SEAL

CONSTRUCTION DOCUMENTS-
OCTOBER 2018

LAYOUT AND MATERIALS
PLAN - SHEET III

SCALE:	1"=30'-0"
JOB NO:	17004.10
FILE:	17004.10-L1.1-LM_PLAN.dwg
DRAWN:	KH/SRC
CHECKED:	EPM/MEB
SHEET NO:	L1.3

Wetland flags from October 5, 2018 (WSP)

Wetlands already filled

Wetland flags from October 25, 2023 (Pare)

INSET D
SCALE:1"=30'-0"

REFER TO SHEET N1.0 FOR ALL PLAN NOTES AND LEGENDS

CONTACT DIGSAFE:
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REV:

SEAL:

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OCTOBER 2018

LAYOUT AND MATERIALS
PLAN - SHEET III

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SHEET NO:	L1.3

Limit of Work on Aerial

Soccer Training Facilities

Foxborough, Massachusetts

Source:
Prepared for:
Date:

0 40 80 160 Feet

vhb