



®

Regulatory Program



®

INTERIM APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): 4/1/2019

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): NAE-2018-02652-RAB

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: MA

County/parish/borough: Norfolk

City: Braintree

Center coordinates of site (lat/long in degree decimal format): Lat. 42.1897, Long. -70.9744.

Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: attached in report/map titled

Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1):

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office (Desk) Determination Only. Date:

Office (Desk) and Field Determination. Office/Desk Dates: 2/20/19 Field Date(s): 3/27/19.

SECTION II: DATA SOURCES

Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: Attached.

Data sheets prepared/submitted by or on behalf of the applicant/consultant.

Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: Attached.

Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include information on revised data sheets/delineation report that this AJD form has relied upon:

Revised Title/Date:

Data sheets prepared by the Corps. Title/Date:

Corps navigable waters study. Title/Date:

CorpsMap ORM map layers. Title/Date:

USGS Hydrologic Atlas. Title/Date:

USGS, NHD, or WBD data/maps. Title/Date:

USGS 8, 10 and/or 12 digit HUC maps. HUC number:

USGS maps. Scale & quad name and date: Attached.

USDA NRCS Soil Survey. Citation: Attached.

USFWS National Wetlands Inventory maps. Citation: Attached.

State/Local wetland inventory maps. Citation:

FEMA/FIRM maps. Citation:

Photographs: Aerial. Citation: Attached. or Other. Citation:

LiDAR data/maps. Citation:

Previous JDs. File no. and date of JD letter:

Applicable/supporting case law:

Applicable/supporting scientific literature:

Other information (please specify):

SECTION III: SUMMARY OF FINDINGS

Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Water Droplet Screen from ORM for All Waters and Features, Regardless of Jurisdictional Status – Required

A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION:

"navigable waters of the U.S." within RHA jurisdiction (as defined by 33 CFR part 329) in the review area.

• **Complete Table 1 - Required**

NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.

B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "waters of the U.S." within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. **Check all that apply.**

(a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))

• **Complete Table 1 - Required**

This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.

(a)(2): All interstate waters, including interstate wetlands.

• **Complete Table 2 - Required**

(a)(3): The territorial seas.

• **Complete Table 3 - Required**

(a)(4): All impoundments of waters otherwise identified as waters of the U.S. under 33 CFR part 328.3.

• **Complete Table 4 - Required**

(a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• **Complete Table 5 - Required**

(a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

• **Complete Table 6 - Required**

Bordering/Contiguous.

Neighboring:

(c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.

(c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water.

(c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes.

(a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• **Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis. - Required**

Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

(a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• **Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(8) waters identified in the similarly situated analysis. - Required**

Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

C. NON-WATERS OF THE U.S. FINDINGS:

Check all that apply.

- The review area is comprised entirely of dry land.
- Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(7) waters identified in the similarly situated analysis. - Required**
- Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis. - Required**
- Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):
- **Complete Table 10 - Required**
- (b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.
- (b)(2): Prior converted cropland.
- (b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1)-(a)(3).
- (b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease.
- (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.
- (b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.¹
- (b)(4)(iv): Small ornamental waters created in dry land.¹
- (b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water.
- (b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways.¹
- (b)(4)(vii): Puddles.¹
- (b)(5): Groundwater, including groundwater drained through subsurface drainage systems.¹
- (b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.¹
- (b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.
- Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of (a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).
- **Complete Table 11 - Required.**

D. ADDITIONAL COMMENTS TO SUPPORT AJD: There were two wetland features needing a jurisdictional determination located on two abutting parcels along Commerce Drive. Wetland B, a 5,700 square foot palustrine emergent wetland, is located on the 10.58 acre northernmost parcel identified as Lot 9 on town map 1118. Wetland C, a 6,062 square foot palustrine scrub-shrub wetland, is located on the 5.54 acre southern parcel identified as Lot 7 on town map 1118. The narrative submitted by the agent stated that the two parcels have a lengthy history as a gravel/sand/land operation. Google Earth aerial photography confirmed that the site has been used for these purposes going back at least as far as 1995 (which is the farthest back Google Earth goes for that site). There is a large forested wetland (Wetland A) with a natural soil profile about 50 feet east of Wetland B just off the property. However, the site visit on 3/27/19 confirmed that Wetland B is at least 15 feet higher in elevation than Wetland A and that they are not connected hydrologically, nor is Wetland B connected hydrologically to any other wetland or water

¹ In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area.

feature. Wetland C occurs right at the base of a steep slope along the eastern property line that rises at least 10 feet until it reaches the backyards of the homeowners on Blueberry Place. Wetland C is physically isolated and is not connected hydrologically to Wetland B nor to any other wetland or water feature. Therefore the desk review of available maps and other information (USGS quadrangle map, soil survey, NWI map, aerials) combined with a site visit on 3/27/19 confirmed that these two wetland features are water-filled depressions created in dry land incidental to mining or construction activity and are therefore (b)(4)(v) excluded waters.

Jurisdictional Waters of the U.S.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
N/A	Choose an item.	N/A

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation
N/A	N/A

Table 3. (a)(3) Territorial Seas

(a)(3) Waters Name	Rationale to Support (a)(3) Designation
N/A	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
N/A	N/A
N/A	N/A

Table 5. (a)(5) Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A

Table 6. (a)(6) Adjacent Waters

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; discuss whether any similarly situated waters were present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 8. (a)(8) Waters

SPOE Name	(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Non-Jurisdictional Waters

Table 9. Non-Waters/No Significant Nexus

SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a) (1) - (a) (3) water.

Table 10. Non-Waters/Excluded Waters and Features

Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
Wetland B	Background information (USGS quadrangle map, soil survey, NWI map, aerials) and a site visit confirm that Wetland B formed incidental to earth-moving relative to the gravel/sand/land operation on-site that has been occurring for decades.
Wetland C	Background information (USGS quadrangle map, soil survey, NWI map, aerials) and a site visit confirm that Wetland C formed incidental to earth-moving relative to the gravel/sand/land operation on-site that has been occurring for decades.

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
N/A	N/A

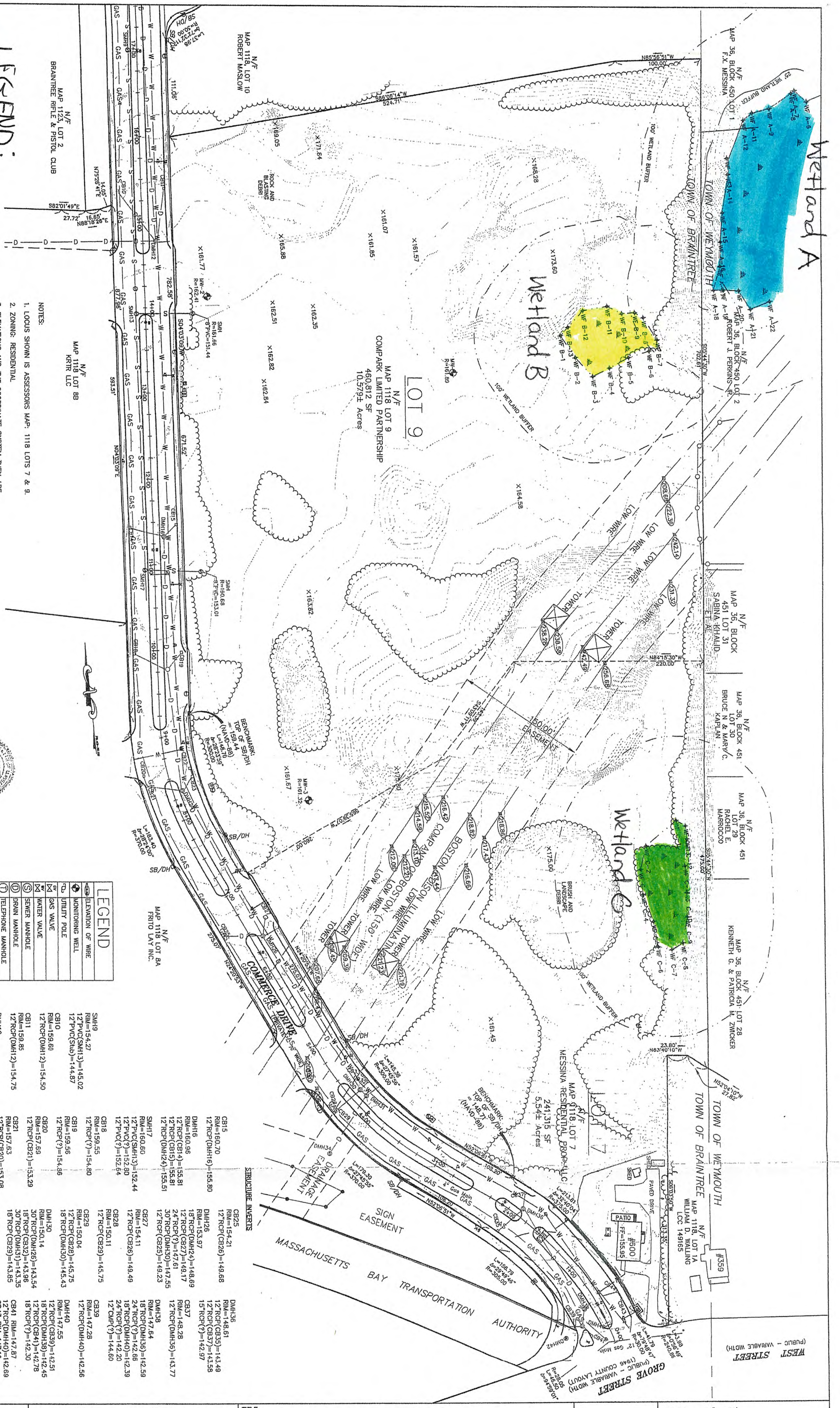


LEGEND:

Wetland A

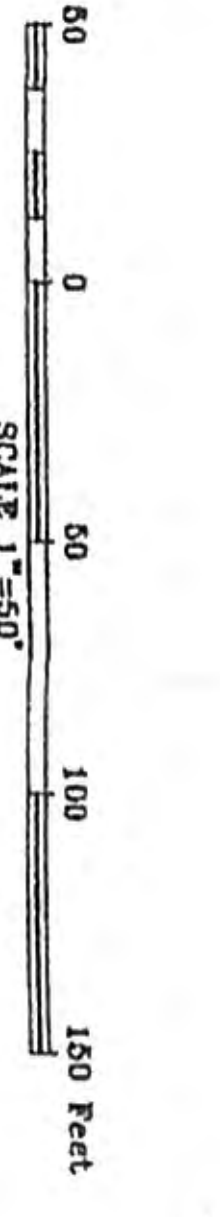
Wetland B

Wetland C



NOTES:

1. LOCUS SHOWN IS ASSESSORS MAP: 1118 LOTS 7 & 9.
2. ZONING: RESIDENTIAL.
3. ELEVATIONS AND THE COORDINATE SYSTEM THEY ARE BASED ON ARE IN US SURVEY FEET AND ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983. CORRS ADJUSTMENT (NAD83/CORS) AS DETERMINED BY GPS OBSERVATIONS MADE JULY 2018 OF CERTAIN KEY POINTS USING THE MA-CORS MASSACHUSETTS DOT GPS VIRTUAL REFERENCE SYSTEM (VRS).
4. PROPERTY LINE BEARINGS DERIVED ARE TAKEN FROM RECORD PLANS OF THE SITE RECORDED AS PLAN 129 OF 1993 IN BOOK 412 AND PLAN 926 OF 1989 IN PLAN BOOK 386.
5. THE PROPERTY SHOWN FALLS WITHIN FLOOD HAZARD ZONE X (NOT A SPECIAL FLOOD HAZARD ZONE) PER FEMA FIRM 250210228E DATED JULY 17, 2017.
6. WETLAND RESOURCE AREAS WERE DELINEATED BY LUCAS ENVIRONMENTAL, LLC ON JUNE 19, 2018.



LEGEND	
	ELEVATION OF WIRE
	MONITORING WELL
	UTILITY POLE
	WATER VALVE
	SEWER MANHOLE
	DRAIN MANHOLE
	TELEPHONE MANHOLE
	CATCH BASIN
	FIRE HYDRANT
	WET FLAG
	STONE BOUND WITH CH
	LINE POLE
	UTILITY HAND HOLE
	HANDICAP RAMP
	TREE LINE

SMH9 RIM=154.27	CB15 RIM=160.70	DMH35 RIM=154.21
12 PVC(SMH3)=145.02	12 RCP(DMH18)=155.80	12 RCP(CB35)=143.49
12 PVC(SMB)=144.87	DMH16 RIM=160.96	12 RCP(CB37)=143.58
CB10 RIM=159.60	12 RCP(CB14)=155.81	DMH26 RIM=153.97
12 RCP(DMH2)=154.50	24 RCP(CB15)=155.81	12 RCP(DMH22)=149.89
CB11 RIM=159.85	12 RCP(DMH24)=155.51	24 RCP(CB17)=149.17
12 RCP(DMH12)=154.75	SMH17 RIM=160.60	30 RCP(DMH30)=147.55
DMH12 RIM=161.35	12 RCP(SMH3)=152.44	12 RCP(CB25)=149.23
12 RCP(CB11)=154.05	12 PVC(?)=152.64	DMH38 RIM=147.64
24 RCP(DMH8)=144.90	CB18 RIM=159.55	18 RCP(DMH35)=142.59
30 RCP(FES497)=144.45	12 RCP(?)=152.64	24 RCP(?)=142.20
24 RCP(?)=144.90	CB19 RIM=159.56	12 CMP(?)=144.60
SMH3 RIM=160.21	12 RCP(CB20)=153.29	CB39 RIM=147.28
12 RCP(SMH9)=150.91	DMH12 RIM=157.83	12 RCP(DMH40)=142.58
12 PVC(SMH7)=156.26	12 RCP(CB21)=152.93	DMH40 RIM=147.55
CB14 RIM=160.79	DMH12 RIM=157.83	12 RCP(CB39)=142.51
12 RCP(DMH6)=156.14	DMH24 RIM=157.76	12 RCP(DMH39)=142.45
	12 RCP(CB22)=151.91	18 RCP(CB41)=142.78
	18 RCP(DMH24)=151.86	30 RCP(CB43)=143.49
	DMH24 RIM=157.81	CB44 RIM=147.28
	12 RCP(DMH18)=152.86	12 RCP(CB44)=143.16
	18 RCP(CB23)=152.71	DMH47 RIM=151.31
	12 RCP(CB26)=152.66	CB49 RIM=145.04
		12 RCP(DMH48)=140.65
		SMH2 RIM=127.44
		10 PVC(SMH1)=103.94
		FESS3 40 RCP(DMH7)=139.57
		FES49 30 RCP(DMH7)=131.50

Mount Hope ENGINEERING, Inc.
 CIVIL/ENVIRONMENTAL SERVICES
 1788 G.A.R. Highway ph. 508-379-1234
 Swansea, MA 02777 fax 508-379-0727

SITE PLAN
 PROJECT: LOTS 7 & 9 COMMERCE DRIVE BRAINTREE, MASSACHUSETTS

SCALE: 1" = 50'
 DATE: 09/04/2018
 DWG. BY: R.A.P.
 REVISED:
 DWG. NO.: 18-290
 JOB NO.: 18-290

DRAWING NO. **T**

Waters_Name	State	Cowardin Code	Hgm Code	Meas Type	Amount	Units	Waters_Type	Latitude	Longitude	Local Waterway	Ohwm Chg	Ohwm Bed	Ohwm Bre:
Wetland B	MA	PSS-PALUSTRINE, SCRUB-SHRUB	Depressional	AREA	0.131	ACRES	EXCLDB4V	42.19071	-70.9739	Smelt Brook			
Wetland C	MA	PSS-PALUSTRINE, SCRUB-SHRUB	Depressional	AREA	0.139	ACRES	EXCLDB4V	42.18884	-70.9739	Smelt Brook			

Ohwm Chg Ohwm Chg Ohwm Chg Ohwm Line Ohwm Des Ohwm Lea Ohwm Mul Ohwm Sco Ohwm Sed Ohwm Sed Ohwm She Ohwm Litt Ohwm Wra Ohwm Veg Ohwm Wat Ohwm Oth Ohwm Oth

Dec 2001



Google earth

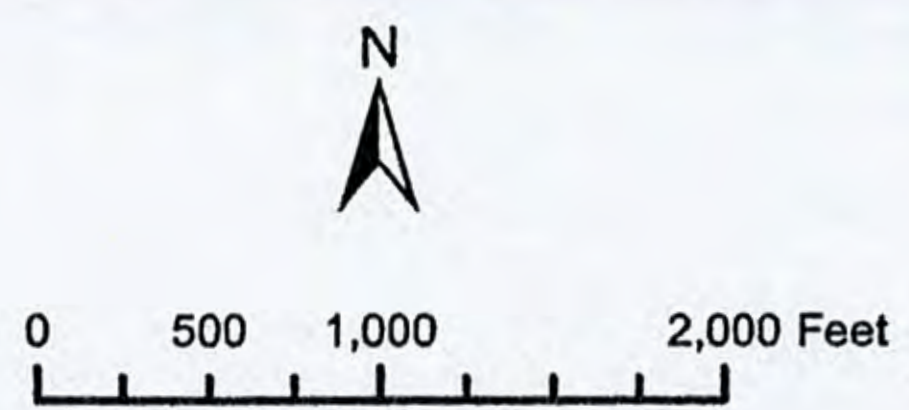
Image Maps © 2001, Community Health of Massachusetts EOEPA

April 2018





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



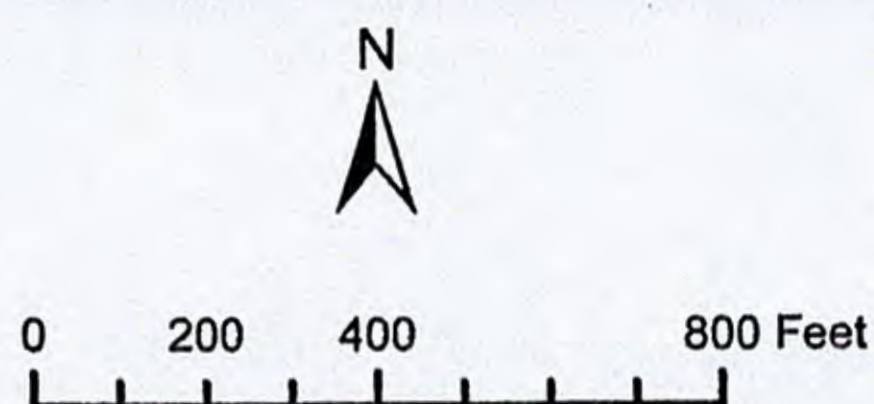
USGS Map
Commerce Drive
Map 1118, Lots 7 & 9
Braintree, MA

FIGURE 1

LUCAS
 ENVIRONMENTAL, LLC



Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 30cm (2013/2014)

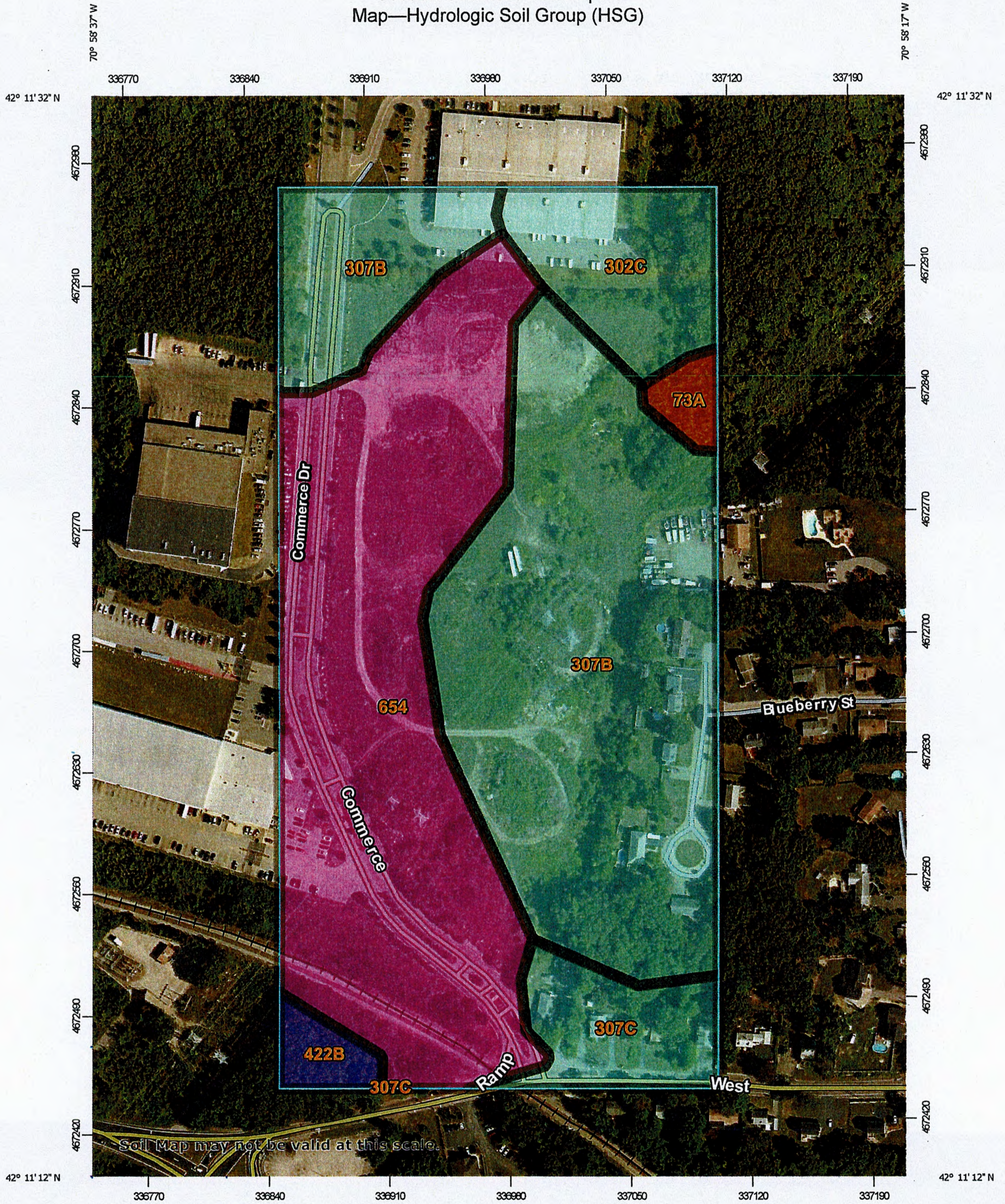


NWI Map
Commerce Drive
Map 1118, Lots 7 & 9
Braintree, MA

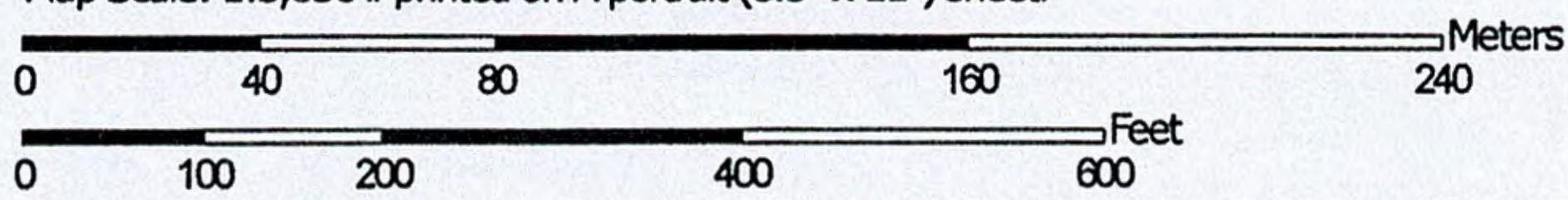
FIGURE 4



Custom Soil Resource Report
 Map—Hydrologic Soil Group (HSG)



Map Scale: 1:3,030 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84