

# EcoTec, Inc.

## ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street  
Worcester, MA 01605-2629  
508-752-9666 – Fax: 508-752-9494

Via Email Only

September 25, 2014

Mr. Hans Larsen  
Town Manager  
Town of Wellesley  
525 Washington Street  
Wellesley, MA 02482

RE: Wetland Due Diligence Evaluation, 156 Weston Road, Wellesley, Massachusetts

Dear Mr. Larsen:

EcoTec was retained by the Town of Wellesley to conduct the following work relative to the above-referenced property:

*...EcoTec proposes to inspect the above-referenced 46±-acre property plus the Aqueduct inclusion ... for the presence of wetland resource areas subject to jurisdiction under the Massachusetts Wetlands Protection Act (the "Act"; M.G.L. c. 131, § 40) and regulations (the "Regulations"; 310 CMR 10.00 et seq.), Section 404 the U.S. Clean Water Act, and the Wellesley Wetlands Protection Bylaw. EcoTec will conduct this work in accordance with our Standard Operating Procedures, and wetland identifications will be conducted in accordance with the above-referenced statutes and regulations and associated policy and guidance. The approximate boundary of jurisdictional resource areas (i.e., Land Under Water, Bank, Bordering Vegetated Wetlands, Bordering and Isolated Land Subject to Flooding, and Riverfront Area under the Act; Waters of the United States under the U.S. Clean Water Act; and analogous resource areas, including Isolated Vegetated Wetlands and Vernal Pools under the Bylaw) will be sketched on the provided Topographic Map. There is one mapped wetland area in the northern corner of the site that is also identified as a certified vernal pool; based upon the provided Topographic Map, there are a number of other more shallow depressed areas mapped across the site with a concentration of smaller such areas near the Aqueduct in the southern portion of the site. Off-site resources that could affect the site (i.e., project a resource area or buffer zone onto the site) will also be identified to the extent possible based upon observations from the site and adjacent areas where observations can be made from without trespass.... EcoTec will prepare a wetland resource evaluation report with various applicable mapping and the site sketch to detail the findings of the inspections.*

*The client acknowledges that the wetland resource areas are not being delineated as part of this review and that the sketch plan provided under this review simply identifies the approximate boundary of areas that meet criteria to be considered as a wetland resource under the applicable statute or regulation. This sketch plan is intended to be used for preliminary planning purposes only; it is not intended to be used for regulatory filings. The Client acknowledges that the*

*regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. The Client hereby acknowledges that it has obtained physical and legal access for all requested work.*

*EcoTec was also asked to review a 'Natural Resource Assessment for the North 40, Wellesley, Massachusetts' that was prepared by Vanasse Hangen Brustlin, Inc. ("VHB"), dated August 4, 2014. Pertinent commentary will be incorporated into the EcoTec, Inc. letter.*

### **Site Description**

The subject site consists of 46.10± acres of land that is divided by the Town-owned former Cochituate Aqueduct in the southern portion of the subject site into approximately 40 acres to the north of the Aqueduct and approximately 6 acres to the south of the Aqueduct (see Attached Annotated Wellesley College 'North 40' Topographic Map; the "Topographic Map"). The subject site is otherwise surrounded by Weston Road to the northeast, Turner Road to the northwest, and the MBTA Commuter Rail to the south. Central Street (Route 135) is located to the south of the MBTA Commuter Rail further to the south of the subject site.

The eastern corner of the subject site near Weston Road is developed with an existing single family structure. An area of land located along Weston Road in the northeastern/north-central portions of the subject site includes multiple community garden plots, gravel access roads to the garden plots, and peripheral meadow and thicket. With the exception of an area of wetland resources near the northern corner of the subject site, the balance of the subject site consists of mixed coniferous-deciduous second growth upland forest. Based upon the Topographic Map, the subject site topography is irregular with shallow depressions common in the western and southern portions of the subject site. A series of walking trails was noted throughout the property. A number of excavator tracks related to an ongoing investigation of the subject site were also noted throughout the subject site during the inspections. Additional information, including discussions of plant communities and wetland resources observed on the subject site, is provided below.

### **Methodology**

EcoTec conducted a desk-top survey of the subject site and its surroundings by reviewing various available resources; a copy of each bulleted resource is attached to this report:

- Wellesley College 'North 40' Topographic Map, Wellesley GIS, prepared for Board of Selectmen June 11, 2014 (Annotated by EcoTec);
- USGS Topographic Map, Framingham Quadrangle, 1987;
- Aerial Photographs, Google Earth, April 17, 2008 and August 24, 2013;
- Town of Wellesley Massachusetts Wetlands Viewer from Town of Wellesley Natural Resource Commission website;
- DEP Wetlands, Certified Vernal Pools, and Potential Vernal Pool Data Layers from MassGIS OLIVER;
- United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey: Soil Map and Map Unit Legend;

- Flood Insurance Rate Map, Norfolk County, Map Number 25021C0016E, Effective Date July 17, 2012;
- *Massachusetts Natural Heritage Atlas*, Priority Habitats and Estimated Habitats, Natick Quadrangle, October 1, 2008; and
- Habitat of Potential Regional or Statewide Importance, Town of Wellesley, UMass Extension, dated November 2011.

In addition, EcoTec reviewed the BioMap2 Report for Wellesley prepared by the Massachusetts Natural Heritage and Endangered Species Program (“MNHESP”). This document is for planning purposes.

Following a review of the above-referenced desk-top references, on August 26 and 28, 2014, EcoTec, Inc. inspected the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the “Act”) and its implementing regulations (310 CMR 10.00 *et seq.*; the “Regulations”); (2) the Town of Wellesley Wetlands Protection Committee Wetlands Protection Bylaw (i.e., Article 44; the “Bylaw”) and Wetlands Protection Regulations (“Bylaw Regulations”); and (3) the U.S. Clean Water Act (i.e., Waters of the United States). John P. Rockwood, Ph.D., PWS conducted the inspections.

In the conduct of this evaluation, the perimeter of the subject site was walked, each of the depressional areas shown on the Topographic Map was evaluated, and the balance of the subject site was evaluated by walking parallel transects across the subject site. No wetland resource area boundaries were delineated as part of this evaluation. The plant taxonomy used in this report is based on the *National Wetland Plant List (Massachusetts 2012 Final State Wetland Plant List)*, ERDC/CRREL TR-12-11 (Lichvar, 2012).

### **Findings**

Based upon a review of the Topographic Map, USGS Map, Town of Wellesley Massachusetts Wetlands Viewer, and the DEP Wetlands data layer from MassGIS, there are no mapped lakes, rivers, or streams located on or within 100 feet of the subject site and there are no mapped rivers or streams located within 200 feet of the subject site. These maps show a small ponding area in the northern corner of the subject site. This ponding area and its status are detailed in a subsequent section of this report. The USGS map shows a solid heavy blue line on the Aqueduct parcel; the Aqueduct itself is clearly a subsurface feature that does not project resource areas onto the subject site.

According to the Web Soil Survey, the soils on the subject site are mapped primarily as Hinckley sandy loam, Hinckley loamy sand, Merrimac fine sandy loam, Merrimac-Urban land complex, and Sudbury fine sandy loam. No mapped wetland soils occur on the subject site.

Again, with the exception of the community garden plots, the vast majority of the uplands on the subject site consist of mixed coniferous-deciduous second growth upland forest and shrub thicket/meadow proximate to the community garden plots. These cover types are clearly seen in the Aerial Photographs from Google Earth dated April 17, 2008 (before leaf-out of the deciduous

species) and August 24, 2013 during the height of the growing season. Plant species observed in these areas include the following.

- Mixed coniferous-deciduous second growth upland forest: Plant species observed through the upland forest on the subject site include northern red oak (*Quercus rubra*), northern white oak (*Quercus alba*), eastern white pine (*Pinus strobus*), pitch pine (*Pinus rigida*), black cherry (*Prunus serotina*), American plum (*Prunus americana*), red maple (*Acer rubrum*), Norway maple (*Acer platanoides*), shag-bark hickory (*Carya ovata*), and sweet birch (*Betula lenta*) trees, saplings, and/or shrubs; eastern poison-ivy (*Toxicodendron radicans*), Virginia-creeper (*Parthenocissus quinquefolia*), Asian bittersweet (*Celastrus orbiculata*), and grape (*Vitis sp.*) climbing woody vines and/or ground cover; highbush blueberry (*Vaccinium corymbosum*), European buckthorn (*Rhamnus cathartica*), glossy false buckthorn (*Frangula alnus*), common winterberry (*Ilex verticillata*), bush honeysuckle (*Lonicera sp.*), winged spindle-tree (*Euonymus alata*), and Japanese barberry (*Berberis thunbergii*) shrubs; and late lowbush blueberry (*Vaccinium angustifolium*), wild sarsaparilla (*Aralia nudicaulis*), princess-pine (*Dendrolycopodium obscurum*), southern ground-cedar (*Diphasoastrum digitatum*), northern bracken fern (*Pteridium aquilinum*), hay-scented fern (*Dennstaedtia punctilobula*), feathery false Solomon's-seal (*Maianthemum racemosum*), false lily-of-the-valley (*Maianthemum canadense*), and spotted prince's-pine (*Chimaphila maculata*) ground cover. Significant trees (i.e., trees with a DBH of 10 inches or more), predominantly eastern white pine trees (*Pinus strobus*), were noted throughout much of the subject site, although more significant concentrations of such trees were observed in the north-central, southwestern, and southeastern portions of the subject site (see attached April 17, 2008 Google Earth Aerial Photograph).
- Shrub thicket and meadow: Plant species observed in the thicket/meadow near the garden plots include Virginia-creeper (*Parthenocissus quinquefolia*) and Asian bittersweet (*Celastrus orbiculata*) climbing woody vines and ground cover; American plum (*Prunus americana*), bramble (*Rubus sp.*), European buckthorn (*Rhamnus cathartica*), glossy false buckthorn (*Frangula alnus*), rambler rose (*Rosa multiflora*), bush honeysuckle (*Lonicera sp.*), and winged spindle-tree (*Euonymus alata*) shrubs; and grasses (Gramineae sp.), whiplash dewberry (*Rubus flagellaris*), bristly dewberry (*Rubus hispidus*), lesser periwinkle (*Vinca minor*), Japanese black-bindweed (*Fallopia japonica*), American pokeweed (*Phytolacca americana*), King's-cureall (*Oenothera biennis*), common wormwood (*Artemisia vulgaris*), Queen Anne's lace (*Daucus carota*), ox-eye daisy (*Leucanthemum vulgare*), goldenrods (*Solidago sp.*), goldentop (*Euthamia sp.*), common milkweed (*Asclepias syriaca*), lesser burdock (*Arctium minus*), garlic-mustard (*Alliaria petiolata*), bushclover (*Lespedeza sp.*), fleabane (*Erigeron sp.*), cinquefoil (*Potentilla sp.*), meadow-rue (*Thalictrum sp.*), wood-sorrel (*Oxalis sp.*), great plantain (*Plantago major*), red clover (*Trifolium pratense*), annual ragweed (*Ambrosia artemisiifolia*), garden vetch (*Vicia sativa*), violet (*Viola sp.*), and common yarrow (*Achillea millefolium*) ground cover.

The balance of this report will cover the various wetland resource areas under the Act and Regulations and the Bylaw and Bylaw Regulations as well as other pertinent areas.

**Land Under Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, Isolated Land Subject to Flooding, Isolated Vegetated Wetlands, Vernal Pool Habitat, and Buffer Zone:** There is an area in the northern portion of the subject site that is mapped as open water on several of the referenced maps. During the site inspections on August 26 and 28, 2014, a depression with a limited area and depth of standing water (approximately 900 square feet at 4 inches maximum depth on August 28, 2014) was observed in the northern portion of the subject site. It is clear, based upon the existing vegetation, that a substantially larger portion of this area (i.e., approximately 10,000 square feet) ponds annually. The annually ponded area is fringed by a thin band of forested swamp. Several orange flags labeled LEC were observed near the southern boundary of the area. Two stormwater outfalls from the surrounding roadways drain to this area, one from the north, one from the southwest. Plant species observed in this area include red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), and American elm (*Ulmus americana*) trees, saplings, and/or shrubs; eastern poison-ivy (*Toxicodendron radicans*) climbing woody vines and ground cover; highbush blueberry (*Vaccinium corymbosum*), silky dogwood (*Cornus amomum*), and glossy false buckthorn (*Frangula alnus*) shrubs; and spotted touch-me-not (*Impatiens capensis*), sedges (*Carex spp.*), and sphagnum moss (*Sphagnum sp.*) ground cover. Evidence of wetland hydrology included an area of shallow inundation, evidence of flooding, saturated soils, high groundwater, and stained leaf litter. EcoTec is not aware of any prior filings or determinations on this resource area under the Act or Bylaw.

In determining what resource areas this ponding area would comprise, the maximum area of the ponding area and its permanence must be determined. Based upon the ponding area shown on the Topographic Map, the area that is shaded blue is approximately 10,000 square feet in size. The source of the ponding area extent on this plan is not known. During the EcoTec inspections, an area of standing water approximately 900 square feet in size and 4 inches in depth was observed in the center of the area. Information included as part of the Vernal Pool Certification Letter, dated October 18, 1989, indicates that this area does not meet the 10,000 square foot requirement to be designated as pond; the letter also indicated that the area does not dry up annually. Under the Regulations (and Bylaw, as Pond is not otherwise defined therein), a Pond:

*...means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 10,000 square feet. Ponds may be either naturally occurring or man-made by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought. Periods of extended drought for purposes of 310 CMR 10.00 shall be those periods, in those specifically identified geographic locations, determined to be at the "Advisory" or more severe drought level by the Massachusetts Drought Management Task Force, as established by the Executive Office of Environmental Affairs and the Massachusetts Emergency Management Agency in 2001, in accordance with the Massachusetts Drought Management Plan (MDMP).*

As of the date of this letter, an Advisory or more severe level of drought had not been designated pursuant to the Massachusetts Drought Management Plan.

It is EcoTec's opinion that adequate information to designate this ponding area as a Pond under the Regulations and Bylaw does not currently exist. The size of the maximum ponding area based upon

field location and survey (preferably during the spring when flooded or based upon area to the base of the shrubs around the ponding area periphery) would be necessary to demonstrate that this area meets the threshold to be designated as a Pond under the Regulations and Bylaw. Anecdotal information from 1989 suggests that the area is too small. Additional historic information regarding the duration of water presence within this area would also be helpful in this determination. If the Committee were to find this area to be a Pond, the Pond would be regulated as Land Under Water Bodies and Waterways and as Bank and the fringe of forested swamp would be regulated as Bordering Vegetated Wetlands under the Regulations and Bylaw. Bordering Vegetated Wetlands and Bank have a 100-foot Buffer Zone under the Regulations and Bylaw/Bylaw Regulations. Under the Bylaw Regulations the 100-foot Buffer Zone is itself a resource area and is divided into an inner 25-foot No Disturbance Zone and an outer 75-foot Limited Disturbance Zone.

Alternatively, this area would be regulated as Isolated Land Subject to Flooding under the Regulations. Under the Regulations (and the Bylaw since Isolated Land Subject to Flooding is not otherwise defined therein), Isolated Land Subject to Flooding:

*...is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches.*

At about 10,000 square feet in size, this area would only have to hold water to a depth of one foot to meet this threshold. It is clear that this depression floods to a depth in excess of one foot on an annual basis. As such, assuming this area is found not to meet the definition of a Pond above, this area would be subject to jurisdiction as Isolated Land Subject to Flooding under the Regulations and Bylaw. Isolated Land Subject to Flooding does not have a 100-foot Buffer Zone under the Regulations. However, Isolated Land Subject to Flooding does have a 100-foot Buffer Zone from the maximum observed extent of flooding with an inner 25-foot No Disturbance Zone and outer 75-foot Limited Disturbance Zone under the Bylaw Regulations. Again, the 100-foot Buffer Zone is a resource area under the Bylaw and Bylaw Regulations. EcoTec's reading of the Bylaw (as originally formatted in 2002) indicates that the Bylaw does not regulate land located within 200 feet of Isolated Land Subject to Flooding (and Bordering Land Subject to Flooding); that error, which currently persists on the website, resulted during prior reformatting of Section 2 of the Bylaw.

Furthermore, under the alternative scenario, this area would also be regulated as an Isolated Vegetated Wetland under the Bylaw as it is greater than 2,500 square feet in size and as Vernal Pool Habitat under the Bylaw. This area was designated as Certified Vernal Pool #32 on November 15, 1989 based upon the presence of facultative invertebrate species, obligate invertebrate species (i.e., fairy shrimp), and obligate amphibian species (i.e., recently confirmed by MNHESP to be wood frog egg masses). Isolated Vegetated Wetlands have a 100-foot Buffer Zone extending outward from the wetland boundary with an inner 25-foot No Disturbance Zone and outer 75-foot Limited Disturbance Zone under the Bylaw Regulations. The Vernal Pool Habitat under the Bylaw includes the pool itself and the land located within 100 feet of the mean annual boundary of the depression (i.e., 100 feet outward from the maximum observed extent of flooding). Vernal Pool Habitat does not need to be located within another resource area protectable under the Bylaw to be subject to

protection under the Bylaw and Bylaw Regulations. Vernal Pool Habitat itself does not have a 100-foot Buffer Zone under the Bylaw and Bylaw Regulations.

Based upon a review of the *Massachusetts Natural Heritage Atlas*, 13<sup>th</sup> edition, Priority Habitats and Estimated Habitats, Natick Quadrangle, valid from October 1, 2008, there are is one Certified Vernal Pool (i.e., CVP #32) located in the northern portion of the subject site. Based upon MassGIS, this pool is also mapped as a Potential Vernal Pool. There are no other mapped Certified Vernal Pools or Potential Vernal Pools located on or within 100 feet of the subject site. Certified Vernal Pools are Class B Outstanding Resource Waters. It must be noted that vernal pools are not a resource area under the Regulations; they are simply a type of wildlife habitat that occurs within other resource areas or within unregulated uplands. Vernal Pool Habitat under the Regulations includes the pool itself as well as land located within 100 feet of the pool boundary that is located within a jurisdictional resource area under the Regulations; the 100-foot Buffer Zone is not a resource area under the Regulations.

With regard to jurisdiction under the U.S. Clean Water Act, while it is quite probable that this wetland lacks a significant nexus to a jurisdictional Water of the United States and would not be jurisdictional under the U.S. Clean Water Act, EcoTec offers no opinion on this matter. Federal wetland jurisdiction can only be determined by the U.S. Army Corps of Engineers (“Corps”) upon the filing of a Jurisdictional Determination or through the submittal of an Application for Permit to the Corps.

Based upon the map review and the site inspections, including observations made from the subject site and public roads, no other resources areas that would project either Riverfront Area or 100-foot Buffer Zone onto the subject site were noted. There is a wetland system located to the south of the site across the MBTA Commuter Rail and Central Street from the subject site; this wetland would be located close to 200 feet from the southern subject site boundary.

**Bordering Land Subject to Flooding:** Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Based upon a review of the Flood Insurance Rate Map, Norfolk County, Map Number 25021C0016E, Effective Date July 17, 2012, the subject site and its surroundings are mapped as Other Areas: Zone X, which are defined as areas located outside of the 0.2% annual chance flood (i.e., outside of 500-year floodplain). Given the lack of a significant water body or waterway or a mapped Zone A or AE (i.e., a mapped 100-year floodplain) proximate to the subject site, Bordering Land Subject to Flooding under the Regulations and the Bylaw would not occur on the subject site. Bordering Land Subject to Flooding does not have a 100-foot Buffer Zone under the Regulations or Bylaw. Again, as noted above for Isolated Land Subject to Flooding, it is EcoTec’s position that the Bylaw does not regulate land located within 200 feet of Bordering Land Subject to Flooding.

**Riverfront Area:** The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. The Bylaw also establishes jurisdiction over land

located within 200 feet of perennial streams. Based upon a review of the current USGS Map and observations made during the site inspection, there are no mapped or unmapped streams located on or within 200 feet of the subject site. Accordingly, Riverfront Area under the Act and Bylaw would not occur on the subject site. Riverfront Area does not have a Buffer Zone under the Act and Regulations or Bylaw.

**Estimated and Priority Habitat:** Based upon a review of the *Massachusetts Natural Heritage Atlas*, 13<sup>th</sup> edition, Priority Habitats and Estimated Habitats, Natick Quadrangle, valid from October 1, 2008 (attached), there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)] and no Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; "MESA") and MESA Regulations (321 CMR 10.00 *et seq.*)] on or in the immediate vicinity of the subject site. The Vernal Pool Certification Letter, dated November 15, 1989, indicates that the MHESP was not notified of the presence of state-listed wildlife species in this vernal pool habitat.

**Habitat of Potential Regional or Statewide Importance:** Based upon a review of the Habitat of Potential Regional or Statewide Importance Map for Wellesley, dated November 2011, the central portion of the subject site is mapped as Habitat of Potential Regional or Statewide Importance. MassDEP's June 2006 Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands ("Guidance") adopted an approach that utilizes maps developed at the University of Massachusetts using the Conservation and Prioritization System ("CAPS") based upon the integrated index of ecological integrity as part of the wildlife habitat evaluation process. This mapping on the subject site is of limited concern as the mapped area is not located within or proximate to a jurisdictional wetland resource area under the Regulations, and a wildlife habitat evaluation under the Regulations and Guidance would not likely be required for any project proposed on the subject site.

**Areas of Critical Environmental Concern:** Based upon a review of the State-wide Map of Areas of Critical Environmental Concern ("ACECs"), there are no ACECs located within or proximate to Wellesley, Massachusetts. This map is available at <http://www.mass.gov/eea/agencies/dcr/conservation/ecology-acec/areas-of-critical-environmental-concern-acec.html>.

**BioMap2:** Based upon a review of the BioMap2 Report prepared for the Town of Wellesley in 2012, there are no areas identified as Core Habitats or Critical Natural Landscapes located on or near the subject site. Core Habitats and Critical Natural Landscapes are located near the northeastern municipal boundary and the extreme southwestern municipal boundary. This report is available at [http://maps.massgis.state.ma.us/dfg/biomap/pdf/town\\_core/Wellesley.pdf](http://maps.massgis.state.ma.us/dfg/biomap/pdf/town_core/Wellesley.pdf).

**VHB Memorandum:** EcoTec was provided with a copy of the updated 'Natural Resource Assessment, North 40, Wellesley, Massachusetts' memorandum, prepared by VHB, dated September 18, 2014. EcoTec concurs that there is a single wetland area on the subject site and that this wetland area may be characterized as Isolated Land Subject to Flooding under the Regulations and Isolated Vegetated Wetlands, Isolated Land Subject to Flooding, and Vernal Pool Habitat under the Bylaw or alternatively a Pond, which would be regulated as Land Under Water Bodies and Waterways and Bank, with a fringe of Bordering Vegetated Wetlands under the Regulations and

Mr. Hans Larsen  
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Bylaw. Certain of these resource areas have a 100-foot Buffer Zone under the Regulations and/or the Bylaw and Bylaw Regulations. Given the ambiguity of the resource area classification, the type and extent of this resource area would need to be determined through a formal filing under the Act and Bylaw with the Wellesley Wetlands Protection Committee. The determination of Wellhead Protection Areas and Significant Trees was outside of EcoTec's scope and, except as noted above, are not otherwise considered within this report. Subject to the above comments, EcoTec is in substantive agreement with the pertinent VHB findings.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. A brief description of my experience and qualifications is attached. If you have any questions, please feel free to contact me at any time.

Cordially,  
ECOTEC, INC.

A handwritten signature in blue ink that reads "John P. Rockwood". The signature is written in a cursive, flowing style.

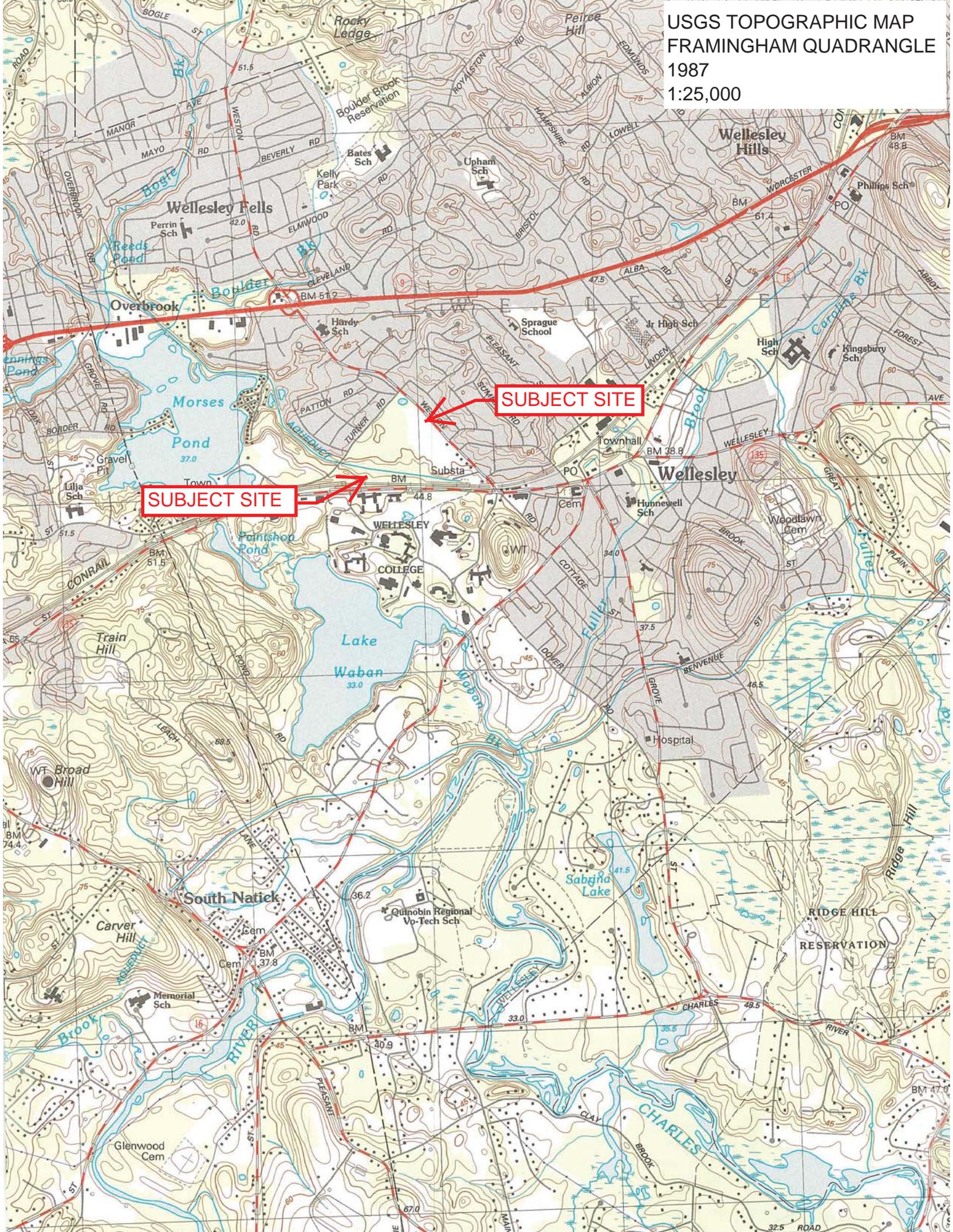
John P. Rockwood, Ph.D., PWS  
Chief Environmental Scientist

Attachments (10, 12 pages)

18/WELLESLEYWESTONNOTH40REVIEWREV20140925



USGS TOPOGRAPHIC MAP  
FRAMINGHAM QUADRANGLE  
1987  
1:25,000



**SUBJECT SITE**

**SUBJECT SITE**

4/17/2008  
1995 2013

AERIAL PHOTOGRAPH  
GOOGLE EARTH  
APRIL 17, 2008

SUBJECT SITE

SUBJECT SITE

Image MassGIS, Commonwealth of Massachusetts EOEA

Google earth

8/24/2013  
1995 2013



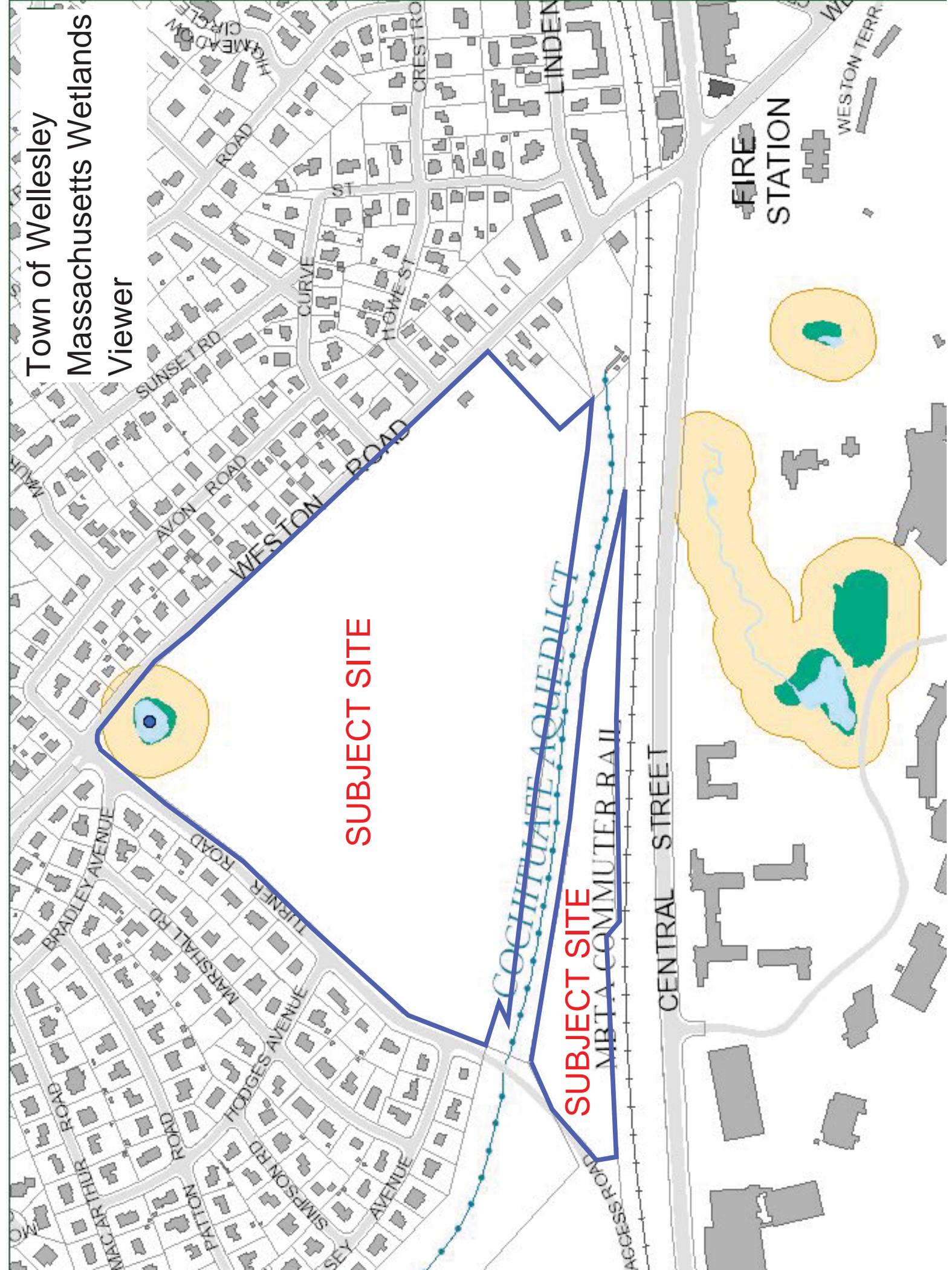
AERIAL PHOTOGRAPH  
GOOGLE EARTH  
AUGUST 24, 2013



SUBJECT SITE

SUBJECT SITE

Town of Wellesley  
Massachusetts  
Wetlands  
Viewer



SUBJECT SITE

SUBJECT SITE

COCHITUATE AQUEDUCT

MBTA COMMUTER RAIL

FIRE STATION

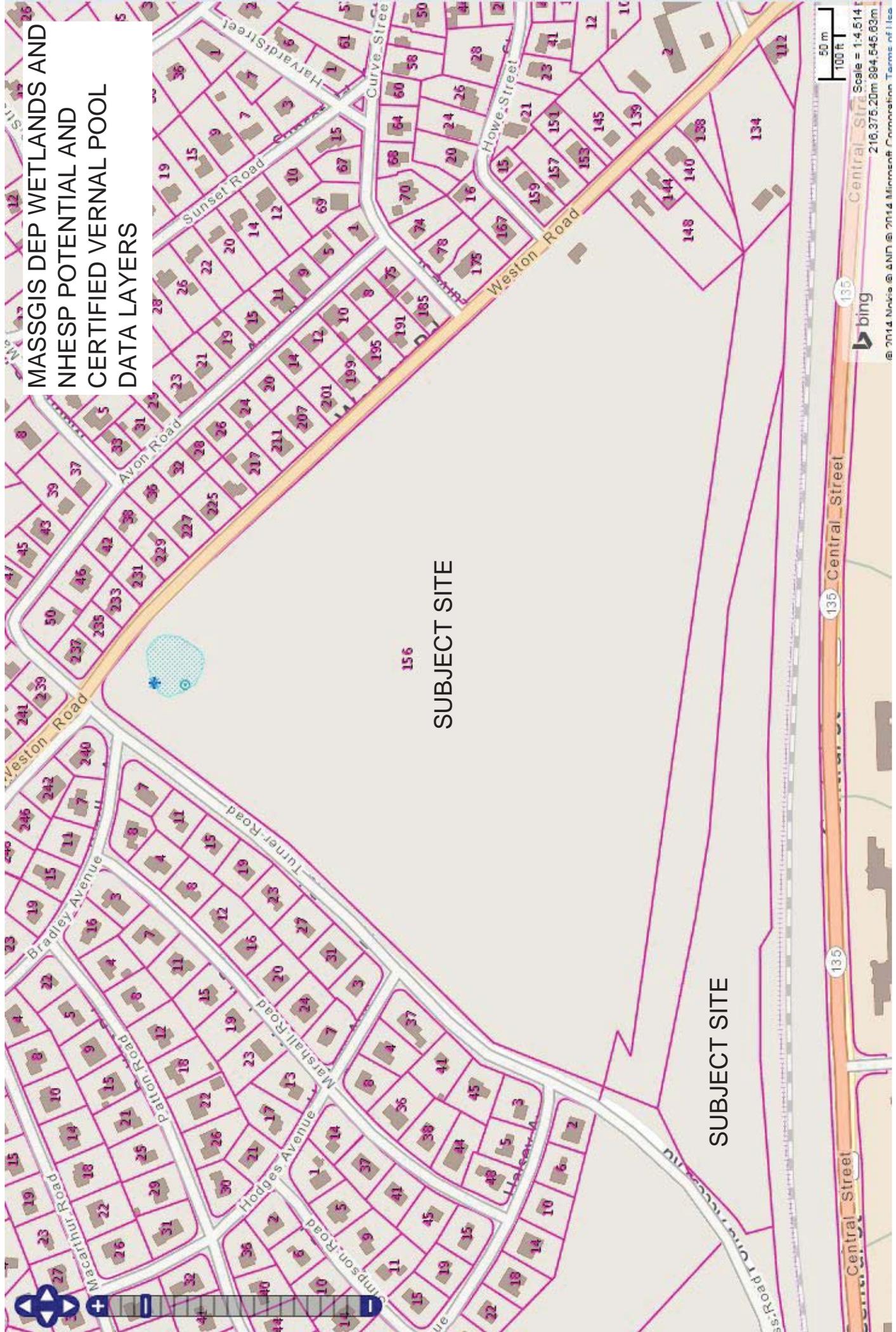
SUNSET RD  
AVON ROAD  
WESTON ROAD  
BRADLEY AVENUE  
MARSHALL RD  
TURNER ROAD  
HODGES AVENUE  
SIMPSON RD  
FATTON ROAD  
MORRIS AVENUE

CURVE ST  
HOWE ST  
CRESTRO  
LINDEN

CENTRAL STREET

WESTON TERR

MASSGIS DEP WETLANDS AND  
NHESP POTENTIAL AND  
CERTIFIED VERNAL POOL  
DATA LAYERS



156

SUBJECT SITE

SUBJECT SITE

50 m

100 ft

bing

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135 Central Street

135

135 Central Street

Central Street Scale = 1:4,614  
216,375.20m 894,545.63m

# Custom Soil Resource Report Soil Map

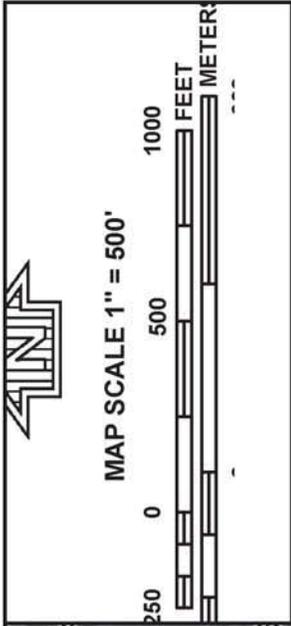


Map Scale: 1:5,510 if printed on A landscape (11" x 8.5") sheet.

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

# Map Unit Legend

Norfolk and Suffolk Counties, Massachusetts (MA616)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
245C	Hinckley sandy loam, 8 to 15 percent slopes	25.9	34.3%
253D	Hinckley loamy sand, 15 to 35 percent slopes	6.6	8.7%
254A	Merrimac fine sandy loam, 0 to 3 percent slopes	14.8	19.6%
254B	Merrimac fine sandy loam, 3 to 8 percent slopes	14.4	19.0%
260B	Sudbury fine sandy loam, 2 to 8 percent slopes	2.2	2.9%
602	Urban land, 0 to 15 percent slopes	1.1	1.4%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	7.7	10.2%
630C	Charlton-Hollis-Urban land complex, 3 to 15 percent slopes	2.8	3.8%
653	Udorthents, sandy	0.0	0.0%
<b>Totals for Area of Interest</b>		<b>75.4</b>	<b>100.0%</b>



**NATIONAL FLOOD INSURANCE PROGRAM**

**NFIP**

PANEL 0016E

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**NORFOLK COUNTY,**  
**MASSACHUSETTS**  
**(ALL JURISDICTIONS)**

PANEL 16 OF 430  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
DOVER, TOWN OF	250238	0016	E
NEEDHAM, TOWN OF	250215	0016	E
WELLESLEY, TOWN OF	250255	0016	E

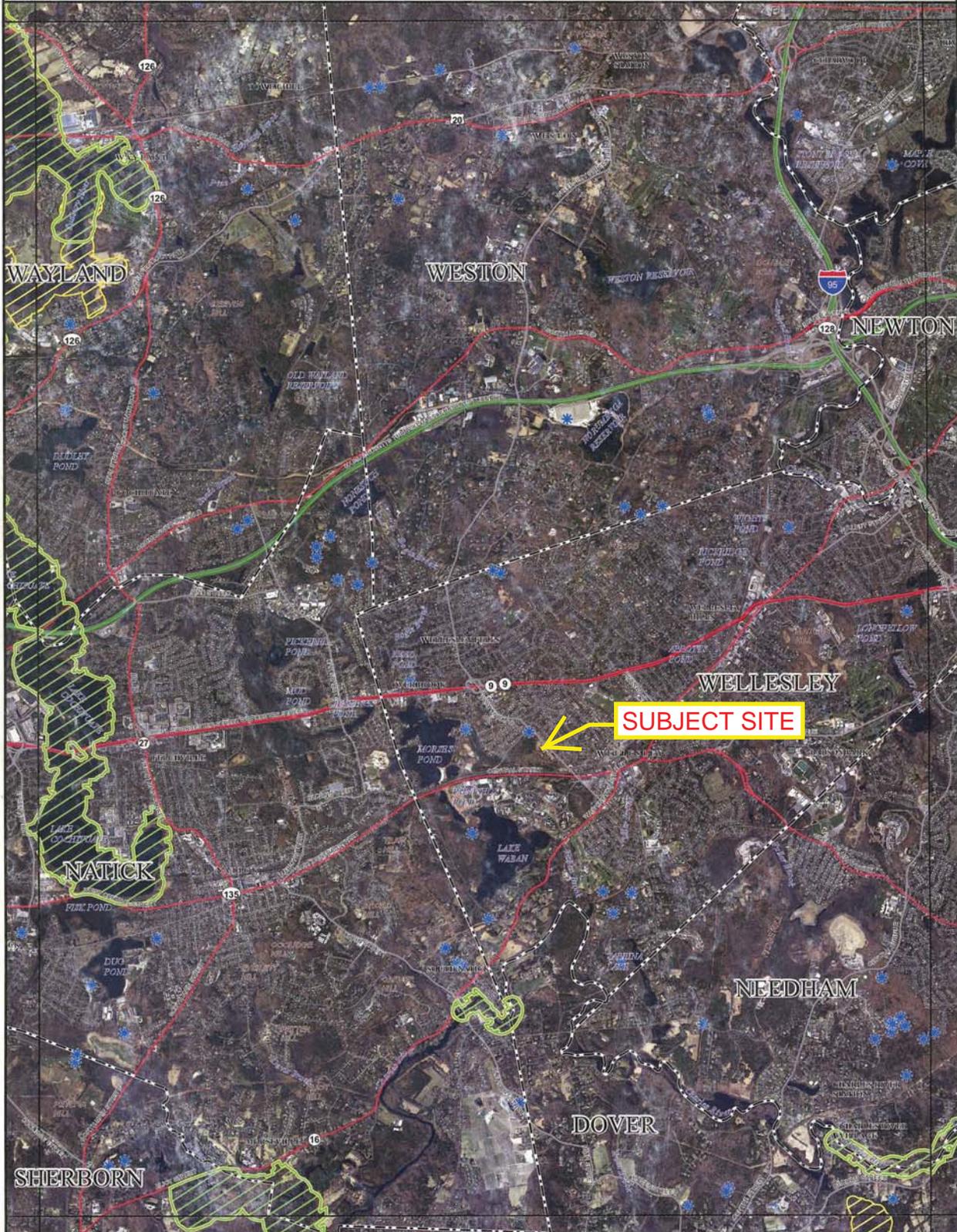
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER**  
**25021C0016E**  
**EFFECTIVE DATE**  
**JULY 17, 2012**  
**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)





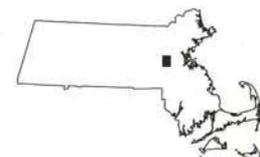
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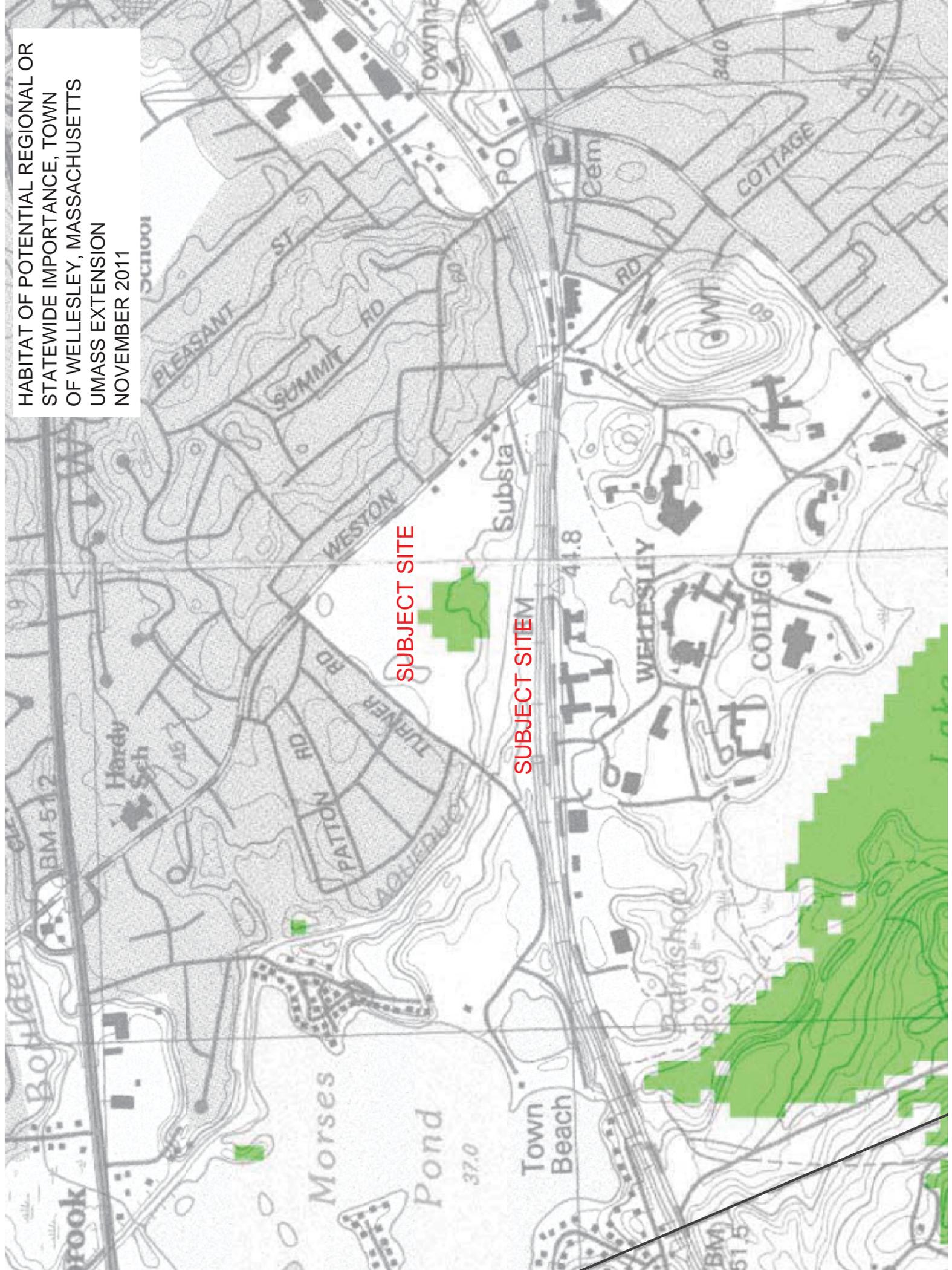
**Priority Habitat of Rare Species**  
**Priority Habitat of Rare Species and also Estimated Habitat of Rare Wildlife**  
**Certified Vernal Pool (as of July 31, 2008)**



Natick Quad



HABITAT OF POTENTIAL REGIONAL OR  
STATEWIDE IMPORTANCE, TOWN  
OF WELLESLEY, MASSACHUSETTS  
UMASS EXTENSION  
NOVEMBER 2011



# EcoTec, Inc.

## ENVIRONMENTAL CONSULTING SERVICES

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### John P. Rockwood, Ph.D., PWS Chief Environmental Scientist

Dr. John P. Rockwood has been with EcoTec, Inc. since October 1999. Dr. Rockwood was previously a Chief Environmental Scientist at Sanford Ecological Services, Inc. of Southborough, Massachusetts from September 1990 to October 1999. Dr. Rockwood was certified in August 2002 and recertified in March 2008 and January 2013 as a Professional Wetland Scientist (PWS) by the Society of Wetland Scientists, the leading professional organization in the field. His project experience includes wetland resource evaluation, delineation, and permitting at the local, state, and federal levels; wildlife habitat evaluation; pond and stream evaluation; vernal pool evaluation, certification, construction/replication, and monitoring; rare species habitat and impact assessment; wetland replacement, replication, and restoration area design, construction, and monitoring; and expert testimony preparation. He has served as a consultant to municipalities, conservation commissions, the development community, engineering and survey firms, industry, and citizen's groups. He has managed and participated in a wide variety of wetlands-related projects ranging in scope from single-family house lots to subdivisions, commercial developments, golf courses, a water park, and a regional mall. He has assessed the potential impacts of stormwater runoff, landfill leachate, and/or hazardous waste disposal sites on rare vertebrate and/or invertebrate species, and has conducted and/or directed surveys, delineated actual habitat, conducted habitat evaluations, and/or developed mitigation strategies necessary to protect rare vertebrate, invertebrate, and plant species and their habitats from proposed development-related impacts. He has conducted a drift fence study for the marbled salamander. He has participated in preconstruction sweeps for the spotted turtle, wood turtle, and eastern box turtle. He has filed MESA Project Review Checklists and has prepared applications for Conservation and Management Permits under MESA. He has conducted environmental impact assessments, and has prepared MEPA documentation related to an office park, an MBTA commuter train station, a water park, residential subdivisions, a landfill, and a regional mall. Dr. Rockwood also has extensive experience in the area of environmental site assessment related to possible oil and/or hazardous material contamination. He has conducted numerous environmental assessments, several including subsurface investigations, for sites located in Massachusetts, and has conducted preliminary environmental assessments for properties located in New York, New Hampshire, and Rhode Island. He has conducted ecological risk assessments (i.e., Stage I Environmental Screenings and Stage II Environmental Risk Characterizations) for a number of disposal sites in Massachusetts, including several disposal sites that had the potential to affect state-listed vertebrate and invertebrate species, and has utilized the EPA Rapid Bioassessment Protocol for macroinvertebrates to assess potential impacts of disposal sites and hazardous material releases on streams and rivers. He has served as the environmental contractor to the Franklin Consolidated Office of the Federal Deposit Insurance Corporation (FDIC-FCO) for 16 months, where he reviewed environmental reports, prepared scopes-of-work for site assessments, and provided technical advice to FDIC employees related to environmentally compromised assets. Dr. Rockwood has designed, conducted, and evaluated numerous surface water and groundwater monitoring programs. His prior research includes a laboratory study of the effects of low pH and aluminum on dragonfly nymphs and a field survey of the impact of chlorinated sewerage effluent of algal periphyton community dynamics. Dr. Rockwood is the co-author of a text book on aquatic biology, and is the principal author of three peer-reviewed research publications in the field of aquatic toxicology that address the effect of low pH and aluminum on nymphs of the dragonfly *Libellula julia*. Dr. Rockwood has served as the Editor of the AMWS Newsletter from November 2004 to October 2010 and as Assistant Editor from May 2003 to November 2004 and October 2010 to January 2012. He has served as President of the Association of Massachusetts Wetland Scientists from November 2013 to the present.

**Education:** Doctor of Philosophy (Ph.D.): Aquatic Pollution Biology – Plant and Soil Sciences  
University of Massachusetts at Amherst, 1989  
Bachelor of Science (B.S.): Environmental Sciences, *Summa Cum Laude*  
University of Massachusetts at Amherst, 1984

**Professional Affiliations:** Society for Freshwater Science  
Sigma Xi, Full Member  
Association of Massachusetts Wetland Scientists, Voting Member  
Society of Wetland Scientists  
Massachusetts Association of Conservation Commissioners

**Certifications:** Society of Wetlands Scientists Professional Wetland Scientist, Certification Number 1349  
OSHA Health and Safety Training, 40-Hour Training, 29 CFR 1910.120  
OSHA Health and Safety Training, 8-Hour Supervisor Training  
OSHA Health and Safety Training, 8-Hour Refresher Training