

# ECR

Environmental Consulting & Restoration, LLC



December 15, 2017

Town of Duxbury  
Conservation Commission  
878 Tremont Street  
Duxbury, MA 02332  
Attn: Joe Grady, Conservation Administrator

**RE: Letter to Support the Abbreviated Notice of Resource Area Delineation (ANRAD), 136 & 138 Alden Street, Duxbury, DEP File #SE18-1786**

Dear Mr. Grady & Members of the Conservation Commission:

Pursuant to Nover Armstrong Associates, Inc.'s December 11, 2017 peer review letter on ANRAD application to confirm the classification and location of wetland resource areas at 126 & 138 Alden Street, ECR is submitting this letter signed under the penalties of perjury to attest to the authenticity the photographs and observations of dry stream bed and/or no flow conditions within the intermittent stream on and near the property at 136 and 138 Alden Street in Duxbury (the Site). I performed field observations and collected photographs of the intermittent stream in a dry and/or no flow status in September 2017 during a non-drought status. My observations and photographs collected during the September 2017 review are contained in the August 30, 2017 wetland delineation report with accompanying photographs.

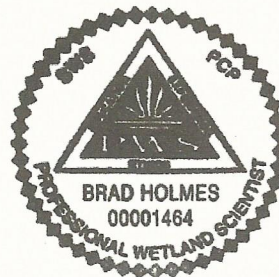
In addition to this letter are the following:

1. Wetland Delineation Memo with Photographs
2. Sketch showing the approximate location of each photograph at the site

The data presented to confirm the intermittent stream status follows the criteria for stream classification as defined in the Riverfront Area Regulations found at 310 CMR 10.58(2)(a)(1)(d). It is also our understanding that intermittent stream status for this stream has been previously been determined for other projects located to the east of the site. If you have any questions or require additional information, please contact me at (617) 529-3792.

Sincerely yours,  
Environmental Consulting & Restoration, LLC

Brad Holmes, PWS, MCA  
Manager



CC: South Shore Survey Consultants, Inc.  
Sealund Corp., 794 Washington Street, Pembroke, MA 02359

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Environmental Consulting & Restoration, LLC

August 30, 2017



## Wetland Delineation Report – #136 Alden Street, Duxbury, Massachusetts

### Wetland Report Narrative

On August 9, 2017 Environmental Consulting & Restoration, LLC (ECR) delineated the landward limits of Bordering Vegetated Wetlands and the Inland Bank of a stream located on and near the property at #136 Alden Street in Duxbury (the Site). The site consists of a single family home with a paved driveway, large barn and outbuildings, horse corrals, lawn, landscaped areas, etc. The weather on August 9<sup>th</sup> was sunny, clear and warm (approximately 70 degrees) with light wind and dry site conditions. As a result of ECR's field work and review of available environmental databases, ECR is able to confirm that the site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- Bordering Vegetated Wetlands (BVW)
- Isolated Vegetated Wetland (IVW)
- 100 foot buffer zone to BVW & IVW

### Notes:

1. The site is not located within an area mapped as Priority Habitat & Estimated Habitat for Rare Species according to the Massachusetts Natural Heritage & Endangered Species Program (MaNHESP).
2. The site does not contain or is near a Certified Vernal Pool according to the MaNHESP. Please note that ECR delineated the Mean Annual High Water line of a mapped Potential Vernal Pool to the northwest of the site.
3. The site is not located within an area mapped as Land Subject to Flooding according to the FEMA Maps.
4. The site does abut a U.S.G.S. mapped perennial stream.
5. The site is not located within an Area of Critical Environmental Concern (ACEC).

### Wetland Delineation

A BVW system is located along and near the eastern portion of the site. This BVW connects to a U.S.G.S. mapped perennial stream located on and near the eastern portion of the site. An IVW system is located on and near the northwestern corner of the site. These vegetated wetlands were delineated following the methodology established by the Massachusetts Department of Environmental Protection (DEP) regulations found at 310 CMR 10.55 pertaining to the delineation of Bordering Vegetated Wetlands. The delineation was performed by analyzing vegetation, hydrology within 12 inches of the surface, and soil conditions within 20 inches of the surface. The vegetated wetlands contain hydric soils, saturated soils, and dominant wetland indicator. BVW flags (pink & black striped ribbons) #A1 to #A40 and IVW flags #B1 to #B9 were placed along the landward limits of the vegetated wetlands resource areas on and near the site. One transect with two examination plots (yellow numbered plastic ribbons) was conducted in order to verify the accuracy of this wetland delineation (please refer to the DEP BVW Field Data Sheets attached).

Please note that within the B series IVW exists a ponded area of water that appears to meet the criteria of a vernal pool. MassGIS identifies this area as a Potential Vernal Pool. Therefore, ECR flagged the Mean Annual High Water line of the potential vernal pool within blue flagging numbered PVP1 to PVP6.

### Inland Bank Delineation

The USGS topographic map identifies the stream within the A series BVW as a perennial stream (dark blue line). Therefore, ECR delineated the top of the Inland Bank of the stream with blue flagging numbered #IB1 to #IB23. The delineation was conducted by locating the first observable break in slope,

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meaning, where the bank of the stream was obvious. Where the stream did not contain an obvious first observable break in slope, the mean annual high water line was delineated by analyzing bankfull conditions. Please note that portions of the stream bed were dry during ECR's site review. It also appears that this stream was created as a channel or ditch as part of the historic cranberry bog operations at the site. It is ECR's opinion that this stream should not be considered a perennial stream since it was dry during the site review and was historically ditched. Although additional dry stream conditions are necessary to support the intermittent stream status, manmade canals are not considered perennials streams in accordance with the Riverfront Regulations (310 CMR 10.58).

## Attachments

Attached for your review are the following attachments:

1. USGS Site Locus Map
2. FEMA Map
3. NHESP Estimated & Priority Habitat Map
4. DEP BVW Field Data Sheets

Upon review of this wetland delineation report, please contact me at (617) 529 – 3792 or [brad@ecrholmes.com](mailto:brad@ecrholmes.com) with any questions or requests for additional information.

Sincerely yours,  
Environmental Consulting & Restoration, LLC



A handwritten signature in blue ink that reads "Brad Holmes". The signature is fluid and cursive, written over a light blue horizontal line.

Brad Holmes, PWS, MCA  
Manager





Photograph #1 – View of the dry stream bed on Sept. 1, 2017.



Photograph #2 – Another view of the dry stream bed on Sept. 1, 2017





Photograph #3 – View of the dry stream bed on Sept. 4, 2017.



Photograph #4 – Another view of the dry stream bed on Sept. 4, 2017.





Photograph #5 – View of the stream bed on Sept. 8, 2017. Water is stagnant with no flow.



Photograph #6 – Another view of the stream bed on Sept. 8, 2017. Water is stagnant with no flow.





Photograph #7 – View of the dry stream bed on September 11, 2017



Photograph #8 – Another view of the dry stream bed on September 11, 2017



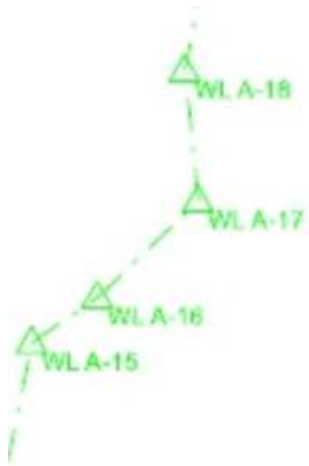


Photograph #9 – View of the dry stream bed on September 12, 2017



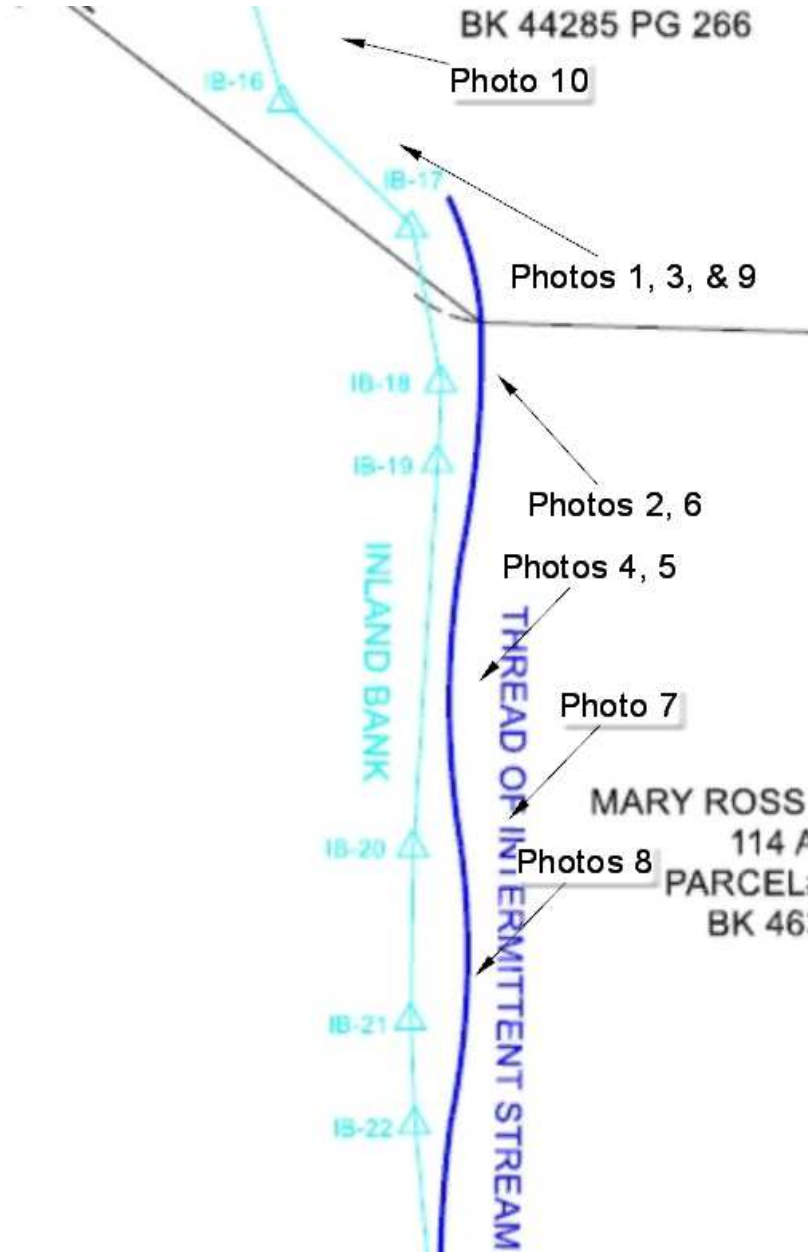
Photograph #10 – Another view of the dry stream bed on September 12, 2017





WLA-14-2  
LA-14  
A-13  
LA-12  
11  
LA10

**BVW A AREA**  
63,602.409 SF  
1.460 AC



N/F  
MARY ROSS WISBACH TRUST  
114 ALDEN ST.  
PARCEL# 106-034-000  
BK 46306 PG 183