

Important:

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

A. General Information

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key.	ח		City/Town (617) 961-3029
	Ţ	2.	Phone Number Representative
return		Hughes Environ	

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Boston Parks & Rec, 1010 Mass Ave,		
Mailing Address		
Boston	MA	
City/Town	State	Zip Code
(617) 961-3029		
Phone Number	Fax Number (if applicable)	
Representative (if any): Hughes Environmental Consulting		
Firm		
Thomas G. Hughes	thughes@hughesenvr.com	
Contact Name	E-Mail Address	
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City/Town	State	Zip Code
978-465-5400	978-465-8100	
Phone Number	Fax Number (if applicable)	

B. Determinations

- 1. I request the Boston make the following determination(s). Check any that apply: **Conservation Commission**
 - a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
 - b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
 - c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
 - d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any municipal wetlands ordinance or bylaw of:

Name of Municipality

e. whether the following scope of alternatives is adequate for work in the Riverfront Area as depicted on referenced plan(s).



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C. Project Description

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

Roslindale Wetlands Urban Wild	Boston
Street Address	City/Town
See attached list	
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

Roslindale Wetlands Urban Wild is a 10.5 acre site consisting of woodlands, wetlands, and wet meadow habitat. The site contains paper streets, sewer and stormwater easements, and primarily gains its hydrology through municipal stormwater systems that enter the site from the surrounding neighborhood through two distinct discharge points at Hazelmere Road and through an easement from Walter Street . Water leaves the site via a 24" outlet on Morrison Street (paper street) where it re-enters the municipal stormwater system in Coniston Road. For more information, see the attached site description from a previous report prepared by Mass Audubon, the axisting conditions plan, and the attached site GIS map. The area does not border any streams or ponds and the outlet prevents flooding above the outlet elevation.

c. Plan and/or Map Reference(s):

Existing conditions plan by Nitsch Engineering	October 8, 2019
Title	Date
GIS Plan showing Flow of Stormwater	
Title	Date
Title	Date

Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

We are seeking to confirm the ILSF elevation and that the Wetlands on site are not Bordering Vegetated Wetlands.

HUGHES ENVIRONMENTAL CONSULTING

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Narrative Suppliement for RDA

Roslindale Wetlands Urban Wlld

11/19/2020 revised 12/9/2020

Overview

The RDA filed for Roslindale Wetlands Urban Wild included a short narrative in the form regarding the request for a jurisdictional determination under the Wetlands Protection Act, MGL c. 130 s40 related to whether the wetlands at the property are Bordering Vegetated Wetlands and a boundary determination related to Isolated Land Subject to Flooding. The following is intended to clarify the basis for this request.

Bordering Vegetated Wetlands

Whether the wetlands present at the Roslindale Wetlands Urban Wild location are jurisdictional under the Act depends on whether they border any of the following: the ocean; an estuary; a creek; a river; a stream; a pond; or a lake. While the wetlands at the location are extensive, there are none of those bodies of water present. The hydrology of the site comes from stormwater, which primarily enters the wetlands from two large stormwater outfalls as noted in the RDA. The water then leaves the system through a large outfall, as noted. Stormwater leaving through the outfall makes its way through the Coniston Street stormwater system to the Stony Brook Conduit ("SBC"). The SBC meanders through Roslindale, Jamaica Plain and the Fenway ultimately discharges into the Muddy River. The Muddy River ultimately outlets into the Charles River. There are some small areas of seeps on the slopes around the wetland that contribute in a minor way to the area hydrology in some areas, but none of these seeps are significant enough to form in a definite channel in the ground that would meet the definition of stream in 310 CMR 10.04. As a result, and with consultation with the staff of the Boston Conservation Commission we conclude that the wetlands are isolated.

Isolated Land Subject to Flooding

The Roslindale Wetlands Urban Wild has an outlet at elevation 118.36 in Boston Base vertical datum (111.9 88 NAVD). Under 310 CMR 10.57 and DEP policy 85-2, "...if there is an outlet at a given elevation such that water will not be confined within the basin above that elevation, the outlet elevation should generally represent the boundary of the area (unless water will continue to be contained above that elevation despite the presence of an outlet). Thus, the boundary of the ILSF is either the elevation at which retained waters reach an "outlet" and flow out of an ILSF basin, or the area of inundation resulting from a 100-year storm if there is no such outlet..." The policy also advises the Commission to consider other information if available to support any setting of the outer limit of the ILSF. Based on the extent of wetlands at the site under that elevation that include significant areas of standing water deeper than 6 inches, we

conclude that Isolated Land Subject to Flooding does exist below the outlet elevation. We estimate that of the roughly 4 acres of area under the elevation of the pipe outlet, much of this contains standing water between a 1.5 feet and a few inches in depth. A conservative estimate is the area holds at least an acre foot of water during wet periods.



Ponding water in the wetland, lower than the outlet elevation.

FEMA does proactively show the area as within the X zone, which means that the area may flood in storms that have a 0.2% chance of occurance (also known as a 500-year event), which is less than the 1% frequency storm (also known as a 100-year event) events regulated under 310 CMR 10.57.

Using photos of the system flooded provided by an abutting property owner, Hughes Environmental Consulting (HEC) visited the site with an RTK GPS unit and located the area where flooding was visible near a stand of trees in the photos. A pin flag was placed at this location. The grade at this location was within the margin of error of the equipment (between 1/10 and 2/20 of a foot vertical) of the outlet elevation (112.00 88 NAVD.



Note in this undated photo taken from a Coniston Street residence of flooding, the water located behind a cluster of trees in the right of center of the photo.



The trees to the right of the GPS unit are the cluster of trees visible in the photo above. Water appears to reach the flat area that is a low spot in the existing path. The elevation was determined by GPS at 112.00 88 NAVD.

During the site visit, we checked with one member of the public who was walking by. He indicated that water has gotten slightly over a location in the path where the GPS elevation was 112.00 88 NAVD. At most, he thought maybe 6 inches but wasn't completely sure of the depth. The applicant, who has 15 years of familiarity with the property, recalls seeing water just barely covering the area where the pink flag was set, saturating the soils but not ponding in any significant way above that area.

We also reached out to members of the public who frequent the site and are very familiar with it, having visited the site for many years. We have not found any evidence of flooding beyond that noted above.

HEC also looked for water staining, which was visible on rocks at the outlet from Walter Street, which was also in within the margin of error at the outlet elevation (111.9 88 NAVD).



Water staining on rocks at top of the bank at the outlet from the stormwater system from Walter Street was at elevation 111.9 88 NAVD, roughly the same elevation as the inlet to the stormwater system where water flows out of the wetlands into the stormwater system at Coniston Road.

Additionally, we evaluated the outlet pipe. There were no signs of staining in the pipe, or on rocks above the pipe inlet. There was no sign of debris hung up on the inlet to the pipe which has bars across it to prevent objects from entering the pipe. All of this information supports setting the elevation at the outlet elevation.



Inlet pipe to stormwater system at Coniston represents outlet to ILSF. There is no sign of water staining above the invert elevation on adjacent rocks. There was no sign of debris on the bars across the inlet.



The proposed ILSF elevation would be just above the bottom bar at the outlet to the system. Note minimal signs that water flows out this pipe very often and it doesn't show any signs of flow over the first cross bar such as staining or scour lines. The applicant does not recall having to remove any debris hung up on the cross bars at this location, further indicating elevations do not get significantly above the bottom of the pipe.

Based on the above information Hughes Environmental Consulting recommends conservatively setting the ILSF elevation at 6 inches above the outlet elevation as a conservative measure. This would mean that all areas under elevation 118.71 in Boston Base Vertical Datum (112.25 in 88 NAVD) are jurisdictional under the Wetland Protection Act as Isolated Land Subject to Flooding.

Conclusion

We ask the Commission for a positive determination 2a. that finds that the ILSF is accurate at elevation 118.71 in Boston Base Vertical Datum (112.25 in 88 NAVD) and that the plans depicting no Bordering Vegetated Wetlands are accurate. We note that this decision would be binding only under the Wetlands Protection Act and the wetlands at the site are fully jurisdictional under the local Ordinance.



ROSLINDALE WETLAND URBAN WILD APPROXIMATE ELEVATIONS IN RELATION TO STORMWATER INLET

NOTE: Inverts surveyed on Boston City Base (BCB) and converted to 88NAVD. Bathymetric contours from 88NAVD, .25' intervals.

