



July 25, 2014

Mr. Raymond Holberger
City of New Bedford
Department of Environmental Stewardship
133 William Street
New Bedford, Massachusetts 02740

Subject: Spring 2014 Wetland Inspection
Keith Middle School, New Bedford, Massachusetts

Dear Mr. Holberger:

In accordance with the Revised Long-Term Monitoring and Maintenance Implementation Plan, Revision 5.5 (LTMMIP) for the Keith Middle School (KMS) dated August 2012. TRC has completed its May 2014 inspection of wetlands abutting the KMS in New Bedford, Massachusetts. A TRC senior ecologist conducted the inspection on May 23, 2014. As stated in the LTMMIP, the purpose of the inspection is to visually observe the wetlands and vicinity for unacceptable conditions including indications of excessive sedimentation occurring within the wetlands, including such conditions as, but not limited to, dumping of debris, exposed side slopes, erosion from spring rains, stressed or dead vegetation, animal burrows, slumping and unauthorized excavation.

The inspection consisted of walking the entire slope adjacent to the wetland area and observing areas of potential erosion and sedimentation at the wetland/cap slope interface. Observations were recorded in the Wetland Sediment Inspection Form included as Appendix G of the Revised LTMMIP. A copy of the completed inspection form is provided with this letter as an attachment. Photographs taken during the inspection are also included as an attachment.

In general, the slope extending down to the wetland from the parking lots and rear school access drive is well vegetated with grasses and herbaceous plants. The predominant vegetation noted on the slope of the landfill cap include grasses, vetch, sheep sorrel, birdsfoot trefoil, mugwort and black swallowwort. Overall, no evidence of erosion or sedimentation into the adjacent wetland was noted during the site inspection. Slopes previously noted as having thin vegetative cover were evaluated and, although plant cover remains thin, these slopes were stabilized.

An apparent area of slight slumping (i.e., approximately one to two inches in height) was previously noted in the northern portion of the cap slope during the 2012 and 2013 inspections. However, this area was not apparent during the latest inspection and appears to be obscured by dense vegetation.

Several small stands of the invasive plant Japanese knotweed (*Polygonum cuspidatum*) that were formerly present in the vicinity of stormwater outfalls and in the central portion of the wetland/cap slope have been previously treated with herbicides. In addition, small tree saplings comprised primarily of black locust (*Robinia pseudoacacia*) have also been treated with an herbicide. It appears that these applications were effective in greatly reducing knotweed abundance along the cap slope. Currently, stands of Japanese knotweed that require herbicide treatment are not present. Tree saplings appear to also have been adversely affected although one black locust tree sapling remains near the toe of the northwestern landfill slope.

Other recommendations regarding the slope conditions and stabilization/repair have been provided under a separate Cap Inspection report by TRC. Implementation of these recommendations will adequately protect the wetlands from any future erosion and sedimentation issues that may occur.

If you have any questions regarding this report, please contact me at 978-656-3583 or David Sullivan at 978-656-3565.

Sincerely,

A handwritten signature in black ink that reads "Scott J. Heim". The signature is written in a cursive style with a large initial 'S' and 'H'.

Scott J. Heim
Senior Ecologist

Attachments

Attachment W-1

Wetland Sediment Inspection Form

WETLAND SEDIMENT INSPECTION FORM
KEITH MIDDLE SCHOOL

Use this inspection form to document annual inspections. If unacceptable conditions are observed, complete an additional form immediately after repairs are completed.

Inspection Date: May 23, 2014 Inspection By: Scott Heim

A. SLOPE BETWEEN SCHOOL AND WETLAND

Is slope condition acceptable? YES No

(look for dumped debris or waste; stained soil; erosion of soil on slope leading down to wetland; subsidence or slumping of greater than two inches of soil on slope; dead vegetation, if such vegetation is required for erosion control; animal burrows; and/ or evidence of unauthorized excavation)

If no, attach photograph

If no, describe unacceptable condition:

Location _____

Condition All portions of the slope are vegetated and stabilized - no evidence of erosion

Describe any repairs to slope conducted since previous inspection:

All repairs adequate? YES No

Photograph of repair attached

B. WETLAND

Is wetland condition acceptable? YES No

(look for dumped debris or waste, stained soil, visible accumulation of mineral sediment in wetland, and/ or evidence of unauthorized excavation)

If no, attach photograph

If no, describe unacceptable condition:

Location _____

Condition No sedimentation noted in wetland from slope

Describe any repairs to slope conducted since previous inspection:

All repairs adequate? YES No

Photograph of repair attached

Attachment W-2

Site Photographs

SITE PHOTOGRAPHS
May 2014 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts



1) Slope in southern portion of wetland/cap edge looking south. Vegetation is well established on the slope.



2) Central portion of slope looking north.

SITE PHOTOGRAPHS
May 2014 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts



3) Northwestern portion of wetland/cap.



4) Past evidence of herbicide application for Japanese knotweed stand at outfall location.

SITE PHOTOGRAPHS
May 2014 Wetland Inspection
Keith Middle School
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5) Stabilized slope along northwestern cap looking north. Note willow saplings along pond edge.



6) Black locust sapling along toe of slope. Tree is stressed but surviving despite 2013 herbicide application.

SITE PHOTOGRAPHS
May 2014 Wetland Inspection
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7) Sparsely vegetated northwestern portion of cap. Area is stabilized.



8) Northern portion of wetland/cap slope.

SITE PHOTOGRAPHS
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9) Small stunted stand of Japanese knotweed associated with outfall in central portion of slope.