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Project Number 115058

June 19, 2008

David Fredette, PE
City of New Bedford
Department of Environmental Stewardship
133 William Street
New Bedford, Massachusetts 02740

Subject: Spring 2008 Cap Inspection
Keith Middle School
New Bedford, Massachusetts

Dear Mr. Fredette:

At the request of the City of New Bedford (City), TRC performed the second inspection of the protective cap installed at the Keith Middle School Site located at 225 Hathaway Boulevard in New Bedford, Massachusetts. A TRC engineer conducted the inspection on May 27, 2008 in accordance with the Long-term Monitoring and Maintenance Implementation Plan (LTMMIP) dated October 20, 2006 prepared by the BETA Group, Incorporated (BETA). The LTMMIP requires three inspections per year in April, August and November to confirm that the cap is being properly maintained to prevent exposure to the impacted fill beneath. TRC's inspection was initiated following contractual authorization by the City.

The inspection consisted of a walking traverse of the entire Site with visual observations of the entire cap including the first floor concrete slab of the building, the courtyard within the building footprint, and concrete, asphalt and landscaped surfaces outside the building. Access to locked rooms within the building was provided by the facility engineer, Gary Gomes and/or a school custodian. The inspection was documented in a log book. Copies of the log book pages are presented as Attachment 1. The findings of the inspection are documented in a site-specific Cap Inspection Form (Attachment 2) provided in the LTMMIP. Annotated photographs taken during the inspection are presented as Attachment 3.

Based on TRC's inspection, the concrete floor within the footprint of the building is currently acting to prevent exposure to the impacted fill beneath. The courtyard within the building and pavement and concrete surfaces outside the building were also acceptable.

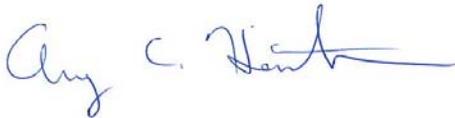
The landscaped areas outside the building were acceptable with the exception of the following:

- Sparse vegetation located on the steep slope at the southeastern corner of the Site property.
- A slope failure located on the steep slope between the wetland to the west and the southern parking lot to the east. A photograph of the slope failure prior to the temporary repair is presented in Attachment 4.
- Sloughing riprap stabilization stone that is undermining the concrete fence support at the top of the slope and filling the outlet of the storm water drainage culvert on the west side of the Site.
- Minor erosion at the northwestern corner of the Site.

At this time the black separation fabric that demarcates the underlying contaminated fill from the clean imported fill is not visible. However, these areas should be repaired in order to prevent further erosion or cap damage that could eventually expose the separation fabric. Please refer to the attached Cap Inspection Form for additional details concerning observed conditions.

If you have any questions, please contact me at 978-656-3560 or David Sullivan at 978-656-3565.

Sincerely,



Amy Hamilton
Project Engineer



David Sullivan, LSP, CHMM
Senior Project Manager

Attachments

Attachment 1

Log Book

RAIN

KEITH MIDDLE SCHOOL 5/29/08

0615 Arrived at site.
 0630 Started inspection of building interior with school custodian, Jim. Completed inspection of kitchen, cafeteria gym, hallways, stairwells
 0730 Conducting inspection with Gary Groves. One area of concern with ^(A) where floor tiles were separated slightly near the main entrance. Repointing - gears weiford. No issues to report with the building interior or courtyard.

0700 Inspection exterior of building asphalt surfaces, courtyards vegetated areas, painted along walkways, exterior foundation of building.

Eastern slope - area w/slope failure has not been repaired, area with falling rip rap has not been repaired; culvert is still filled in w/rip rap.

Some vegetation southern corner ^(A) of the site.

KEITH MIDDLE SCHOOL 5/27/08
 corner

Minor erosion / rill northwestern ^(A) of the site outside fence line. Rill was down the slope.

Asphalt is in good condition; vegetation is in good condition; concrete pads / walks are in good condition.

Also onsite for TRC - C. Foster, D. Sullivan
 + G. Duncan

1030 left site

Attachment 2
Cap Inspection Form

CAP INSPECTION FORM KEITH MIDDLE SCHOOL

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

Inspection Date: May 27, 2008 Inspection by: Amy Hamilton

A. ASPHALT AND CONCRET PAVING – observe asphalt and concrete paving for cracking, holes, asphalt removed during construction, other damage.

All Asphalt and concrete paving acceptable? YES NO

If no, attach photograph

If no, describe unacceptable condition:

Location

Condition

Describe any repairs to asphalt and/or concrete paving conducted since previous inspection

All repairs adequate YES NO Photograph of repair attached

B. INTERIOR CONCRETE FLOORS – observe concrete for cracking, holes, concrete removed during construction, other damage.

All interior concrete floors acceptable? YES NO

The two cracks in the boiler room floor are still less than ¼-inch wide. The majority of interior concrete floors are covered with tiles or other type of flooring material. Based on visual inspection and conversations with current employees, there are no breaches or other significant damage or deterioration of the interior surficial flooring materials or, where visible, concrete floors. No construction was occurring within the building at the time of the inspection.

If no, attach photograph

If no, describe unacceptable condition:

Location

Condition

Describe any repairs to interior concrete floors conducted since previous inspection

All repairs adequate YES NO Photograph of repair attached

C. LANDSCAPING – observe landscaping for erosion animal holes, excavation, erosion control vegetation health.

All landscaped areas acceptable? YES NO

If no, attach photograph

If no, describe unacceptable condition:

Location: The southeastern and northeastern ends of the school property and the steep slope just above the wetland and to the west of the southern parking lot and school.

Condition:

1. The ground surface at the southeastern corner of the school property is sparsely vegetated. See Photograph #8.
2. The slope failure in the steep slope between the wetland to the west and the southern parking lot to the east The hay bales, silt fence and geotextile filter fabric were all in good condition at the time of the inspection and no further slumping was observed. A permanent repair is required and has been designed. The City is in the process of soliciting cost estimates from a contractor.
3. Riprap stabilization rock placed around the outlet of one of the storm water drainage culverts is falling down the slope and filling the end of the culvert. The outlet in question is the fourth outlet south of the above ground oil storage tank. The falling riprap has undermined the concrete fence support at the top of the slope and the deposited rock is impeding the flow of water from the culvert. The structural integrity of the fence may be compromised if the sloughing of the riprap continues. The cap soils beneath the riprap may also become exposed and susceptible to erosion. See Photograph #10.
4. There is minor erosion at the northwestern corner of the property that is approximately 2 to 3 inches in depth. The rill runs the length of the slope. See Photographs #11 and #12.

Describe any repairs to landscaping since previous inspection: This is the second cap inspection to be completed as required by the October 20, 2006 LTMMIP. Repairs to the slope failure and the falling riprap, Conditions 2 and 3 reported during the Spring 2007 Cap Inspection, were not made at the time of this inspection.

All repairs adequate YES NO

Photograph of repair attached

D. Areas Not Inspected:

Reason:

Additional Notes:

Attachment 3
Site Inspection Photographs

SITE PHOTOGRAPHS
May 2008 Cap Inspection
Keith Middle School
New Bedford, Massachusetts



1) Boiler in Boiler Room.



2) Kitchen.

SITE PHOTOGRAPHS
May 2008 Cap Inspection
Keith Middle School
New Bedford, Massachusetts



3) Courtyard looking North.



4) Community Room courtyard.

SITE PHOTOGRAPHS
May 2008 Cap Inspection
Keith Middle School
New Bedford, Massachusetts



5) West side of School looking South.



6) North Parking Lot facing Southeast.

SITE PHOTOGRAPHS
May 2008 Cap Inspection
Keith Middle School
New Bedford, Massachusetts



7) East side of School facing South.



8) Vegetation at Southeast corner of property.

SITE PHOTOGRAPHS
May 2008 Cap Inspection
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9) Temporary slope failure repair.



10) Sloughing rip rap at culvert outlet. Note undermining of fence support.

SITE PHOTOGRAPHS
May 2008 Cap Inspection
Keith Middle School
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11) Minor erosion Northwest corner.



12) Minor rill Northwest corner.

SITE PHOTOGRAPHS
May 2008 Cap Inspection
Keith Middle School
New Bedford, Massachusetts



13) Vegetation just north of slope failure. Eastern slope facing North.



13) Eastern slope facing South.

Attachment 4

April 2006 Slope Failure Photograph

(Prior to Temporary Repair)

