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December 16, 2010

Mr. Scott Alfonse, Director
City of New Bedford
Department of Environmental Stewardship
133 William Street
New Bedford, Massachusetts 02740

**Subject: Fall 2010 Cap Inspection
Keith Middle School
New Bedford, Massachusetts**

Dear Mr. Alfonse:

At the request of the City of New Bedford (City), TRC performed the eighth 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 November 18, 2010 in accordance with the Long-term Monitoring and Maintenance Implementation Plan (LMMIP) dated October 20, 2006 prepared by the BETA Group, Incorporated (BETA). The LMMIP 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.

The inspection consisted of a walking traverse of the entire Site with visual observations of the 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 LMMIP. 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:

- 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. The area is stable at this time.
- The southern slope, adjacent to the Nemasket lots (former Bethel A.M.E.), has areas of erosion and, in places, the grass is sparse. The southeastern corner of the cap has evidence of construction equipment tracks and the vegetation is sparse in this area.

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 978-656-3565.

Sincerely,



David M. Sullivan, LSP, CHMM
Senior Project Manager

Attachments

Attachment 1

Log Book

Thursday, 11/18/10
 OES A. Hamilton arrives onsite to conduct the Fall inspection of the North Middle School (NMS) cap. TRC provided access to all areas of the First Floor to conduct the inspection.

There are no areas of cracking in concrete greater than $\frac{1}{4}$ " in width in any areas where concrete is visible. Pipe penetrations through the concrete floor were inspected; no changes in areas where the floor is covered with tile or well maintained and there is no evidence of significant wear or settlement.

OES TRC conducted exterior inspection of cap. All paved areas are in good condition w/ no evidence of cracking. All concrete walkways are in good condition w/ minor cracking. Court yards and landscaped areas are well maintained w/ no evidence of erosion or excavation. Cap perimeter slopes to wetland - woody vegetation was cut

Thursday, 11/18/10
 1015 Met w/ Molly Cole (DEP) to conduct walk around.
 045 offsite

11/18/10

~~M. Cole~~

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: November 18, 2010 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

Some very minor cracking of the concrete sidewalks were observed but exposure to underlying soils is not a concern. The cracks will be monitored during future inspections. See Photographs #19 and #20.

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 end 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. 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 undermined the concrete fence support at the top of the slope. See Photographs #14 and #15. 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. The area appears stable at the moment. The extent of erosion seems similar to the conditions observed during the previous inspection. See inspection report letter dated May 11, 2010, Attachment 3, Photograph #10.

2. Some erosion has occurred on the southern slope of the cap, adjacent to the Bethel A.M.E. property. The slope was inspected and Photographs #16 through #18 illustrate the condition of the surface cover on this slope. There is one area of erosion, located at the toe of slope, approximately 110 feet west of Hathaway Boulevard (Photograph #16). The southeastern corner of the cap suffered some minor damage from a piece of construction equipment (Photograph #17).

Describe any repairs to landscaping since previous inspection: This is the eighth cap inspection to be completed as required by the December 2006 Long-term Monitoring Plan.

All repairs adequate YES NO Photograph of repair attached

1. Woody growth was cut along the perimeter of the cap, adjacent to the wetlands, including the growth in front of discharge structures. See Photographs #8, #11, #10, #13. The repair is adequate. TRC recommends cutting back any vegetative growth in front of the discharge structures if any returns in the spring.

2. Gopher hole was filled in. See Photograph #12.

D. Areas Not Inspected:

None

Reason:

Additional Notes: None

Attachment 3
Site Inspection Photographs

SITE PHOTOGRAPHS
November 2010 Cap Inspection
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New Bedford, Massachusetts



1) Pipe penetrations in boiler room.

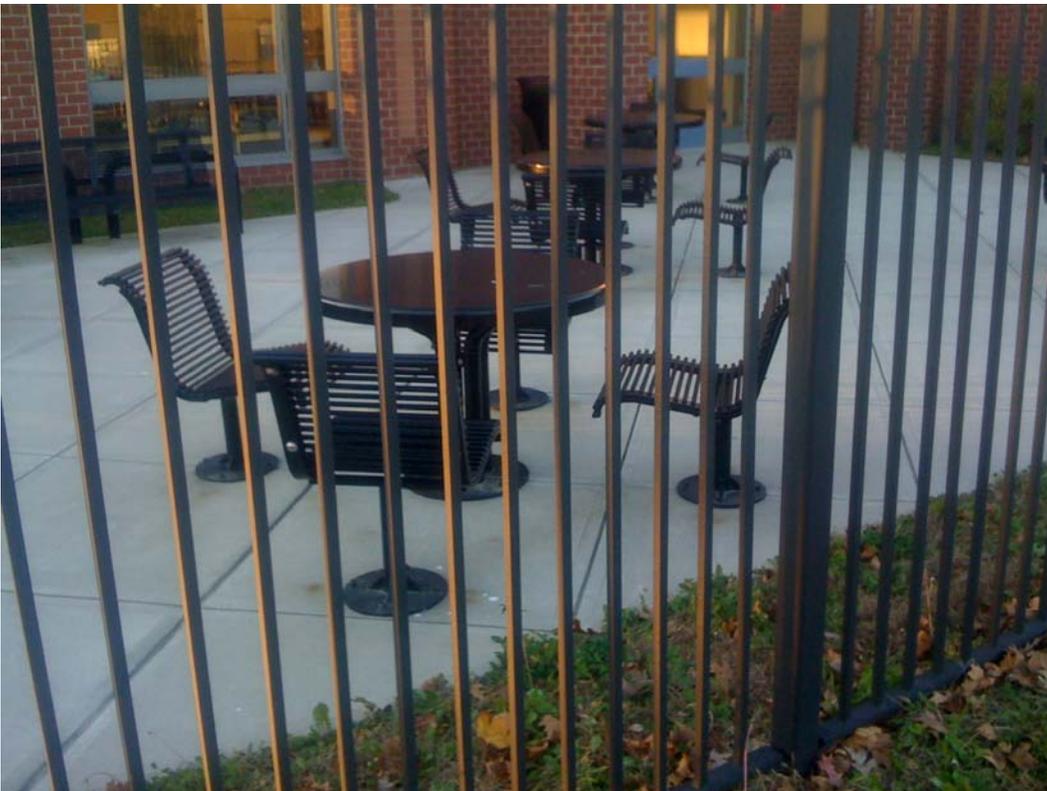


2) Kitchen.

SITE PHOTOGRAPHS
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3) Courtyard looking North.



4) Community room courtyard.

SITE PHOTOGRAPHS
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5) West side of school looking South.



6) North parking lot facing Southeast.

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7) East side of school facing North.



8) Cut woody vegetation.

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9) Temporary slope failure repair.



10) Western slope facing south.

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11) Eastern slope facing north. Woody vegetative growth cut.



12) Filled in gopher hole.

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13) Eastern slope facing South.



14) Culvert filled in with riprap.

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15) Undermining of concrete fence support. No evident change.



16) Area of erosion and sparse grass growth.

SITE PHOTOGRAPHS
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17) Southeastern corner with tracks evident.

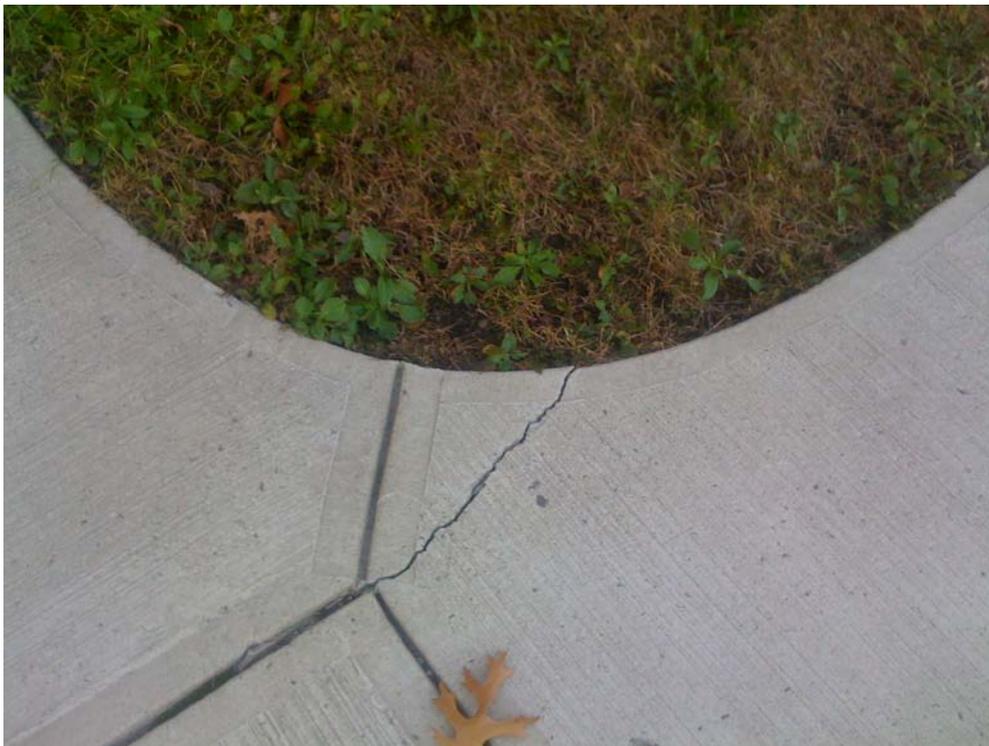


18) Southern slope facing west.

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19) Minor concrete sidewalk crack.



20) Minor concrete sidewalk crack.