



DEPARTMENT OF GENERAL SERVICES

Isiah Leggett
County Executive

David E. Dise
Director

September 5, 2013

To: Isiah Leggett, County Executive
Nancy Navarro, Council President

From: David Dise, Director 

Subject: Progress Update – Remediation of Defects at Silver Spring Transit Center

Provided below is a progress update of the Cooperative Remediation Working Group (CRWG) for remediation of defects at the Silver Spring Transit Center (SSTC). Progress of the remediation effort is presented by key area.

General

- Over the past few weeks it was determined that Latex Modified Concrete (LMC) is the overlay material that will be used. Based on this, Parsons Brinckerhoff (PB), the engineer-of-record, prepared overlay plans and details for Levels 330 and 350 of the transit center. These plans were reviewed by the entire CRWG at its August 29th meeting. PB will submit revised and corrected drawings and plans for review at the CRWG meeting this Friday, September 6th.
- KCE continues to work with WMATA staff to address questions about the KCE analysis of the SSTC structure and other related issues. KCE is also continuing its assessment of potential extraordinary maintenance costs of the remediated facility. This will be compared with the O&M cost anticipated by WMATA in its original 2004 estimate. WMATA is interested in identifying what, if any, additional costs may be anticipated beyond what would be assumed had remediation not been necessary.

Schedule

- Foulger Pratt (FP) will prepare an updated schedule based on the LMC design. That schedule will not be available until FP has had the opportunity to review in detail the final design with its LMC subcontractor. Based on the subcontractor's early estimates, it will take 6 weeks to prepare the surface and lay down the overlay.
- Achieving this schedule hinges on several critical factors: quick design review and approval by DPS and WMATA; early receipt of a demolition permit to allow demolition work to begin on both levels of the transit center in advance of LMC application, and; rapid mobilization of the LMC subcontractor.

- Beam submittals are under review. The actual formwork and pouring of the mock-up beams will be done the week of August 12th.

Pour Strip Repairs

- Crack repair in the slabs and joints in the pour strip areas is underway. Testing of the integrity of the crack repairs is being performed using pulse-echo equipment.
- Installation of beam dowels, beam end-pocket demolition, and installation of slab dowels is underway. Scaffolding and formwork construction for the 18 new beams is underway.
- Pour of the 18 new beams under the pour strips at level 330 will take place in mid-October.
- Early test strength results of the concrete in the mockup beam indicate strength exceeding 90% of the fully cured design strength. Forms were stripped this week following the required 7-day cure period.

Surface Overlay on Decks

- PB will continue to revise drawings and add details based on comments received at the CRWG meeting this Friday.
- Applying a 2” LMC overlay that tapers to 1.25” at the curb will result in a reduced curb height from 6” to 5”. WMATA specifies 6” curb heights in its standard drawing packages and considers this a requirement. However, WMATA will consider a 5” height provided proper water flow is maintained throughout the entire structure, with particular attention paid to sidewalks, elevator and escalator locations and the overall water drainage methodology. If a 5” curb is allowed, a significant amount of additional work can be avoided.

Waterproofing

- Leaks have been observed at the planters on the top 350 Level. PB is preparing a dye-testing plan to evaluate the exact location of the leaks from the slab adjacent to the planters.

Beam and Girder Repairs

- PB, KCE and Foulger Pratt’s structural consultant will meet September 27, 2013 to review petrographic and concrete testing results from the KCE Report to establish consensus on concrete strength across the structure. This will have a direct bearing on the extent of beam and girder work required, if any.
- In response to WMATA’s request for some testing in lieu of the slot stress test, the CRWG agreed to explore a review of a static load test on selected areas of the structure. KCE will lead the drafting of a test protocol and submit it to PB, WMATA, and Foulger Pratt for comment prior to review by the CRWG. Testing, if any, will be done at a later date following remediation construction activities.

cc: Roger Berliner, Chair, T&E Committee
Valerie Ervin, District 5 Councilmember
Tim Firestine, Chief Administrative Officer