



**Planning and Development Committee**

**Board Action Item III-B**

**October 19, 2006**

## **Platform Structural Rehabilitation**

**Washington Metropolitan Area Transportation Authority  
Board Action/Information Summary**

Action  
 Information

MEAD Number:  
99682

Resolution:  
 Yes  No

**PURPOSE**

Initiate and award a competitive contract for a pilot program to rehabilitate deteriorated platforms at Minnesota Avenue and Deanwood Stations by replacing sections of the platform. The contract will include a change to the tile flooring standard design for both stations, which will be used for all new and future rehabilitated Metrorail stations.

**DESCRIPTION**

The original station and platform concrete structures at both stations were constructed prior to 1978. Severe deterioration of the platform slab has resulted in cracking, leaks and deterioration of the structural concrete. Repair to this deterioration is essential to ensure the overall safety and longevity of the structure.

Structural evaluation was performed to identify the portions of platforms that are structurally weak and therefore will have to be replaced with new precast concrete. Both ends of the platform exposed to weather beyond the canopy and platform edges under the station canopy were found deteriorated and beyond normal repair. A pilot project to replace the platform slab in sections has been developed to minimize impact on Metro rail operations and to keep these two stations in service while rehabilitation work is in progress.

The design concept would be in a smaller scale and to replace only the worst deteriorated sections of platform slab. Under this concept, the new platform slab sections will be cast with final finish of platform surface and erected to align with existing platform edges. This method will minimize weather dependent repair of tile, plus reduce use of temporary covers for unfinished platform surface which causes inconvenience to patrons using the platforms.

The rehabilitated final finish flooring for both stations and for all new and future rehabilitated Metrorail stations will utilize square porcelain tiles in lieu of the hexagonal quarry tiles.

Upon successful completion of this contract, a new contract for major rehabilitation of the remaining non-covered portions of the platforms will be developed for the Minnesota and Deanwood stations.

## **FUNDING IMPACT**

Infrastructure Renewal Program, Fiscal 2007-2010

Project Title - ROW Structural Rehabilitation

Line Item Budget - \$49,194,792

This Action - \$2,800,000

Prior Actions - \$7,383,981

Subtotal - \$10,183,981

Remaining Budget - \$39,010,811

## **RECOMMENDATION**

Initiate and award a competitive contract for a pilot program to rehabilitate deteriorated platforms at Minnesota Avenue and Deanwood Stations by replacing sections of the platform. The contract will include a change to the tile flooring standard design for both stations, which will be used for all new and future rehabilitated Metrorail stations.



# Rehabilitation of Platform Slab at Minnesota Ave & Deanwood Stations

*Presented to the Board of Directors:*

**Planning and Development Committee**

October 19, 2006





# Platform Edge at Minnesota Avenue Station

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## Out Bound Track



## In Bound Track





# Platform Edge at Deanwood Station

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## Out Bound Track



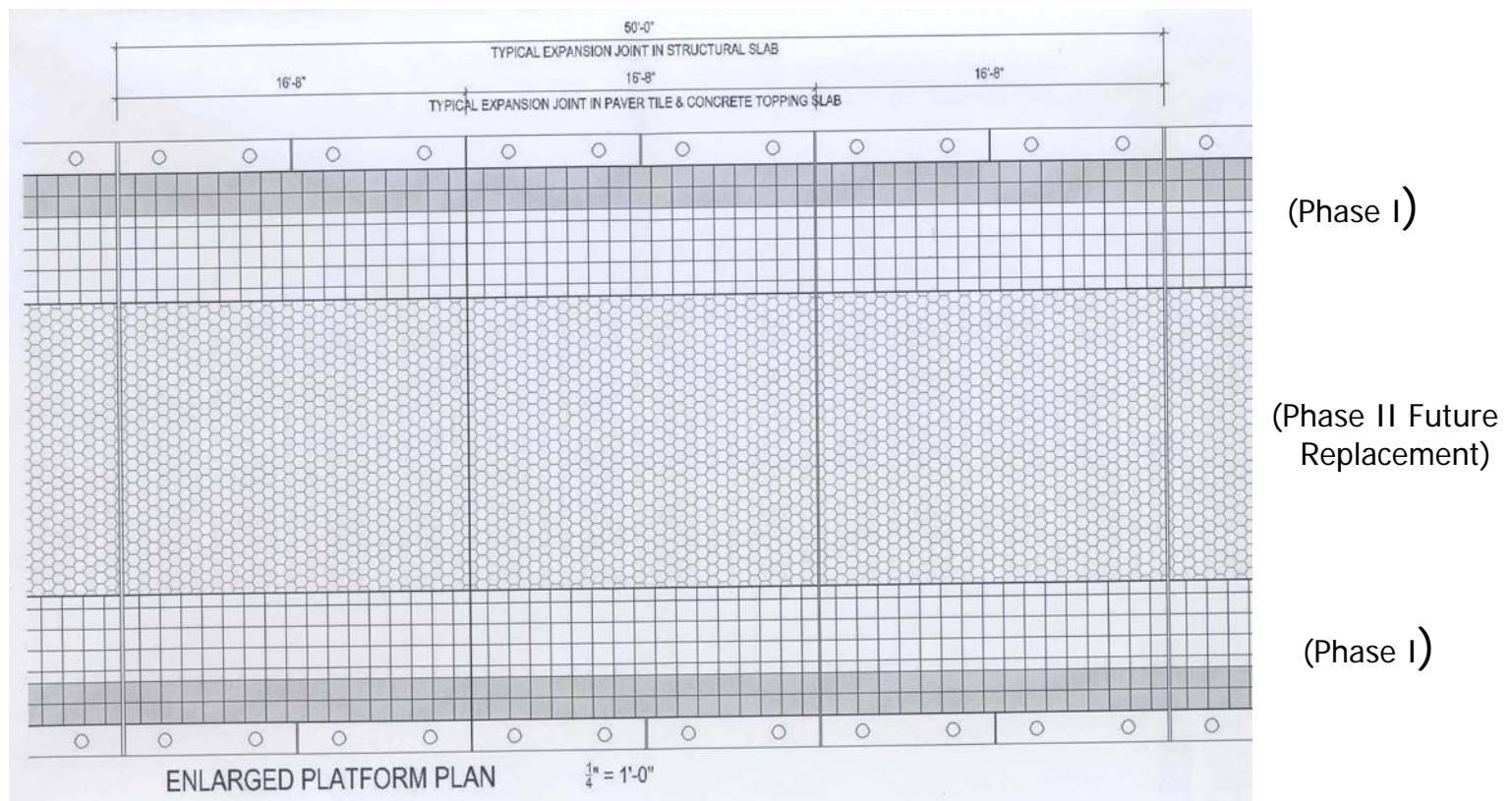
## In Bound Track





# Platform Tile Layout

This is a conceptual Platform Plan design which will be used to install new 12-inch porcelain square tiles in lieu of seven-inch (nominal) hexagonal quarry tiles.



Plan View



# New Porcelain Tiles

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- The new Square Porcelain Tiles will be the new standard platform finish for the Dulles Extension, future new construction and any future platform slab replacement.
- The new Square Porcelain Tiles in lieu of Hexagonal Quarry Tiles will have:
  - Improved Slip Resistance
  - Better Maintainability
  - Similar Cleaning characteristics
  - ADA compliance
  - Availability of suppliers.
- Phase II will replace remaining hexagonal tiles in between escalator well-ways with the new tiles, however Phase II is not included in this action.





# Recommendations

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Proceed with Board of Directors approval to:

- Initiate and award a competitive contract for Phase I rehabilitation and replacement of the platform tile flooring at Minnesota Avenue and Deanwood Stations.
- Change to tile flooring standard design for rehabilitation of the above two stations, and all new and future rehabilitated Metrorail stations.