May 26, 2004

MEMORANDUM TO TEAM LEADERS AND CONSULTANTS

SUBJECT: End Wall Details

The embankment adjacent to the end walls of all prestressed and structural steel end spans shall be detailed with a special backfill material and underdrain as shown on the attached drawing. Additionally, the construction joint between the end wall and the bent cap shall be waterproofed.

For integral end bents, the end wall shall be detailed the full width of the end bent and the end wall concrete shall be cast as the last portion of the deck pour of the end span.

The requirements of this memorandum replace the requirements of DM0500 and DM0502. For previously completed plans that do not conform to the requirements of this memorandum, the State Bridge Design Engineer will, on a case-by-case basis, assess the need for revisions.

Douglas E. McClure, P. E.
State Bridge Design Engineer

Attachment

cc: Assistant State Bridge Design Engineers
    Bridge Construction Engineer
    FHWA
    CRM East
    CRM West

File: PC/BWB
PIPE UNDERDRAIN DETAIL

Note:
4" Dia. Perforated PVC Pipe Underdrain shall comply with Section 802.07 of the Standard Specifications. Special Backfill Material shall be 789 Coarse Aggregate, Uncompacted, and shall comply with Section 802.08 of the Standard Specifications. Filter Sock shall be Geotextile for Drainage Filtration, Class 1 Fabric (Protected) - See Special Provisions. All costs of furnishing and installing the 4" Dia. Perforated PVC Pipe Underdrain, Filter Sock, Special Backfill Material, 4" Dia. Non-Perforated PVC Outlet Pipe, Riprap, and Geotextile Fabric for Riprap shall be included in the unit price bid for 4" Perforated Pipe Underdrain. Measurement of the 4" Perforated Pipe Underdrain shall be taken along the back face of the End Wall from inside edge of Wing Wall to inside edge of Wing Wall and all costs associated with the construction of the Outlets shall be considered Incidental and included in the unit price bid for the 4" Perforated Pipe Underdrain.

A) Second Method Waterproofing shall extend the full length of the End Wall. See Section 814 of the Standard Specifications.

B) Slope Pipe a minimum of 0.5% to drain.

PIPE OUTLET DETAIL

4" Dia. Perforated PVC Pipe Underdrain

Place Outlet Pipe Beneath Wing Wall

4" Dia. Non-Perforated PVC Outlet Pipe - Slope Down at 3% Minimum.