

B910
Drainage System

Approved, and signed, March 26, 2009. Last day revised: December 21, 2022.

Revised 12-21-2022

At SECTION THROUGH PARAPET AND SEMI-INTEGRAL ABUTMENTS:

- Added a berm to the top of the slope protection/front face of abutment.
- Removed the "← Bridge" and "Approach →" callouts at the top of the detail.

Under NOTES:

- Changed the 2nd note from " All Pipe To Comply With Special Provision 3245.2(6)." to "All Pipe to Comply with Spec. 3245.2(5)."
- 3rd note: Removed the word "Per" in two locations and replaced it with "In Accordance With".
- Changed numbered note ① from "At Contractor's Option, Tie Approach Panel Drainage System And Abutment Drainage System Into A Single Precast Concrete Headwall Or Into A Catch Basin As Long As A Minimum Of 1% Positive Slope Can Be Maintained. Use Precast Concrete Headwall With Rodent Screen. See Standard Plate 3131 For Details. At Contractor's Option, Tie Approach Panel Drainage System And Abutment Drainage System Into A Single Precast Concrete Headwall Or Into A Catch Basin As Long As A Minimum Of 2% Positive Slope Can Be Maintained."

Revised 11-08-2018

Under NOTES:

- Changed the 2nd note *from*: All pipe to comply with spec. 3245.2(6). *to*: All pipe to comply with special provision 3245.2(6).

Revised 02-22-2018

At SECTION THROUGH PARAPET AND SEMI-INTEGRAL ABUTMENTS:

- Added numbered note ② to the end of the 4" nominal dia. perforated pipe note.

At SECTION A-A:

- Added numbered note ② and a directional flow arrow for the 4" nominal perforated pipe.

Under Notes:

- Changed the 2nd note spec number from 3245 to 3245.2(6).
- Changed the 3rd note to read: "Sleeve perforated pipe with geotextile knit sock per spec. 3733, Type 1. Attach to pipe per spec. 2502.3.B."

Throughout the Detail

- Changed the word "Non-perforated" to "Unperforated".

Revised 12-2-2015

The detail was updated to move the pipe drain for integral abutments to pass under the wing wall instead of through the bottom of the wing wall.

At SECTION THROUGH INTEGRAL ABUTMENT:

- Changed the note in lower left corner from "4" NOMINAL DIA. PERFORATED PIPE" to "4" NOMINAL DIA. PERFORATED PIPE (HIGH SIDE)". Added a low side drawing of the pipe and the note "LOW SIDE".

At SECTION B-B:

- Removed the "COUPLING" and "PIPE SLEEVE" labels.
- Moved the end of the perforated pipe to the 45 degree elbow and eliminated a short section of non-perforated pipe.
- Added circled note 2 indicating the pipe slope.
- Changed the note "CAP END" to "CAP END ON HIGH SIDE".

Re-Approved 01-13-2015

At detail: "Section Through Parapet and Semi Integral Abutments" a hyphen (-) was added between "Semi" and "Integral".

Removed from the B-Detail:

- The Summary of Quantities for Drainage System and the accompanying notes.

Under Notes:

- Added, to become the 1st note: Payment will be included in the single lump sum price for "Drainage System Type (B910)", includes but is not limited to 4" diameter perforated and non-perforated pipe, elbows, end caps, couplings, sleeves and precast concrete headwalls.
- Changed 2nd note to read: All pipe to comply with spec. 3245.
- Changed 3rd note to read: Wrap perforated pipe with geotextile per spec. 3733, Type 1. Attach to pipe per spec. 2502.
- Changed numbered note ① to read: At contractor's option, may tie approach panel drainage system and abutment drainage system into a single precast concrete headwall or into a catch basin as long as a minimum of 1% positive slope can be maintained.
Use precast concrete headwall with rodent screen. See standard plate 3131 for details.
- Changed numbered note ③ to read: Refer to grading plans for abutment backfill requirements.

Revised 10-22-2009

At SECTIONS A-A and B-B:

- Added the pipe sleeve through the wingwall for the drain pipe.

Re-Approved 03-26-2009

This standard plate has been revised to include new drainage details for integral and semi-integral abutments.

At the SHEET TITLE:

- Removed the sub note (FOR HIGH ABUTMENTS).

Under NOTES:

- Changed the first note to read "ALL PIPE SHALL COMPLY WITH Mn/DOT SPEC.3245".
- Added a numbered note ③ "Material shall comply..." note which has been moved from the "SECTION THROUGH ABUTMENT" location.

At SECTION THROUGH ABUTMENT:

- Changed name to "SECTION THROUGH PARAPET AND SEMI INTEGRAL ABUTMENTS".
- Added a numbered note ③ to replace the "Material shall comply..." note which has been moved under the NOTES: portion of the detail.

At SECTION A-A:

- Downsized the width of the section to allow room for new details.

Added: New detail "SECTION THROUGH INTEGRAL ABUTMENT" and "SECTION B-B" to the sheet.

08-25-2006

In notes under SUMMARY OF QUANTITIES: changed ... ITEM 2502.601 ... to ... ITEM 2502.502 ... which corresponds to 2005 Spec. Book Pay Items.

04-20-2004

In SECTION THROUGH ABUTMENT: eliminated 1 vertical:1.5 horizontal slope for granular borrow material.

Approved, and signed, November 22, 2002.