Bridge Design Details 6.3 June 2025

Abutment Drainage Details

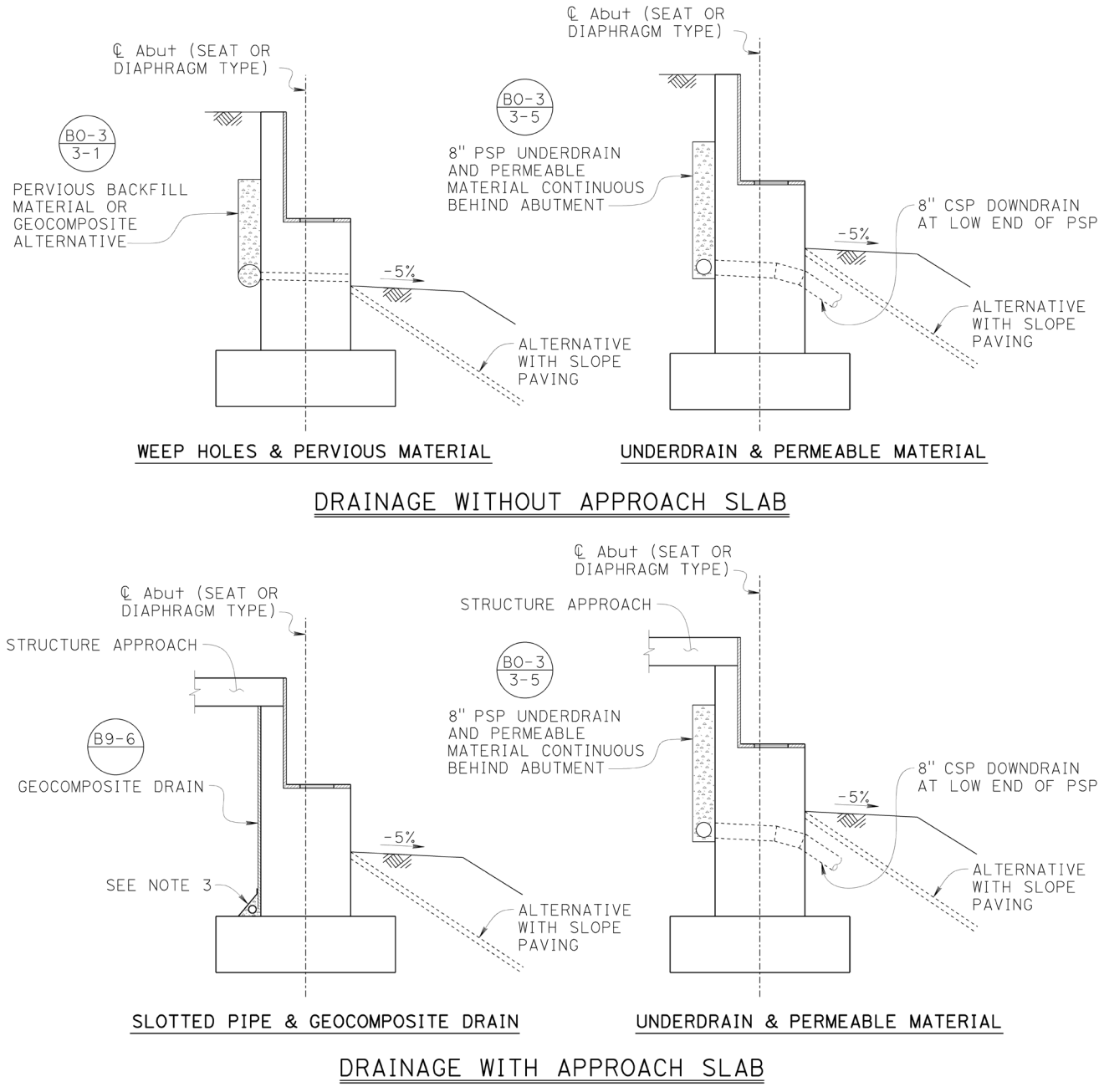
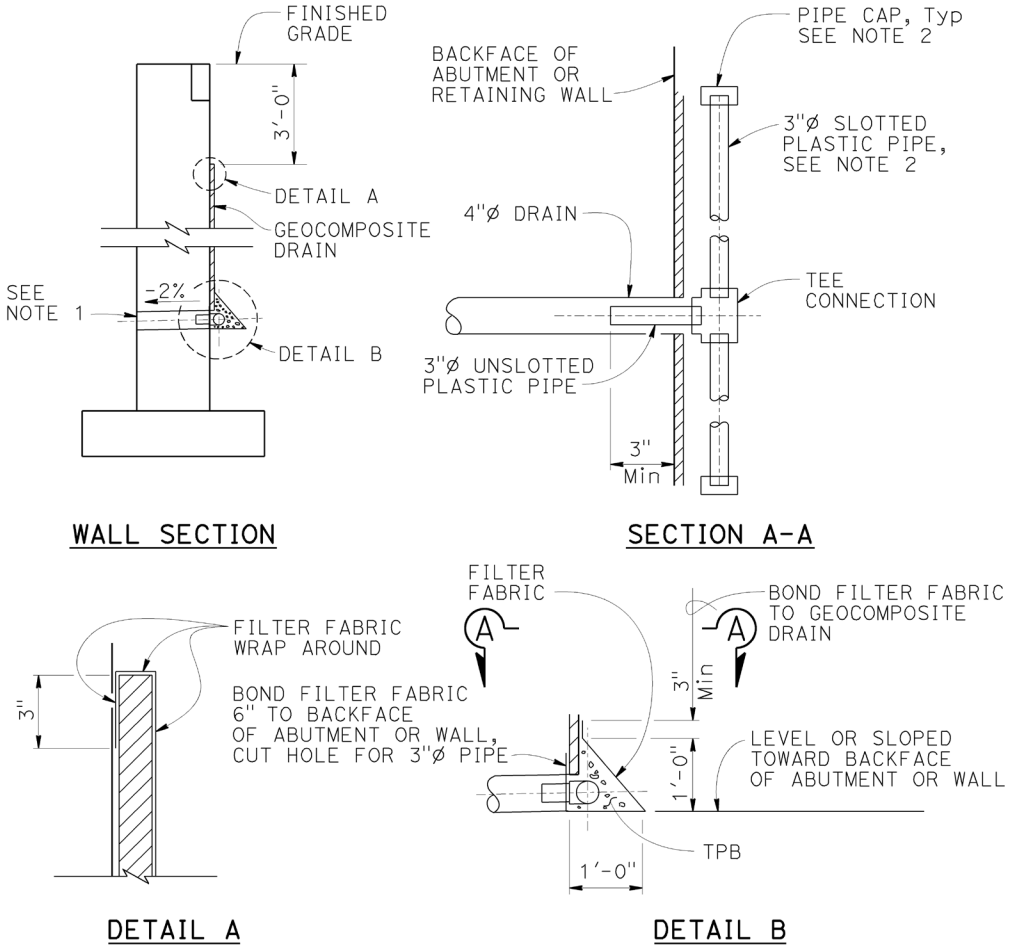


Figure 6.3.1 Abutment Drainage



NOTES:

1. 4"Ø drains at intermediate sag points and 25' maximum center to center. For walls adjacent to sidewalks or curbs, provide 4"Ø plastic pipe under the sidewalk to discharge through curb face. Exposed wall drains shall be located 3"± above finished grade.
2. Geocomposite drain, treated permeable base material and 3"Ø slotted plastic pipe continuous behind retaining wall or abutment. Cap ends of pipe. Provide "Tee" connection at each 4"Ø drain.
3. Connect the low end of plastic pipe to the main outlet pipe as applicable.

ALTERNATIVE TO BRIDGE DETAIL B0-3 / 3-1

WEEP HOLE AND GEOCOMPOSITE DRAIN DETAIL

NO SCALE

Figure 6.3.2 Weep Hole and Geocomposite Drain Alternative

Notes:

1. Continuous pervious backfill material (*Standard Plan B0-3*: Bridge Detail 3-1), structure approach drainage (*Standard Plan B9-6*: Structure Approach Drainage Details), or perforated pipe with permeable material (*Standard Plan B0-3*: Bridge Detail 3-5) should be placed in accordance with the instructions in Memo to Designers: 5-2 Diaphragm Abutments. Permeable material (*Standard Plan B0-3*: Bridge Detail 3-5), is only specified when known water bearing material is present behind the abutment as identified in the Foundation Report.
2. For all abutments (without structure approaches) and for retaining walls, the “Weep Hole and Geocomposite Drain Detail”, shown in Figure 6.3.2, shall be added to the plans. This detail provides an alternative detail to the pervious backfill specified in Standard Plan B0-3: Bridge Detail 3-1. The plans should show the pervious material and not the alternative geocomposite drain in the abutment or retaining wall sections. Edit the NOTES in the “Weep Hole and Geocomposite Drain Detail” to remove references to wall types or elements that are not specific to the project plans.
3. Reference ROADWAY PLANS or show drainage outlet details behind the abutment whenever possible.