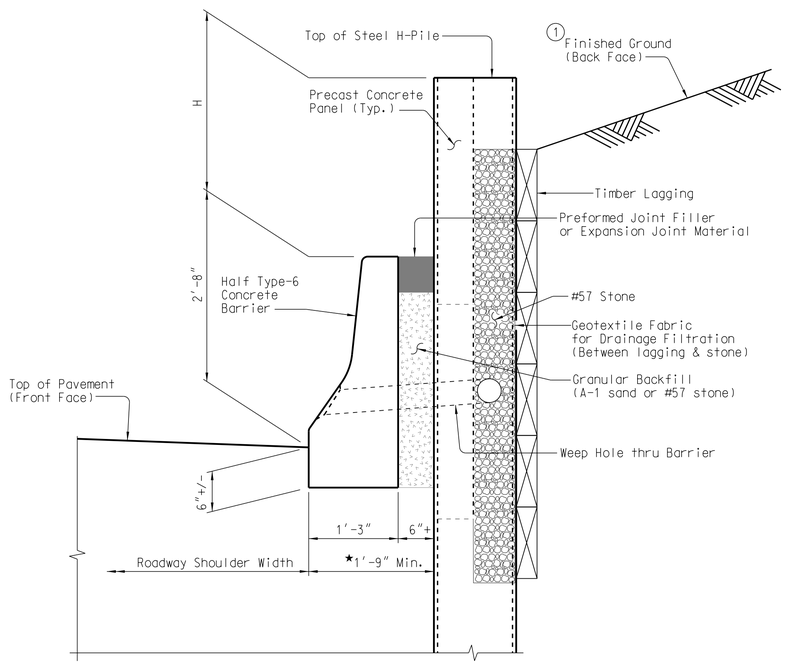
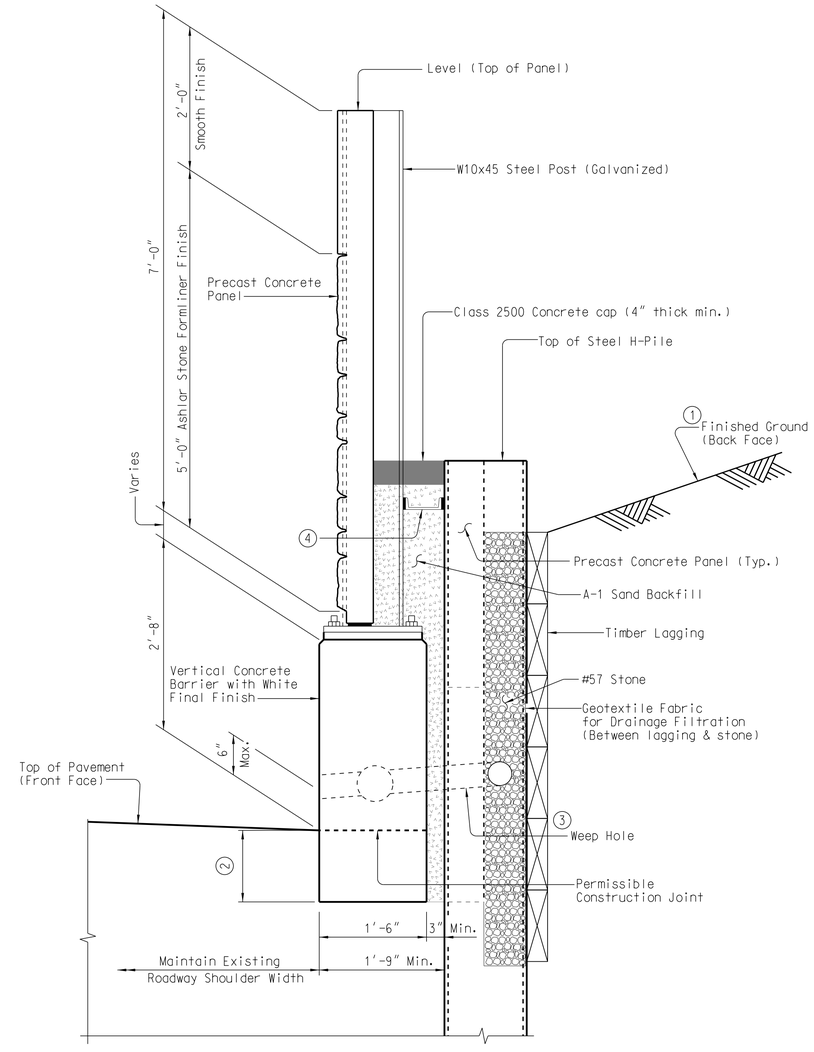


SECTION THRU EXISTING PILE & PANEL WALL "H" LESS THAN 7-FEET

★1'-9" dimension on as-built plans.
Lidar survey indicates additional space may be available.



SECTION THRU PROPOSED NEW FACING & BARRIER - TYPE A EXISTING PILE & PANEL WALL "H" LESS THAN 7-FEET

Notes:

1. In some locations, existing Pile & Panel walls have ditches with concrete slope protection at top of back face. See As-Built Plans.
2. Barrier embedment to be determined by designer.
3. Retain weep holes where they exit existing wall. Plumb drainage through new barrier with compatible PVC pipes and fittings. Reduce number of weep hole outlets through new barrier to one outlet every 50 feet.
4. Connection between piles to be determined by designer.

Barrier and Precast Panel reinforcing not shown.

Construction Sequence:

1. Remove existing Half-Type-6 concrete barrier, joint material, and granular backfill.
2. Cast new vertical concrete barrier. See weep hole note.
3. Install new W10x45 posts and precast concrete panels with Ashlar Stone finish. Connect new posts to existing facing if applicable.
4. Backfill void between new barrier, posts, and panels with sand and cap with Class 2500 concrete.
5. Apply Anti-Graffiti coating to precast concrete panels. Apply white Final Finish to exposed barrier concrete.

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	BY	CHK.	DATE

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

RETAINING WALL IMPROVEMENT DETAILS (1 OF 6)

COUNTY: GREENVILLE

ROUTE: I-85/385

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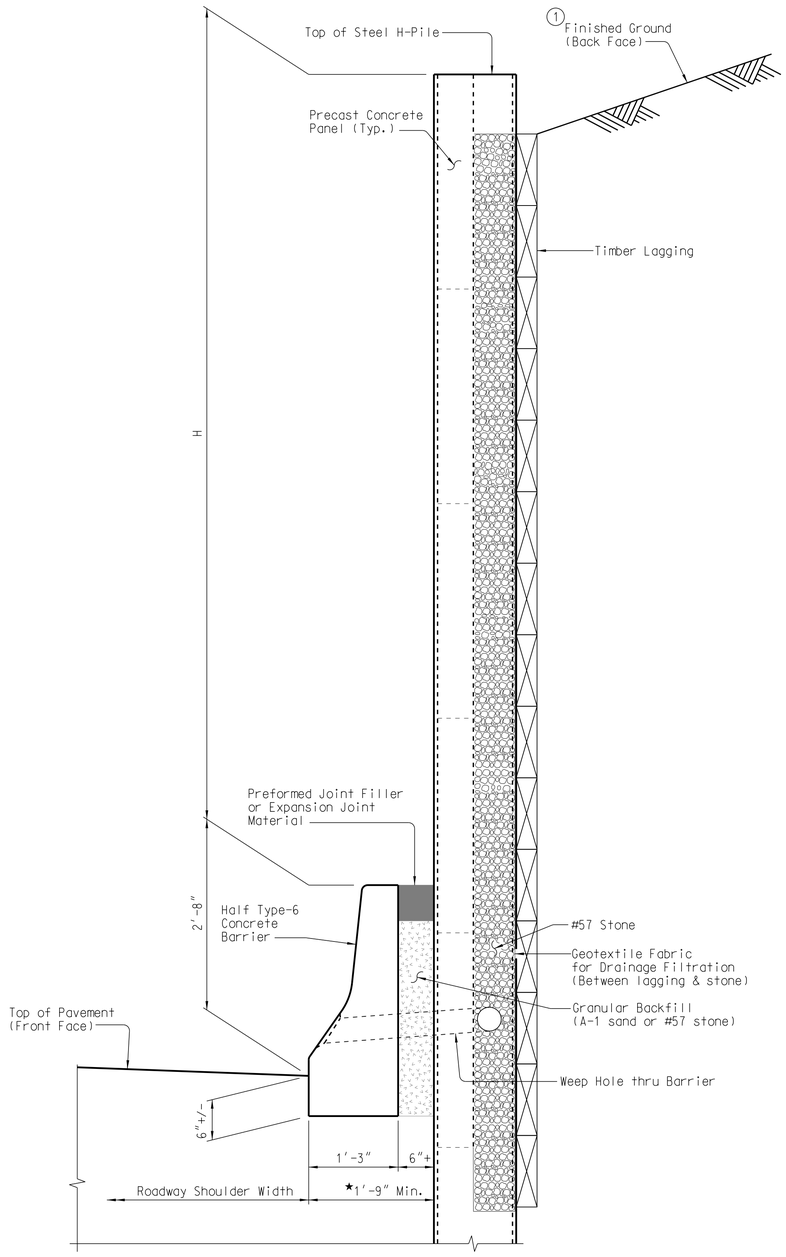
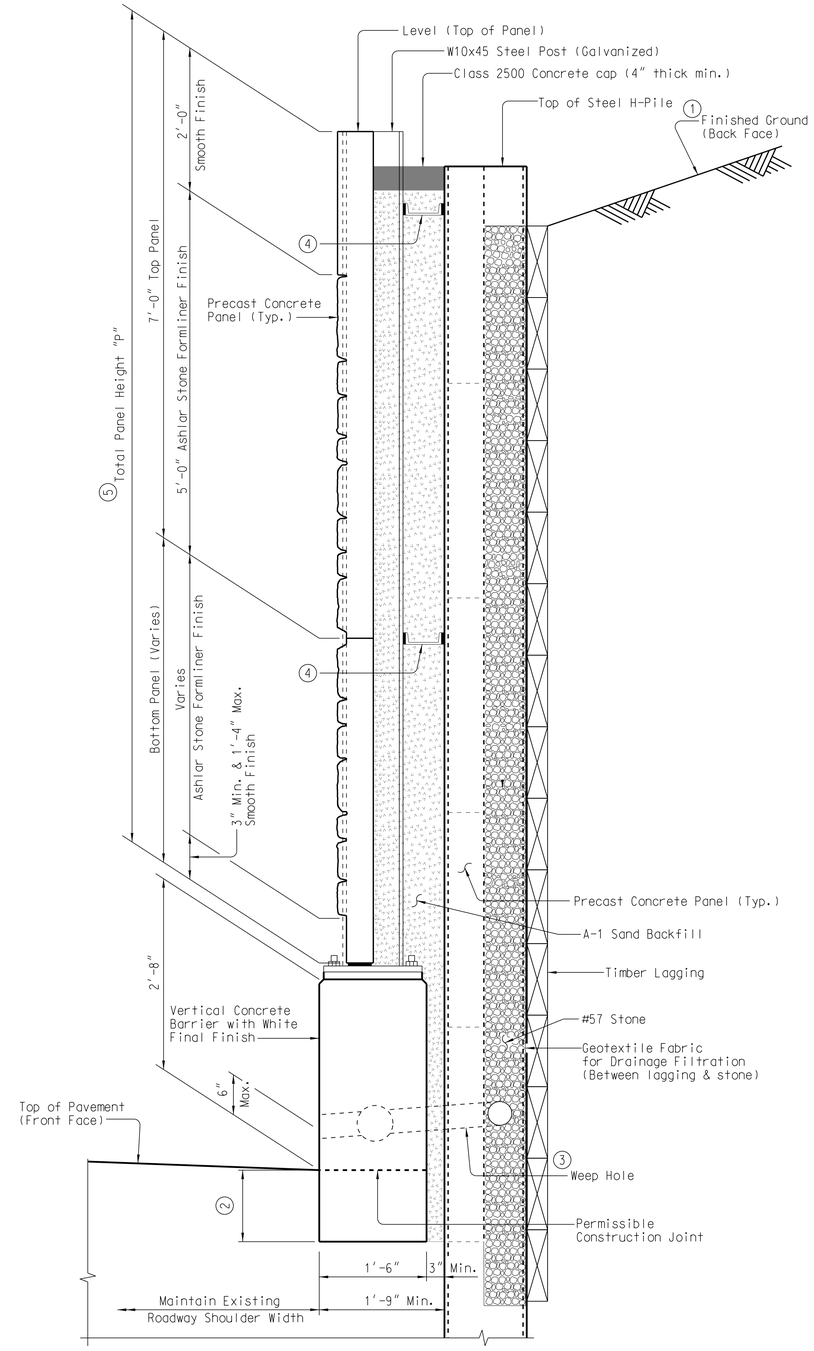


SECTION THRU EXISTING PILE & PANEL WALL "H" GREATER THAN 7-FEET

★1'-9" dimension on as-built plans.
Lidar survey indicates additional space may be available.



SECTION THRU PROPOSED NEW FACING & BARRIER - TYPE B "H" GREATER THAN 7-FEET

Notes:

1. In some locations, existing Pile & Panel walls have ditches with concrete slope protection at top of back face. See As-Built Plans.
2. Barrier embedment to be determined by designer.
3. Retain weep holes where they exit existing wall. Plumb drainage through new barrier with compatible PVC pipes and fittings. Reduce number of weep hole outlets through new barrier to one outlet every 50 feet.
4. Connection between piles to be determined by designer.
5. The minimimum top panel height is 7'-0".
   For 7'-0" < P ≤ 12'-0", use a maximum of two panels per column.
   For P > 12'-0", the minimum height for middle panels is 5'-0" and bottom panels may be less than 5'-0".

   Barrier and Precast Panel reinforcing not shown.

Construction Sequence:

1. Remove existing Half-Type-6 concrete barrier, joint material, and granular backfill.
2. Cast new vertical concrete barrier. See weep hole note.
3. Install new W10x45 posts and precast concrete panels with Ashlar Stone finish. Connect new posts to existing facing.
4. Backfill void between new barrier, posts, and panels with sand and cap with Class 2500 concrete.
5. Apply Anti-Graffiti coating to precast concrete panels. Apply white Final Finish to exposed barrier concrete.

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RETAINING WALL IMPROVEMENT DETAILS (2 OF 6)

COUNTY: GREENVILLE

ROUTE: I-85/385

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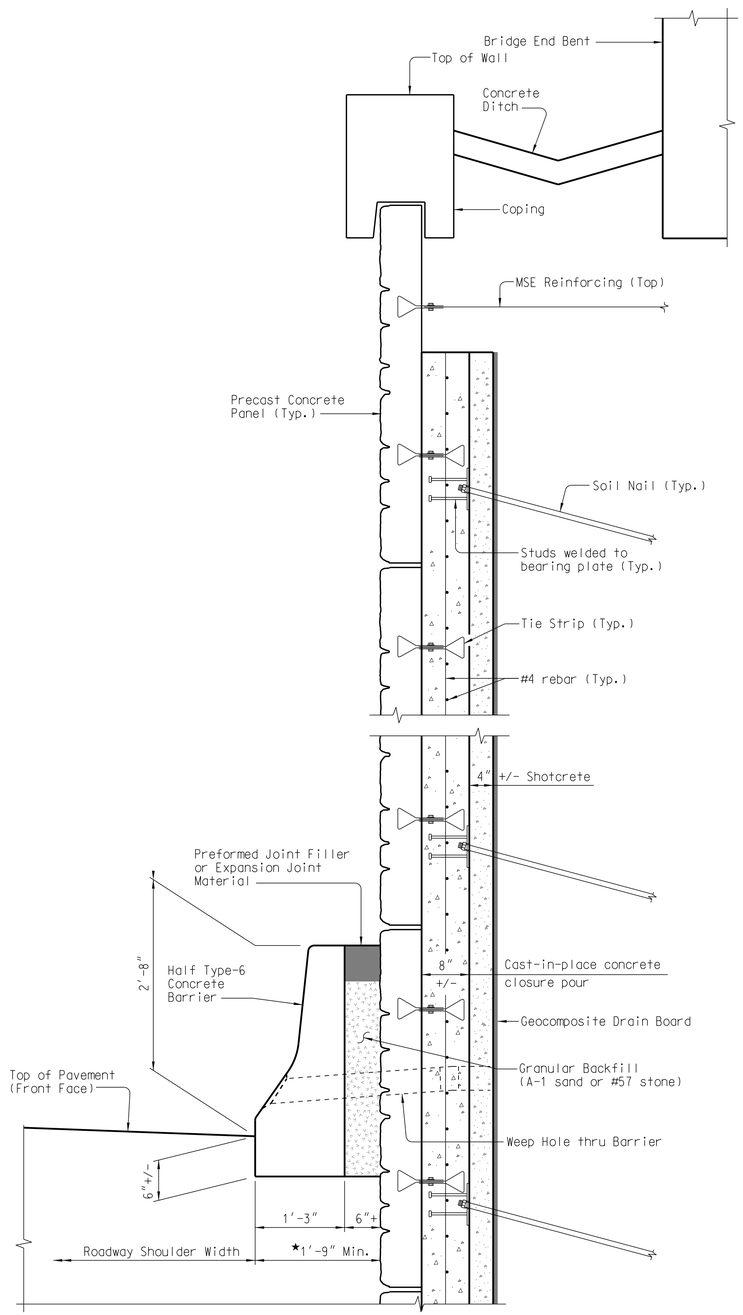
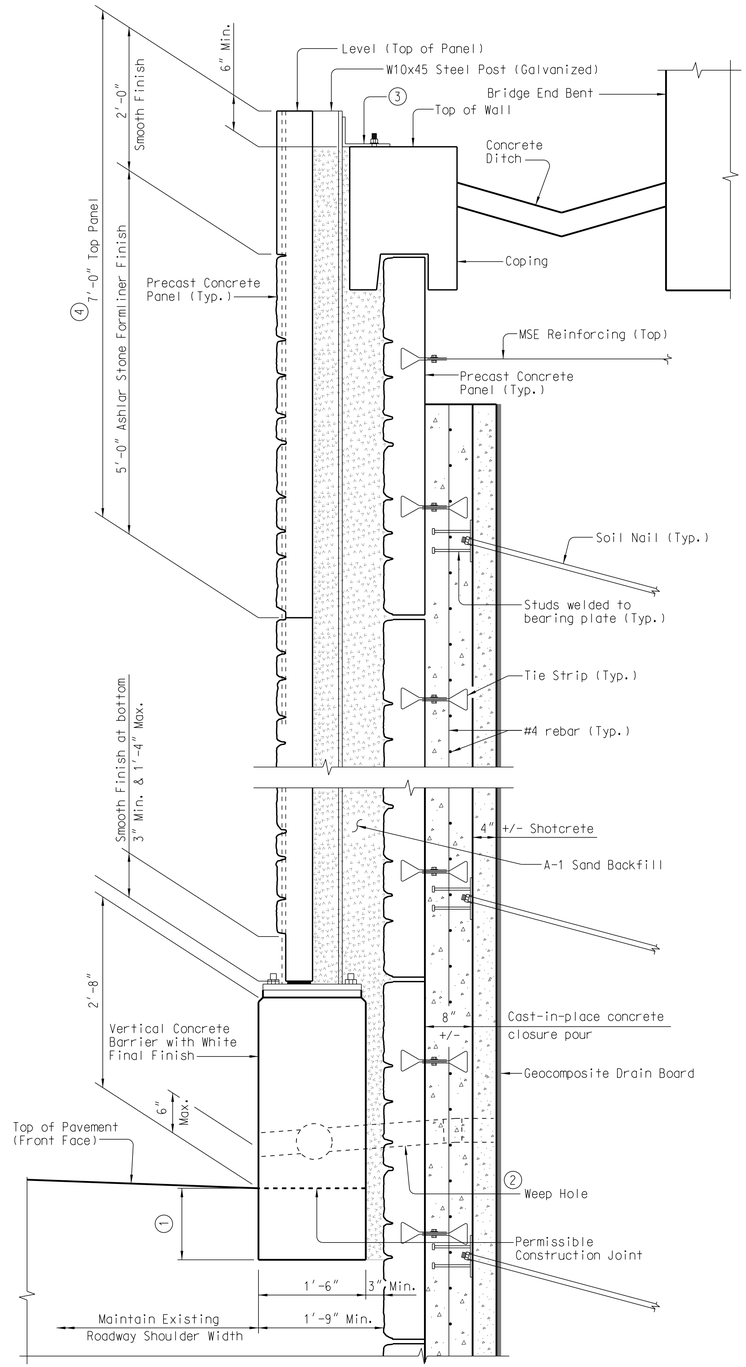


SECTION THRU
EXISTING BRIDGE 11 ABUTMENT WALL

★1'-9" dimension on as-built plans.
Lidar survey indicates additional space may be available.



SECTION THRU
PROPOSED NEW FACING AND BARRIER - TYPE C
BRIDGE 11 ABUTMENT WALLS

Notes:

① Barrier embedment to be determined by designer.

② Retain weep holes where they exit existing wall. Plumb drainage through new barrier with compatible PVC pipes and fittings. Reduce number of weep hole outlets through new barrier to one outlet every 50 feet.

③ Connection from post to coping to be determined by designer.

④ The minimimum top panel height is 7'-0".
The minimum height for middle panels is 5'-0".
Bottom panels may be less than 5'-0".

Bridge End Bent piles not shown.

Barrier and Precast Pile reinforcing not shown.

Construction Sequence:

1. Remove existing Half-Type-6 concrete barrier, joint material, and granular backfill.
2. Cast new vertical concrete barrier. See weep hole note.
3. Install new W10x45 posts and precast concrete panels with Ashlar Stone finish. Connect new posts to existing coping.
4. Backfill void between new barrier, posts, and panels with sand.
5. Apply Anti-Graffiti coating to precast concrete panels. Apply white Final Finish to exposed barrier concrete.

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RETAINING WALL
IMPROVEMENT DETAILS
(3 OF 6)

COUNTY: GREENVILLE
ROUTE: I-85/385

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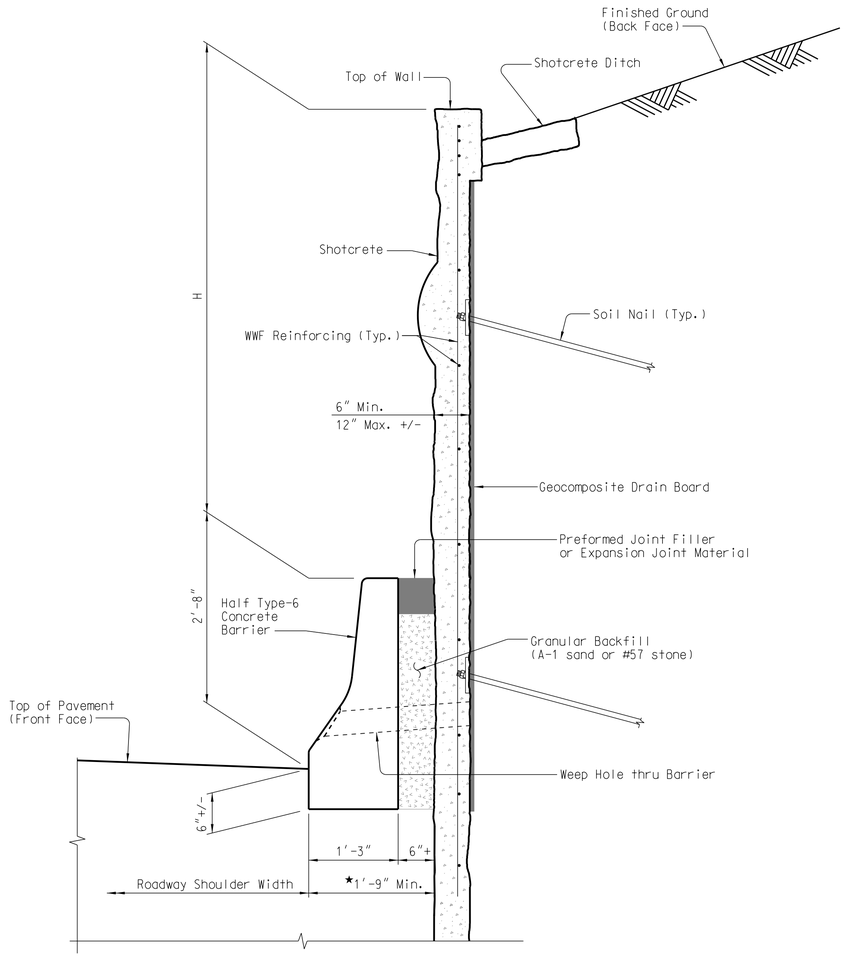
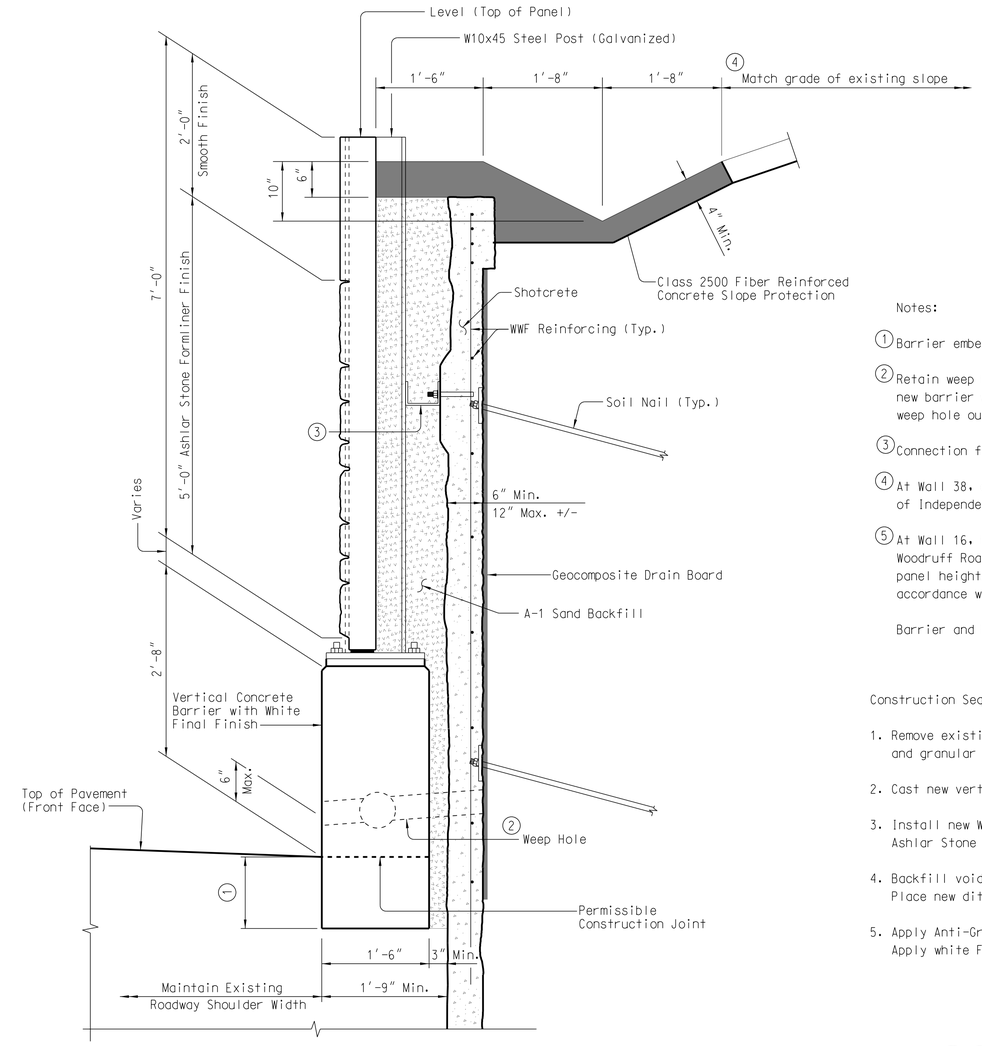


SECTION THRU
EXISTING SOIL NAIL WALL
"H" LESS THAN 7-FEET

★1'-9" dimension on as-built plans.
Lidar survey indicates additional space may be available.



SECTION THRU
PROPOSED NEW FACING & BARRIER - TYPE D 5
EXISTING SOIL NAIL WALL
"H" LESS THAN 7-FEET

Notes:

1. Barrier embedment to be determined by designer.
2. Retain weep holes where they exit existing wall. Plumb drainage through new barrier with compatible PVC pipes and fittings. Reduce number of weep hole outlets through new barrier to one outlet every 50 feet.
3. Connection from post to existing face to be determined by designer.
4. At Wall 38, continue slope protection to shoulder break of Independence Boulevard. At Wall 16, tie to existing grade/ditch.
5. At Wall 16, height transition occurs as new facing steps up approaching Woodruff Road Overpass (approx. Wall 16 Sta. 22+75 to Sta. 23+30). For panel heights greater than 7-feet, use multiple panels per column in accordance with Note 5 on Sheet 2 (Facing Type B).

Barrier and Precast Panel reinforcing not shown.

Construction Sequence:

1. Remove existing Half-Type-6 concrete barrier, joint material, and granular backfill.
2. Cast new vertical concrete barrier. See weep hole note.
3. Install new W10x45 posts and precast concrete panels with Ashlar Stone finish. Connect new posts to existing facing if applicable.
4. Backfill void between new barrier, posts, and panels with sand. Place new ditch (Class 2500 fiber reinforced concrete) on top of wall.
5. Apply Anti-Graffiti coating to precast concrete panels. Apply white Final Finish to exposed barrier concrete.

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RETAINING WALL
IMPROVEMENT DETAILS
(4 OF 6)

COUNTY: GREENVILLE
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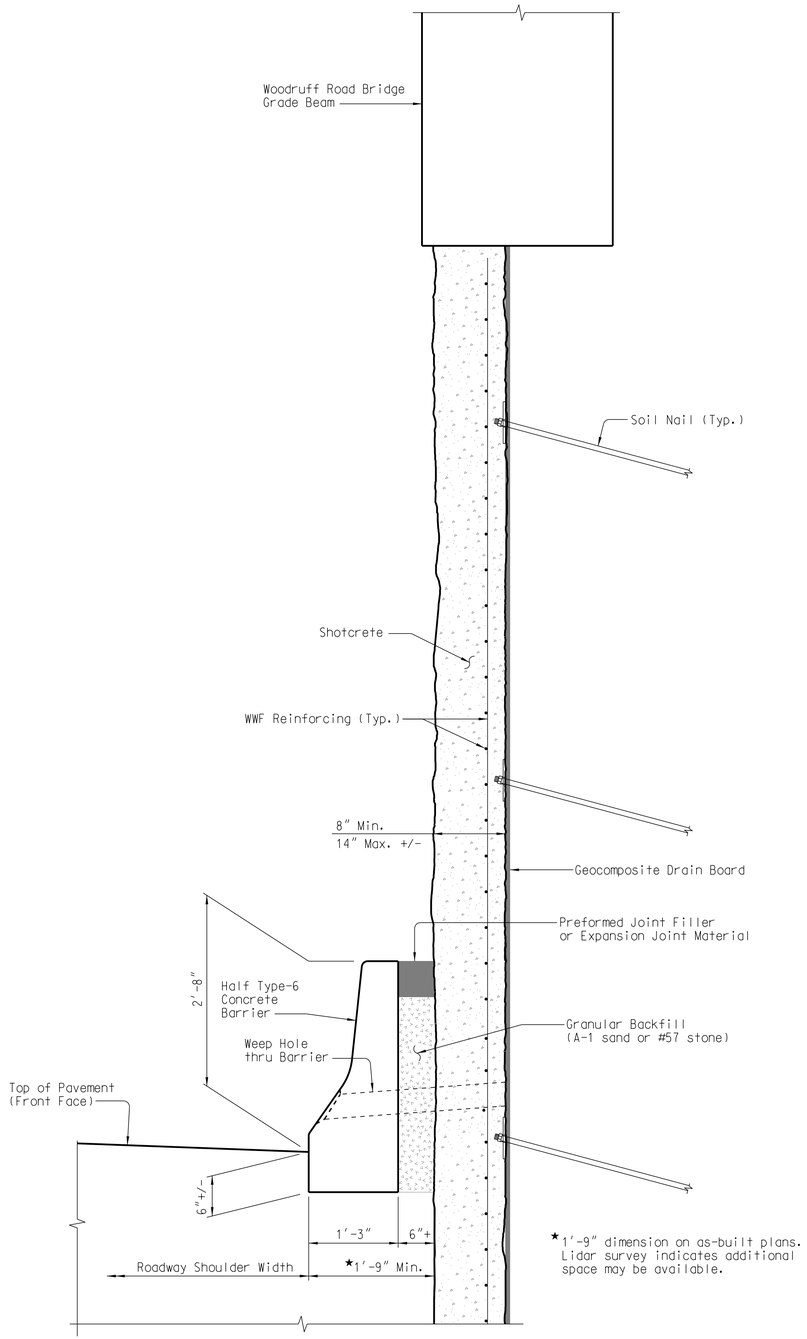
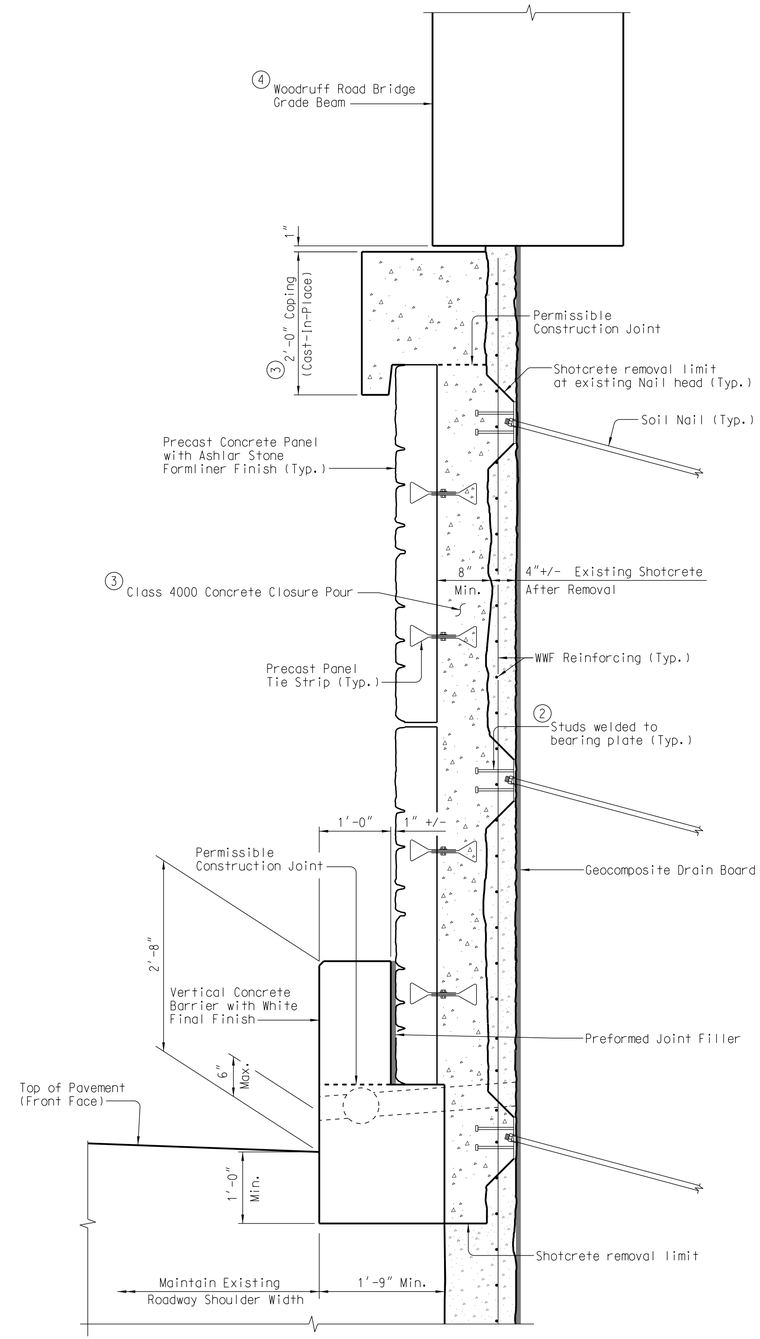


SECTION THRU
EXISTING SOIL NAIL WALLS 26 & 27
UNDER WOODRUFF ROAD BRIDGE



SECTION THRU
PROPOSED NEW FACING - TYPE E
WALLS 26 & 27

Notes:

1. Retain weep holes where they exit existing wall. Plumb drainage through new barrier with compatible PVC pipes and fittings. Reduce number of weep hole outlets through new barrier to one outlet every 50 feet.

2. Connection to existing nail bearing plates to be determined by designer.

3. Reinforcing not shown. Designer to determine Closure Pour and Coping rebar.

4. Outside of Grade Beam limits, provide cast-in-place or precast coping, similar to top of new facing detail Type F on Sheet 6. Set top of coping 6" minimum above top of existing wall face.

End Bent Cap and Piles not shown.

Barrier and Precast Panel reinforcing not shown.

Construction Sequence:

1. Remove existing Half-Type-6 concrete barrier, joint material, and granular backfill.

2. Remove existing shotcrete to the limits shown. Use caution to expose existing nail heads and bearing plates.

3. Install shear studs on existing nail bearing plates (to be determined by designer)

3. Cast new concrete barrier with panel seat. See weep hole note.

4. Install new precast concrete panels with Ashlar Stone finish. Cast closure pour and coping.

5. Apply Anti-Graffiti coating to precast concrete panels and coping. Apply white Final Finish to exposed barrier concrete and existing Grade Beam.

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RETAINING WALL
IMPROVEMENT DETAILS
(5 OF 6)

COUNTY: GREENVILLE
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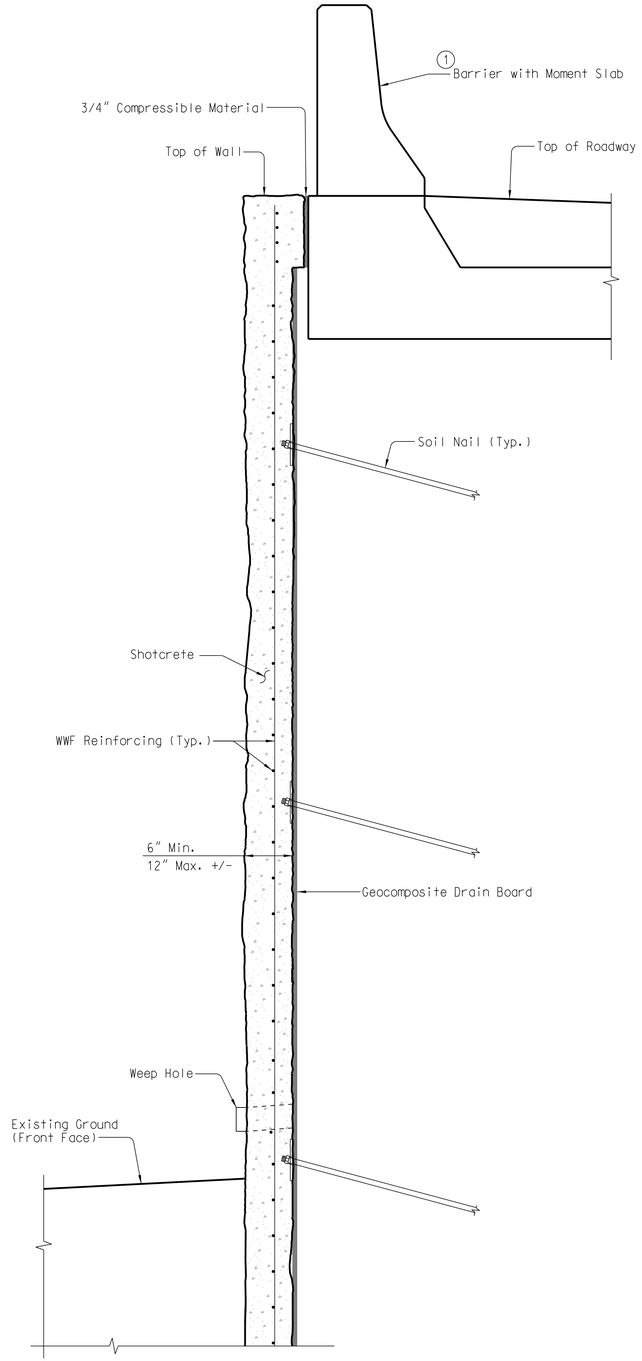
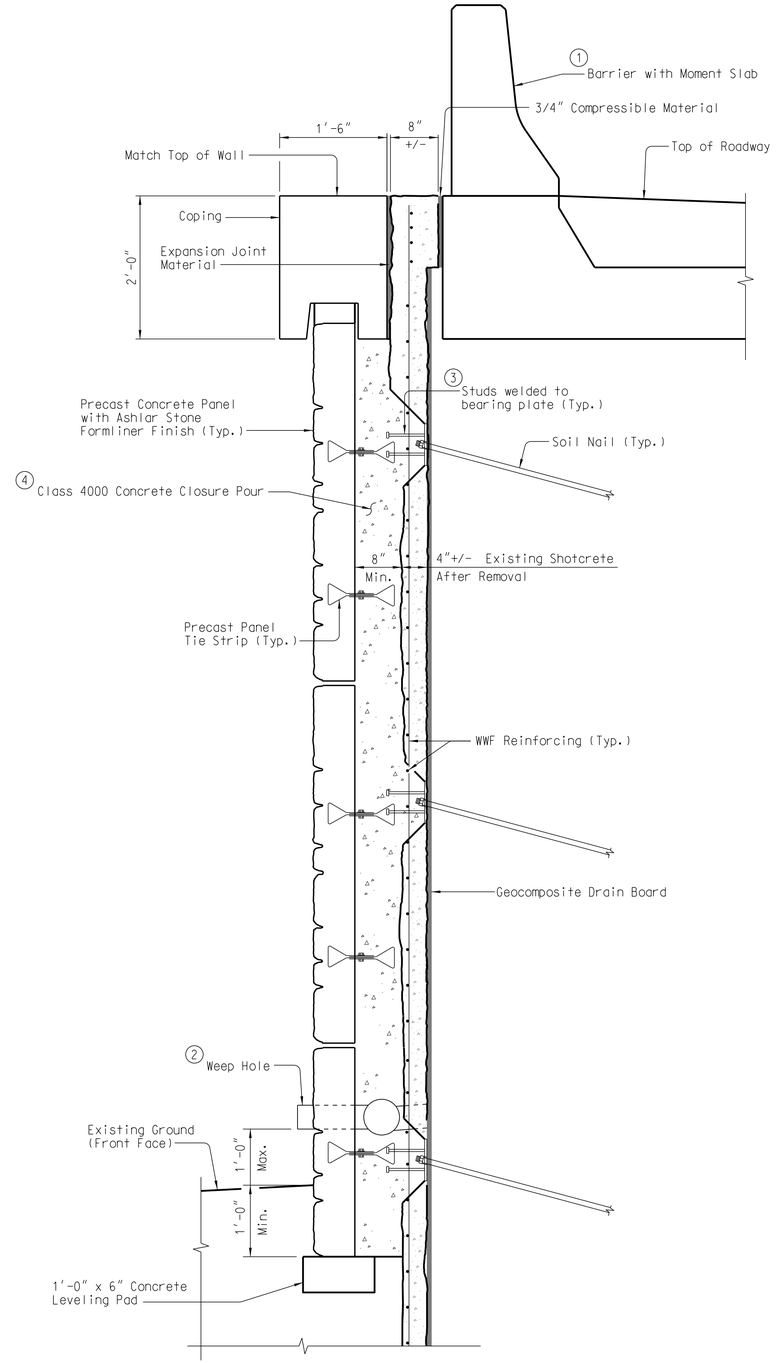


SECTION THRU
EXISTING SOIL NAIL WALL 10



SECTION THRU
PROPOSED NEW FACING - TYPE F
SOIL NAIL WALL 10

Notes:

1. Wall departs from barrier with moment slab near Wall Sta. 13+00. Concrete ditch is located at top of wall from Sta. 13+05 to end of wall. Retain barrier and ditch on top of wall.
2. Retain weep holes where they exit existing wall. Plumb drainage behind new precast panels with compatible PVC pipes and fittings. Reduce number of weep hole outlets through new precast panels to one outlet every 50 feet.
3. Connection to existing nail bearing plates to be determined by designer.
4. Reinforcing not shown. Designer to determine Closure Pour rebar.

Precast Panel reinforcing not shown.

Construction Sequence:

1. Remove existing Half-Type-6 concrete barrier, joint material, and granular backfill.
2. Remove existing shotcrete to the limits shown (4" Min.). Use caution to expose existing nail heads and bearing plates.
3. Install shear studs on existing nail bearing plates (to be determined by designer).
4. Place leveling pad. Install new precast concrete panels with Ashlar Stone finish. Cast closure pour. Install coping.
5. Apply Anti-Graffiti coating to precast concrete panels and coping. Regrade ground in front of wall to drain away from wall facing and match existing slopes.

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RETAINING WALL
IMPROVEMENT DETAILS
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