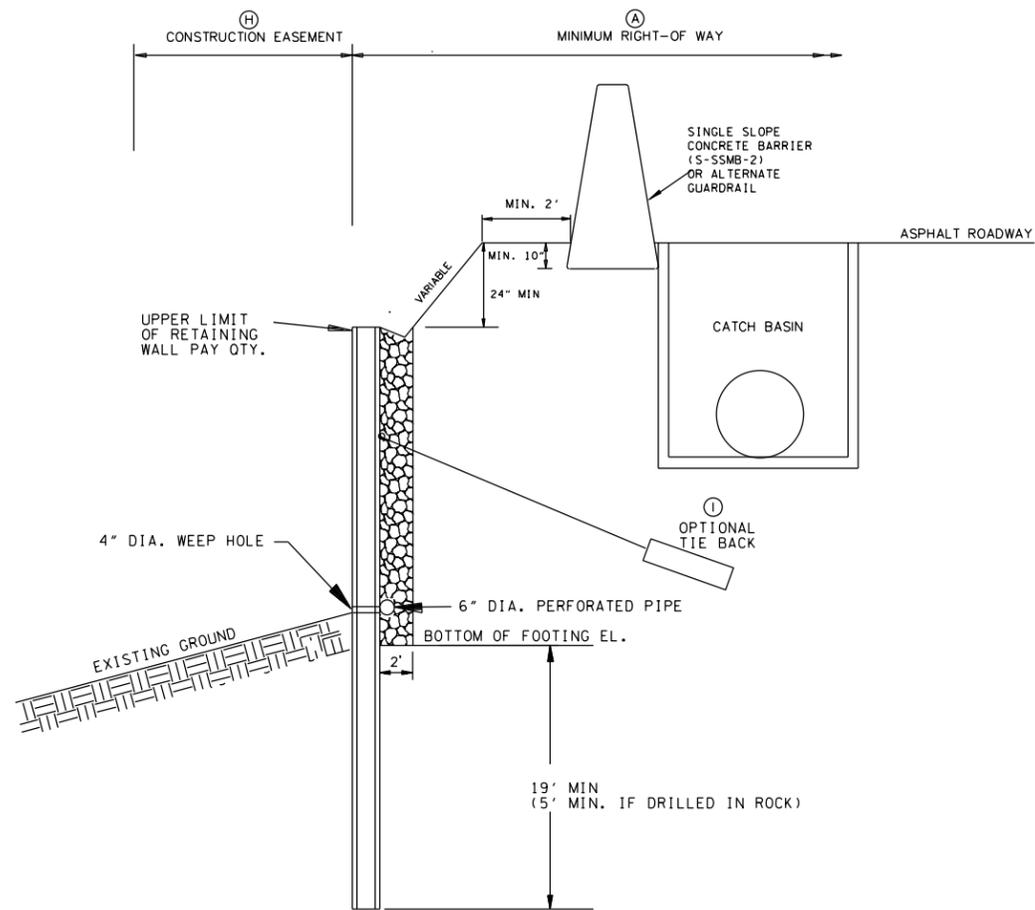
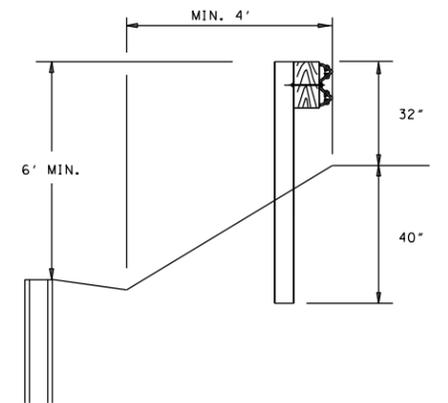


SOLDIER PILE WALL
TYPICAL SECTION IN CUT



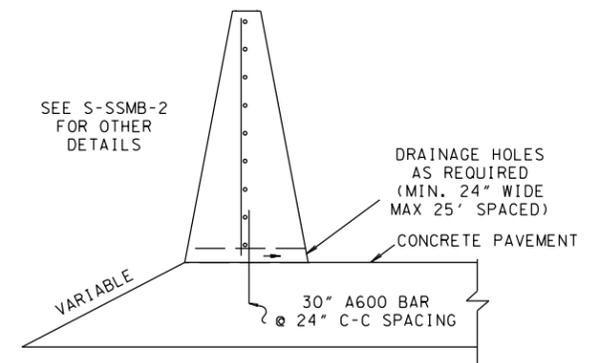
SOLDIER PILE WALL
TYPICAL SECTION IN FILL



ALTERNATE GUARDRAIL DETAIL

SEE NOTE (E)

S-SSMB-2, 51" CONCRETE BARRIER WALL IS RECOMMENDED SINCE INSTALLATION PROVIDES TL-5 PROTECTION.



CONCRETE PAVEMENT
ATTACHMENT DETAIL

GENERAL NOTES

THE PURPOSE OF THIS DRAWING IS TO ILLUSTRATE TO THE DESIGNER THE RIGHT-OF-WAY, SAFETY AND DRAINAGE REQUIREMENTS ASSOCIATED WITH RETAINING WALLS.

- (A) ENTIRE WALL MUST BE BUILT WITHIN THE RIGHT-OF-WAY. IF TIE BACK USED, MIN ROW SHALL BE EXTENDED.
- (B) BACKFILL AREA TO BE PURCHASED AS SLOPE EASEMENT UNTIL TIED IN WITH EXISTING GROUND LINE.
- (C) 15' CONSTRUCTION EASEMENT REQUIRED BEHIND SLOPE TIE IN.
- (D) IF WALL IS WITHIN CLEAR ZONE OF ROADWAY, PLACE CONCRETE BARRIER WALL (PER S-SSMB-3).
- (E) BRIDGE RAIL (STD-1-1SS) WITH MOMENT SLAB IS REQUIRED UNLESS THE ROADWAY IS EXPECTED TO HAVE LITTLE TO NO TRUCK TRAFFIC IN WHICH CASE GUARDRAIL OFFSET A MINIMUM OF 4' FROM THE WALL FACE MAY BE USED.
- (F) DRAINAGE STRUCTURES MAY BE PLACED BEHIND WALLS REQUIRED.
- (G) UNDERCUT DEPTH AND BACKFILL SLOPE TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER.
- (H) COST OF MOMENT SLAB, INCLUDING DESIGN WILL BE PAID FOR IN THE COST OF THE RETAINING WALL.
- (I) IF TIE BACK IS PROPOSED TO BE USED THE ENTIRE TIE SHALL BE INSIDE THE RIGHT-OF-WAY.
- (J) ALIGN WALL WEEP HOLES AND BARRIER WALL WEEP HOLES.

DESIGN NOTES

- (1) LAGGING FOR SOLDIER PILE WALLS, WITH AND WITHOUT PERMANENT GROUND ANCHORS, SHALL BE DESIGNED AS EITHER TEMPORARY OR PERMANENT, BASED ON THE CONDITIONS DESCRIBED BELOW.
- (2) CAST-IN-PLACE CONCRETE FASCIA PANELS SHALL BE DESIGNED AS A PERMANENT LOAD CARRYING MEMBER IN ACCORDANCE WITH AASHTO LRFD.
- (3) THE STRUCTURAL DESIGN OF SOLDIER PILES SHALL BE BASED ON THE ELASTIC SECTION MODULUS "S" FOR THE ENTIRE LENGTH OF THE PILE.
- (4) THE ANTICIPATED LATERAL DEFLECTION AT TOP OF THE SOLDIER PILE WALL SHALL BE SHOWN IN THE PLANS.

FOUNTION TYPES

- DRILLED IN ROCK (5' MIN.)
- CONCRETE FILLED DRILLED (19' MIN.)

WALL TYPES

- STEEL PILES WITH WOOD LAGGING
- CONCRETE WITH WOOD LAGGING
- CONCRETE WITH CONCRETE LAGGING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY
FEATURES
AT SOLDIER PILE
RETAINING WALL

W-SP-1