

**TYPICAL SECTION
PERMANENT GEOSYNTHETIC RETAINING WALL
WITH CAST-IN-PLACE CONCRETE FASCIA**

KEY NOTES

- ① "N" ROWS OF ① #4 DOWEL REINFORCEMENT PLACE BETWEEN GEOSYNTHETIC LAYERS AT 5' - 0" O.C. HORIZONTAL SPACING, SEE TABLE. VERTICAL SPACING BETWEEN ROWS TO BE EQUAL, AS MULTIPLES OF "S_v" ALLOW. ROWS MAY BE STAGGERED. SEE **STD. PLAN D-3.09** FOR "S_v".
- ② INCREASE THE COVER AS REQUIRED TO ACCOMMODATE ARCHITECTURAL FEATURES AND FINISH.
- ③ CONSTRUCTION JOINT WITH ROUGHENED SURFACE.
- ④ 3" I.D. PVC PIPE FOR WEEP HOLE IN WALL FACING ~ PLACE BETWEEN GEOSYNTHETIC LAYERS APPROX. 9" DEEP AT 12' - 0" HORIZONTAL SPACING. LENGTH TO EXTEND TO OUTER SURFACE OF SPECIFIED WALL. WEEP HOLES SHALL BE KEPT CLEAR OF CONCRETE. SEE **STANDARD PLAN D-3.09**, FOR DETAILS NOT SHOWN.
- ⑤ VERTICAL CONSTRUCTION JOINTS IN FASCIA @ 24' - 0" O.C. WITH 1/2" PREMOLDED JOINT FILLER (SEE **STANDARD PLAN D-10.45**, "SPLIT ELEVATION").
- ⑥ VERTICAL CONSTRUCTION JOINTS IN FOOTING @ 120' O.C. MAX. (SEE **STANDARD PLAN D-10.45**, "ELEVATION"). IF THE FOOTING IS STEPPED, PROVIDE 2' - 0" NON-CONTACT LAP SPLICES FOR THE ⑥ #4 BARS AT EACH STEP.
- ⑦ COORDINATE WALL FINISH AND CONFIGURATION WITH STATE BRIDGE AND STRUCTURES ARCHITECT PER WSDOT DESIGN MANUAL 730.04(5).
- ⑧ THE ④ BARS AND INTERIOR ③ BARS SHALL BE USED ONLY IF THE FACE IS VERTICAL.

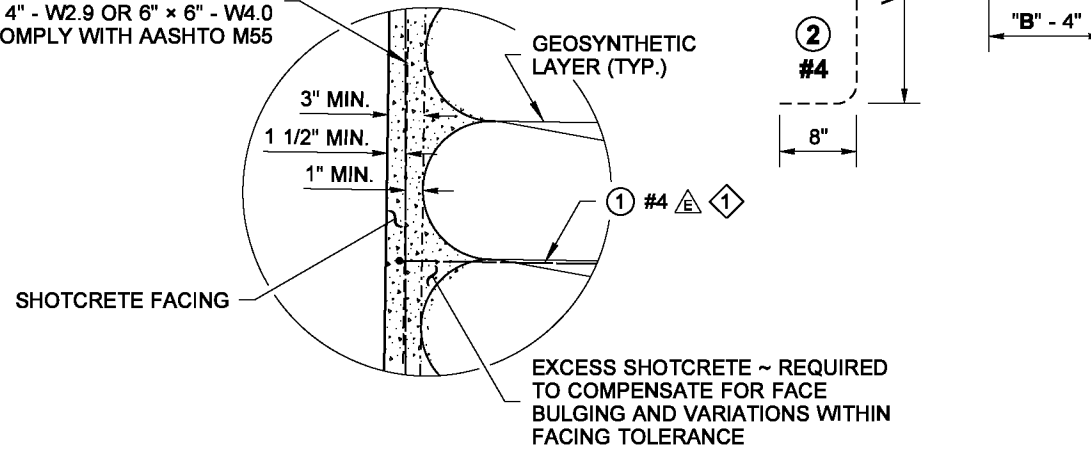
FOR THE VALUES OF "X",
SEE **STANDARD PLAN D-3.09**, SHEET 1.

FOR WALLS WITHOUT TRAFFIC BARRIER, OR WHERE THE TRAFFIC BARRIER IS AT GRADE, USE THE DETAILS SHOWN ABOVE THE MATCH LINE ON THIS SHEET

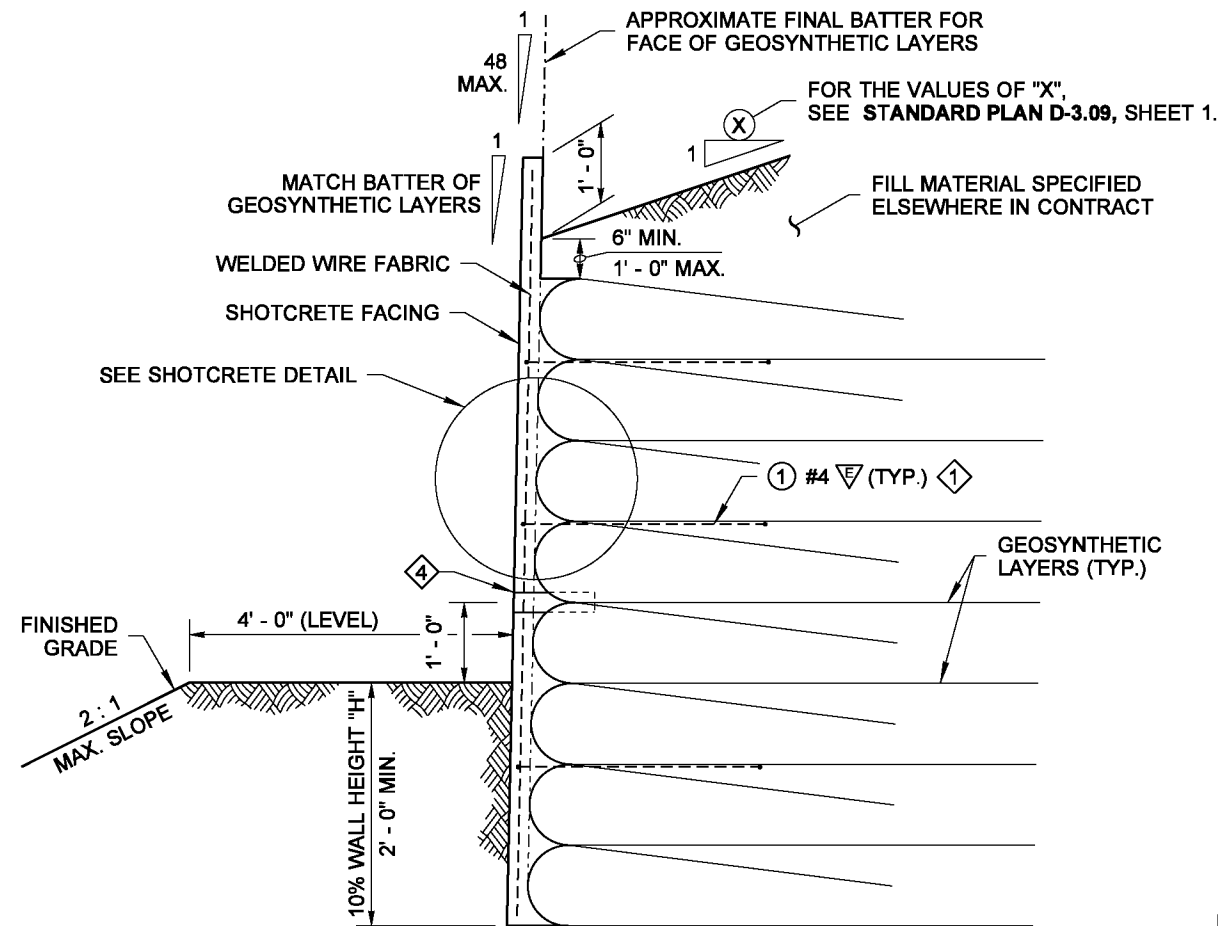
FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON **STANDARD PLAN D-3.15**

FOR WALLS WITH F-SHAPE TRAFFIC BARRIER USE THE DETAILS ABOVE THE MATCH LINE ON **STANDARD PLAN D-3.16**

WELDED WIRE FABRIC FOR CONCRETE REINFORCEMENT 4" x 4" - W2.9 OR 6" x 6" - W4.0 ~ COMPLY WITH AASHTO M55



SHOTCRETE DETAIL



**TYPICAL SECTION
PERMANENT GEOSYNTHETIC RETAINING WALL
WITH SHOTCRETE FACING**

NOTES

- 1. All bars shown on this plan shall be ASTM A706 unless otherwise specified in the Contract.
- 2. Safety cable or fence required when "H" ≥ 10' - 0".
- 3. All cast-in-place concrete shall be class 4000.

▽ = EPOXY COATED

DESIGN HEIGHT "H" (ft.)	ROWS OF #4 DOWEL BARS REQUIRED N (no.)	FASCIA FOOTING WIDTH B (ft. - in.)
UP TO 5	2	1' - 0"
6	3	1' - 0"
7	3	1' - 0"
8	3	1' - 0"
9	3	1' - 0"
10	4	1' - 0"
11	4	1' - 0 1/2"
12	4	1' - 0 1/2"
13	4	1' - 1"
14	4	1' - 1"
15	6	1' - 2"
16	6	1' - 2"
17	8	1' - 2 1/2"
18	8	1' - 2 1/2"
19	8	1' - 3"
20	10	1' - 3"
21	10	1' - 3 1/2"
22	10	1' - 3 1/2"
23	10	1' - 4"
24	10	1' - 4"
25	10	1' - 5"
26	10	1' - 5"
27	10	1' - 5 1/2"
28	10	1' - 5 1/2"
29	10	1' - 6"
30	10	1' - 6"
31	10	1' - 6 1/2"
32	10	1' - 6 1/2"
33	10	1' - 7"
34	10	1' - 7"
35	10	1' - 8"



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT UNTIL ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER AND APPROVED FOR PUBLICATION IS FILED AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

**CAST-IN-PLACE PERMANENT
GEOSYNTHETIC WALL
FASCIA AND FACING
STANDARD PLAN D-3.10-01**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 5/29/13

STATE DESIGN ENGINEER DATE
Washington State Department of Transportation