

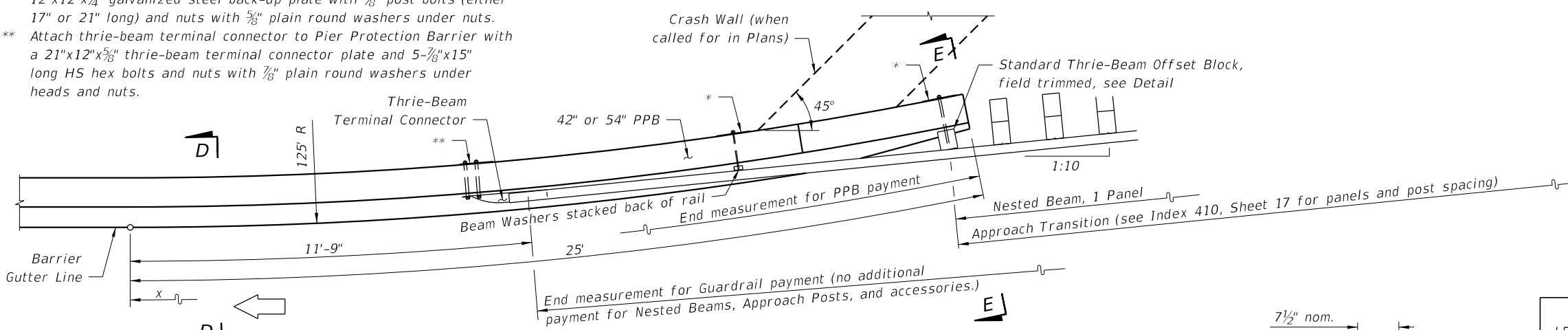
- * 12"x12"x1/4" galvanized steel back-up plate with 5/8" post bolts (either 17" or 21" long) and nuts with 5/8" plain round washers under nuts.
- ** Attach thrie-beam terminal connector to Pier Protection Barrier with a 21"x12"x5/8" thrie-beam terminal connector plate and 5-7/8"x15" long HS hex bolts and nuts with 7/8" plain round washers under heads and nuts.

NOTES

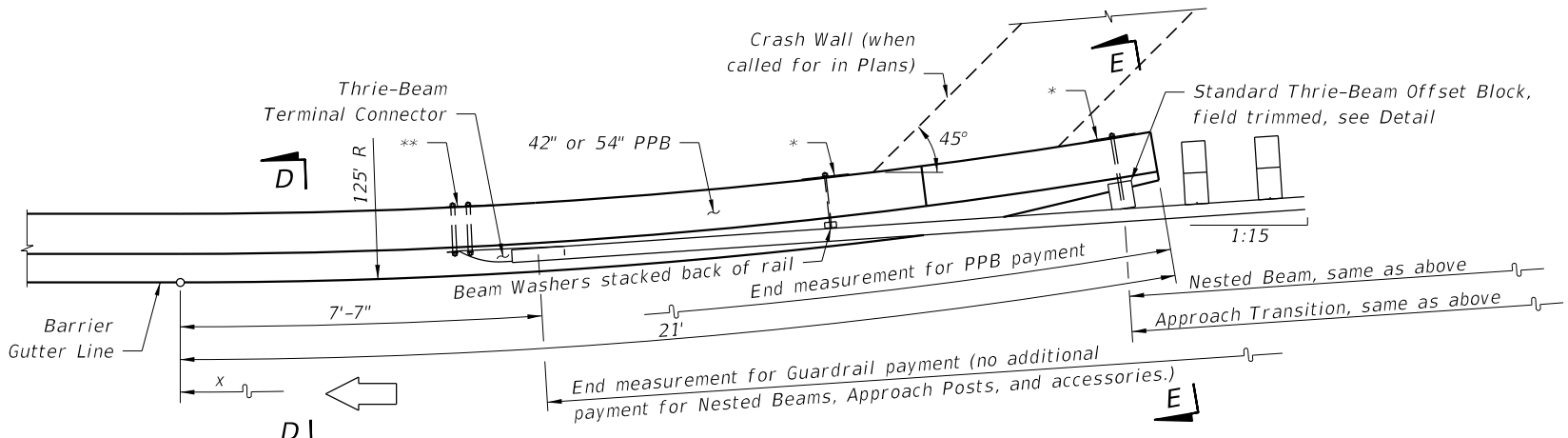
1. The Pier Protection Barrier radial segments are intended for use on approach and trailing ends of both one-way and two-way facilities. The guardrail connections shown on this sheet apply to one-way approaches and to the approaching and trailing ends of two-lane two-way facilities. On trailing ends of two-way multilane and one-way facilities, the trailing connection in Index 400 may be used.

For guardrail connections, see Index 410, Sheet 18.

2. Refer to Index No. 400 for additional guardrail information.

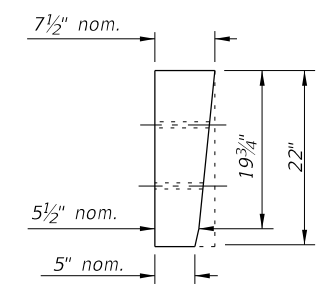


PLAN FOR DESIGN SPEED ≤ 45 MPH



PLAN FOR DESIGN SPEED ≥ 50 MPH

FLARED END TREATMENT - PIER PROTECTION BARRIER WITH GUARDRAIL CONTINUATION

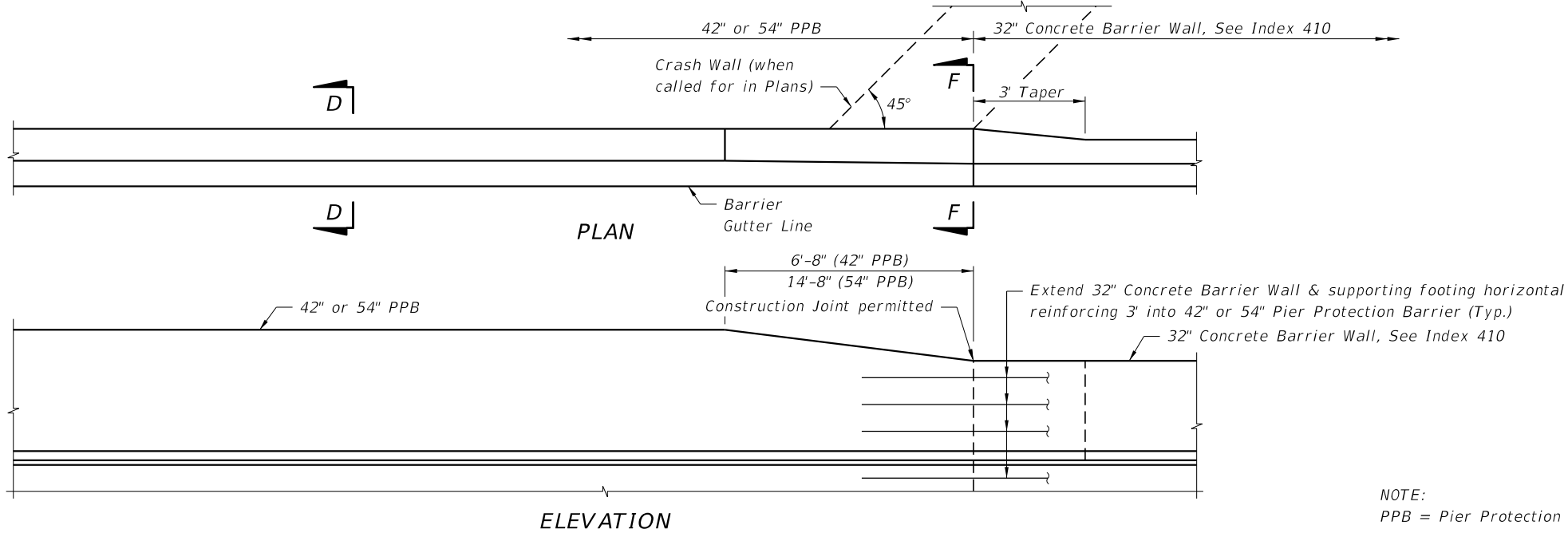


FOR USE WITH EITHER 1:10 OR 1:15 GUARDRAIL TRANSITIONS

STANDARD THRIE-BEAM OFFSET BLOCK (FIELD TRIMMED)

ARC LENGTH (Ft.)	DISTANCE "x" (Ft.)	OFFSETS "y" "y" (Ft.)
4	4.00	0.06
8	7.99	0.26
12	11.98	0.58
16	15.96	1.02
20	19.91	1.60
24	23.85	2.30
25	24.83	2.49

Note: Barrier may be constructed in chords having lengths ≤ 4 feet.



ELEVATION

NOTE: PPB = Pier Protection Barrier.

END TREATMENT - PIER PROTECTION BARRIER WITH CONCRETE BARRIER WALL CONTINUATION

2/1/2016 10:03:20 AM

LAST REVISION 02/01/16	DESCRIPTION: Updated Notes 1 and 2; Updated Approach Transition call-out in plan views
---------------------------	--



PIER PROTECTION BARRIER

INDEX NO. 411	SHEET NO. 6 of 10
------------------	----------------------