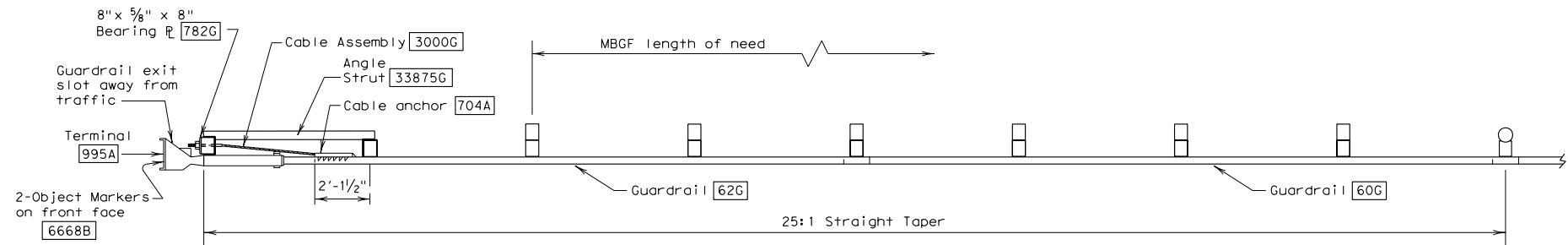
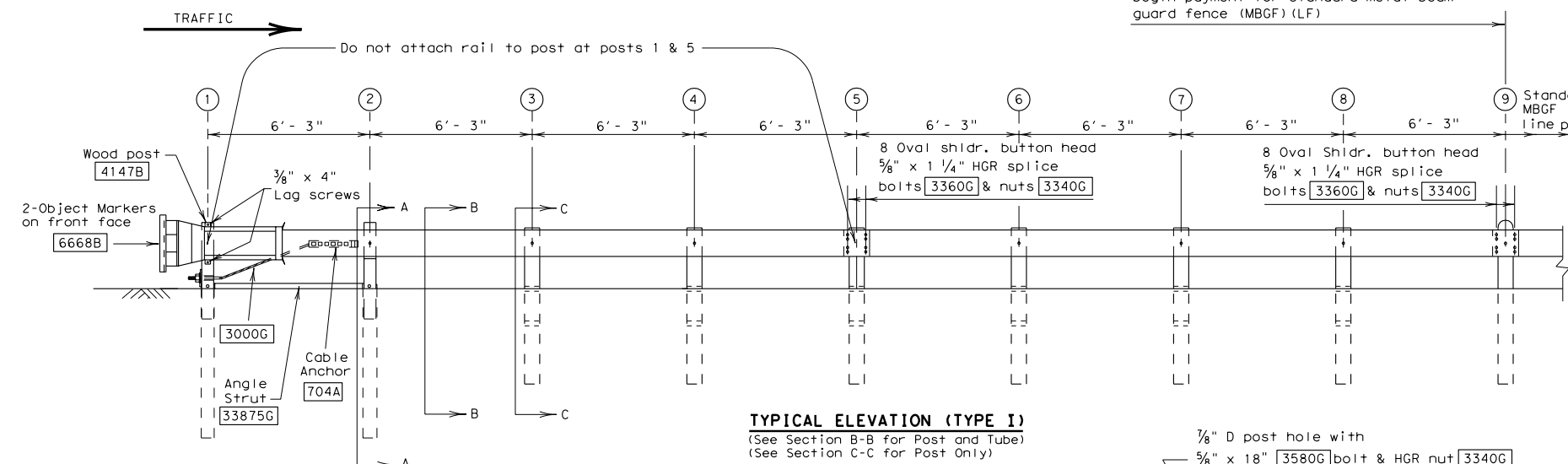


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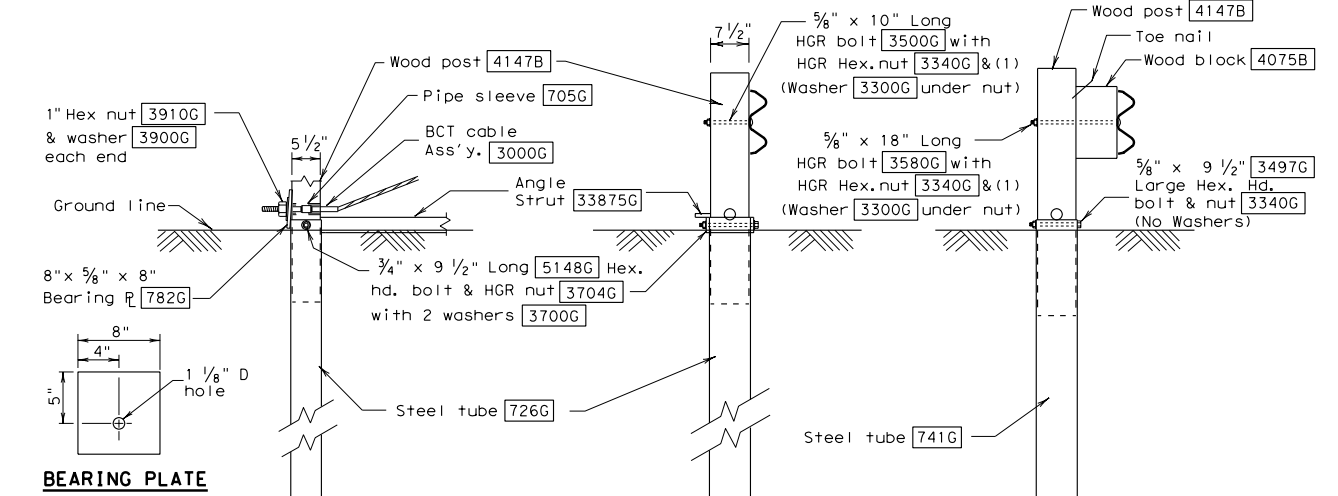
LEVELS DISPLAYED	
1	



PLAN



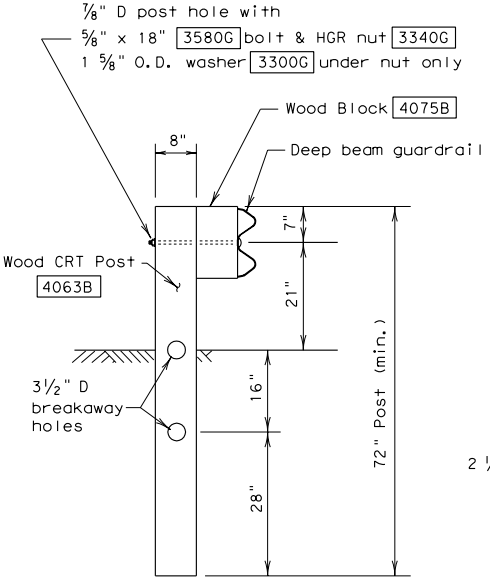
TYPICAL ELEVATION (TYPE I)
(See Section B-B for Post and Tube)
(See Section C-C for Post Only)



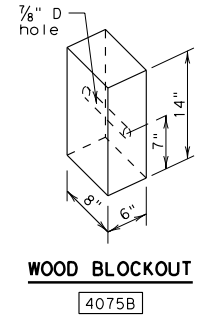
PARTIAL VIEW AT POST #1

SECTION A-A
(at post 2)

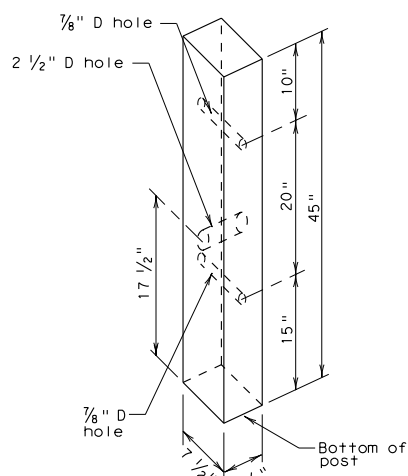
SECTION B-B
(Typ. at Posts 3 thru 8, Type II & III)



SECTION C-C
(Typ. at post only positions)



WOOD BLOCKOUT
4075B



WOOD POST
4147B

All measurements should be taken from bottom of posts.

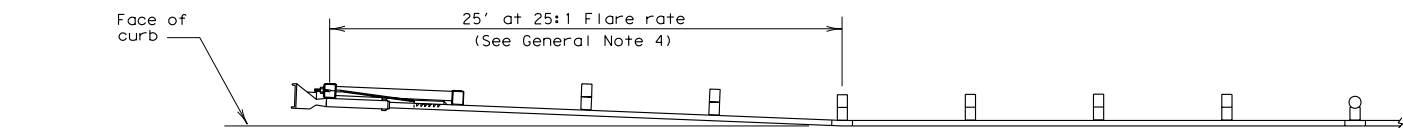
POST & TUBE OPTIONS		
Type I	Posts	① thru ②
Type II	Posts	① thru ④
Type III	Posts	① thru ⑧

GENERAL NOTES

- The Type of SGT unit will be specified elsewhere in the plans. Numbers in circles indicate post position. The Type of SGT unit chosen is a maintenance consideration and does not affect the systems performance.

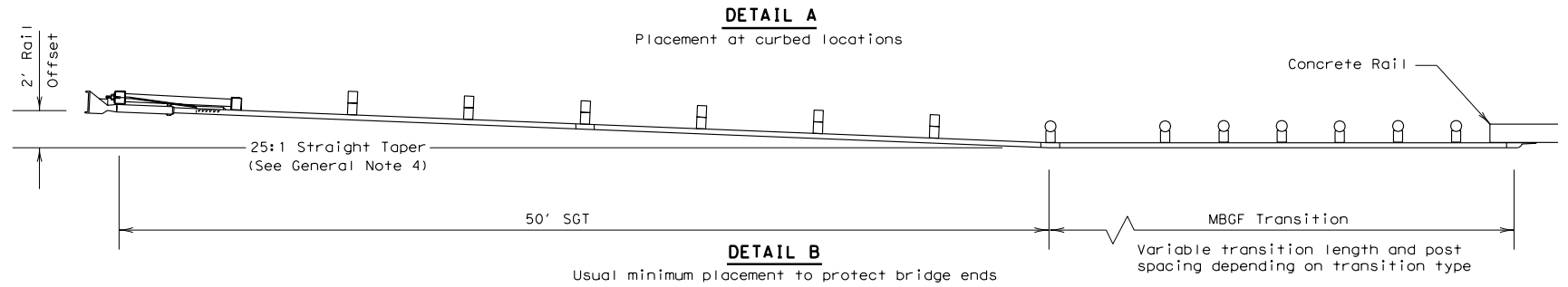
Post & Tube Options		Post Only	
Type I	Posts ① thru ②	Posts ③ thru ⑧	
Type II	Posts ① thru ④	Posts ⑤ thru ⑧	
Type III	Posts ① thru ⑧	None	
- If the SGT system must be placed on a radius, the minimum radius is 150 feet.
- All bolts, nuts, cable assemblies, cable anchors, steel tubes & bearing plates shall be galvanized.
- For non-curb installations, the MGBF will be flared at a rate of 25:1 over the first 50 foot of the system to prevent the terminal head from encroaching on the shoulder. The flare may be decreased or eliminated for specific installations if directed by the Engineer. A 25:1 flare rate will be used at curb sections, beginning at post number 5 and ending at post number one.
- The steel tubes shall not protrude more than 4 inches above ground. Site grading may be necessary to meet this requirement.
- The steel tubes may be driven with an approved driving head. They shall not be driven with the wood post in the tube. If the steel tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent tube settlement.
- When rock excavation is encountered, a 12 inch diameter post hole, 20 inches deep may be used if approved by the Engineer. Granular material will be placed in the bottom of the hole approximately 2 1/2 inches deep to provide drainage. The steel tube sleeves will be field cut to 20 inches in length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
- The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening the nuts.
- The wood blockouts shall be "toe nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.
- For curb installations, the soil tubes and posts shall be installed at the proper ground elevation behind the curb. The posts will then require field drilling new holes to accommodate the rail to post connection bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed if directed by the Engineer.
- An object marker shall be installed on the front of the impact head as detailed on D&M(VIA).
- A special site evaluation should be considered, prior to using this end treatment where there is less than 25 feet between the extrusion side of the end treatment and any adjacent driving lane.

BILL OF MATERIAL				
Code #	POST & TUBE OPTIONS			DESCRIPTION
	Type I Qty.	Type II Qty.	Type III Qty.	
62G	1	1	1	#1 Deep Beam Guardrail (12 Ga) at 25'
60G	1	1	1	#2 Deep Beam Guardrail (12 Ga) at 25'
726G	2	2	2	Steel Tube - 6"x 8"x 72"x 1/8" min
741G	0	2	6	Steel Tube - 6" x 8" x 54" x 1/8" min
4147B	2	4	8	Wood Posts - 5 1/2" x 7 1/2" x 45"
4063B	6	4	0	Wood CRT Posts - 6" x 8" x 72"
4075B	6	6	6	Wood Block - 6" x 8" x 14"
705G	1	1	1	Pipe Sleeve - 2" std. pipe x 5 1/2"
782G	1	1	1	Bearing Plate - 8" x 8" x 5/8"
704A	1	1	1	Cable Anchor
3000G	1	1	1	Cable Assembly (3/4" x 78")
33875G	1	1	1	Angle Strut
995A	1	1	1	ET-2000 Plus Guardrail Terminal
HARDWARE				
5148G	2	2	2	3/4" x 9 1/2" Hex Hd (Top of tubes 1&2)A325
3300G	7	7	7	5/8" Washers
3478G	2	2	2	5/8" x 7 1/2" Hex Bolt
3500G	1	1	1	5/8" x 10" Post Bolt (Post 2 of LET)
3580G	6	6	6	5/8" x 18" HGR Post Bolt (posts ③ thru ⑧)
3360G	16	16	16	5/8" x 1 1/4" HGR Splice Bolt
3340G	25	27	31	5/8" HGR Nut (16-spl, 7-posts)
4228G	2	2	2	3/8" x 4" Lag Screw
3910G	2	2	2	1" Hex Nut (Anchor Cable)
3900G	2	2	2	1" Washer (Anchor Cable)
6668B	2	2	2	Object Marker (12" x 12")
3700G	4	4	4	3/4" Washer
3704G	2	2	2	3/4" Heavy Hex Nut
3497G	0	2	6	5/8" x 9 1/2" Hex Hd (Top of Tubes 3-8)A307



DETAIL A

Placement at curbed locations



DETAIL B

Usual minimum placement to protect bridge ends

Variable transition length and post spacing depending on transition type

R = Radius
D = Diameter

SINGLE GUARDRAIL TERMINAL
 (ET-2000 PLUS)
 (WOOD POST)
SGT (7) -03A

FILE: sgt703a.dgn	DN: MAM	CK: MAM	DW: BGD	CK:
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