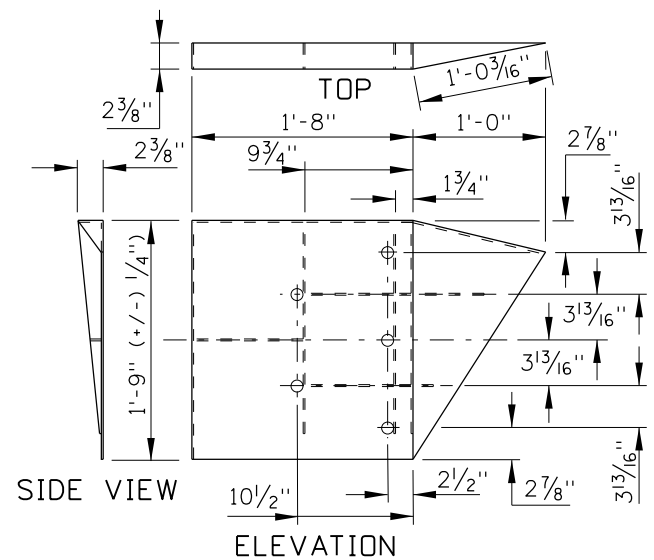
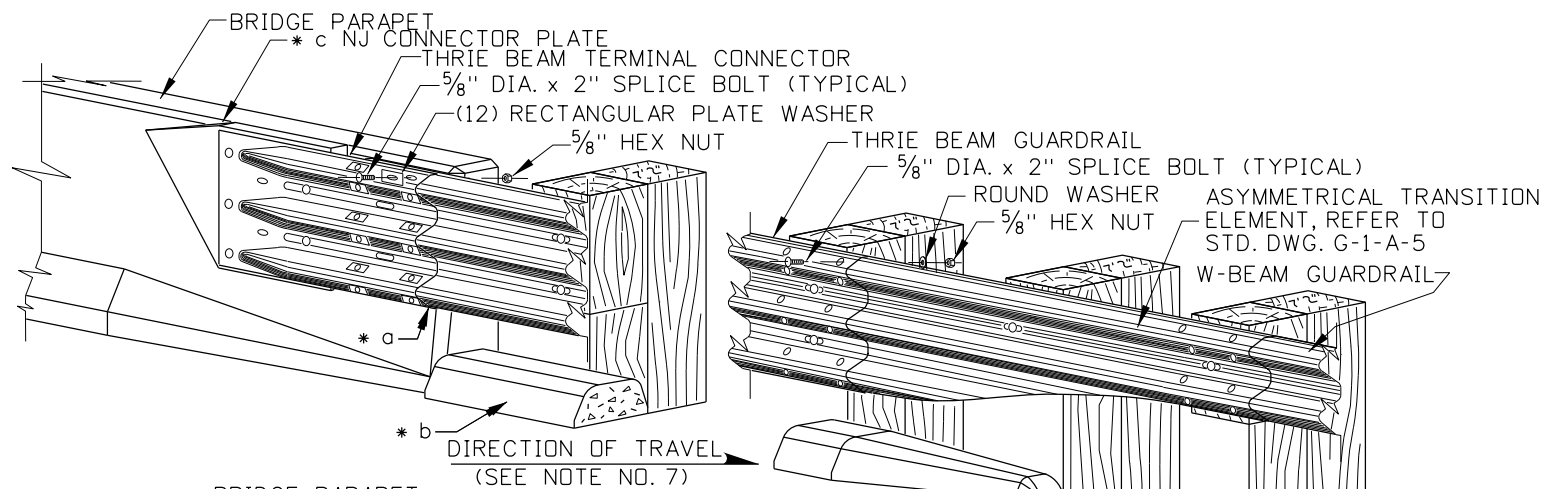


SPECIFICATION NOTES

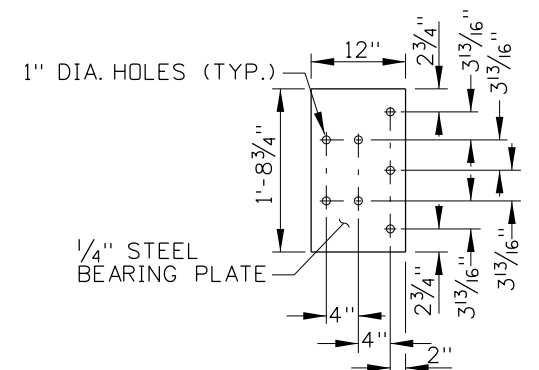
1. ALL STEEL SHALL CONFORM TO ASTM A 36.
2. FLAT PLATE PANELS ARE 3/16" THICK.
3. STIFFENERS ARE 1/4" PLATE STEEL.
4. ALL HOLE DIAMETERS ARE 1".
5. WELD COMPONENTS WITH E60 WELDING ROD.
6. GALVANIZE.

WELDING INSTRUCTIONS

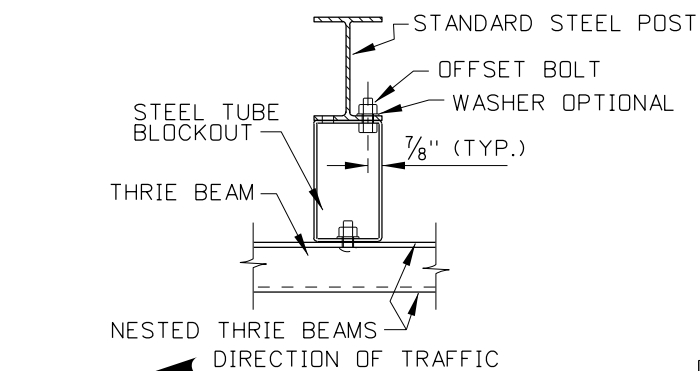
- (I) STIFFENERS LOCATED ON THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS: 3/16" CONTINUOUS BACK WELD ON EXTERNAL SIDES AND 3/16" FILET WELD BY 1" LONG SPACE AT 2" ON INTERNAL SIDES.
- (II) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS: 3/16" FILET WELD BY 1" LONG SPACED AT 2".
- (III) RECTANGULAR AND TRIANGULAR COVER PLATES SHALL BE WELDED TOGETHER WITH A 3/16" CONTINUOUS BACK WELD ON BOTH SIDES.



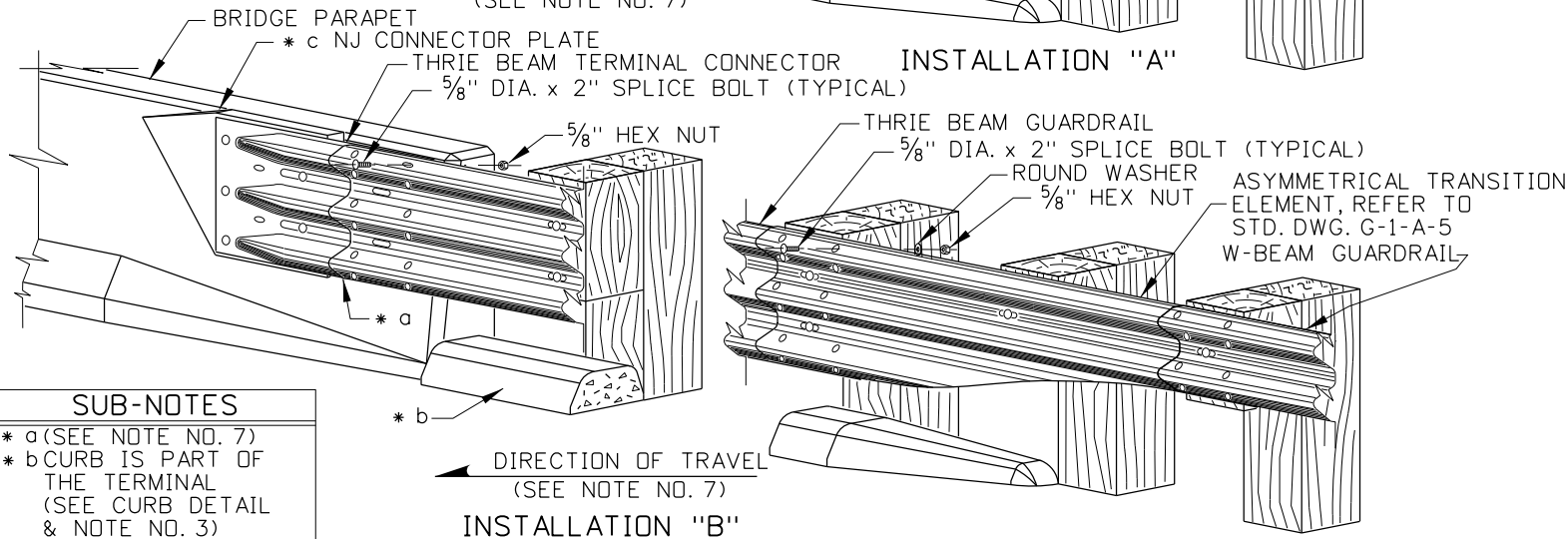
NEW JERSEY CONNECTOR PLATE
(TO BE PLACED ON INSIDE PARAPET FACE ONLY)



THRIE BEAM CONNECTOR PLATE
ITEM NO. FPB07

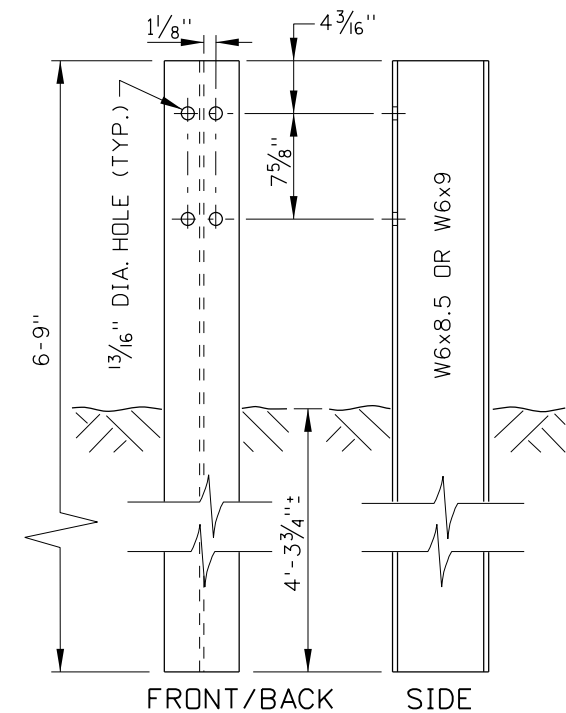


TYPE 3 STL. TUBE BOLTING DETAIL
(SEE NOTE NOS. 10 & 11)

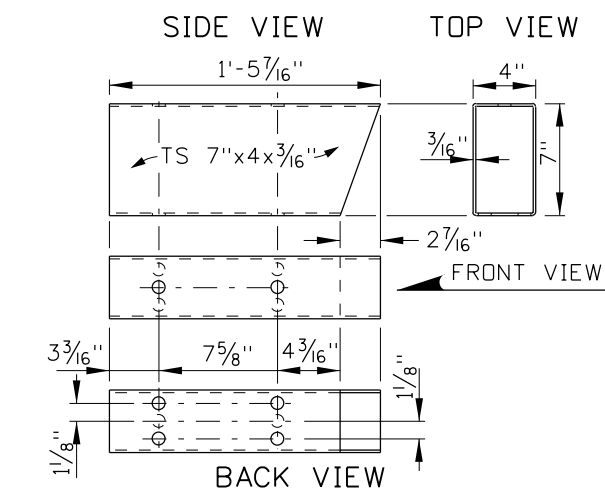


THRIE BEAM TO W-BEAM INSTALLATION
(WOOD POST INSTALLATION SHOWN)

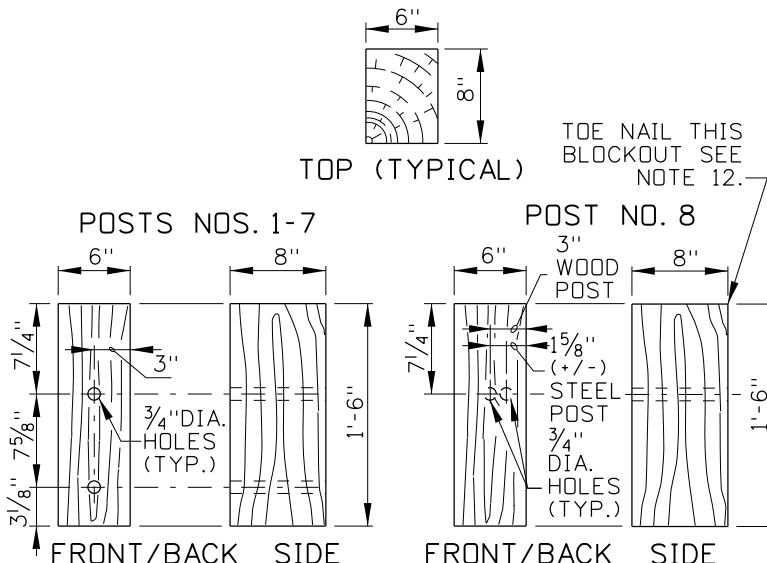
- SUB-NOTES**
- * a (SEE NOTE NO. 7)
 - * b CURB IS PART OF THE TERMINAL (SEE CURB DETAIL & NOTE NO. 3)
 - * c THE NJ CONN. PLATE IS FOR SLANTED PARAPET FACES ONLY



THRIE BEAM TUBE BLOCKOUT
STEEL POST
NCHRP 350, TL-3



TYPE 3 STEEL TUBE BLOCKOUT



TYPE 3 WOOD BLOCKOUT DETAILS

NOTES

1. THIS DRAWING REQUIRES STANDARD DRAWINGS G-1-A-1 THROUGH G-1-A-5 AND IS SUBJECT TO THE W-BEAM GUARDRAIL AND THRIE BEAM INSTALLATION REQUIREMENTS AND HARDWARE/ACCESSORY SPECIFICATIONS.
2. ALL THRIE BEAM BARRIER RAIL AND ACCESSORIES SHALL CONFORM TO THE SPECIFICATIONS CONTAINED WITHIN THE "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE".
3. TYPE 3 TERMINALS REQUIRE THE INSTALLATION OF CURB SECTION 10 AT THE BASE AND ALONG THE FACE OF POSTS NO. 1 THRU 7 (SEE STD. DWG. H-1 FOR CURB DETAILS).
4. ALL FIELD DRILLED WOODEN W-BEAM AND THRIE BEAM ACCESSORIES SHALL BE PAINTED WITH AN APPROVED PRESERVATIVE.
5. NO PUNCHING, DRILLING, CUTTING, OR WELDING WILL BE PERMITTED ON ANY METAL W-BEAM, THRIE BEAM OR GALVANIZED ACCESSORY.
6. THE TYPE 3 TERMINAL SHALL BE USED WITH PARAPETS DETAILED ON STANDARD DRAWINGS G-2-C, G-2-D, AND BRIDGE DRAWING TYPE IV STANDARD CONCRETE PARAPET WITH THRIE BEAM GUARDRAIL. REFER TO STANDARD DRAWINGS G-2-C AND G-2-D FOR CONCRETE TRANSITION BARRIER OR CONCRETE TRANSITION PARAPET BARRIER.
7. WHEN ATTACHING THRIE BEAM AND W-BEAM RAIL TO THE SYMMETRICAL TRANSITION ELEMENT LAP THE RAIL IN THE DIRECTION OF THE NEAREST TRAFFIC LANE TO PREVENT SNAGGING.
8. FIELD WARPING THE THRIE BEAM END TO THE SLOPED FACE OF THE CONCRETE PARAPET IS NOT ALLOWED. THE NEW JERSEY CONNECTOR PLATE WITH THRIE BEAM CONNECTOR PLATE SHALL BE USED.
9. ALL THRIE BEAM GUARDRAIL POSTS NOS. 1-7 SHALL BE EITHER WOOD WITH WOOD BLOCKOUTS OR STEEL WITH STEEL TUBE BLOCKOUTS, POST NO. 8 SHALL BE WOOD OR STEEL WITH MODIFIED WOOD BLOCKOUT.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: RYAN SCOT CARNIE
DATE ORIGINAL SIGNED: AUGUST 26, 2011

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
2	06-96	MSM	7	09-03	MSM	12	11-06
3	07-00	MSM	8	11-03	MSM	13	05-07
4	10-00	MSM	9	06-04	MSM	14	11-08
5	06-01	MSM	10	11-04	MSM	15	09-10
6	05-02	MSM	11	04-06	MSM	16	08-11

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: g1e_0811.dgn
DRAWING DATE: JUNE, 1988

IDAHO TRANSPORTATION DEPARTMENT



BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

GUARDRAIL TERMINAL TYPE 3

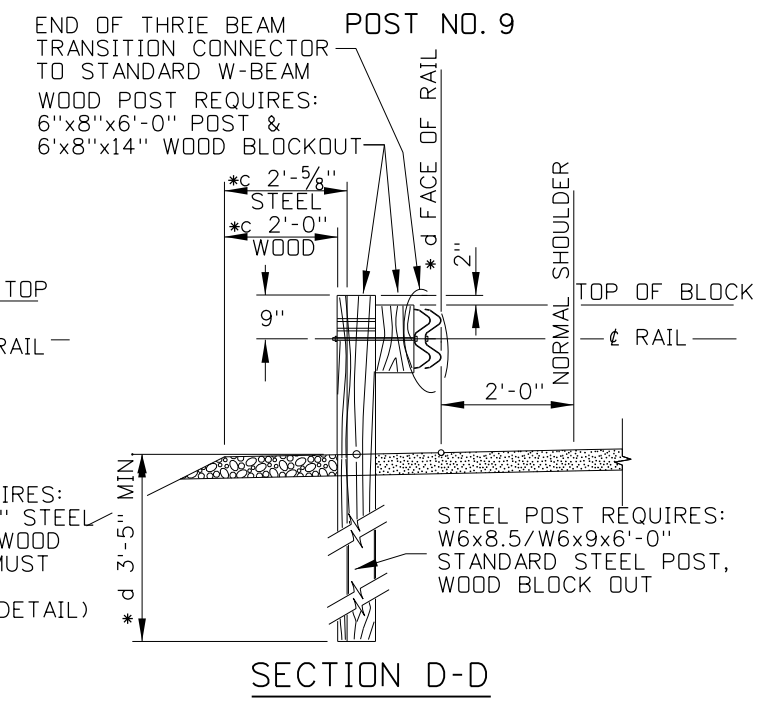
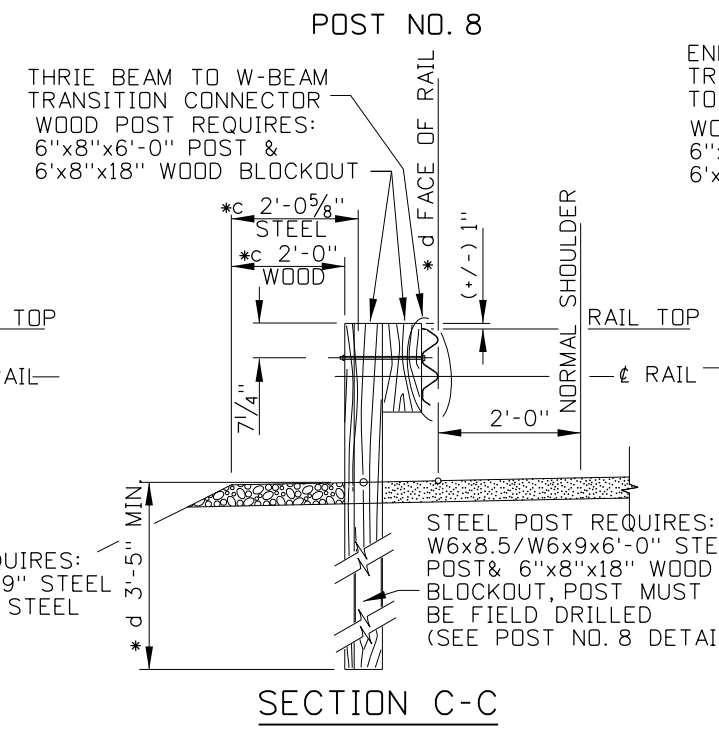
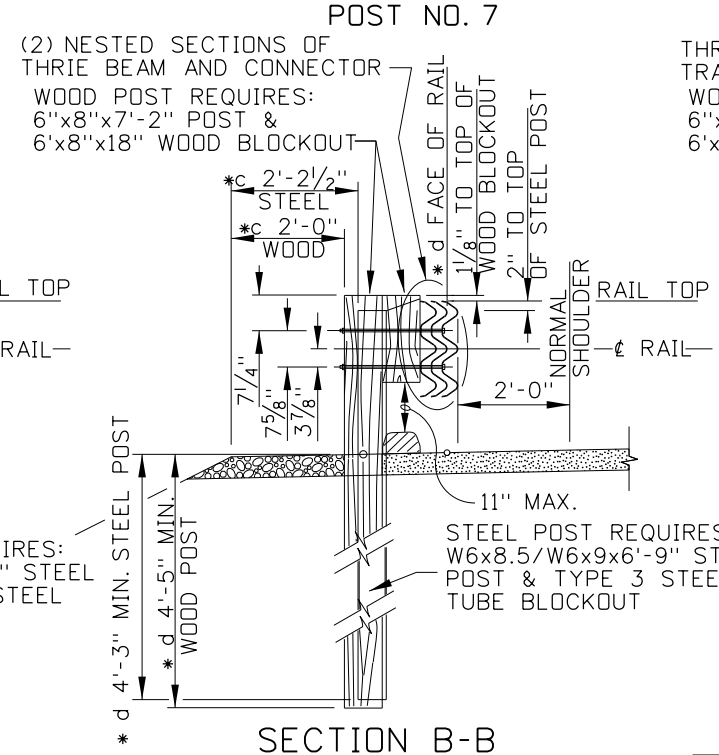
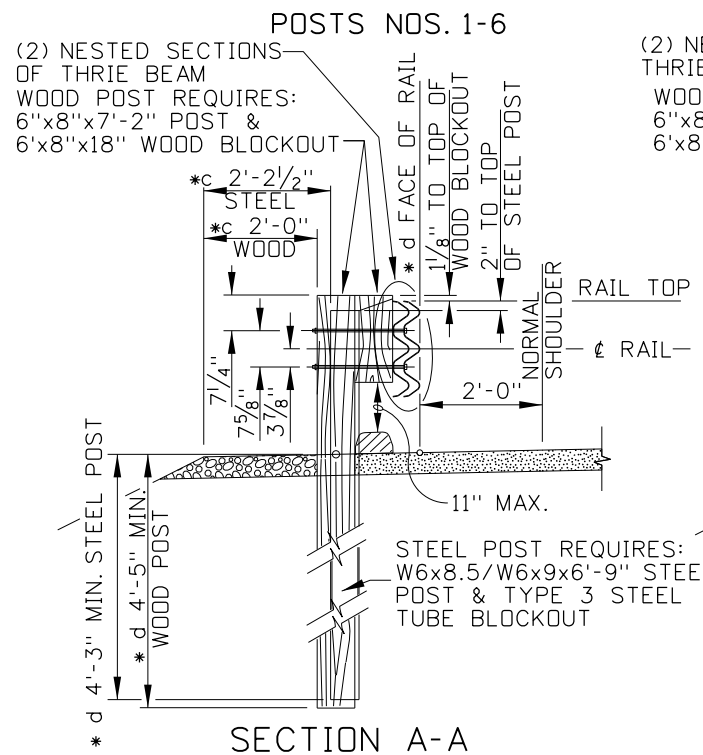
REQUIRES SHEET 2 OF 2 & STD. DWGS. G-1-A-1 THRU G-1-A-5 & 615-1

English

STANDARD DRAWING NO.

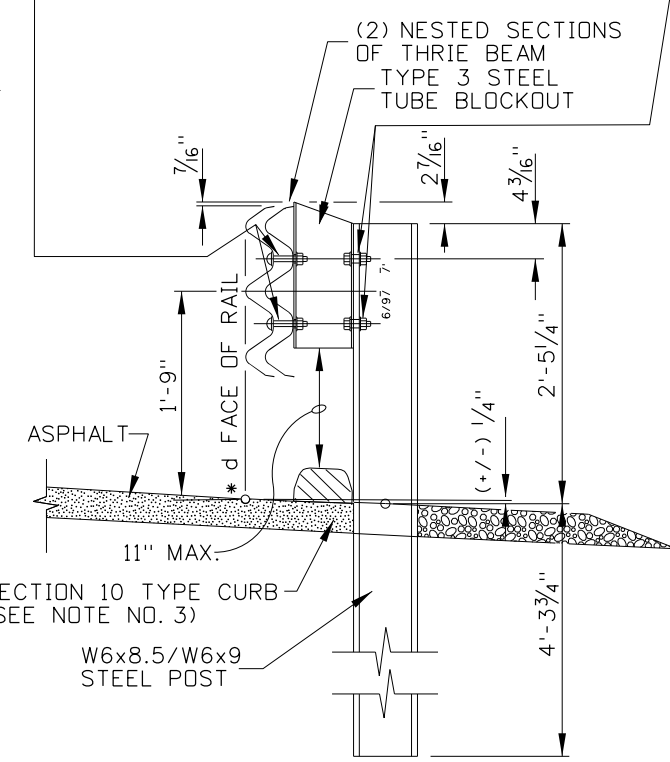
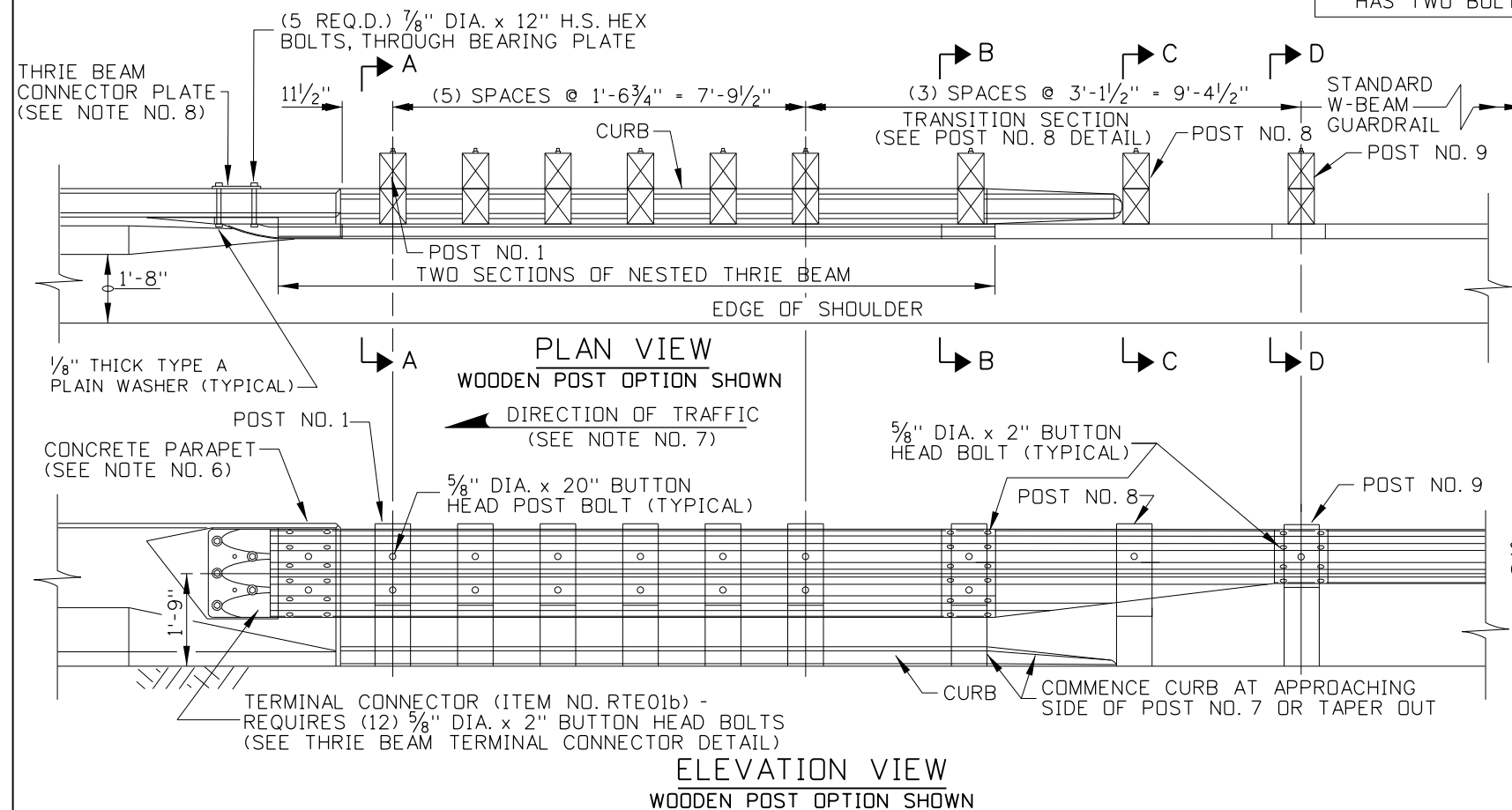
G-1-E

SHEET 1 OF 2



* f (2) 5/8" DIA. x 2 1/2" BUTTON HEAD BOLT EACH ON RAIL SIDE, STEEL WASHER & HEAVY HEX NUT ON BACK OF POST FLANGE, EACH POST HAS TWO BOLT CONNECTIONS.

* f (2) 5/8" DIA. x 1 1/2" HEX HEAD BOLT EACH ON RAIL SIDE, STEEL WASHER & HEAVY HEX NUT ON BACK OF POST FLANGE, EACH POST HAS TWO BOLT CONNECTIONS



- SUB-NOTES**
- * c A TYPE 3 TERMINAL REQUIRES THE TYPE A INSTALLATION ONLY (SEE STD. DWG. G-1-A-1).
 - * d ALL RAIL, POST, & BLOCKOUT MEASUREMENTS ARE MADE ALONG THE "FACE OF RAIL" FROM THE ROADWAY SURFACE, EXCEPT THE POST DEPTH WHICH IS MEASURED FROM WHERE THE INSIDE FACE OF THE POST MEETS THE ROADWAY SURFACE PLANE.
 - * e WHEN LINE POSTS CHANGE FROM WOOD TO STEEL OR STEEL TO WOOD THE POST SPACING MUST BE SHIFTED TO ALIGN WITH THE BOLT HOLES ON THE RAIL.
 - * f RECTANGULAR WASHERS ONLY REQUIRED ON THE TERMINAL CONNECTOR INSTALLATION "A".

- NOTES CONT.**
10. THE BOLT(S) OF THE TYPE 3 STEEL TUBE BLOCKOUT SHALL BE PLACED ON THE APPROACHING TRAFFIC SIDE (SEE TYPE 3 STEEL TUBE BOLTING DETAIL).
 11. STEEL FOR TYPE 3 STEEL TUBE BLOCKOUT SHALL MEET ASTM A 500 GRADE B REQUIREMENTS.
 12. THE WOODEN BLOCKOUTS SHALL BE TOE-NAILED TO THE WOODEN POST WITH 16d GALVANIZED NAILS TO RESTRICT BLOCK ROTATION.
 13. NOT TO SCALE.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
2	06-96	MSM	7	09-03	MSM	12	11-06
3	07-00	MSM	8	11-03	MSM	13	05-07
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SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
 CADD FILE NAME: g1e_0811.dgn
 DRAWING DATE: JUNE, 1988

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
 HIGHWAYS PROGRAM OVERSIGHT ENGINEER

ORIGINAL SIGNED BY: TOM COLE
 CHIEF ENGINEER

STANDARD DRAWING
GUARDRAIL TERMINAL TYPE 3
 REQUIRES SHEET 2 OF 2 &
 STD. DWGS. G-1-A-1 THRU G-1-A-5 & 615-1

English
 STANDARD DRAWING NO.
G-1-E
 SHEET 2 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY:
 RYAN SCOT CARNIE
 DATE: AUGUST 26, 2011