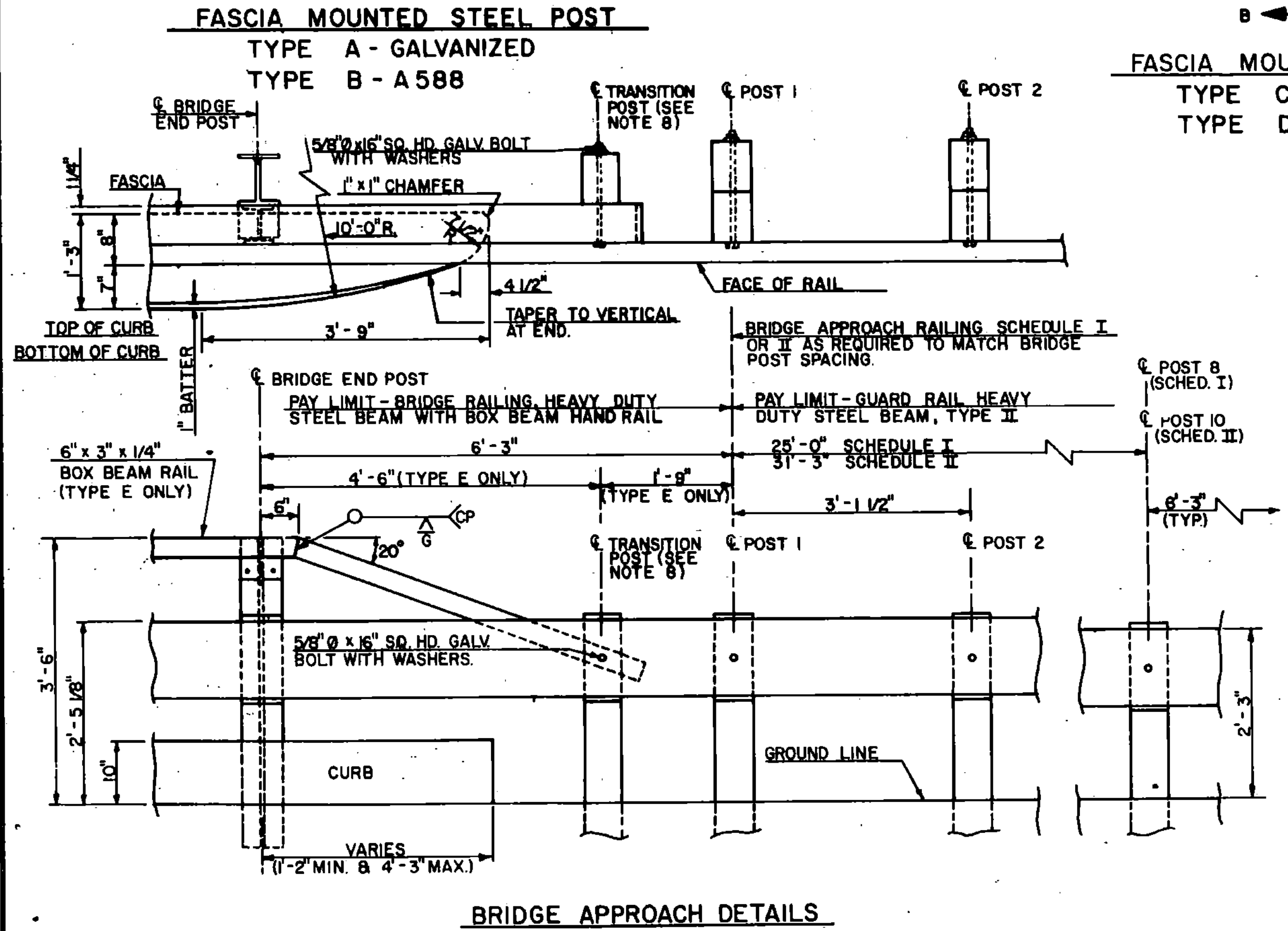


- NOTES**
- SEE STANDARD DRAWING G-1 & G-1d FOR ADDITIONAL DETAILS OF STEEL BEAM GUARD RAIL AND STANDARD SB-R46-82 FOR ADDITIONAL DETAILS OF BOX BEAM RAIL.
  - ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND CONFORM WITH SECTION 714.16.
  - BRIDGE RAIL TYPES A, C, & E: HEAVY DUTY STEEL BEAM RAIL SHALL BE AASHTO M 180, CLASS B - TYPE 2. POSTS, BRACKETS AND PLATE WASHER SHALL BE ASTM A 36 STEEL. BOLTS SHALL BE ASTM A 307. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION TO ASTM A 123.
  - BRIDGE RAIL TYPE B & D: HEAVY DUTY STEEL BEAM RAIL SHALL BE AASHTO M 180, CLASS B - TYPE 4. POSTS, BRACKETS & PLATE WASHER SHALL BE ASTM A 588 STEEL. BOLTS SHALL BE ASTM A 325 TYPE III.
  - ALL POSTS SHALL BE SET NORMAL TO GRADE.
  - BRIDGE APPROACH RAIL HEIGHT SHALL BE TRANSITIONED TO NORMAL ROADWAY RAIL HEIGHT IN 25 FEET.
  - APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM FOR 50 FEET FROM THE END OF THE BRIDGE.
  - FOR THE TYPE A, B, C, OR D BRIDGE RAILING, THE TRANSITION POST SHALL HAVE AN OFFSET BLOCK AND BE LOCATED AS CLOSE AS PRACTICAL TO THE MID-POINT BETWEEN THE BRIDGE END POST AND APPROACH RAIL POST I.
  - SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW.
  - SEE STANDARD SHEET G-1 FOR DELINEATOR DETAILS AND PLACEMENT.
  - ERECT DELINEATOR ON EVERY FIFTH POST OR APPROXIMATELY 30 FEET APART. PAYMENT SHALL BE SUBSIDIARY TO OTHER ITEMS.

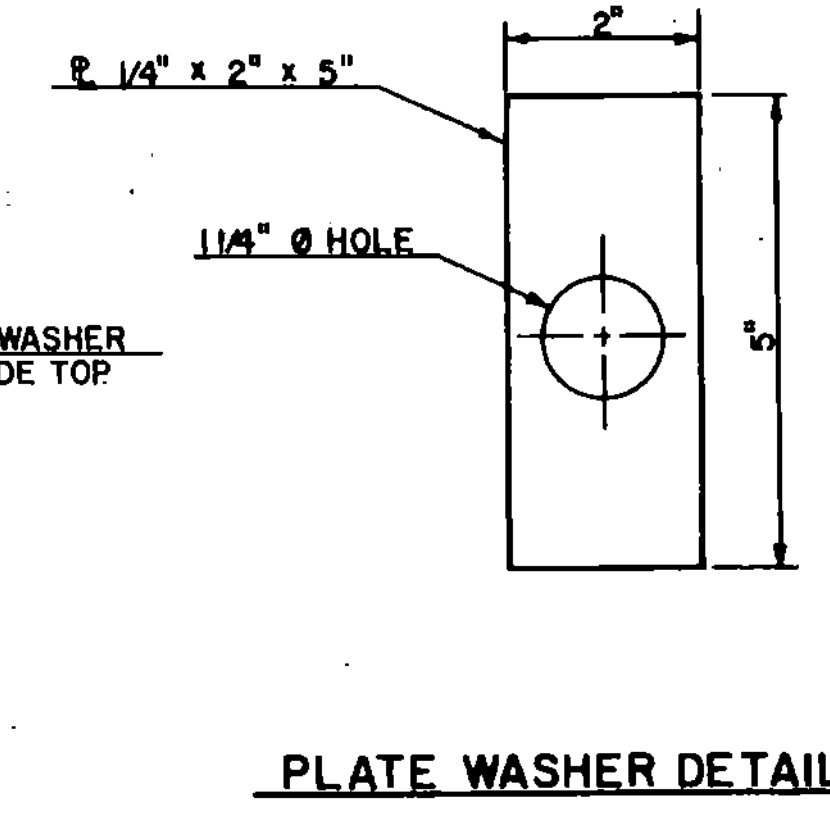
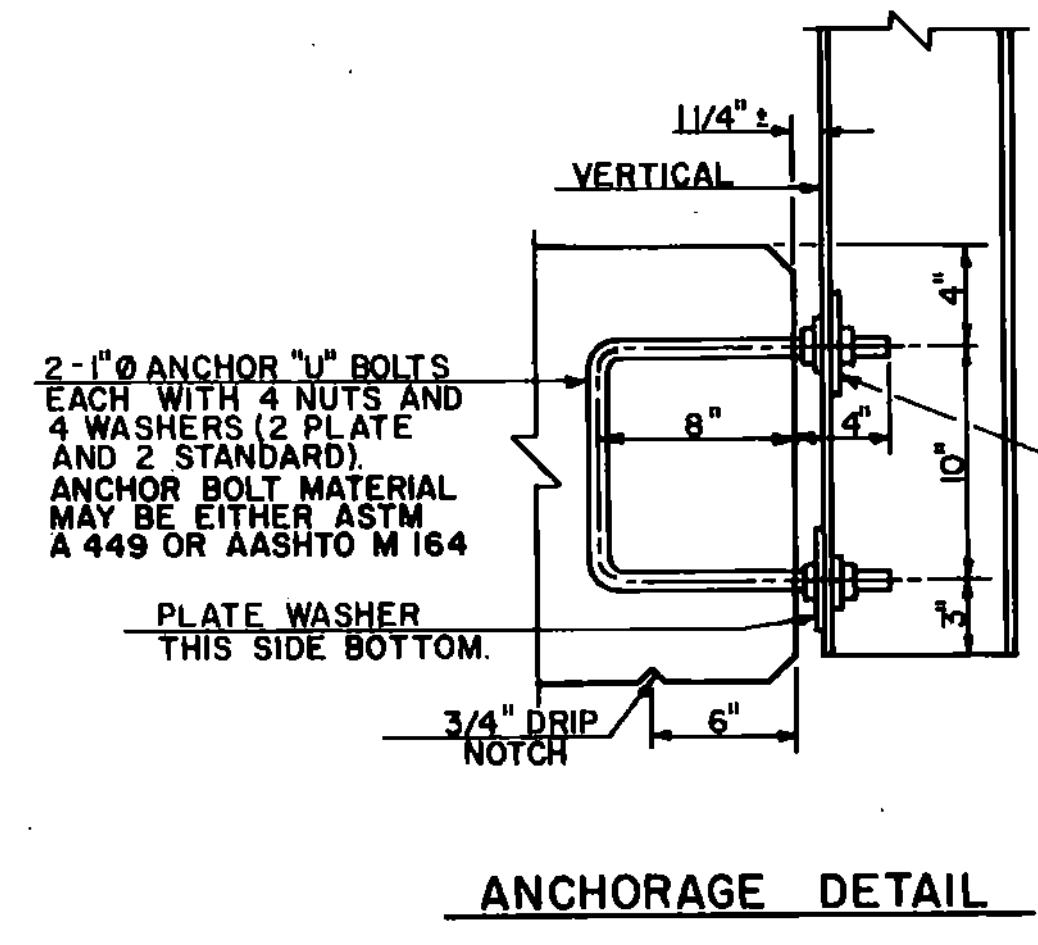
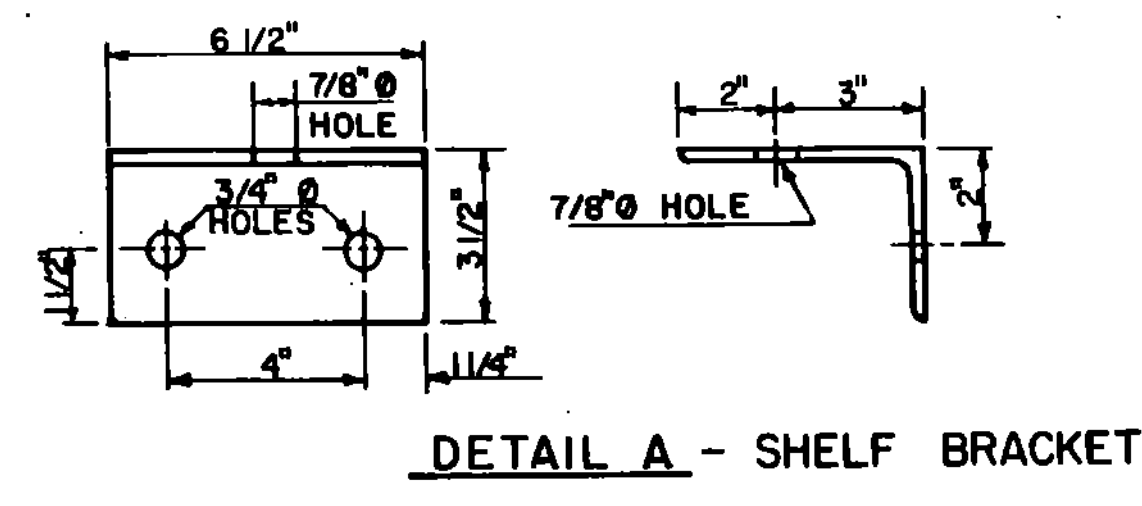


**BRIDGE APPROACH RAILING**  
 WHEN A RAIL PANEL SPLICE OCCURS AT POST NO. 1 USE SCHEDULE I FOR APPROACH RAILING. WHEN A RAIL PANEL SPLICE OCCURS AT BRIDGE END POST USE SCHEDULE II FOR APPROACH RAILING.

SCHEDULE I		
POST NO.	SPACING	PAYMENT FACTOR
1	3'-1 1/2"	
2	3'-1 1/2"	1.4 x 12'-6"
3	3'-1 1/2"	
4	3'-1 1/2"	
5	4'-2"	
6	4'-2"	1.2 x 12'-6"
7	4'-2"	
8	4'-2"	
9	6'-3"	1.0 (TYP)

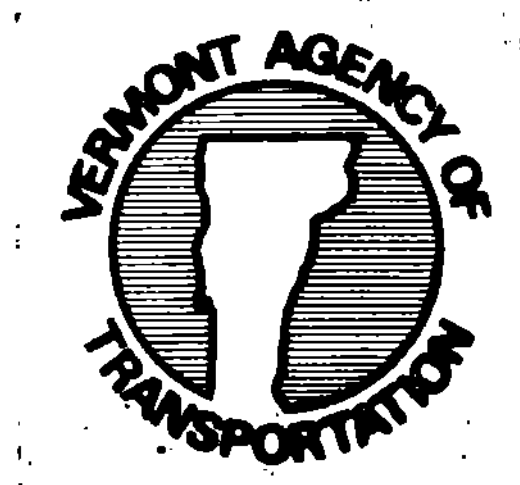
SCHEDULE II		
POST NO.	SPACING	PAYMENT FACTOR
1	3'-1 1/2"	
2	3'-1 1/2"	
3	3'-1 1/2"	1.4 x 18'-9"
4	3'-1 1/2"	
5	3'-1 1/2"	
6	3'-1 1/2"	
7	4'-2"	
8	4'-2"	1.2 x 12'-6"
9	4'-2"	
10	4'-2"	
11	6'-3"	1.0 (TYP)



REVISIONS AND CORRECTIONS  
 REVISION DELINEATORS ADDED D.A.R 6-18-82  
 REVISION, BOLTS THRU BOX BEAM RAIL R.S.H. 12-13-84  
 REVISION, CHANGED BOLT HOLE THROUGH SHELF BRACKET R.S.H. 12-13-84

APPROVED: **DECEMBER 28, 1981**  
 DATE  
*William J. Smith*  
 CHIEF OF DESIGN  
*W. M. Smith*  
 STRUCTURES ENGINEER  
 DIRECTOR OF ENGINEERING AND CONSTRUCTION

**BRIDGE RAILING HEAVY DUTY STEEL BEAM  
 (TYPE A, TYPE B, TYPE C, AND TYPE D)  
 BRIDGE RAILING HEAVY DUTY STEEL BEAM  
 WITH BOX BEAM HAND RAIL (TYPE E)**



**STANDARD  
 SB-R6-82**