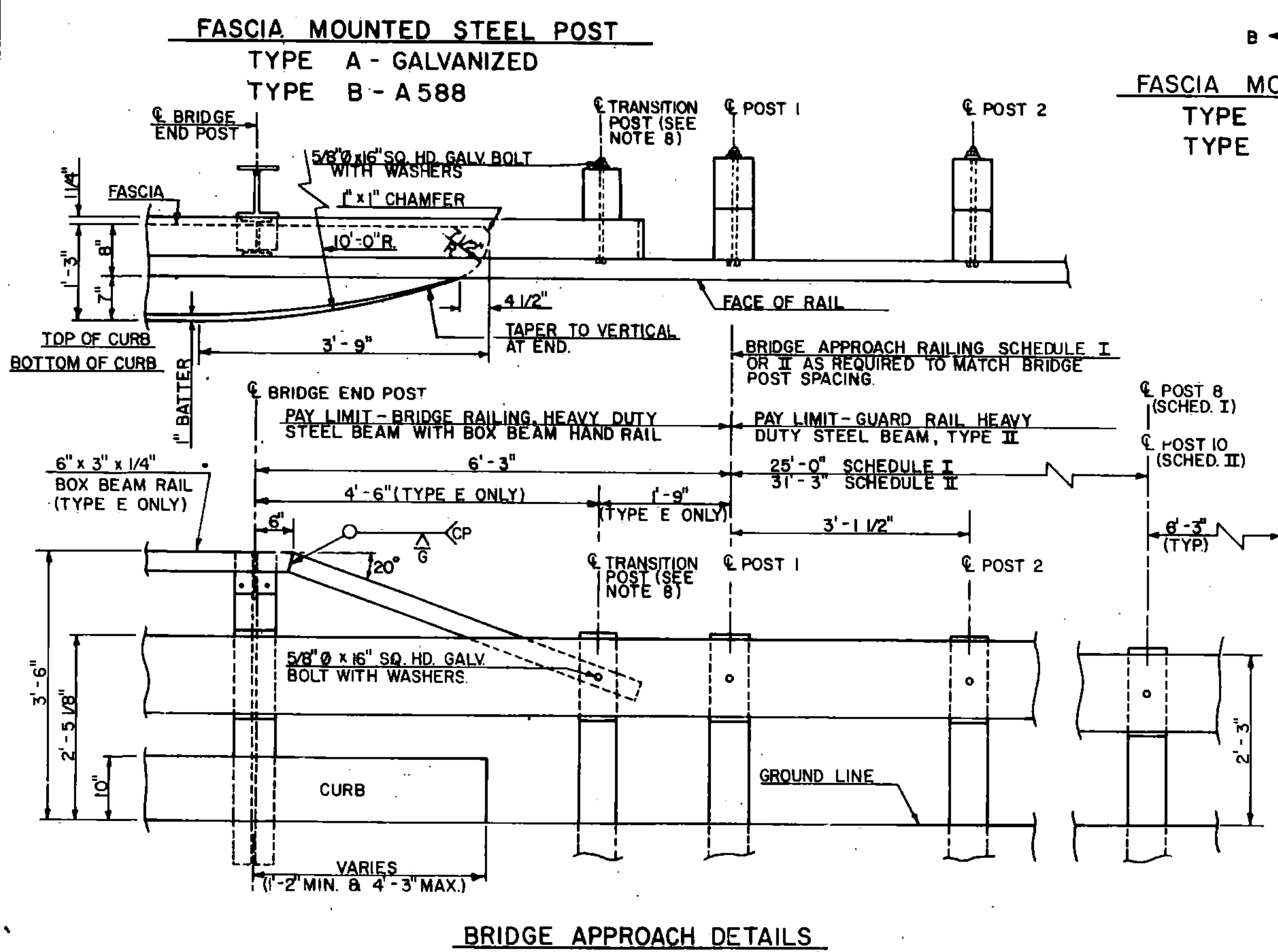


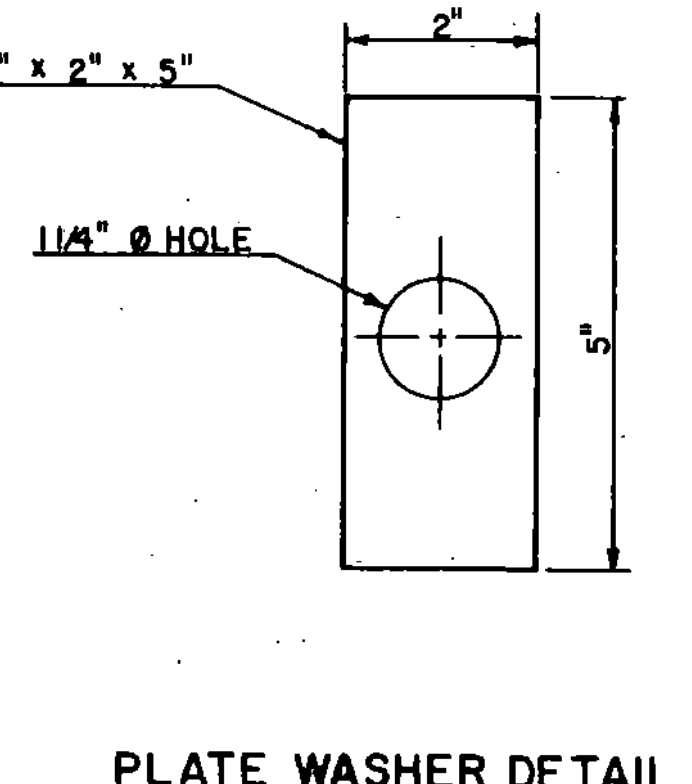
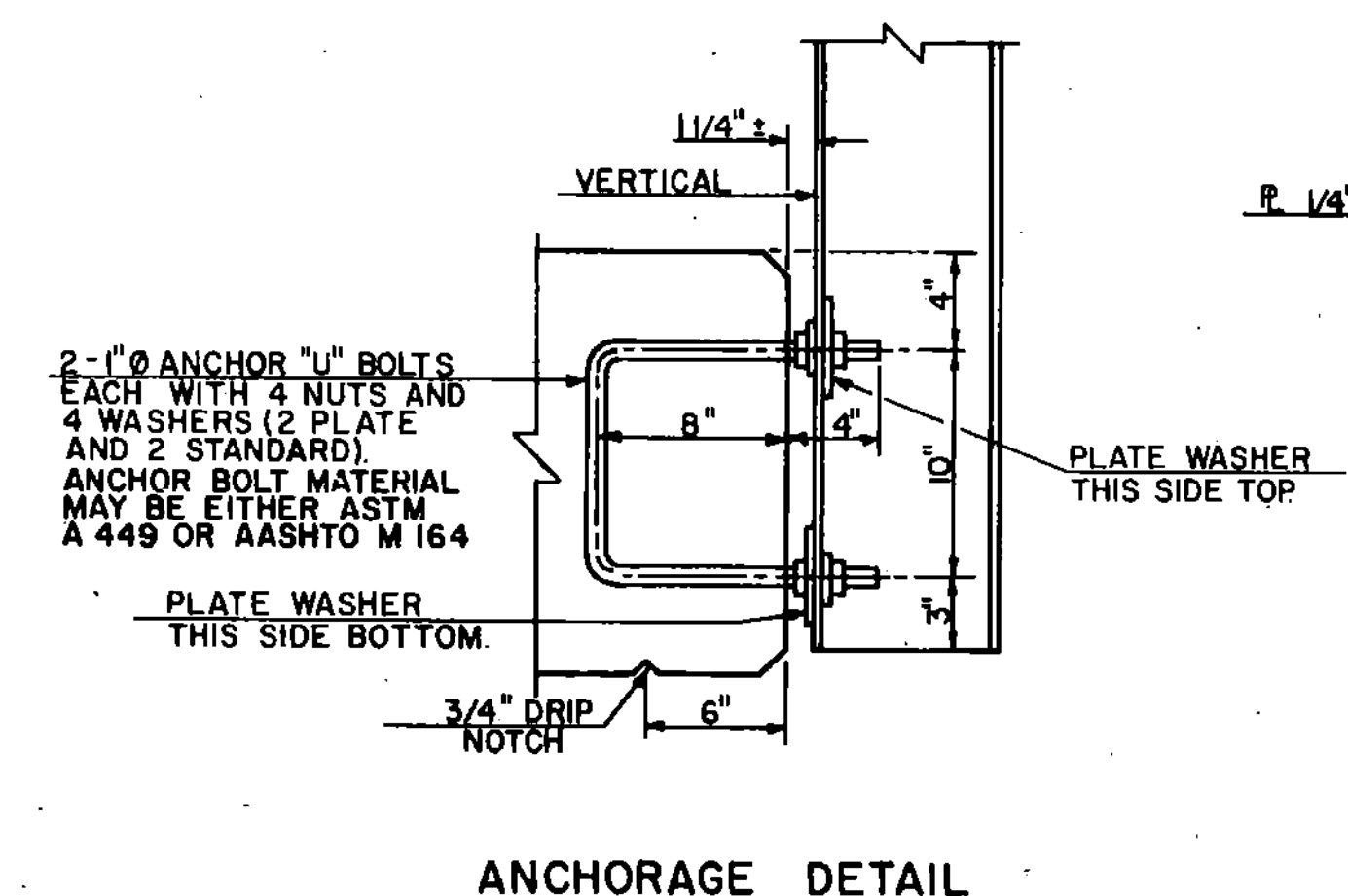
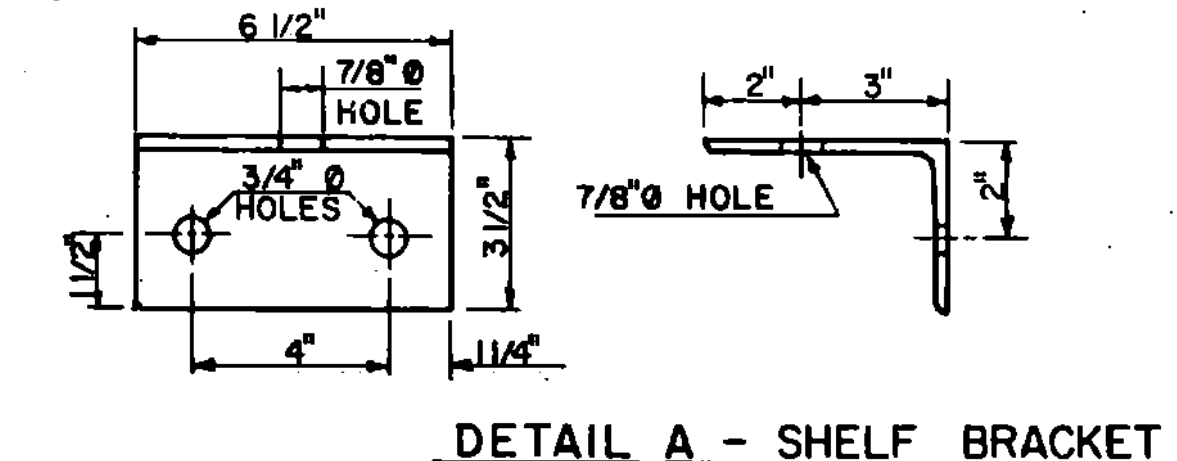
- NOTES**
- SEE STANDARD DRAWING G-1 & G-1d FOR ADDITIONAL DETAILS OF STEEL BEAM GUARD RAIL AND STANDARD SB-R4a-82 FOR ADDITIONAL DETAILS OF BOX BEAM RAIL.
 - ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND CONFORM WITH SECTION 714.16.
 - BRIDGE RAIL TYPES A, C, & E: HEAVY DUTY STEEL BEAM RAIL 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 1.
 - 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" | 1.4 x 12'-6" |
| 2 | 3'-1 1/2" | |
| 3 | 3'-1 1/2" | |
| 4 | 3'-1 1/2" | |
| 5 | 3'-1 1/2" | 1.2 x 12'-6" |
| 6 | 4'-2" | |
| 7 | 4'-2" | |
| 8 | 4'-2" | |
| 9 | 6'-3" (TYP) | 1.0 (TYP) |

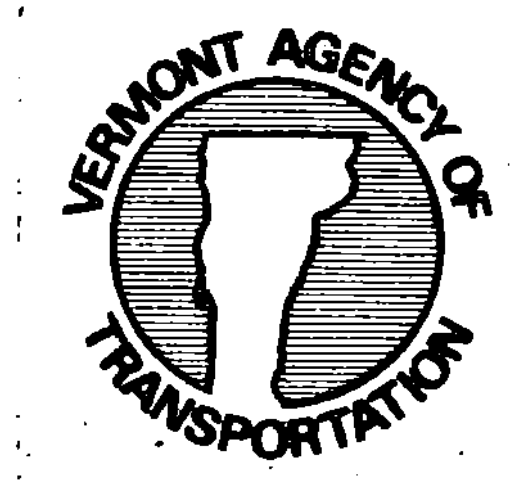
| SCHEDULE II | | |
|-------------|-------------|----------------|
| POST NO. | SPACING | PAYMENT FACTOR |
| 1 | 3'-1 1/2" | 1.4 x 18'-9" |
| 2 | 3'-1 1/2" | |
| 3 | 3'-1 1/2" | |
| 4 | 3'-1 1/2" | |
| 5 | 3'-1 1/2" | 1.2 x 12'-6" |
| 6 | 4'-2" | |
| 7 | 4'-2" | |
| 8 | 4'-2" | |
| 9 | 4'-2" | 1.0 (TYP) |
| 10 | 4'-2" | |
| 11 | 6'-3" (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
[Signature]
 CHIEF OF DESIGN
[Signature]
 STRUCTURES ENGINEER
[Signature]
 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**