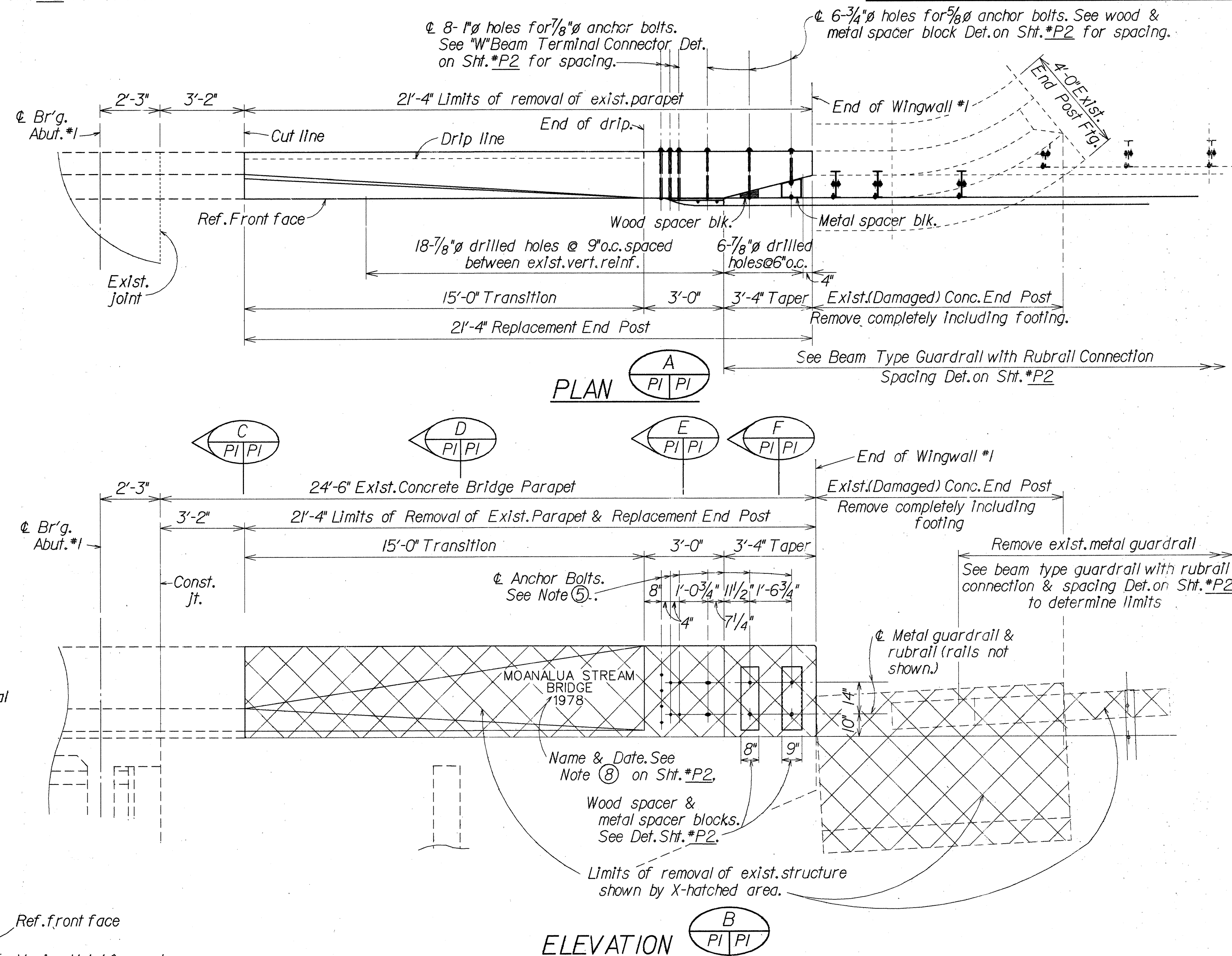
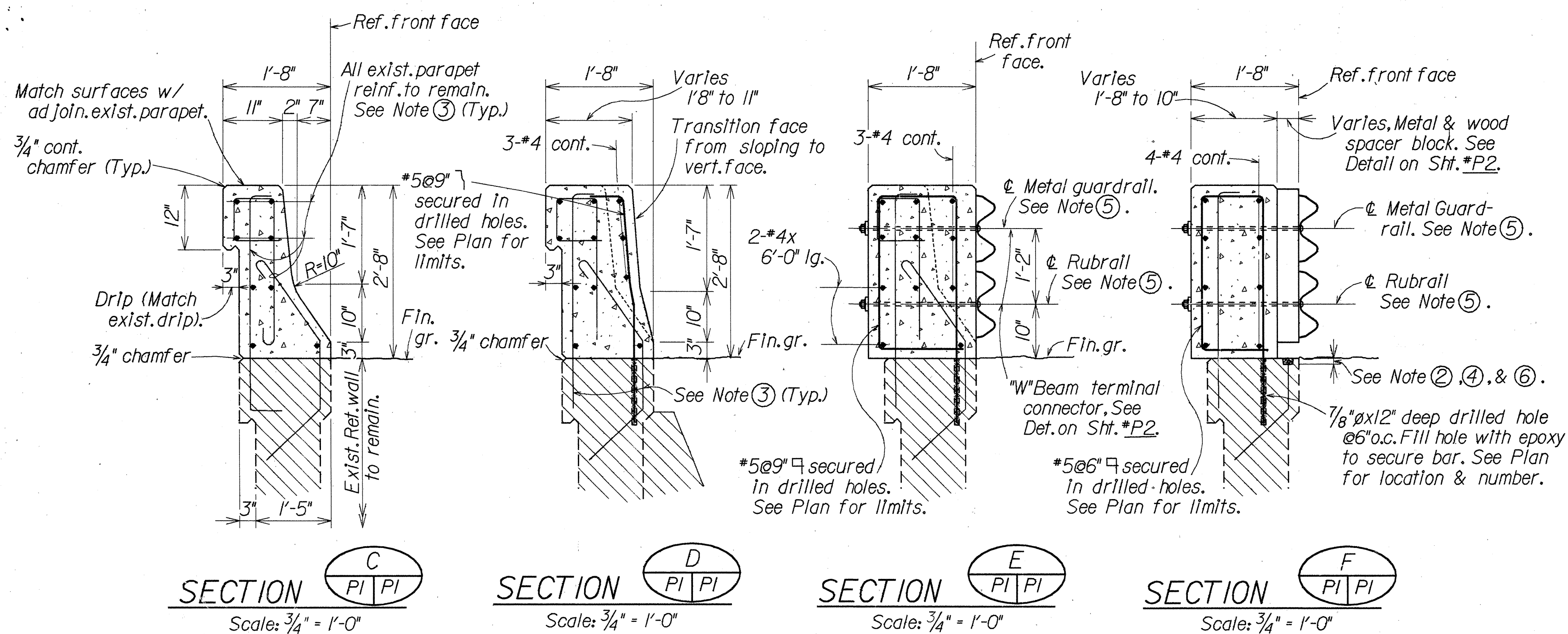


LOCATION PLAN

Scale: 1" = 20'-0"

- ① Existing structure shown by hatched lines.
- ② Exposed existing reinforcement not incorporated in the reconstruction of the bridge rail, shall be removed to a depth of 1" beneath finish grade and the resultant depression finished with mortar.
- ③ Existing reinforcement occurring within the new rail shall be cleaned and utilized as indicated and as directed by the Engineer.
- ④ Concrete areas left exposed due to removal of existing concrete shall be filled as necessary, ground smooth, and grooved to extend the shoulder grade.
- ⑤ For connection details of metal guardrail to concrete end post, see Sh. *P2.
- ⑥ Pits or depressions resulting from the removal of the sunken end post & guardrail posts shall be filled with filter rock #4, #5 or #57 conforming to AASHTO M43, and the surface dressed to conform to the roadway prism. This work shall be incidental to item No. 202.0300, of the proposal schedule.
- ⑦ Removal of portion of existing bridge rail (Concrete barrier) & end post shall be paid for on a lump sum basis as indicated in the proposal schedule (Item No. 202.0300).
- ⑧ Replacement of end post shall be paid for on a lump sum basis as indicated in the proposal schedule (Item No. 507.7500).
- ⑨ Type 3 guardrail with rubrail on steel post, including the terminal connector and a panel of the single rail with steel post, which limits are as indicated on the plans shall be paid for on a lump sum basis as indicated in the proposal schedule (Item No. 606.3205). Post shall be new and at least four new rail panels are required. Removal of post shall be incidental to this item. Reusable replaced post as determined by the Engineer shall be salvaged and stored as directed by the Engineer.



Scale: $\frac{3}{8}'' = 1'-0''$

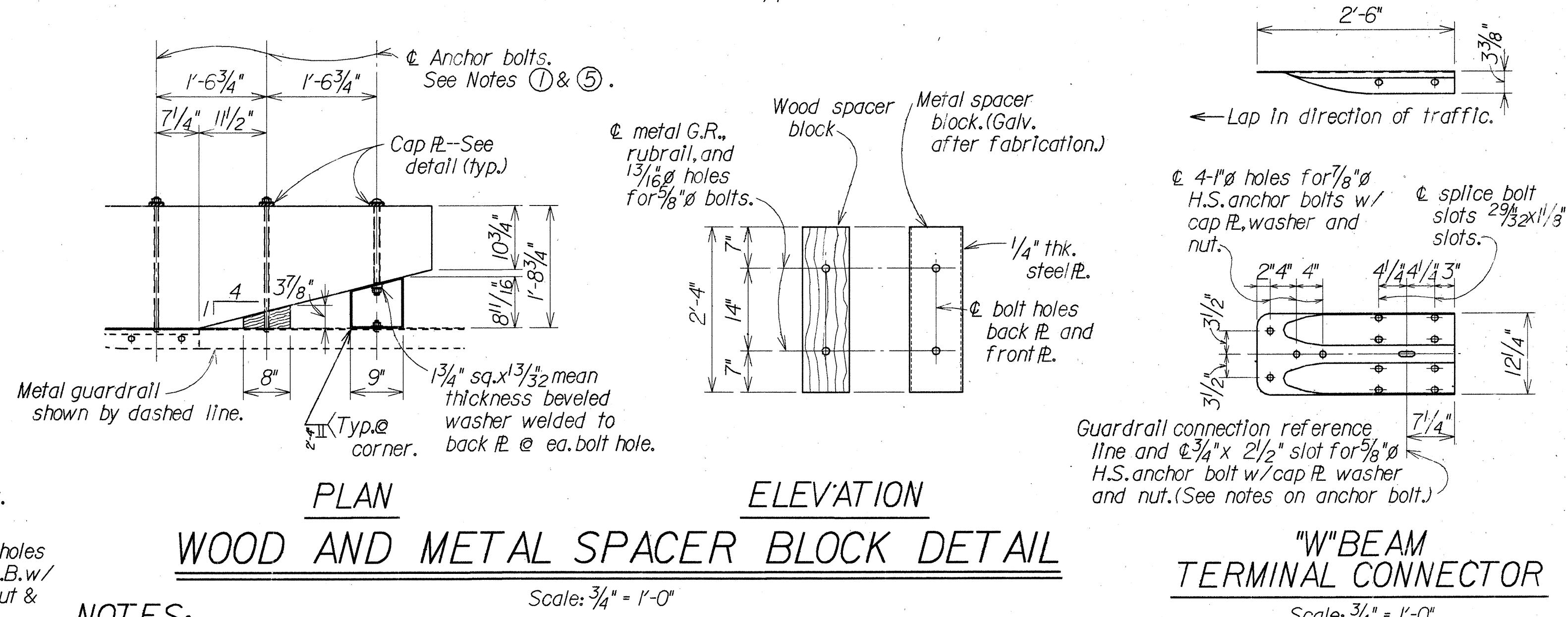
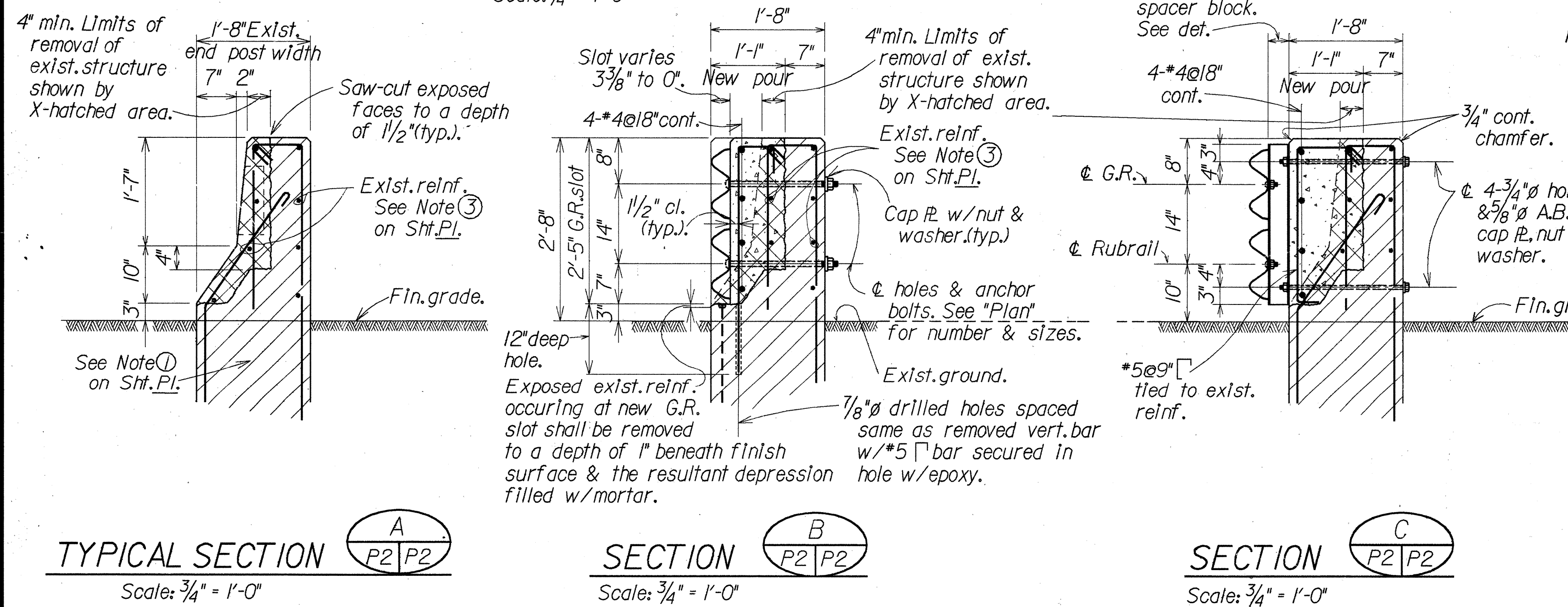
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

REPLACEMENT OF END POST ON
MOANALUA STREAM BRIDGE
E.B.COLLECTOR ROAD (MOANALUA ROAD)
PUULOA RESURFACING, PUKULOA TO MAHIOLE
Proj. No. 7310A-01-88M

Scale: As Shown Date: April 11, 1988

SHEET No. 1 OF 2 SHEETS

6/6/88 	Kaua Street Revised Concrete End Post Details added. Other details rearranged.
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
END POST AND CONNECTION DETAILS	
<u>MOANALUA STREAM BRIDGE, MOANALUA ROAD</u> <u>(E.B.COLLECTOR ROAD AND KAUA STREET)</u>	
<u>PUULOA RESURFACING, PUKULOA TO MAHIOLE</u> <u>Proj. No. 7310A-01-88M</u>	
Scale: As Shown	Date: June 1988



- ## NOTES:
1. All anchor bolts shall be high strength bolts conforming to the requirements of ASTM 325.
 2. All "Terminal Connector" including anchor bolts, nuts and washers, shall be galvanized.
 3. "Terminal Connector" shall be fabricated from 10 gauge steel conforming to the requirements of AASHTO M180.
 4. First 2'-0" of guardrail adjoining "Terminal Connector" shall be of galvanized steel.
 5. Anchor bolt length shall be such that a snug fit of the elements and full thread engagement plus $\frac{1}{4}"$ (max.) is attained.
 6. Heads of through anchor bolts shall be placed on the traffic side of the end block; those at the thru spacer block excepted.
 7. Drilling of through holes shall be done in such manner that will preclude cone puncturing of the daylighting end.
 8. Place name of structure as shown. For location, see "Plan" on contract drawing. Date shown will be year structure is completed. For letter size and detail see Standard Plan B-01.