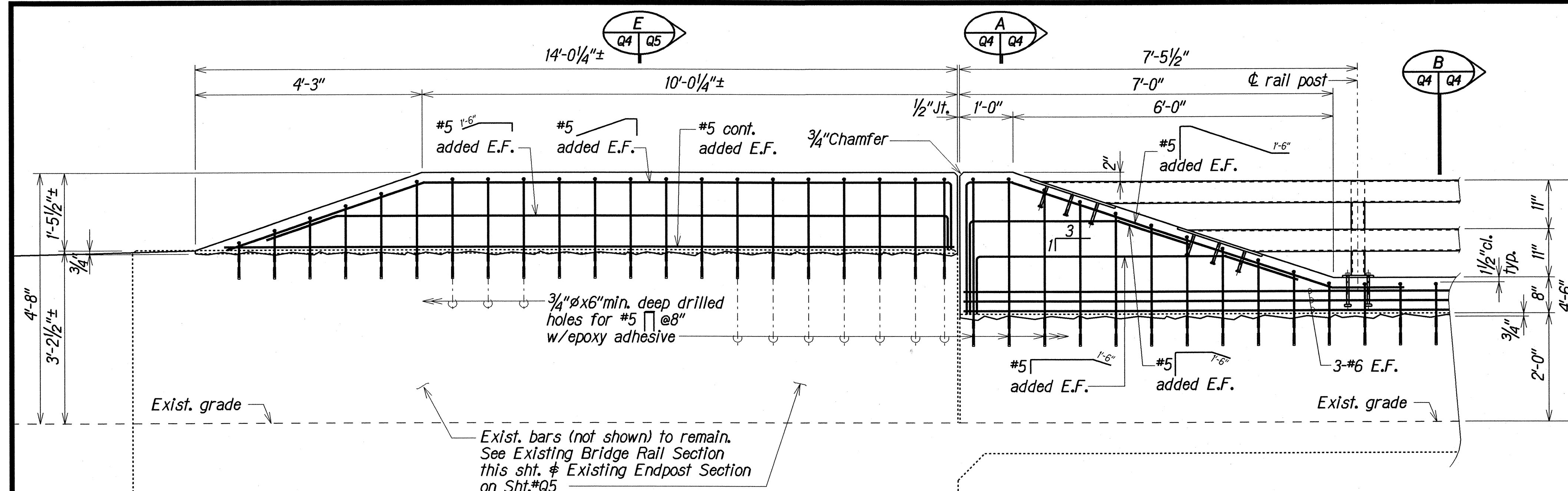


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0540(2)	2004	20	23

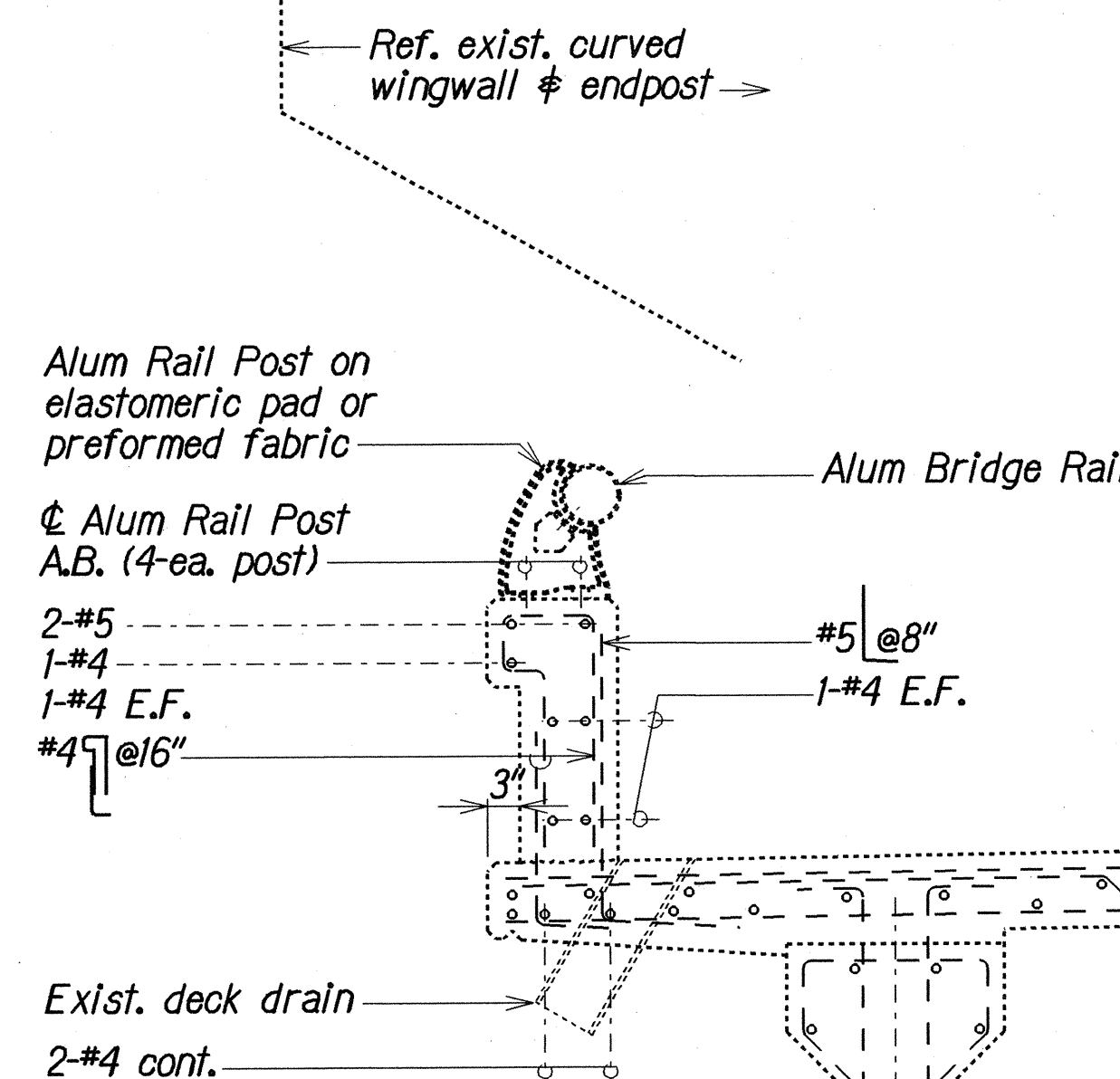


PORTION of EXISTING ENDPST UPGRADE

Scale: 3/4" = 1'-0"

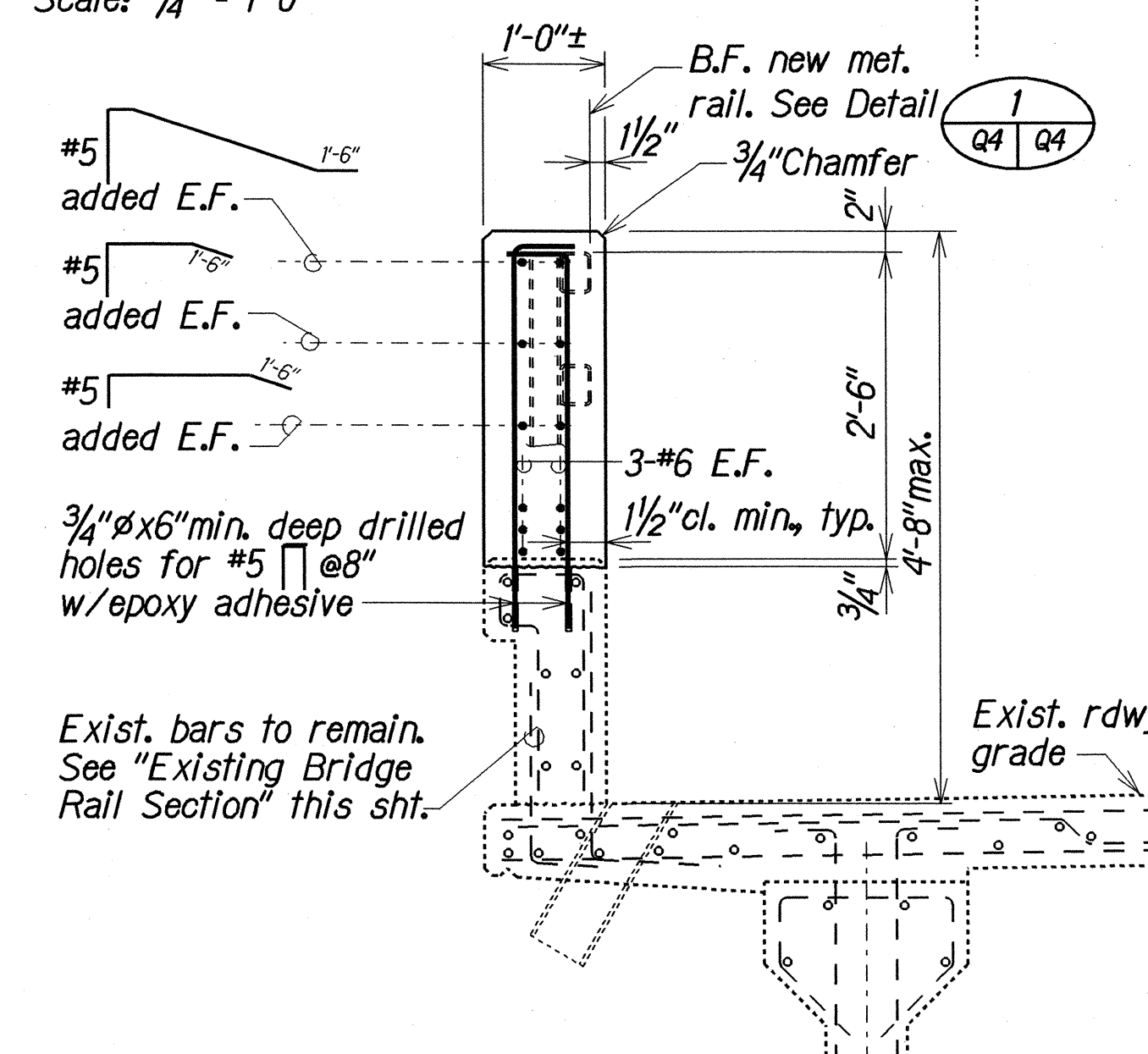
EXISTING BRIDGE RAIL UPGRADE

Scale: 3/4" = 1'-0"



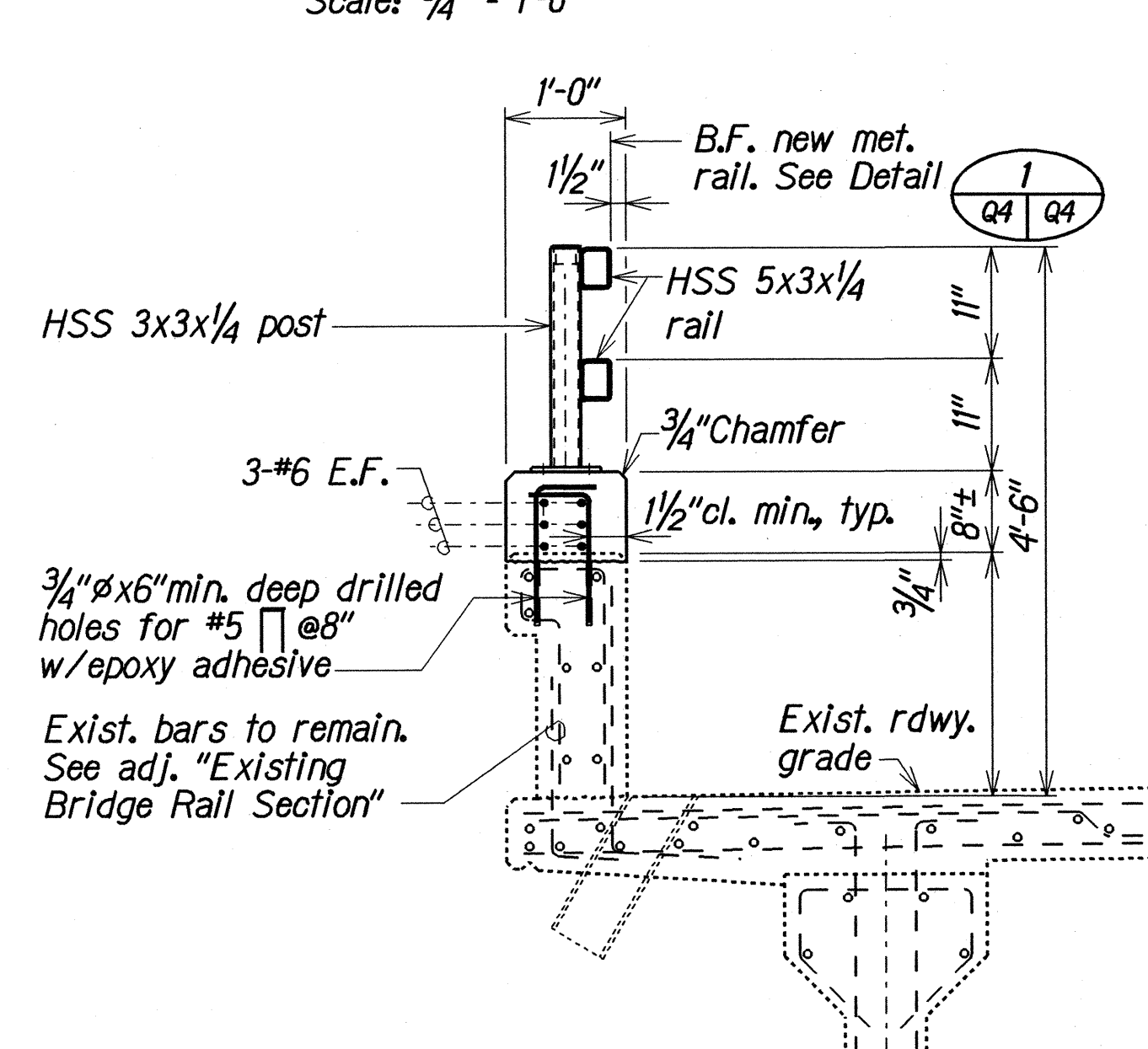
EXISTING BRIDGE RAIL SECTION

Scale: 3/4" = 1'-0"



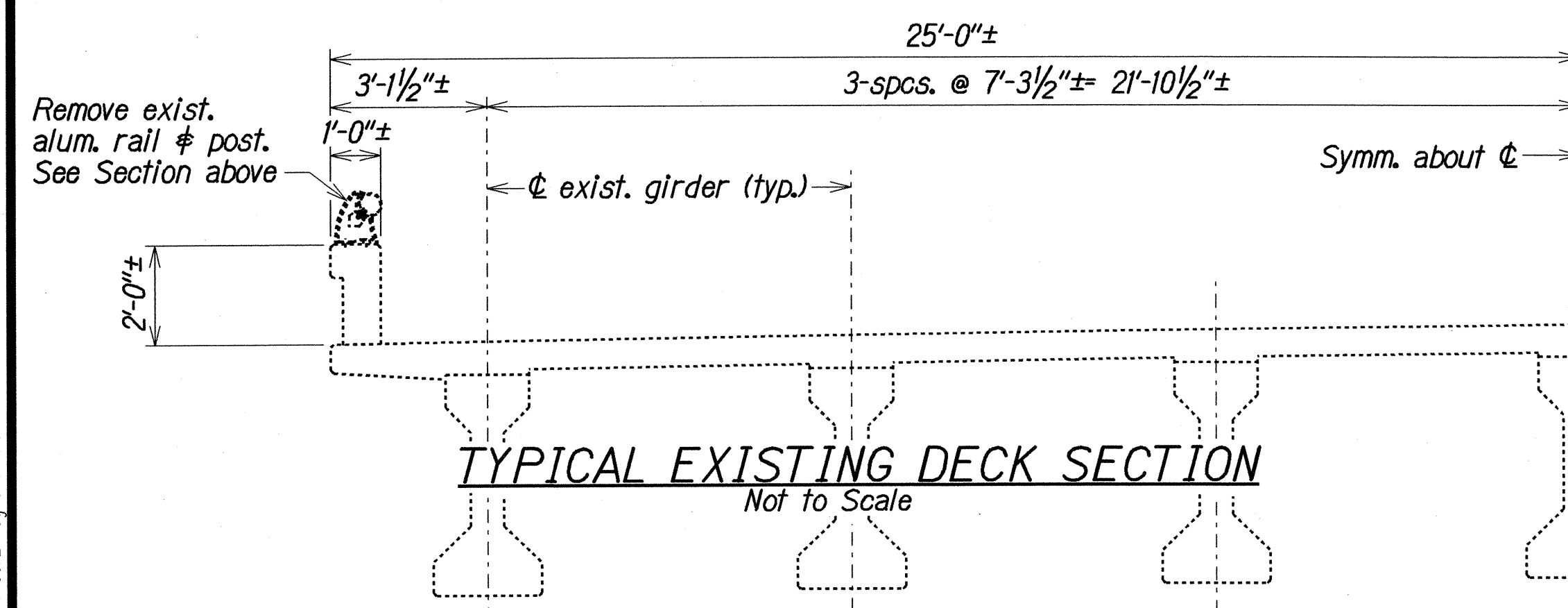
BRIDGE RAIL UPGRADE END SECTION

Scale: 3/4" = 1'-0"



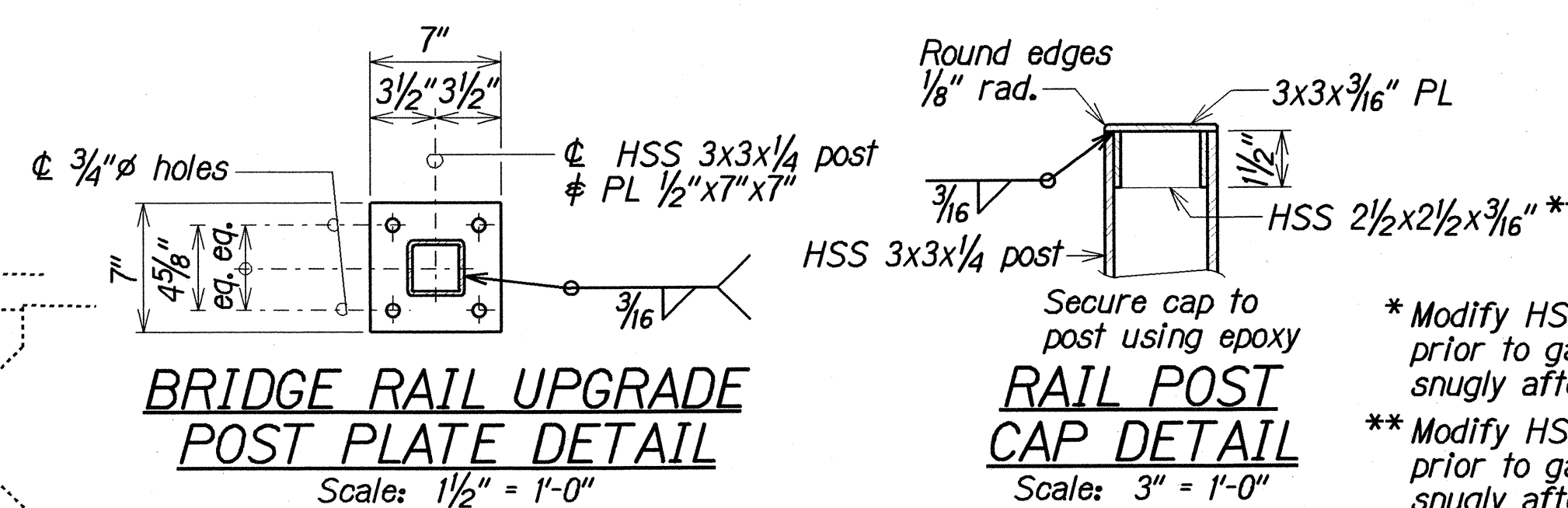
TYPICAL BRIDGE RAIL UPGRADE SECTION

Scale: 3/4" = 1'-0"



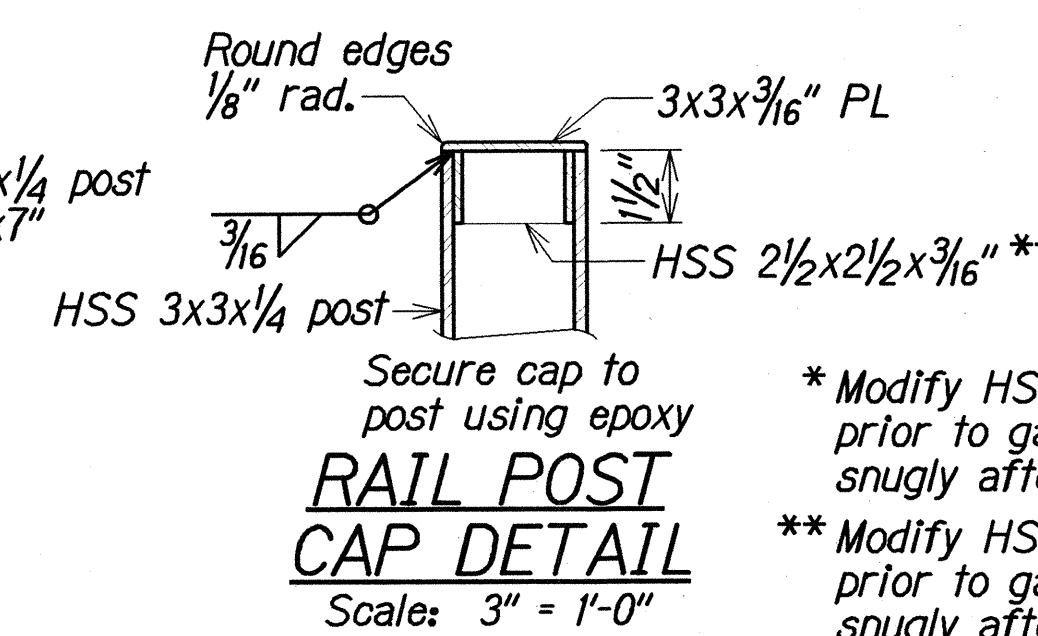
TYPICAL EXISTING DECK SECTION

Not to Scale



BRIDGE RAIL UPGRADE POST PLATE DETAIL

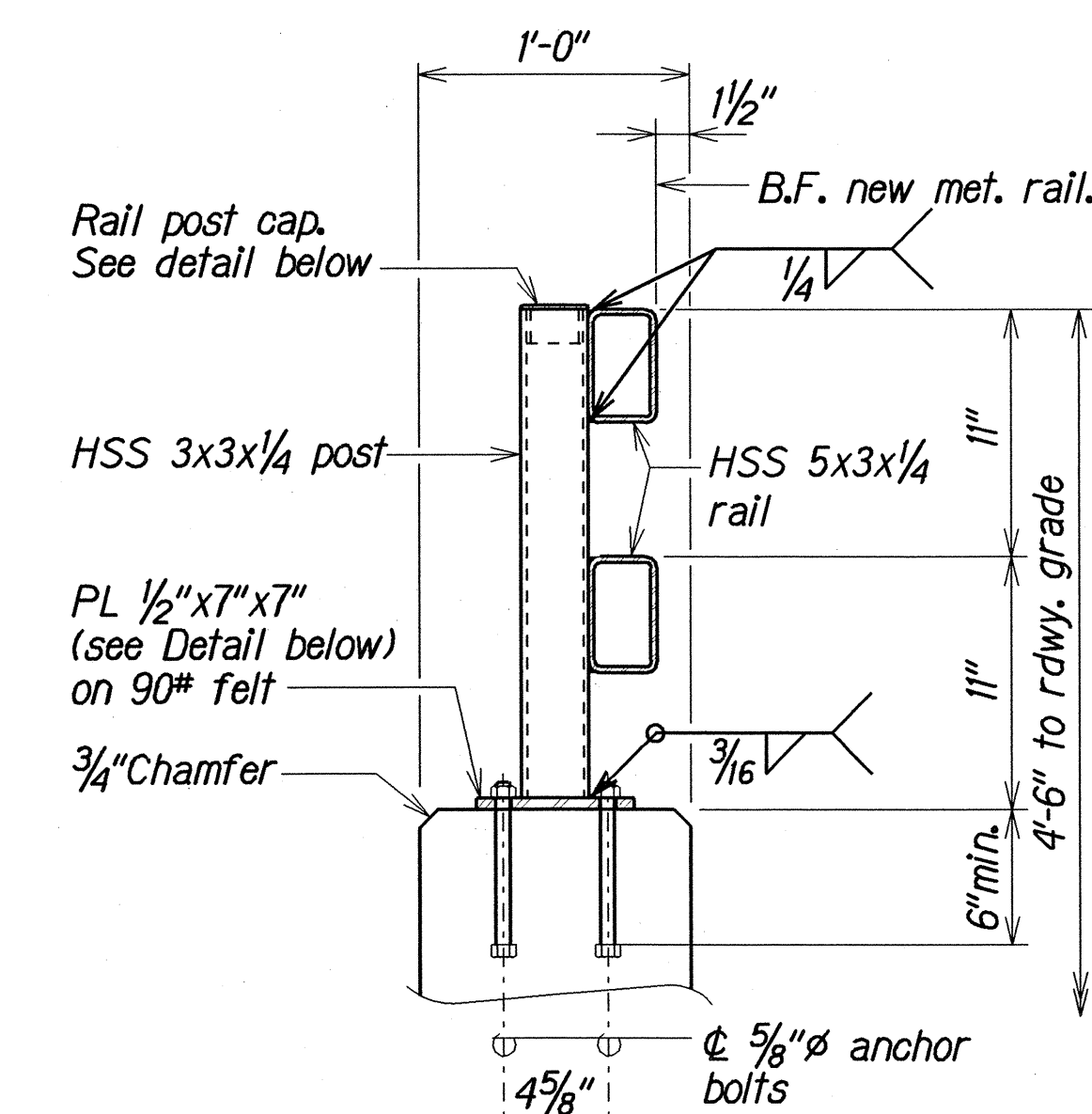
Scale: 1 1/2" = 1'-0"



RAIL POST CAP DETAIL

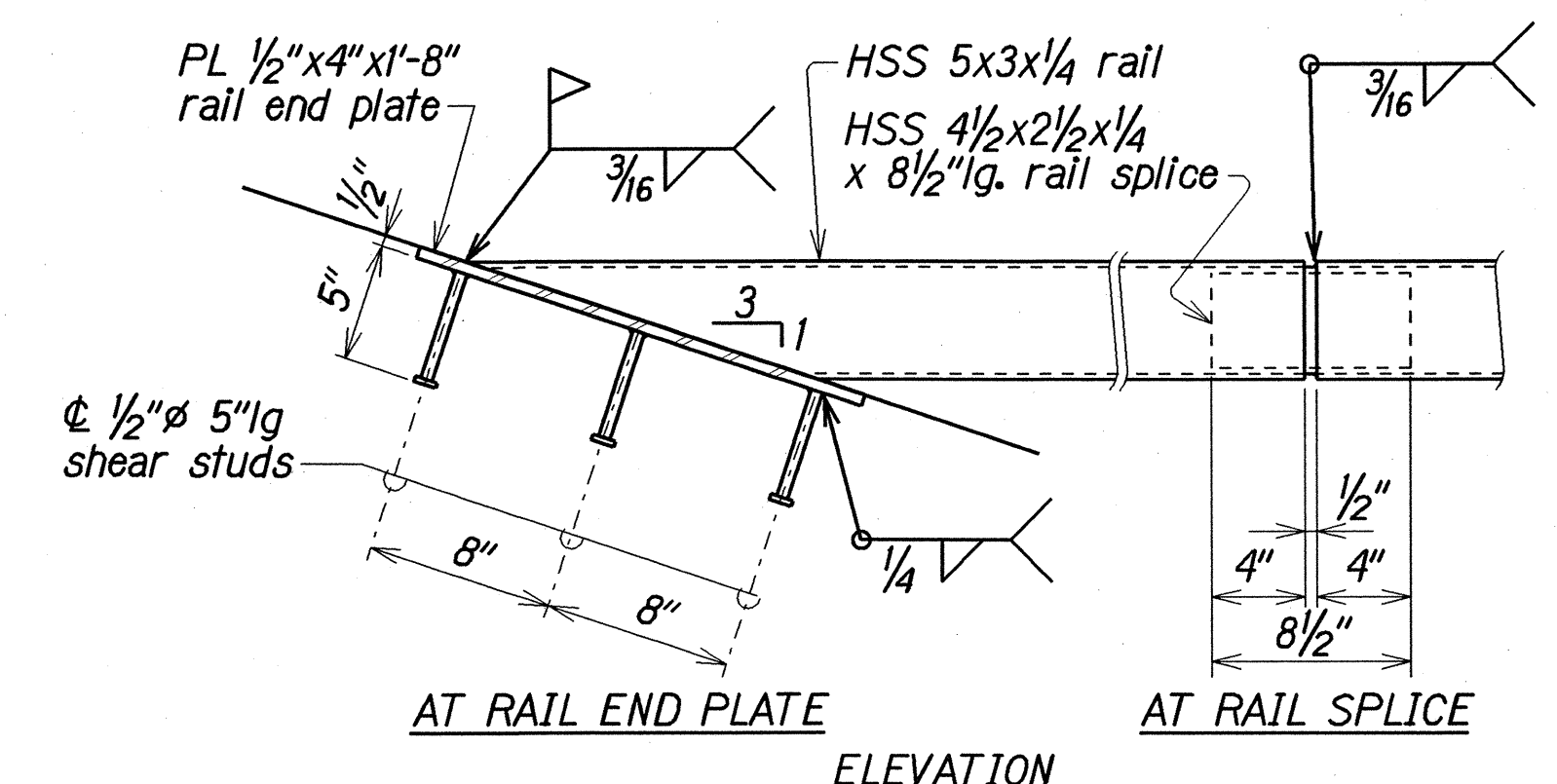
Scale: 3" = 1'-0"

- * Modify HSS rail splice as necessary prior to galvanizing, to fit HSS rail snugly after galvanizing
- ** Modify HSS rail post cap as necessary prior to galvanizing, to fit HSS rail post snugly after galvanizing



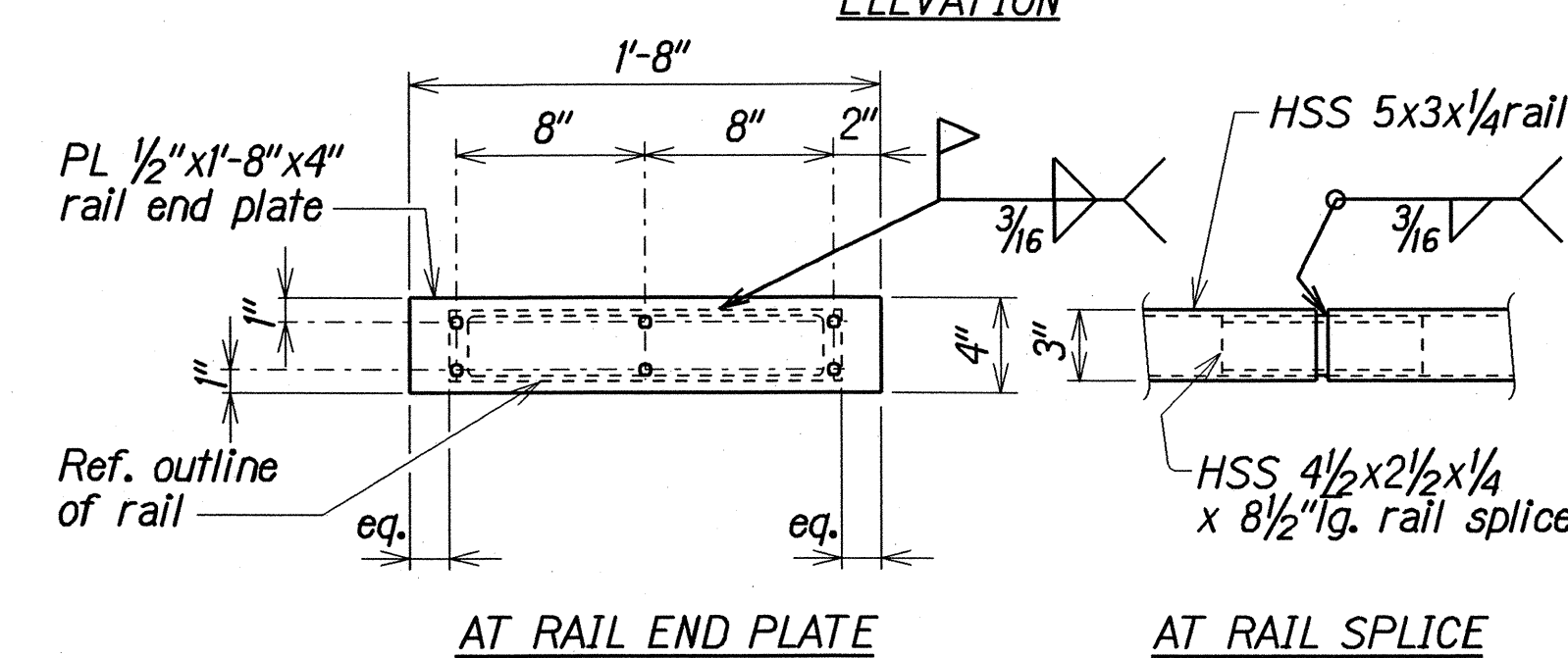
BRIDGE RAIL UPGRADE DETAIL

Scale: 1 1/2" = 1'-0"



AT RAIL END PLATE

AT RAIL SPLICE



AT RAIL END PLATE

AT RAIL SPLICE

BRIDGE RAIL UPGRADE END DETAIL

Scale: 1 1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
BRIDGE RAIL UPGRADE DETAILS
WAHIAWA STREAM BRIDGE
HALEWILI ROAD
Guardrail and Shoulder Improvements
Federal Aid Project No. STP-0540(2)

Scale: As Noted

Date: Jun, 2003

SHEET No. 04 OF 7 SHEETS