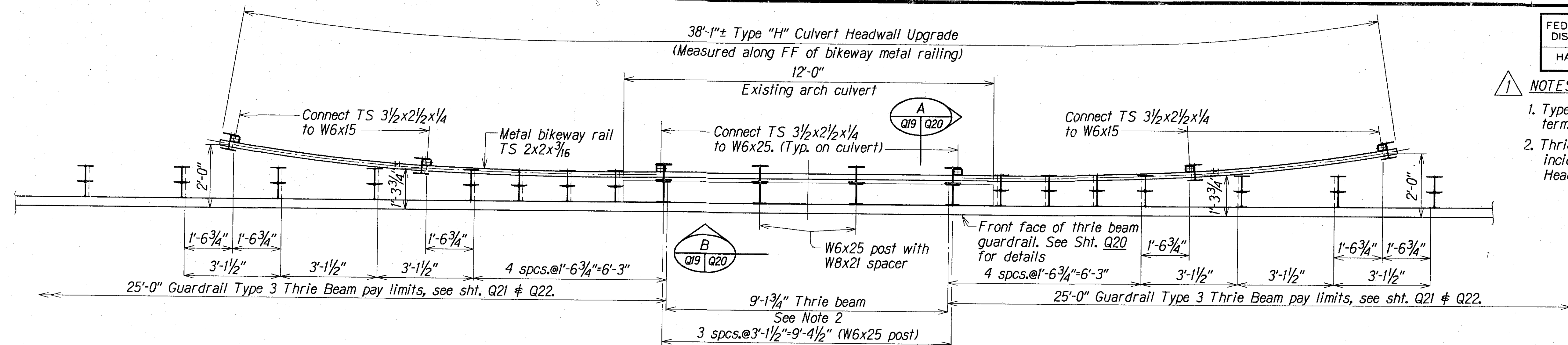


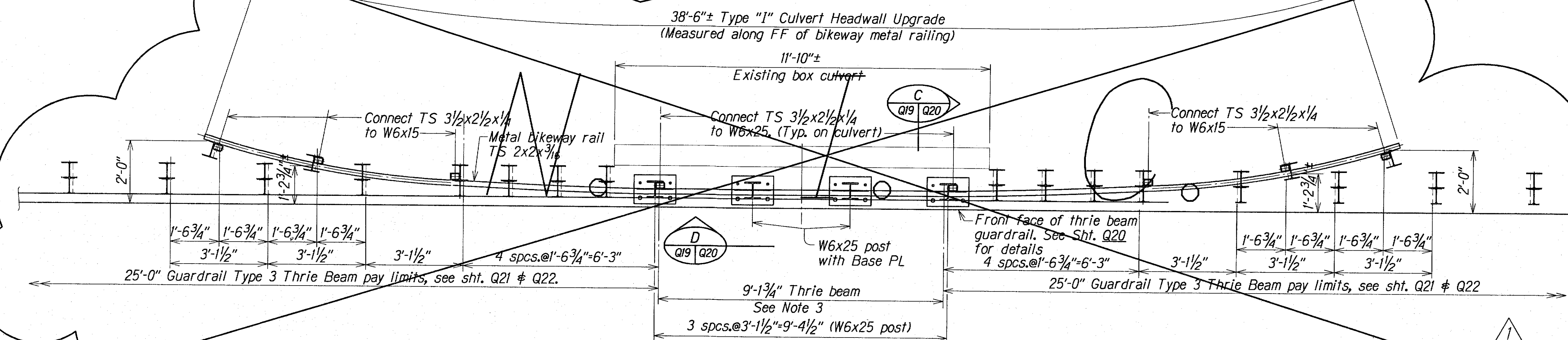
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(53)	2000	C.O. 59	73

- NOTES:**
1. Type "H" Culvert Headwall Upgrades shall not use terminal connector.
 2. Thrie beam guardrail on culvert headwall shall be incidental to Item No. 507.7635 - Type "H" Culvert Headwall Upgrade and will not be paid for separately.



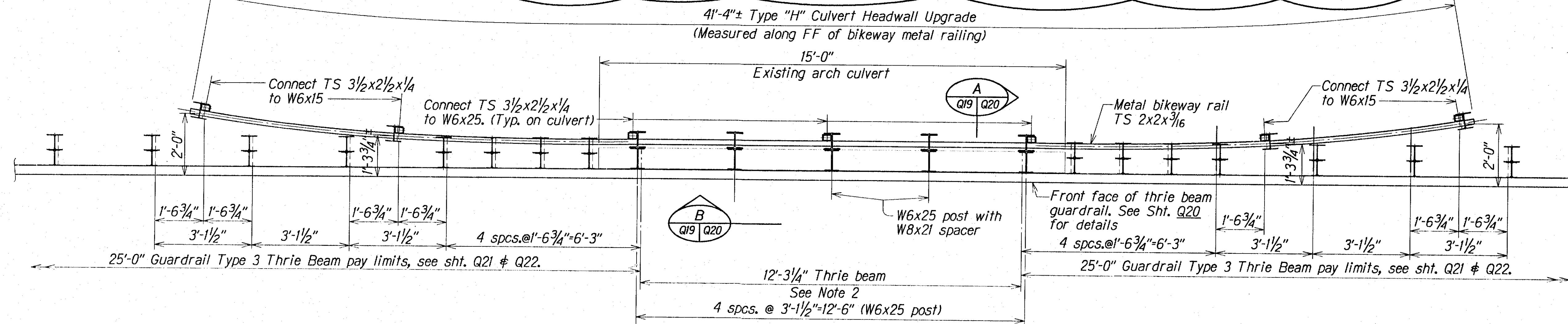
LAYOUT PLAN - ARCH CULVERT AT STA. 99 + 84 (INLET AND OUTLET)

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



LAYOUT PLAN - BOX CULVERT AT STA. 199 + 16 (INLET AND OUTLET) & STA. 210 + 97 (INLET)

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



LAYOUT PLAN - ARCH CULVERT AT STA. 249 + 92 (INLET AND OUTLET)

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

Layout Plan removed from contract as a change order. Notes revised to reflect change. See Sht. C. O. 59 S-1 for revised Type "I" Culvert Upgrade.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CULVERT HEADWALL UPGRADE

LAYOUT PLAN - TYPES "H" & "I" CULVERT UPGRADE
AT STA. 99+84, STA. 199+16, STA. 210+97, & STA. 249+92

HONOLULU HIGHWAY GUARDRAIL AND SHOULDER IMPROVEMENTS
High Street to Puamana

Federal Aid Project No. STP-0900(53)

Scale: As Noted Date: May 1999

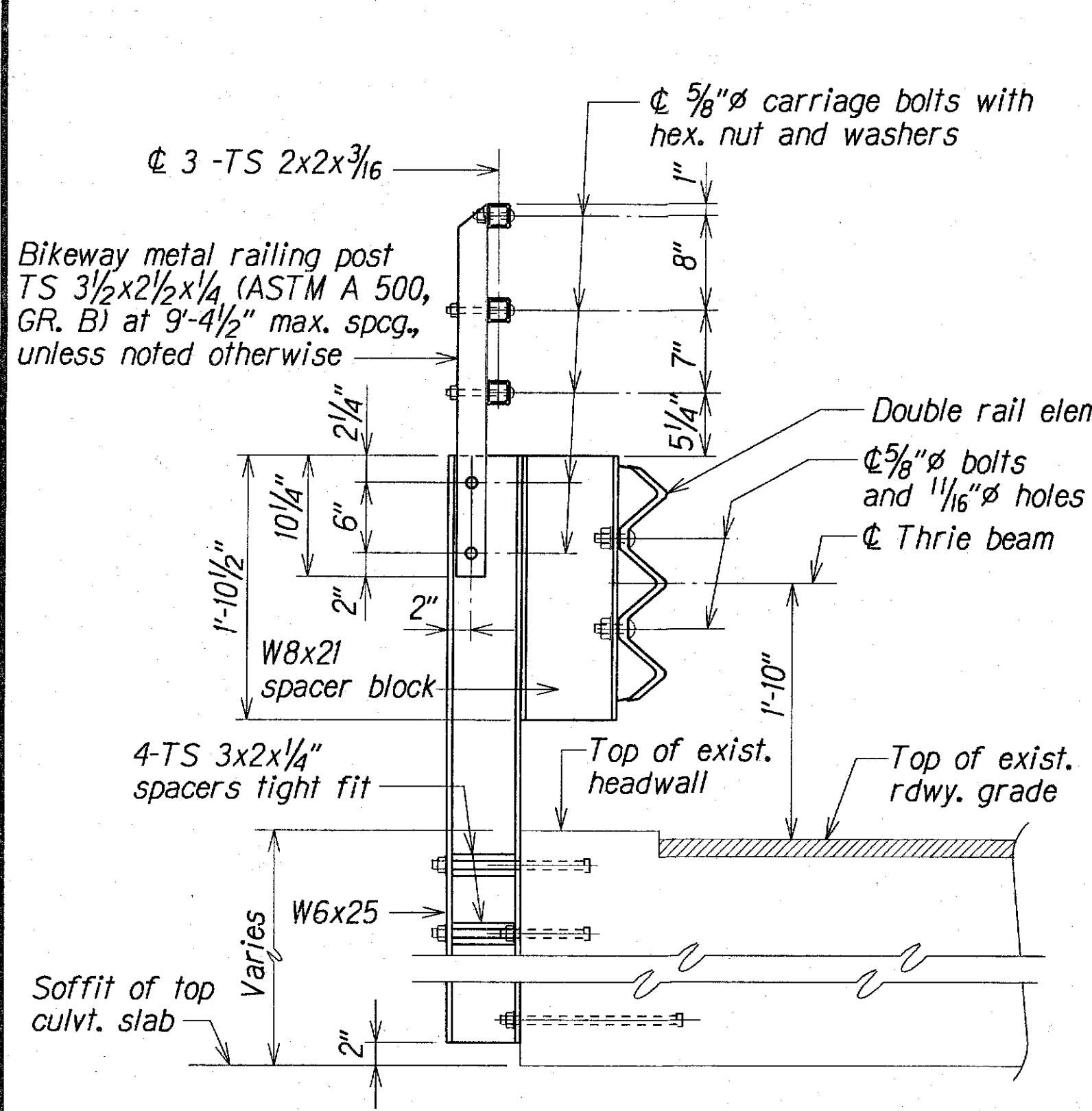
SHEET No. Q19 OF 22 SHEETS

C O 59

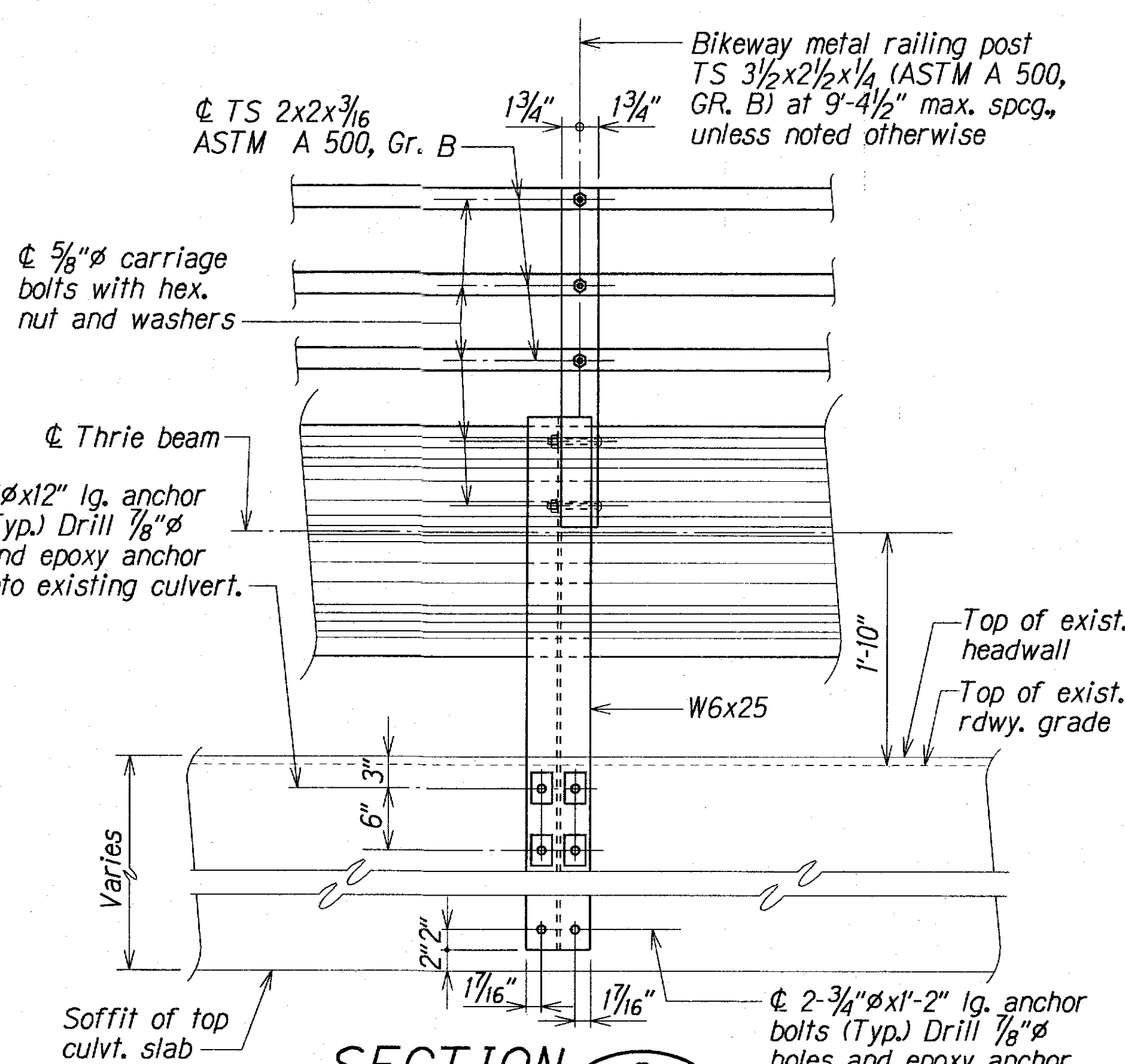
ORIGINAL PLAN	DATE	XXX 1991
DESIGNED BY	XXX	XXX 1991
NOTED BY	XXX	XXX 1991
CHECKED BY	XXX	XXX 1991
DATE	XXX	XXX 1991



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(53)	2000	C.O. 60	73



SECTION A
Scale: 1"=1'-0" Q19 Q20

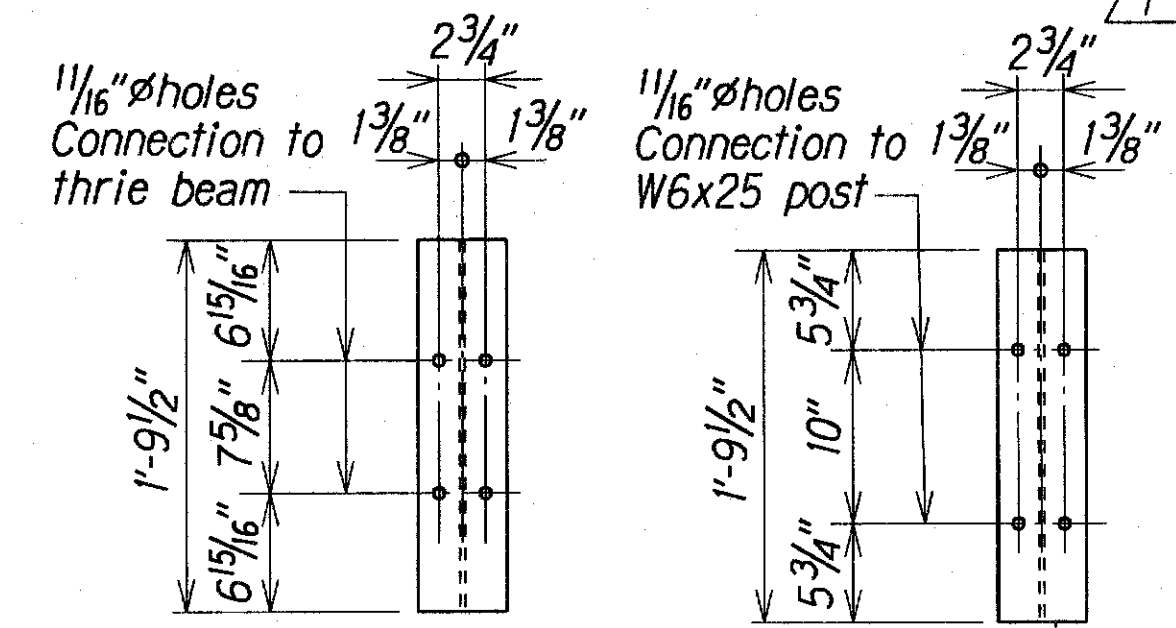


SECTION B
Scale: 1"=1'-0" Q19 Q20

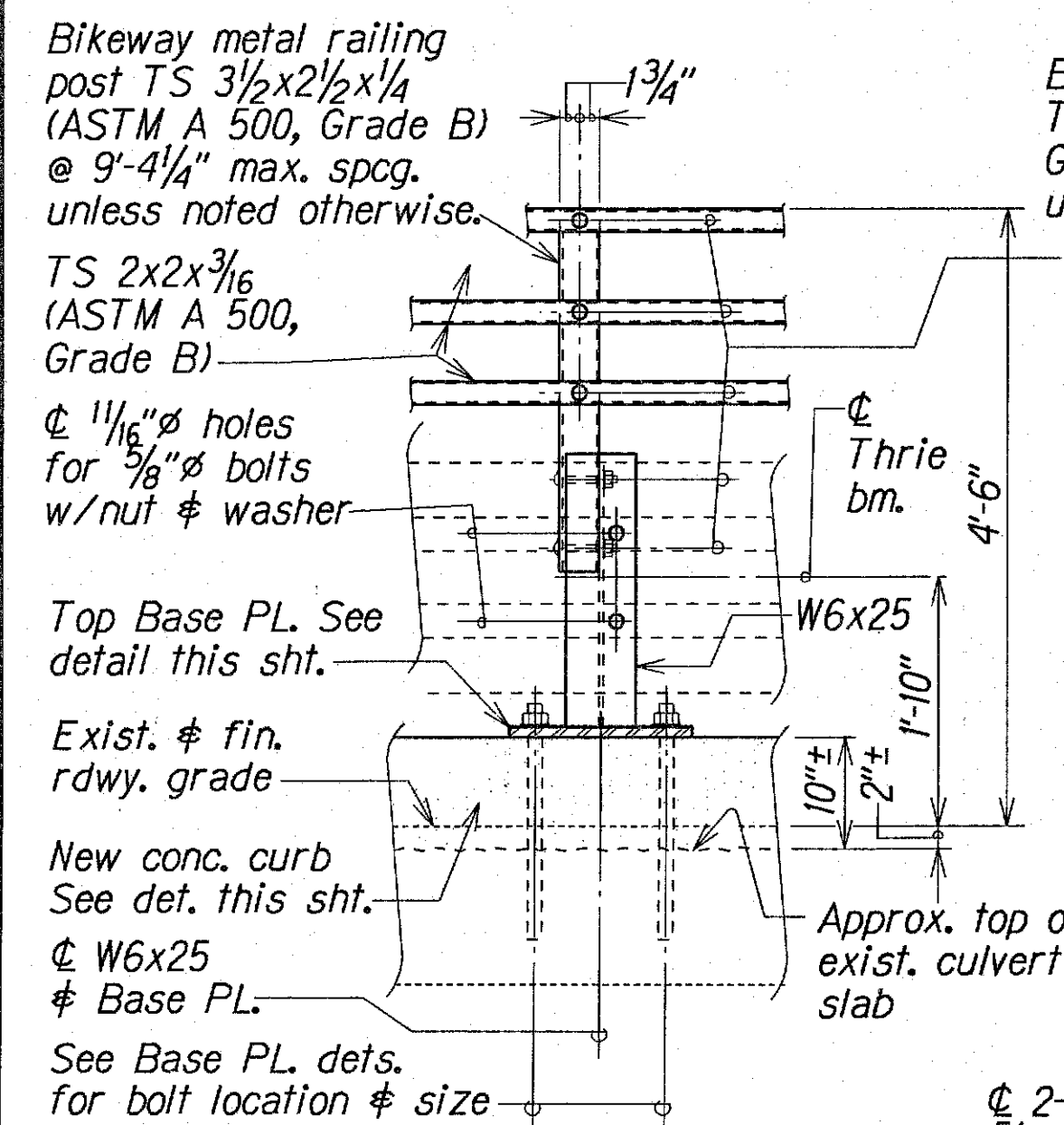
TYPE "H" CULVERT HEADWALL UPGRADE

FRONT W6X25 POST DETAIL (AT TYPE "H")

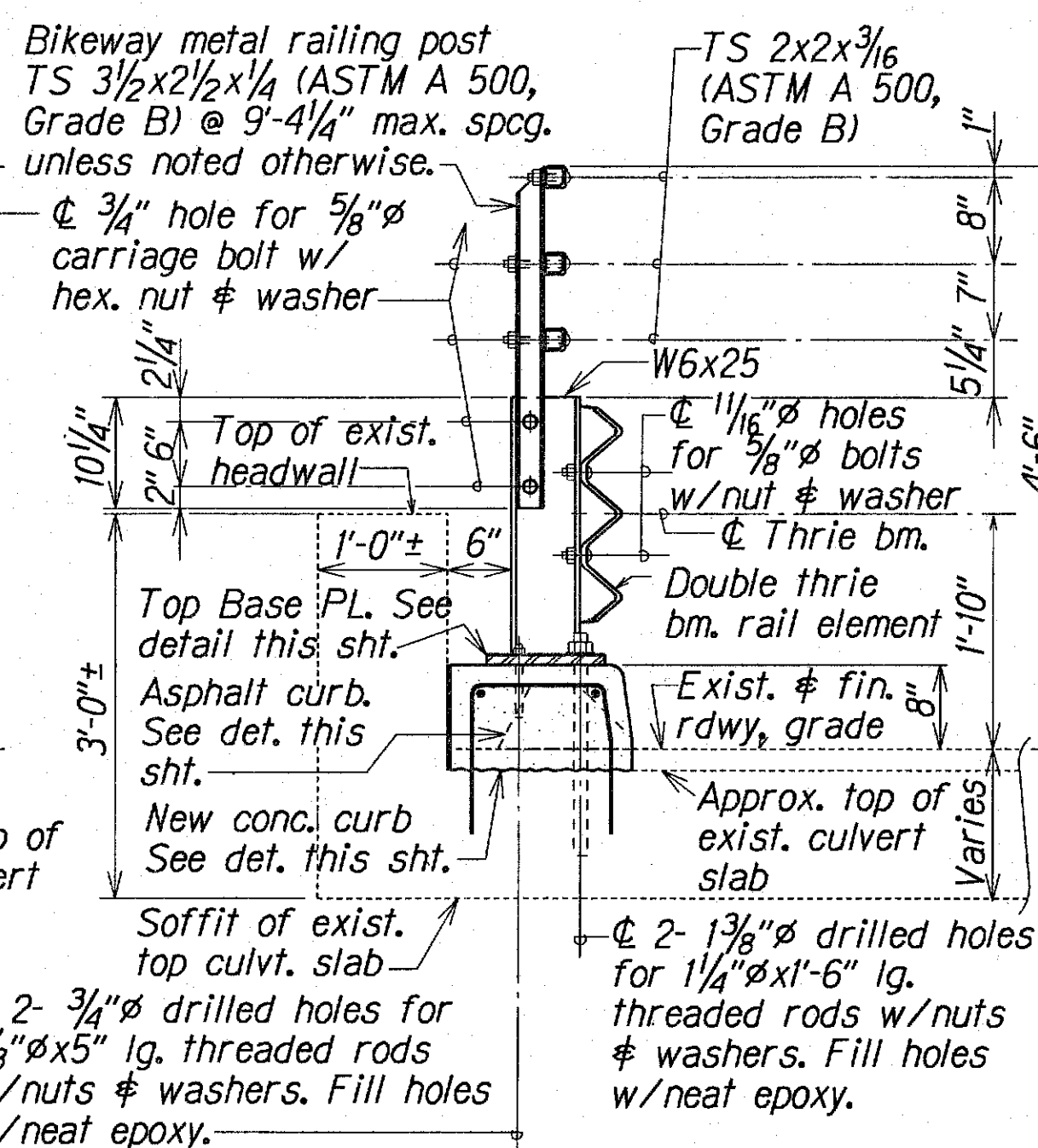
Scale: 1"=1'-0"



FRONT REAR
W8x21 SPACER DETAILS
Scale: 1"=1'-0"



W6x25 POST PARTIAL ELEVATION
Scale: 3/4"=1'-0"

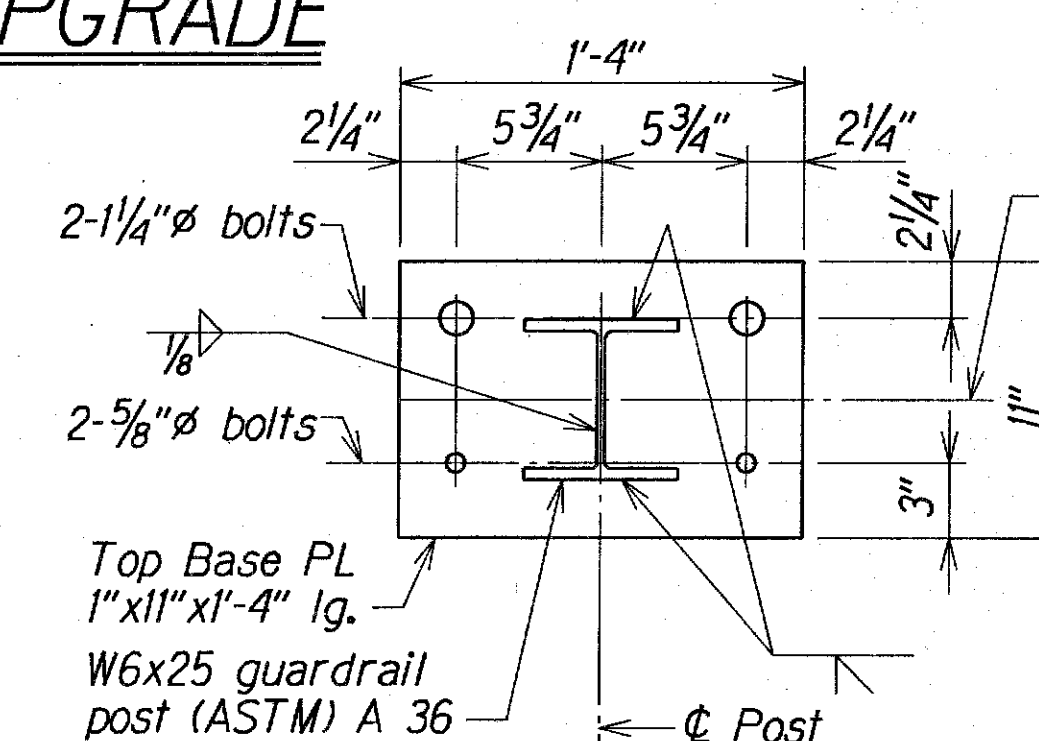


SECTION C
Scale: 3/4"=1'-0" Q19A Q20

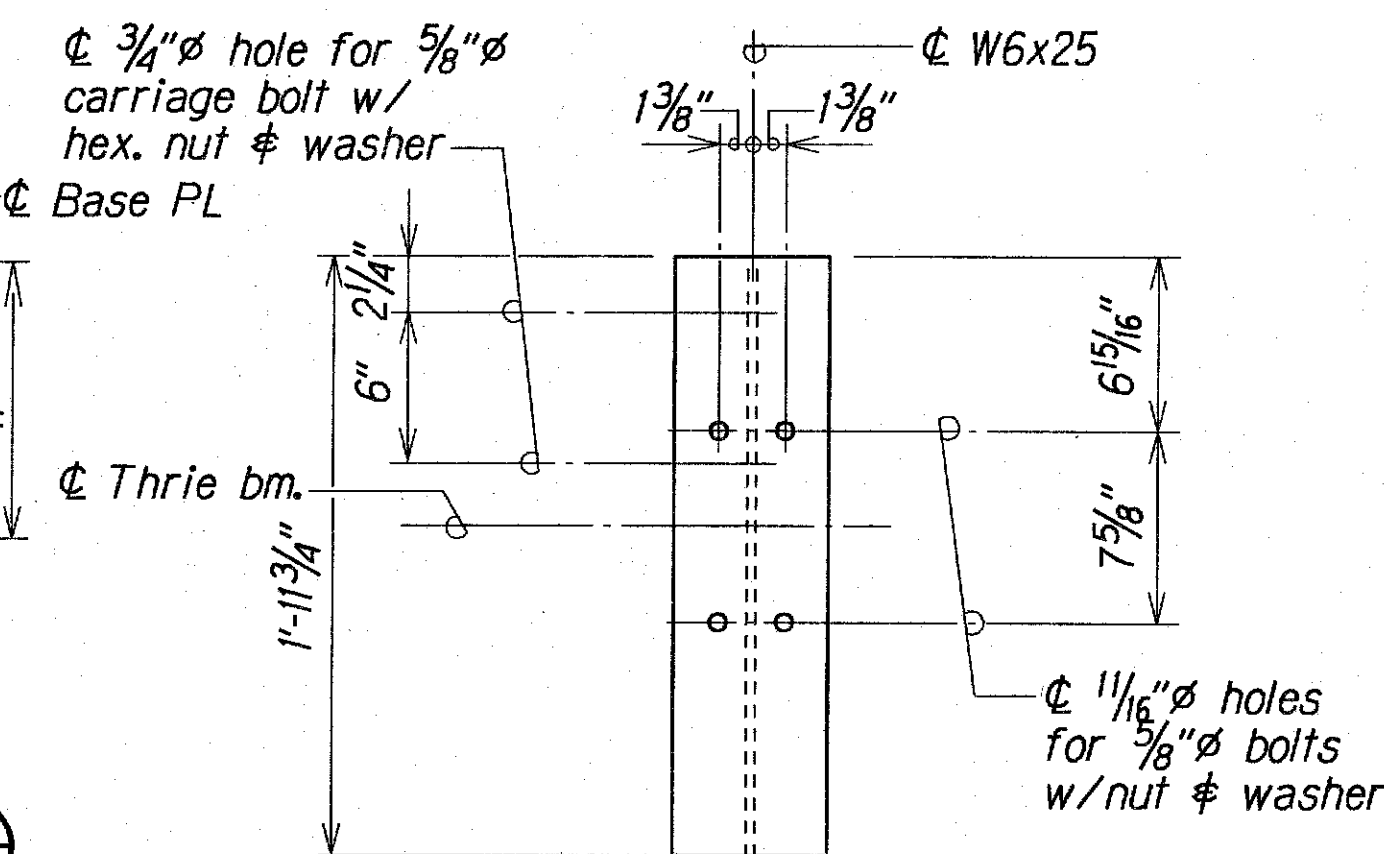
NEW CONCRETE CURB DETAIL

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

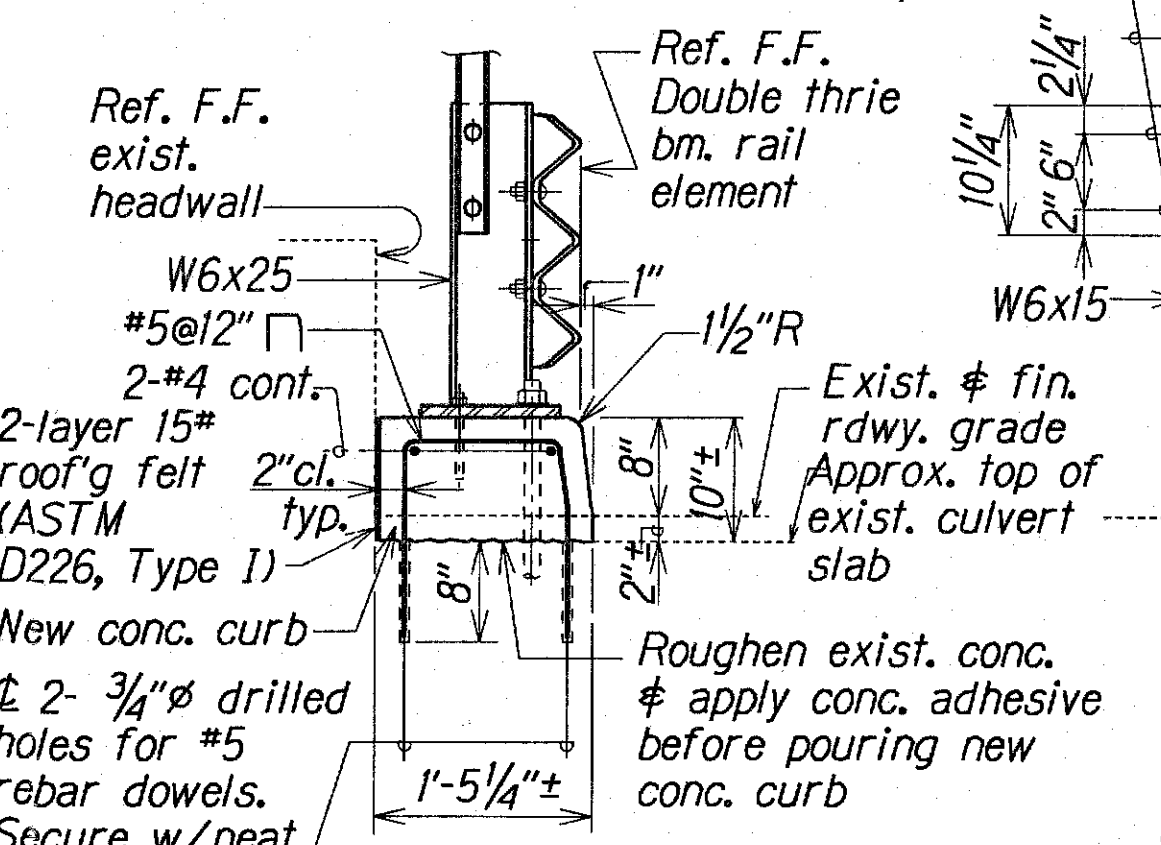
TYPE "I" CULVERT HEADWALL UPGRADE at STA. 210+97 (OUTLET)



PLAN-TOP BASE PL
Scale: 1 1/2"=1'-0" Q19A Q20



ELEVATION--W6x25 POST TYPE "I"
Scale: 1 1/2"=1'-0"



SECTION D
Scale: 3/4"=1'-0" Q19A Q20

ASPHALT CURB DETAIL

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

Changes to Type "I" Culvert Headwall Upgrade were made as a change order. Removed details w/o conc. or asphalt curb & necessary details added. Plan-Top Base PL det. remained the same.

DATE	REVISIONS
6/8/01	Changes to Type "I" Culvert Headwall Upgrade were made as a change order. Removed details w/o conc. or asphalt curb & necessary details added. Plan-Top Base PL det. remained the same.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CULVERT HEADWALL UPGRADE
TYPE "H" AND TYPE "I" CULVERT UPGRADE SECTIONS, POST & BASE PLATES DETAILS
HONOLULU HIGHWAY GUARDRAIL AND SHOULDER IMPROVEMENTS
High Street to Puamana
Federal Aid Project No. STP-0900(53)
Scale: As Noted Date: May 1999