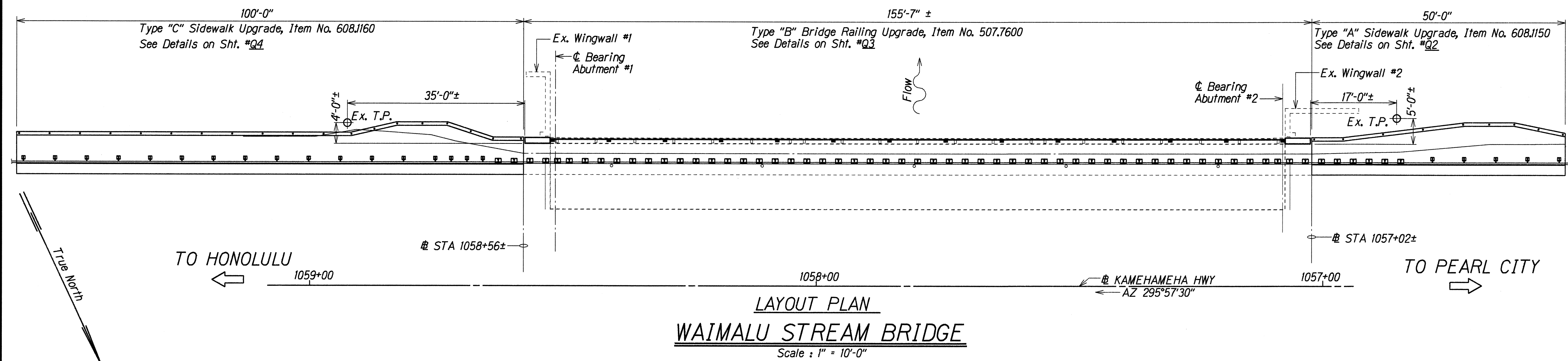


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1999	30	44



GENERAL STRUCTURE NOTES

GENERAL SPECIFICATIONS

State of Hawaii Department of Transportation Standard Specifications for Road and Bridge Construction, 1994 and Special Provisions.

DESIGN SPECIFICATIONS:

AASHTO LRFD Bridge Design Specifications, First Edition including 1996 and 1997 Interim Revisions.

MATERIALS

1. Reinforced Concrete: Class A
2. Reinforcing Steels: ASTM A 615, Grade 40 or Grade 60
3. Admixture in Concrete: See Special Provisions
4. All Expansion and Premolded Joint Filler shall be incidental to concrete and will not be paid for separately.
5. All Structural Steel shall be ASTM A 36 hot-dip galvanized after fabrication.
6. All Anchor Bolts, Washers and Nuts shall be ASTM A 325 hot-dip galvanized after fabrication, unless noted otherwise.
7. All welding shall be in accordance with the current edition of Reinforcing Steel Welding Code AWS D 14 Welding Electrodes for Structural Steel shall be E 70.

CONSTRUCTION METHODS:

1. Refer to Hawaii Standard Specifications for Road, Bridges and Public Works Construction, 1994 Edition and Special Provisions.
2. Except as noted otherwise, all dimensions are measured plumb.
3. For Concrete Finish, see Standard Specifications and Special Provisions.
4. For Steel Reinforcing, stagger all splices where possible.
5. Steel Reinforcing shall be supported, bent and placed as per the ACI Detailing Manual, 1994.
6. At time concrete is placed, reinforcing shall be free from mud, oil, laitance or other coatings adversely affecting bond capacity.
7. Reinforcement, dowels and other embedded items shall be positively secured before pouring of new concrete.

8. All existing concrete face receiving new concrete in the finish product shall be roughened and cleaned prior to placement of new pour, unless noted otherwise, according to the contract.
9. Epoxy fill shall be "Double Cartridge" type. Epoxies that require manual measuring or mixing shall not be allowed, according to the Manufacturer's Requirements.

REFERENCE:

Refer to Standard Plans for additional details not covered by details and typical drawings.

GENERAL:

1. All items noted incidental will not be paid for separately.
2. The Contractor shall verify the locations of all utility lines and notify their respective owners before commencing with any work. The Contractor shall exercise extreme caution when excavating near the AT&T fiber optic concrete duct line.
3. The Contractor shall verify all grades and dimensions in the field before commencing with any work.
4. The Contractor shall be solely responsible for the protection of adjacent property, utilities and existing and new structures from damage due to construction. Repairing any damage shall be at no cost to the State.
5. The Contractor shall conduct his work in such a manner and provide such temporary shoring or other measures as may be necessary to insure the safety of all concerned and to protect existing structures.
6. Unless noted otherwise chamfer all exposed concrete edges three quarters ($\frac{3}{4}$) of an inch.

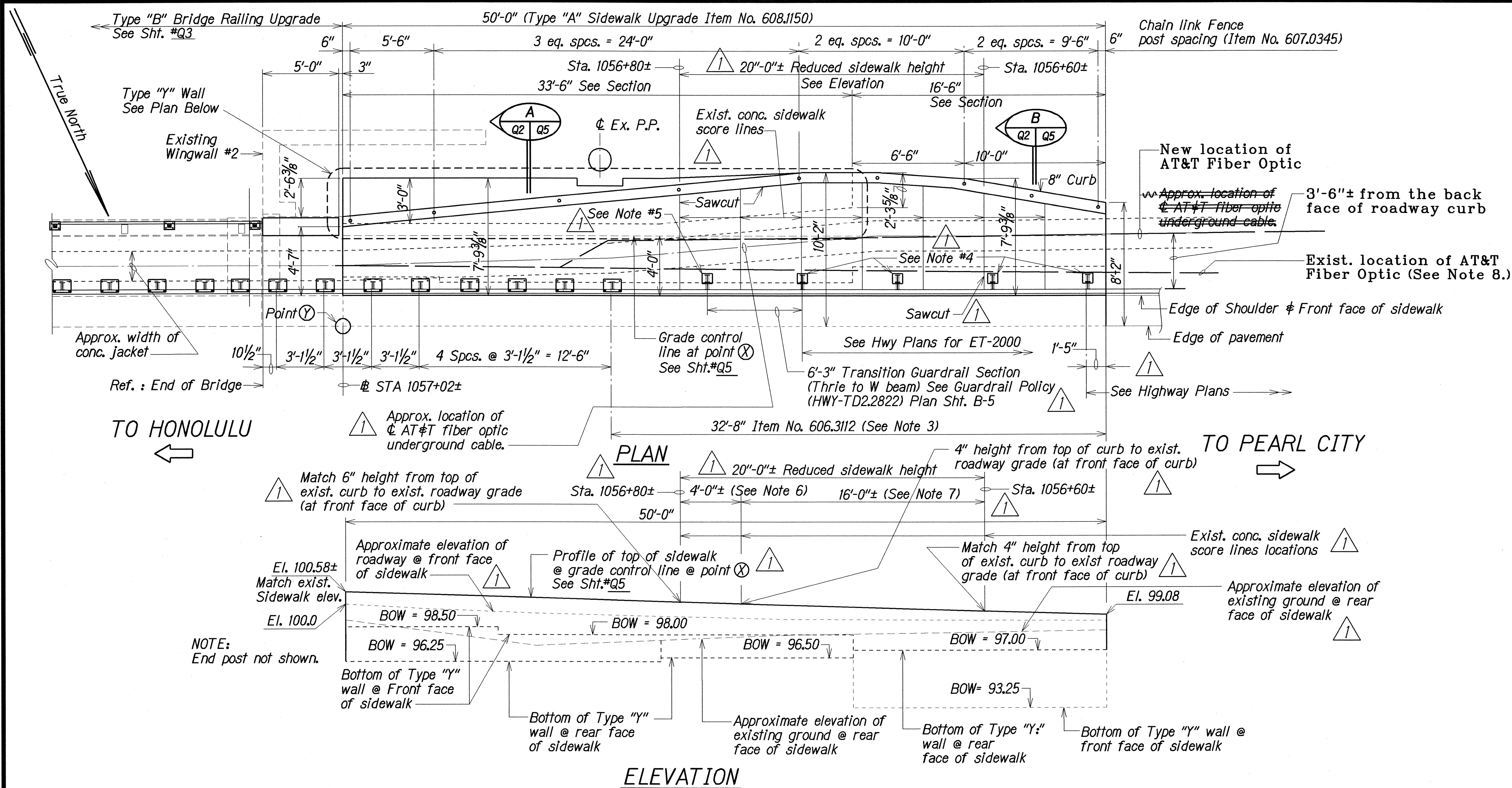
ESTIMATED QUANTITIES

Item No.	Item	Unit	Quantity
507.7600	Type "B" Upgrade Bridge Railing Including End Posts	Lf	156
606.3112	Guardrail, Type 3, Thrie Beam	Lf	128
607.0345	4 Ft. Chain Link Fence without Top Rail on Concrete Sidewalk	Lf	150
608.1150	Type "A" Sidewalk Upgrade	sq. yd.	40
608.1160	Type "C" Sidewalk Upgrade	sq. yd.	75

ORIGINAL PLAN	DATE	DATE
SURVEY PLOTTED BY	CHD	JUN 1998
DRAWN BY	XXX	XXX 1997
DESIGNED BY	XXX	XXX 1997
QUANTITIES BY	XXX	XXX 1997
CHECKED BY	XXX	XXX 1997

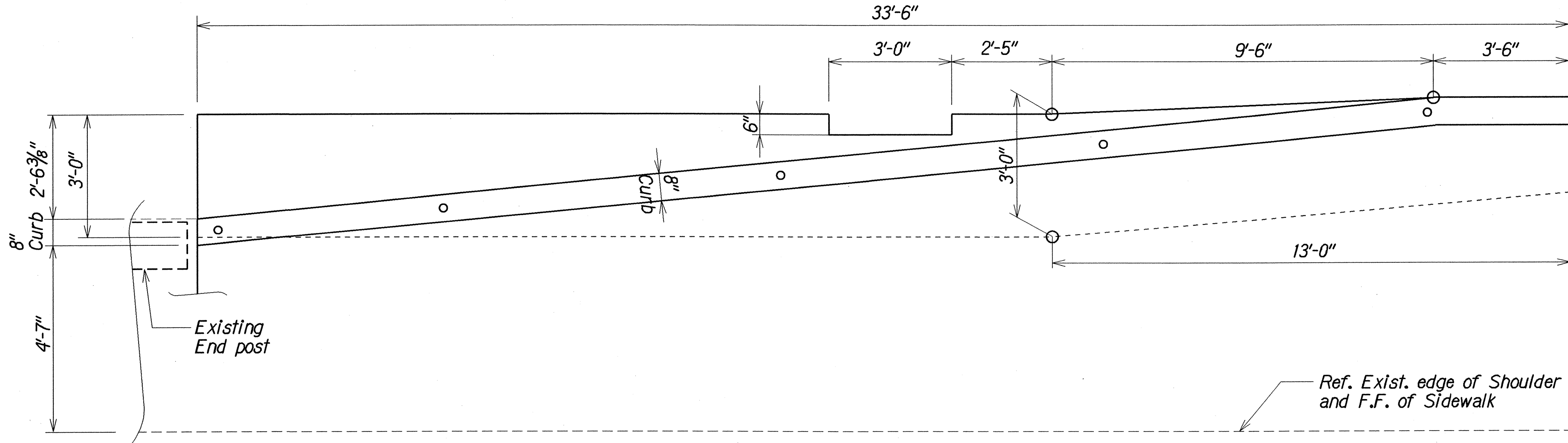
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SIDEWALK UPGRADE
ESTIMATED QUANTITIES, LAYOUT PLANS,
GENERAL STRUCTURAL NOTES
KAMEHAMEHA HIGHWAY
PEDESTRIAN ACCESSIBLE ROUTE IMPROVEMENTS
ACACIA ROAD TO HONOMANU STREET
Fed Aid Project No. STP-099-1(20)
Scale: As Noted Date: Jan, 1999

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1999	C.O. 31	44



TYPE "A" SIDEWALK UPGRADE-INBOUND APPROACH END OF WAIMALU STREAM BRIDGE

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



PLAN-TYPE "Y" WALL

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

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
	Text for as-built posting

Added and deleted notes and dimensions. Added exist. sidewalk score lines. Moved label to clarify drawing. Change Order is req'd to accomodate reduction in sidewalk height from Sta. 1056+80± to Sta. 1056+60±.

DATE

REVISIONS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

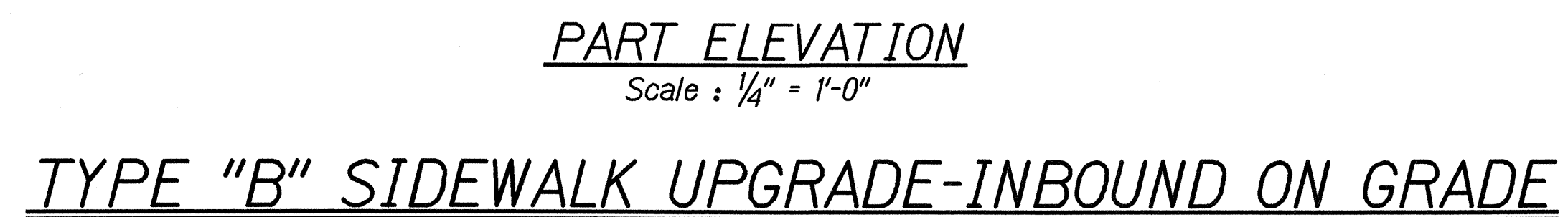
SIDEWALK UPGRADE
TYPE "A" SIDEWALK UPGRADE-APPROACH END
KAMEHAMEHA HIGHWAY
PEDESTRIAN ACCESSIBLE ROUTE IMPROVEMENTS
ACACIA STREET TO HOOMANII STREET
Fed Aid Project No. STP-099-1(20)


Scale: As Noted

Date: Jan, 1999

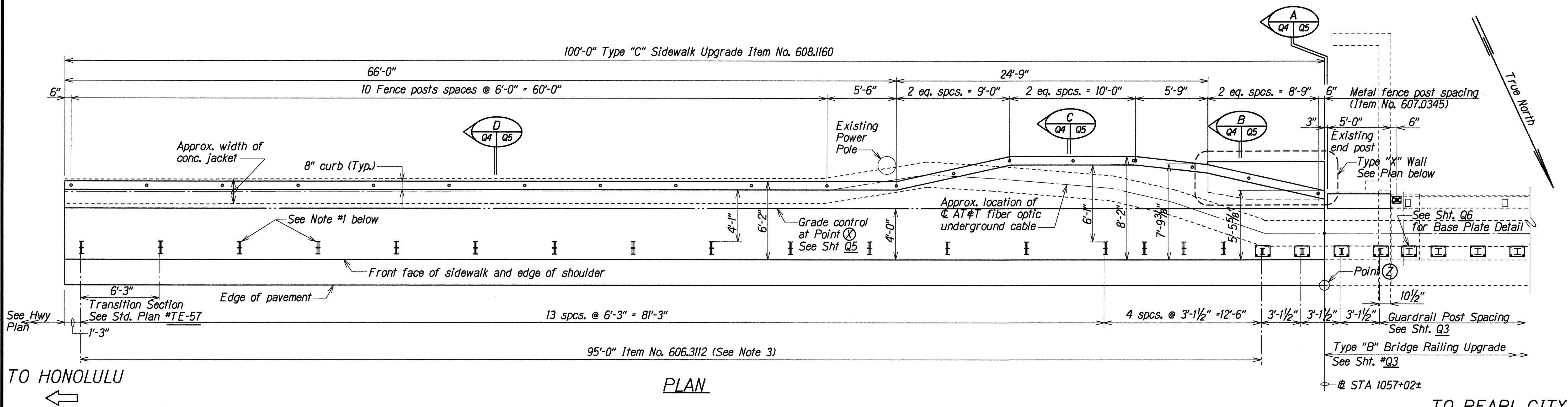
SHEET No. Q2 OF 8 SHEETS

C.O. 31

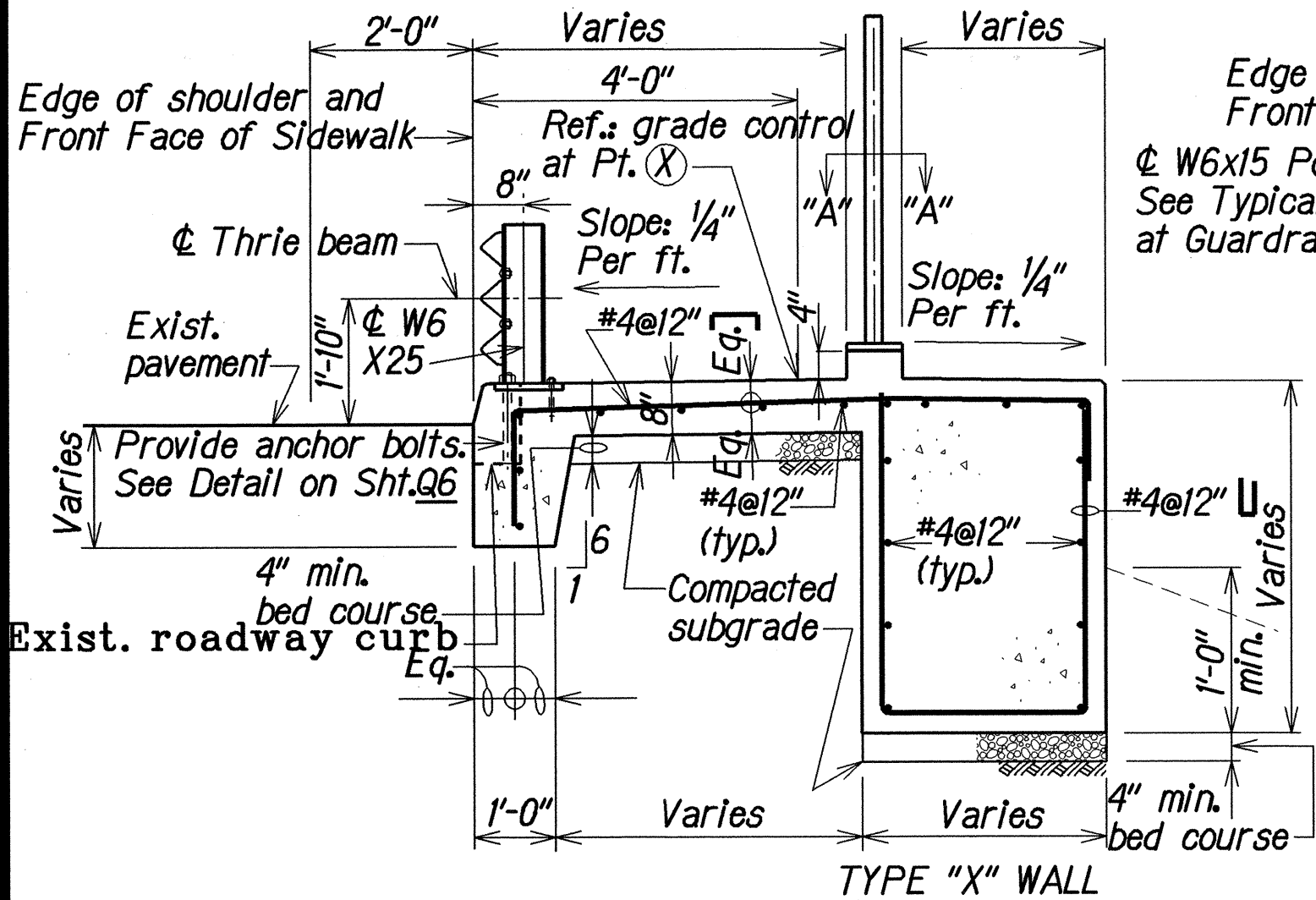
[illegible]

 7/17/02	Added guardrail and dimension. Moved label to clarify drawing.
DATE	REVISIONS
<p>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</p> <p><u>SIDEWALK UPGRADE</u></p> <p><u>TYPE "B" BRIDGE RAILING UPGRADE</u></p> <p><u>KAMEHAMEHA HIGHWAY</u> <u>PEDESTRAIN ACCESSABLE ROUTE IMPROVEMENTS</u> <u>ACACIA ROAD TO HONOMANU STREET</u> <u>Fed Aid Project No. STP-099-1(20)</u></p> <p>Scale: As Noted Date: Jan, 1999</p> <p>SHEET No. 03 OF 8 SHEETS</p>	

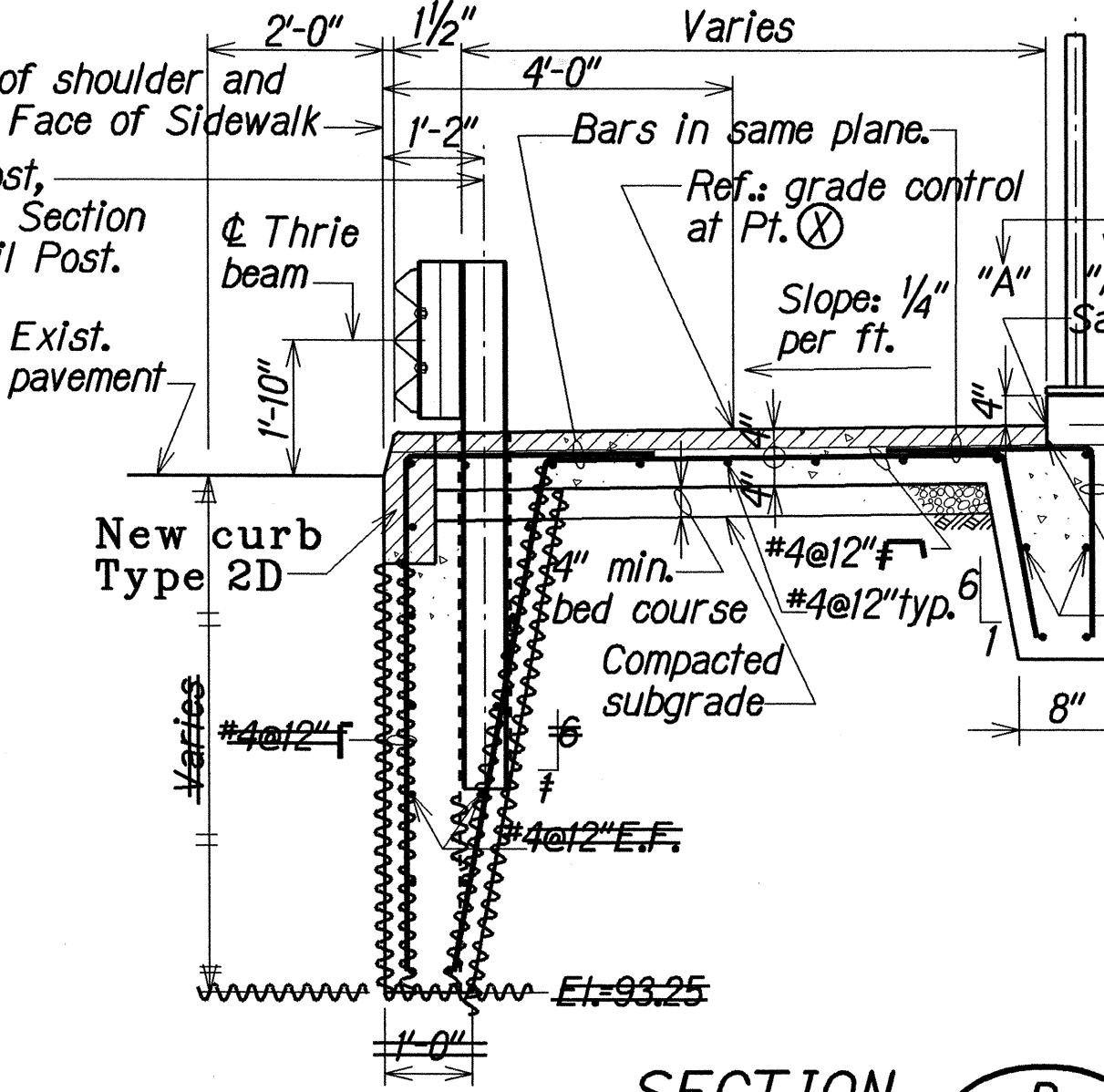
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1999	33	44



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1999	C.O. 34	44



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

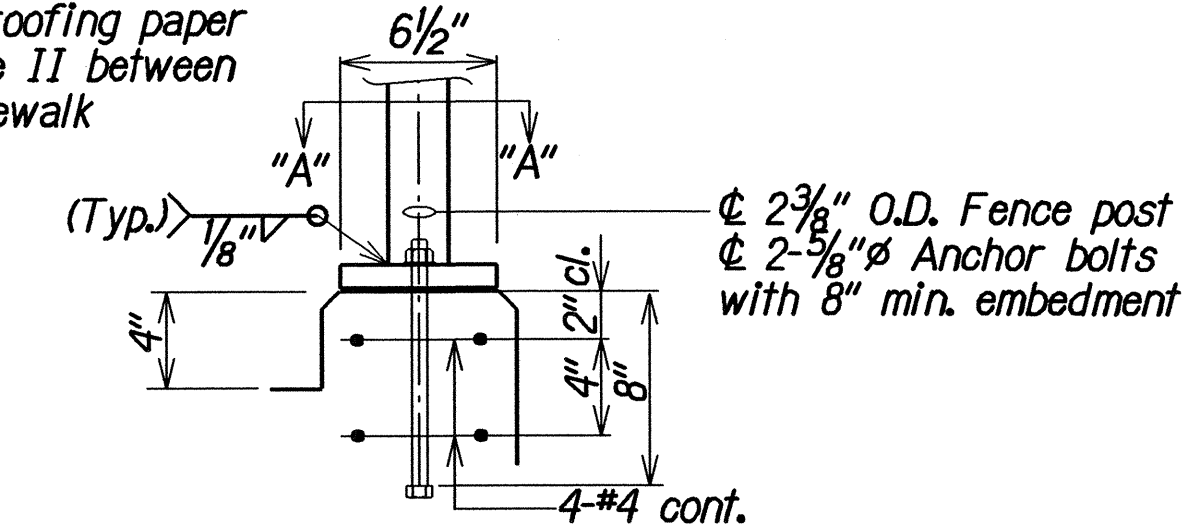
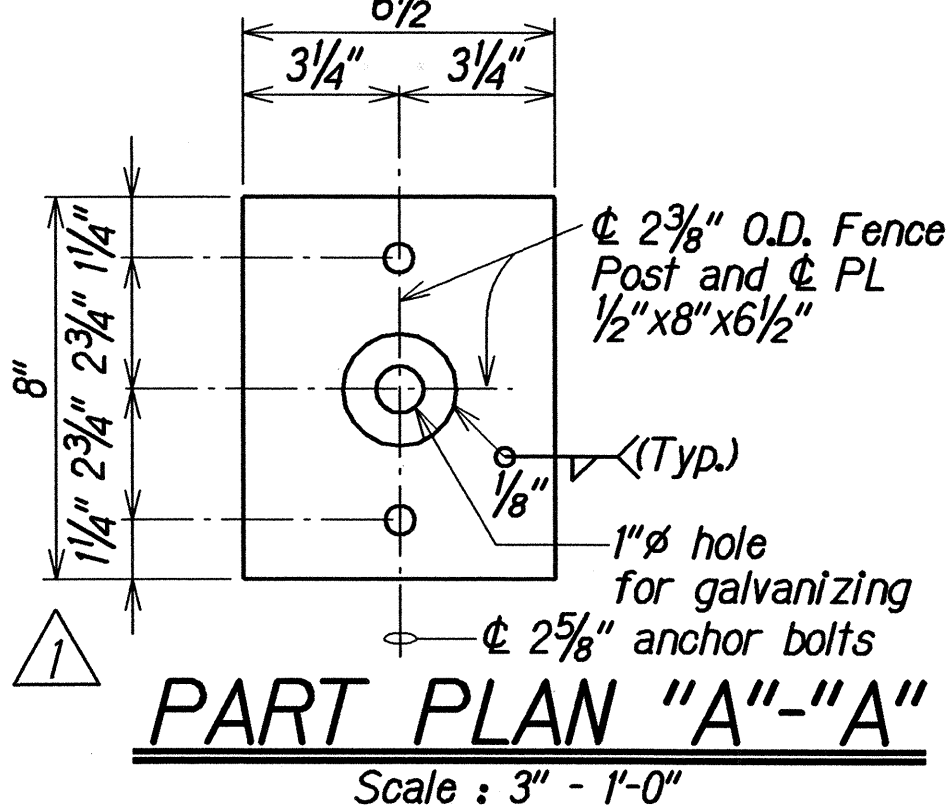


SECTION B
Scale : 1/2" = 1'-0"

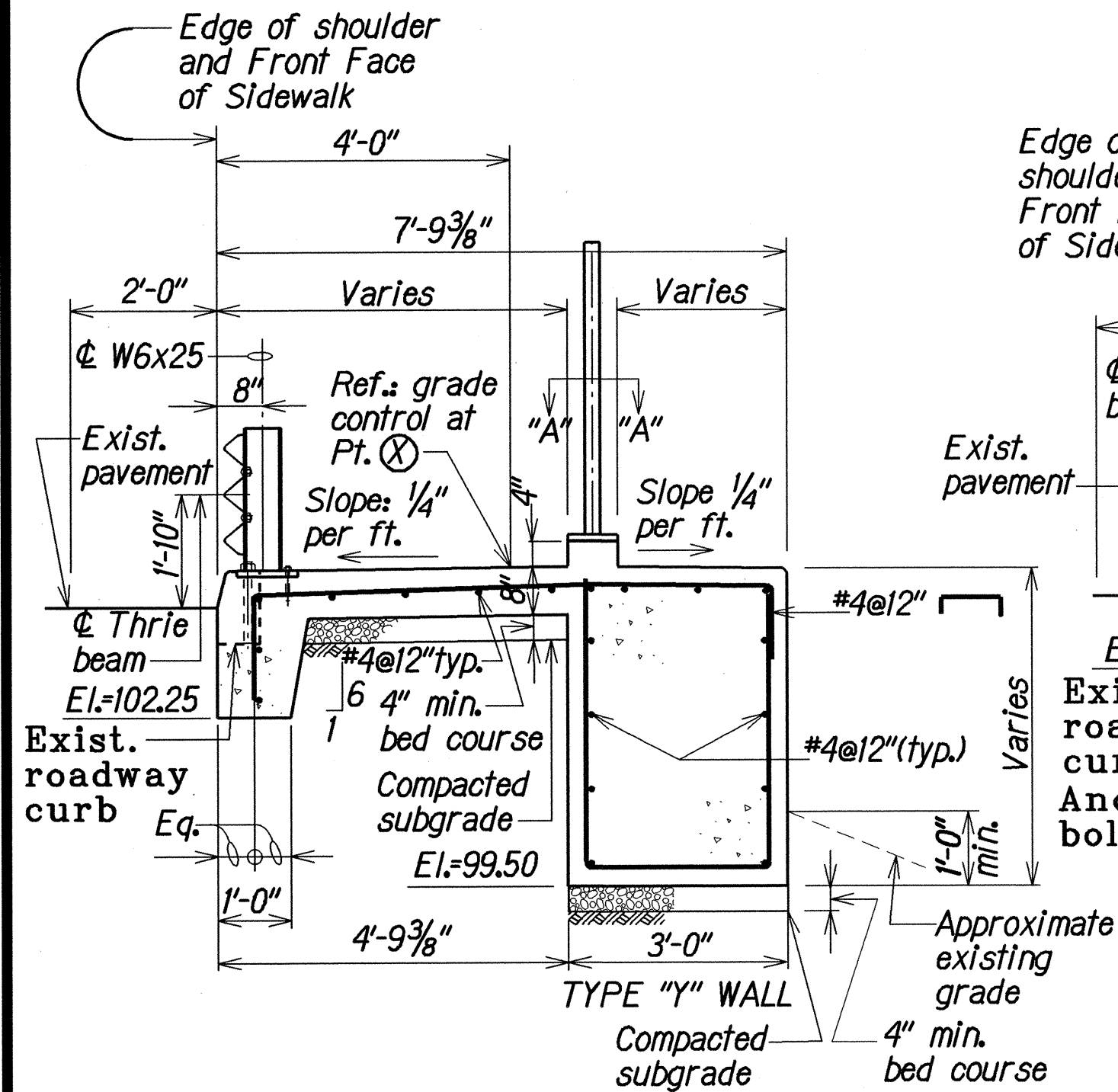
TYPE "A" SIDEWALK UPGRADE

For Sta. 1056+60 to Sta. 1056+80:
remove 3 3/4" of exist. conc. Do not
remove beyond the top of the exist.
reinf. Build up the sidewalk to achieve
the new curb height as shown on Sht.
C.O. 31. Material for the build up
for the sidewalk shall be approved by
the Engineer.

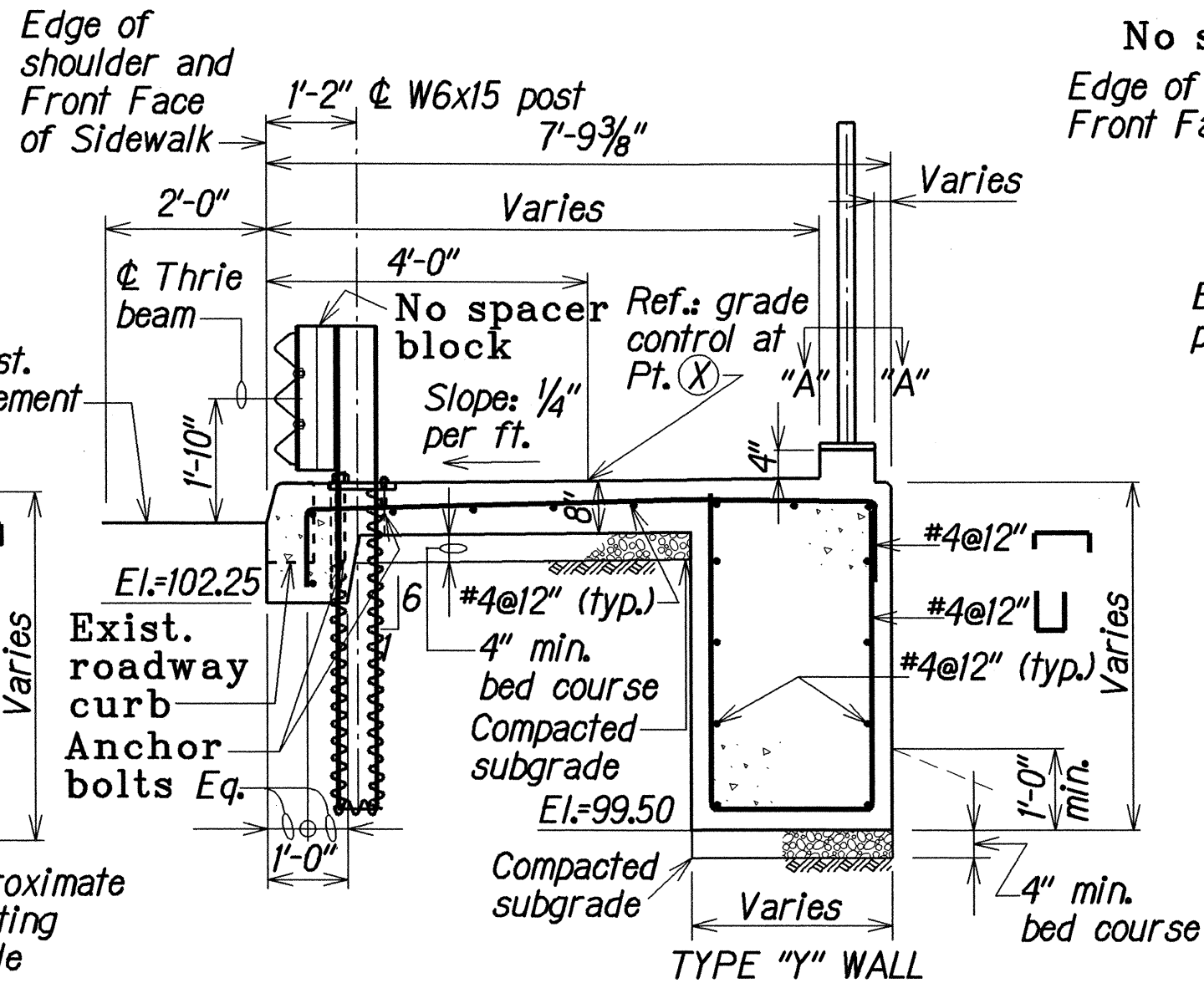
For Sta. 1056+60 to Sta. 1056+80:
2 layers asphalt roll roofing paper
per ASTM D 224, Type II between
existing curb and sidewalk



PART PLAN VIEW "B-B"
Scale : 1/2" = 1'-0"

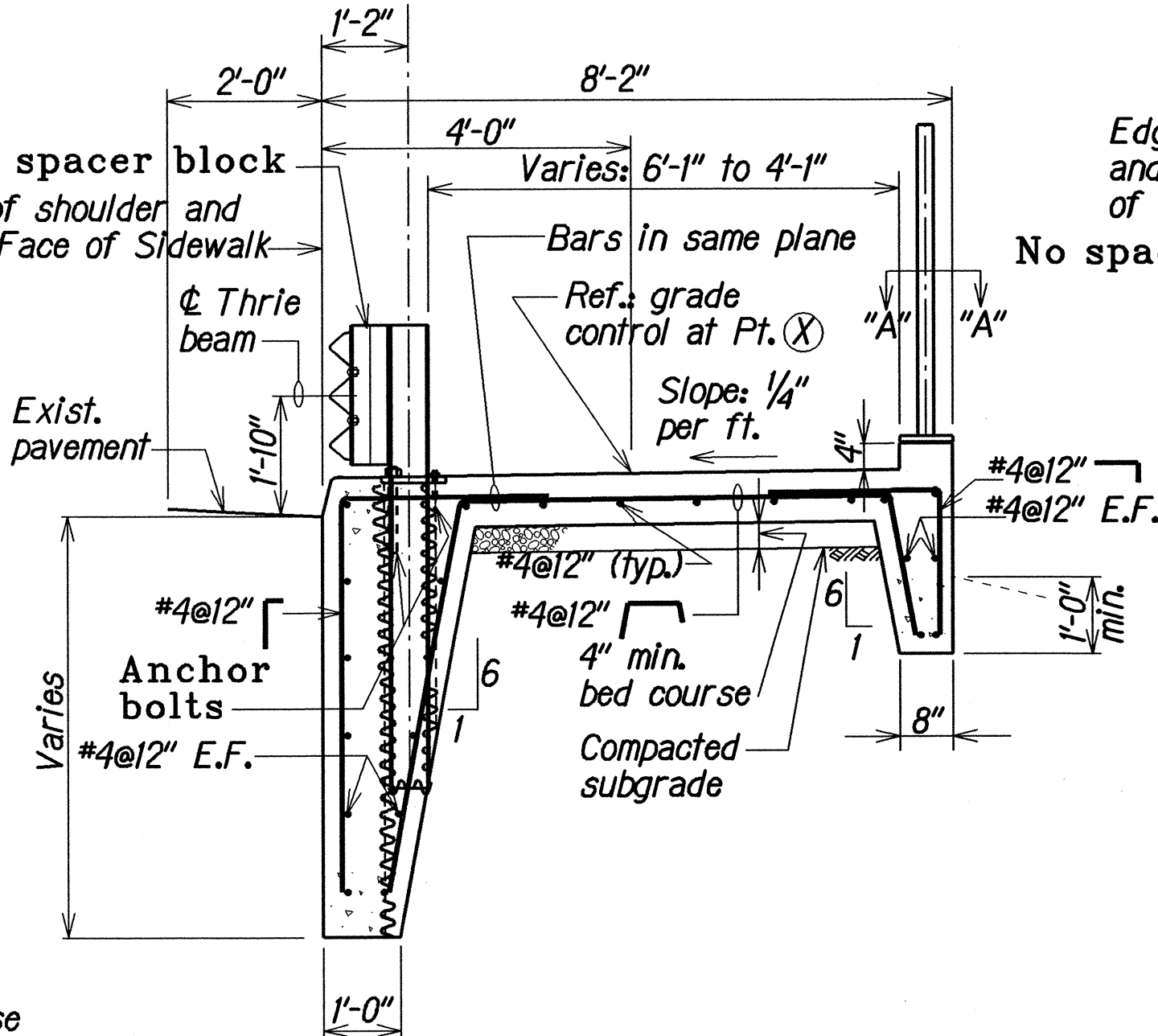


SECTION A
Scale : 1/2" = 1'-0"

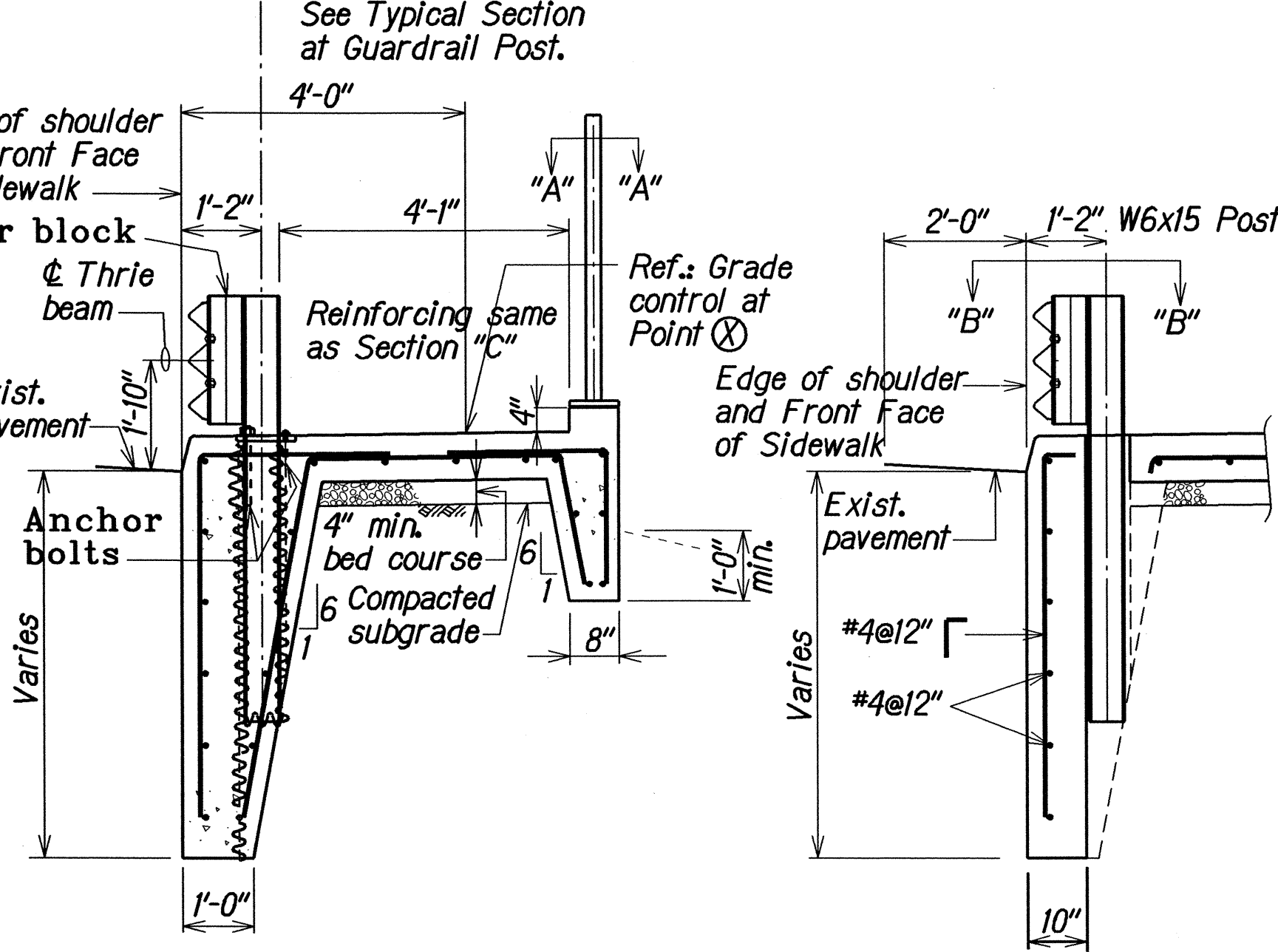


SECTION B
Scale : 1/2" = 1'-0"

TYPE "C" SIDEWALK UPGRADE



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



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

TYPICAL SECTION AT
GUARDRAIL POST
Scale : 1/2" = 1'-0"

ORIGINAL PLAN	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

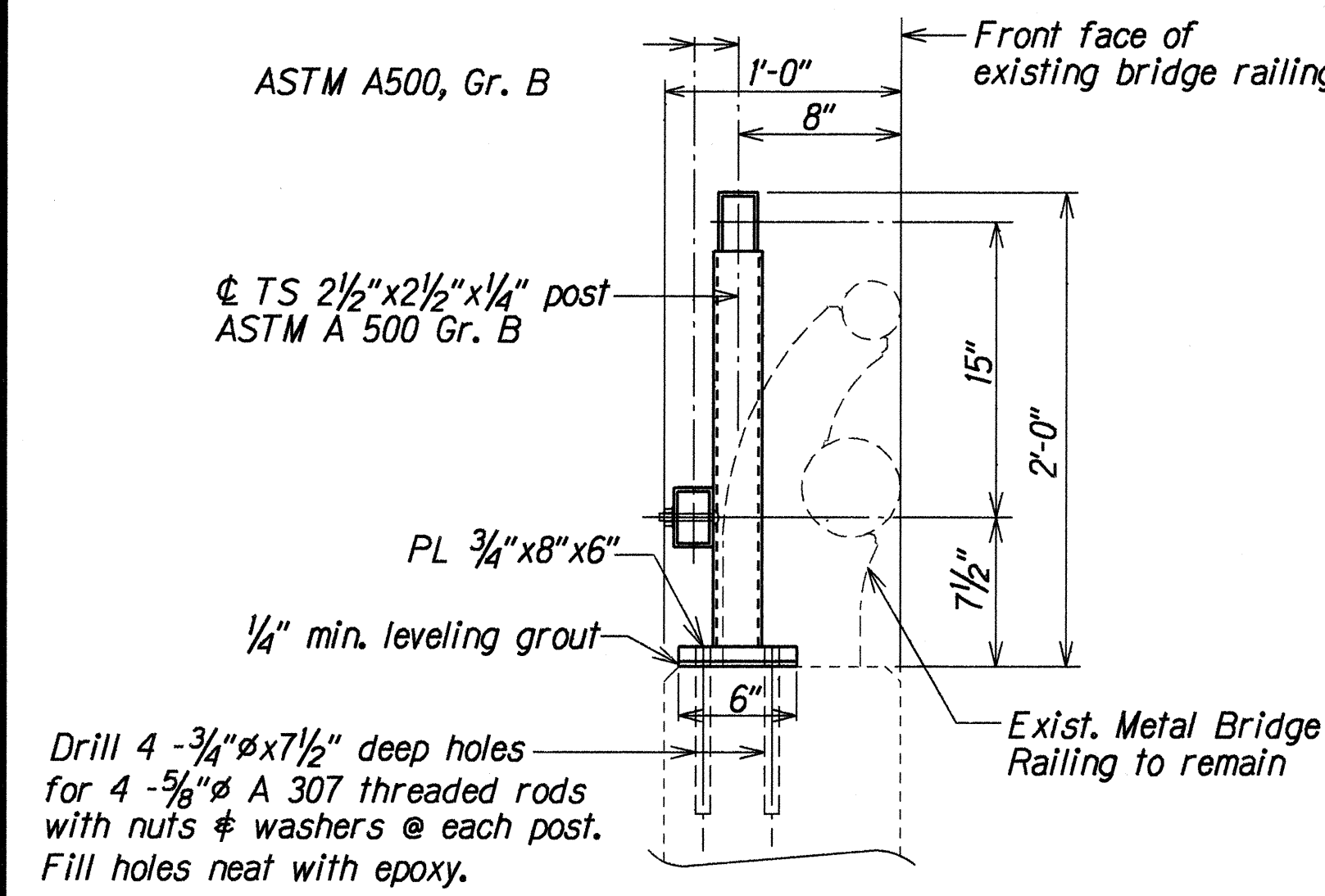
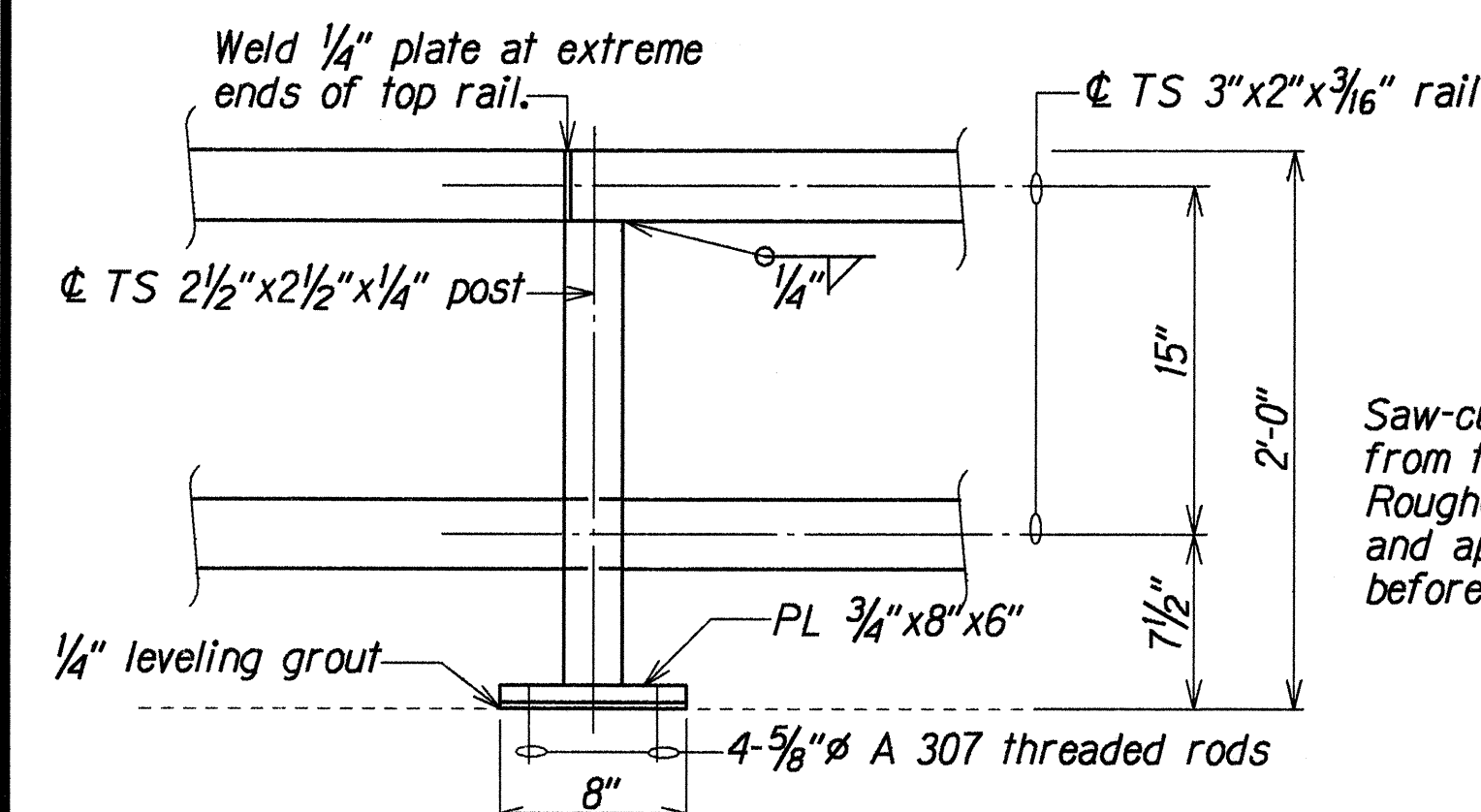
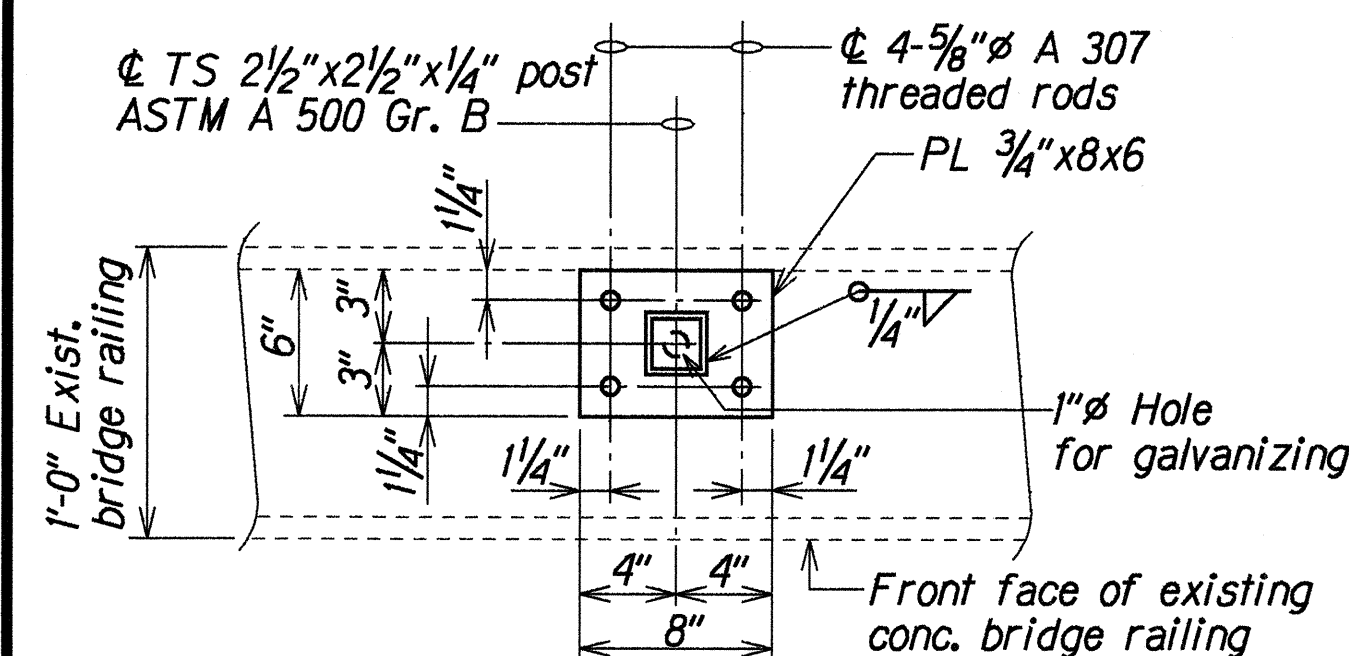
7/17/02	Revised Section B and moved PART PLAN "A" - "A" to clarify drawing.
DATE	REVISIONS

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION SIDEWALK UPGRADE TYPE "A" AND "C" DETAILS KAMEHAMEHA HIGHWAY PEDESTRIAN ACCESSIBLE ROUTE IMPROVEMENTS ACACIA ROAD TO HONOLULU STREET Fed Aid Project No. STP-099-1(20)	Scale: As Noted Date: Jan, 1999
SHEET No. Q5 OF 8 SHEETS	

"AS-BUILT"

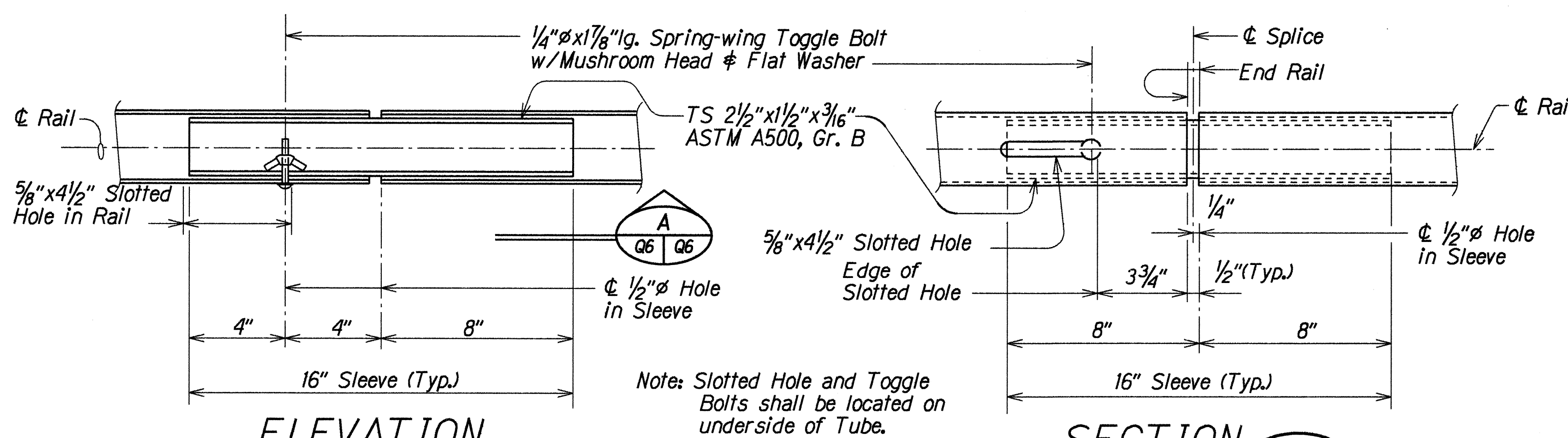
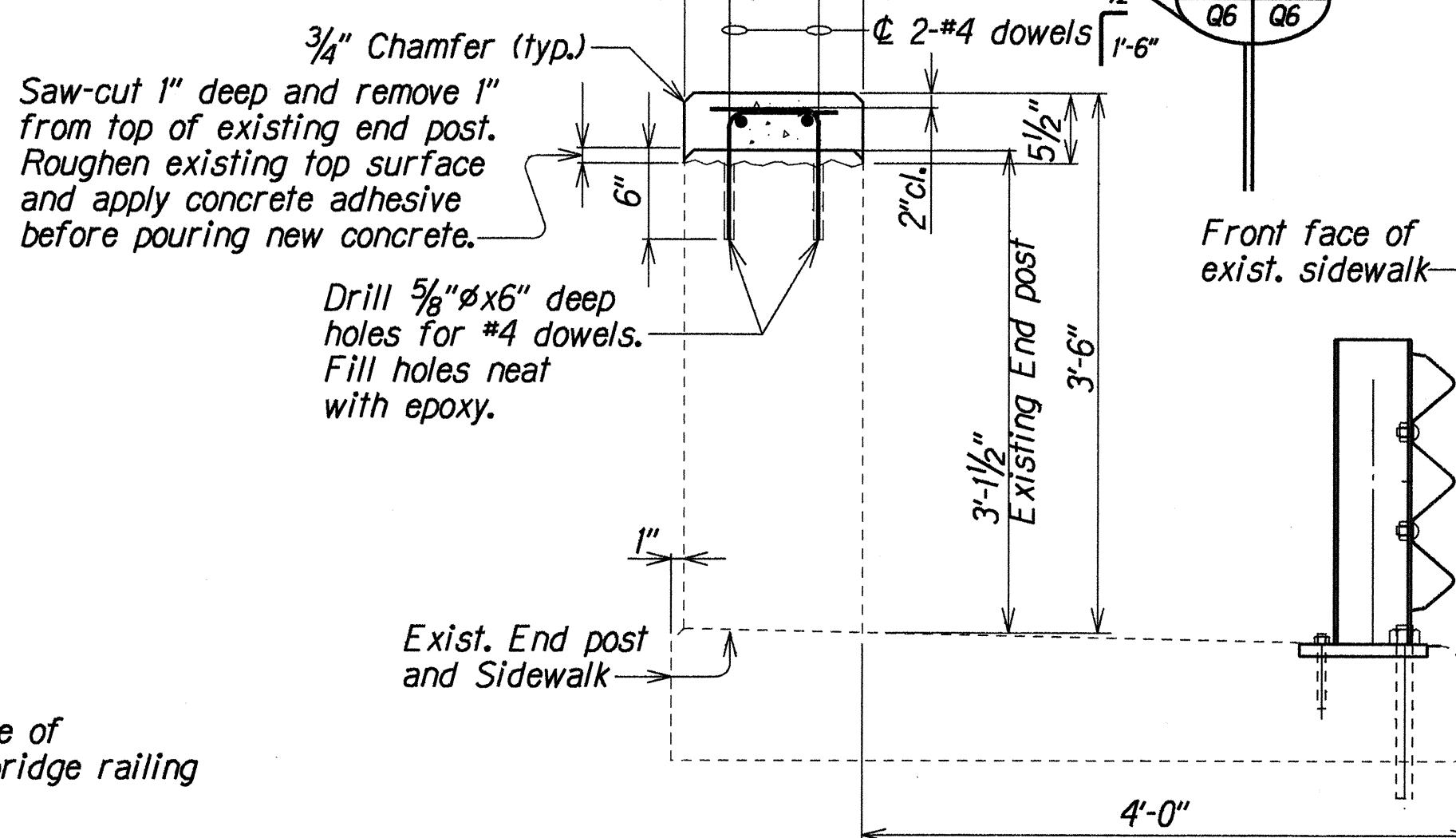
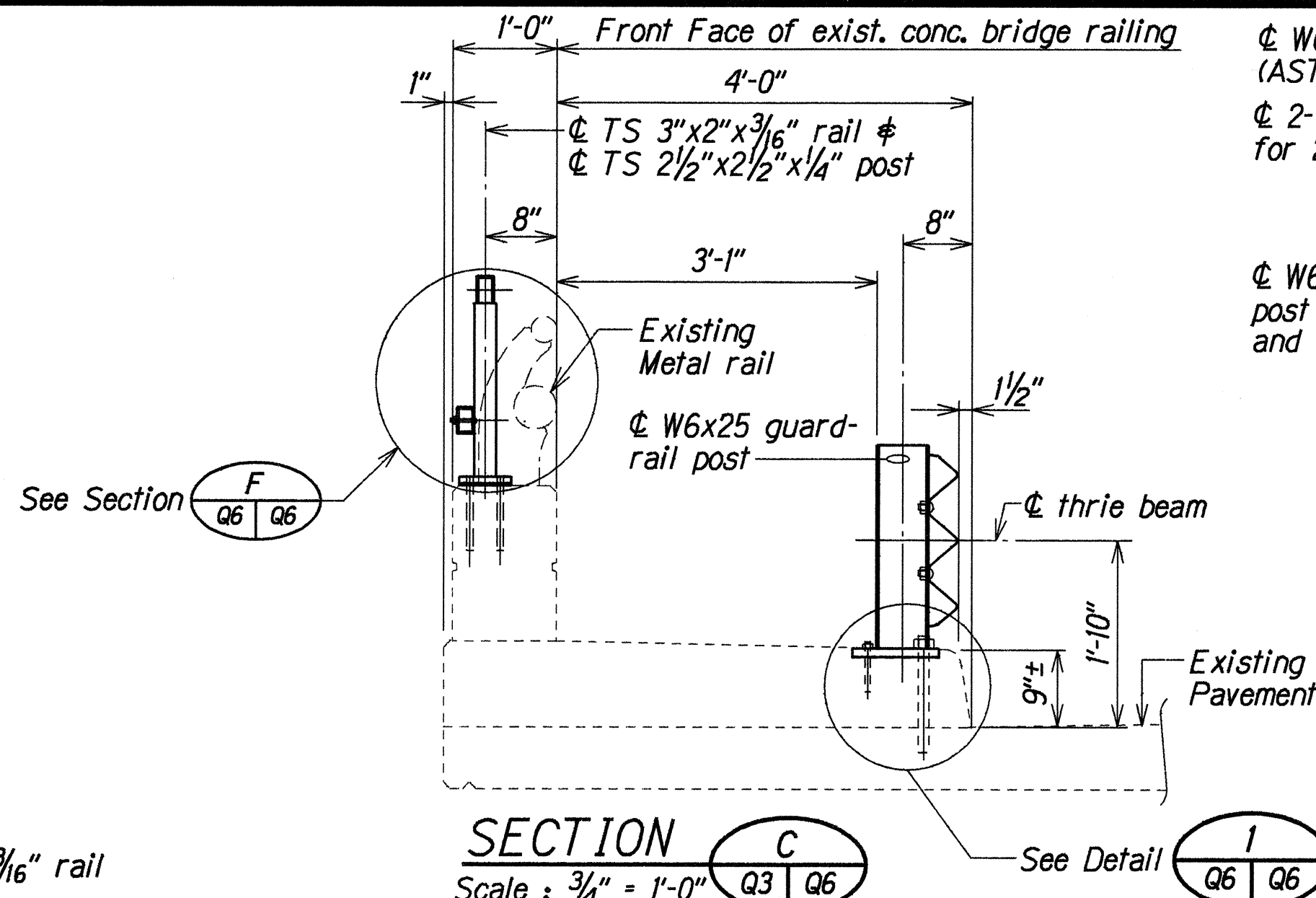
C.O. 34

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1999	35	44



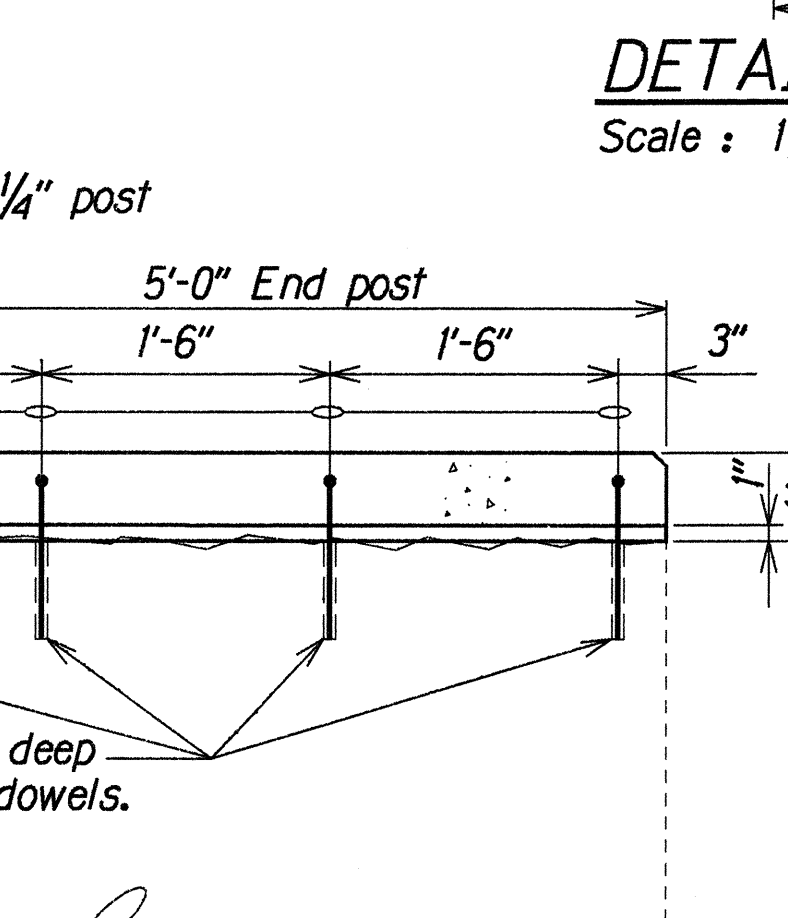
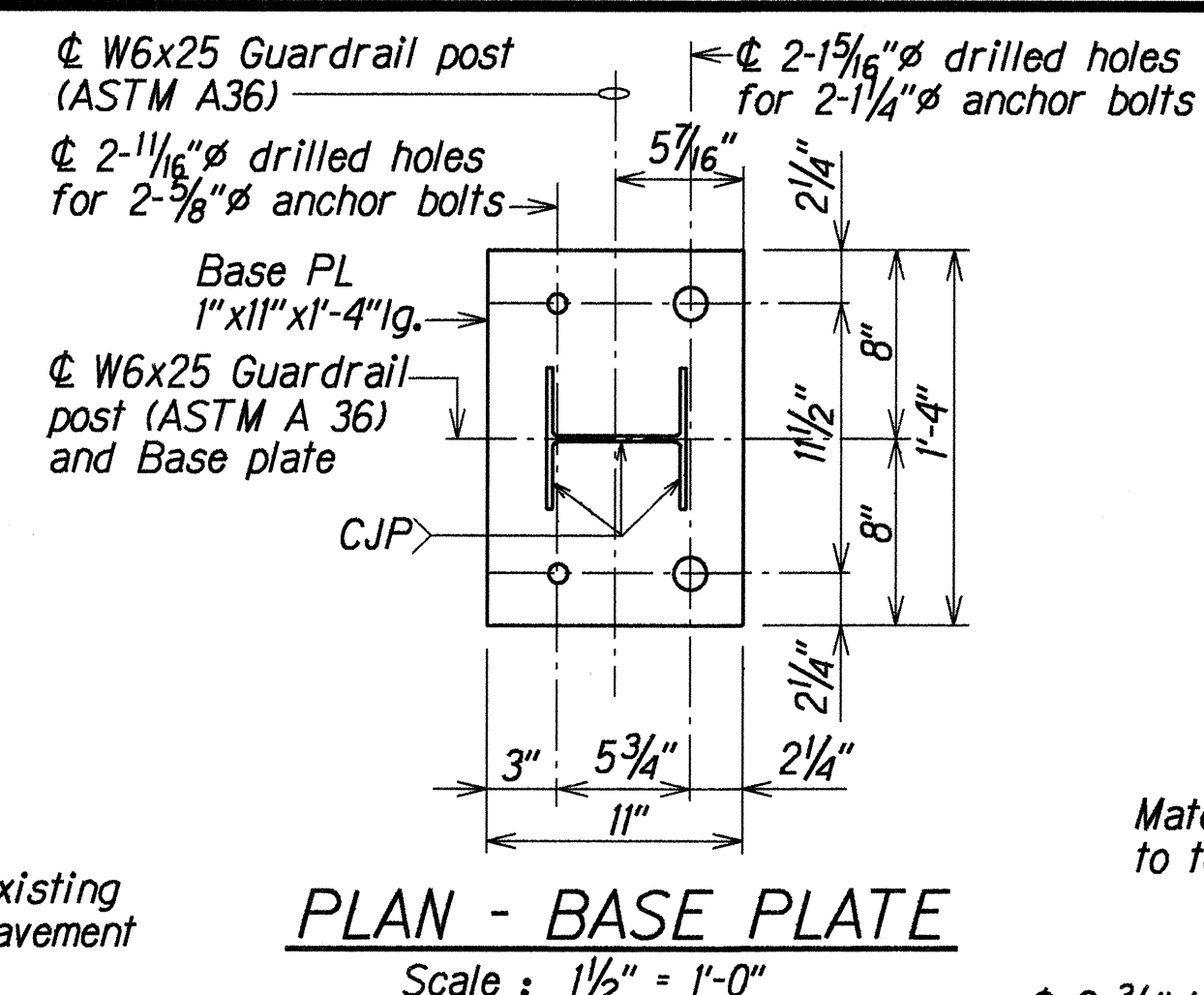
PEDESTRIAN METAL RAILING

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



TYPICAL TUBE SPLICE DETAIL

Scale: 3" = 1'-0"



DETAIL I

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

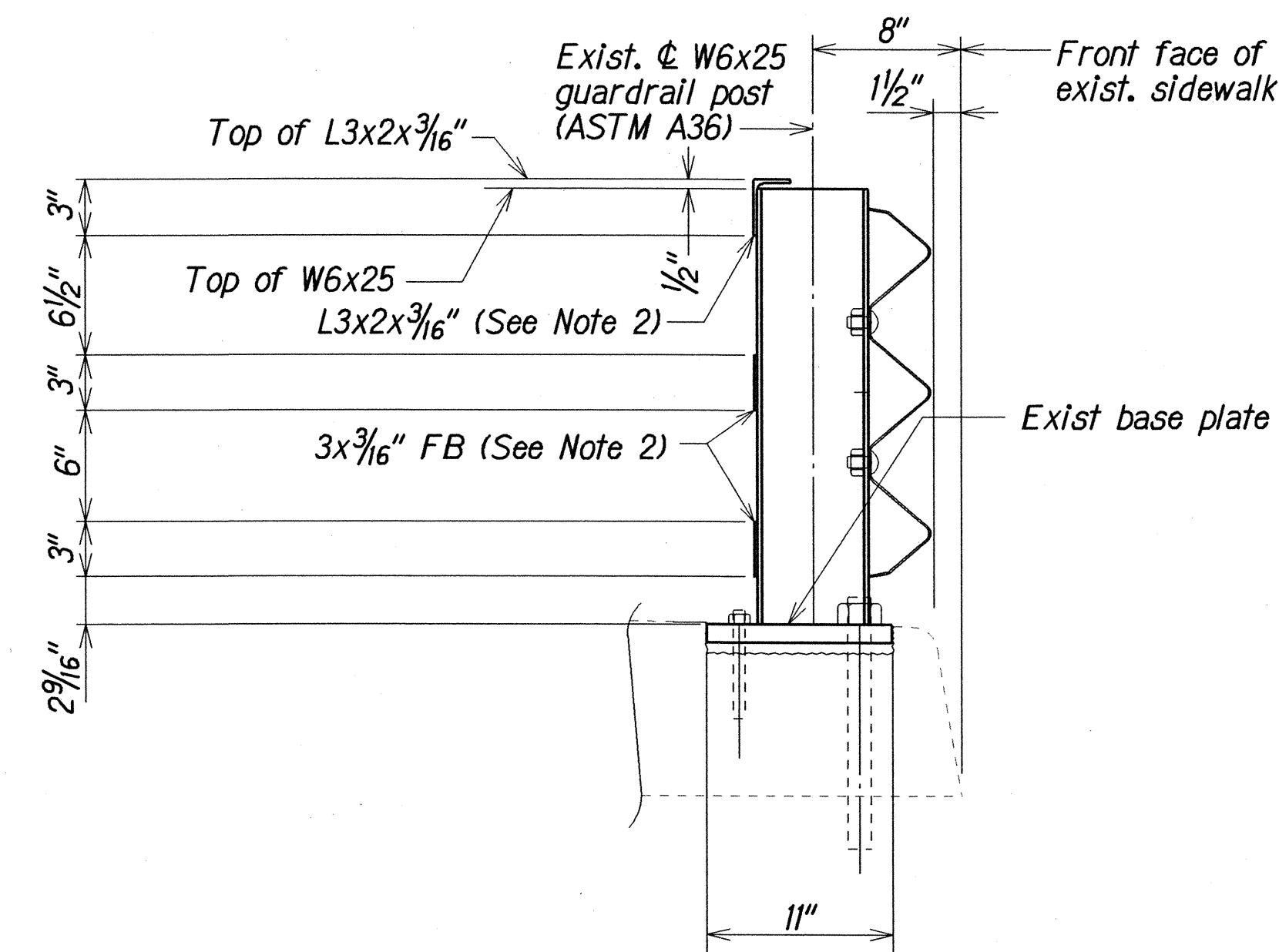
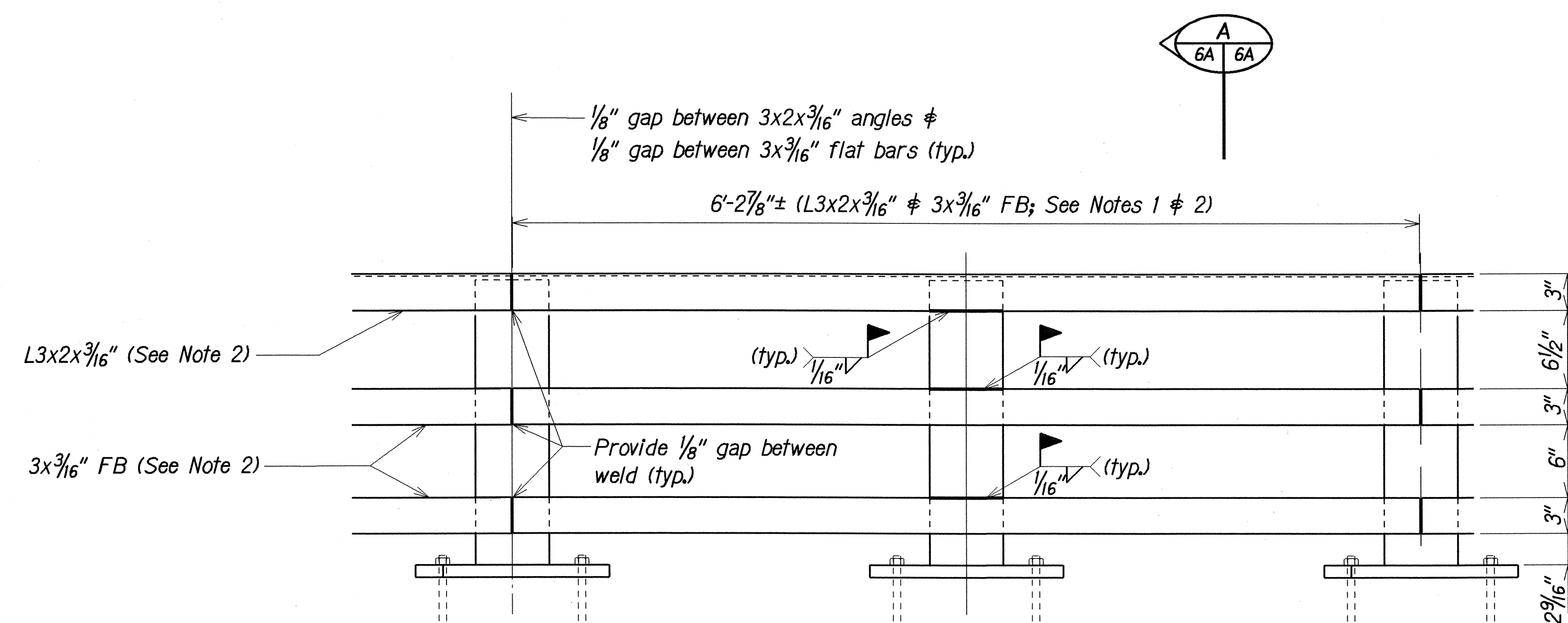
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDEWALK UPGRADE
PEDESTRIAN METAL RAILING
KAMEHAMEHA HIGHWAY
PEDESTRIAN ACCESSIBLE ROUTE IMPROVEMENTS
ACACIA ROAD TO HONOMANU STREET
Fed. Aid Project No. STP-099-1(20)

Scale: As Noted Date: Jan, 1999

SHEET No. Q6 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1993	C.O. 35 S-1	44



- NOTES:**
- The Contractor shall verify all grades and dimensions in the field before commencing with any work.
 - All exposed edges of L3x2x $\frac{3}{16}"$ and 3x $\frac{3}{16}"$ FB shall be planed to produce a neat and smooth finish before hot dip galvanization.
 - All notes pertaining to General Structure Notes on Sht. Q1 shall apply to work shown on this sheet.

SECTION

SECTION

GUARDRAIL APPURTENANCES DETAILS

Scale : 1 $\frac{1}{2}"$ = 1' - 0"

ORIGINAL PLAN	DATE
DESIGNED BY	XXX 1991
CHECKED BY	XXX 1991
NOTED BY	XXX 1991
QUANTITIES BY	XXX 1991
TRACED BY	XXX 1991
PLOTTED BY	XXX 1991

7/17/02

This C.O. supplementary sheet added.

DATE	REVISIONS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDEWALK UPGRADE

PEDESTRIAN METAL RAILING

PEDESTRIAN ACCESSIBLE ROUTE IMPROVEMENT
ACACIA STREET TO HOOMANII STREET
Fed Aid Project No. STP-099-1(20)

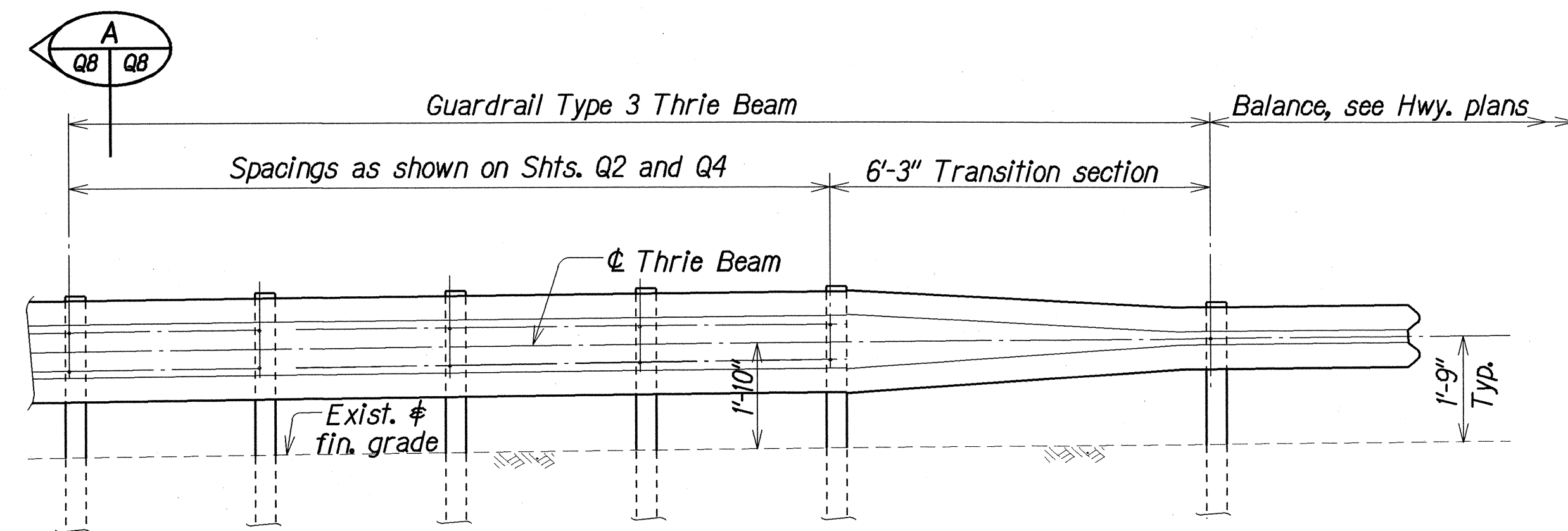
Scale: As Noted

Date: XXX, 199X

SHEET No. 6A OF 8 SHEETS

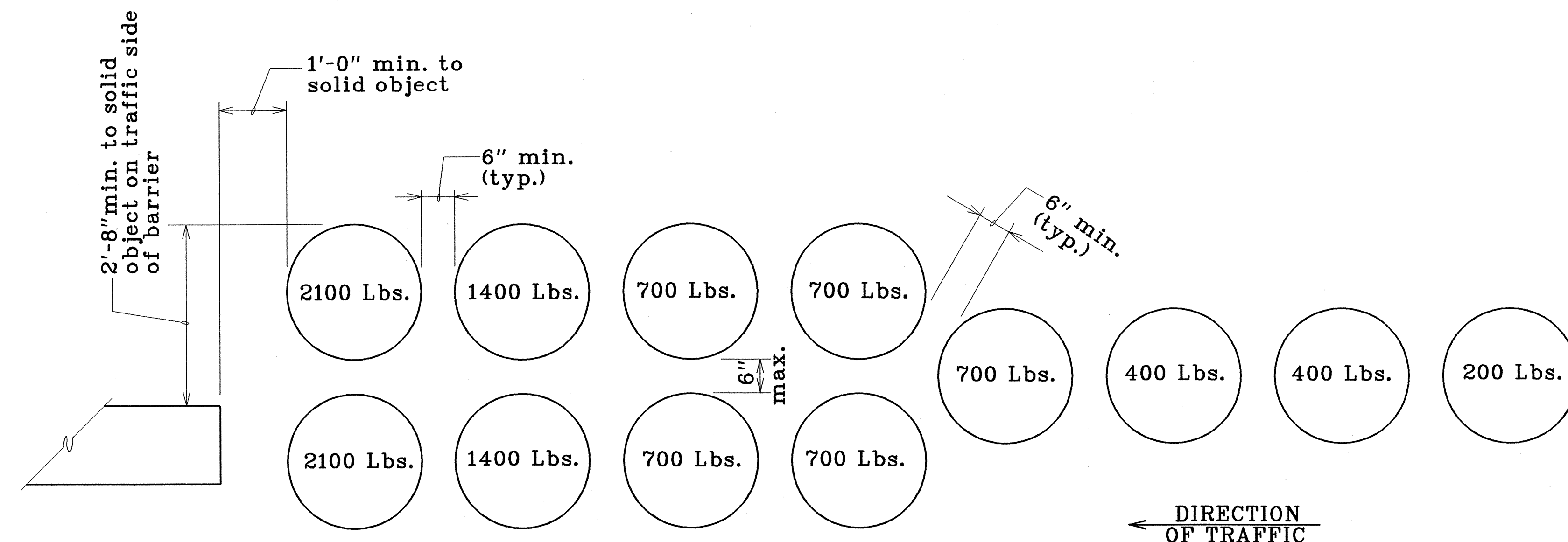
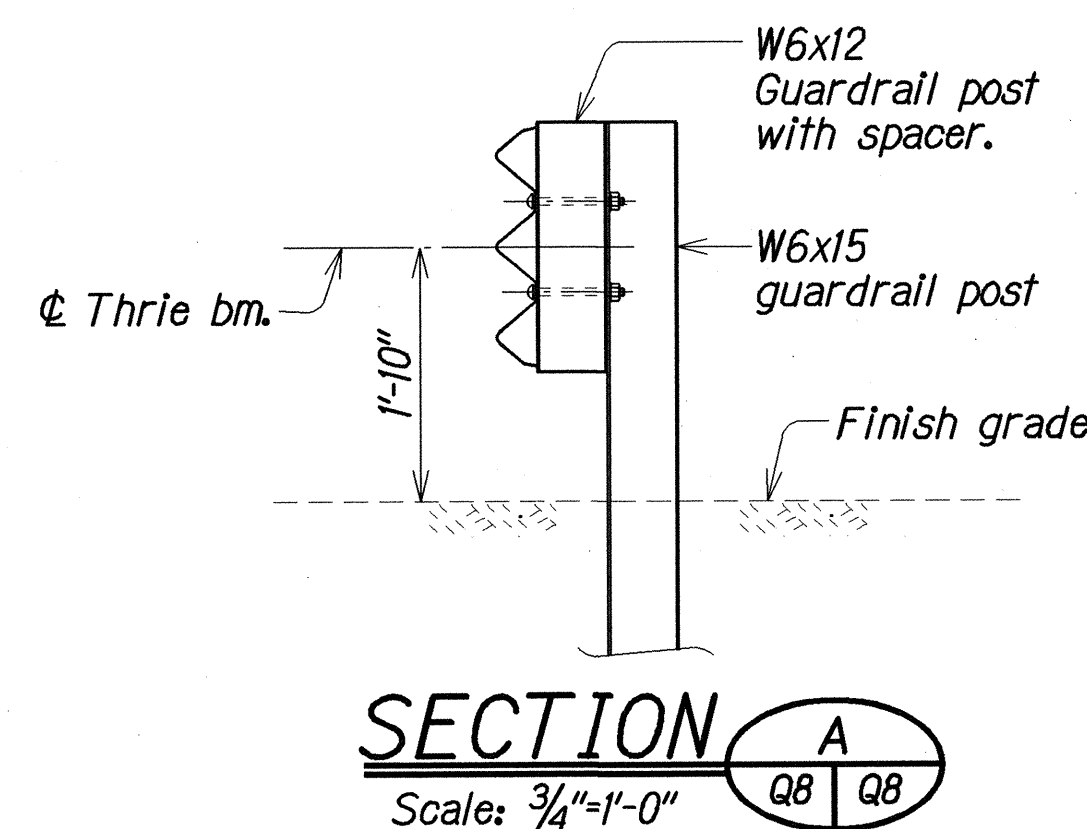
C.O. 35 S-1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(20)	1999	36	44



ELEVATION

TYPICAL TYPE 3 THRIE BEAM METAL GUARDRAIL UPGRADE
Scale: 1/2"=1'-0"



TRAFFIC IMPACT ATTENUATOR SAND BARRELS
N.T.S.

LEGEND FOR
AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDWALK UPGRADE

THRIE BEAM METAL GUARDRAIL DETAILS

KAMEHAMEHA HIGHWAY

PEDESTRIAN ACCESSIBLE ROUTE IMPROVEMENTS

ACADICIA ROAD TO HONOMANU STREET

Federal Aid Project No. STP-099-1(20)

Scale: As Noted

Date: Jan. 1999

DESIGNED BY	DATE
DRAWN BY	May 1998
CHECKED BY	May 1998
NOTED BY	May 1998
QUANTITIES BY	May 1998
REVISIONS	May 1998

