

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT VI	1999	58	111

METAL GUARDRAIL NOTES:

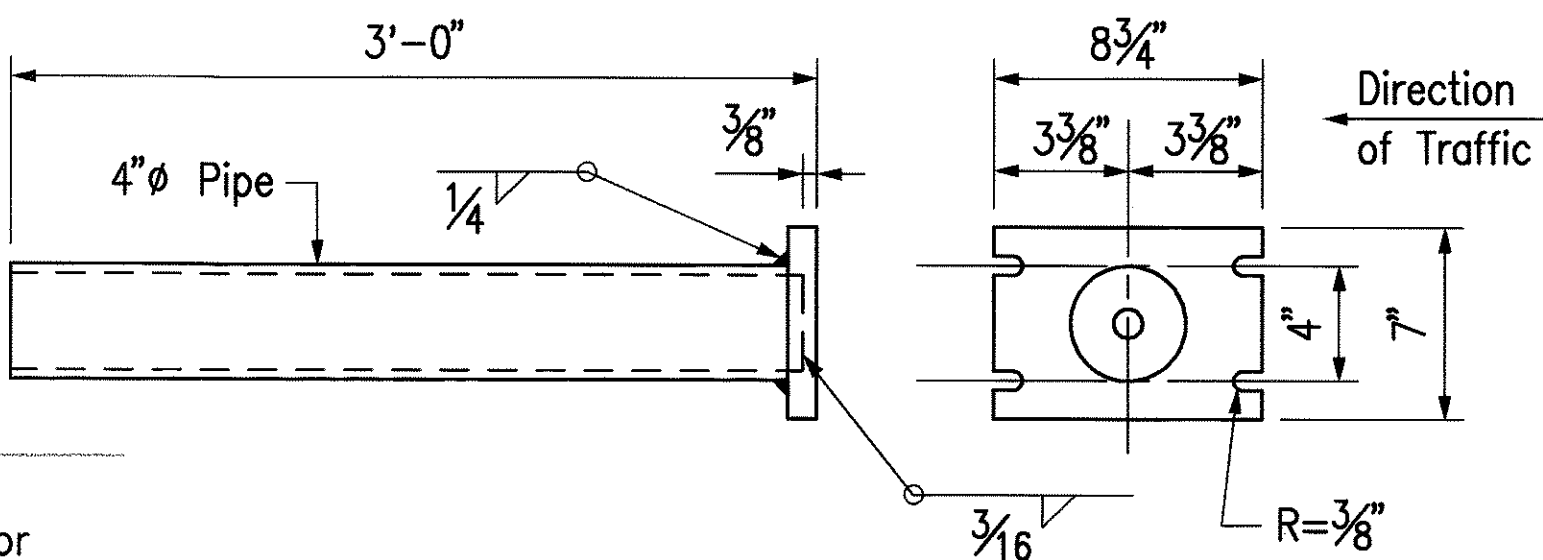
- The Contractor shall exercise caution when installing metal guardrail posts to prevent damage to existing drainage, communication and power facilities.
- Prior to installation of guardrail posts, the Contractor shall expose 45 LF± of the existing communication and power conduits, and provide 45 LF of plain concrete jacket for the existing conduits (18"W x 9"H).
- At guardrail posts locations within the existing concrete gutter, the Contractor shall saw cut and remove an 8" x 8" section. After installation of the guardrail posts, patch and compact the 8" x 8" cut sections with A.C. Mix IV.
- See Sheet 4C2 for Details of flare, anchor block, and guardrail crossing at existing communication and power conduits.
- See Sheets SP1, SP2 & SP3 for Metal Guardrail Details.
- See Sheet SP6 for Type "G" Flare Details.

EMERGENCY TELEPHONE NOTES:

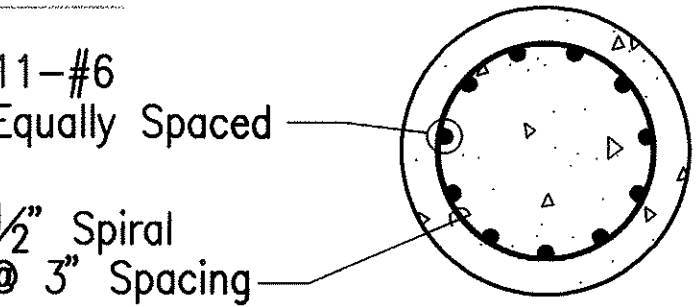
- The Contractor shall furnish and install 1-1" PVC Schedule 80 conduit (2'-0" minimum cover) with 2-2PR#22 conductors in accordance with the requirements of Special Provisions Section 964 - Remove and Reinstall Existing Systems Components.
- At the relocated emergency telephone location, the Contractor shall probe for existing communication and power conduits, and provide protection as necessary, prior to installation of 24"Ø concrete foundation.
- Payment for this work will be made under Pay Item 964.0100 - Remove and Reinstall Existing Systems Components. The work shall also include the removal and restoration of the existing concrete gutter, removal of the existing concrete foundation and base pole, and restoration of the existing graded slope.
- Drilled shaft concrete shall attain a compressive strength of 4500 psi in 28 days.
- Reinforcing steel shall meet the requirements of ASTM A615 Grade 60.

GRP NOTE:

- The Contractor shall probe for existing communication and power conduits, and provide protection as necessary, prior to installation of the cutoff walls.



POLE SLIP BASE PLATE DETAIL
Not to Scale



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

Existing emergency telephone call box unit. Adjust mounting as necessary to meet 2'-8" height dimension.

Reconstruct existing concrete gutter

Existing edge of shoulder

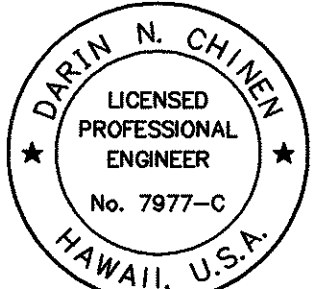
Sawcut and remove existing concrete gutter for 24"Ø Concrete Foundation

4"Ø Galvanized Steel Pole

Concrete Foundation

EMERGENCY TELEPHONE ASSEMBLY DETAIL

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



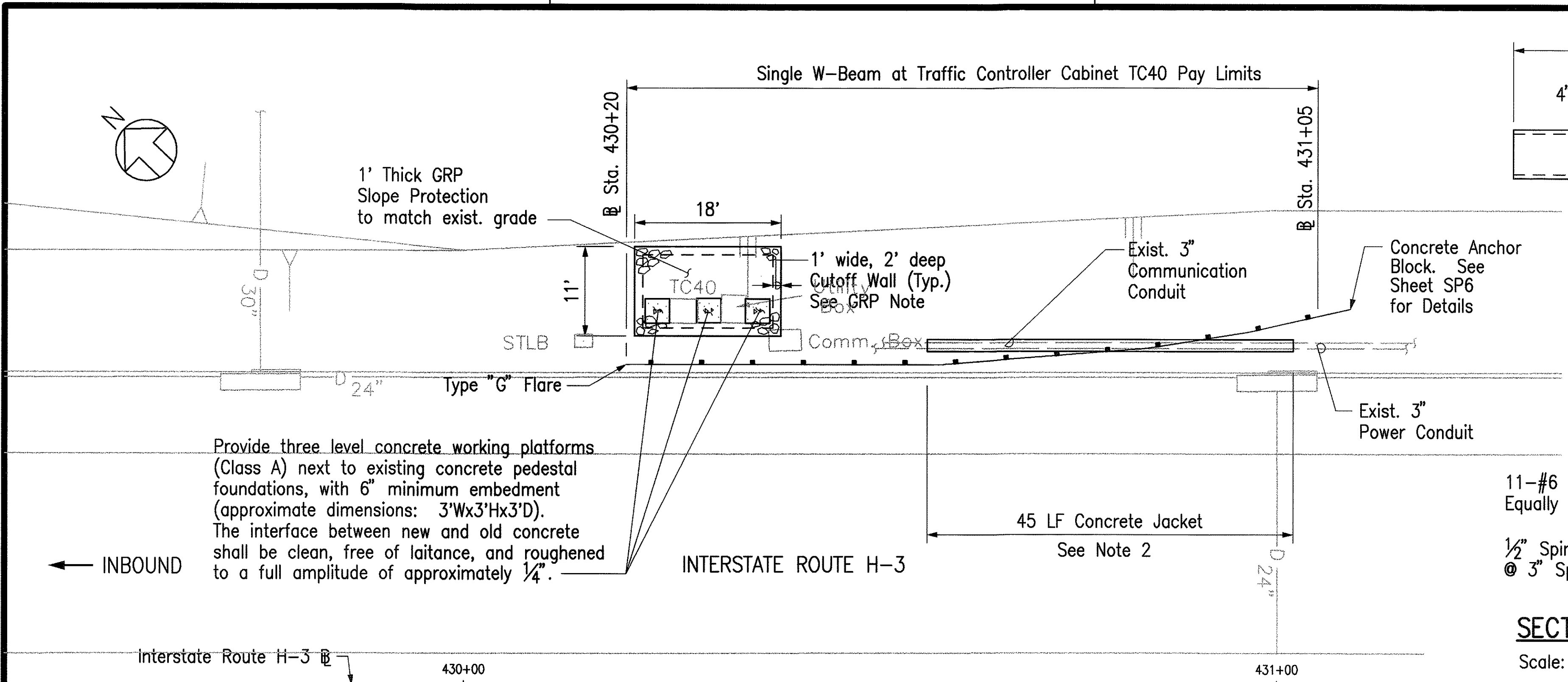
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Darrin N. Chinen

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**ADDITIONAL ROADSIDE GUARDRAIL
WINDWARD HIGHWAY
ROADWAY CONSTRUCTION PLAN**
H-3 FINISH (UNIT VI)
FAIP NO. I-H3-1(75), UNIT VI

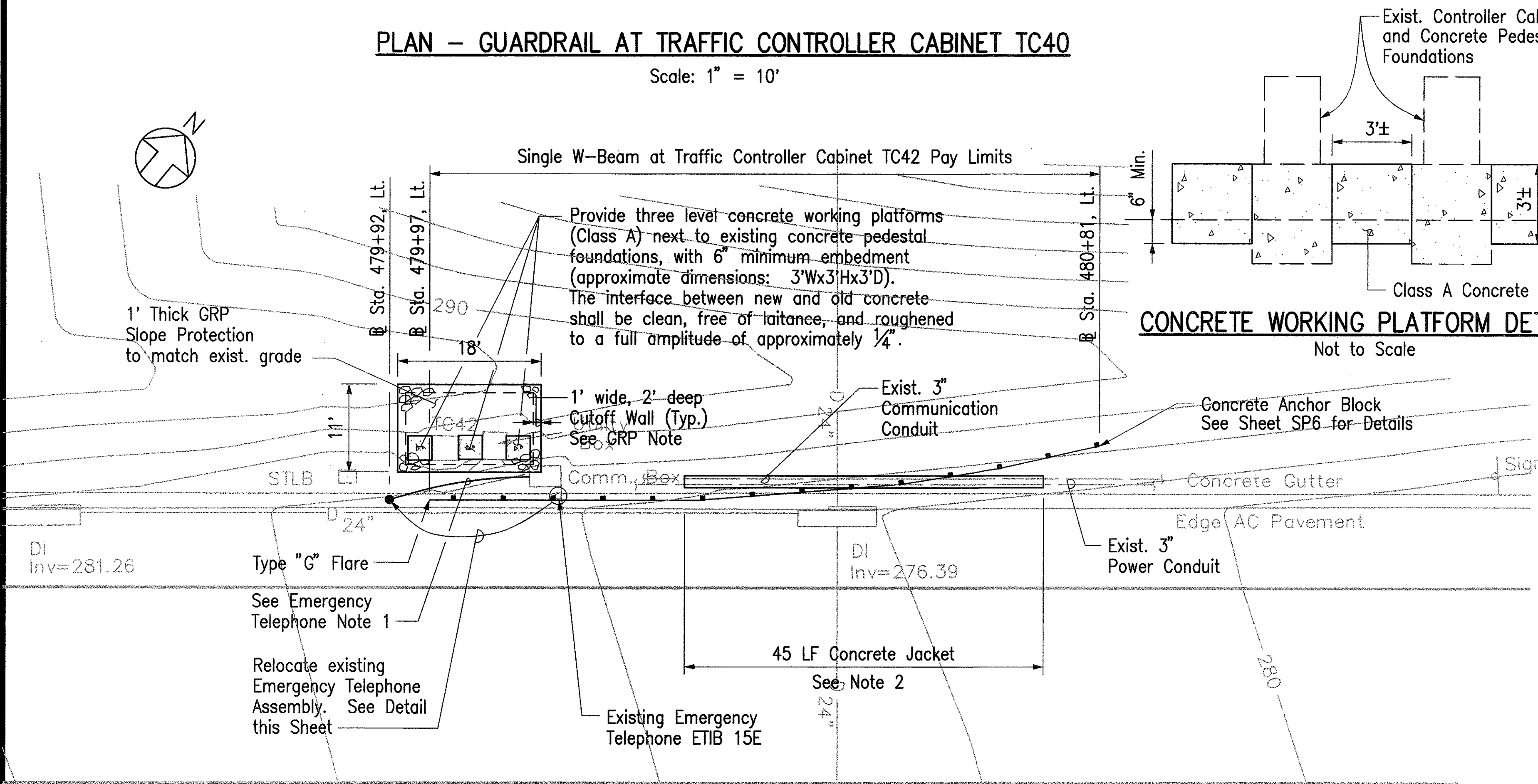
SCALE: 1" = 20' DATE: APRIL 1999

SHEET NO. 4C1 OF 2 SHEETS



PLAN - GUARDRAIL AT TRAFFIC CONTROLLER CABINET TC40

Scale: 1" = 10'



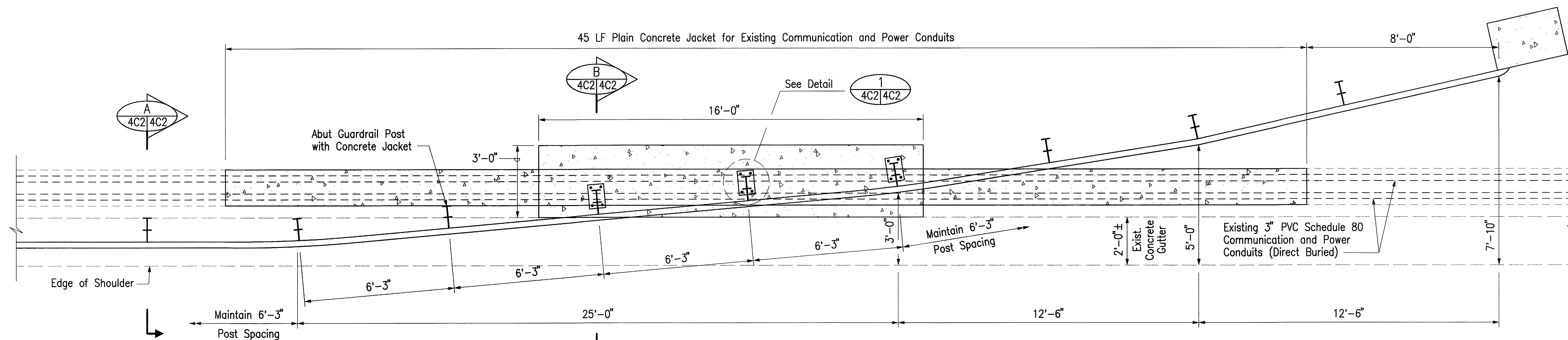
PLAN - GUARDRAIL AT TRAFFIC CONTROLLER CABINET TC42

Scale: 1" = 10'

ORIGINAL PLAN
DATE
DRAWN BY
CHECKED BY
NOTE BOOK
NO.

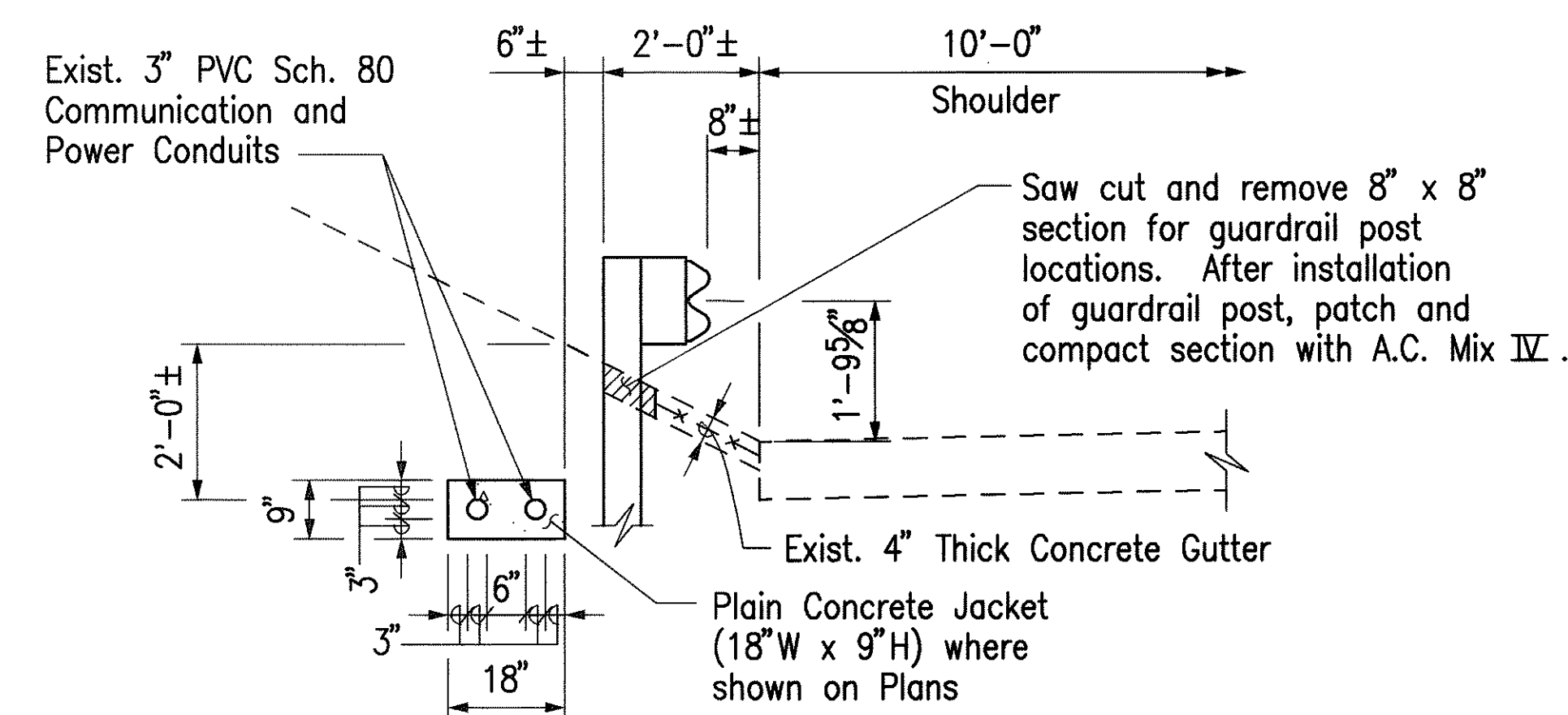
CAD by J. Mimura, 95-52

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT VI	1999	59	111



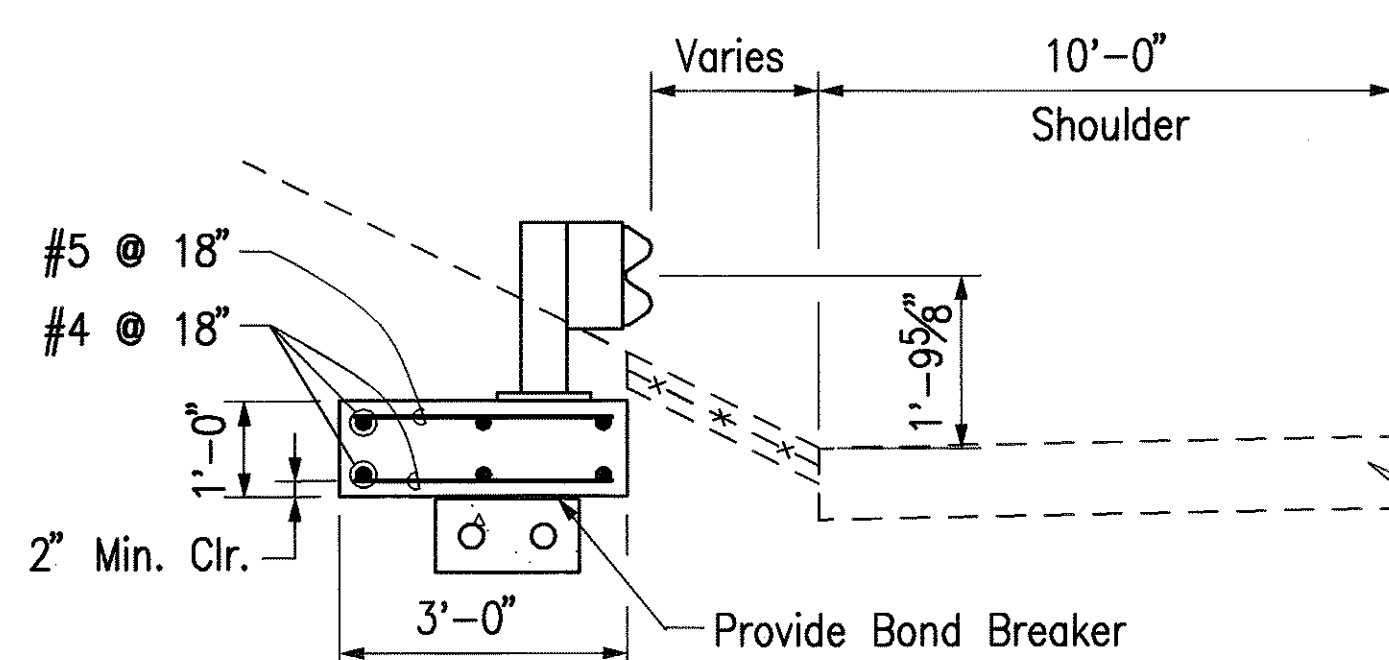
PLAN

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



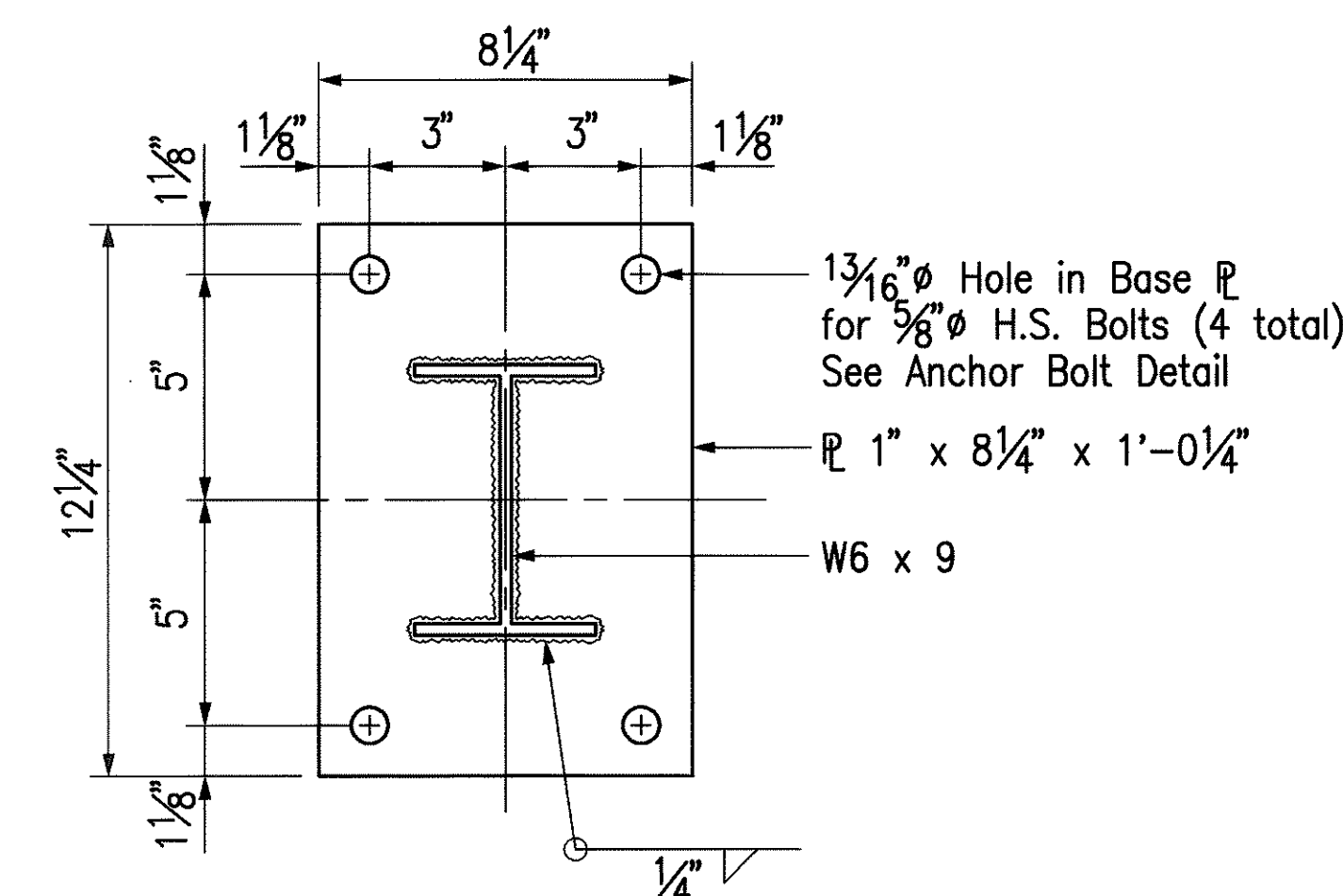
SECTION

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



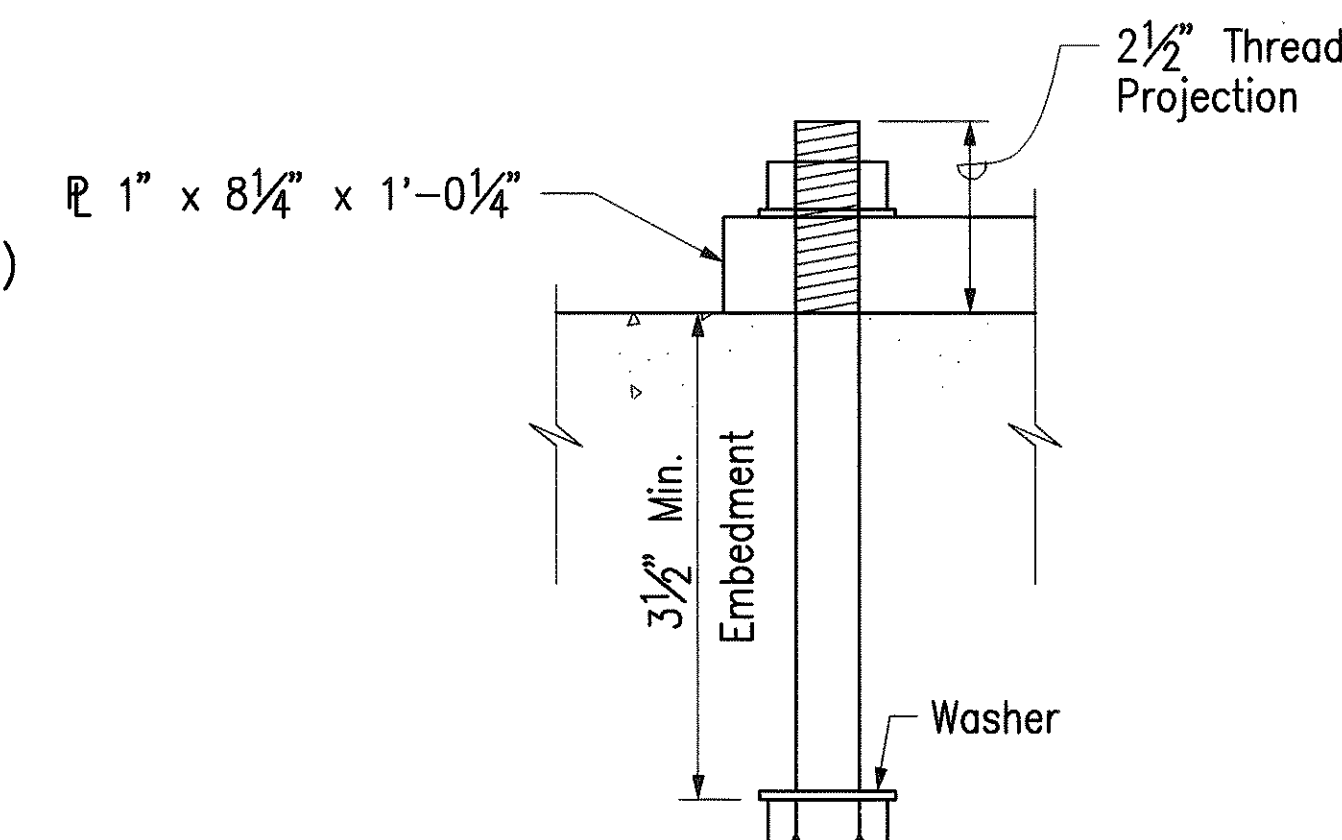
SECTION

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



DETAIL

Scale: 3" = 1'-0"



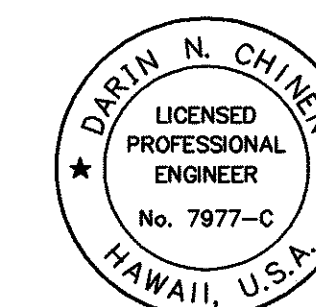
ANCHOR BOLT DETAIL

Not to Scale

NOTES:

1. For construction of the anchor bolts, the Contractor shall use a rigid template to hold the bolts in place.
2. Structural steel shall be ASTM A36, hot-dip galvanized.
3. Anchor bolts shall be high strength bolts conforming to the requirements of ASTM A325, with hex nuts and washers. The anchor bolts shall be snug tight only.
4. The concrete for the guardrail post footing shall have a 28-day compressive strength of 5000 psi. Reinforcing steel shall be ASTM A615, Grade 60.

METAL GUARDRAIL AT WINDWARD HIGHWAY
STA. 430+25±, LT. (TC40) AND STA. 480+00±, LT. (TC42)



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Wm. N. Quinn

8-9-99	Revised Guardrail Layout
Date	Revision

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

ADDITIONAL ROADSIDE GUARDRAIL

WINDWARD HIGHWAY

ROADWAY CONSTRUCTION DETAILS

H-3 FINISH (UNIT VI)

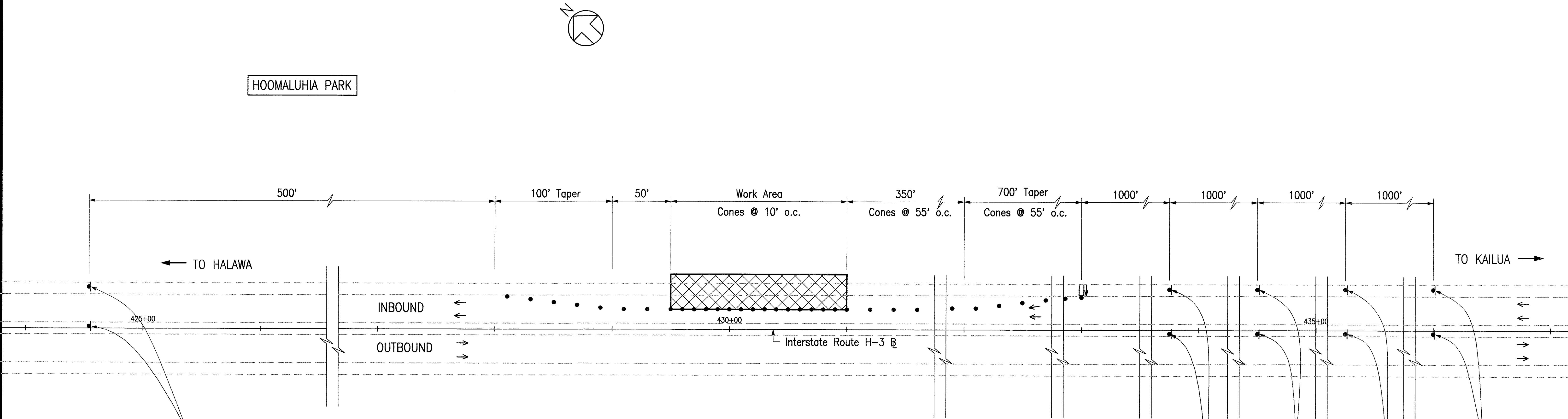
FAIP NO. I-H3-1(75), UNIT VI

SCALE: AS SHOWN

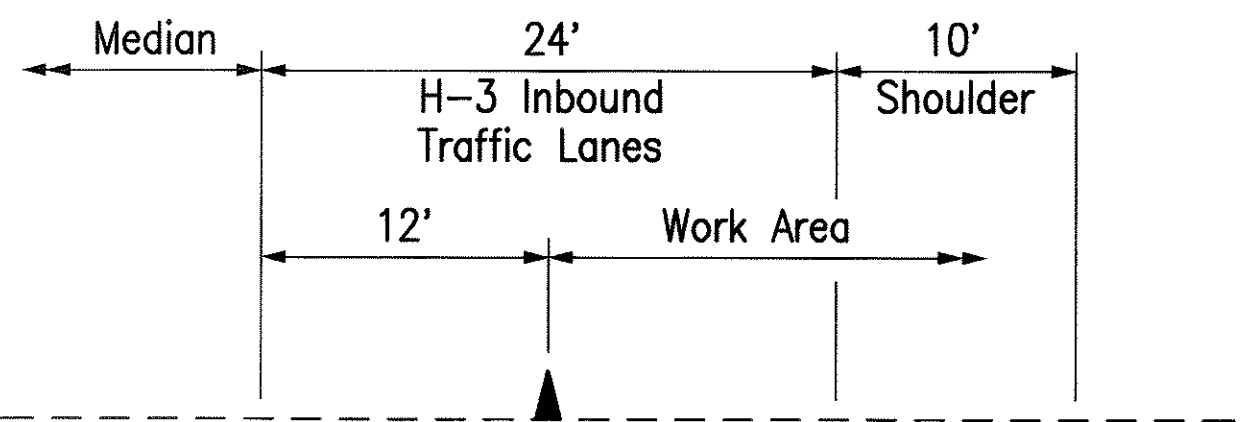
DATE: APRIL 1999

SHEET NO. 4C2 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT VI	1999	ADD. 59S-1	111



END
ROAD WORK
CG20-2
48" x 24"

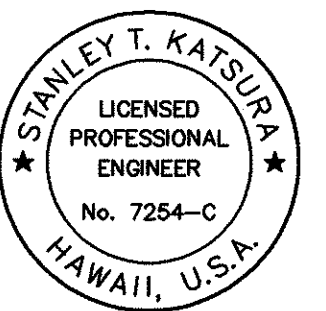


TYPICAL SECTION
Scale: 1/8" = 1'-0"

- LEGEND:
- Work Area
 - Traffic Cone or Delineator
 - Flashing Arrow Board
 - Traffic Control Sign
 - Traffic Flow

Diagram showing various traffic control signs and their dimensions:

- CW4-2(R)-A 48" x 48"
- CW20-5(2000)(R) 48" x 48"
- CW20-1A(3000) 48" x 48"
- ROAD WORK AHEAD CW20-1Ad 48" x 48"
- RIGHT LANE CLOSED 2000 FT
- ROAD WORK 3000 FT
- CW13-1(45)-A 24" x 24"
- CW13-1(45)-A 24" x 24"



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Stanley T. Katsura

Date	Revision
8-9-99	Added Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ADDITIONAL ROADSIDE GUARDRAIL
WINDWARD HIGHWAY
TRAFFIC CONTROL PLAN**

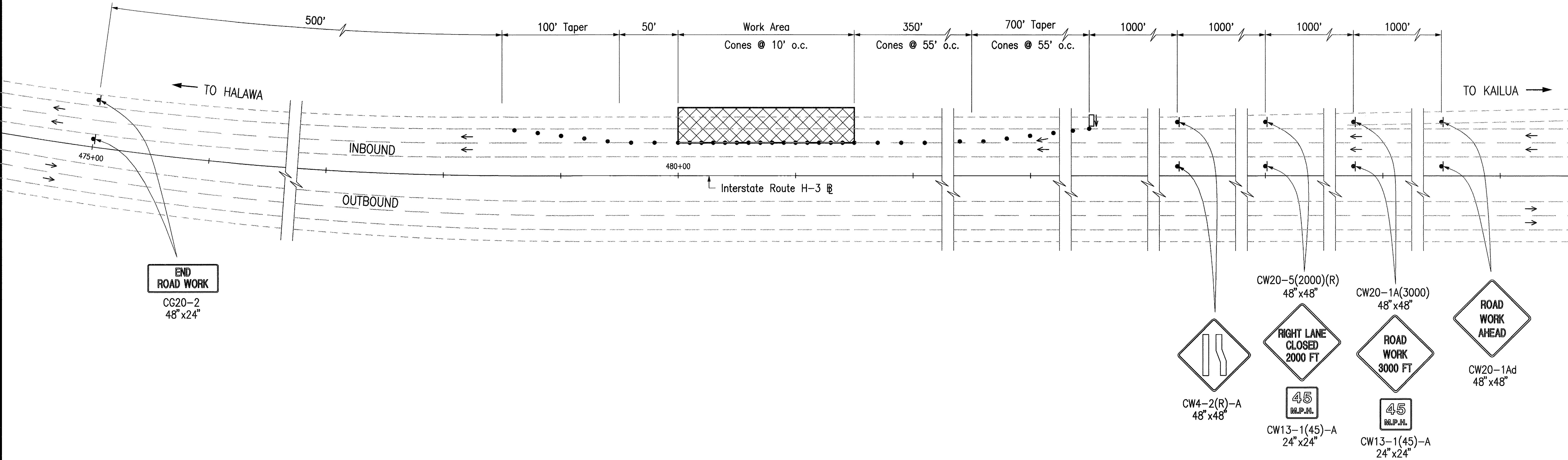
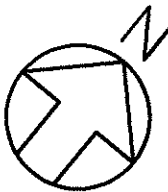
H-3 FINISH (UNIT VI)
FAIP NO. I-H3-1(75), UNIT VI

SCALE: 1" = 40' DATE: APRIL 1999
SHEET NO. 4C2A OF 2 SHEETS

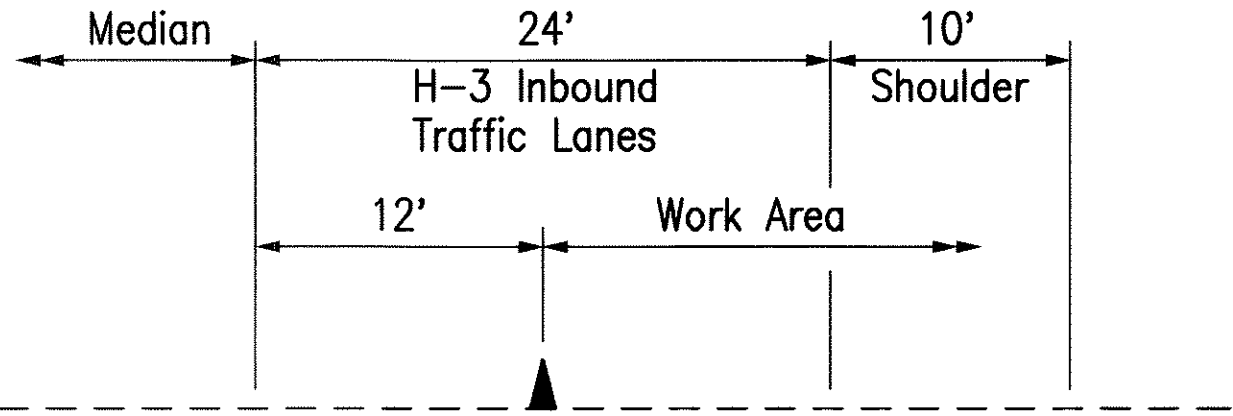
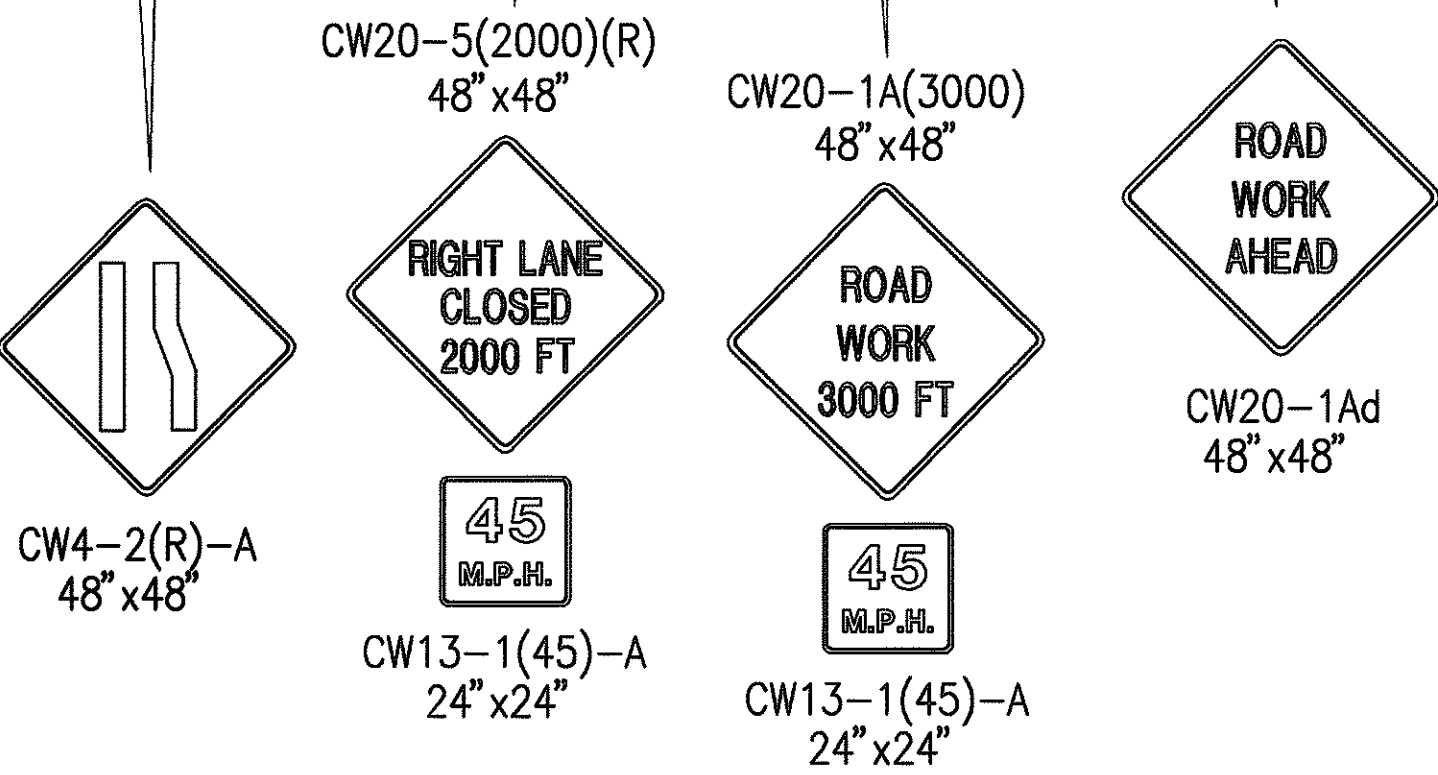
ORIGINAL PLAN
DATE
DRAWN BY
CHECKED BY
NOTE BOOK
QUANTITIES BY
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT VI	1999	ADD. 59S-2	111

HOOMALUHIA PARK



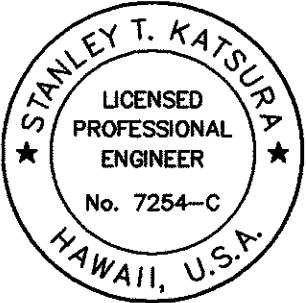
END
ROAD WORK
CG20-2
48" x 24"



TYPICAL SECTION
Scale: 1/8" = 1'-0"

LEGEND:

- Work Area
- Traffic Cone or Delineator
- Flashing Arrow Board
- Traffic Control Sign
- Traffic Flow



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Stanley T. Katsura

8-9-99	Added Sheet
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION ADDITIONAL ROADSIDE GUARDRAIL WINDWARD HIGHWAY TRAFFIC CONTROL PLAN H-3 FINISH (UNIT VI) FAIP NO. I-H3-1(75), UNIT VI SCALE: 1" = 40' DATE: APRIL 1999 SHEET NO. 4C2B OF 2 SHEETS	

ADD. 59S-2

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	CHECKED BY	
No.		

CAD by J. Mimura, 85-52