FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(184)	1984	8	114

Ramp WL-I Sta. 5+69 to 6+25 Lt.
Construct Concrete Barrier, Type 4E

Ramp WL-I Sta. 6+25 to 7+35.39 Lt.
Construct Concrete Barrier, Type 4F

For Type 4E and Type 4F Concrete Barrier Details, See Sht. No. 9

Install 6' Chain Link Fence End Post. Notch Concrete Barrier Footing to Construct Fence Footing.

Remove Existing Chain Link Fence

10' Transition

OLD WAIALAE ROAD

RAMP (T)

Meter No. 3858409H09
Service No. 722-11461

Saw Cut Existing Pavement, Curb & Gutter and Sidewalk

Ramp WL-I Sta. 5+90± to 8+18± Rt.
Install Metal Guard Rail, Type 3 Single and Type 3 Thrie Beam with Steel Post

Note:
Ramp WL-I Sta. 6+50 Lt.
Existing Highway Light Mounted on New Barrier Wall

Construct Concrete Barrier End Post For Details, See Sht. No. 9

Meter No. 2180193807
Service No. 722-11411

WL-I-B1

Thrie Beam-44 L.F.

Remove Existing Guard Rail

Adjust Water Manholes

WL-I-1

Thrie Beam-44 L.F.

Connect to Conc. End Post with Terminal Connector

Connect to Existing Conc. End Post with Type "M5-6A" Connection See Sht. No. 10 for Details

Ramp WL-I P.C. Sta. 8+65.57

Ramp WL-I P.T. Sta. 9+75.47

Ramp WL-I Sta. 7+35.39 to 10+05± Lt.
Install Metal Guard Rail, Type 3 Single and Type 3 Thrie Beam with Steel Post

RAMP (WL-I)

312° 34' 00"

Install BCT

End Railing

Connect to Conc. End Post with Special End Shoe Connection. For Details, See Sht. No. 25

INBOUND LANES

OUTBOUND LANES

Ramp WL-I P.C. Sta. 5+87.67

Ramp WL-I P.T. Sta. 4+29.53

Connect to Existing Conc. Wall with Terminal Connector For Details, See Sht. No. 34

Begin Paving

258° 22' 49"

Ramp WL-I Sta. 4+65± Lt.
Relocate WM. Boxes and Valves (See Note this Sheet)

234° 06' 00"

Connect to Conc. End Post with Type "X" Connection, See Sht. No. 10 for Details

RAMP (WL-O)

296° 42' 45"

Install Type "6" Flare

Install Type "C" Flare

Remove Existing Guard Rail

Provide 10' Curb Ramp Down

Install Median End

Provide 6' Curb Ramp Down

Remove Existing A.C. Curb

Ramp WL-O Sta. 4+78.02

Install 6' Chain Link Fence

For Concrete End Post and 6' Chain Link Fence Details, See Sht. No. 91

Construct Conc. End Post. For Details, See Sht. No. 91

Install 6' Chain Link Fence

Delete
Gore Area at Old Waialae Rd. & Ramp WL-O
Remove Existing Curb, Curb & Gutter and Conc. Island.
Cave Hatched Area with 2½" Asphalt Concrete Pavement Mix No. II, 8" Aggregate Base Course and 6" Aggregate Subbase

Construct Concrete Barrier Type 4F

3'-6' Varies

14'

Top of Existing Pavement

S.E. as required

℄ (Grade Control)

New Metal Guard Rail with Steel Post

Remove Existing Metal Guard Rail

Existing Curb and Gutter to remain

Remove Existing Metal Guard Rail

Varies

Remove Existing Concrete Curb

Asphalt Concrete Pavement, Mix No. I

Remove Existing A.C. Pavement as required. (Existing pavement thickness 4")

TYPICAL SECTION RAMP WL-I

Scale: 1¼"=1'-0"

Ramp WL-O Sta. 6+32± to 8+42± Rt.
Install Metal Guard Rail, Type 3 Single and Type 3 Thrie Beam with Steel Post.

Ramp WL-O Sta. 4+70± to 7+57± Lt.
Install Metal Guard Rail, Type 3 Single with Steel Post

Ramp WL-O Sta. 4+65± Lt.
Relocate Existing Type III WM Box and Meter, and Type B Meter Box and Valve. Meter No. 21801935. Service No. 722-115112. (Work to be done by Contractor).

Ramp WL-O Sta. 8+40± to 8+76± Rt.
Construct New End Block W/Chain Link Fence. For Details, See Sht. No. 94

Ramp WL-O Sta. 8+78± to 11+20± Rt.
Modify Bridge Railings and Repair Wall Expansion Joint. For Details, See Sht. No. 94

CURVE DATA

	WL-I-1	WL-I-B1
Δ	54° 11' 11"	54° 11' 11"
R	150.00'	174.23'
T	76.74'	89.13'
L	141.86'	164.78'

APPROVED:

DATE 4-4-83

for CHIEF, PLANNING & ENGINEERING, BWS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

PLAN
RAMP WL-I & RAMP WL-O
INTERSTATE ROUTE H-1
SAFETY IMPROVEMENTS
KALO LANE TO AINAKOA AVE.
F.A.I. PROJECT NO. IR-HI-1(184)

SCALE: 1" = 20' Date: March, 1983

SHEET No. OF SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H1-1(184)	1984	8	114

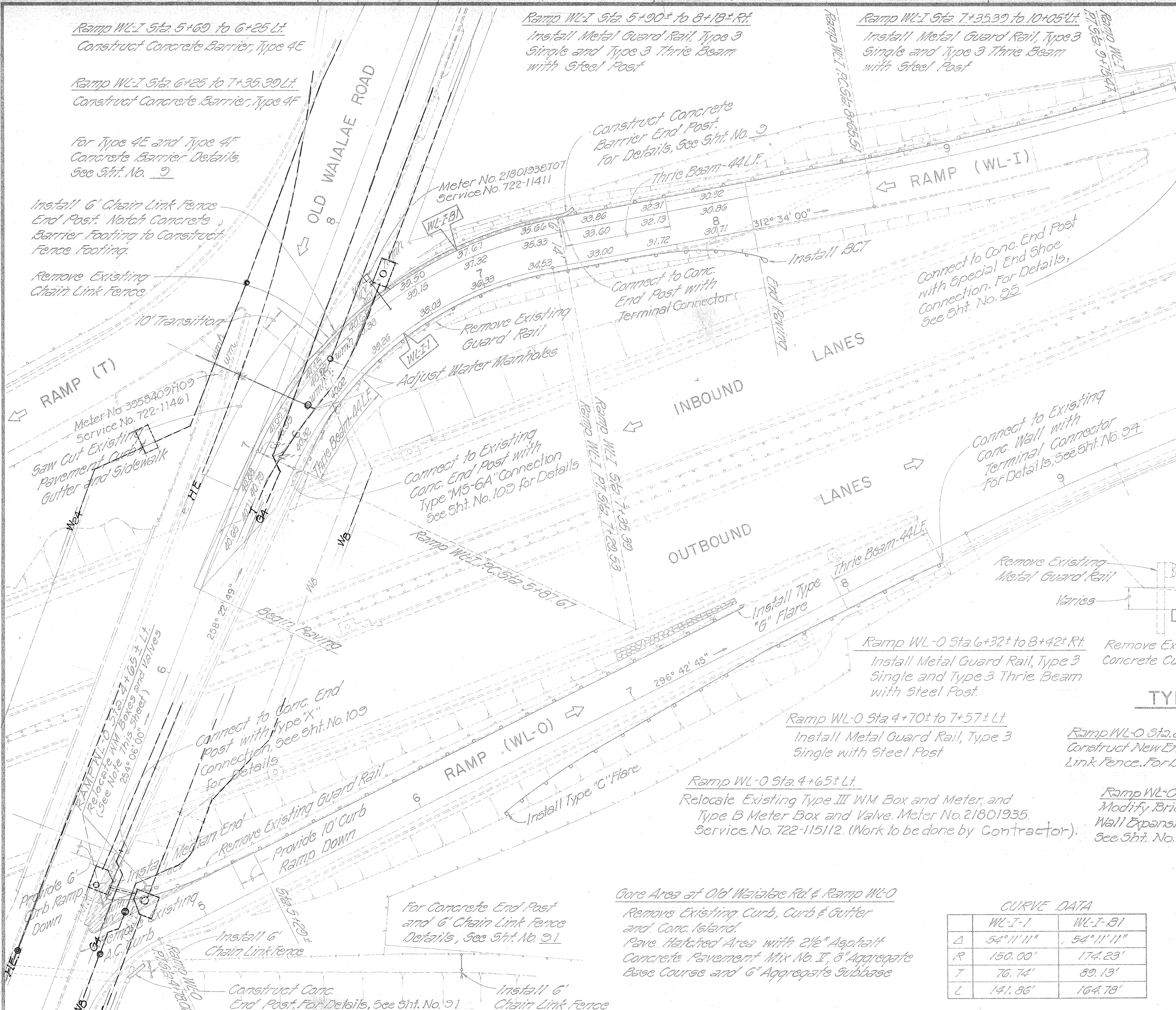
Ramp WL-I Sta. 5+69 to 6+25 Lt.
Construct Concrete Barrier, Type 4E

Ramp WL-I Sta. 6+25 to 7+35.39 Lt.
Construct Concrete Barrier, Type 4F

For Type 4E and Type 4F Concrete Barrier Details, See Sht. No. 9

Ramp WL-I Sta. 5+90± to 8+18± Rt.
Install Metal Guard Rail, Type 3 Single and Type 3 Thrie Beam with Steel Post

Ramp WL-I Sta. 7+35.39 to 10+05± Lt.
Install Metal Guard Rail, Type 3 Single and Type 3 Thrie Beam with Steel Post



Construct Conc. End Post. For Details, See Sht. No. 91

Install 6' Chain Link Fence

For Concrete End Post and 6' Chain Link Fence Details, See Sht. No. 91

Gore Area at Old Waialae Rd. & Ramp WL-O
Remove Existing Curb, Curb & Gutter and Conc. Island.
Pave Hatched Area with 2½" Asphalt Concrete Pavement Mix No. V, 8" Aggregate Base Course and 6" Aggregate Subbase

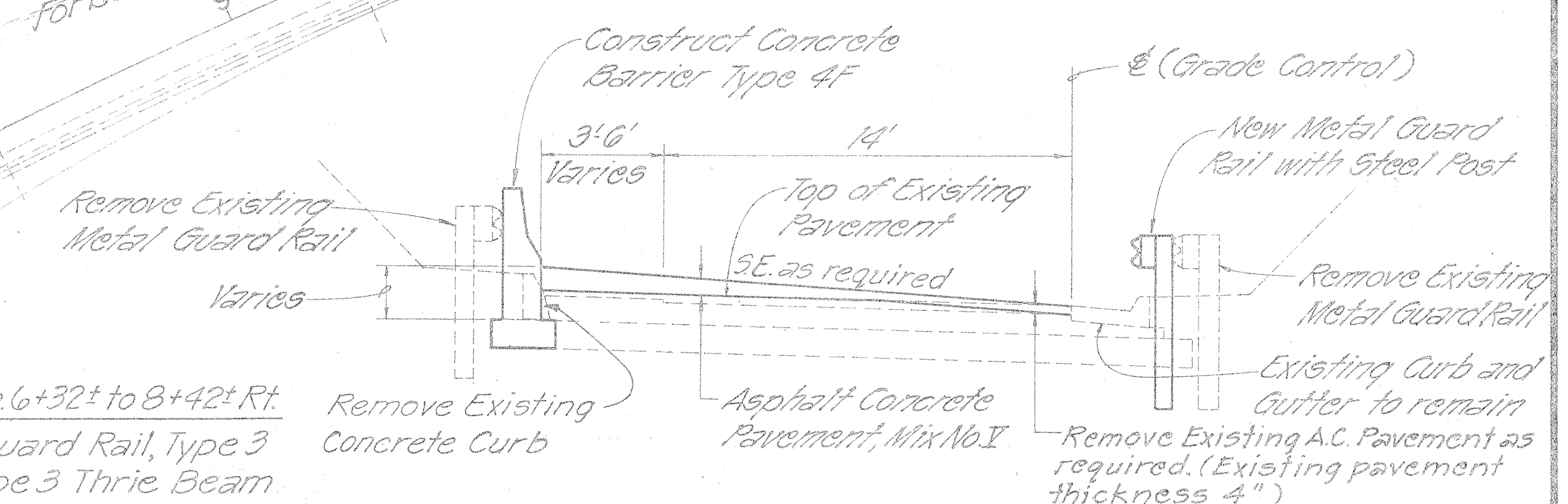
Ramp WL-O Sta. 6+32± to 8+42± Rt.
Install Metal Guard Rail, Type 3 Single and Type 3 Thrie Beam with Steel Post.

Ramp WL-O Sta. 4+70± to 7+57± Lt.
Install Metal Guard Rail, Type 3 Single with Steel Post

Ramp WL-O Sta. 4+65± Lt.
Relocate Existing Type III WM Box and Meter, and Type B Meter Box and Valve. Meter No. 21801935. Service No. 722-115112. (Work to be done by Contractor).

Ramp WL-O Sta. 8+40± to 8+76± Rt.
Construct New End Block w/Chain Link Fence. For Details, See Sht. No. 94

Ramp WL-O Sta. 8+78± to 11+20± Rt.
Modify Bridge Railings and Repair Wall Expansion Joint. For Details, See Sht. No. 94



TYPICAL SECTION RAMP WL-I

Scale: ¼" = 1'-0"

CURVE DATA

	WL-I-1	WL-I-B1
Δ	54°11'11"	54°11'11"
R	150.00'	174.23'
T	76.74'	89.13'
L	141.86'	164.78'

APPROVED: DATE 4-4-83

R. Nagato
for CHIEF, PLANNING & ENGINEERING, BWS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

PLAN
RAMP WL-I & RAMP WL-O
INTERSTATE ROUTE H-1
SAFETY IMPROVEMENTS
KALO LANE TO AINAKOA AVE.
F.A.I. PROJECT NO. IR-H1-1(184)

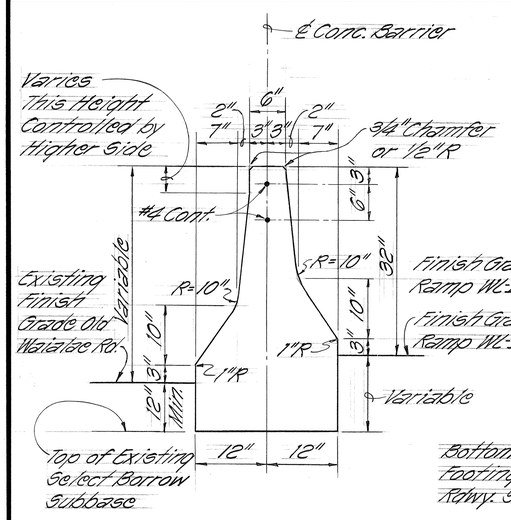
SCALE: 1" = 20' Date: March, 1983

SHEET NO. OF SHEETS

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

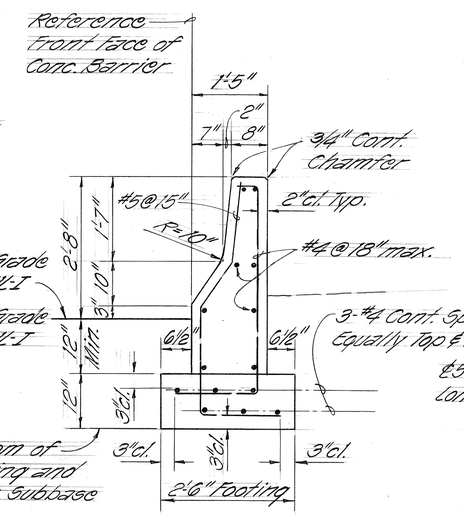
WORKSHEET (SAVE) 8

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1R-HI-1(184)	1984	9	114



TYPE 4E CONCRETE BARRIER

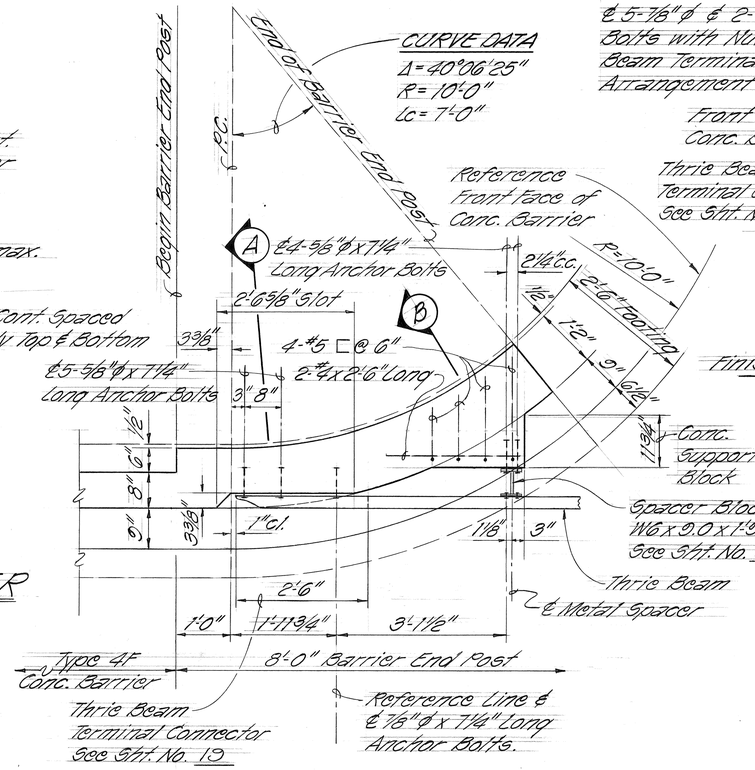
Scale: 1"=1'-0"



TYPE 4F CONCRETE BARRIER

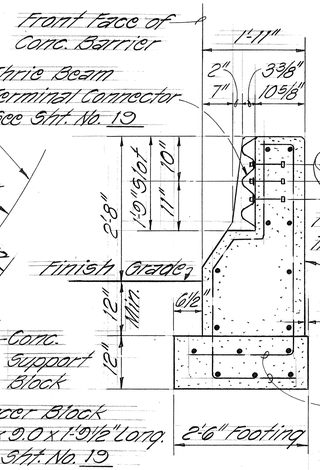
NOTES: Scale: 3/4"=1'-0"

1. All anchor bolts shall be high strength bolts conforming to the requirements of ASTM A 325.
2. Anchor bolt length given from under bolt head.
3. All anchor bolts, nuts and washers, shall be galvanized.



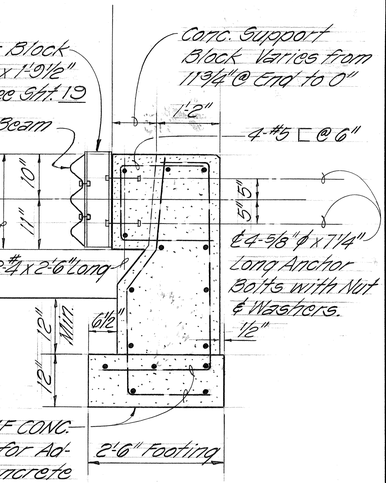
CONCRETE BARRIER END POST PLAN

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



SECTION A

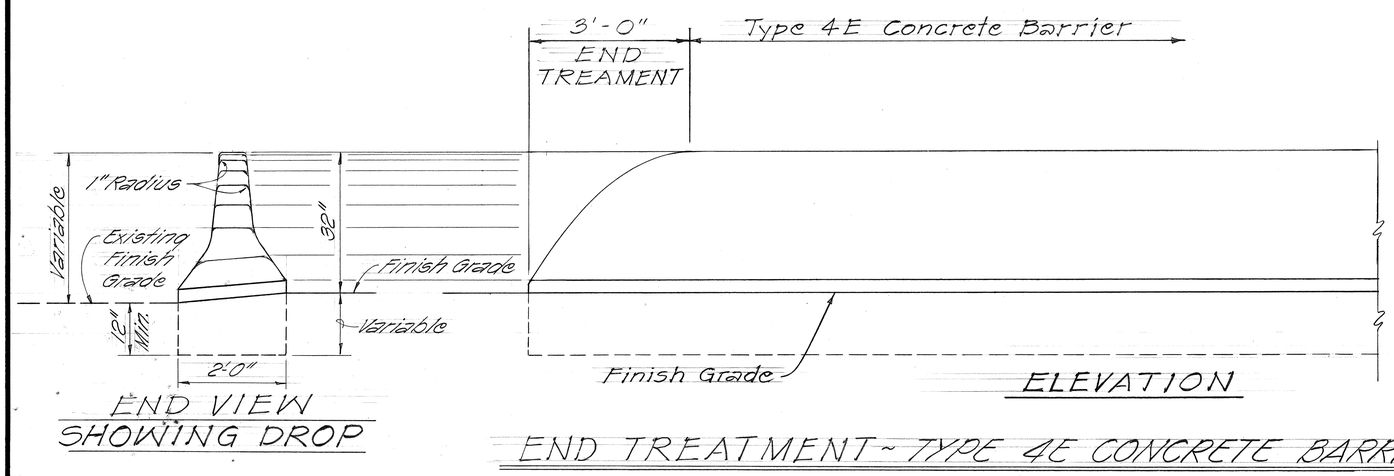
Scale: 3/4"=1'-0"



SECTION B

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

NOTE: For Expansion and Construction Joint Details see "Standard Details Guard Rail, Type 4 (Rigid Barrier)".



END TREATMENT ~ TYPE 4E CONCRETE BARRIER

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

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

GUARD RAIL, TYPE 4E & 4F
RAMP WL-1 & RAMP WL-0
INTERSTATE ROUTE H-1
SAFETY IMPROVEMENTS
KALO LANE TO AINAKOA AVE.
F.A.I. PROJECT No. 1R-HI-1(184)

Scale: As Shown Sept. 1983

SHEET No. OF SHEETS