

TYPICAL MEDIAN CLOSING DETAIL

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

ESTIMATED EARTHWORK QUANTITIES

Estimated Excavation 7,800 C.Y.
Estimated Embankment 140 C.Y.
Area to be Graded 59,500 C.Y.

- All grading will be done within the State right-of-way.
- Quantities shown are for permit purposes only & shall not be used for bidding. Contractor is responsible for determination of the exact quantities.
- The estimated quantities do not include a.c. pavement, base course, subbase course & top soil.

CONSTRUCTION NOTES-

- All construction work in the City right-of-way shall be done in accordance with the Standard Specifications for Public Works Construction, Sept. 1986, and Standard Details for Public Works Construction, Sept. 1984, of the Departments of Public Works, City & County of Honolulu and the Counties of Kauai, Maui & Hawaii.
- The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicate on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing utility lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
- The Contractor shall notify the Department of Public Works, Division of Engineering, Construction Branch, seven (7) days prior to commencement of Construction.

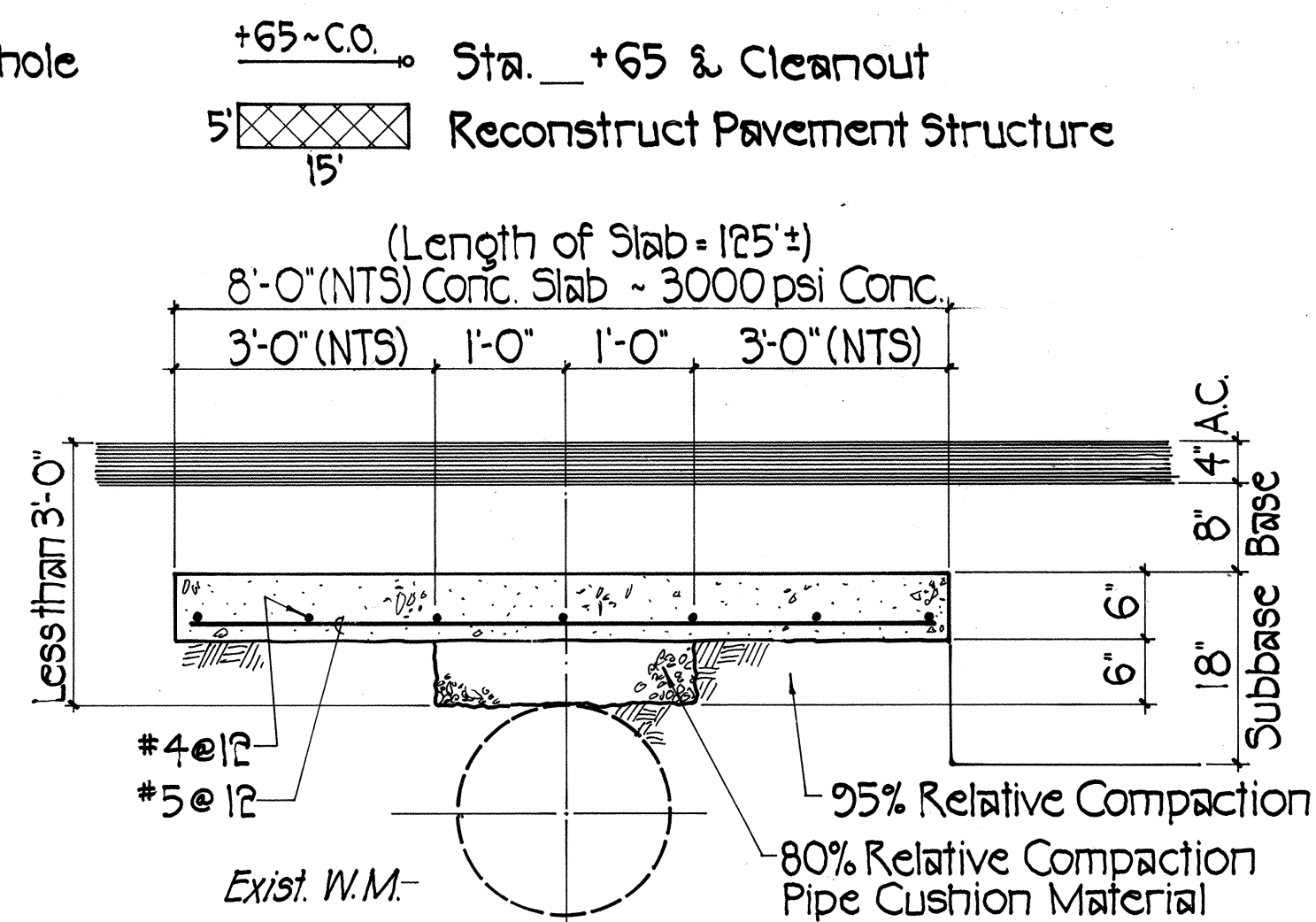
~ LEGEND ~

EXISTING ~

- SDMH Catch Basin & Storm Drain Manhole
- SMH Sewer Manhole
- WV Water Valve
- NMH Water Manhole
- GMH Gas Manhole
- PP Power Pole
- SL Street Light
- TS Traffic Box
- TS Traffic Signal
- D8 Drain Line & Size
- S8 Sewer Line & Size
- W6 Water Line & Size
- G4 Gas Line & Size
- E Electric Line
- T Telephone Line
- SLC Street Light Conduit
- TS Traffic Signal Conduit

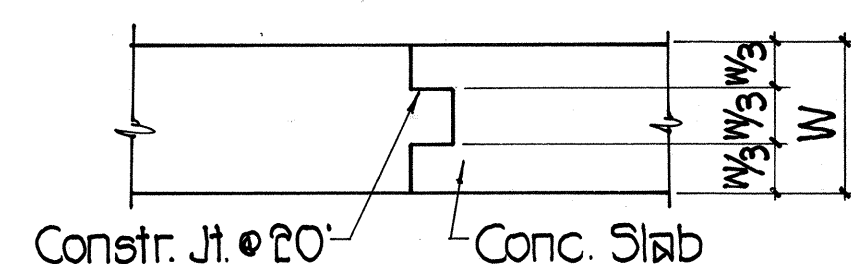
NEW ~

- TS-0 Traffic Signal Conduit & Pull Box
- D24 Drain Line & Size
- G4 Gas Line & Size



TYPICAL SECTION - CONC. SLAB OVER EXIST. W.M.

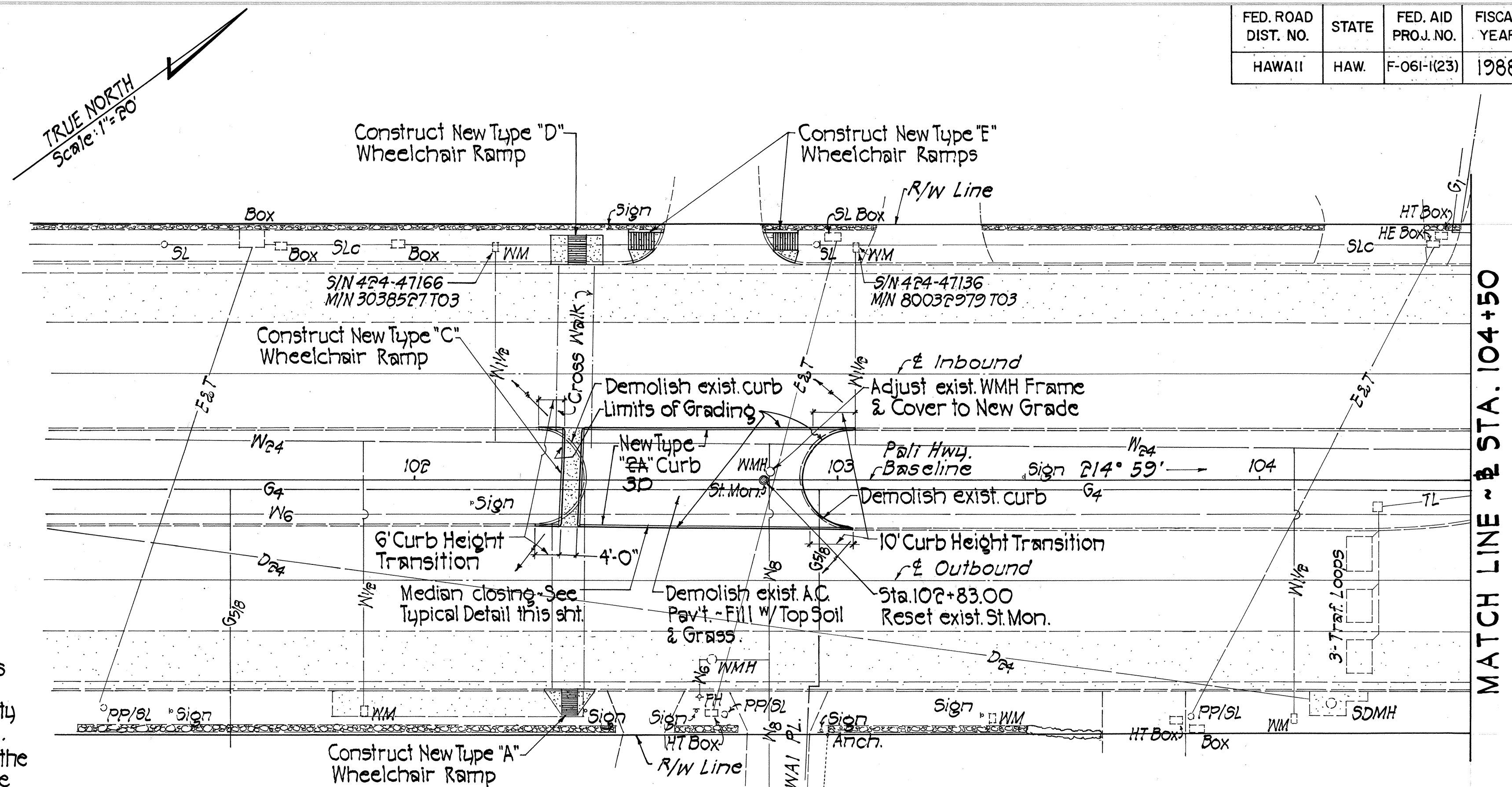
Scale: 3/4" = 1'-0"



TYPICAL CONSTR. JOINT

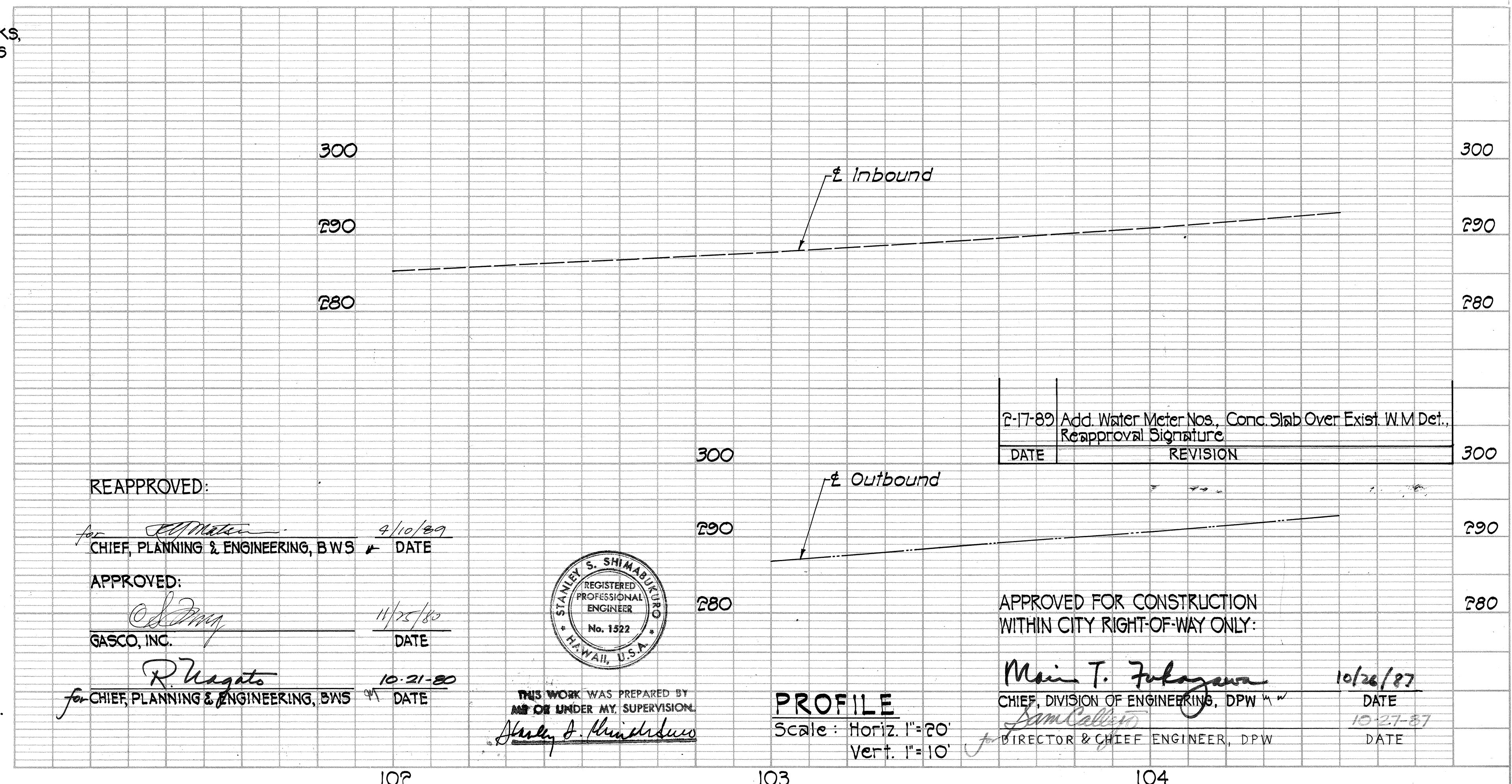
Scale: 3/4" = 1'-0"

NOTE:
Provide access to all valves in the affected area. (manhole or vaults).



PLAN - PALI HIGHWAY

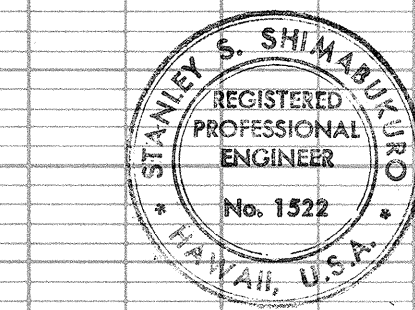
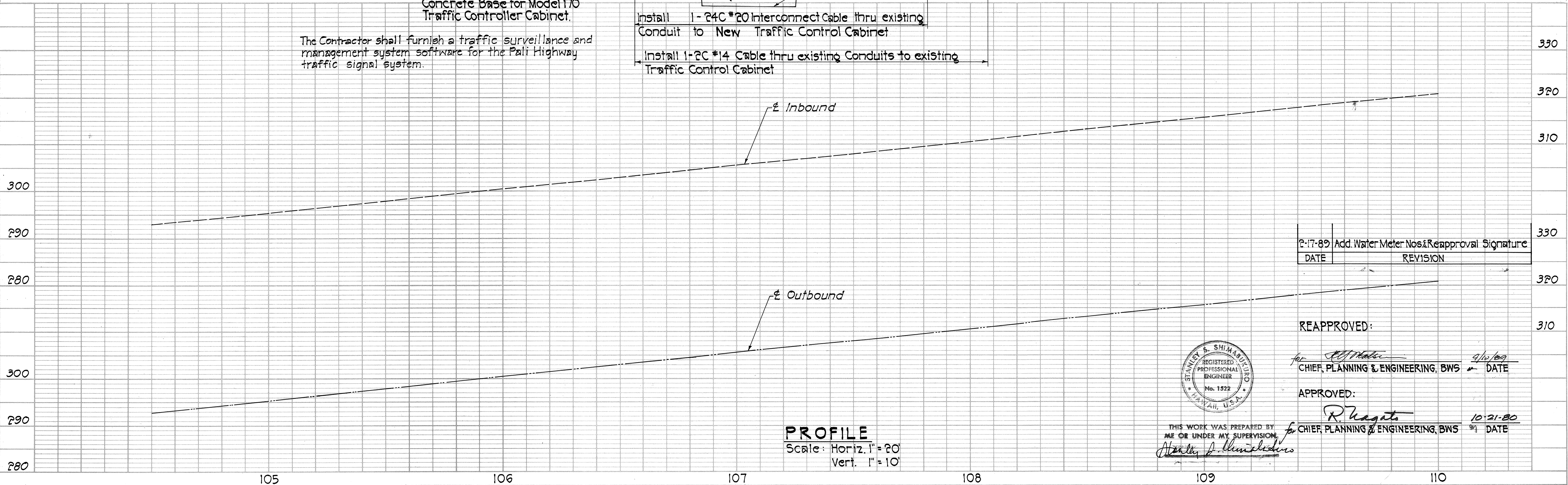
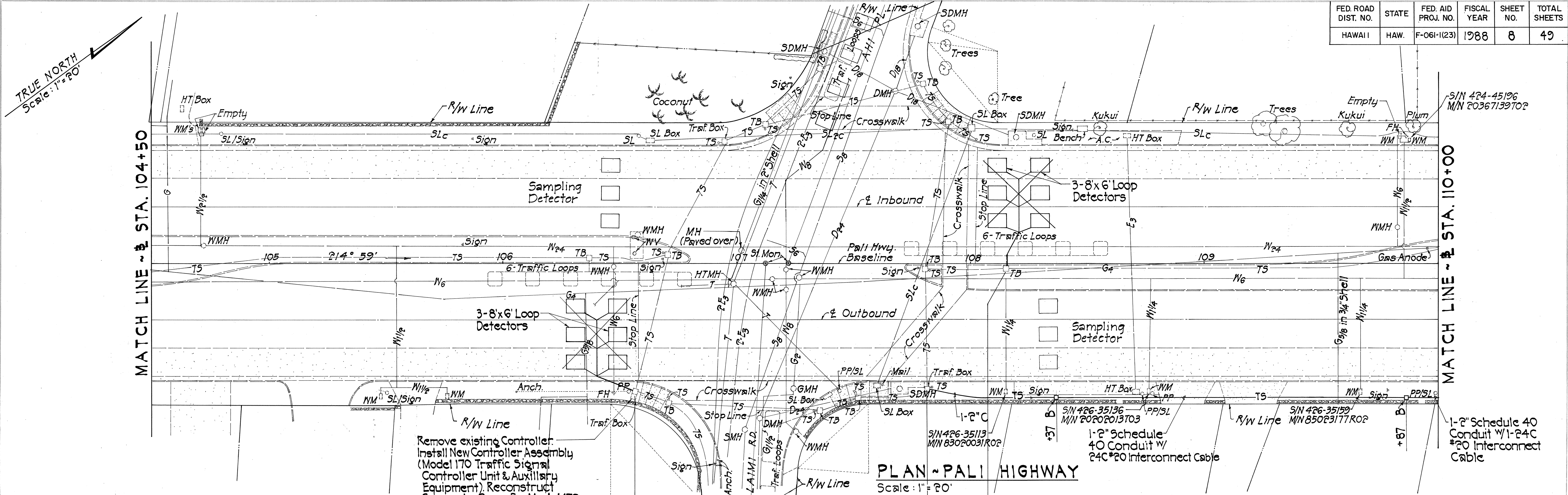
Scale: 1" = 20'



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	8	49

PLAN	SURVEYED	DATE
PLOTTED	BY	
CHECKED		
NO. OF WAY CHECKED		
NO.		

PROFILE	SURVEYED	DATE
PLOTTED	BY	
CHECKED		
NO. OF WAY CHECKED		
NO.		



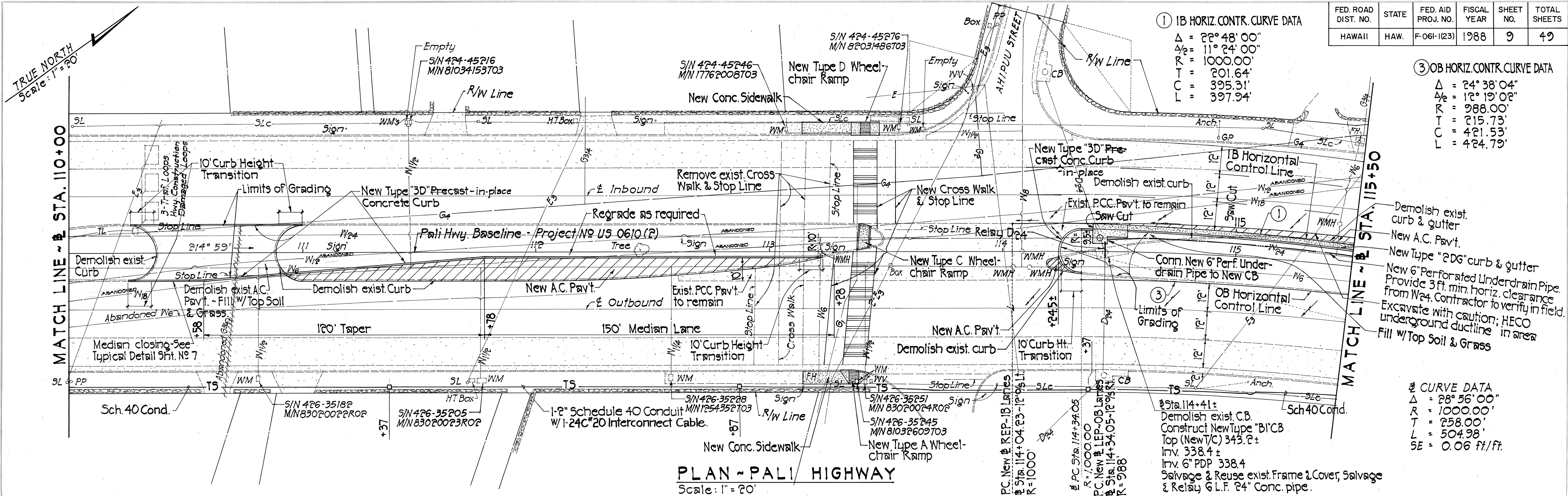
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Stanley S. Shimada

2-17-89	Add. Water Meter Nos. & Reapproval Signature	330
DATE	REVISION	
		320
		310
REAPPROVED:		310
for <i>[Signature]</i>	CHIEF, PLANNING & ENGINEERING, BWS	DATE 9/12/89
APPROVED:		
for <i>[Signature]</i>	CHIEF, PLANNING & ENGINEERING, BWS	DATE 10-21-80

PLAN	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NO. OF WAY CHECKED			
NOTE BOOK			
NO.			

PROFILE	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NO. OF WAY CHECKED			
NOTE BOOK			
NO.			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	9	49

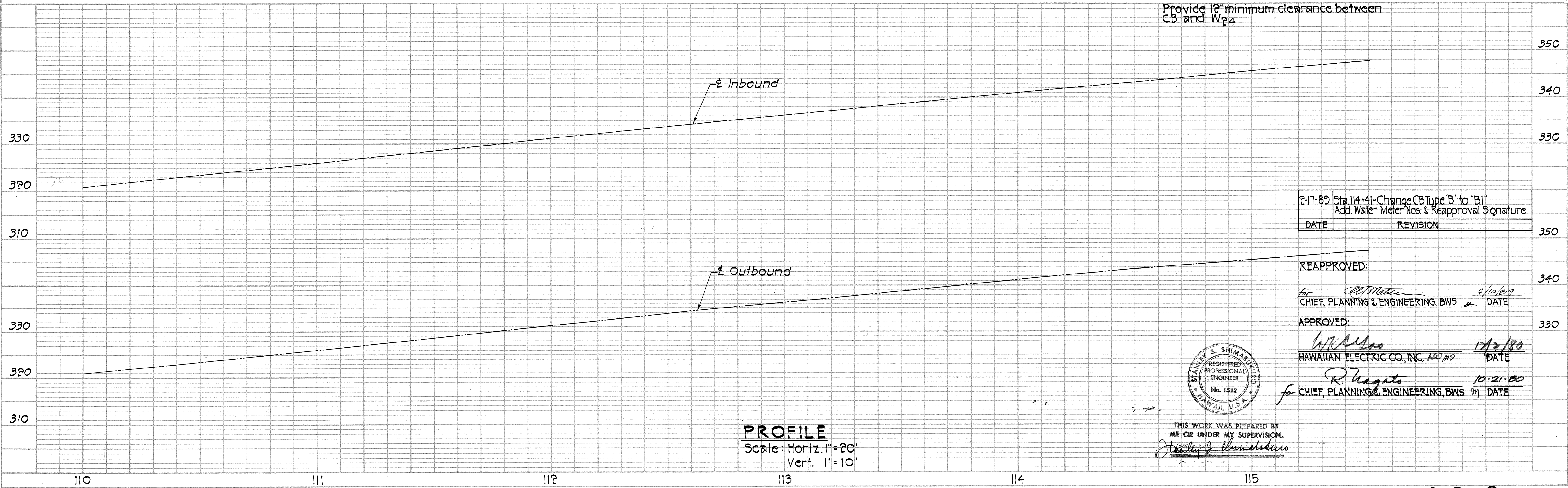


① 1B HORIZ. CONTR. CURVE DATA
 $\Delta = 22^\circ 48' 00''$
 $A/2 = 11^\circ 24' 00''$
 $R = 1000.00'$
 $T = 201.64'$
 $C = 395.31'$
 $L = 397.94'$

③ OB HORIZ. CONTR. CURVE DATA
 $\Delta = 24^\circ 38' 04''$
 $A/2 = 12^\circ 19' 02''$
 $R = 988.00'$
 $T = 215.73'$
 $C = 421.53'$
 $L = 424.79'$

② CURVE DATA
 $\Delta = 28^\circ 56' 00''$
 $R = 1000.00'$
 $T = 258.00'$
 $L = 504.98'$
 $SE = 0.06 \text{ ft./ft.}$

PLAN - PALI HIGHWAY
 Scale: 1" = 20'

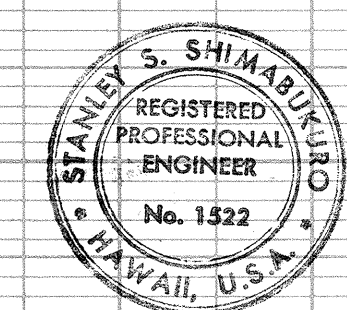


PROFILE
 Scale: Horiz. 1" = 20'
 Vert. 1" = 10'

DATE	REVISION
12-17-89	Sta. 114+41-Change CB Type "B" to "B1" Add Water Meter Nos. & Reapproval Signature

REAPPROVED:
 for *[Signature]* 4/10/89
 CHIEF, PLANNING & ENGINEERING, BWS DATE

APPROVED:
[Signature] 12/2/80
 HAWAIIAN ELECTRIC CO., INC. NO. 119 DATE
 for *[Signature]* 10-21-80
 CHIEF, PLANNING & ENGINEERING, BWS DATE



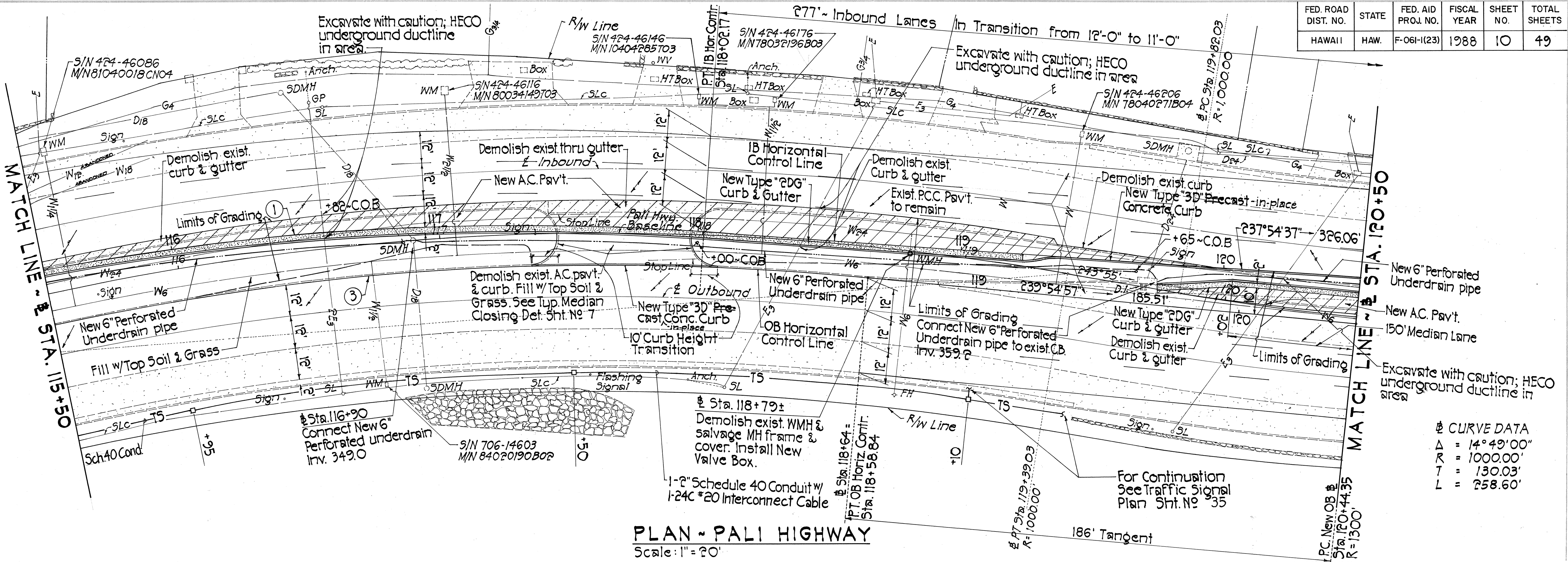
THIS WORK WAS PREPARED BY
 ME OR UNDER MY SUPERVISION.
Stanley S. Shimadzu

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	10	49

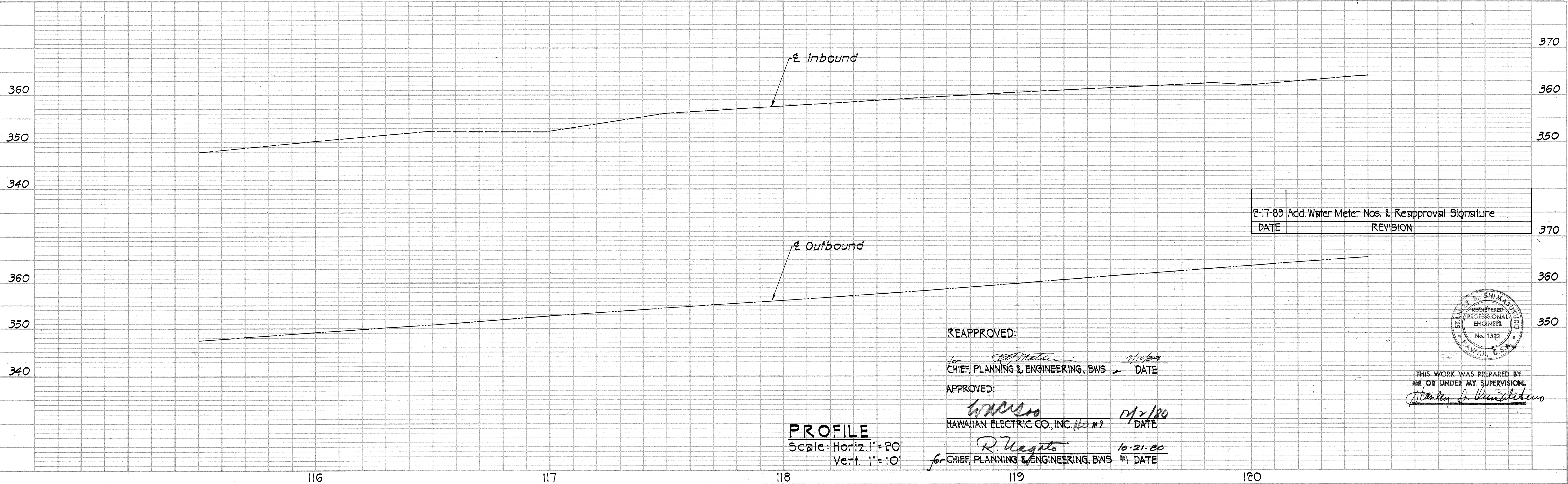
PLAN	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTED				
NO.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTED				
NO.				

TRUE NORTH
Scale: 1" = 20'



§ CURVE DATA
Δ = 14° 49' 00"
R = 1000.00'
T = 130.03'
L = 258.60'



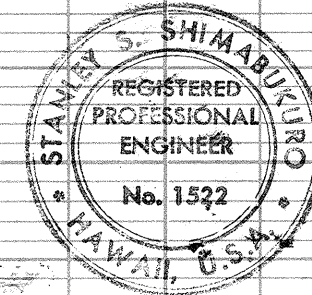
REAPPROVED:
for *[Signature]* 4/10/89
CHIEF, PLANNING & ENGINEERING, BWS DATE

APPROVED:
[Signature] 10/21/80
HAWAIIAN ELECTRIC CO., INC. 110 m? DATE

for *[Signature]* 10-21-80
CHIEF, PLANNING & ENGINEERING, BWS DATE

PROFILE
Scale: Horiz. 1" = 20'
Vert. 1" = 10'

2-17-89	Add Water Meter Nos. & Reapproval Signature	370
DATE	REVISION	



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
[Signature]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	11	49

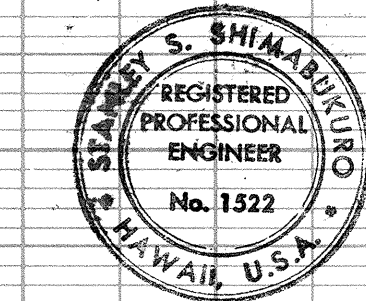
NOTES:

- Concrete median shall be constructed as specified for concrete sidewalks in Section 608-Sidewalks, will be measured by the square yard & paid for under Plain Concrete Median.
- Planting Soil shall be obtained from within the Highway Right-of-Way as specified for selected materials in Section 203-Excavation & Embankment & placed as specified in Section 617-Planting Soil. Planting Soil will not be measured & paid for separately but shall be incidental to other items of work.
- New grass shall match the existing grass & planting shall be done by matting as specified in Section 618-Grassed Surfaces. Freshly dug existing grass from areas to be cleared of grass & free from weeds may be used on this project. The Contractor shall schedule his work accordingly.
- Relocated sprinkler lines shall be installed as specified in Section 616-Sprinkler System, will be measured by the lump sum & paid for under Relocation of Existing Sprinkler Lines.

Sta. 120+35.3± 46'9" Lt.
Demolish exist. C.B.
Construct New Type "C" C.B.
Top 366.4± @ New T/C
Inv. 357.3±
Salvage & Reuse exist. Frame
& Cover & install 2" LF New
24" Conc. pipe

② IB Horiz. Contr. Curve Data
Δ = 8° 41' 00"
Δ/2 = 4° 20' 30"
R = 1000.00'
T = 75.92'
C = 151.41'
L = 151.55'

④ OB Horiz. Contr. Curve Data
Δ = 10° 31' 04"
Δ/2 = 5° 15' 32"
R = 1300.00'
T = 119.66'
C = 238.31'
L = 238.64'



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Stanley S. Shimadzu

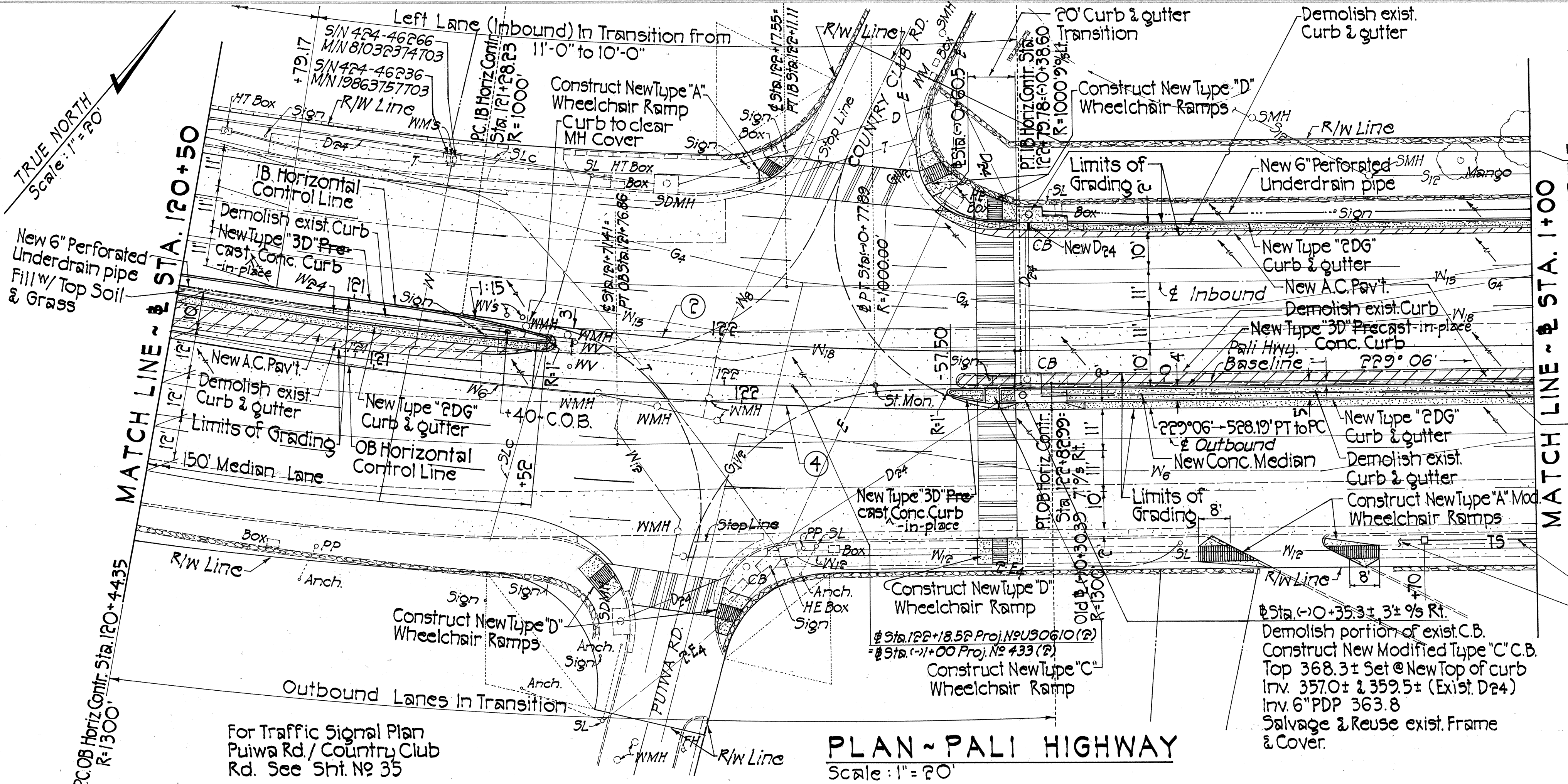
2-17-89	Add Water Meter Nos. & Reapproval Signature
DATE	REVISION

REAPPROVED:

[Signature]
CHIEF, PLANNING & ENGINEERING, BWS DATE 4/10/89

APPROVED:

[Signature]
HAWAIIAN ELECTRIC CO., INC. DATE 12/21/80
[Signature]
CHIEF, PLANNING & ENGINEERING, BWS DATE 10-21-80



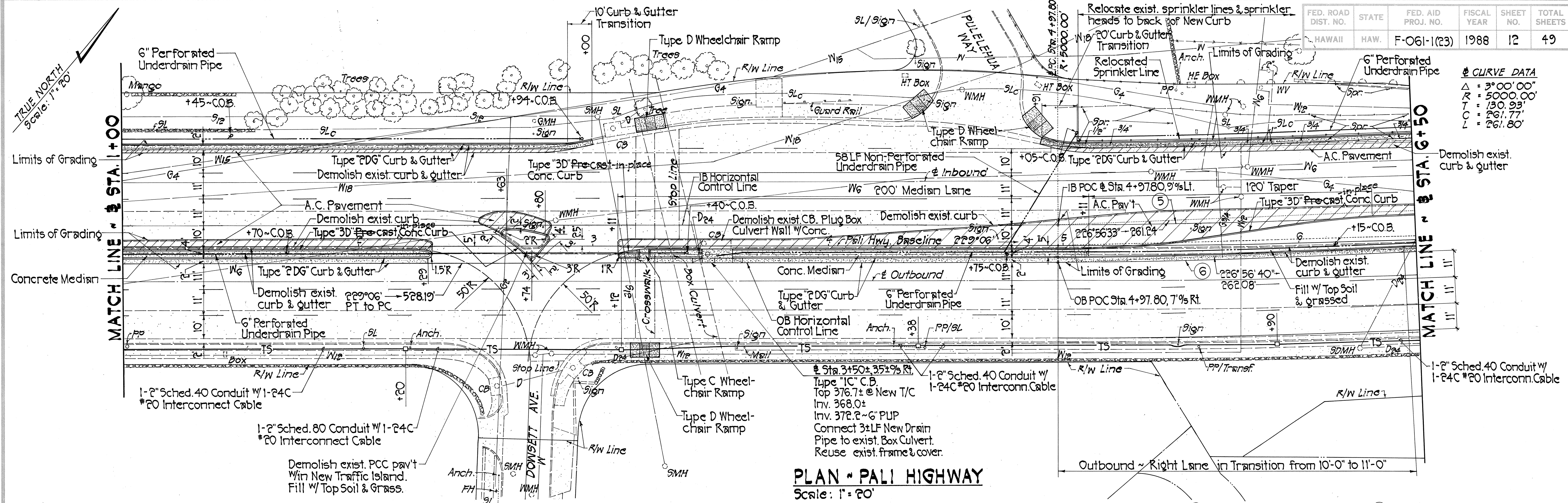
PLAN ~ PALI HIGHWAY
Scale: 1" = 20'



PROFILE
Scale: Horiz. 1" = 20'
Vert. 1" = 10'

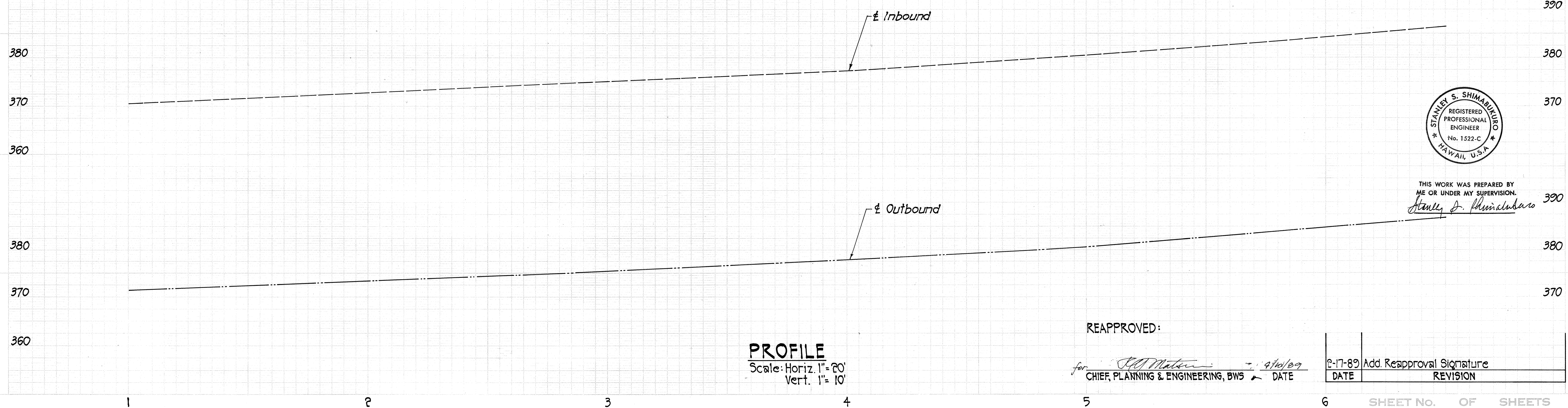
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	12	49

CURVE DATA
 $\Delta = 3^{\circ}00'00''$
 $R = 5000.00'$
 $T = 130.93'$
 $C = 261.77'$
 $L = 261.80'$

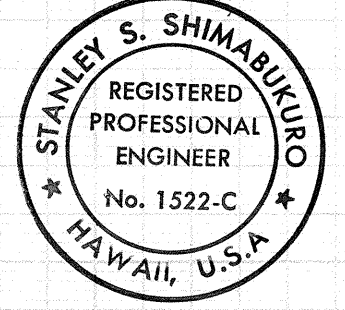


PLAN - PALI HIGHWAY
 Scale: 1" = 20'

5) IB Horiz. Contr. Curve Data	6) OB Horiz. Contr. Curve Data
$\Delta = 3^{\circ}00'00''$	$\Delta = 3^{\circ}00'00''$
$\Delta/2 = 1^{\circ}30'00''$	$\Delta/2 = 1^{\circ}00'00''$
$R = 4989.89'$	$R = 5006.01'$
$T = 130.66'$	$T = 131.09'$
$C = 261.24'$	$C = 262.08'$
$L = 261.27'$	$L = 262.11'$



PROFILE
 Scale: Horiz. 1" = 20'
 Vert. 1" = 10'



THIS WORK WAS PREPARED BY
 ME OR UNDER MY SUPERVISION.
Stanley S. Shimabuku

REAPPROVED:

for *[Signature]* 9/10/89
 CHIEF, PLANNING & ENGINEERING, BWS DATE

DATE	REVISION
2-17-89	Add. Reapproval Signature

ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	

Relocate exist. sprinkler lines & sprinkler heads to back of curb

Demolish exist. curb & gutter

Relocated Sprinkler Line

Relocate exist. St. Lt. Min. 4' Back

St. Lt.

Type "B" Wheelchair Ramp

Conc. Wall 1/2

W/MH

R/W Line

Type "D" Wheelchair Ramp

Demolish exist. curb & gutter

1-2" Sched. 40 Conduit w/ 1-24C #20 Interconn. Cable

Type D Wheelchair Ramp

Mock Orange Hedge

Concrete Sidewalk

Bougainvillea

Limits of Grading

6" Perforated Underdrain Pipe

TS

SL/Sign

1-2" Sched. 40 Conduit w/ 1-24C #20 Interconn. Cable

Demolish exist. C.B. Construct Type "C" C.B. Top 405.2 @ New T/C Inv. 399.3 Inv. 400.6 ~ 6" PUP Salvage & reuse exist. frame & cover & install 51 LF New 64" Conc. Pipe

+68 ~ C.O.B.

Type "PDG" Curb & Gutter

Demolish exist. gutter

A.C. Pav't

150' Median Lane

Type "PDG" Curb & Gutter

Demolish exist. curb & gutter

150' Median Lane

IB Horizontal Control Line

A.C. Pav't

OB Horizontal Control Line

Type "3D" Pre-cast-in-place 3'R Conc. Curb

OB Sta. 7+59.60, 4% Rt.

PP/SL

TS

D24 Slope Line

W/MH

1-2" Sched. 40 Conduit w/ 1-24C #20 Interconnect Cable

1-2" Sched. 80 Conduit w/ 1-24C #20 Interconnect Cable

Type "D" Wheelchair Ramps

Provide Smooth Riding Connection

Type "B" Wheelchair Ramp

1 1/2" A.C. Pav't, Mix No. V

PRINEX Hedge

Stop Line Sign

W/MH

ANCH.

WOOD ST.

R/W Line

Adjust MH Frame & Cover

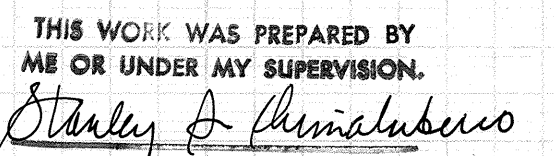
Type "C" Wheelchair Ramp

Type "D" Wheelchair Ramps

PLAN - PALI HIGHWAY

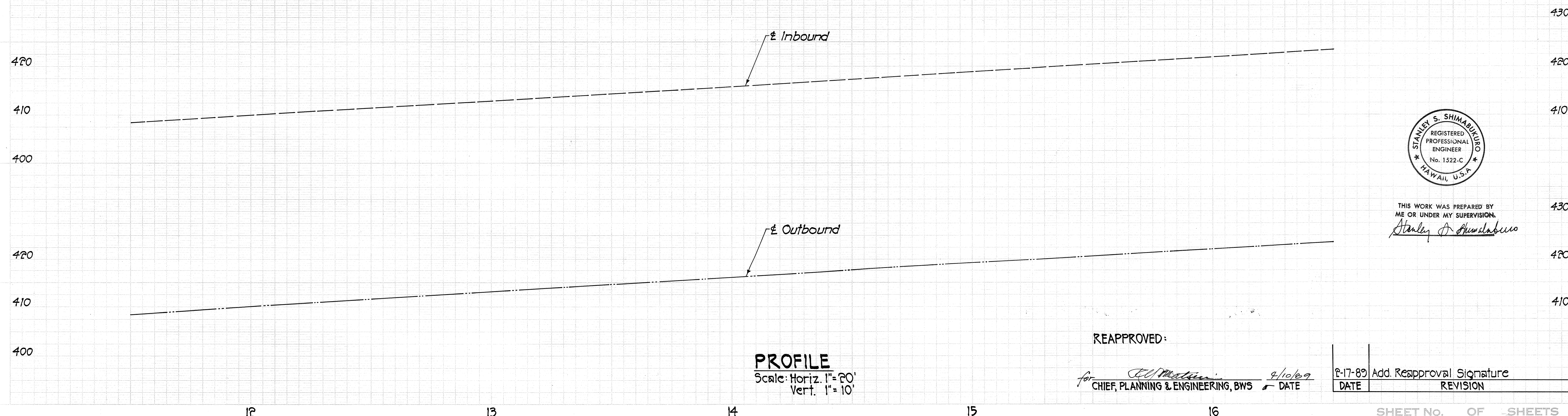
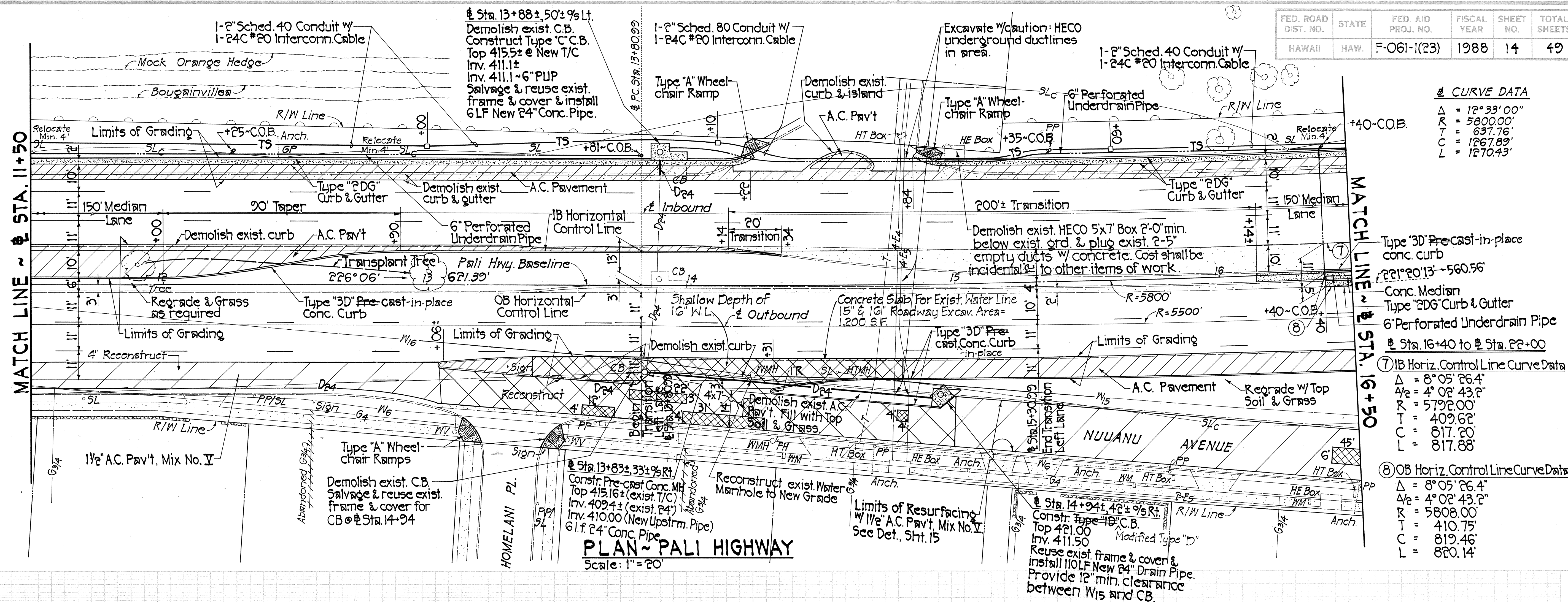
Scale: 1" = 20'

Scale: 1" = 10'



2-17-89	Add. Reapproval Signature
DATE	REVISION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	14	49



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Stanley A. Hunsicker

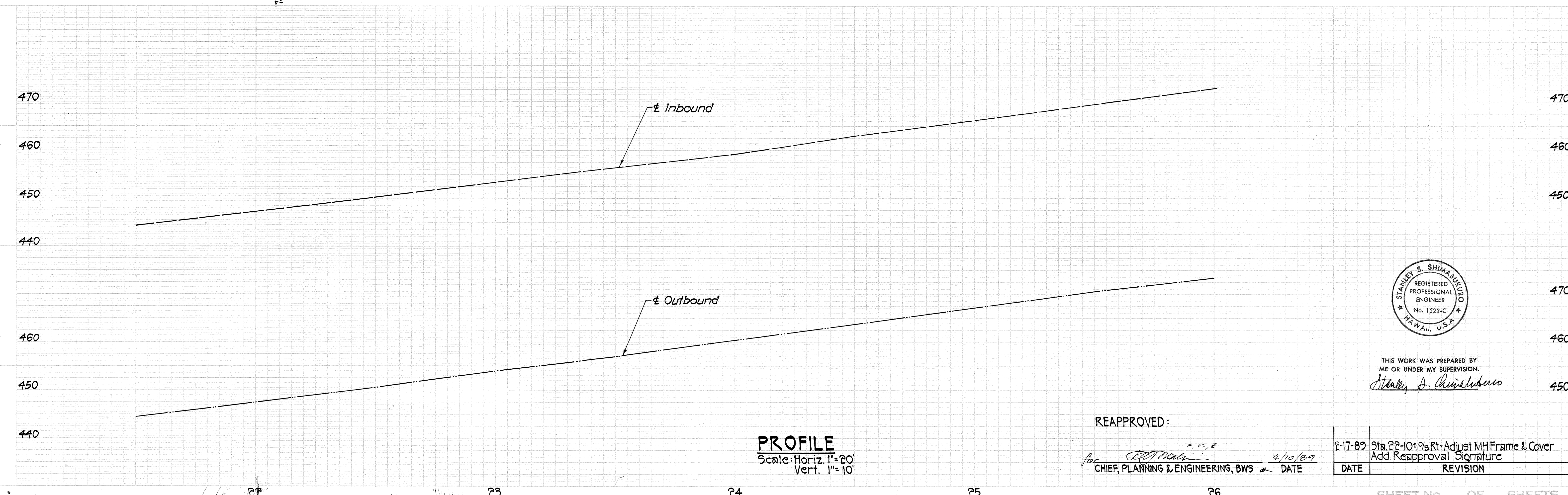
REAPPROVED:

for JL Matsui 4/10/02
CHIEF PLANNING & ENGINEERING, BWS DATE

2-17-89	Add. Reapproval Signature
DATE	REVISION

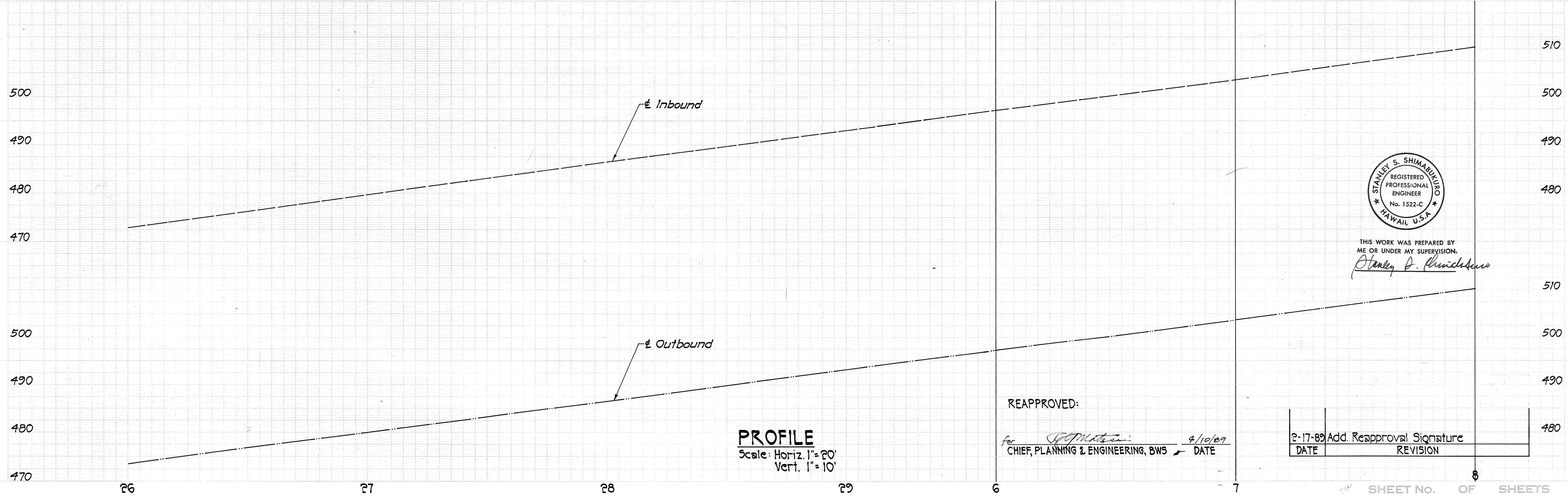
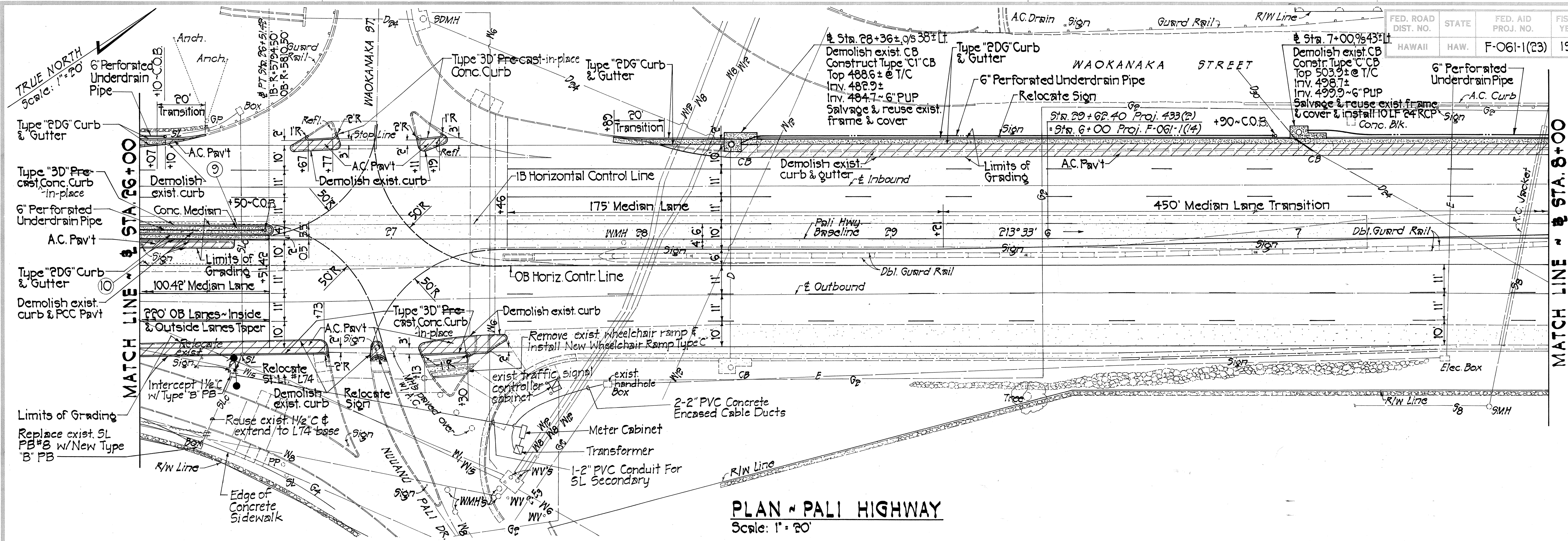
SHEET No. OF SHEETS

C.O. 14

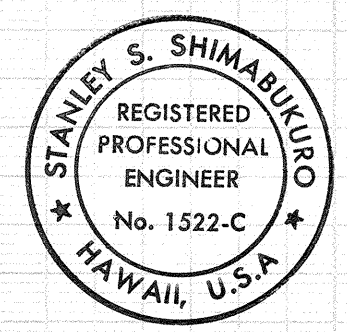


C.O. 16

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	17	49



ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Stanley S. Shimamura

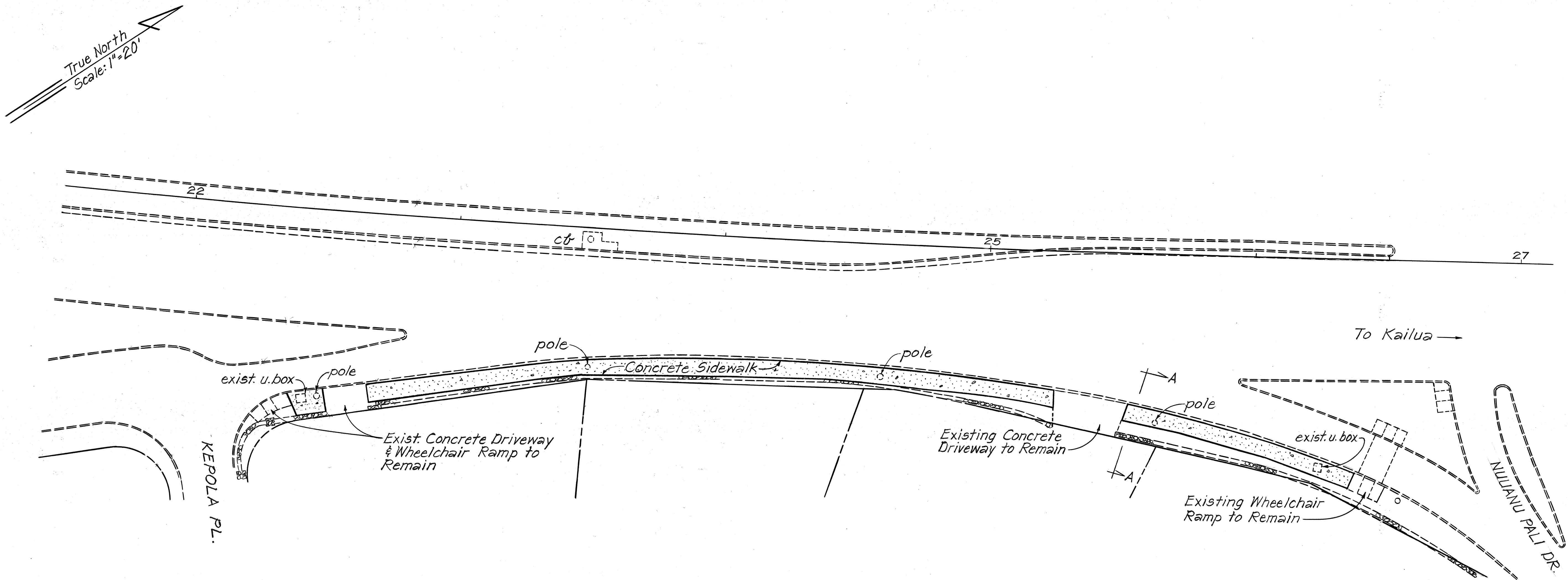
REAPPROVED:
 for *[Signature]* 4/10/89
 CHIEF, PLANNING & ENGINEERING, BWS DATE

DATE	REVISION
2-17-89	Add. Reapproval Signature

SHEET NO. 17 OF 49

C.O. 17

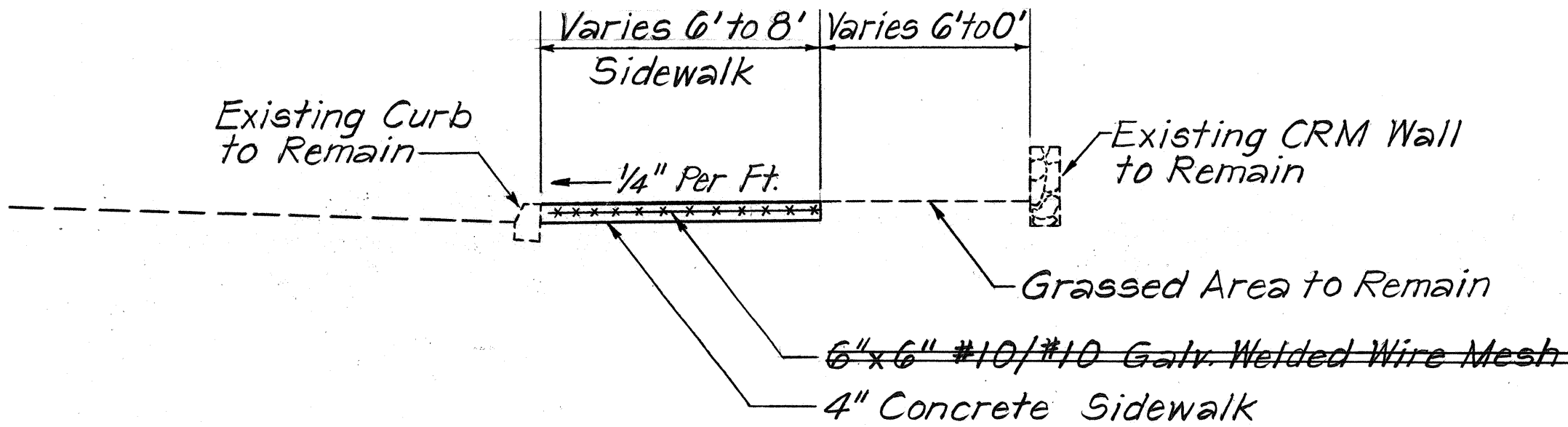
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	C.O.175-1	40



NOTES:

1. Sidewalk to be constructed in accordance with Section 608 of the Standard Specifications.
2. Any damage to the existing curb, driveways, wheelchair ramps & existing CRM wall by the Contractor, shall be restored by the Contractor at no cost to the State.
3. Any required adjustments to the utility boxes shall be considered incidental to the sidewalk.
4. The existing utility poles located in the proposed sidewalk area to remain. Concrete to be placed around the utility poles.

ESTIMATED QUANTITIES		
Plain	Reinforced Concrete Sidewalk	200 Square Yards

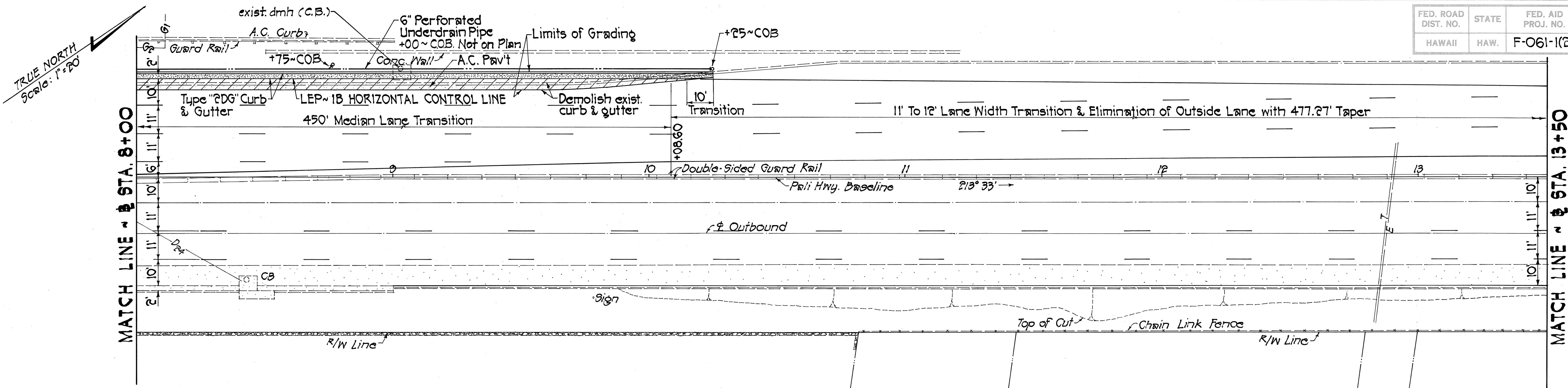


SECTION A-A
Not to Scale

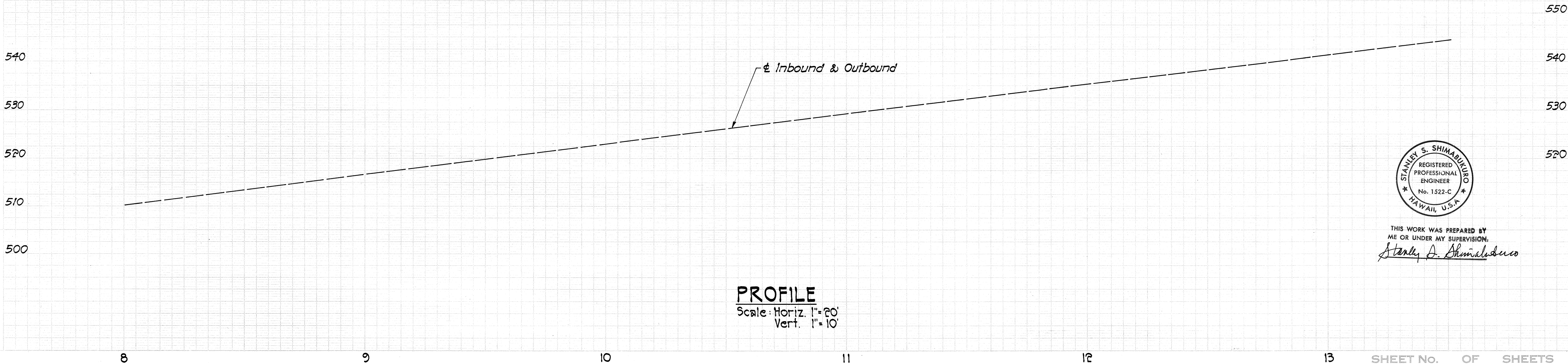
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**SIDEWALK BETWEEN KEPOLA PL.
& NUUANU PALI DRIVE**
IMPROVEMENTS ALONG PALI HIGHWAY
BETWEEN NIOLOPA PL. & WAOKANAKA ST.
PROJECT NO. F-061-1(23)
Scale: As Shown

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	18	42



PLAN - PALI HIGHWAY
Scale: 1" = 20'

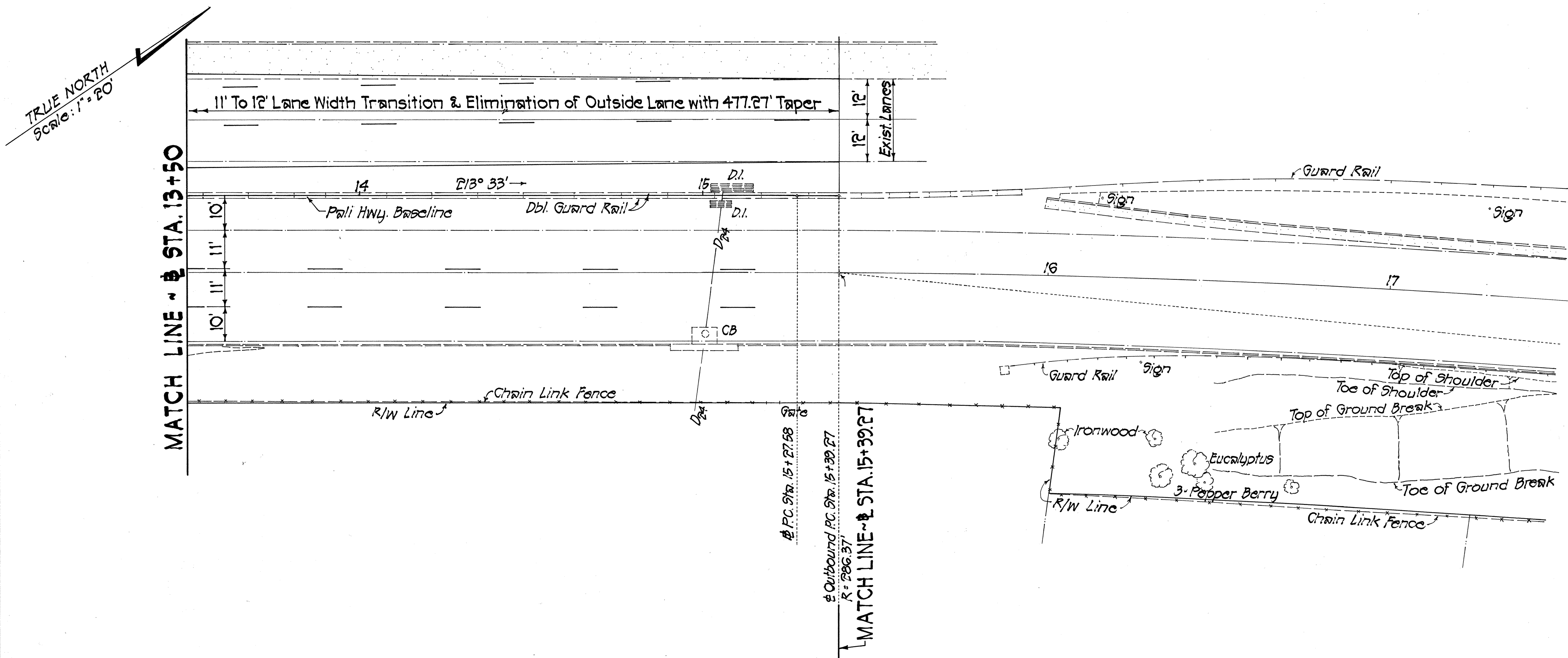


PROFILE
Scale: Horiz. 1" = 20'
Vert. 1" = 10'



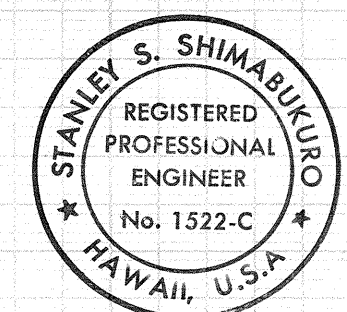
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Stanley S. Shimadzu

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(23)	1988	19	49



PLAN - PALI HIGHWAY
Scale: 1" = 20'

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



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Stanley S. Shimakubo