

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MOKAPU BOULEVARD AND
MOKAPU SADDLE ROAD RESURFACING
Proj. No. 65B-01-87M

Scale: 1" = 40' Date: July, 1986
SHEET No. 1 OF 4 SHEETS

$$\begin{aligned}\Delta &= 13^{\circ}39'00'' \\ 4/2 &= 6^{\circ}49'30'' \\ R &= 1498.17' \\ T &= 179.30' \\ C &= 356.50' \\ L &= 356.92' \\ SE &= 0.05 \text{ ft./ft.}\end{aligned}$$

**COLD PLANE AND
RESURFACE 1 1/2" A.C.**

BEGIN PROJECT
MB @ STA. 1 + 48 ±

LEGEND

MB	Mokapu Boulevard
MSR	Mokapu Saddle Road
mon	Monument

e	Electric
ep	Electric Pole
pb	Pull Box
pp	Power Pole
tp	Telephone Pole

av	Air Valve
fh	Fire Hydrant
w	Water Lines
wm	Water Meter
wmh	Water Manhole
wv	Water Valve
s	Sewer Lines
smh	Sewer Manhole

cb	Catch Basin
cdi	Concrete Drop Intake
d	Drainage Culverts
dma	Drain Manhole
tsb	Traffic Signal Box
tsp	Traffic Signal Pole
ub	Utility Box

 Reconstruction Areas

True North
Scale: 1" = 40'

OUTBOUND

LANES

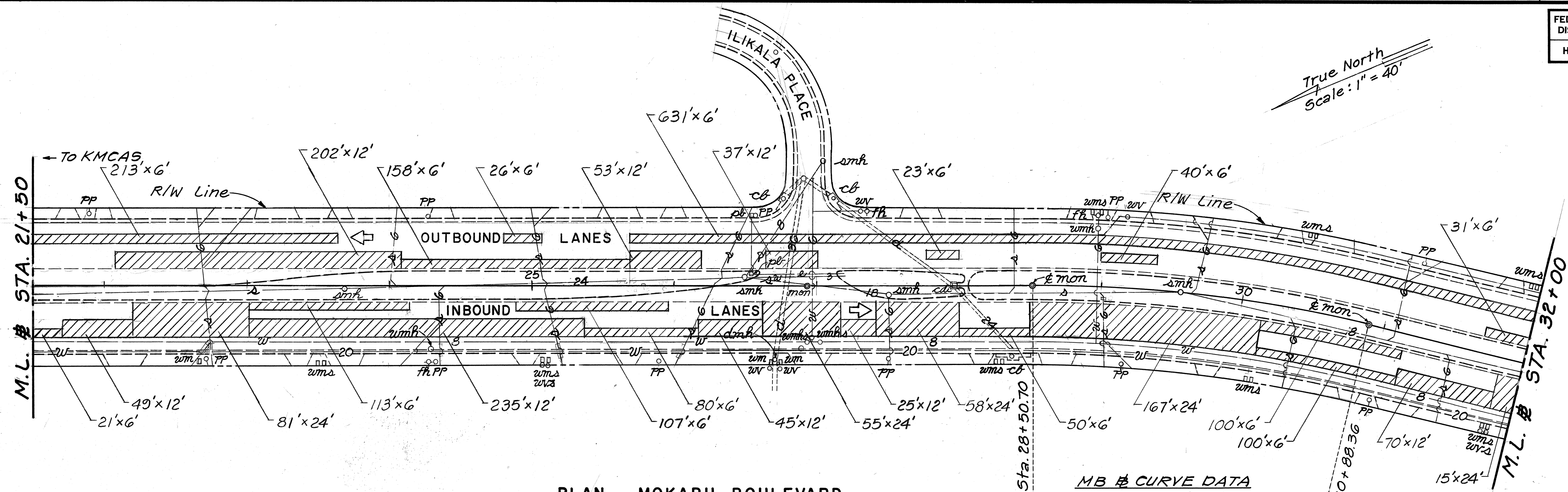
6 INBOUND

LANES

PLAN - MOKAPU BOULEVARD

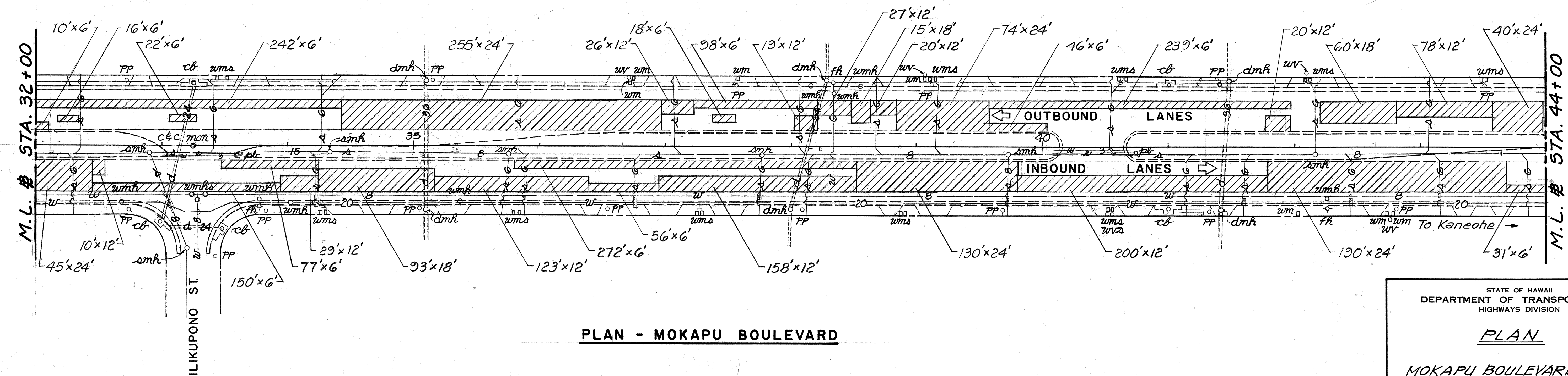
ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
	DRAWN BY _____ " _____
	TRACED BY _____ " _____
NOTE BOOK	DESIGNED BY _____ " _____
	QUANTITIES BY _____ " _____
	CHECKED BY _____ " _____
No. _____	No. _____

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65B-01-87M	1987	8	15



PLAN - MOKAPU BOULEVARD

MB # CURVE DATA
Δ = 13°37'00"
Δ/2 = 6°48'30"
R = 1000.00'
T = 119.39'
C = 237.10'
L = 237.60'
SE = 0.058 ft./ft.



PLAN - MOKAPU BOULEVARD

STATE OF HAWAII
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PLAN

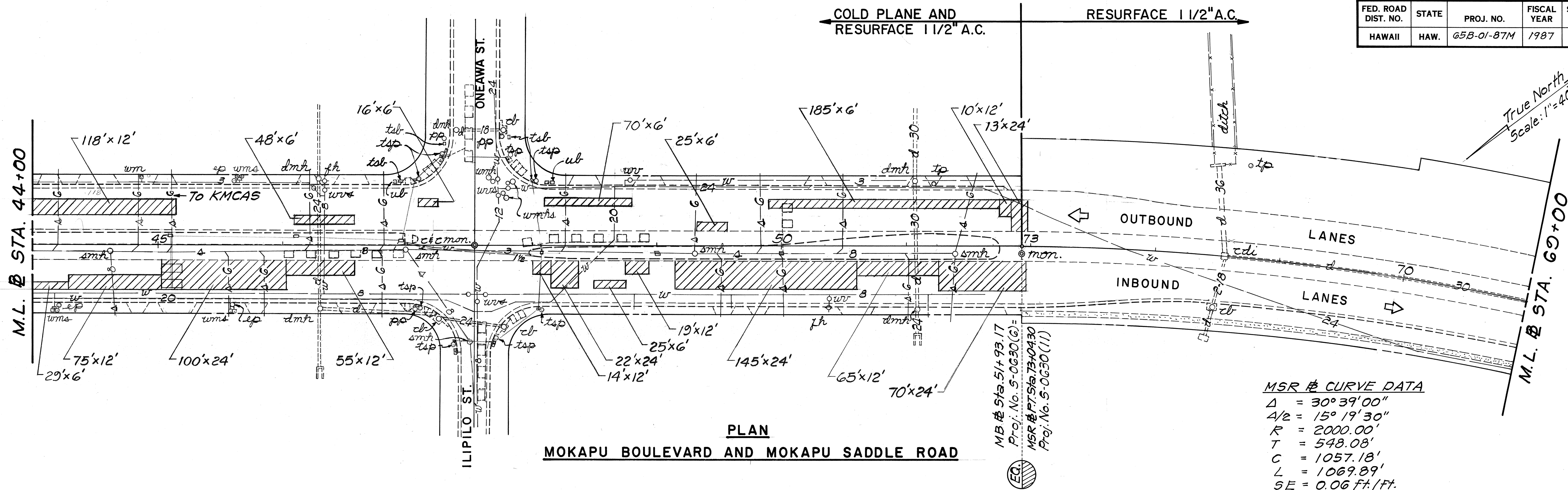
MOKAPU BOULEVARD AND
MOKAPU SADDLE ROAD RESURFACING
Proj. No. 65B-01-87M

Scale: 1" = 40' Date: July, 1986

SHEET No. 2 OF 4 SHEETS

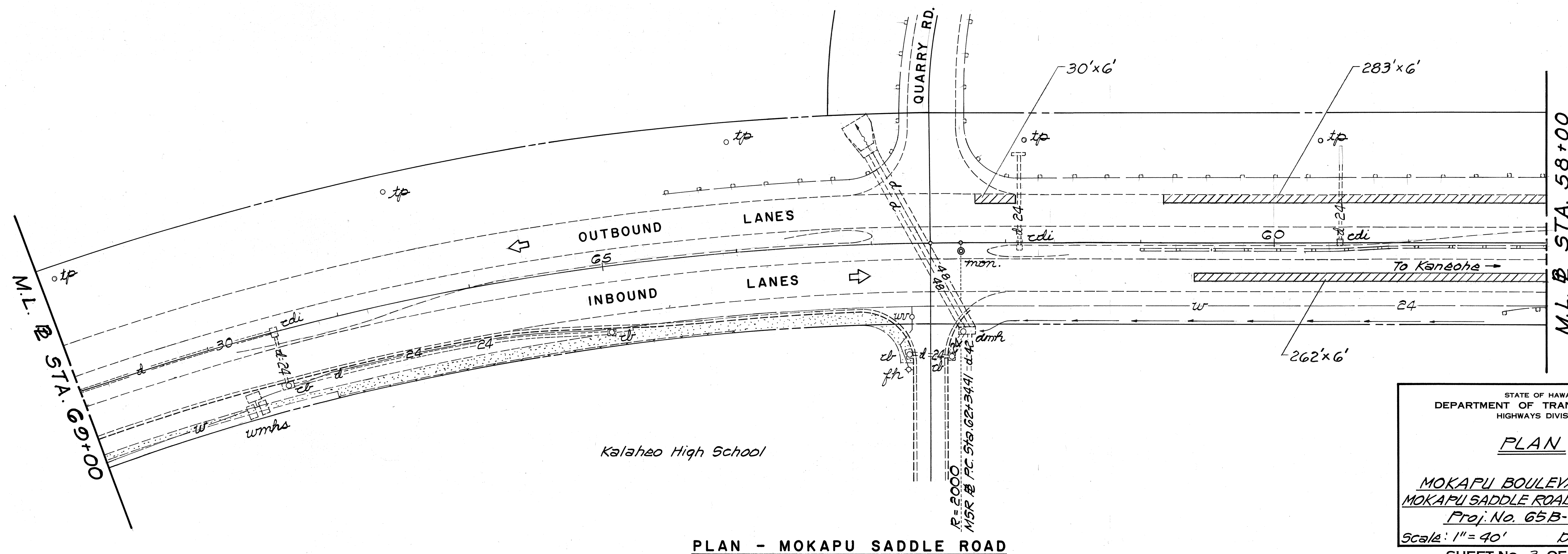
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY		
DESIGNED BY		
CHECKED BY		
NO.		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65B-01-87M	1987	9	15



MSR & CURVE DATA

$\Delta = 30^{\circ} 39' 00''$
 $A/2 = 15^{\circ} 19' 30''$
 $R = 2000.00'$
 $T = 548.08'$
 $C = 1057.18'$
 $L = 1069.89'$
 $SE = 0.06 \text{ ft./ft.}$



PLAN - MOKAPU SADDLE ROAD

STATE OF HAWAII
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HIGHWAYS DIVISION

PLAN

MOKAPU BOULEVARD AND
MOKAPU SADDLE ROAD RESURFACING
Proj. No. 65B-01-87M

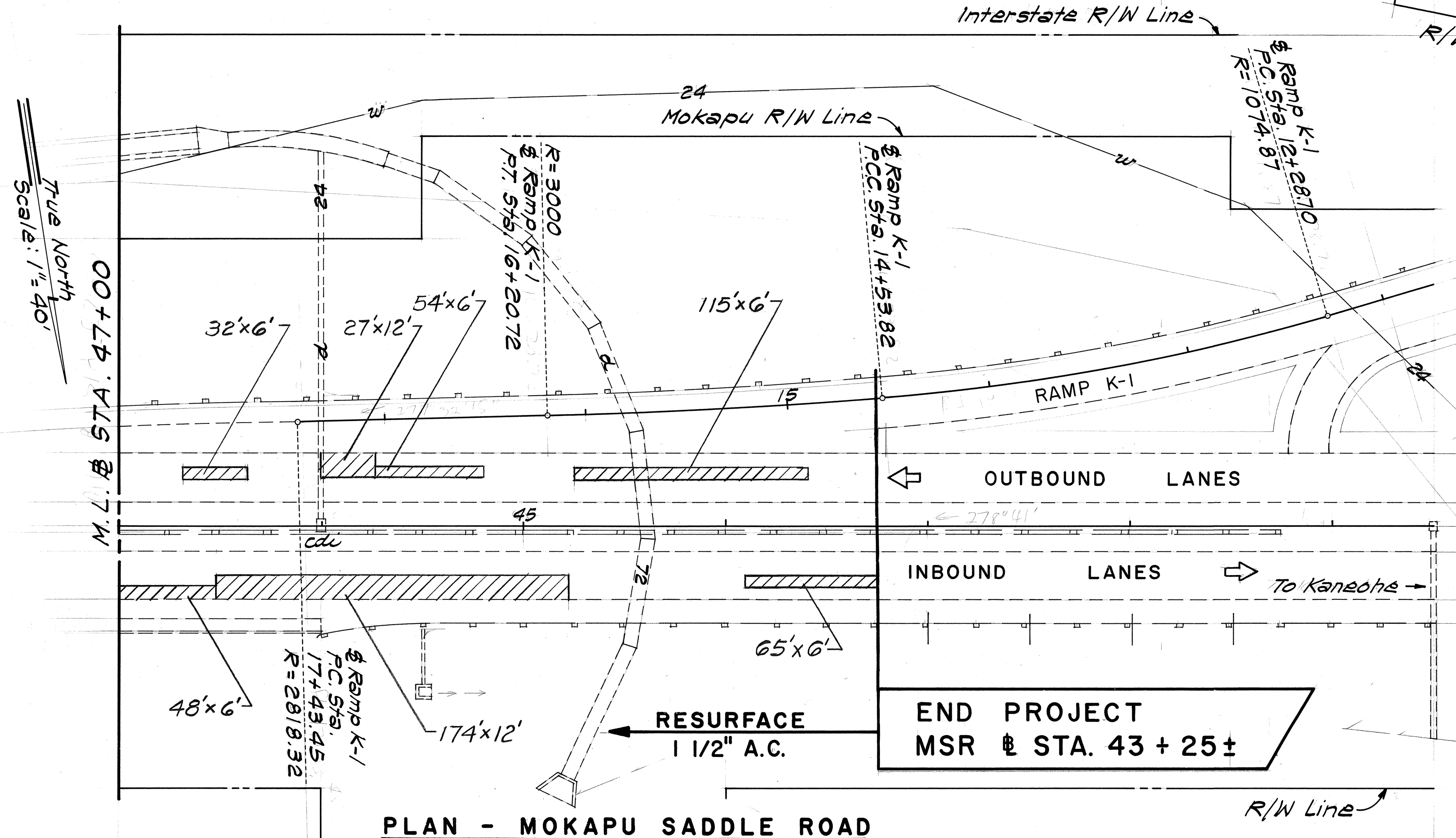
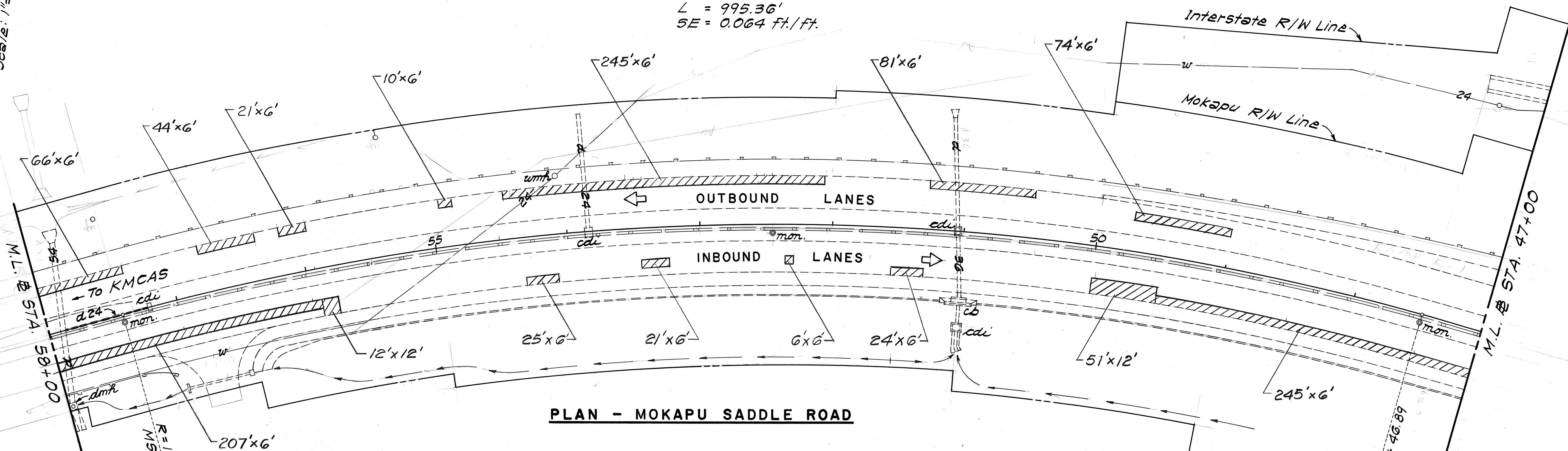
Scale: 1" = 40' Date: July, 1986

SHEET NO. 3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65B-01-87M	1987	10	15

MSR @ CURVE DATA
 $\Delta = 31^{\circ}41'00''$
 $\Delta/2 = 15^{\circ}50'30''$
 $R = 1800.00'$
 $T = 510.76'$
 $C = 985.73'$
 $L = 995.36'$
 $SE = 0.064 \text{ Ft./Ft.}$

True North
Scale: 1" = 40'



END PROJECT
MSR @ STA. 43+25±

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PLAN

MOKAPU BOULEVARD AND
MOKAPU SADDLE ROAD RESURFACING
Proj. No. 65B-01-87M
Scale: 1" = 40' Date: July, 1986
SHEET No. 4 OF 4 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	6-0030(00) 6-0030(01)	1970	7	188

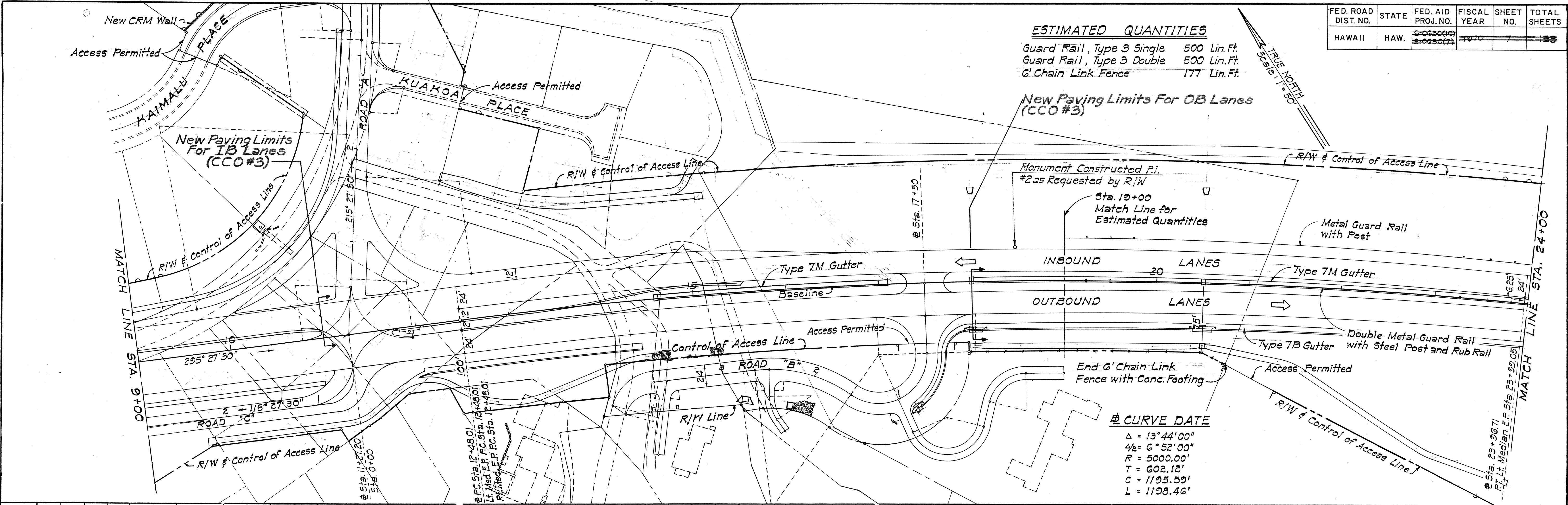
ESTIMATED QUANTITIES

Guard Rail, Type 3 Single 500 Lin. Ft.
Guard Rail, Type 3 Double 500 Lin. Ft.
G' Chain Link Fence 177 Lin. Ft.

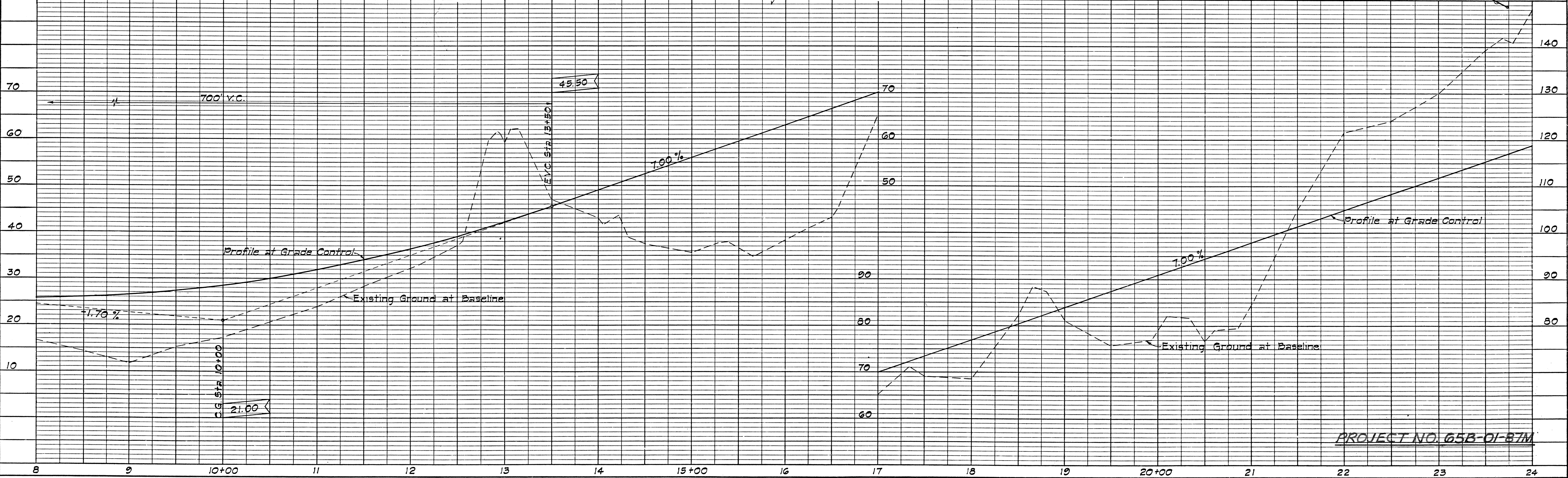
New Paving Limits For OB Lanes (CCO #3)

TRUE NORTH
Scale: 1"=50'

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



PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	B. M.S NOTED		
	STRUCTURE NOTATIONS CH KD.		



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

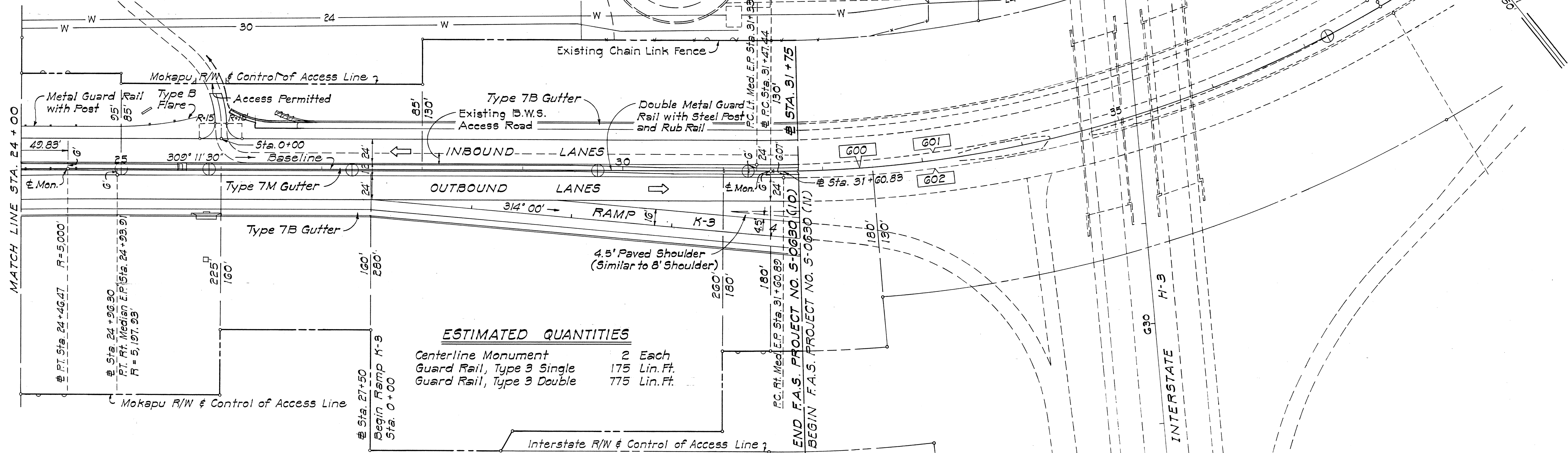
PROFILE	SURVEYED	DATE
	BY	
NOTE BOOK	PLOTTED	
	GRADES CHECKED	
NO.	STRUCTURE NOTATIONS CHKD	
	NO.	

CURVE DATA

600	601	602
$\Delta = 30^\circ 30' 30''$		
$\frac{\Delta}{2} = 15^\circ 15' 15''$		
$R = 1,200.00'$		
$T = 327.25'$		
$C = 631.44'$		
$L = 636.96'$		

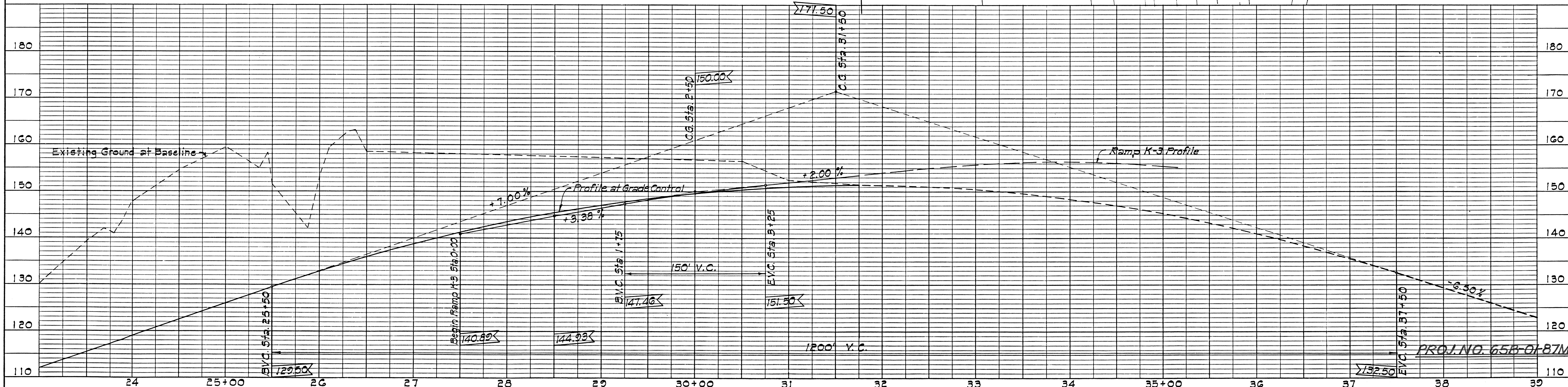
Sta. 26+00 Lt.

Construct B.W.S. Approach
Road. Pavement Design
same as Inbound Lanes
up to Sta. 0+15. For Typical
Section and Centerline Profile
See Sheet No. 23.

B.W.S.
RESERVOIRB.M. "□" in Conc. Disc.
in Roadway El. = 238.04TRUE NORTH
Scale: 1" = 50'

ESTIMATED QUANTITIES

Centerline Monument	2 Each
Guard Rail, Type 3 Single	175 Lin. Ft.
Guard Rail, Type 3 Double	775 Lin. Ft.



CURVE DATA

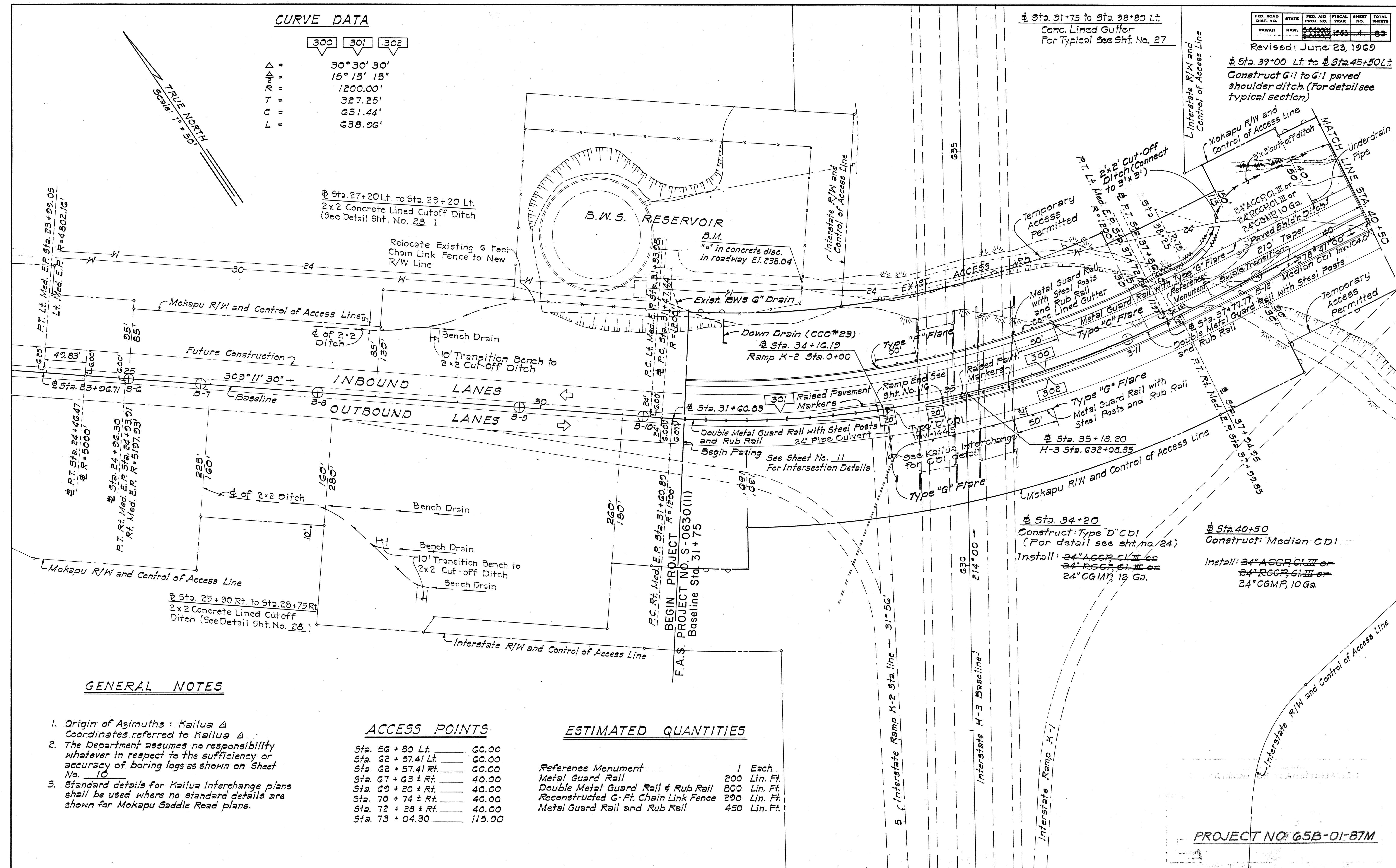
Δ	=	30° 30' 30"
$\Delta/2$	=	15° 15' 15"
R	=	1200.00'
T	=	327.25'
C	=	631.44'
L	=	638.96'

TRUE NORTH
Scale: 1" = 50'

Sta. 31+75 to Sta. 38+80 Lt.
Conc. Lined Gutter
For Typical See Sht. No. 27

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5063001	1968	4	83

Revised: June 23, 1969
Sta. 39+00 Lt. to Sta. 45+50 Lt.
Construct G:1 to G:1 paved shoulder ditch. (For detail see typical section)



GENERAL NOTES

- Origin of Azimuths: Kailua Δ Coordinates referred to Kailua Δ
- The Department assumes no responsibility whatever in respect to the sufficiency or accuracy of boring logs as shown on Sheet No. 10
- Standard details for Kailua Interchange plans shall be used where no standard details are shown for Mokapu Saddle Road plans.

ACCESS POINTS

Sta. 56 + 80 Lt.	60.00
Sta. 62 + 57.41 Lt.	60.00
Sta. 62 + 57.41 Rt.	60.00
Sta. 67 + 63 $\pm$ Rt.	40.00
Sta. 69 + 20 $\pm$ Rt.	40.00
Sta. 70 + 74 $\pm$ Rt.	40.00
Sta. 72 + 28 $\pm$ Rt.	40.00
Sta. 73 + 04.30	115.00

ESTIMATED QUANTITIES

Reference Monument	1	Each
Metal Guard Rail	200	Lin. Ft.
Double Metal Guard Rail & Rub Rail	800	Lin. Ft.
Reconstructed G-Ft. Chain Link Fence	290	Lin. Ft.
Metal Guard Rail and Rub Rail	450	Lin. Ft.

PROJECT NO. 65B-01-87M

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	S-0630(11) S-0630(7)	1968	6	83

REVISED: June 23, 1969

<u>CURVE DATA</u>			
	304	400	401
Δ	90°00'	31°41'00"	7°57'42"
$\frac{A}{2}$	45°00'	15°50'30"	3°58'51"
R	48.00'	180.00'	3000.00'
T	48.00'	510.76'	208.77'
C	67.88'	985.73'	416.54'
L	75.40'	995.36'	416.87'

5 Sta 51+05.25
 Construct Conc Lined Ditch
 C.D.I., Type "A-2" C.B., Median C.D.I.
 Outlet Structure
 Install ~~30" A.C.C.P. C.I. III or~~
~~36" R.C.C.P. C.I. III or~~
 30" C.G.M.P. 8 ga.
 Install ~~36" A.C.C.P. C.I. IV or~~
~~36" R.C.C.P. C.I. IV or~~
 36" C.G.M.P. 8 ga.
 (For detail see sht no. 25)

4 Sta. 45+90 to Sta. 56+25 Lt.
 Conc. Lined Gutter
 For Typical See Sht. No. 27

Sta. 48+50 ± to Sta. 50+73 ± Lt.
2 x 2 Cut-Off Ditch
For Typical: See Sht. No. 2

W. 2x2 Cut-off Ditch

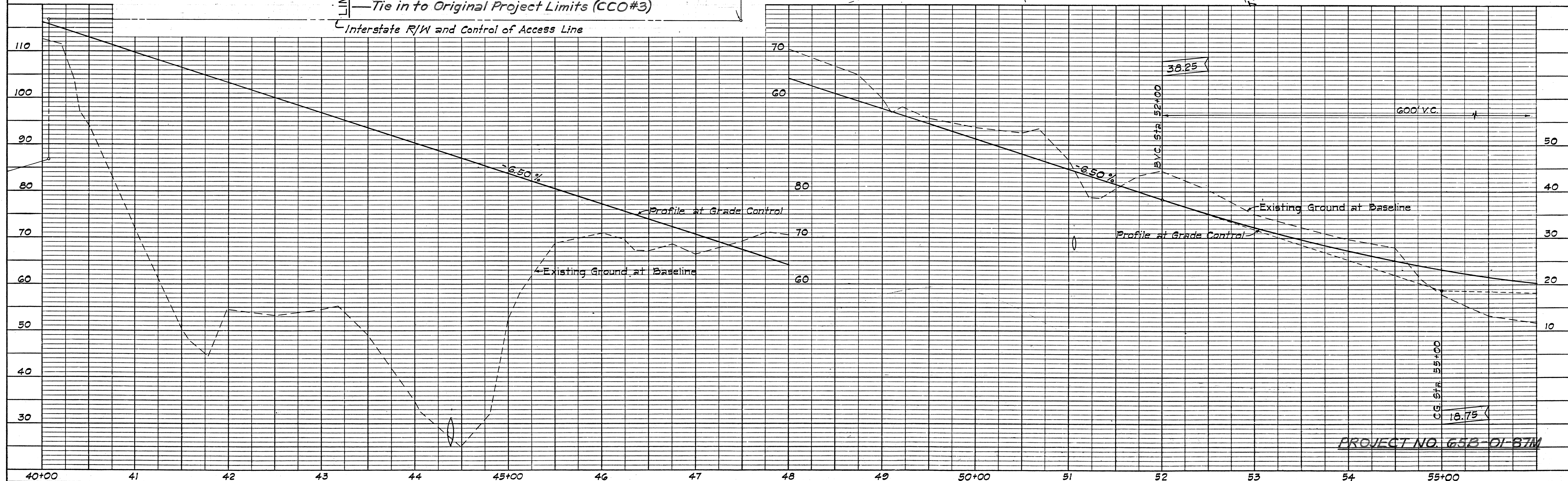
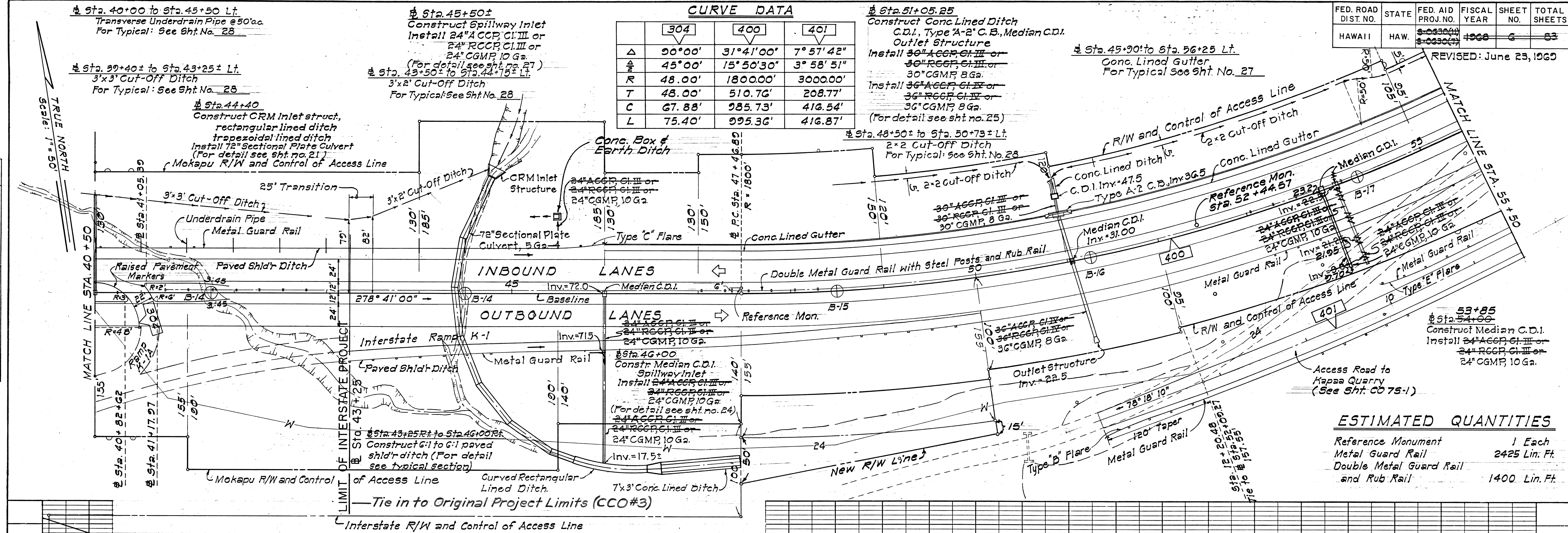
R/W and Control of Access Line
2x2 Cut-off Ditch
Conc. Lined Ditch
C.D.I. Inv. 47.5
Type A-2 C.B. Inv. 36.5
Conc. Lined Gutter
Reference Mon.
Sta. 52 + 44.57
2322
+ 22.5

53+85
~~\$512.54.00~~
 Construct Median C.D.I.
 Install ~~24"ACGP, Cl. III or~~
~~24"RCGP, Cl. III or~~
 24"CGMP, 10 Ga.

Access Road to
Kapaa Quarry
(See Sht. CO 75-1)

ESTIMATED QUANTITIES

Reference Monument	1 Each
Metal Guard Rail	2425 Lin. Ft.
Double Metal Guard Rail and Rub Rail	1400 Lin. Ft.



PROJECT NO. 65B-01-87M

C.O. 10 S-4 