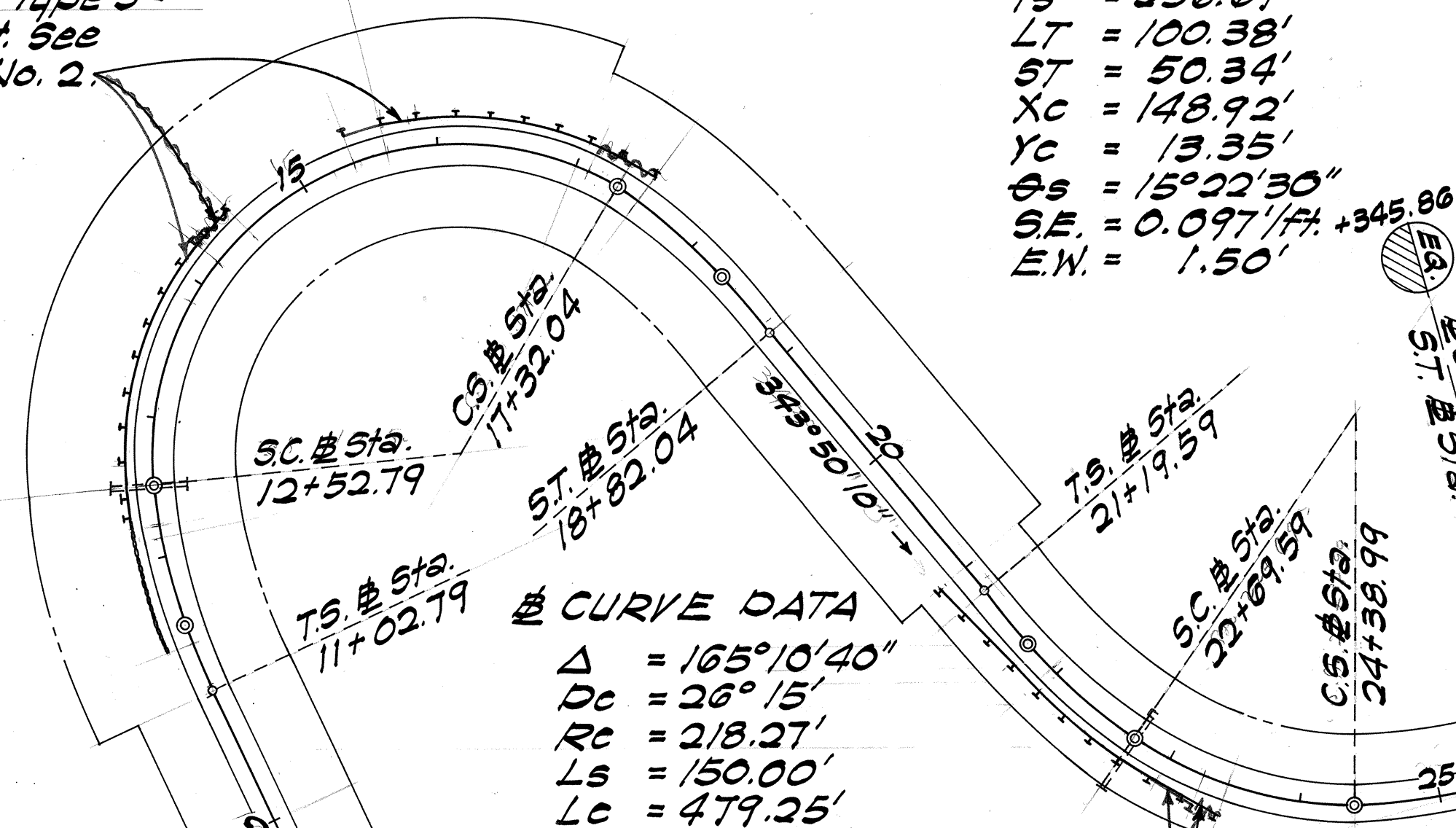


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	440A-01-81M 440A-02-81	1981	3	13

§ CURVE DATA

$\Delta = 65^{\circ}28'40''$
 $Dc = 20^{\circ}30'$
 $Rc = 279.49'$
 $Ls = 150.00'$
 $Lc = 169.40'$
 $Ts = 256.67'$
 $LT = 100.38'$
 $ST = 50.34'$
 $Xc = 148.92'$
 $Yc = 13.35'$
 $\theta s = 15^{\circ}22'30''$
 $SE = 0.097'/ft.$
 $EW = 1.50'$

Install new Guardrail, Type 3-
Single with Steel Post. See
Table B, Plan Sheet No. 2.



§ CURVE DATA

$\Delta = 165^{\circ}10'40''$
 $Dc = 26^{\circ}15'$
 $Rc = 218.27'$
 $Ls = 150.00'$
 $Lc = 479.25'$
 $Ts = 1785.62'$
 $LT = 100.63'$
 $ST = 50.57'$
 $Xc = 148.24'$
 $Yc = 17.04'$
 $\theta s = 19^{\circ}41'15''$
 $SE = 0.10'/ft.$
 $EW = 2.00'$

Install new Guardrail, Type 3-
Single with Steel Post. See
Table B, Plan Sheet No. 2.

§ CURVE DATA

$\Delta = 69^{\circ}49'$
 $Dc = 22^{\circ}00'$
 $Rc = 260.44'$
 $Ls = 150.00'$
 $Lc = 167.35'$
 $Ts = 259.04'$
 $LT = 100.44'$
 $ST = 50.40'$
 $Xc = 148.76'$
 $Yc = 14.31'$
 $\theta s = 16^{\circ}30'$
 $SE = 0.099'/ft.$
 $EW = 1.50'$

Install new Guardrail, Type 3-
Single with Steel Post. See
Table B, Plan Sheet No. 2.

§ CURVE DATA

$\Delta = 139^{\circ}28'$
 $Dc = 22^{\circ}30'$
 $Rc = 254.65'$
 $Ls = 150.00'$
 $Lc = 469.85'$
 $Ts = 774.36'$
 $LT = 100.46'$
 $ST = 50.42'$
 $Xc = 148.70'$
 $Yc = 14.64'$
 $\theta s = 16^{\circ}52'30''$
 $SE = 0.10'/ft.$
 $EW = 2.00'$

Install new Guardrail, Type 3-
Single with Steel Post. See
Table B, Plan Sheet No. 2.

PROJECT NO. 440A-02-81
END PROJECT
§ STA. 39+00

§ CURVE DATA

$\Delta = 108^{\circ}15'$
 $Dc = 26^{\circ}15'$
 $Rc = 218.27'$
 $Ls = 150.00'$
 $Lc = 262.38'$
 $Ts = 382.42'$
 $LT = 100.63'$
 $ST = 50.57'$
 $Xc = 148.24'$
 $Yc = 17.04'$
 $\theta s = 19^{\circ}41'15''$
 $SE = 0.10'/ft.$
 $EW = 2.00'$

Install new Guardrail, Type 3-
Single with Steel Post. See
Table B, Plan Sheet No. 2.

PROJECT NO. 440A-02-81
BEGIN PROJECT
§ STA. 0+00

TRUE NORTH
Scale: 1"=100'

M.L. § STA. 45+00

To Lanai City

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

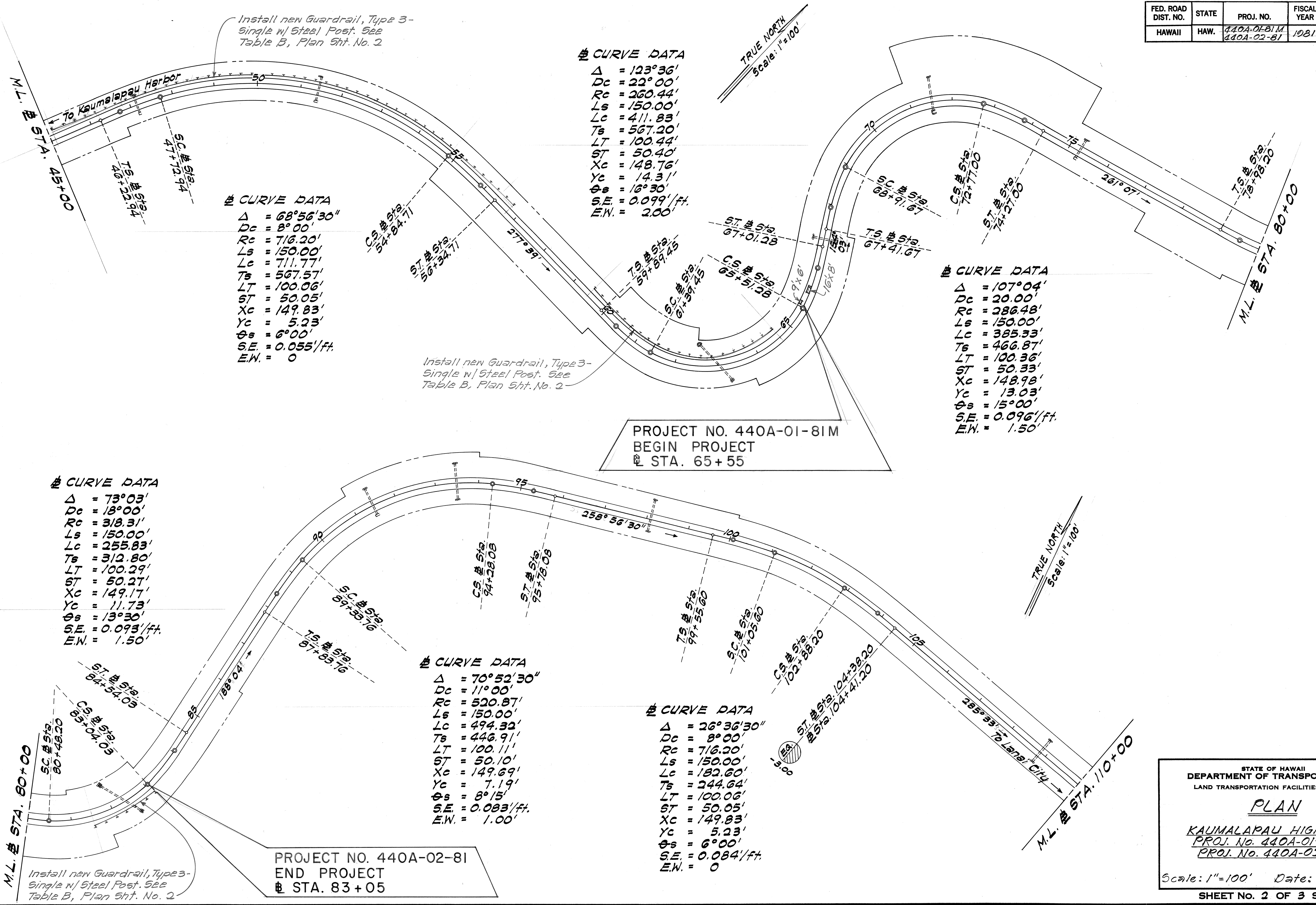
PLAN

KAUMALAPAU HIGHWAY
PROJ. No. 440A-01-81M
PROJ. No. 440A-02-81

Scale: 1"=100' Date: May, 1981

SHEET NO. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	440A-01-81M 440A-02-81	1981	4	13



CURVE DATA
 $\Delta = 68^{\circ}56'30''$
 $Dc = 8^{\circ}00'$
 $Rc = 716.20'$
 $Ls = 150.00'$
 $Lc = 711.77'$
 $Ts = 567.57'$
 $LT = 100.06'$
 $ST = 50.05'$
 $Xc = 149.83'$
 $Yc = 5.23'$
 $\theta_s = 6^{\circ}00'$
 $S.E. = 0.055'/ft.$
 $E.N. = 0$

CURVE DATA
 $\Delta = 123^{\circ}36'$
 $Dc = 22^{\circ}00'$
 $Rc = 260.44'$
 $Ls = 150.00'$
 $Lc = 411.83'$
 $Ts = 567.20'$
 $LT = 100.44'$
 $ST = 50.40'$
 $Xc = 148.76'$
 $Yc = 14.31'$
 $\theta_s = 16^{\circ}30'$
 $S.E. = 0.099'/ft.$
 $E.N. = 2.00$

CURVE DATA
 $\Delta = 107^{\circ}04'$
 $Dc = 20.00'$
 $Rc = 286.48'$
 $Ls = 150.00'$
 $Lc = 385.33'$
 $Ts = 466.87'$
 $LT = 100.36'$
 $ST = 50.33'$
 $Xc = 148.98'$
 $Yc = 13.03'$
 $\theta_s = 15^{\circ}00'$
 $S.E. = 0.096'/ft.$
 $E.N. = 1.50$

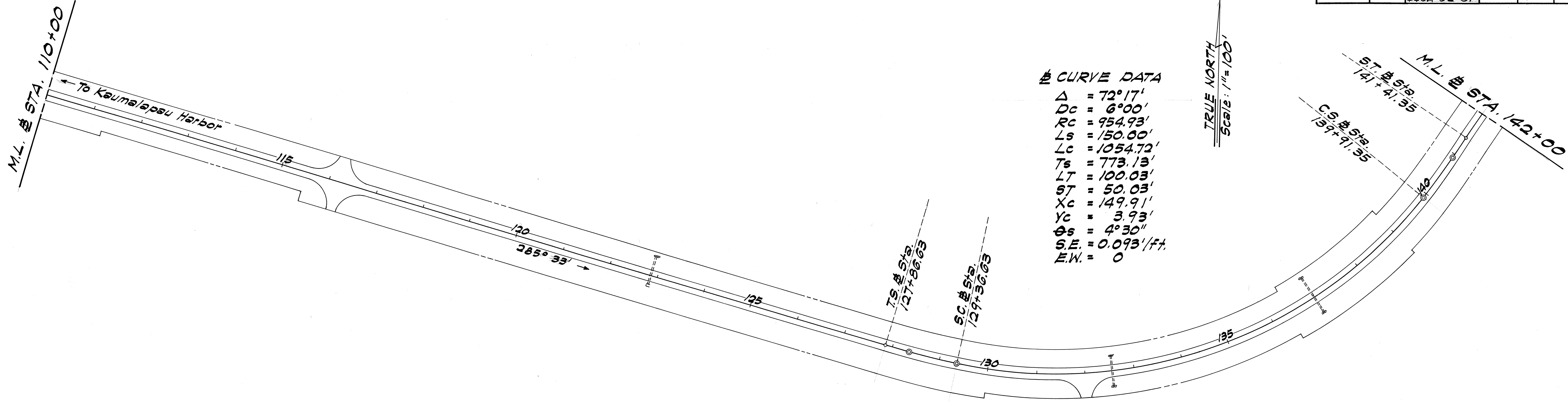
CURVE DATA
 $\Delta = 73^{\circ}03'$
 $Dc = 18^{\circ}00'$
 $Rc = 318.31'$
 $Ls = 150.00'$
 $Lc = 255.83'$
 $Ts = 312.80'$
 $LT = 100.29'$
 $ST = 50.27'$
 $Xc = 149.17'$
 $Yc = 11.73'$
 $\theta_s = 13^{\circ}30'$
 $S.E. = 0.093'/ft.$
 $E.N. = 1.50$

CURVE DATA
 $\Delta = 70^{\circ}52'30''$
 $Dc = 11^{\circ}00'$
 $Rc = 520.87'$
 $Ls = 150.00'$
 $Lc = 494.32'$
 $Ts = 446.91'$
 $LT = 100.11'$
 $ST = 50.10'$
 $Xc = 149.69'$
 $Yc = 7.19'$
 $\theta_s = 8^{\circ}15'$
 $S.E. = 0.083'/ft.$
 $E.N. = 1.00$

CURVE DATA
 $\Delta = 26^{\circ}36'30''$
 $Dc = 8^{\circ}00'$
 $Rc = 716.20'$
 $Ls = 150.00'$
 $Lc = 182.60'$
 $Ts = 244.64'$
 $LT = 100.06'$
 $ST = 50.05'$
 $Xc = 149.83'$
 $Yc = 5.23'$
 $\theta_s = 6^{\circ}00'$
 $S.E. = 0.084'/ft.$
 $E.N. = 0$

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	440A-01-81M 440A-02-81	1981	5	13

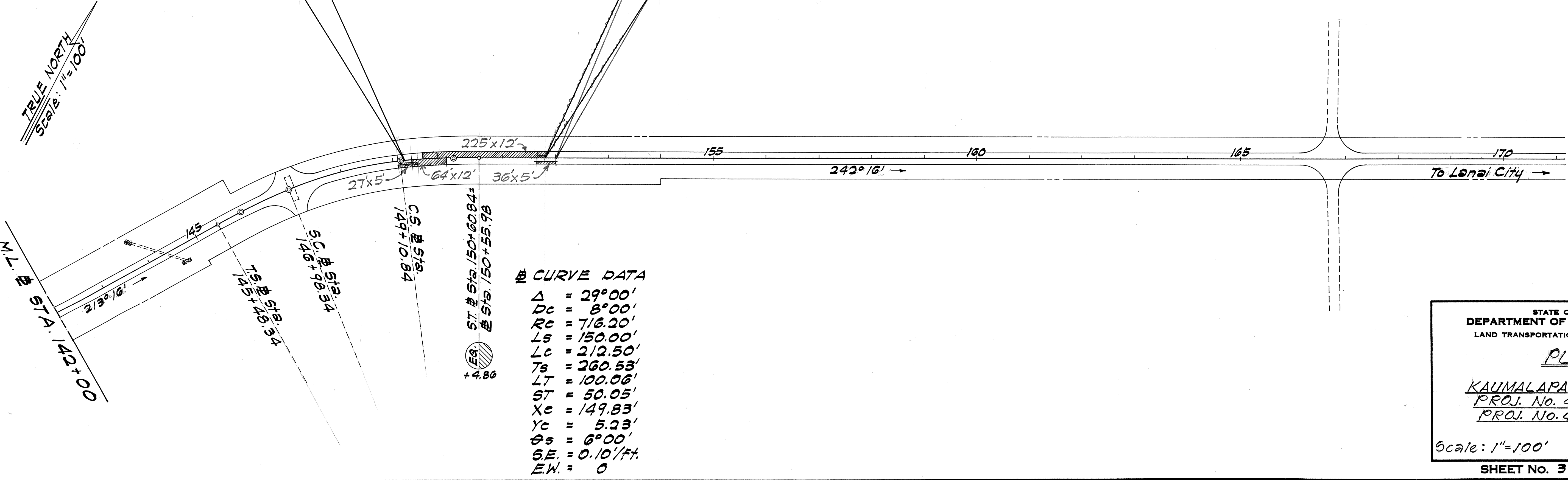


CURVE DATA

Δ	= 72° 17'
D_c	= 6° 00'
R_c	= 754.93'
L_s	= 150.00'
L_c	= 1054.72'
T_s	= 773.13'
L_T	= 100.03'
S_T	= 50.03'
X_c	= 149.91'
Y_c	= 3.93'
θ_s	= 4° 30"
$S.E.$	= 0.093'/ft.
$E.W.$	= 0

PROJECT NO. 440A-01-81M
BEGIN PROJECT
STA. 149+20

PROJECT NO. 440A-01-81M
END PROJECT
STA. 151+81 152+01



CURVE DATA

Δ	= 29° 00'
D_c	= 8° 00'
R_c	= 716.20'
L_s	= 150.00'
L_c	= 212.50'
T_s	= 260.53'
L_T	= 100.06'
S_T	= 50.05'
X_c	= 149.83'
Y_c	= 5.23'
θ_s	= 6° 00'
$S.E.$	= 0.10'/ft.
$E.W.$	= 0

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

PLAN
KAUNALAPAU HIGHWAY
PROJ. No. 440A-01-81M
PROJ. No. 440A-02-81

Scale: 1"=100' Date: May, 1981
SHEET NO. 3 OF 3 SHEETS

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