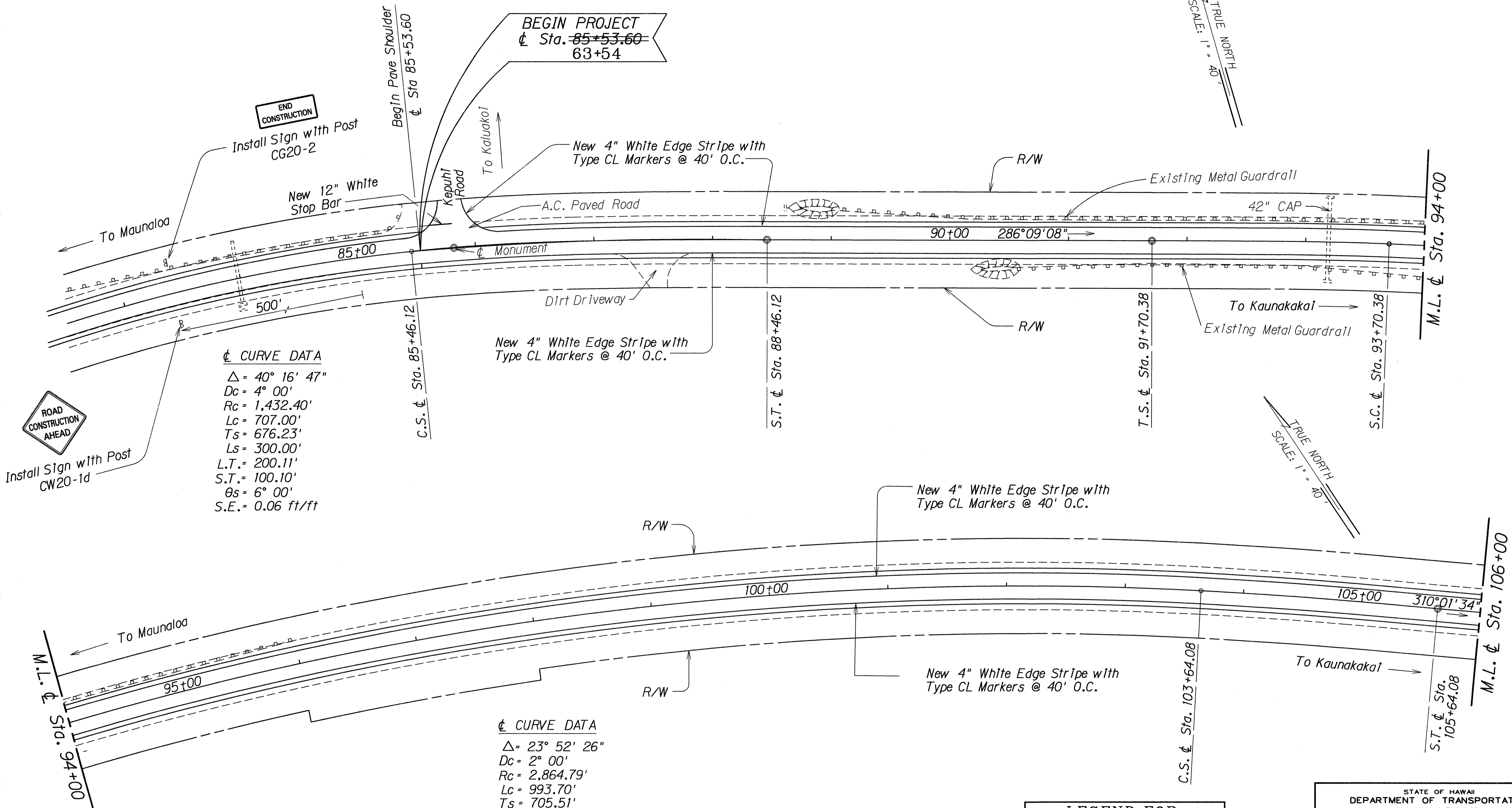


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	5	31

TRUE NORTH
SCALE: 1" = 40'

TRUE NORTH
SCALE: 1" = 40'



☉ CURVE DATA
 $\Delta = 40^\circ 16' 47''$
 $Dc = 4^\circ 00'$
 $Rc = 1,432.40'$
 $Lc = 707.00'$
 $Ts = 676.23'$
 $Ls = 300.00'$
 $L.T. = 200.11'$
 $S.T. = 100.10'$
 $\theta_s = 6^\circ 00'$
 $S.E. = 0.06 \text{ ft/ft}$

☉ CURVE DATA
 $\Delta = 23^\circ 52' 26''$
 $Dc = 2^\circ 00'$
 $Rc = 2,864.79'$
 $Lc = 993.70'$
 $Ts = 705.51'$
 $Ls = 200.00'$
 $L.T. = 133.34'$
 $S.T. = 66.67'$
 $\theta_s = 2^\circ 00'$
 $S.E. = 0.03 \text{ ft/ft}$

LEGEND FOR AS-BUILT POSTINGS

	squiggly line for as-built deletion
	double line for as-built deletion
	text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

SHEET No. 1 OF 21 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	

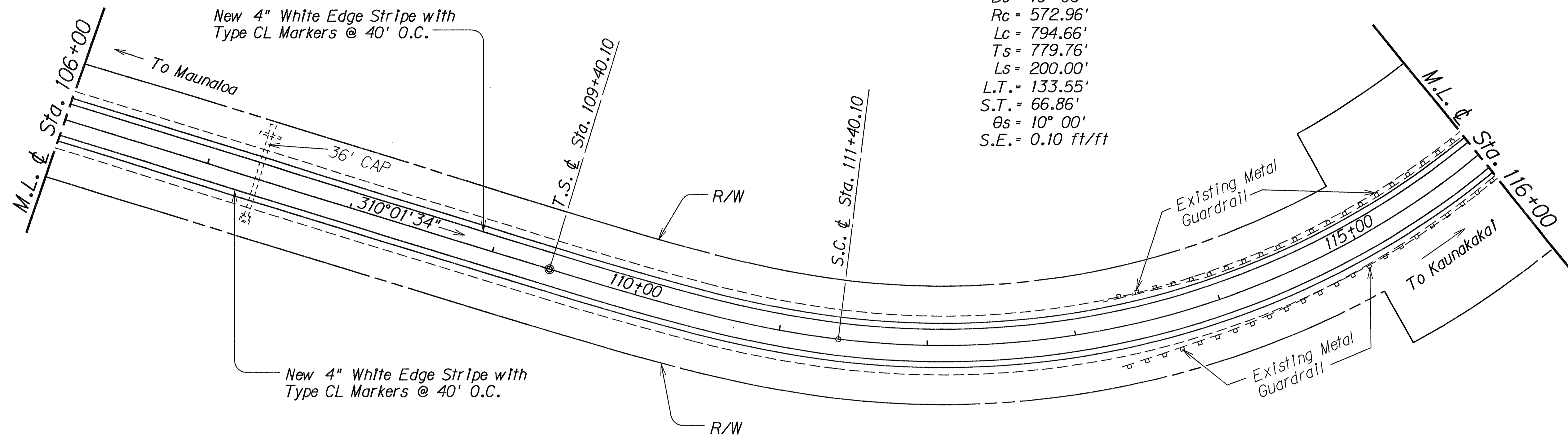
AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	6	31

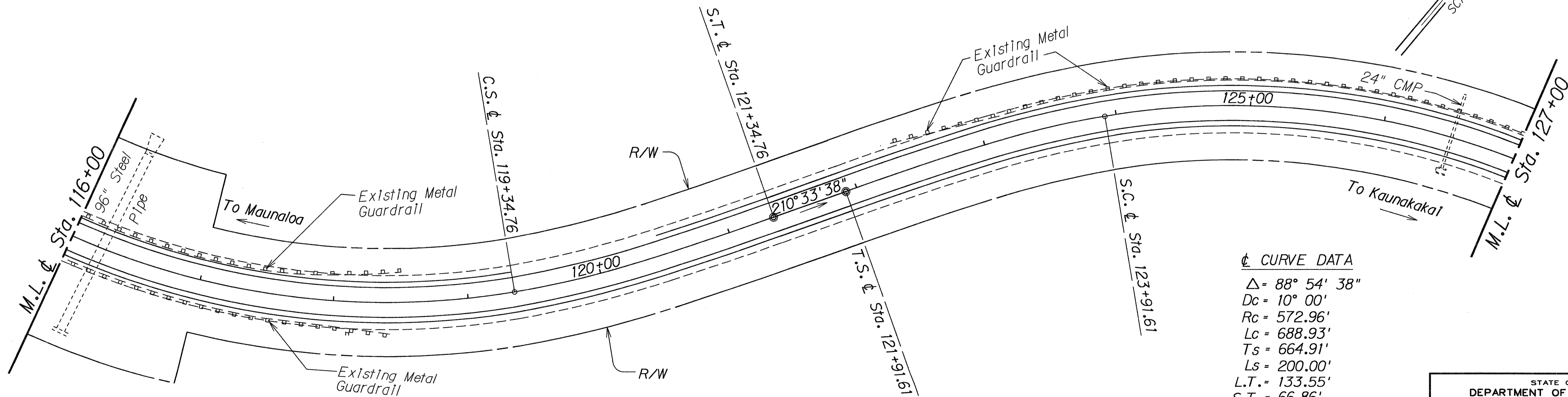
☺ CURVE DATA

$\Delta = 99^\circ 27' 56''$
 $Dc = 10^\circ 00'$
 $Rc = 572.96'$
 $Lc = 794.66'$
 $Ts = 779.76'$
 $Ls = 200.00'$
 $L.T. = 133.55'$
 $S.T. = 66.86'$
 $\theta_s = 10^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

TRUE NORTH
SCALE: 1" = 40'



TRUE NORTH
SCALE: 1" = 40'



☺ CURVE DATA

$\Delta = 88^\circ 54' 38''$
 $Dc = 10^\circ 00'$
 $Rc = 572.96'$
 $Lc = 688.93'$
 $Ts = 664.91'$
 $Ls = 200.00'$
 $L.T. = 133.55'$
 $S.T. = 66.86'$
 $\theta_s = 10^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

DATE	
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

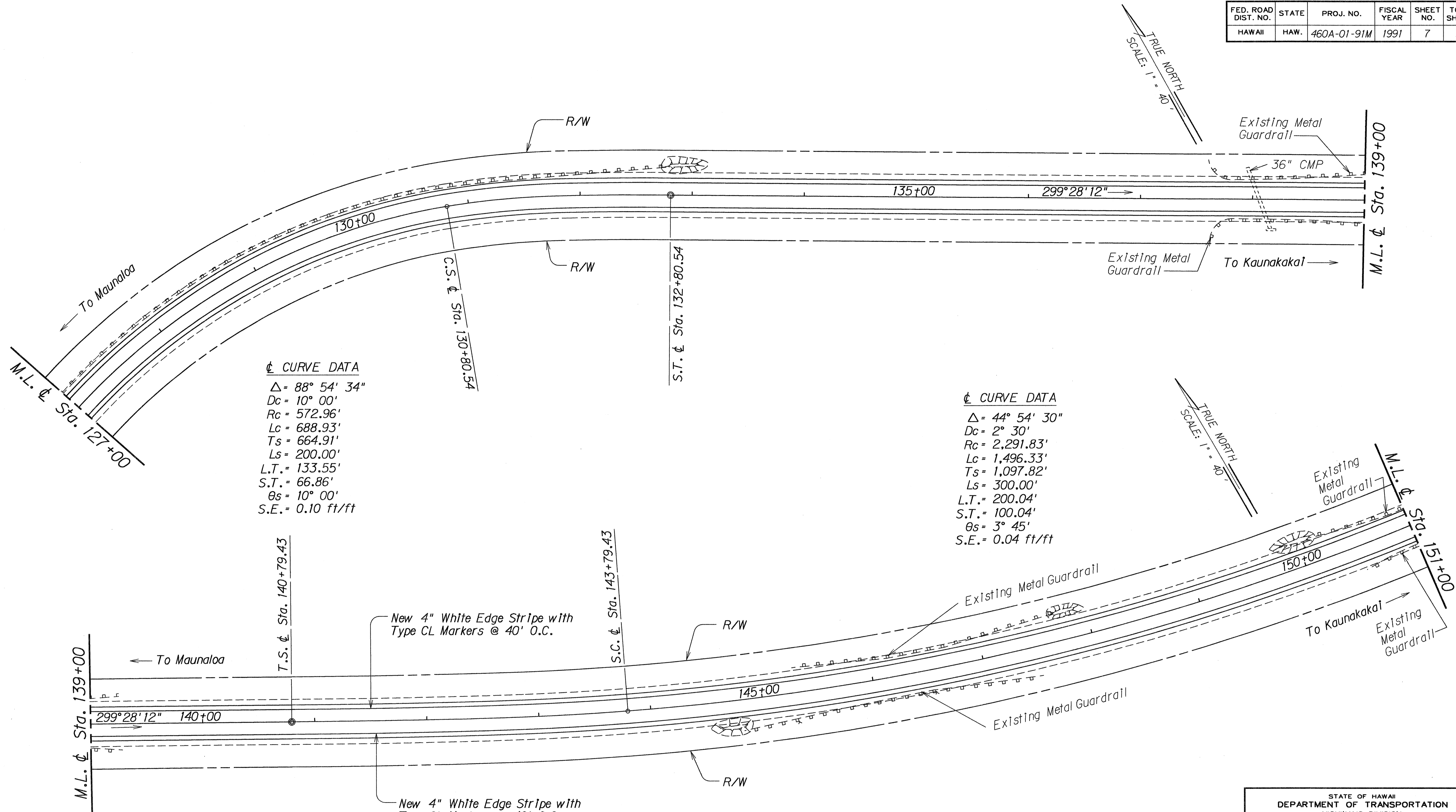
ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

SHEET No. 2 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	7	31



$\Delta = 88^\circ 54' 34''$
 $Dc = 10^\circ 00'$
 $Rc = 572.96'$
 $Lc = 688.93'$
 $Ts = 664.91'$
 $Ls = 200.00'$
 $L.T. = 133.55'$
 $S.T. = 66.86'$
 $\theta_s = 10^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

$\Delta = 44^\circ 54' 30''$
 $Dc = 2^\circ 30'$
 $Rc = 2,291.83'$
 $Lc = 1,496.33'$
 $Ts = 1,097.82'$
 $Ls = 300.00'$
 $L.T. = 200.04'$
 $S.T. = 100.04'$
 $\theta_s = 3^\circ 45'$
 $S.E. = 0.04 \text{ ft/ft}$

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

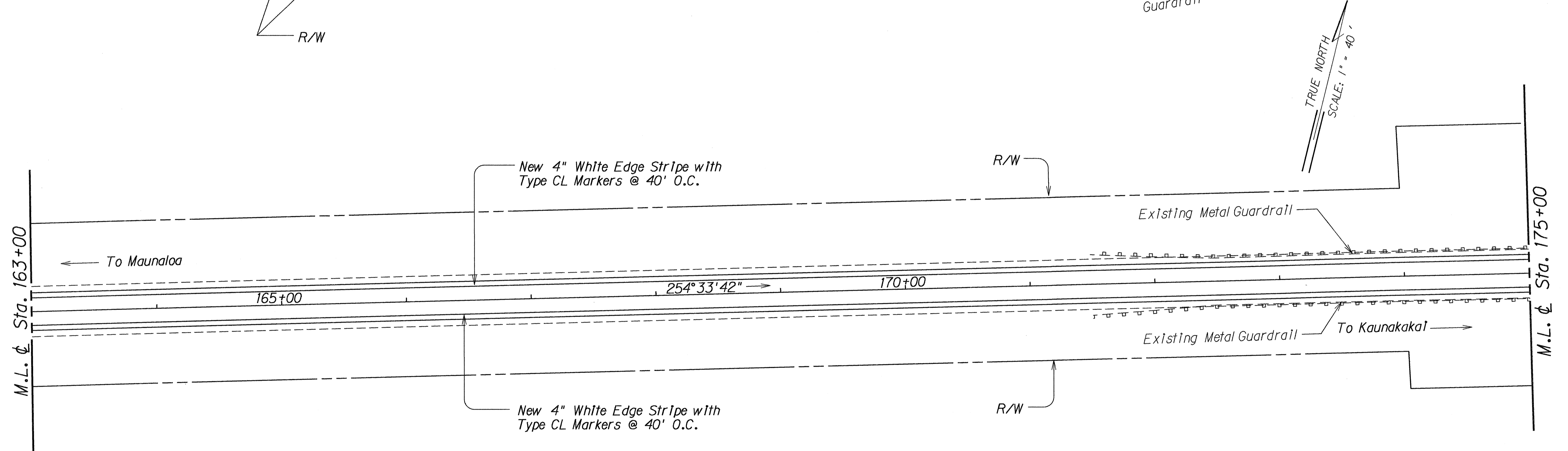
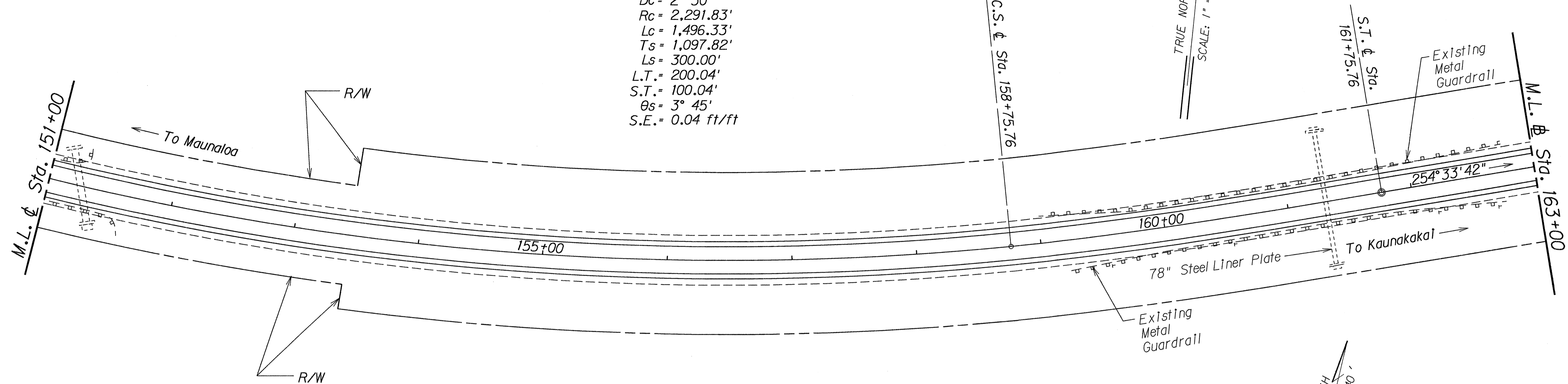
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS
 MAUNALOA HIGHWAY SHOULDER PAVING
 KEPUHI ROAD TO KEONELELE AVENUE
 PROJECT NO. 460A-01-91M
 Scale: 1" = 40' Date: Nov, 1990
 SHEET No. 3 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	8	31

☉ CURVE DATA

$\Delta = 44^\circ 54' 30''$
 $Dc = 2^\circ 30'$
 $Rc = 2,291.83'$
 $Lc = 1,496.33'$
 $Ts = 1,097.82'$
 $Ls = 300.00'$
 $L.T. = 200.04'$
 $S.T. = 100.04'$
 $\theta_s = 3^\circ 45'$
 $S.E. = 0.04 \text{ ft/ft}$

TRUE NORTH
SCALE: 1" = 40'



SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

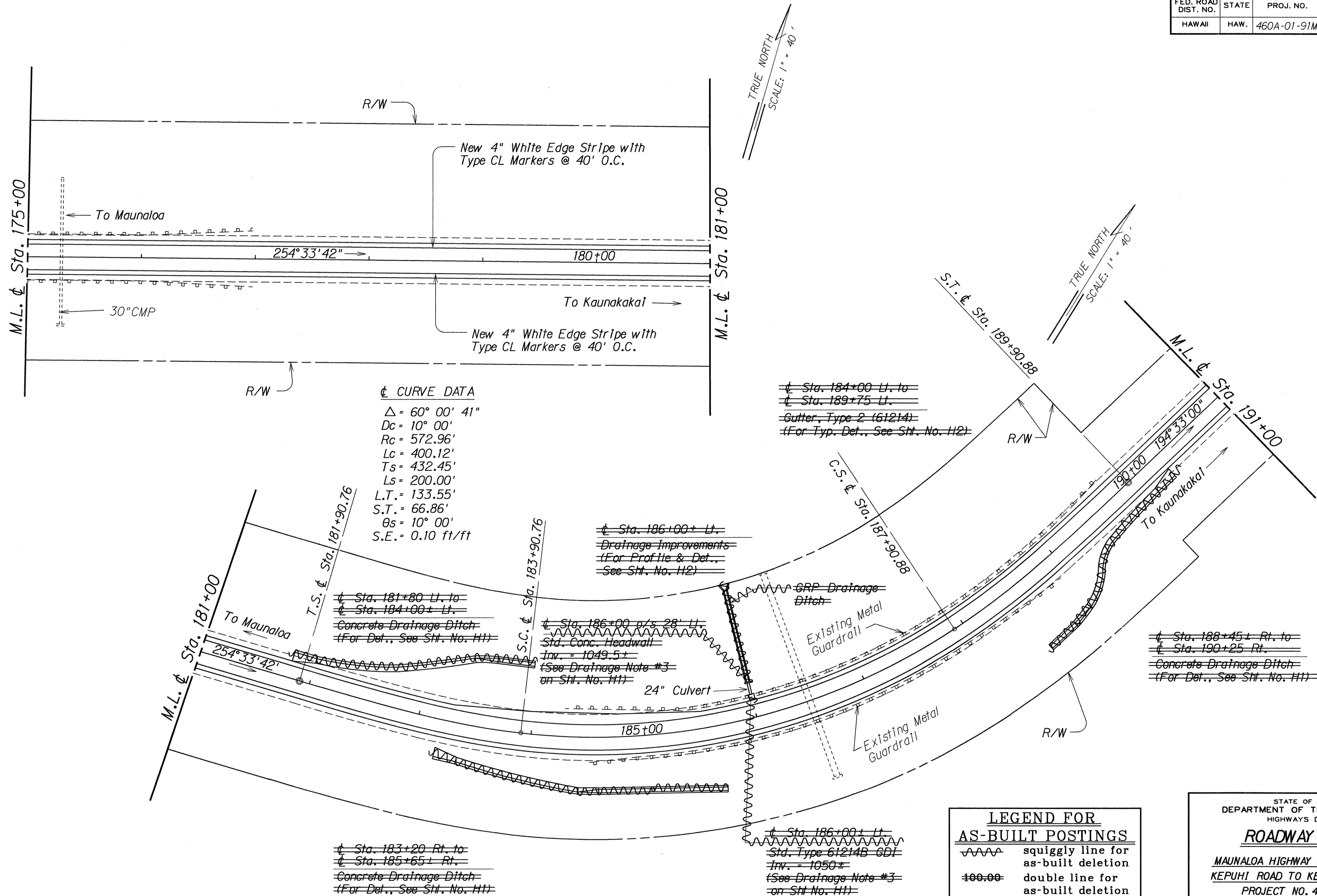
ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov., 1990

SHEET No. 4 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	9	31



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

LEGEND FOR AS-BUILT POSTINGS

	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

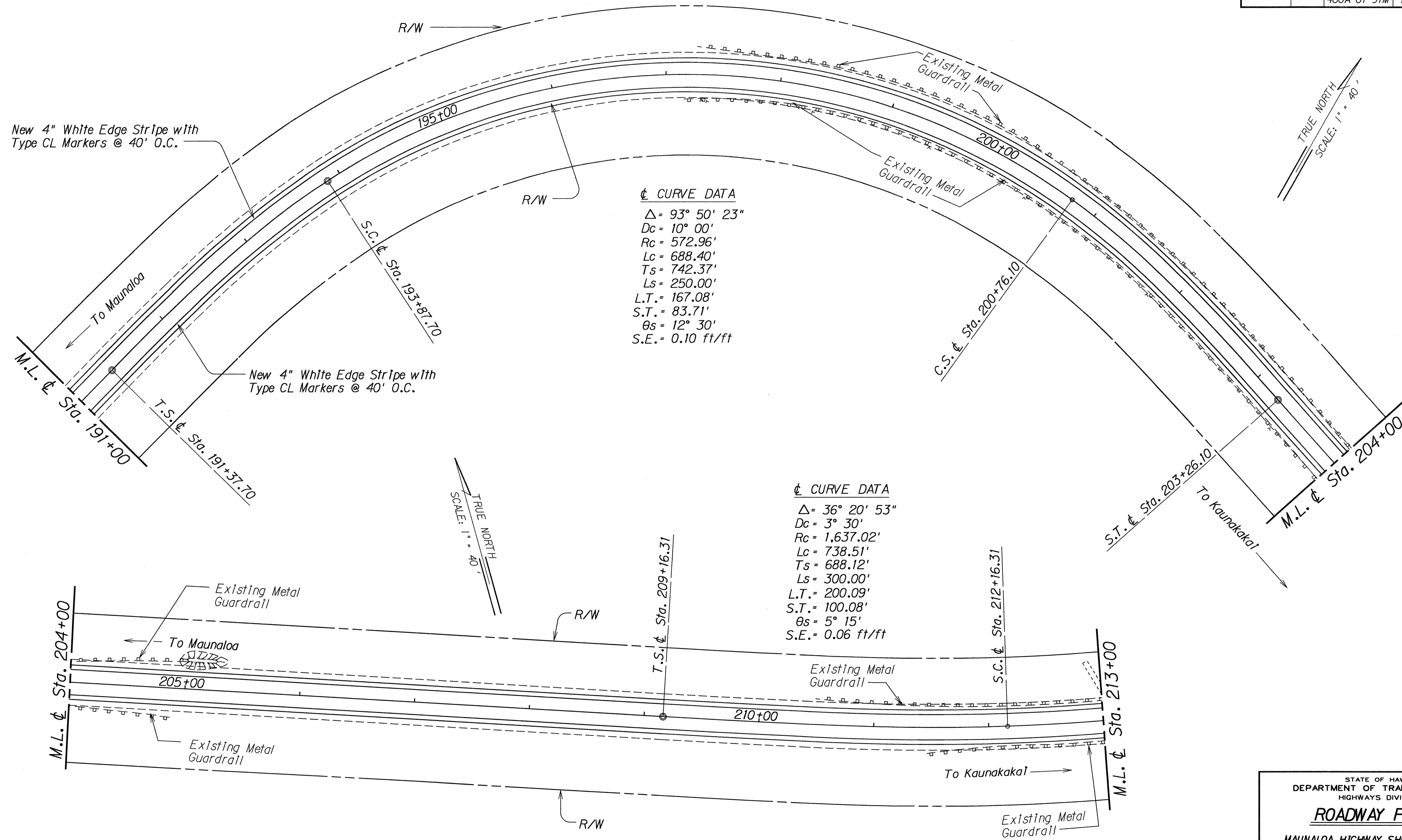
MAUNALO A HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

SHEET No. 5 OF 21 SHEETS

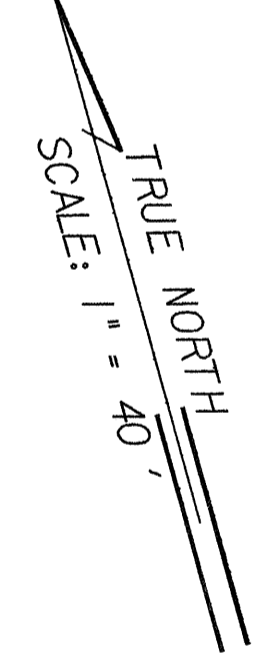
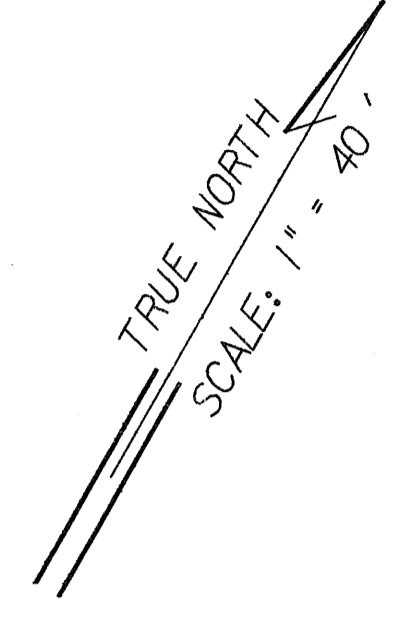
AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	10	31



$\Delta = 93^\circ 50' 23''$
 $Dc = 10^\circ 00'$
 $Rc = 572.96'$
 $Lc = 688.40'$
 $Ts = 742.37'$
 $Ls = 250.00'$
 $L.T. = 167.08'$
 $S.T. = 83.71'$
 $\theta_s = 12^\circ 30'$
 $S.E. = 0.10 \text{ ft/ft}$

$\Delta = 36^\circ 20' 53''$
 $Dc = 3^\circ 30'$
 $Rc = 1,637.02'$
 $Lc = 738.51'$
 $Ts = 688.12'$
 $Ls = 300.00'$
 $L.T. = 200.09'$
 $S.T. = 100.08'$
 $\theta_s = 5^\circ 15'$
 $S.E. = 0.06 \text{ ft/ft}$



SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
DATE	

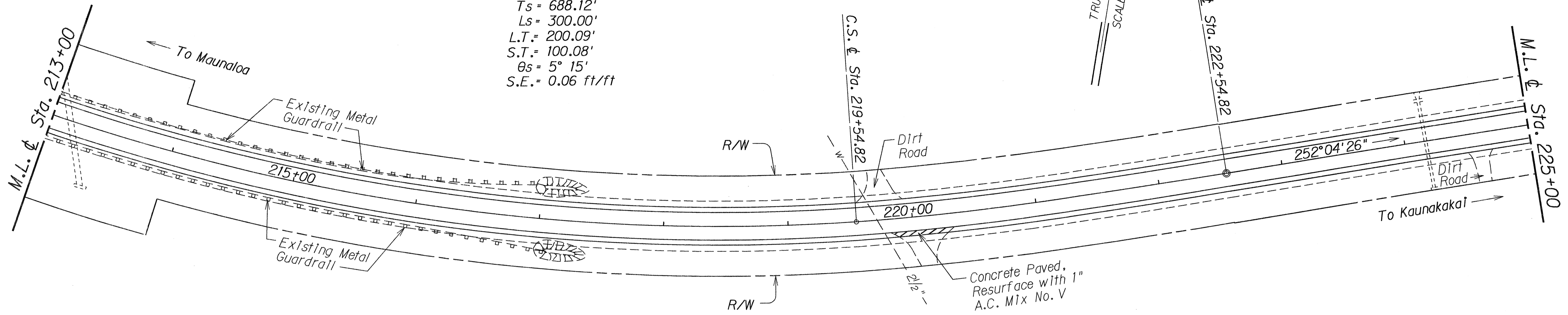
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS
 MAUNALOA HIGHWAY SHOULDER PAVING
 KUPUHI ROAD TO KEONELELE AVENUE
 PROJECT NO. 460A-01-91M
 Scale: 1" = 40' Date: Nov., 1990
 SHEET No. 6 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	11	31

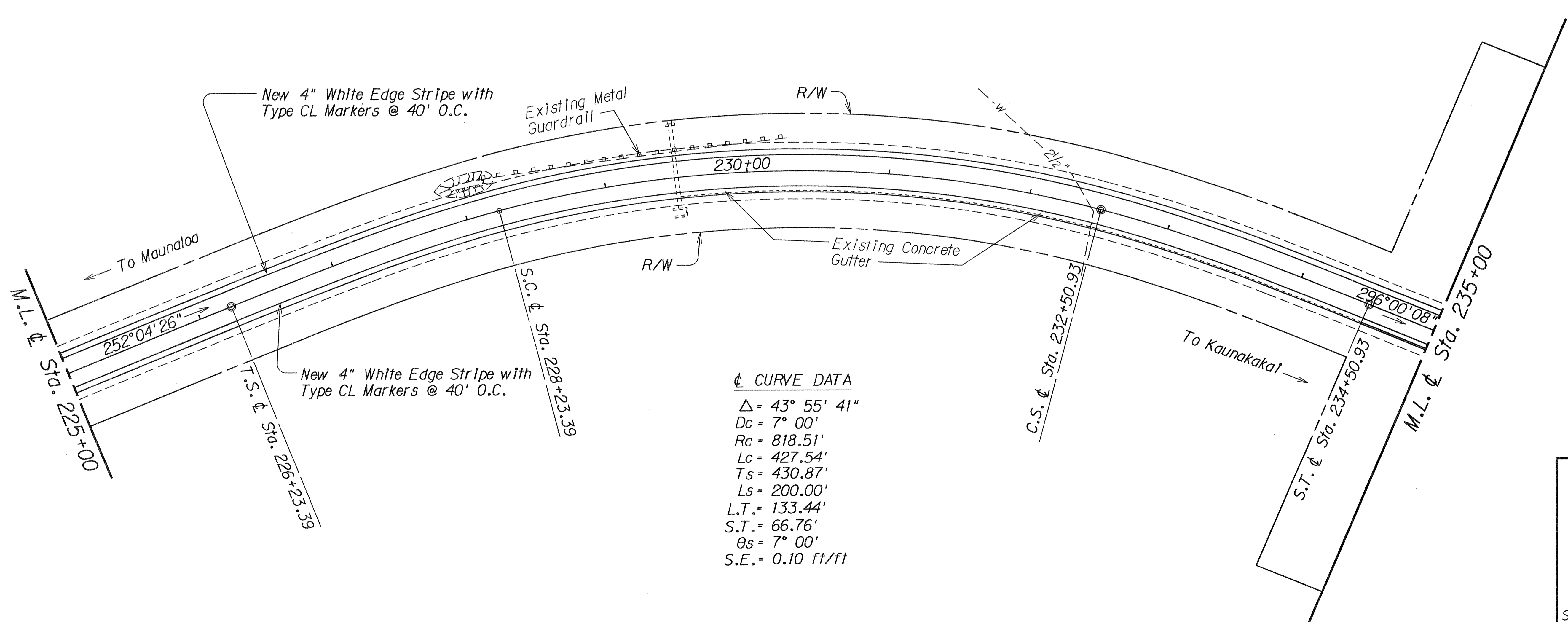
☺ CURVE DATA

$\Delta = 36^\circ 20' 53''$
 $Dc = 3^\circ 30'$
 $Rc = 1,637.02'$
 $Lc = 738.51'$
 $Ts = 688.12'$
 $Ls = 300.00'$
 $L.T. = 200.09'$
 $S.T. = 100.08'$
 $\theta_s = 5^\circ 15'$
 $S.E. = 0.06 \text{ ft/ft}$

TRUE NORTH
SCALE: 1" = 40'



TRUE NORTH
SCALE: 1" = 40'



☺ CURVE DATA

$\Delta = 43^\circ 55' 41''$
 $Dc = 7^\circ 00'$
 $Rc = 818.51'$
 $Lc = 427.54'$
 $Ts = 430.87'$
 $Ls = 200.00'$
 $L.T. = 133.44'$
 $S.T. = 66.76'$
 $\theta_s = 7^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MAUNALO A HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

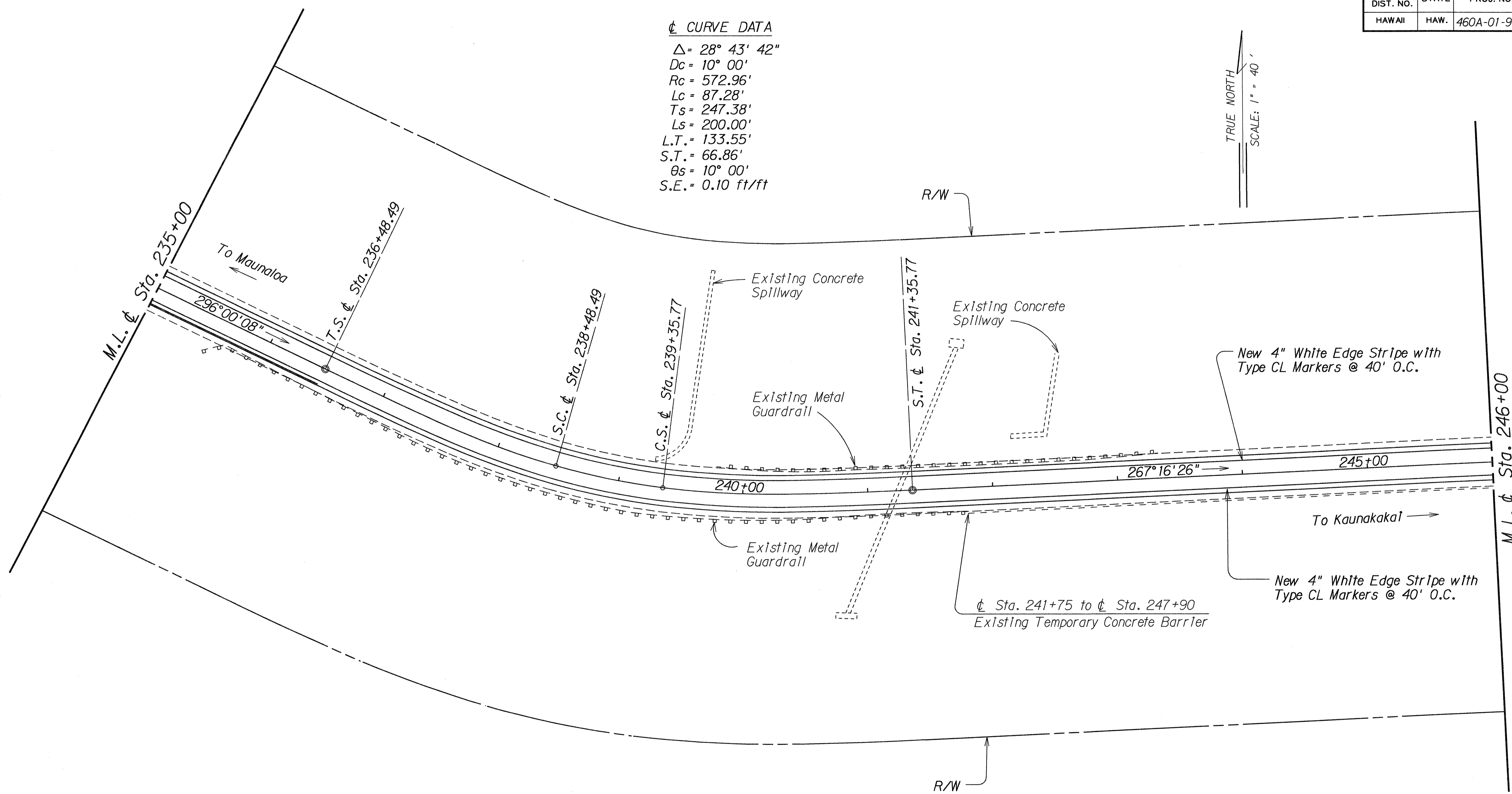
Scale: 1" = 40' Date: Nov, 1990
SHEET No. 7 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	12	31

☉ CURVE DATA

$\Delta = 28^\circ 43' 42''$
 $D_c = 10^\circ 00'$
 $R_c = 572.96'$
 $L_c = 87.28'$
 $T_s = 247.38'$
 $L_s = 200.00'$
 $L.T. = 133.55'$
 $S.T. = 66.86'$
 $\theta_s = 10^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

TRUE NORTH
SCALE: 1" = 40'



ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

SHEET No. 8 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	13	31

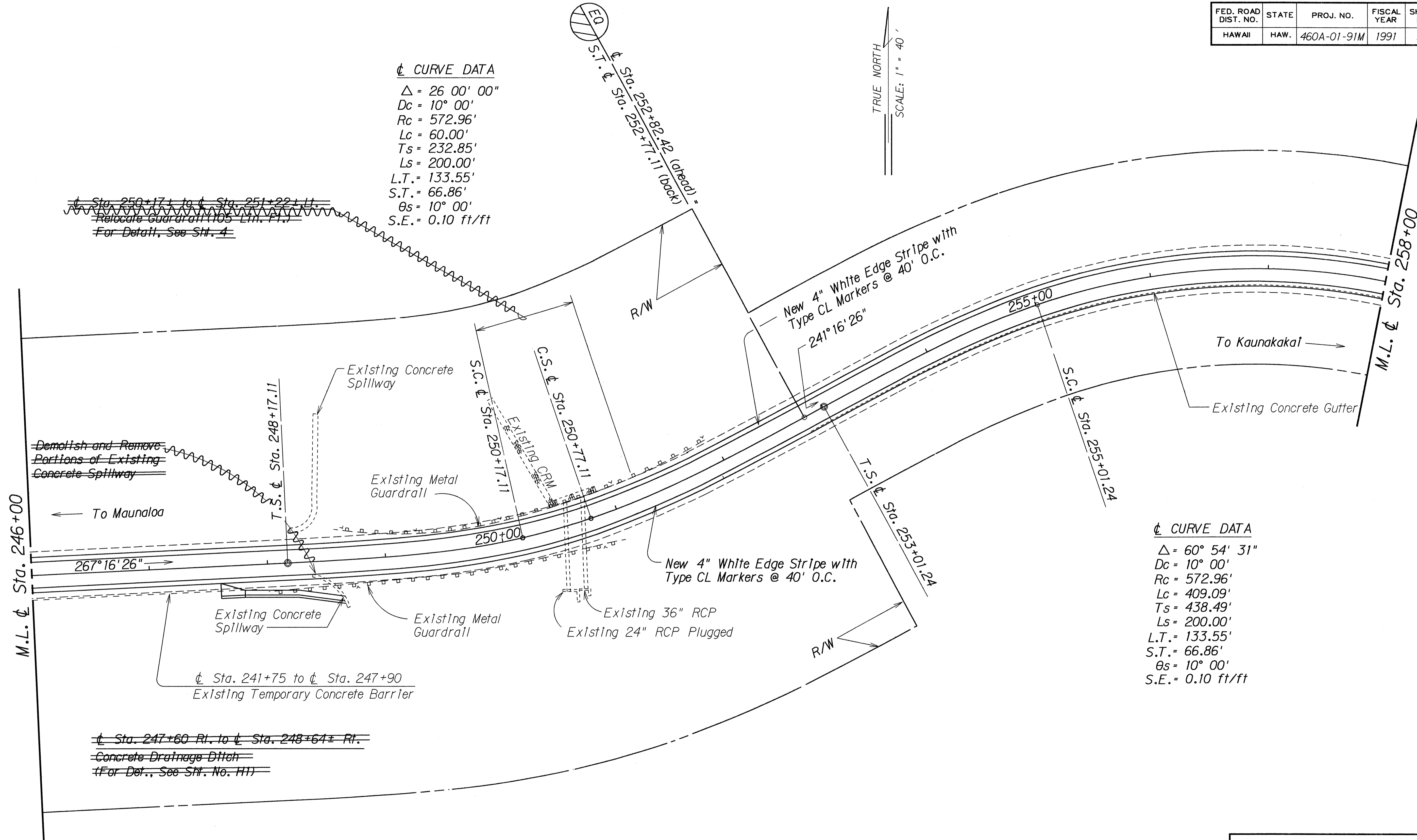
☺ CURVE DATA

$\Delta = 26^\circ 00' 00''$
 $Dc = 10^\circ 00'$
 $Rc = 572.96'$
 $Lc = 60.00'$
 $Ts = 232.85'$
 $Ls = 200.00'$
 $L.T. = 133.55'$
 $S.T. = 66.86'$
 $\theta s = 10^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

~~Sta. 250+17 to Sta. 251+22 L.L.~~
~~Reinforce Guardrail 105 L.H. P.P.~~
~~For Detail, See Sht. 4~~



TRUE NORTH
SCALE: 1" = 40'



☺ CURVE DATA

$\Delta = 60^\circ 54' 31''$
 $Dc = 10^\circ 00'$
 $Rc = 572.96'$
 $Lc = 409.09'$
 $Ts = 438.49'$
 $Ls = 200.00'$
 $L.T. = 133.55'$
 $S.T. = 66.86'$
 $\theta s = 10^\circ 00'$
 $S.E. = 0.10 \text{ ft/ft}$

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

~~Sta. 247+60 R.I. to Sta. 248+64± R.I.~~
~~Concrete Drainage Ditch~~
~~(For Det., See Sht. No. H1)~~

LEGEND FOR AS-BUILT POSTINGS

	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

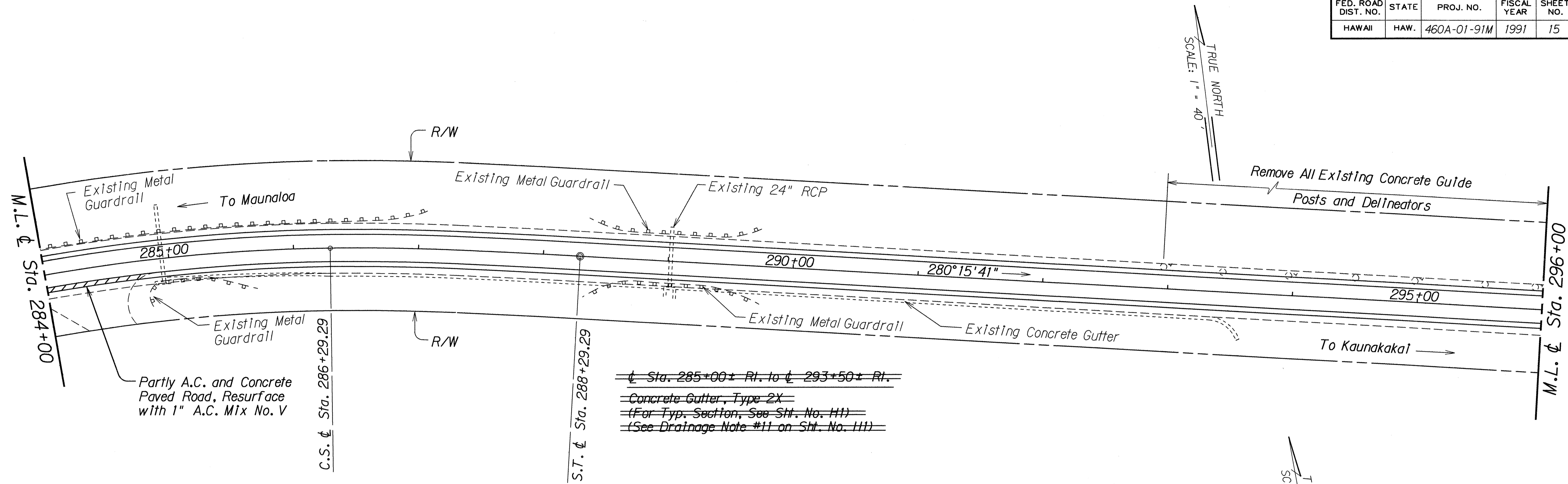
MAUNALO A HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

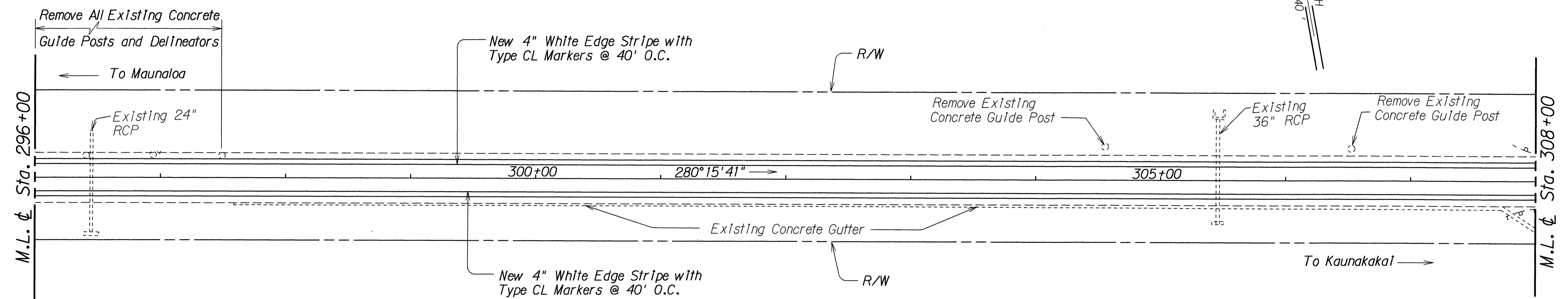
SHEET No. 9 OF 21 SHEETS

AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	15	31



~~Sta. 285+00+Rt. to Sta. 293+50+Rt.~~
~~Concrete Gutter, Type 2X~~
~~(For Typ. Section, See Sht. No. H1)~~
~~(See Drainage Note #11 on Sht. No. H1)~~



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

LEGEND FOR AS-BUILT POSTINGS	
	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

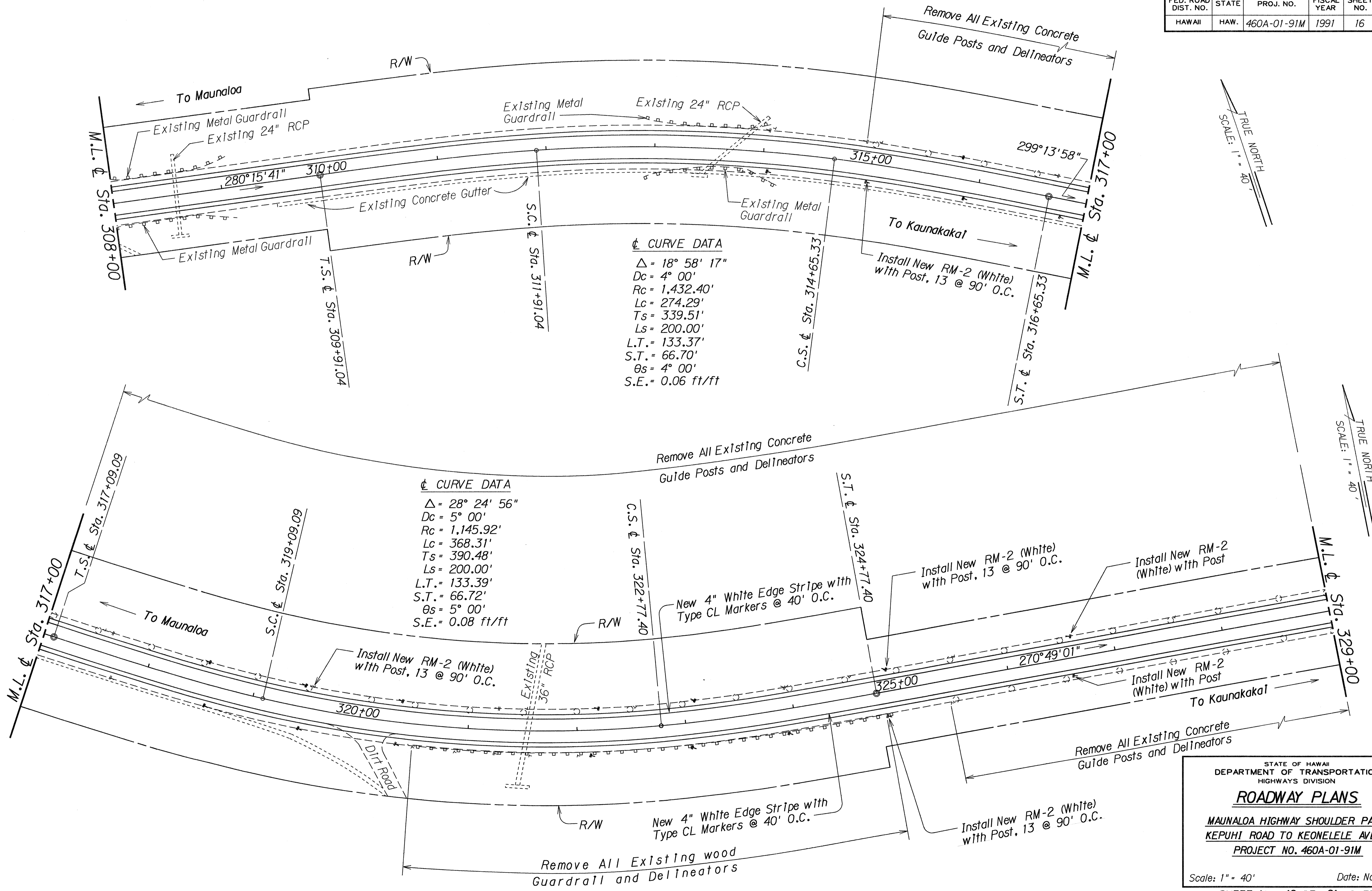
MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

SHEET No. 11 OF 21 SHEETS

AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	16	31



☉ CURVE DATA
 $\Delta = 18^\circ 58' 17''$
 $Dc = 4' 00'$
 $Rc = 1,432.40'$
 $Lc = 274.29'$
 $Ts = 339.51'$
 $Ls = 200.00'$
 $L.T. = 133.37'$
 $S.T. = 66.70'$
 $\theta s = 4^\circ 00'$
 $S.E. = 0.06 \text{ ft/ft}$

☉ CURVE DATA
 $\Delta = 28^\circ 24' 56''$
 $Dc = 5' 00'$
 $Rc = 1,145.92'$
 $Lc = 368.31'$
 $Ts = 390.48'$
 $Ls = 200.00'$
 $L.T. = 133.39'$
 $S.T. = 66.72'$
 $\theta s = 5^\circ 00'$
 $S.E. = 0.08 \text{ ft/ft}$

DATE	
SURVEY PLOTTED BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

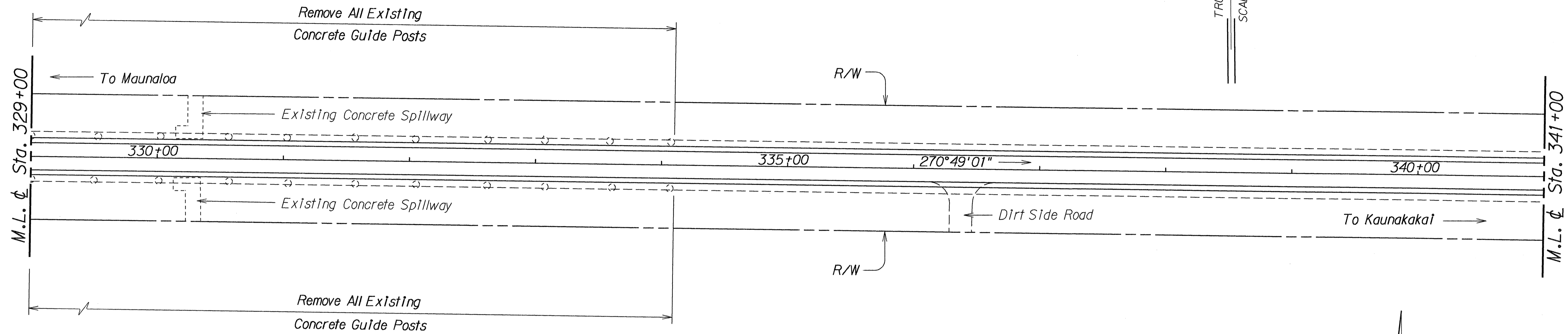
MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

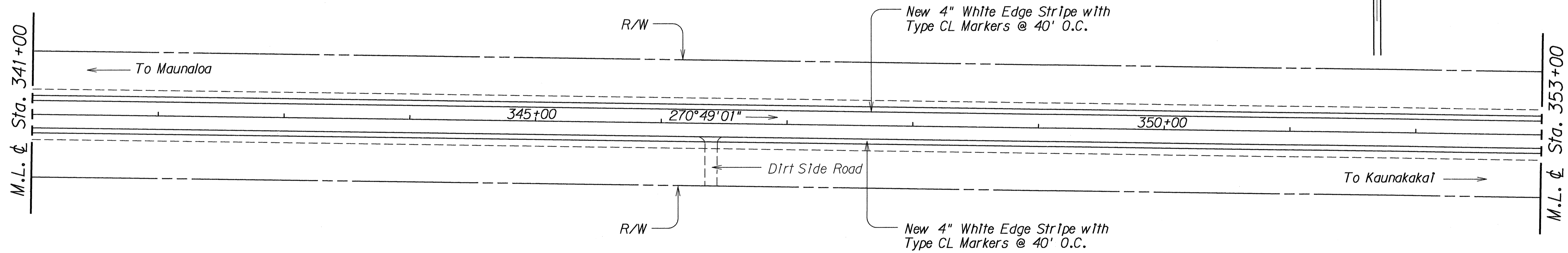
SHEET No. 12 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	17	31

TRUE NORTH
SCALE: 1" = 40'



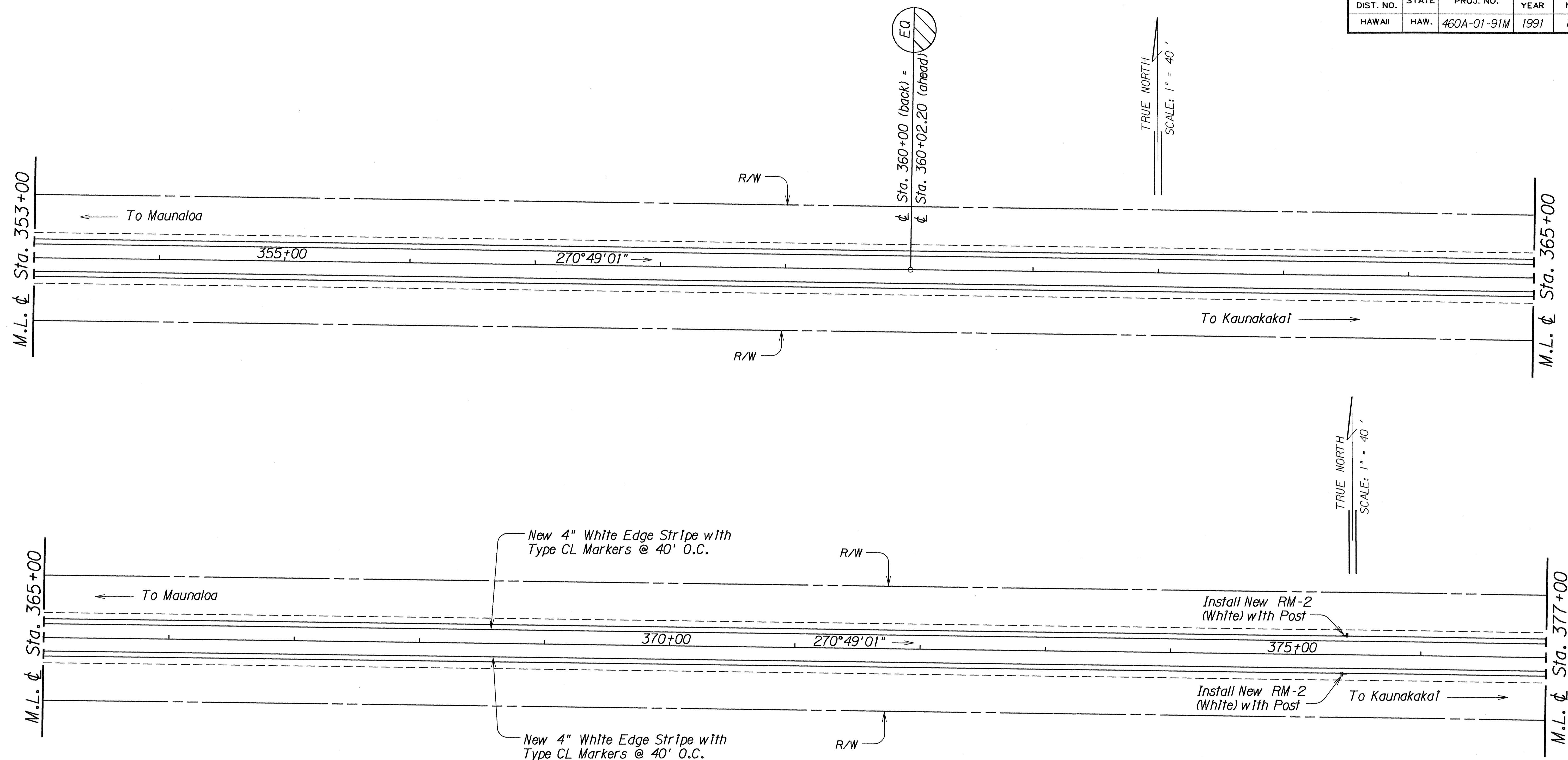
TRUE NORTH
SCALE: 1" = 40'



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS
MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M
Scale: 1" = 40' Date: Nov., 1990

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	18	31



SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MAUNALO A HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

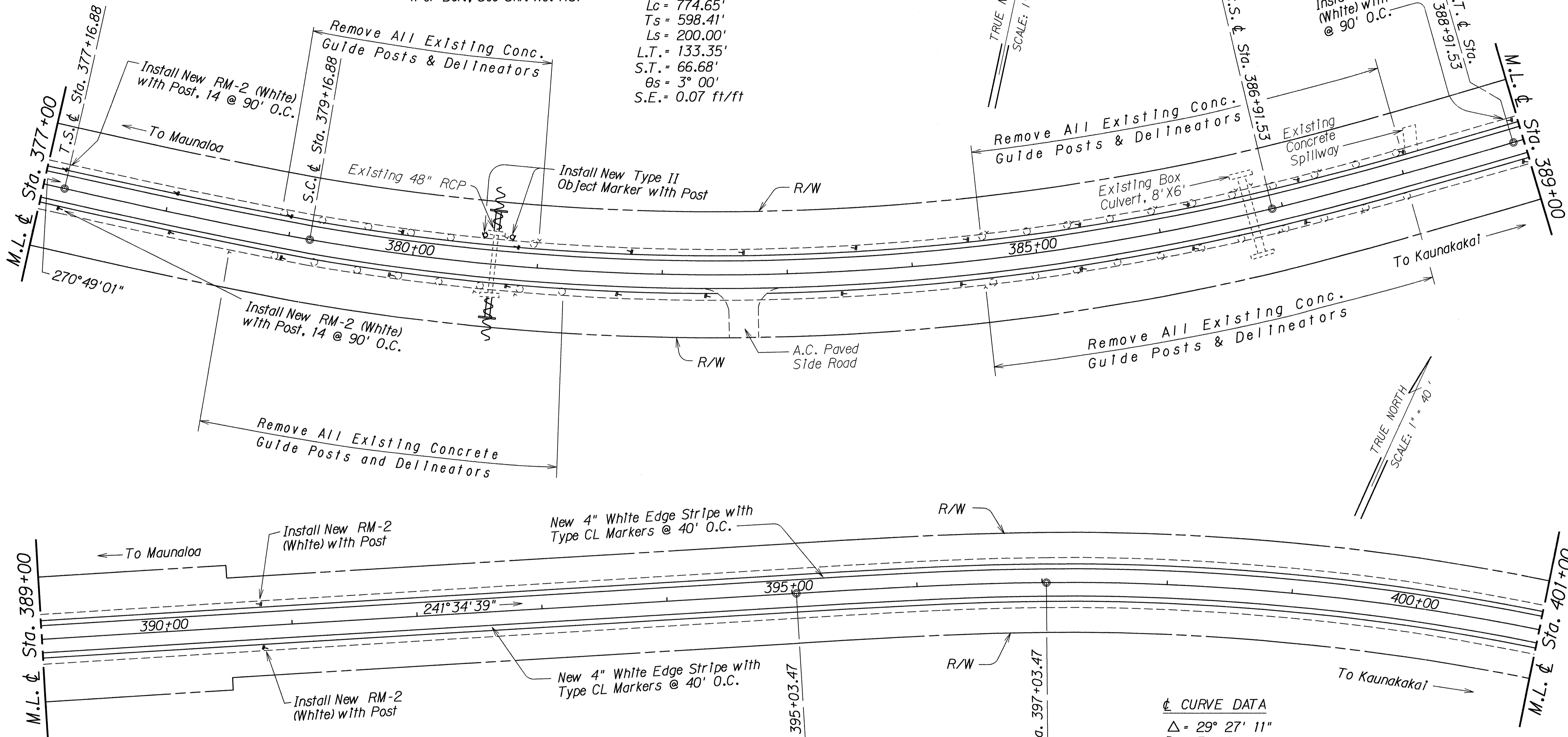
SHEET No. 14 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	19	31

~~Sta. 380+65 L. and~~
~~Sta. 380+65 R.~~
~~Drainage Improvements~~
~~(For Det., See Sht. No. H3)~~

☉ CURVE DATA
 $\Delta = 29^\circ 14' 23''$
 $Dc = 3^\circ 00'$
 $Rc = 1,909.86'$
 $Lc = 774.65'$
 $Ts = 598.41'$
 $Ls = 200.00'$
 $L.T. = 133.35'$
 $S.T. = 66.68'$
 $\theta s = 3^\circ 00'$
 $S.E. = 0.07 \text{ ft/ft}$

TRUE NORTH
 SCALE: 1" = 40'



TRUE NORTH
 SCALE: 1" = 40'

☉ CURVE DATA
 $\Delta = 29^\circ 27' 11''$
 $Dc = 3^\circ 00'$
 $Rc = 1,909.86'$
 $Lc = 781.77'$
 $Ts = 602.22'$
 $Ls = 200.00'$
 $L.T. = 133.35'$
 $S.T. = 66.68'$
 $\theta s = 3^\circ 00'$
 $S.E. = 0.07 \text{ ft/ft}$

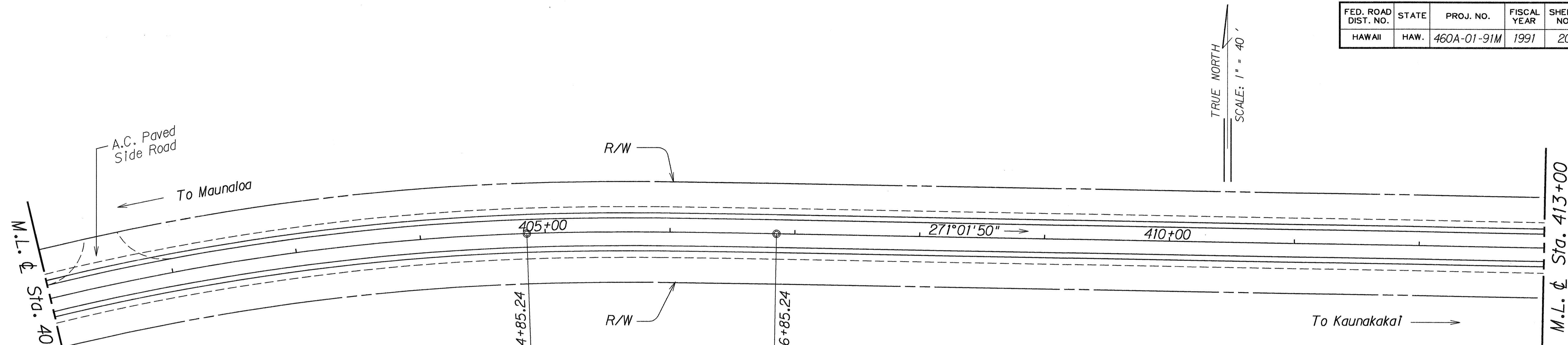
LEGEND FOR AS-BUILT POSTINGS
 squiggly line for as-built deletion
 double line for as-built deletion
 Roadway text for as-built posting

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS
 MAUNALOA HIGHWAY SHOULDER PAVING
 KEPUHI ROAD TO KEONELELE AVENUE
 PROJECT NO. 460A-01-91M
 Scale: 1" = 40' Date: Nov, 1990
 SHEET No. 15 OF 21 SHEETS

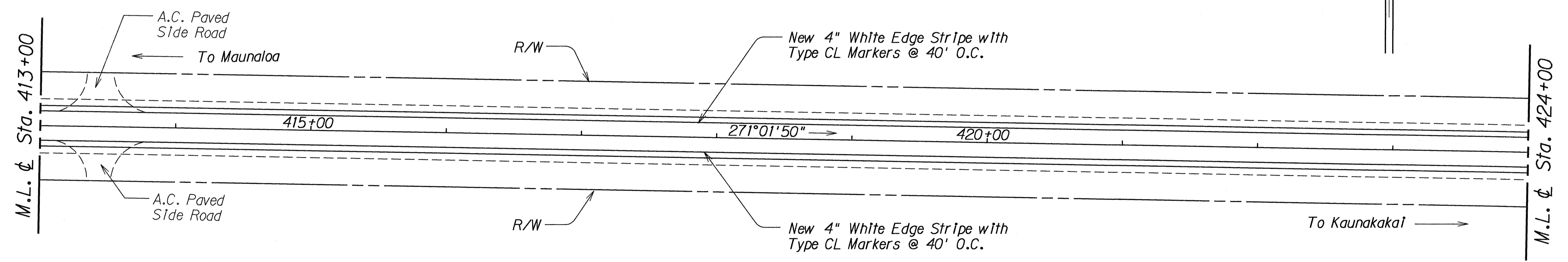
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	20	31



☉ CURVE DATA
 $\Delta = 29^\circ 27' 11''$
 $Dc = 3^\circ 00'$
 $Rc = 1,909.86'$
 $Lc = 781.77'$
 $Ts = 602.22'$
 $Ls = 200.00'$
 $L.T. = 133.35'$
 $S.T. = 66.68'$
 $\theta_s = 3^\circ 00'$
 $S.E. = 0.07 \text{ ft/ft}$

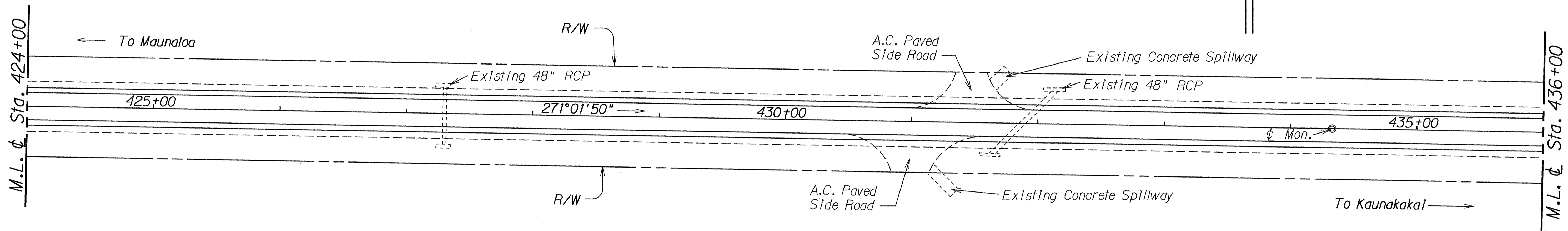


ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

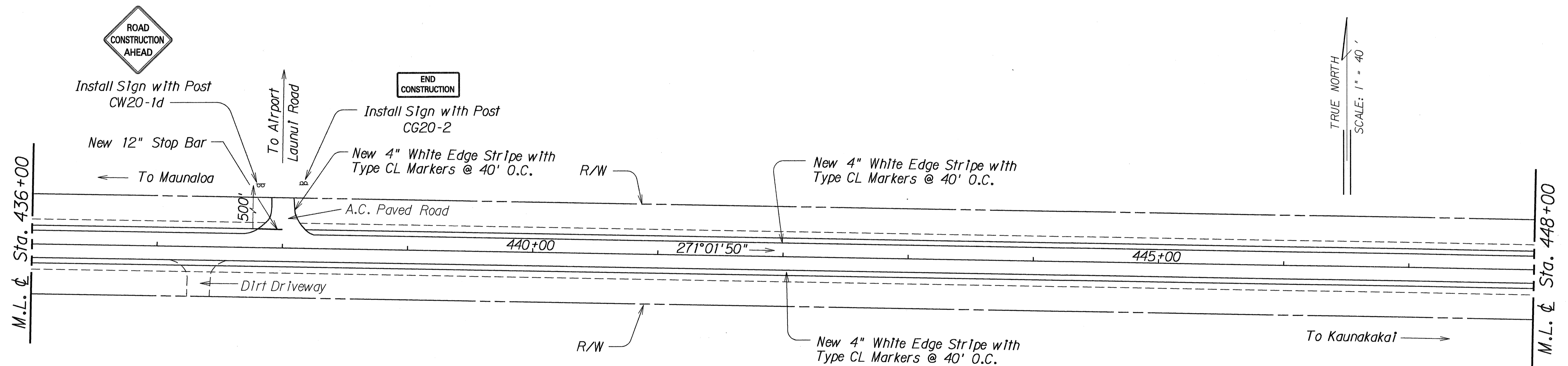
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS
 MAUNALOA HIGHWAY SHOULDER PAVING
 KEPUHI ROAD TO KEONELELE AVENUE
 PROJECT NO. 460A-01-91M
 Scale: 1" = 40' Date: Nov, 1990
 SHEET No. 16 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	21	31

TRUE NORTH
SCALE: 1" = 40'



TRUE NORTH
SCALE: 1" = 40'



ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

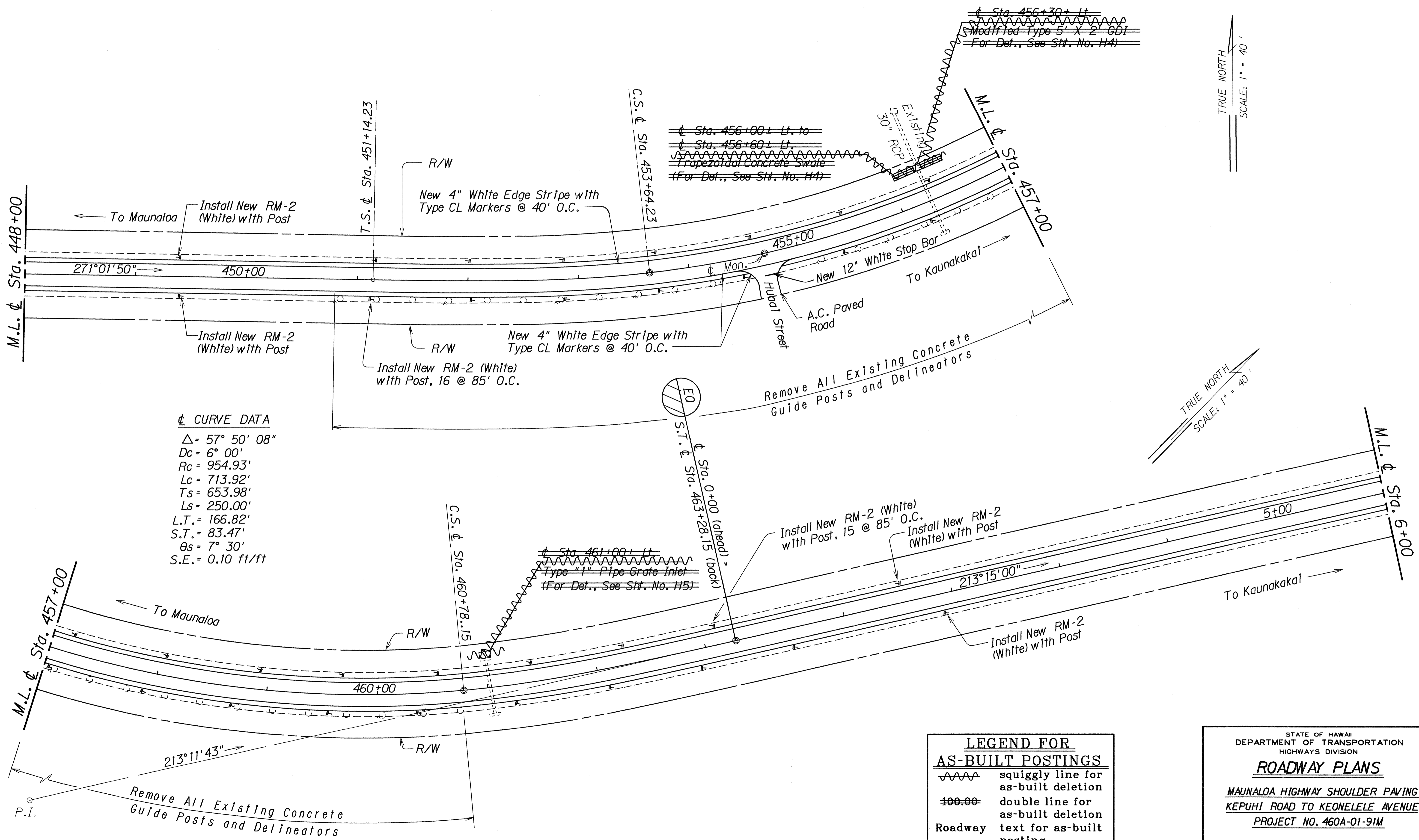
ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov., 1990

SHEET No. 17 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	22	31



$\Delta = 57^\circ 50' 08''$
 $D_c = 6' 00''$
 $R_c = 954.93'$
 $L_c = 713.92'$
 $T_s = 653.98'$
 $L_s = 250.00'$
 $L.T. = 166.82'$
 $S.T. = 83.47'$
 $\theta_s = 7^\circ 30'$
 $S.E. = 0.10 \text{ ft/ft}$

LEGEND FOR AS-BUILT POSTINGS	
	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

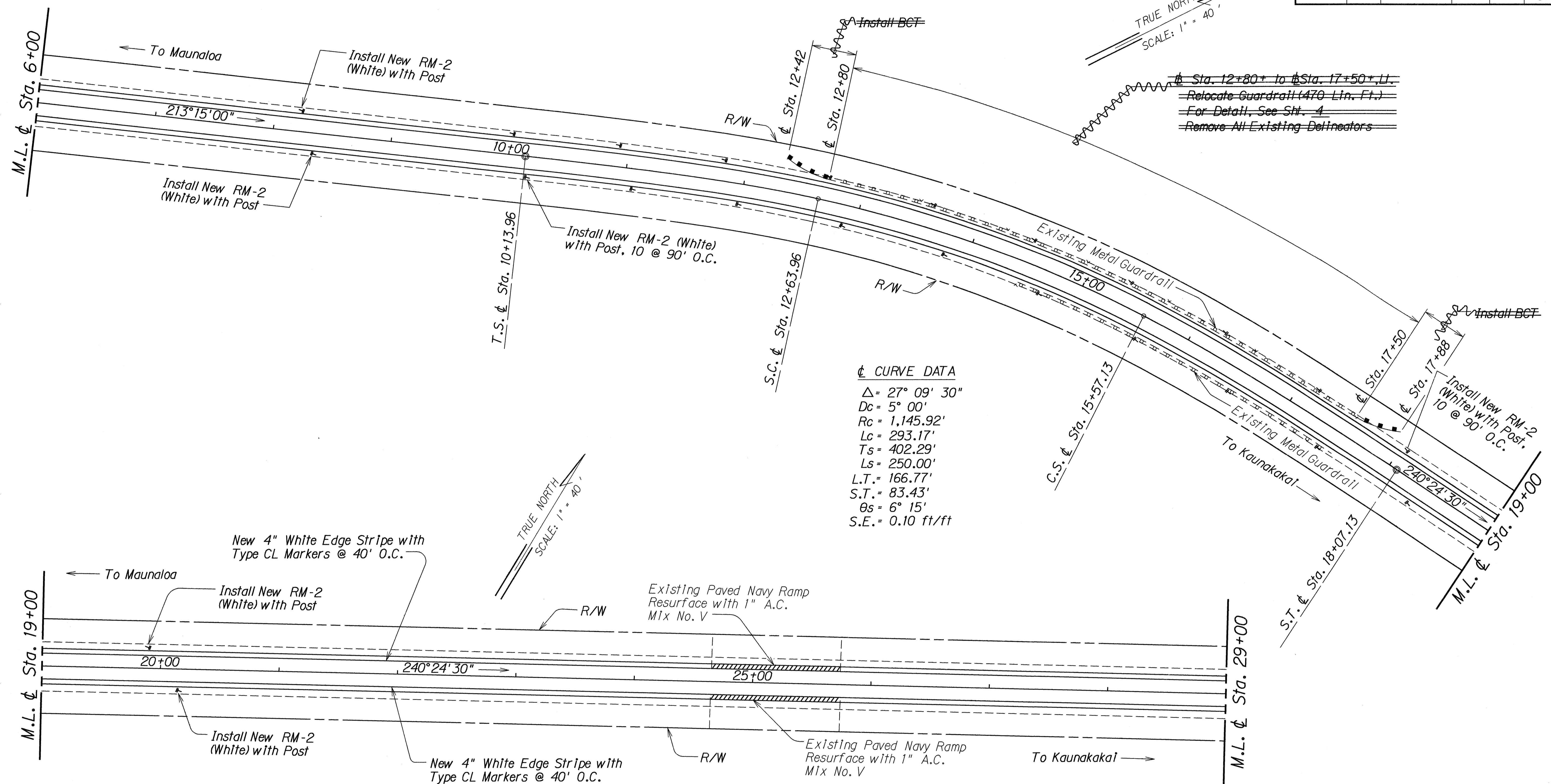
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS
 MAUNALOA HIGHWAY SHOULDER PAVING
 KEPUHI ROAD TO KEONELELE AVENUE
 PROJECT NO. 460A-01-91M
 Scale: 1" = 40' Date: Nov., 1990
 SHEET No. 18 OF 21 SHEETS

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

AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	23	31

TRUE NORTH
SCALE: 1" = 40'



☉ CURVE DATA

Δ	= 27° 09' 30"
Dc	= 5° 00'
Rc	= 1,145.92'
Lc	= 293.17'
Ts	= 402.29'
Ls	= 250.00'
$L.T.$	= 166.77'
$S.T.$	= 83.43'
θs	= 6° 15'
$S.E.$	= 0.10 ft/ft

~~☉ Sta. 12+80+ to ☉ Sta. 17+50+ LL.~~
~~Relocate Guardrail (470 Lin. Ft.)~~
~~For Detail, See Sht. 4~~
~~Remove All Existing Delineators~~

LEGEND FOR AS-BUILT POSTINGS

	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

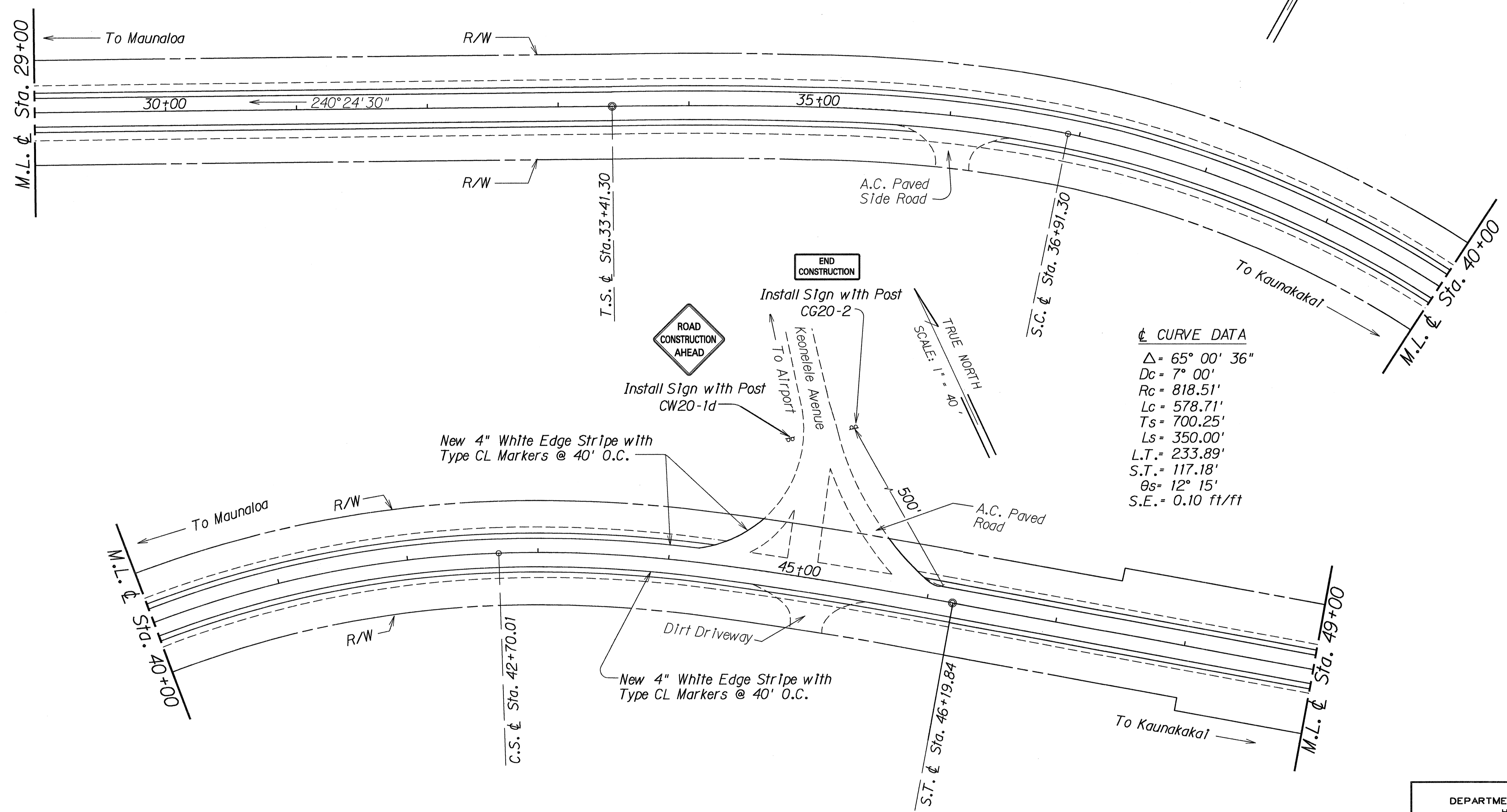
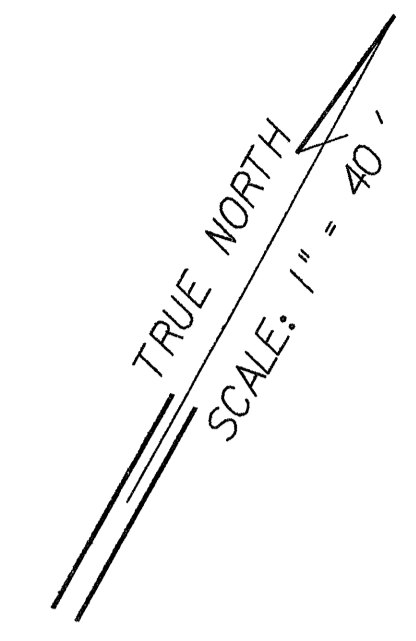
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS
MAUNALOHA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990
SHEET No. 19 OF 21 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
DATE	

AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	24	31



☉ CURVE DATA

$\Delta = 65^\circ 00' 36''$
$D_c = 7^\circ 00'$
$R_c = 818.51'$
$L_c = 578.71'$
$T_s = 700.25'$
$L_s = 350.00'$
$L.T. = 233.89'$
$S.T. = 117.18'$
$\theta_s = 12^\circ 15'$
$S.E. = 0.10 \text{ ft/ft}$

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

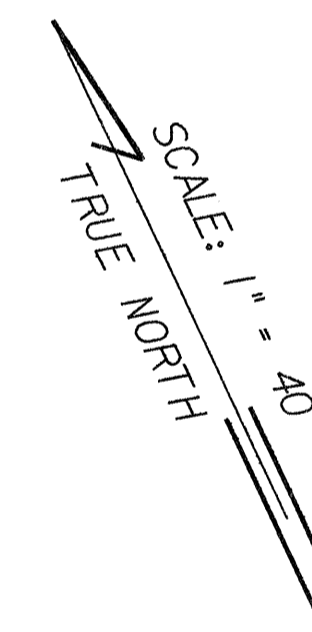
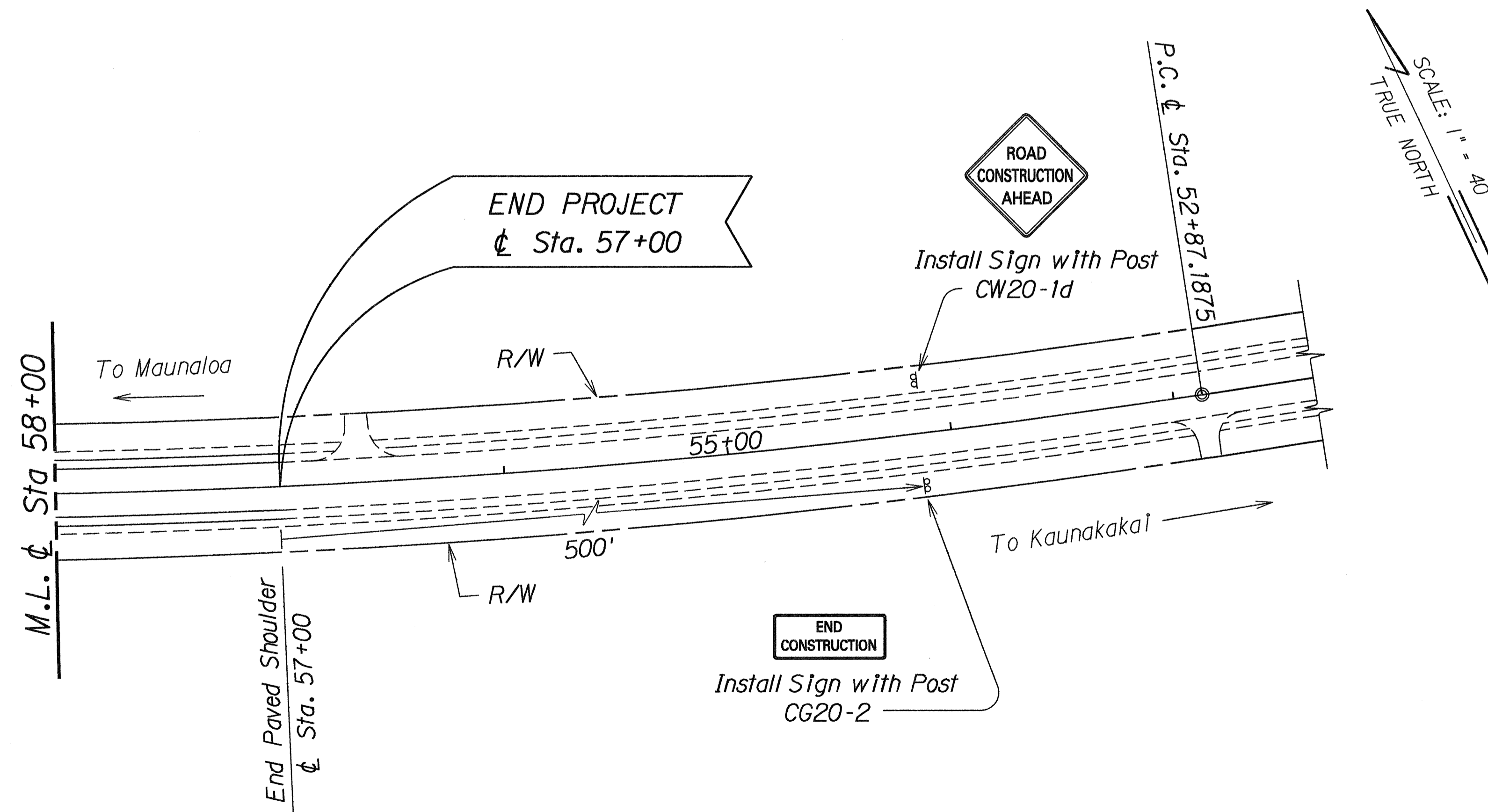
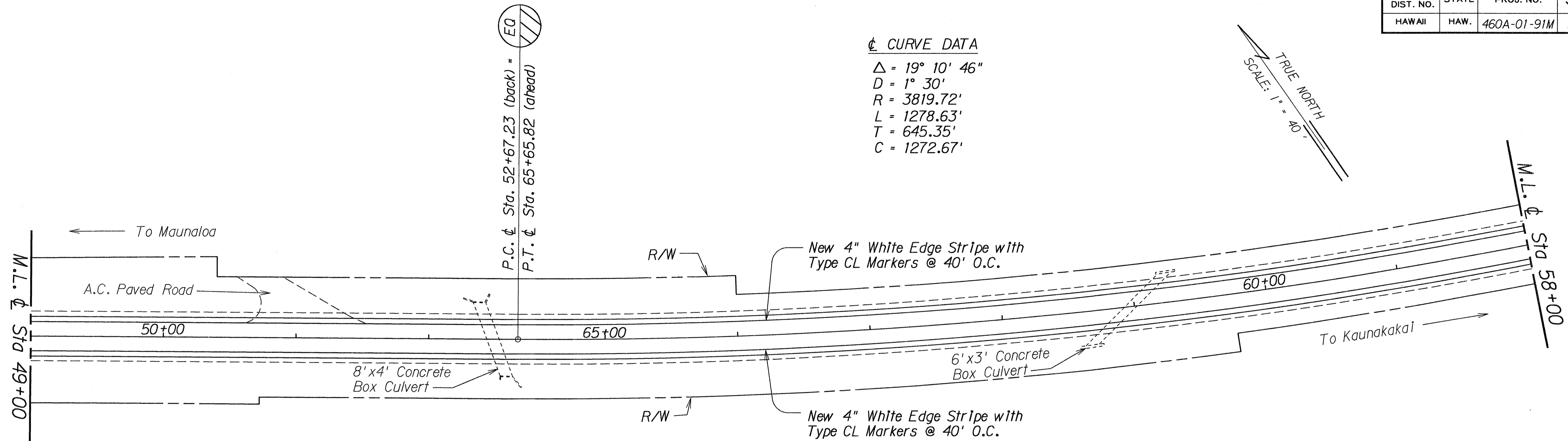
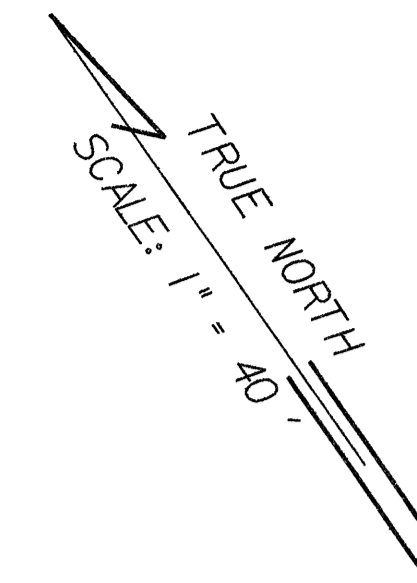
Scale: 1" = 40' Date: Nov, 1990

SHEET No. 20 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	25	31

☉ CURVE DATA

$\Delta = 19^\circ 10' 46''$
 $D = 1^\circ 30'$
 $R = 3819.72'$
 $L = 1278.63'$
 $T = 645.35'$
 $C = 1272.67'$



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MAUNALOA HIGHWAY SHOULDER PAVING
KEPUHI ROAD TO KEONELELE AVENUE
PROJECT NO. 460A-01-91M

Scale: 1" = 40' Date: Nov, 1990

SHEET No. 21 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-91M	1991	26	31

PAVEMENT MARKING SCHEDULE

STATION		LEFT EDGE STRIPE QUANTITIES (LIN. FT.)*	RIGHT EDGE STRIPE QUANTITIES (LIN. FT.)*	INTERSECTION /SIDE ROAD STRIPING QUANTITIES (LIN. FT.)**	TYPE "CL" RAISED PAVEMENT MARKERS QUANTITIES (EACH)	COMMENTS
FROM	TO	4" White	4" White	12" White		
Begin Striping	85+00	45	45		2	
85+45	86+20	100	75	20	6	Intersection (Kepuhi Road)
86+20	EQUATION 252+77.11 - 252+82.42	16,658	16,658		834	
252+82.42	EQUATION 269+07.86 - 272+00.94	1,626	1,626		82	
272+00.94	EQUATION 360+00 - 360+02.20	8,800	8,800		440	
360+02.20	437+70	7,768	7,768		390	
437+70	438+30	100	60	15	5	Intersection (Launui Road)
438+30	454+40	1,610	1,610		82	
454+40	454+90	50	90	10	5	Intersection (Huaa1 Street)
454+90	EQUATION 463+28.15 - 0+00	839	839		42	
0+00	44+20	4,420	4,420		222	
44+20	46+10	120	190		8	Intersection (Keonelele Road)
46+10	EQUATION 52+67.23 - 65+65.82	658	658		34	
65+65.82	56+50 End Striping	916	916		46	
TOTAL		43,710	43,755	45	2,198	

* New 4" Wide White Edge Stripe w/Type CL Raised Pavement Markers @ 40' o.c. (Tape, Type II or Thermoplastic Extrusion)

** New 12" Wide White Stop Bar (Thermoplastic Extrusion)

CONSTRUCTION SIGN SUMMARY

SIGN NO.	MESSAGE	W/POSTS	W/O POST
CW20-1d	ROAD CONSTRUCTION AHEAD	4	
CG20-2	END CONSTRUCTION	4	
TOTAL		8	0

REFLECTOR MARKER SUMMARY

TYPE	QUANTITY			
	W/ POST		W/FLEXIBLE POST	
	YELLOW	WHITE	YELLOW	WHITE
RM-2		119		
TOTAL	0	119	0	0

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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
MISCELLANEOUS SUMMARIES
 MAUNALO A HIGHWAY SHOULDER PAVING
 KEPUHI ROAD TO KEONELELE AVENUE
 PROJECT NO. 460A-01-91M
 Date: Mar., 1991
 SHEET No. 26 OF 31 SHEETS