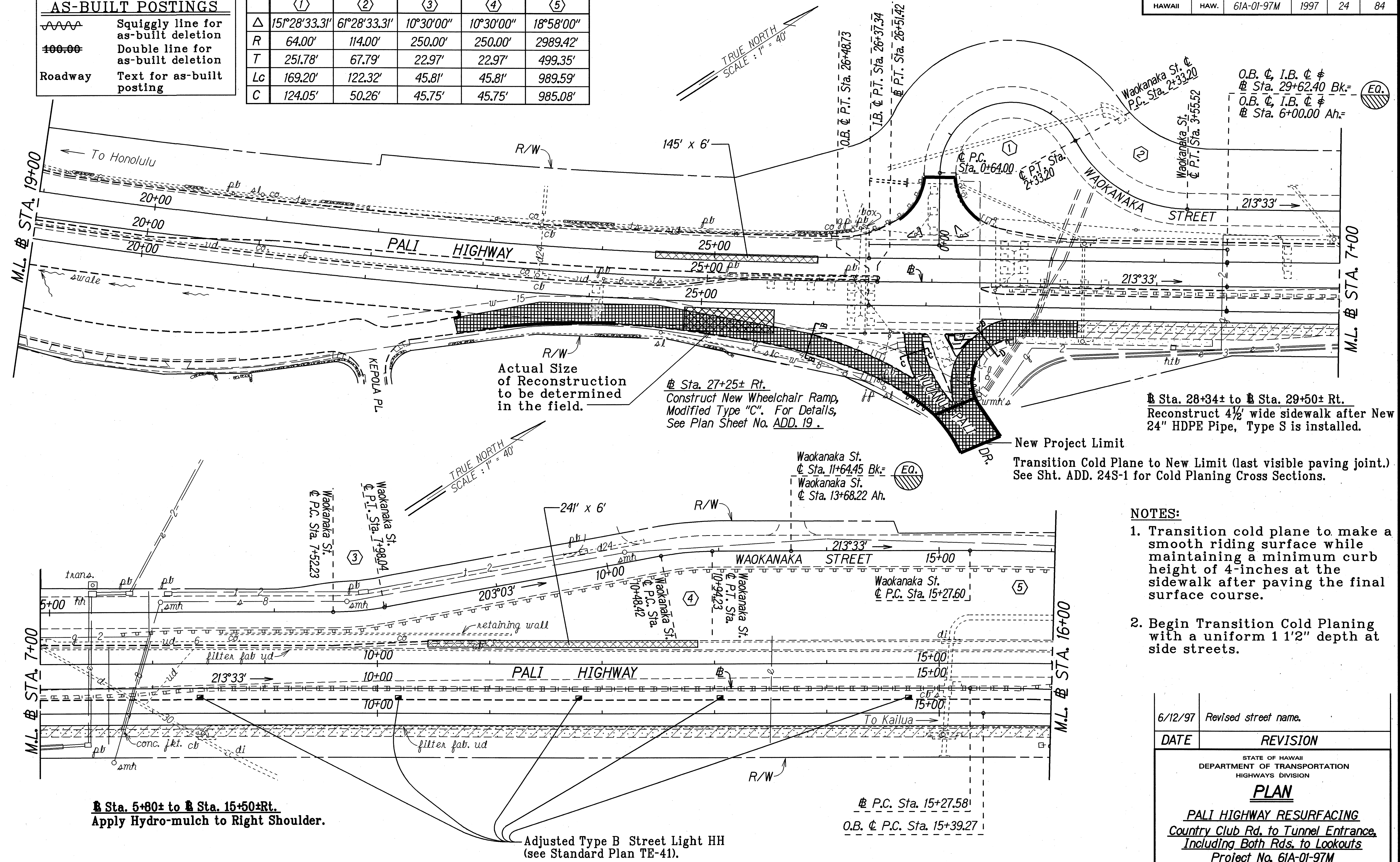


LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

WAKANAKA ST. & CURVE DATA					
	①	②	③	④	⑤
Δ	15°28'33.31"	61°28'33.31"	10°30'00"	10°30'00"	18°58'00"
R	64.00'	114.00'	250.00'	250.00'	2989.42'
T	251.78'	67.79'	22.97'	22.97'	499.35'
Lc	169.20'	122.32'	45.81'	45.81'	989.59'
C	124.05'	50.26'	45.75'	45.75'	985.08'

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	24	84



O.B. & I.B. & # Sta. 29+62.40 Bk. = EQ.
 O.B. & I.B. & # Sta. 6+00.00 Ah. =

Sta. 28+34± to Sta. 29+50± Rt.
 Reconstruct 4 1/2' wide sidewalk after New 24" HDPE Pipe, Type S is installed.

New Project Limit
 Transition Cold Plane to New Limit (last visible paving joint.)
 See Sht. ADD. 24S-1 for Cold Planing Cross Sections.

- NOTES:**
1. Transition cold plane to make a smooth riding surface while maintaining a minimum curb height of 4-inches at the sidewalk after paving the final surface course.
 2. Begin Transition Cold Planing with a uniform 1 1/2" depth at side streets.

Sta. 5+80± to Sta. 15+50± Rt.
 Apply Hydro-mulch to Right Shoulder.

Adjusted Type B Street Light HH
 (see Standard Plan TE-41).

DATE	11/2/97
DESIGNED BY	W. J. W. W.
TRACED BY	W. J. W. W.
NOTED BY	W. J. W. W.
CHECKED BY	W. J. W. W.

6/12/97	Revised street name.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PLAN	
PALI HIGHWAY RESURFACING Country Club Rd. to Tunnel Entrance, Including Both Rds. to Lookouts Project No. 61A-01-97M	
Scale: 1"=40.0'	Date: May, 1997
SHEET No. 2 OF 12 SHEETS	

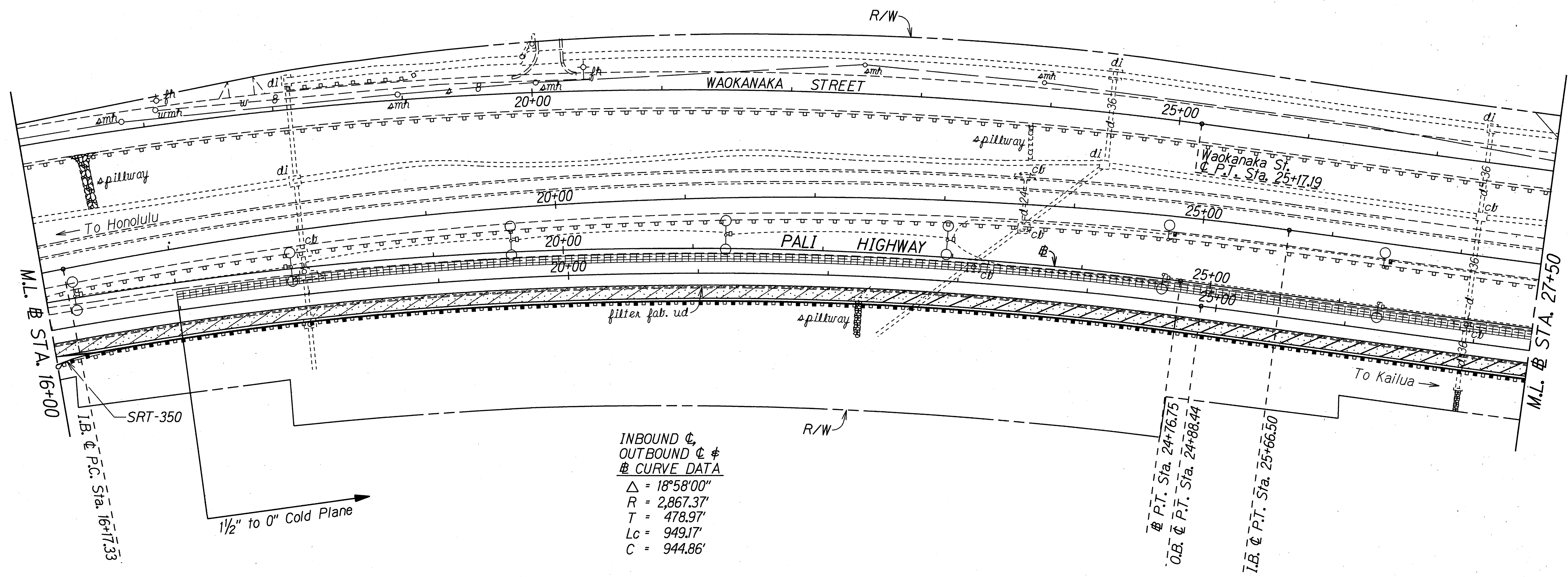
"AS-BUILT"

ADD. 24

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	25	84

WAKKANAKA ST.
 @ CURVE DATA
 $\Delta = 18^{\circ}58'00''$
 $R = 2,989.42'$
 $T = 499.35'$
 $Lc = 989.59'$
 $C = 985.08'$

TRUE NORTH
 SCALE: 1" = 40'



INBOUND @,
 OUTBOUND @ #
 @ CURVE DATA
 $\Delta = 18^{\circ}58'00''$
 $R = 2,867.37'$
 $T = 478.97'$
 $Lc = 949.17'$
 $C = 944.86'$

1 1/2" to 0" Cold Plane

@ Sta. 16+00± to @ Sta. 30+30± Rt.
 Install Curb and Gutter, Type 2DG with Beginning Taper 15:l and End Taper 60:l. Remove 1,430 L.F. of exist. guardrail and Install 1,400 L.F. of New Guardrail, Type 3-Single w/Steel Post with SRT-350 at Approach End and a Type "G" Flare at Trailing End.

@ Sta. 17+00± Lt. to @ Sta. 51+00± Lt.
 Cold Plane 4.0' of exist. travelway and Gutter area. Paid Under Item No. 652.0400 - 1 1/2" Cold Planing. For Detail, See Plan Sht. No. 12.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	5/2/1997
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN
 PALI HIGHWAY RESURFACING
 Country Club Rd. to Tunnel Entrance,
 Including Both Rds. to Lookouts
 Project No. 61A-01-97M

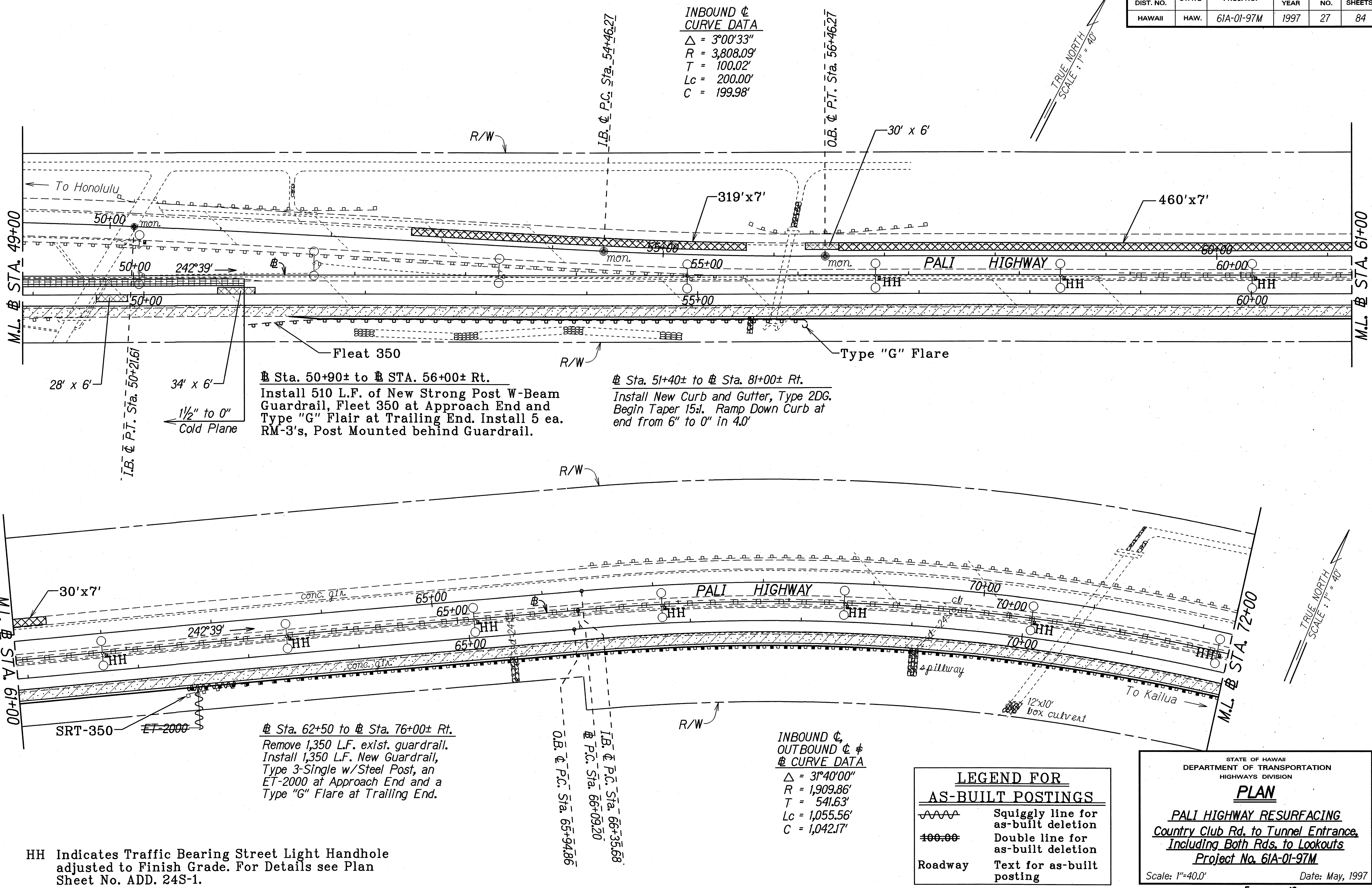
Scale: 1"=40.0'
 Date: May, 1997

SHEET No. 3 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	27	84

INBOUND &
CURVE DATA
 $\Delta = 3^{\circ}00'33''$
 $R = 3,808.09'$
 $T = 100.02'$
 $Lc = 200.00'$
 $C = 199.98'$

TRUE NORTH
SCALE: 1" = 40'



Sta. 50+90± to # Sta. 56+00± Rt.
 Install 510 L.F. of New Strong Post W-Beam Guardrail, Fleet 350 at Approach End and Type "G" Flare at Trailing End. Install 5 ea. RM-3's, Post Mounted behind Guardrail.

Sta. 51+40± to # Sta. 81+00± Rt.
 Install New Curb and Gutter, Type 2DG. Begin Taper 15:1. Ramp Down Curb at end from 6" to 0" in 4.0'

Sta. 62+50 to # Sta. 76+00± Rt.
 Remove 1,350 L.F. exist. guardrail. Install 1,350 L.F. New Guardrail, Type 3-Single w/Steel Post, an ET-2000 at Approach End and a Type "G" Flare at Trailing End.

INBOUND &
OUTBOUND &
CURVE DATA
 $\Delta = 3^{\circ}40'00''$
 $R = 1,909.86'$
 $T = 541.63'$
 $Lc = 1,055.56'$
 $C = 1,042.17'$

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

PLAN

PALI HIGHWAY RESURFACING
 Country Club Rd. to Tunnel Entrance,
 Including Both Rds. to Lookouts
 Project No. 61A-01-97M

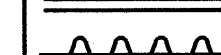
Scale: 1"=40.0' Date: May, 1997

SHEET No. 5 OF 12 SHEETS

HH Indicates Traffic Bearing Street Light Handhole adjusted to Finish Grade. For Details see Plan Sheet No. ADD. 24S-1.

"AS-BUILT"

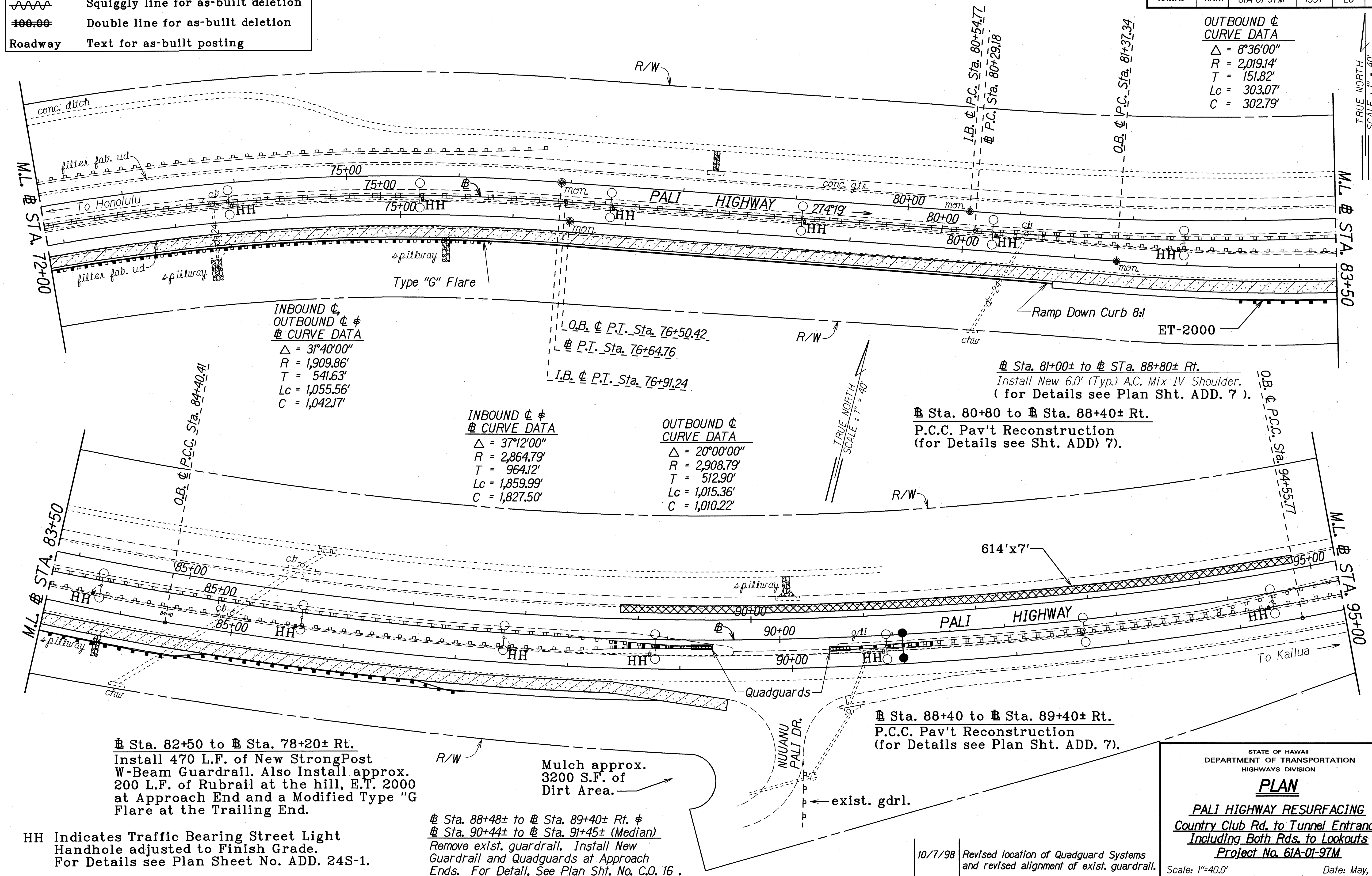
LEGEND FOR AS-BUILT POSTINGS

 Squiggly line for as-built deletion
 Double line for as-built deletion
 Roadway Text for as-built posting

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	28	84

OUTBOUND & CURVE DATA

$\Delta = 8^{\circ}36'00''$
 $R = 2,019.14'$
 $T = 151.82'$
 $Lc = 303.07'$
 $C = 302.79'$



DATE	7/2/98
SURVEY PLOTTED BY	MAKALUPE WONG
DESIGNED BY	FASQUE/SQUILIERA
QUANTITIES BY	6/10/96, 6/07
CHECKED BY	NE

HH Indicates Traffic Bearing Street Light Handhole adjusted to Finish Grade.
 For Details see Plan Sheet No. ADD. 24S-1.

Sta. 88+48± to Sta. 89+40± Rt. & Sta. 90+44± to Sta. 91+45± (Median)
 Remove exist. guardrail. Install New Guardrail and Quadguards at Approach Ends. For Detail, See Plan Sht. No. C.O. 16.

10/7/98	Revised location of Quadguard Systems and revised alignment of exist. guardrail.
DATE	REVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PLAN
PALI HIGHWAY RESURFACING
Country Club Rd. to Tunnel Entrance,
Including Both Rds. to Lookouts
Project No. 61A-01-97M
 Scale: 1"=40.0' Date: May, 1997
 SHEET No. 6 OF 12 SHEETS

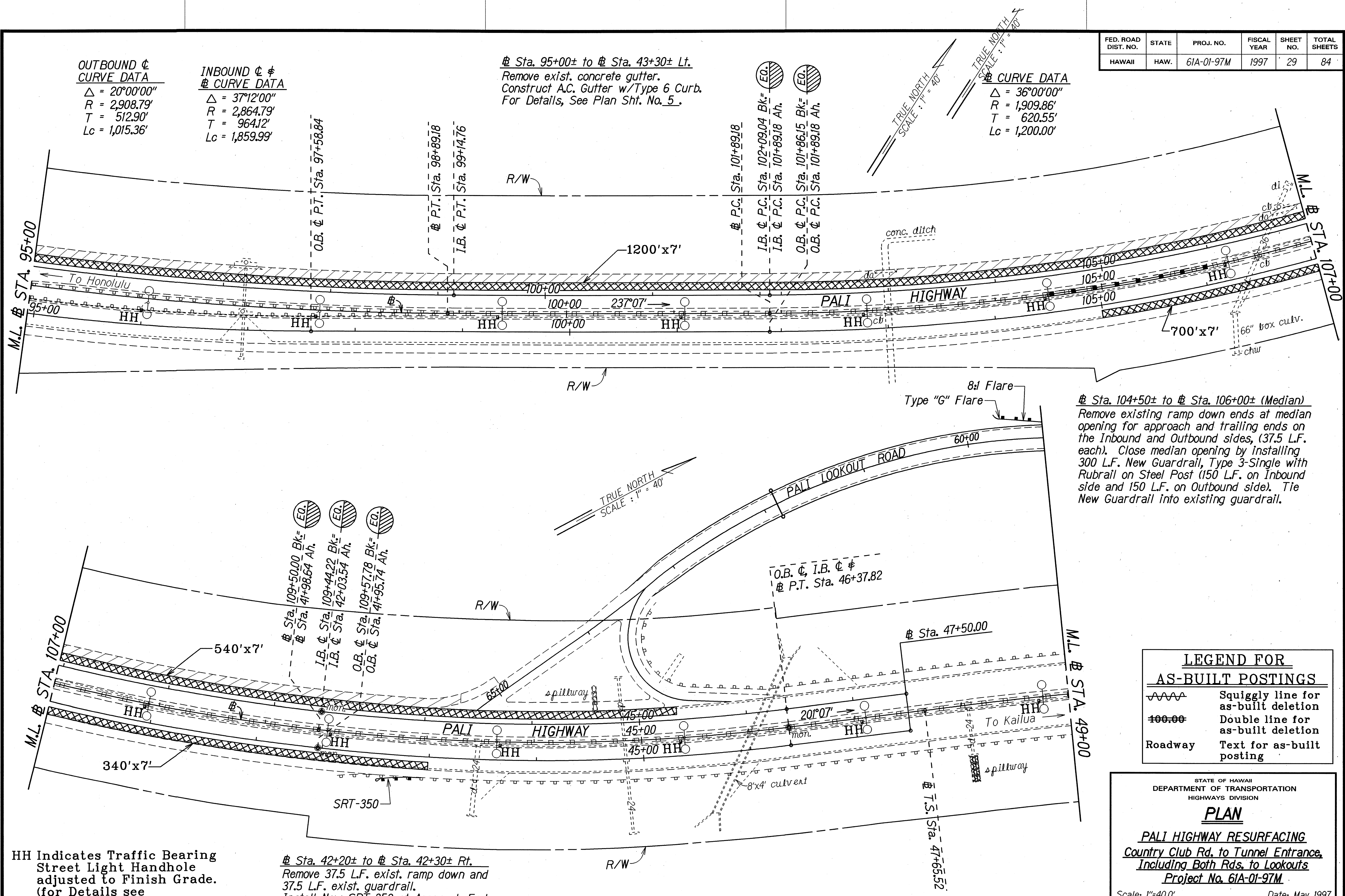
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	29	84

OUTBOUND Δ
CURVE DATA
 $\Delta = 20^{\circ}00'00''$
 $R = 2,908.79'$
 $T = 512.90'$
 $Lc = 1,015.36'$

INBOUND Δ
CURVE DATA
 $\Delta = 37^{\circ}12'00''$
 $R = 2,864.79'$
 $T = 964.12'$
 $Lc = 1,859.99'$

Sta. 95+00± to # Sta. 43+30± Lt.
 Remove exist. concrete gutter.
 Construct A.C. Gutter w/Type 6 Curb.
 For Details, See Plan Sht. No. 5.

CURVE DATA
 $\Delta = 36^{\circ}00'00''$
 $R = 1,909.86'$
 $T = 620.55'$
 $Lc = 1,200.00'$



Sta. 104+50± to # Sta. 106+00± (Median)
 Remove existing ramp down ends at median opening for approach and trailing ends on the Inbound and Outbound sides, (37.5 L.F. each). Close median opening by installing 300 L.F. New Guardrail, Type 3-Single with Rubrail on Steel Post (150 L.F. on Inbound side and 150 L.F. on Outbound side). Tie New Guardrail into existing guardrail.

Sta. 42+20± to # Sta. 42+30± Rt.
 Remove 37.5 L.F. exist. ramp down and 37.5 L.F. exist. guardrail.
 Install New SRT-350 at Approach End.

HH Indicates Traffic Bearing Street Light Handhole adjusted to Finish Grade. (for Details see Plan Sht. ADD. 24S-1).

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

PLAN

PALI HIGHWAY RESURFACING
 Country Club Rd. to Tunnel Entrance,
 Including Both Rds. to Lookouts
 Project No. 61A-01-97M

Scale: 1"=40.0' Date: May 1997

SHEET No. 7 OF 12 SHEETS

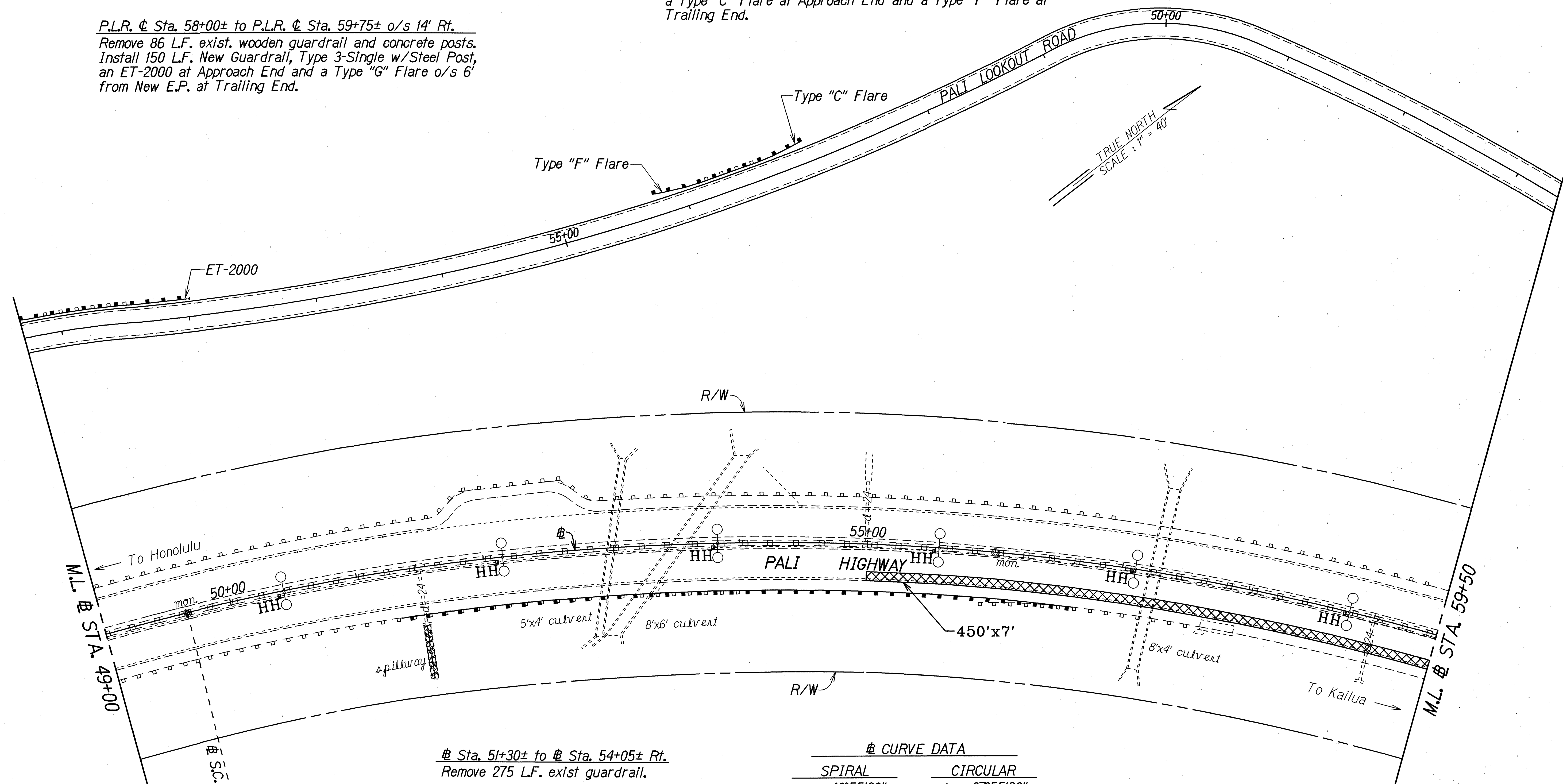
DATE	2/27/98
DESIGNED BY	W. J. Sullivan
CHECKED BY	W. J. Sullivan
NOTED BY	W. J. Sullivan
QUANTITIES BY	W. J. Sullivan
ORIGINAL PLAN	

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	30	84

P.L.R. @ Sta. 58+00± to P.L.R. @ Sta. 59+75± o/s 14' Rt.
Remove 86 L.F. exist. wooden guardrail and concrete posts.
Install 150 L.F. New Guardrail, Type 3-Single w/Steel Post,
an ET-2000 at Approach End and a Type "G" Flare o/s 6'
from New E.P. at Trailing End.

P.L.R. @ Sta. 53+00± to P.L.R. @ Sta. 54+25± o/s 14' Rt.
Remove 40 L.F. exist. wooden guardrail and concrete posts.
Install 125 L.F. New Guardrail, Type 3-Single w/Steel Post,
a Type "C" Flare at Approach End and a Type "F" Flare at
Trailing End.



@ Sta. 51+30± to @ Sta. 54+05± Rt.
Remove 275 L.F. exist guardrail.

@ Sta. 55+90± to @ Sta. 56+65± Rt.
Remove 37.5 L.F. exist ramp down
and 37.5 L.F. exist. guardrail.

@ Sta. 51+30± to @ Sta. 56+65± Rt.
Install 535 L.F. New Guardrail,
Type 3-Single w/Steel Post.

CURVE DATA

SPIRAL	CIRCULAR
$\Delta = 43^\circ 55' 20''$	$\Delta = 37^\circ 55' 20''$
$D_c = 3^\circ 00' 00''$	$R = 1,909.86$
$\theta_s = 3^\circ 00' 00''$	$T = 656.17'$
$L_s = 200.00'$	$L_c = 1,264.07'$
$T_s = 870.48'$	
$E_s = 150.30'$	

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

HH Indicates Traffic Bearing Street Light
Handhole adjusted to Finish Grade.
(for Details see Plan Sht. ADD. 24S-1).

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
Country Club Rd. to Tunnel Entrance,
Including Both Rds. to Lookouts
Project No. 61A-01-97M

Scale: 1"=40.0' Date: May 1997

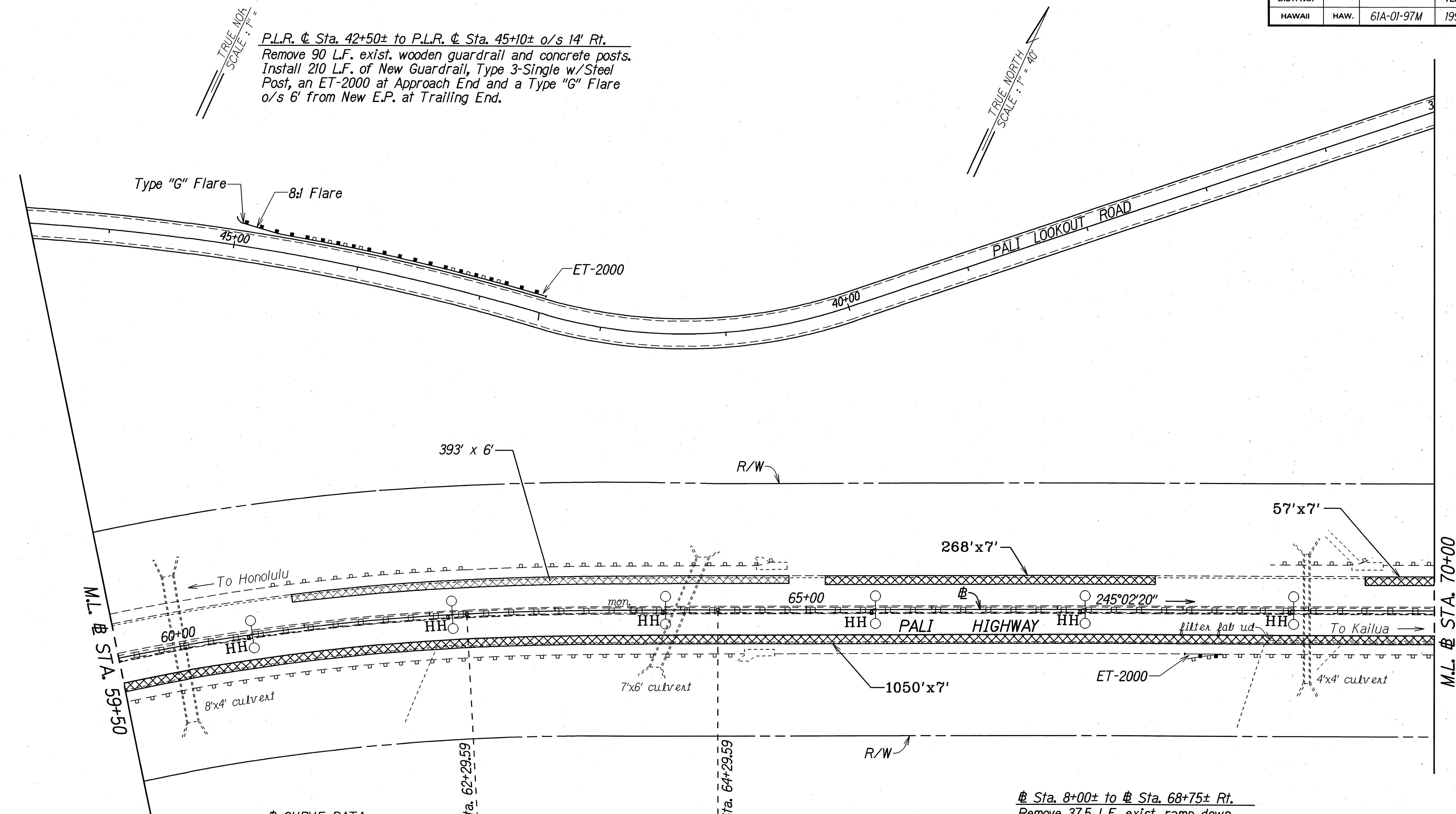
SHEET No. 8 OF 12 SHEETS

"AS-BUILT"

30

ORIGINAL PLAN	DATE
DESIGNED BY	2/27/97
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	31	84



② CURVE DATA

SPIRAL	CIRCULAR
$\Delta = 43^{\circ}55'20''$	$\Delta = 37^{\circ}55'20''$
$D_c = 3^{\circ}00'00''$	$R = 1,909.86$
$\theta_s = 3^{\circ}00'00''$	$T = 656.17'$
$L_s = 200.00'$	$L_c = 1,264.07'$
$T_s = 870.48'$	
$E_s = 150.30'$	

@ Sta. 8+00± to @ Sta. 68+75± Rt.
Remove 37.5 L.F. exist. ramp down and 37.5 L.F. exist. guardrail.
Install 25 L.F. New Guardrail, Type 3-Single w/Steel Post and an ET-2000 at Approach End.

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

HH Indicates Traffic Bearing Street Light Handhole adjusted to Finish Grade. (for Details see Plan Sht. ADD. 24S-1).

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
Country Club Rd. to Tunnel Entrance,
Including Both Rds. to Lookouts
Project No. 61A-01-97M

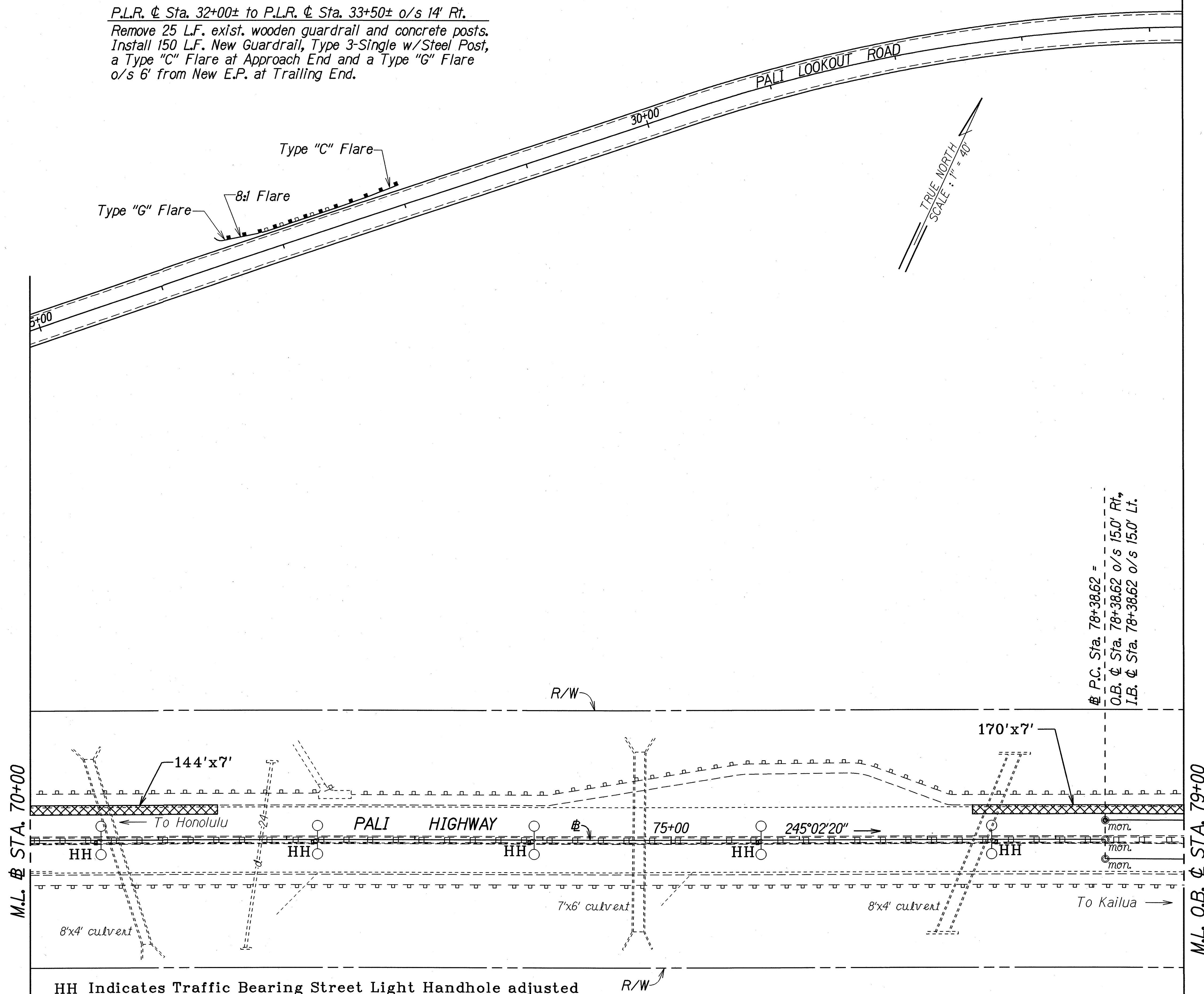
Scale: 1"=40.0' Date: May 1997

SHEET No. 9 OF 12 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	32	84

P.L.R. @ Sta. 32+00± to P.L.R. @ Sta. 33+50± o/s 14' Rt.
 Remove 25 L.F. exist. wooden guardrail and concrete posts.
 Install 150 L.F. New Guardrail, Type 3-Single w/Steel Post,
 a Type "C" Flare at Approach End and a Type "G" Flare
 o/s 6' from New E.P. at Trailing End.



P.C. Sta. 78+38.62 =
 O.B. @ Sta. 78+38.62 o/s 15.0' Rt.
 I.B. @ Sta. 78+38.62 o/s 15.0' Lt.

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

PLAN
PALI HIGHWAY RESURFACING
Country Club Rd. to Tunnel Entrance,
Including Both Rds. to Lookouts
Project No. 61A-01-97M

Scale: 1"=40.0'
Date: May 1997

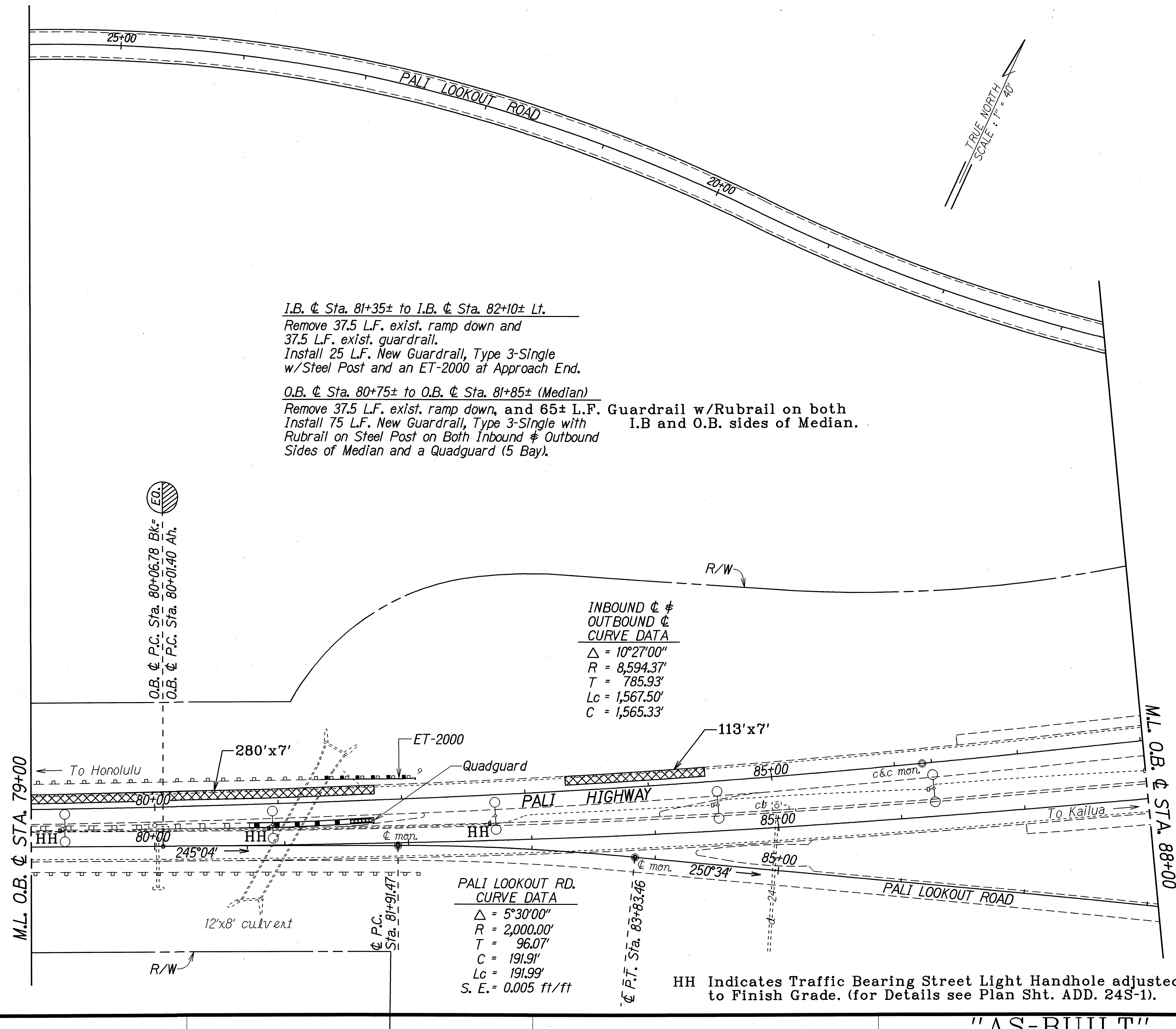
SURVEY PLOTTED BY	DATE
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

HH Indicates Traffic Bearing Street Light Handhole adjusted to Finish Grade. (for Details see Plan Sht. ADD. 24S-1).

"AS-BUILT"

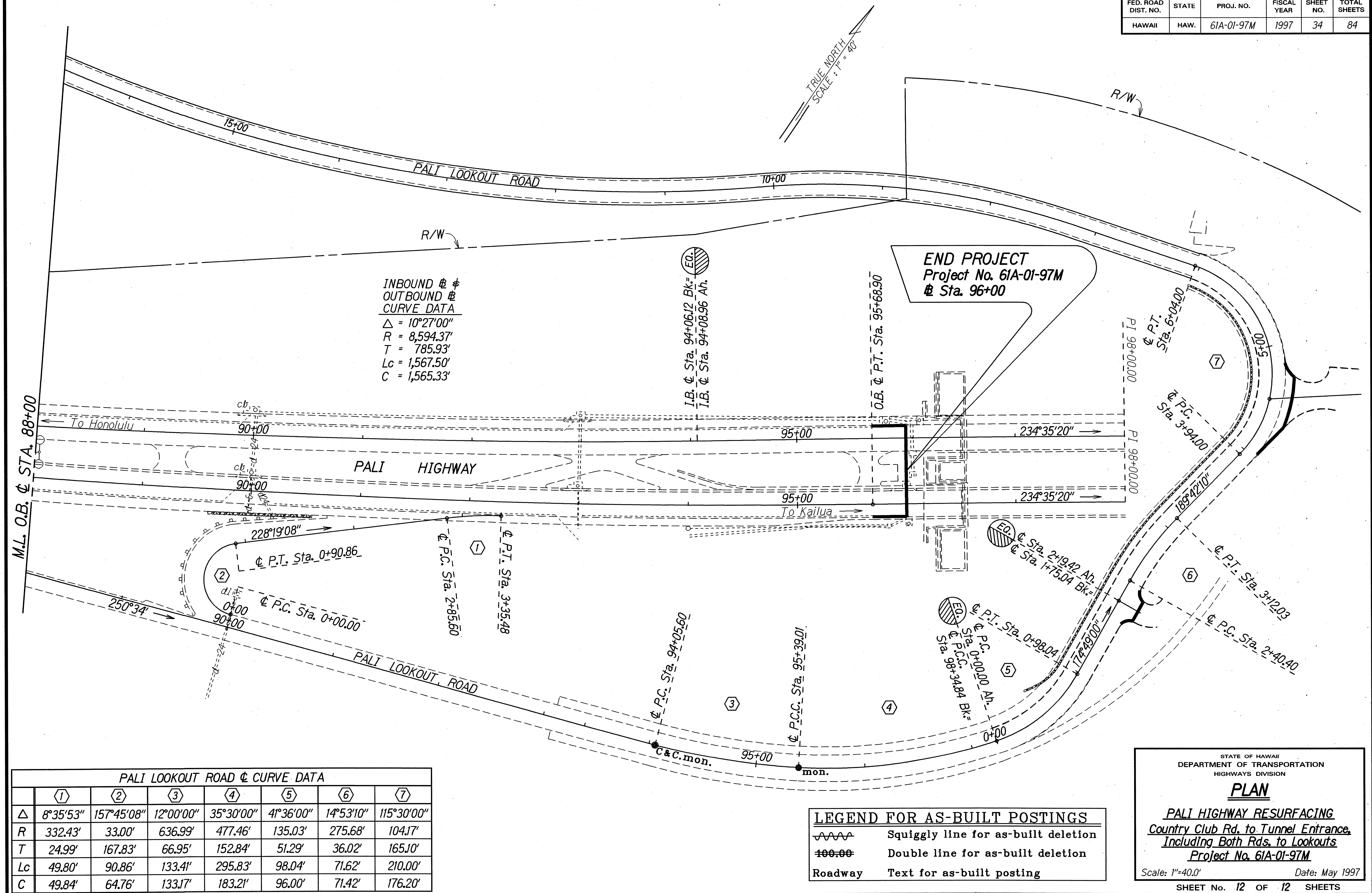
SHEET No. 10 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	33	84



ORIGINAL PLAN	DATE
NOTED BY	DESIGNED BY
QUANTITIES BY	CHECKED BY
DATE	DATE

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-97M	1997	34	84



"AS-BUILT"

34