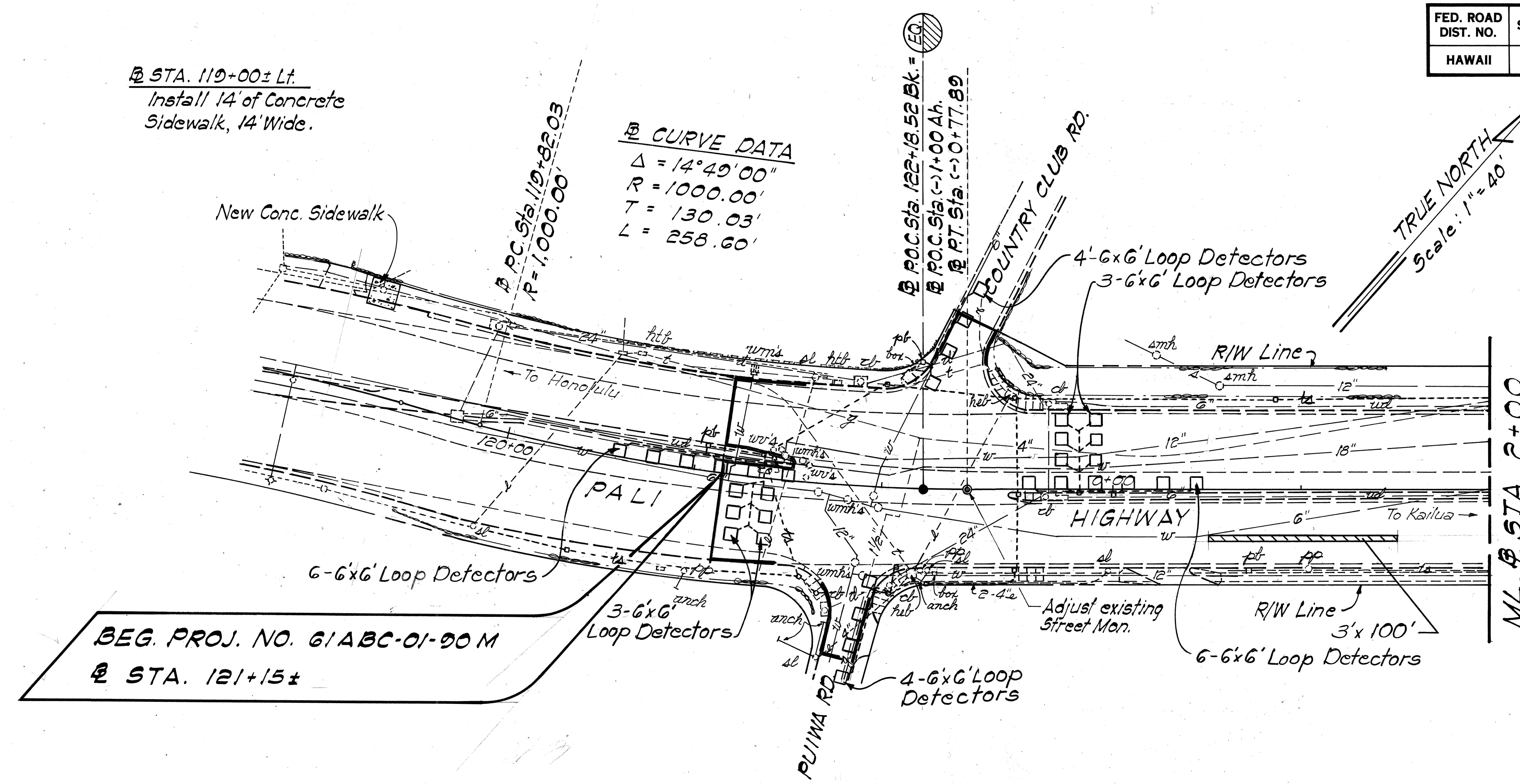


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	6/ABC-01-2001	1990	7	44



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

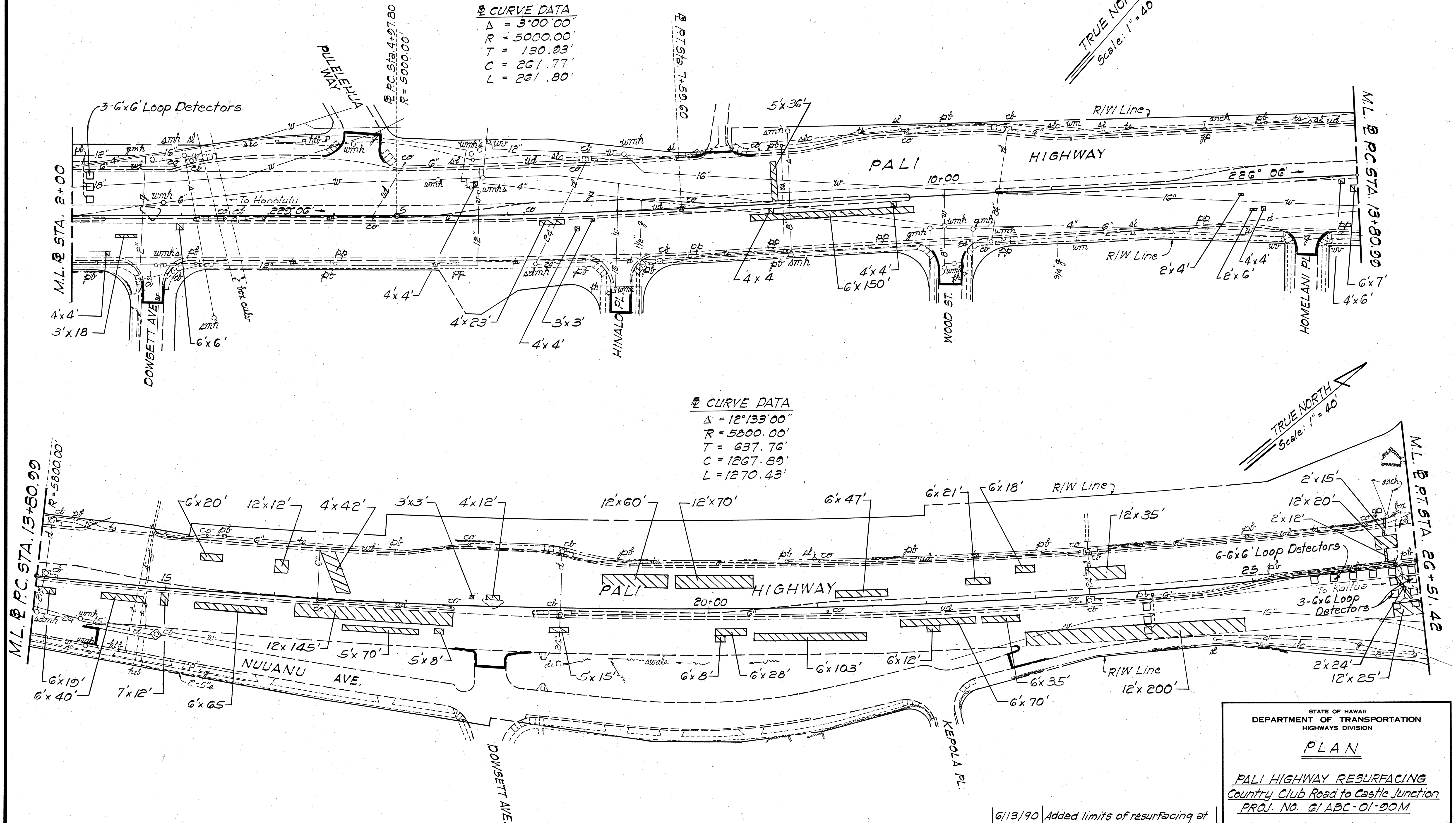
PLAN

PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. GIABC-01-00M

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

SHEET NO. 1 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	6/ABC-01-200M	1990	8	44



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 6/ABC-01-200M

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

SHEET NO. 2 OF 14 SHEETS

6/13/90	Added limits of resurfacing at Kepola Pl. as per Add. No. 1.
DATE	REVISION

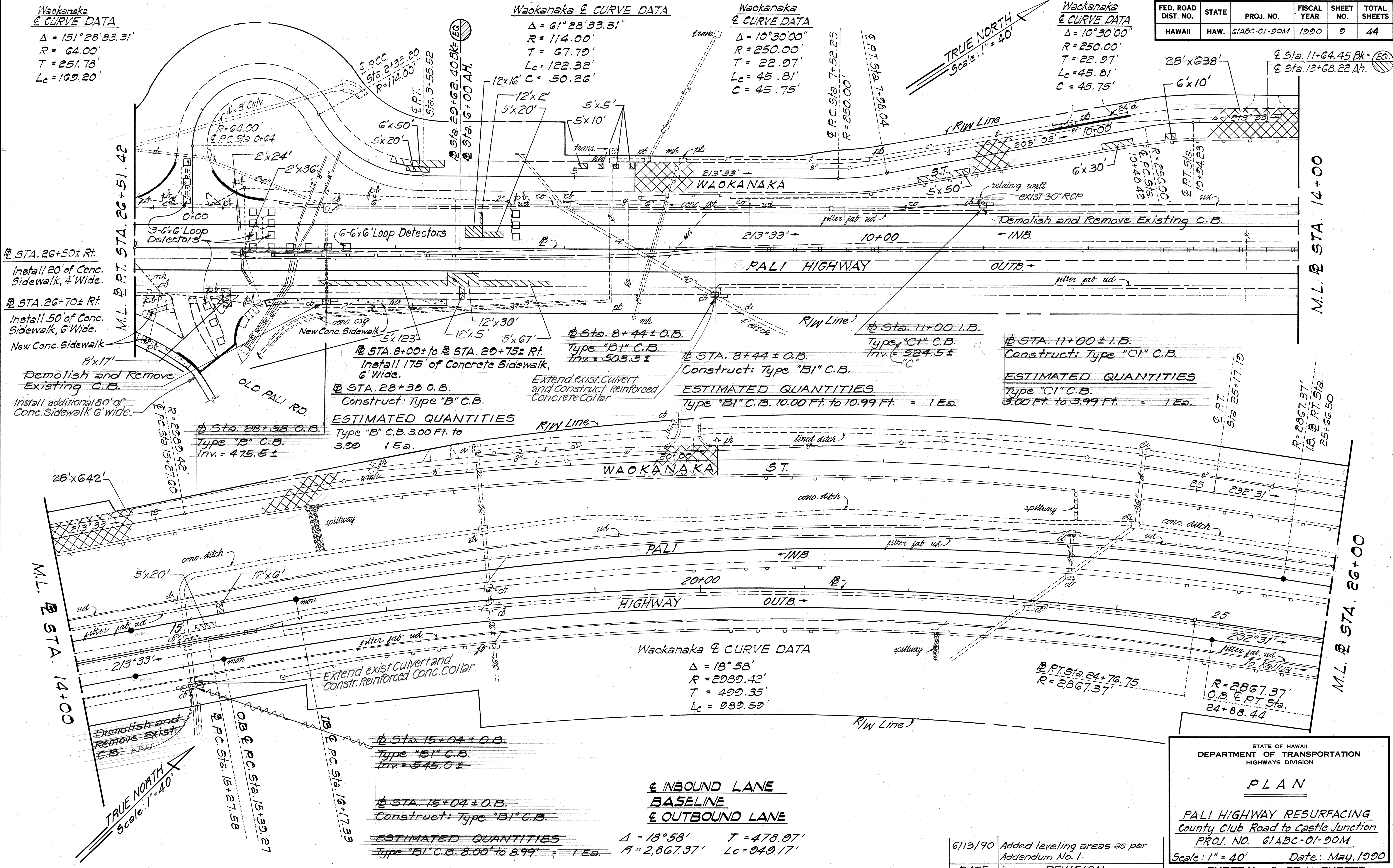
Waikanaka
 & CURVE DATA
 $\Delta = 151^{\circ}28'33.31''$
 $R = 64.00'$
 $T = 251.78'$
 $L_c = 169.20'$

Waikanaka & CURVE DATA
 $\Delta = 61^{\circ}28'33.31''$
 $R = 114.00'$
 $T = 67.79'$
 $L_c = 122.32'$
 $12 \times 16' C = 50.26'$

Waikanaka
 & CURVE DATA
 $\Delta = 10^{\circ}30'00''$
 $R = 250.00'$
 $T = 22.97'$
 $L_c = 45.81'$
 $C = 45.75'$

Waikanaka
 & CURVE DATA
 $\Delta = 10^{\circ}30'00''$
 $R = 250.00'$
 $T = 22.97'$
 $L_c = 45.81'$
 $C = 45.75'$

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	9	44



ORIGINAL PLAN	DATE
SURVEY OBTAINED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
 County Club Road to Castle Junction
 PROJ. NO. 61ABC-01-90M
 Scale: 1" = 40' Date: May, 1990
 SHEET No. 3 OF 14 SHEETS

6/13/90	Added leveling areas as per Addendum No. 1.
DATE	REVISION

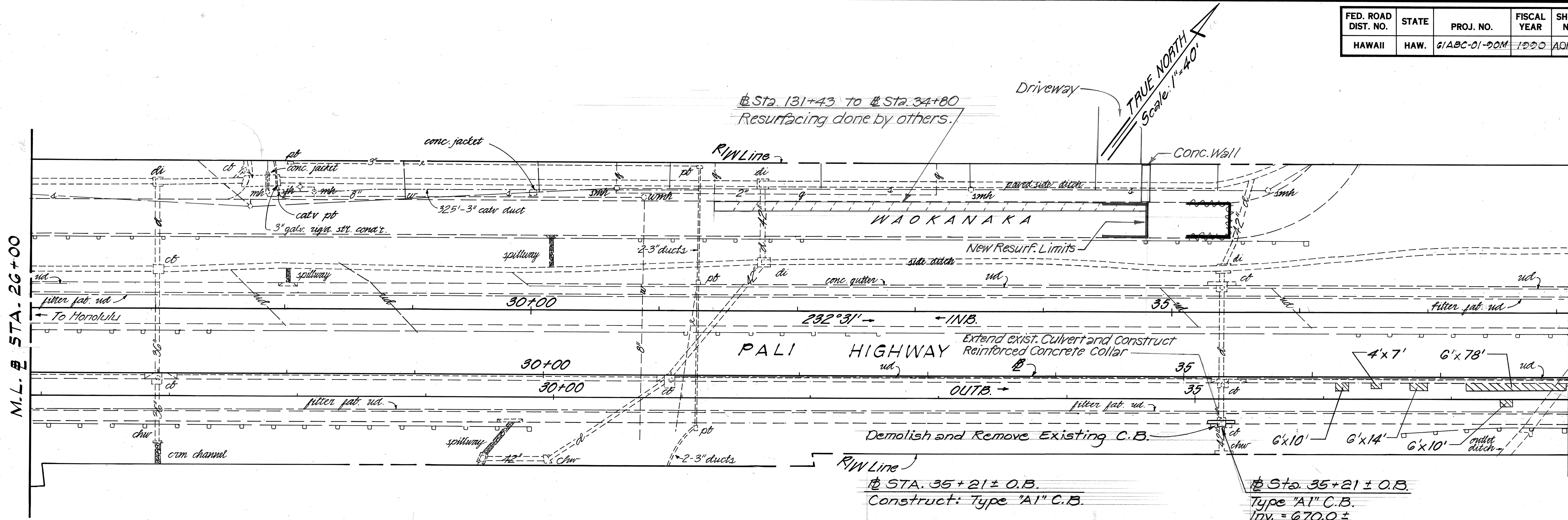
**& INBOUND LANE
 BASELINE
 & OUTBOUND LANE**

ESTIMATED QUANTITIES
 Type "B1" C.B. 8.00' to 8.99' = 1 Ea.

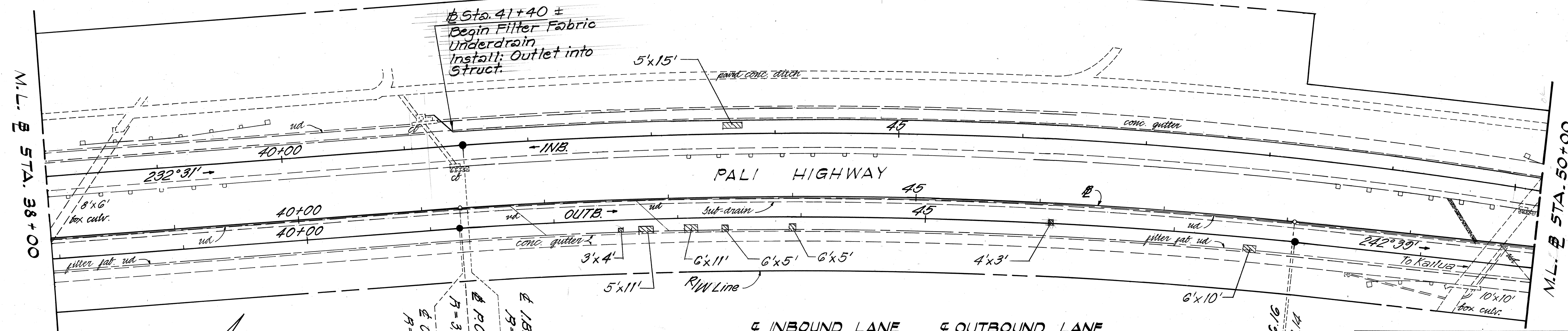
P.T. Sta. 24+76.75
 $R = 2867.37'$

$R = 2867.37'$
 O.B. & P.T. Sta. 24+88.44

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	6/ABC-01-00M	1990	ADD.10	44



ESTIMATED QUANTITIES
 Type "A1" C.B. 7.00' to 7.99' = 1 Ea.



INBOUND LANE	OUTBOUND LANE
$\Delta = 13^{\circ}08'33''$	$\Delta = 10^{\circ}08'$
$R = 3,812.10'$	$R = 3,813.41'$
$T = 439.15'$	$T = 338.10'$
$Lc = 874.44'$	$Lc = 674.44'$

Δ P.C. Sta. 41+31.72
 $R = 3,813.41'$
 Δ O.B. P.C. Sta. 41+23.10
 $R = 3,813.41'$
 Δ P.T. Sta. 48+00.16
 Δ O.B. P.T. Sta. 47+08.14

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN
 PALI HIGHWAY RESURFACING
 County Club Road to Castle Junction
 PROJ. NO. 6/ABC-01-00M
 Scale: 1" = 40' Date: May, 1990
 SHEET NO. 4 OF 14 SHEETS

6/15/90	Revised Underdrain Plan
DATE	REVISION

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

TRUE NORTH
 Scale: 1" = 40'

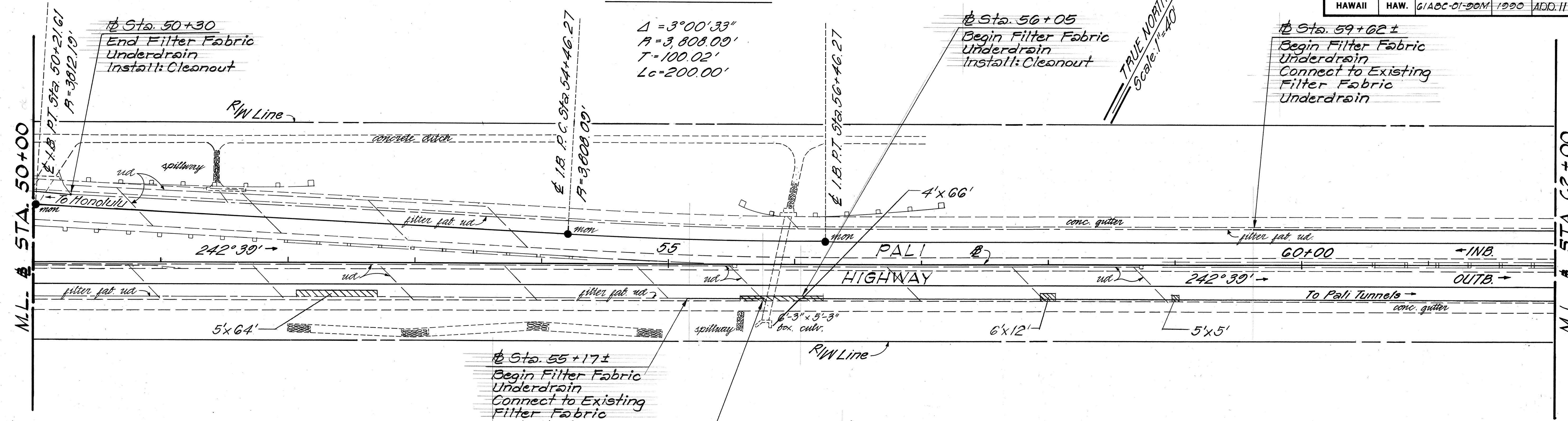
ADD.10

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	G/ABC-01-90M	1990	ADD. II	44

INBOUND LANE

$\Delta = 3^{\circ}00'33''$
 $R = 3,808.09'$
 $T = 100.02'$
 $Lc = 200.00'$

TRUE NORTH
 Scale: 1"=40'



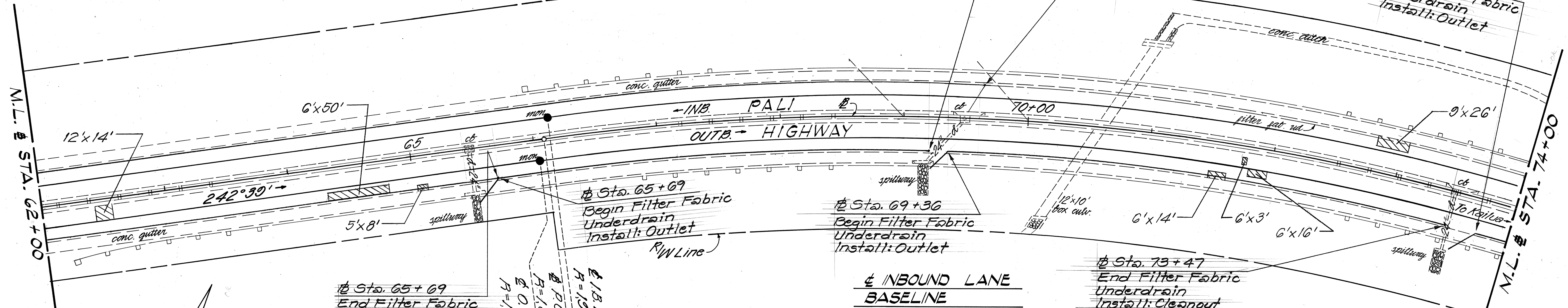
Sta. 55+17±
 Begin Filter Fabric Underdrain
 Connect to Existing Filter Fabric Underdrain

Sta. 55+75
 End Filter Fabric Underdrain
 Install: Cleanout

Sta. 69+20±
 End Filter Fabric Underdrain
 Install: Cleanout

Sta. 69+66±
 End Filter Fabric Underdrain
 Connect to Existing Filter Fabric Underdrain

Sta. 73+79
 Begin Filter Fabric Underdrain
 Install: Outlet



Sta. 65+69
 Begin Filter Fabric Underdrain
 Install: Outlet

Sta. 69+36
 Begin Filter Fabric Underdrain
 Install: Outlet

Sta. 73+47
 End Filter Fabric Underdrain
 Install: Cleanout

Sta. 65+69
 End Filter Fabric Underdrain
 Install: Cleanout

INBOUND LANE BASELINE OUTBOUND LANE

$\Delta = 31^{\circ}40'$
 $R = 1,909.86'$
 $T = 541.63'$
 $Lc = 1,055.56'$

TRUE NORTH
 Scale: 1"=40'

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
 Country Club Road to Castle Junction
 PROJ. NO. G/ABC-01-90M

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

SHEET No. 5 OF 14 SHEETS

ADD. II

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

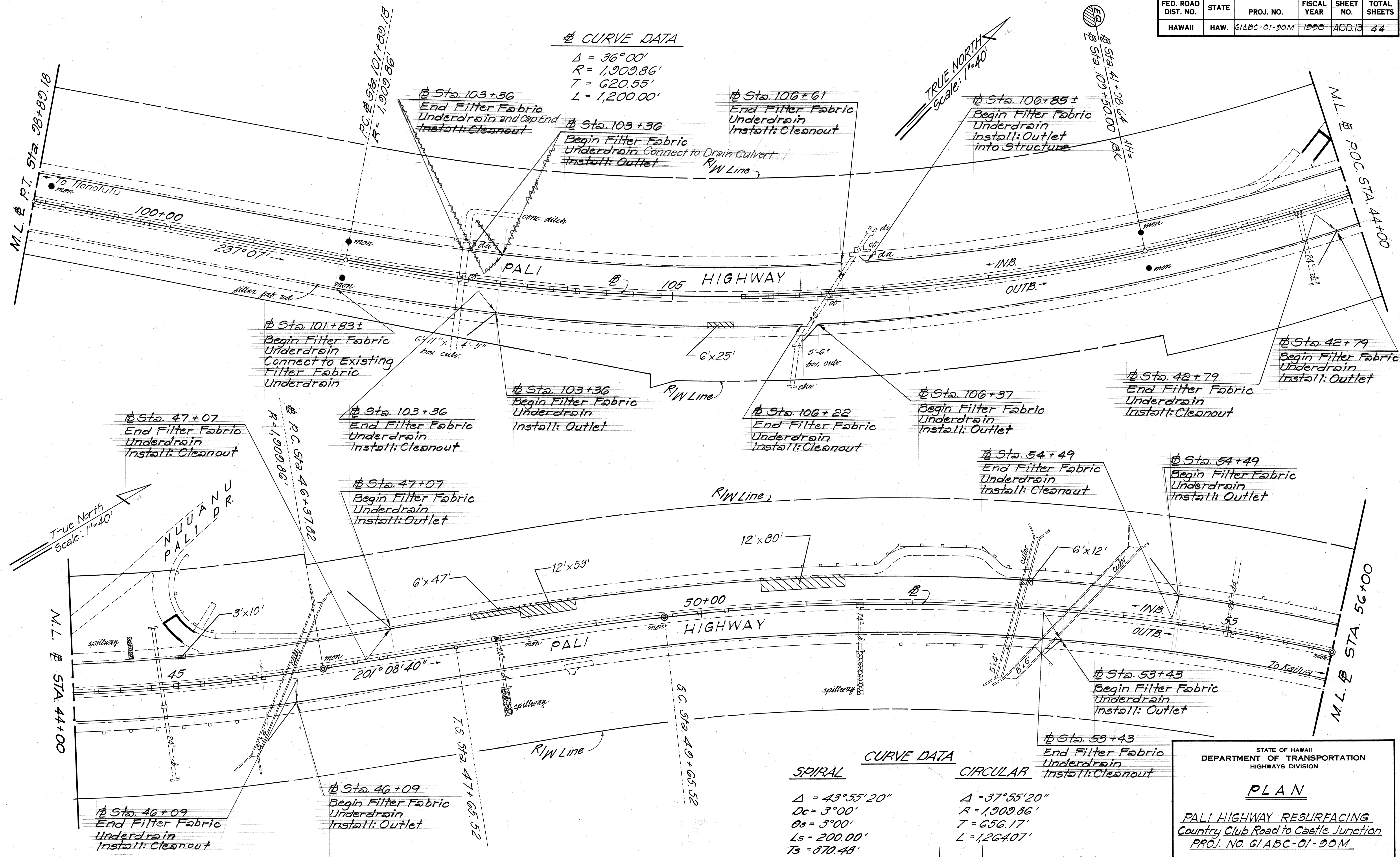
6/15/90	Revised Underdrain Plan
DATE	REVISION

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	ADD.13	44

CURVE DATA

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

TRUE NORTH
 Scale: 1"=40'



SPIRAL

$\Delta = 43^{\circ}55'20''$
 $D_c = 3^{\circ}00'$
 $O_s = 3^{\circ}00'$
 $L_s = 200.00'$
 $T_s = 870.48'$
 $L_s = 150.3'$

CURVE DATA

CIRCULAR

$\Delta = 37^{\circ}55'20''$
 $R = 1,909.86'$
 $T = 656.17'$
 $L = 1,264.07'$

6/15/90	Revised Underdrain Plan
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

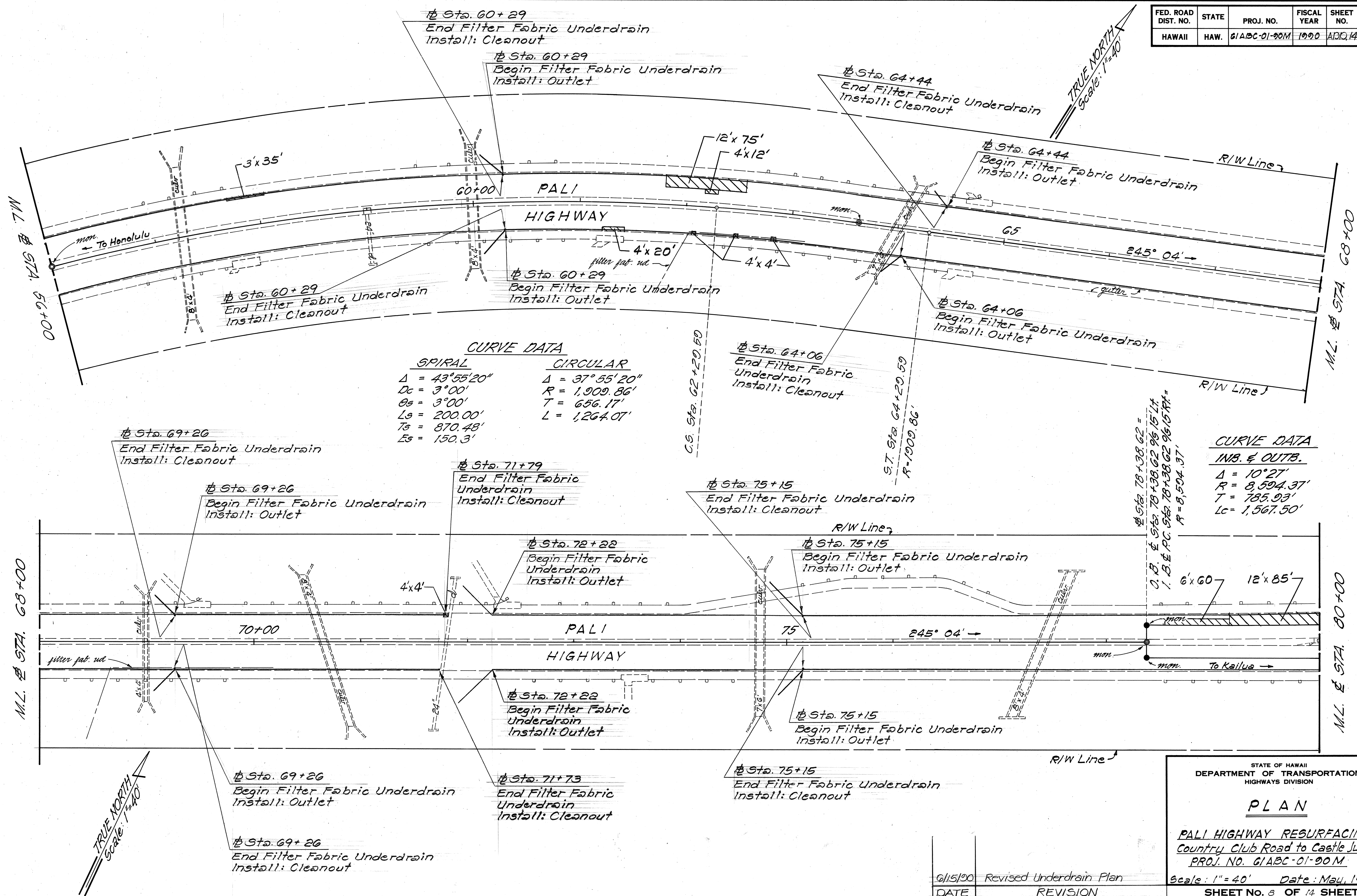
PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 61ABC-01-90M

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

SHEET No. 7 OF 14 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	ADD.14	44



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

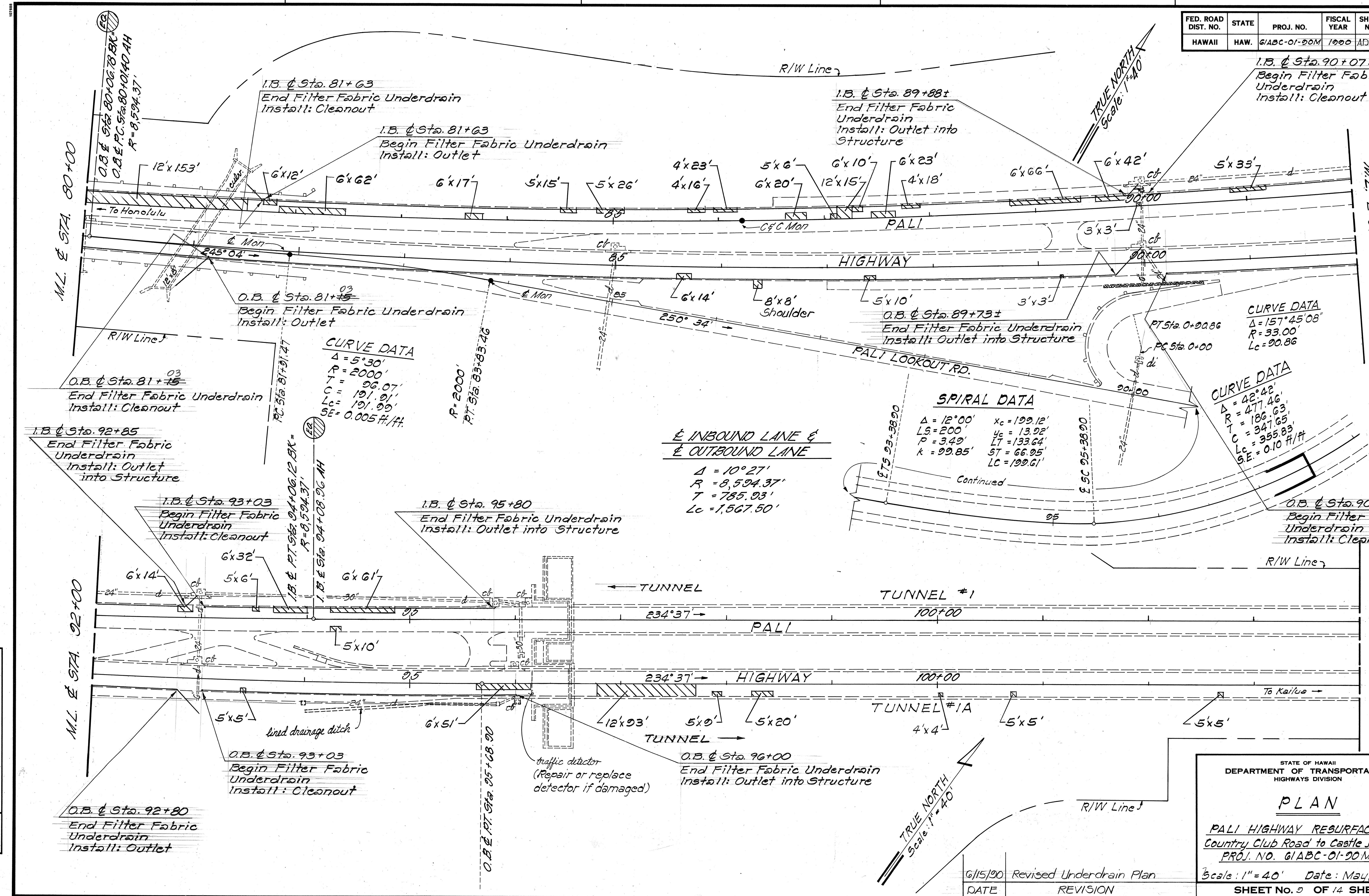
PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 61ABC-01-90M

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

SHEET No. 3 OF 14 SHEETS

DATE	REVISION
6/15/90	Revised Underdrain Plan

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	6/ABC-01-200M	1990	ADD.15	44



DATE	DESIGNED BY	CHECKED BY
NO.	QUANTITIES BY	NO.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

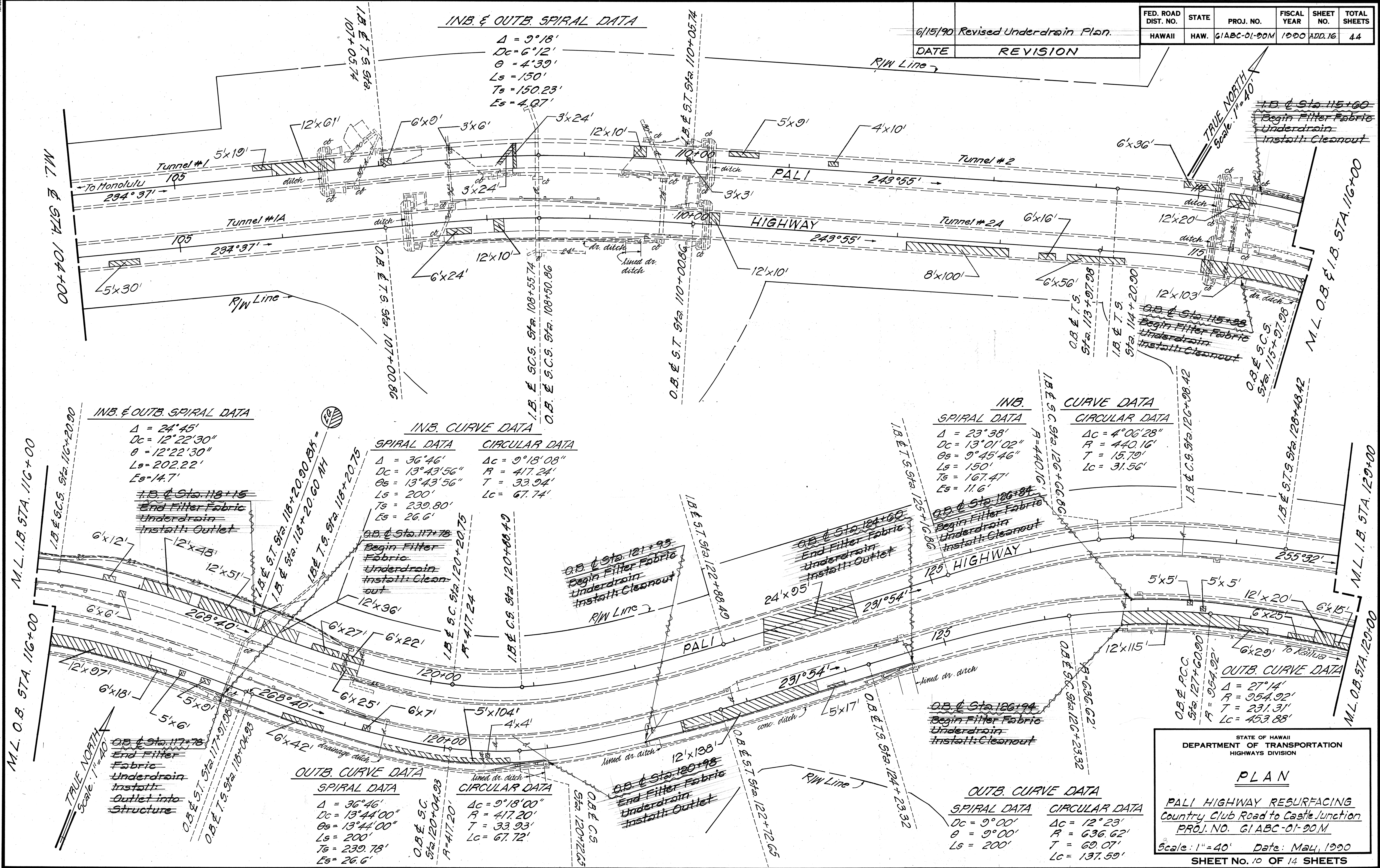
PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 6/ABC-01-200M
Scale: 1" = 40' Date: May, 1990

SHEET No. 2 OF 14 SHEETS

DATE	REVISION
6/15/90	Revised Underdrain Plan

ADD.15

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6/15/90	HAWAII	GI ABC-01-90M	1990	ADD. 16	44
DATE	REVISION				
	Revised Underdrain Plan.				



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING

Country Club Road to Castle Junction

PROJ. NO. GI ABC-01-90M

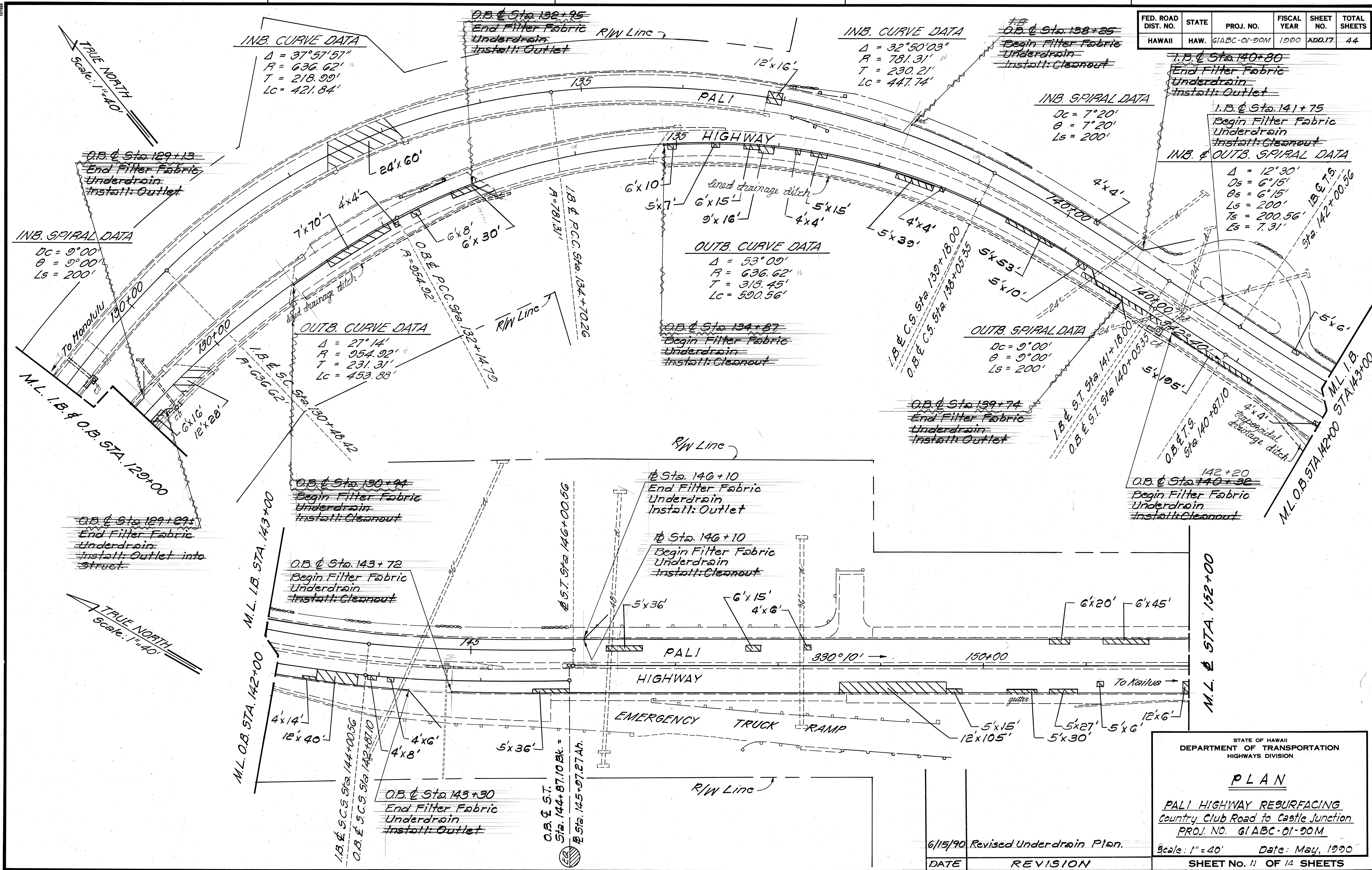
Scale: 1" = 40'

Date: May, 1990

SHEET NO. 10 OF 14 SHEETS

ADD. 16

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	GIABC-01-90M	1990	ADD.17	44



6/15/90	Revised Underdrain Plan
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 61ABC-01-20M

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

SHEET NO. 11 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	GIABC-01-90M	1990	ADD. 18	44

M.L. STA. 152+00

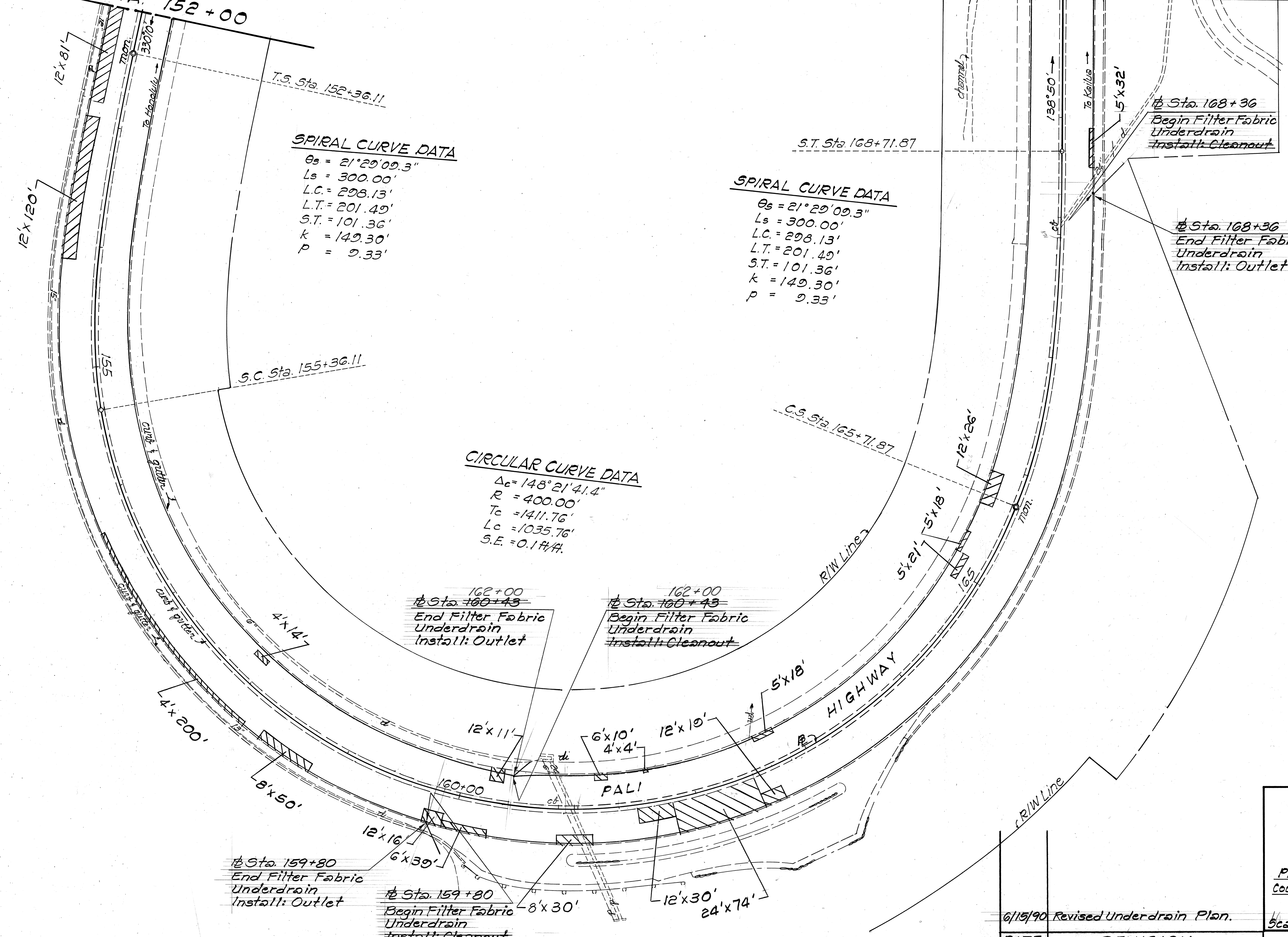
M.L. STA. 170+00

SPIRAL CURVE DATA
 $\theta_s = 21^\circ 29' 09.3''$
 $L_s = 300.00'$
 $L.C. = 208.13'$
 $L.T. = 201.49'$
 $S.T. = 101.36'$
 $k = 149.30'$
 $p = 9.33'$

SPIRAL CURVE DATA
 $\theta_s = 21^\circ 29' 09.3''$
 $L_s = 300.00'$
 $L.C. = 208.13'$
 $L.T. = 201.49'$
 $S.T. = 101.36'$
 $k = 149.30'$
 $p = 9.33'$

CIRCULAR CURVE DATA
 $\Delta_c = 148^\circ 21' 41.4''$
 $R = 400.00'$
 $T_c = 1411.76'$
 $L_c = 1035.76'$
 $S.E. = 0.1 \text{ ft/ft.}$

TRUE NORTH
Scale: 1" = 40'



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

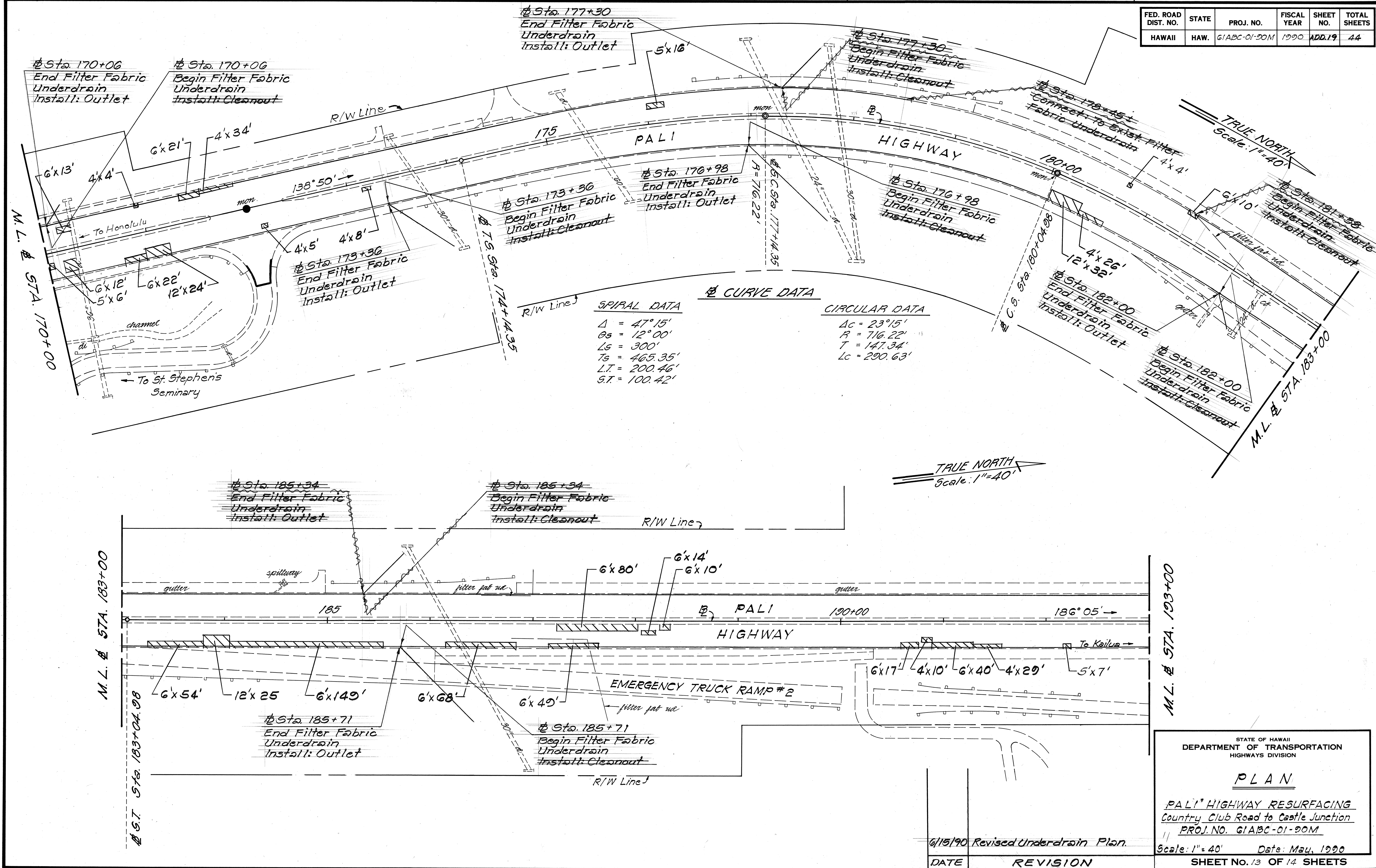
PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. GIABC-01-90M

6/15/90 Revised Underdrain Plan.
Scale: 1" = 40' Date: May, 1990

DATE	REVISION

SHEET No. 12 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	ADD.19	44



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

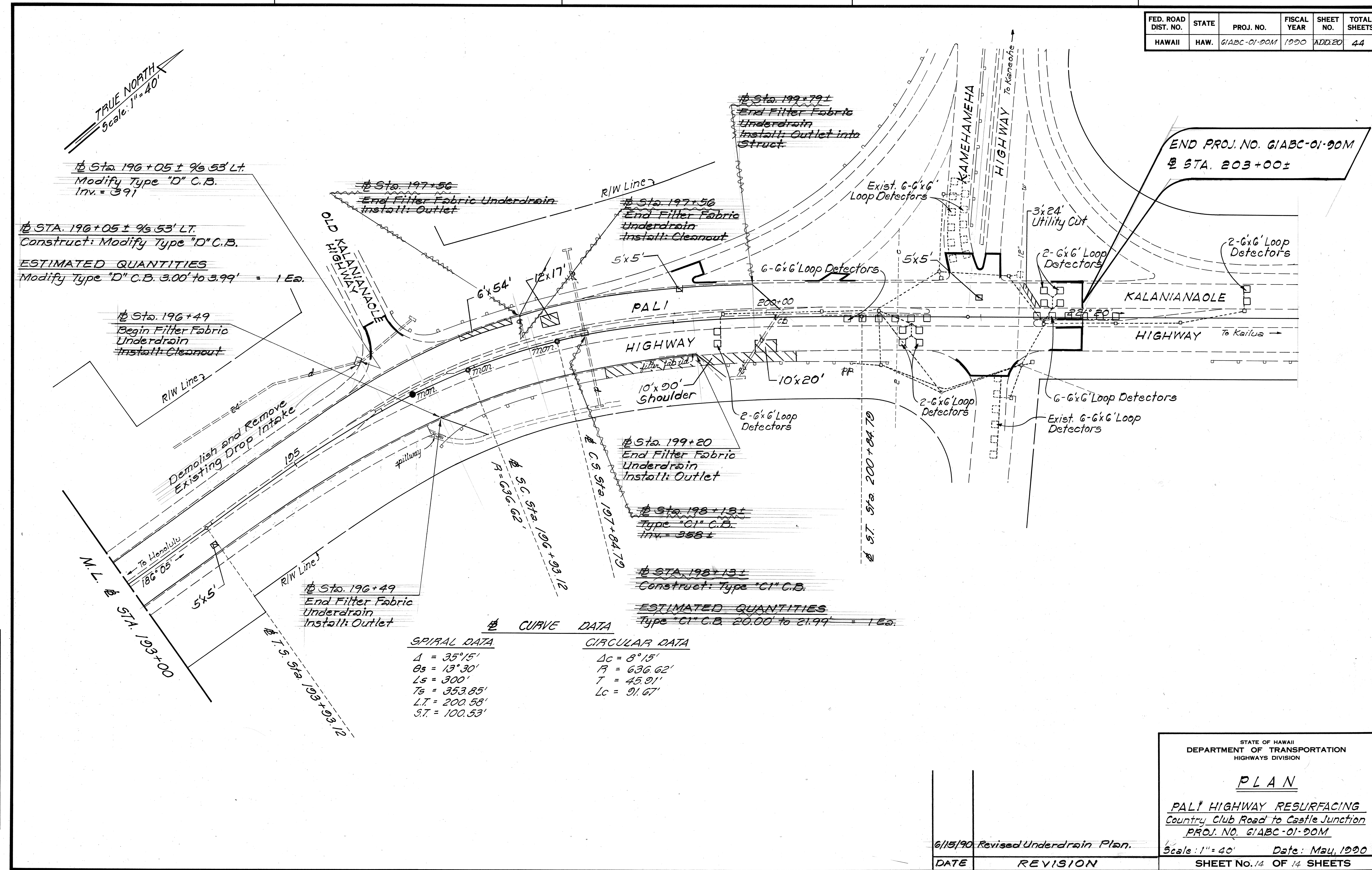
PLAN

PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 61ABC-01-90M

6/15/90 Revised Underdrain Plan.
DATE
REVISION

Scale: 1" = 40'
Date: May, 1990
SHEET No. 13 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	ADD.20	44



ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 61ABC-01-90M

6/15/90 Revised Underdrain Plan.
Scale: 1"=40' Date: May, 1990

DATE	REVISION

SHEET No. 14 OF 14 SHEETS
ADD.20