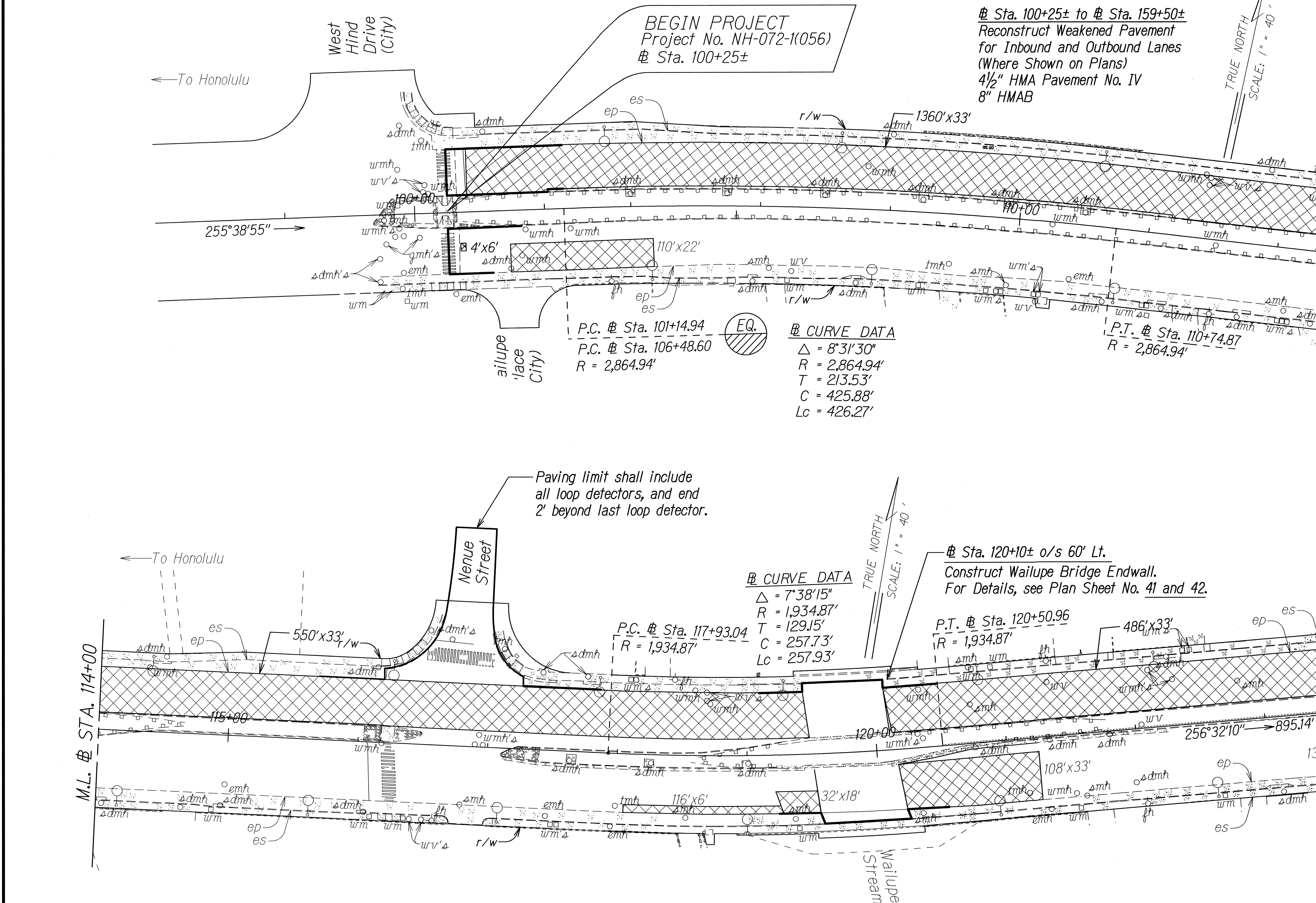
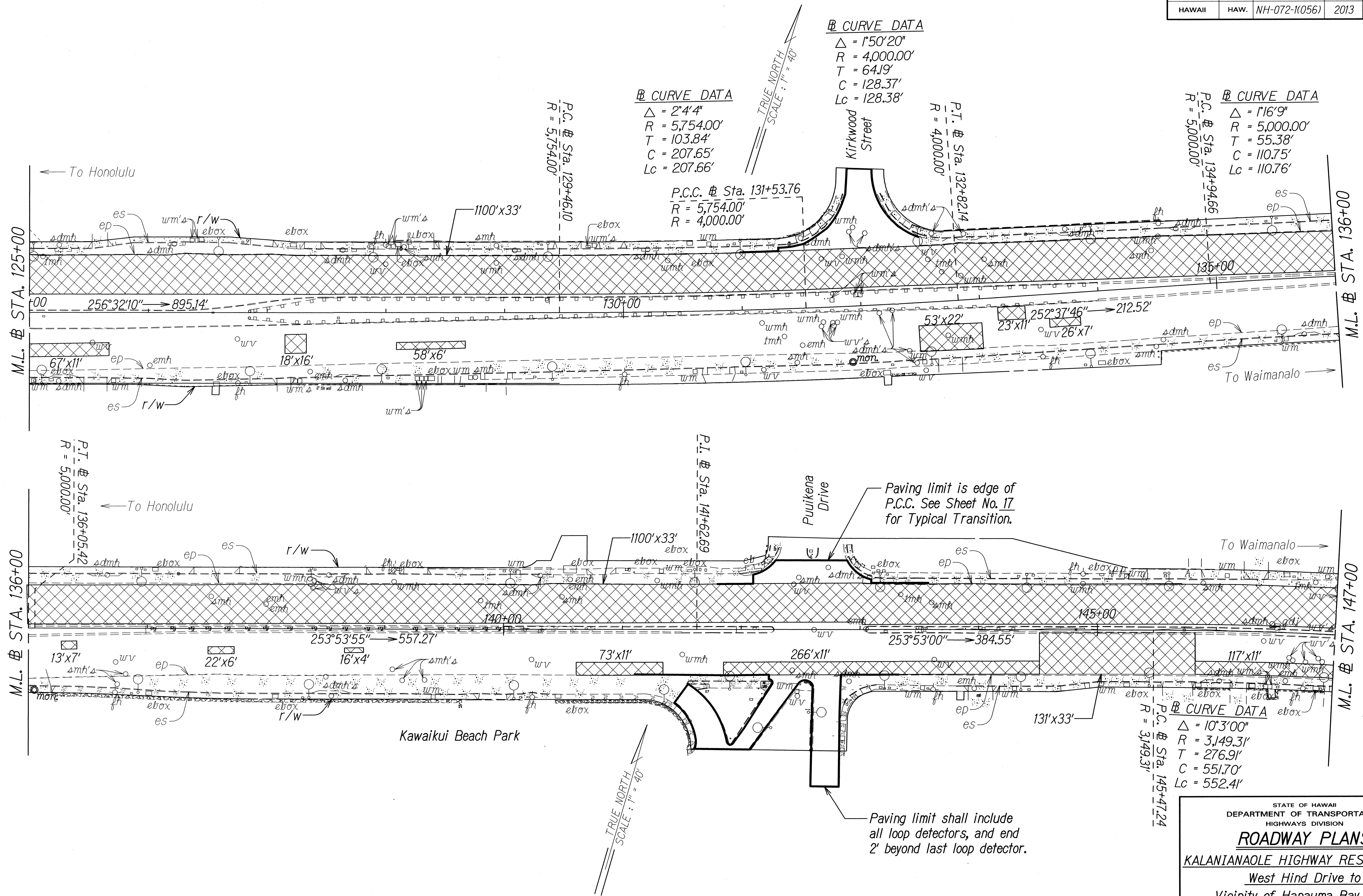


☐ \$ 24.120.00 ☐ \$ 24.150.00 ☐ \$ 24.180.00 ☐ \$ 24.210.00 ☐ \$ 24.240.00 ☐ \$ 24.270.00 ☐ \$ 24.300.00 ☐ \$ 24.330.00 ☐ \$ 24.360.00 ☐ \$ 24.390.00 ☐ \$ 24.420.00 ☐ \$ 24.450.00 ☐ \$ 24.480.00 ☐ \$ 24.510.00 ☐ \$ 24.540.00 ☐ \$ 24.570.00 ☐ \$ 24.600.00 ☐ \$ 24.630.00 ☐ \$ 24.660.00 ☐ \$ 24.690.00 ☐ \$ 24.720.00 ☐ \$ 24.750.00 ☐ \$ 24.780.00 ☐ \$ 24.810.00 ☐ \$ 24.840.00 ☐ \$ 24.870.00 ☐ \$ 24.900.00 ☐ \$ 24.930.00 ☐ \$ 24.960.00 ☐ \$ 24.990.00 ☐ \$ 25.020.00 ☐ \$ 25.050.00 ☐ \$ 25.080.00 ☐ \$ 25.110.00 ☐ \$ 25.140.00 ☐ \$ 25.170.00 ☐ \$ 25.200.00 ☐ \$ 25.230.00 ☐ \$ 25.260.00 ☐ \$ 25.290.00 ☐ \$ 25.320.00 ☐ \$ 25.350.00 ☐ \$ 25.380.00 ☐ \$ 25.410.00 ☐ \$ 25.440.00 ☐ \$ 25.470.00 ☐ \$ 25.500.00 ☐ \$ 25.530.00 ☐ \$ 25.560.00 ☐ \$ 25.590.00 ☐ \$ 25.620.00 ☐ \$ 25.650.00 ☐ \$ 25.680.00 ☐ \$ 25.710.00 ☐ \$ 25.740.00 ☐ \$ 25.770.00 ☐ \$ 25.800.00 ☐ \$ 25.830.00 ☐ \$ 25.860.00 ☐ \$ 25.890.00 ☐ \$ 25.920.00 ☐ \$ 25.950.00 ☐ \$ 25.980.00 ☐ \$ 26.010.00 ☐ \$ 26.040.00 ☐ \$ 26.070.00 ☐ \$ 26.100.00 ☐ \$ 26.130.00 ☐ \$ 26.160.00 ☐ \$ 26.190.00 ☐ \$ 26.220.00 ☐ \$ 26.250.00 ☐ \$ 26.280.00 ☐ \$ 26.310.00 ☐ \$ 26.340.00 ☐ \$ 26.370.00 ☐ \$ 26.400.00 ☐ \$ 26.430.00 ☐ \$ 26.460.00 ☐ \$ 26.490.00 ☐ \$ 26.520.00 ☐ \$ 26.550.00 ☐ \$ 26.580.00 ☐ \$ 26.610.00 ☐ \$ 26.640.00 ☐ \$ 26.670.00 ☐ \$ 26.700.00 ☐ \$ 26.730.00 ☐ \$ 26.760.00 ☐ \$ 26.790.00 ☐ \$ 26.820.00 ☐ \$ 26.850.00 ☐ \$ 26.880.00 ☐ \$ 26.910.00 ☐ \$ 26.940.00 ☐ \$ 26.970.00 ☐ \$ 27.000.00 ☐ \$ 27.030.00 ☐ \$ 27.060.00 ☐ \$ 27.090.00 ☐ \$ 27.120.00 ☐ \$ 27.150.00 ☐ \$ 27.180.00 ☐ \$ 27.210.00 ☐ \$ 27.240.00 ☐ \$ 27.270.00 ☐ \$ 27.300.00 ☐ \$ 27.330.00 ☐ \$ 27.360.00 ☐ \$ 27.390.00 ☐ \$ 27.420.00 ☐ \$ 27.450.00 ☐ \$ 27.480.00 ☐ \$ 27.510.00 ☐ \$ 27.540.00 ☐ \$ 27.570.00 ☐ \$ 27.600.00 ☐ \$ 27.630.00 ☐ \$ 27.660.00 ☐ \$ 27.690.00 ☐ \$ 27.720.00 ☐ \$ 27.750.00 ☐ \$ 27.780.00 ☐ \$ 27.810.00 ☐ \$ 27.840.00 ☐ \$ 27.870.00 ☐ \$ 27.900.00 ☐ \$ 27.930.00 ☐ \$ 27.960.00 ☐ \$ 27.990.00 ☐ \$ 28.020.00 ☐ \$ 28.050.00 ☐ \$ 28.080.00 ☐ \$ 28.110.00 ☐ \$ 28.140.00 ☐ \$ 28.170.00 ☐ \$ 28.200.00 ☐ \$ 28.230.00 ☐ \$ 28.260.00 ☐ \$ 28.290.00 ☐ \$ 28.320.00 ☐ \$ 28.350.00 ☐ \$ 28.380.00 ☐ \$ 28.410.00 ☐ \$ 28.440.00 ☐ \$ 28.470.00 ☐ \$ 28.500.00 ☐ \$ 28.530.00 ☐ \$ 28.560.00 ☐ \$ 28.590.00 ☐ \$ 28.620.00 ☐ \$ 28.650.00 ☐ \$ 28.680.00 ☐ \$ 28.710.00 ☐ \$ 28.740.00 ☐ \$ 28.770.00 ☐ \$ 28.800.00 ☐ \$ 28.830.00 ☐ \$ 28.860.00 ☐ \$ 28.890.00 ☐ \$ 28.920.00 ☐ \$ 28.950.00 ☐ \$ 28.980.00 ☐ \$ 29.010.00 ☐ \$ 29.040.00 ☐ \$ 29.070.00 ☐ \$ 29.100.00 ☐ \$ 29.130.00 ☐ \$ 29.160.00 ☐ \$ 29.190.00 ☐ \$ 29.220.00 ☐ \$ 29.250.00 ☐ \$ 29.280.00 ☐ \$ 29.310.00 ☐ \$ 29.340.00 ☐ \$ 29.370.00 ☐ \$ 29.400.00 ☐ \$ 29.430.00 ☐ \$ 29.460.00 ☐ \$ 29.490.00 ☐ \$ 29.520.00 ☐ \$ 29.550.00 ☐ \$ 29.580.00 ☐ \$ 29.610.00 ☐ \$ 29.640.00 ☐ \$ 29.670.00 ☐ \$ 29.700.00 ☐ \$ 29.730.00 ☐ \$ 29.760.00 ☐ \$ 29.790.00 ☐ \$ 29.820.00 ☐ \$ 29.850.00 ☐ \$ 29.880.00 ☐ \$ 29.910.00 ☐ \$ 29.940.00 ☐ \$ 29.970.00 ☐ \$ 30.000.00 ☐ \$ 30.030.00 ☐ \$ 30.060.00 ☐ \$ 30.090.00 ☐ \$ 30.120.00 ☐ \$ 30.150.00 ☐ \$ 30.180.00 ☐ \$ 30.210.00 ☐ \$ 30.240.00 ☐ \$ 30.270.00 ☐ \$ 30.300.00 ☐ \$ 30.330.00 ☐ \$ 30.360.00 ☐ \$ 30.390.00 ☐ \$ 30.420.00 ☐ \$ 30.450.00 ☐ \$ 30.480.00 ☐ \$ 30.510.00 <



Hand-drawn site plan of the Waialeale Stream area. The plan shows a main road running horizontally with various structures and features labeled. On the left, a vertical line is labeled 'M.L. & S'. The stream is labeled 'Waialeale Stream' and runs along the bottom. Structures include a large cross-hatched rectangle labeled '108'x33'', a smaller cross-hatched rectangle labeled '32'x18'', and a rectangular structure labeled '116'x6''. Other labels include 'wmh', 'dmh', 'smh', 'tmh', 'emh', 'wm', 'fh', 'ep', 'es', 'r/w', 'uv's', and '120'00'. A scale bar at the top right shows '256'32'10' and '655'13'.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(056)	2013	25	85



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY		
NOTED BY		
CHECKED BY		
DATE		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

KALANIANA'OLE HIGHWAY RESURFACING

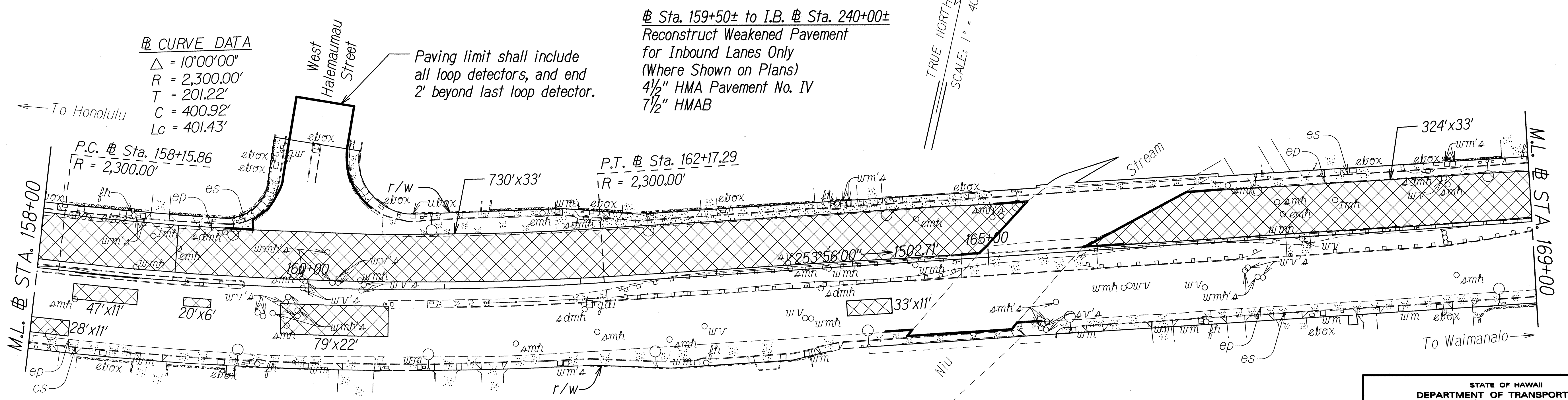
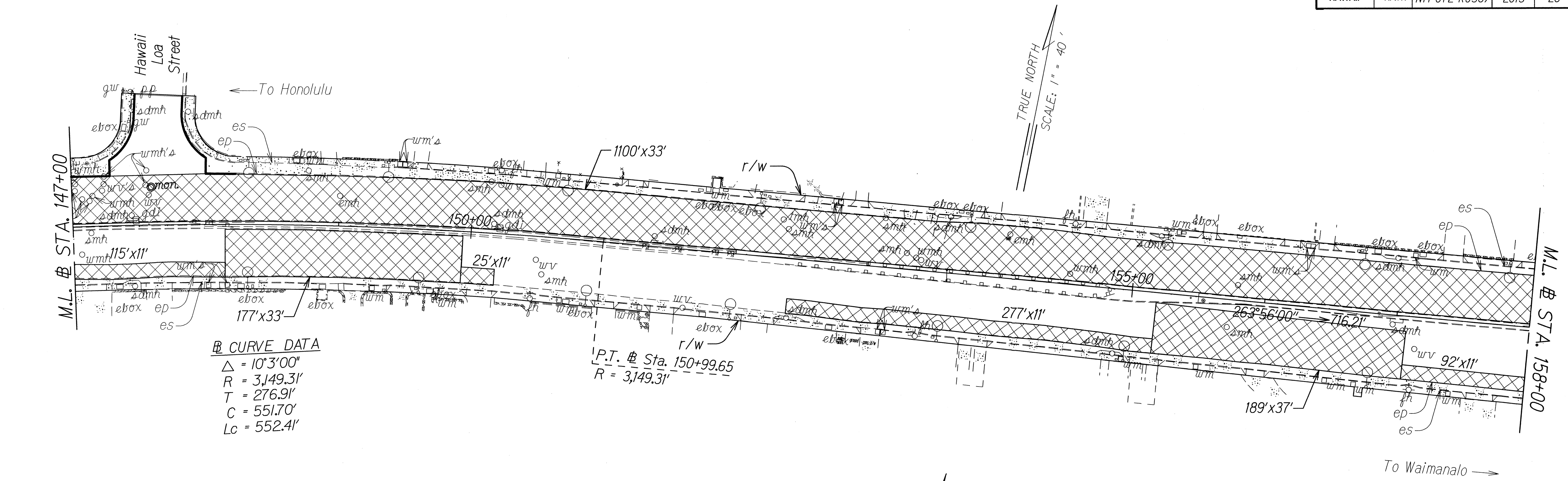
West Hind Drive to
Vicinity of Hanauma Bay Road

Federal Aid Project No. NH-072-1(056)

Scale: 1"=40' Date: August, 2013

SHEET No. 2 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-K(056)	2013	26	85



Sta. 159+50± to Sta. 177+20±
Reconstruct Weakened Pavement
for Outbound Lanes Only
(Where Shown on Plans)
3 1/2" HMA Pavement No. IV
6 1/2" HMAB

Sta. 159+50± to I.B. Sta. 240+00±
Reconstruct Weakened Pavement
for Inbound Lanes Only
(Where Shown on Plans)
4 1/2" HMA Pavement No. IV
7 1/2" HMAB

Paving limit shall include
all loop detectors, and end
2' beyond last loop detector.

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
FILED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

KALANIANA'OLE HIGHWAY RESURFACING

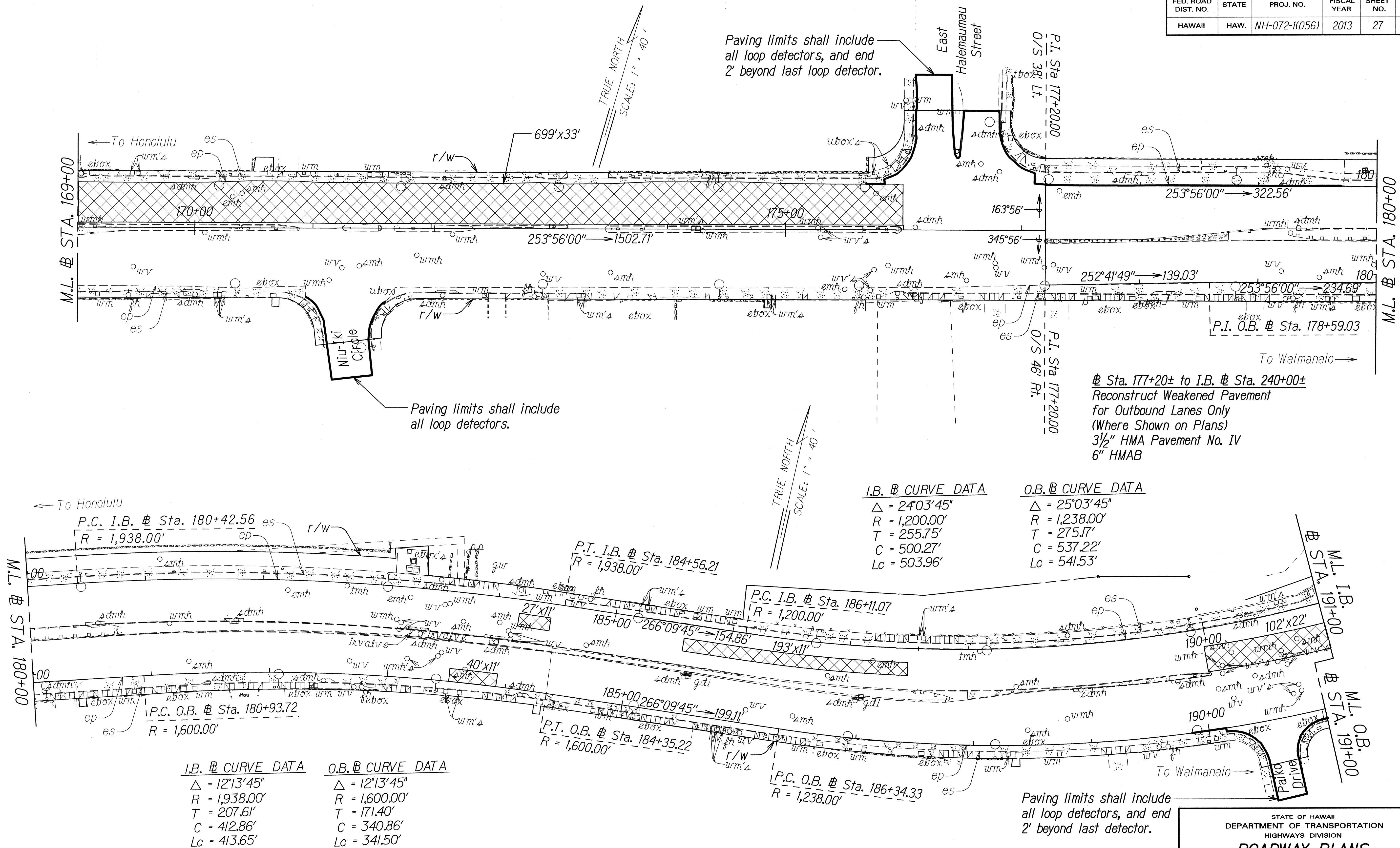
West Hind Drive to
Vicinity of Hanauma Bay Road

Federal Aid Project No. NH-072-K(056)

Scale: 1"=40' Date: August, 2013

SHEET No. 3 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(056)	2013	27	85



I.B. CURVE DATA	O.B. CURVE DATA
$\Delta = 24^{\circ}03'45''$	$\Delta = 25^{\circ}03'45''$
$R = 1,200.00'$	$R = 1,238.00'$
$T = 255.75'$	$T = 275.17'$
$C = 500.27'$	$C = 537.22'$
$Lc = 503.96'$	$Lc = 541.53'$

I.B. CURVE DATA	O.B. CURVE DATA
$\Delta = 12^{\circ}13'45''$	$\Delta = 12^{\circ}13'45''$
$R = 1,938.00'$	$R = 1,600.00'$
$T = 207.61'$	$T = 171.40'$
$C = 412.86'$	$C = 340.86'$
$Lc = 413.65'$	$Lc = 341.50'$

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
add'l	
No. Xdgn	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

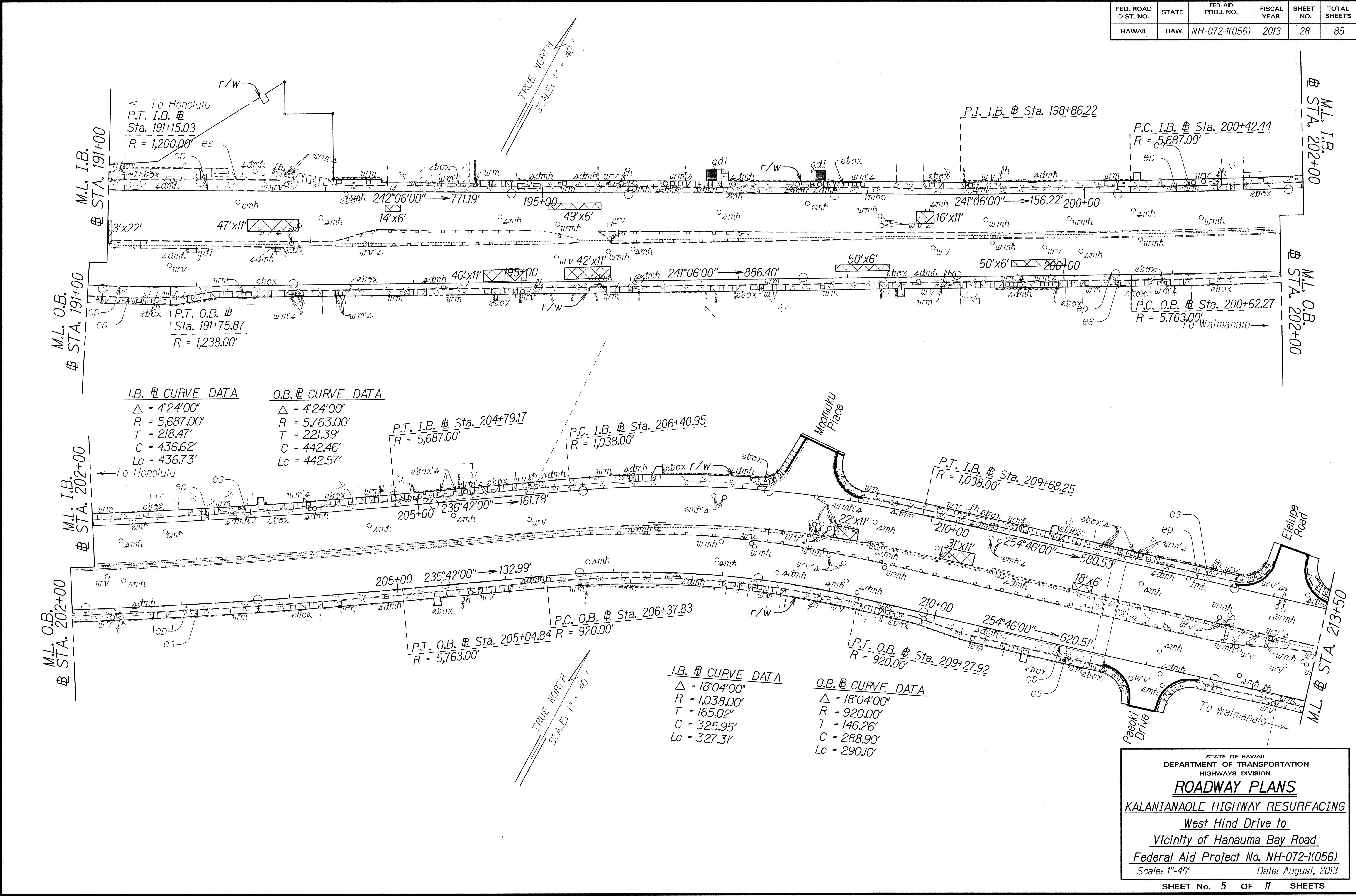
KALANIANA'OLE HIGHWAY RESURFACING

West Hind Drive to
Vicinity of Hanauma Bay Road

Federal Aid Project No. NH-072-1(056)
Scale: 1"=40' Date: August, 2013

SHEET No. 4 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(056)	2013	28	85



SURVEY PLOTTED BY	DATE
DRAWN BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

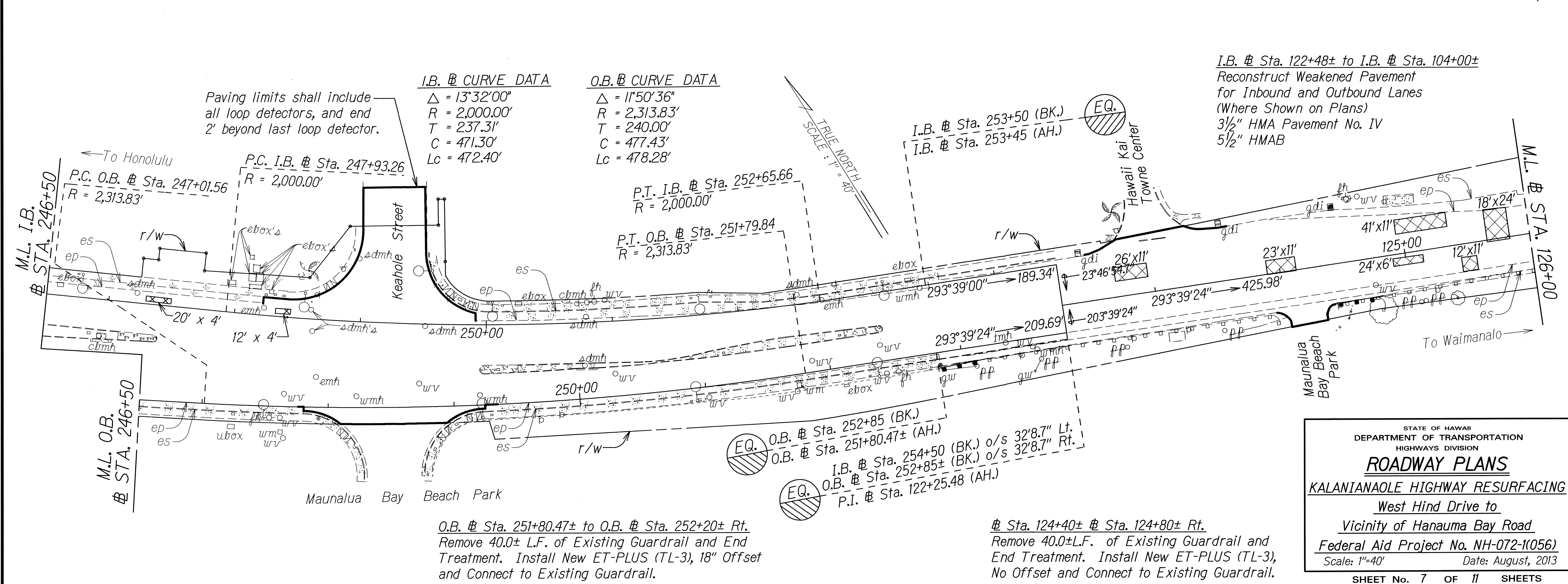
KALANIANA'OLE HIGHWAY RESURFACING

West Hind Drive to
Vicinity of Hanauma Bay Road

Federal Aid Project No. NH-072-1(056)

Scale: 1"=40' Date: August, 2013

SHEET No. 5 OF 11 SHEETS



**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

ROADWAY PLANS

KALANIANA'OLE HIGHWAY RESURFACING

**West Hind Drive to
Vicinity of Hanauma Bay Road**

Federal Aid Project No. NH-072-1(056)

Scale: 1"=40' Date: August, 2013

SHEET No. 7 OF 11 SHEETS

ROADWAY PLAN DATA:

- I.B. CURVE DATA:**
 - $\Delta = 13^\circ 32' 00''$
 - $R = 2,000.00'$
 - $T = 237.31'$
 - $C = 471.30'$
 - $Lc = 472.40'$
- O.B. CURVE DATA:**
 - $\Delta = 11^\circ 50' 36''$
 - $R = 2,313.83'$
 - $T = 240.00'$
 - $C = 477.43'$
 - $Lc = 478.28'$

STATIONING AND CURVE DATA:

- I.B. Sta. 247+93.26** (P.C. I.B. Sta. 247+93.26, R = 2,000.00')
- O.B. Sta. 247+01.56** (P.C. O.B. Sta. 247+01.56, R = 2,313.83')
- I.B. Sta. 252+65.66** (P.T. I.B. Sta. 252+65.66, R = 2,000.00')
- O.B. Sta. 251+79.84** (P.T. O.B. Sta. 251+79.84, R = 2,313.83')
- I.B. Sta. 252+85 (BK.)**
- O.B. Sta. 251+80.47± (AH.)**
- I.B. Sta. 254+50 (BK.)** o/s 32'8.7" Lt.
- O.B. Sta. 252+85± (BK.)** o/s 32'8.7" Rt.
- P.I. Sta. 122+25.48 (AH.)**

PAVING LIMITS:

Paving limits shall include all loop detectors, and end 2' beyond last loop detector.

MAINTENANCE LIMITS:

- M.L. I.B. Sta. 246+50**
- M.L. O.B. Sta. 246+50**

ROADWAY PLAN DETAILS:

- Keahole Street**
- Maunaloa Bay Beach Park**
- Hawaii Kai Towne Center**
- Maunaloa Bay Beach Park**
- To Honolulu**
- To Waimanalo**

PAVEMENT DETAILS:

- 3 1/2" HMA Pavement No. IV**
- 5 1/2" HMA**

STATIONING AND CURVE DATA:

- I.B. Sta. 253+50 (BK.)**
- I.B. Sta. 253+45 (AH.)**
- O.B. Sta. 252+85 (BK.)**
- O.B. Sta. 251+80.47± (AH.)**
- I.B. Sta. 254+50 (BK.)** o/s 32'8.7" Lt.
- O.B. Sta. 252+85± (BK.)** o/s 32'8.7" Rt.
- P.I. Sta. 122+25.48 (AH.)**

PAVING LIMITS:

Paving limits shall include all loop detectors, and end 2' beyond last loop detector.

MAINTENANCE LIMITS:

- M.L. I.B. Sta. 246+50**
- M.L. O.B. Sta. 246+50**

ROADWAY PLAN DETAILS:

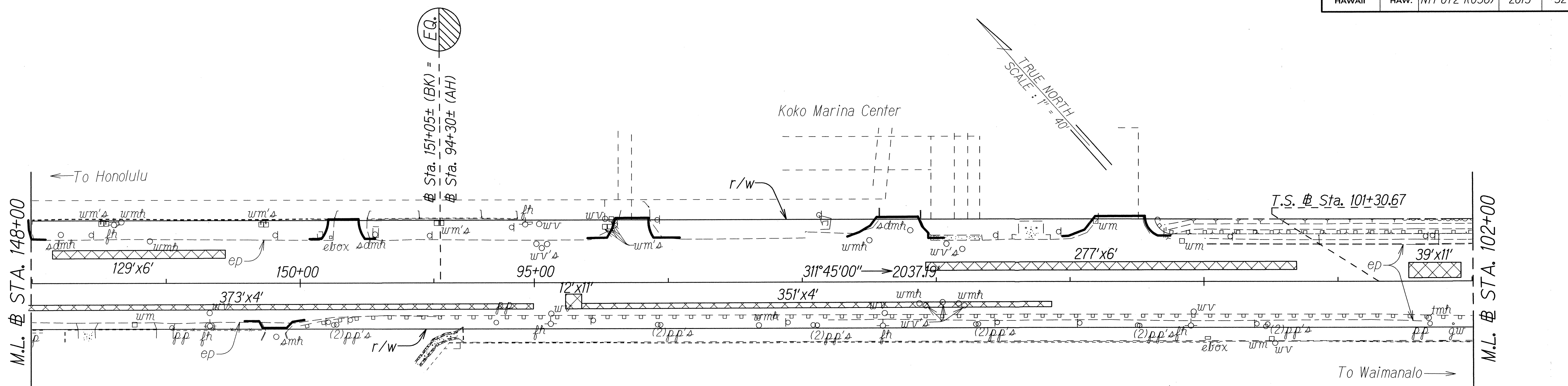
- Keahole Street**
- Maunaloa Bay Beach Park**
- Hawaii Kai Towne Center**
- Maunaloa Bay Beach Park**
- To Honolulu**
- To Waimanalo**

PAVEMENT DETAILS:

- 3 1/2" HMA Pavement No. IV**
- 5 1/2" HMA**

[illegible]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(056)	2013	32	85



CURVE DATA
 $\Delta s = 38^{\circ}30'00''$
 $\theta s = 4^{\circ}12'00''$
 $Ts = 807.54'$
 $Es = 114.96'$
 $Ls = 280.00'$

S.C. # Sta. 104+10.66

CURVE DATA
 $\Delta c = 30^{\circ}06'00''$
 $Dc = 3^{\circ}00'00''$
 $Rc = 1,909.86'$
 $Tc = 513.53'$
 $Lc = 1,003.33'$

Sta. 104+00± to # Sta. 139+50±
 Reconstruct Weakened Pavement
 for Inbound and Outbound Lanes
 (Where Shown on Plans)
 3 1/2" HMA Pavement No. IV
 8 1/2" HMAB

Paving limit shall include
 all loop detectors, and end
 2' beyond last loop detector.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLANS

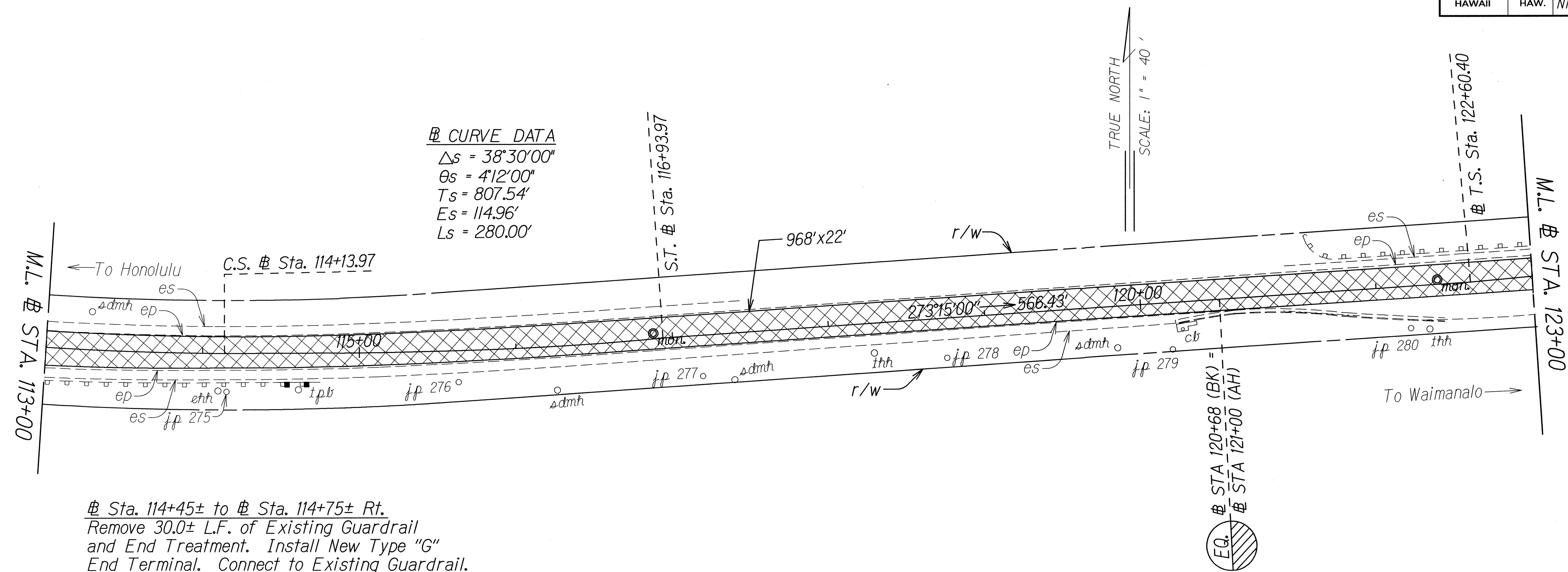
KALANIANA'OLE HIGHWAY RESURFACING

West Hind Drive to
 Vicinity of Hanauma Bay Road

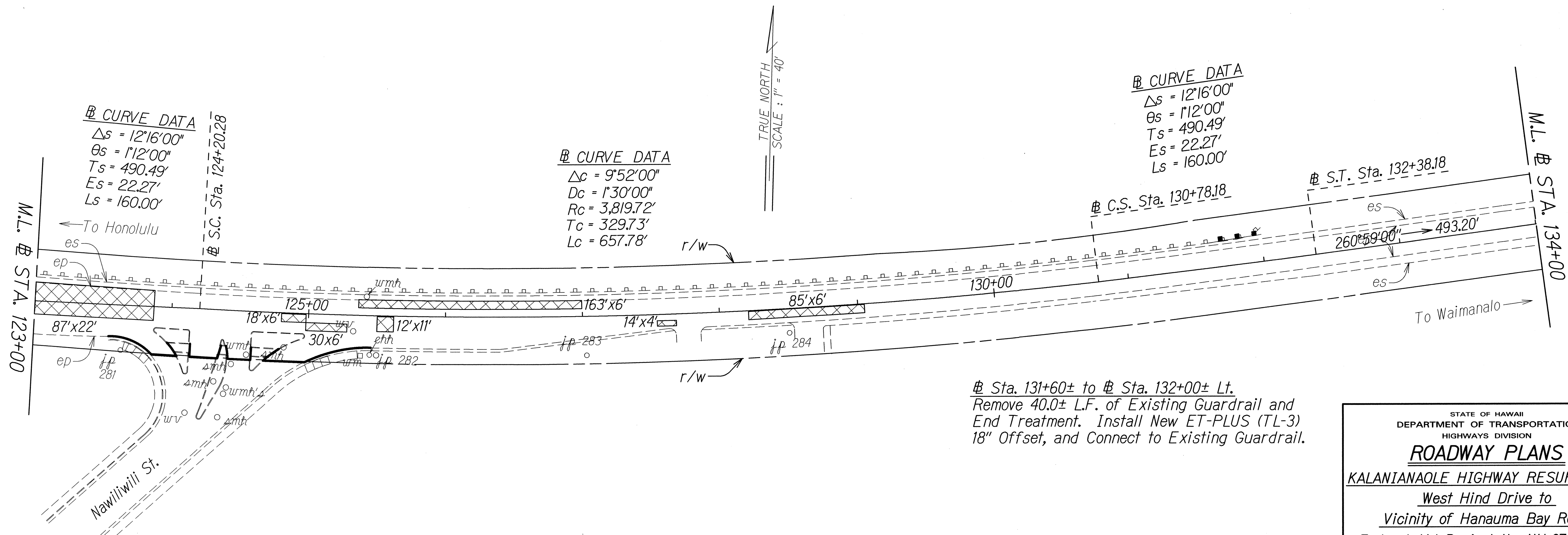
Federal Aid Project No. NH-072-1(056)
 Scale: 1"=40' Date: August, 2013

SHEET No. 9 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(056)	2013	33	85



Sta. 114+45± to Sta. 114+75± Rt.
 Remove 30.0± L.F. of Existing Guardrail
 and End Treatment. Install New Type "G"
 End Terminal. Connect to Existing Guardrail.



Sta. 131+60± to Sta. 132+00± Lt.
 Remove 40.0± L.F. of Existing Guardrail and
 End Treatment. Install New ET-PLUS (TL-3)
 18" Offset, and Connect to Existing Guardrail.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
DESIGNED BY	
CONSTRUCTED BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLANS

KALANIANA'OLE HIGHWAY RESURFACING

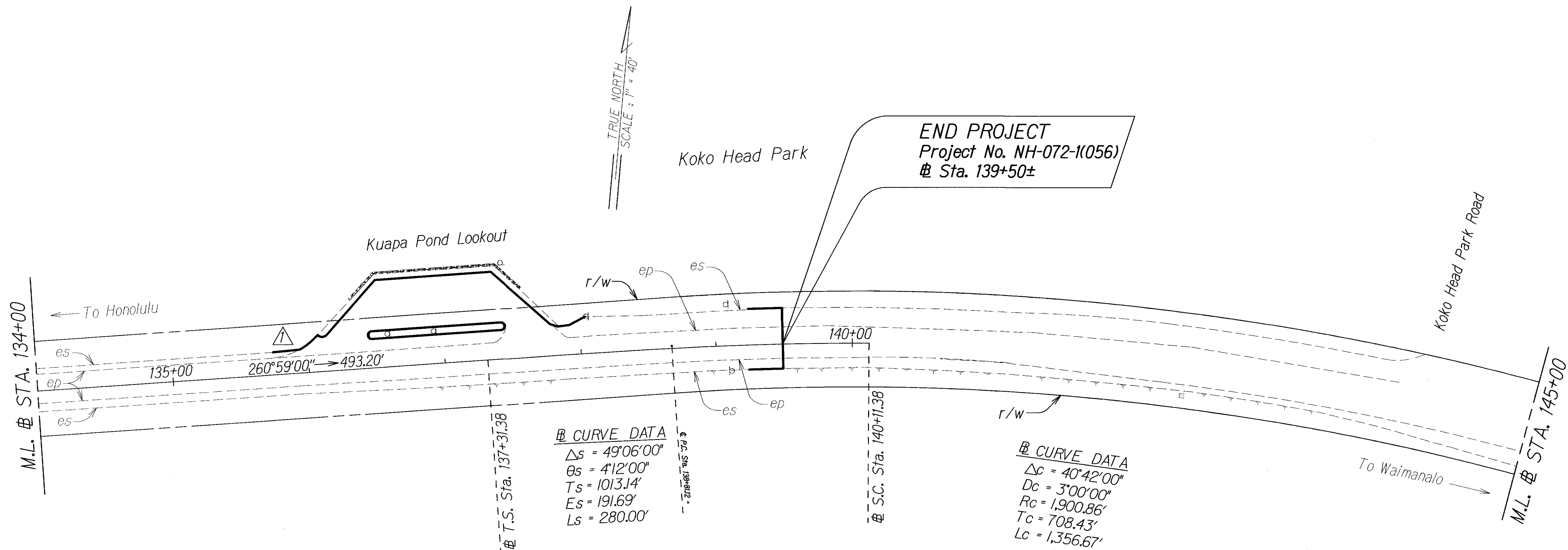
West Hind Drive to
 Vicinity of Hanauma Bay Road

Federal Aid Project No. NH-072-1(056)

Scale: 1"=40' Date: August, 2013

SHEET No. 10 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(056)	2013	ADD.34	85



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY		
DESIGNED BY		
CHECKED BY		
DATE		

11/8/13	Revise Plan to Show Paving Limit for Kuapa Pond Lookout to Follow ES.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION ROADWAY PLANS KALANIANA'OLE HIGHWAY RESURFACING <u>West Hind Drive to</u> <u>Vicinity of Hanauma Bay Road</u> Federal Aid Project No. NH-072-1(056) Scale: 1"=40' Date: August, 2013	
SHEET No. 11 OF 11 SHEETS	