

Sta. 72+00 to 72.25 Rt.
Install 25' Rubrail

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(36)	2009	ADD.16	27

BEGIN PROJECT
Project No. NH-019-1(36)
Sta. 73+00

§ CURVE DATA
Δ = 48°00'30"
Δc = 38°00'30"
D = 4°00'00"
θ = 5°00'00"
R = 1,432.40
Lc = 950.21
Ls = 250.00
Ts = 763.65
S. E. = 0.09 ft/ft

Sta. 63+48 to 72+25.5 Rt.
Install 812.5 Lin. Ft. Std. Mtl.
Guardrail and Posts.
Install 1- Modified Type "A-1" Leading End Treatment.
Install 25 Lin. Ft. Double (Nested) W-Beam
and Eliminate One Post at Culvert.
with 62.5 Lin. Ft. Additional Rubrail at Swale Crossing
Install 1-Type "G" Modified Trailing End Treatment, R=70'.

Sta. 61+12.5 to 61+50 Lt.
Install 37.5' Rubrail

Sta. 61+25 to 72+52 Lt.
Install 1087.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 1-Type "G" Modified Leading End Treatment, R=40'.
Install 1-Modified Type "A-1" Trailing End Treatment.

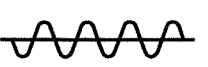
Sta. 64+41 to 71+07 Lt.
Remove 675 Lin. Ft. Mtl. Guardrail and Posts.
Remove 1-Type "G" End Treatment.
Remove 1-"BCT" End Treatment.

Sta. 0+00 to 73+00 Lt. & Rt.
Cold Plane Shoulder 1.5 Inches to Face of
Guardrail Pave Shoulder with 2% Slope.
See Details, Sht. 14

Sta. 54+41 to 55+38 Rt.
Remove 100 Lin. Ft. Mtl. Guardrail and Posts.
Remove 1-Type "G" End Treatment.
Remove 1-Type "C" End Treatment.

~~Sta. 60+55 to 61+55 Lt.~~
~~Cold Plane Transition 1.5 Inches to 0 Inch.~~
~~See Details, Sht. 14~~

LEGEND FOR
AS-BUILT POSTINGS


Double line symbol
Roadway

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

HAWAII BELT ROAD GUARDRAIL
AND SHOULDER IMPROVEMENTS
Paauhau Road to Pakalana Street
Federal-Aid Project No. NH-019-1(36)

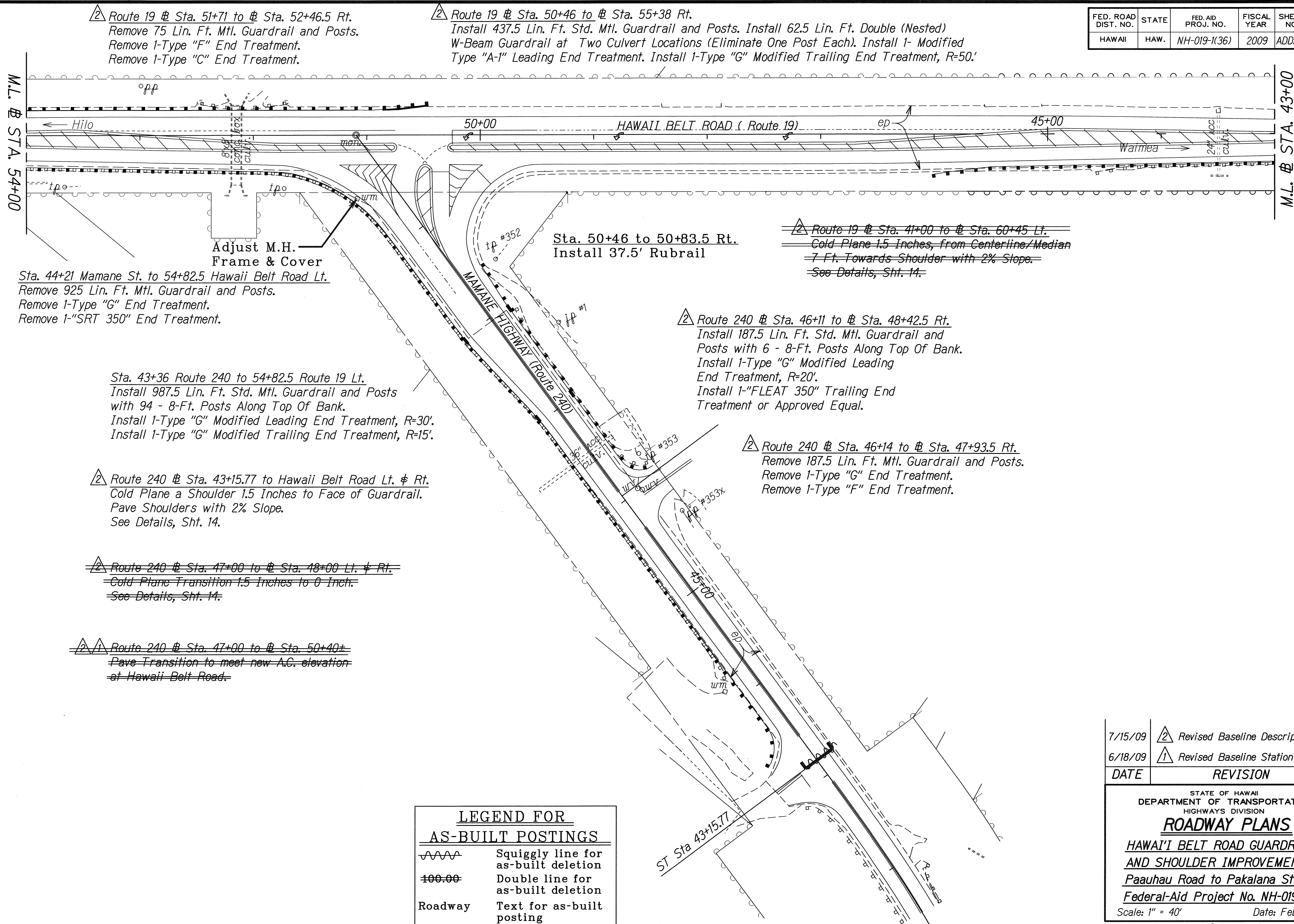
Scale: 1" = 40' Date: Feb, 2009

SHEET No. 1 OF 4 SHEETS

DATE	REVISION
6/16/09	Revised Baseline Stations.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(36)	2009	ADD. 17	27

TRUE NORTH
SCALE: 1" = 40'



7/15/09	Revised Baseline Description
6/18/09	Revised Baseline Station
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION ROADWAY PLANS HAWAII BELT ROAD GUARDRAIL AND SHOULDER IMPROVEMENTS Paauhau Road to Pakalana Street Federal-Aid Project No. NH-019-1(36) Scale: 1" = 40' Date: Feb, 2009	
SHEET No. 2 OF 4 SHEETS	

"AS-BUILT"

ADD. 17

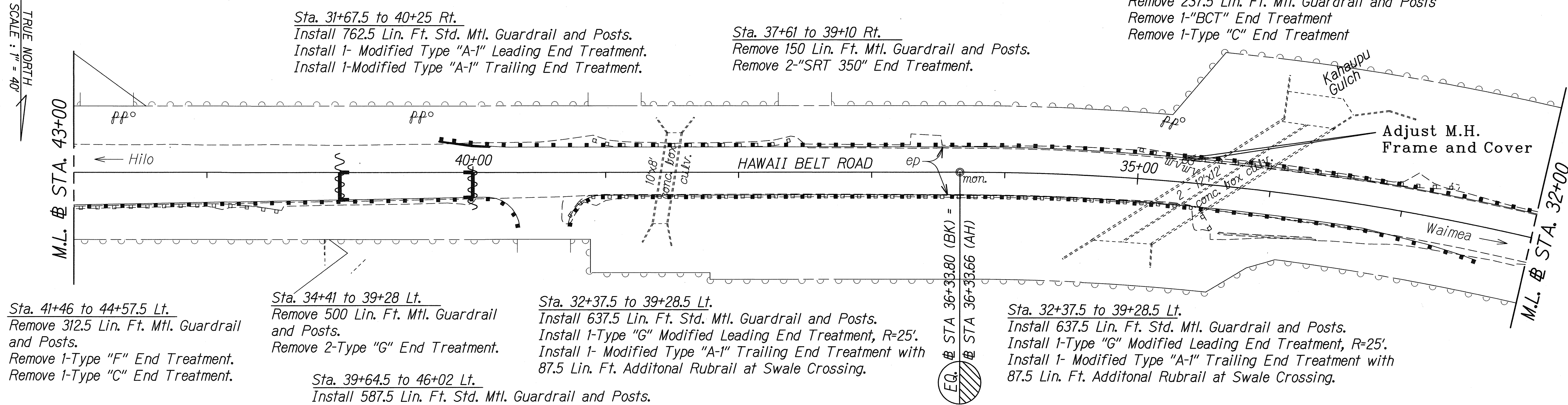
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(36)	2009	ADD.18	27

Sta. 39+75 to 40+12.5 Rt.
Install 37.5' Rubrail

Sta. 31+67.5 to 40+25 Rt.
Install 762.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 1- Modified Type "A-1" Leading End Treatment.
Install 1-Modified Type "A-1" Trailing End Treatment.

Sta. 37+61 to 39+10 Rt.
Remove 150 Lin. Ft. Mtl. Guardrail and Posts.
Remove 2-"SRT 350" End Treatment.

Sta. 32+65.5 to 35+00 Rt.
Remove 237.5 Lin. Ft. Mtl. Guardrail and Posts
Remove 1-"BCT" End Treatment
Remove 1-Type "C" End Treatment



Sta. 41+46 to 44+57.5 Lt.
Remove 312.5 Lin. Ft. Mtl. Guardrail and Posts.
Remove 1-Type "F" End Treatment.
Remove 1-Type "C" End Treatment.

Sta. 34+41 to 39+28 Lt.
Remove 500 Lin. Ft. Mtl. Guardrail and Posts.
Remove 2-Type "G" End Treatment.

Sta. 32+37.5 to 39+28.5 Lt.
Install 637.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 1-Type "G" Modified Leading End Treatment, R=25'.
Install 1- Modified Type "A-1" Trailing End Treatment with 87.5 Lin. Ft. Additional Rubrail at Swale Crossing.

Sta. 32+37.5 to 39+28.5 Lt.
Install 637.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 1-Type "G" Modified Leading End Treatment, R=25'.
Install 1- Modified Type "A-1" Trailing End Treatment with 87.5 Lin. Ft. Additional Rubrail at Swale Crossing.

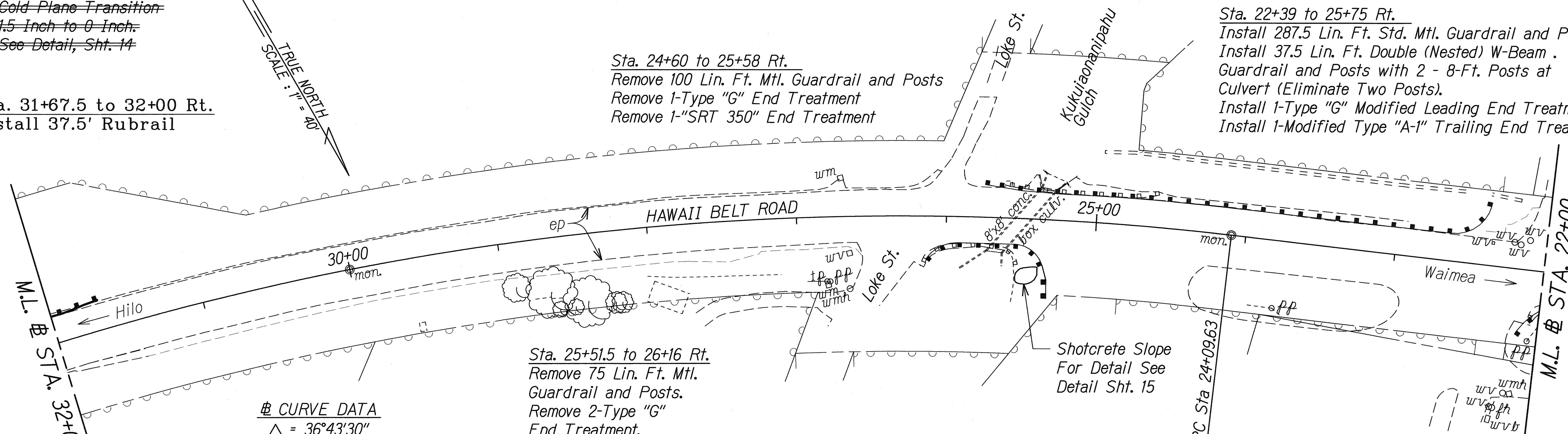
Sta. 39+64.5 to 46+02 Lt.
Install 587.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 1- Modified Type "A-1" Leading End Treatment.
Install 1-Type "G" Modified Trailing End Treatment, R=25'.

~~Sta. 40+00 to 41+00 Lt.~~
~~Gold Plane Transition~~
~~1.5 Inch to 0 Inch.~~
~~See Detail, Sht. 14~~

Sta. 31+67.5 to 32+00 Rt.
Install 37.5' Rubrail

Sta. 24+60 to 25+58 Rt.
Remove 100 Lin. Ft. Mtl. Guardrail and Posts
Remove 1-Type "G" End Treatment
Remove 1-"SRT 350" End Treatment

Sta. 22+39 to 25+75 Rt.
Install 287.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 37.5 Lin. Ft. Double (Nested) W-Beam .
Guardrail and Posts with 2 - 8-Ft. Posts at Culvert (Eliminate Two Posts).
Install 1-Type "G" Modified Leading End Treatment, R=25'.
Install 1-Modified Type "A-1" Trailing End Treatment.



CURVE DATA
Δ = 36°43'30"
R = 1,909.86
T = 633.94
C = 1,203.32
Lc = 1,224.17
S. E. = 0.07 ft/ft

Sta. 25+51.5 to 26+16 Rt.
Remove 75 Lin. Ft. Mtl. Guardrail and Posts.
Remove 2-Type "G" End Treatment.

Sta. 25+35 to 26+16.5 Lt.
Install 62.5 Lin. Ft. Std. Mtl. Guardrail and Posts.
Install 37.5 Lin. Ft. Double (Nested) W-Beam Guardrail and Posts with 4 - 8-Ft. Posts At Culvert (Eliminate Two Post).
Install 1-Type "G" Modified Leading End Treatment, R=20'.
Install 1-Type "G" Modified Trailing End Treatment, R=25'.

LEGEND FOR AS-BUILT POSTINGS

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

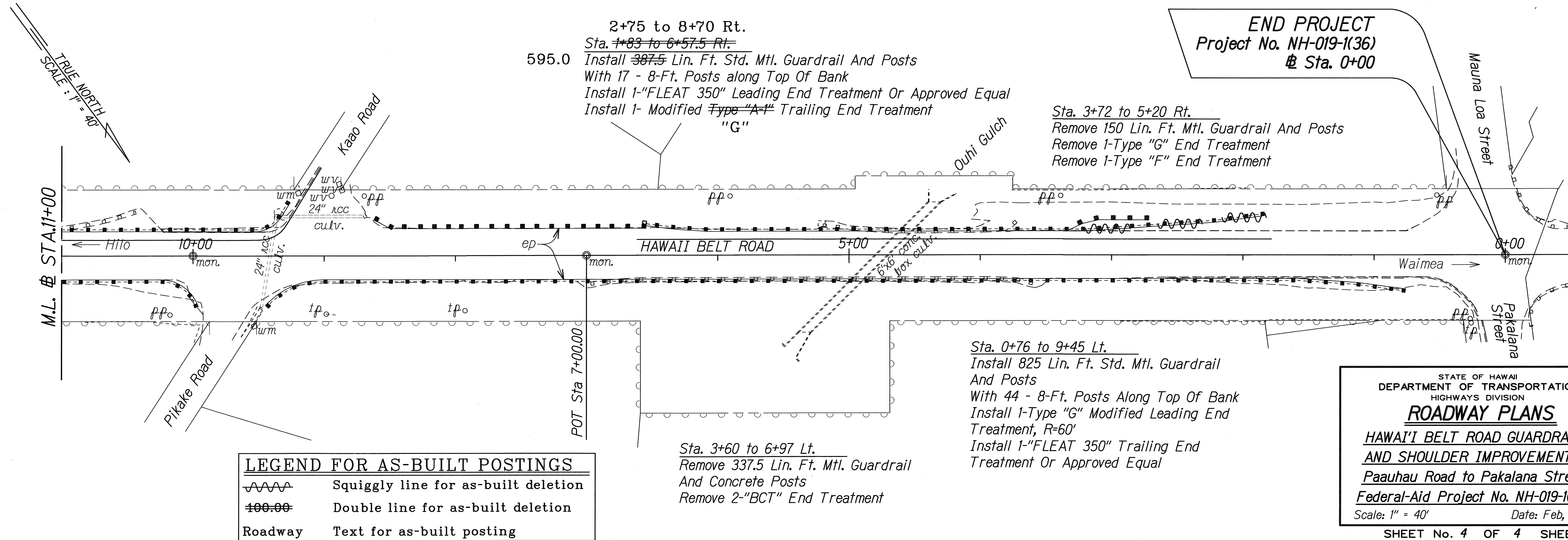
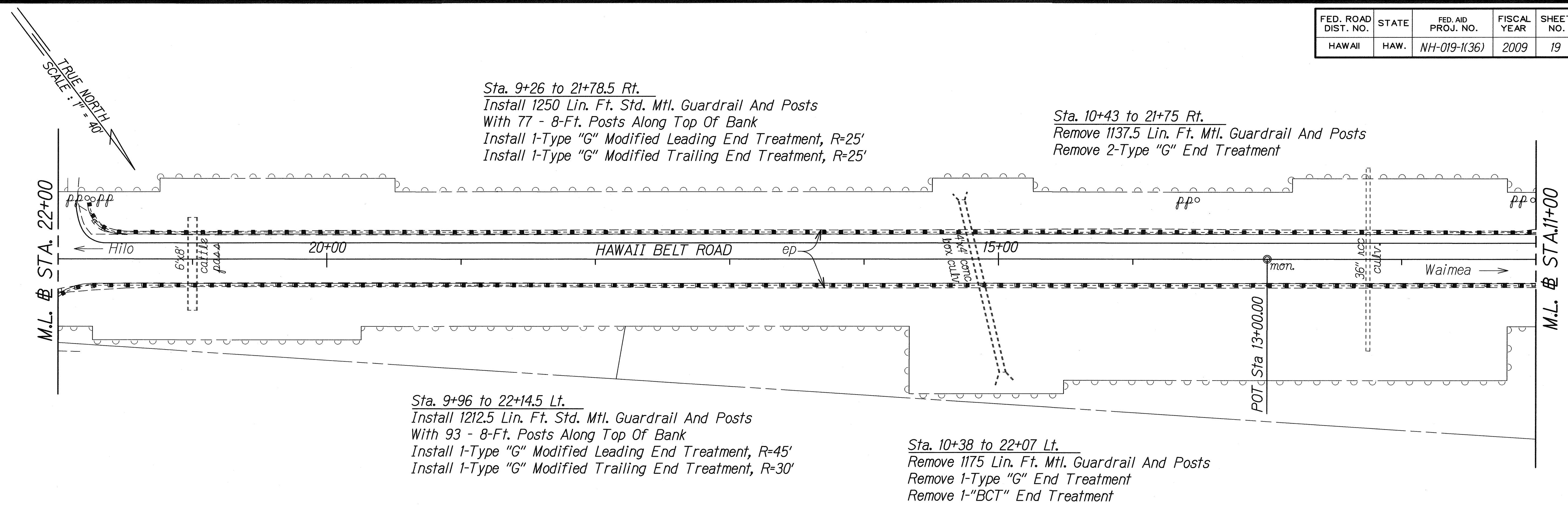
6/16/09	Revised Baseline Stations.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS
HAWAII BELT ROAD GUARDRAIL AND SHOULDER IMPROVEMENTS
Paauhau Road to Pakalana Street
Federal-Aid Project No. NH-019-1(36)
Scale: 1" = 40' Date: Feb, 2009
SHEET No. 3 OF 4 SHEETS

"AS-BUILT"

ADD.18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(36)	2009	19	27



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

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

HAWAII BELT ROAD GUARDRAIL
AND SHOULDER IMPROVEMENTS

Paaahu Road to Pakalana Street

Federal-Aid Project No. NH-019-1(36)

Scale: 1" = 40' Date: Feb, 2009