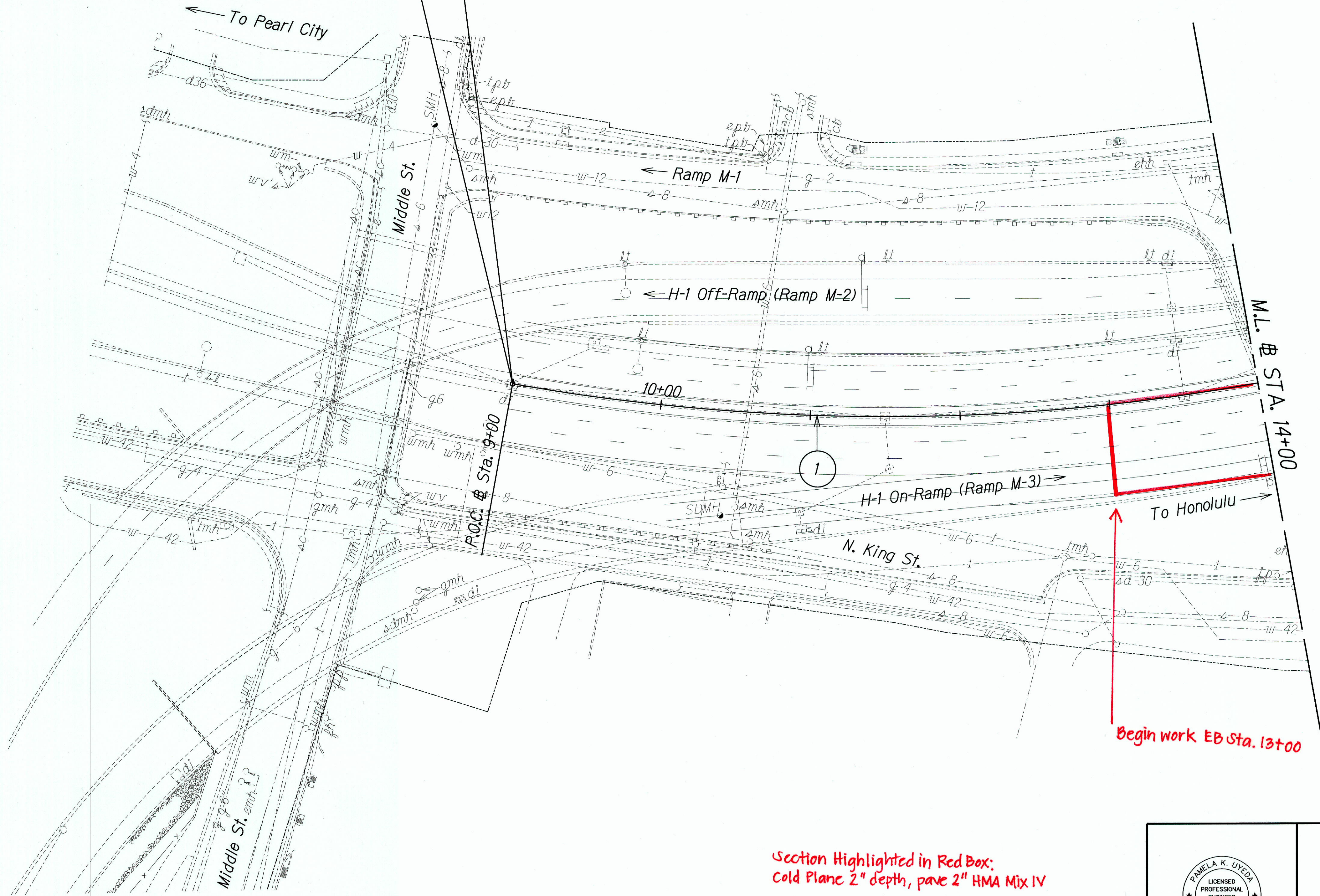


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	22	382

TRUE NORTH
SCALE: 1"=40'

CURVE 1 DATA
 $\Delta = 50^{\circ}47'01''$
 $R = 1,400.00'$
 $T = 664.52'$
 $C = 1,200.66'$
 $Lc = 1,240.88'$

BEGIN PROJECT IM-HI-1(269)
 STA. 9+00
 N 62098.55
 E 1680045.13



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

T-164594 IDIQ PAVMT PREVENTIVE MAINTENANCE/HI-MIDDLE TO WARD/CADD/SHEETS/01 ROAD/R-01.dgn

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Pamela K. Uyeda*
 EXPIRATION DATE OF THE LICENSE: 04/30/14

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

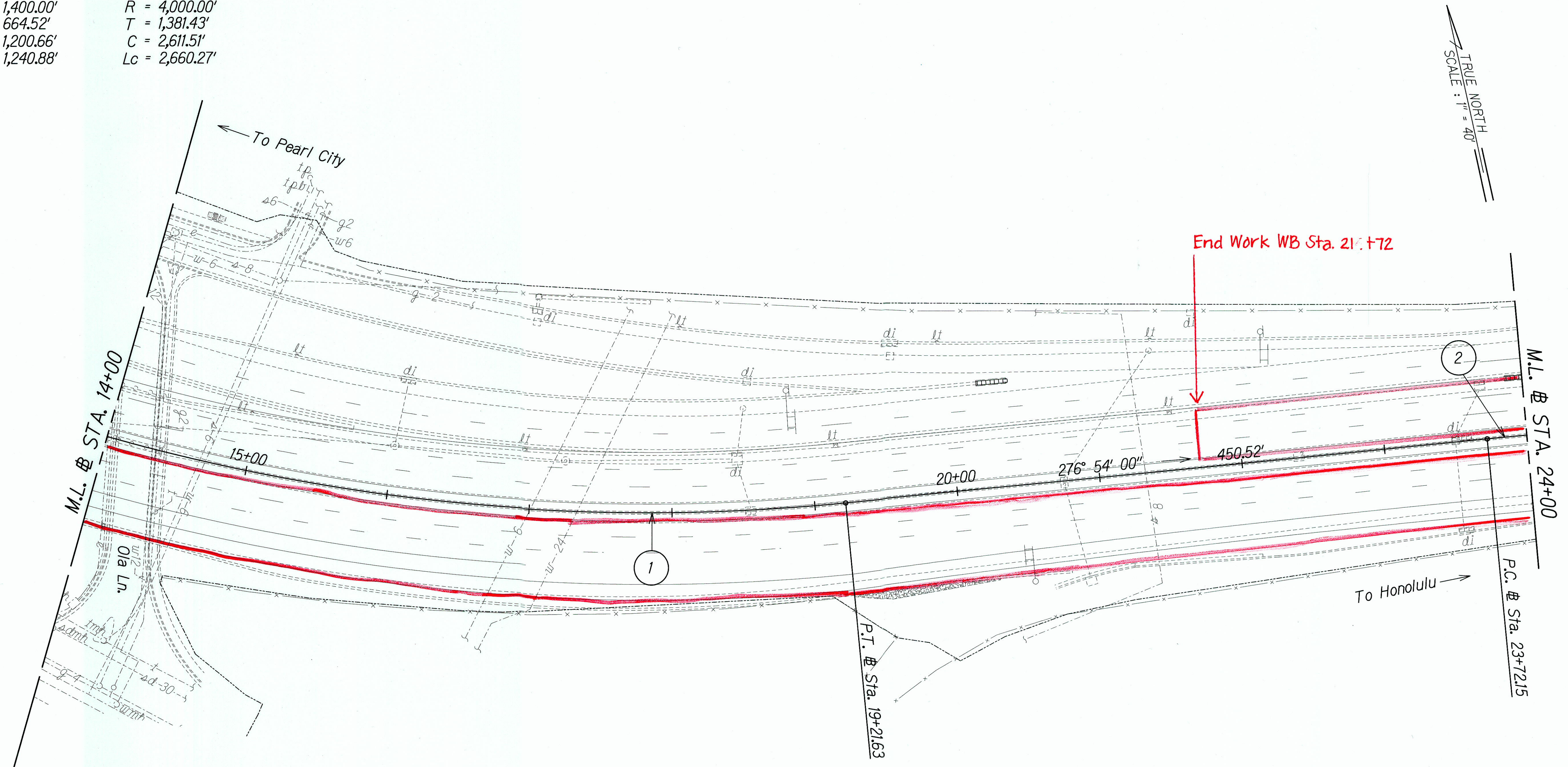
ROADWAY PLAN
STA. 9+00 TO STA. 14+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. IM-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	23	382

CURVE 1 DATA	CURVE 2 DATA
$\Delta = 50^{\circ}47'01''$	$\Delta = 38^{\circ}06'20''$
$R = 1,400.00'$	$R = 4,000.00'$
$T = 664.52'$	$T = 1,381.43'$
$C = 1,200.66'$	$C = 2,611.51'$
$Lc = 1,240.88'$	$Lc = 2,660.27'$



ORIGINAL PLAN	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITY BY	
CHECKED BY	
DATE	

T:\164594 IDIQ PAVMT PREVENTIVE MAINTENANCE\HI-MIDDLE TO WARD\CADD\SHEETS\02 ROAD\R-02.dgn

Section Highlighted in Red Box:
Cold Plane 2" depth, pave 2"
HMA Mix IV

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Pamela K. Uyeda
SIGNATURE

04/30/14
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

STA. 14+00 TO STA. 24+00

INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-04 OF 43 SHEETS

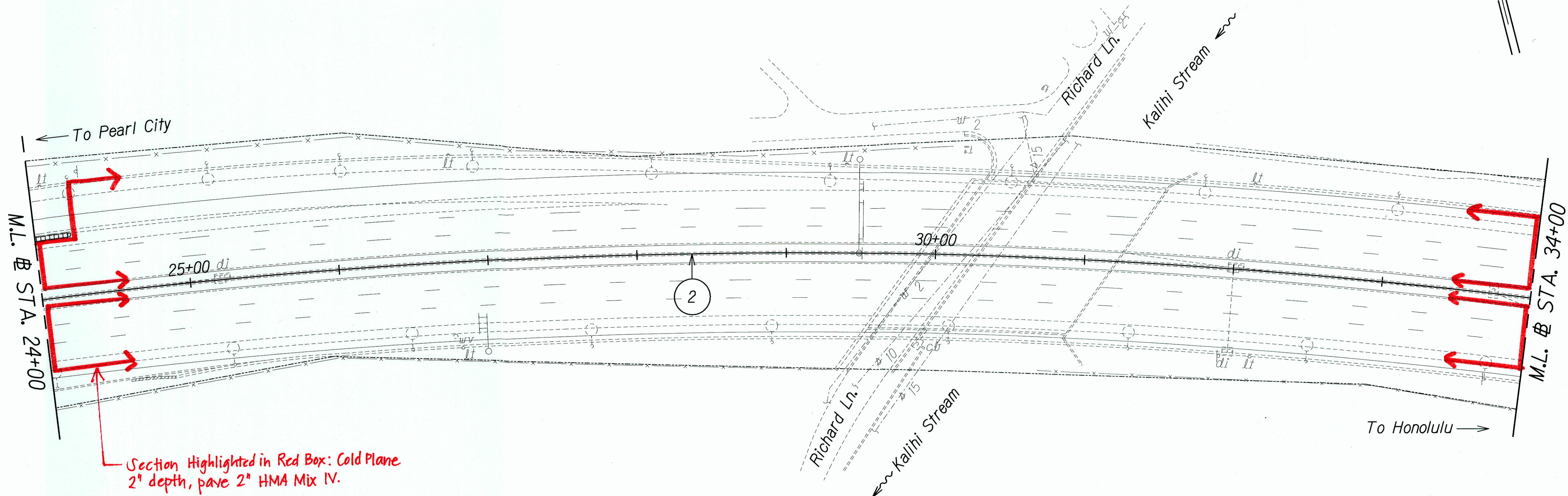
"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	24	382

CURVE 2 DATA

$\Delta = 38^{\circ}06'20''$
 $R = 4,000.00'$
 $T = 1,381.43'$
 $C = 2,611.51'$
 $Lc = 2,660.27'$

TRUE NORTH
 SCALE: 1" = 40'



Section Highlighted in Red Box: Cold Plane
 2" depth, pave 2" HMA Mix IV.

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

T:\164594 IDIQ PAVMT PREVENTIVE MAINTENANCE\HI MIDDLE TO WARD\CADD\SHEETS\02 ROAD\R-03.dgn

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[Signature]
 SIGNATURE

04/30/14
 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

STA. 24+00 TO STA. 34+00

INTERSTATE ROUTE H-1 REHABILITATION

Middle Street to Vicinity of Ward Avenue

FAP NO. IM-HI-1(269)

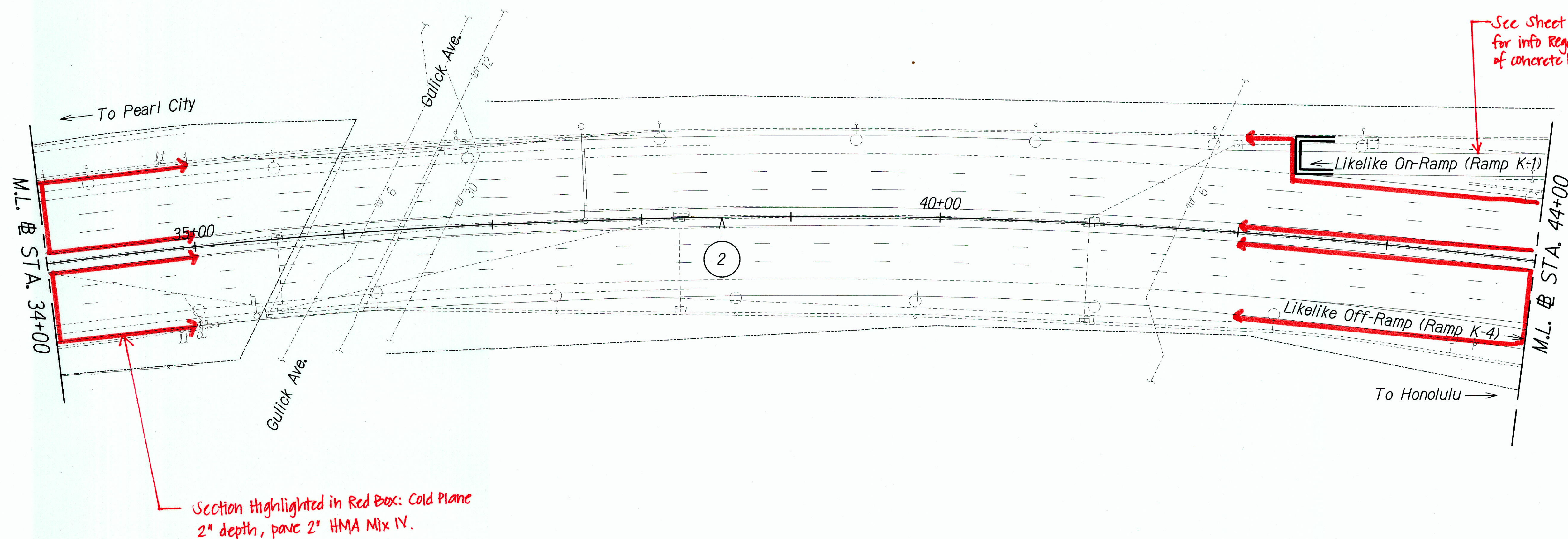
Scale: 1"=40' Date: Apr. 26, 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	25	382

CURVE 2 DATA

$\Delta = 38^{\circ}06'20''$
 $R = 4,000.00'$
 $T = 1,381.43'$
 $C = 2,611.51'$
 $Lc = 2,660.27'$

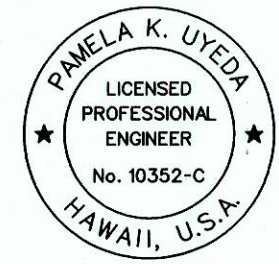
TRUE NORTH
SCALE: 1" = 40'



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BOOK	DRAWN BY	
	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	

LEGEND:

 Resurfacing Limits - Ramps
 4" Cold Plane
 4" AC Mix IV



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SIGNATURE: *[Signature]* EXPIRATION DATE OF THE LICENSE: 04/30/14

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 34+00 TO STA. 44+00
 INTERSTATE ROUTE H-1 REHABILITATION
 Middle Street to Vicinity of Ward Avenue
 FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-06 OF 43 SHEETS

"AS-BUILT"

LEGEND:

- | | | | |
|-----|---|-----|--|
| [] | Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV | [] | Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV |
| [] | Weakened Pavement Reconstruction
See Table this Sheet for Pavement Structure | | |
| [] | Shoulder Pavement Reconstruction
See Table this Sheet for Pavement Structure | | |
| [] | Bridge Deck Repair
Remove Exist. AC Surface Course
2" HMA Mix IV | | |

**BEGIN RESURFACING
STA. 46+00**

CURVE 2 DATA

Δ = 38°06'20"
R = 4,000.00'
T = 1,381.43'
C = 2,611.51'
Lc = 2,660.27'

NOTES:

- Construct Light Pole Concrete Ditch around new light pole. For light pole location, See Highway Lighting Plan Sht. E-7. For Light Pole Concrete Ditch, See Detail on Sht. R-38.
- Cut tree branches that obstruct installation of the highway lighting pole or blocks the luminaires illumination on the roadway. Cut tree branches that overhang the freeway right-of-way and remove additional branches to give tree a balanced appearance. Contract tree work to ISA certified Arborist with a minimum of 10 years of continuous licensure and experience. Contact Larry Schmitt of Bishop Museum before doing any tree work. Payment for tree trimming shall be incidental to pay item 622.1000 - Roadway Lighting System.

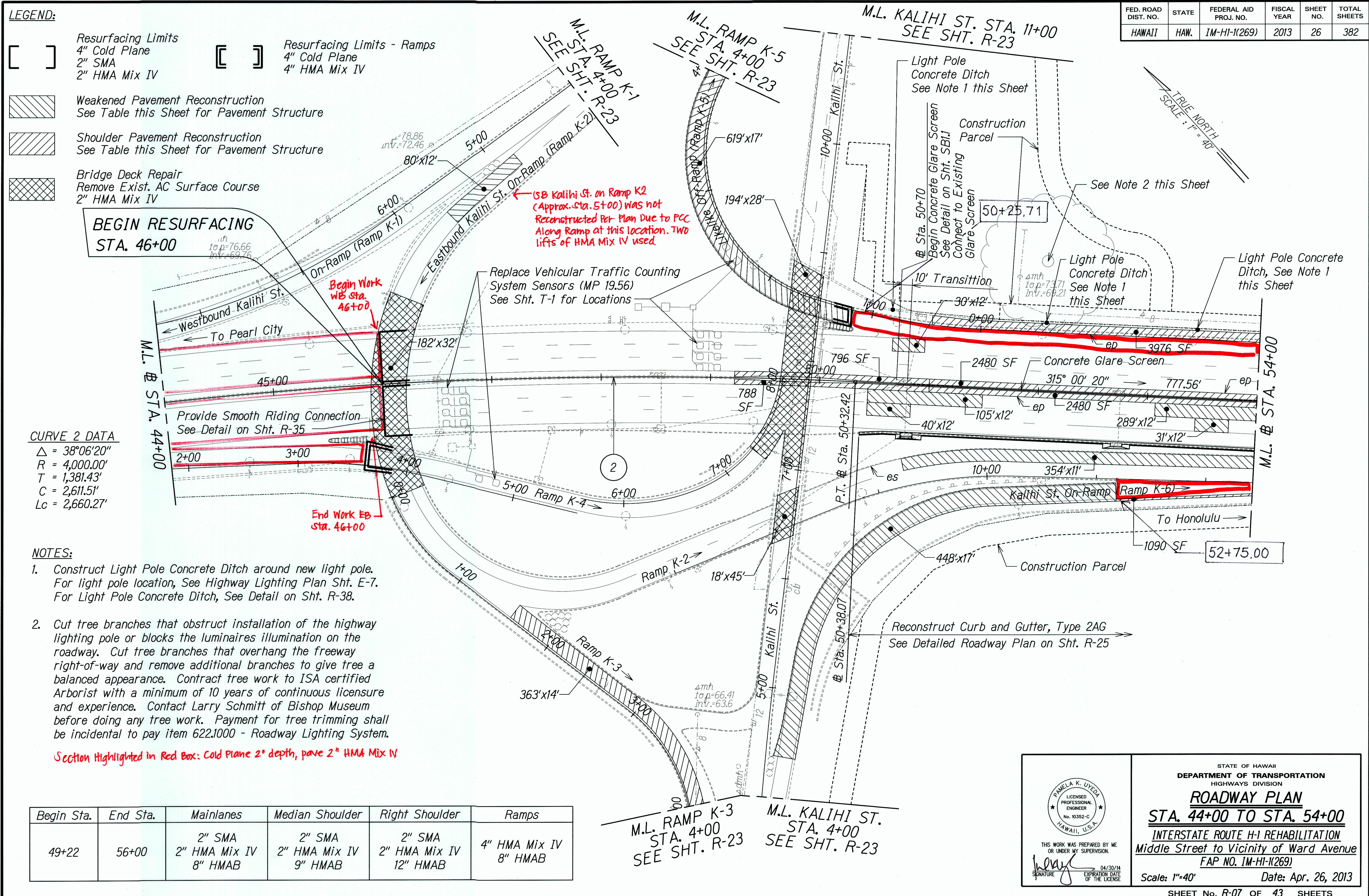
Section Highlighted in Red Box: Cold Plane 2" depth, pave 2" HMA Mix IV

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
49+22	56+00	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 9" HMAB	2" SMA 2" HMA Mix IV 12" HMAB	4" HMA Mix IV 8" HMAB

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	26	382

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

T-16459A IDIQ PAVMT PREVENTIVE MAINTENANCE/HI-MIDDLE TO WARD/CADD/SHEETS/02 ROAD/R-05.dgn



PAMELA K. UYEDA
 LICENSED PROFESSIONAL ENGINEER
 No. 10352-C
 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *[Signature]* EXPIRATION DATE OF THE LICENSE: 04/30/14

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN
STA. 44+00 TO STA. 54+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-HI-1(269)

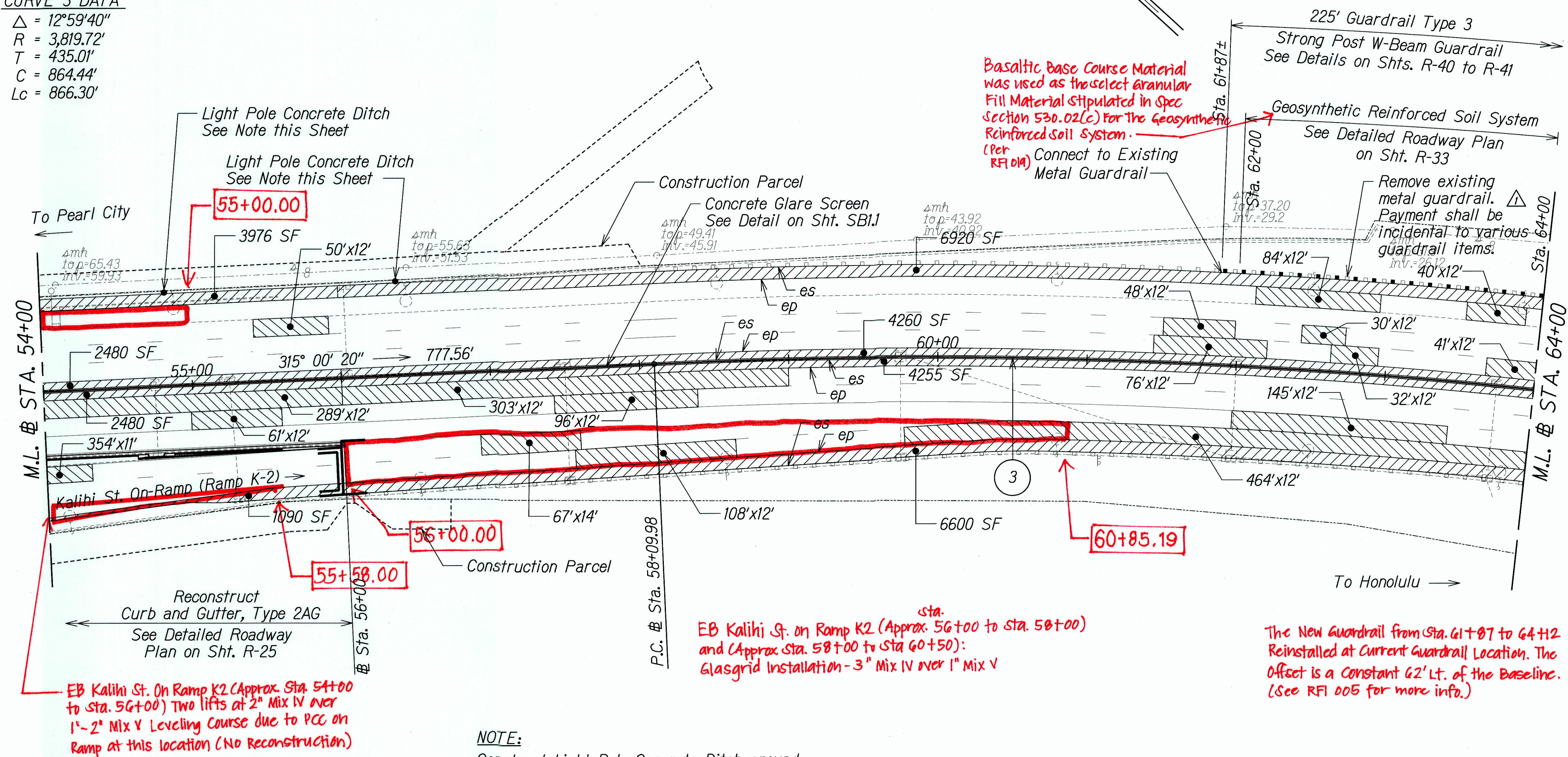
Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-07 OF 43 SHEETS

"AS-BUILT"

CURVE 3 DATA

$\Delta = 12^\circ 59' 40''$
 $R = 3,819.72'$
 $T = 435.01'$
 $C = 864.44'$
 $L_c = 866.30'$



EB Kalihi St. On Ramp K2 (Approx. Sta. 54+00 to Sta. 56+00) Two lifts at 2" Mix IV over 1"-2" Mix V Leveling Course due to PCC on Ramp at this location (No Reconstruction)

EB Kalihi St. on Ramp K2 (Approx. Sta. 56+00 to Sta. 58+00) and (Approx. Sta. 58+00 to Sta. 60+50): Glasgrid Installation - 3" Mix IV over 1" Mix V

The New Guardrail from Sta. 61+87 to 64+12 Reinstalled at Current Guardrail Location. The Offset is a Constant 62' Lt. of the Baseline. (See RFI 005 for more info.)

NOTE:

Construct Light Pole Concrete Ditch around new light pole. For light pole location, See Highway Lighting Plan Sht. E-7. For Light Pole Concrete Ditch, See Detail on Sht. R-38.

LEGEND:

- [] Resurfacing Limits
- [] 4" Cold Plane
- [] 2" SMA
- [] 2" HMA Mix IV
- [] Resurfacing Limits - Ramps
- [] 4" Cold Plane
- [] 4" HMA Mix IV
- [] Weakened Pavement Reconstruction
- [] See Table for Pavement Structure
- [] Shoulder Pavement Reconstruction
- [] See Table for Pavement Structure

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
49+22	56+00	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 9" HMAB	2" SMA 2" HMA Mix IV 12" HMAB	4" HMA Mix IV 8" HMAB
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	4" HMA Mix IV 6" HMAB

6/17/13	Added Callout
Date	Revision

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SIGNATURE: *[Signature]* EXPIRATION DATE: 04/30/14

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

STA. 54+00 TO STA. 64+00

INTERSTATE ROUTE H-1 REHABILITATION

Middle Street to Vicinity of Ward Avenue

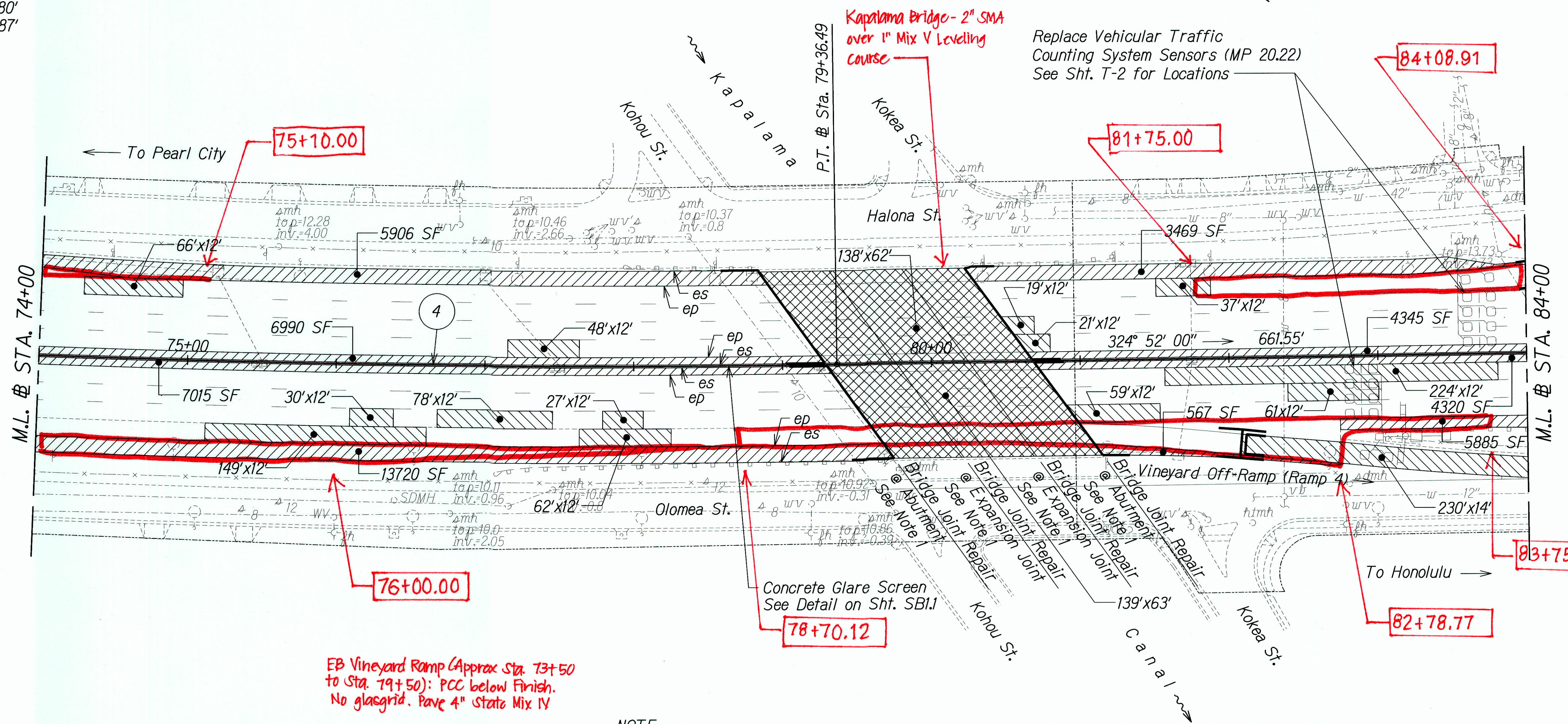
FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	29	382

CURVE 4 DATA
 $\Delta = 3^{\circ}08'00''$
 $R = 10,000.00'$
 $T = 273.50'$
 $C = 546.80'$
 $Lc = 546.87'$

TRUE NORTH
SCALE: 1" = 40'



EB Vineyard Ramp (Approx Sta. 73+50 to Sta. 79+50): PCC below Finish. No glasgrid. Pave 4" State Mix IV

NOTE:
1. For Bridge Joint Repair, See Detail on Sht. R-39.

LEGEND:

- [] Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- [] Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- [] Weakened Pavement Reconstruction
See Table for Pavement Structure
- [] Shoulder Pavement Reconstruction
See Table for Pavement Structure
- [] Bridge Deck Repair
Remove Exist. AC Surface Course
2" SMA

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	4" HMA Mix IV 6" HMAB

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *[Signature]* DATE: 04/30/14

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 74+00 TO STA. 84+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

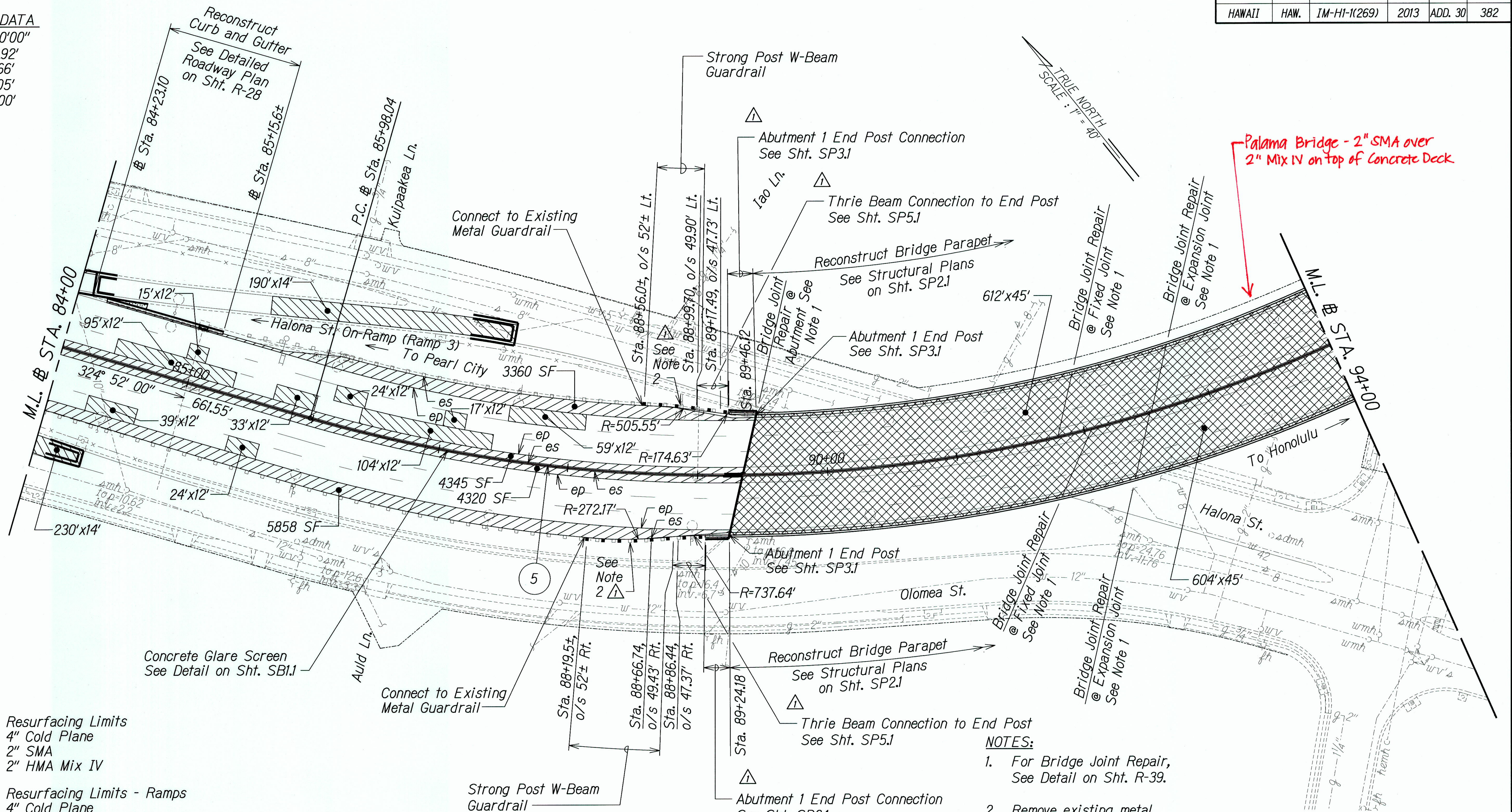
SHEET No. R-10 OF 43 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-H1-1(269)	2013	ADD. 30	382

CURVE 5 DATA

$\Delta = 45^{\circ}00'00''$
 $R = 1,145.92'$
 $T = 474.66'$
 $C = 877.05'$
 $L_c = 900.00'$



LEGEND:

- [] Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- [] Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- [] Weakened Pavement Reconstruction
See Table for Pavement Structure
- [] Shoulder Pavement Reconstruction
See Table for Pavement Structure
- [] Bridge Deck Repair
Remove Exist. AC Surface Course
2" SMA
- [] 4" Plain Concrete

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	4" HMA Mix IV 6" HMAB

NOTES:

- For Bridge Joint Repair, See Detail on Sht. R-39.
- Remove existing metal guardrail. Payment shall be incidental to the various guardrail items.

6/17/13	Revised Connections
Date	Revision

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 84+00 TO STA. 94+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-H1-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-11 OF 43 SHEETS

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[Signature]
PAMELA K. UYEDA
LICENSED PROFESSIONAL ENGINEER
No. 10352-C
HAWAII, U.S.A.

04/30/14
EXPIRATION DATE OF THE LICENSE

"AS-BUILT"

ADD. 30

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	ADD. 31	382

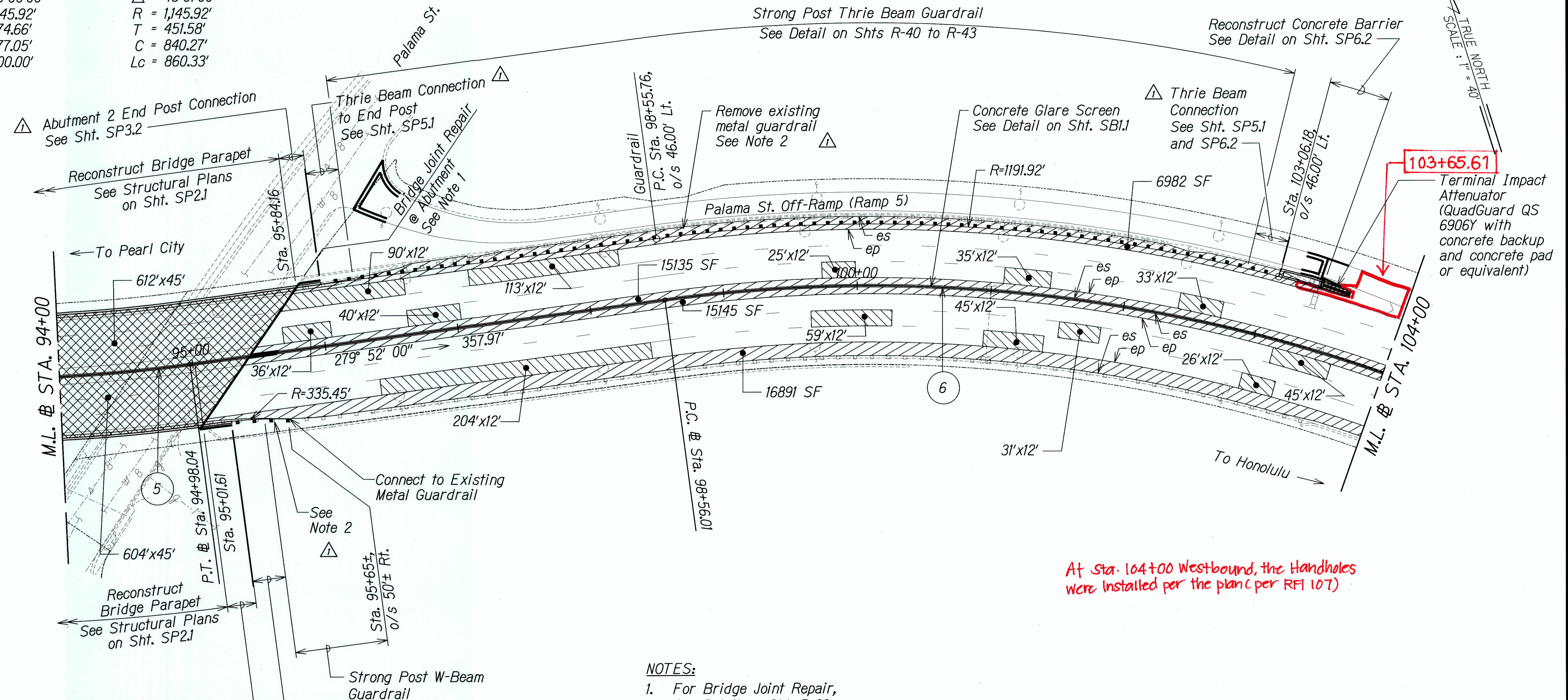
CURVE 5 DATA

$\Delta = 45^{\circ}00'00''$
 $R = 1,145.92'$
 $T = 474.66'$
 $C = 877.05'$
 $Lc = 900.00'$

CURVE 6 DATA

$\Delta = 43^{\circ}01'00''$
 $R = 1,145.92'$
 $T = 451.58'$
 $C = 840.27'$
 $Lc = 860.33'$

HDC constructed the Guardrail while the Pavement was still Fresh Per RFI 156. See Attached drawing for more info.



At Sta. 104+00 Westbound, the Handholes were installed per the plan (per RFI 107)

LEGEND:

- Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- Weakened Pavement Reconstruction
See Table for Pavement Structure
- Shoulder Pavement Reconstruction
See Table for Pavement Structure
- Bridge Deck Repair
Remove Exist. AC Surface Course
2" SMA

NOTES:

- For Bridge Joint Repair, See Detail on Sht. R-39.
- Remove existing metal guardrail. Payment shall be incidental to the various guardrail items.

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTES	
NO.	

T:\16459A IDIQ PAINT PREVENTIVE MAINTENANCE\HLMIDDLE TO WARD\CADD\SHEETS\02 ROAD\R-10.dgn

6/17/13

Date

Revised Connections and Added Note 2

Revision

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *[Signature]* EXPIRATION DATE: 04/30/14

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

STA. 94+00 TO STA. 104+00

INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. IM-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

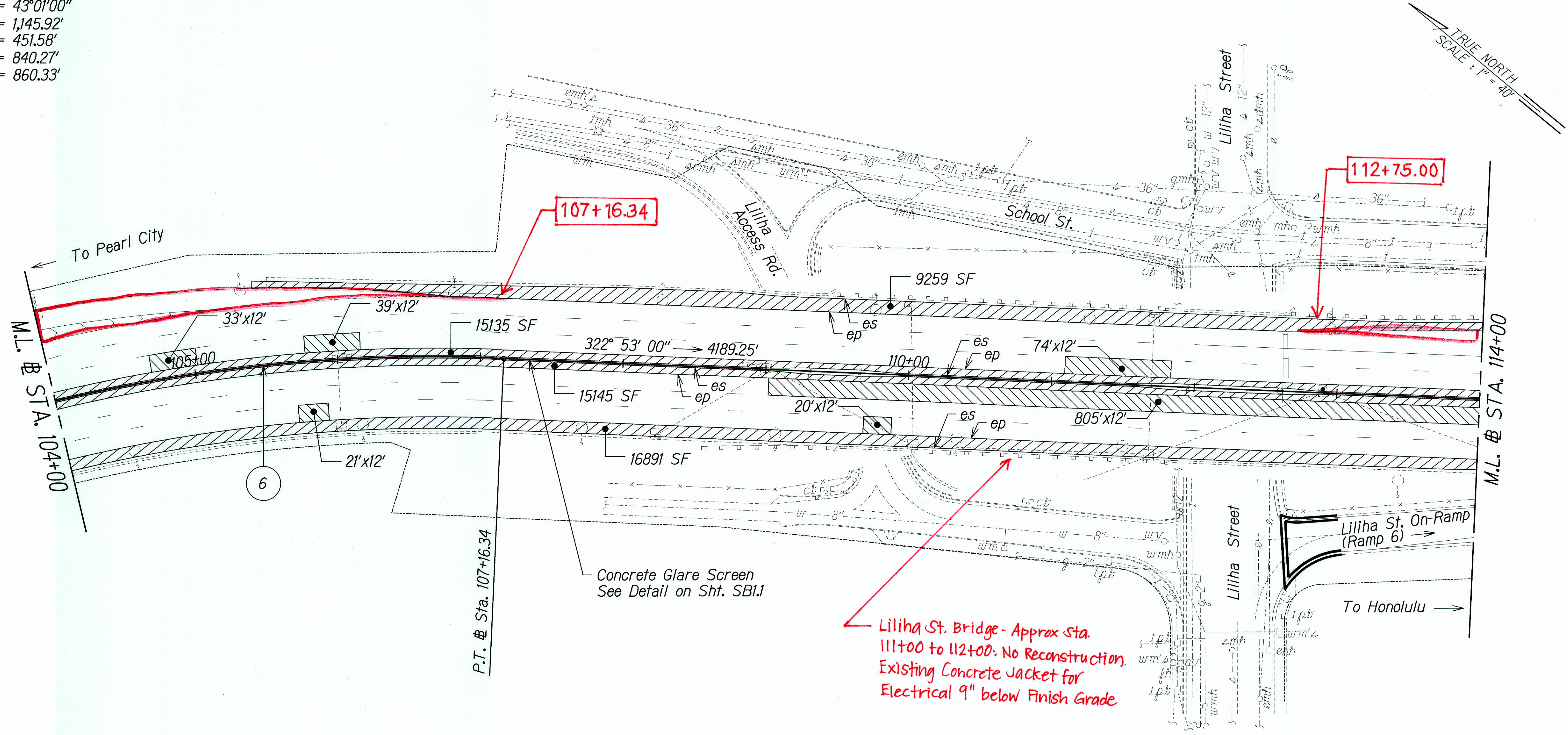
"AS-BUILT"

ADD. 31

SHEET No. R-12 OF 43 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	32	382

CURVE 6 DATA
 $\Delta = 43^{\circ}01'00''$
 $R = 1,145.92'$
 $T = 451.58'$
 $C = 840.27'$
 $Lc = 860.33'$



LEGEND:

- [] Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- [] Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- [Hatched Box] Weakened Pavement Reconstruction
See Table for Pavement Structure
- [Hatched Box] Shoulder Pavement Reconstruction
See Table for Pavement Structure

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HAB Mix IV 6" HMAB

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[Signature] 04/30/14
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

STA. 104+00 TO STA. 114+00

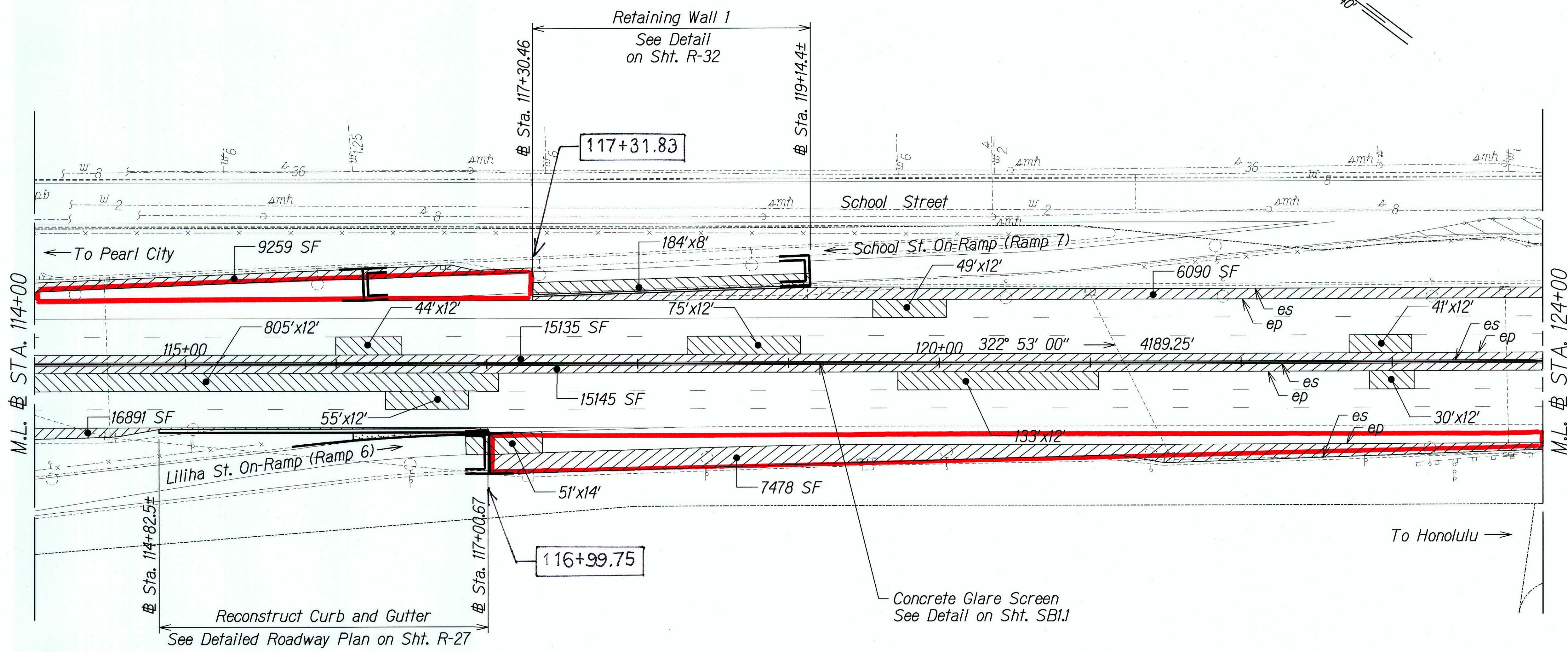
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue

FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	ADD. 33	382

TRUE NORTH
SCALE: 1" = 40'



LEGEND:

- [] Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- [] Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- [Hatched Box] Weakened Pavement Reconstruction
See Table for Pavement Structure
- [Diagonal Hatched Box] Shoulder Pavement Reconstruction
See Table for Pavement Structure
- [Dotted Box] 4" Plain Concrete

NOTES:

1. New pavement structure fronting Retaining Wall 1 shall be:
2" SMA
2" HMA Mix IV
6" HMAB
14" ASB (Above footing)
2. New pavement structure behind Retaining Wall 1 shall be:
4" HMA Mix IV
6" HMAB
19" ASB Above footing

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB See Note 1	4" HMA Mix IV 6" HMAB See Note 2

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *[Signature]* 04/30/14
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 114+00 TO STA. 124+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

T-16459A IDIQ PAVMT PREVENTIVE MAINTENANCE/HI-MIDDLE TO WARD/CADD/SHEETS/02 ROAD/R-12.dgn

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

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder
56+00	127+00	2" SMA 2" HMA Mix IV 6" HMAB See Note 3	2" SMA 2" HMA Mix IV 6" HMAB	2" SMA 2" HMA Mix IV 6" HMAB
127+00	144+50	2" SMA 2" HMA Mix IV 8" HMAB See Note 4	2" SMA 2" HMA Mix IV 12" HMAB	2" SMA 2" HMA Mix IV 12" HMAB See Note 5

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	ADD. 34	382

T-164594 IDIQ PAVMT PREVENTIVE MAINTENANCE/HI-MIDDLE TO WARD/CADD/SHEETS/02 ROAD/R-13.dgn

LEGEND:

- [] Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- [] Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- [] Weakened Pavement Reconstruction
See Table for Pavement Structure
- [] Shoulder Pavement Reconstruction
See Table for Pavement Structure
- [] Bridge Deck Repair
Remove Exist. AC Surface Course
2" SMA
- ☒ Cleanout, See Std. Plan H-29
- 6" Underdrain, See Detail on Sht. R-38
- 4" Underdrain, See Detail on Sht. R-38

NOTES:

1. Connect Underdrain to drainage structure. See Std. Plan H-30. All costs associated with the underdrain connection to Drainage Structures will not be paid separately and will be considered incidental to the various underdrain pay items.
2. 4-inch Cleanout shall be similar to Underdrain Cleanout Detail on Std. Plan H-29 except all pipes shall be 4"Ø. Payment shall be made under pay item 605.3000 Cleanout.

3. New pavement structure in widened area fronting Retaining Wall 2 shall be:
2" SMA
2" HMA Mix IV
6" HMAB
19" ASB (14" ASB Above footing) △
4. New pavement structure in widened area fronting Retaining Wall 3 shall be:
2" SMA
2" HMA Mix IV
8" HMAB
14" ASB (12" ASB Above footing) △
5. See Detail of 4-inch Underdrain at Westbound Sta. 129+70 to Sta. 147+00 for modified pavement section on Sht. R-38.
6. Contractor shall remove all existing underdrains adjacent to new underdrain installation that is not specified to remain. Existing penetrations into drainage structures and the box culvert shall be patched with 60 mil HDPE liner extending 2 feet beyond the existing hole. Payment shall be considered incidental to the various underdrain pay items.
7. An existing shallow box culvert underlies the Westbound right shoulder/mainlane between Nuuanu Stream and Pali Interchange. The Contractor shall excavate the 100'x12' pavement area to expose the top of the existing 10'-8"x4' box culvert (approx. 1.8' deep) and inspect the culvert for pre-existing damage. Any holes or damaged portions uncovered shall be patched with 60 mil HDPE liner extending 2 feet beyond the damaged area. In order to ensure that the lane is open to traffic the following day, the Contractor may place structural fill with 4" AC to match existing grade as a temporary condition (3 days max.) until the final pavement section is constructed. Payment shall be considered incidental to the various underdrain pay items.

6/17/13	△ Revised notes 3, 4, and 7.
Date	Revision

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE: *Pamela K. Uyeda* 04/30/14
EXPIRATION DATE OF THE LICENSE

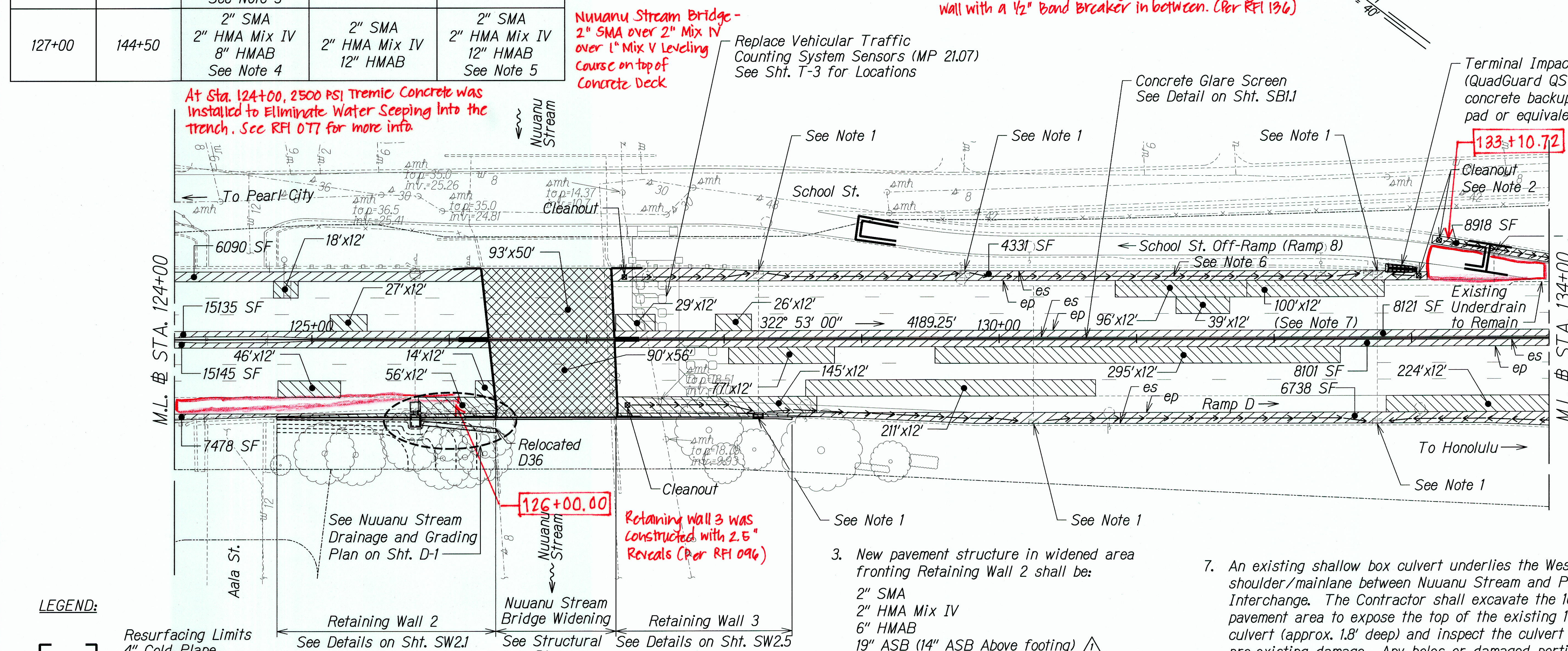
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 124+00 TO STA. 134+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

"AS-BUILT"

ADD. 34



At the School St. Off-Ramp, the Existing Concrete Pad (Not shown on the plans) was removed to install New Impact Attenuator. The New Attenuator Concrete Pad was installed against the Retaining Wall with a 1/2" Band Breaker in between. (Per RFI 136)

Nuuanu Stream Bridge - 2" SMA over 2" Mix IV over 1" Mix V Leveling Course on top of Concrete Deck

Replace Vehicular Traffic Counting System Sensors (MP 21.07) See Sht. T-3 for Locations

At Sta. 124+00, 2500 PSI Tremie Concrete was Installed to Eliminate Water Seeping into the Trench. See RFI 077 for more info.

Terminal Impact Attenuator (QuadGuard QS 6906Y with concrete backup and concrete pad or equivalent)

133+10.72

Cleanout See Note 2

8918 SF

Existing Underdrain to Remain

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12'

15145 SF

15135 SF

6090 SF

7478 SF

21'x12'

29'x12'

26'x12'

322' 53' 00"

4189.25'

130+00

96'x12'

39'x12'

100'x12'

8121 SF

224'x12'

8101 SF

6738 SF

295'x12'

211'x12'

145'x12'

90'x56'

56'x12'

14'x12'

46'x12

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-H1-1(269)	2013	35	382

NOTES:

1. Connect Underdrain to drainage structure. See Std. Plan H-30. All costs associated with the underdrain connection to Drainage Structures will not be paid separately and will be considered incidental to the various underdrain pay items.
2. Modified Cleanout shall be similar to Underdrain Cleanout Detail on Std. Plan H-29 except all pipes shall be 4"Ø and 6" nonperforated 45° Elbow shall be replaced with 4" nonperforated Wye to allow continuation of the underdrain. Payment shall be made under pay item 605.3000 Cleanout.
3. Align terminal impact attenuator to provide 2' minimum clearance to edge stripe. Adjust guardrail connection as necessary to ensure proper installation of rear fender panel. Payment shall be considered incidental to the terminal impact attenuator.
4. See Detail of 4-inch Underdrain at Westbound Sta. 129+70 to Sta. 147+00 for modified pavement section on Sht. R-38.
5. Contractor shall remove all existing underdrains adjacent to new underdrain installation that is not specified to remain. Existing penetrations into drainage structures and the box culvert shall be patched with 60 mil HDPE liner extending 2 feet beyond the existing hole. Payment shall be considered incidental to the various underdrain pay items.
6. Modified Cleanout shall be similar to Underdrain Cleanout Detail on Std. Plan H-29 except 6" non-perforated elbow shall be replaced with 6" non-perforated wye to allow continuation of the underdrain pipe. Payment shall be made under pay item 605.3000 Cleanout.
7. For Bridge Joint Repair, See Detail on Sht. R-39.

Speed Concrete PM was used in lieu of the 60 Mil HDPE Liner on Vertical Walls only. Patches on top wall used the HDPE Liner (Per RFI 065)

Pali Off Ramp Sta. 134+00 to 137+21: PCC at 5" below Finish Elevation. Place 3 1/2" Mix IV over Glasgrid over 1" Mix V.

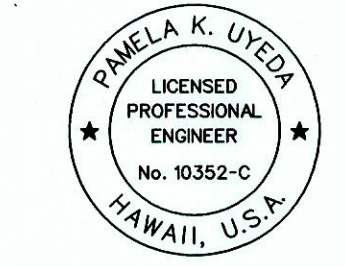
LEGEND:

- | | | | |
|-----|--|-----|--|
| [] | Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV | [] | Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV |
| [] | Weakened Pavement Reconstruction
See Table for Pavement Structure | | |
| [] | Shoulder Pavement Reconstruction
See Table for Pavement Structure | | |
| [] | Bridge Deck Repair
Remove Exist. AC Surface Course
2" HMA Mix IV | | |
| ☒ | Cleanout, See Std. Plan H-29 | | |
| → | 6" Underdrain, See Detail on Sht. R-38 | | |
| → | 4" Underdrain, See Detail on Sht. R-38 | | |

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
127+00	144+50	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 12" HMAB	2" SMA 2" HMA Mix IV 12" HMAB See Note 4	4" HMA Mix IV 8" HMAB

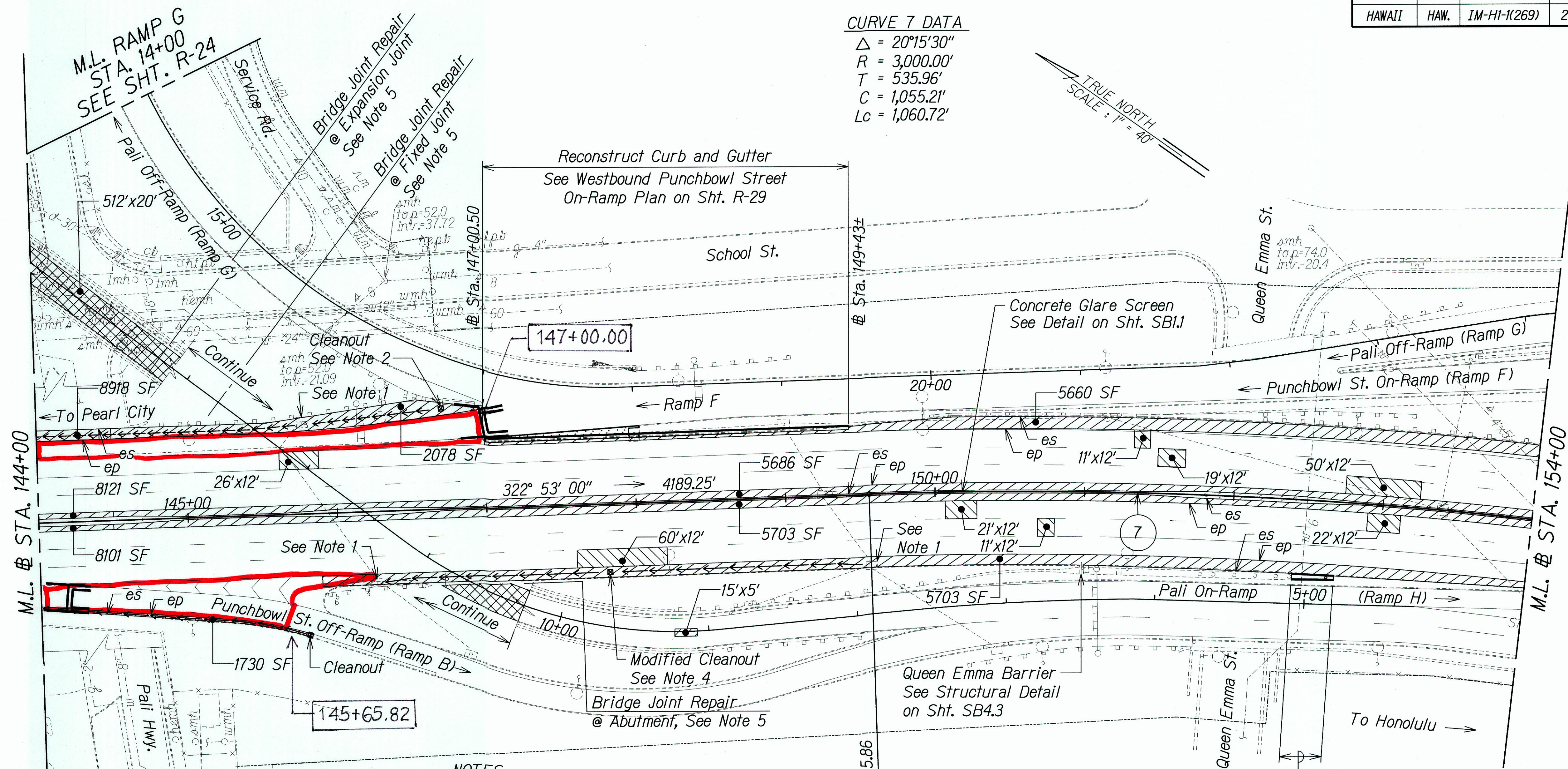
Existing Attenuator Left in Place, With 2' clearance from Striping Per RFI 130.

Three Lead Loops, not Included in 16 we were to Replace, were Replace at an Additional Cost. See RFI 144 for more info Circular Loops were Installed in substitution of Loop Detectors. Per RFI 145

 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. Signature: <i>P. Uyeda</i> Date: 04/30/14 EXPIRATION DATE OF THE LICENSE	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION ROADWAY PLAN STA. 134+00 TO STA. 144+00 INTERSTATE ROUTE H-1 REHABILITATION Middle Street to Vicinity of Ward Avenue FAP NO. 1M-H1-1(269) Scale: 1"=40' Date: Apr. 26, 2013 SHEET No. R-16 OF 43 SHEETS
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"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-11269	2013	36	382



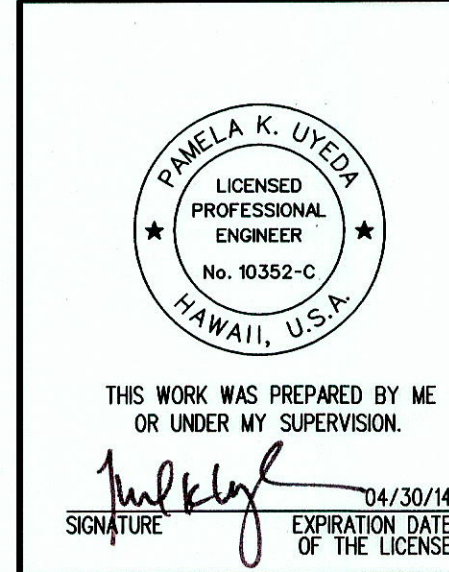
LEGEND:

- | | | | |
|-----|--|-----|--|
| [] | Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV | [] | Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV |
| [] | Weakened Pavement Reconstruction
See Table for Pavement Structure | | |
| [] | Shoulder Pavement Reconstruction
See Table for Pavement Structure | | |
| [] | Bridge Deck Repair
Remove Exist. AC Surface Course
2" HMA Mix IV | | |
| [] | 4" Plain Concrete | | |
| ☒ | Cleanout, See Std. Plan H-29 | | |
| → | 6" Underdrain, See Detail on Sht. R-38 | | |
| → | 4" Underdrain, See Detail on Sht. R-38 | | |

NOTES:

1. Connect Underdrain to drainage structure. See Std. Plan H-30. All costs associated with the underdrain connection to Drainage Structures will not be paid separately and will be considered incidental to the various underdrain pay items.
2. 4-inch Cleanout shall be similar to Underdrain Cleanout Detail on Std. Plan H-29 except all pipes shall be 4"Ø. Payment shall be made under pay item 605.3000 Cleanout.
3. See Detail of 4-inch Underdrain at Westbound Sta. 129+70 to Sta. 147+00 for modified pavement section on Sht. R-38.
4. Modified Cleanout shall be similar to Underdrain Cleanout Detail on Std. Plan H-29 except 6" non-perforated elbow shall be replaced with 6" non-perforated wye to allow continuation of the underdrain pipe. Payment shall be made under pay item 605.3000 Cleanout.
5. For Bridge Joint Repair, See Detail on Sht. R-39.

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder	Ramps
127+00	144+50	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 12" HMAB	2" SMA 2" HMA Mix IV 12" HMAB See Note 3	4" HMA Mix IV 8" HMAB
144+50	156+92	2" SMA 2" HMA Mix IV 7" HMAB	2" SMA 2" HMA Mix IV 9" HMAB	2" SMA 2" HMA Mix IV 10" HMAB See Note 3	4" HMA Mix IV 7" HMAB



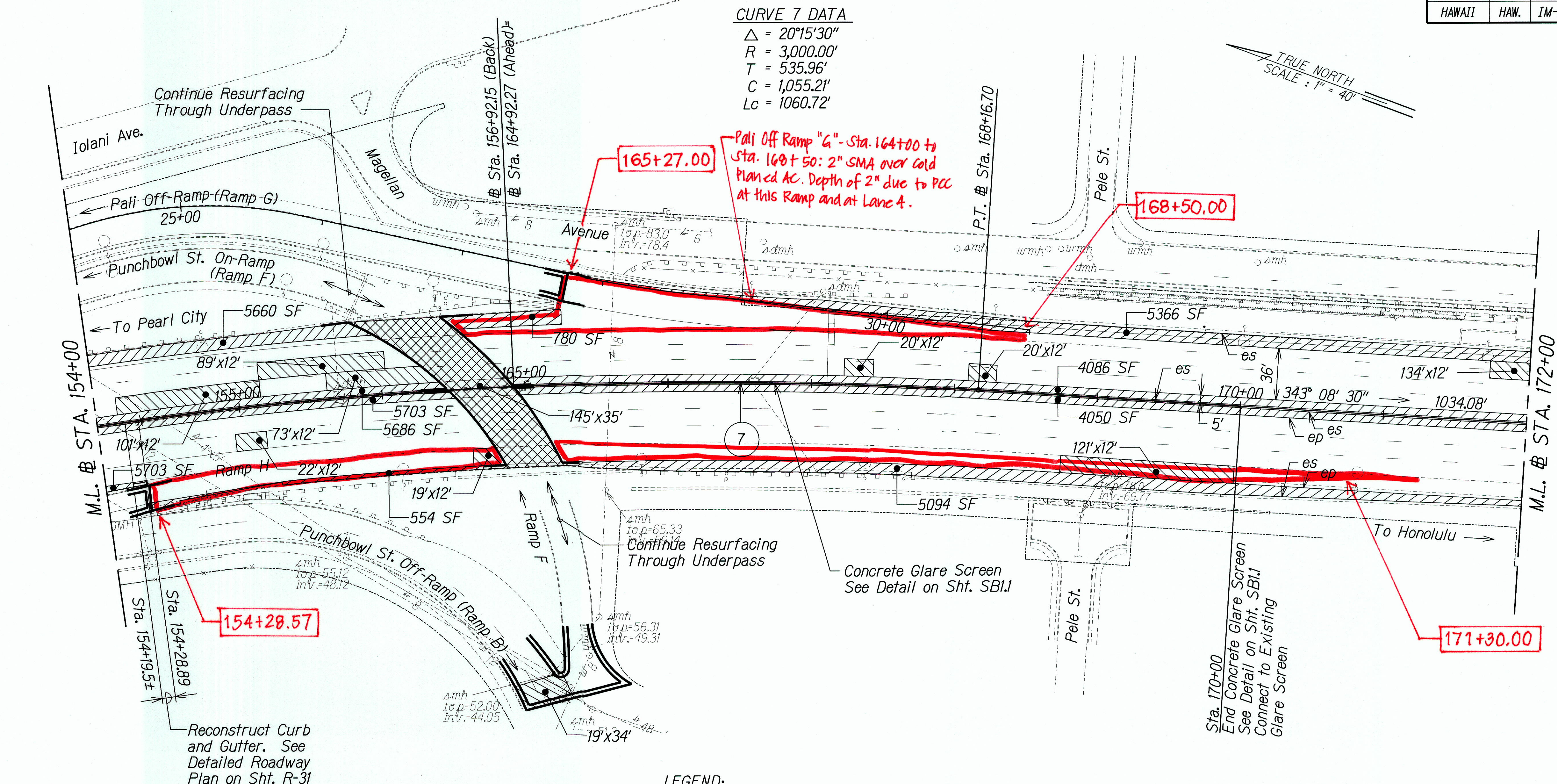
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN
STA. 144+00 TO STA. 154+00
 INTERSTATE ROUTE H-1 REHABILITATION
 Middle Street to Vicinity of Ward Avenue
 FAP NO. IM-HI-11269

Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-17 OF 43 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	37	382



CURVE 7 DATA
 $\Delta = 20^\circ 15' 30''$
 $R = 3,000.00'$
 $T = 535.96'$
 $C = 1,055.21'$
 $Lc = 1060.72'$

LEGEND:

- [] Resurfacing Limits
 4" Cold Plane
 2" SMA
 2" HMA Mix IV
- [] Resurfacing Limits - Ramps
 4" Cold Plane
 4" HMA Mix IV
- [] Weakened Pavement Reconstruction
 See Table for Pavement Structure
- [] Shoulder Pavement Reconstruction
 See Table for Pavement Structure
- [] Bridge Deck Repair
 Remove Exist. AC Surface Course
 2" SMA

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder
144+50	156+92	2" SMA 2" HMA Mix IV 7" HMAB	2" SMA 2" HMA Mix IV 9" HMAB	2" SMA 2" HMA Mix IV 10" HMAB
156+92 Eastbound	173+06 Eastbound	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 12" HMAB	2" SMA 2" HMA Mix IV 12" HMAB
156+92 Westbound	173+06 Westbound	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 12" HMAB

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

T-16459A IDIQ PAVMT PREVENTIVE MAINTENANCE/HI-MIDDLE TO WARD/CADD/SHEETS/02 ROAD/RC-16.dgn

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *[Signature]* EXPIRATION DATE: 04/30/14 OF THE LICENSE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

STA. 154+00 TO STA. 172+00

INTERSTATE ROUTE H-1 REHABILITATION
 Middle Street to Vicinity of Ward Avenue
 FAP NO. 1M-HI-1(269)

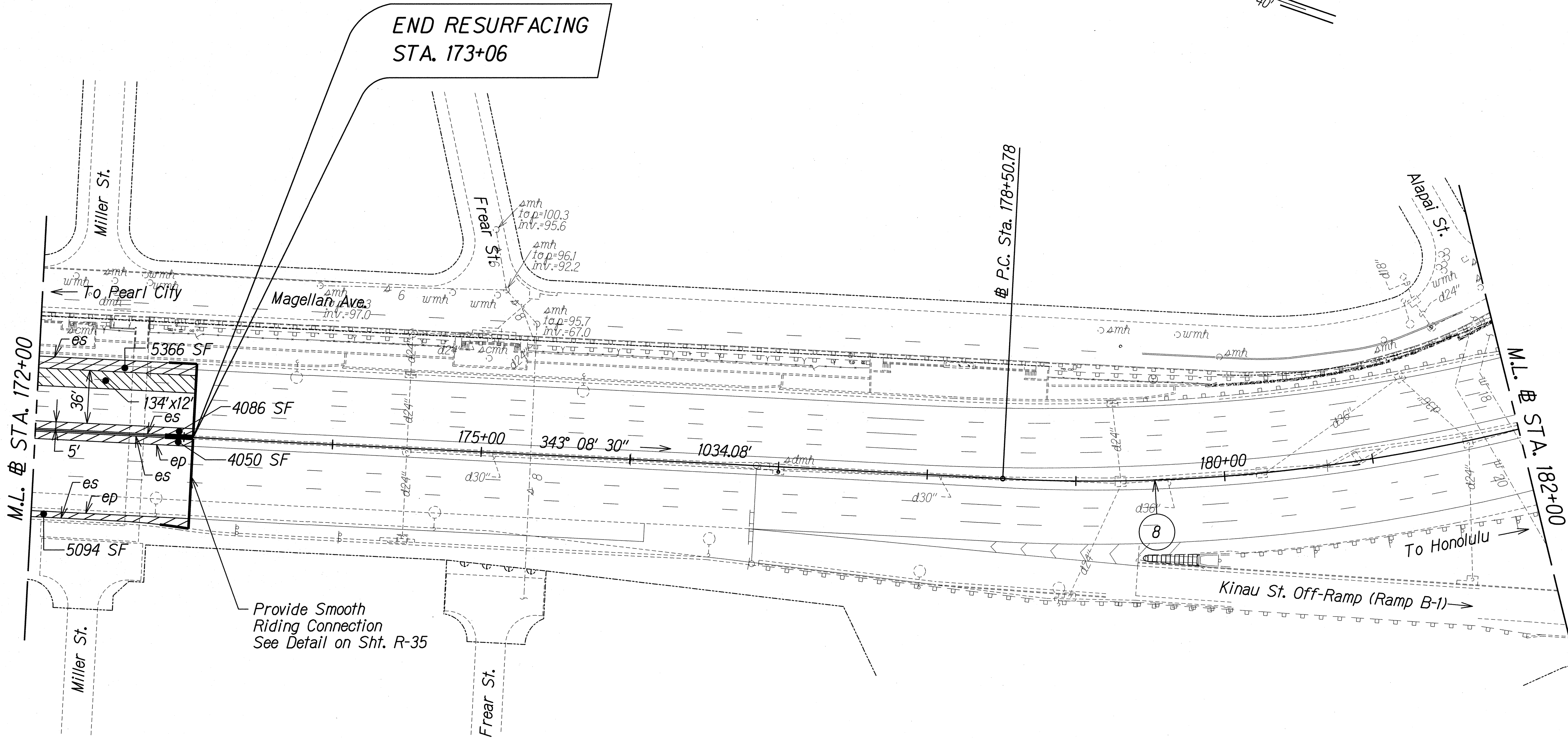
Scale: 1"=40' Date: Apr. 26, 2013

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	38	382

CURVE 8 DATA
 $\Delta = 52^{\circ}42'01''$
 $R = 1,200.00'$
 $T = 594.38'$
 $C = 1065.25'$
 $Lc = 1103.75'$

TRUE NORTH
SCALE : 1" = 40'



LEGEND:

- [] Resurfacing Limits
4" Cold Plane
2" SMA
2" HMA Mix IV
- [Hatched Box] Weakened Pavement Reconstruction
See Table for Pavement Structure
- [Diagonal Hatched Box] Shoulder Pavement Reconstruction
See Table for Pavement Structure

Begin Sta.	End Sta.	Mainlanes	Median Shoulder	Right Shoulder
156+92 Westbound	173+06 Westbound	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 3" HMA Mix IV 12" HMAB	2" SMA 2" HMA Mix IV 12" HMAB
156+92 Eastbound	173+06 Eastbound	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 8" HMAB	2" SMA 2" HMA Mix IV 12" HMAB

PAMELA K. UYEDA
LICENSED PROFESSIONAL ENGINEER
No. 10352-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 172+00 TO STA. 182+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. IM-HI-1(269)

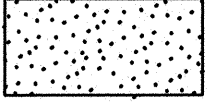
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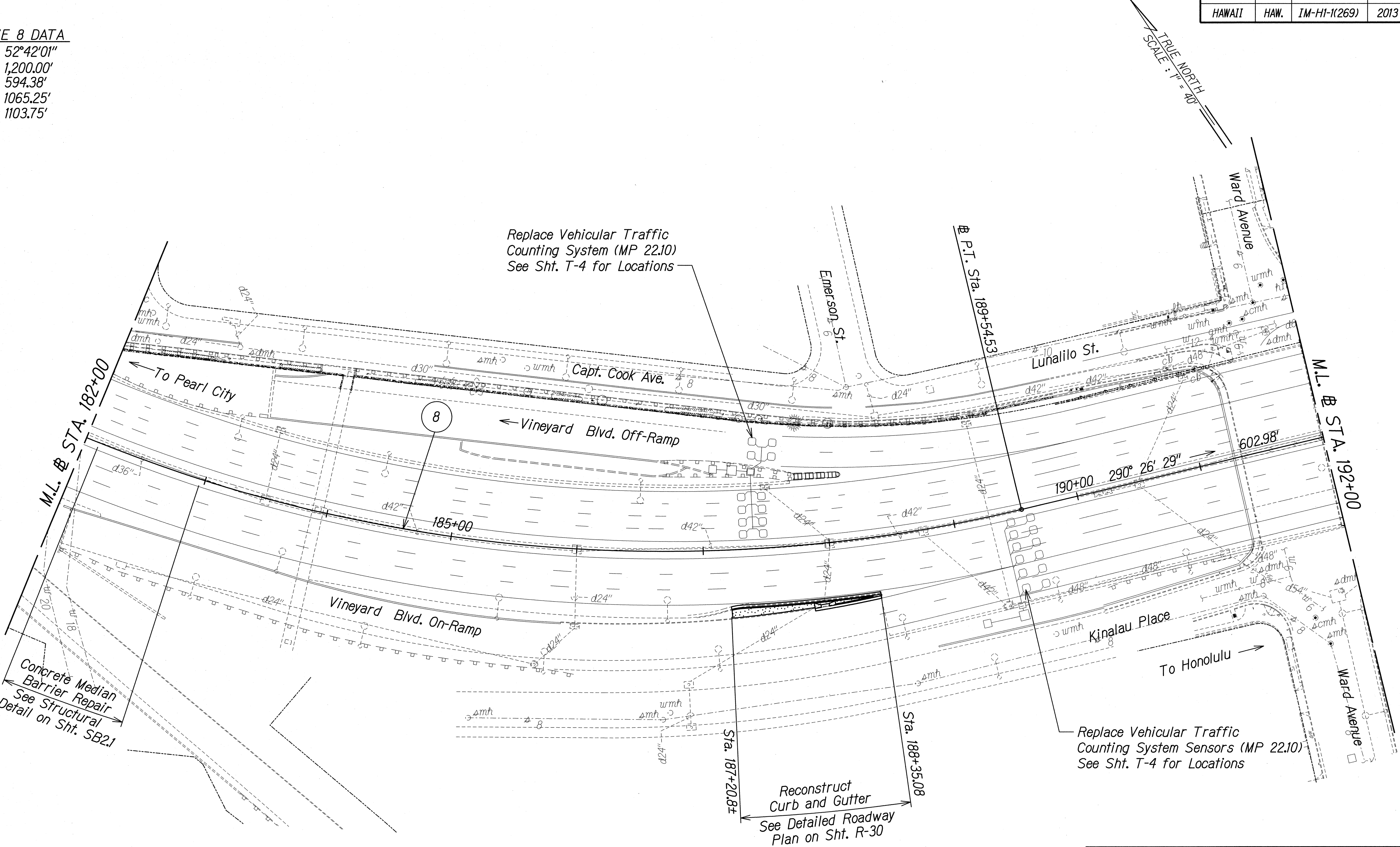
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(K269)	2013	39	382

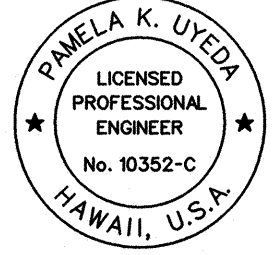
CURVE 8 DATA
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 $R = 1,200.00'$
 $T = 594.38'$
 $C = 1065.25'$
 $L_c = 1103.75'$

1-164659A IDIG PAVMT PREVENTIVE MAINTENANCE/HL MIDDLE TO WARD/CADD/SHEETS/02 ROAD/R-18.dgn

ORIGINAL PLAN	DATE
DESIGNED BY	
DRAWN BY	
CHECKED BY	
IN CHARGE	
DATE	

LEGEND:
 4" Plain Concrete





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SIGNATURE: *P. Uyeda* EXPIRATION DATE: 04/30/14 OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 182+00 TO STA. 192+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. IM-HI-1(K269)

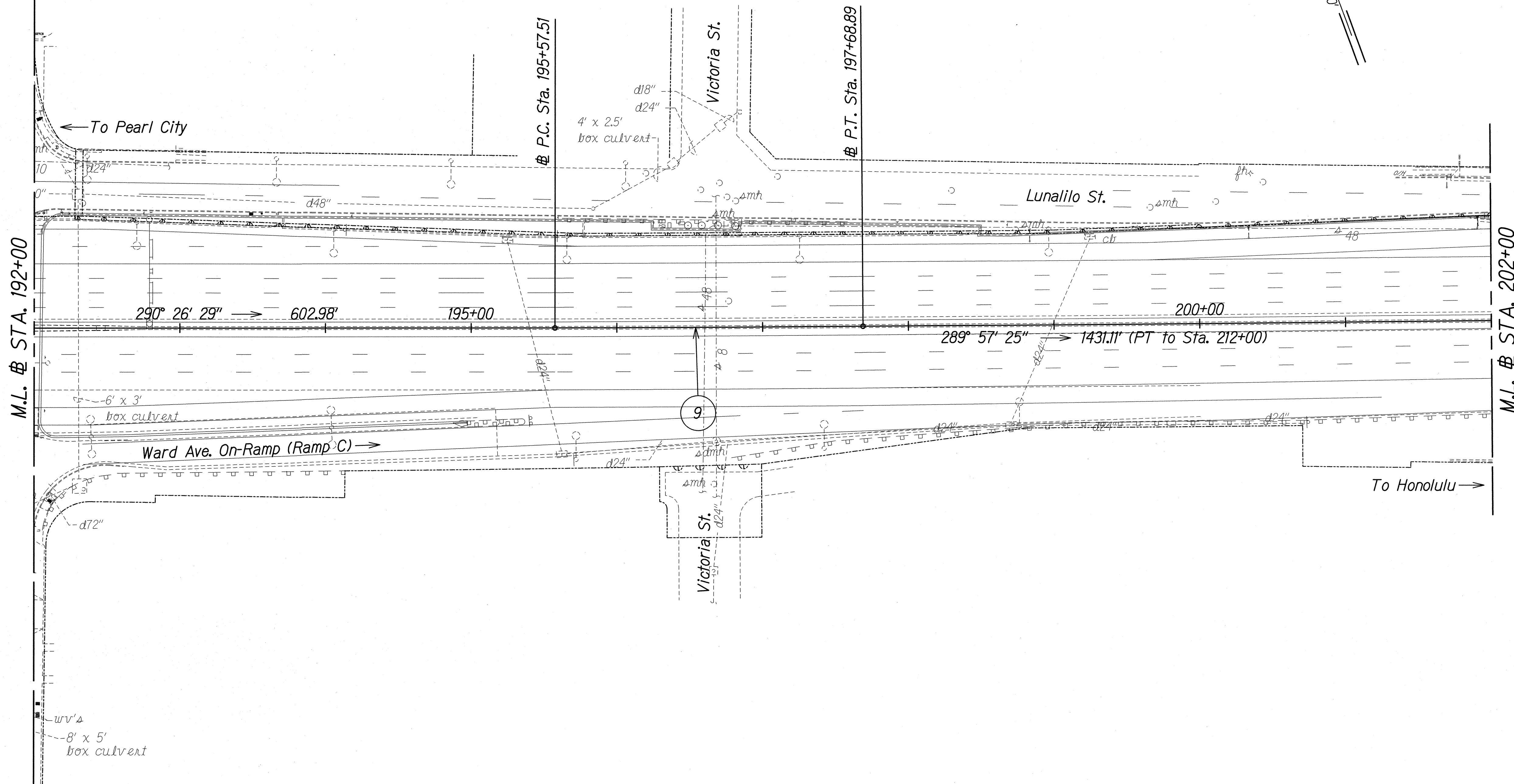
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SHEET No. R-20 OF 43 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	40	382

CURVE 9 DATA
 $\Delta = 00^{\circ}29'04''$
 $R = 25,000.00'$
 $T = 105.69'$
 $C = 211.38'$
 $Lc = 211.38'$

TRUE NORTH
 SCALE: 1" = 40'



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

T-16459A IDIQ PAVT PREVENTIVE MAINTENANCE/HL MIDDLE TO WARD/CADD/SHEETS/02 ROAD/R-19.dgn

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SIGNATURE: *P. Uyeda* EXPIRATION DATE OF THE LICENSE: 04/30/14

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

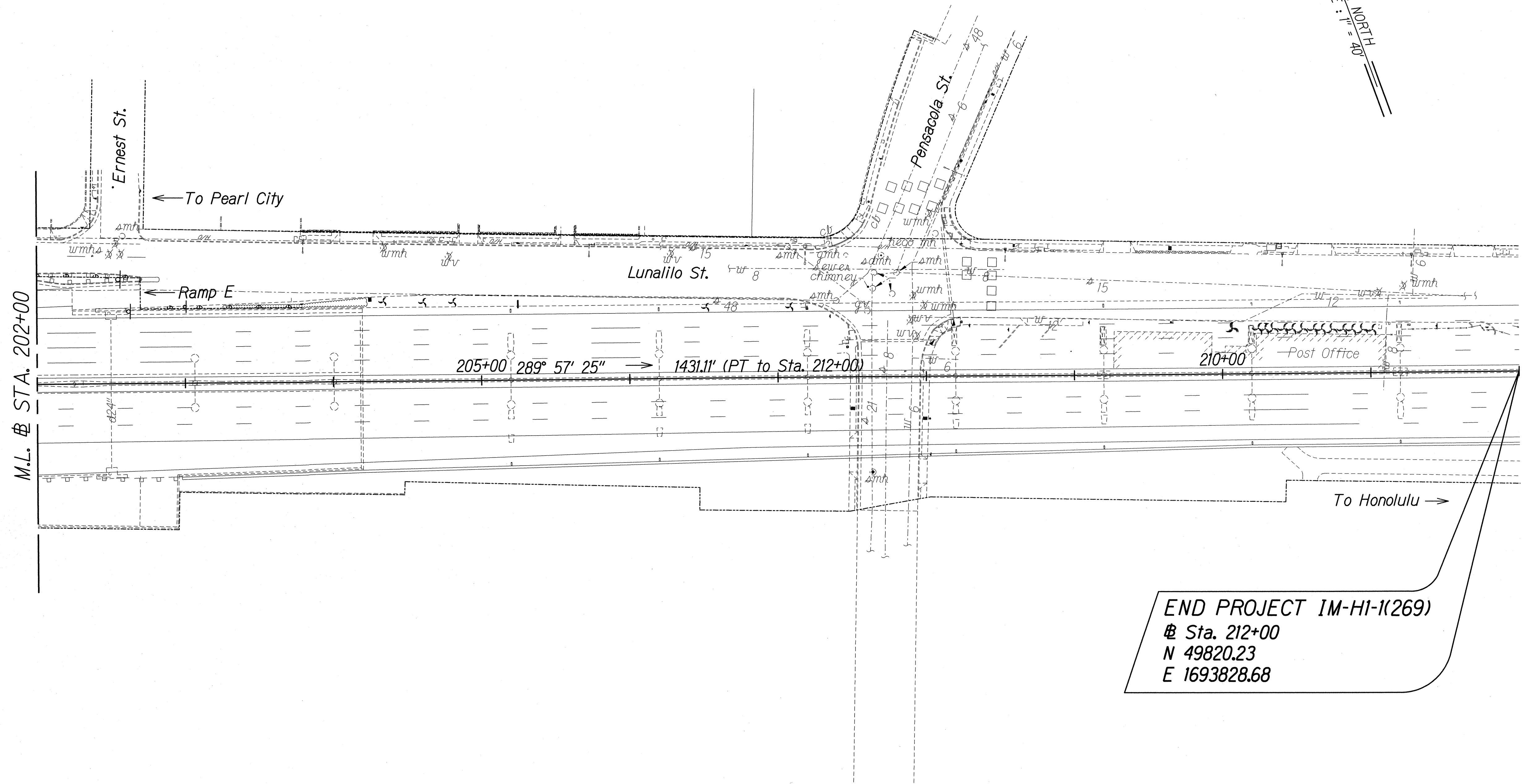
ROADWAY PLAN
STA. 192+00 TO STA. 202+00
 INTERSTATE ROUTE H-1 REHABILITATION
 Middle Street to Vicinity of Ward Avenue
 FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-21 OF 43 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(269)	2013	41	382

TRUE NORTH
SCALE: 1" = 40'



END PROJECT IM-HI-1(269)
Sta. 212+00
N 49820.23
E 1693828.68

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

T:\164594 IDIQ PAVT PREVENTIVE MAINTENANCE\H1 MIDDLE TO WARD\CADD\SHEETS\02 ROAD\R-20.dgn

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SIGNATURE: *P. Uyeda* EXPIRATION DATE OF THE LICENSE: 04/30/14

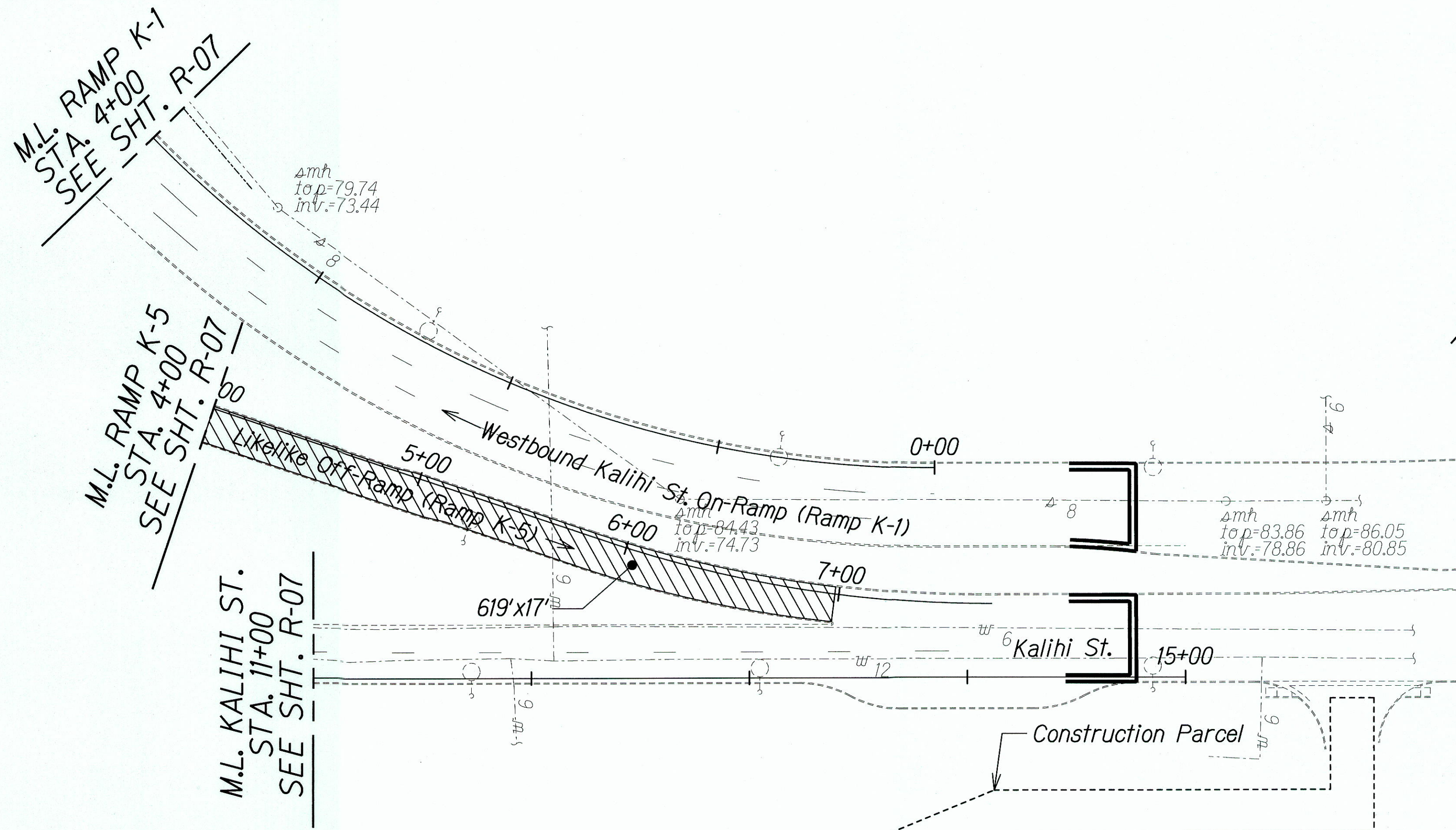
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 202+00 TO STA. 212+00
INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. IM-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

SHEET No. R-22 OF 43 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(269)	2013	42	382

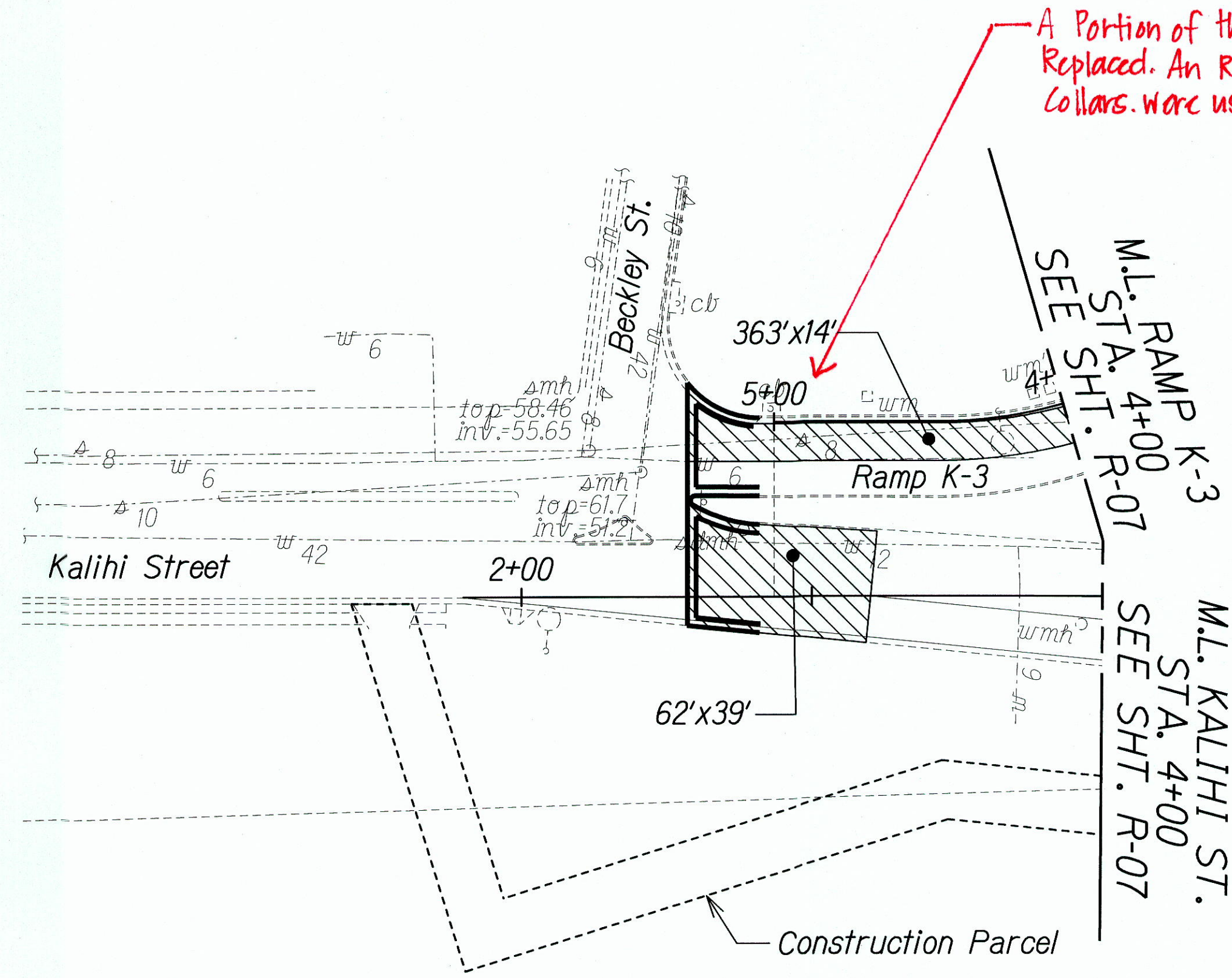


TRUE NORTH
SCALE: 1" = 40'

LEGEND:

- [] Resurfacing Limits - Ramps
4" Cold Plane
4" HMA Mix IV
- [Hatched Box] Weakened Pavement Reconstruction
See Table for Pavement Structure

Ramps
4" HMA Mix IV 8" HMAB



TRUE NORTH
SCALE: 1" = 40'

ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	

T-16459A IDIQ PAVMT PREVENTIVE MAINTENANCE/HI MIDDLE TO WARD/CADD/SHEETS/02 ROAD/R-24gn

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *[Signature]* EXPIRATION DATE: 04/30/14

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
KALIHI STREET

INTERSTATE ROUTE H-1 REHABILITATION
Middle Street to Vicinity of Ward Avenue
FAP NO. 1M-HI-1(269)

Scale: 1"=40' Date: Apr. 26, 2013

"AS-BUILT"

