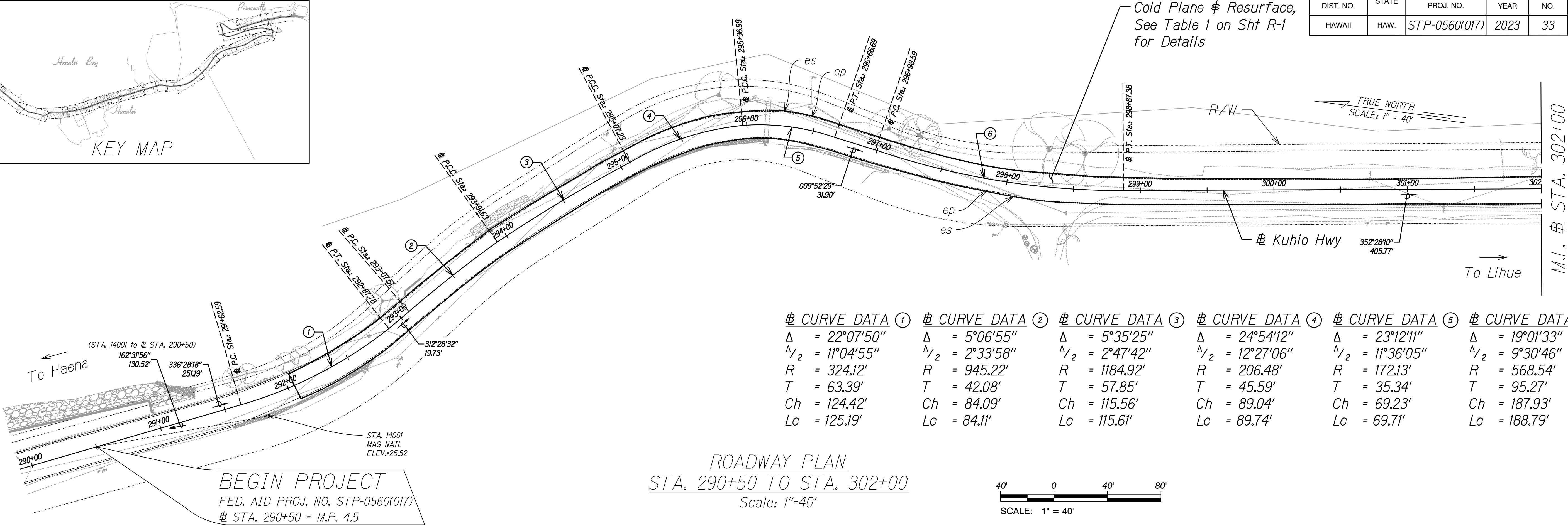
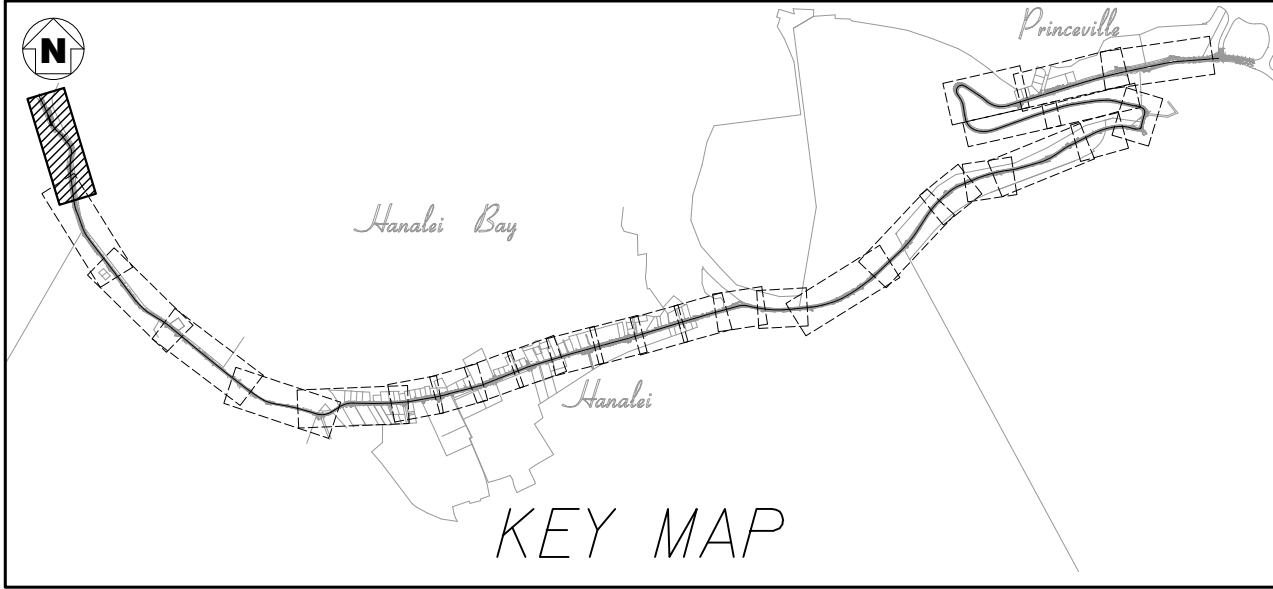
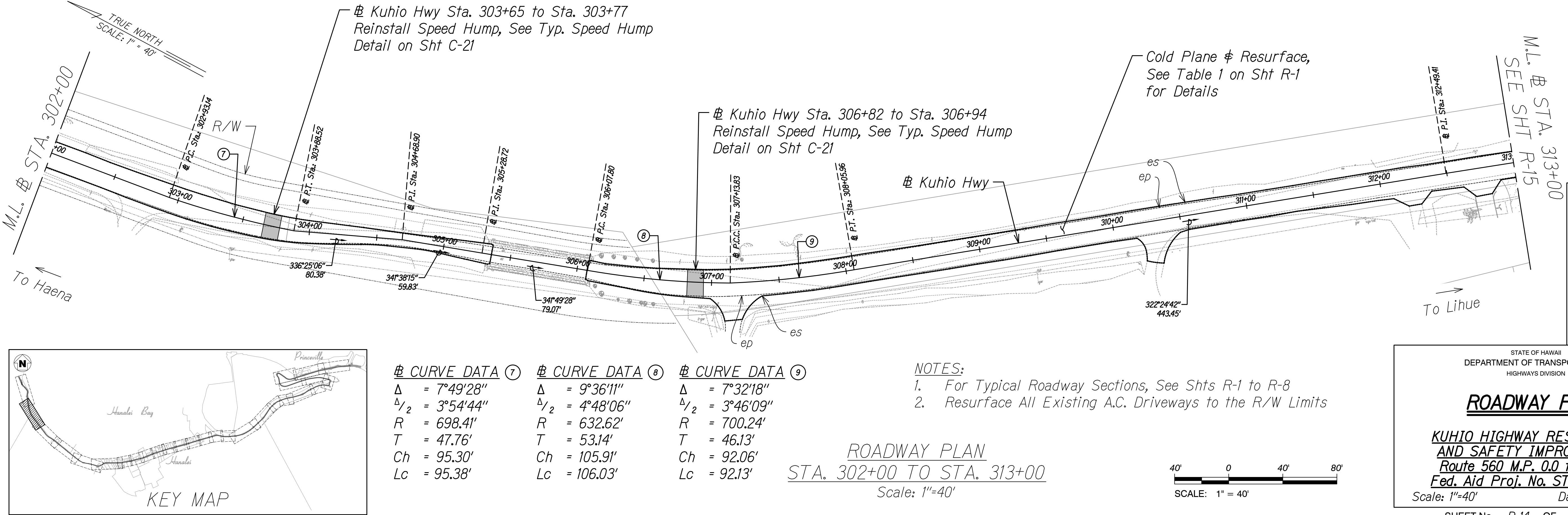
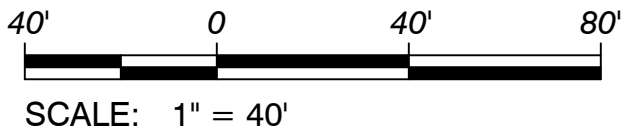


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	33	92



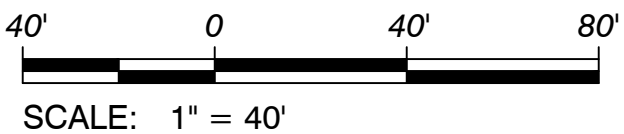
# CURVE DATA ①	# CURVE DATA ②	# CURVE DATA ③	# CURVE DATA ④	# CURVE DATA ⑤	# CURVE DATA ⑥
$\Delta = 22^{\circ}07'50''$	$\Delta = 5^{\circ}06'55''$	$\Delta = 5^{\circ}35'25''$	$\Delta = 24^{\circ}54'12''$	$\Delta = 23^{\circ}12'11''$	$\Delta = 19^{\circ}01'33''$
$\Delta/2 = 11^{\circ}04'55''$	$\Delta/2 = 2^{\circ}33'58''$	$\Delta/2 = 2^{\circ}47'42''$	$\Delta/2 = 12^{\circ}27'06''$	$\Delta/2 = 11^{\circ}36'05''$	$\Delta/2 = 9^{\circ}30'46''$
$R = 324.12'$	$R = 945.22'$	$R = 1184.92'$	$R = 206.48'$	$R = 172.13'$	$R = 568.54'$
$T = 63.39'$	$T = 42.08'$	$T = 57.85'$	$T = 45.59'$	$T = 35.34'$	$T = 95.27'$
$Ch = 124.42'$	$Ch = 84.09'$	$Ch = 115.56'$	$Ch = 89.04'$	$Ch = 69.23'$	$Ch = 187.93'$
$Lc = 125.19'$	$Lc = 84.11'$	$Lc = 115.61'$	$Lc = 89.74'$	$Lc = 69.71'$	$Lc = 188.79'$

ROADWAY PLAN
STA. 290+50 TO STA. 302+00
Scale: 1"=40'

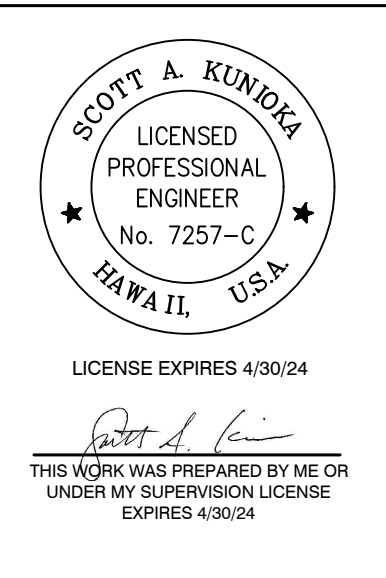


# CURVE DATA ⑦	# CURVE DATA ⑧	# CURVE DATA ⑨
$\Delta = 7^{\circ}49'28''$	$\Delta = 9^{\circ}36'11''$	$\Delta = 7^{\circ}32'18''$
$\Delta/2 = 3^{\circ}54'44''$	$\Delta/2 = 4^{\circ}48'06''$	$\Delta/2 = 3^{\circ}46'09''$
$R = 698.41'$	$R = 632.62'$	$R = 700.24'$
$T = 47.76'$	$T = 53.14'$	$T = 46.13'$
$Ch = 95.30'$	$Ch = 105.91'$	$Ch = 92.06'$
$Lc = 95.38'$	$Lc = 106.03'$	$Lc = 92.13'$

ROADWAY PLAN
STA. 302+00 TO STA. 313+00
Scale: 1"=40'



- NOTES:
- For Typical Roadway Sections, See Shts R-1 to R-8
 - Resurface All Existing A.C. Driveways to the R/W Limits



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

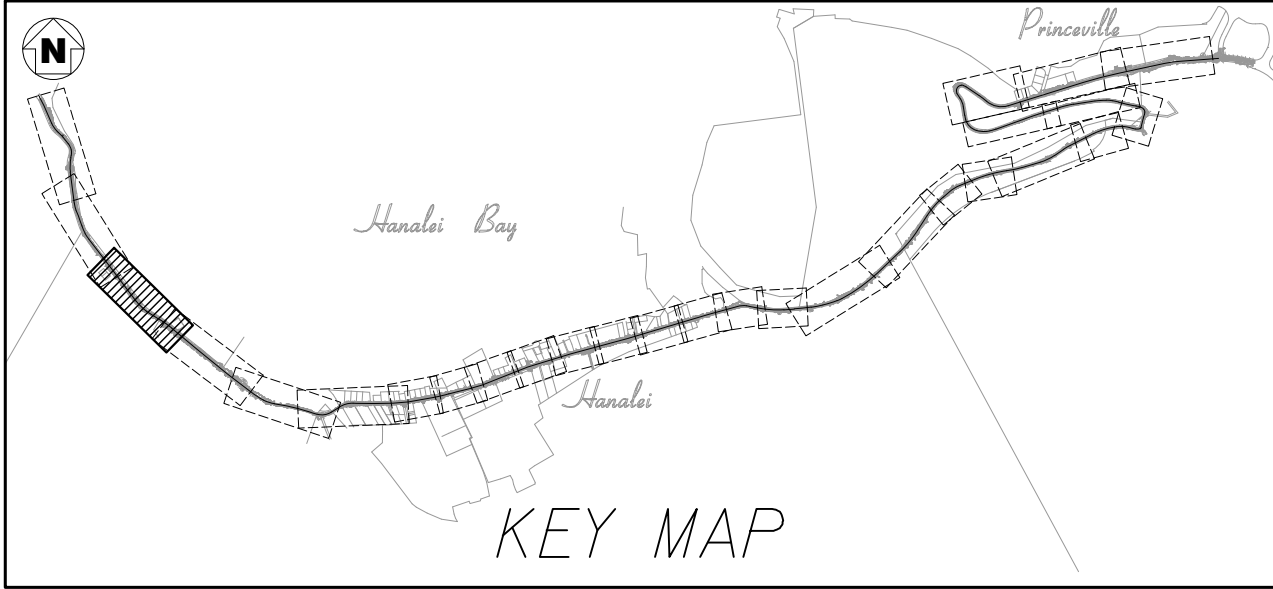
**KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS**
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=40' Date: July, 2023

SHEET No. R-14 OF 28 SHEETS

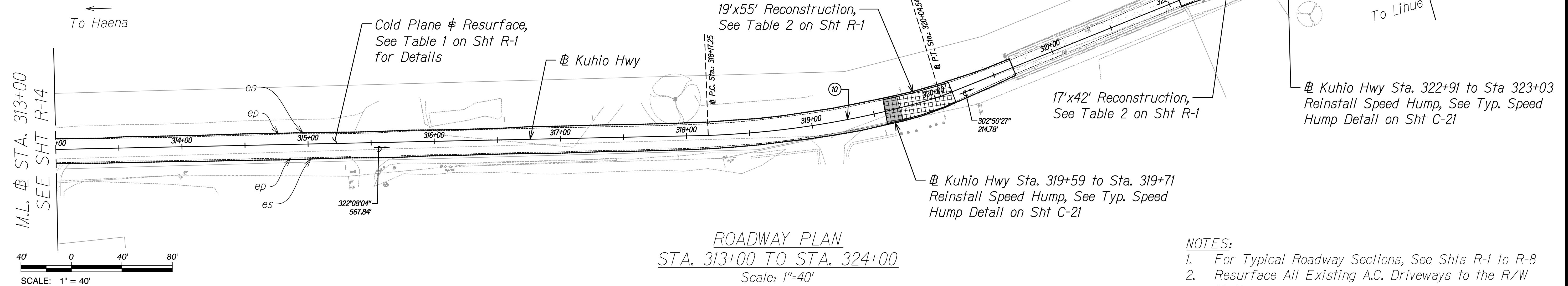
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	34	92

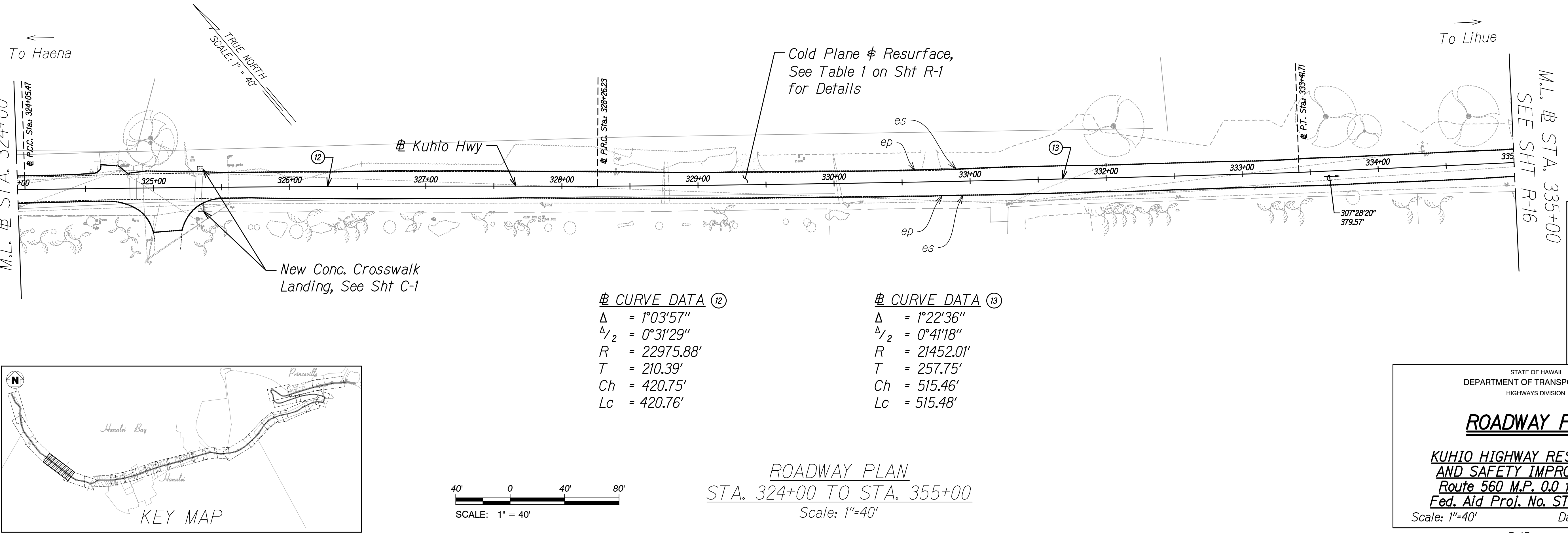


TRUE NORTH
SCALE: 1" = 40'

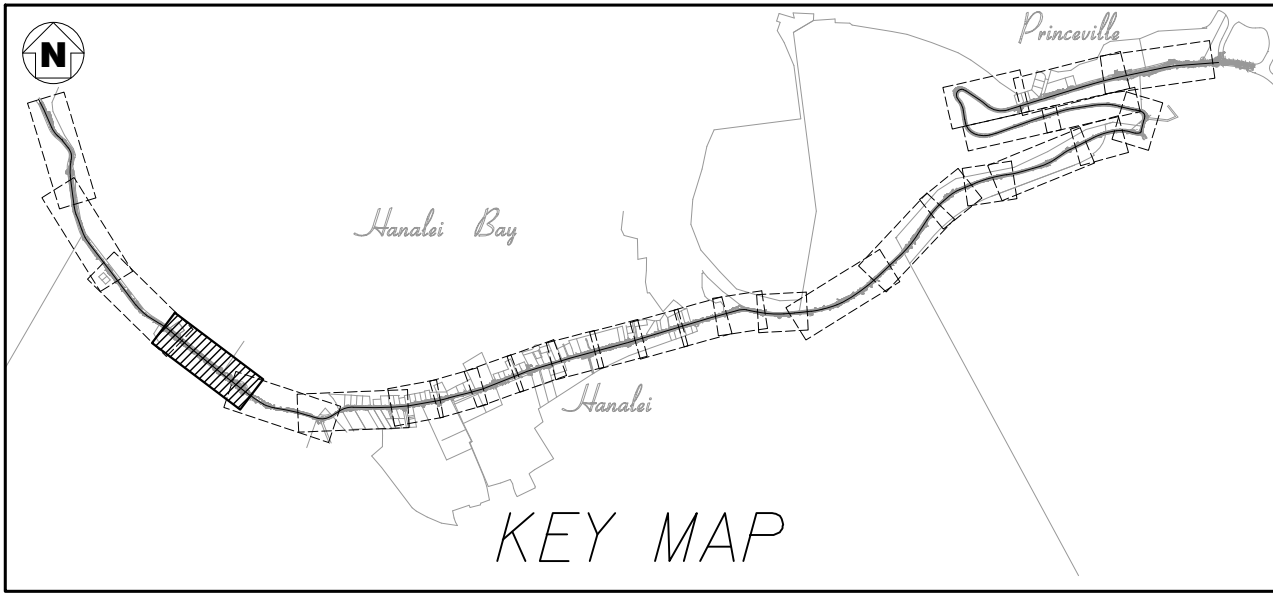
⑩ CURVE DATA	⑪ CURVE DATA
Δ = 14°48'42"	Δ = 5°32'28"
$\Delta/2$ = 7°24'21"	$\Delta/2$ = 2°46'14"
R = 724.48'	R = 1924.96'
T = 94.17'	T = 93.15'
Ch = 186.77'	Ch = 186.09'
Lc = 187.29'	Lc = 186.16'



- NOTES:
- For Typical Roadway Sections, See Shts R-1 to R-8
 - Resurface All Existing A.C. Driveways to the R/W Limits

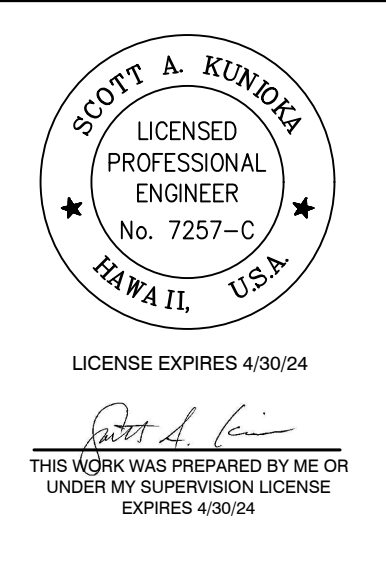


⑫ CURVE DATA	⑬ CURVE DATA
Δ = 1°03'57"	Δ = 1°22'36"
$\Delta/2$ = 0°31'29"	$\Delta/2$ = 0°41'18"
R = 22975.88'	R = 21452.01'
T = 210.39'	T = 257.75'
Ch = 420.75'	Ch = 515.46'
Lc = 420.76'	Lc = 515.48'



SCALE: 1" = 40'

ROADWAY PLAN
STA. 324+00 TO STA. 355+00
Scale: 1"=40'



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

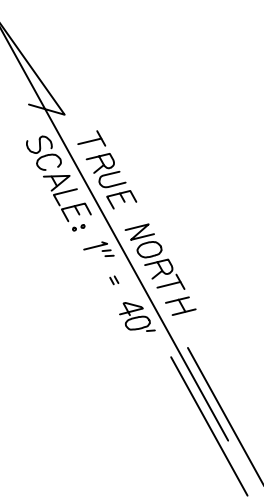
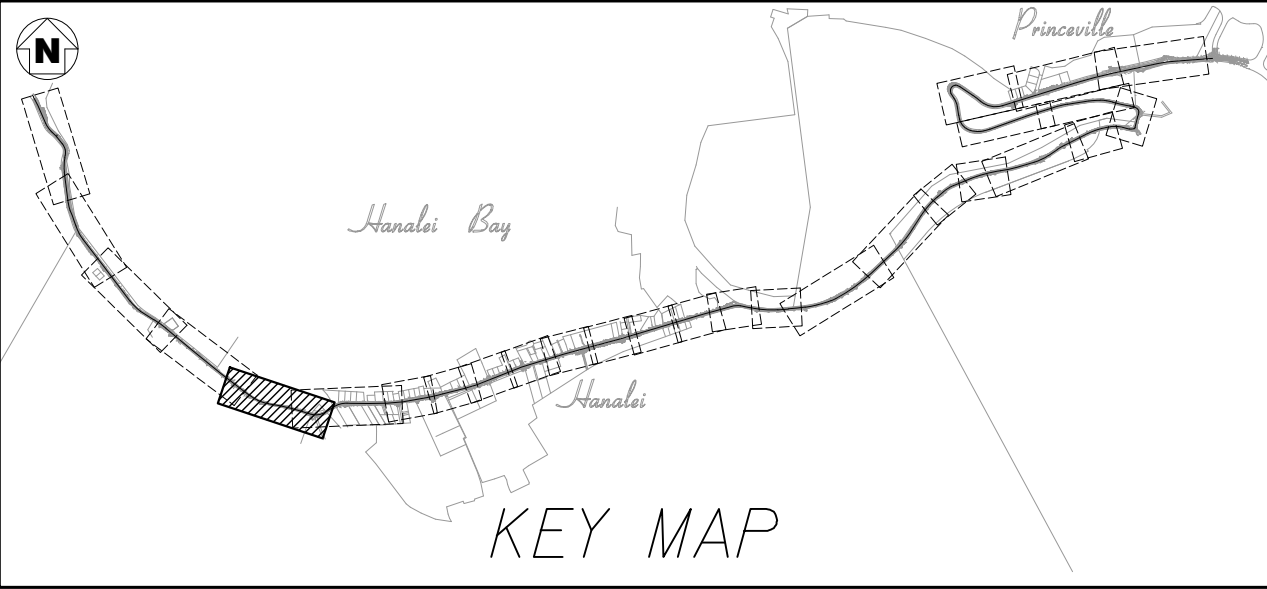
ROADWAY PLAN

**KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS**
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)
Scale: 1"=40' Date: July, 2023

SHEET No. R-15 OF 28 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	35	92



CURVE DATA ⑭

Δ = 11°37'31"

$\Delta/2$ = 5°48'45"

R = 991.42'

T = 100.93'

Ch = 200.81'

Lc = 201.16'

CURVE DATA ⑮

Δ = 17°57'08"

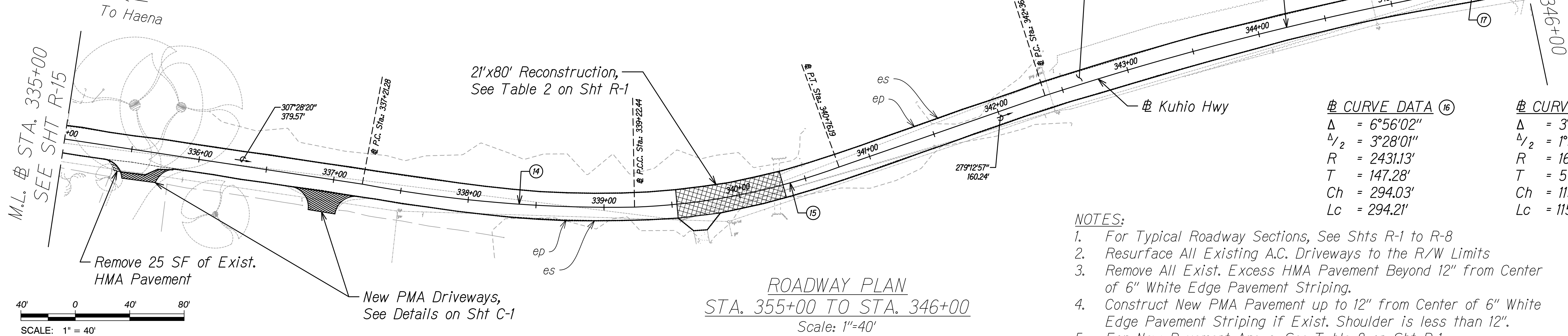
$\Delta/2$ = 8°58'34"

R = 490.72'

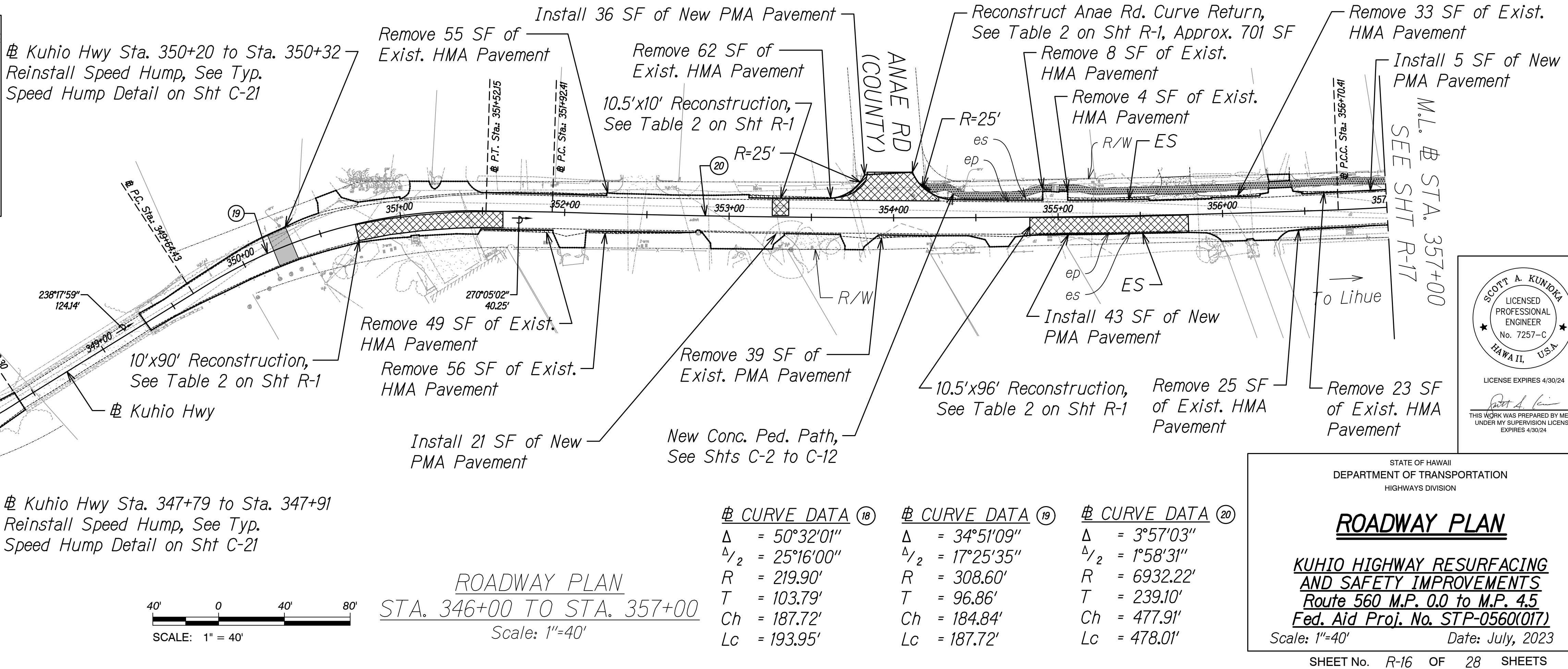
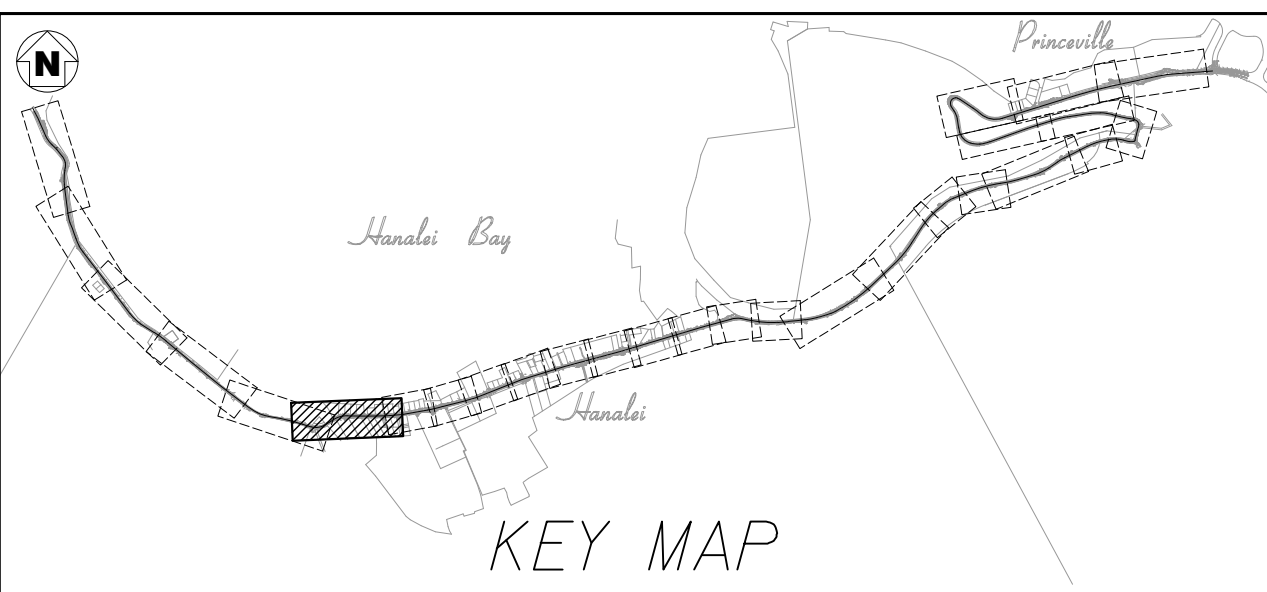
T = 77.51'

Ch = 153.13'

Lc = 153.75'



- NOTES:
- For Typical Roadway Sections, See Shts R-1 to R-8
 - Resurface All Existing A.C. Driveways to the R/W Limits
 - Remove All Exist. Excess HMA Pavement Beyond 12" from Center of 6" White Edge Pavement Striping.
 - Construct New PMA Pavement up to 12" from Center of 6" White Edge Pavement Striping if Exist. Shoulder is less than 12".
 - For New Pavement Areas, See Table 2 on Sht R-1



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

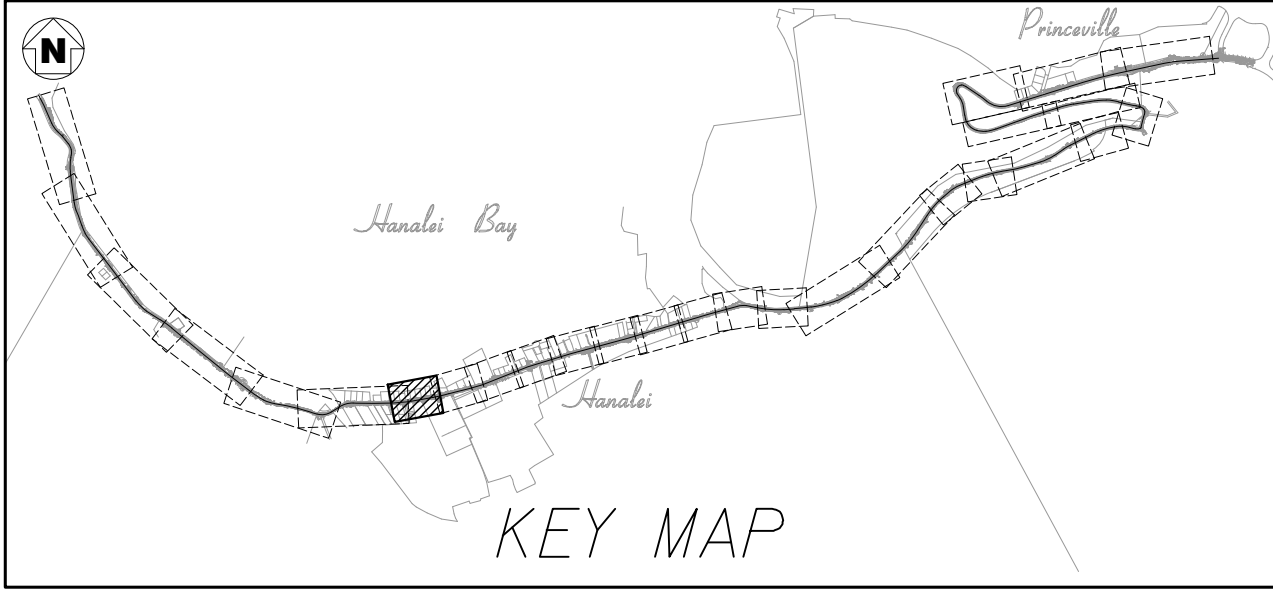
KUHIO HIGHWAY RESURFACING AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=40'
Date: July, 2023

SHEET No. R-16 OF 28 SHEETS

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

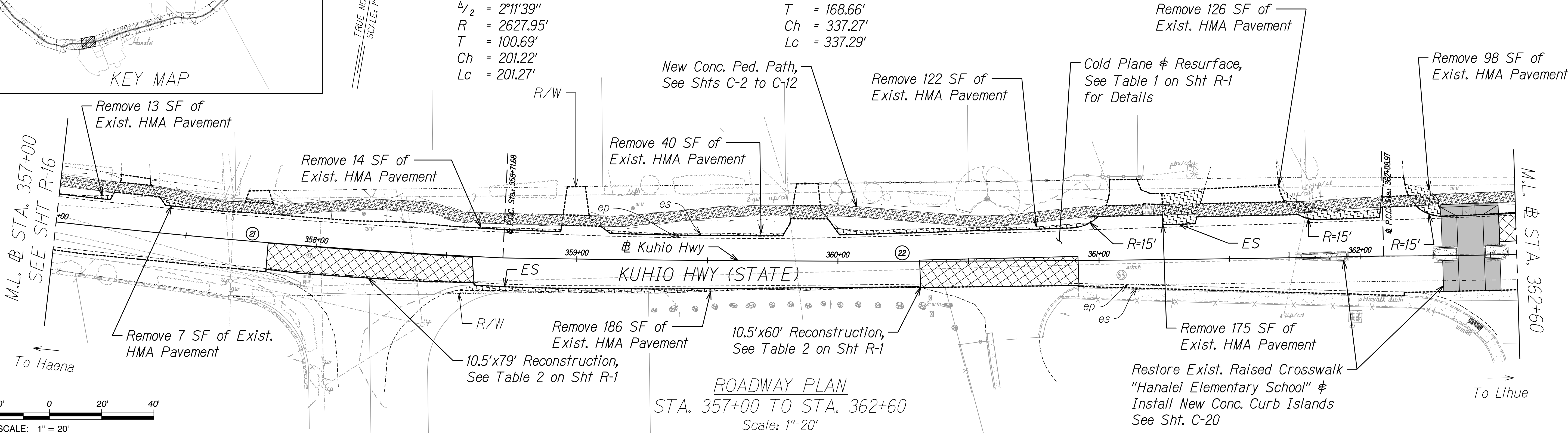
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	36	92



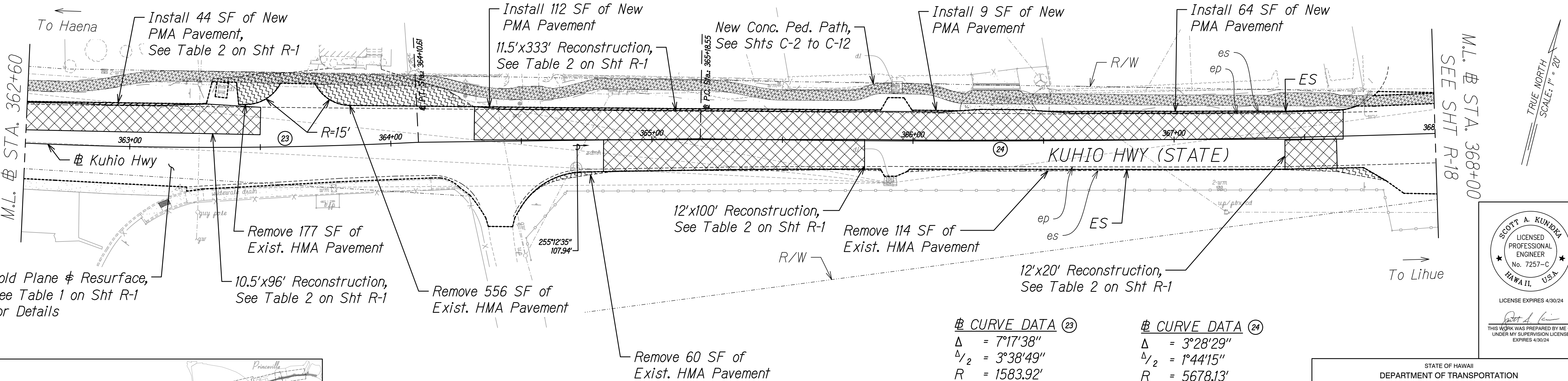
TRUE NORTH
SCALE: 1" = 20'

CURVE DATA ②
 $\Delta = 4^{\circ}23'18''$
 $\Delta/2 = 2^{\circ}11'39''$
 $R = 2627.95'$
 $T = 100.69'$
 $Ch = 201.22'$
 $Lc = 201.27'$

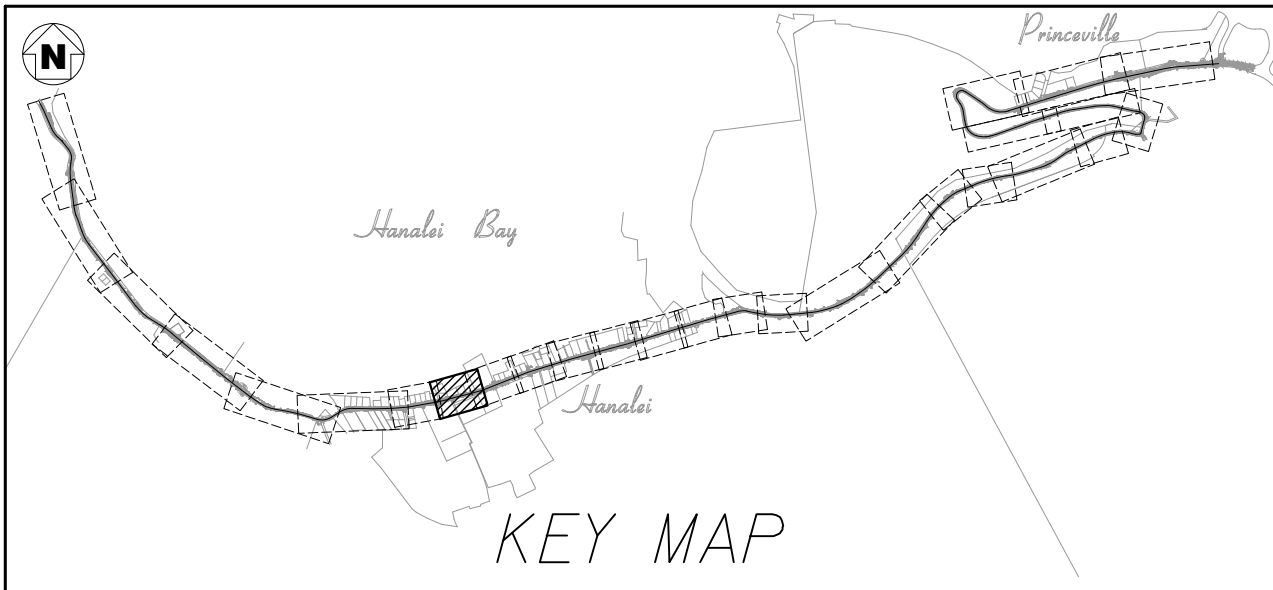
CURVE DATA ②②
 $\Delta = 2^{\circ}10'29''$
 $\Delta/2 = 1^{\circ}05'15''$
 $R = 8885.78'$
 $T = 168.66'$
 $Ch = 337.27'$
 $Lc = 337.29'$



20' 0 20' 40'
SCALE: 1" = 20'



Cold Plane & Resurface,
See Table 1 on Sht R-1
for Details



NOTES:

- For Typical Roadway Sections, See Shts R-1 to R-8
- Resurface All Existing A.C. Driveways to the R/W Limits
- Remove All Exist. Excess HMA Pavement Beyond 12" from Center of 6" White Edge Pavement Striping.
- Construct New PMA Pavement up to 12" from Center of 6" White Edge Pavement Striping if Exist. Shoulder is less than 12".
- For New Pavement Areas, See Table 2 on Sht R-1

CURVE DATA ③
 $\Delta = 7^{\circ}17'38''$
 $\Delta/2 = 3^{\circ}38'49''$
 $R = 1583.92'$
 $T = 100.95'$
 $Ch = 201.50'$
 $Lc = 201.63'$

CURVE DATA ④
 $\Delta = 3^{\circ}28'29''$
 $\Delta/2 = 1^{\circ}44'15''$
 $R = 5678.13'$
 $T = 172.23'$
 $Ch = 344.30'$
 $Lc = 344.36'$

ROADWAY PLAN
STA. 362+60 TO STA. 368+00
Scale: 1"=20'

20' 0 20' 40'
SCALE: 1" = 20'



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

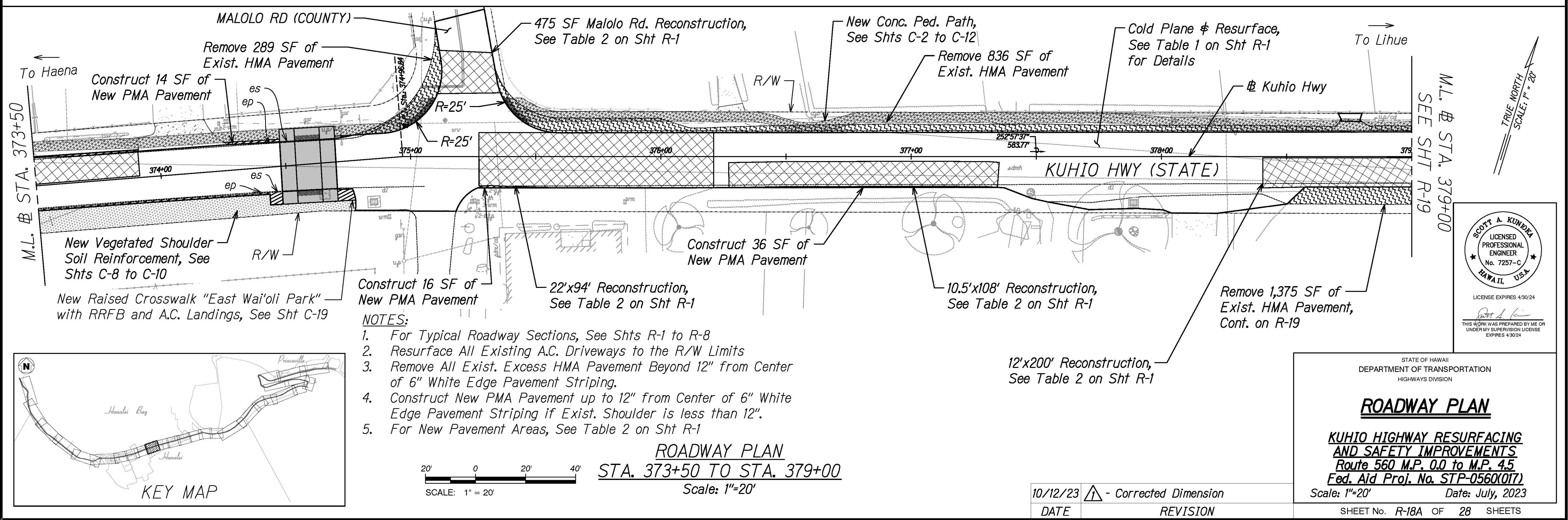
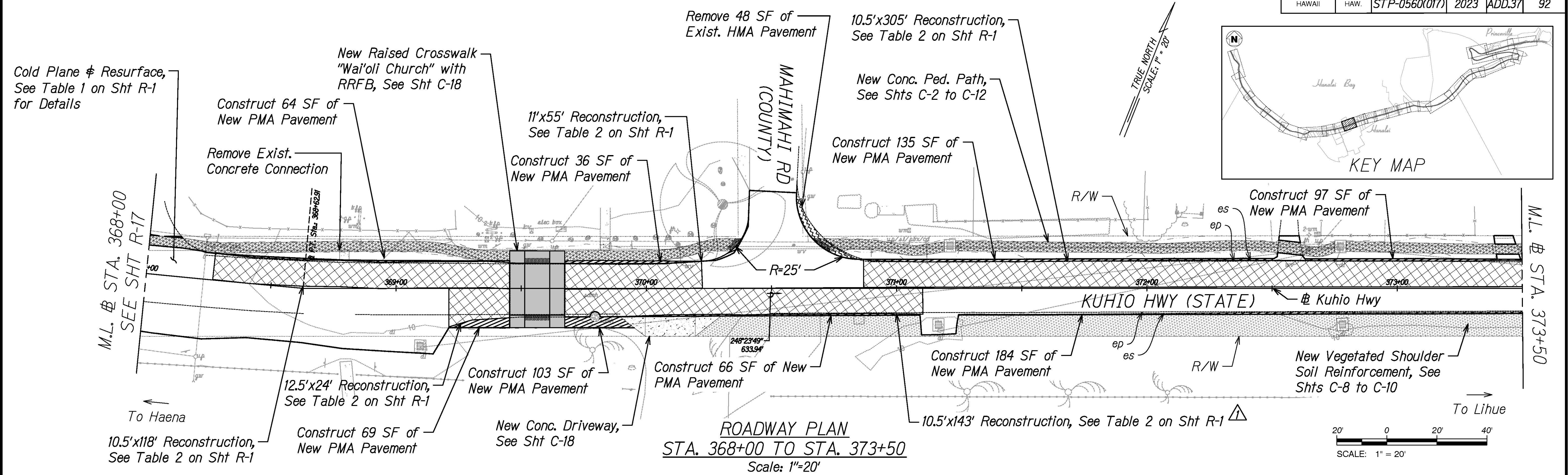
ROADWAY PLAN

KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=20' Date: July, 2023

SHEET No. R-17 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	ADD.37	92



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

10/12/23	△ - Corrected Dimension
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

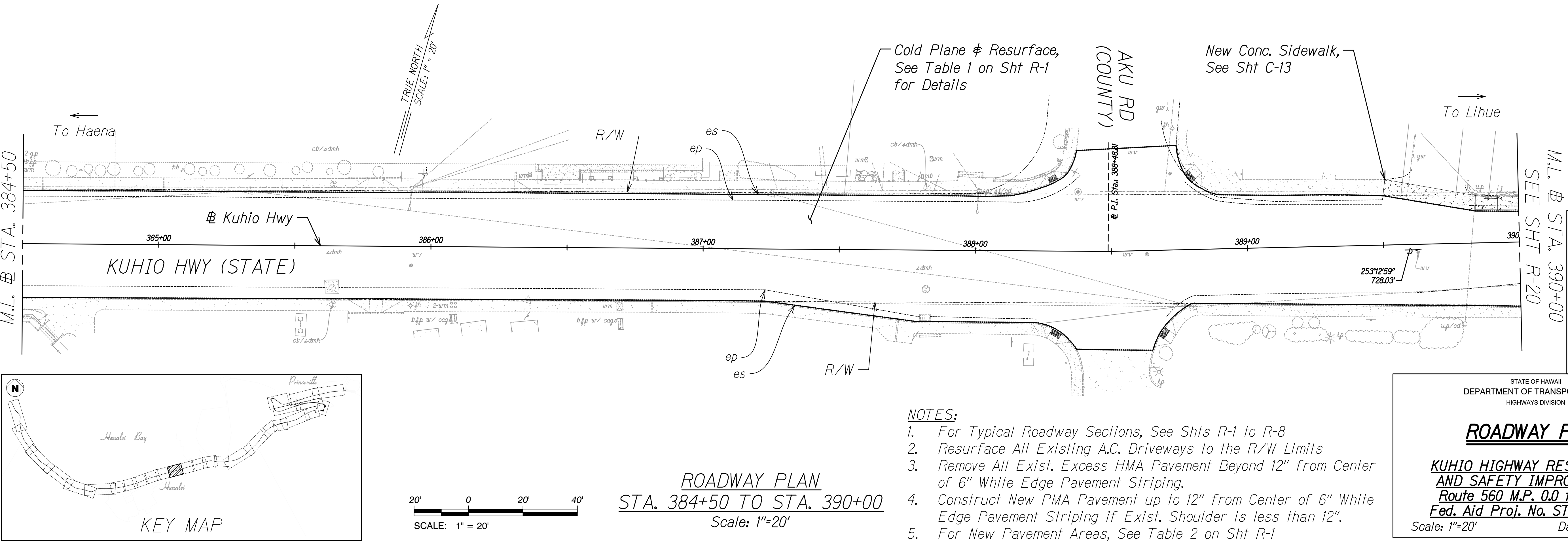
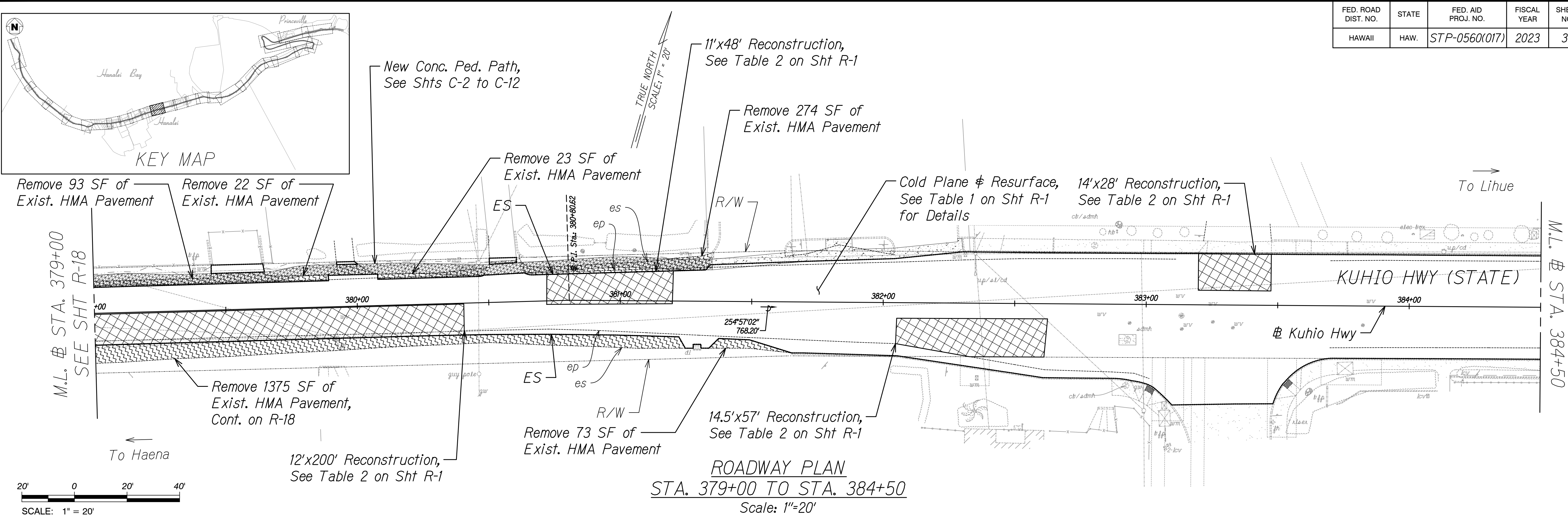
ROADWAY PLAN

KUHIO HIGHWAY RESURFACING AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=20' Date: July, 2023

SHEET No. R-18A OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	38	92



- NOTES:**
- For Typical Roadway Sections, See Shts R-1 to R-8
 - Resurface All Existing A.C. Driveways to the R/W Limits
 - Remove All Exist. Excess HMA Pavement Beyond 12" from Center of 6" White Edge Pavement Striping.
 - Construct New PMA Pavement up to 12" from Center of 6" White Edge Pavement Striping if Exist. Shoulder is less than 12".
 - For New Pavement Areas, See Table 2 on Sht R-1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

**KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS**
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=20' Date: July, 2023

SHEET No. R-19 OF 28 SHEETS

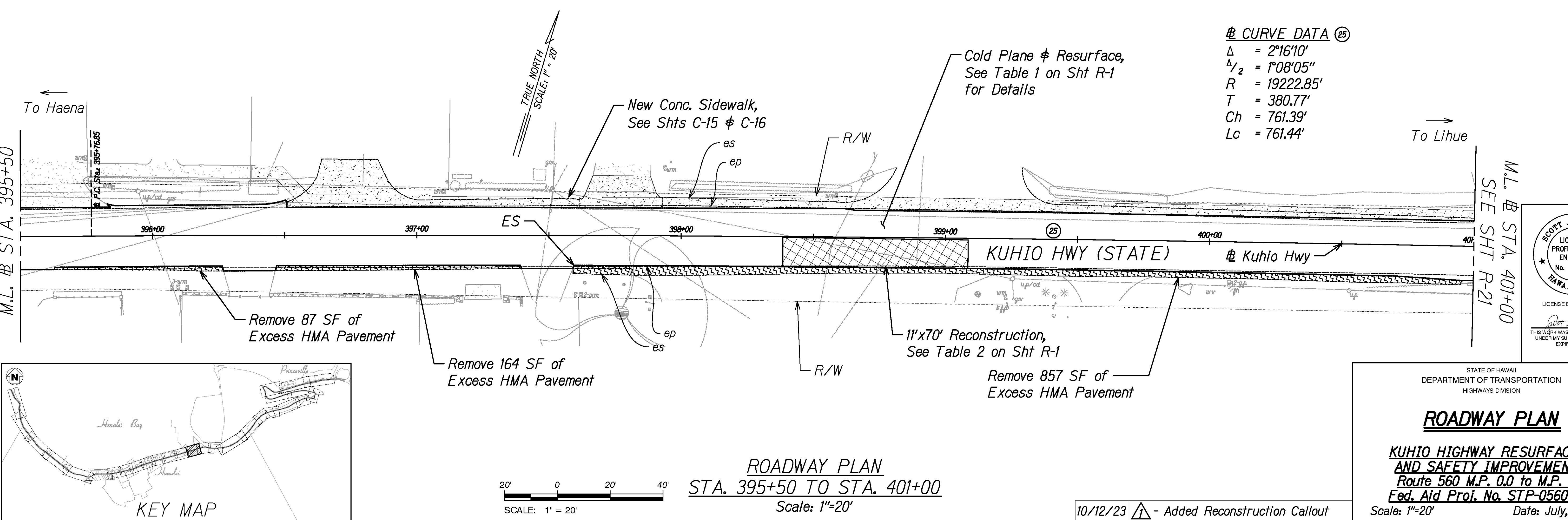
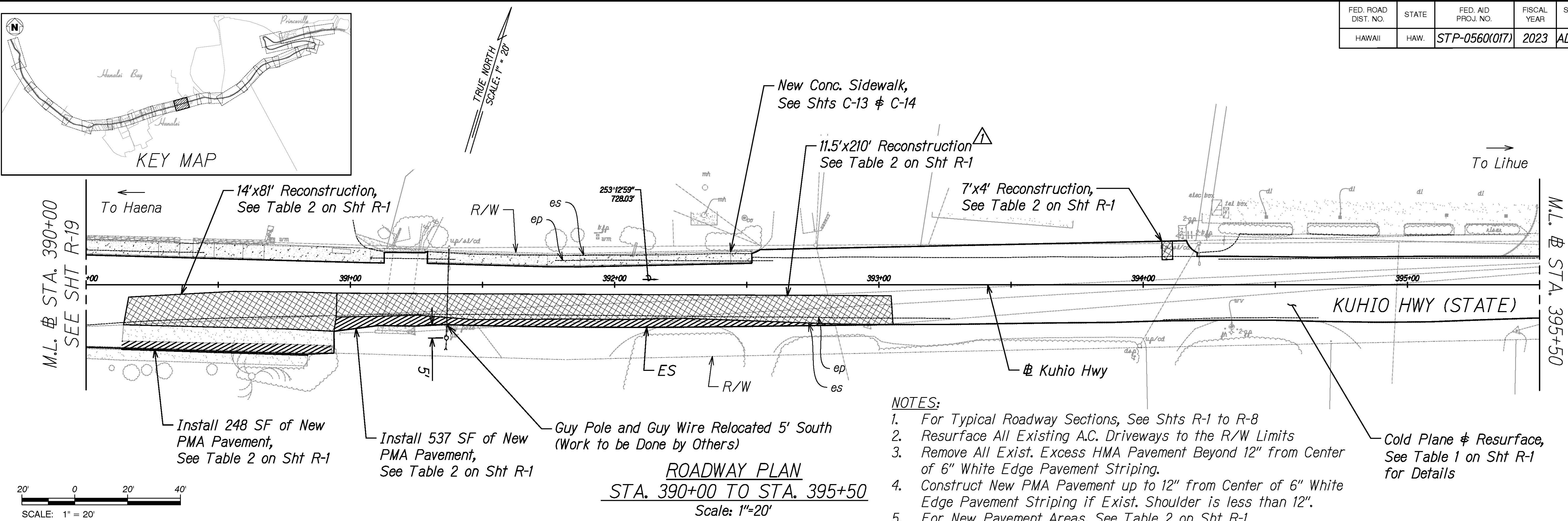
SCOTT A. KUNO
LICENSED PROFESSIONAL ENGINEER
No. 7257-C
HAWAII, U.S.A.

LICENSE EXPIRES 4/30/24

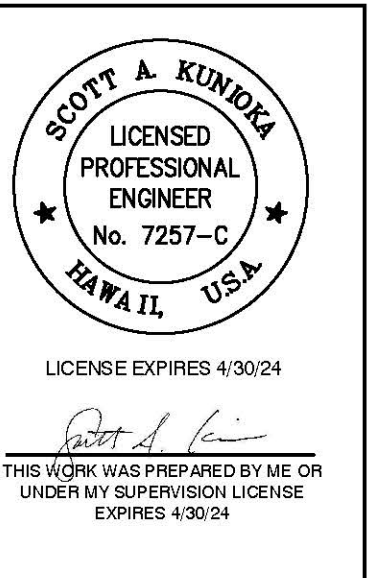
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION LICENSE EXPIRES 4/30/24

SURVEYED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	ADD.39	92



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



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

**KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS**
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

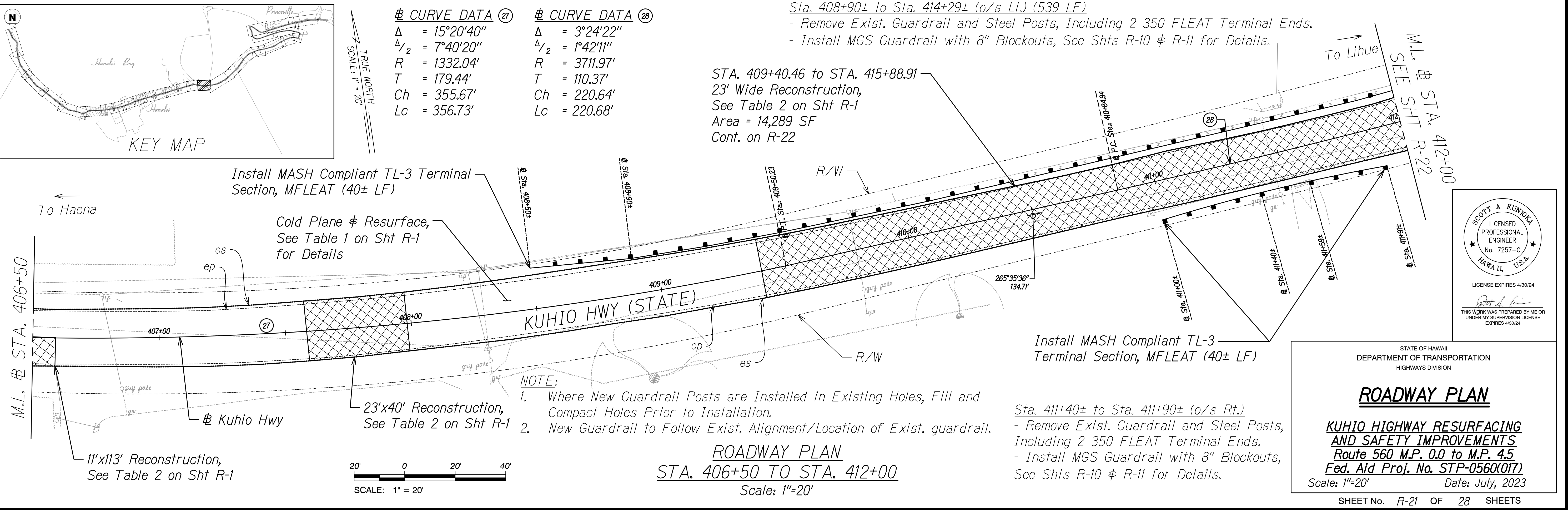
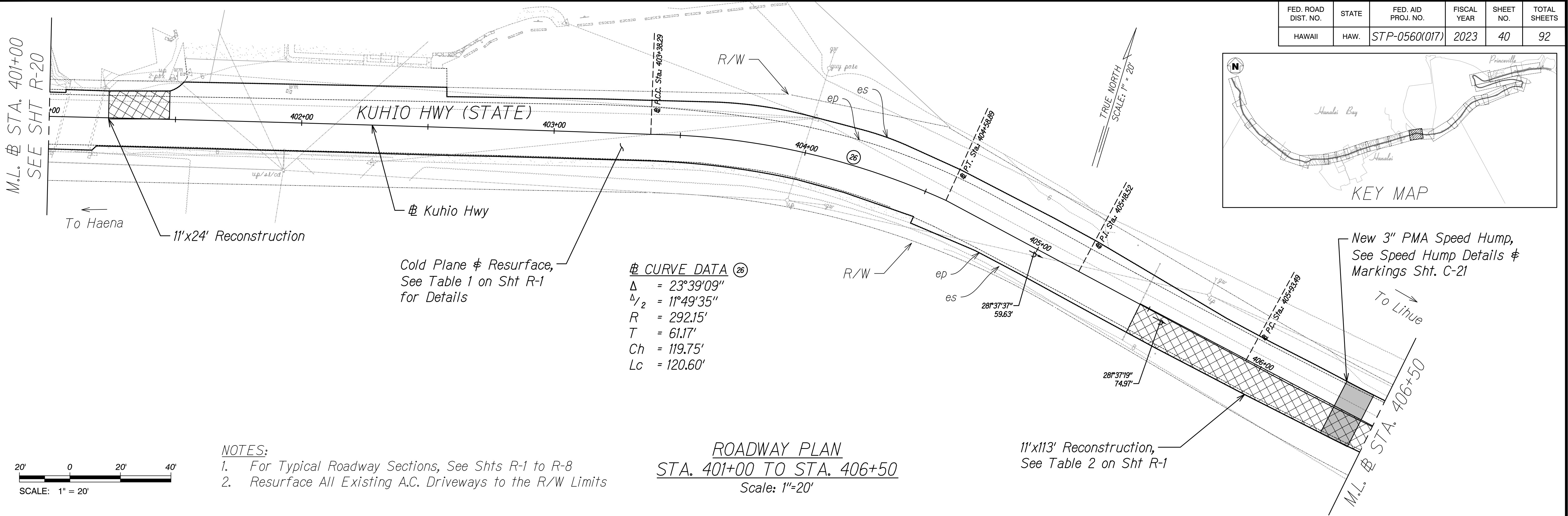
Scale: 1"=20' Date: July, 2023

10/12/23 - Added Reconstruction Callout

DATE	REVISION

SHEET No. R-20A OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	40	92



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

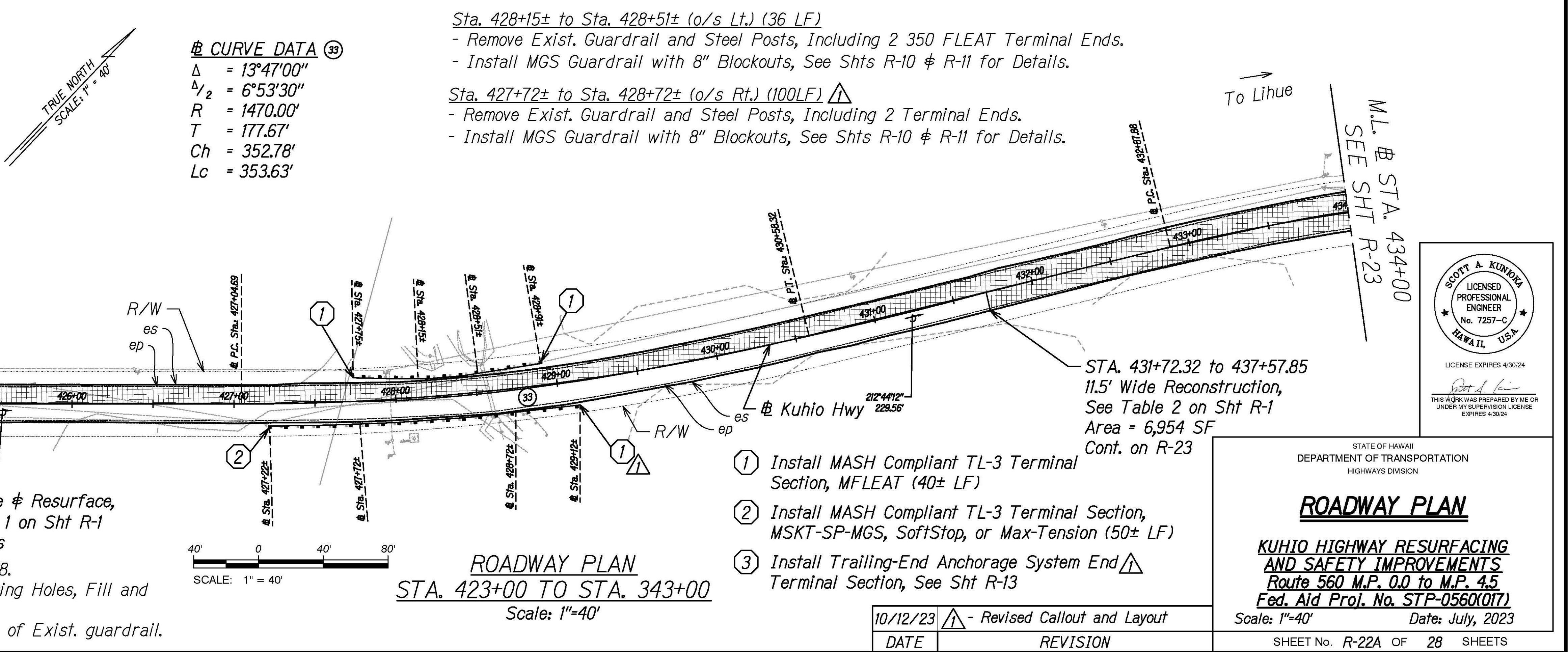
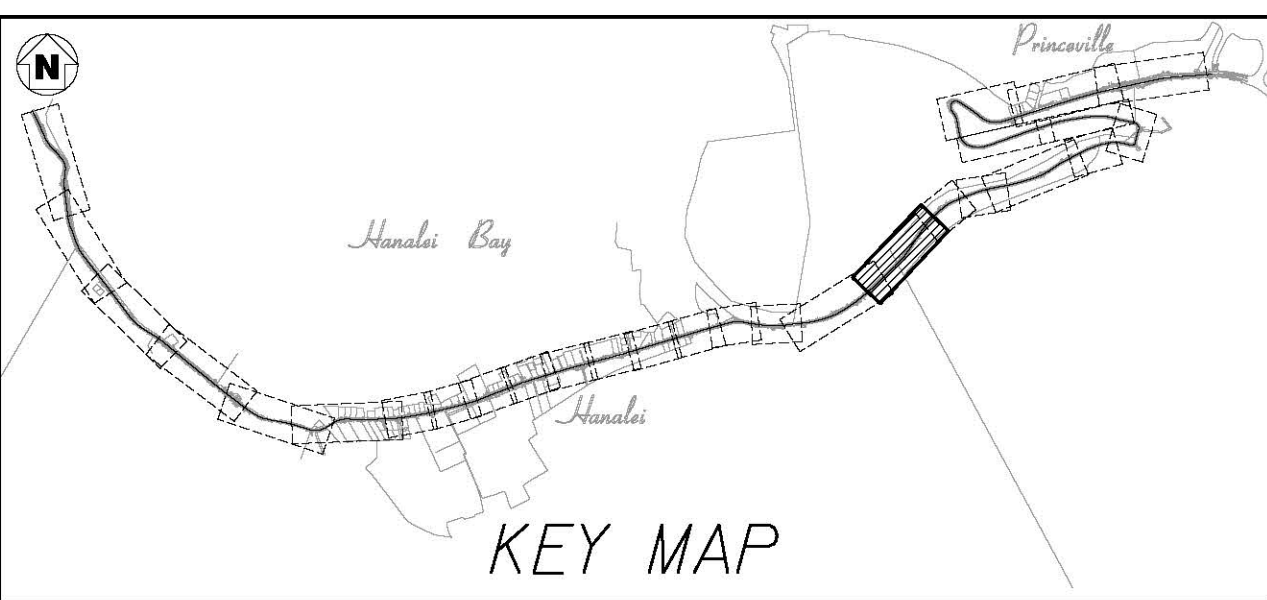
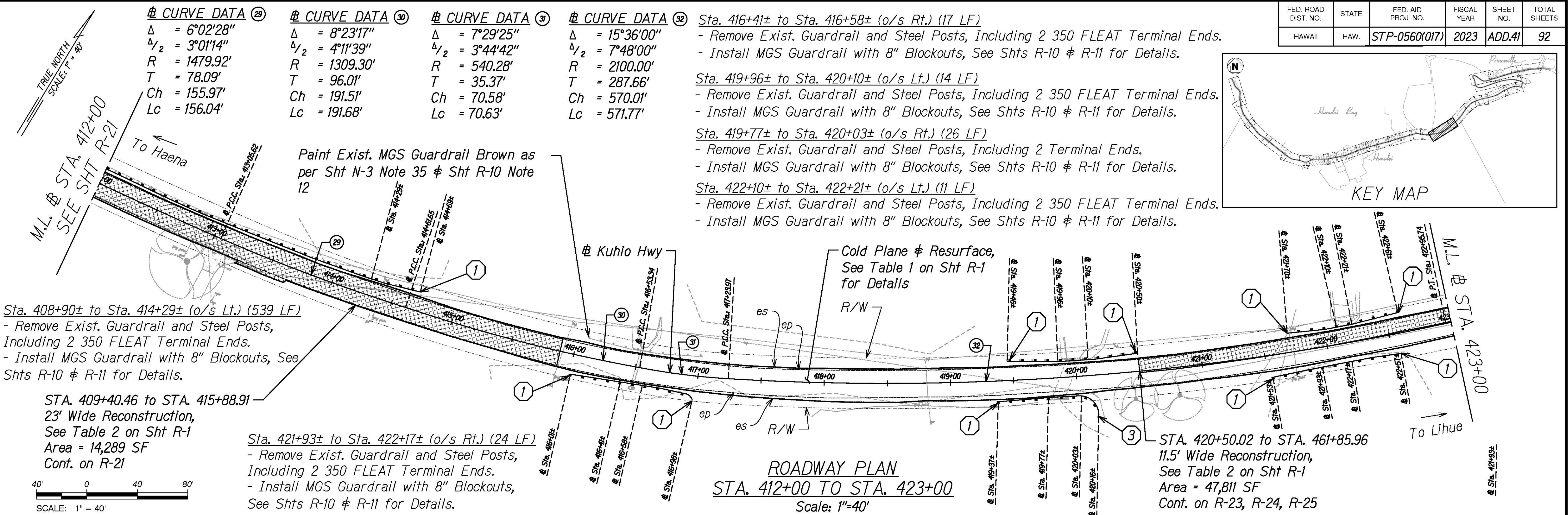
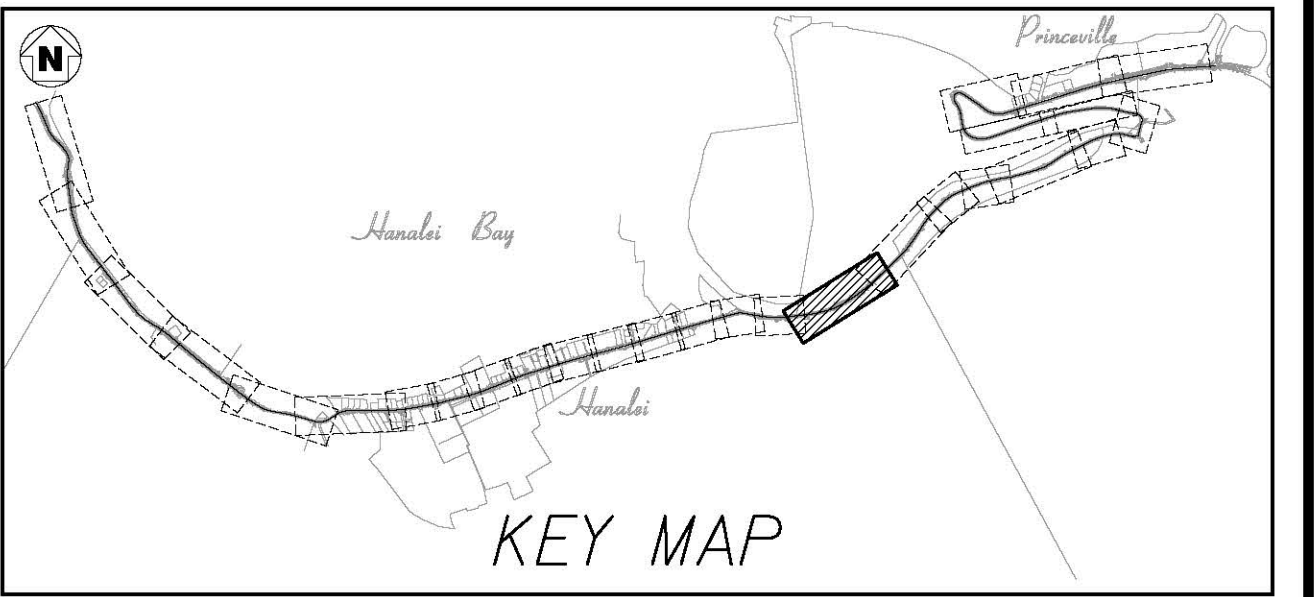
KUHIO HIGHWAY RESURFACING AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=20' Date: July, 2023

SHEET No. R-21 OF 28 SHEETS

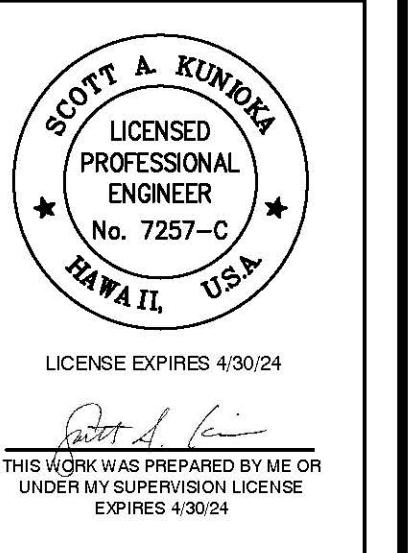
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	ADD.41	92



SURVEYED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

- NOTE:**
- For Typical Roadway Sections, See Shts R-1 to R-8.
 - Where New Guardrail Posts are Installed in Existing Holes, Fill and Compact Holes Prior to Installation.
 - New Guardrail to Follow Exist. Alignment/Location of Exist. guardrail.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

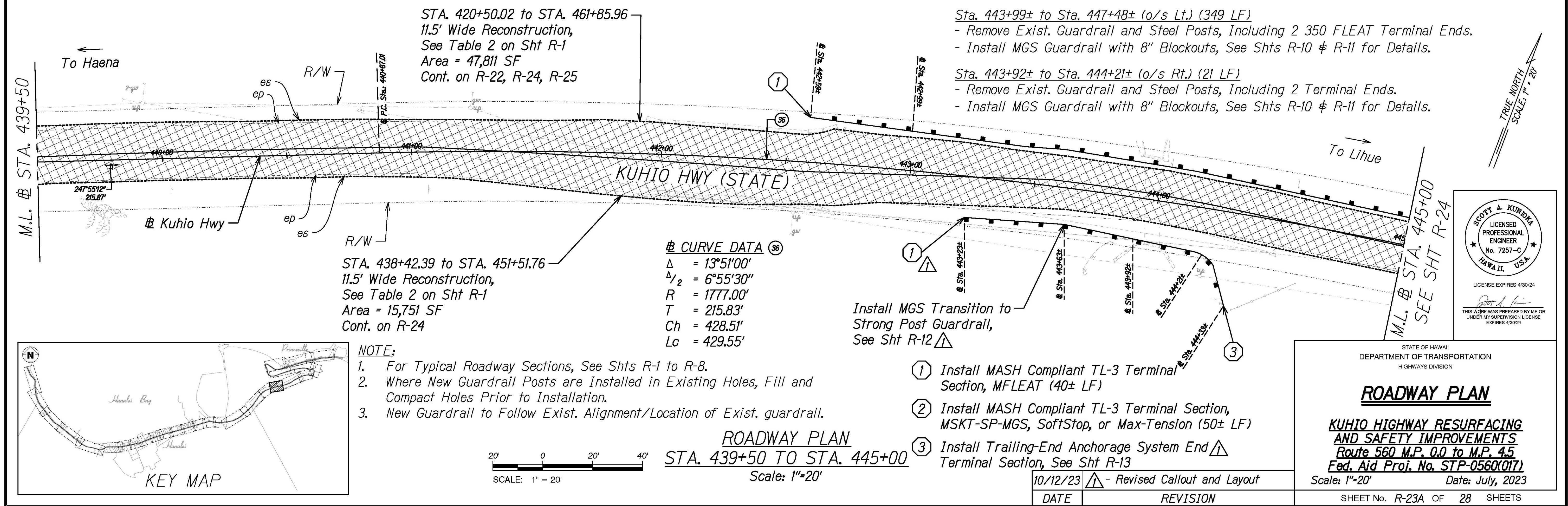
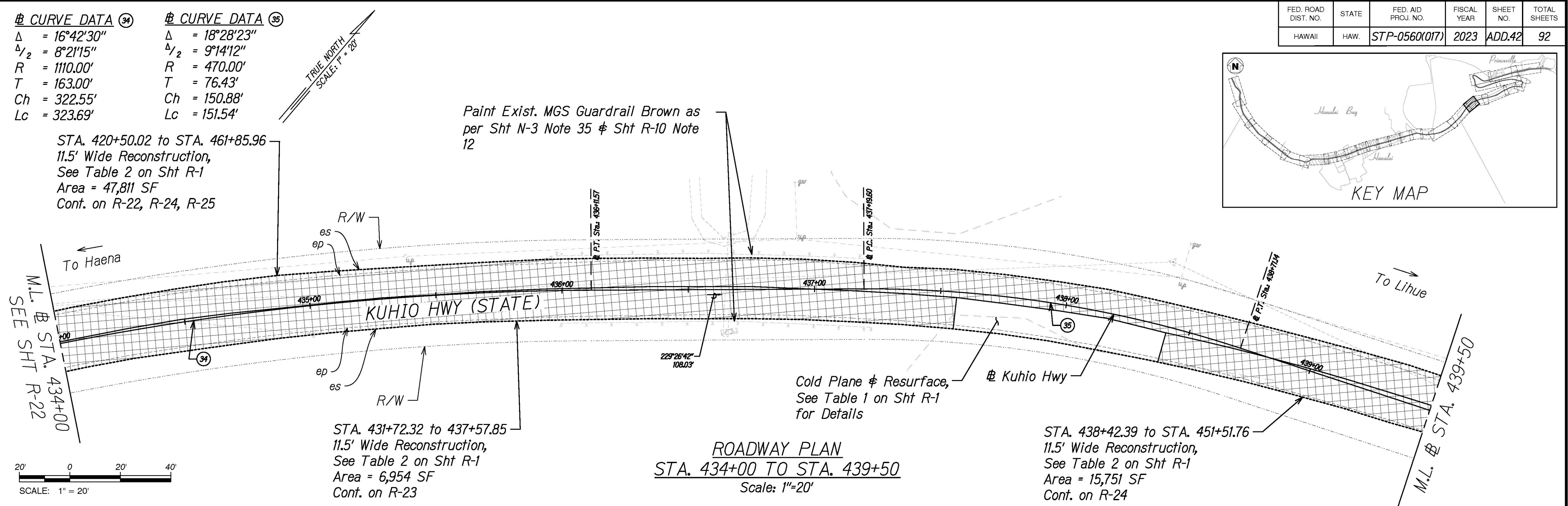
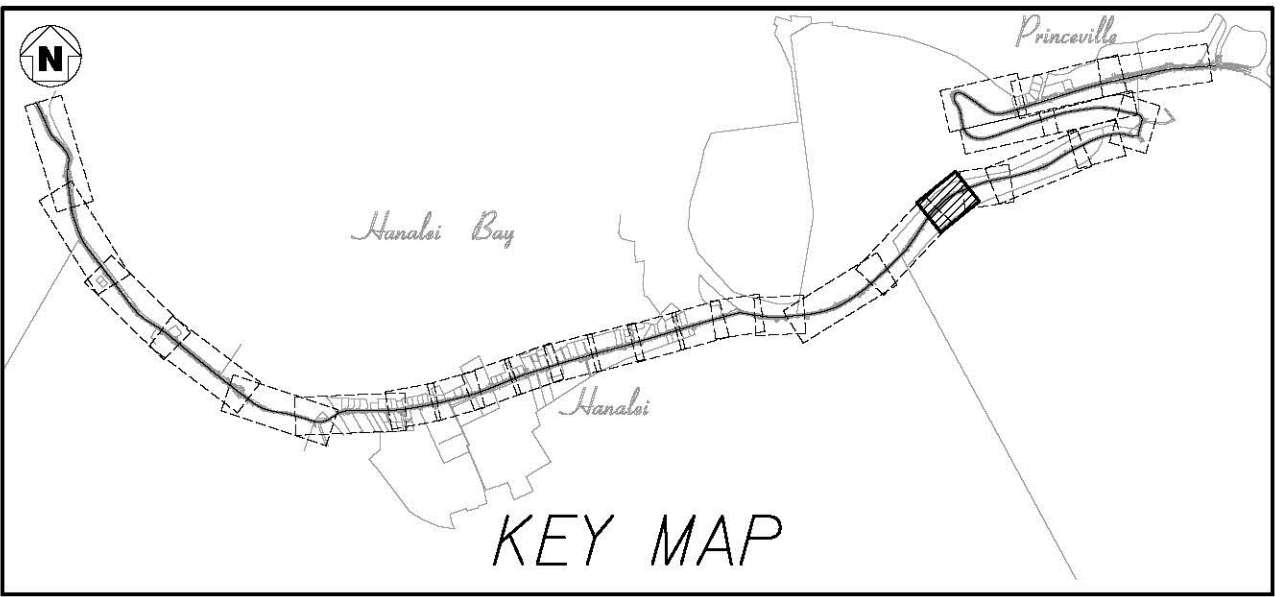
KUHIO HIGHWAY RESURFACING AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

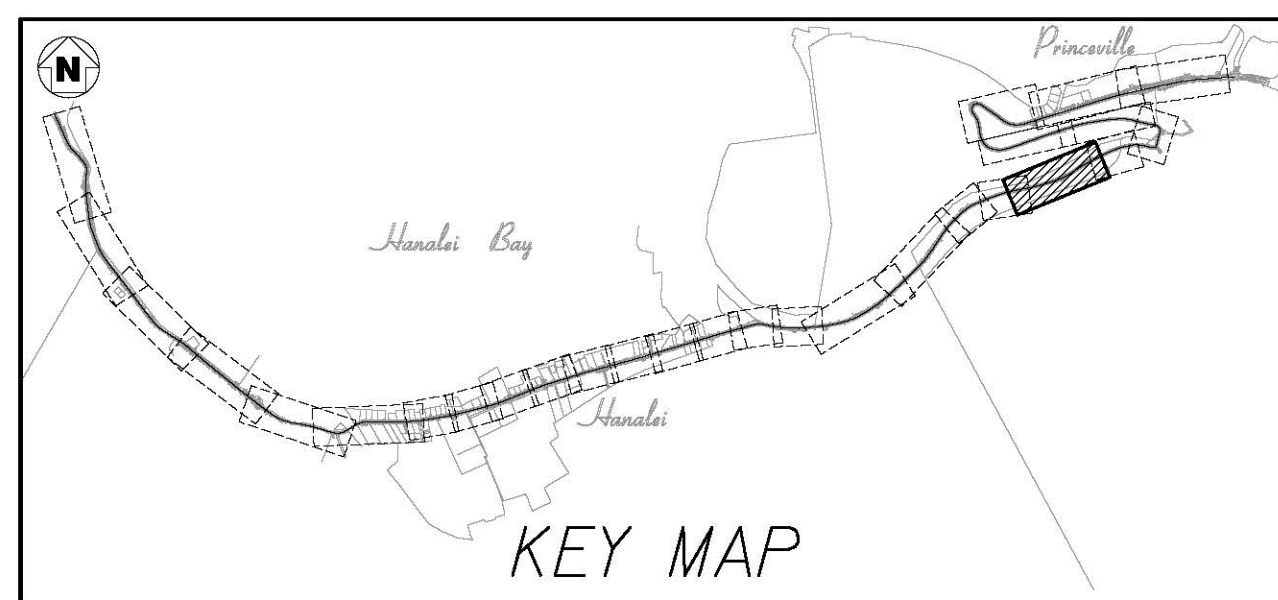
Scale: 1"=40' Date: July, 2023

SHEET No. R-22A OF 28 SHEETS

10/12/23	Δ - Revised Callout and Layout
DATE	REVISION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	ADD.42	92





CURVE DATA (37)
 $\Delta = 8^{\circ}01'00''$
 $\Delta/2 = 4^{\circ}00'30''$
 $R = 1600.00'$
 $T = 112.12'$
 $Ch = 223.68'$
 $Lc = 223.87'$

CURVE DATA (38)
 $\Delta = 17^{\circ}51'00''$
 $\Delta/2 = 8^{\circ}55'30''$
 $R = 657.00'$
 $T = 103.18'$
 $Ch = 203.86'$
 $Lc = 204.68'$

CURVE DATA (39)
 $\Delta = 7^{\circ}25'30''$
 $\Delta/2 = 3^{\circ}42'45''$
 $R = 850.00'$
 $T = 55.15'$
 $Ch = 110.08'$
 $Lc = 110.15'$

Sta. 443+99± to Sta. 447+48± (o/s Lt.) (349 LF)
- Remove Exist. Guardrail and Steel Posts, Including 2 350 FLEAT Terminal Ends.
- Install MGS Guardrail with 8" Blockouts, See Shts R-10 & R-11 for Details.

Sta. 450+35± to Sta. 451+17± (o/s Lt.) (82 LF)
- Remove Exist. Guardrail and Steel Posts, Including 350 FLEAT Terminal End.
- Install MGS Guardrail with 8" Blockouts, See Shts R-10 & R-11 for Details.

STA. 420+50.02 to STA. 461+85.96
11.5' Wide Reconstruction,
See Table 2 on Sht R-1
Area = 47,811 SF
Cont. on R-22, R-23, R-25

Sta. 453+95± to Sta. 454+12± (o/s Lt.) (17 LF)
- Remove Exist. Guardrail and Steel Posts,
Including 2 350 FLEAT Terminal Ends.
- Install MGS Guardrail with 8" Blockouts,
See Shts R-10 & R-11 for Details.

Sta. 451+17± o/s Lt. Connect New
Guardrail to Exist. MGS Guardrail.

Paint Exist. MGS Guardrail Brown as
per Sht N-3 Note 35 & Sht R-10 Note
12

TRUE NORTH
SCALE: 1" = 40'

M.L. # STA. 445+00
SEE SHT R-23

SCALE: 1" = 40'

ROADWAY PLAN
STA. 445+00 TO STA. 456+00
Scale: 1"=40'

Kuhio Hwy

Cold Plane & Resurface,
See Table 1 on Sht R-1
for Details

STA. 453+56.62 to STA. 455+50.69
11.5' Wide Reconstruction,
See Table 2 on Sht R-1
Area = 2,514 SF

STA. 438+42.39 to STA. 451+51.76
11.5' Wide Reconstruction,
See Table 2 on Sht R-1
Area = 15,751 SF
Cont. on R-23

Sta. 450+40± to Sta. 450+76± (o/s Rt.) (36 LF)
- Remove Exist. Guardrail and Steel Posts,
Including 350 FLEAT Terminal End.
- Install MGS Guardrail with 8" Blockouts,
See Shts R-10 & R-11 for Details.

Sta. 458+37± to Sta. 458+97± (o/s Lt.) (60 LF)
- Remove Exist. Guardrail and Steel Posts, Including 2 350 FLEAT Terminal Ends.
- Install MGS Guardrail with 8" Blockouts, See Shts R-10 & R-11 for Details.

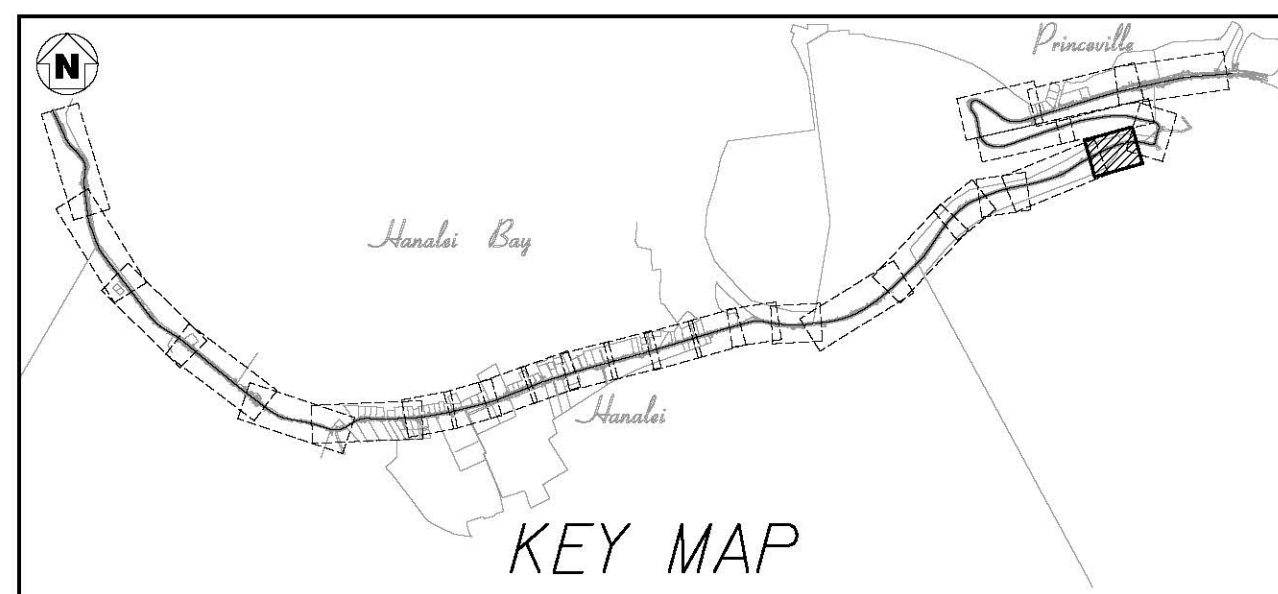
CURVE DATA (40)
 $\Delta = 19^{\circ}03'09''$
 $\Delta/2 = 9^{\circ}31'35''$
 $R = 945.27'$
 $T = 158.63'$
 $Ch = 312.88'$
 $Lc = 314.33'$

M.L. # STA. 456+00
To Haena

STA. 456+13.76 to STA. 459+36.83
11.5' Wide Reconstruction,
See Table 2 on Sht R-1
Area = 3,750 SF

NOTE:

1. For Typical Roadway Sections, See Shts R-1 to R-8.
2. Where New Guardrail Posts are Installed in Existing Holes, Fill and Compact Holes Prior to Installation.
3. New Guardrail to Follow Exist. Alignment/Location of Exist. guardrail.



SCALE: 1" = 20'

ROADWAY PLAN
STA. 456+00 TO STA. 461+00
Scale: 1"=20'

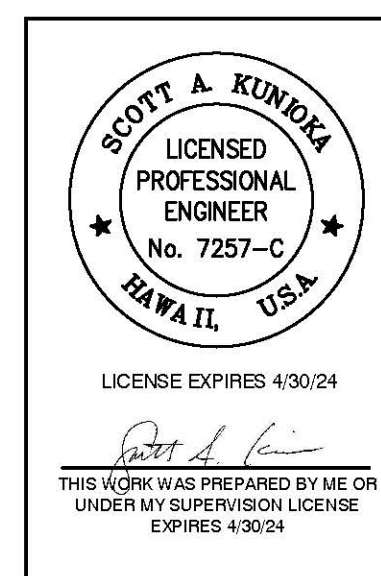
Cold Plane & Resurface,
See Table 1 on Sht R-1
for Details

1. Install MASH Compliant TL-3 Terminal Section, MFLEAT (40± LF)
2. Install MASH Compliant TL-3 Terminal Section, MSKT-SP-MGS, SoftStop, or Max-Tension (50± LF)
3. Install Trailing-End Anchorage System End Δ Terminal Section, See Sht R-13

10/12/23 Δ - Revised Callout
DATE REVISION

To Lihue

M.L. # STA. 461+00
SEE SHT R-25



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

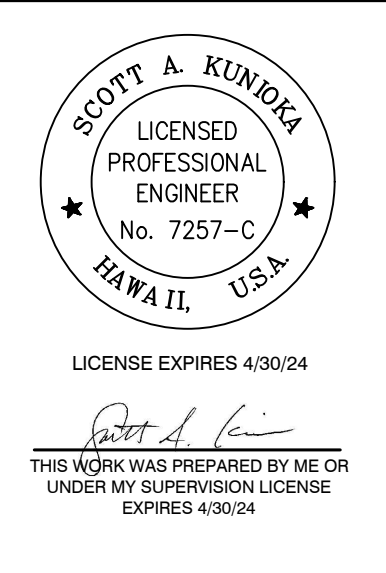
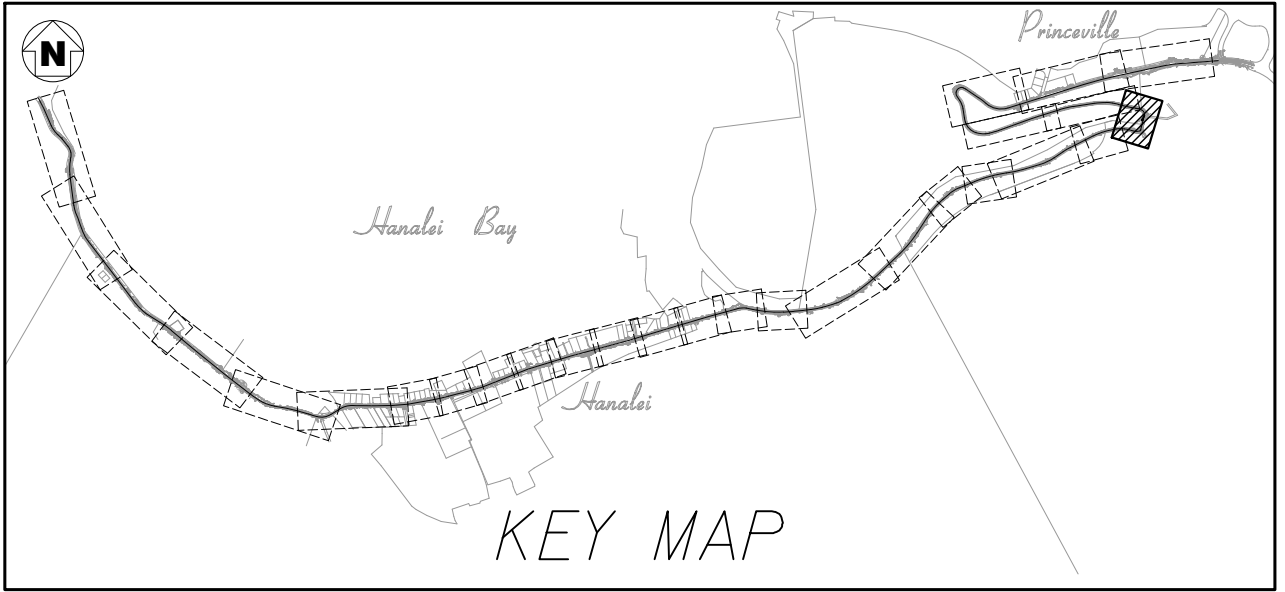
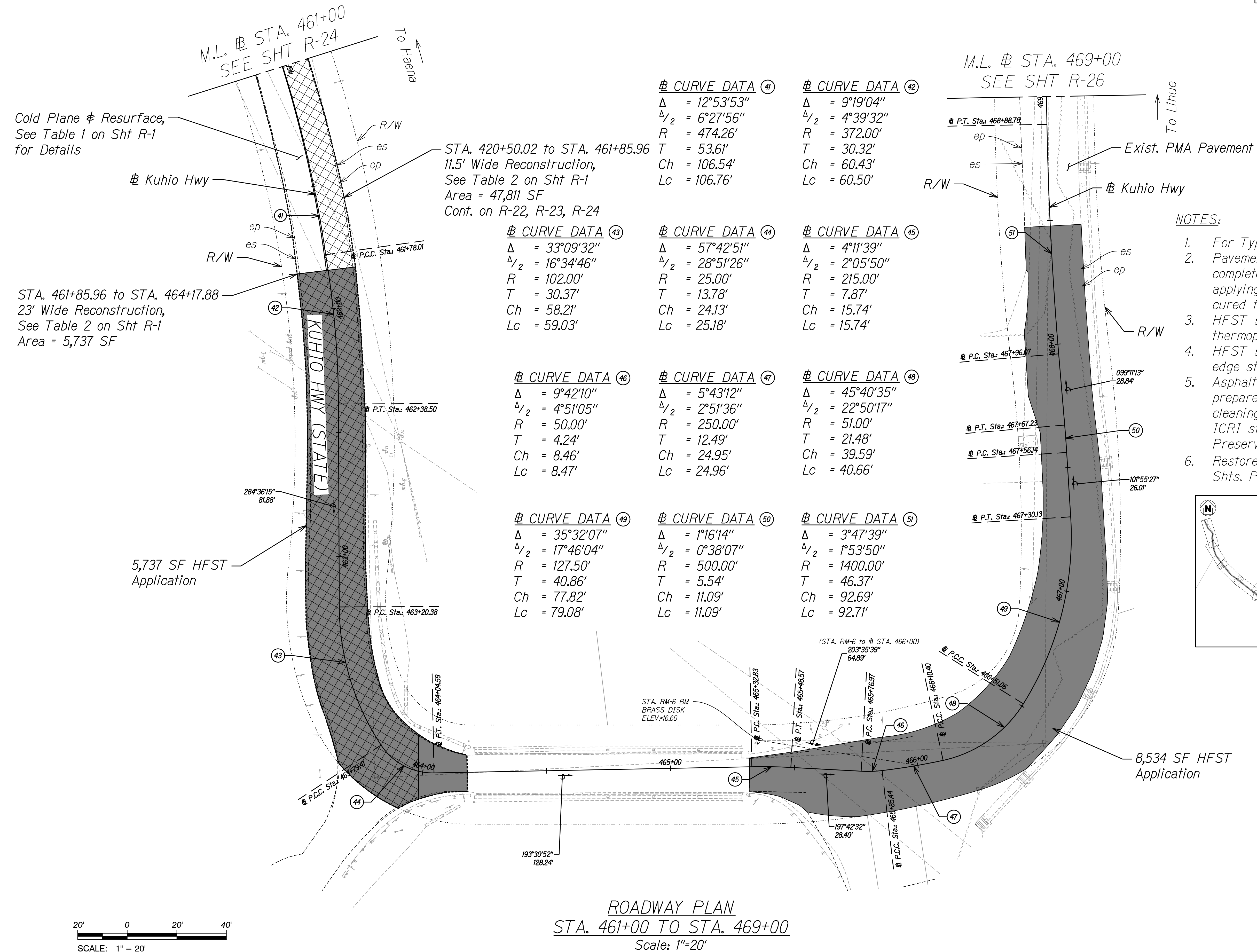
KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: As Noted Date: July, 2023

SHEET No. R-24A OF 28 SHEETS

ADD. 43

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	44	92



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

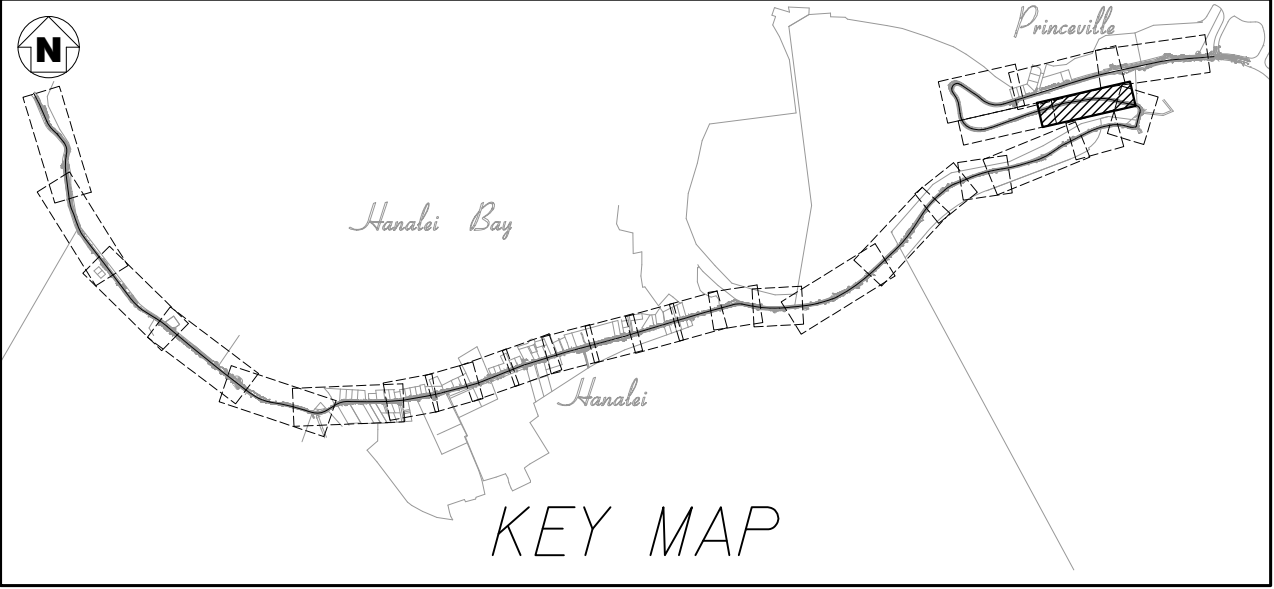
ROADWAY PLAN

**KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS**
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=20' Date: July, 2023

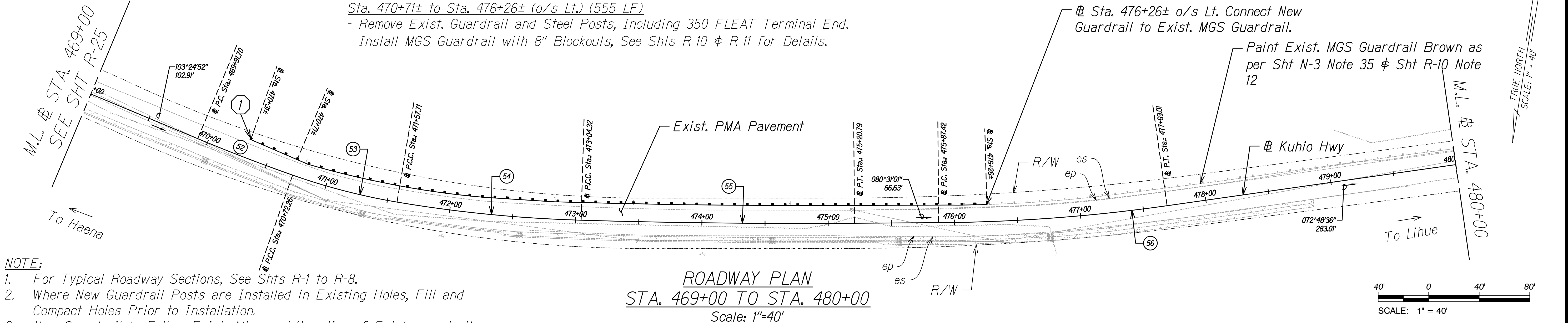
SHEET No. R-25 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	45	92

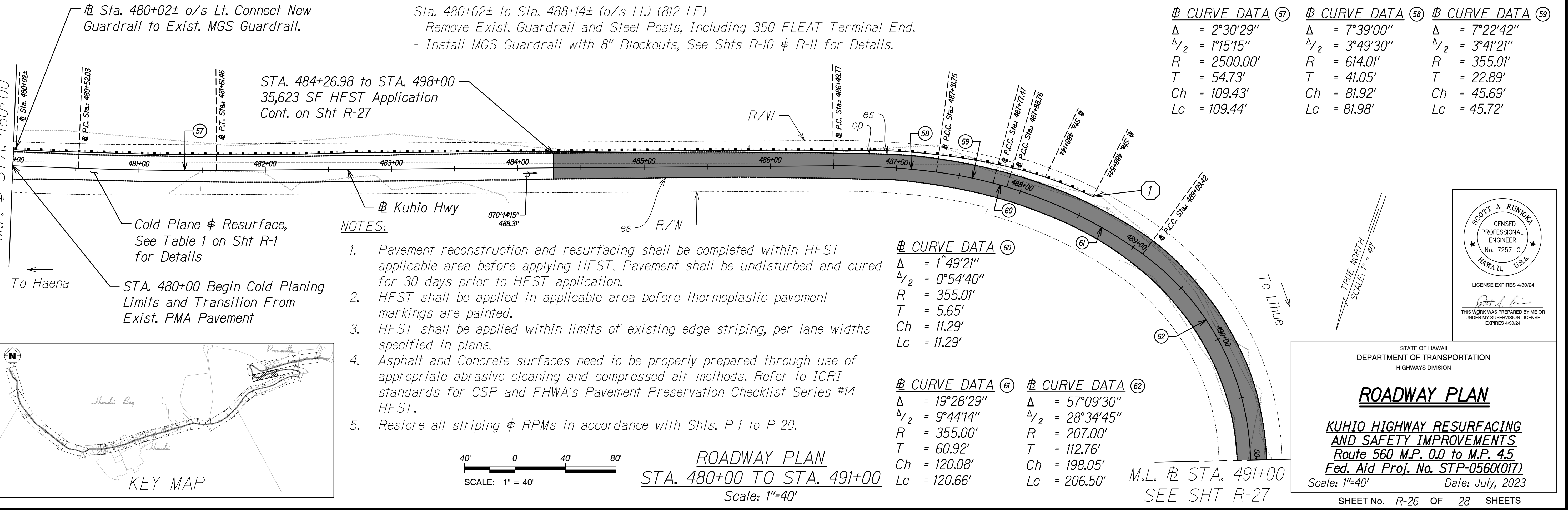


① Install MASH Compliant TL-3 Terminal Section, MFLEAT (40± LF)

②	③	④	⑤	⑥
② CURVE DATA	③ CURVE DATA	④ CURVE DATA	⑤ CURVE DATA	⑥ CURVE DATA
$\Delta = 3^{\circ}17'49''$	$\Delta = 9^{\circ}47'33''$	$\Delta = 7^{\circ}55'27''$	$\Delta = 2^{\circ}04'02''$	$\Delta = 7^{\circ}42'25''$
$\Delta/2 = 1^{\circ}38'55''$	$\Delta/2 = 4^{\circ}53'46''$	$\Delta/2 = 3^{\circ}57'44''$	$\Delta/2 = 1^{\circ}02'01''$	$\Delta/2 = 3^{\circ}51'12''$
$R = 1400.00'$	$R = 500.00'$	$R = 1060.00'$	$R = 6000.00'$	$R = 1350.00'$
$T = 40.29'$	$T = 42.83'$	$T = 73.42'$	$T = 108.25'$	$T = 90.93'$
$Ch = 80.55'$	$Ch = 85.35'$	$Ch = 146.49'$	$Ch = 216.47'$	$Ch = 181.45'$
$Lc = 80.56'$	$Lc = 85.45'$	$Lc = 146.60'$	$Lc = 216.48'$	$Lc = 181.59'$



- NOTE:
- For Typical Roadway Sections, See Shts R-1 to R-8.
 - Where New Guardrail Posts are Installed in Existing Holes, Fill and Compact Holes Prior to Installation.
 - New Guardrail to Follow Exist. Alignment/Location of Exist. guardrail.

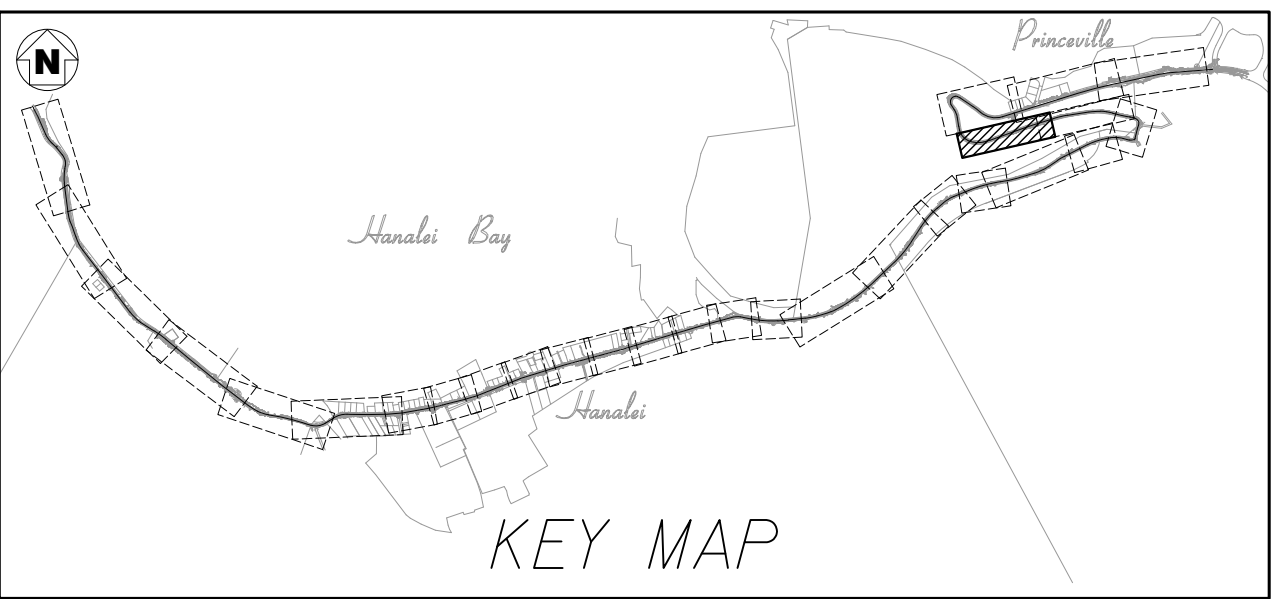


Sta. 480+02± to Sta. 488+14± (o/s Lt.) (812 LF)
- Remove Exist. Guardrail and Steel Posts, Including 350 FLEAT Terminal End.
- Install MGS Guardrail with 8" Blockouts, See Shts R-10 & R-11 for Details.

⑦	⑧	⑨
⑦ CURVE DATA	⑧ CURVE DATA	⑨ CURVE DATA
$\Delta = 2^{\circ}30'29''$	$\Delta = 7^{\circ}39'00''$	$\Delta = 7^{\circ}22'42''$
$\Delta/2 = 1^{\circ}15'15''$	$\Delta/2 = 3^{\circ}49'30''$	$\Delta/2 = 3^{\circ}41'21''$
$R = 2500.00'$	$R = 614.01'$	$R = 355.01'$
$T = 54.73'$	$T = 41.05'$	$T = 22.89'$
$Ch = 109.43'$	$Ch = 81.92'$	$Ch = 45.69'$
$Lc = 109.44'$	$Lc = 81.98'$	$Lc = 45.72'$

- NOTES:
- Pavement reconstruction and resurfacing shall be completed within HFST applicable area before applying HFST. Pavement shall be undisturbed and cured for 30 days prior to HFST application.
 - HFST shall be applied in applicable area before thermoplastic pavement markings are painted.
 - HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
 - Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
 - Restore all striping & RPMs in accordance with Shts. P-1 to P-20.

⑩	⑪
⑩ CURVE DATA	⑪ CURVE DATA
$\Delta = 1^{\circ}49'21''$	$\Delta = 57^{\circ}09'30''$
$\Delta/2 = 0^{\circ}54'40''$	$\Delta/2 = 28^{\circ}34'45''$
$R = 355.01'$	$R = 207.00'$
$T = 5.65'$	$T = 112.76'$
$Ch = 11.29'$	$Ch = 198.05'$
$Lc = 11.29'$	$Lc = 206.50'$



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KUHIO HIGHWAY RESURFACING AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)

Scale: 1"=40' Date: July, 2023

SHEET No. R-26 OF 28 SHEETS

SCOTT A. KUNDA
LICENSED PROFESSIONAL ENGINEER
No. 7257-C
HAWAII, U.S.A.

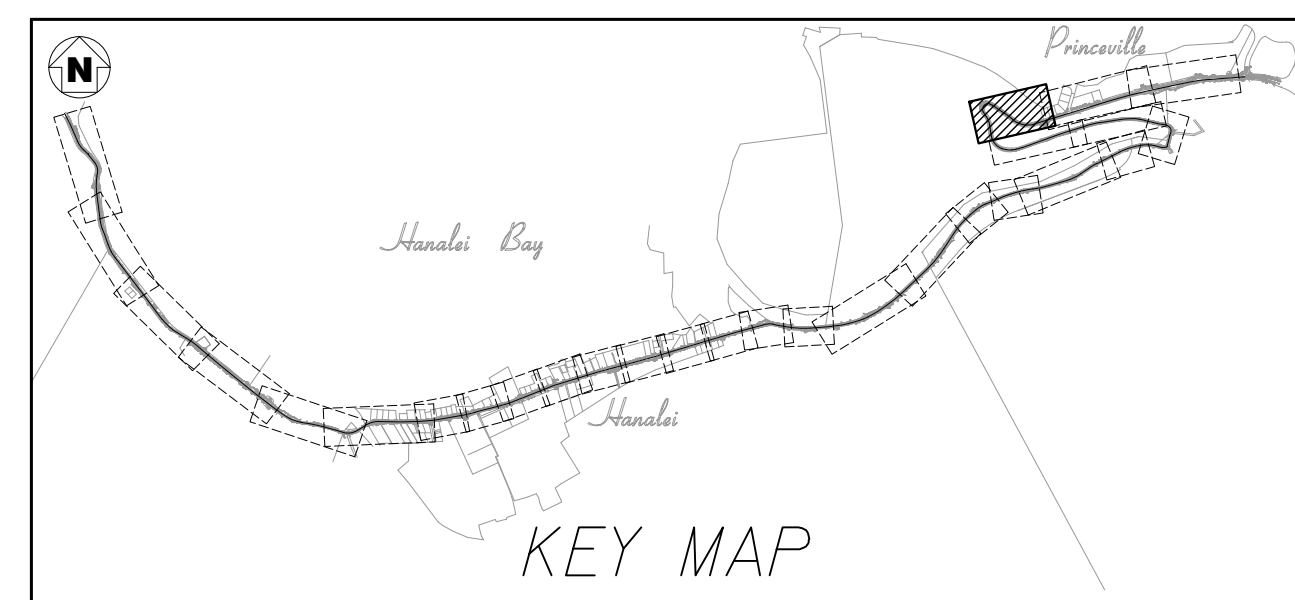
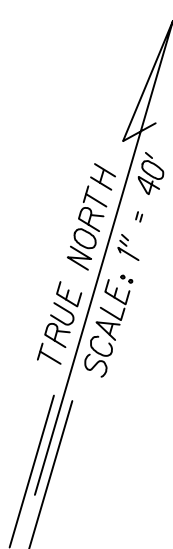
LICENSE EXPIRES 4/30/24

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION LICENSE EXPIRES 4/30/24

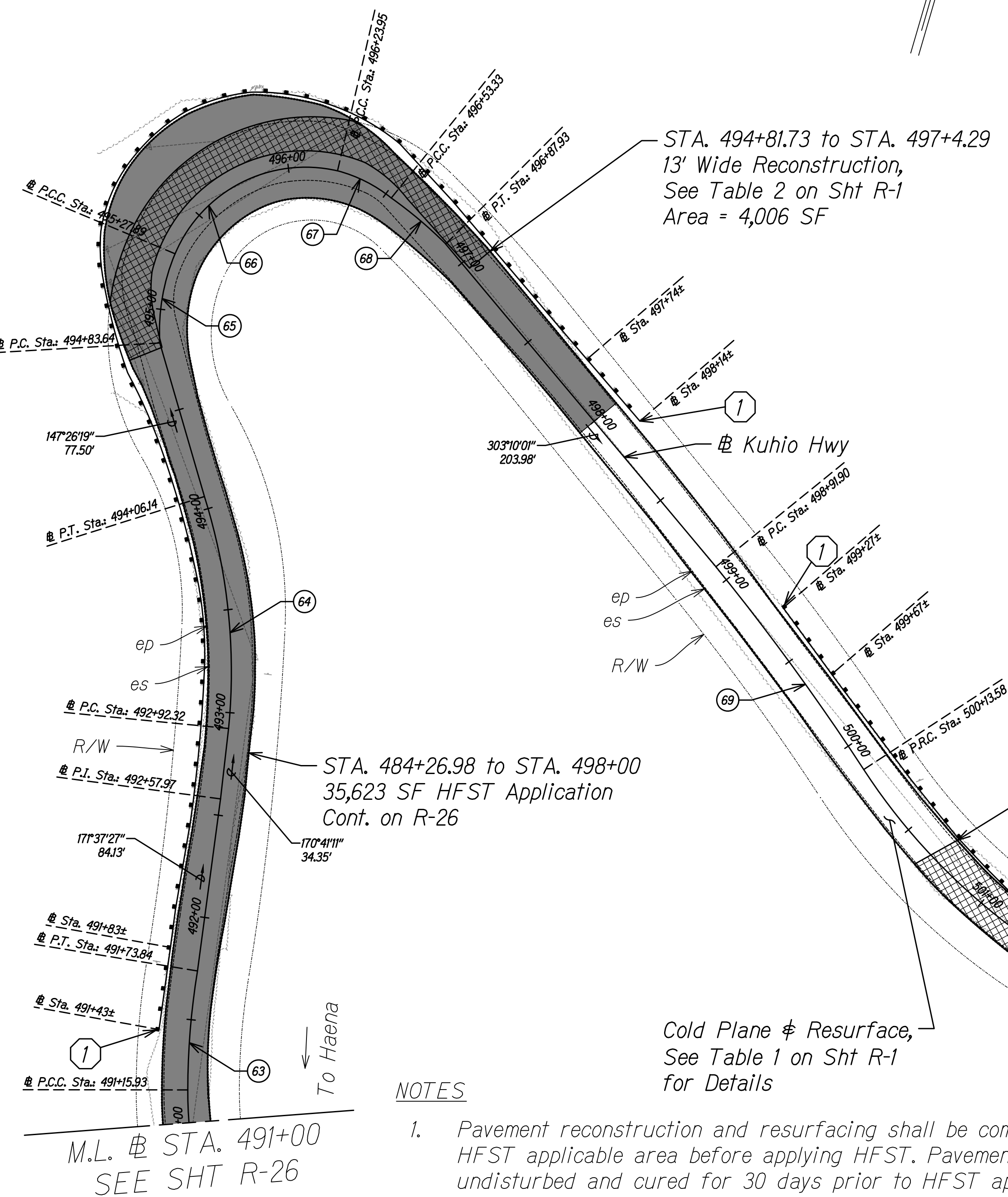
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

NOTE:

1. For Typical Roadway Sections, See Shts R-1 to R-8.
2. Where New Guardrail Posts are Installed in Existing Holes, Fill and Compact Holes Prior to Installation.
3. New Guardrail to Follow Exist. Alignment/Location of Exist. Guardrail.
4. Resurface All Existing A.C. Driveways to the R/W Limits.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	46	92



Ⓢ CURVE DATA Ⓢ
 Δ = 9°13'00"
 $\Delta/2$ = 4°36'30"
 R = 360.00'
 T = 29.02'
 Ch = 57.85'
 Lc = 57.91'

Ⓢ CURVE DATA Ⓢ
 Δ = 23°06'18"
 $\Delta/2$ = 11°33'09"
 R = 282.26'
 T = 57.70'
 Ch = 113.05'
 Lc = 113.82'

Ⓢ CURVE DATA Ⓢ
 Δ = 26°08'21"
 $\Delta/2$ = 13°04'11"
 R = 97.00'
 T = 22.52'
 Ch = 43.87'
 Lc = 44.25'

Ⓢ CURVE DATA Ⓢ
 Δ = 80°12'09"
 $\Delta/2$ = 40°06'04"
 R = 68.62'
 T = 57.79'
 Ch = 88.40'
 Lc = 96.05'

Ⓢ CURVE DATA Ⓢ
 Δ = 24°06'25"
 $\Delta/2$ = 12°03'13"
 R = 69.83'
 T = 14.91'
 Ch = 29.17'
 Lc = 29.38'

Ⓢ CURVE DATA Ⓢ
 Δ = 9°32'07"
 $\Delta/2$ = 4°46'03"
 R = 207.90'
 T = 17.34'
 Ch = 34.56'
 Lc = 34.60'

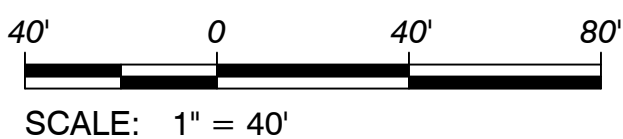
Ⓢ CURVE DATA Ⓢ
 Δ = 5°57'30"
 $\Delta/2$ = 2°58'45"
 R = 1170.00'
 T = 60.89'
 Ch = 121.62'
 Lc = 121.67'

Ⓢ CURVE DATA Ⓢ
 Δ = 57°51'34"
 $\Delta/2$ = 28°55'47"
 R = 300.25'
 T = 165.95'
 Ch = 290.48'
 Lc = 303.20'

Sta. 491+83± to Sta. 497+74± (o/s Lt.) (591 LF)
- Remove Exist. Guardrail and Steel Posts, Including 350 FLEAT Terminal End.
- Install MGS Guardrail with 8" Blockouts, See Shts R-10 & R-11 for Details.

Sta. 499+67± to Sta. 503+92± (o/s Lt.) (425 LF)
- Remove Exist. Guardrail and Steel Posts, Including 2 350 FLEAT Terminal Ends.
- Install MGS Guardrail with 8" Blockouts, See Shts R-10 & R-11 for Details.

STA. 506+00
End Cold Planing Limits and
Transition to Exist. PMA Pavement
See Sht. R-8



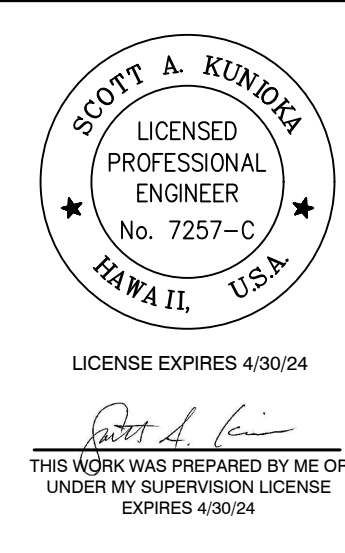
NOTES

1. Pavement reconstruction and resurfacing shall be completed within HFST applicable area before applying HFST. Pavement shall be undisturbed and cured for 30 days prior to HFST application.
2. HFST shall be applied in applicable area before thermoplastic pavement markings are painted.
3. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
4. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
5. Restore all striping & RPMs in accordance with Shts. P-1 to P-20.

ROADWAY PLAN
STA. 491+00 TO STA. 507+00
Scale: 1"=40'

① Install MASH Compliant TL-3 Terminal Section, MFLEAT (40± LF)

M.L. @ STA. 507+00
SEE SHT R-28
To Lihue



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

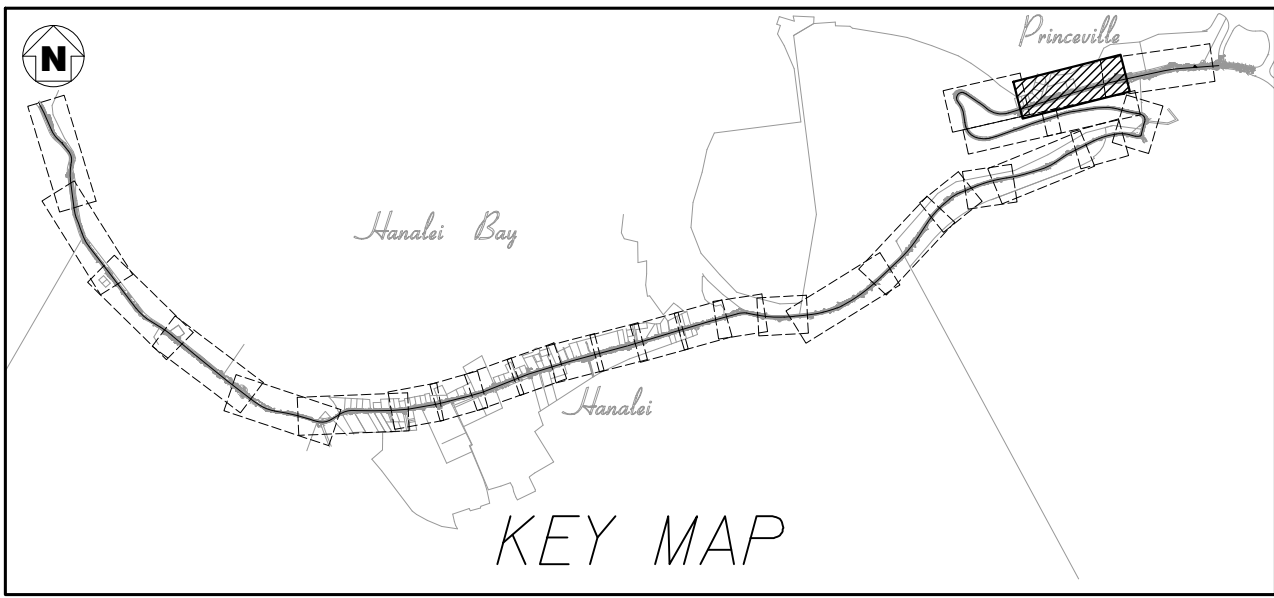
ROADWAY PLAN

**KUHIO HIGHWAY RESURFACING
AND SAFETY IMPROVEMENTS**
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)
Scale: 1"=40' Date: July, 2023

SHEET No. R-27 OF 28 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0560(017)	2023	47	92



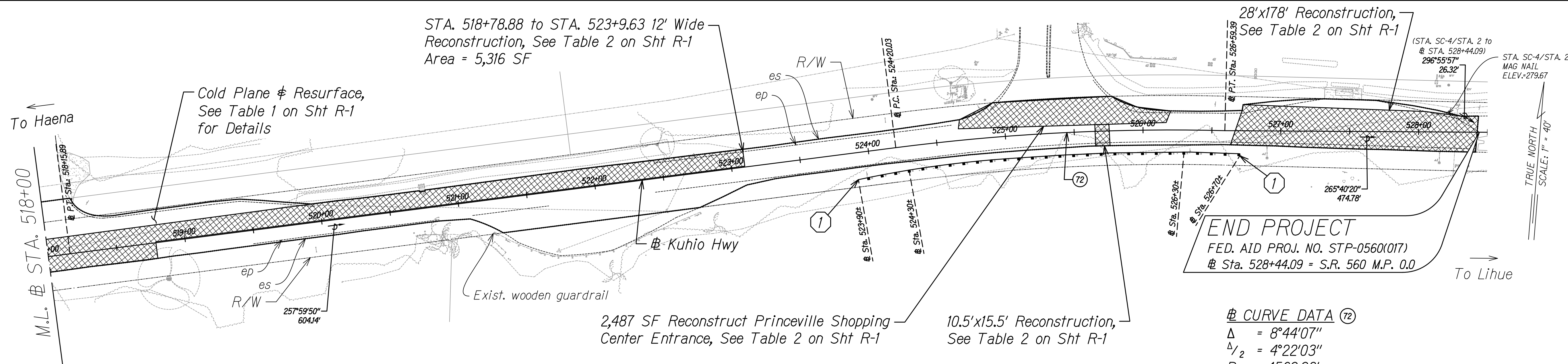
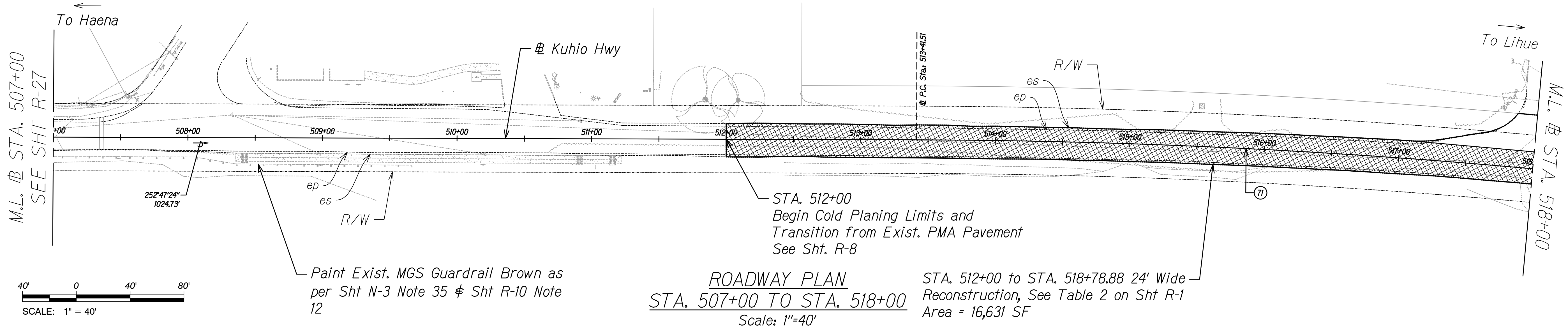
TRUE NORTH
SCALE: 1" = 40'

NOTE:

1. For Typical Roadway Sections, See Shts R-1 to R-8.
2. Where New Guardrail Posts are Installed in Existing Holes, Fill and Compact Holes Prior to Installation.
3. New Guardrail to Follow Exist. Alignment/Location of Exist. Guardrail.
4. Resurface All Existing A.C. Driveways to the R/W Limits.

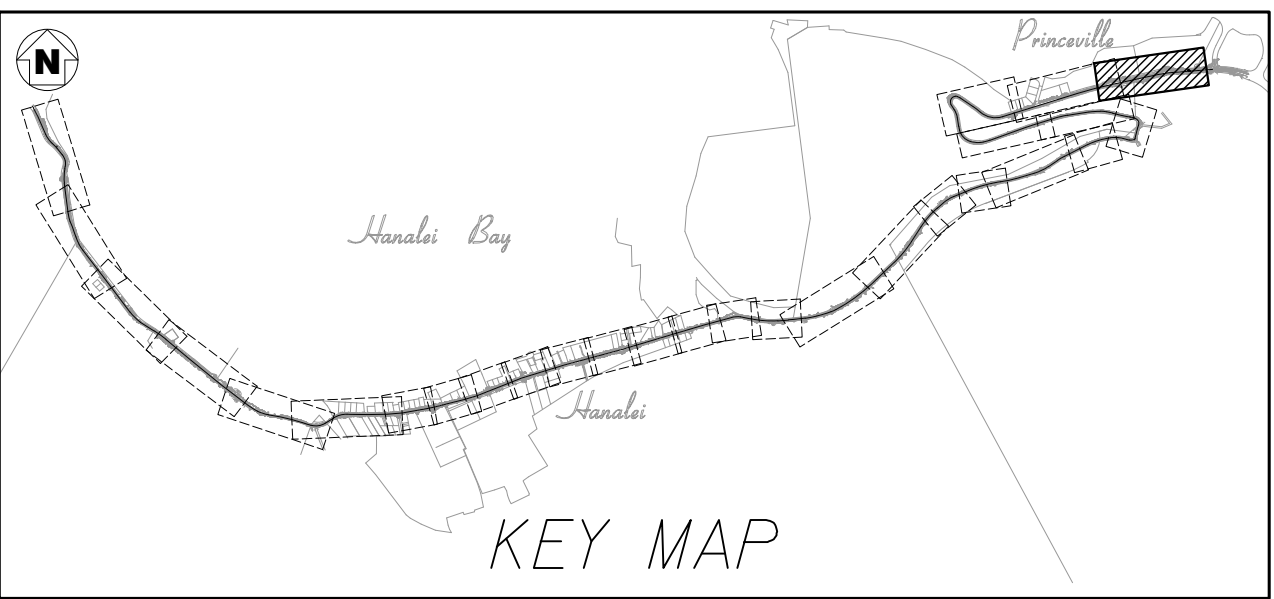
⑦ CURVE DATA ⑦

Δ = 5°12'43"
 $\Delta/2$ = 2°36'21"
 R = 5214.98'
 T = 237.35'
 Ch = 474.21'
 Lc = 474.37'



⑧ CURVE DATA ⑧

Δ = 8°44'07"
 $\Delta/2$ = 4°22'03"
 R = 1569.98'
 T = 119.91'
 Ch = 239.12'
 Lc = 239.36'



SCALE: 1" = 40'

ROADWAY PLAN
STA. 518+00 TO END
 Scale: 1"=40'

① Install MASH Compliant TL-3 Terminal Section, MFLEAT (40± LF)



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

KUHIO HIGHWAY RESURFACING AND SAFETY IMPROVEMENTS
Route 560 M.P. 0.0 to M.P. 4.5
Fed. Aid Proj. No. STP-0560(017)
 Scale: 1"=40' Date: July, 2023

SHEET No. R-28 OF 28 SHEETS