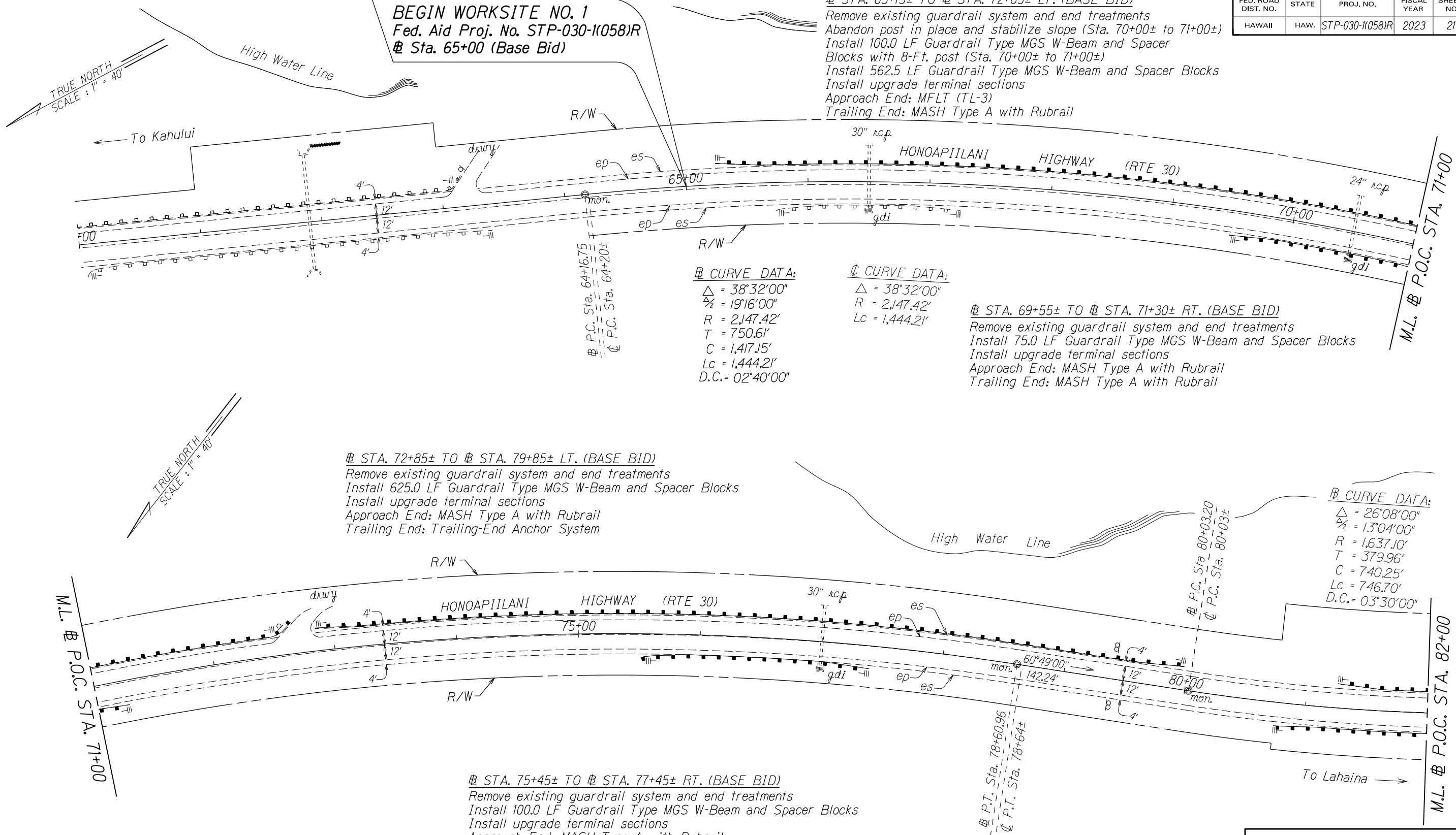


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	21	40



SURVEY PLOTTED BY	DATE
DRAWN BY	3/23
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN	NOTE BOOK
me/lay	me/lay
me/lay	me/lay

NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

HONOAPIILANI HIGHWAY

GUARDRAIL & SHOULDER IMPROVEMENTS

Vicinity of North Kihei Road to Hononana

Federal-Aid Project No. STP-030-1(058)R

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

SHEET No. 1 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	22	40

STA. 81+20± TO # STA. 83+55± LT. (BASE BID)
Remove existing guardrail system and end treatments
Abandon post in place and stabilize slope (Sta. 81+85± to 82+85±)
Install 100.0 LF Guardrail Type MGS W-Beam and Spacer Blocks with 8-Ft. post (Sta. 81+85± to 82+85±)
Install 37.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MASH Type A with Rubrail
Trailing End: MSKT-SP-MGS8(TL-3)

∠ CURVE DATA:
Δ = 25°53'21"
R = 1,594.17'
Lc = 720.33'

STA. 85+25± TO # STA. 93+25± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 712.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MFLT (TL-3)
Trailing End: MASH Type A with Rubrail

∠ CURVE DATA:
Δ = 67°26'00"
Δ/2 = 33°43'00"
R = 573.14'
T = 382.48'
C = 636.28'
Lc = 674.55'
D.C. = 10°00'00"

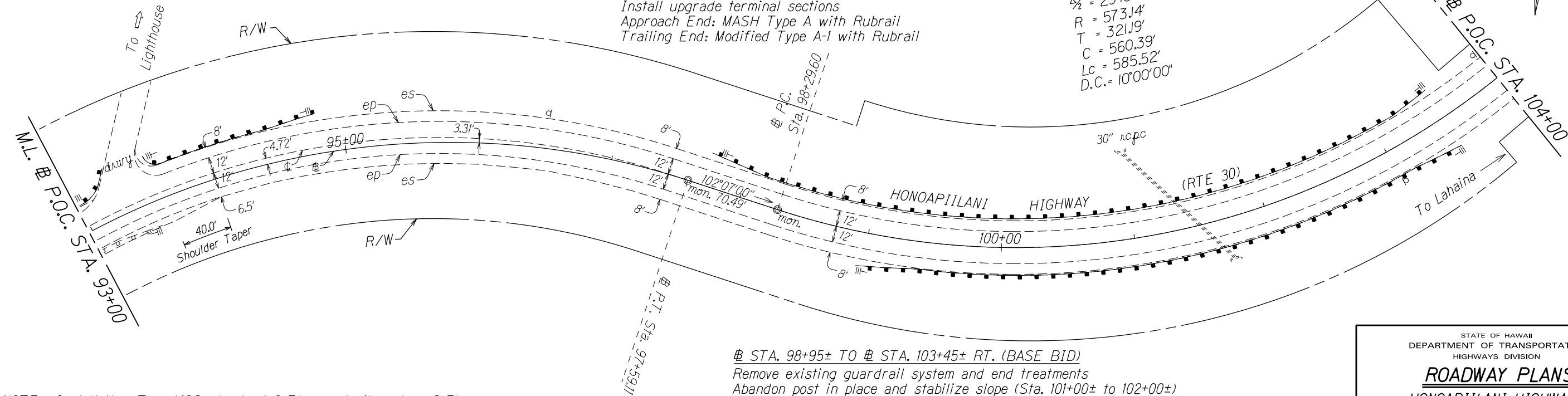
∠ CURVE DATA:
Δ = 58°32'00"
Δ/2 = 29°16'00"
R = 573.14'
T = 321.19'
C = 560.39'
Lc = 585.52'
D.C. = 10°00'00"

STA. 97+70± TO # STA. 103+45± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 475.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MASH Type A with Rubrail
Trailing End: Modified Type A-1 with Rubrail

STA. 98+95± TO # STA. 103+45± RT. (BASE BID)
Remove existing guardrail system and end treatments
Abandon post in place and stabilize slope (Sta. 101+00± to 102+00±)
Install 100.0 LF Guardrail Type MGS W-Beam and Spacer Blocks with 8-Ft. post (Sta. 101+00± to 102+00±)
Install 250.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: MASH Type A with Rubrail

STA. 80+75± TO # STA. 83+25± RT. (BASE BID)
Remove existing guardrail system and end treatments
Abandon post in place and stabilize slope (Sta. 82+10± to 82+60±)
Install 50.0 LF Guardrail Type MGS W-Beam and Spacer Blocks with 8-Ft. post (Sta. 82+10± to 82+60±)
Install 100.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MASH Type A with Rubrail
Trailing End: MASH Type A with Rubrail

STA. 93+60± TO # STA. 94+85± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 50.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Trailing-End Anchor System



NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

HONOAPIILANI HIGHWAY

GUARDRAIL & SHOULDER IMPROVEMENTS

Vicinity of North Kihei Road to Hononana

Federal-Aid Project No. STP-030-1(058)R

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

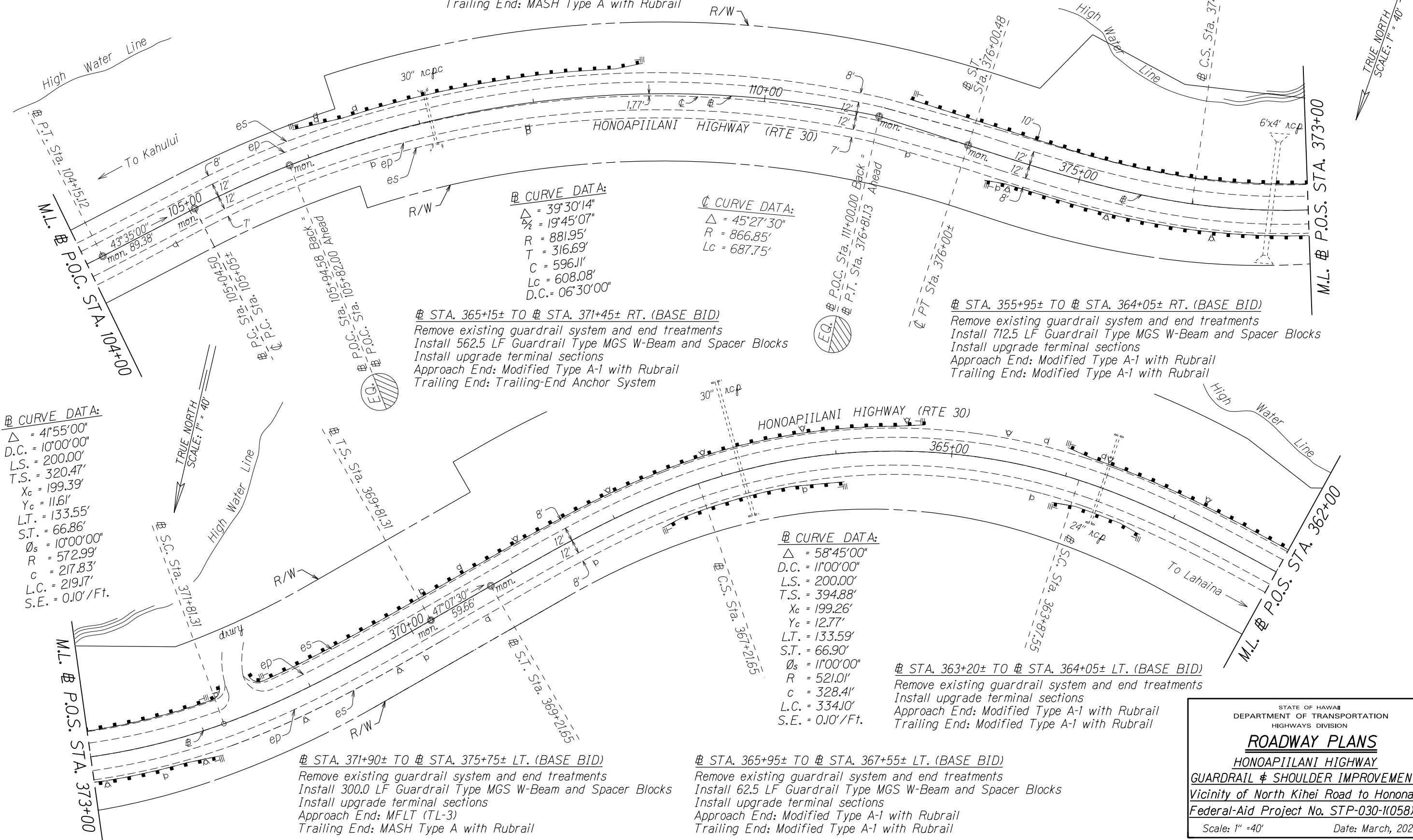
SHEET No. 2 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	23	40

NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

± STA. 105+95± TO ± STA. 108+95± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 200.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MASH Type A with Rubrail
Trailing End: MASH Type A with Rubrail

± STA. 371+75± TO ± STA. 376+65± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 400.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MFLT (TL-3)
Trailing End: MASH Type A with Rubrail



± CURVE DATA:
Δ = 41°55'00"
D.C. = 10°00'00"
L.S. = 200.00'
T.S. = 320.47'
Xc = 199.39'
Yc = 11.61'
L.T. = 133.55'
S.T. = 66.86'
Ds = 10°00'00"
R = 572.99'
C = 217.83'
L.C. = 219.17'
S.E. = 0.10'/Ft.

± CURVE DATA:
Δ = 39°30'14"
Ds = 19°45'07"
R = 881.95'
T = 316.69'
C = 596.11'
Lc = 608.08'
D.C. = 06°30'00"

± CURVE DATA:
Δ = 45°27'30"
R = 866.85'
Lc = 687.75'

± STA. 365+15± TO ± STA. 371+45± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 562.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Trailing-End Anchor System

± STA. 355+95± TO ± STA. 364+05± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 712.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

± CURVE DATA:
Δ = 58°45'00"
D.C. = 11°00'00"
L.S. = 200.00'
T.S. = 394.88'
Xc = 199.26'
Yc = 12.77'
L.T. = 133.59'
S.T. = 66.90'
Ds = 11°00'00"
R = 521.01'
C = 328.41'
L.C. = 334.10'
S.E. = 0.10'/Ft.

± STA. 363+20± TO ± STA. 364+05± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

± STA. 371+90± TO ± STA. 375+75± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 300.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MFLT (TL-3)
Trailing End: MASH Type A with Rubrail

± STA. 365+95± TO ± STA. 367+55± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 62.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

HONOAPIILANI HIGHWAY

GUARDRAIL & SHOULDER IMPROVEMENTS

Vicinity of North Kihei Road to Hononana

Federal-Aid Project No. STP-030-1(058)R

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

SHEET No. 3 OF 17 SHEETS

NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	24	40

STA. 346+00± TO # STA. 352+10± RT. (BASE BID)

Remove existing guardrail system and end treatments
Install 312.5 LF Strong Post Thrie-Beam Guardrail (Sta. 347+25± to 350+37.5±)
Transition Thrie-Beam Guardrail to Guardrail Type MGS (2 x 6.25 LF)
Install 200.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MFLT (TL-3)
Trailing End: Modified Type A-1 with Rubrail

CURVE DATA:

$\Delta = 26^{\circ}22'30''$
D.C. = 7'00'00"
L.S. = 200.00'
T.S. = 292.23'
 $X_c = 199.70'$
 $Y_c = 8.14'$
L.T. = 133.44'
S.T. = 66.76'

$\phi_s = 7^{\circ}00'13''$
R = 819.10'
C = 176.47'
L.C. = 176.81'
S.E. = 0.10' / Ft.

STA. 355+95± TO # STA. 360+05± LT. (BASE BID)

Remove existing guardrail system and end treatments
Install 312.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

CURVE DATA:

$\Delta = 10^{\circ}45'00''$ L.T. = 133.37'
D.C. = 4'00'00" S.T. = 66.69'
L.S. = 200.00' $\phi_s = 4^{\circ}00'00''$
T.S. = 234.87' R = 1,430.78'
 $X_c = 199.90'$ C = 68.76'
 $Y_c = 4.65'$ L.C. = 68.77'
S.E. = 0.06' / Ft.

CURVE DATA:

$\Delta = 60^{\circ}05'00''$
D.C. = 10'00'00"
L.S. = 200.00'
T.S. = 432.93'
 $X_c = 199.39'$
 $Y_c = 11.61'$
L.T. = 135.55'
S.T. = 64.89'
 $\phi_s = 10^{\circ}18'26''$
R = 581.51'
C = 392.71'
L.C. = 400.58'
S.E. = 0.10' / Ft.

STA. 347+50± TO # STA. 350+75± LT. (BASE BID)

Remove existing guardrail system between anchor blocks
Install 50.0 LF Strong Post Thrie-Beam Guardrail with 8' posts (Sta. 349+45± to 349+95±)
Install 275.0 LF Strong Post Thrie-Beam Guardrail
Install new terminal connectors (RTE01b)
Attach to existing anchor blocks
Repair anchor blocks as needed

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS
HONOAPIILANI HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Vicinity of North Kihei Road to Hononana
Federal-Aid Project No. STP-030-1(058)R

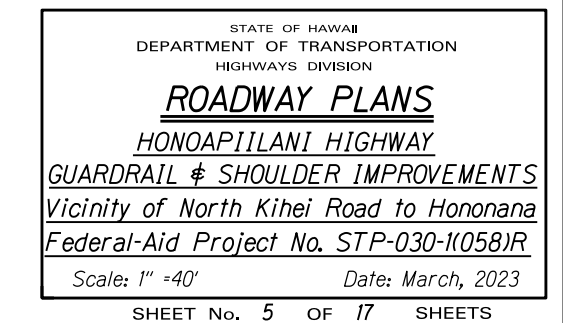
Scale: 1" = 40'

Date: March, 2023

SHEET No. 4 OF 17 SHEETS

DATE	3/23
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	LH
QUANTITIES BY	me/lay
CHECKED BY	me/lay
ORIGINAL PLAN	

NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

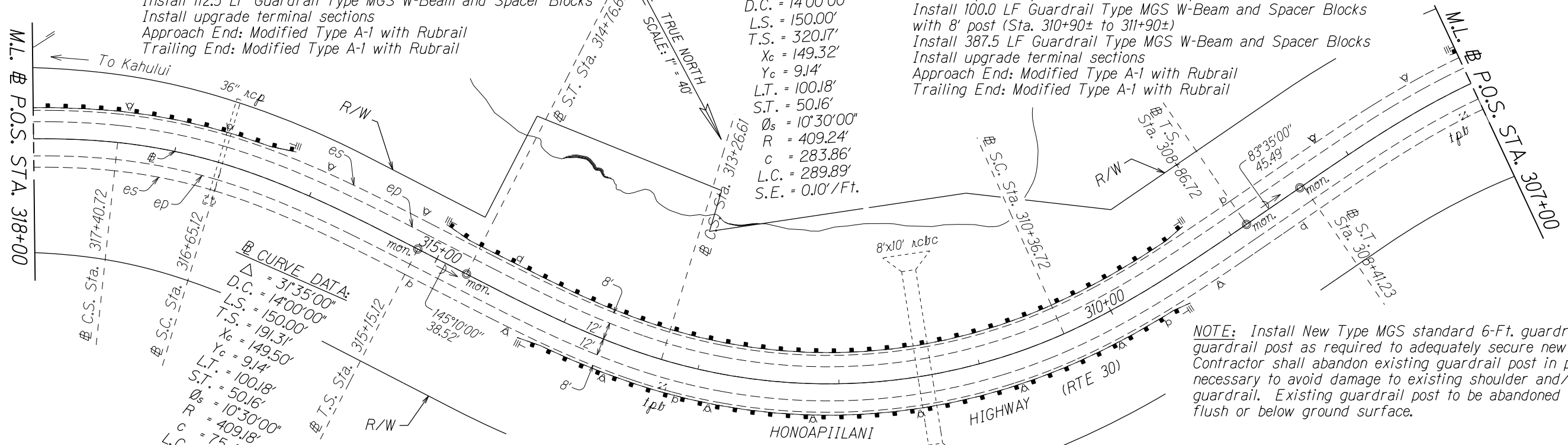


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	26	40

STA. 316+20± TO # STA. 318+30± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 112.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

CURVE DATA:
 $\Delta = 61^{\circ}35'00''$
D.C. = 14°00'00"
L.S. = 150.00'
T.S. = 320.17'
 $X_c = 149.32'$
 $Y_c = 9.14'$
L.T. = 100.18'
S.T. = 50.16'
 $\phi_s = 10^{\circ}30'00''$
R = 409.24'
C = 283.86'
L.C. = 289.89'
S.E. = 0.10'/Ft.

STA. 309+20± TO # STA. 315+05± RT. (BASE BID)
Remove existing guardrail system and end treatments
Abandon post in place and stabilize slope (Sta. 310+90± to 311+90±)
Install 100.0 LF Guardrail Type MGS W-Beam and Spacer Blocks with 8' post (Sta. 310+90± to 311+90±)
Install 387.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail



CURVE DATA:
 $\Delta = 31^{\circ}35'00''$
D.C. = 14°00'00"
L.S. = 150.00'
T.S. = 191.31'
 $X_c = 149.50'$
 $Y_c = 9.14'$
L.T. = 100.18'
S.T. = 50.16'
 $\phi_s = 10^{\circ}30'00''$
R = 409.18'
C = 75.49'
L.C. = 75.60'
S.E. = 0.10'/Ft.

STA. 309+45± TO # STA. 314+30± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 387.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

STA. 297+20± TO # STA. 300+30± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 212.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

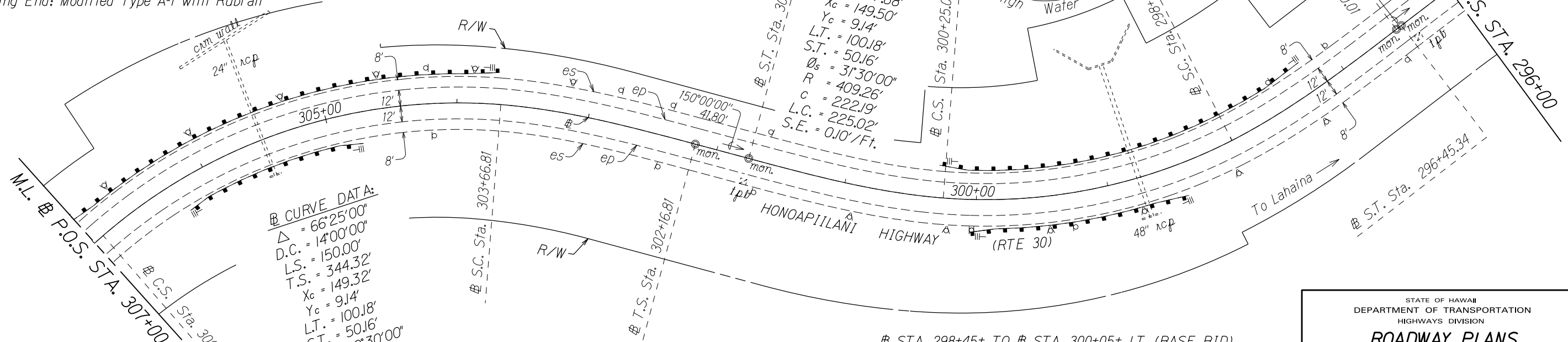
STA. 303+70± TO # STA. 307+05± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 237.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

CURVE DATA:
 $\Delta = 52^{\circ}30'00''$
D.C. = 14°00'00"
L.S. = 150.00'
T.S. = 277.88'
 $X_c = 149.50'$
 $Y_c = 9.14'$
L.T. = 100.18'
S.T. = 50.16'
 $\phi_s = 31^{\circ}30'00''$
R = 409.26'
C = 222.19'
L.C. = 225.02'
S.E. = 0.10'/Ft.

CURVE DATA:
 $\Delta = 66^{\circ}25'00''$
D.C. = 14°00'00"
L.S. = 150.00'
T.S. = 344.32'
 $X_c = 149.32'$
 $Y_c = 9.14'$
L.T. = 100.18'
S.T. = 50.16'
 $\phi_s = 10^{\circ}30'00''$
R = 409.26'
C = 313.99'
L.C. = 324.42'
S.E. = 0.10'/Ft.

STA. 304+75± TO # STA. 306+30± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 62.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

STA. 298+45± TO # STA. 300+05± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 62.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS
HONOAPIILANI HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Vicinity of North Kihei Road to Hononana
Federal-Aid Project No. STP-030-1(058)R

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

SHEET No. 6 OF 17 SHEETS

SURVEY PLOTTED BY	DATE
3/23	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
me/lay	
me/comp/dgn	

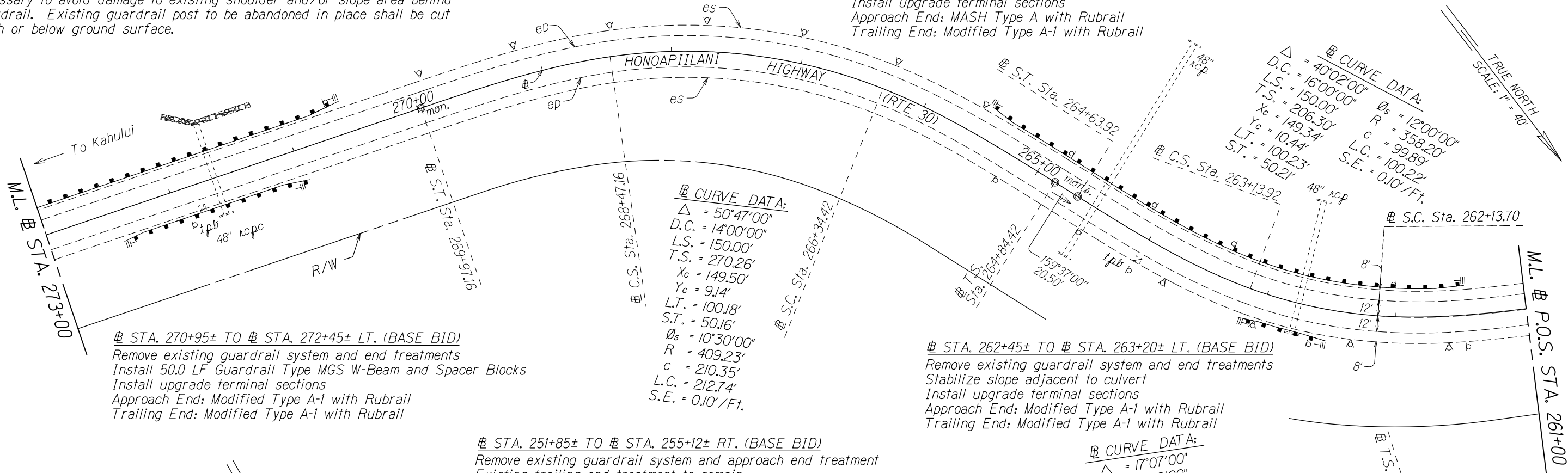
Technical drawing of a roadway plan showing guardrail and shoulder improvements. The drawing includes stationing from 284+00 to 285+00, a centerline (M.L.), and a right-of-way (R/W) line. Dimensions for shoulder width (8') and guardrail offset (12') are shown. A north arrow and scale (1" = 40') are provided. The drawing is titled "ROADWAY PLANS" and "HONOAPIILANI HIGHWAY".

27

NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

STA. 261+45± TO # STA. 265+55± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 312.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MASH Type A with Rubrail
Trailing End: Modified Type A-1 with Rubrail

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	28	40



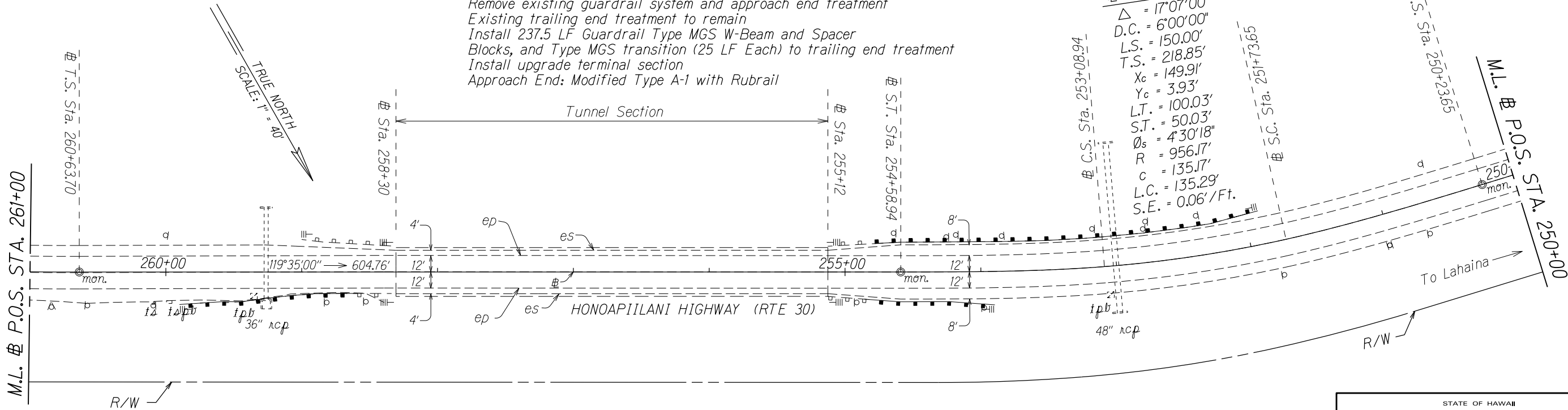
STA. 270+95± TO # STA. 272+45± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 50.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

CURVE DATA:
 $\Delta = 50^{\circ}47'00''$
D.C. = 14'00'00"
L.S. = 150.00'
T.S. = 270.26'
 $X_c = 149.50'$
 $Y_c = 9.14'$
L.T. = 100.18'
S.T. = 50.16'
 $\phi_s = 10^{\circ}30'00''$
 $R = 409.23'$
 $c = 210.35'$
L.C. = 212.74'
S.E. = 0.10'/Ft.

STA. 262+45± TO # STA. 263+20± LT. (BASE BID)
Remove existing guardrail system and end treatments
Stabilize slope adjacent to culvert
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

CURVE DATA:
 $\Delta = 17^{\circ}07'00''$
D.C. = 6'00'00"
L.S. = 150.00'
T.S. = 218.85'
 $X_c = 149.91'$
 $Y_c = 3.93'$
L.T. = 100.03'
S.T. = 50.03'
 $\phi_s = 4^{\circ}30'18''$
 $R = 956.17'$
 $c = 135.17'$
L.C. = 135.29'
S.E. = 0.06'/Ft.

STA. 251+85± TO # STA. 255+12± RT. (BASE BID)
Remove existing guardrail system and approach end treatment
Existing trailing end treatment to remain
Install 237.5 LF Guardrail Type MGS W-Beam and Spacer Blocks, and Type MGS transition (25 LF Each) to trailing end treatment
Install upgrade terminal section
Approach End: Modified Type A-1 with Rubrail



STA. 258+30± TO # STA. 259+90± LT. (BASE BID)
Remove existing guardrail system and approach end treatment
Existing trailing end treatment to remain
Install 75.0 LF Guardrail Type MGS W-Beam and Spacer Blocks, and Type MGS transition (25 LF Each) to trailing end treatment
Install upgrade terminal section
Approach End: Modified Type A-1 with Rubrail

STA. 253+95± TO # STA. 255+12± LT. (BASE BID)
Remove existing guardrail system and trailing end treatment
Existing approach end treatment to remain
Install 25.0 LF Guardrail Type MGS W-Beam and Spacer Blocks, and Type MGS transition (25 LF Each) to approach end treatment
Install upgrade terminal section
Trailing End: Modified Type A-1 with Rubrail

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

HONOAPIILANI HIGHWAY

GUARDRAIL & SHOULDER IMPROVEMENTS

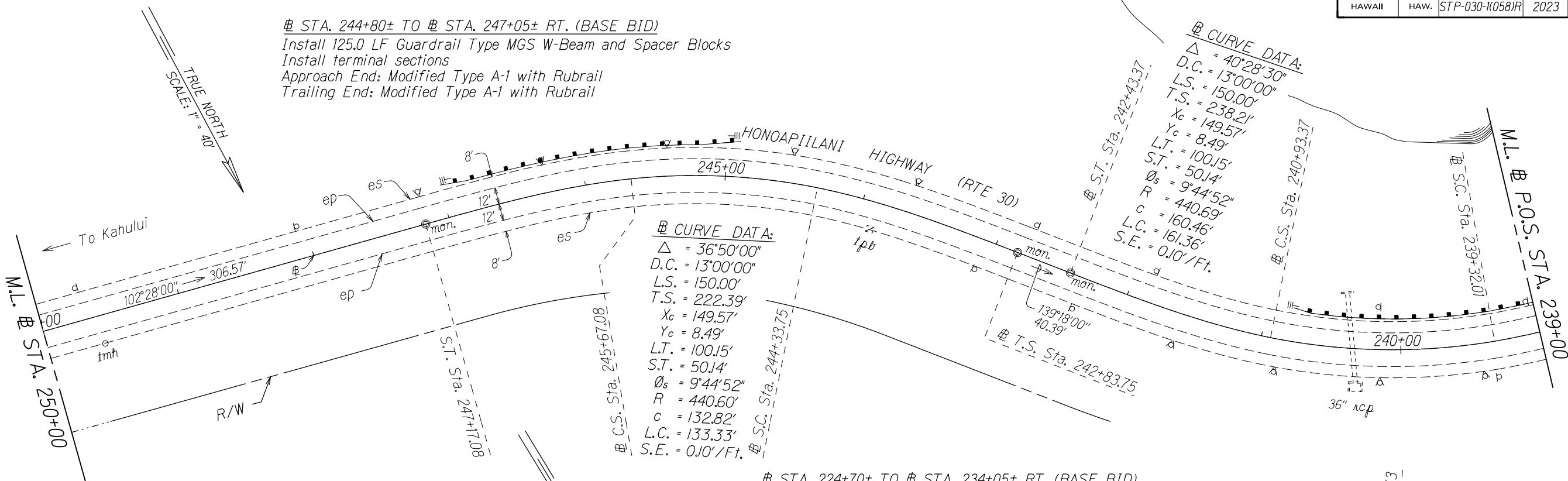
Vicinity of North Kihei Road to Hononana

Federal-Aid Project No. STP-030-1(058)R

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

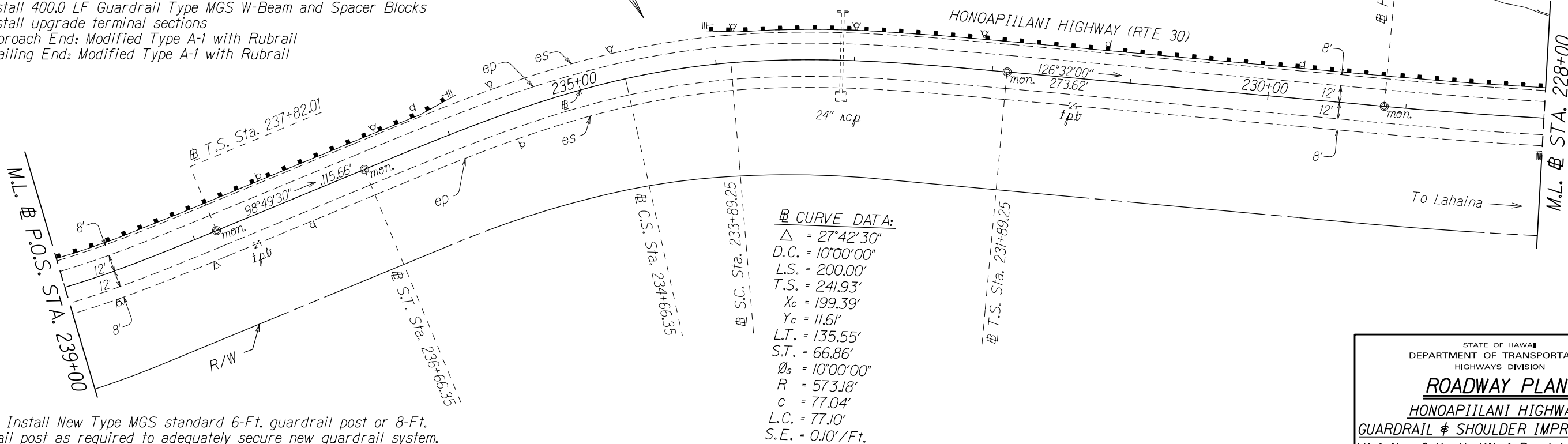
SHEET No. 8 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	29	40



⊞ STA. 235+85± TO ⊞ STA. 240+85± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 400.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: Modified Type A-1 with Rubrail
Trailing End: Modified Type A-1 with Rubrail

⊞ STA. 224+70± TO ⊞ STA. 234+05± RT. (BASE BID)
Remove existing guardrail system and end treatments
Install 837.5 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal section
Approach End: MSKT-SP-MGS8 (TL-3)
Trailing End: Modified Type A-1 with Rubrail



NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

HONOAPIILANI HIGHWAY

GUARDRAIL & SHOULDER IMPROVEMENTS

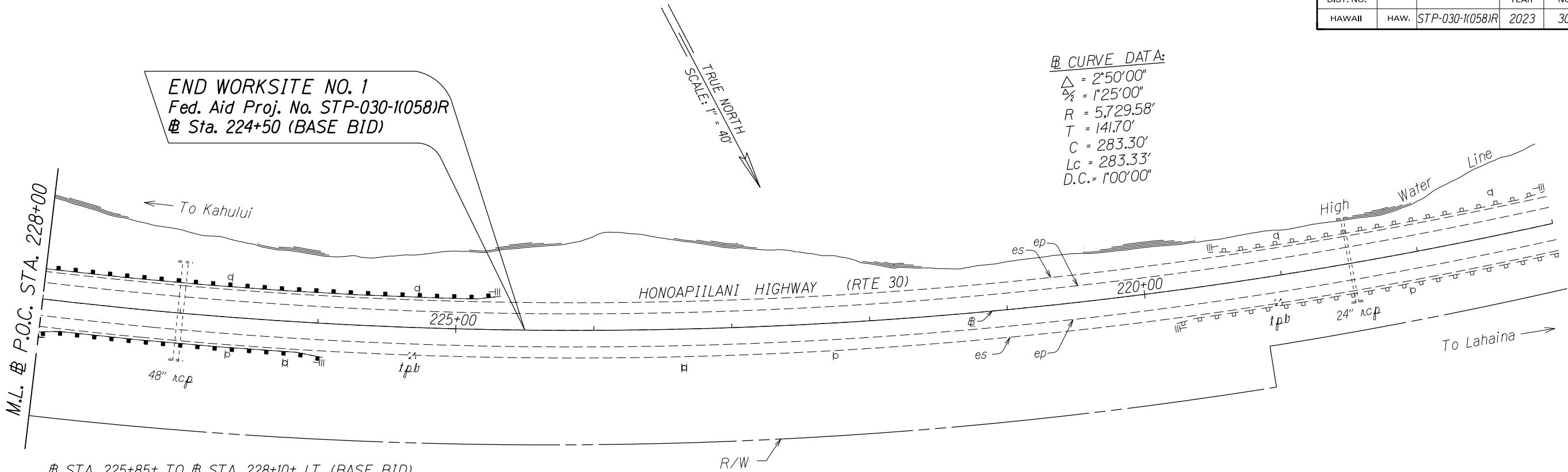
Vicinity of North Kihei Road to Hononana

Federal-Aid Project No. STP-030-1(058)R

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

SHEET No. 9 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-030-1(058)R	2023	30	40



STA. 225+85± TO # STA. 228+10± LT. (BASE BID)
Remove existing guardrail system and end treatments
Install 125.0 LF Guardrail Type MGS W-Beam and Spacer Blocks
Install upgrade terminal sections
Approach End: MSKT-SP-MGS8 (TL-3)
Trailing End: Modified Type A-1 with Rubrail

NOTE: Install New Type MGS standard 6-Ft. guardrail post or 8-Ft. guardrail post as required to adequately secure new guardrail system. Contractor shall abandon existing guardrail post in place as determined necessary to avoid damage to existing shoulder and/or slope area behind guardrail. Existing guardrail post to be abandoned in place shall be cut flush or below ground surface.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

HONOAPIILANI HIGHWAY

GUARDRAIL & SHOULDER IMPROVEMENTS

Vicinity of North Kihei Road to Hononana

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

SHEET No. 10 OF 17 SHEETS