GUARDRAIL WORK ITEMS - KAUMUALII HIGHWAY, ROUTE 50

M.P.	0/5	END	DEMOLITION	QTY
	,	,	Remove SRT-350 End Treatment with Wood Posts	1 Ea
3.0	LT LT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
F. CO	DT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
5.60	RT	Trailing	Remove Guardrail ¢ Steel Posts	50 LF <b>‡</b> 7 Ea
5.60	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
J.00	LI	Approach	Remove Guardrail & Steel Posts	50 LF <b>‡</b> 7 Ea
5.78	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
3.70		, , annig	Remove Guardrail \$ Steel Posts	50 LF <b>‡</b> 7 Ea
5.80	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
			Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
5.78	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
5.70	, , ,	Approach	Remove Guardrail ¢ Steel Posts	50 LF <b>\$</b> 7 Ea
5.80	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
J.00	7 ( 7	rraining	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
6.24	RT	∣ Approacn⊢	Remove SRT-350 End Treatment with Wood Posts	1 Ea
0.2 /	, , , ,		Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
6.25	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
U•2.		, ranning	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
6.45	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
0.75	<i>L</i> '	rrannig	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
6.75	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
0.7 3	/ / /	Арргоаст	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
6.00	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
6.88	πι	Approach	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
C 00	1.7	Anaronah	Remove SRT-350 End Treatment with Wood Posts	1 Ea
6.88	LT	Approach	Remove Guardrail ≰ Steel Posts	50 LF \$ 7 Ea
8.78	$LT$	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0., 0	<i>L</i> ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Remove Guardrail ♦ Steel Posts	37.5 <i>LF</i> <b>\$</b> 5 <i>Ea</i>
12.0	RT	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
12.00	. 111	πρρισσοιί	Remove Guardrail & Steel Posts	37.5 LF \$ 5 Ea
12.08	LT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
			Remove Guardrail \$ Steel Posts	37.5 <i>LF</i> \$ 5 <i>Ea</i>

NOTF.	TYPICAL	FOR ALL	INCATIONS	FXCFPT	WHFRF	REPLACING	FNTIRF	GUARDRAII	SECTION:
NOI L.	IIIICAL	, ON MEL	LOUNTIONS	LNOLI	**	ILI LIOINO		OOMIDIMIL	02011011

1. Install MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications - 1 Ea

\*FOR THE FOLLOWING LOCATIONS, REPLACE ENTIRE GUARDRAIL SECTION (Note: All new 12'-6" W-beam guardrail shall have 5 slotted holes)

⚠ M.P. 6.18 to M.P. 6.21 Lt:

MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications: 2 Ea

Guardrail, 31" Strong Post MGS with 6-Ft Posts: 37.5 LF

M.P. 6.46 to M.P. 6.49 Rt:

MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications: 2 Ea Guardrail, 31" Strong Post MGS with 6-Ft Posts: 75 LF

MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications: 2 Ea Guardrail, 31" Strong Post MGS with 6-Ft Posts: 37.5 LF M.P. 11.5 to M.P. 11.517 Lt:

MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications: 2 Ea Guardrail, 31" Strong Post MGS with 6-Ft Posts: 12.5 LF

GUARDRAIL	WORK	ITEMS -	- KUHIO	HIGHWAY,	ROUTE	56

M.P.	0/5	END	DEMOLITION	QTY
1 O E	, T	Annanah	Remove ET-2000 End Treatment with Wood Posts	1 Ea
1.05	LT	Approach	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
1.10	1 T	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
1.16	LT	Trailing	Remove Guardrail ♦ Steel Posts	50 LF <b>\$</b> 7 Ea
122	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
1.32	$\Pi I$	Approach	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
1.59	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
1.09	/ \	Approach	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
1.66	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
7.00	/ \	ITaning	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
0.00	ΩŦ	Tanilina	Remove SRT-350 End Treatment with Wood Posts	1 Ea
2.89	RT	Trailing	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
¥C 10	<i>1 T</i>	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*6.18	LT	Trailing	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
*C 21	ıT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*6.21	LT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
u.C. 4C	ΩŦ	Anorocah	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*6.46	RT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
	O.T.	T	Remove ET-2000 End Treatment with Wood Posts	1 Ea
*6.49	RT	Trailing	Remove Guardrail \$ Steel Posts	37.5 LF \$ 5 Ea
0 = 0			Remove SRT-350 End Treatment with Wood Posts	1 Ea
6.53	LT	Approach	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
			Remove SRT-350 End Treatment with Wood Posts	1 Ea
11.0	RT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
			Remove SRT-350 End Treatment with Wood Posts	1 Ea
11.04	LT	Trailing	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
. 11 40	OT	1000000	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*11.49	RT	Approach	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
			Remove SRT-350 End Treatment with Wood Posts	1 Ea
*11.51	RT	Trailing	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
, 11 F.O.		T :!!	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*11.50	LT	Trailing	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
11 5 1-7	, _	A	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*11.517	LT LT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
10.00	DT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
12.06	RT	Trailing	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
10.05	, ,	Twailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
12.65	LT	Trailing	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea

8/28/17 A Replace Entire Guardrail Section REVISION

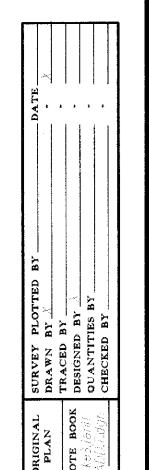
> STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

GUARDRAIL WORK ITEMS

GUARDRAIL ¢ SHOULDER IMPROVEMENTS AT VARIOUS LOCATIONS, PART 4 Federal Aid Project No. STP-0700(078)

Date: August 2017

SHEET No. 1 OF 3 SHEETS ADD. 7



<sup>2.</sup> Install Midwest Guardrail System (MGS) Transition From 31" Height to Existing Strong-Post Guardrail, 273/4" Height (See Sheet No. 10)

3. All new 12'-6" W-beam guardrail shall have 5 slotted holes.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0700(078)	2017	8	12

M.P.	0/5	END	DEMOLITION	QTY
12.695	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
			Remove Guardrail ♦ Steel Posts	<i>50 LF </i> ≢ 7
12.65	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
12.03	7 \ 7	Αρρι σαστι	Remove Guardrail ♦ Steel Posts	50 LF <b>‡</b> 7
12.69	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
72.03	7 \ 1	rranng	Remove Guardrail ≢ Steel Posts	50 LF <b></b>
12.75	RT	Approach -	Remove SRT-350 End Treatment with Wood Posts	1 Ea
12.13	7 ( )	7 (ppr 00011	Remove Guardrail ≢ Steel Posts	<i>50 LF </i> ≢ 7
13.13	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
13.13	/ \ /	Аррі басіт	Remove Guardrail ♦ Steel Posts	50 LF <b>‡</b> 7
13.20	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
, 0.20	1 \ 1	, raining	Remove Guardrail ♦ Steel Posts	50 LF <b>\$</b> 7
13.36	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
70.00		7 7 377719	Remove Guardrail ≢ Steel Posts	50 LF <b></b>
13.41	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
		77	Remove Guardrail ≢ Steel Posts	50 LF <b></b>
13.78	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
		J	Remove Guardrail ≢ Steel Posts	50 LF <b></b>
13.90	RT	Approach -	Remove SRT-350 End Treatment with Wood Posts	1 Ea
70.00	, , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Remove Guardrail ≢ Steel Posts	50 LF <b></b>
13.90	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
			Remove Guardrail ¢ Steel Posts	50 LF <b></b>
14.64	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
		, ,	Remove Guardrail \$ Steel Posts	50 LF \$ 7
14.69	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
			Remove Guardrail ¢ Steel Posts	50 LF \$ 7
14.78	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
		μρ. σσ	Remove Guardrail ¢ Steel Posts	50 LF \$ 7
14.88	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
7 7.00		rranng	Remove Guardrail ¢ Steel Posts	50 LF \$ 7
14.93	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
11.55	7 \ 7	Αρρι σαστι	Remove Guardrail ¢ Steel Posts	50 LF \$ 7
15.13	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.10	<i>∟</i> /	rranny	Remove Guardrail ¢ Steel Posts	50 LF \$ 7
15.93	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
	<b></b> .	7-7- 33311	Remove Guardrail \$ Steel Posts	50 LF <b>\$</b> 7
16.13	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea

M.P.	0/5	END	DEMOLITION	
16.12	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.12	<i>L1</i>	i i aiiiiig	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E
16.20	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.20	L1	Арргоаст	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E
16.21	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.21	L1	7 T dTTTTG	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 E
16.26	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.20	<i>L</i> /	πρρισσοιί	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 E
16.22	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.22	7 ( 7	γιρρισαστ	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E
16.29	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.23	7 \ 7	Training	Remove Guardrail \$ Steel Posts	50 LF \$ 7 E
17.33	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
11.55		Training	Remove Guardrail \$ Steel Posts	50 LF \$ 7 E
<del>17.45</del>	<i>1.T</i>	<del>  Approach</del> -	Remove SRT-350 End Treatment with Wood Posts	1 Ea
11.10	LI	Τρρισασιτ	Remove Guardrail & Steel Posts	50 LF \$ 7 E
17 22	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
17.33	Π1	Approach	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E
17.45	RT	<del>Trailing</del>	Remove ET-2000 End Treatment with Wood Posts	1 Ea
11.13	/ / /	Training	Remove Guardrail	37.5 LF \$ 5 E
<del>17.46</del>	RT	<del>- Approach</del>	Remove SRT-350 End Treatment with Wood Posts	1 Ea
11.10	7 \ 7	γιρρισαστι	Remove Guardrail & Steel Posts	50 LF \$ 7 E
<del>17.46</del>	17	<del>Trailing</del>	Remove SRT-350 End Treatment with Wood Posts	<del>1 Ea</del>
	<i>L</i> ,	r r arring	Remove Guardrail	50 LF \$ 7 E
17.93	RT	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
		PP	Remove Guardrail \$ Steel Posts	37.5 LF \$ 5 E
18.17	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
		J	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 E
18.76	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.10	L /	7 T dTTTTg	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 E
18.79	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
10.13	, , ,	πρρισαστι	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E
19.82	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
	<i>L</i> '	, φρισασιι	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E
19.91	RT	Approach -	Remove FLEAT-350 End Treatment with Wood Posts	1 Ea
	/ / /		Remove Guardrail & Steel Posts	50 LF \$ 7 E
20.01	RT	Trailing	Remove FLEAT-350 End Treatment with Wood Posts	1 Ea
LU.UI	/ \ /	i i aiiiiig	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 E

NOTE: TYPICAL FOR ALL LOCATIONS EXCEPT WHERE REPLACING ENTIRE GUARDRAIL SECTION:

1. Install MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications - 1 Ea

2. Install Midwest Guardrail System (MGS) Transition From 31" Height

to Existing Strong-Post Guardrail, 27¾" Height (See Sheet No. 10)

3. All new 12'-6" W-beam guardrail shall have 5 slotted holes

LEGEND FOR AS-BUILT POSTINGS Squiggly line for as-built deletion **√** 

Double line for as-built deletion <del>100.00</del> Text for as-built posting Roadway

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

## <u>GUARDRAIL WORK ITEMS</u>

GUARDRAIL ¢ SHOULDER IMPROVEMENTS AT VARIOUS LOCATIONS, PART 4

Federal Aid Project No. STP-0700(078)

Date: March 2017

"AS-BUILT"

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	STP-0700(078)	2017	8S-1	12

GUARDRA	GUARDRAIL WORK ITEMS - KUHIO HIGHWAY, ROUTE 56 (CONTINUED)					
M.P.	0/5	END	DEMOLITION	QTY		
21.40	1 T	Approach -	Remove SRT-350 End Treatment with Wood Posts	1 Ea		
27870	<i>L</i> '	γιρρί σαστί -	Remove Guardrail 🛊 Steel Posts	50 LF \$ 7 Ea		
21.40	P.T	RT Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea		
21.70	/ / /		Remove Guardrail 🛊 Steel Posts	50 LF <b>\$</b> 7 Ea		
21.42	<i> </i>	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea		
21.72	LI	Аррі басіі	Remove Guardrail 🛊 Steel Posts	50 LF \$ 7 Ea		
21.42	RT	RT Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea		
<u> </u>	/ / /	i i aiiiiig	Remove Guardrail 🛊 Steel Posts	50 LF \$ 7 Ea		

SURVEY PLOTTE
DRAWN BY X

TRACED BY
DESIGNED BY X

QUANTITIES BY

CHECKED BY

Note: This tracing prepared during "As-Built" posting.

NOTE: TYPICAL FOR ALL LOCATIONS EXCEPT WHERE REPLACING ENTIRE GUARDRAIL SECTION:

1. Install MSKT-SP-MGS, SoftStop or approved equal terminal as per Manufacturer's Specifications - 1 Ea

2. Install Midwest Guardrail System (MGS) Transition From 31" Height

to Existing Strong-Post Guardrail, 27¾" Height (See Sheet No. 10)

3. All new 12'-6" W-beam guardrail shall have 5 slotted holes

LEGEND FOR AS-BUILT POSTINGS Squiggly line for as-built deletion

**√** Double line for as-built deletion <del>100.00</del>

Text for as-built posting Roadway

STATE OF HAWAII HIGHWAYS DIVISION

## <u>GUARDRAIL WORK ITEMS</u>

GUARDRAIL ¢ SHOULDER IMPROVEMENTS AT VARIOUS LOCATIONS, PART 4

Federal Aid Project No. STP-0700(078)

Date: March 2017

"AS-BUILT"

SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0700(078)	2017	ADD. 9	12

#### GUARDRAIL WORK ITEMS - KUHIO HIGHWAY, ROUTE 56 (CONTINUED)

M.P.	0/5	END	DEMOLITION	QTY
20.36	LT	Approach	Remove FLEAT-350 End Treatment with Wood Posts	1 Ea
20.30	L1	Approacri	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
00.67	, <del>T</del>	T	Remove SRT-350 End Treatment with Wood Posts	1 Ea
20.67	LT	Trailing	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
20.71	DT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
20.71	RT	Trailing	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
20.72	LT	Angranch	Remove SRT-350 End Treatment with Wood Posts	1 Ea
20.72	LI	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
00.00	07	1	Remove SRT-350 End Treatment with Wood Posts	1 Ea
20.86	RT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
20,88	LT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
20.00	LI	Training	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
22.00	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
22.00	TXT	Training	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
22.04	LT	Арргоасп  —	Remove SRT-350 End Treatment with Wood Posts	1 Ea
22.07	LI		Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
23.012	LT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
23.012	<i>L1</i>	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
23.02	RT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
25.02	, , ,	Training	Remove Guardrail ♦ Steel Posts	37.5 LF \$ 5 Ea
22.00	ſΩT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
23.08	RT	Approach	Remove Guardrail \$ Steel Posts	50 LF \$ 7 Ea
2215	DT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
23.15	RT	Trailing	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
*2E 21	17	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*25.31	LT	Training	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
4.2E.24	1 T	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
*25.34	LT	Approach	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
25.31	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
25.51	/	Approach	Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
25.34	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
23.37	1 A I	, raining	Remove Guardrail \$ Steel Posts	50 LF <b>‡</b> 7 Ea

NOTE: TYPICAL FOR ALL LOCATIONS EXCEPT WHERE REPLACING ENTIRE GUARDRAIL SECTION:

1. Install MSKT-SP-MGS, SoftStop or approved equal terminal as per
Manufacturer's Specifications - 1 Ea

2. Install Midwest Guardrail System (MGS) Transition From 31" Height
to Existing Strong-Post Guardrail, 27¾" Height (See Sheet No. 10)
3. All new 12'-6" W-beam guardrail shall have 5 slotted holes

\*FOR THE FOLLOWING LOCATION, REPLACE ENTIRE GUARDRAIL SECTION (Note: All new 12'-6" W-beam guardrail shall have 5 slotted holes.)

M.P. 25.31 to M.P. 25.34 Lt:

MSKT-SP-MGS, SoftStop or approved equal terminal as per

Manufacturer's Specifications: 2 Ea

Guardrail, 31" Strong Post MGS with 6-Ft Posts: 75 LF

### GUARDRAIL WORK ITEMS - KUAMOO ROAD,, ROUTE 580

M.P.	0/5	END	DEMOLITION	
0.04	DT	Assessab	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.04	RT	Approach	Remove Guardrail & Steel Posts	37.5 LF \$ 5 Ea
0.10	, ,	Assessab	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.10	LT	Approach	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
0.16	LT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.16	LI	Training	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
0.20	RT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.2.0		, raming	Remove Guardrail ♦ Steel Posts	37.5 LF \$ 5 Ea
0.57	LT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.01			Remove Guardrail ∉ Steel Posts	37.5 LF \$ 5 Ea
0.58	RT	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.30	1\1	Approach	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
0.77	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
U.1 1	/ / /	1 Tanning	Remove Guardrail ♦ Steel Posts	50 LF \$ 7 Ea
0.78	RT	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
0.70		γιρρισσον	Remove Guardrail ♦ Steel Posts	37.5 LF \$ 5 Ea
1.53	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
	, , , ,	, , a.m.	Remove Guardrail 🛊 Steel Posts	50 LF \$ 7 Ea
1.58	LT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
1.50	L	Training	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
1.71	LT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
1.11	<i>L1</i>	Training	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
1.77	LT	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
1.11		, ippi oderi	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
1.92	RT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
1.32	/ / /	Training	Remove Guardrail ¢ Steel Posts	37.5 LF \$ 5 Ea
<i>3.67</i>	RT	Trailing	Remove SRT-350 End Treatment with Wood Posts	1 Ea
J.O7	, , ,	, , aiiiiig	Remove Guardrail ♦ Steel Posts	50 LF <b>\$</b> 7 Ea
<i>3.68</i>	RT	Approach	Remove ET-2000 End Treatment with Wood Posts	1 Ea
J.00	/ / /	πρρισσοιί	Remove Guardrail \$ Steel Posts	37.5 LF \$ 5 E
3.80	RT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
	, , , ,	, raining	Remove Guardrail \$ Steel Posts	37.5 LF \$ 5 E
<i>3.88</i>	RT	Approach	Remove SRT-350 End Treatment with Wood Posts	1 Ea
	, , ,		Remove Guardrail ¢ Steel Posts	50 LF \$ 7 Ea
3.91	RT	Trailing	Remove ET-2000 End Treatment with Wood Posts	1 Ea
	, , , ,		Remove Guardrail ♦ Steel Posts	37.5 LF \$ 5 Ea

8/28/17 A Replace Entire Guardrail Section REVISION

> STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

# GUARDRAIL WORK ITEMS

GUARDRAIL & SHOULDER IMPROVEMENTS AT VARIOUS LOCATIONS, PART 4 Federal Aid Project No. STP-0700(078)

Date: August 2017

SHEET No. 3 OF 3 SHEETS