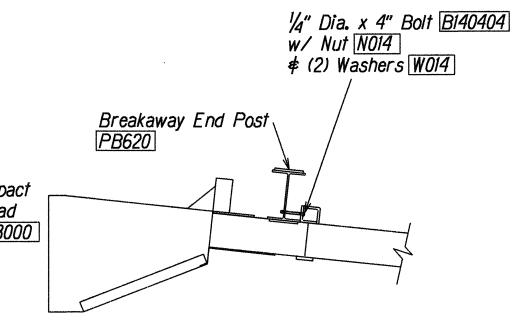
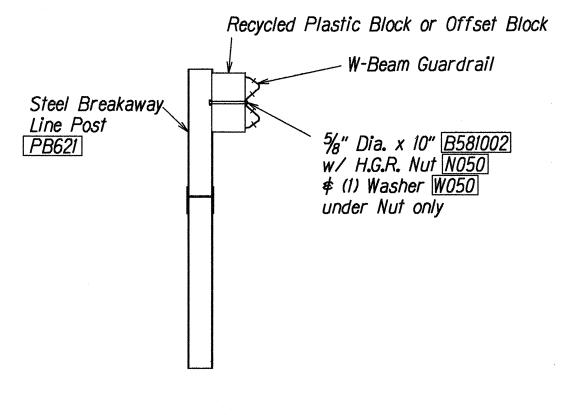


GENERAL NOTES

- 1. Breakaway posts are required with the FLEAT Terminal.
- 2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- 3. The soil tubes shall not protrude more than 4" above ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
- 4. The soil tubes may be driven with an approved driving head. Soil tubes should not be driven with the post in the tube. If the tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
- 5. When rock is encountered during excavation, a 12" Dia. post hole, 20" deep may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 2 ½" deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
- 6. The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.



IMPACT HEAD CONNECTING DETAIL



<u>SECTION B-B</u> (Typical @ Post 3 - 7) NOTE: RAIL NOT BOLTED @ POST #3

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	450AB-01-01M	2001	5	42

ITEM NO.	QTY	BILL OF MATERIALS		
F3000	1	IMPACT HEAD		
F1303	1	W-BEAM GUARDRAIL END SECTION, 12 GA.		
F1304	1	W-BEAM GUARDRAIL CENTER SECTION, 12 GA.		
G1203	1	W-BEAM GUARDRAIL, 12 GA.		
<i>S730</i>	2	*FOUNDATION SOIL TUBE, 6" x 8" x 72"		
E750	1	BEARING PLATE		
<i>S760</i>	1	CABLE ANCHOR BOX		
E770	1	BCT CABLE ANCHOR ASSEMBLY		
E780	1	GROUND STRUT		
PB620	2	STEEL BREAKAWAY END POST		
PB621	5	STEEL BREAKAWAY LINE POST		
	5	RECYCLED PLASTIC BLOCKOUT OR OFFSET BLOCK		
		HARDWARE		
B580122	25	5⁄8" Dia. x 11⁄4" SPLICE BOLT, POST #2		
B580754	2	5⁄8" Dia. x 7½" HEX BOLT		
B341004	2	3/4" Dia. x 10" HEX BOLT		
B581002	5	5/8" Dia. x 10" H.G.R. BOLT (POST 3 THRU 7)		
N050	32	5/8" Dia. H.G.R. NUT (SPLICE 24, SOIL TUBES 2,		
N030	2	¾" Dia. HEX NUT		
W050	6	H.G.R. WASHER		
W030	4	3/4" ID WASHER		
N100	2	1" ANCHOR CABLE HEX NUT		
W100	2	1" ANCHOR CABLE WASHER		
B140404	2	1/4" x 4" HEX BOLT		
N014	2	1/4" HEX NUT		
W014	4	1/4" WASHER		
SB58A	8	CABLE ANCHOR BOX SHOULDER BOLT		
N055A	8	1/2" A325 STRUCTURAL NUT		
W050A	16	1/16" OD x 9/16" ID A325 STR. WASHER		

Foundation Tube Options For Posts 1 \$ 2

*6'-0" Split Foundation Tubes S730

*6'-0" Solid Foundation Tubes E731 *5'-0" Foundation Tubes S735 W/Soil

Plates SP600

*4'-6" Foundation Tubes E735 W/Soil Plates SP600

FLEAT-350

FLARED ENERGY ABSORBING TERMINAL

KAMEHAMEHA V HIGHWAY RESURFACING

STATE OF HAWAII

KAMEHAMEHA V HIGHWAY RESURFA
Kaunakakai to Kamiloloa Bridge
and Kanuokoolau to Kamalo

and Kapuokoolau to Kamalo Project No. 450AB-01-01M

Not to Scale

Date: September, 2000

SHEET No. 1 OF 1 SHEETS

5