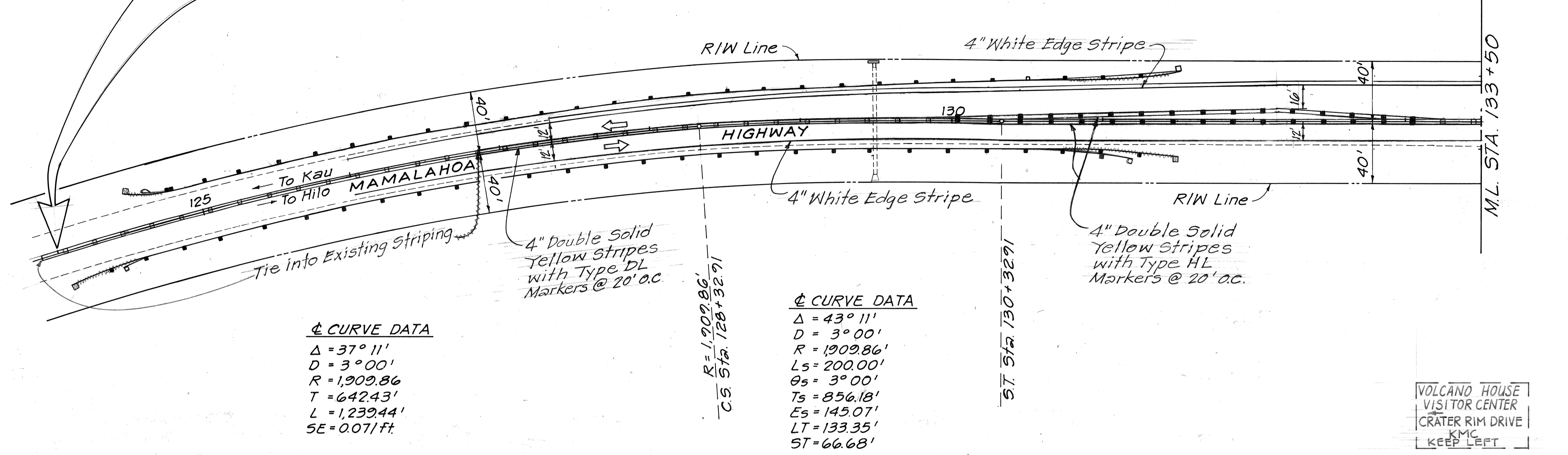


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(18)	1986	10	18

TRUE NORTH  
Scale: 1"=40'

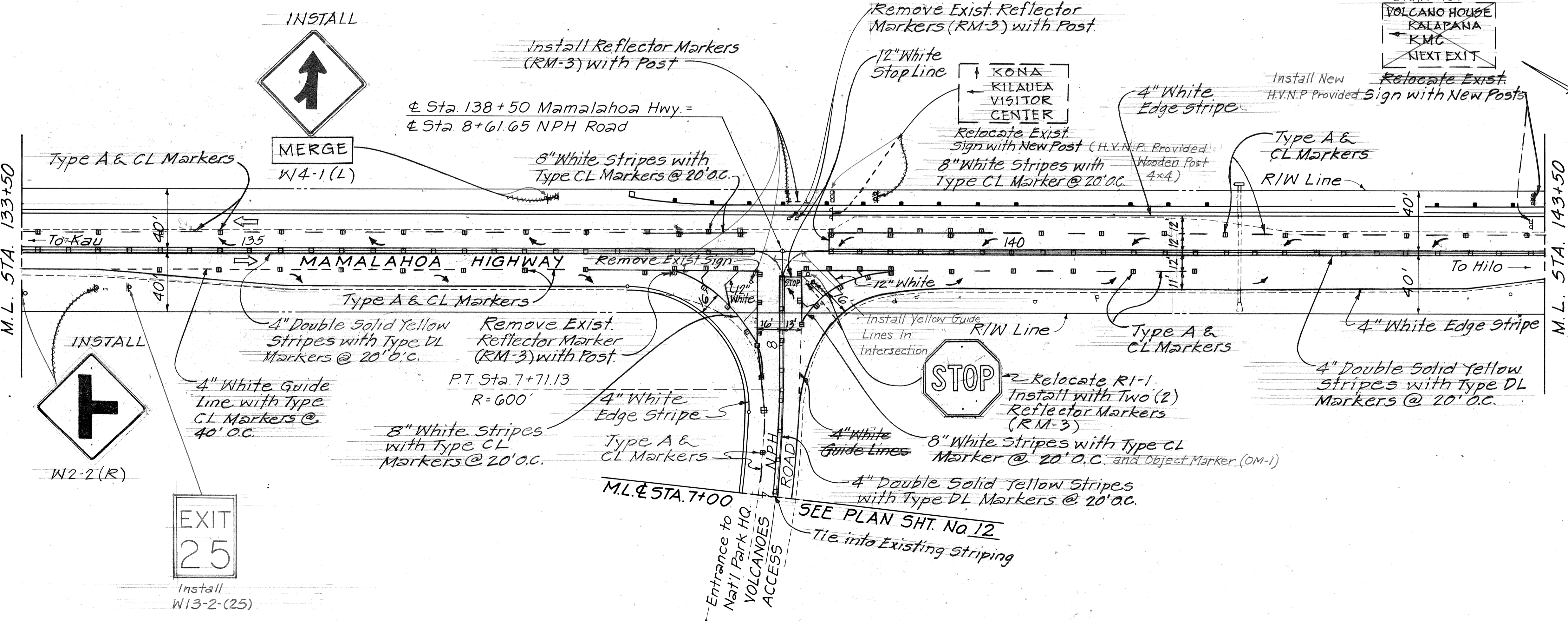
BEGIN PROJECT  
FED. AID PROJ. No. FLH-011-2(18)  
STA. 124+00



☺ CURVE DATA  
 $\Delta = 37^\circ 11'$   
 $D = 3^\circ 00'$   
 $R = 1,909.86'$   
 $T = 642.43'$   
 $L = 1,239.44'$   
 $SE = 0.071/ft$

☺ CURVE DATA  
 $\Delta = 43^\circ 11'$   
 $D = 3^\circ 00'$   
 $R = 1,909.86'$   
 $Ls = 200.00'$   
 $\theta_s = 3^\circ 00'$   
 $Ts = 856.18'$   
 $Es = 145.07'$   
 $LT = 133.35'$   
 $ST = 66.68'$

VOLCANO HOUSE  
VISITOR CENTER  
CRATER RIM DRIVE  
KMC  
KEEP LEFT

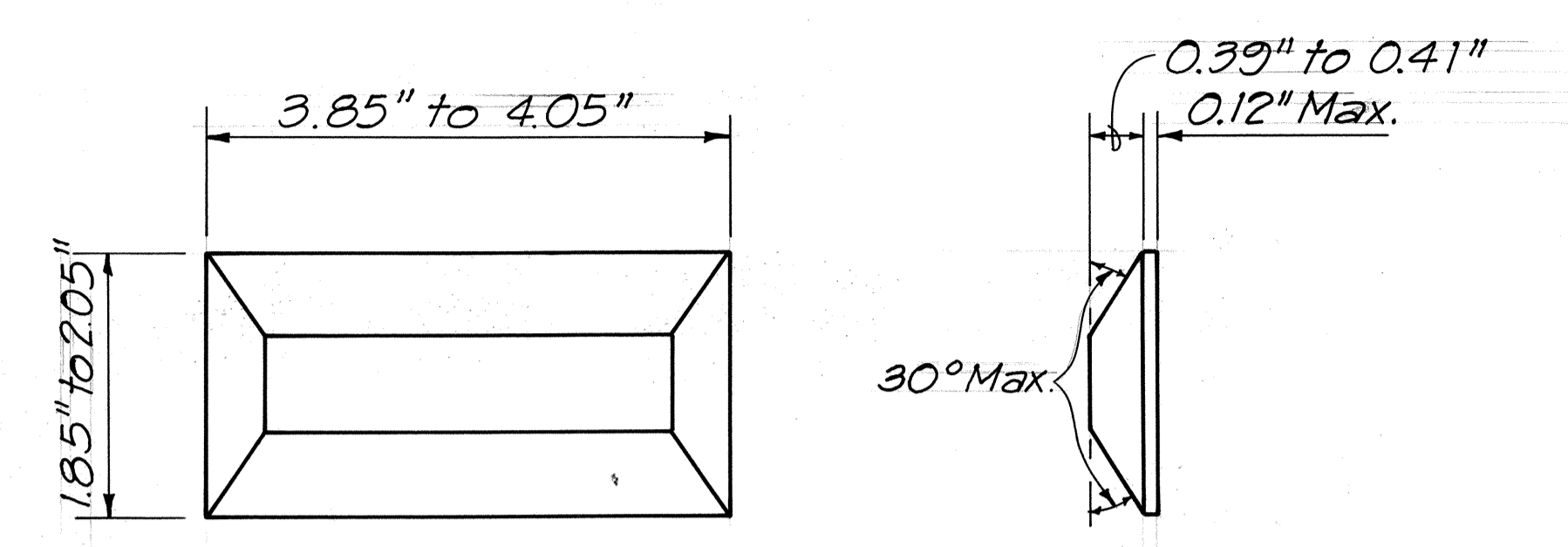
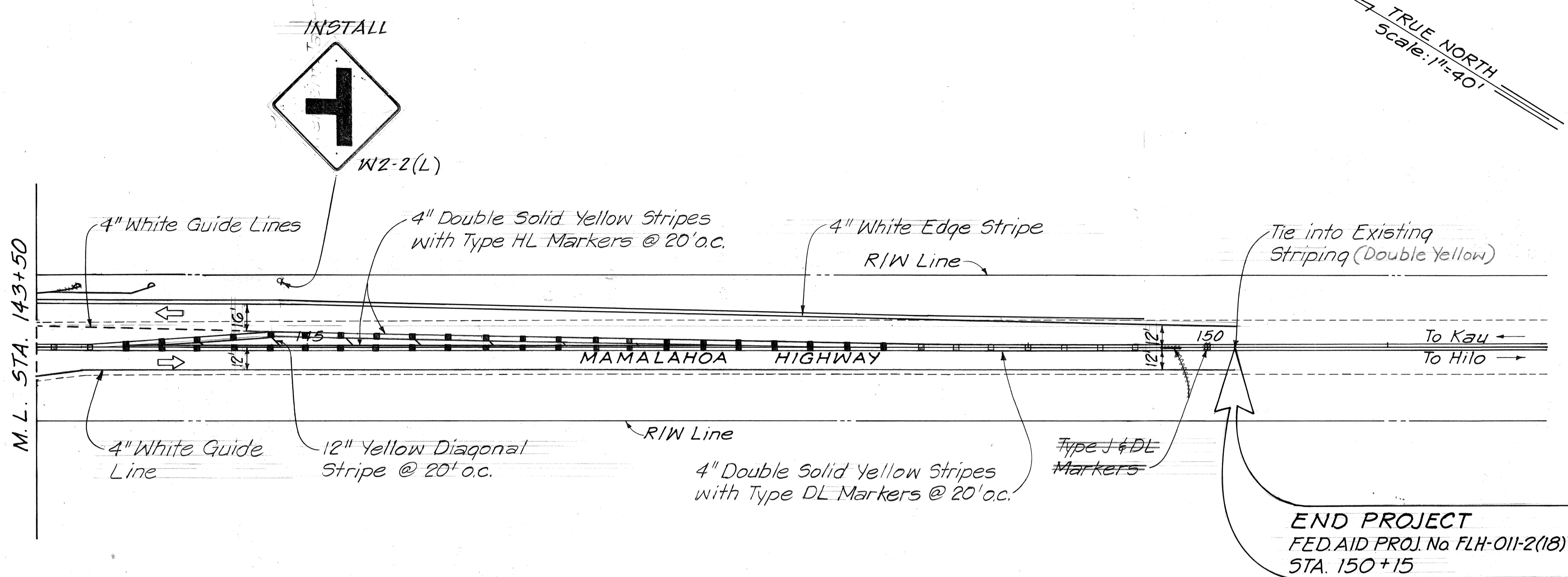


TRUE NORTH  
Scale: 1"=40'

DATE	
SURVEY PLOTTED BY	
ORIGINAL PLAN	
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**TRAFFIC SIGNS, STRIPING  
& PAVEMENT MARKERS**  
HAWAII BELT ROAD  
INTERSECTION IMPROVEMENTS AT  
HAWAII VOLCANOES NATIONAL PARK  
HEADQUARTERS ACCESS ROAD  
FED. AID PROJECT No. FLH-011-2(18)  
Scale: As Shown Date: Aug. 1986  
SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(18)	1986	11	18



**TYPE CL**  
Red-Clear Reflective Marker  
or  
**TYPE DL**  
Two-Way Yellow Reflective Marker  
or  
**TYPE HL**  
One-Way Yellow Reflective Marker  
Not to Scale

**END PROJECT**  
FED. AID PROJ. No. FLH-011-2(18)  
STA. 150+15

**NOTES**

- Locations of all new Pavement Markings shall be staked out by the Contractor for approval by the Engineer prior to installation.
- Existing Pavement Markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
- Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
- Final locations of all signs shall be approved by the Engineer.
- All references to Type C, Type D and Type H Markers in the plans shall mean Type CL, Type DL and Type HL Markers. For details, see this sheet.
- All roadway striping to be done by others.

**LEGEND**

- 4 each Type A Raised Pavement Markers
- Type CL Raised Pavement Markers @ 40'-0"o.c.
- 4 each Type J Raised Pavement Markers
- Type DL Raised Pavement Markers @ 40'-0"o.c.
- 8" White Stripe with Type CL Raised Pavement Markers @ 20'-0"o.c.
- 4" Double Solid Yellow Stripes with Type DL Raised Pavement Markers @ 20'-0"o.c.
- 4" Double Solid Yellow Stripes with Type HL Raised Pavement Markers @ 20'-0"o.c.
- 4" Yellow Edge Stripe (Paint) with Type HL Raised Pavement Markers @ 40'-0"o.c.
- 4" White Edge Stripe (Paint)
- 4" White Guide Lines. See Sheet TE 31.
- Transverse Median Marking  
See sheet TE 31.
- Channelizing Island  
See sheet TE 31.
- Pavement Arrow
- STOP Pavement Word

DATE	_____
SURVEY PLOTTED BY	_____
ORIGINAL PLAN	_____
DRAWN BY	_____
CHECKED BY	_____
NO.	_____

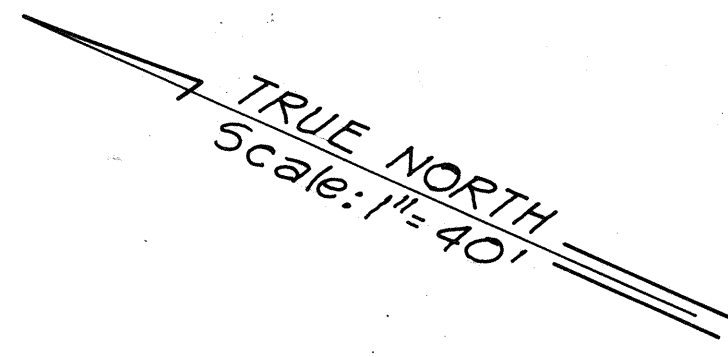
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**TRAFFIC SIGNS, STRIPING  
& PAVEMENT MARKERS**  
HAWAII BELT ROAD  
INTERSECTION IMPROVEMENTS AT  
HAWAII VOLCANOES NATIONAL PARK  
HEADQUARTERS ACCESS ROAD  
FED. AID PROJECT No. FLH-011-2(18)  
Scale: As shown Date: August, 1986  
SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(18)	1980	12	18

CURVE DATA 2

Δ = 25° 50' 00"  
 R = 600.00'  
 T = 137.60'  
 C = 268.24'  
 L = 270.53'

M.L. & STA. 7+00



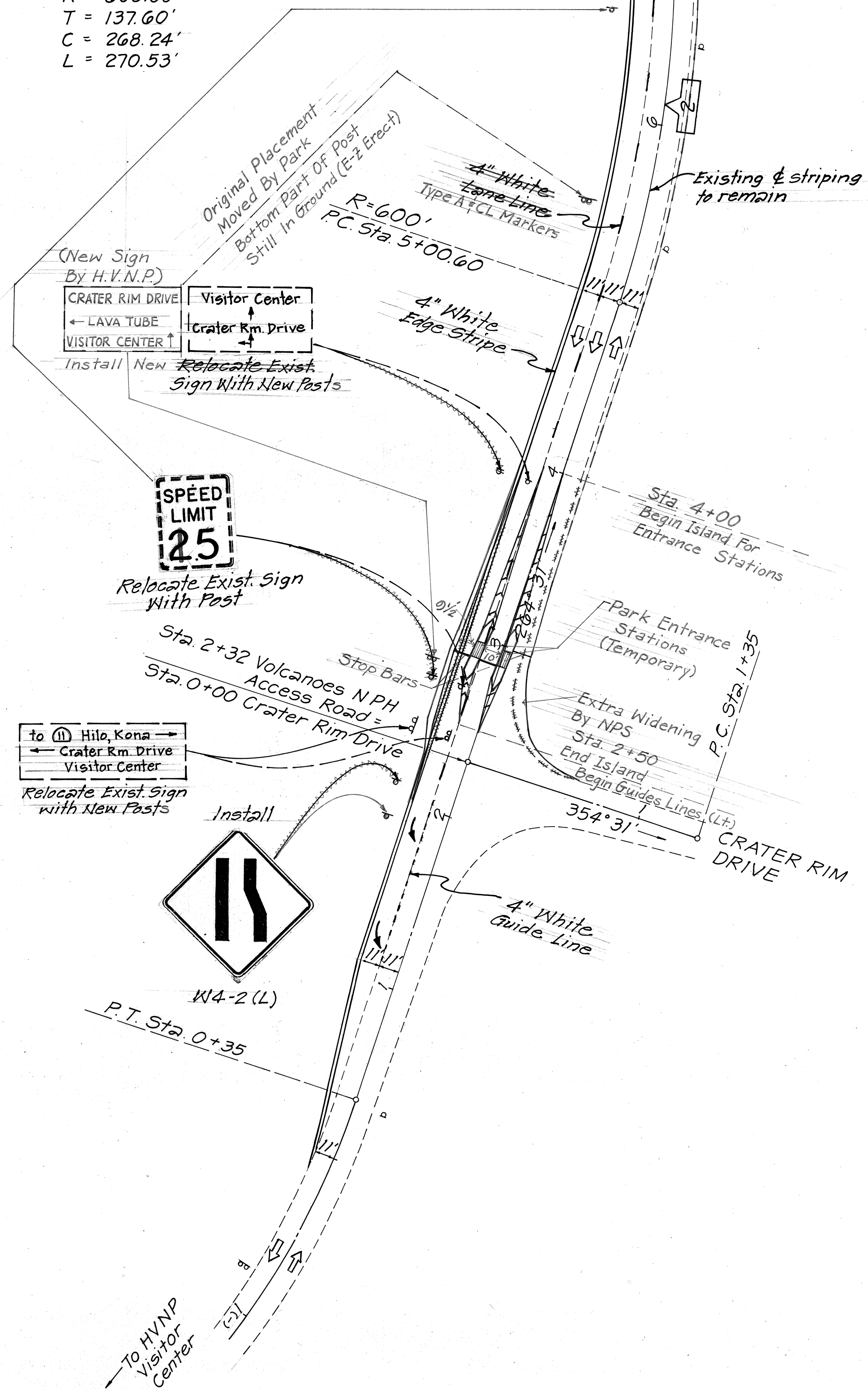
SUMMARY - TRAFFIC SIGNS AND MARKERS

HAWAII BELT ROAD MAMALAHOA HIGHWAY		STATION	NEW W / POST	NEW W/O POST	RELOCATE W / NEW POST	RELOCATE W / POST	REMOVE & STOCKPILE	
W2-2(R)	—	133+95 Rt.	1					Breakaway
W4-1(L)	↘ Merge	137+00 Lt.	1					Breakaway
RM-3	Reflector Marker (Yellow)	137+75 Rt.					1	
	Left Turn ← Here	138+30 Rt.					1	
RM-3	Reflector Marker (Yellow)	138+55 Lt.					2	
R1-1	Stop	138+70 Rt.				1		
RM-3	Reflector Marker (Yellow)	138+70 Rt.		2				On Stop Sign
Destin.	↑ Kona							
	← Kilauea	138+80 Lt.						
	Visitor Center	139+15 Lt.				1 (Post)		Wooden Posts Provided By H.V.N.P.
Destin.	Volcano House							
	Kalapana					1 (Post)		
	← KMC Next Exit	143+35 Lt.						
W2-2(L)	—	144+85 Lt.	1					Breakaway
W13-2(B)	EXIT 25	134+20 Rt.	1					Breakaway C.C.O.
VOLCANOES NATIONAL PARK HEADQUARTERS ACCESS ROAD								
W4-2(L)	↘	2+08 Lt.	1					
Destin.	To (D) Hilo, Kona							
	← Crater Rm. Drive							
	Visitor Center	2+42 Lt. & 2+35 Lt.				1 (Post)		
R2-1(25)	Speed Limit 25 15	2+71 Lt. & 6+65 Lt.					1	
Destin.	Visitor Center ↑							
	Crater Rm. Drive ↗	3+90 Lt. & 5+50 Lt.				1 (Post)		
RM-3	HBR - Mamalahoa Reflector Marker (Yellow)	138+50 Lt.	1					
RM-3	HBR - Mamalahoa Reflector Marker (Yellow)	138+65.5 Lt.	1					
	TOTALS		37	2	4	2	4	

SUMMARY - RAISED PAVEMENT MARKERS

TYPE	DESCRIPTION	QUANTITY
A	Non-Reflective White	#2 156
CL	Red-Clear Reflective	67 80
DL	Two-Way Yellow Reflective	83 00
HL	One-Way Yellow Reflective	76 80
F	Non-Reflective Yellow	4 0

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**TRAFFIC SIGNS, STRIPING & PAVEMENT MARKERS**  
 HAWAII BELT ROAD  
 INTERSECTION IMPROVEMENTS AT  
 HAWAII VOLCANOES NATIONAL PARK  
 HEADQUARTERS ACCESS ROAD  
 FED. AID PROJECT NO. FLH-011-2(18)  
 Scale: As Shown Date: August 1980  
 SHEET No. 3 OF 3 SHEETS



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