

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(28)	2002	37	72

LEGEND

4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 40'-0" o.c.

4 each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.

8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)

4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)

4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)

4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)

4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)

Lane Change Restriction Marking
4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)

4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)

4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)

Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)

Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)

Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)

②
Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment (Tape, Type III or Thermoplastic Extrusion)

Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)

STOP
Pavement Word (Tape, Type III or Thermoplastic Extrusion)

4 Each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
Type H Raised Pavement Markers (Reflective Surface facing no-passing direction)
4" Single Solid Yellow Stripe (Tape, Type I or Thermoplastic Extrusion)

10' 10' 10' 10'
Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)

NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. 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.
3. Raised pavement markers shall not be installed within crosswalks.
4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. 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.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the legend or plans.
8. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
9. Existing signs that are to be replaced shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
10. Backing for all new regulatory and warning signs shall not be spliced.
11. All sign panels shall conform to Section 621 of Special Provisions and the latest editions and amendments of the following FHWA publications:
 - a. "Manual on Uniform Traffic Control Devices for Street and Highways" (MUTCD)
 - b. "Standard Highway Signs"
 - c. "Standard Alphabets for Highway Signs"
12. All new and relocated signs and markers installed on pipe post or light standard are to be mounted with band brackets and steel braces.
13. The Contractor shall erect at the beginning of the project and at the end of the project advance construction warning signs as indicated on the plans or as directed by the Engineer for the duration of the highway project and shall be maintained by the Contractor. These signs shall be placed in addition to the required traffic control signs called for in Section 645-Traffic Control. The advance construction warning signs shall be new and become the property of the State. The Contractor shall remove, clean, and deliver the signs and posts to the Oahu District Baseyard or as directed by the Engineer at the end of the project.

REFLECTOR MARKERS LEGEND

- ||| RM-3 (Yellow)
|| RM-2 (White)

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN
NOTE BOOK
102.may
N. Dornier

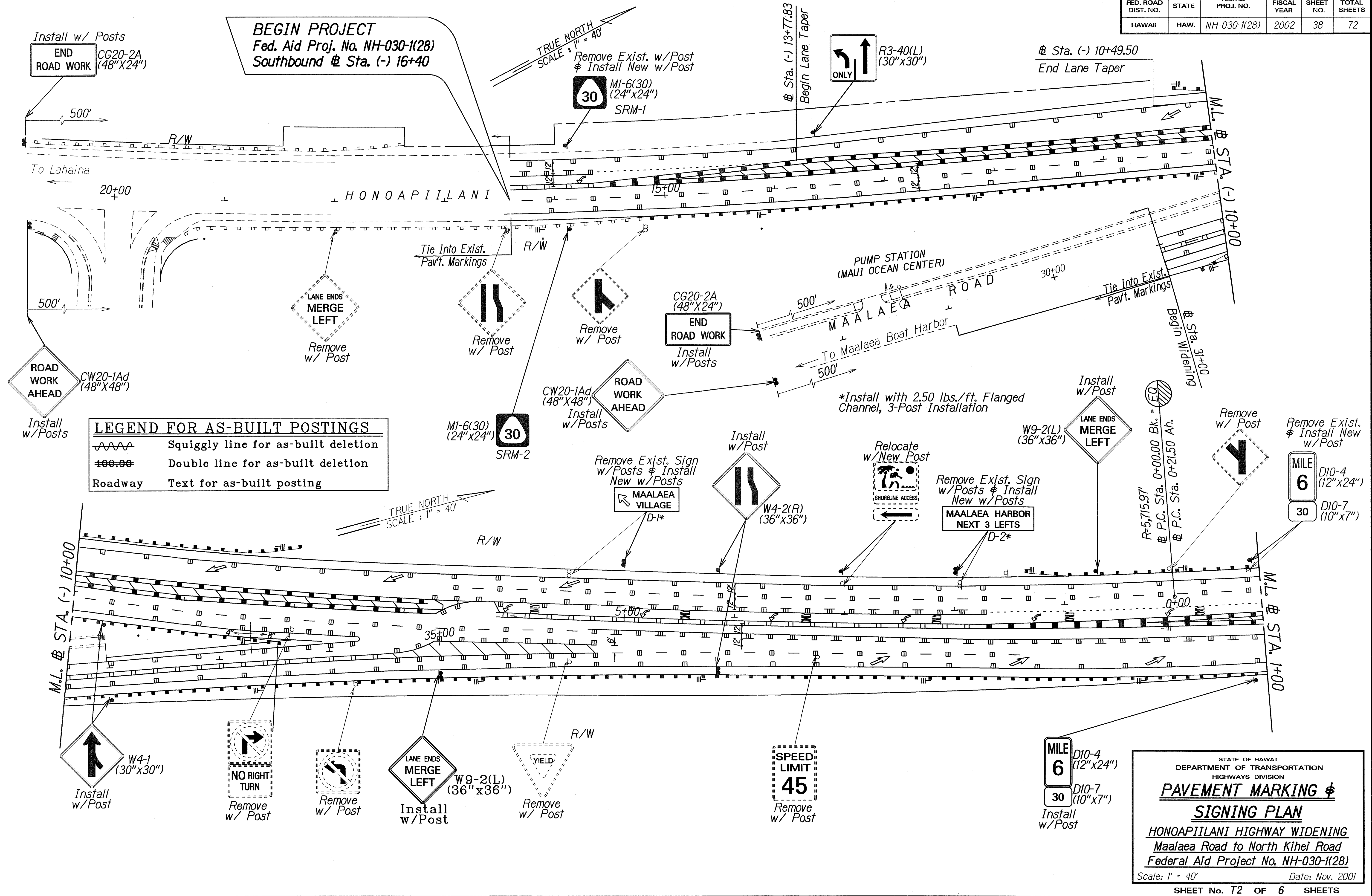
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING
LEGEND, DETAILS & NOTES

HONOAPIILANI HIGHWAY WIDENING
Maalaea Road to North Kihei Road
Fed. Aid Project No. NH-030-1(28)

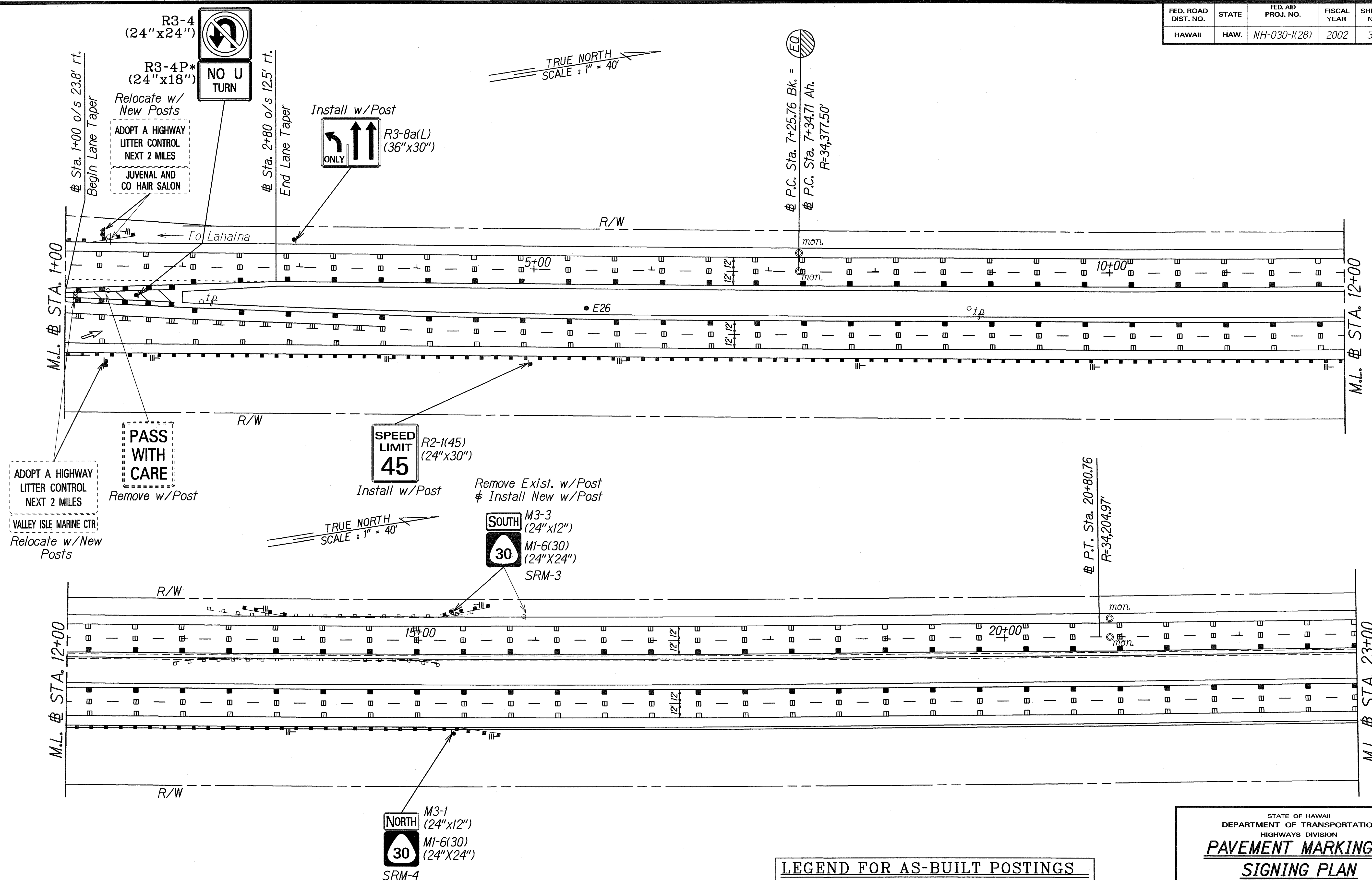
Date: Nov. 2001

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(28)	2002	38	72



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ORIGINAL PLAN	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

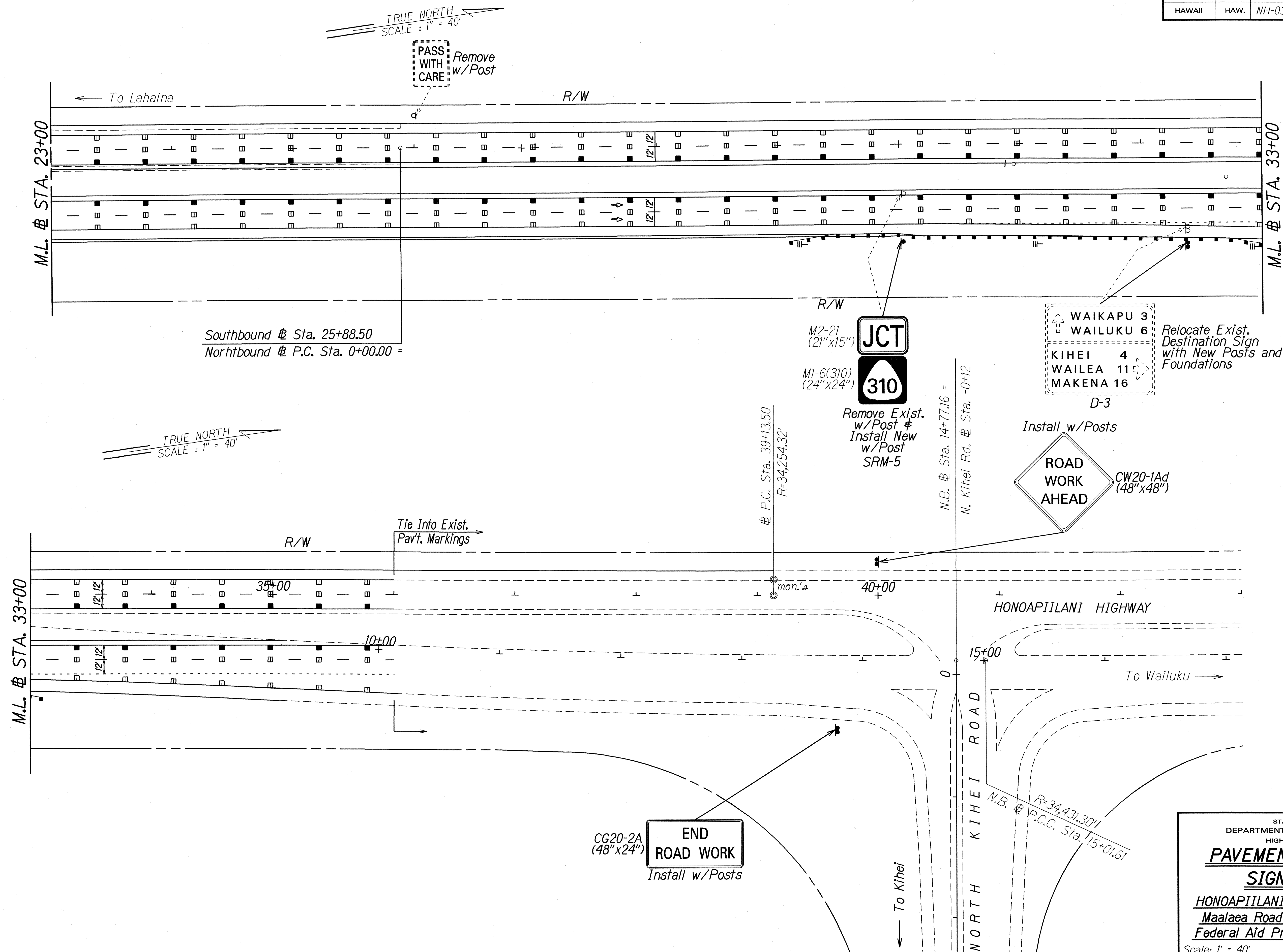
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(28)	2002	39	72



AS-BUILT

39

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-K(28)	2002	40	72



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
QUANTITIES BY	DESIGNED BY	
CHECKED BY	IN CHARGE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

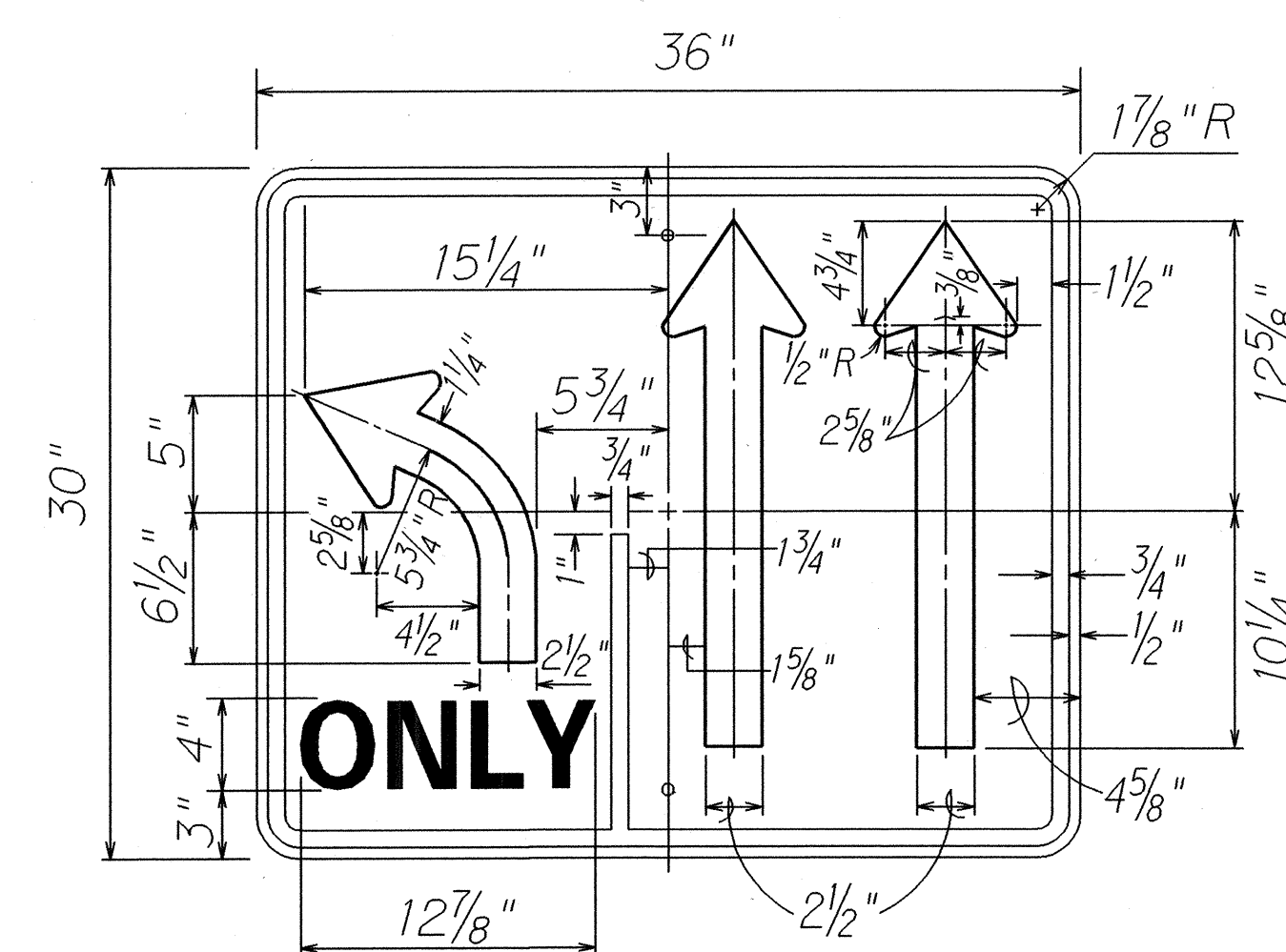
PAVEMENT MARKING & SIGNING PLAN

HONOAPIILANI HIGHWAY WIDENING
Maalaea Road to North Kihei Road
Federal Aid Project No. NH-030-K(28)

Scale: 1" = 40' Date: Nov. 2001

SHEET No. **T4** OF **6** SHEETS

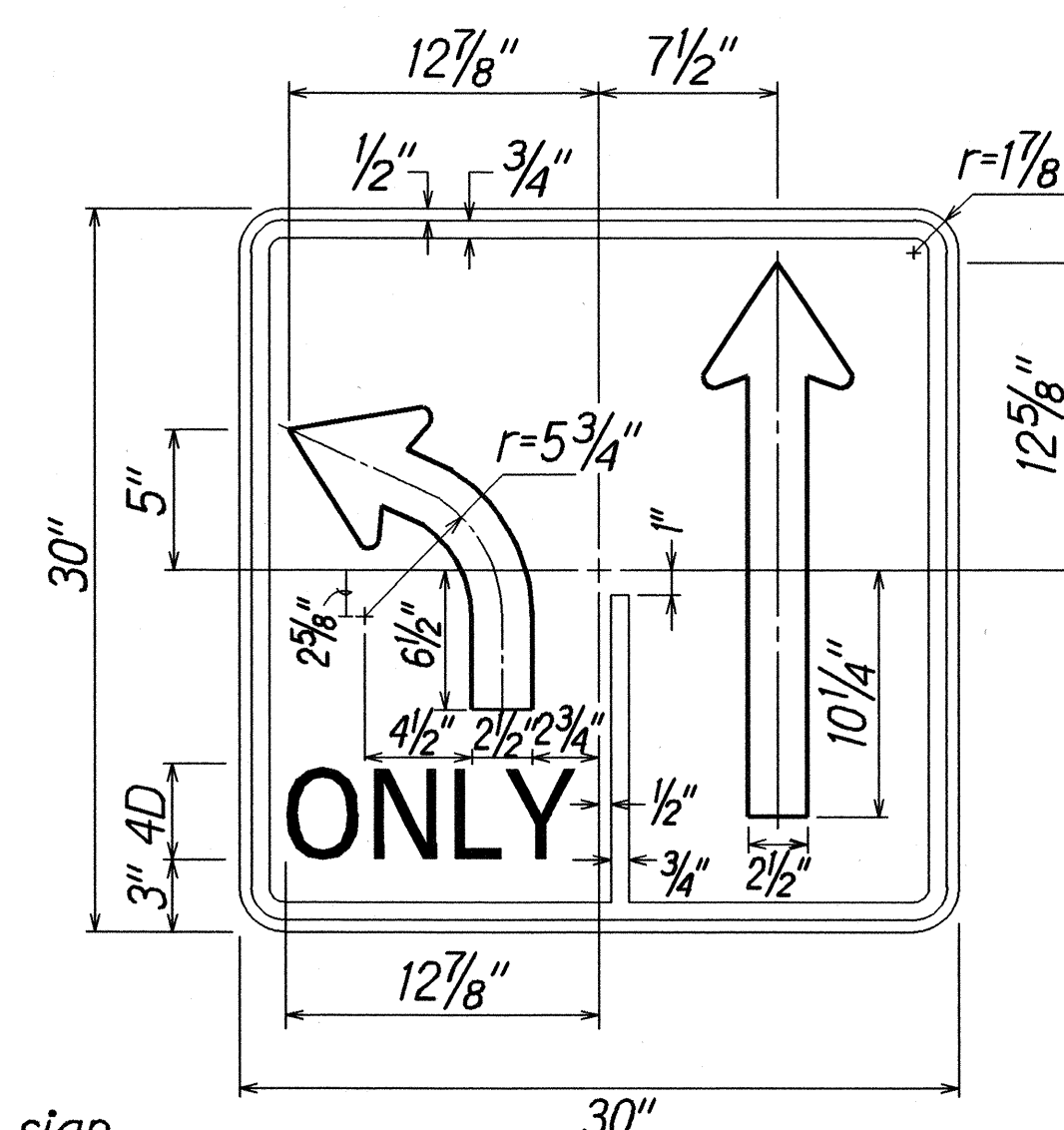
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(28)	2002	41	72



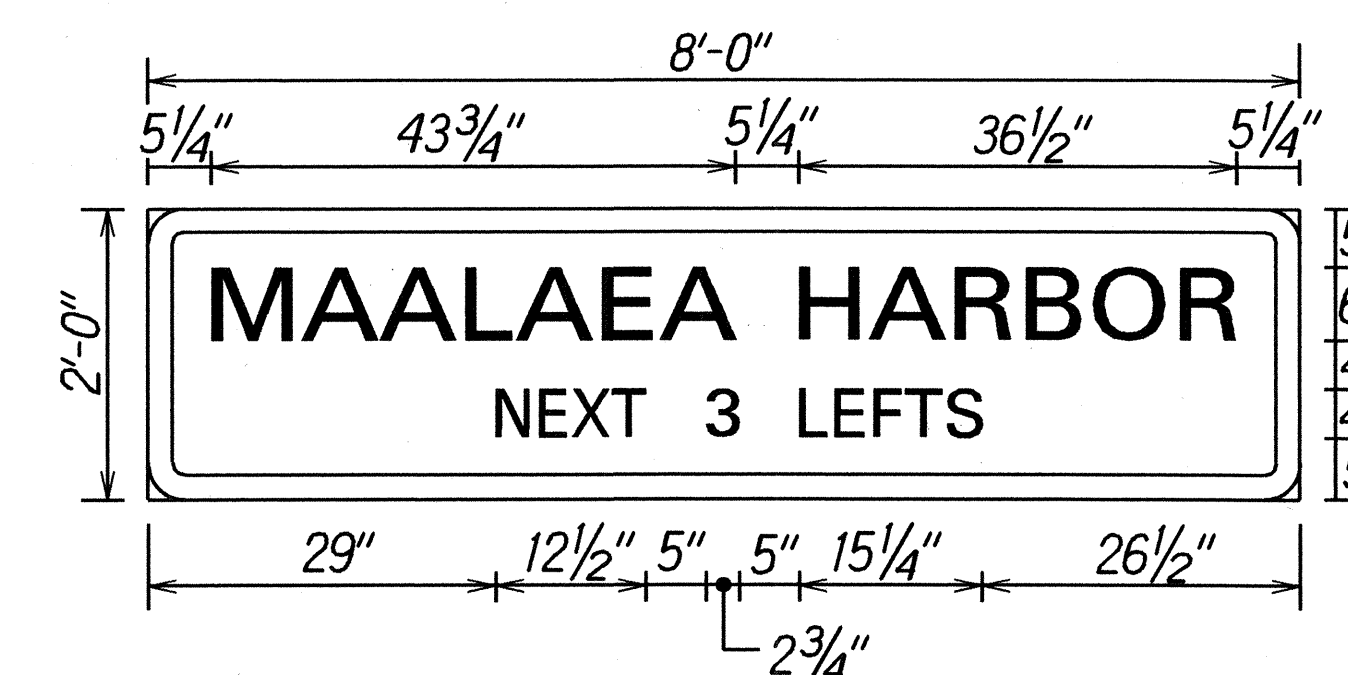
R3-8A(L)
Scale: 1 1/2" = 1' - 0"

NOTE:

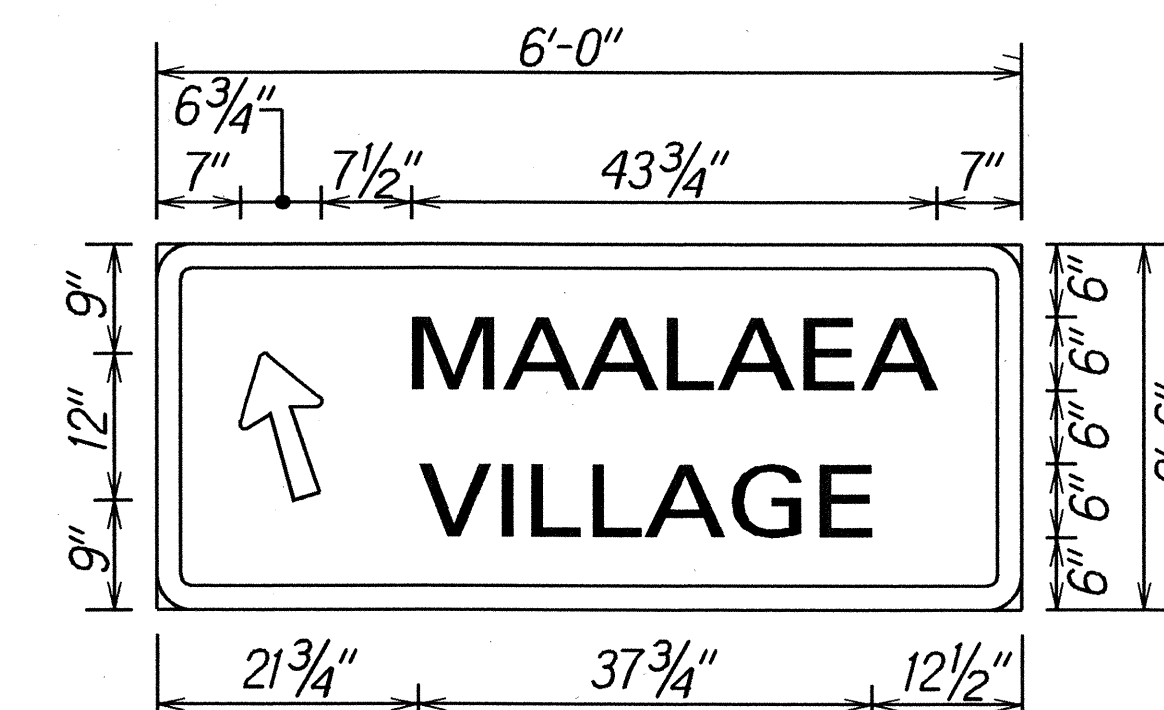
Sign R3-40 is a variation of sign R3-8. Plate and arrow details shall conform to sign R3-8.



R3-40
Scale: 1 1/2" = 1' - 0"



D-2
Scale: 3/4" = 1' - 0"



D-1
Scale: 3/4" = 1' - 0"

GENERAL NOTES

1. Letter Size:

- When letters are all uppercase, use series "E".
- When initial uppercase letter is used in conjunction with lowercase letters, use series "E" (M) for uppercase letter.

2. All signs shall conform to Section 621 of the Special Provisions and the latest editions and amendments of the following FHWA publications:

- "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
- "Standard Highway Signs"
- "Standard Alphabets for Highway Signs"

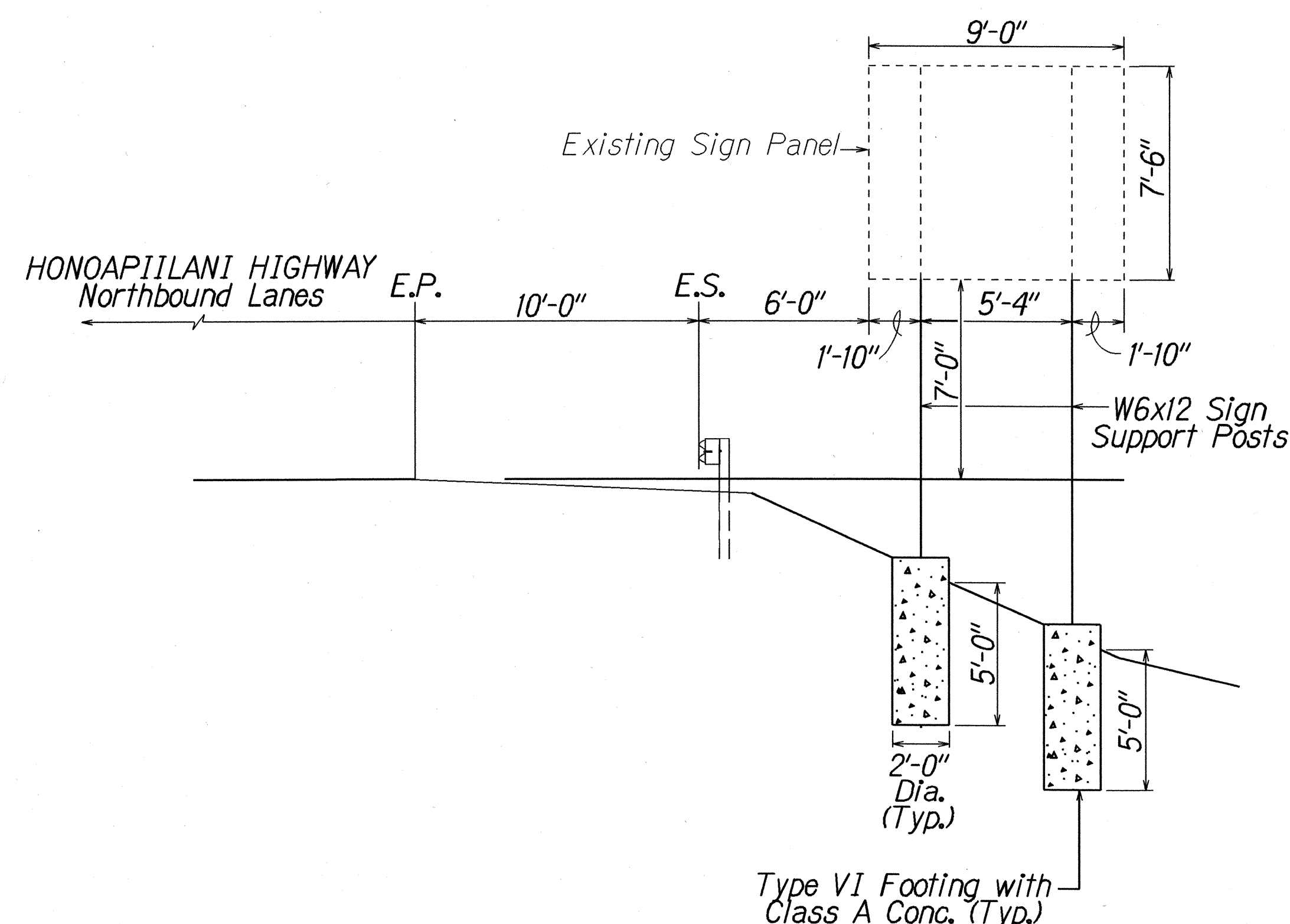
3. Borders, messages, arrows, symbols and shield conform to details as shown on the plans and as specified in the MUTCD.

4. Sign messages shall be as indicated on the plans.

5. All panels shall be reflectorized in accordance with Section 712.20 of the Standard Specifications. Minimum width of panels shall be 2 feet. Abutting edges of panels shall be in only one direction if vertical abutting edges are used, no horizontal abutting shall be allowed and vice versa.

6. Contractor shall submit all sign splicing details to the Engineer for approval. All backing for signs 4 feet by 6 feet or less shall be of one sheet.

7. All signs shall be provided w/frame stiffeners in accordance with TE-03 of the Standard Plans.



SIGN D-3

Honoapiilani Highway N.B. Sta. 6+50± Rt.
Scale: 1/4" = 1' - 0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAIL

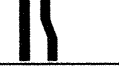
HONOAPIILANI HIGHWAY WIDENING
Maalaea Road to North Kihei Road
Fed. Aid Project No. NH-030-1(28)

Scale: As Shown Date: Nov. 2001

SHEET No. **T5** OF **6** SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(28)	2002	42	72

PAVEMENT MARKING SUMMARY		
DESCRIPTION	QUANTITY	
PAVEMENT MARKERS		
TYPE A	1,020	EA.
TYPE C	586	EA.
TYPE D	44	EA.
TYPE H	288	EA.
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION		
4-INCH PAVEMENT STRIPE (WHITE)	1,210	L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW)	870	L.F.
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION		
4-INCH PAVEMENT STRIPE (WHITE)	10,880	L.F.
4-INCH PAVEMENT STRIPE (YELLOW)	6,800	L.F.
8-INCH PAVEMENT STRIPE (WHITE)	580	L.F.
12-INCH PAVEMENT STRIPE (WHITE)	130	L.F.
12-INCH PAVEMENT STRIPE (YELLOW)	480	L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW)	2,480	L.F.
TAPE - TYPE III OR THERMOPLASTIC EXTRUSION		
4-INCH PAVEMENT STRIPE (WHITE)	1,200	L.F.
12-INCH PAVEMENT STRIPE (WHITE)	15	L.F.
PAVEMENT ARROW	14	EA.
PAVEMENT WORD	6	EA.

TRAFFIC SIGN SUMMARY			
SIGN NO.	MESSAGE	QUANTITY	
		10 SQ. FT. OR LESS	
		W/POST	W/O POST
R2-1(45)	SPEED LIMIT 45	1	
R3-8a(L)		1	
R3-40(L)		1	
W4-1		2	
W4-2-(R)		1	
W9-2(L)	LANE ENDS MERGE LEFT	1	
TOTAL		7	

ROUTE MARKER SUMMARY				
SIGN ASSEMBLY	LOCATION	SIGN NO. AND MESSAGE	TYPE A ASSEMBLY	
			W/POST	W/O POST
SRM-1	S.B. STA. 15+90 RT.	M1-6(30) 30	1	
SRM-2	S.B. STA. 15+90 LT.	M1-6(30) 30	1	
SRM-3	S.B. STA. 15+30 LT.	M3-3 SOUTH M1-6(30) 30	1	
SRM-4	S.B. STA. 15+30 RT.	M3-1 NORTH M1-6(30) 30	1	
SRM-5	S.B. STA. 30+00 RT.	M2-1 JCT M1-6(310) 310	1	
TOTAL			5	

CONSTRUCTION SIGN SUMMARY				
SIGN NO.	LOCATION	MESSAGE	W/POSTS	W/O POST
CG20-2A	HONOAPIILANI HWY. STA. (-) 21+40 RT.	END ROAD WORK	1	
CW20-1Ad	HONOAPIILANI HWY. STA. (-) 21+40 LT.	ROAD WORK AHEAD	1	
CG20-2A	MAALAEA RD. STA. 36+00 RT.	END ROAD WORK	1	
CW20-1Ad	MAALAEA RD. STA. 36+00 LT.	ROAD WORK AHEAD	1	
CW20-1Ad	HONOAPIILANI HWY. N.B. STA. 40+00 LT.	ROAD WORK AHEAD	1	
CG20-2A	HONOAPIILANI HWY. S.B. STA. 13+80 RT.	END ROAD WORK	1	
TOTAL			6	

MILEPOST MARKER SUMMARY				
LOCATION	SIGN NO. AND MESSAGE	QUANTITY		
		W/POST	W/O POST	
# STA. 1+00 LT.	D10-4 6 D10-7 30	1		
# STA. 1+00 LT.	D10-4 6 D10-7 30	1		
TOTAL		2		

REFLECTOR MARKER SUMMARY						
TYPE	QUANTITY					
	W/O POST		W/FLEXIBLE POST		W/STEEL POST	
	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE
RM-3					28	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
TRAFFIC SUMMARIES
HONOAPIILANI HIGHWAY WIDENING Maalaea Road to North Kihei Road Fed. Aid Project No. NH-030-1(28)

Date: Nov. 2001

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY M. Takahashi	
142may	CHECKED BY	
N. Ghosh		