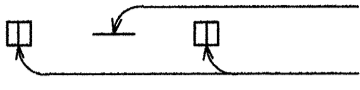
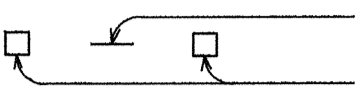






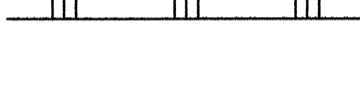

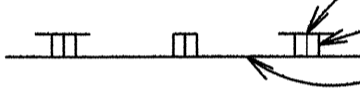



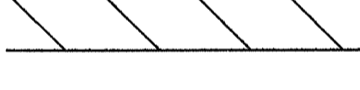
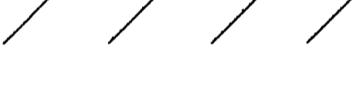




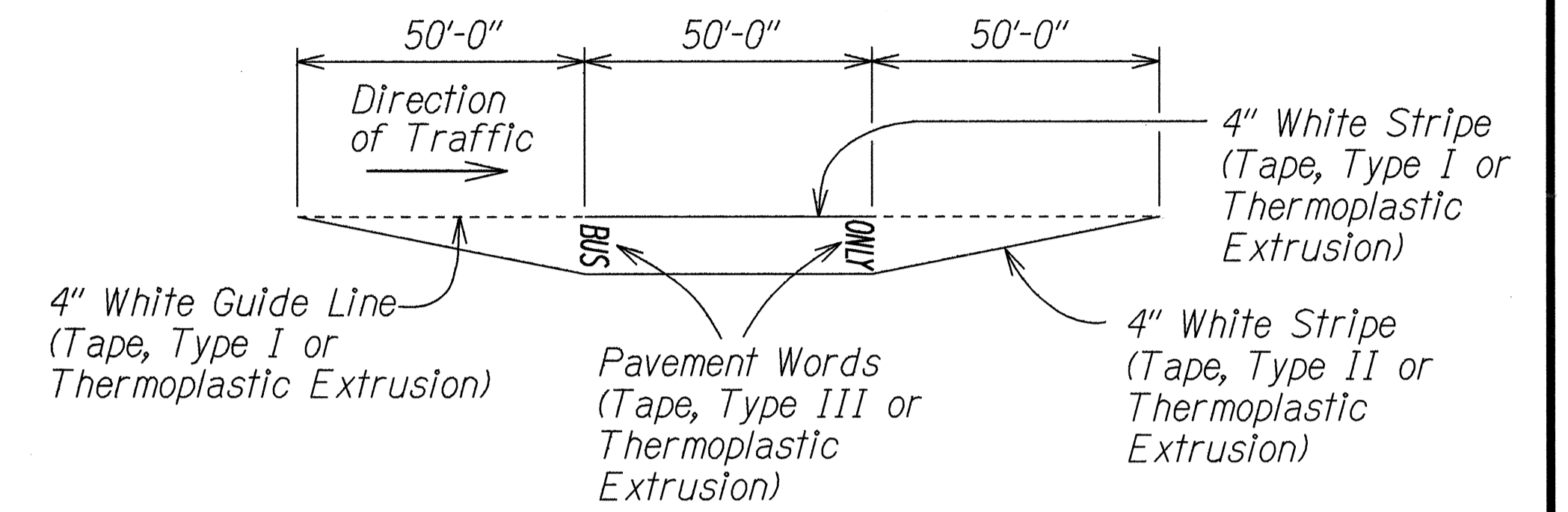
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	100	122

**LEGEND**

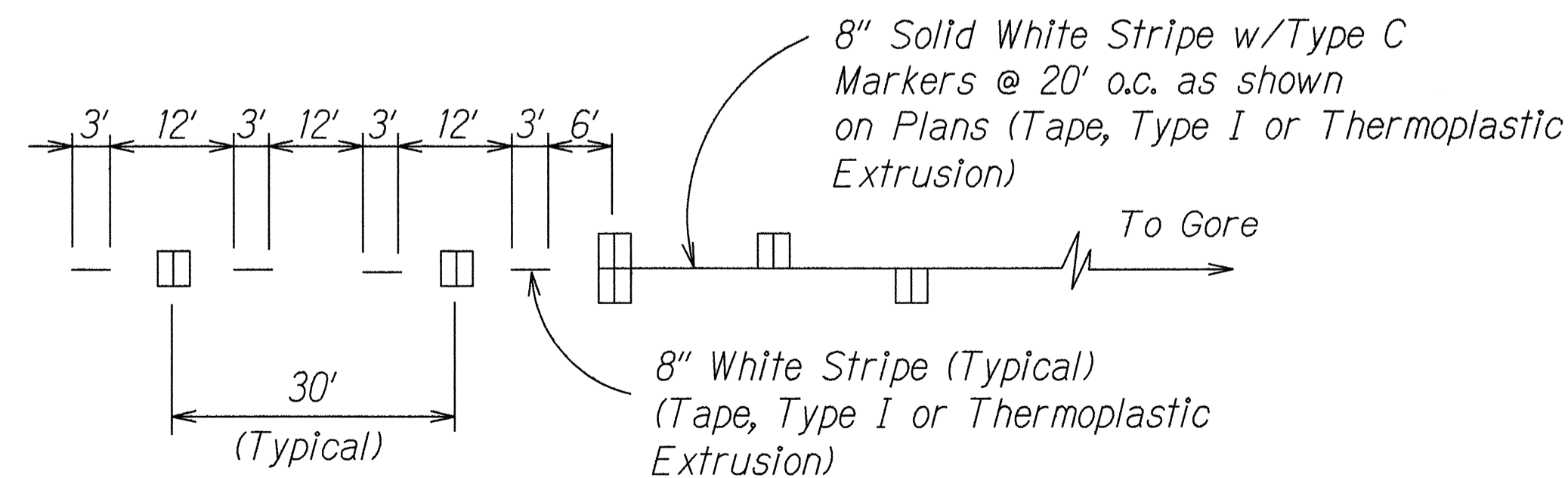
-  4 each Type A Raised Pavement Markers  
Type C Raised Pavement Markers @ 40'-0" o.c.
-  4 each Type J Raised Pavement Markers  
Type D Raised Pavement Markers @ 40'-0" o.c.
-  8" White Stripe with Type C Raised Pavement  
Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic  
Extrusion)
-  4" Double 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)
-  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)
-  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)
-  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.



**TYPICAL BUS BAY STRIPING**  
Not to Scale

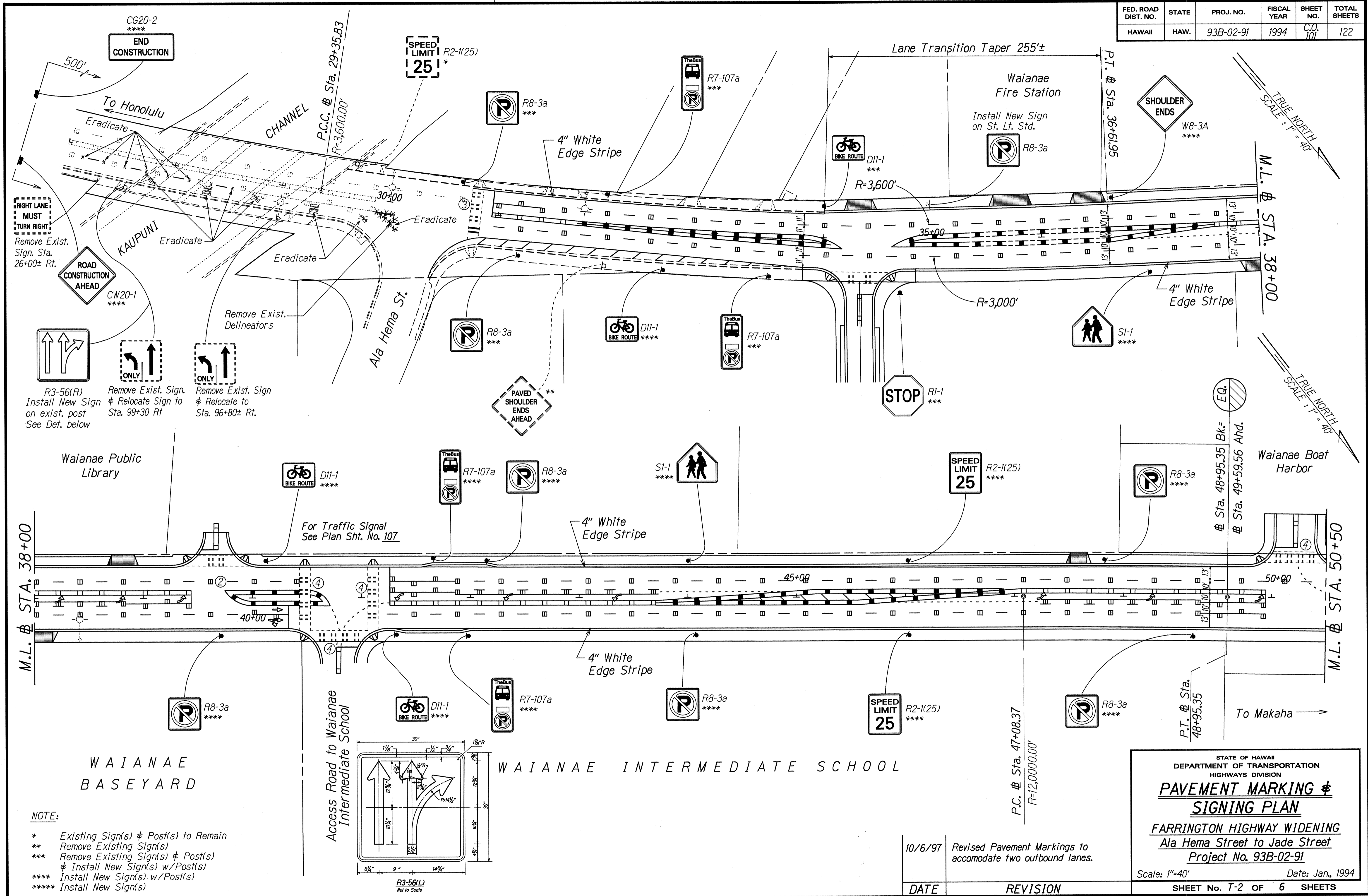


**LANE DROP MARKING**  
Not to Scale

SURVEY PLOTTED BY	DATE
DRAWN BY	12/93
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
FOR THE	
DESIGNATION	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**TRAFFIC**  
**LEGEND, DETAILS & NOTES**  
FARRINGTON HIGHWAY WIDENING  
Ala Hema Street to Jade Street  
Project No. 93B-02-91  
Scale: As shown Date: Jan, 1994  
SHEET No. T-1 OF 6 SHEETS

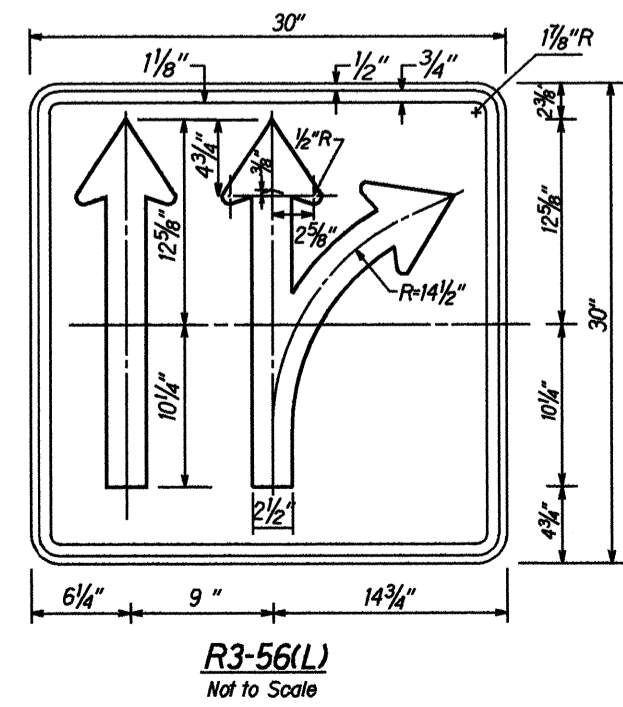
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	C.O. 101	122



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	12/93
DRAWN BY	M. Hironaka / R. Arch
DESIGNED BY	E. Ching
CHECKED BY	
DATE	

**NOTE:**

- \* Existing Sign(s) & Post(s) to Remain
- \*\* Remove Existing Sign(s)
- \*\*\* Remove Existing Sign(s) & Post(s) & Install New Sign(s) w/Post(s)
- \*\*\*\* Install New Sign(s) w/Post(s)
- \*\*\*\*\* Install New Sign(s)



DATE	REVISION
10/6/97	Revised Pavement Markings to accommodate two outbound lanes.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

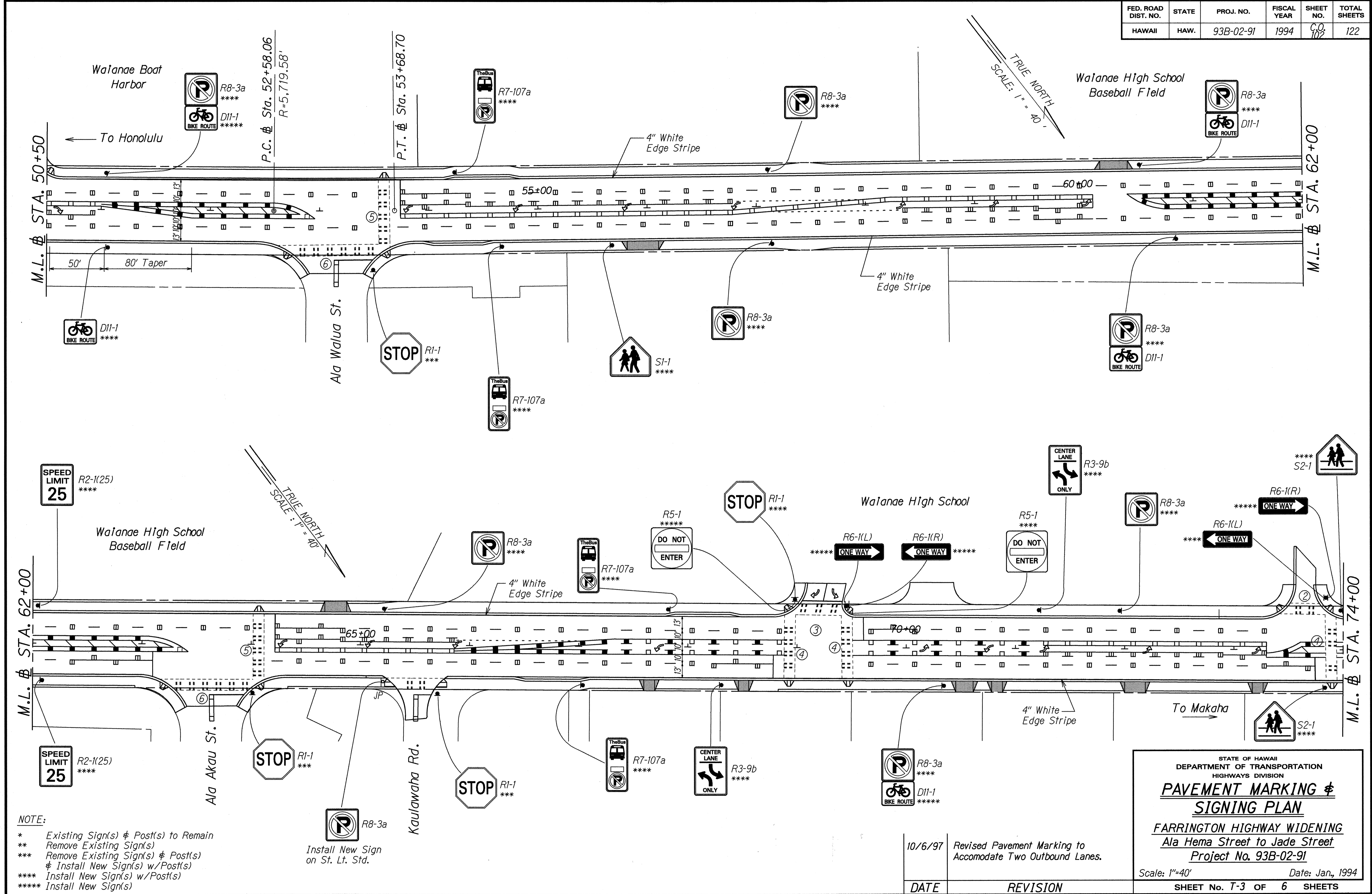
**PAVEMENT MARKING &  
SIGNING PLAN**

FARRINGTON HIGHWAY WIDENING  
Ala Hema Street to Jade Street  
Project No. 93B-02-91

Scale: 1"=40'      Date: Jan., 1994

SHEET No. T-2 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	C.O. 102	122



SURVEY PLOTTED BY	DATE
DRAWN BY M. Howells / R. Achi	12/93
NOTE BOOK	
NOTED BY B. Chize	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

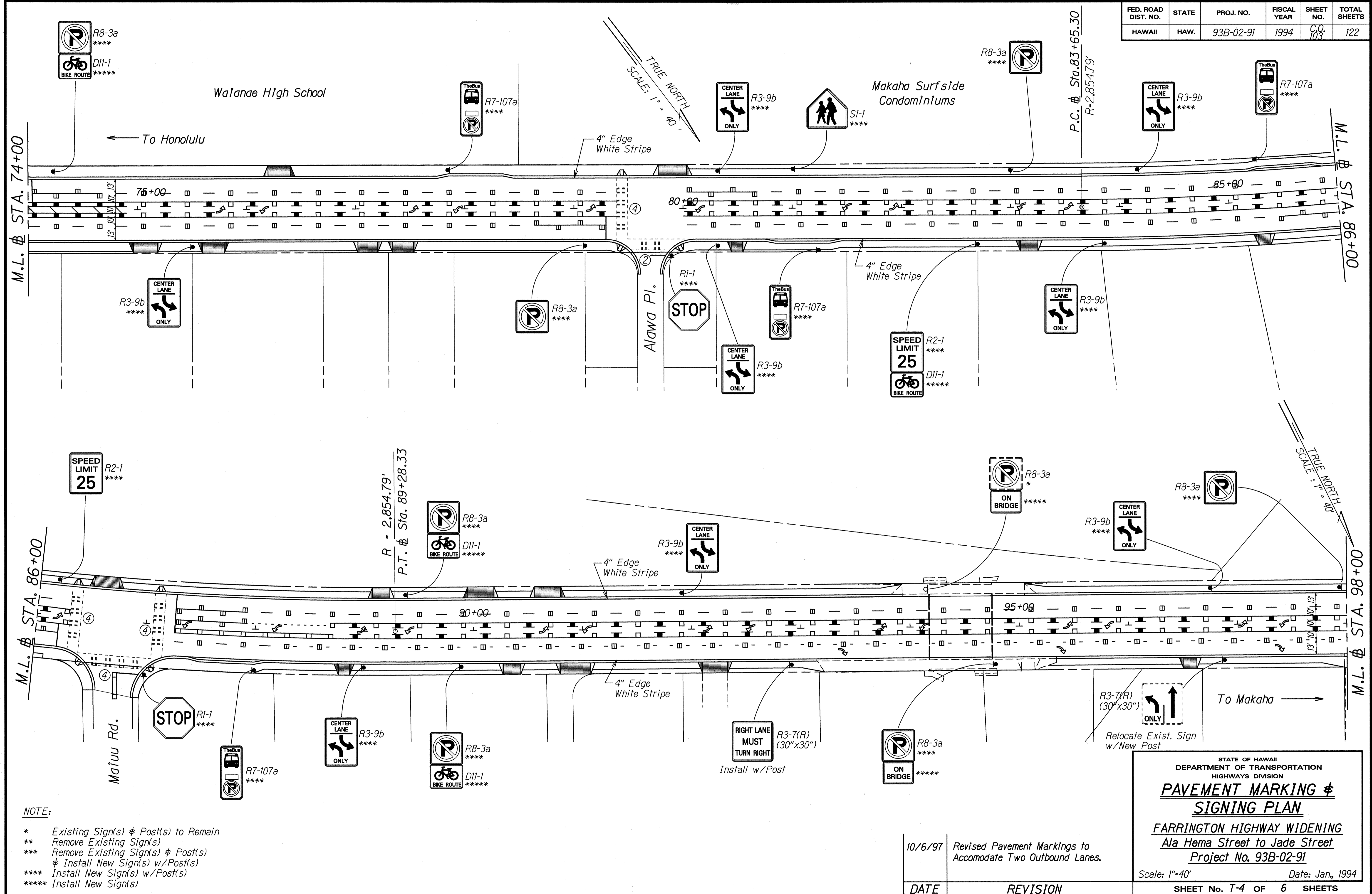
**NOTE:**  
 \* Existing Sign(s) & Post(s) to Remain  
 \*\* Remove Existing Sign(s)  
 \*\*\* Remove Existing Sign(s) & Post(s)  
 & Install New Sign(s) w/Post(s)  
 \*\*\*\* Install New Sign(s) w/Post(s)  
 \*\*\*\*\* Install New Sign(s)

Install New Sign on St. Lt. Std.

10/6/97	Revised Pavement Marking to Accomodate Two Outbound Lanes.
DATE	REVISION

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**PAVEMENT MARKING & SIGNING PLAN**  
 FARRINGTON HIGHWAY WIDENING  
 Ala Hema Street to Jade Street  
 Project No. 93B-02-91  
 Scale: 1"=40' Date: Jan., 1994  
 SHEET No. T-3 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	C.O. 103	122



SURVEY PLOTTED BY	DATE
DRAWN BY	12/93
TRACED BY	
NOTES	
QUANTITIES BY	
CHECKED BY	

**NOTE:**

- \* Existing Sign(s) & Post(s) to Remain
- \*\* Remove Existing Sign(s)
- \*\*\* Remove Existing Sign(s) & Post(s)
- \*\*\*\* Install New Sign(s) w/Post(s)
- \*\*\*\*\* Install New Sign(s)

DATE	REVISION
10/6/97	Revised Pavement Markings to Accomodate Two Outbound Lanes.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**PAVEMENT MARKING &  
SIGNING PLAN**

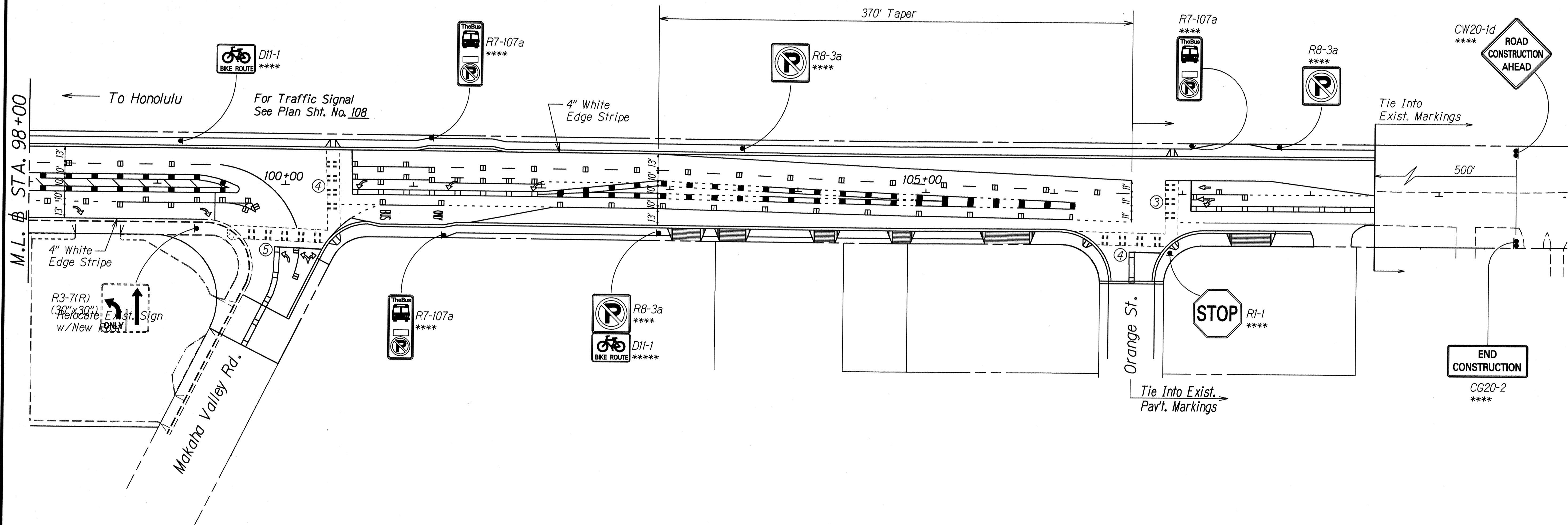
**FARRINGTON HIGHWAY WIDENING  
Ala Hema Street to Jade Street  
Project No. 93B-02-91**

Scale: 1"=40'      Date: Jan., 1994

SHEET No. T-4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	C.O. 104	122

TRUE NORTH  
SCALE: 1" = 40'



ORIGINAL PLAN	DATE
DESIGNED BY	12/93
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DATE	

**NOTE:**  
 \* Existing Sign(s) & Post(s) to Remain  
 \*\* Remove Existing Sign(s)  
 \*\*\* Remove Existing Sign(s) & Post(s)  
 & Install New Sign(s) w/Post(s)  
 \*\*\*\* Install New Sign(s) w/Post(s)  
 \*\*\*\*\* Install New Sign(s) w/Post(s)

10/6/97	Revised Pavement Marking to Accomodate Two Outbound Lanes. Relocate existing sign with new post.
DATE	REVISION

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**PAVEMENT MARKING &  
 SIGNING PLAN**

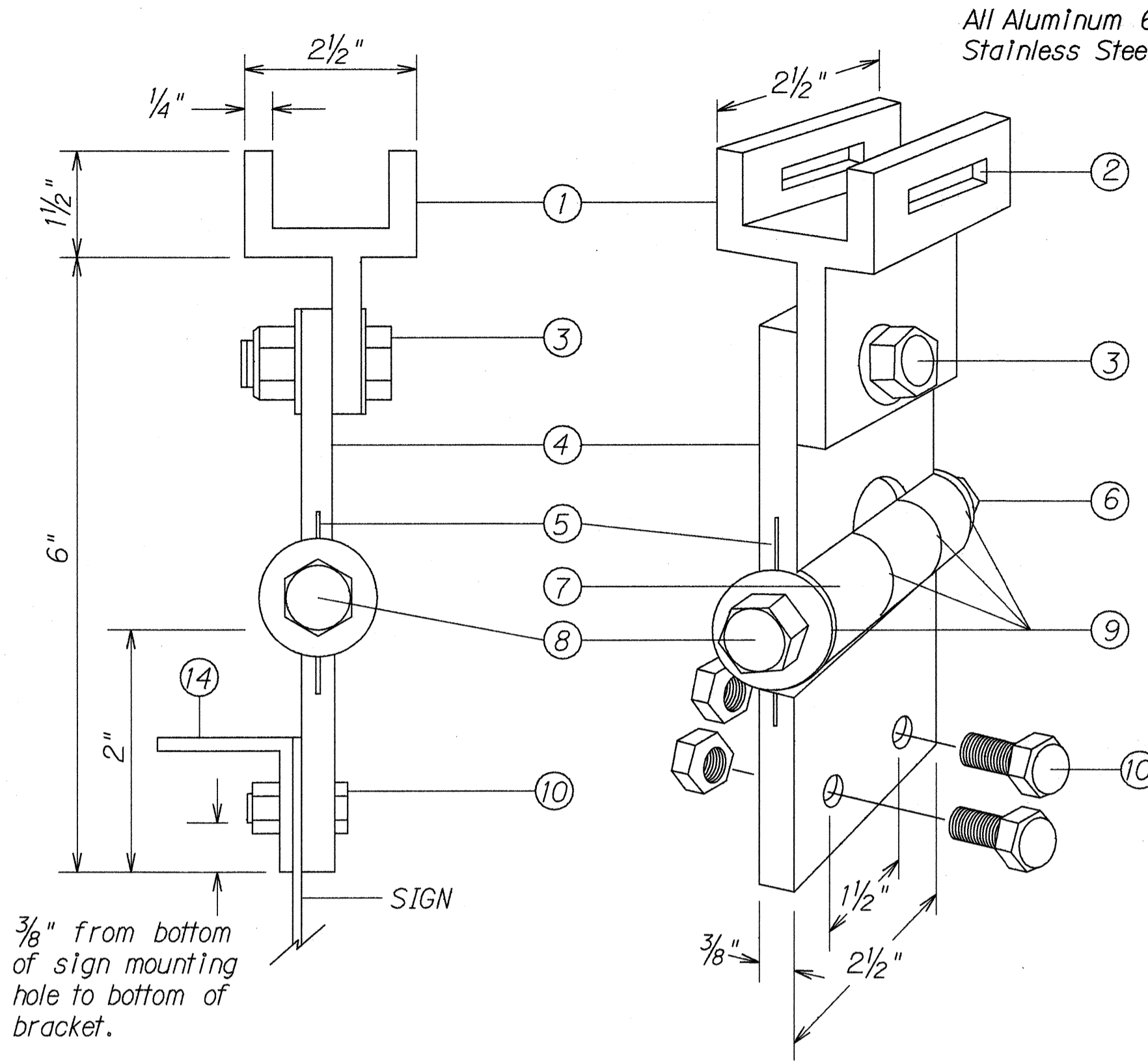
FARRINGTON HIGHWAY WIDENING  
 Ala Hema Street to Jade Street  
 Project No. 93B-02-91

Scale: 1"=40' Date: Jan., 1994  
 SHEET No. T-5 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	C.O. 104 S-1	122

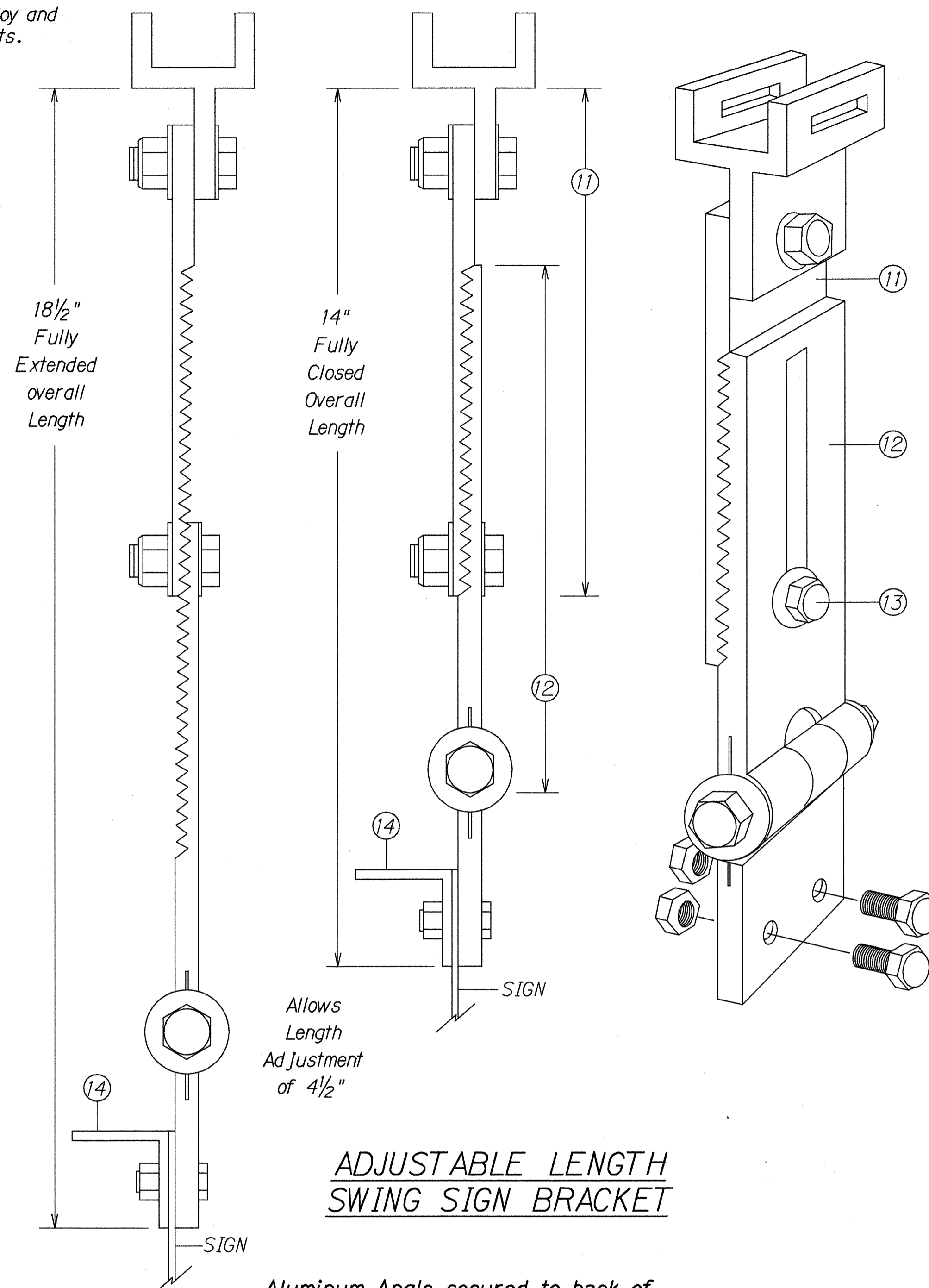
**NOTES:**

- Sign D3-1 shall be new Street Name Sign. The Contractor shall provide the same message on the front and back side of the sign. Payment will not be made separately but shall be considered as one unit.
- Colors:  
Legend - White (Reflectorized)  
Background - Green (Reflectorized)
- All panels shall be reflectorized with Type B reflective sheeting in accordance with Section 712.20 of the Standard Specifications.
- Borders and messages shall conform to details as shown on the plans and as specified in the MUTCD.
- Sign mounting brackets, aluminum angle, fixtures, fasteners, and all necessary hardware, and equipment, tools, labor, materials and other incidentals for installation, will not be paid for separately but shall be considered incidental to street name sign installation.
- All signs shall conform to section 621 of the Standard Specifications 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"

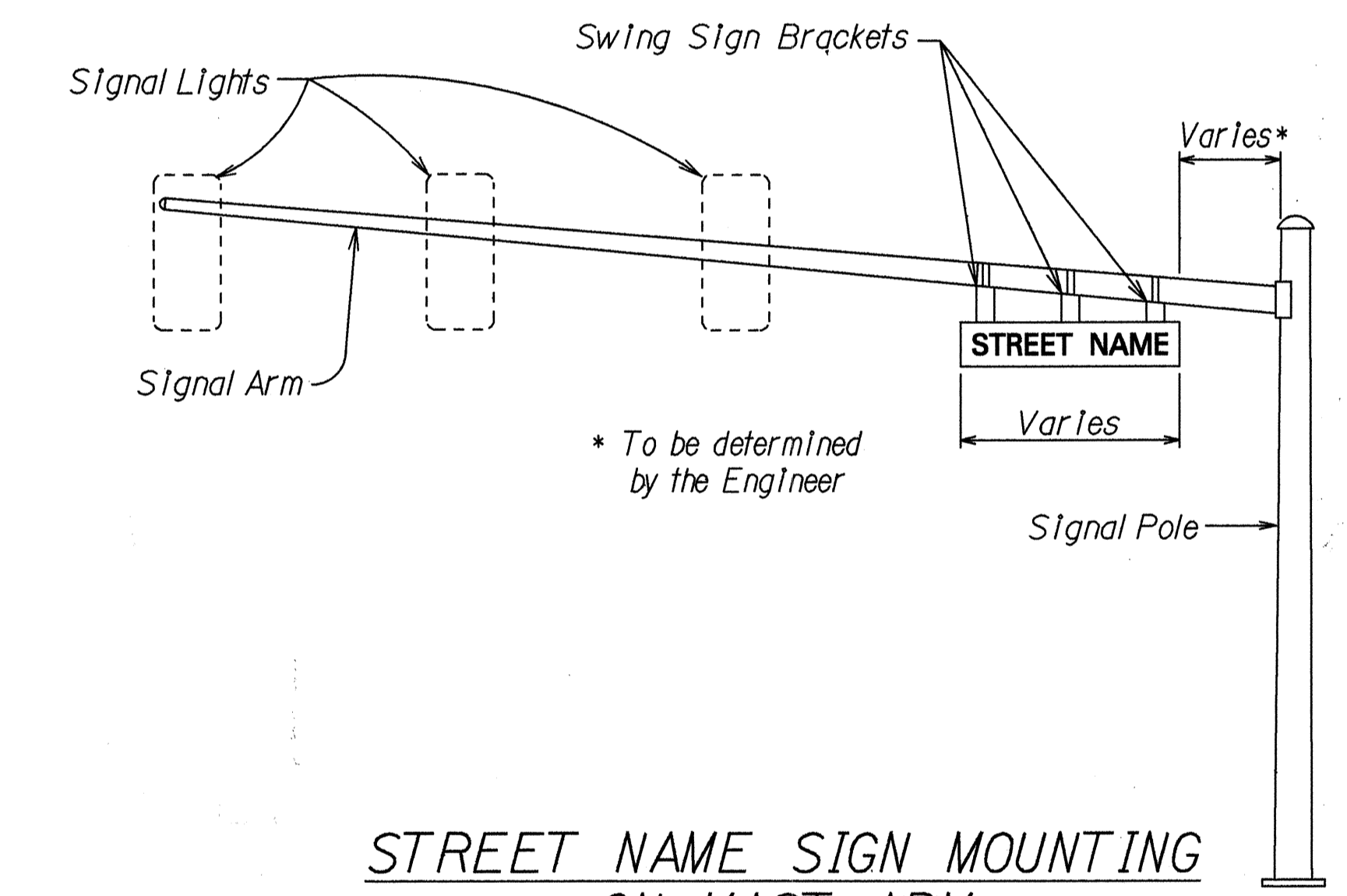


**FIXED LENGTH NON-ADJUSTABLE SWING SIGN BRACKET**

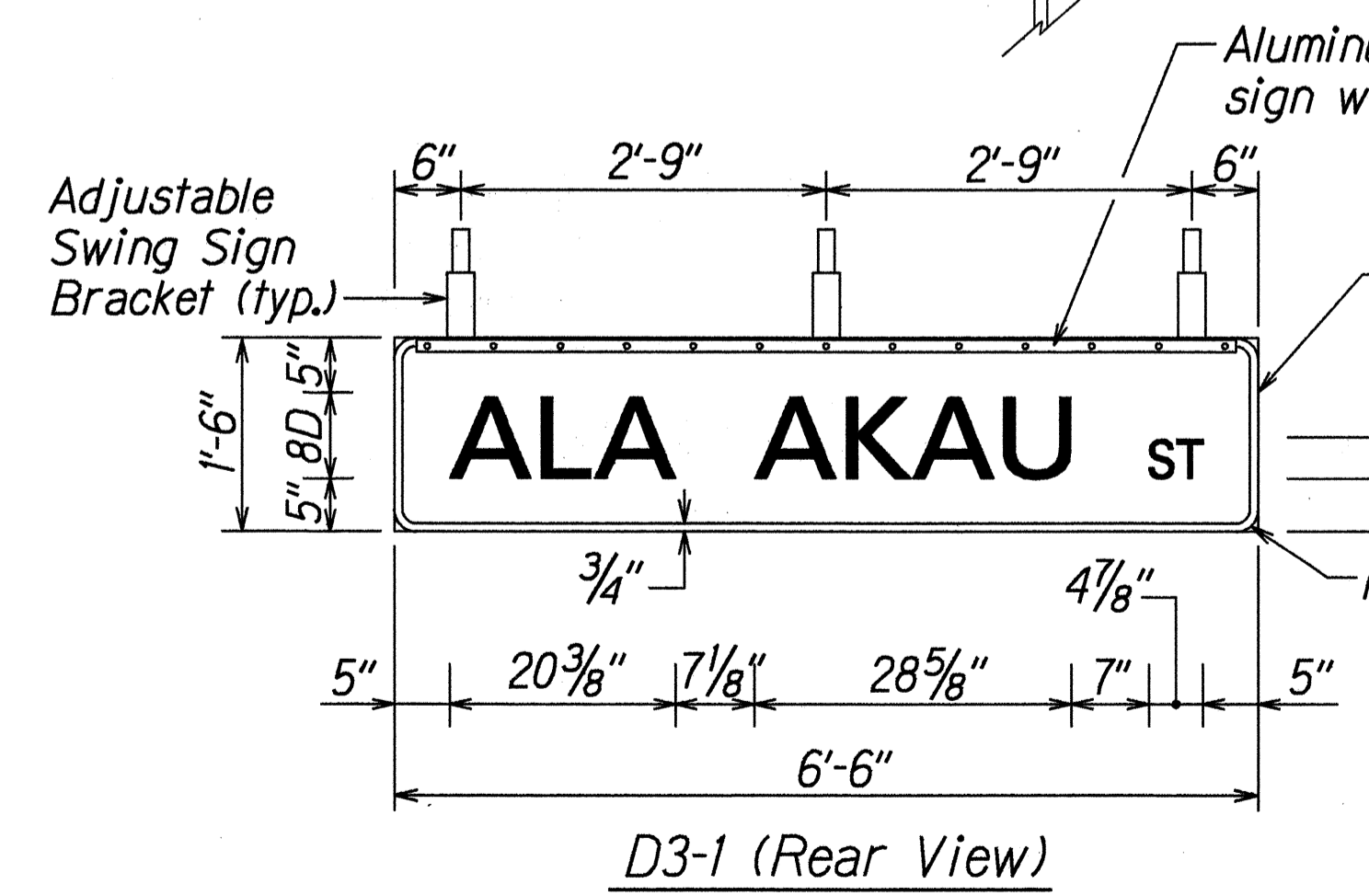
- Pivotal Upper Bracket
- 1 3/8" x 1/4" Slot for double strapping to electrolier mast arm. (M2G-34S(HD) .030" x 3/4" Heavy Duty Stainless Steel Strap with M2G-34B(HD) Buckle recommended.)
- 1/2" - 13 x 1 1/2" Stainless Steel Hex Head Bolt with Stainless Steel Hex Lock Nut and 1/16" Stainless Steel Washer (both sides). Allows upper bracket to pivot and align with electrolier mast arm.
- 6" Overall drop with Fixed Length Sign Bracket
- Stainless Steel Dampener Spring (Removable)
- Stainless Steel Hex Lock Nut with 1/16" Stainless Steel Washer
- 1" O.D. Axle Housing
- 1/2" - 13 x 4" Stainless Steel Hex Head Bolt with 1/16" Stainless Steel Washer
- Ollite Bushing
- Sign Mounting Sets, consisting of two each 5/16" - 18 x 1" Stainless Steel Hex Head Bolt with Stainless Steel Hex Lock Nut. Two holes on 1 1/2" centers provide positive lock sign mounting to bracket.
- 8 1/4" overall length Upper Adjustable Sign Bracket section
- 9" overall length Lower Adjustable Sign Bracket section, including Axle Housing (8" overall length to top of Axle Housing)
- 1/2" - 13 x 1 1/2" Stainless Steel Hex Bolt with Stainless Steel Hex Lock Nut and 1/16" Stainless Steel Washers (both sides). Loosen lock nut, adjust bracket teeth to level sign.
- 1 1/4" x 1 1/4" x 1/8" Aluminum Angle



**ADJUSTABLE LENGTH SWING SIGN BRACKET**

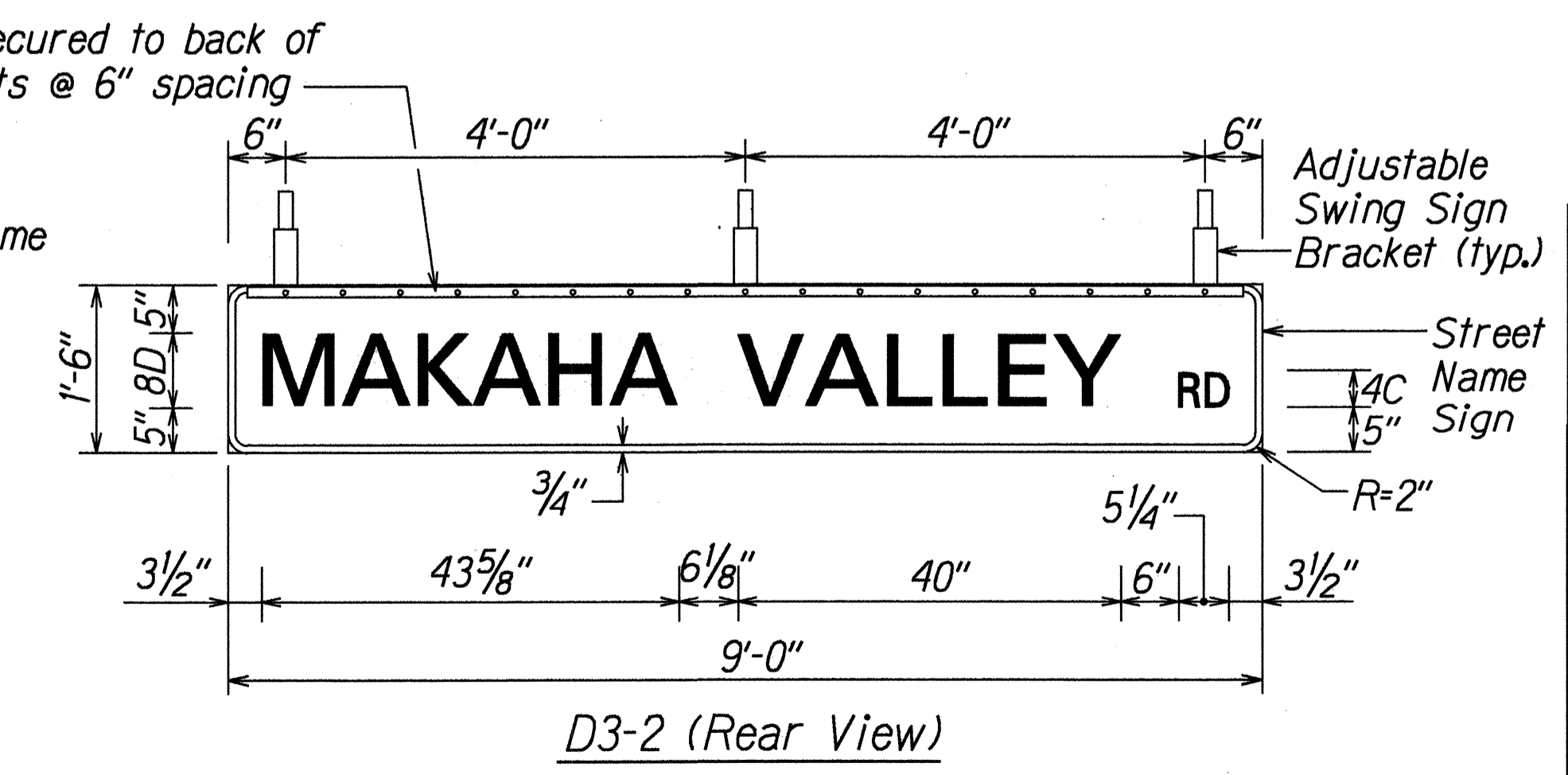


**STREET NAME SIGN MOUNTING ON MAST ARM**



D3-1 (Rear View)

For Mast Arm Location, See Plan Sht. No. C.O. 108 S-1



D3-2 (Rear View)

For Mast Arm Location, See Plan No. C.O. 108

**PANEL & SWING BRACKET LAYOUT FOR STREET NAME SIGN**








DATE	2/24/97
DESIGNED BY	G. K. KAHN
CHECKED BY	
QUANTITIES BY	
REVISIONS	

DATE	2/24/97	REVISION	Details added to Install Street Name Sign on Mast Arm.
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION			
<b>SWING SIGN BRACKET DETAIL</b>			
FARRINGTON HIGHWAY WIDENING Ala Hema Street to Jade Street Project No. 93B-02-91			
Scale: As shown		Date: Feb, 1997	
SHEET No. T-5 OF 6 SHEETS			

### PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
<b>PAVEMENT MARKERS</b>	
TYPE A _____	612 EA.
TYPE C _____	256 EA.
TYPE D _____	329 EA.
TYPE H _____	316 EA.
TYPE J _____	586 EA.
<b>TAPE - TYPE I OR THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) _____	3,895 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	4,680 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	1,020 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	2,610 L.F.
<b>TAPE - TYPE II OR THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) _____	14,880 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	1,315 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) _____	4,565 L.F.
<b>TAPE - TYPE III OR THERMOPLASTIC EXTRUSION</b>	
12-INCH PAVEMENT STRIPE (WHITE) _____	630 L.F.
CROSSWALK MARKINGS _____	98 LANES
PAVEMENT ARROW _____	63 EA.
PAVEMENT WORD _____	24 EA.


### TRAFFIC SIGN SUMMARY

SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POST	W/O POST
R1-1	STOP	8			
R2-1(25)	SPEED LIMIT 25	6			
R3-9b	CENTER LANE  ONLY	10			
R5-1	DO NOT ENTER	1	1		
R6-1(L)		1	1		
R6-1(R)			2		
R7-107a		15			
R8-3a		27	2		
Plaque	ON BRIDGE		2		
W8-3A	SHOULDER ENDS	1			
S1-1		4			
S2-1		2			
TOTAL		75	8		

### CONSTRUCTION SIGN SUMMARY

SIGN NO.	MESSAGE	W/POSTS	W/O POST
CW20-1d	ROAD CONSTRUCTION AHEAD	2	
CG20-2	END CONSTRUCTION	2	
TOTAL		4	

### BIKE SIGNS

SIGN NO.	MESSAGE	W/POST	W/O POST
D11-1	 BIKE ROUTE	6	9

SURVEY PLOTTED BY \_\_\_\_\_ DATE 1/94  
 DRAWN BY J. A. Hill  
 DESIGNED BY E. Ching  
 QUANTITIES BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 ORIGINAL PLAN  
 NOTE BOOK  
 for Mike  
 K. Tsunoda

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**MISCELLANEOUS TRAFFIC  
 SUMMARIES**  
 FARRINGTON HIGHWAY WIDENING  
 Ala Hema Street to Jade Street  
 Project No. 93B-02-91  
 Date: Jan., 1994