

NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	27	70

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. Details of Type C, Type D and Type H Markers on Standard Plan Nos. TE-30, TE-31 and TE-32 shall be deleted and replaced with details of Type CL, Type DL and Type HL Markers as shown on Sheet No. T2. All references to Type C, Type D and Type H Markers in the plans shall mean Type CL, Type DL and Type HL Markers respectively.
5. Final locations of all signs shall be approved by the Engineer prior to any installation work.
6. All pavement striping shall be as noted on the legend or plans.
7. 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.
8. Backing for all new Regulatory and Warning Signs shall not be spliced.
9. Interstate Route Marker Symbols shall conform to details shown on the plans and as specified in the MUTCD.
10. 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 Streets and Highways" (MUTCD)
 - b. "Standard Highway Signs."
 - c. "Standard Alphabets for Highway Signs."
11. Borders, messages, arrows, symbols and shields shall conform to details as shown on the plans and as specified in the MUTCD.
12. Sign messages shall be as indicated on the plan.
13. All panels shall be reflectorized in accordance with Section 712.20 of the Standard Specifications. Minimum width of panels shall be 2 ft. abutting edges of panels shall be in only one direction if vertical abutting edges are used, no horizontal abutting edges shall be allowed and vice versa.
14. All new and relocated signs and markers installed on pipe posts, light standard or expressway sign post are to be mounted with band brackets and steel braces.
15. 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.
16. Removal of Existing Delineators and Posts shall be considered incidental to the various signing items.
17. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as directed by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.

18. Removing and reinstalling existing Street Name Signs on Regulatory and Warning Sign Post shall not be paid for separately but shall be considered incidental to the various signing items.
19. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
20. The Contractor shall notify the Traffic Signal Branch, Dept. of Transportation Services, City & County of Honolulu, 2 weeks prior to commencing any loop detector work.
21. Dept. of Transportation Services, City & County of Honolulu, will assist the Engineer in construction inspection for the loop detector work.
22. The exact locations of the new loop detectors shall be determined in the field by the Engineer.
23. Loop detectors damaged during the Contractor's reconstruction of pavement areas or cold planing operation, shall be replaced within 48 hours. Replacement and location of the new loop detectors shall be as directed by the Engineer.
24. The Contractor shall install construction signs as noted on the plans. At the Project completion, these signs and posts shall become the property of the State. The Contractor shall remove and deliver these signs and posts to a location as directed by the Engineer. The contract price paid shall be full compensation for all excavation and backfilling, for furnishing, installing, removing and delivering all materials and for all equipment, tools, labor and incidentals necessary to complete the work.

7. All existing expressway sign luminaires that are not operational and to remain, shall be made operational. All additional materials and labor which are necessary to complete this work, shall be considered incidental to replacement of existing luminaires with 175-Watt metal halide, and no additional compensation will be allowed therefor.
8. Existing damaged steel framing luminaire supports and/or ballast housing box shall be replaced prior to installing the new sign luminaires. This work shall be considered incidental to Item No. 622.2300 - Replacement of Existing Luminaires with 175-Watt Metal Halide Luminaires for Expressway Sign Lighting.
9. Incidental parts and services, including sign lighting system, not shown on the plans or specified but deemed necessary for the sign installation, shall be furnished and installed by the Contractor as part of the work contracted.
10. Removal and disposal of existing sign panels, posts with foundation, luminaires and supports will not be paid for separately, but shall be considered incidental to the various signing items.
11. Connections of new sign luminaires to existing transformer and ballast housing and all incidental parts and service necessary will not be paid for separately, but shall be considered as incidental to replacement of existing luminaires with 175-Watt metal halide.
12. Moving existing Exit Number Sign Panels to the right edge of Expressway or Destination Signs shall be considered incidental to Item No. 621.0600 - Overlay Panel for Exit Number Sign.
13. Installing additional steel framing luminaire supports will not be paid for separately, but shall be considered incidental to Item No. 622.2300 - Replacement of Existing Luminaires with 175-Watt Metal Halide Luminaires for Expressway Sign Lighting.

EXPRESSWAY (E) AND DESTINATION (D) SIGN NOTES

1. The Contractor shall verify the locations and dimensions of existing Sign Panels and supports.
2. New sign panels shall be laminated aluminum or extruded aluminum.
3. Letter Size:
 - a. When letters are all uppercase, use series "E"
 - b. When initial uppercase letter is used in conjunction with lowercase letters, use series "E"(M) for uppercase
4. 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.
5. The amount and center-to-center spacing of Expressway Sign Luminaires shall be in accordance with the luminaires manufacturer's instructions. Maximum center-to-center spacing of luminaires shall be 10-feet.
6. Destination and Expressway Sign Posts shall be as noted on the plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES

**MOANALUA FWY. RESURFACING
AIEA I.C. TO MOANALUA STREAM BRIDGE
(OUTBOUND LANES)**

PROJECT NO. 78A-01-91M

Date: Sept. 1991

SHEET No. 71 OF 44 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	28	70

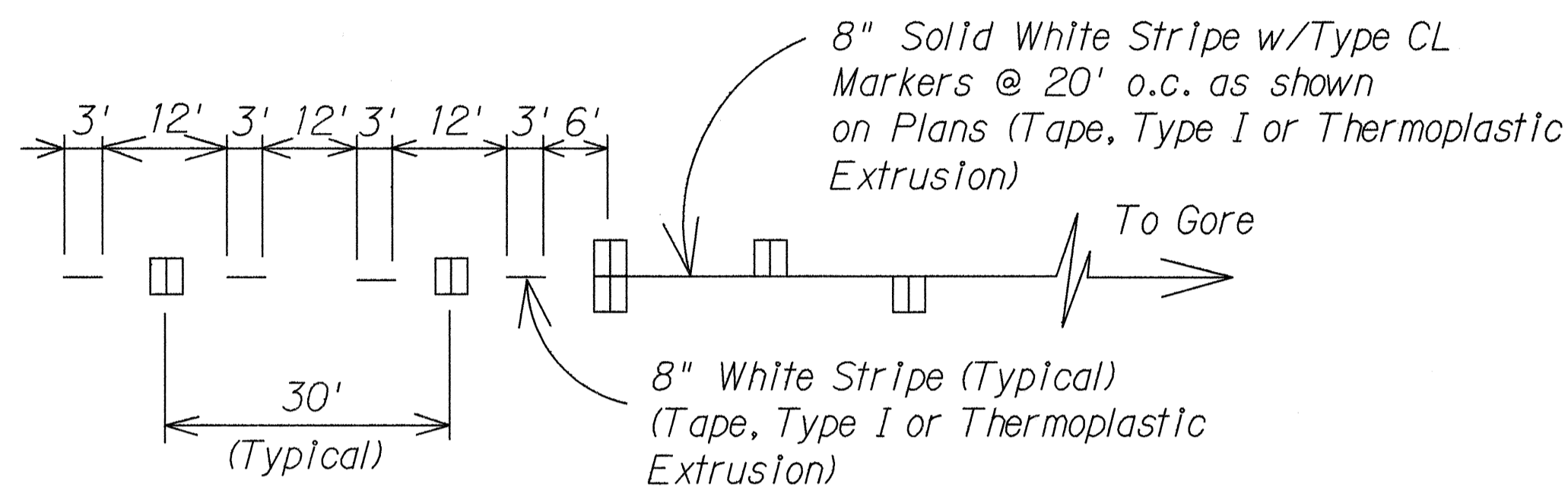
LEGEND

- 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. (Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow with Type DL Raised Pavement Markers @ 20' - 0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow Stripes with Type HL Raised Pavement Markers @ 20" - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" Yellow Edge Stripe with Type HL Raised Pavement Markers @ 40' - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" Double Solid White Stripes with Type CL 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 CL Raised Pavement Markers @ 20' - 0" o.c.
4" White Stripe/Tape, Type I or Thermoplastic Extrusion
- 4" or 8" White Edge Stripe with Type CL Raised Pavement Markers @ 40' - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" White Guide Lines (Thermoplastic Extrusion)
- 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. (Thermoplastic Extrusion)
- Pavement Arrow (Tape, Type I or Thermoplastic Extrusion)
- Pavement Word (Tape, Type I or Thermoplastic Extrusion)
- 4 Each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40' - 0" o.c.
Type HL 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 CL Markers @ 40' - 0" o.c. (Thermoplastic Extrusion)

△ △
2 EA.

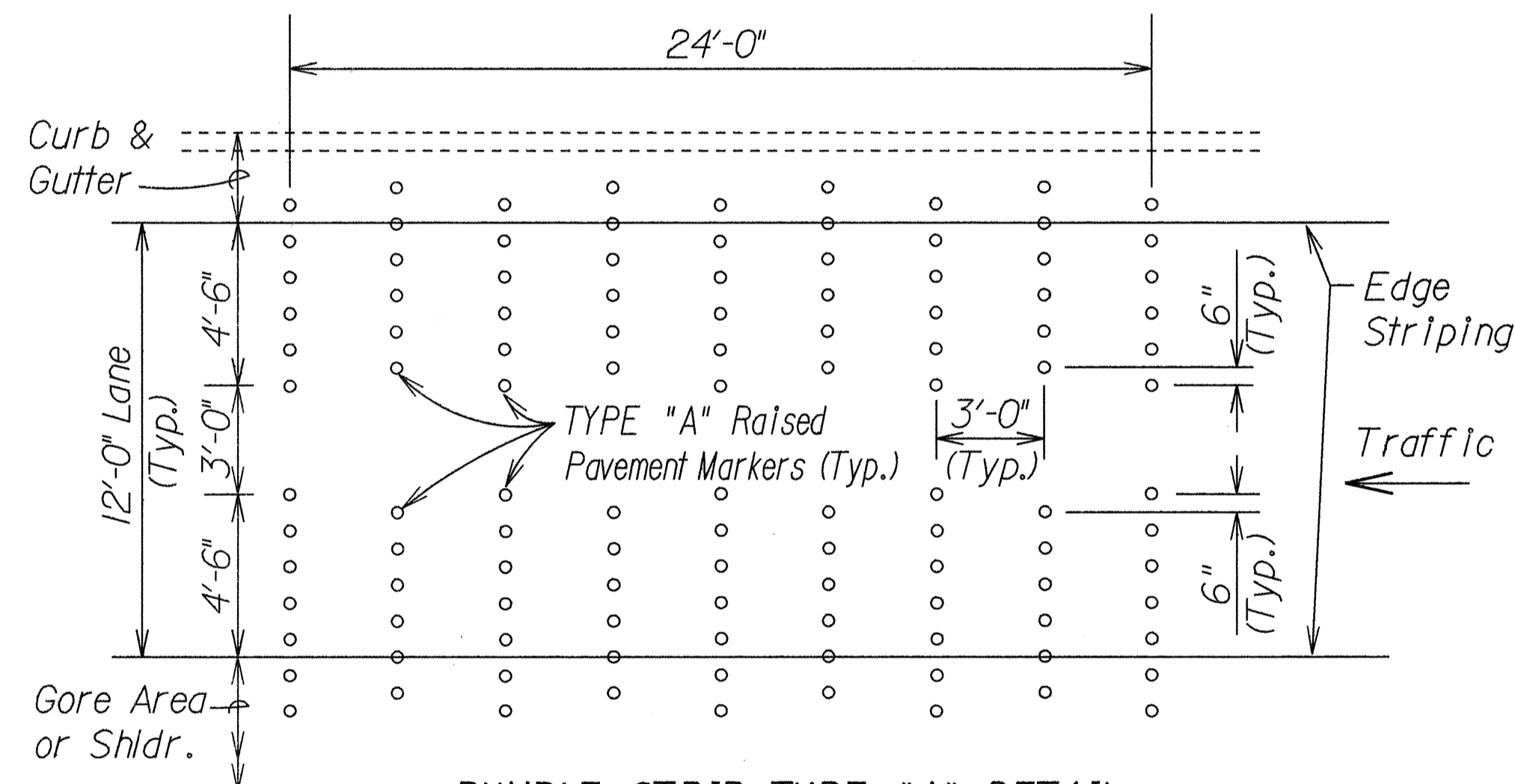
LEGEND

- RM-2 RM-3
- Reflector Marker with Steel Post
- Reflector Marker Mounted on Concrete Retaining Wall
- Reflector Marker Mounted on Bridge Railing
- Reflector Marker with Flexible Delineator Post



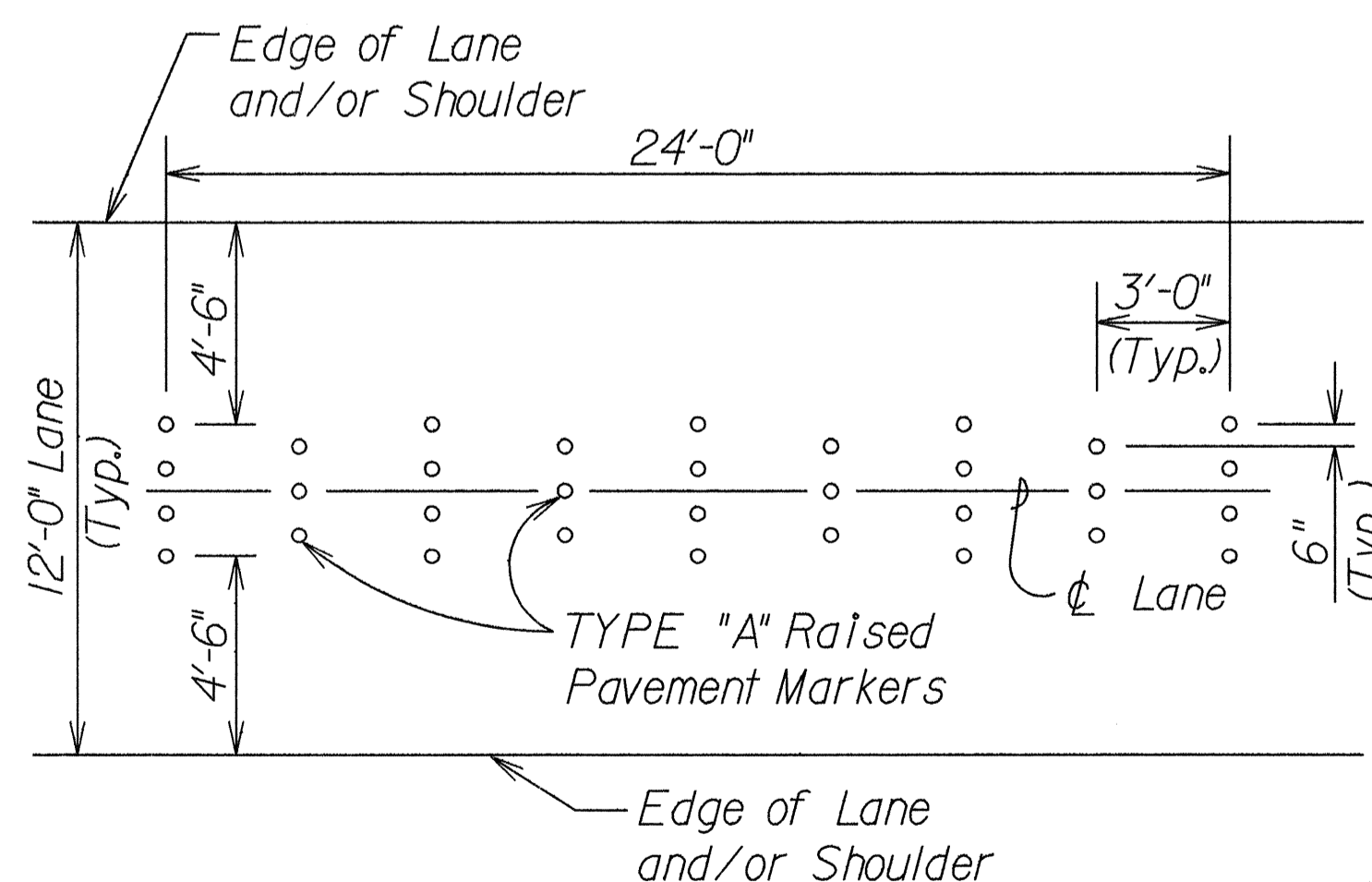
LANE DROP MARKING

Not to Scale



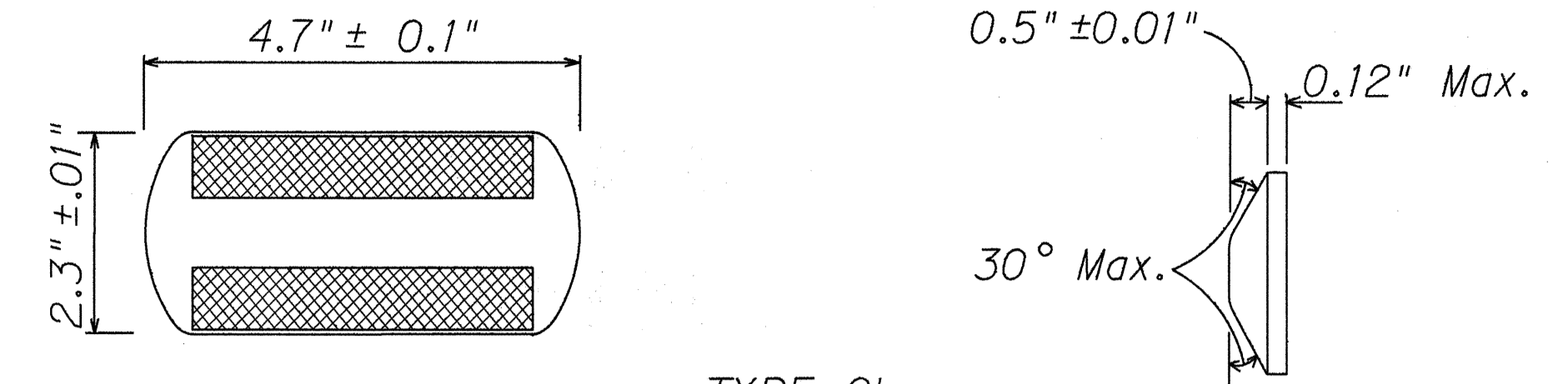
RUMBLE STRIP TYPE "A" DETAIL

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



RUMBLE STRIP TYPE "B" DETAIL

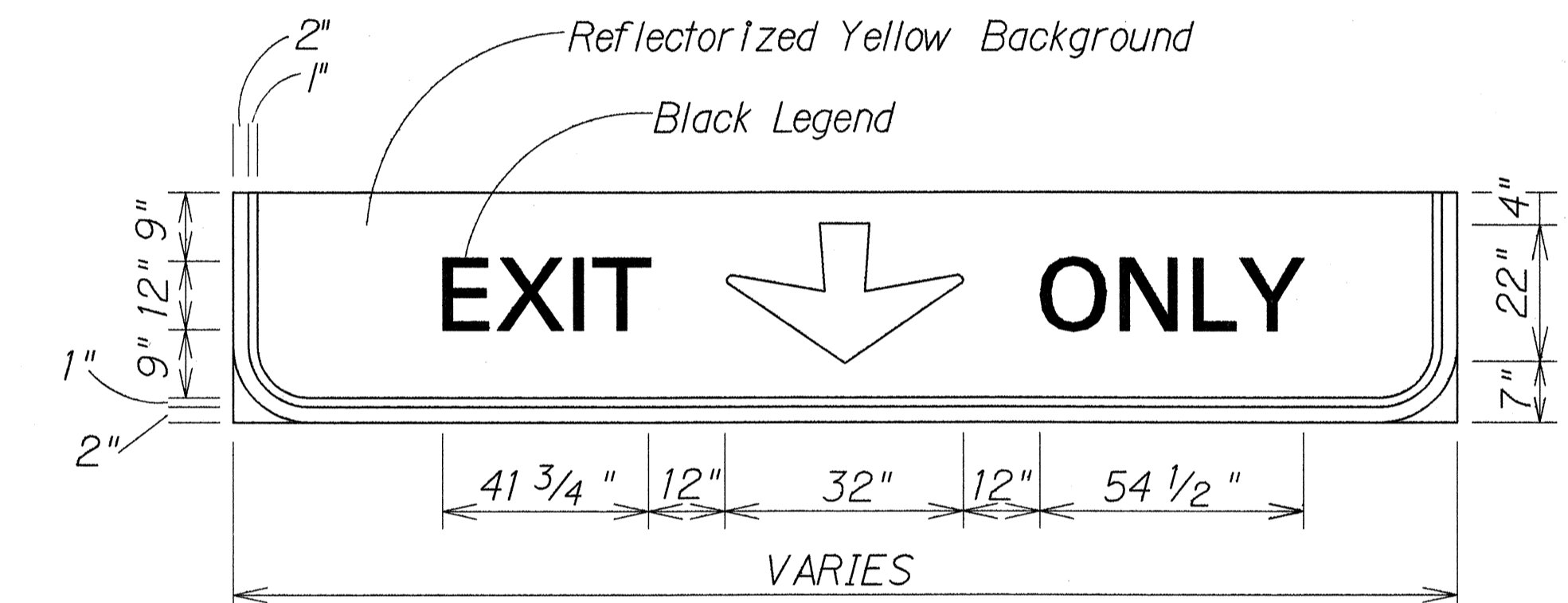
Scale: 1/4" = 1' - 0"



- TYPE CL
Red-Clear Reflective Marker
- or
- TYPE DL
Two-Way Yellow Reflective Marker
- or
- TYPE HL
One-Way Yellow Reflective Marker

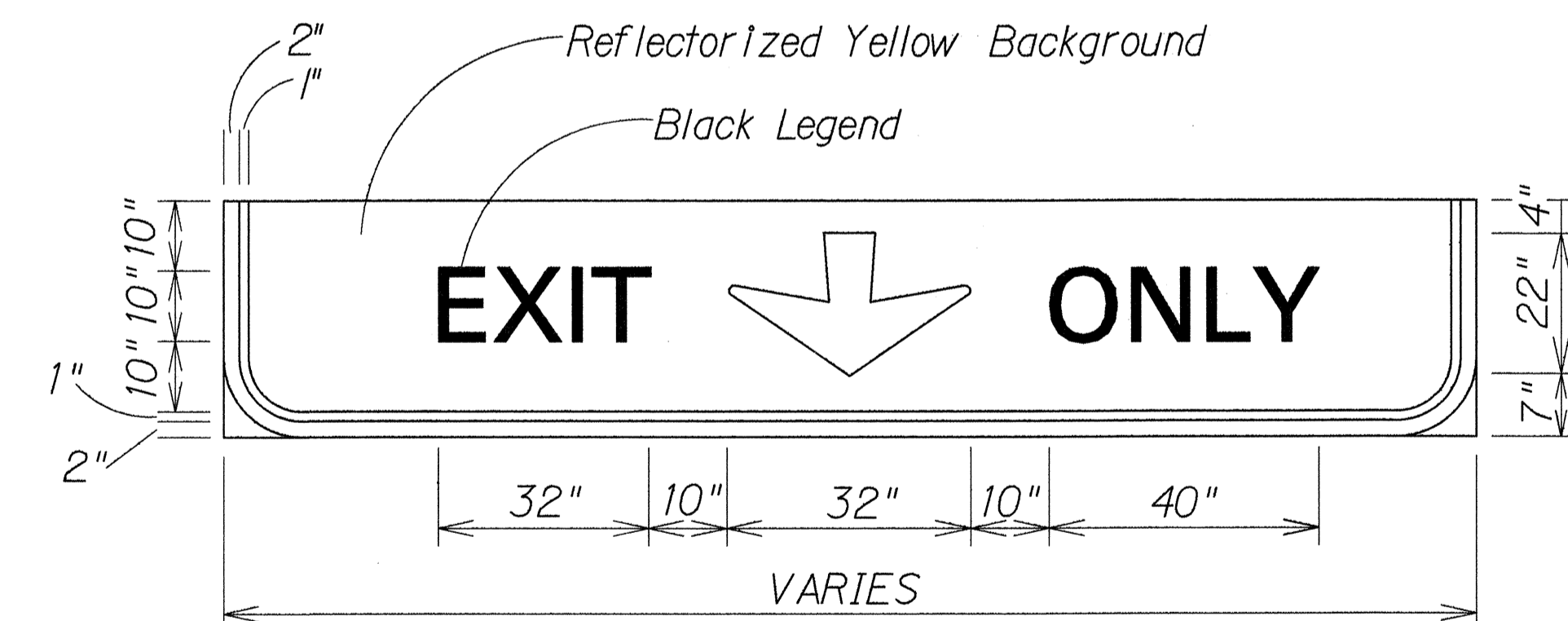
RAISED PAVEMENT MARKER DETAILS

Not to Scale



TYPICAL EXIT ONLY PANEL

12" Letters
Not to Scale



TYPICAL EXIT ONLY PANEL

10" Letters
Not to Scale

NOTE:

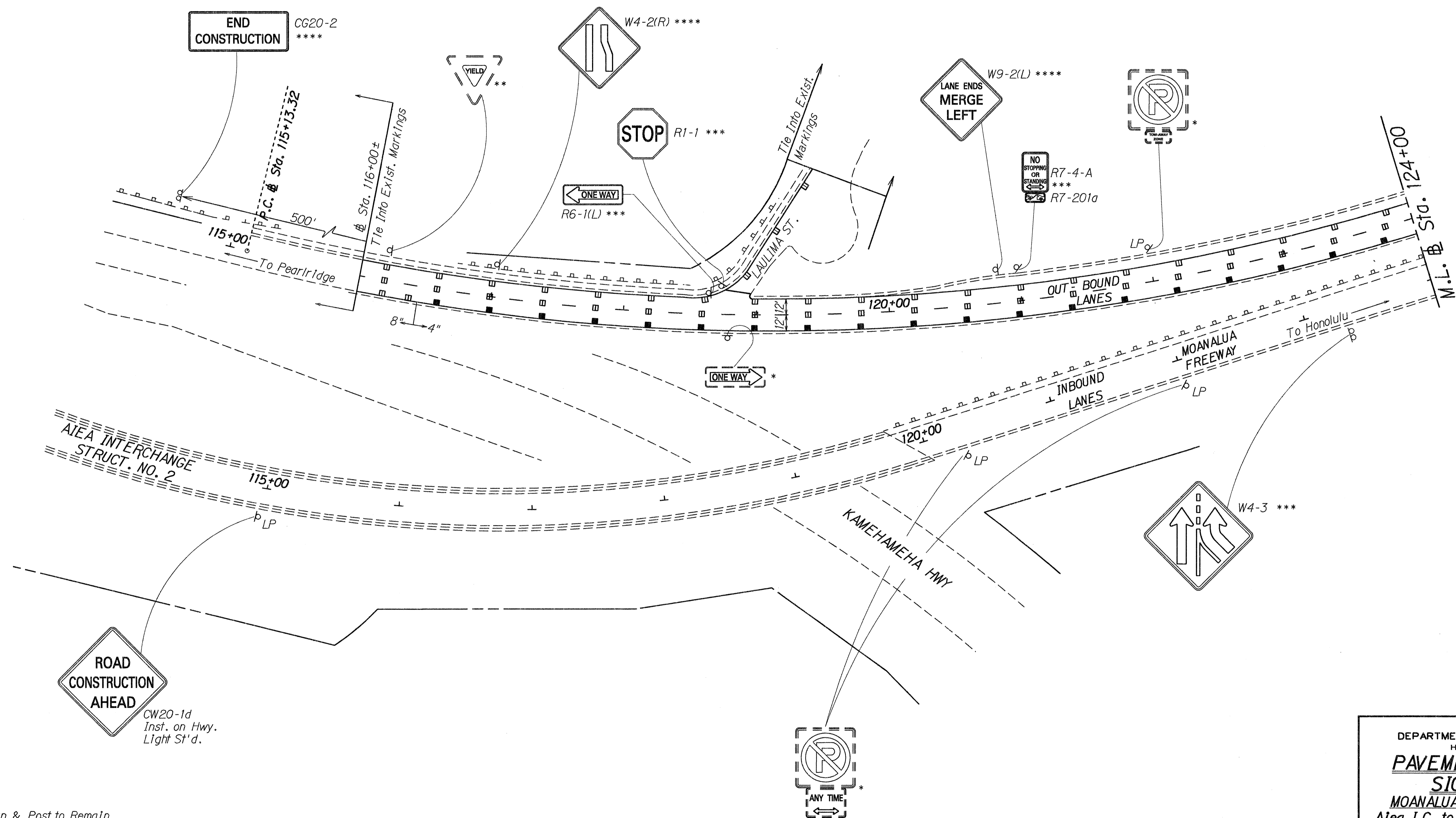
- 1. Rumble Strip will be paid for under Type A Pav't. Markers.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING
LEGEND, DETAILS & NOTES
MOANALUA FWY. RESURFACING
Aiea I.C. To Moanalua Stream Bridge
(Outbound Lanes)
PROJECT NO. 78A-01-91M
Scale: As Noted Date: Sept. 1991
SHEET No. T2 OF 44 SHEETS

DATE: _____
DESIGNED BY: _____
CHECKED BY: _____
QUANTITIES BY: _____
NOTE BOOK: _____
ORIGINAL PLAN: _____
SERIES PLOTTED BY: _____

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	29	70

TRUE NORTH
SCALE: 1" = 40'



DATE
SURVEY PLOTTED BY
PLAN
TRACED BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY
N.

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)

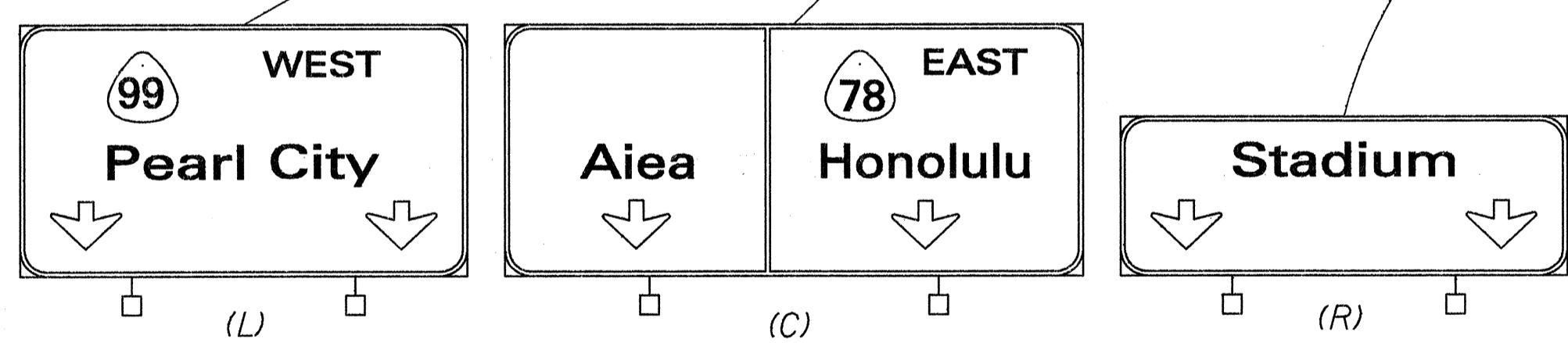
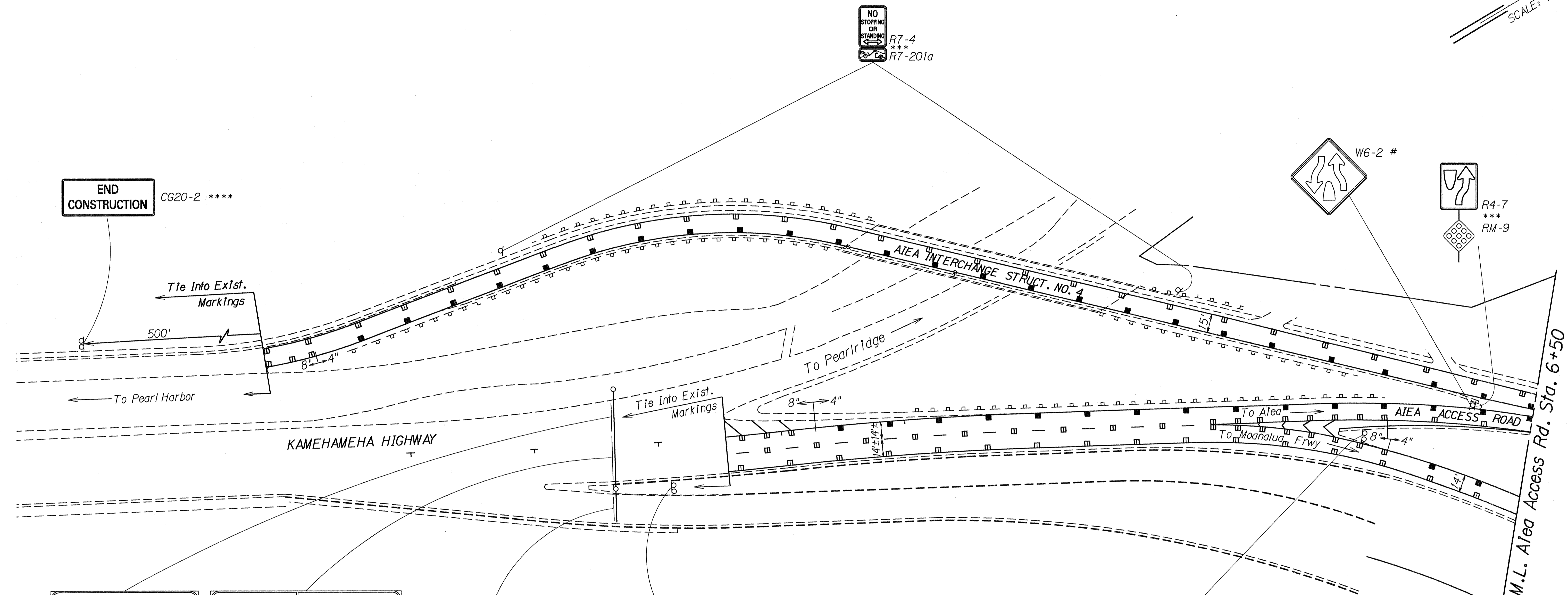
Project No. 78A-01-91M

Scale: 1" = 40'-0" Date: Sept. 1991

SHEET No. 73 OF 44 SHEETS

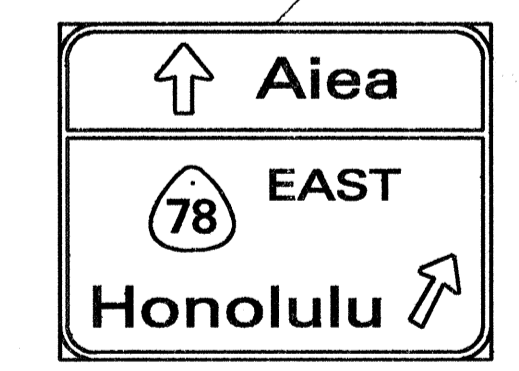
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	30	70

TRUE NORTH
SCALE: 1" = 40'



SIGN E-1

Kamehameha Hwy. Sta. 292+64±
Inst. New Overlay w/ Messages
Over Ex. Sign Panel



SIGN D-1

Aiea Access Rd. O.B. Sta. 8+00± Rt.
Remove and Dispose Ex. Sign &
Inst. New Sign Panel on Ex. Supports



CW20-1d ****

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

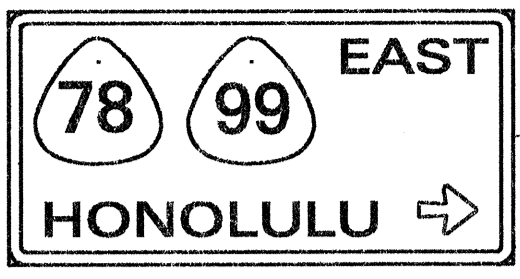
PAVEMENT MARKING & SIGNING PLAN

MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)

Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 74 OF 44 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
PREPARED BY	
REVISIONS BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	31	70

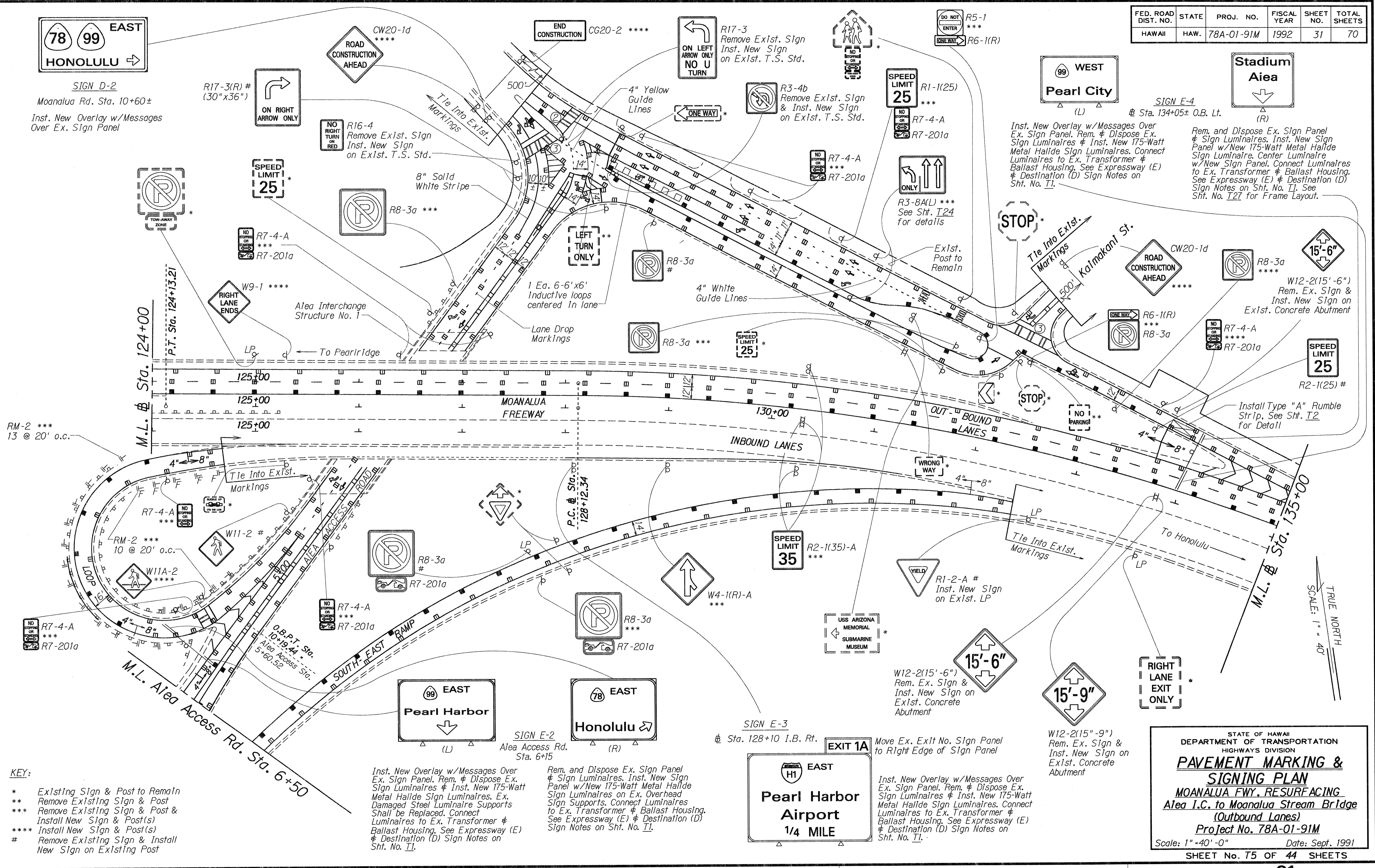


SIGN D-2
Moanalua Rd. Sta. 10+60±
Inst. New Overlay w/Messages Over Ex. Sign Panel



SIGN E-4
Sta. 134+05± O.B. Lt.
Inst. New Overlay w/Messages Over Ex. Sign Panel. Rem. & Dispose Ex. Sign Luminaires & Inst. New 175-Watt Metal Halide Sign Luminaires. Connect Luminaires to Ex. Transformer & Ballast Housing. See Expressway (E) & Destination (D) Sign Notes on Sht. No. 11.

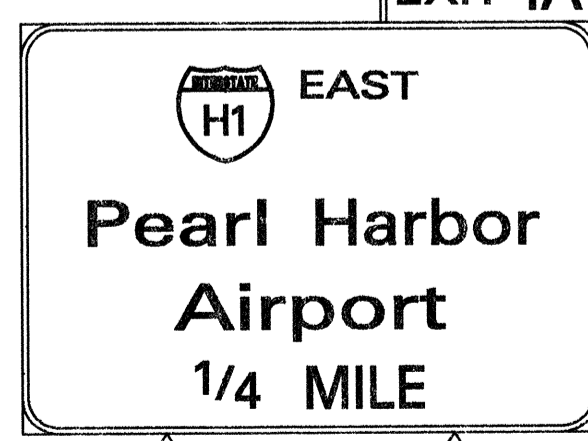
Rem. and Dispose Ex. Sign Panel & Sign Luminaires. Inst. New Sign Panel w/New 175-Watt Metal Halide Sign Luminaires. Connect Luminaires to Ex. Transformer & Ballast Housing. See Expressway (E) & Destination (D) Sign Notes on Sht. No. 11. See Sht. No. 127 for Frame Layout.



- KEY:**
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

Inst. New Overlay w/Messages Over Ex. Sign Panel. Rem. & Dispose Ex. Sign Luminaires & Inst. New 175-Watt Metal Halide Sign Luminaires. Ex. Damaged Steel Luminaire Supports Shall be Replaced. Connect Luminaires to Ex. Transformer & Ballast Housing. See Expressway (E) & Destination (D) Sign Notes on Sht. No. 11.

Rem. and Dispose Ex. Sign Panel & Sign Luminaires. Inst. New Sign Panel w/New 175-Watt Metal Halide Sign Luminaires on Ex. Overhead Sign Supports. Connect Luminaires to Ex. Transformer & Ballast Housing. See Expressway (E) & Destination (D) Sign Notes on Sht. No. 11.



SIGN E-3
Sta. 128+10 I.B. Rt.
Move Ex. Exit No. Sign Panel to Right Edge of Sign Panel

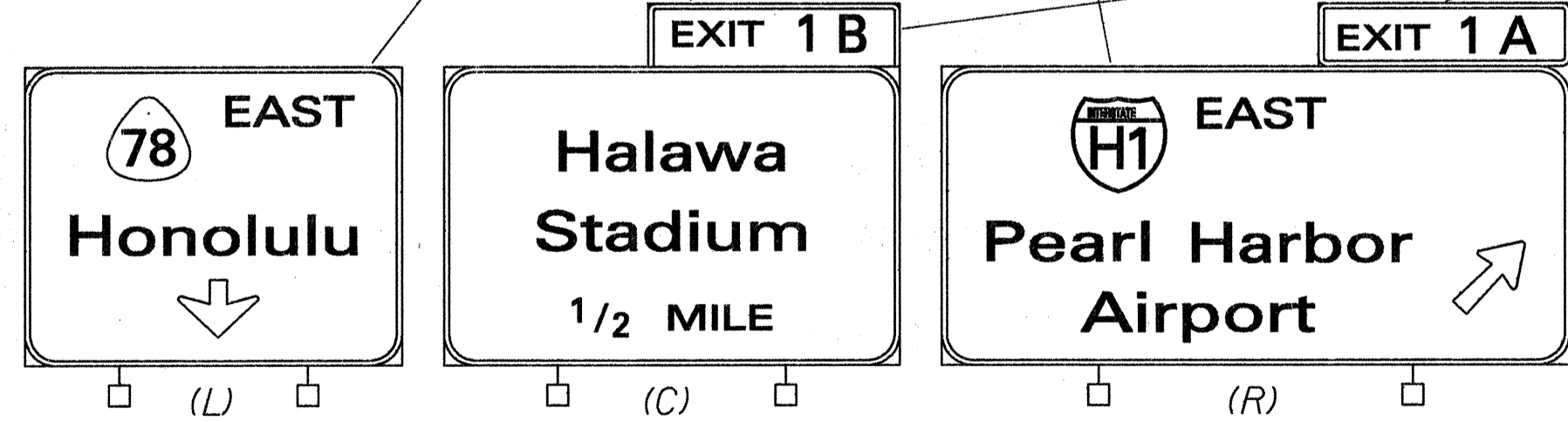
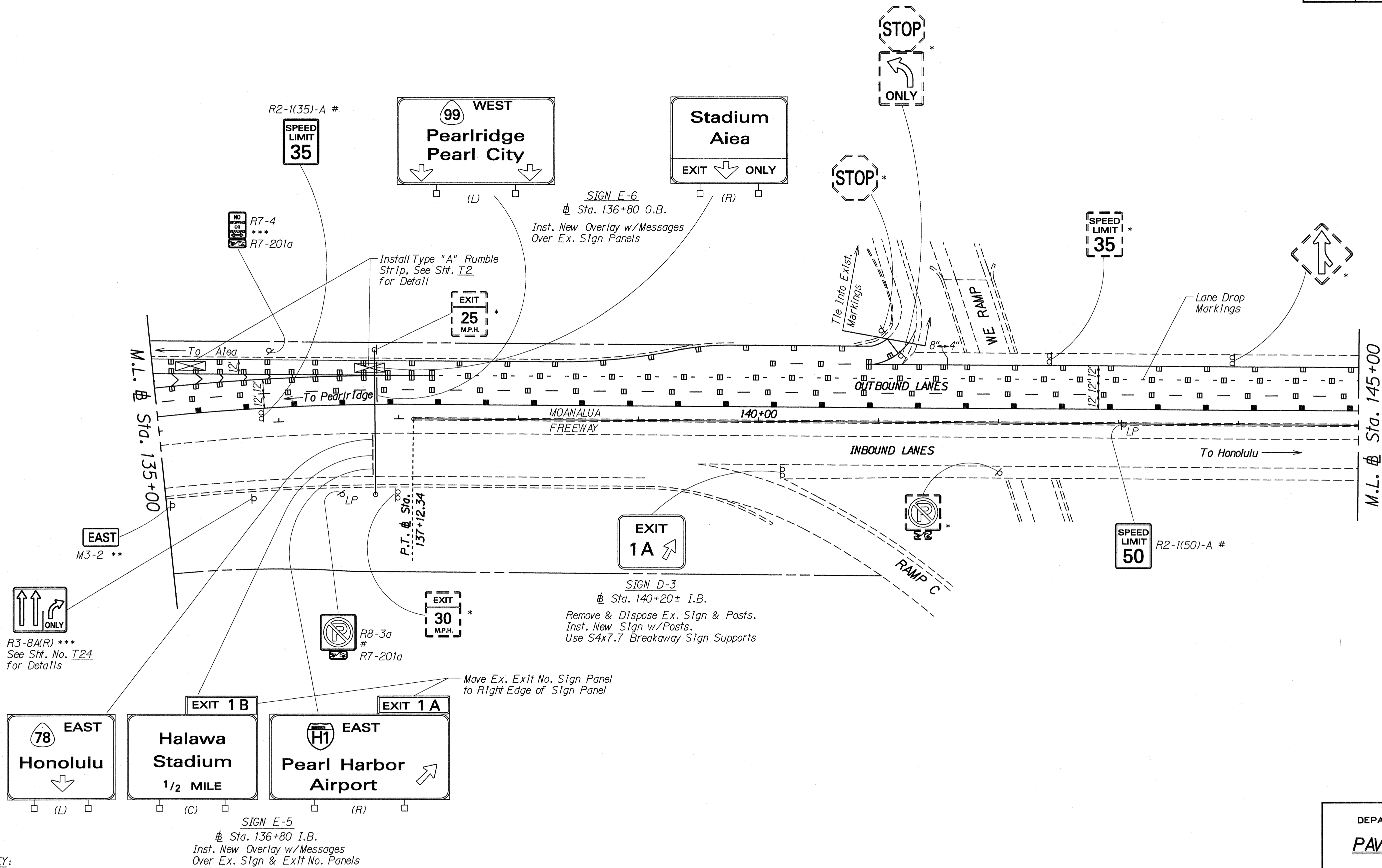
Inst. New Overlay w/Messages Over Ex. Sign Panel. Rem. & Dispose Ex. Sign Luminaires & Inst. New 175-Watt Metal Halide Sign Luminaires. Connect Luminaires to Ex. Transformer & Ballast Housing. See Expressway (E) & Destination (D) Sign Notes on Sht. No. 11.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 75 OF 44 SHEETS

DESIGNED BY	DATE
TRACED BY	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	32	70

TRUE NORTH
SCALE: 1" = 40'



SIGN E-5
 Sta. 136+80 I.B.
 Inst. New Overlay w/Messages
 Over Ex. Sign & Exit No. Panels

SIGN D-3
 Sta. 140+20± I.B.
 Remove & Dispose Ex. Sign & Posts.
 Inst. New Sign w/Posts.
 Use 54x7.7 Breakaway Sign Supports

SIGN E-6
 Sta. 136+80 O.B.
 Inst. New Overlay w/Messages
 Over Ex. Sign Panels

R3-8A(R) ***
 See Sht. No. T24
 for Details

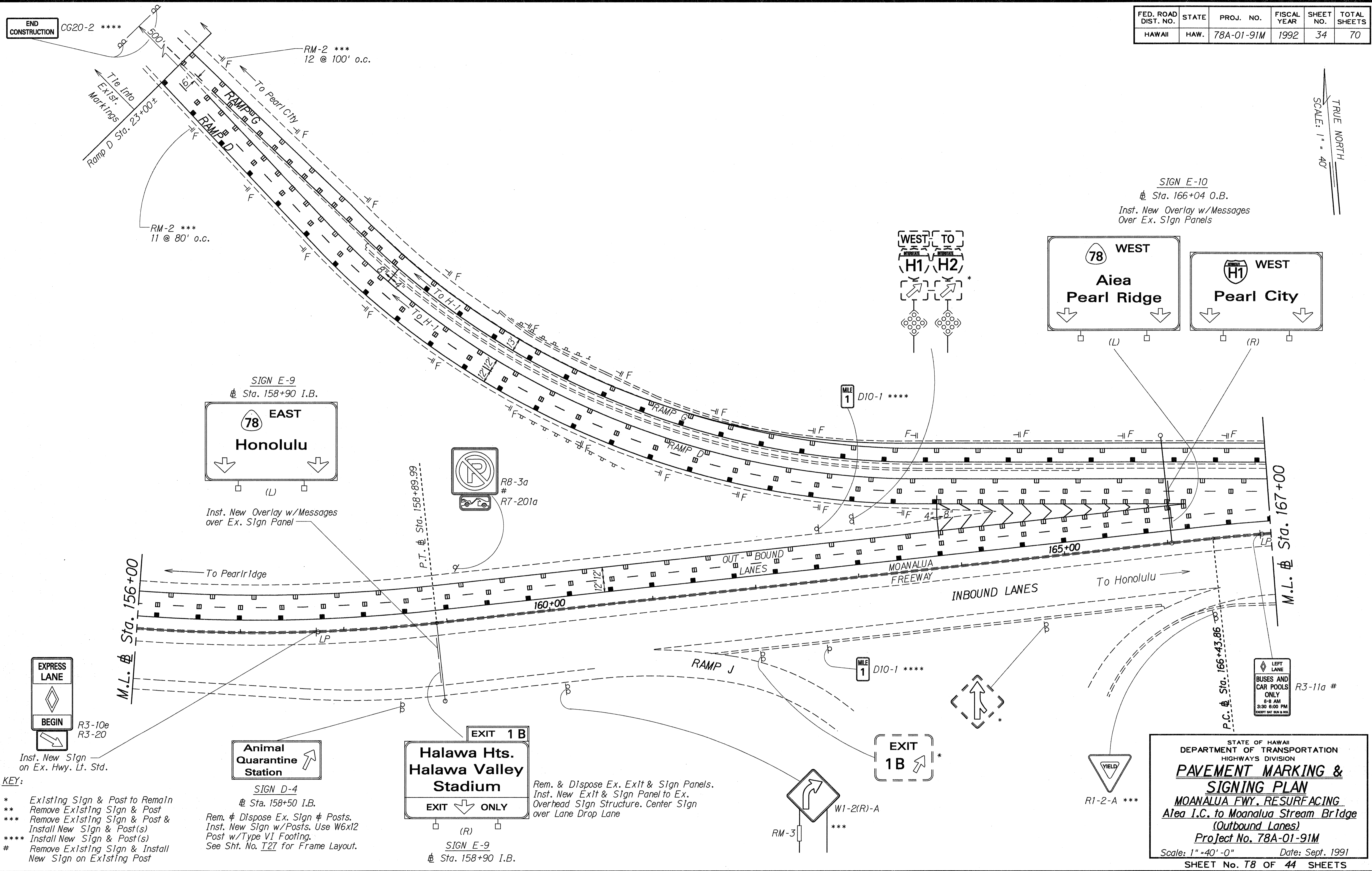
- KEY:**
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
 MOANALUA FWY. RESURFACING
 Aiea I.C. to Moanalua Stream Bridge
 (Outbound Lanes)
 Project No. 78A-01-91M
 Scale: 1" = 40' - 0" Date: Sept. 1991
 SHEET No. 76 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	34	70

TRUE NORTH
SCALE: 1" = 40'



SIGN E-10
Sta. 166+04 O.B.
Inst. New Overlay w/ Messages
Over Ex. Sign Panels

SIGN E-9
Sta. 158+90 I.B.
78 EAST
Honolulu
Inst. New Overlay w/ Messages
over Ex. Sign Panel

EXIT 1 B
Halawa Hts.
Halawa Valley Stadium
EXIT ONLY
SIGN E-9
Sta. 158+90 I.B.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40'-0" Date: Sept. 1991
SHEET No. T8 OF 44 SHEETS

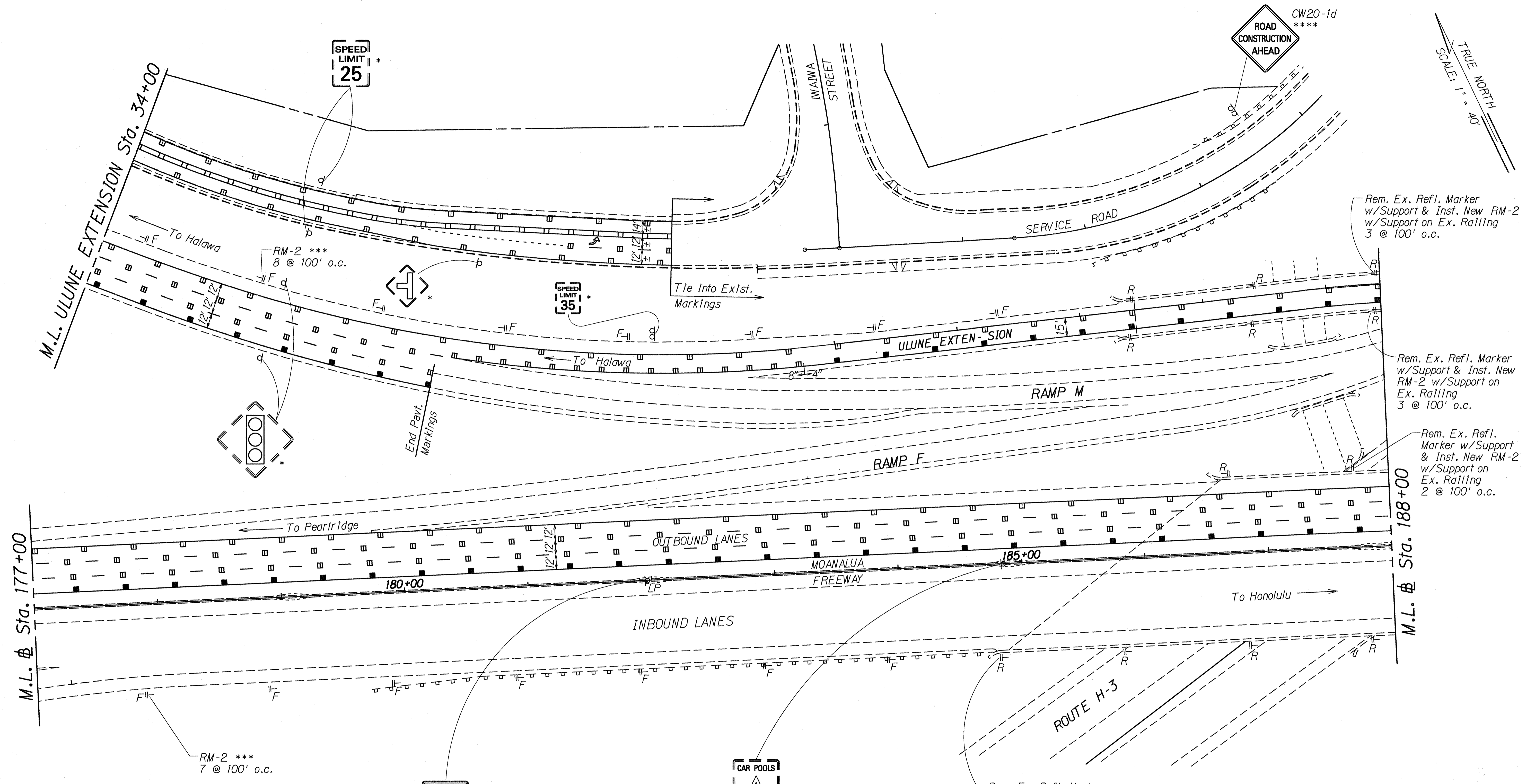
SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
CHECKED BY	

- KEY:**
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

SIGN D-4
Sta. 158+50 I.B.
Rem. & Dispose Ex. Sign & Posts.
Inst. New Sign w/ Posts. Use W6x12
Post w/ Type VI Footing.
See Sht. No. T27 for Frame Layout.

Rem. & Dispose Ex. Exit & Sign Panels.
Inst. New Exit & Sign Panel to Ex.
Overhead Sign Structure. Center Sign
over Lane Drop Lane

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	36	70



TRUE NORTH
SCALE: 1" = 40'

CW20-1d
ROAD CONSTRUCTION AHEAD

Rem. Ex. Refl. Marker w/Support & Inst. New RM-2 w/Support on Ex. Railing 3 @ 100' o.c.

Rem. Ex. Refl. Marker w/Support & Inst. New RM-2 w/Support on Ex. Railing 3 @ 100' o.c.

Rem. Ex. Refl. Marker w/Support & Inst. New RM-2 w/Support on Ex. Railing 2 @ 100' o.c.

Rem. Ex. Refl. Marker w/Support & Inst. New RM-2 w/Support on Ex. Railing 4 @ 100' o.c.

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

SURVEY PLATTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

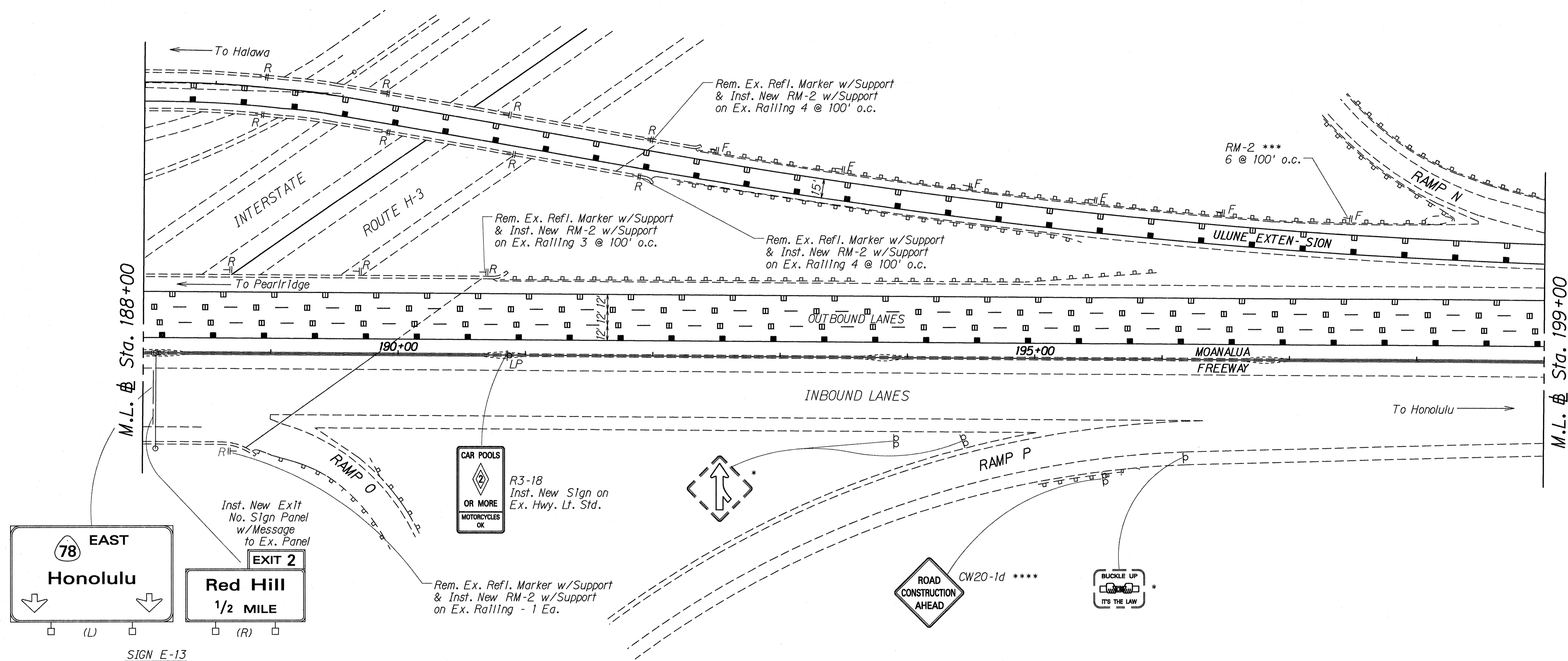
MOANALUA FWY. RESURFACING
(Outbound Lanes)

Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991

SHEET No. T10 OF 44 SHEETS

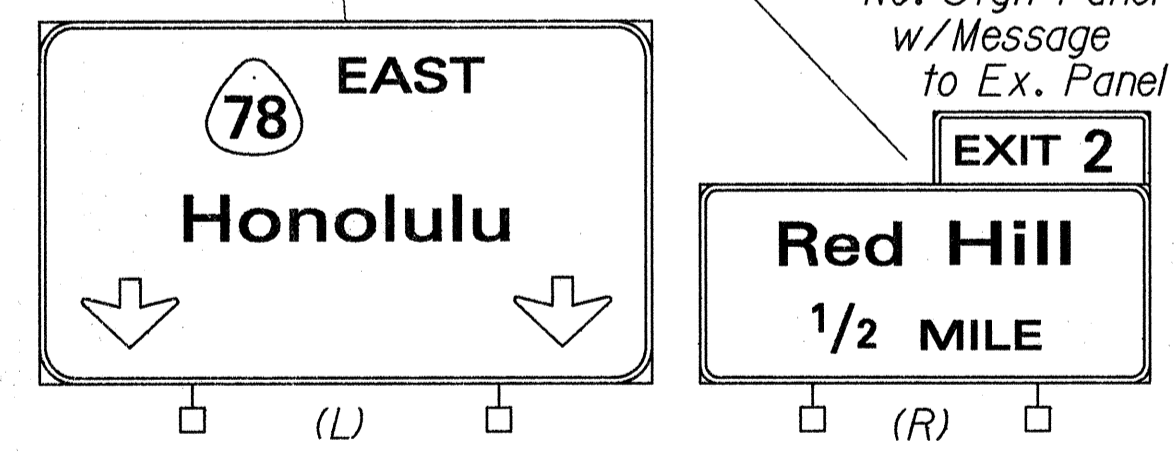
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	37	70

TRUE NORTH
SCALE: 1" = 40'

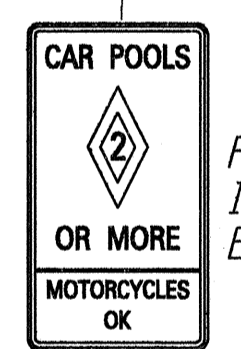


M.L. Sta. 188+00

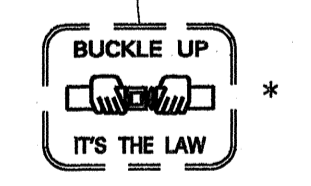
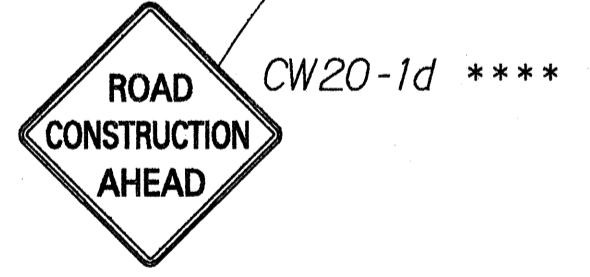
M.L. Sta. 199+00



SIGN E-13
Sta. 188+10 I.B.
Inst. New Overlay w/Messages
over Ex. Sign Panel.



R3-18
Inst. New Sign on
Ex. Hwy. Lt. Std.



- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 111 OF 44 SHEETS

DATE
DESIGNED BY
CHECKED BY
NOTE BOOK
QUANTITIES BY
N.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	38	70

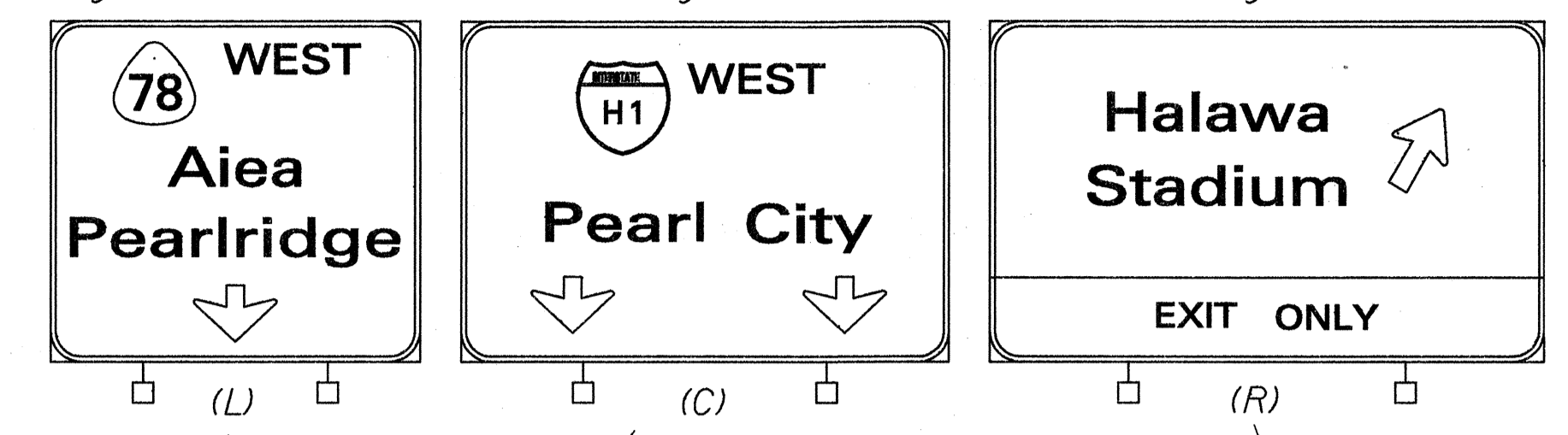
**Halawa Stadium
Camp Smith**

SIGN E-14
Ulune Ext. Sta. 11+85
Inst. New Overlay w/Messages
over Ex. Sign Panel.

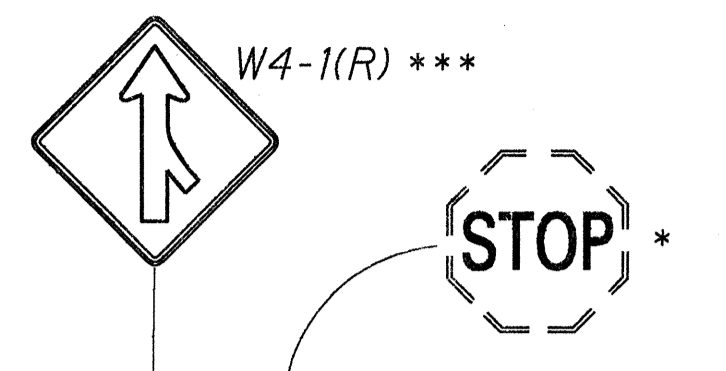
Rem. & Dispose Ex. Sign
Panel. Inst. New Sign
Panel on Ex. Overhead
Sign Supports. Center
Sign Over Lane.

Inst. New Overlay
w/Messages Over
Ex. Sign Panel

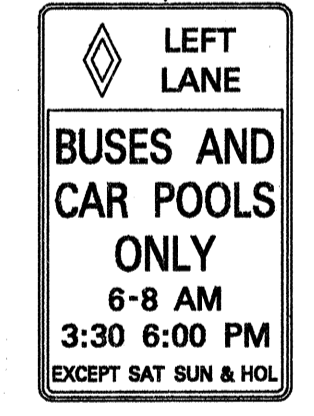
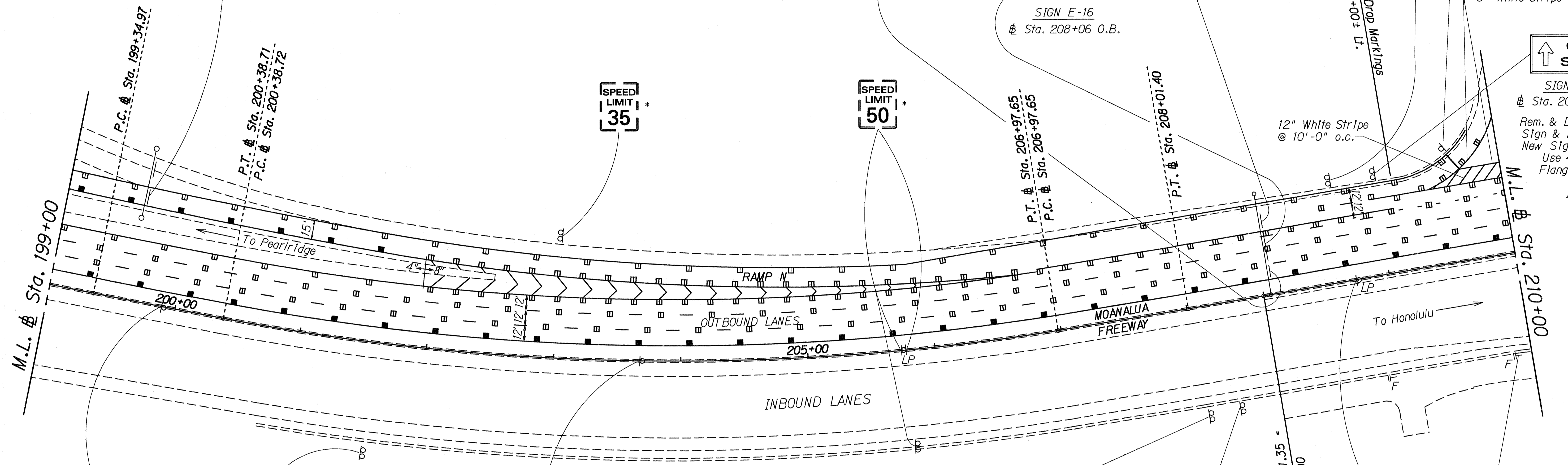
Inst. New Overlay
w/Messages Over
Ex. Sign Panel



SIGN E-16
Sta. 208+06 O.B.



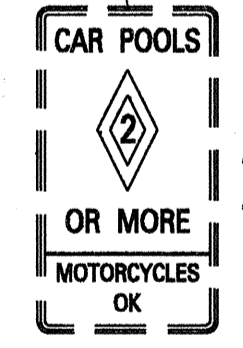
SIGN D-11
Sta. 209+00 O.B.
Rem. & Dispose Ex.
Sign & Posts. Inst.
New Sign w/Posts.
Use 4.00 lbs/ft
Flanged Channel,
3-Post
Installation.



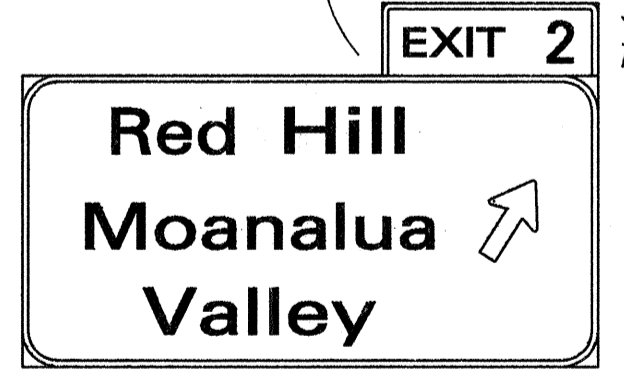
R3-11a #



SIGN E-15
Sta. 201+60 I.B.85
Inst. New Overlay w/Messages
over Ex. Sign Panel.



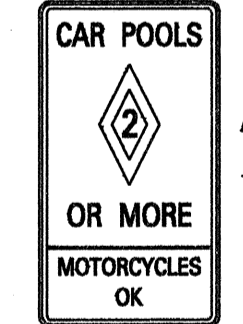
R3-18
Rem. Ex. Sign



SIGN D-10
Sta. 207+95 I.B.
Inst. New Overlay w/Messages
over Ex. Sign Panel.



Inst. New Exit No.
Sign Panel w/Message
to Ex. Sign



R3-18
Inst. on Hwy. Lt. Std.

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PAVEMENT MARKING &
SIGNING PLAN**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 712 OF 44 SHEETS

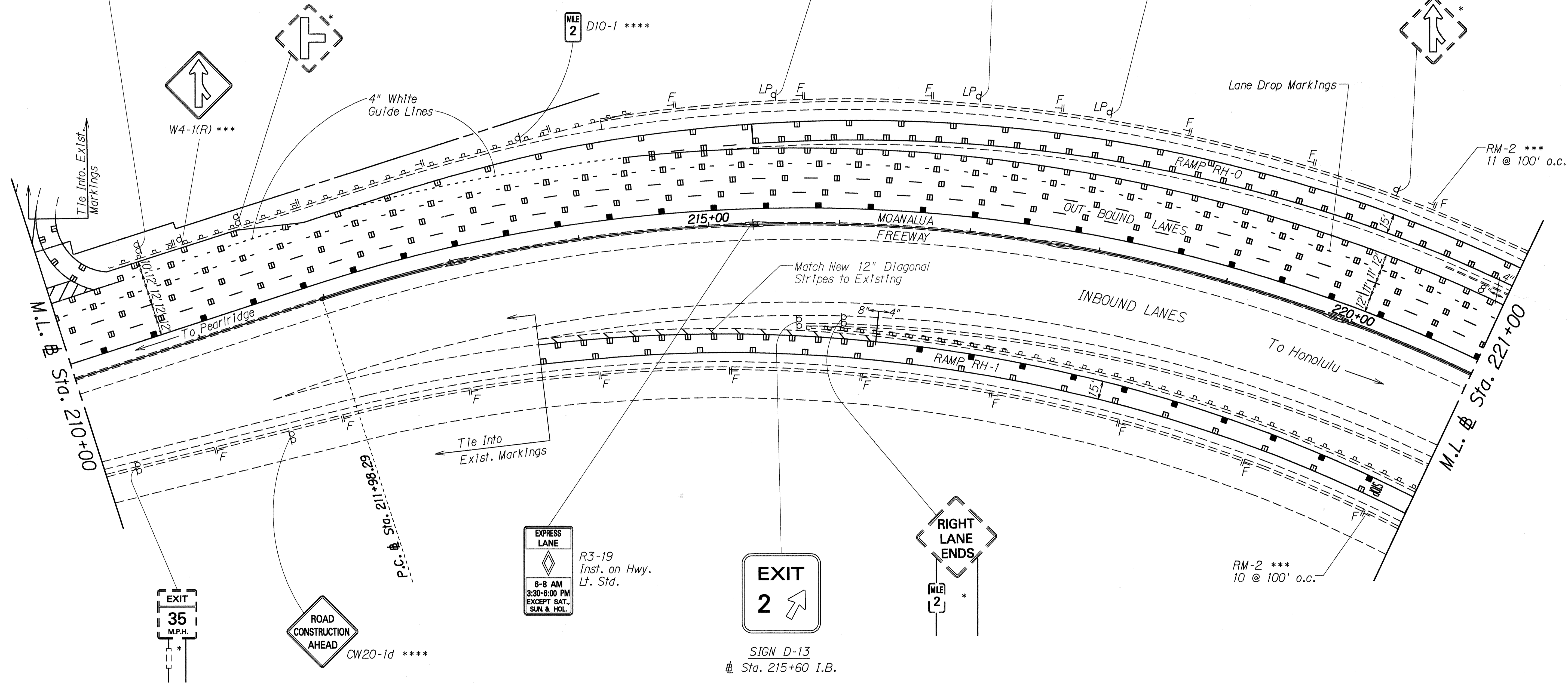
SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	39	70

HALAWA CORRECTIONAL FACILITY →

SIGN D-12
Sta. 210+75 ± 0.B.

Rem. & Dispose Ex. Sign & Posts.
Inst. New Sign w/Posts. Use 4.00 lbs/ft
Flanged Channel, 3-Post Inst.



TRUE NORTH
SCALE: 1" = 40'

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

SIGN D-13
Sta. 215+60 I.B.
Inst. New Sign w/Posts
Use 4.00 lbs/ft Flanged Channel
3-Post Installation
Inst. One (1) Ea. RM-9 on
Ea. Outside Post.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

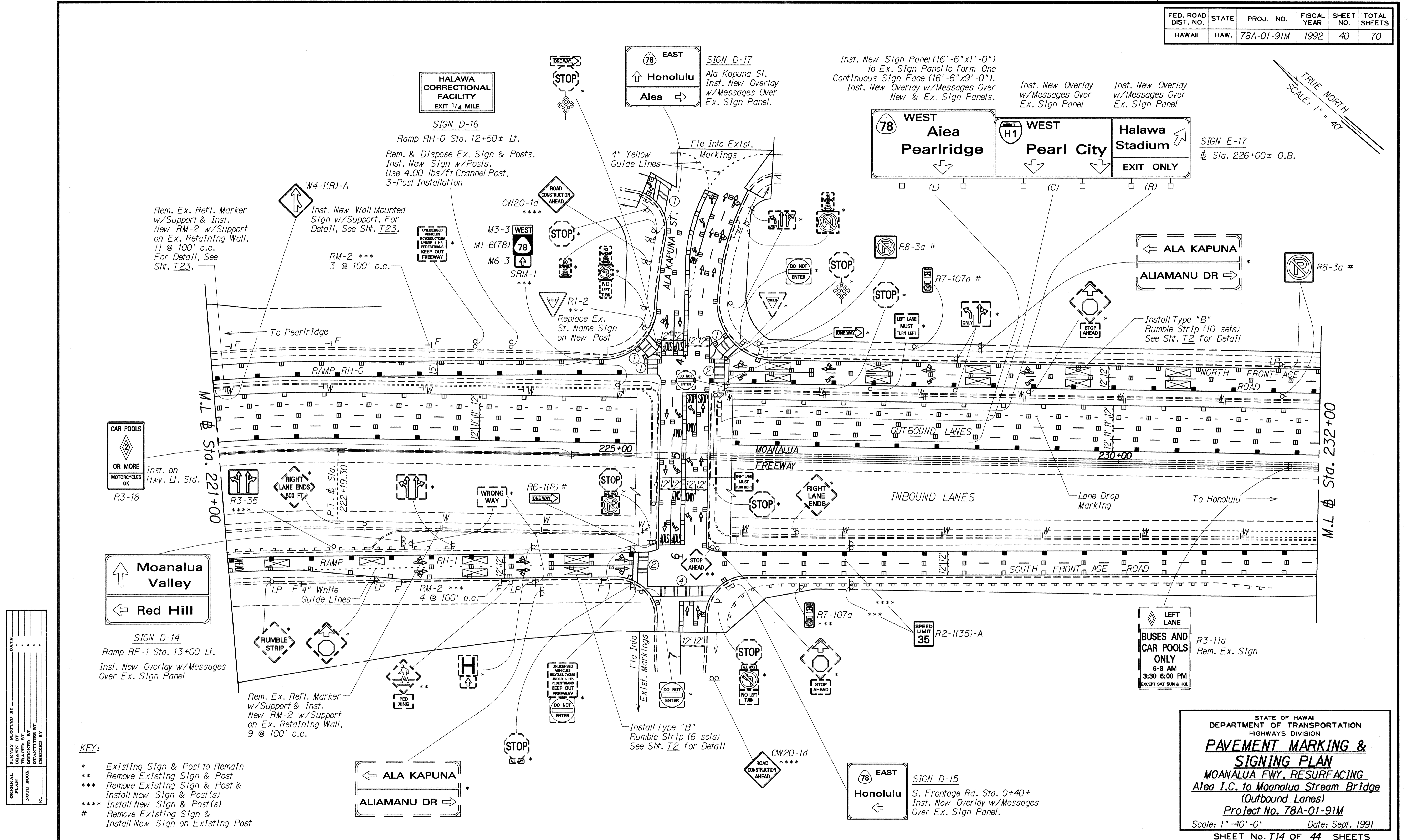
PAVEMENT MARKING & SIGNING PLAN

MOANALUA FWY. RESURFACING
Alea I.C. to Moanalua Stream Bridge
(Outbound Lanes)

Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 113 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	40	70

TRUE NORTH
SCALE: 1" = 40'



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

KEY:

- * Existing Sign & Post to Remain
- ** Remove Existing Sign & Post
- *** Remove Existing Sign & Post & Install New Sign & Post(s)
- **** Install New Sign & Post(s)
- # Remove Existing Sign & Install New Sign on Existing Post

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

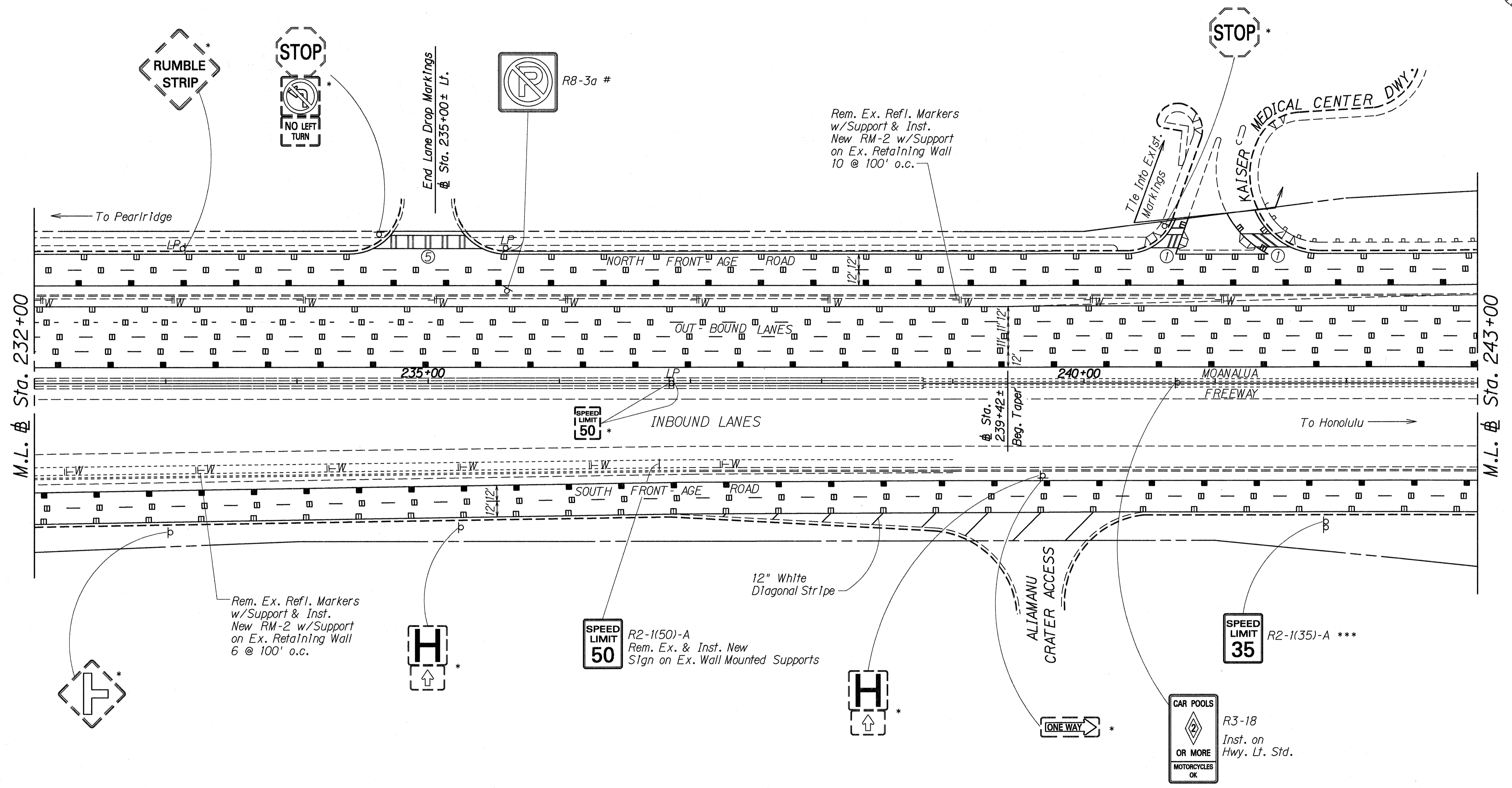
PAVEMENT MARKING & SIGNING PLAN

MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)

Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 114 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	41	70

TRUE NORTH
SCALE: 1" = 40'



SURVEY PLATTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

- KEY:**
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

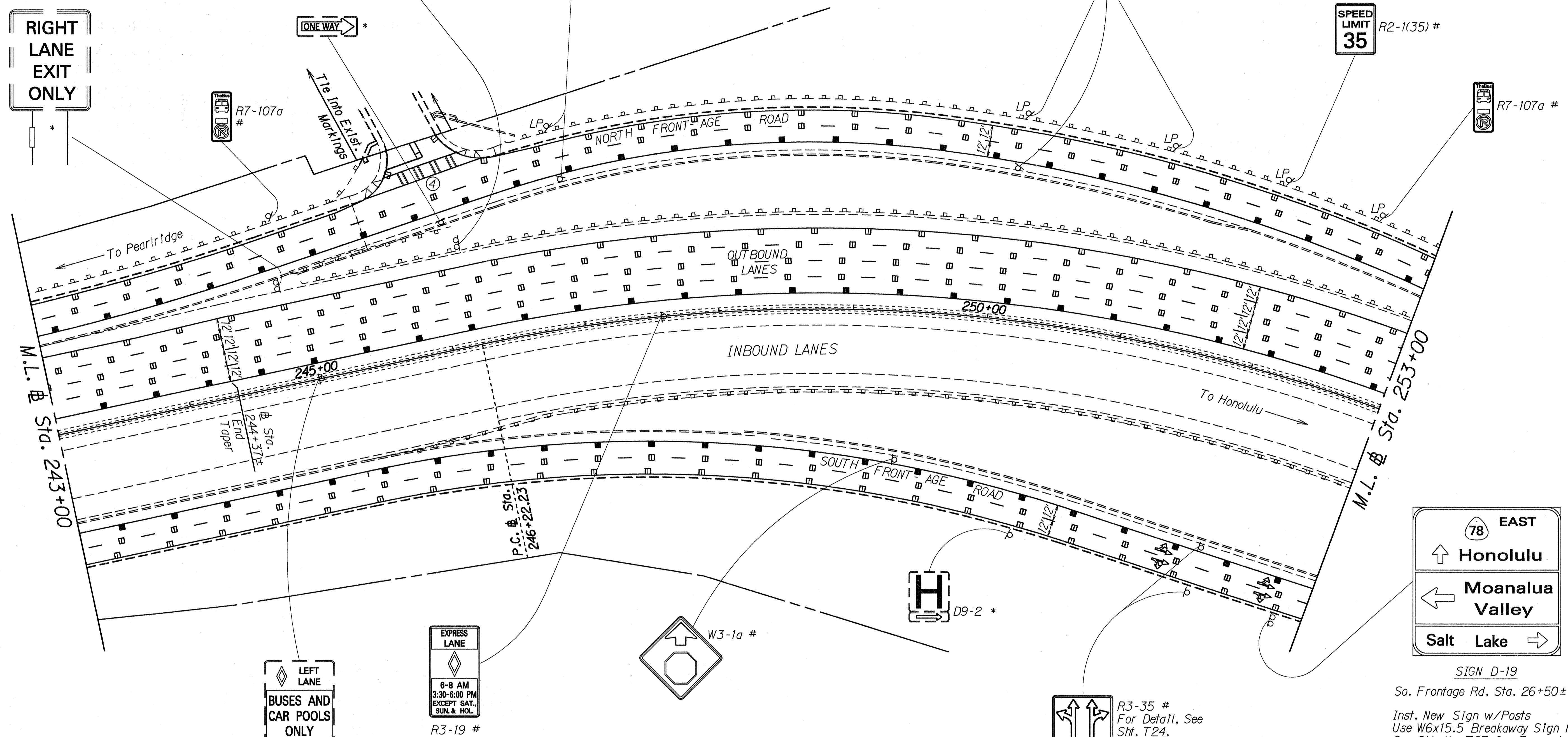
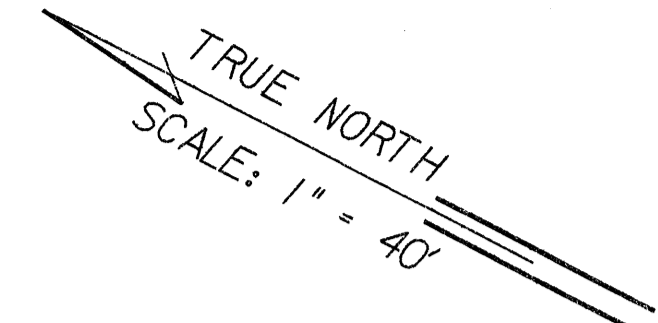
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. 715 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	42	70

Camp Smith
3/4 MILE

Rem. & Dispose Ex. Sign & Posts
Inst. New Sign Panel w/Posts
Use 4.00 lbs/ft Flanged Channel,
3-Post Installation.



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

- KEY:**
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

LEFT LANE
BUSES AND CAR POOLS ONLY
6-8 AM
3:30-6:00 PM
EXCEPT SAT SUN & HOL

R3-11a
Rem. Ex. Sign

EXPRESS LANE
6-8 AM
3:30-6:00 PM
EXCEPT SAT., SUN. & HOL.

R3-19 #

78 EAST
↑ Honolulu
← Moanalua Valley
Salt Lake →

SIGN D-19
So. Frontage Rd. Sta. 26+50± Rt.
Inst. New Sign w/Posts
Use W6x15.5 Breakaway Sign Posts
See Sht. No. T27 for Frame Layout.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Alea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. T16 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	43	70

TRUE NORTH
SCALE: 1" = 40'

Moanalua Valley
Salt Lake

SIGN D-22
Ala Aolani St. Sta. 3+80± Lt.
Inst. New Overlay w/Messages Over Ex. Sign panel

Red Hill
Moanalua Valley
Salt Lake

SIGN D-25
No. Frontage Rd. Sta. 32+40± Lt.
Inst. New Overlay w/Messages Over Ex. Sign Panel

EXIT 2

SIGN D-26
Sta. 261+40± O.B.
Rem. & Dispose Ex. Sign & Posts
Inst. New Sign w/Posts in back of Median Barrier. Use 4.00 lbs/ft Flanged Channel, 3-Post Installation.

Ala Aolani St. Sta. 6+50± Lt.
Inst. New Signs w/Post (Type B Assembly)

Aiea
Honolulu

Aiea
Honolulu

SIGN D-21
Ala Aolani St. Sta. 7+50± Lt.
Inst. New Sign w/Posts
Use S4x7.7 Breakaway Sign Posts
See Sht. No. T27 for Frame Layout

SURVEY PLOTTED BY	DATE
PLAN CHECKED BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

CAR POOLS OR MORE MOTORCYCLES OK
Inst. on Hwy. Lt. St.
R3-18
Sta. 254+50 I.B.

SIGN D-23
Ala Napunani St.
Rem. & Dispose Ex. Sign & Posts.
Inst. New Sign w/Posts.
Use W6x12 Breakaway Sign Posts.
See Sht. No. T27 for Frame Layout.

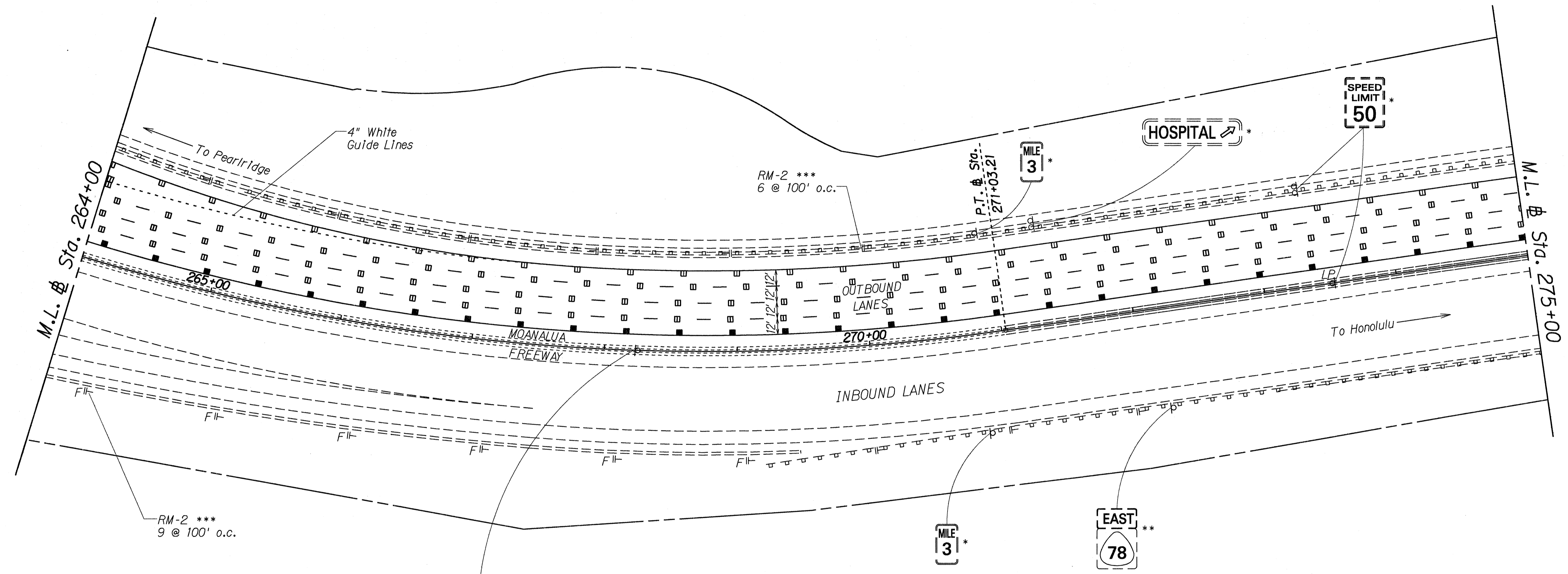
LEFT LANE
BUSES AND CAR POOLS ONLY
6-8 AM
3:30 6:00 PM
EXCEPT SAT SUN & HOL
Rem. Ex. Sign

LEFT LANE
BUSES AND CAR POOLS ONLY
6-8 AM
3:30 6:00 PM
EXCEPT SAT SUN & HOL
R3-11a

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40'-0" Date: Sept. 1991
SHEET No. T17 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	44	70

TRUE NORTH
SCALE: 1" = 40'



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

- KEY:
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)

CAR POOLS
OR MORE
MOTORCYCLES OK
R3-18
Inst. on Hwy. Lt. Std.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Alea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40'-0" Date: Sept. 1991
SHEET No. T18 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	45	70

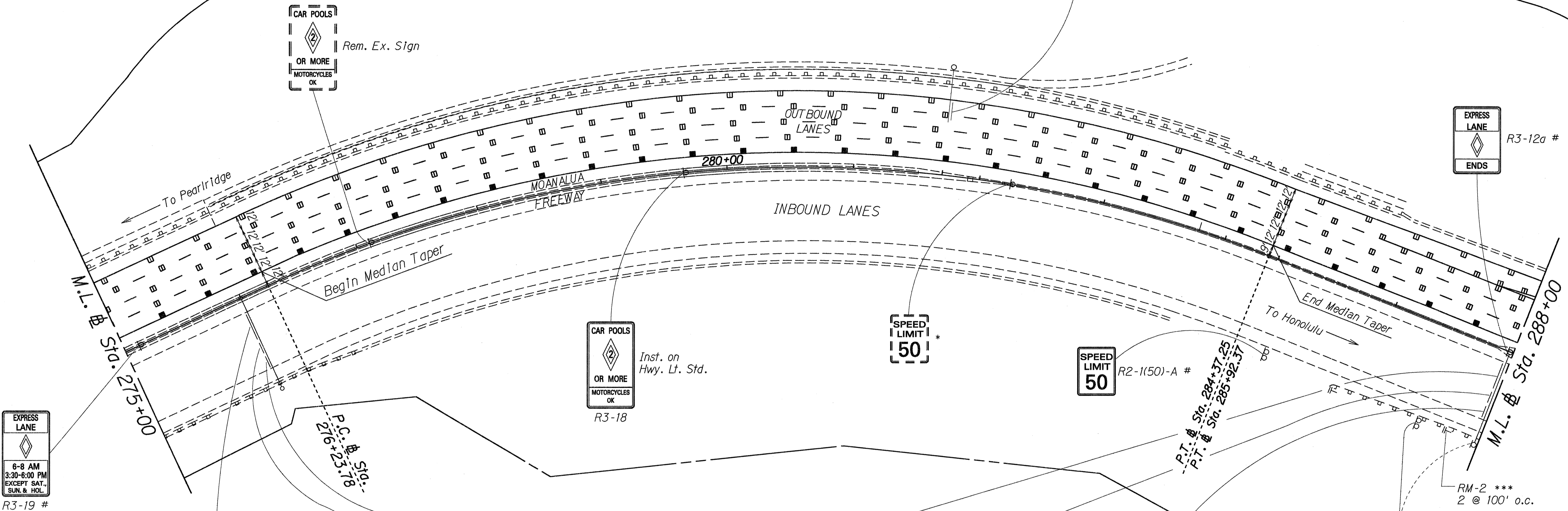
TRUE NORTH
SCALE: 1" = 40'

EXIT 2
Moanalua Valley
Salt Lake
Red Hill
1/4 MILE

Inst. New Exit No. Sign
Panel w/Messages to
Ex. Sign

SIGN E-19
Sta. 281+70± O.B.
Inst. New Overlay w/Messages
Over Ex. Sign Panel

EXPRESS LANE
R3-12a #
ENDS



78 EAST
Honolulu

EXIT 3
Ft. Shafter
King St.

EXIT 3
Airport
Tripler Hosp.
EXIT ONLY

78 EAST
Honolulu

EXIT 3
Ft. Shafter
King St.

EXIT 3
7310
Airport
Tripler Hosp.
EXIT ONLY

Paa Street
RM-2 ***
2 @ 100' o.c.
SIGN D-27
Sta. 287+50± Rt. O.B.

SIGN E-18
Sta. 276+00± I.B.
Inst. New Overlay w/Messages
Over Ex. Sign Panels.

SIGN E-20
Sta. 288+00± I.B.

Rem. & Dispose Ex. Sign Panel.
Inst. New Exit No. & Sign Panels
to Ex. Overhead Sign Structure.
Ex. Damaged Sign Luminaire Supports
shall be Replaced. See Expressway (E)
& Destination (D) Notes on Sht. No. T1.

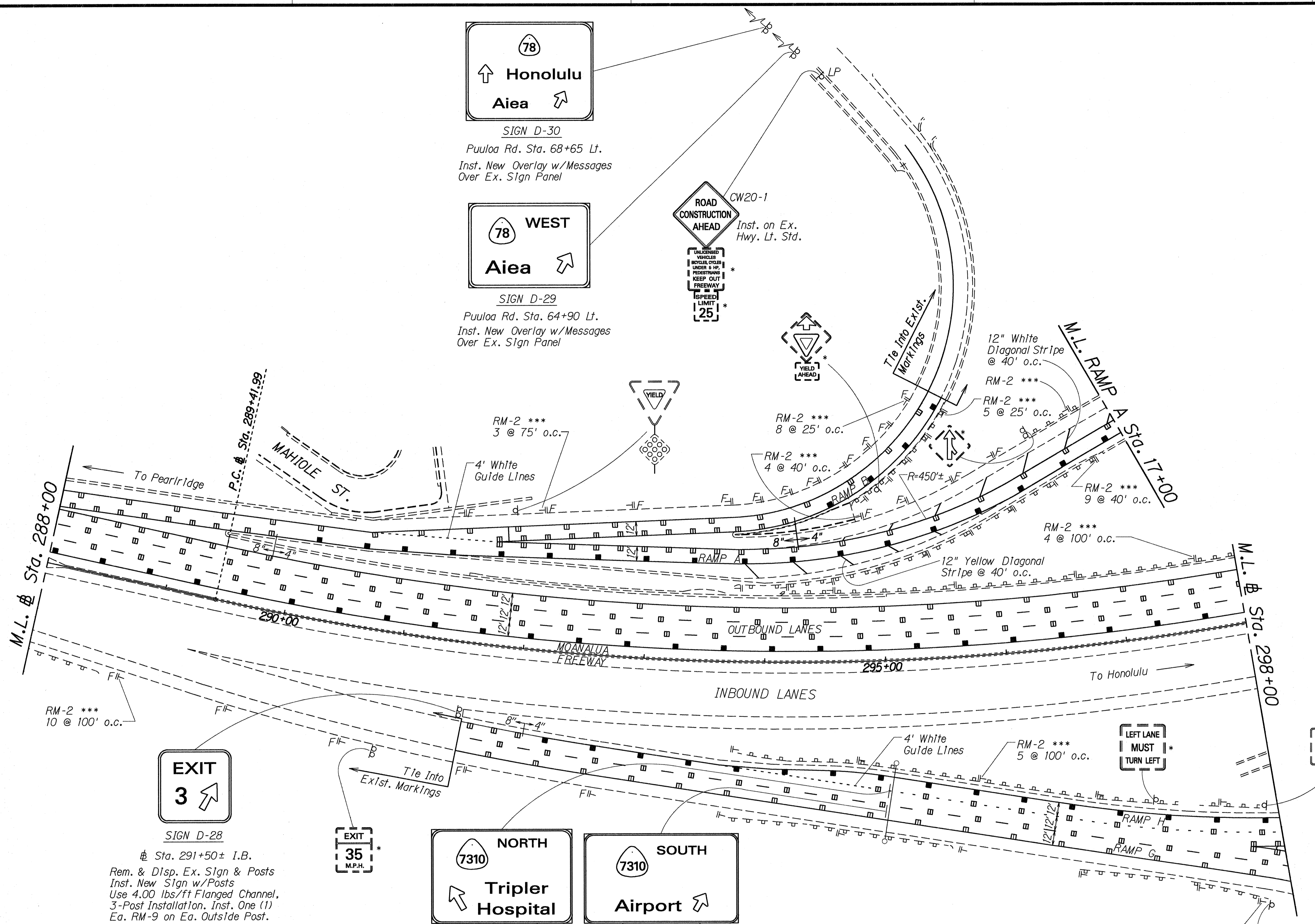
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Allea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. T19 OF 44 SHEETS

KEY:
* Existing Sign & Post to Remain
** Remove Existing Sign & Post
*** Remove Existing Sign & Post & Install New Sign & Post(s)
**** Install New Sign & Post(s)
Remove Existing Sign & Install New Sign on Existing Post

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	46	70

TRUE NORTH
SCALE: 1" = 40'



78
↑ Honolulu
Aiea ↑
SIGN D-30
Puuloa Rd. Sta. 68+65 Lt.
Inst. New Overlay w/Messages
Over Ex. Sign Panel

78 WEST
Aiea ↑
SIGN D-29
Puuloa Rd. Sta. 64+90 Lt.
Inst. New Overlay w/Messages
Over Ex. Sign Panel

ROAD CONSTRUCTION AHEAD
CW20-1
Inst. on Ex. Hwy. Lt. Std.

UNLICENSED VEHICLES
MOTORCYCLES
MOPEDS & HP
PEDESTRIANS
KEEP OUT
FREEWAY
SPEED LIMIT
25

YIELD AHEAD

EXIT 3
SIGN D-28
Sta. 291+50± I.B.
Rem. & Disp. Ex. Sign & Posts
Inst. New Sign w/Posts
Use 4.00 lbs/ft Flanged Channel,
3-Post Installation. Inst. One (1)
Ea. RM-9 on Ea. Outside Post.

EXIT 35
M.P.H.

7310 NORTH
Tripler Hospital
SIGN E-21
Ramp G Sta. 15+25
Inst. New Overlay w/Messages
Over Ex. Sign Panel

7310 SOUTH
Airport
SIGN E-21
Ramp G Sta. 15+25
Inst. New Overlay w/Messages
Over Ex. Sign Panel

LEFT LANE MUST TURN LEFT

WRONG WAY

LANE ENDS MERGE LEFT

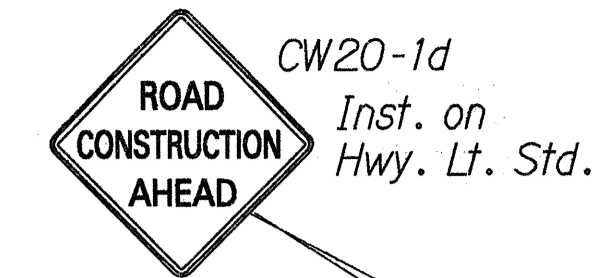
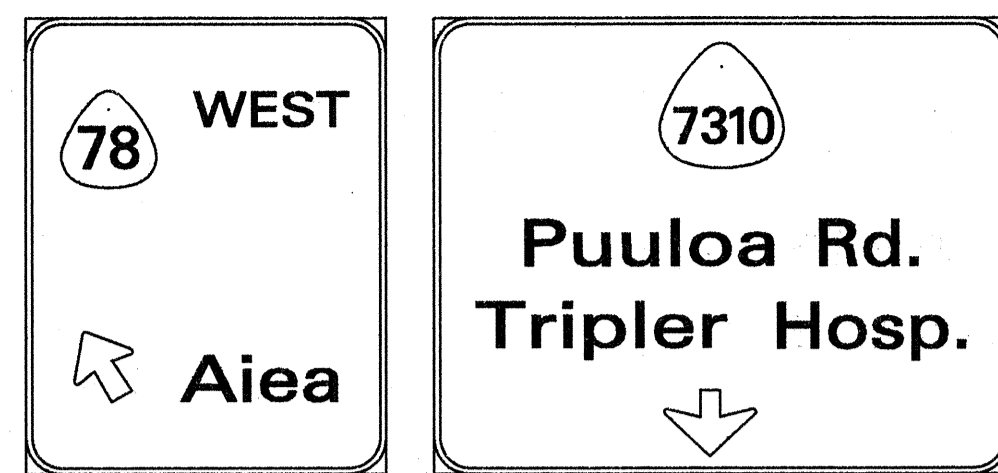
KEY:
* Existing Sign & Post to Remain
** Remove Existing Sign & Post
*** Remove Existing Sign & Post &
Install New Sign & Post(s)
**** Install New Sign & Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: 1" = 40' - 0" Date: Sept. 1991
SHEET No. T20 OF 44 SHEETS

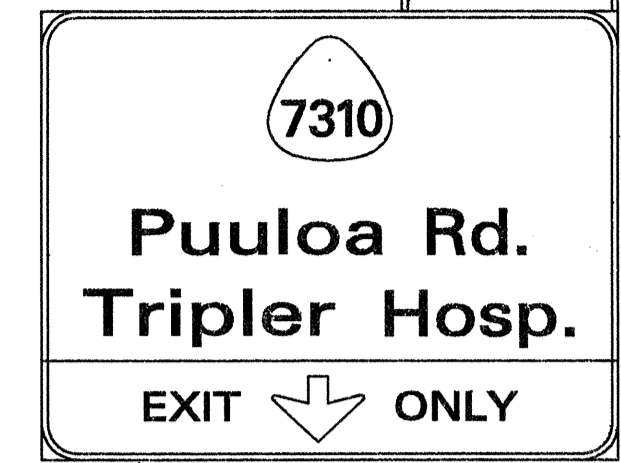
DATE	
SURVEY PLOTTED BY	
PLAN	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	48	70

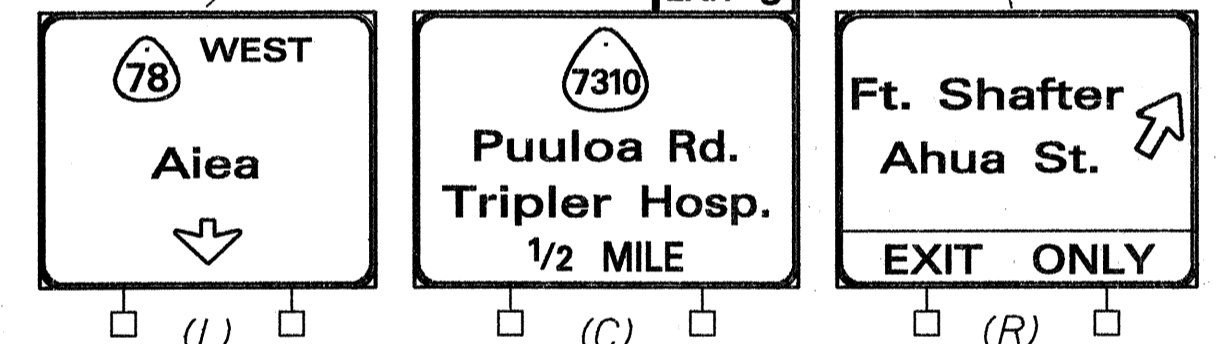
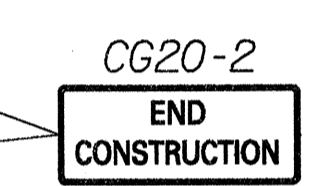
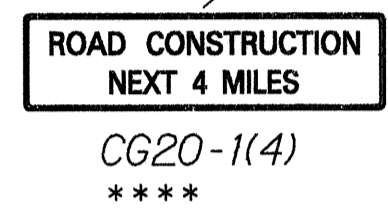
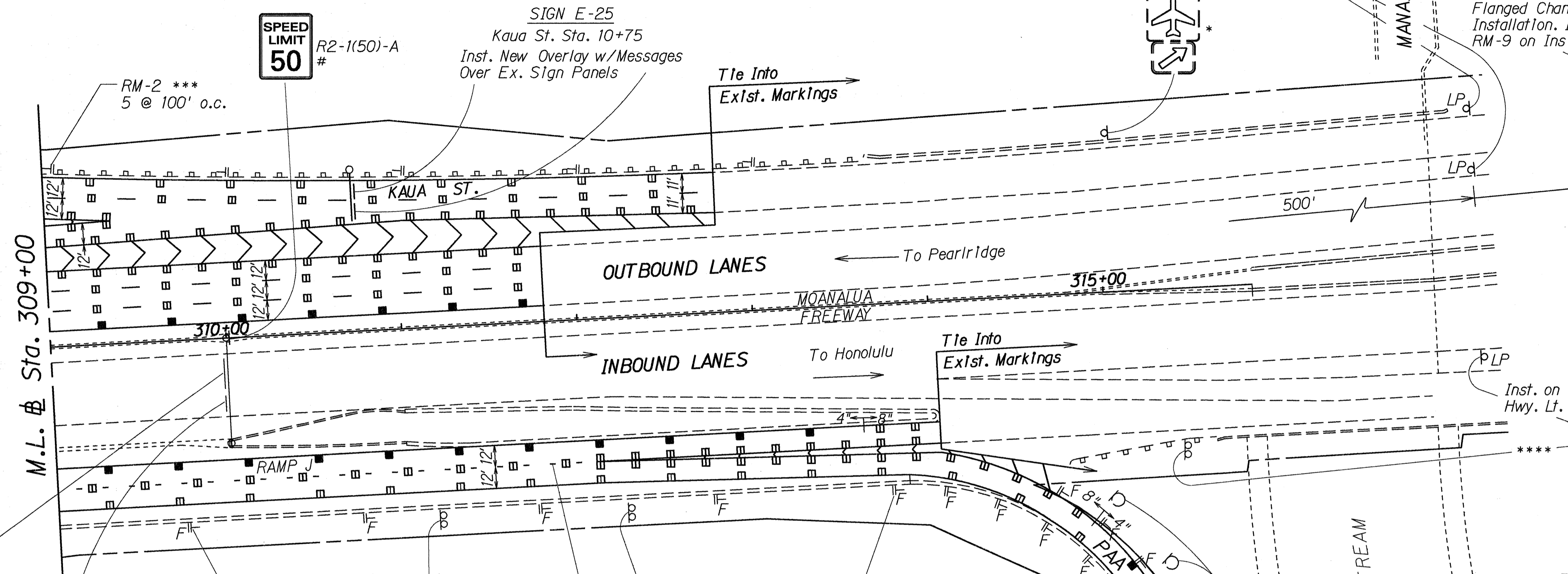
Inst. New Exit No. Sign Panel w/Messages to Ex. Sign



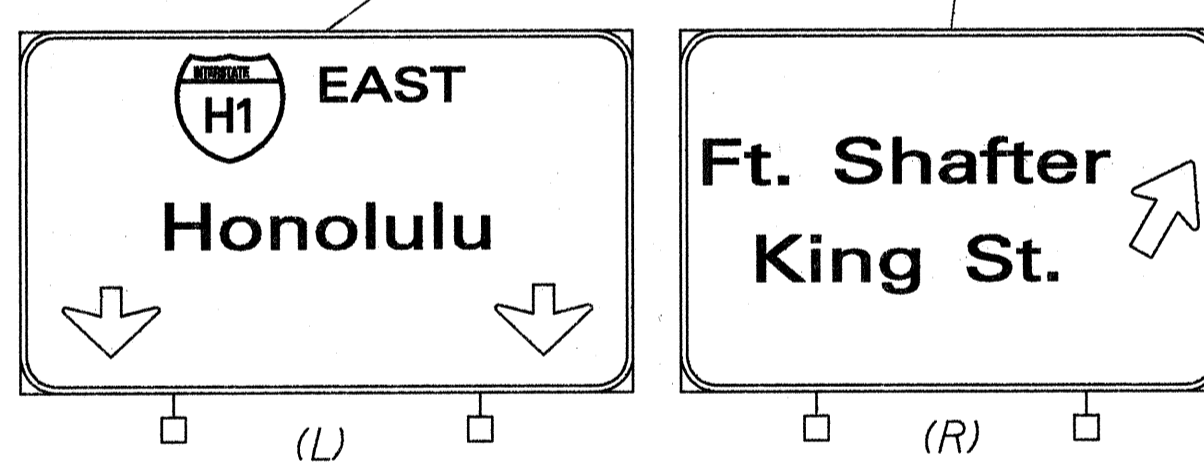
SIGN D-38
 Sta. 319+50 Lt.
 Rem. & Dispose Ex. Sign & Posts. Inst. New Sign w/Posts. Use 4.00 lbs/ft Flanged Channel, 3-Post Installation. Inst. One (1) Ea. RM-9 on Inside Post.



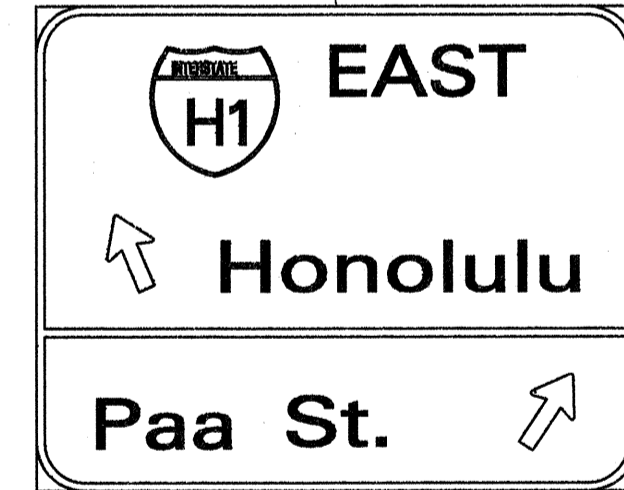
SIGN E-26
 Sta. 323+50 O.B.
 Inst. New Overlay w/Messages Over Ex. Sign Panel



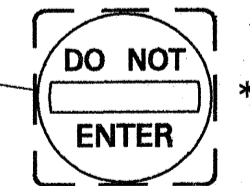
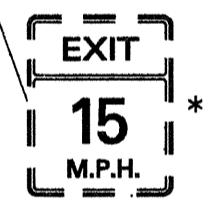
SIGN E-27
 Sta. 351+27 O.B.
 Inst. New Overlay w/Messages Over Ex. Sign Panel



SIGN E-24
 Sta. 310+00 I.B.
 Inst. New Overlay w/Messages Over Ex. Sign Panels



SIGN D-37
 Ramp J Sta. 21+00 Lt.
 Inst. New Overlay w/Messages Over Ex. Sign Panel

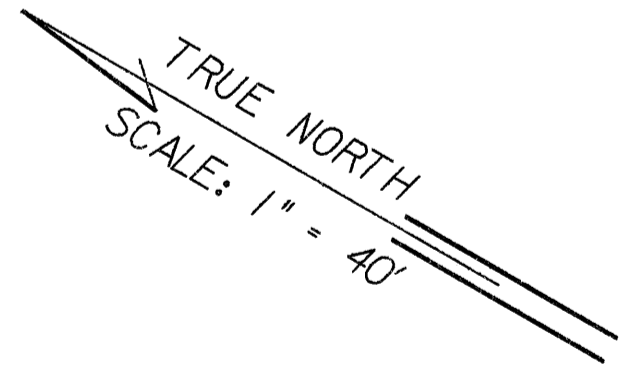


SURVEY PLOTTED BY	DATE
DESIGNED BY	
PLACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

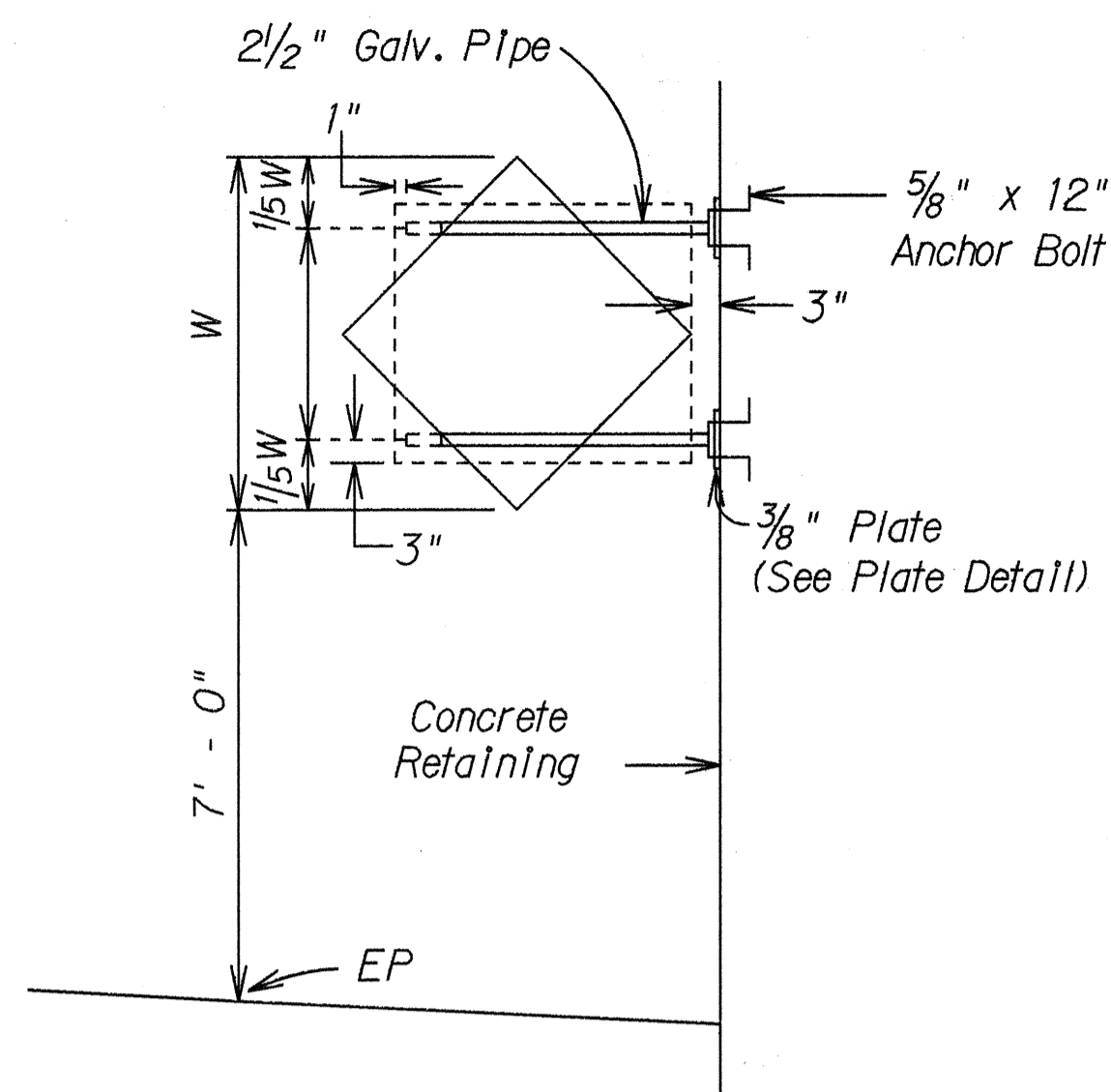
- KEY:**
- * Existing Sign & Post to Remain
 - ** Remove Existing Sign & Post
 - *** Remove Existing Sign & Post & Install New Sign & Post(s)
 - **** Install New Sign & Post(s)
 - # Remove Existing Sign & Install New Sign on Existing Post

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN
MOANALUA FWY. RESURFACING
 Aiea I.C. to Moanalua Stream Bridge
 (Outbound Lanes)
 Project No. 78A-01-91M
 Scale: 1"=40'-0" Date: Sept. 1991
 SHEET No. T22 OF 44 SHEETS



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1991	49	70



Sign Mounted on Wall

Not to Scale

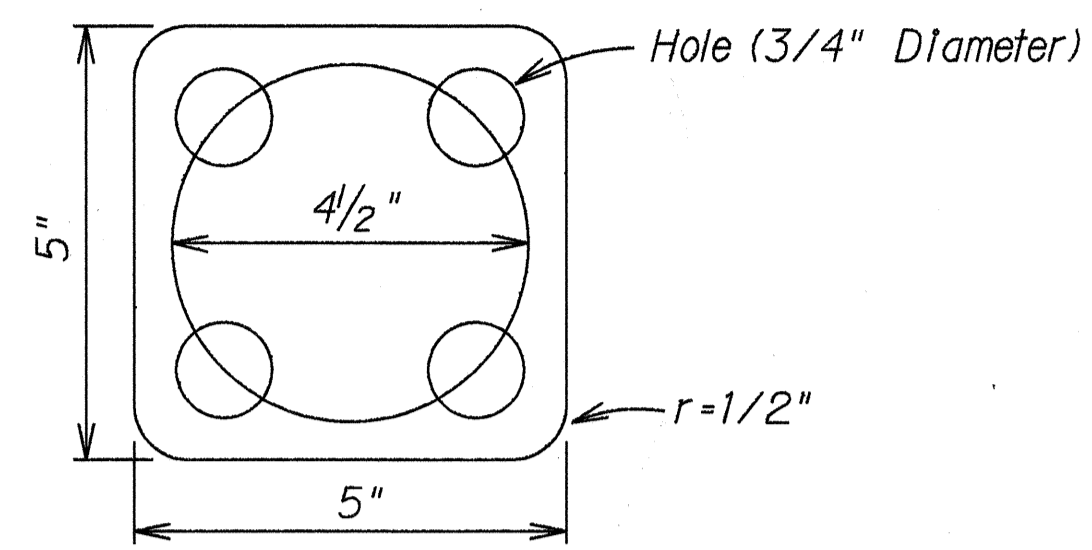
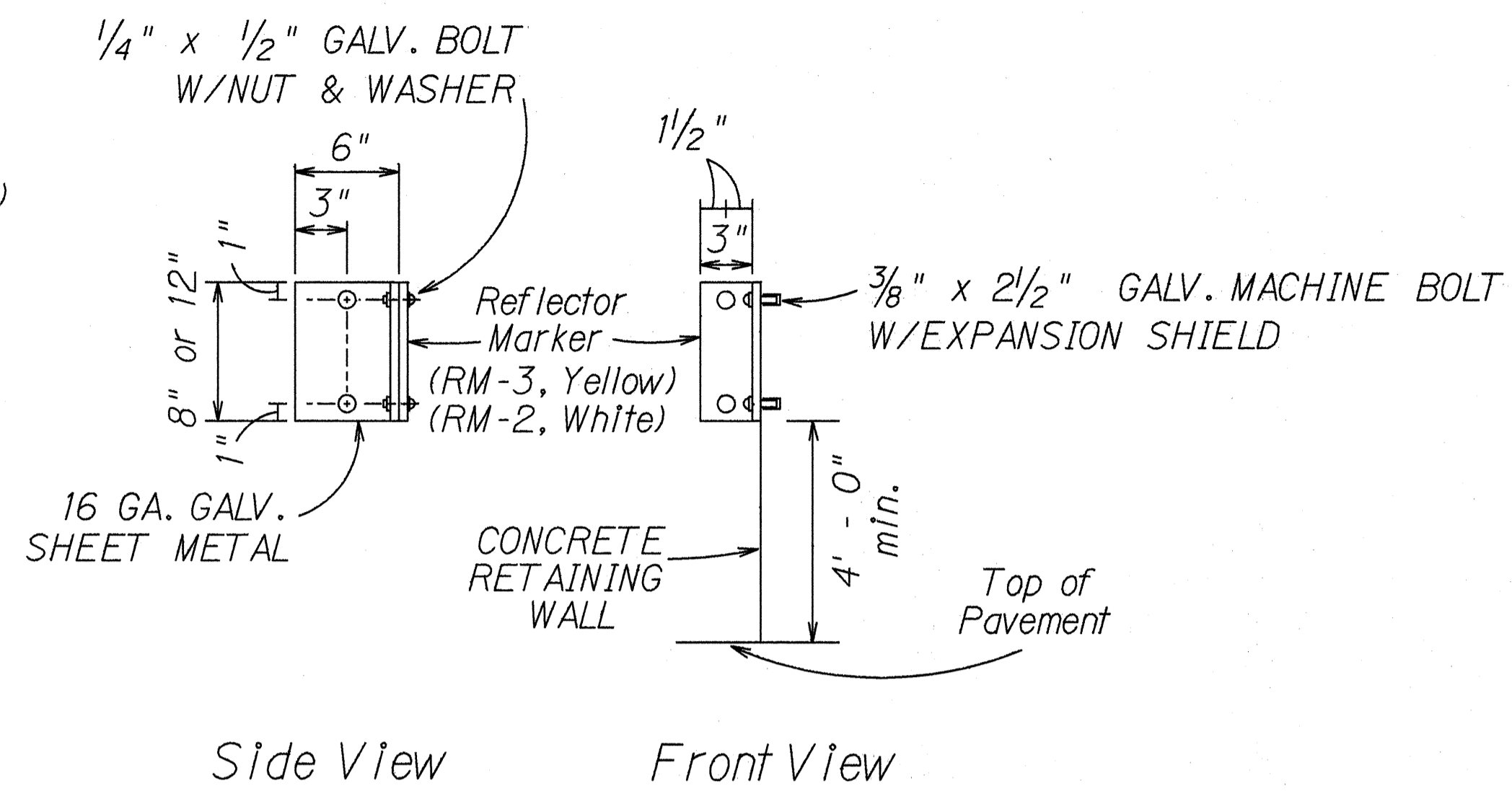


Plate Detail

Not to Scale



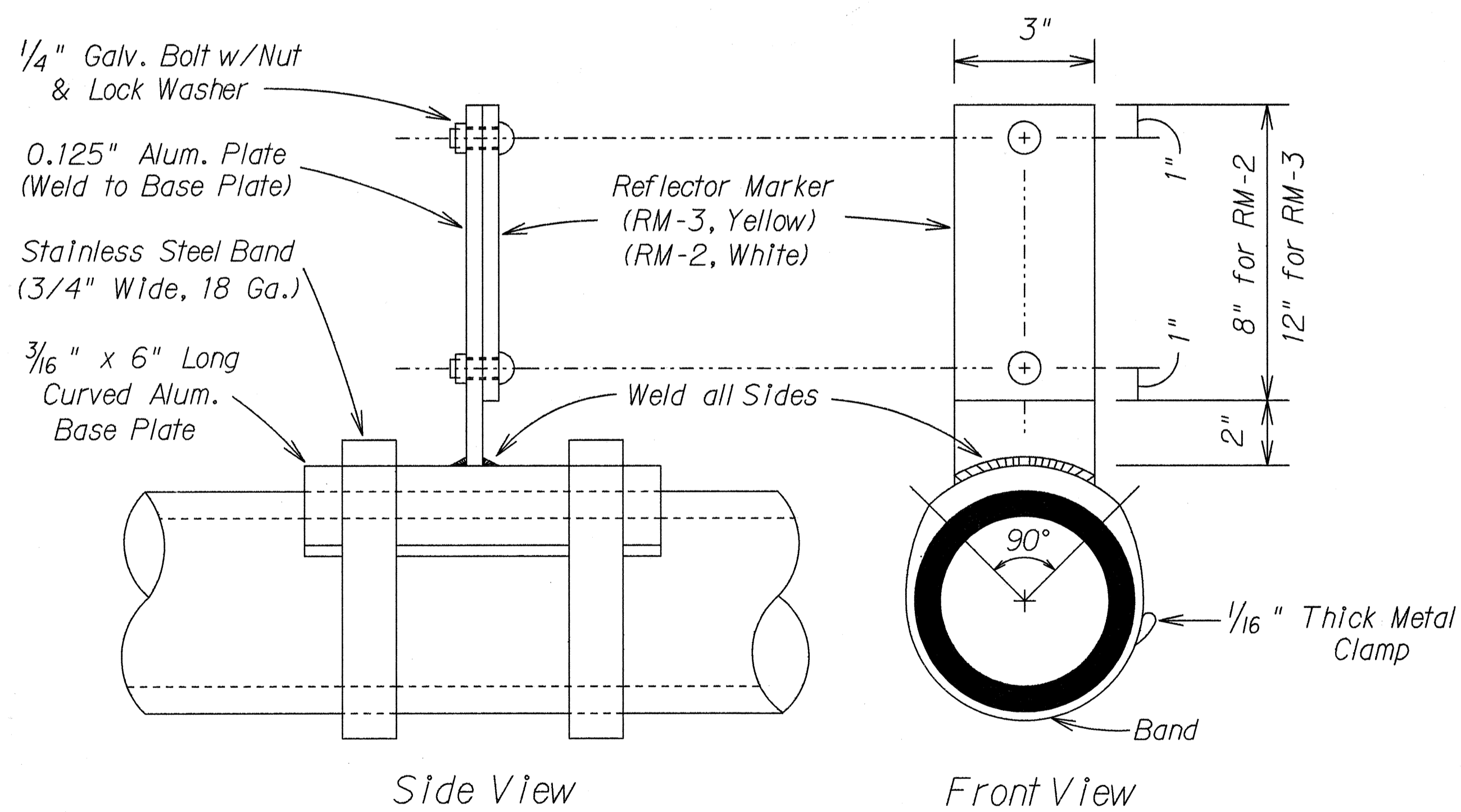
Side View Front View

Wall Mounted Reflector Marker

Not to Scale

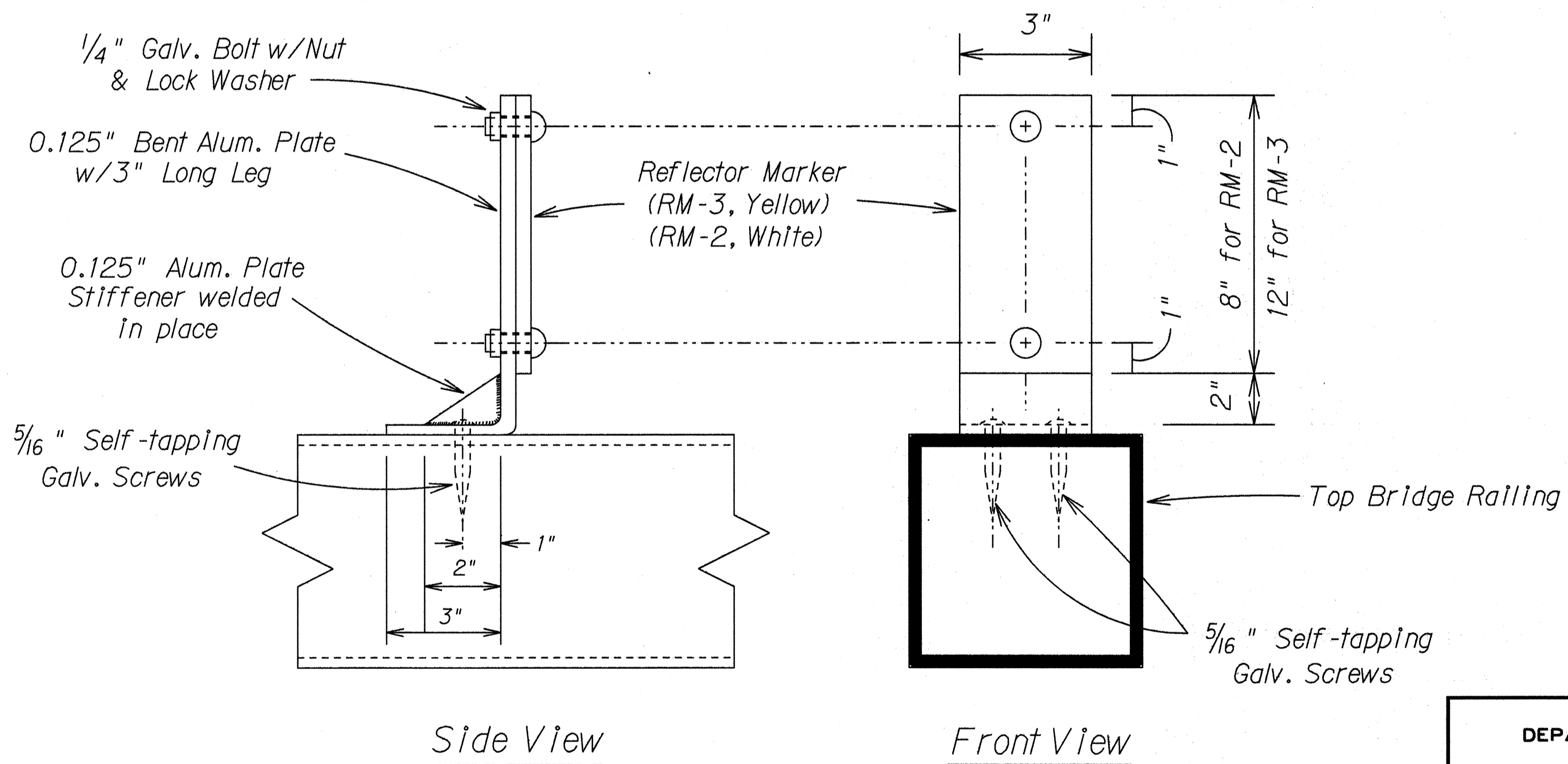
NOTE:

All holes resulting from the removal of existing bolts mounted on existing structures shall be plugged with mortar. Any damaged to the existing structure caused by the Contractor's operation shall be repaired by the Contractor at his expense and to the satisfaction of the Engineer. This work shall be considered incidental to installing reflector markers on Concrete Barrier and Retaining Wall.



Side View

Front View



Side View

Front View

Details of Brackets for Reflector Markers

Mounted on Bridge Railings

Not to Scale

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
CHECKED BY	
N.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

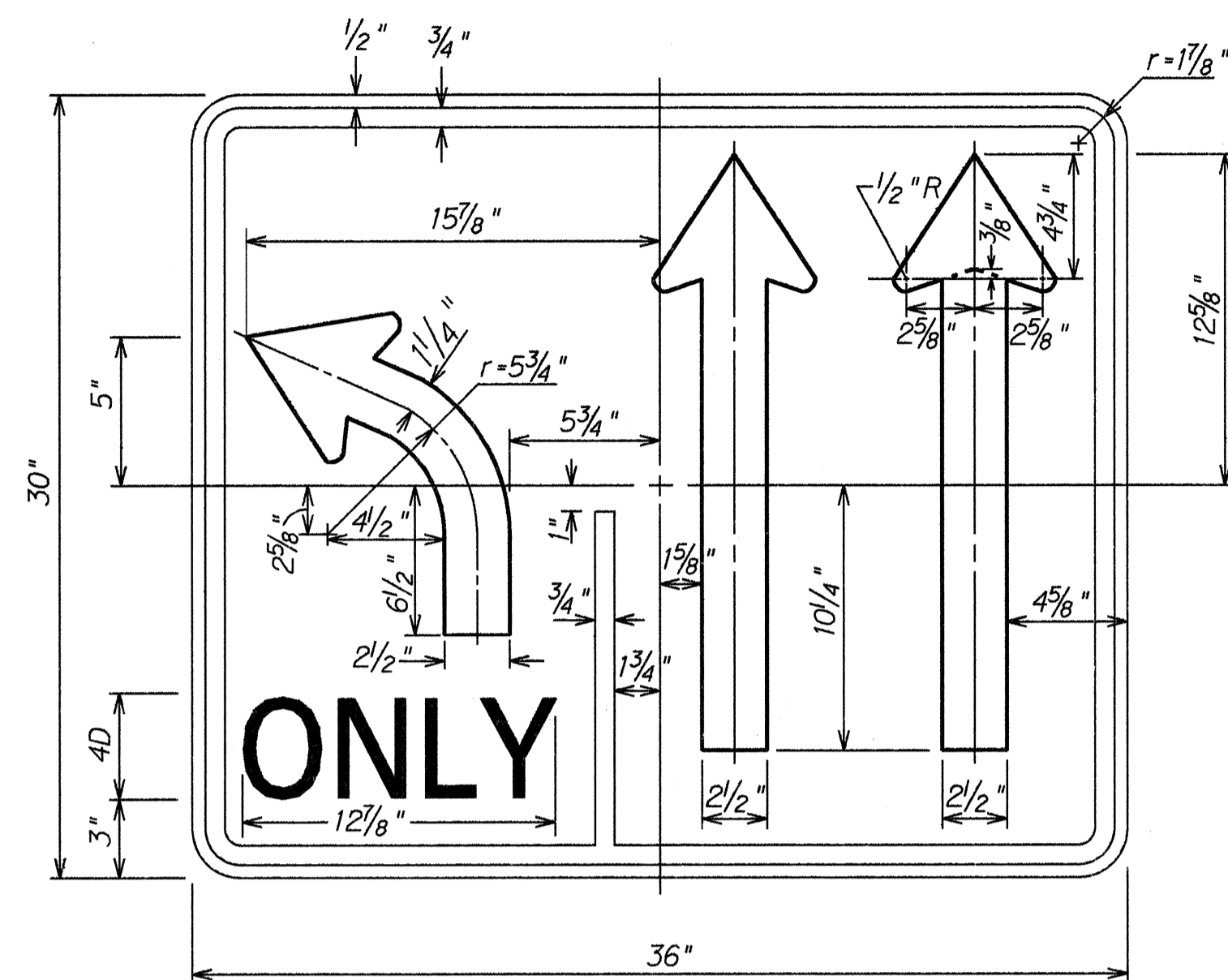
MISCELLANEOUS DETAILS

MOANALUA FWY. RESURFACING,
(OUTBOUND LANES)
Alea I.C. to Moanalua Stream Bridge
Proj. No. 78A-01-91M

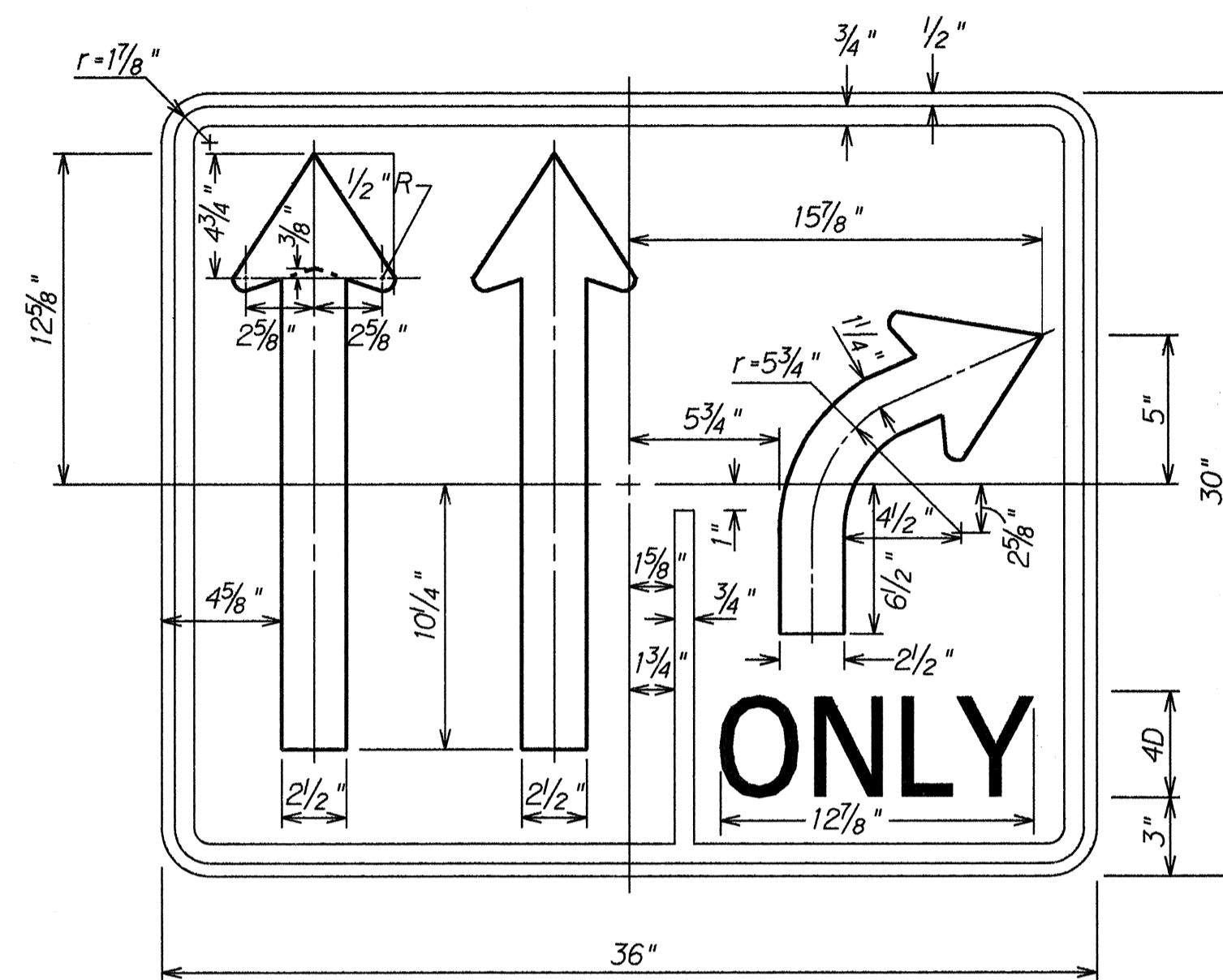
Scale: As Shown Date: Sept. 1991

SHEET No. T23 OF 44 SHEETS

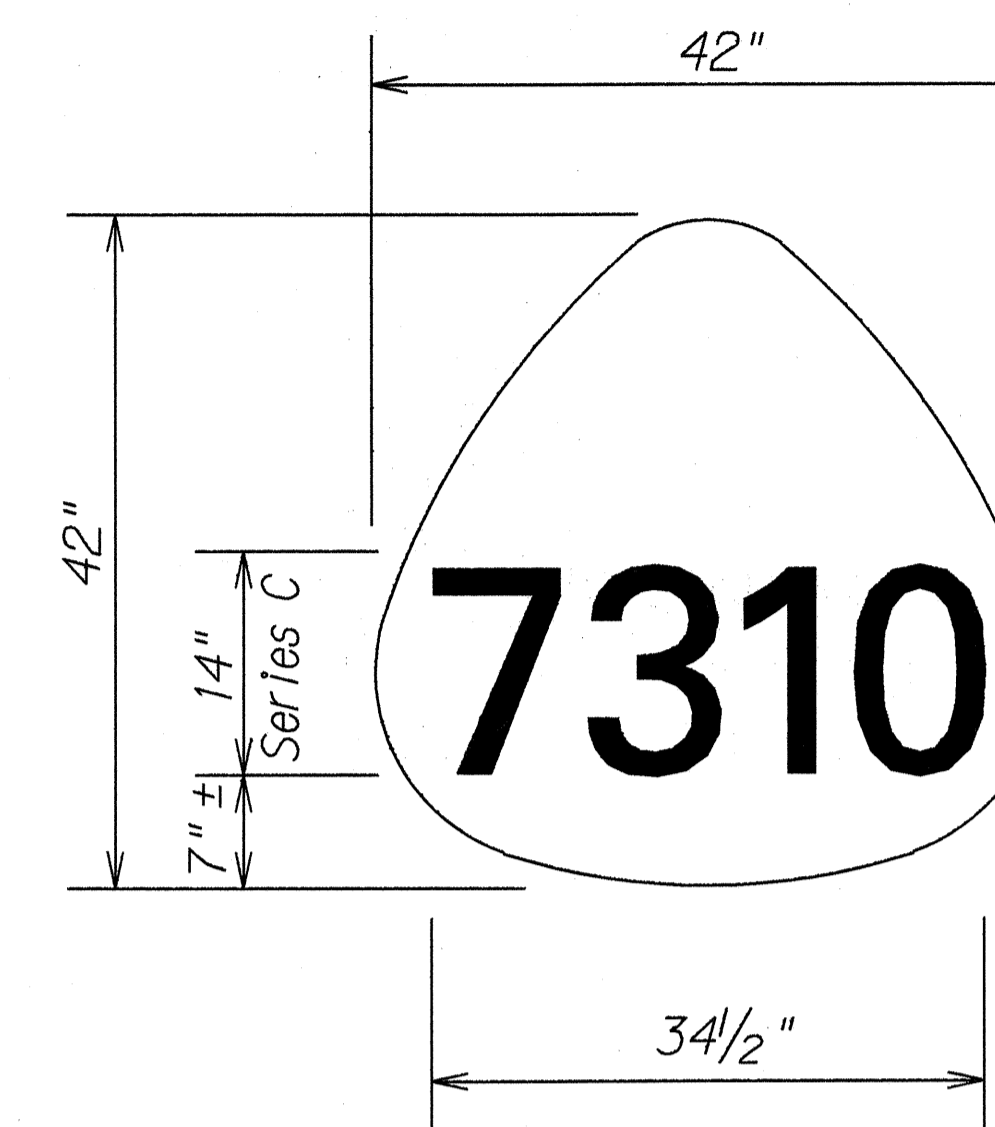
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	50	70



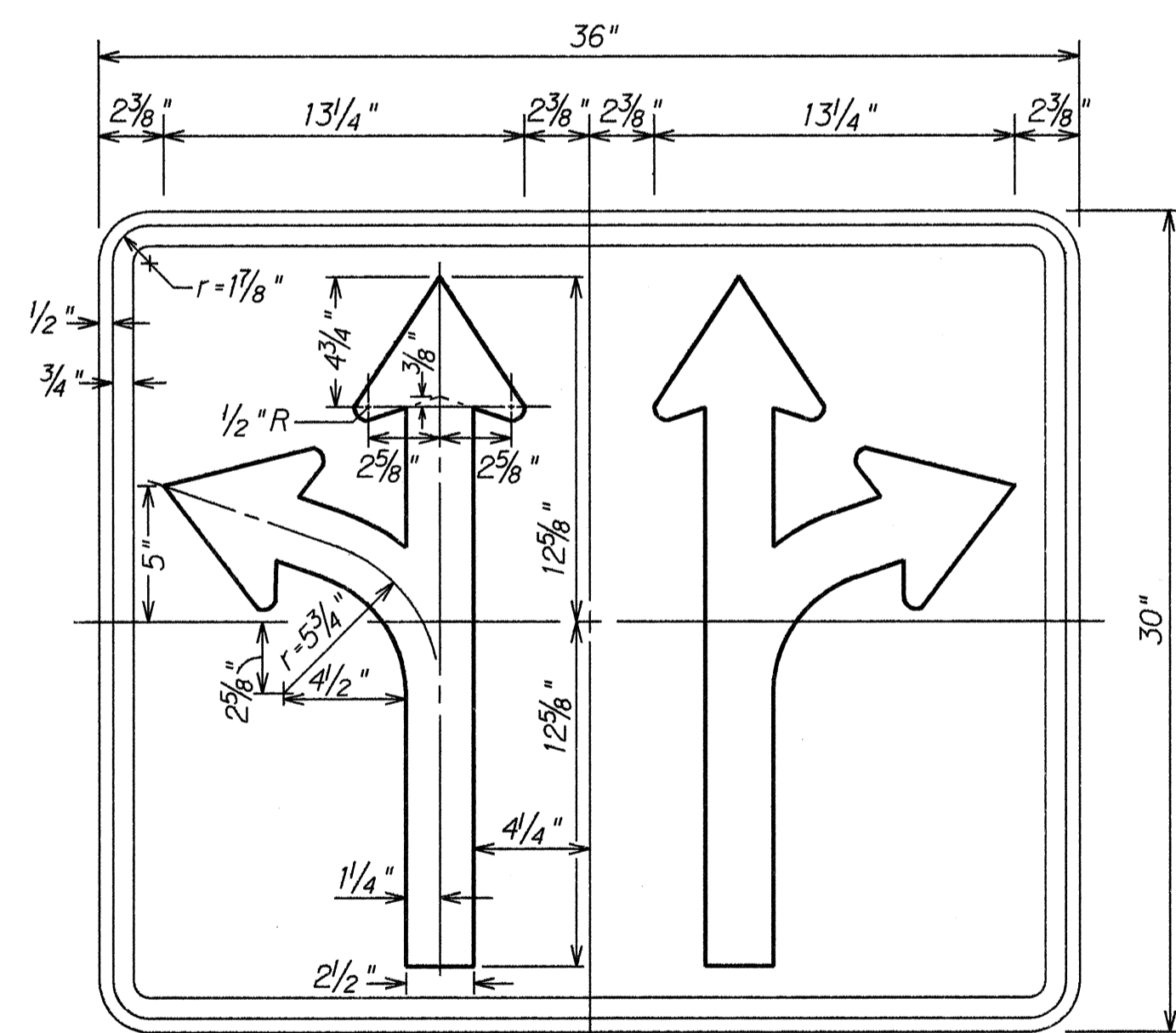
R3-8A(L)
Scale: 2" = 1'-0"



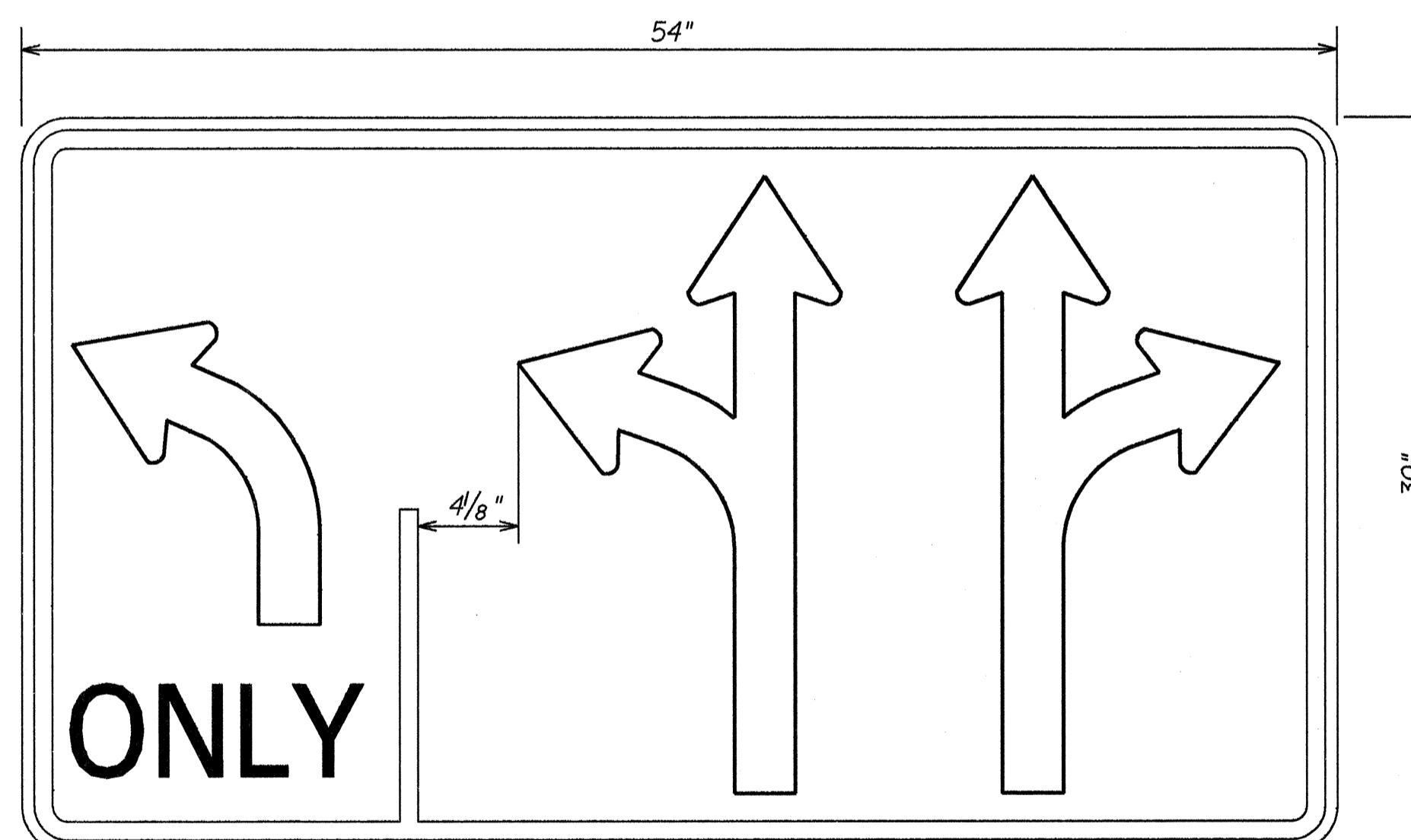
R3-8A(R)
Scale: 2" = 1'-0"



STATE ROUTE MARKER
FOR GUIDE SIGNS
Not to Scale



R3-35
Scale: 2" = 1'-0"



R3-47
Scale: 2" = 1'-0"

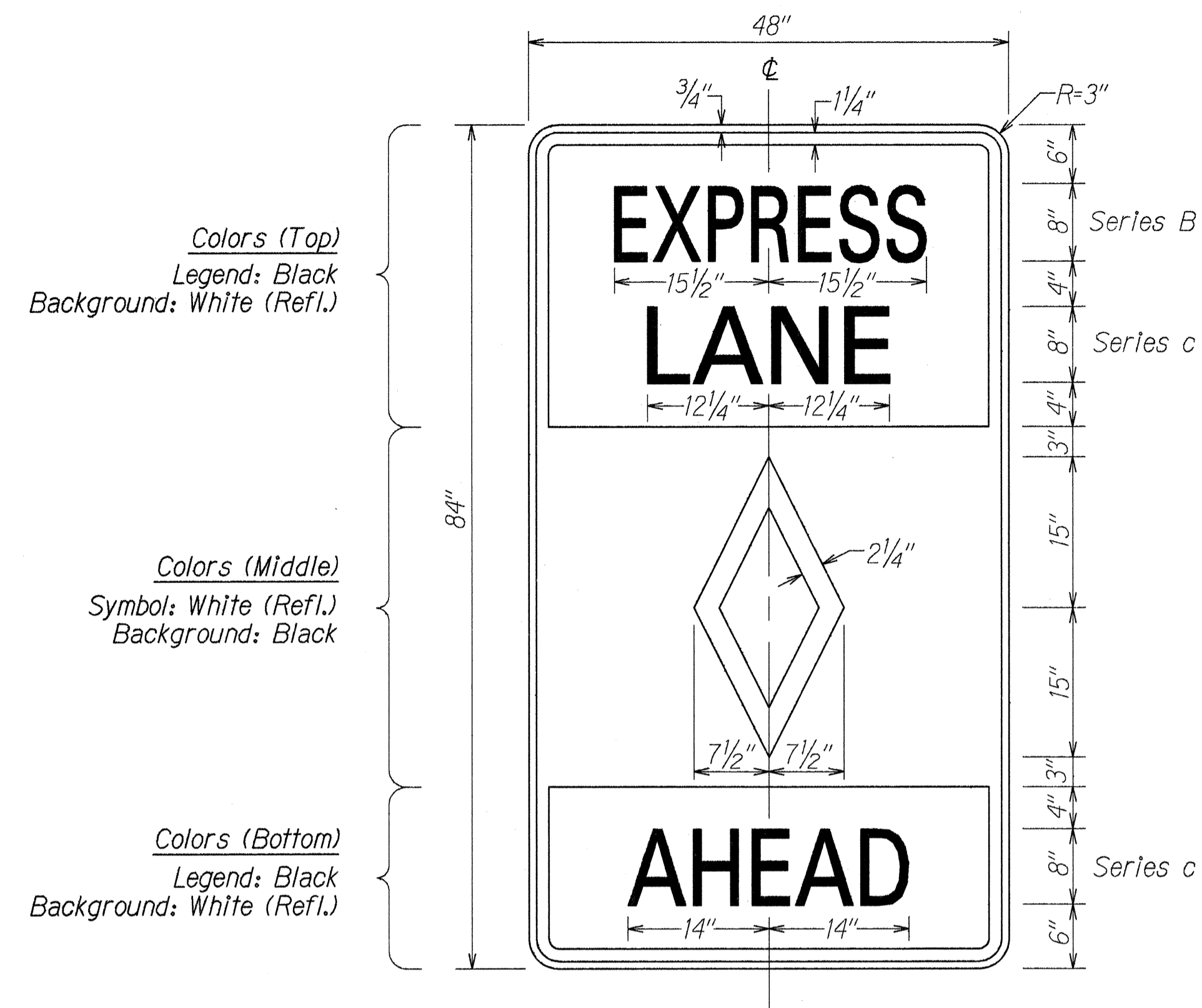
NOTES:

1. Signs R3-8A(L), R3-8A(R), and R3-35 are variations of Sign R3-8.
2. Sign R3-47 is a variation of Signs R3-8, R3-8A(L), and R3-35.
3. Plate and arrow details shall conform to Sign R3-8.

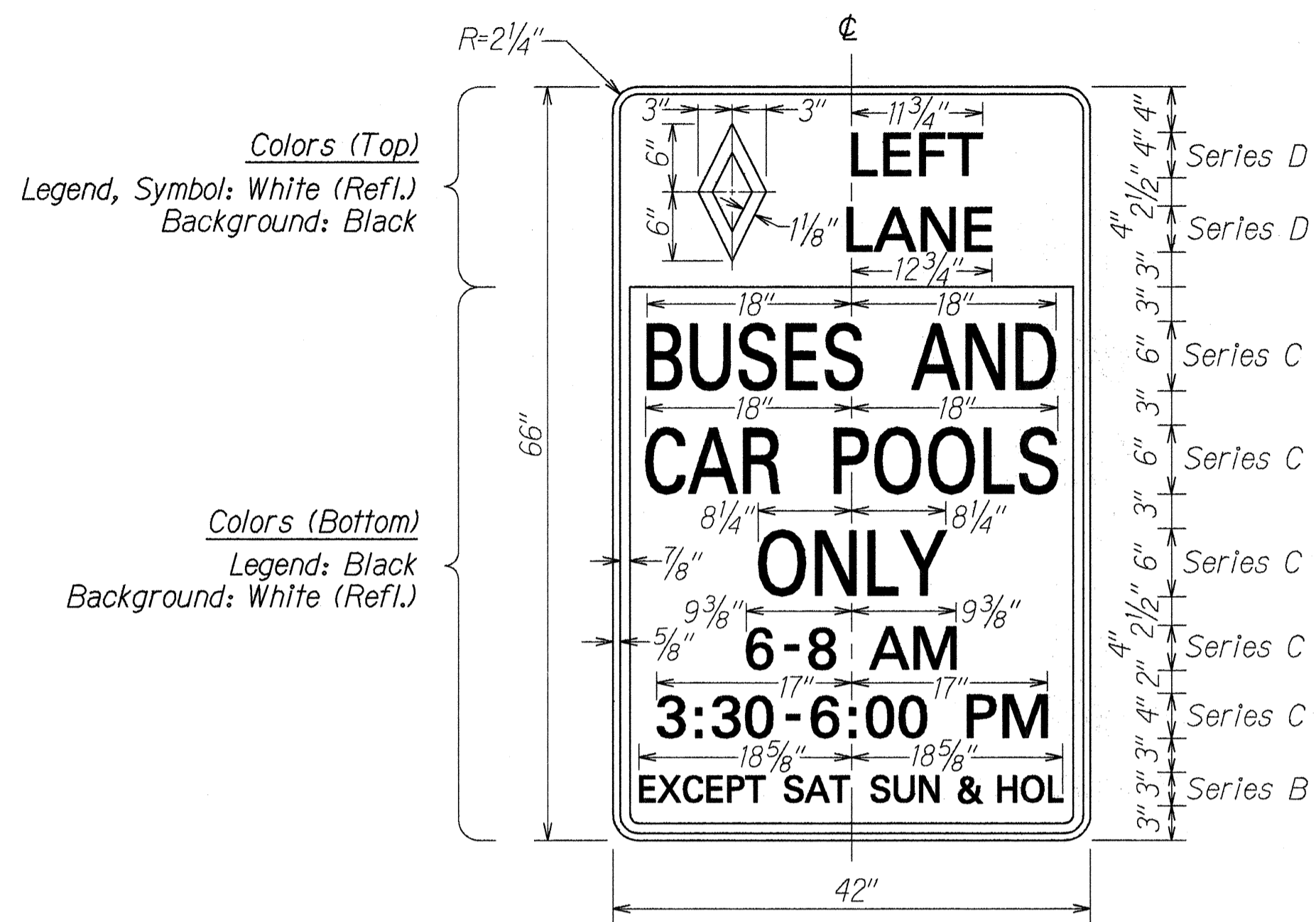
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**MISCELLANEOUS
SIGN DETAILS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
PROJECT NO. 78A-01-91M
Scale: As Noted Date: Sept. 1991
SHEET No. T24 OF 44 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
FRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

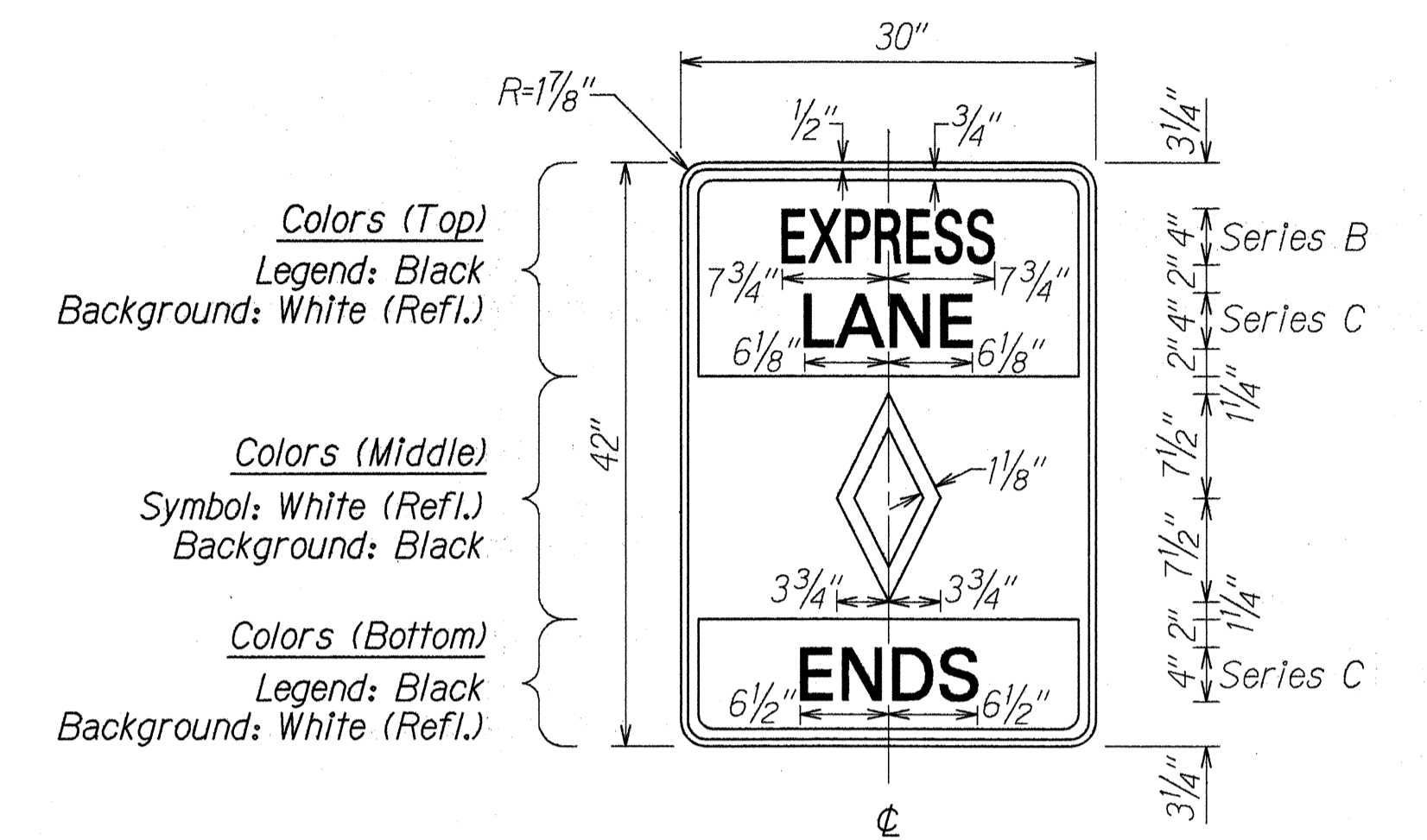
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	51	70



R3-10d

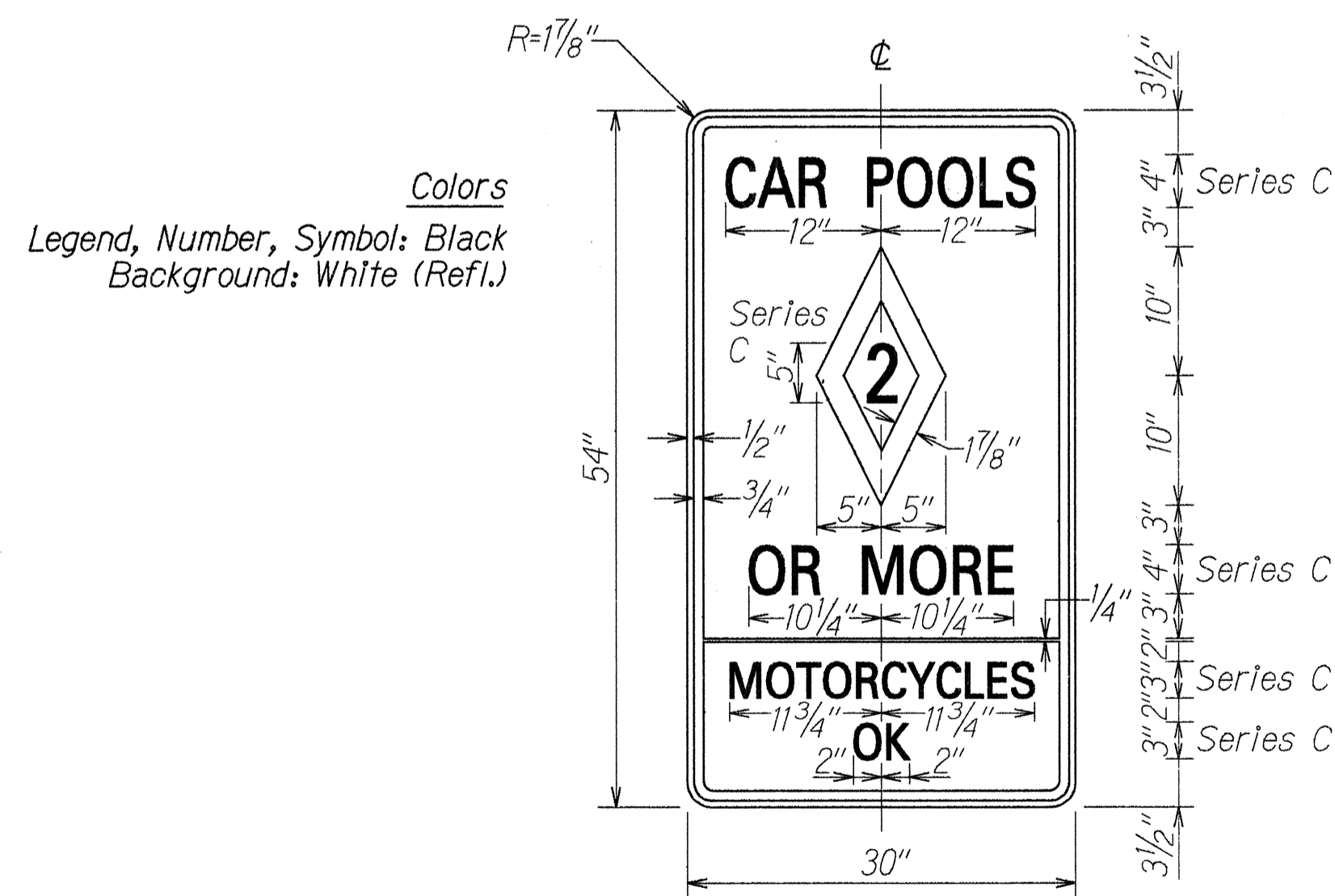


R3-11a

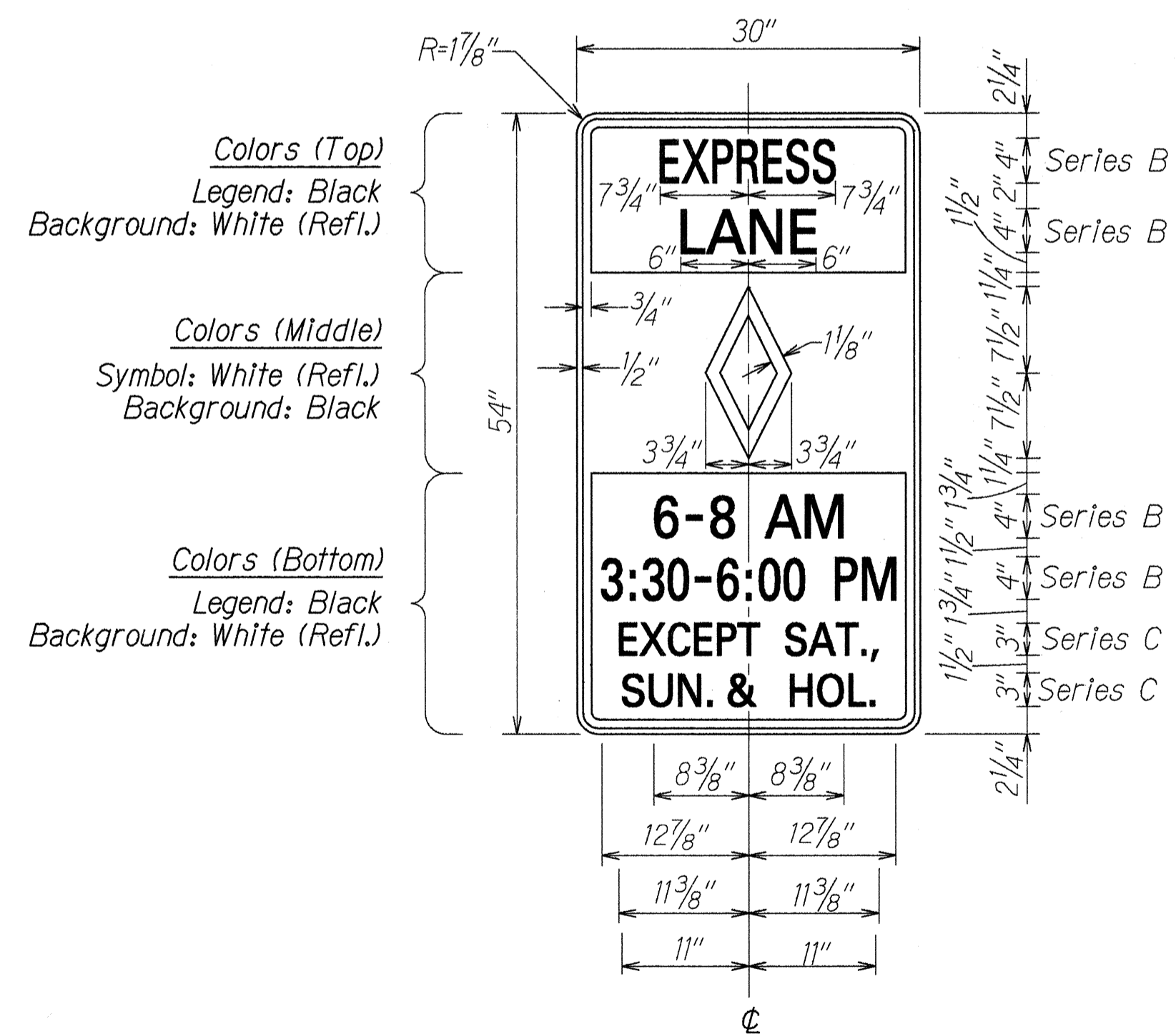


R3-12a

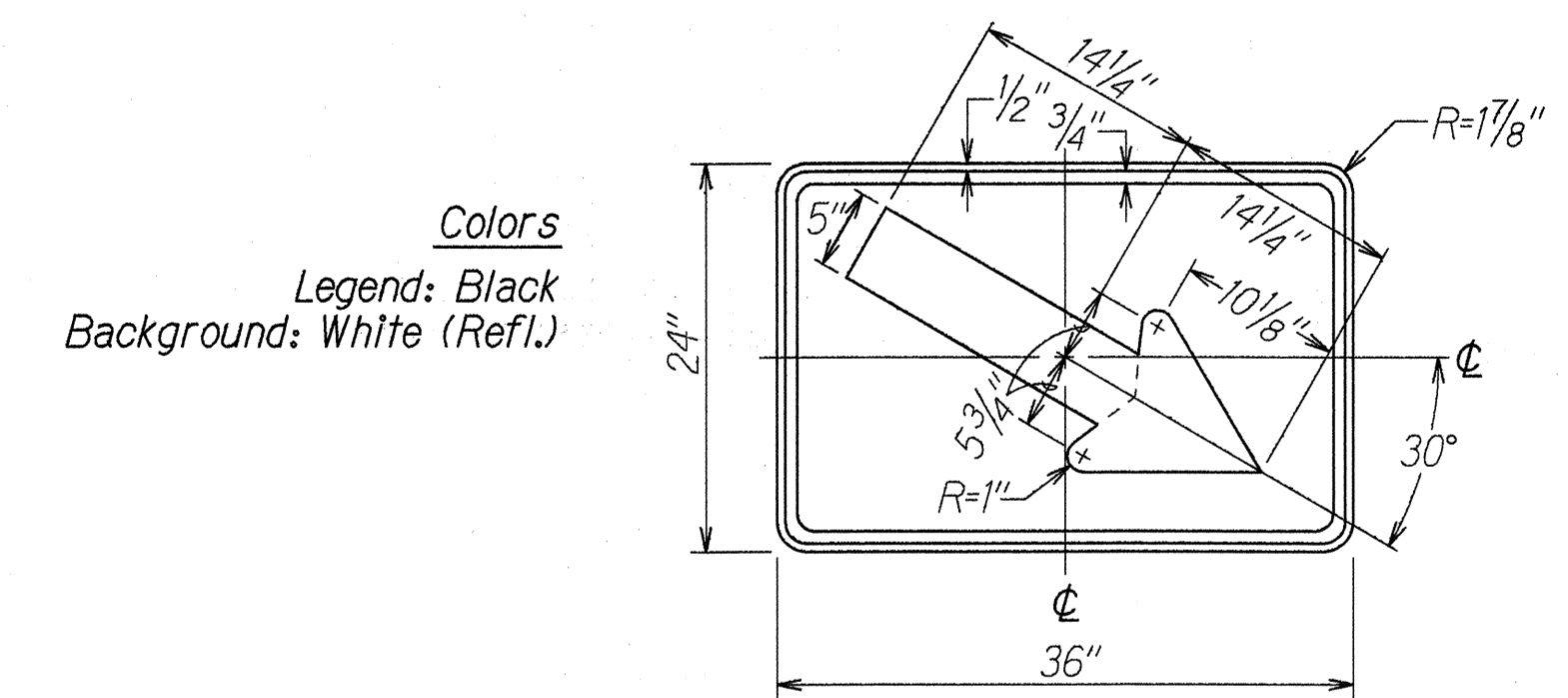
NOTE: For R3-10 Series Signs, Suffixes a, b, c, d, and e are as Follows:
a-1500 FT. b-1000 FT. c-500 FT.
d-AHEAD e-BEGIN.



R3-18



R3-19

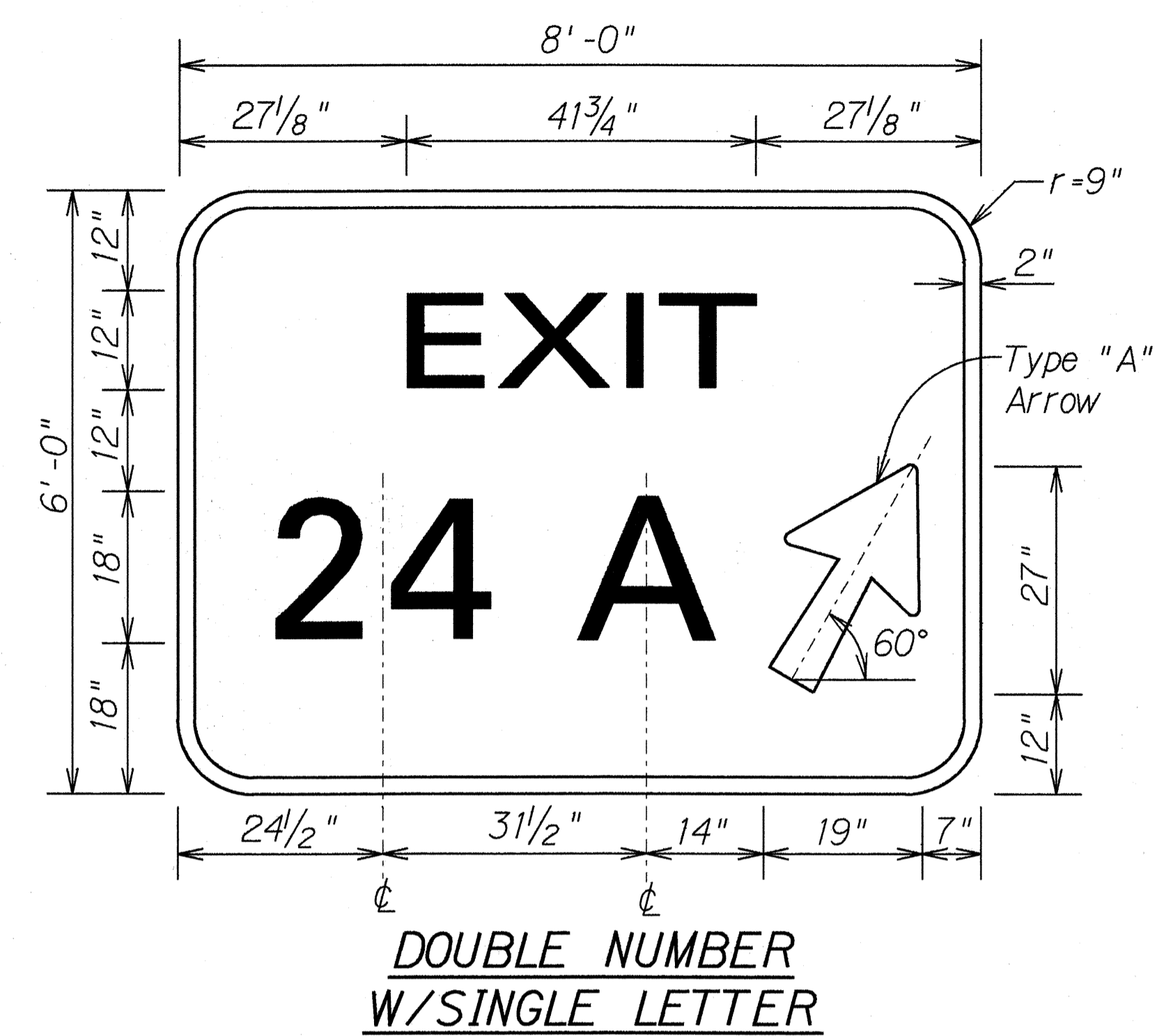
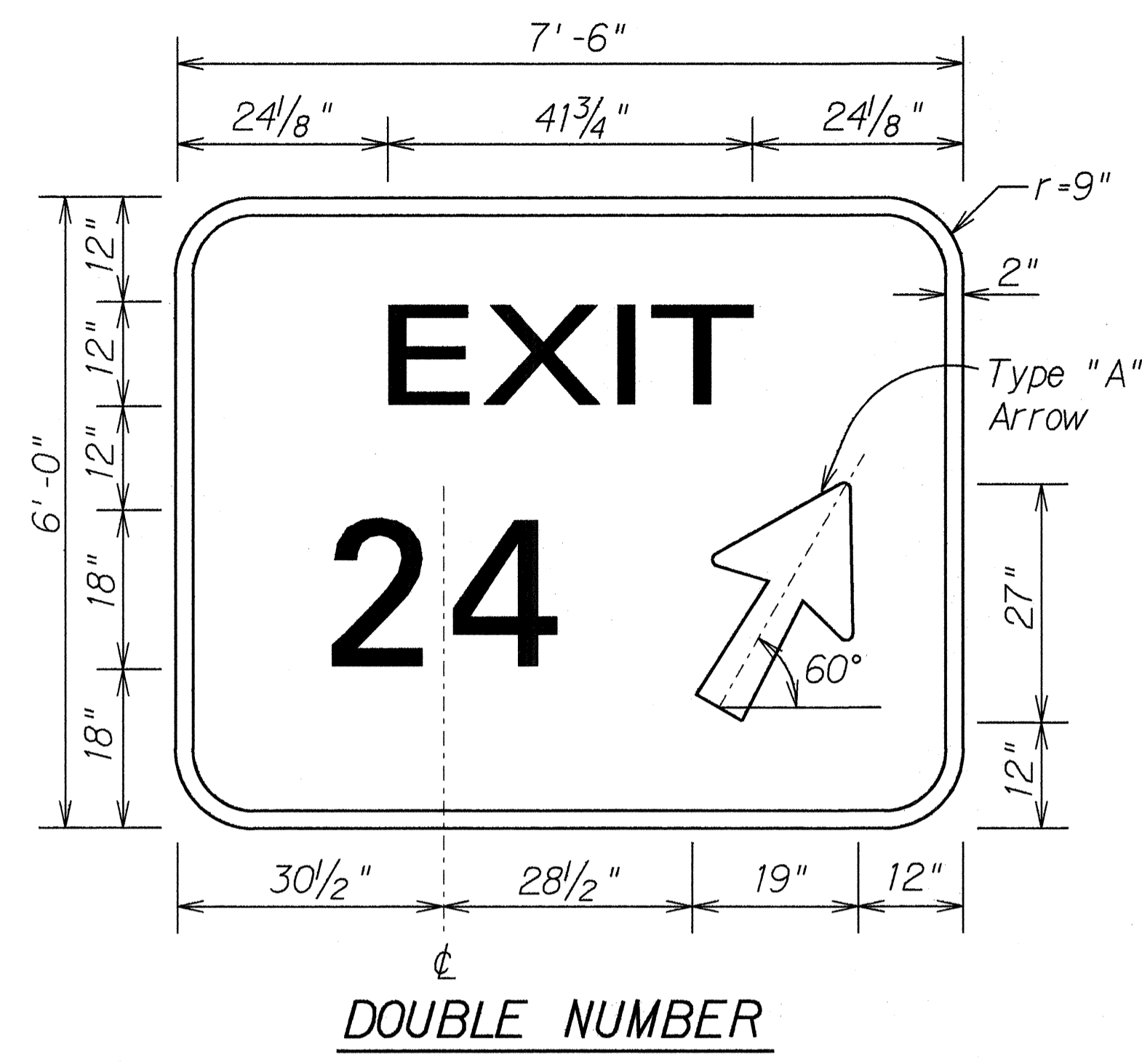
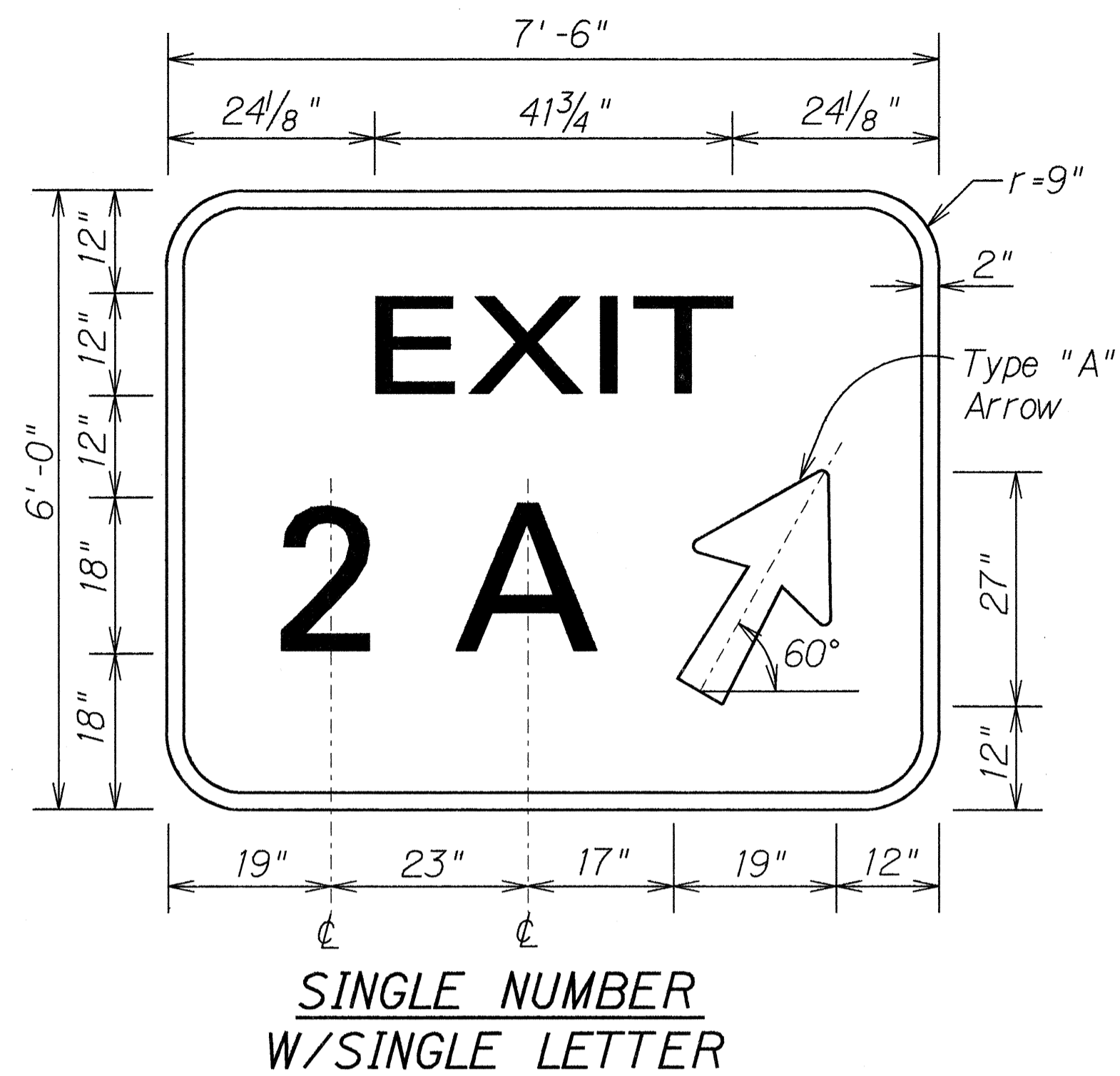
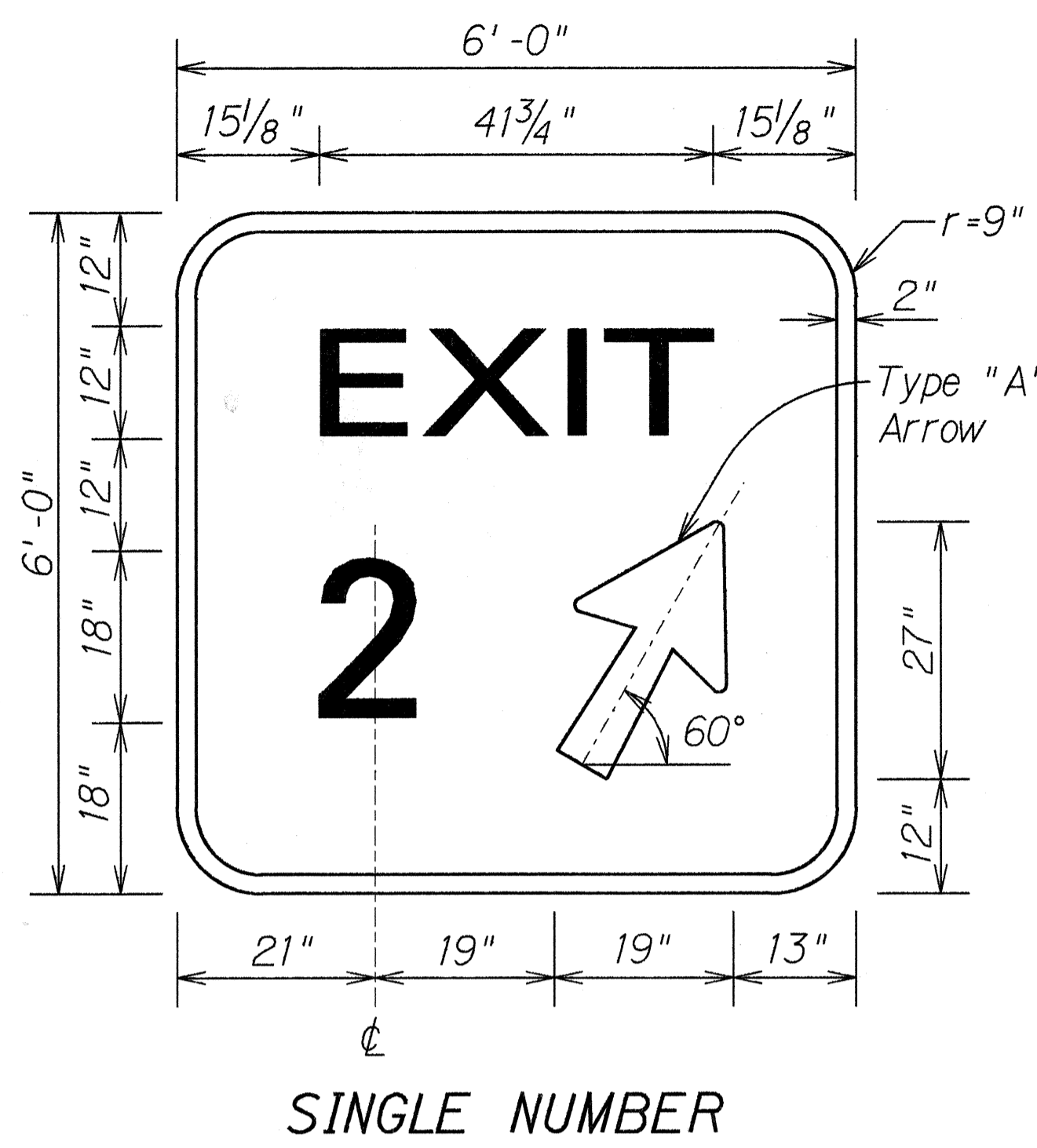


R3-20

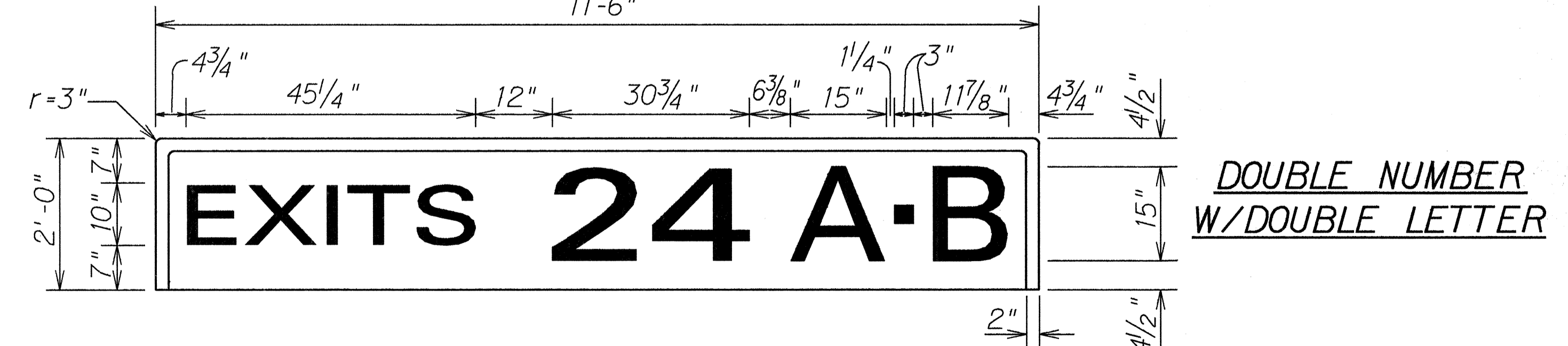
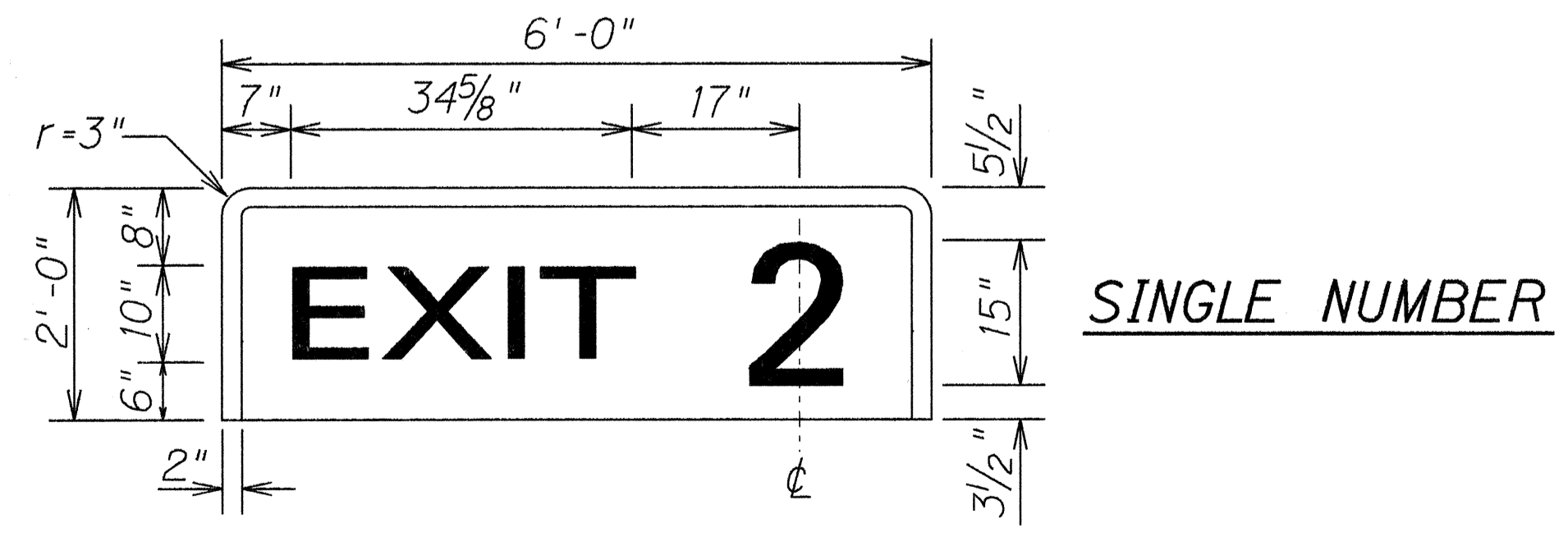
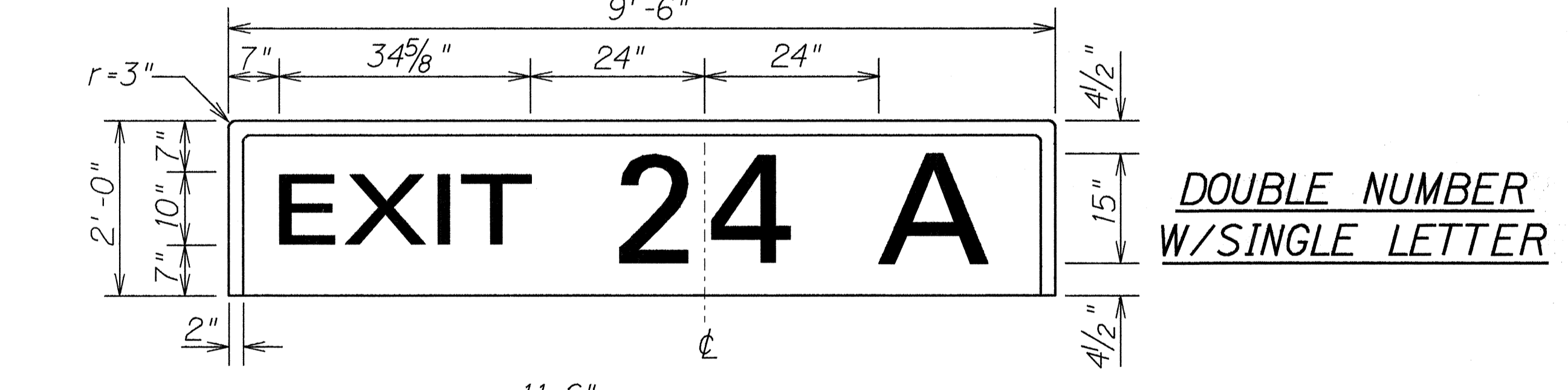
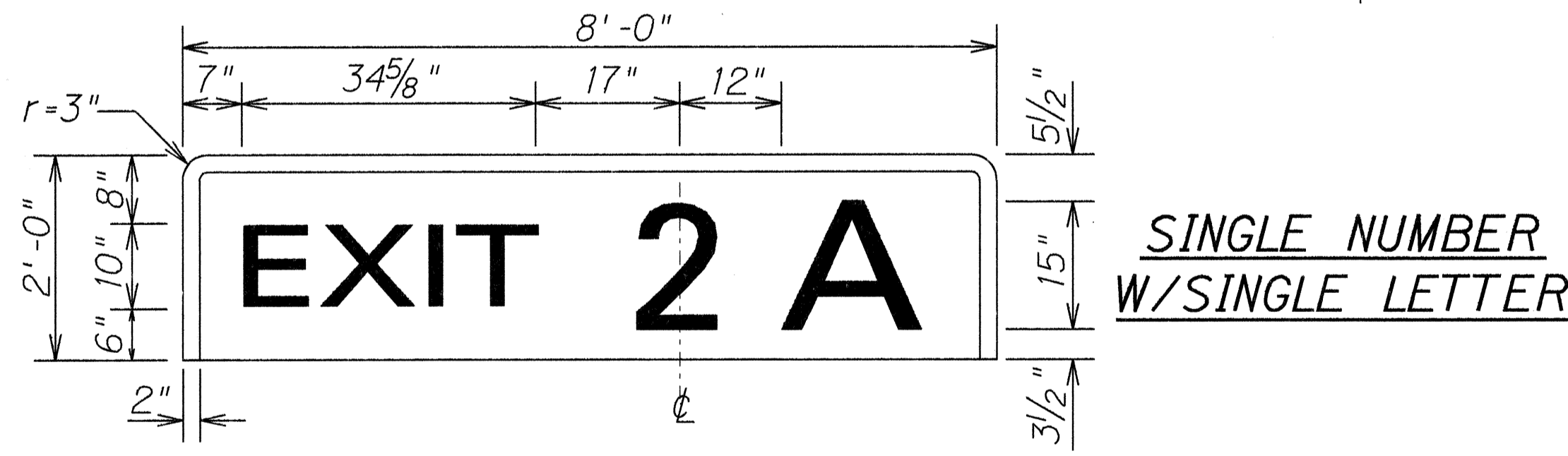
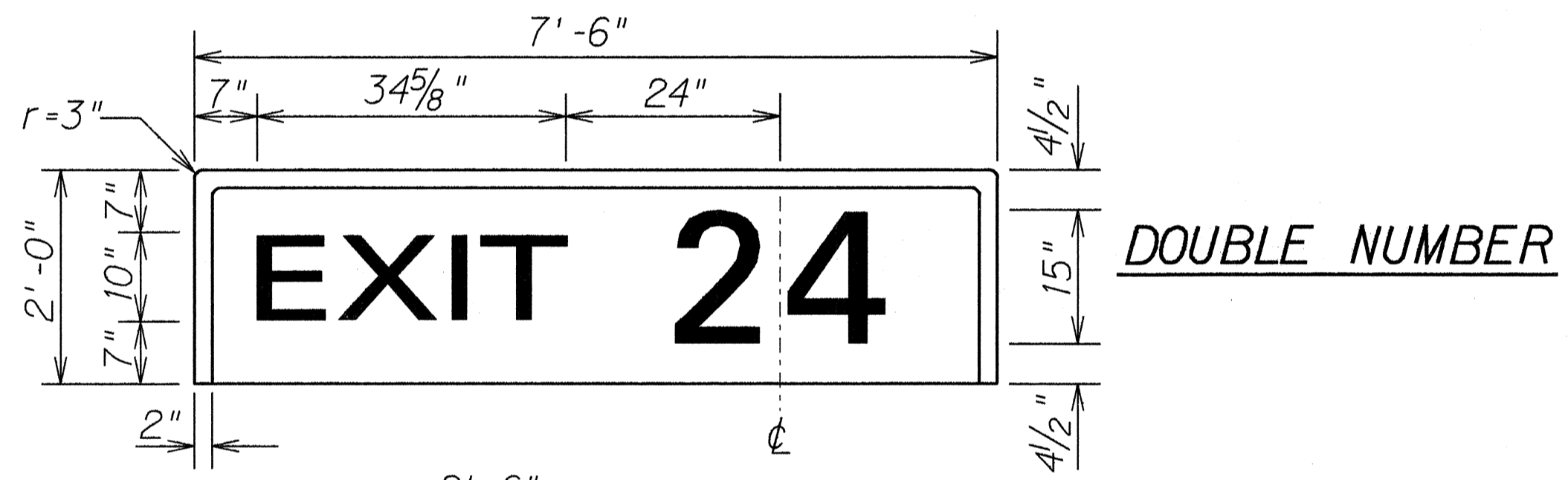
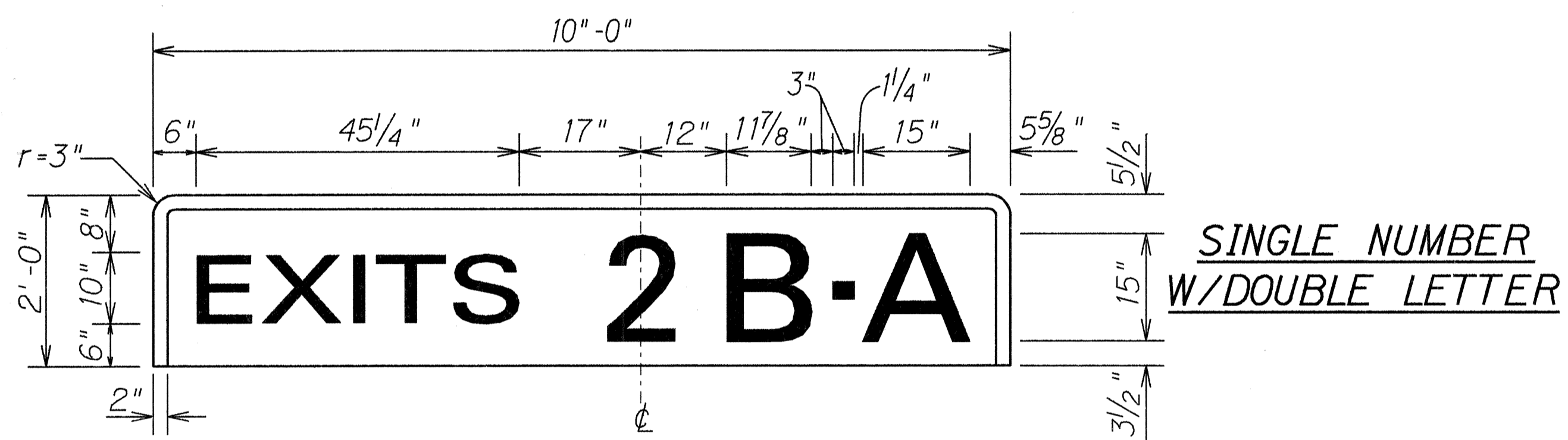
SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**HOV SIGNING NOTES
& DETAILS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
PROJECT NO. 78A-01-91M
Scale: 1" = 1'-0" Date: Sept. 1991
SHEET No. 725 OF 44 SHEETS

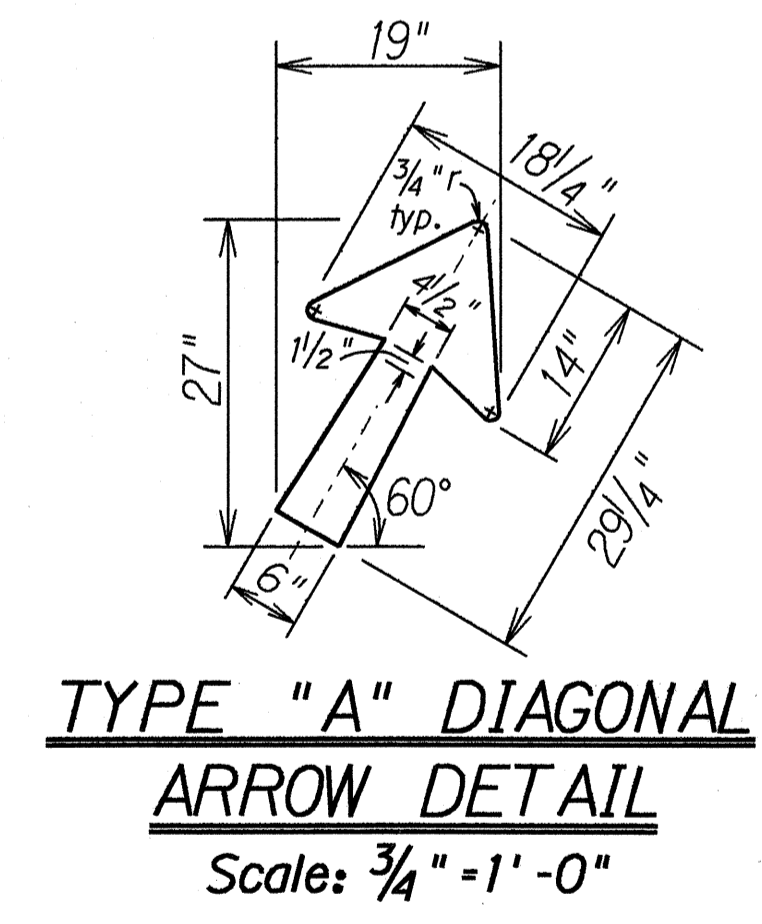
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	52	70



GORE EXIT SIGNS
Scale: 3/4" = 1'-0"



1. Design of Exit Number Panels shall conform to plans and specifications for either the Expressway or Destination Sign to which the Exit Number Panel will be attached.
2. Sign message shall be lettered in uppercase according to Standard Alphabets for Highway Signs, FHWA, 1966. Use Series "E" letters unless otherwise noted.
3. Arrows, Borders, and Route Markers shall conform with details as shown on standard plans and/or as specified in the MUTCD.
4. Contractor shall submit for approval, shop drawings for the attachment of Exit Number Panels to Sign Panels.

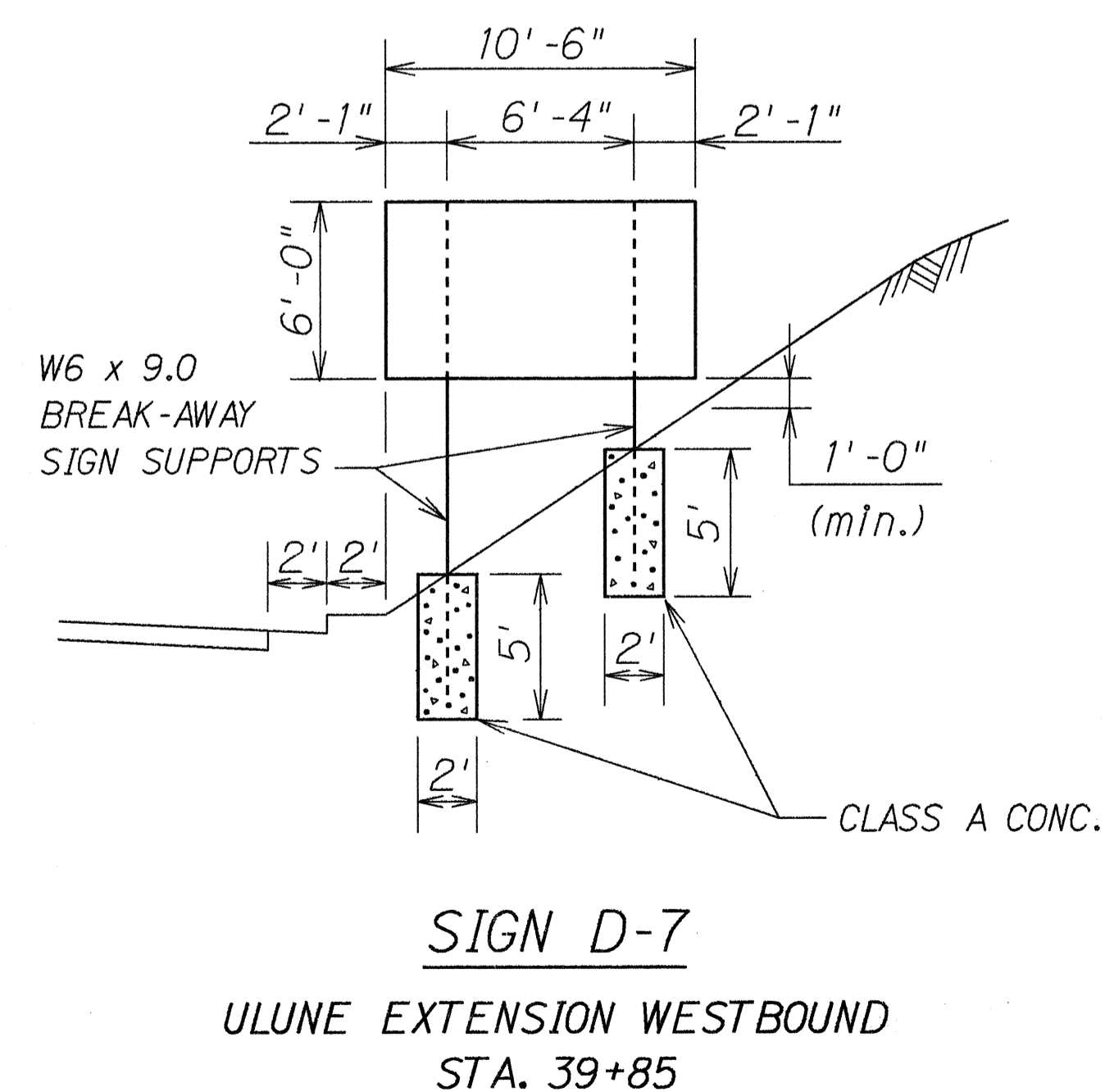
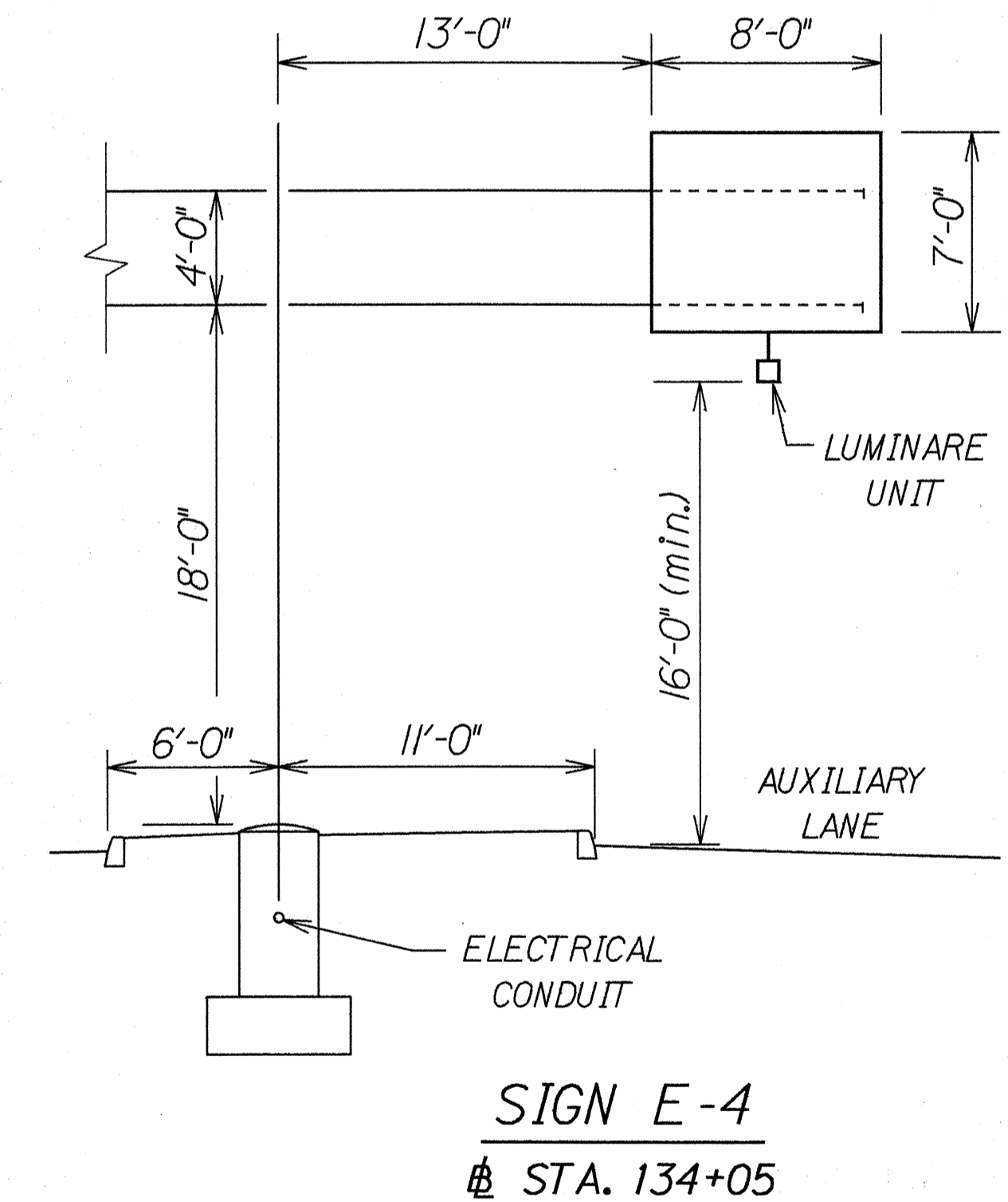
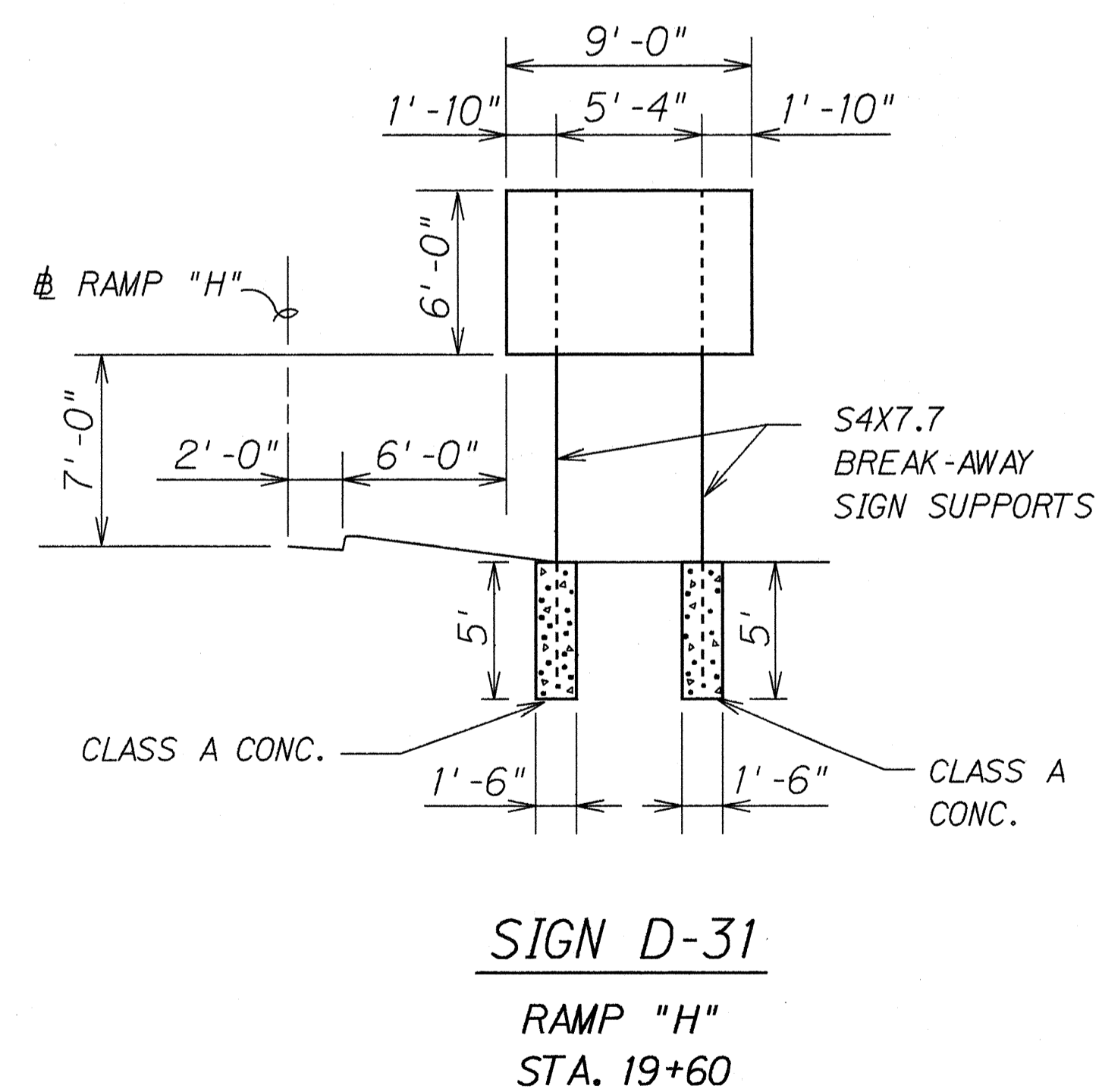
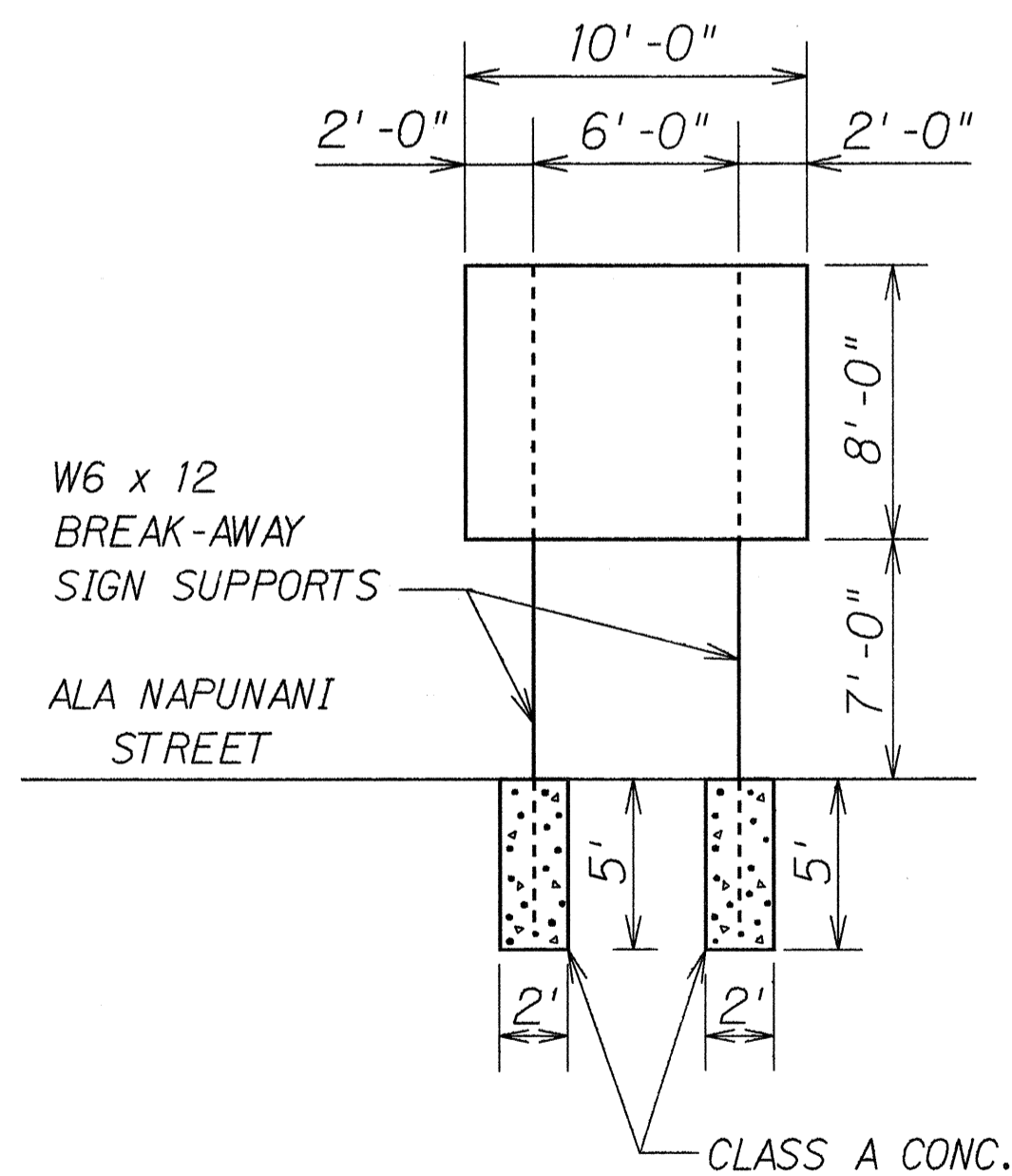
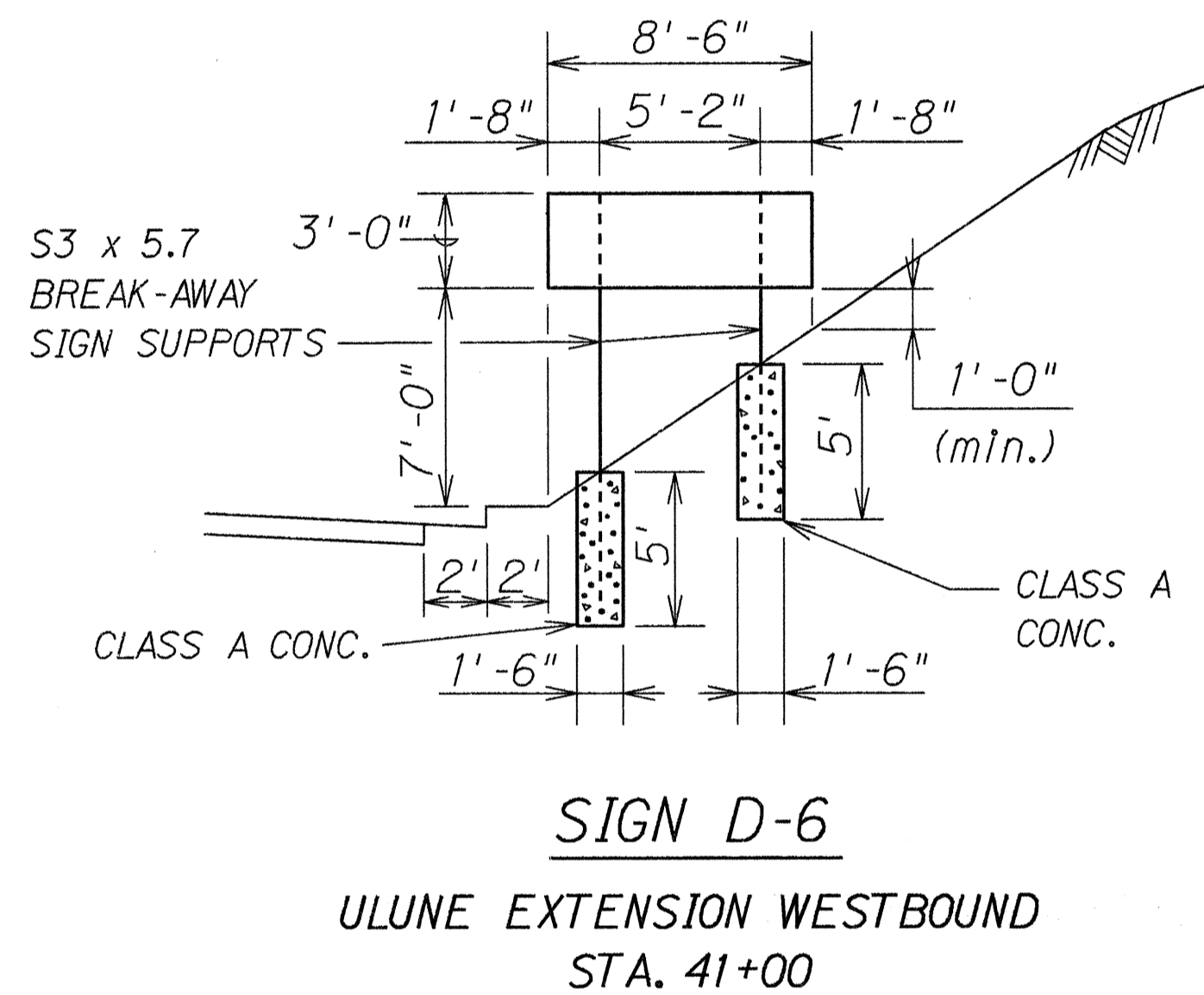
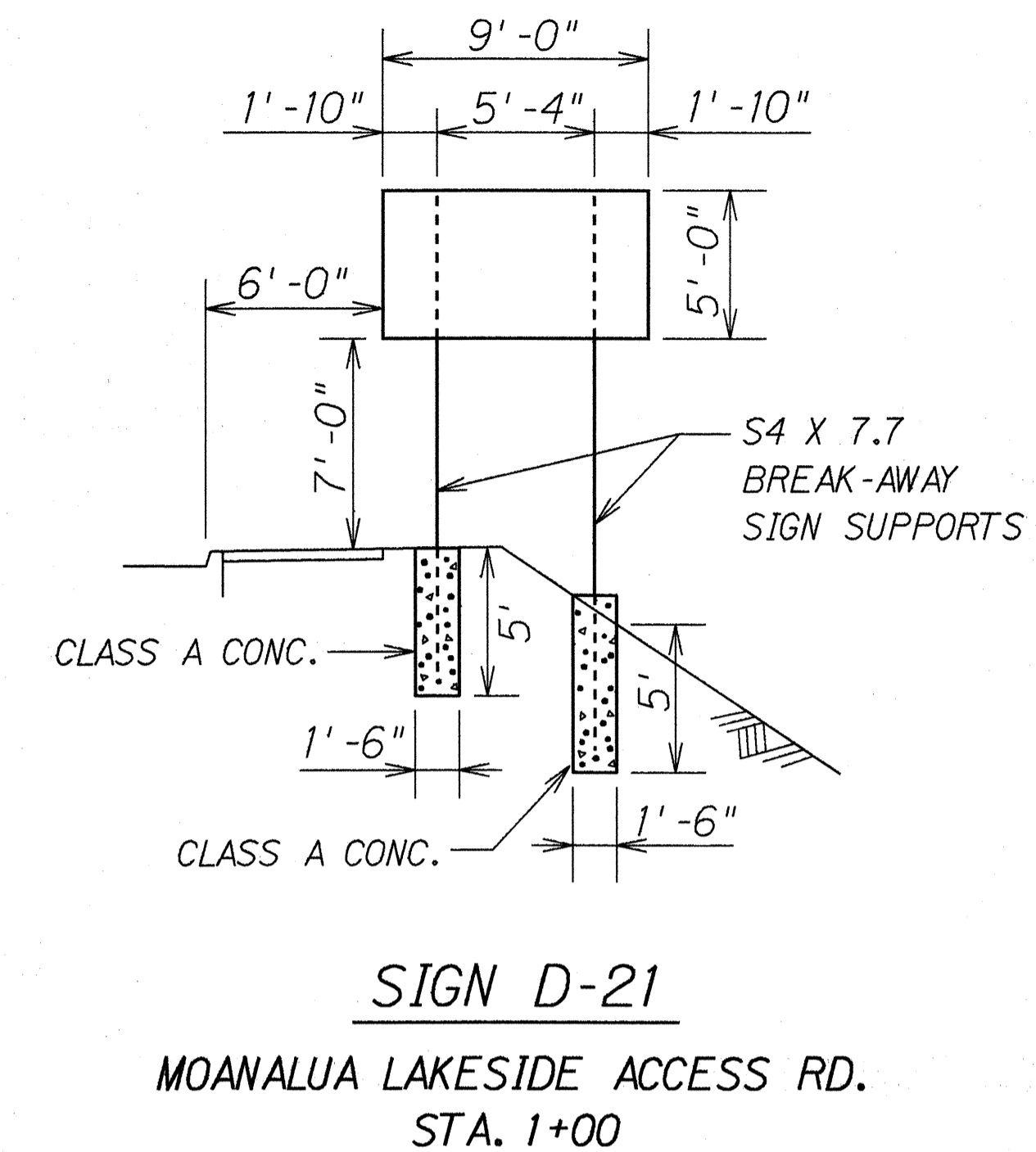
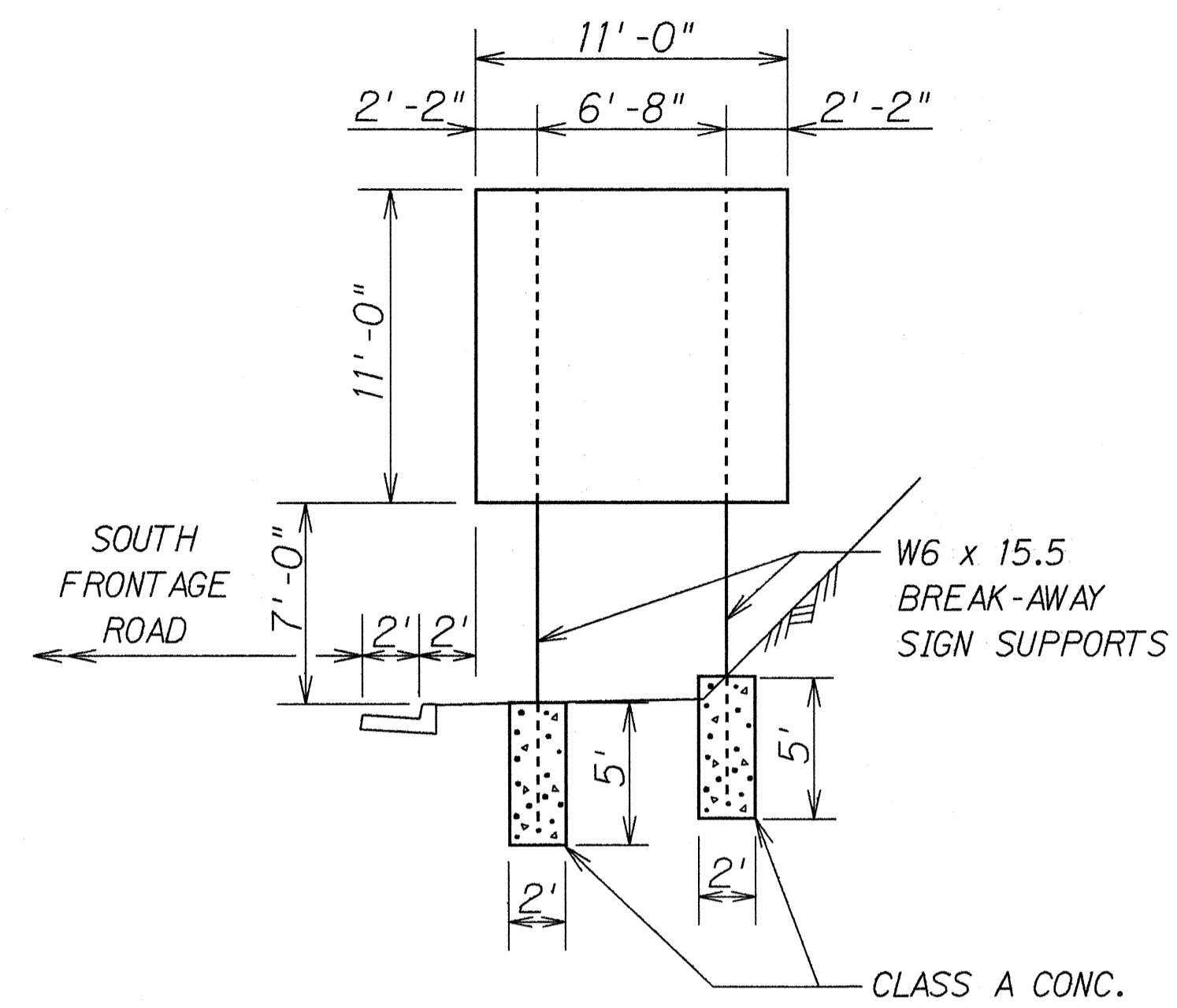
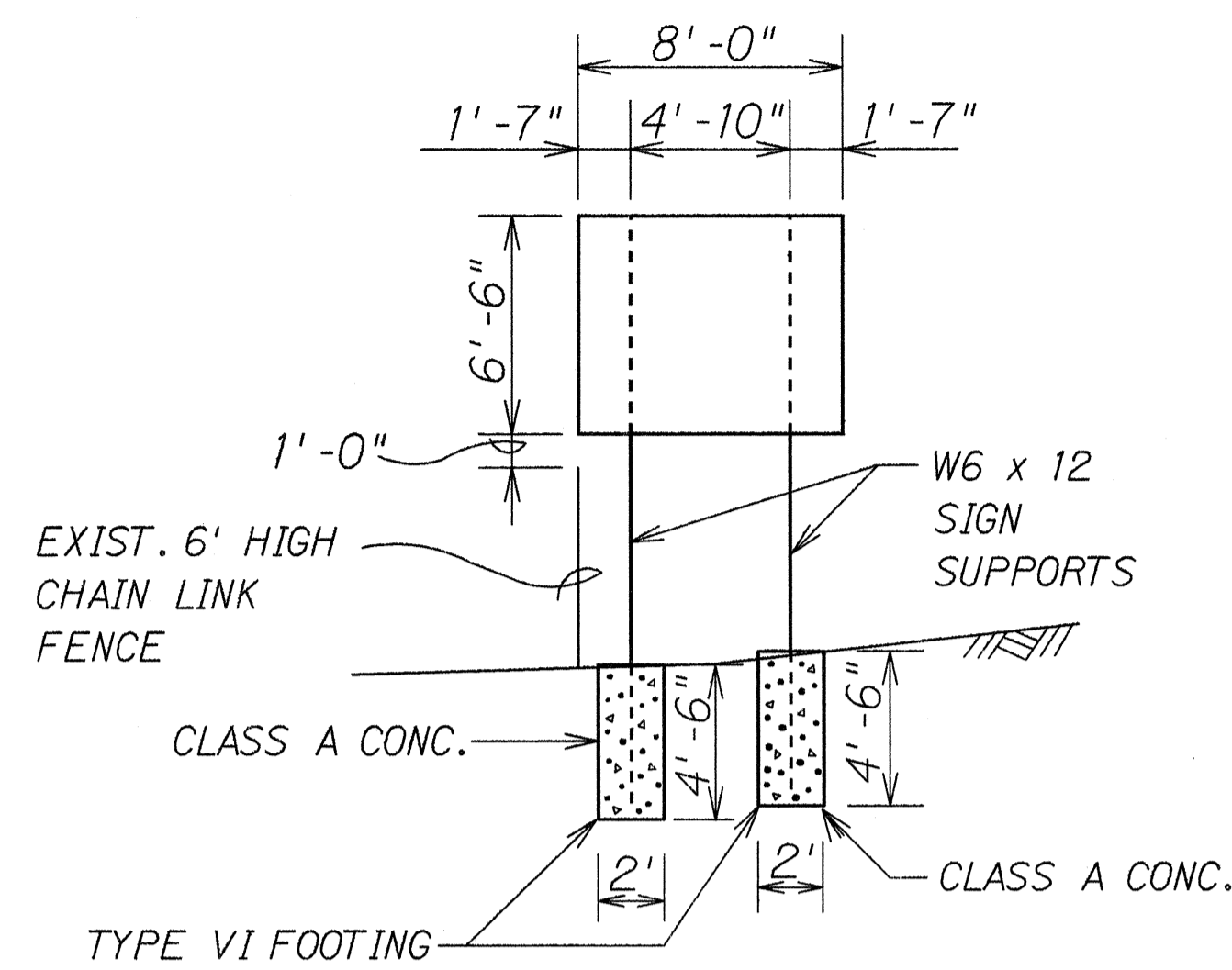
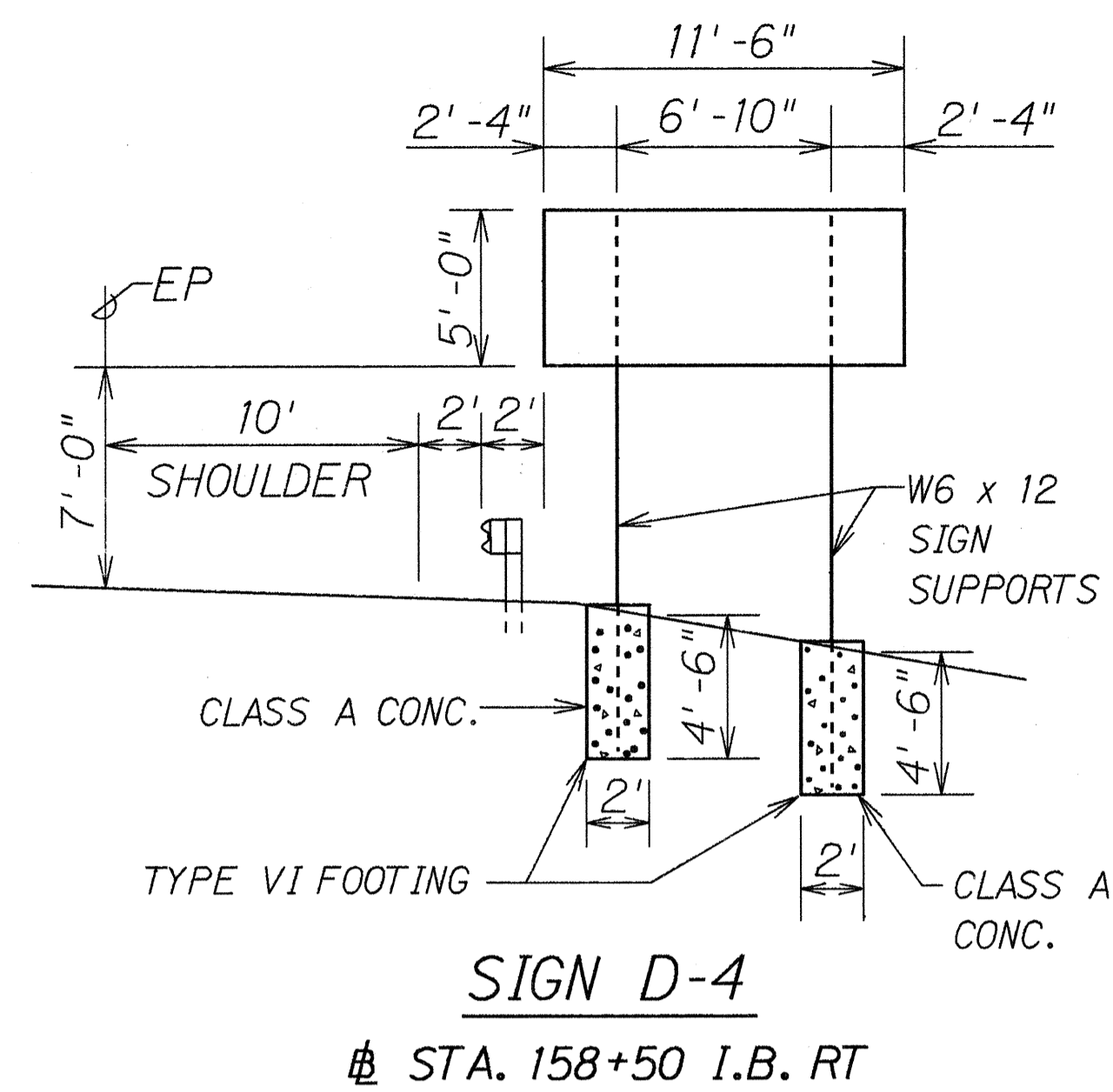


EXIT NUMBER PANELS
Scale: 3/4" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXIT NUMBER SIGN
PANEL LAYOUT**
MOANALUA FREEWAY RESURFACING
Alea I.C. to Moanalua Stream Bridge
(Outbound Lanes)
Project No. 78A-01-91M
Scale: As Shown Date: Sept. 1991
SHEET No. T26 OF 44 SHEETS

DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
NOTE BOOK QUANTITIES BY: _____
CHECKED BY: _____
N. _____

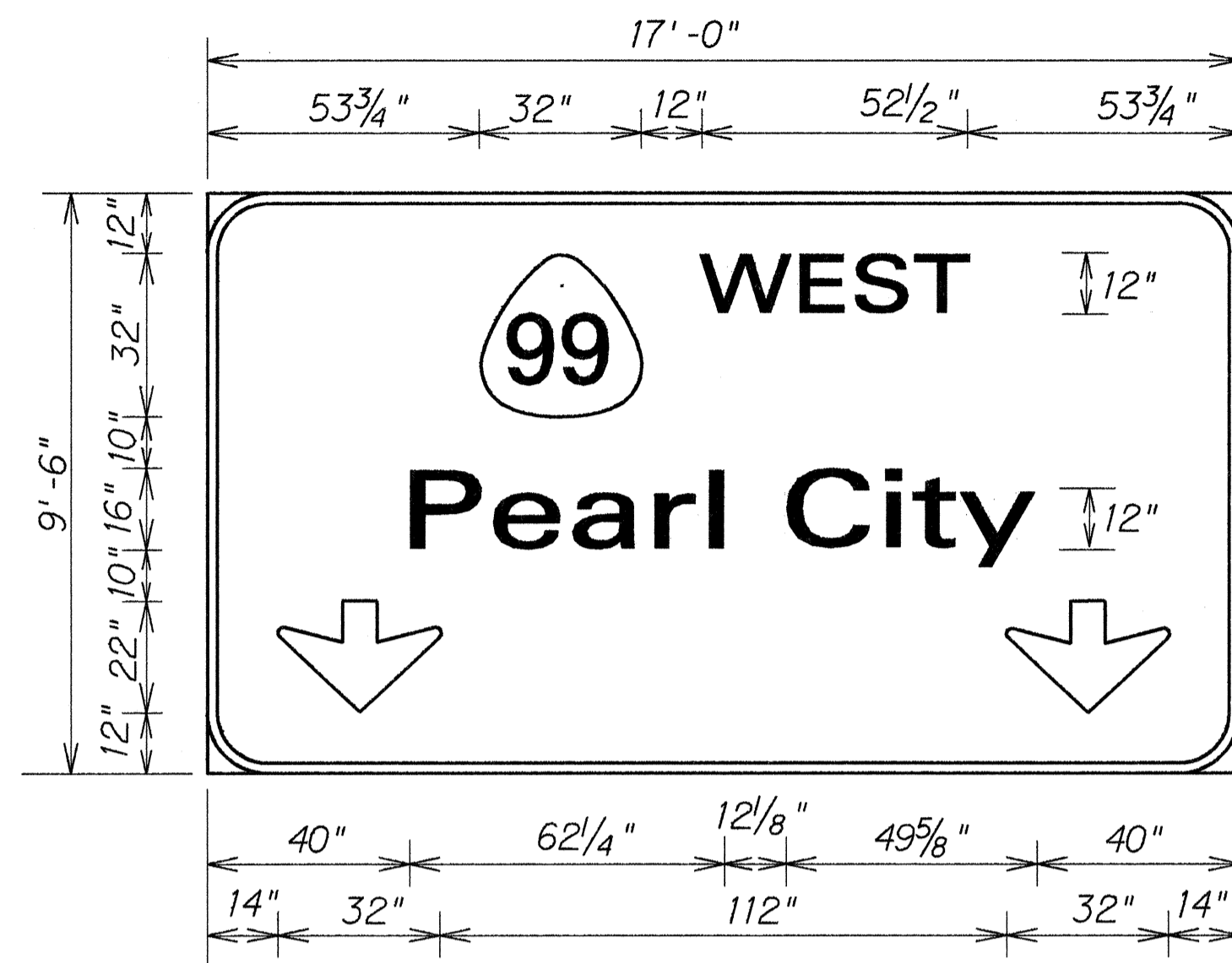
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	53	70



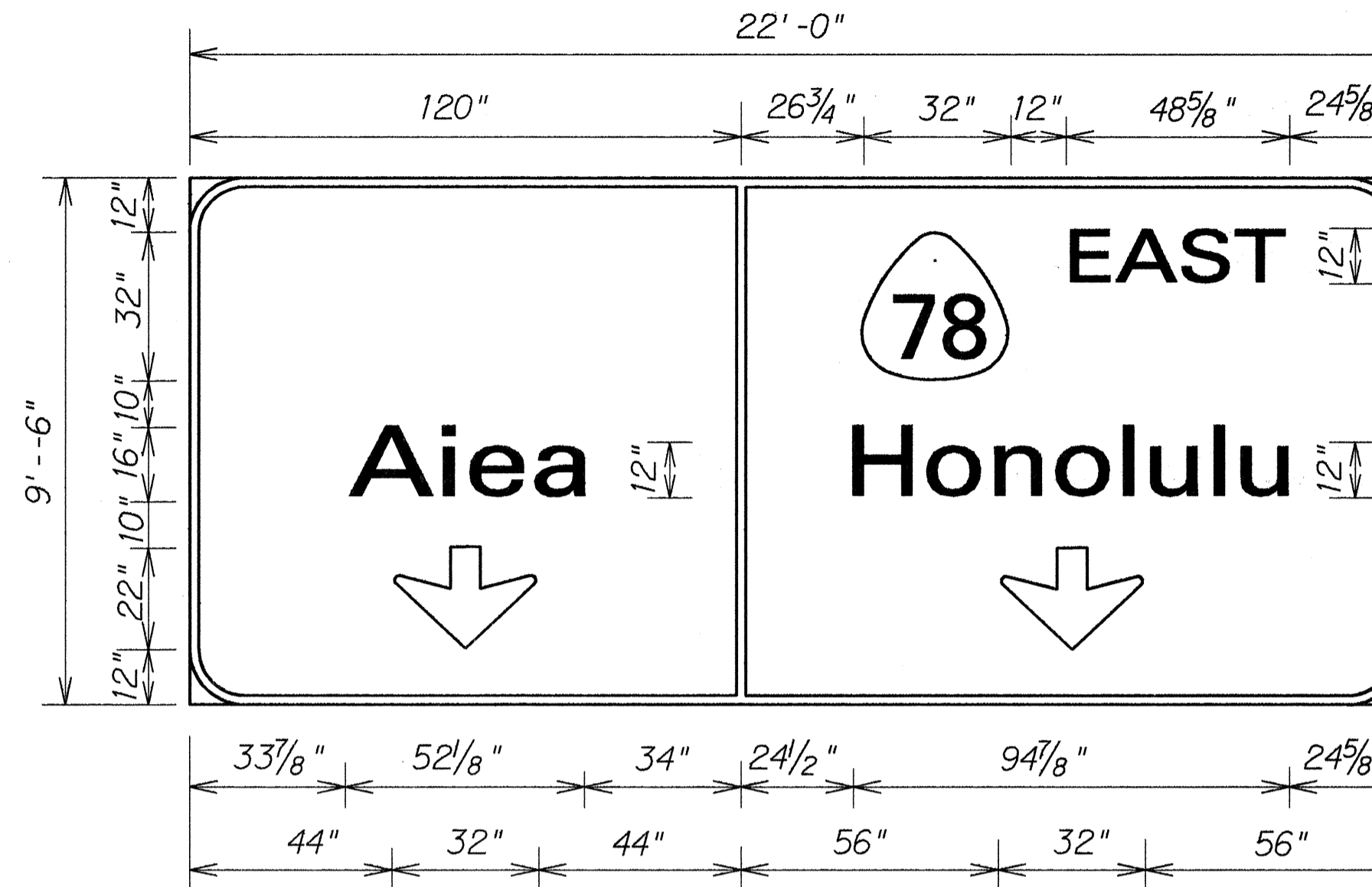
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
FRAME LAYOUT
 MOANALUA FWY. RESURFACING
 AIEA I.C. TO MOANALUA STREAM BRIDGE
 (OUTBOUND LANES)
 PROJECT NO. 78A-01-91M
 Scale: 3/16" = 1'-0" Date: Sept. 1991
 SHEET No. T27 OF 44 SHEETS

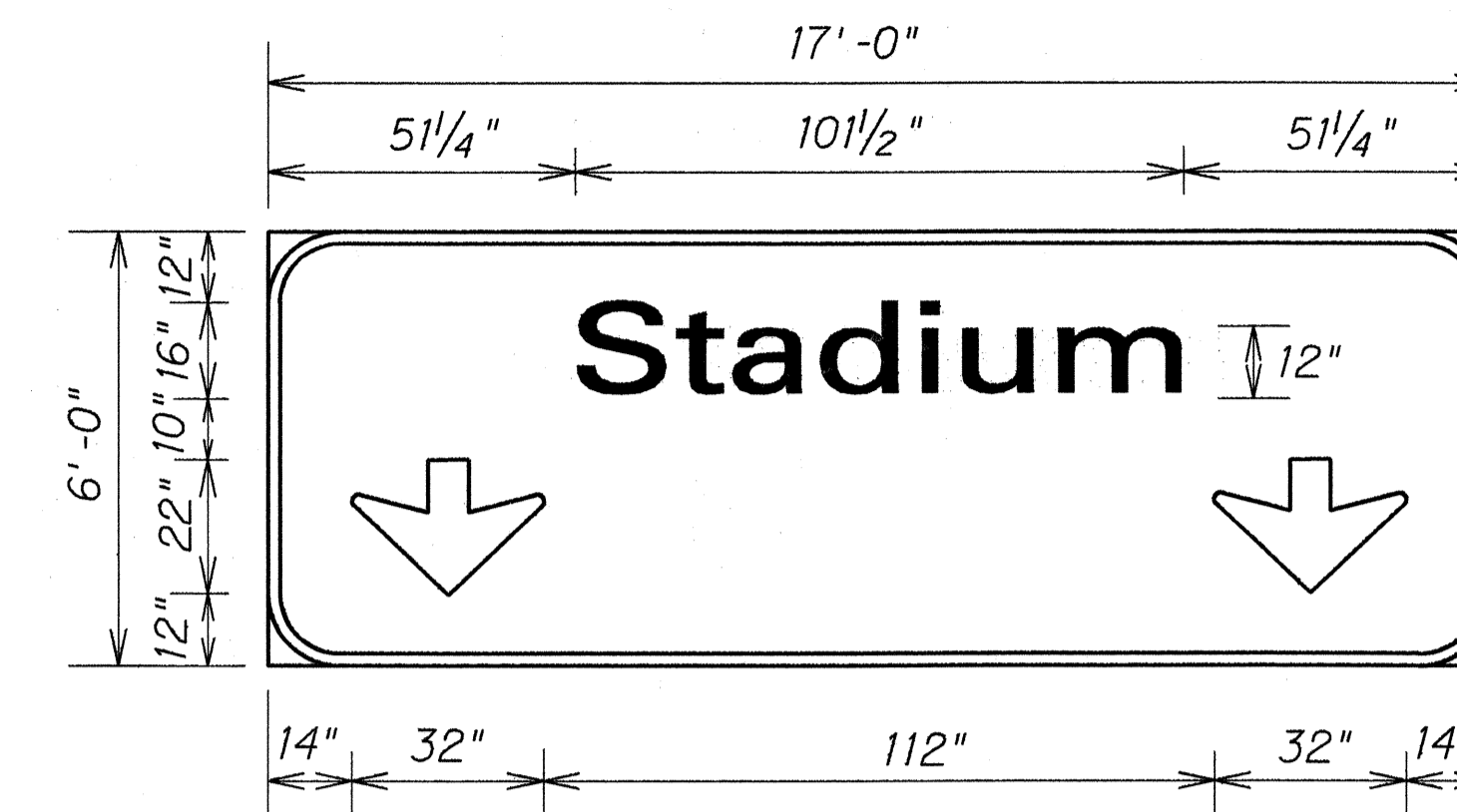
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	54	70



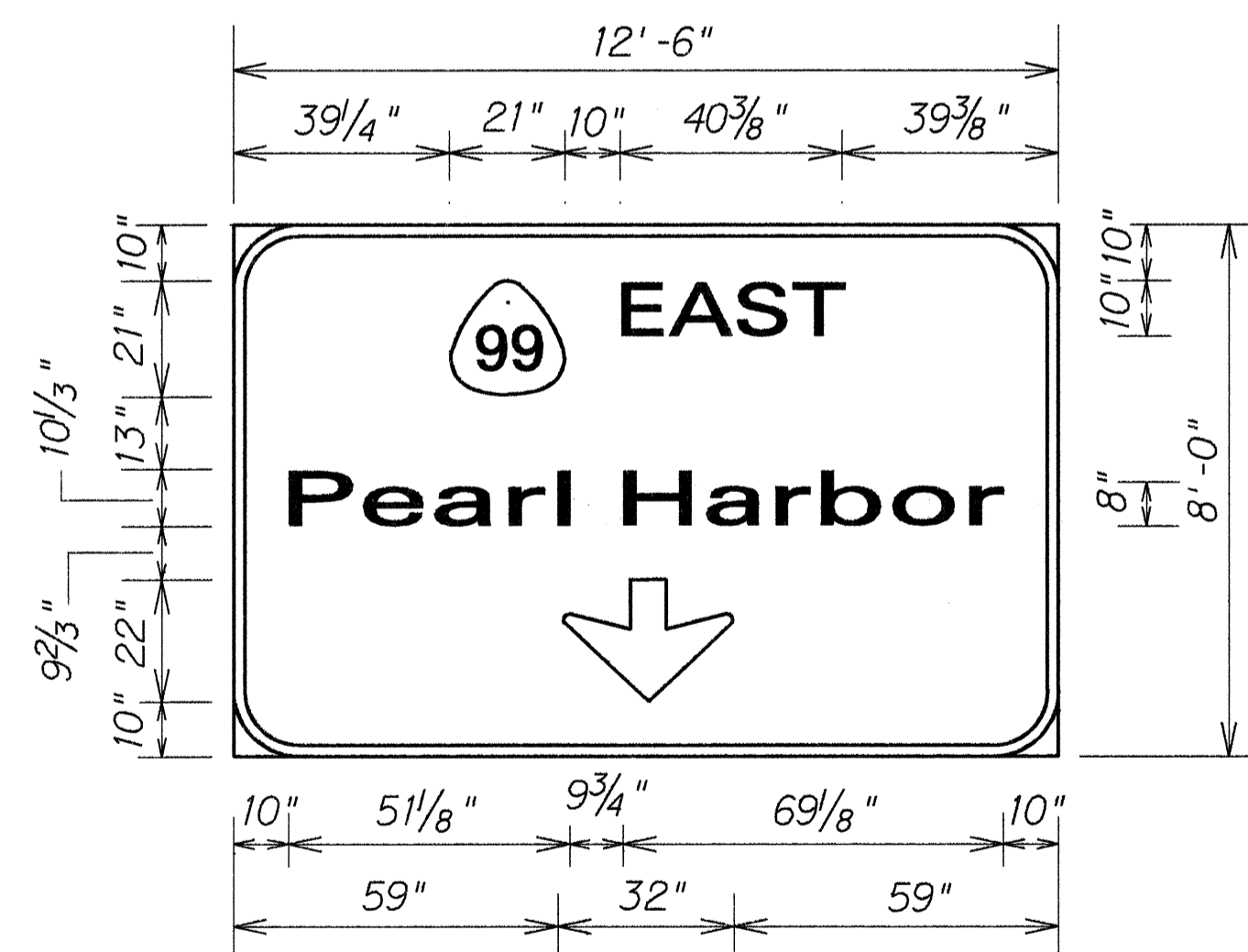
SIGN E-1 (L)
Scale: 3/8" = 1'-0"



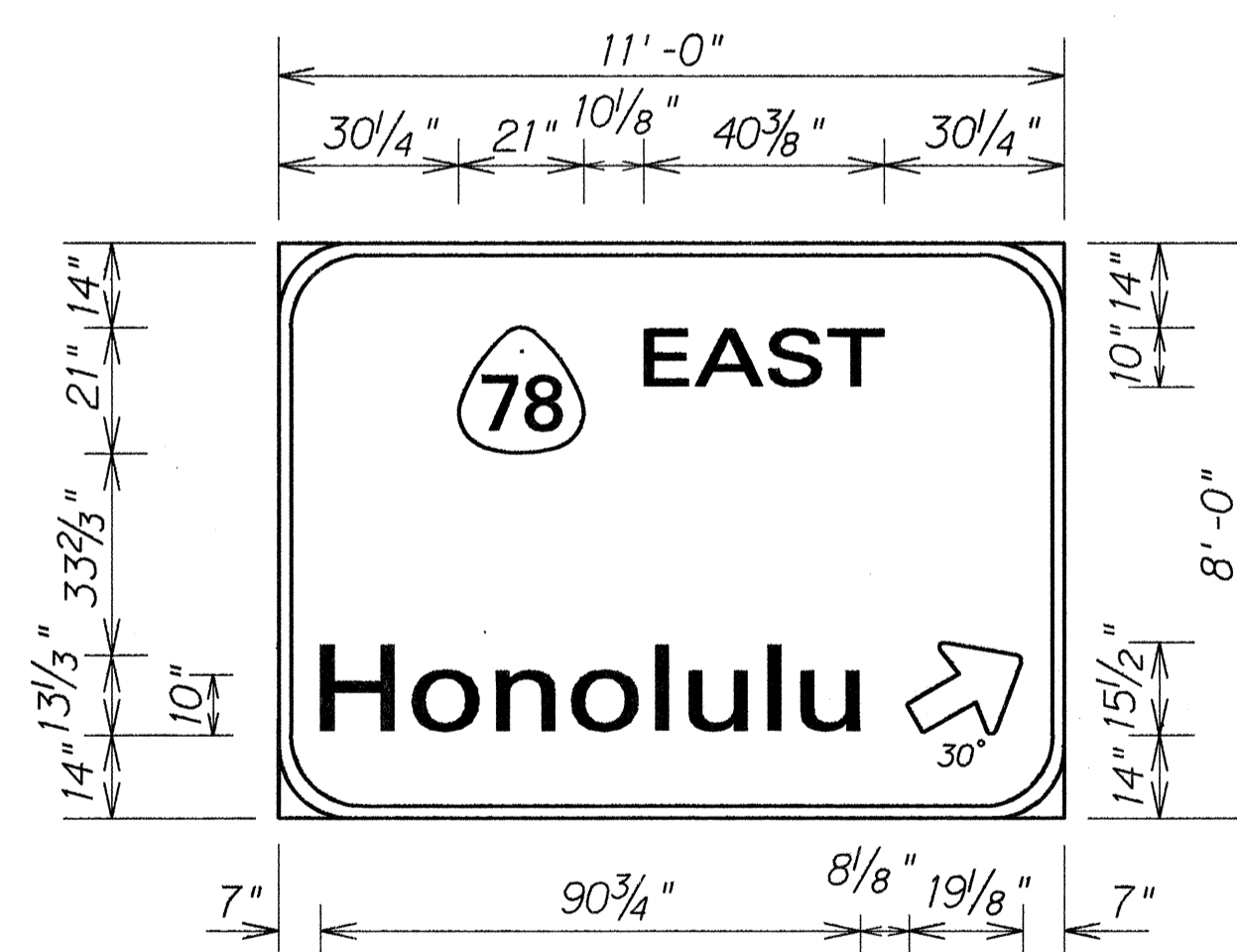
SIGN E-1 (C)
Scale: 3/8" = 1'-0"



SIGN E-1 (R)
Scale: 3/8" = 1'-0"



SIGN E-2 (L)
Scale: 3/8" = 1'-0"



SIGN E-2 (R)
Scale: 3/8" = 1'-0"

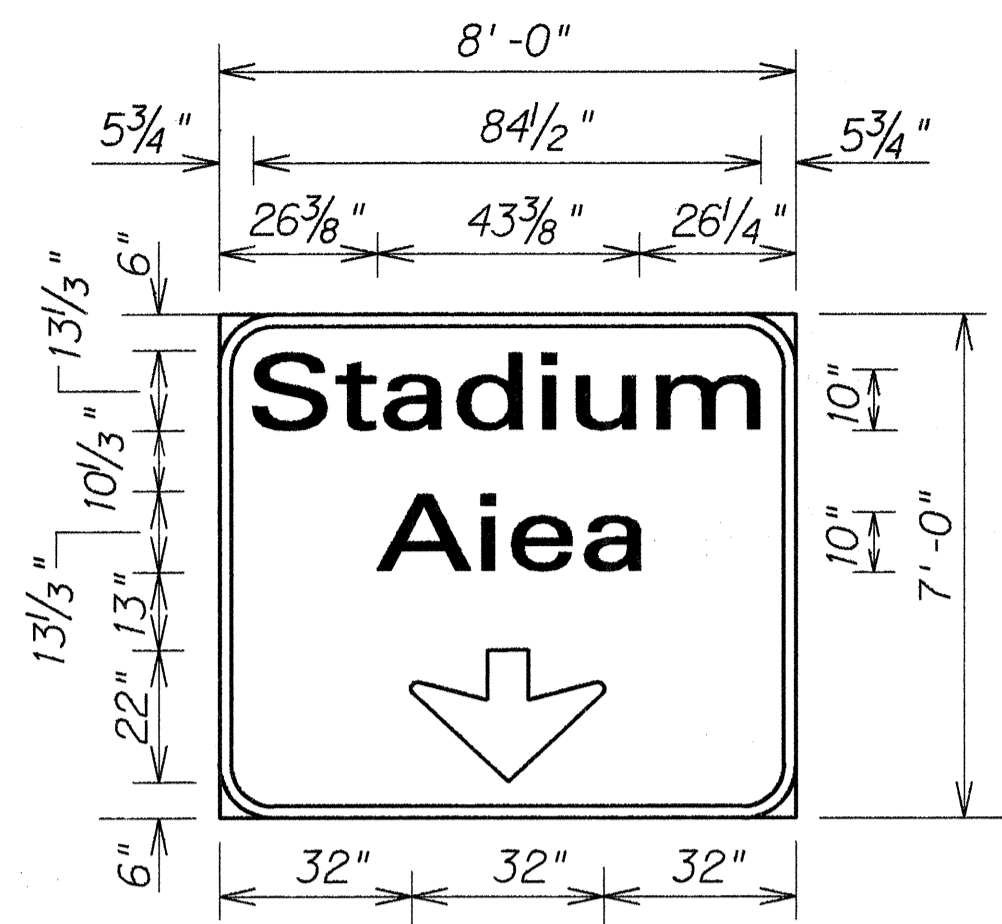


SIGN E-3
Scale: 3/8" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: 3/8" = 1'-0" Date: Sept. 1991
SHEET No. 728 OF 44 SHEETS

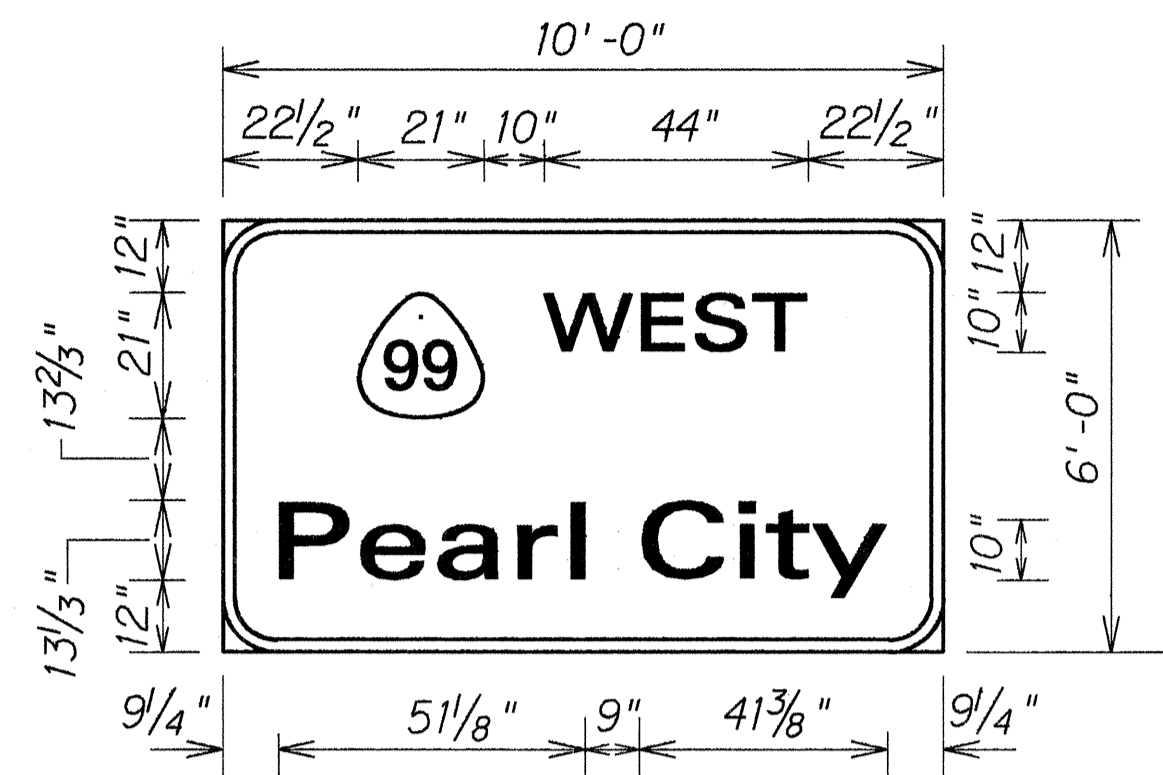
DATE: _____
SERVEY PLOTTED BY: _____
DESIGNED BY: _____
NOTE BOOK: _____
QUANTITIES BY: _____
CHECKED BY: _____

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	55	70



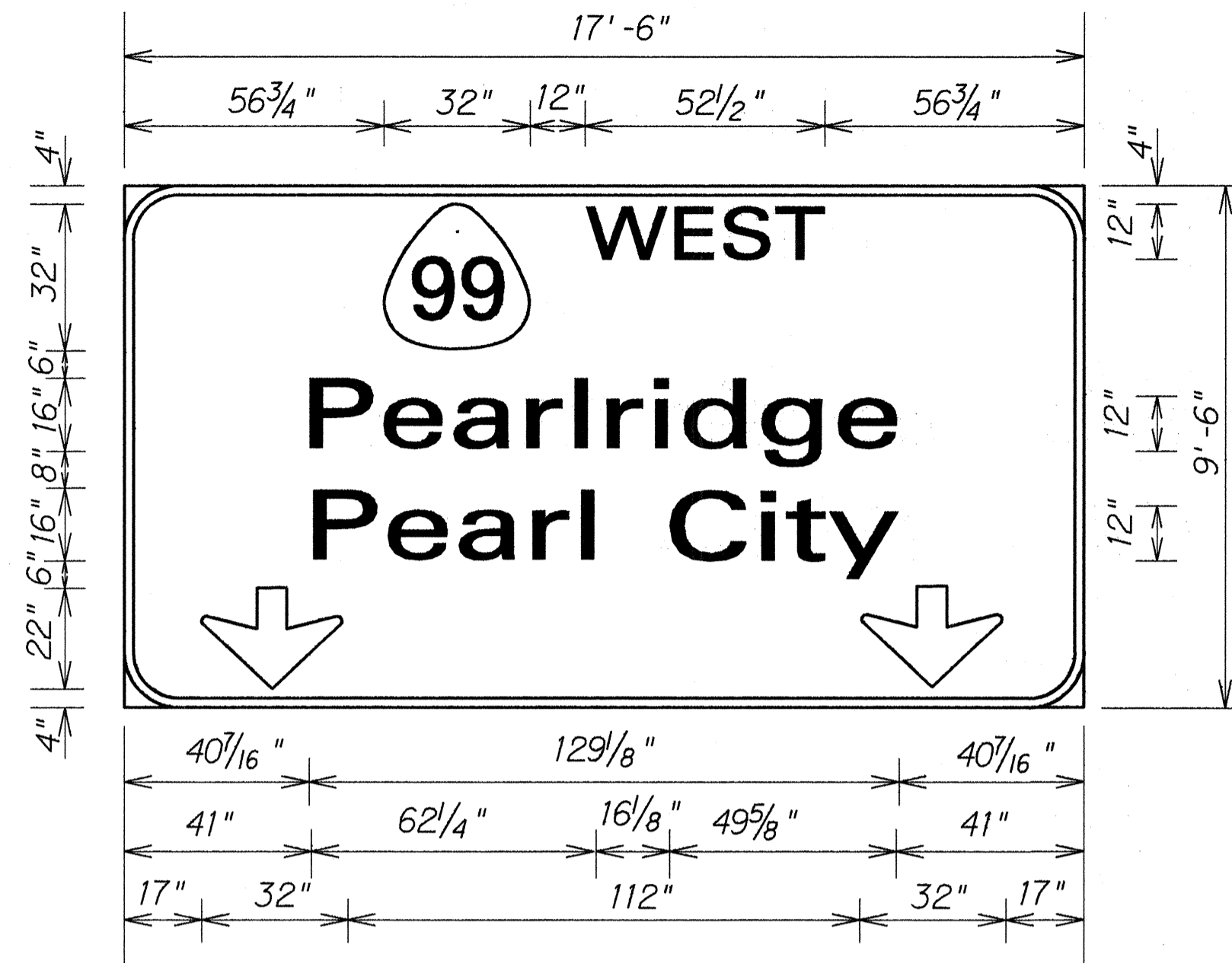
SIGN E-4 (R)

Scale: $\frac{3}{8}$ " = 1' - 0"



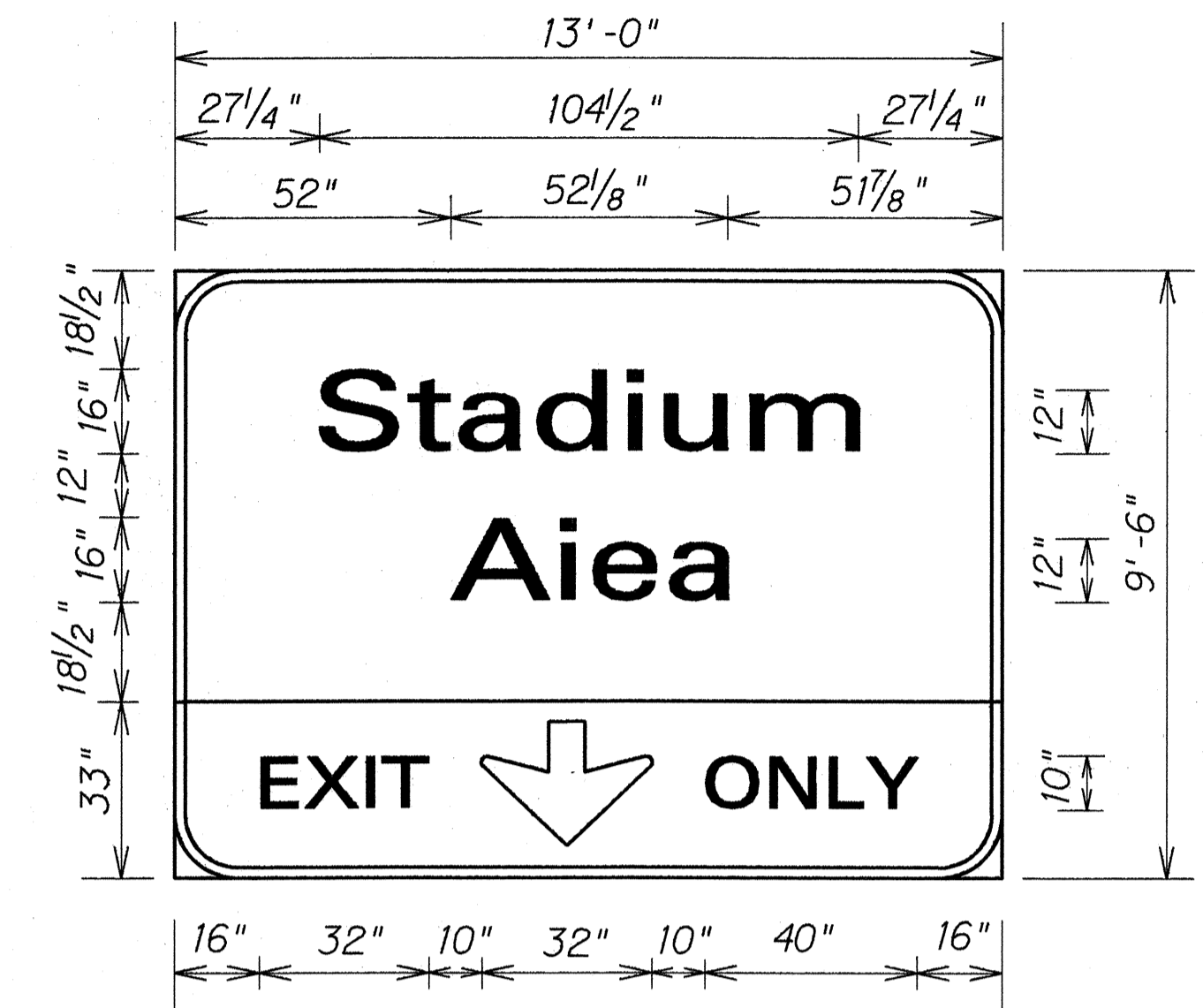
SIGN E-4 (L)

Scale: $\frac{3}{8}$ " = 1' - 0"



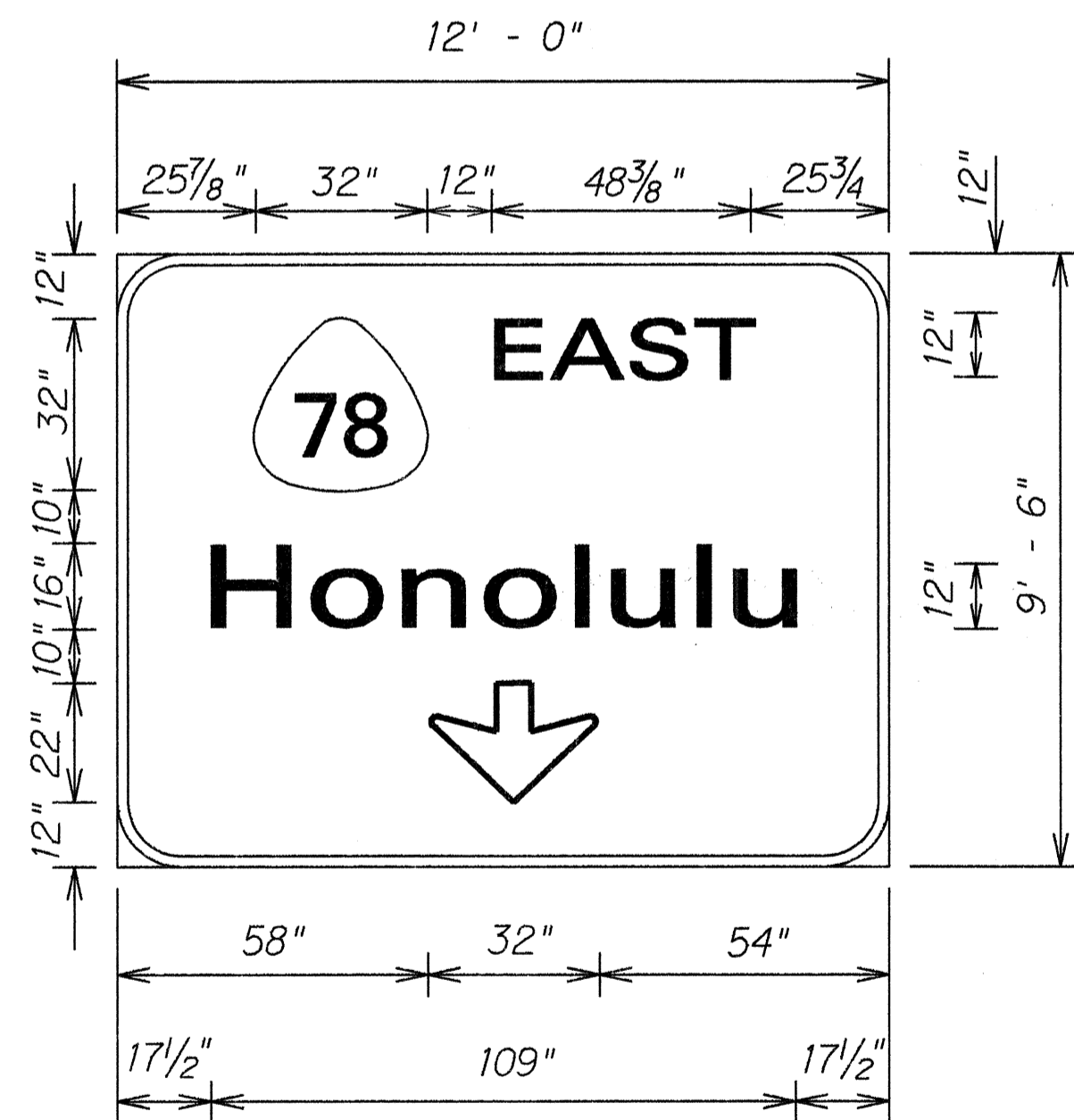
SIGN E-6 (L)

Scale: $\frac{3}{8}$ " = 1' - 0"



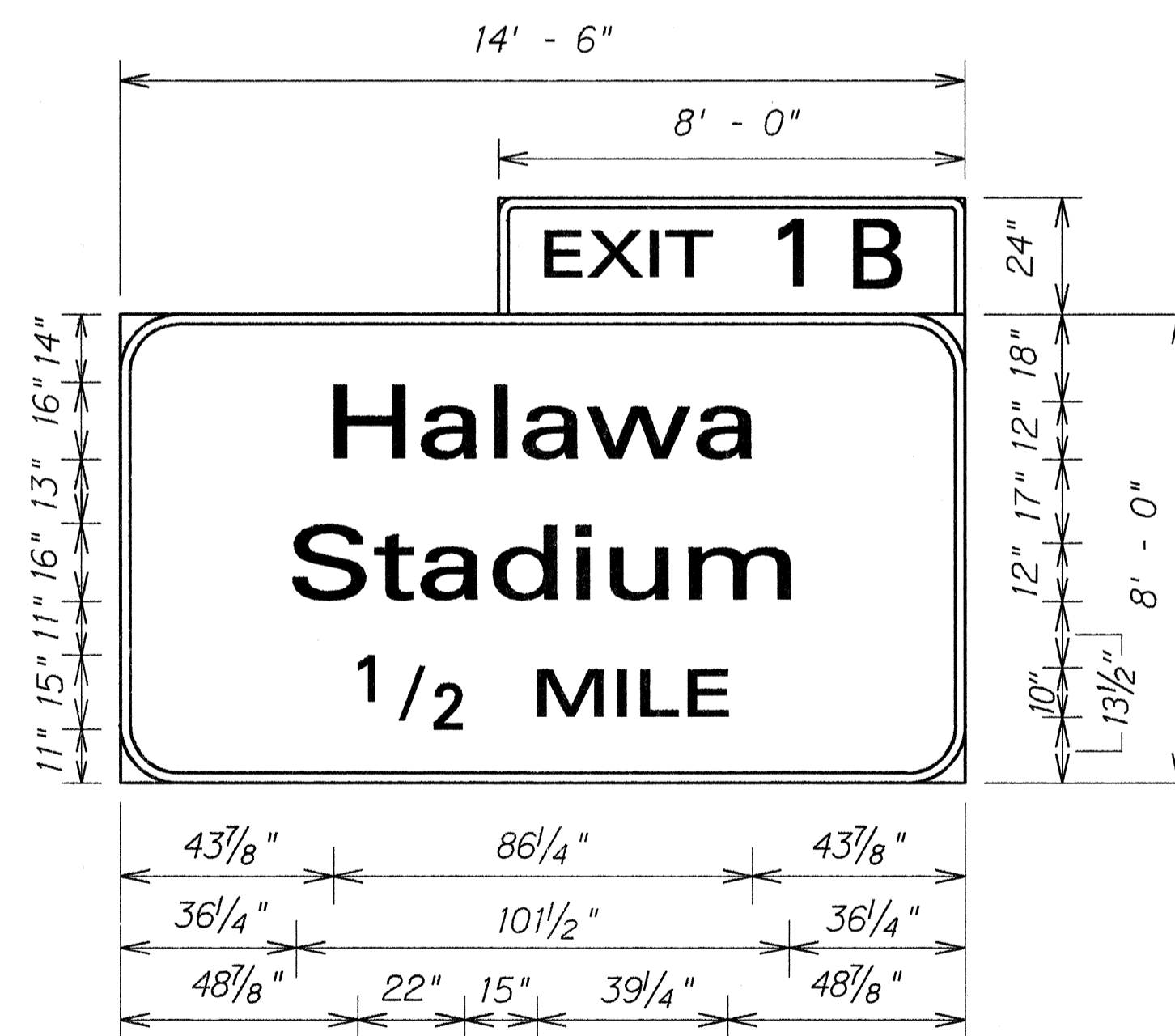
SIGN E-6 (R)

Scale: $\frac{3}{8}$ " = 1' - 0"



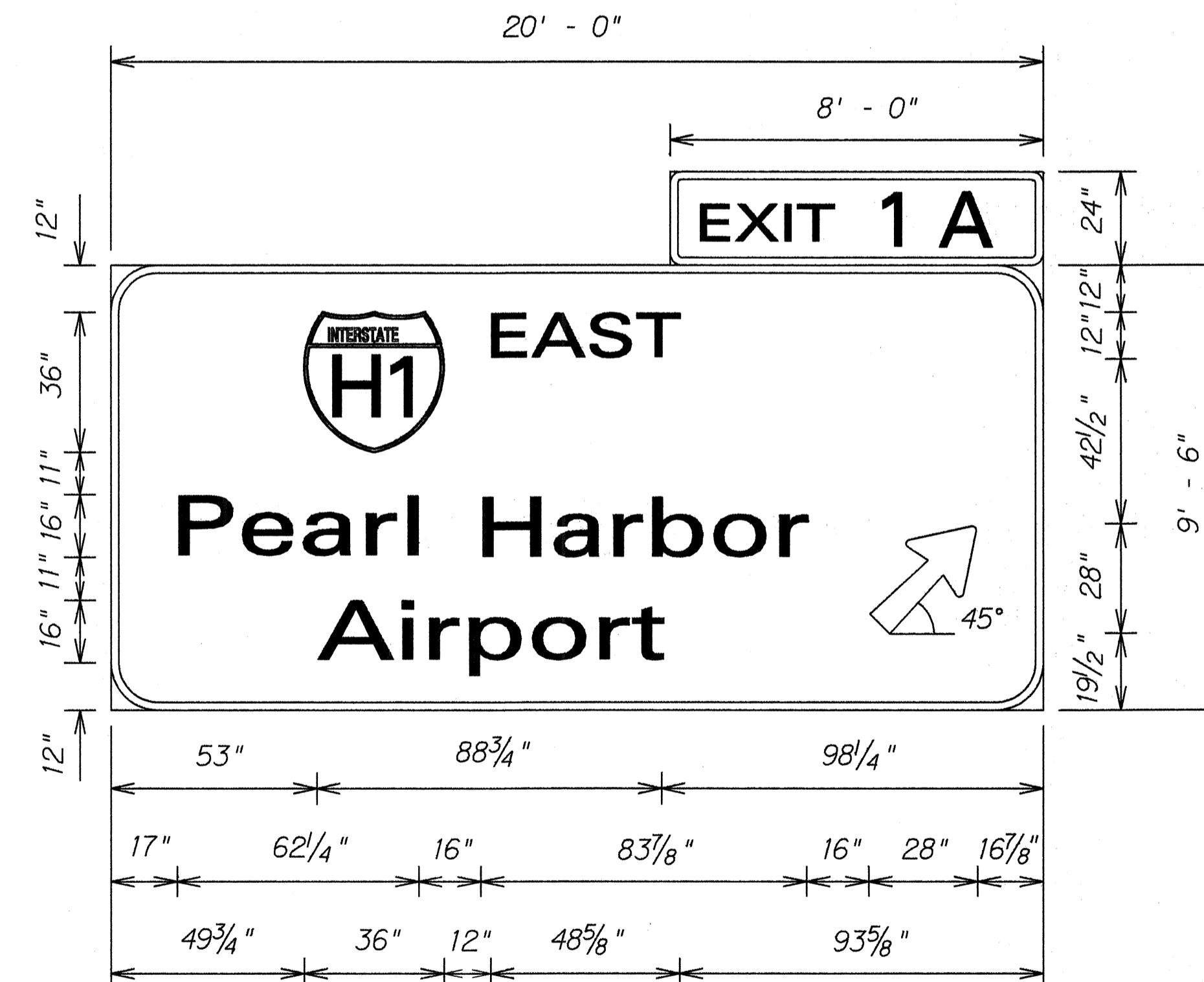
E-5(L)

Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN E-5(C)

Scale: $\frac{3}{8}$ " = 1' - 0"



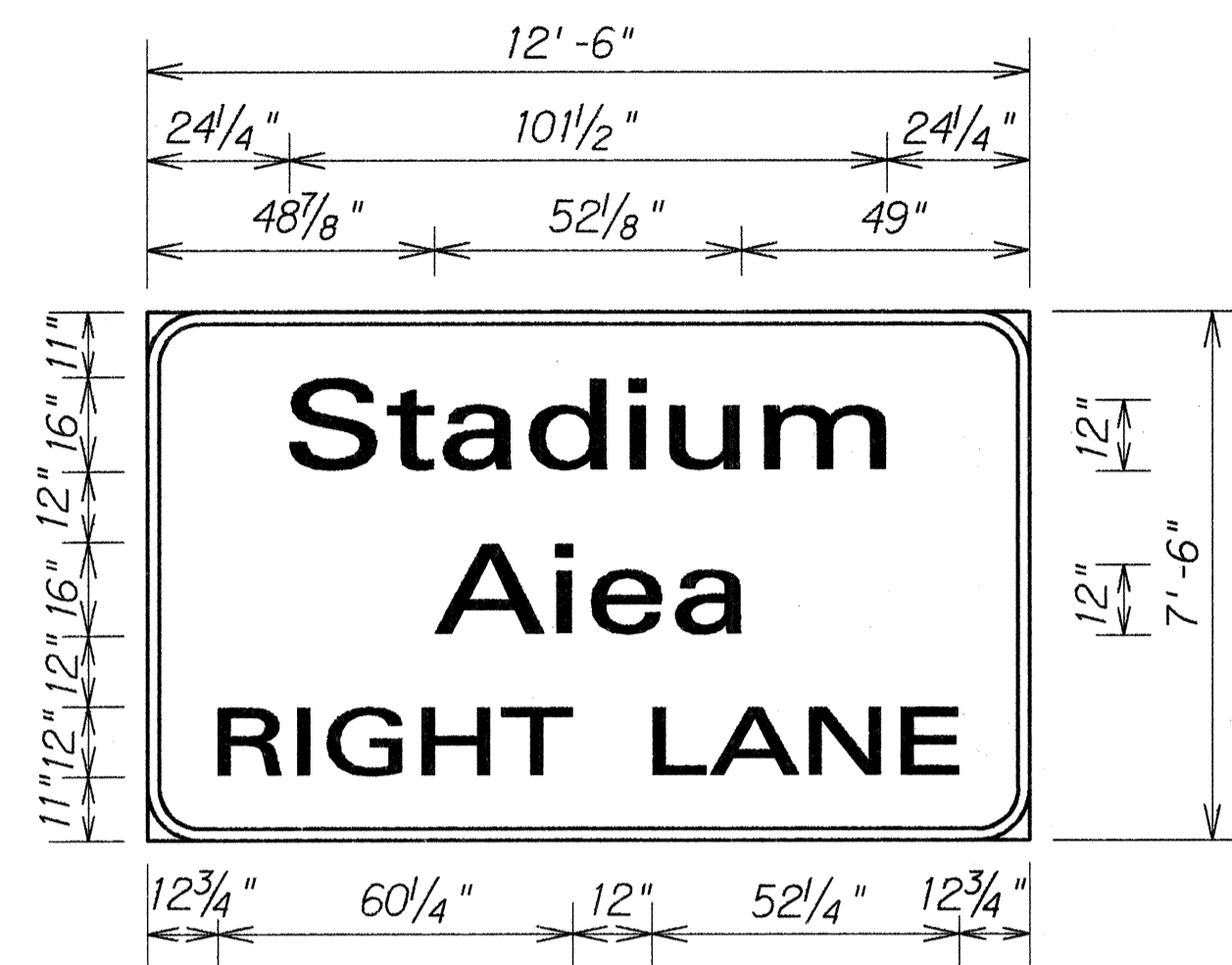
E-5(R)

Scale: $\frac{3}{8}$ " = 1' - 0"

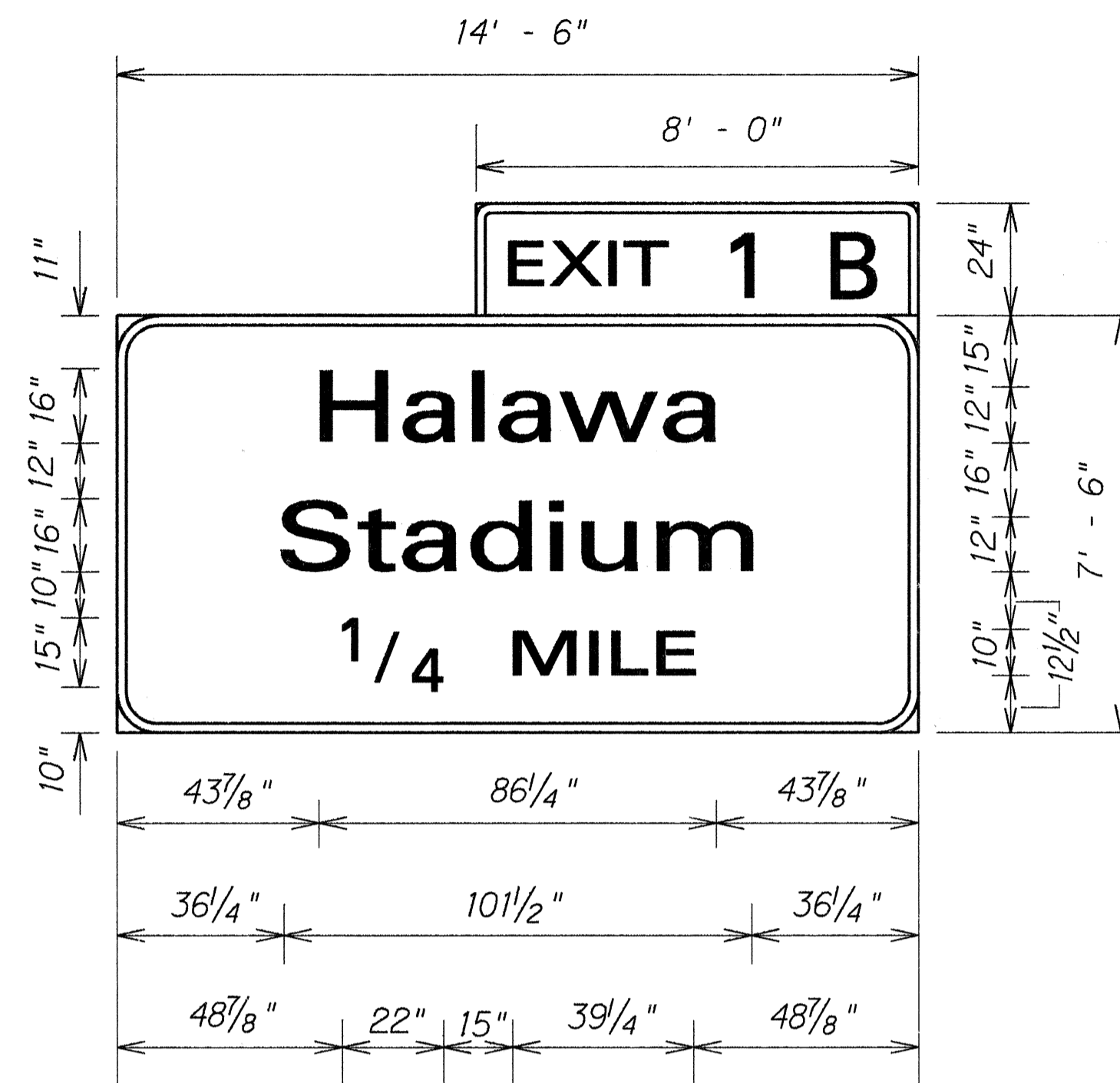
ORIGINAL PLAN
DATE
SURVEY PLOTTED BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1' - 0" Date: Sept. 1991
SHEET No. T29 OF 44 SHEETS

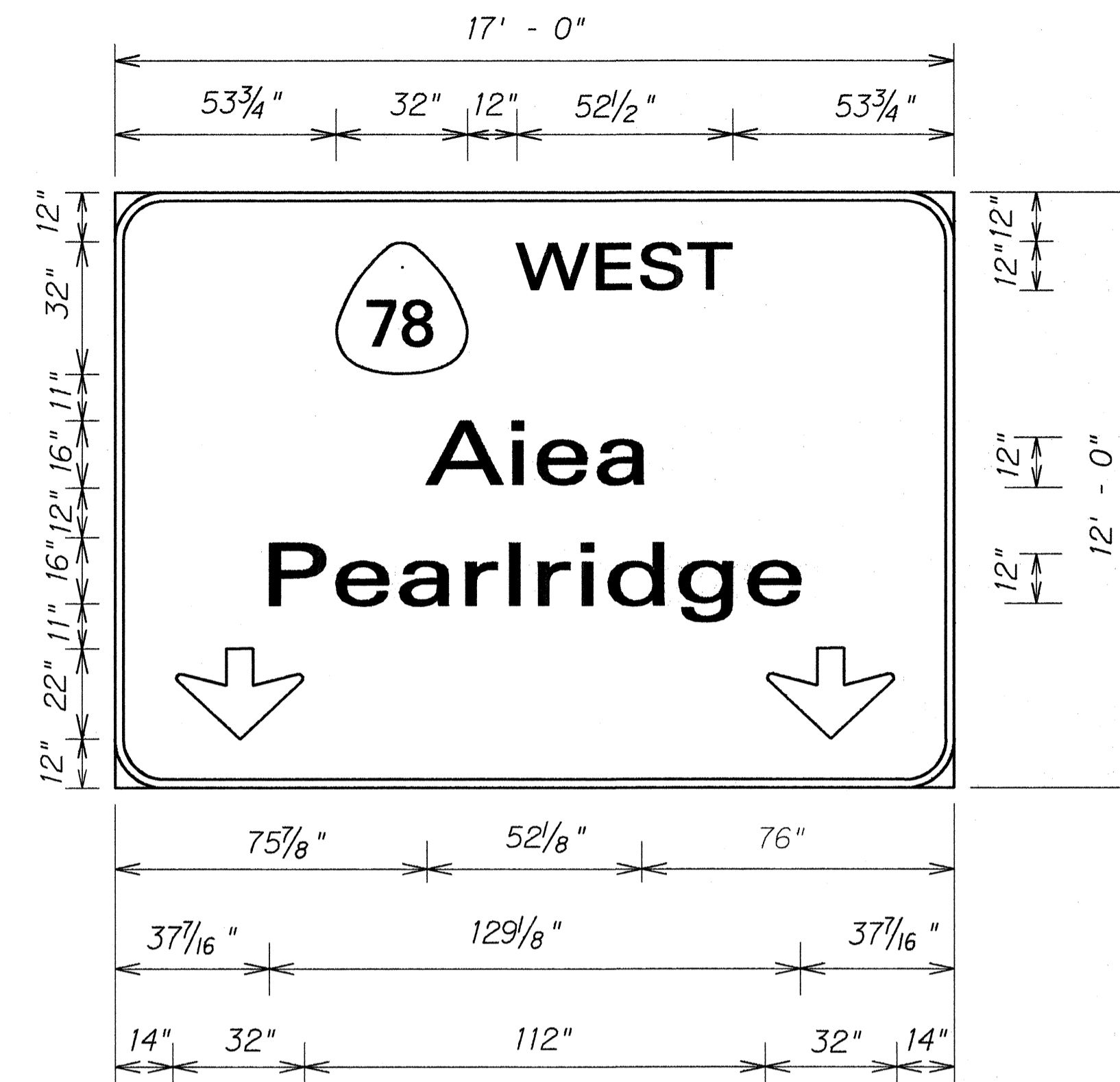
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	56	70



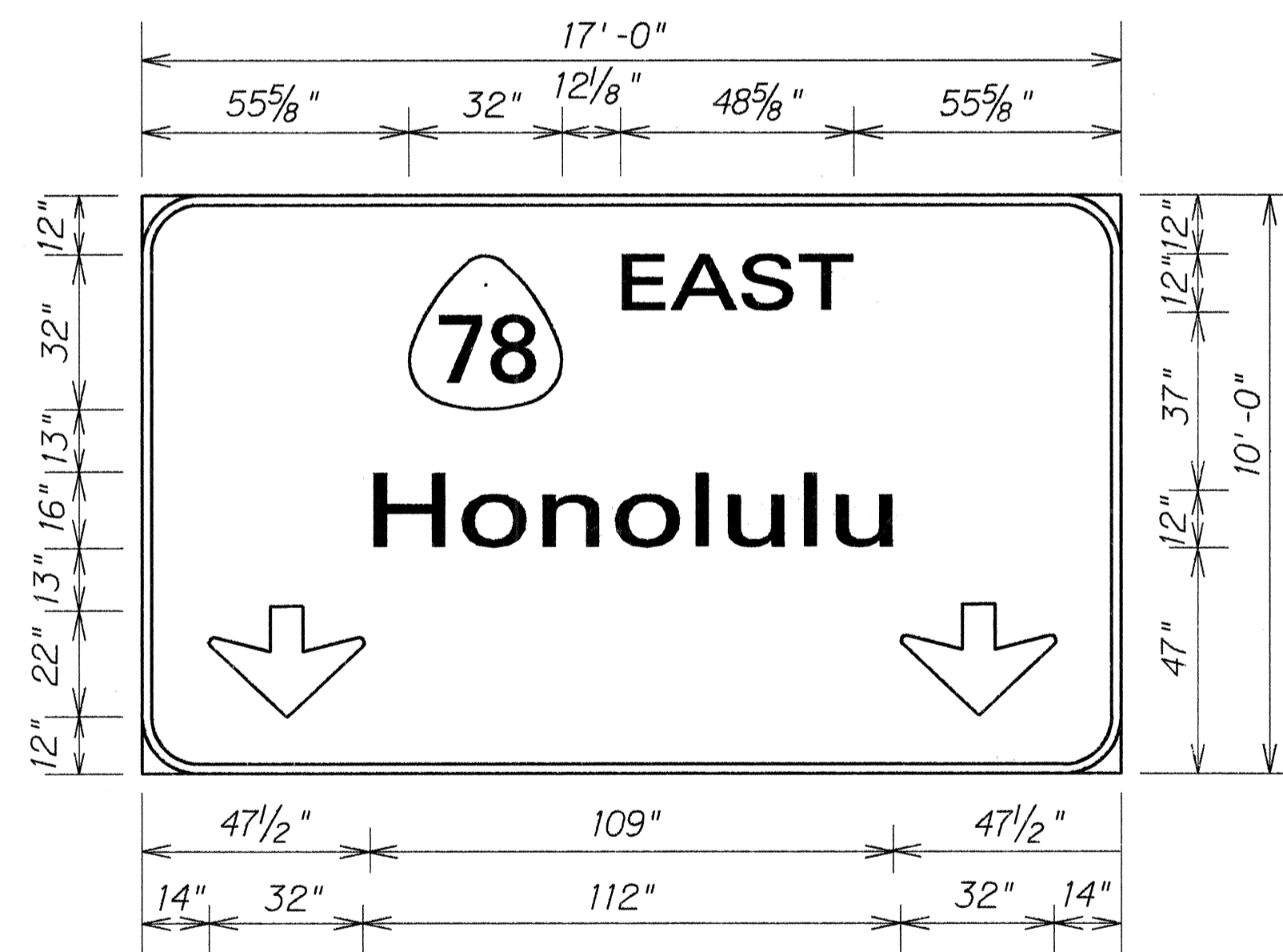
SIGN E-7
Scale: $\frac{3}{8}$ " = 1'-0"



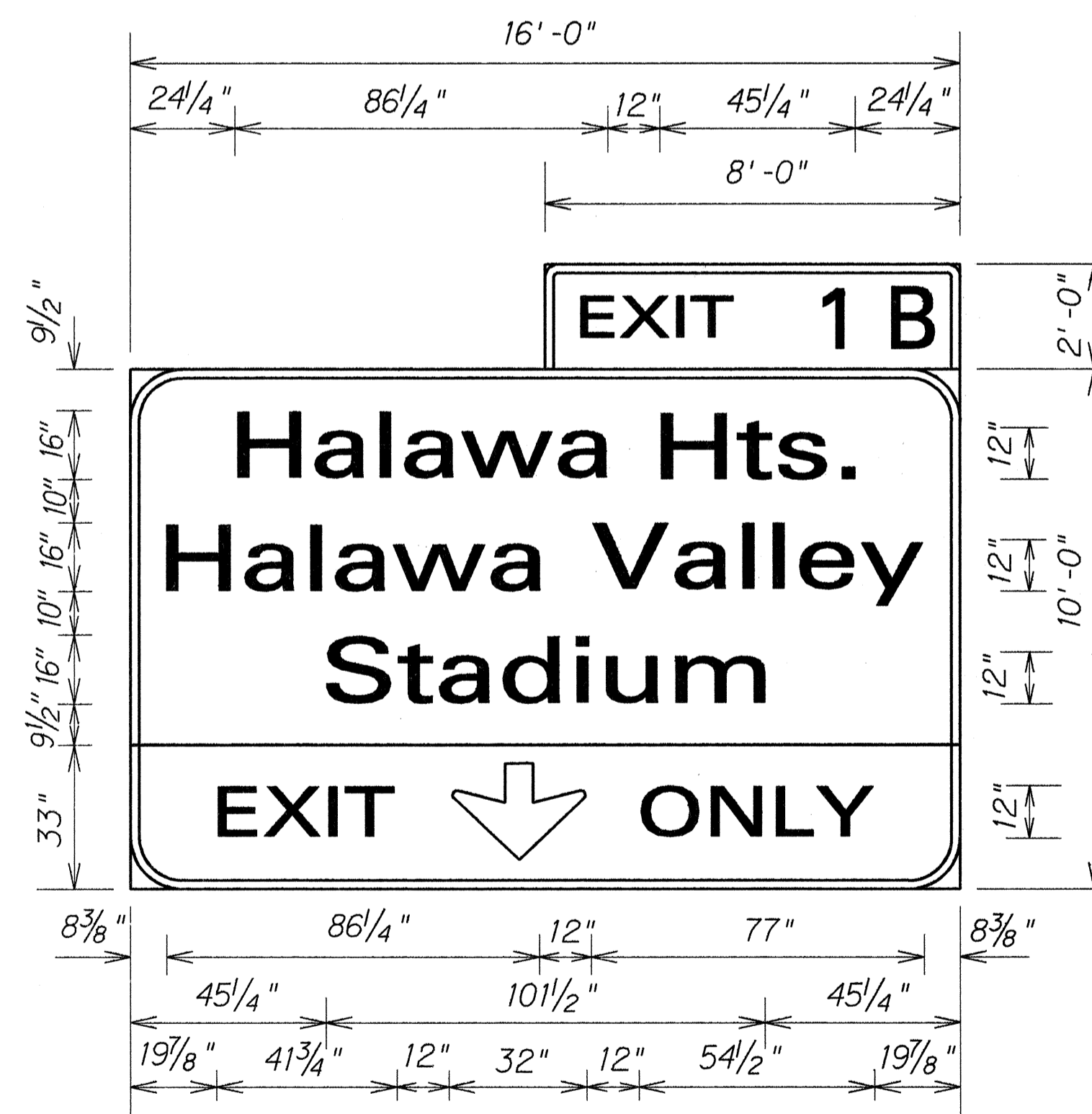
SIGN E-8
Scale: $\frac{3}{8}$ " = 1'-0"



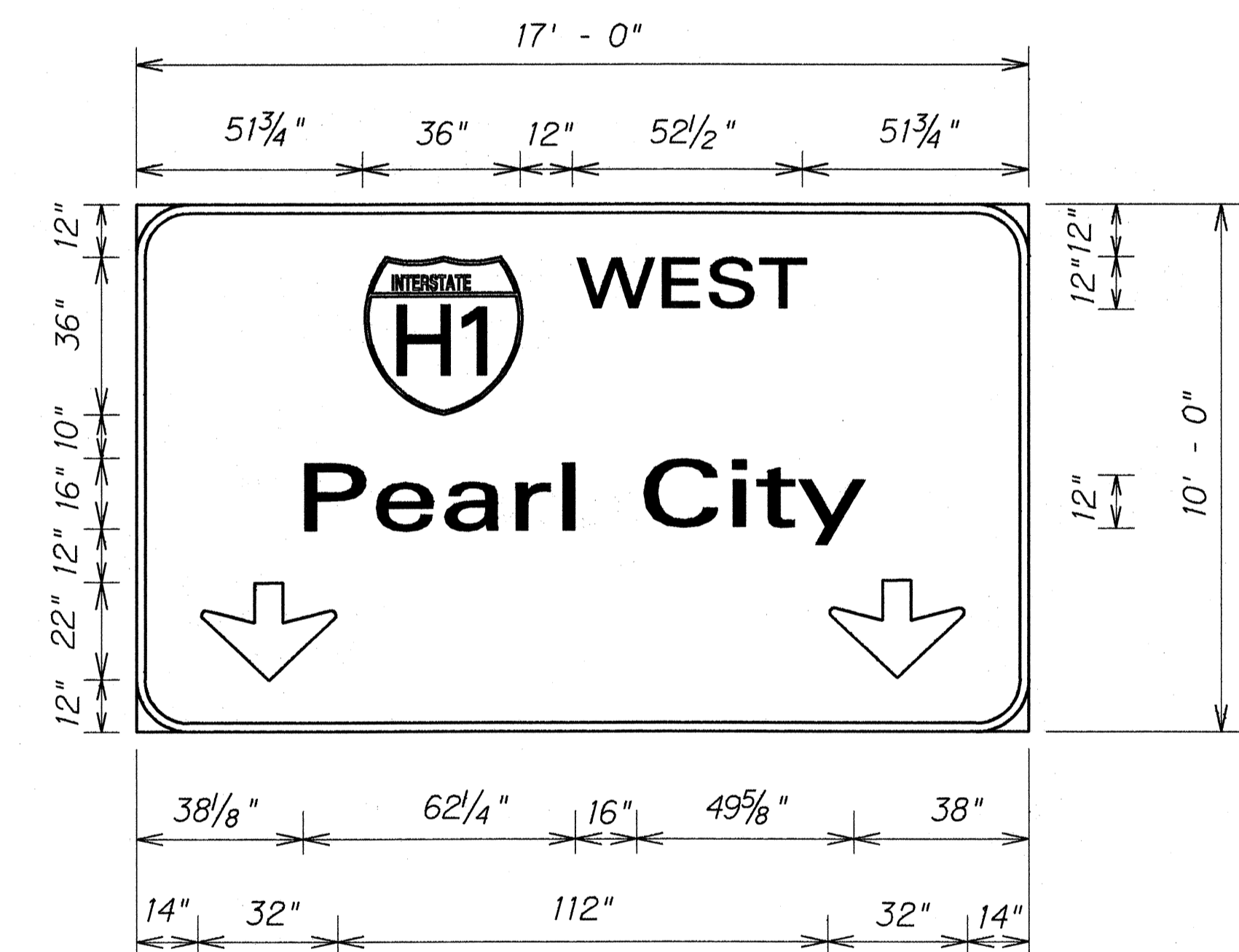
SIGN E-10(L)
Scale: $\frac{3}{8}$ " = 1'-0"



SIGN E-9 (L)
Scale: $\frac{3}{8}$ " = 1'-0"



SIGN E-9 (R)
Scale: $\frac{3}{8}$ " = 1'-0"



SIGN E-10(R)
Scale: $\frac{3}{8}$ " = 1'-0"

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

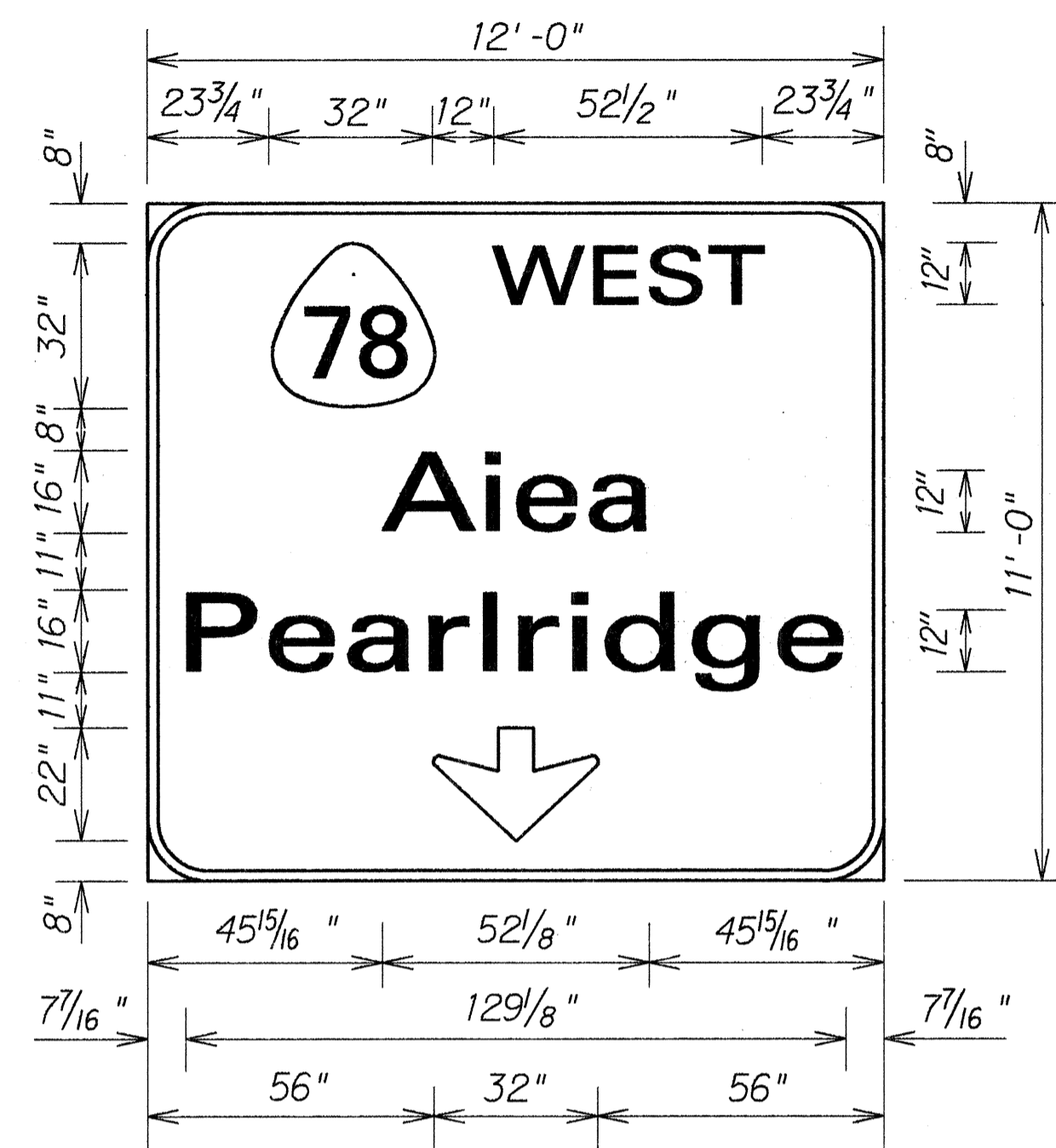
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**EXPRESSWAY SIGN
PANEL LAYOUTS**

MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M

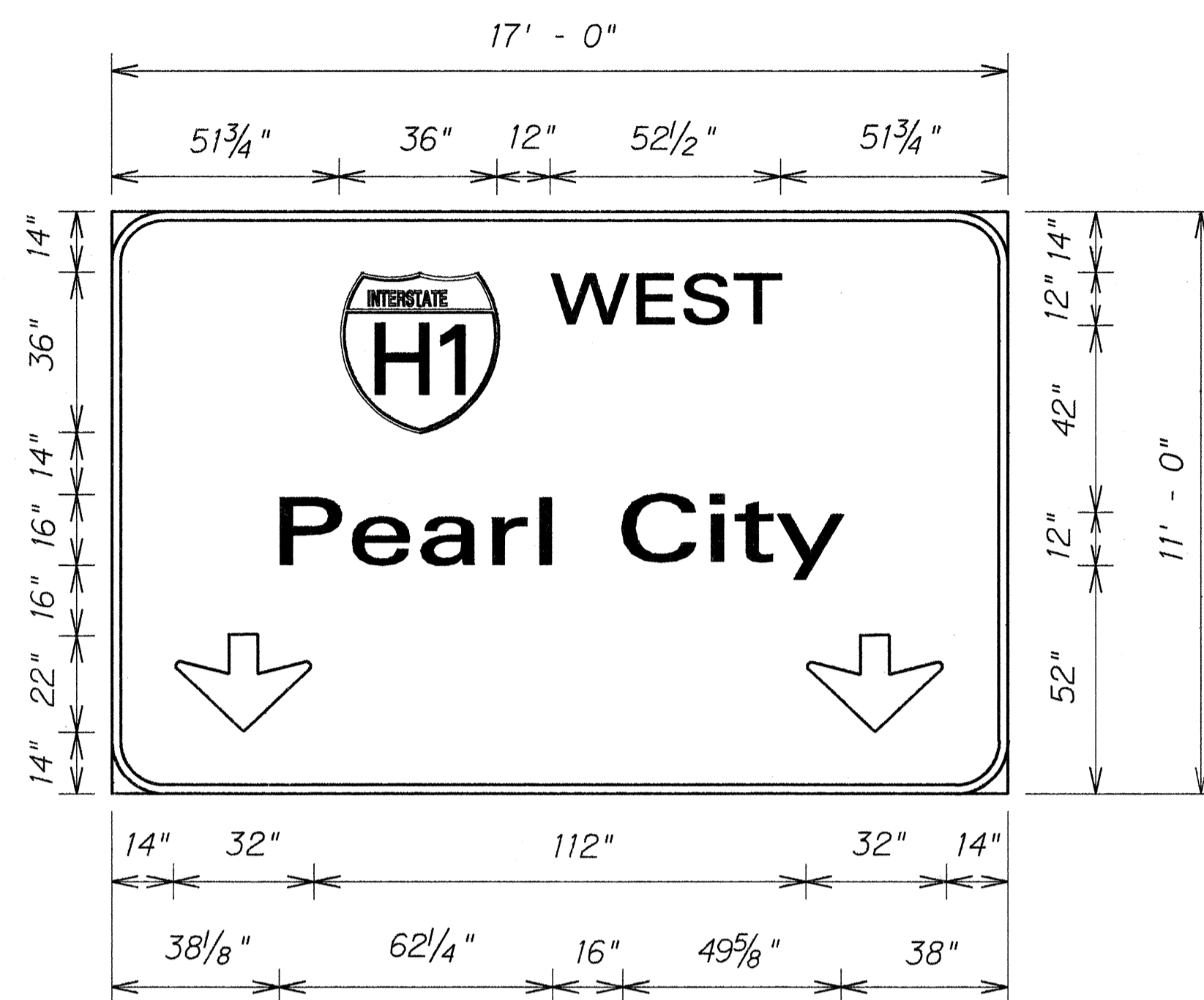
Scale: $\frac{3}{8}$ " = 1'-0" Date: Sept. 1991

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	57	70



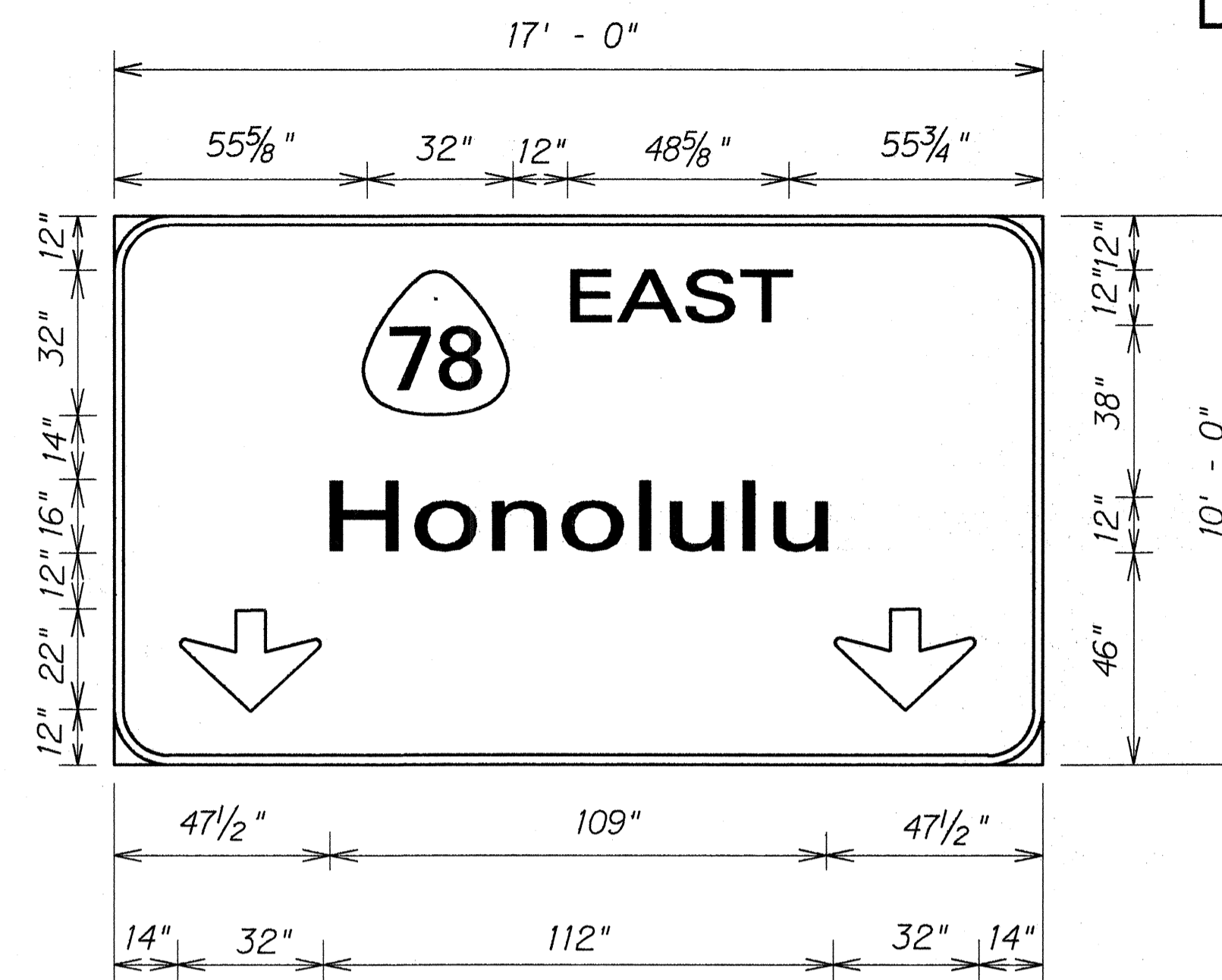
SIGN E-11 (L)

Scale: $\frac{3}{8}$ " = 1' - 0"



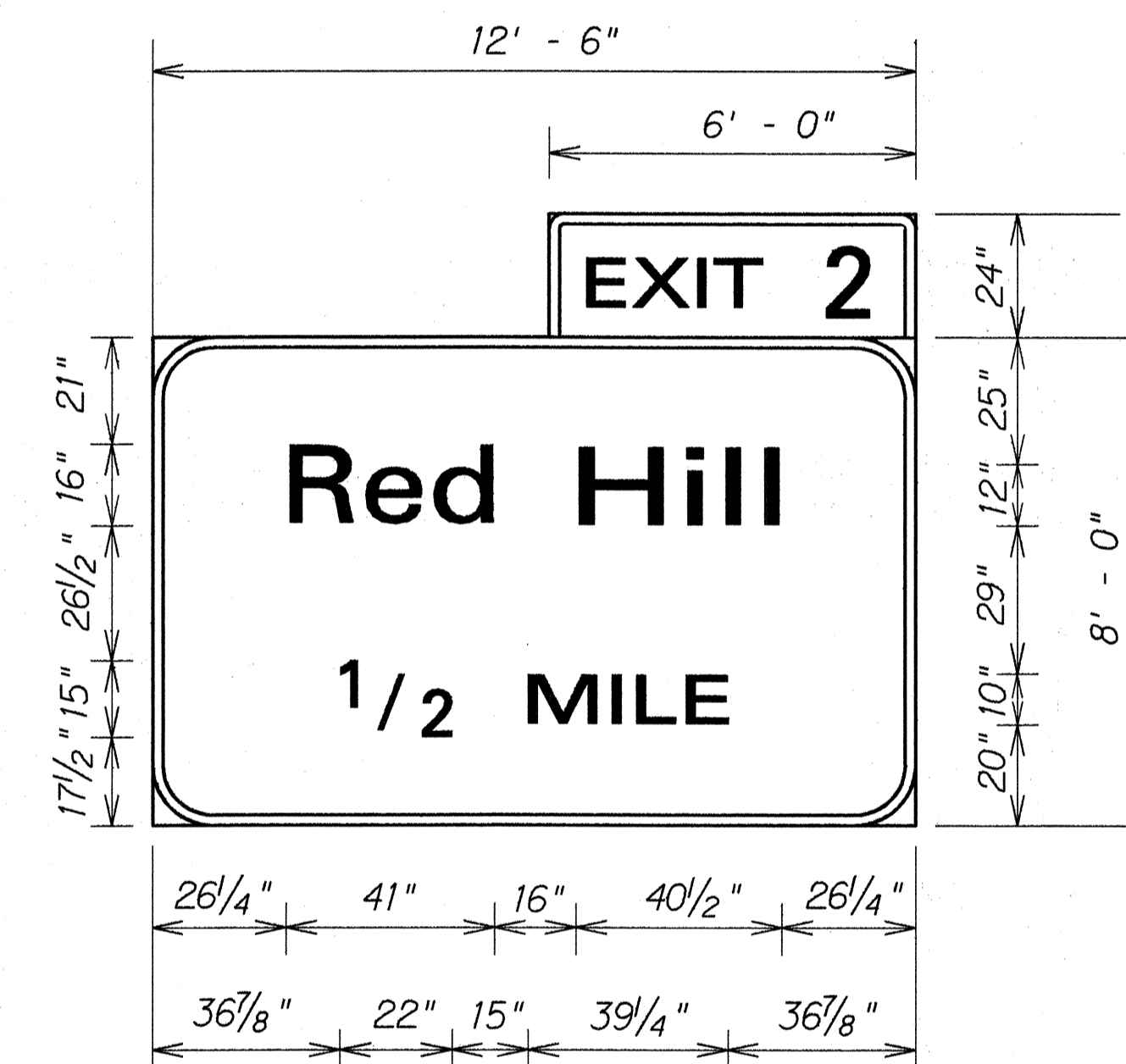
SIGN E-11 (R)

Scale: $\frac{3}{8}$ " = 1' - 0"



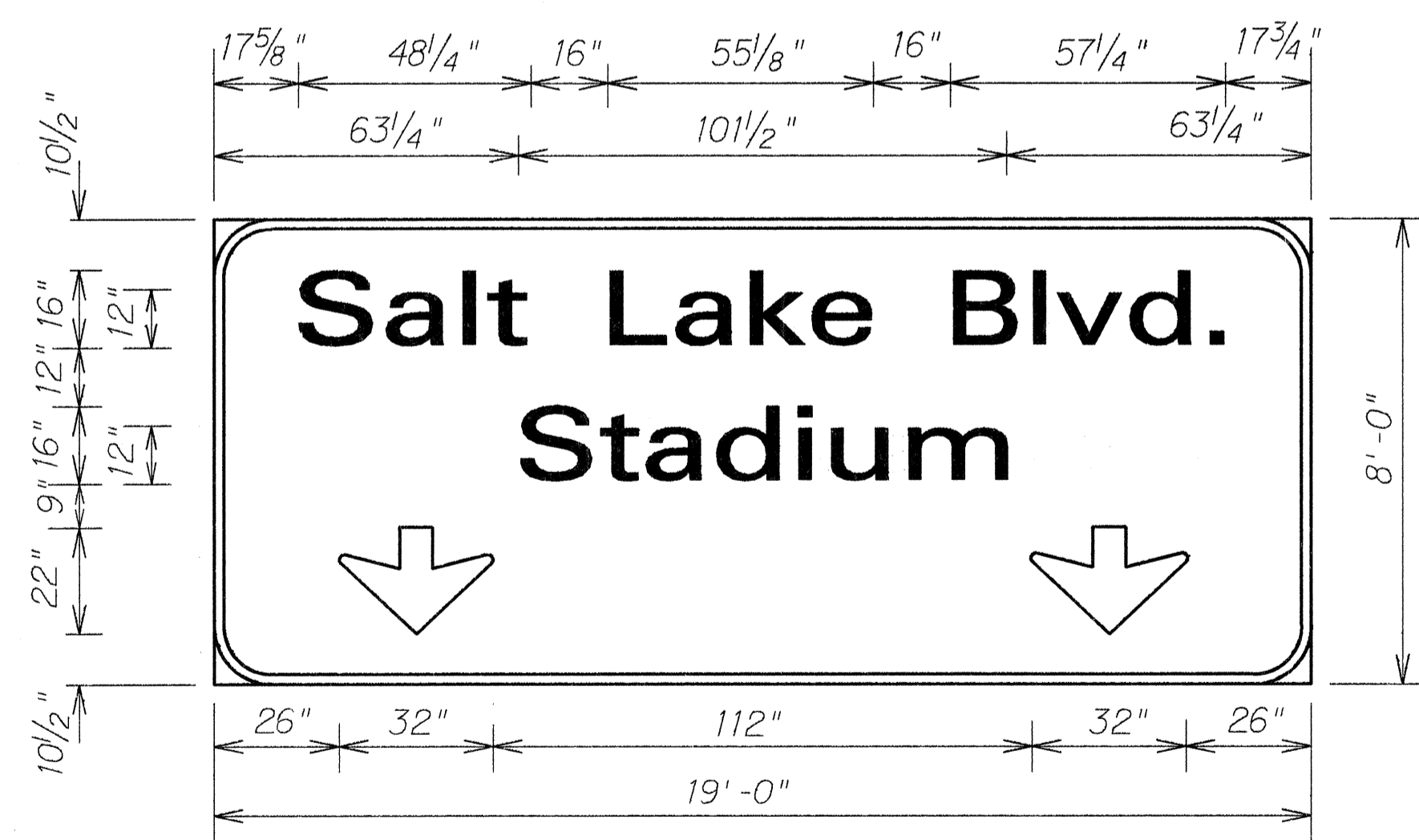
SIGN E-13 (L)

Scale: $\frac{3}{8}$ " = 1' - 0"



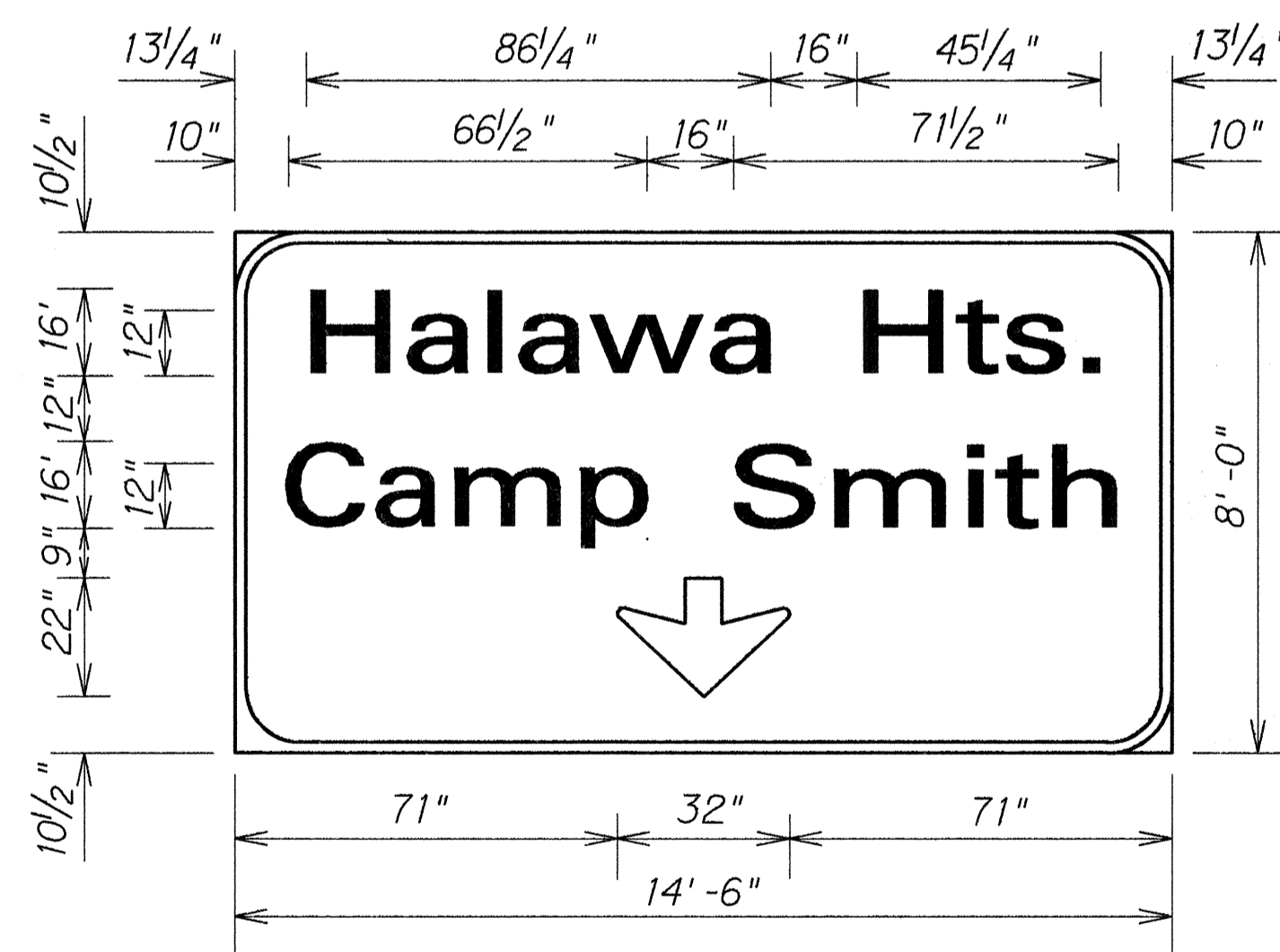
SIGN E-13 (R)

Scale: $\frac{3}{8}$ " = 1' - 0"



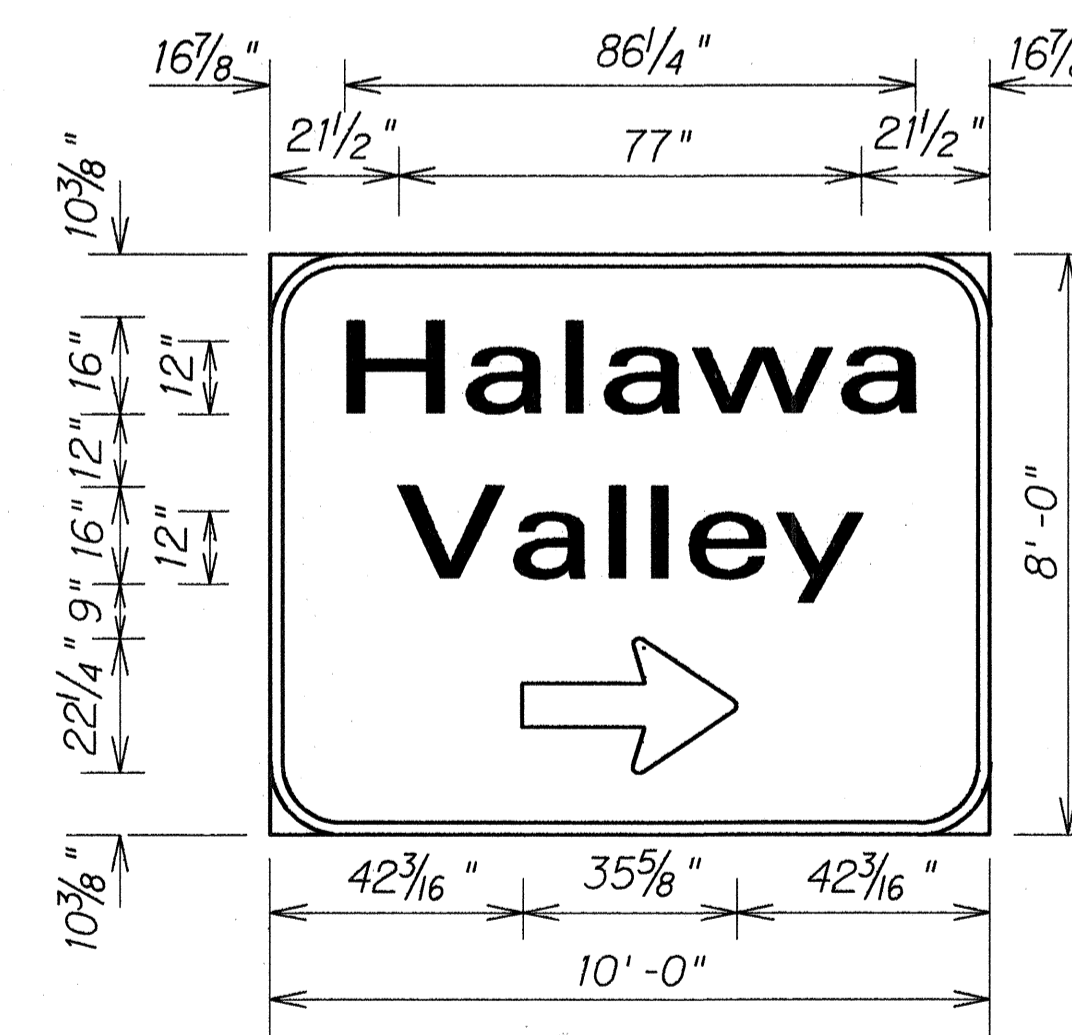
SIGN E-12 (L)

Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN E-12 (C)

Scale: $\frac{3}{8}$ " = 1' - 0"



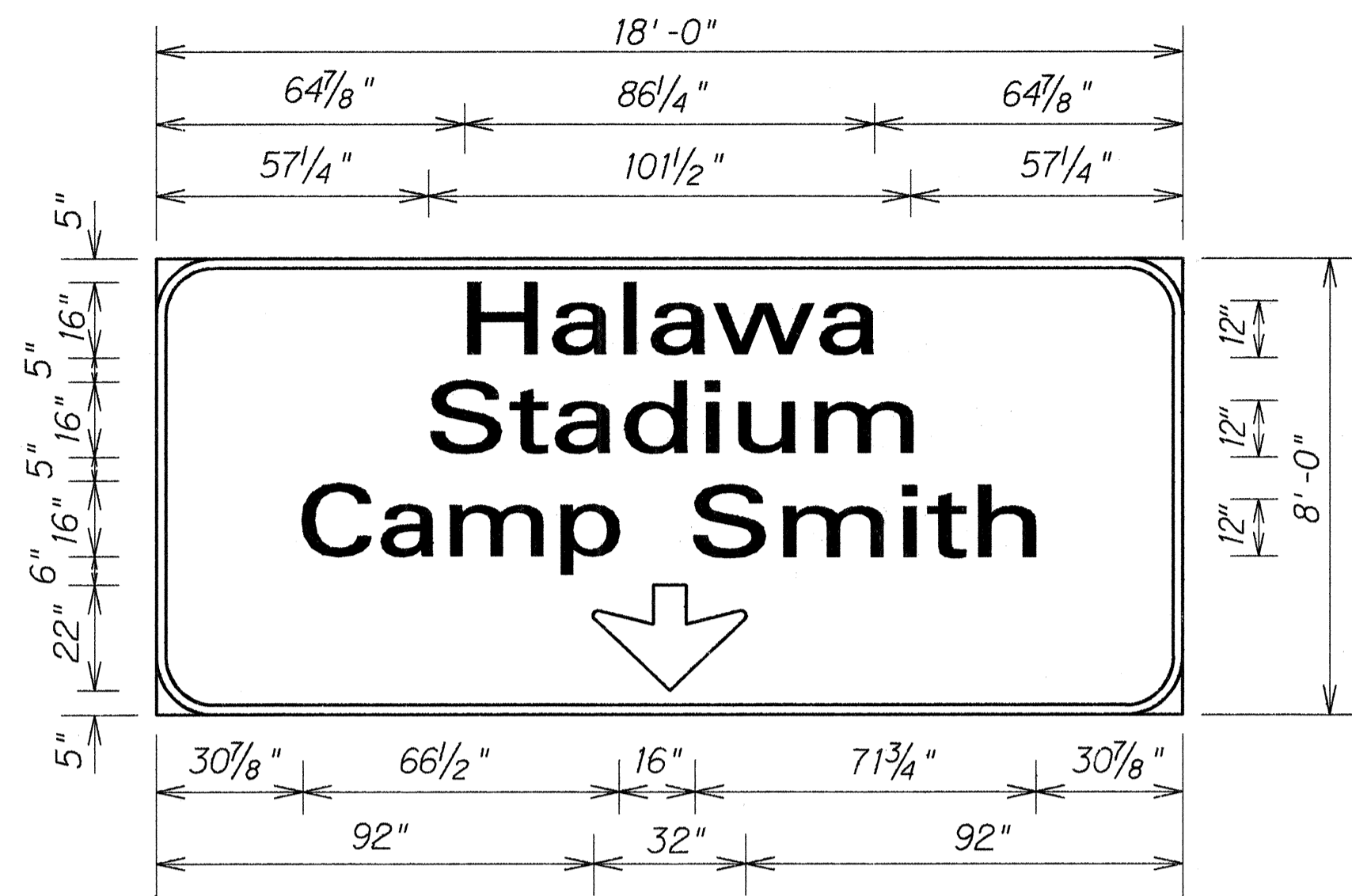
SIGN E-12 (R)

Scale: $\frac{3}{8}$ " = 1' - 0"

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
QUANTITIES BY	_____
NOTE BOOK	_____
ORIGINAL PLAN	_____
SURVEY PLOTTED BY	_____

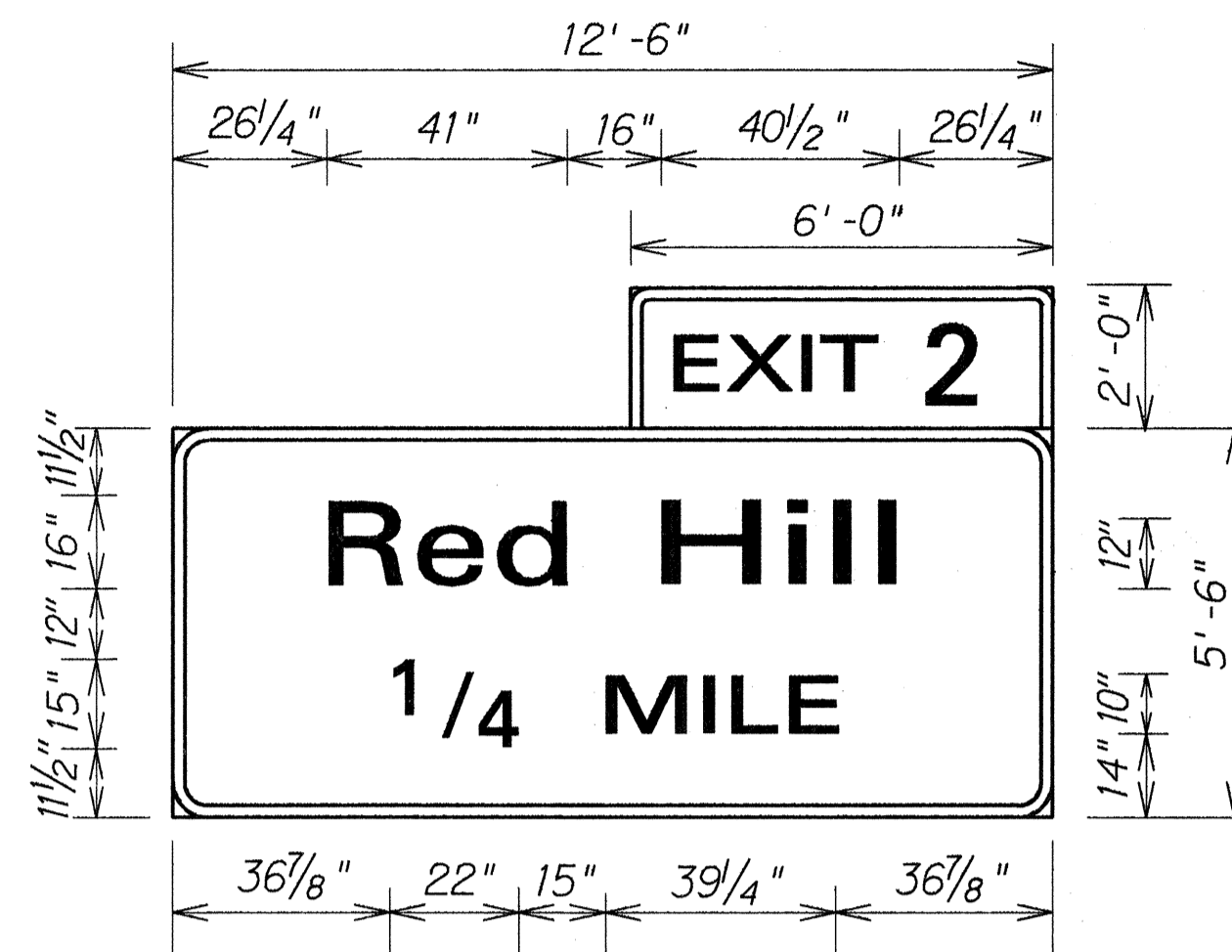
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1' - 0" Date: Sept. 1991
SHEET No. 731 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	58	70



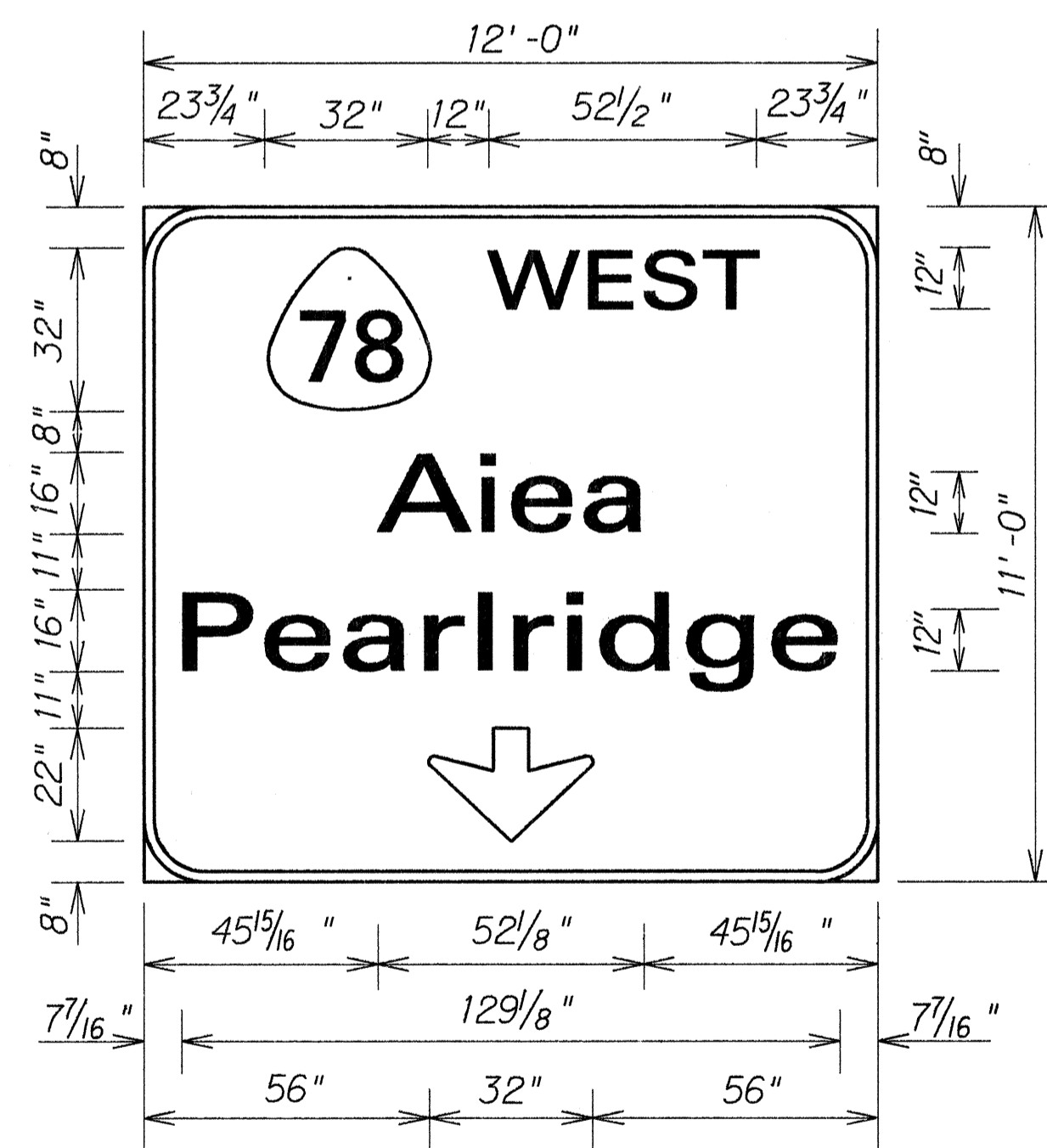
SIGN E-14

Scale: $\frac{3}{8}$ " = 1' - 0'



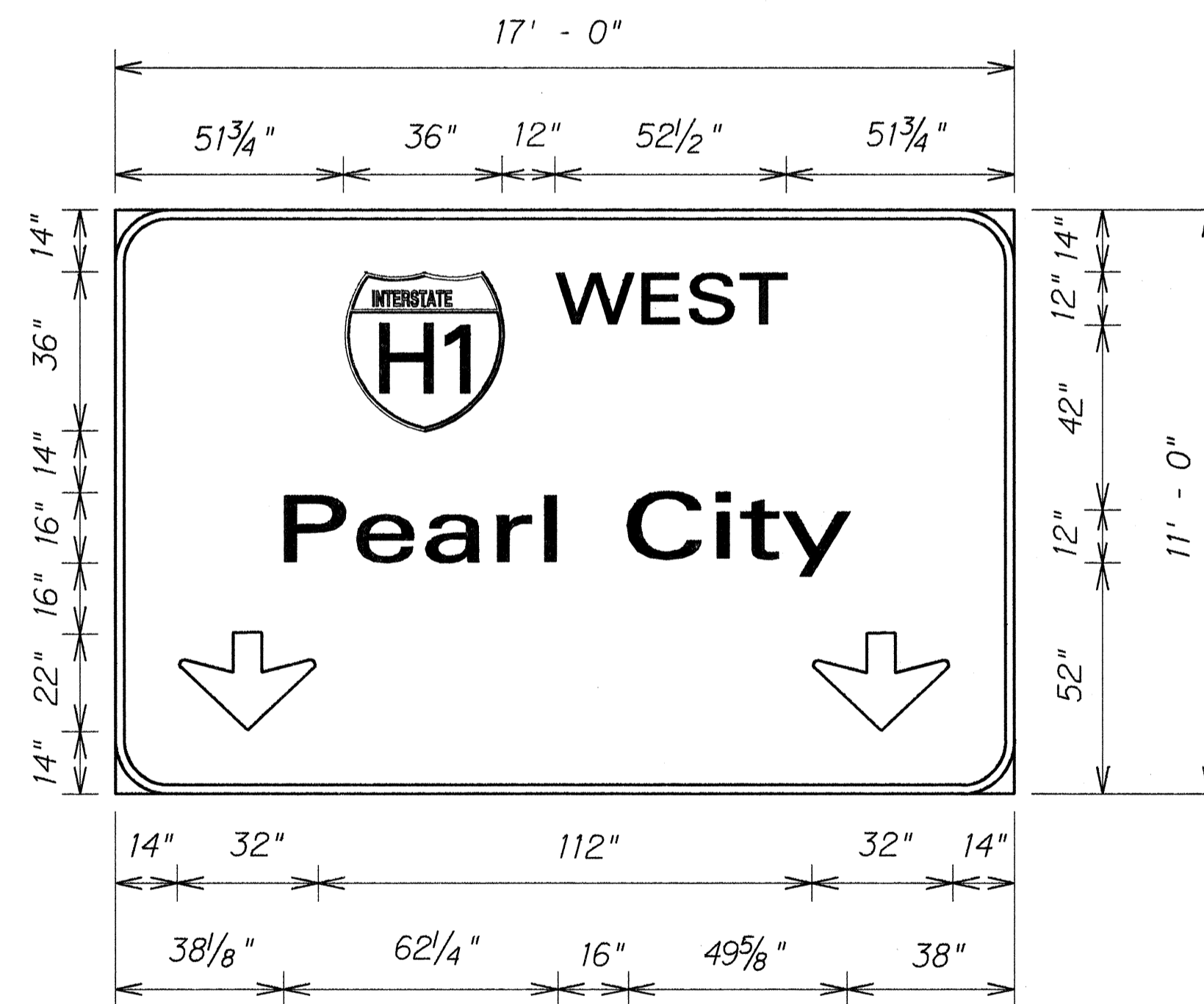
SIGN E-15

Scale: $\frac{3}{8}$ " = 1' - 0'



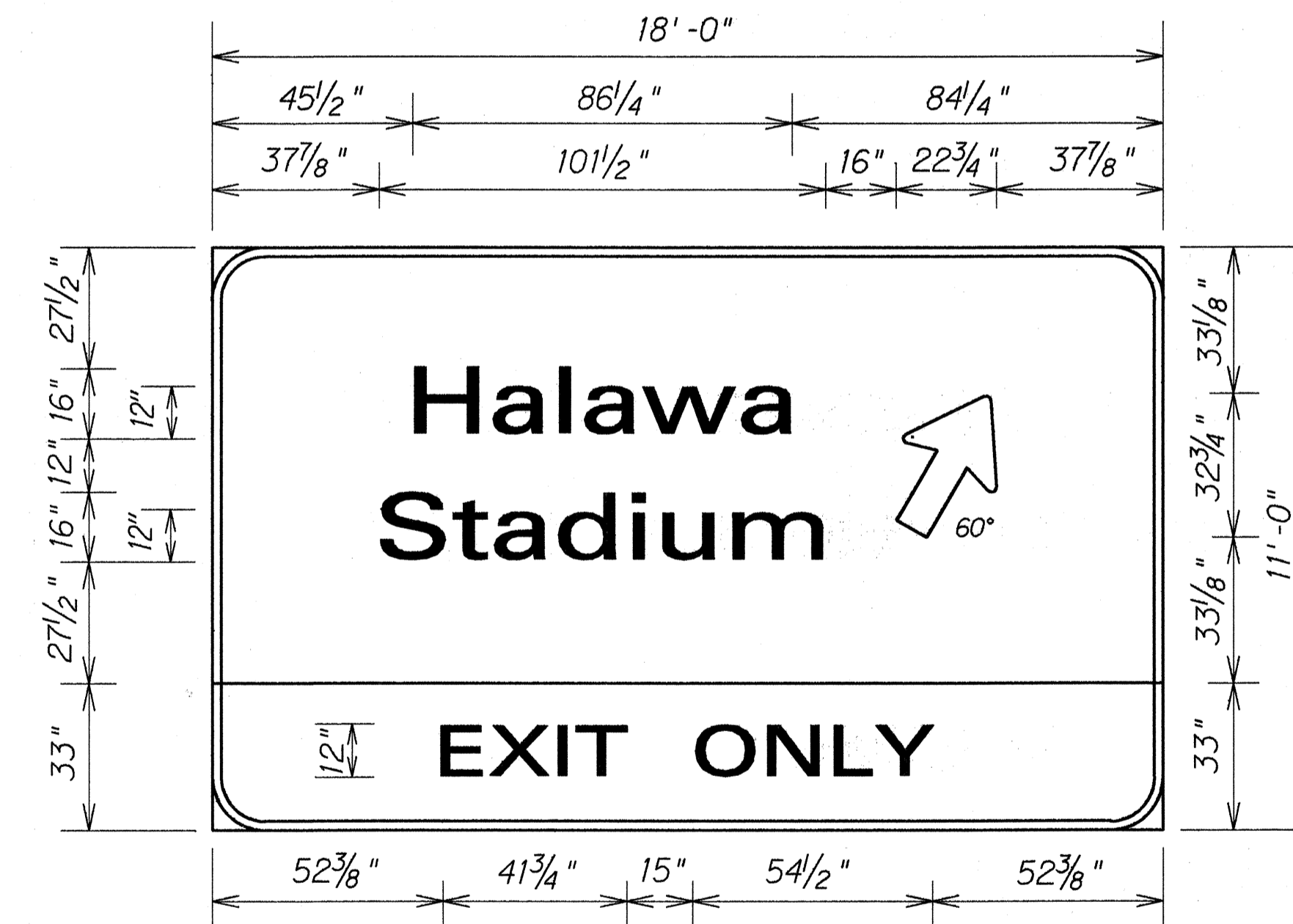
SIGN E-16 (L)

Scale: $\frac{3}{8}$ " = 1' - 0'



SIGN E-16 (C)

Scale: $\frac{3}{8}$ " = 1' - 0'



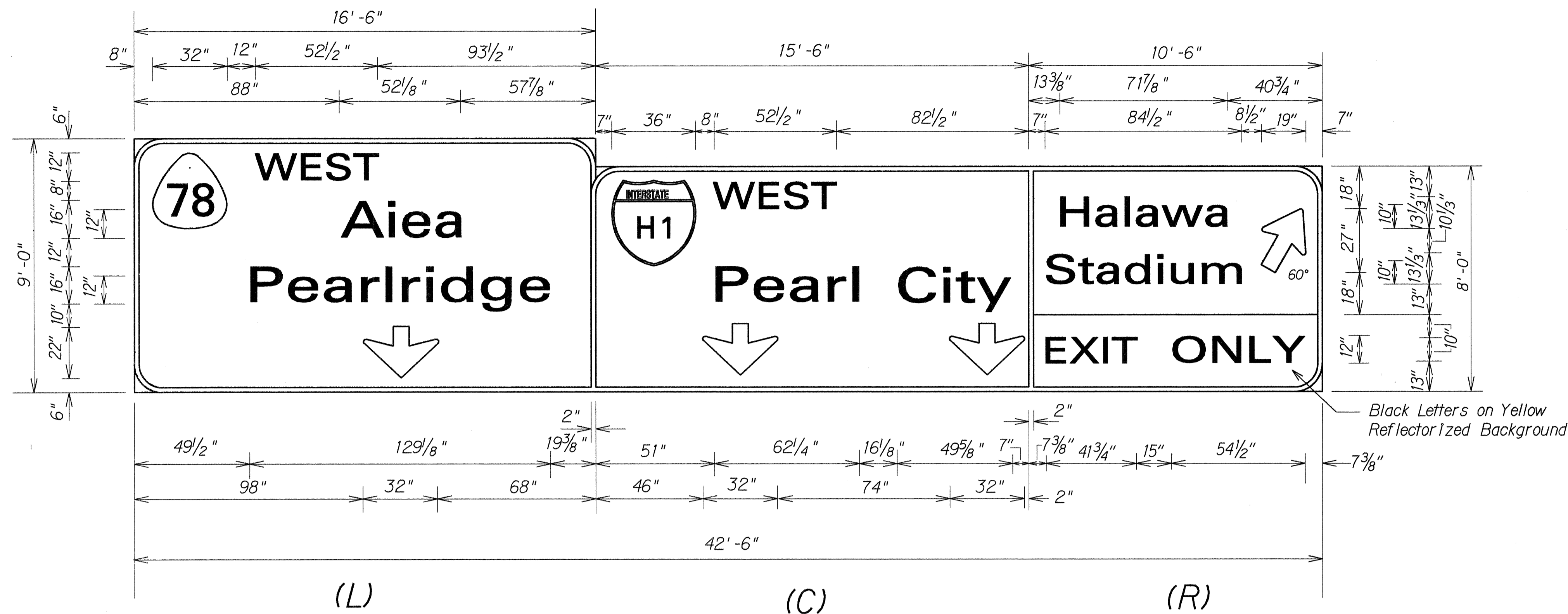
SIGN E-16 (R)

Scale: $\frac{3}{8}$ " = 1' - 0'

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
N.	_____

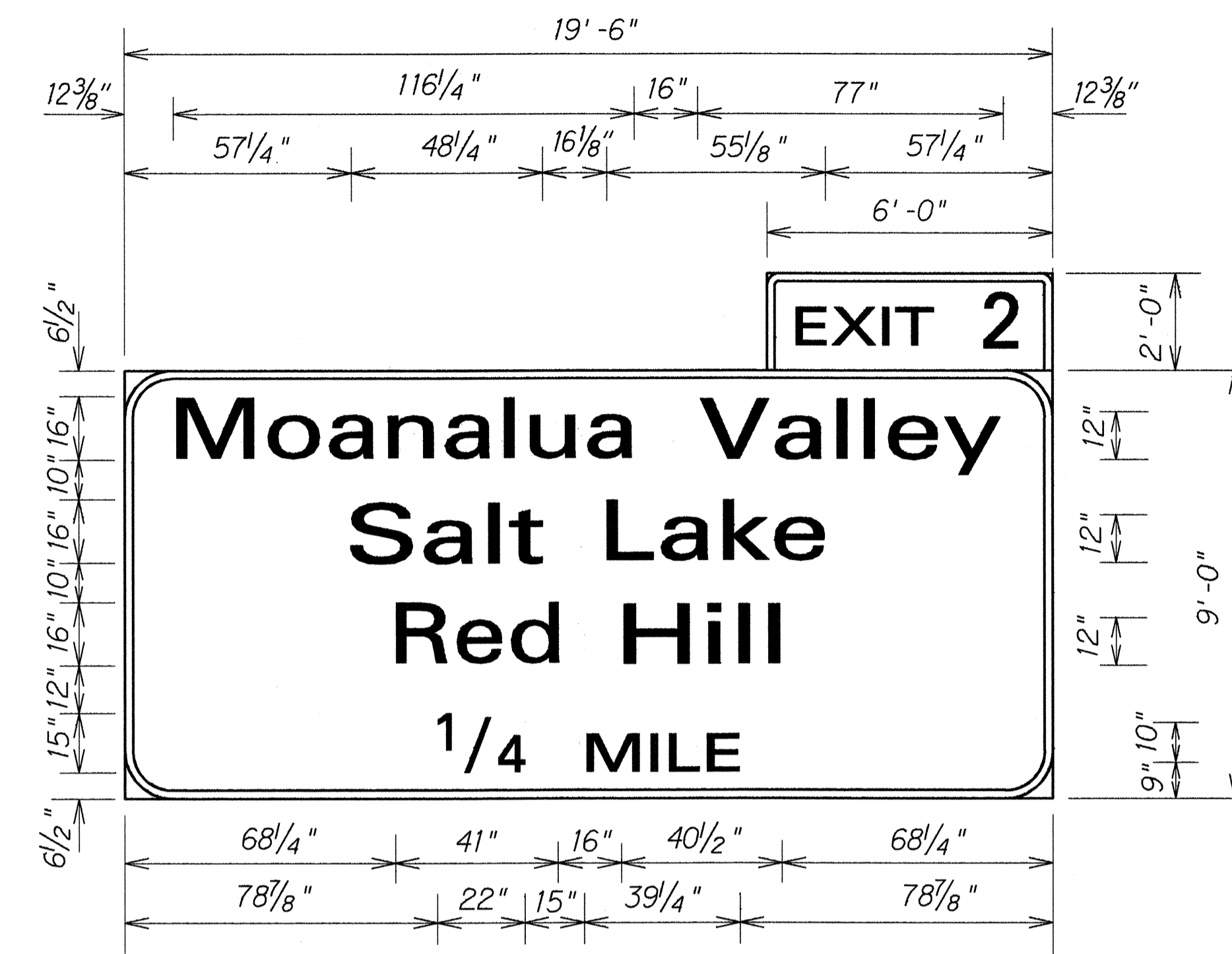
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1' - 0' Date: Sept. 1991
SHEET No. T32 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	59	70



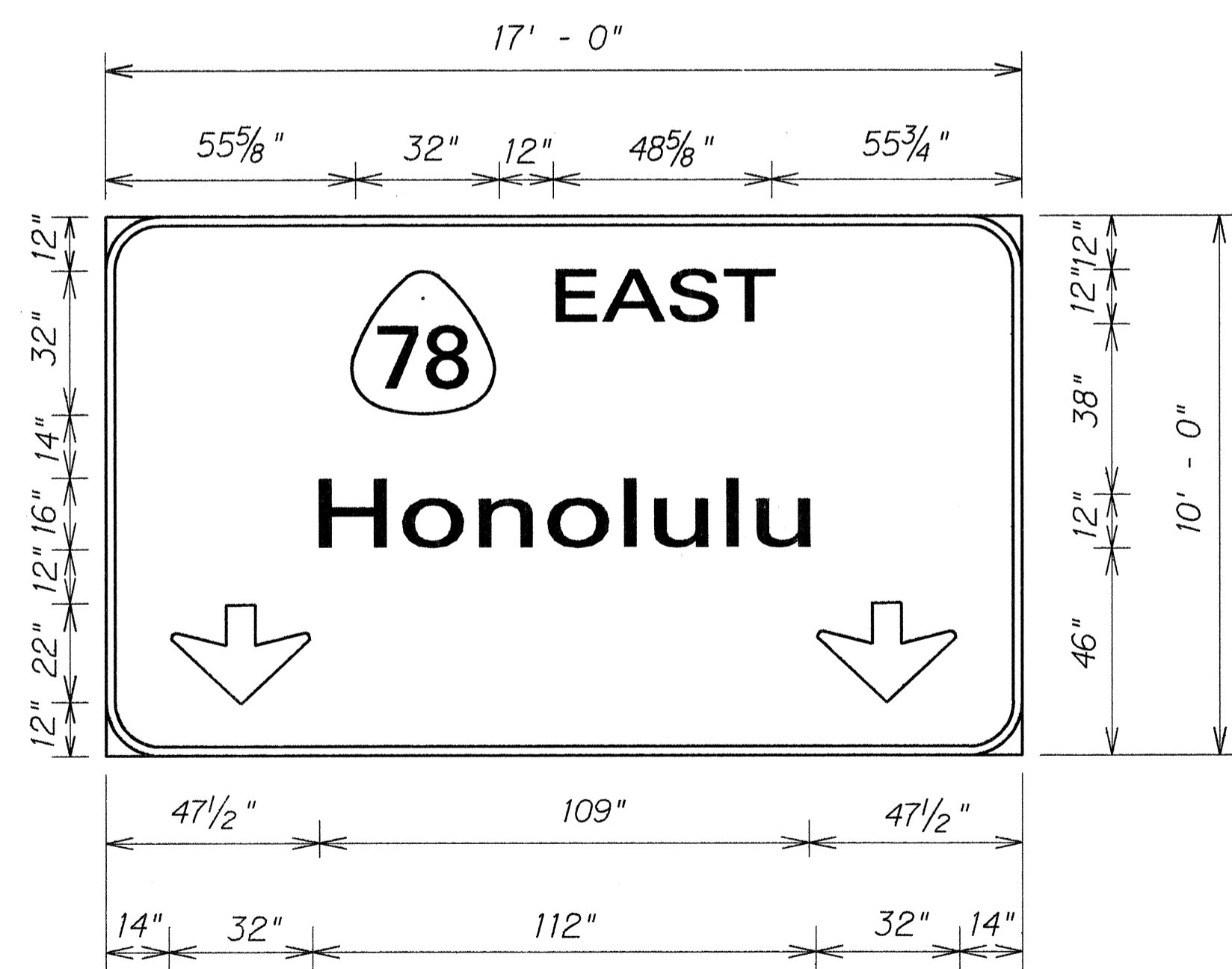
SIGN E-17

Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN E-19

Scale: $\frac{3}{8}$ " = 1' - 0"



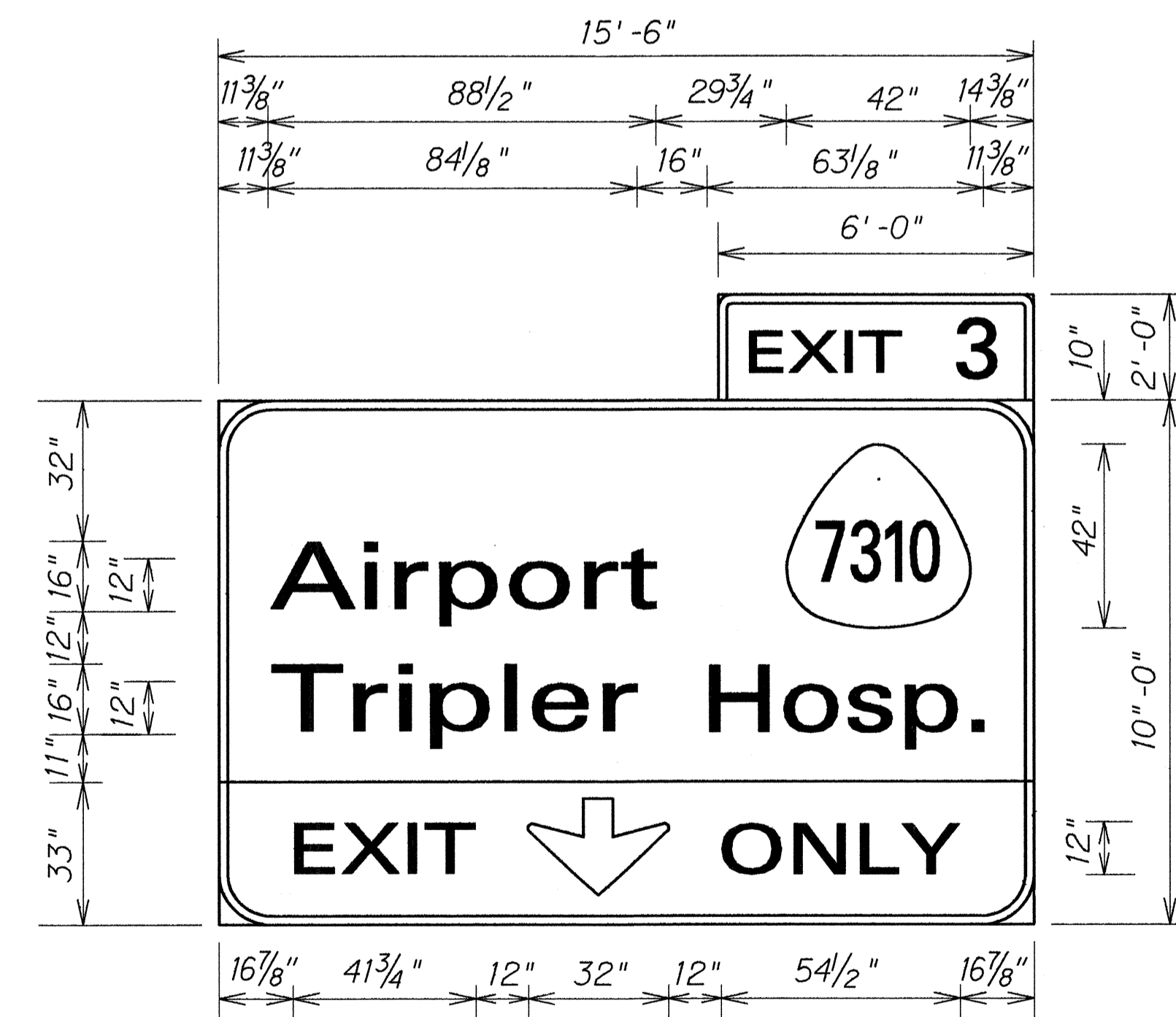
SIGN E-18(L)

Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN E-18(C)

Scale: $\frac{3}{8}$ " = 1' - 0"



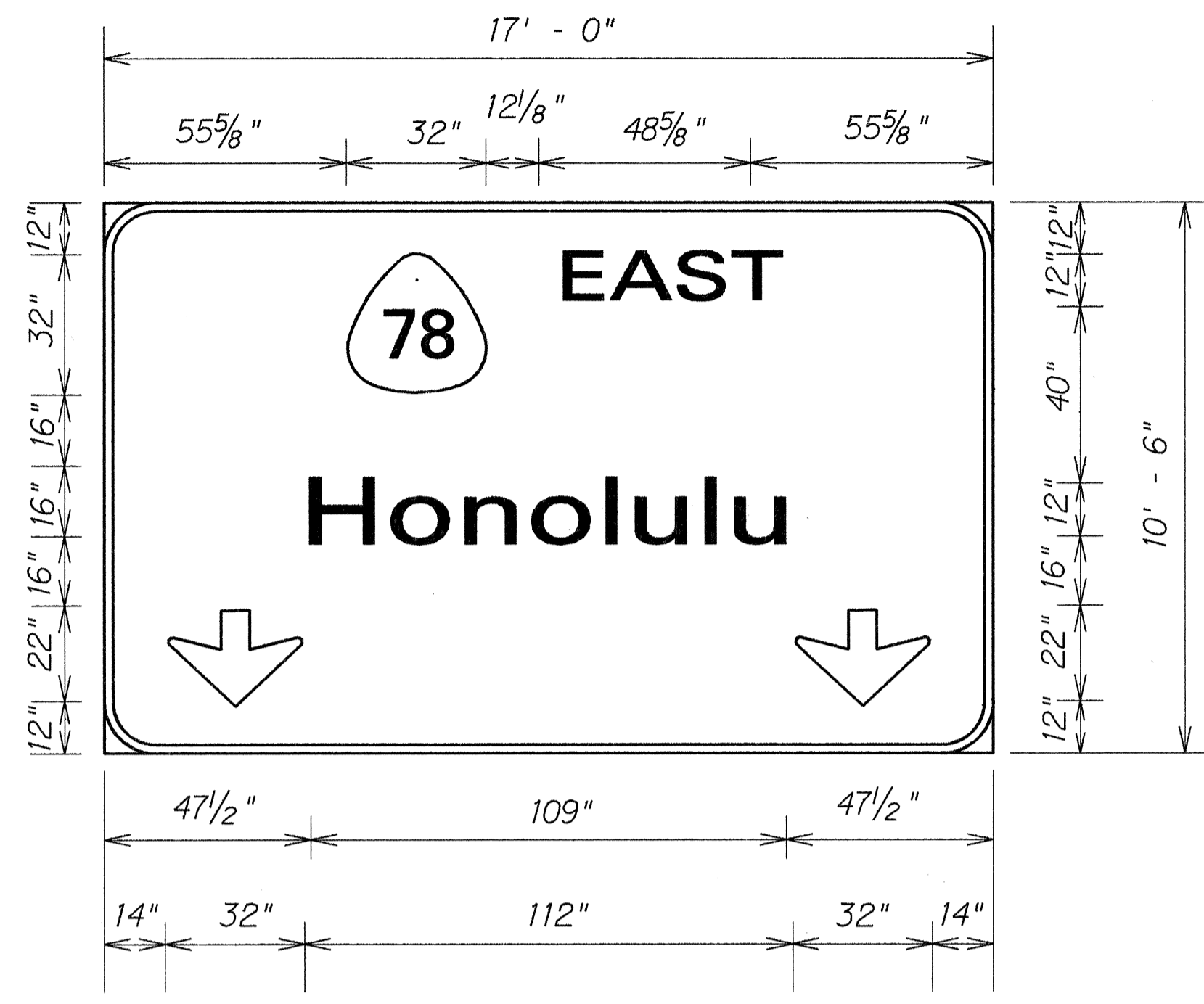
SIGN E-18 (R)

Scale: $\frac{3}{8}$ " = 1' - 0"

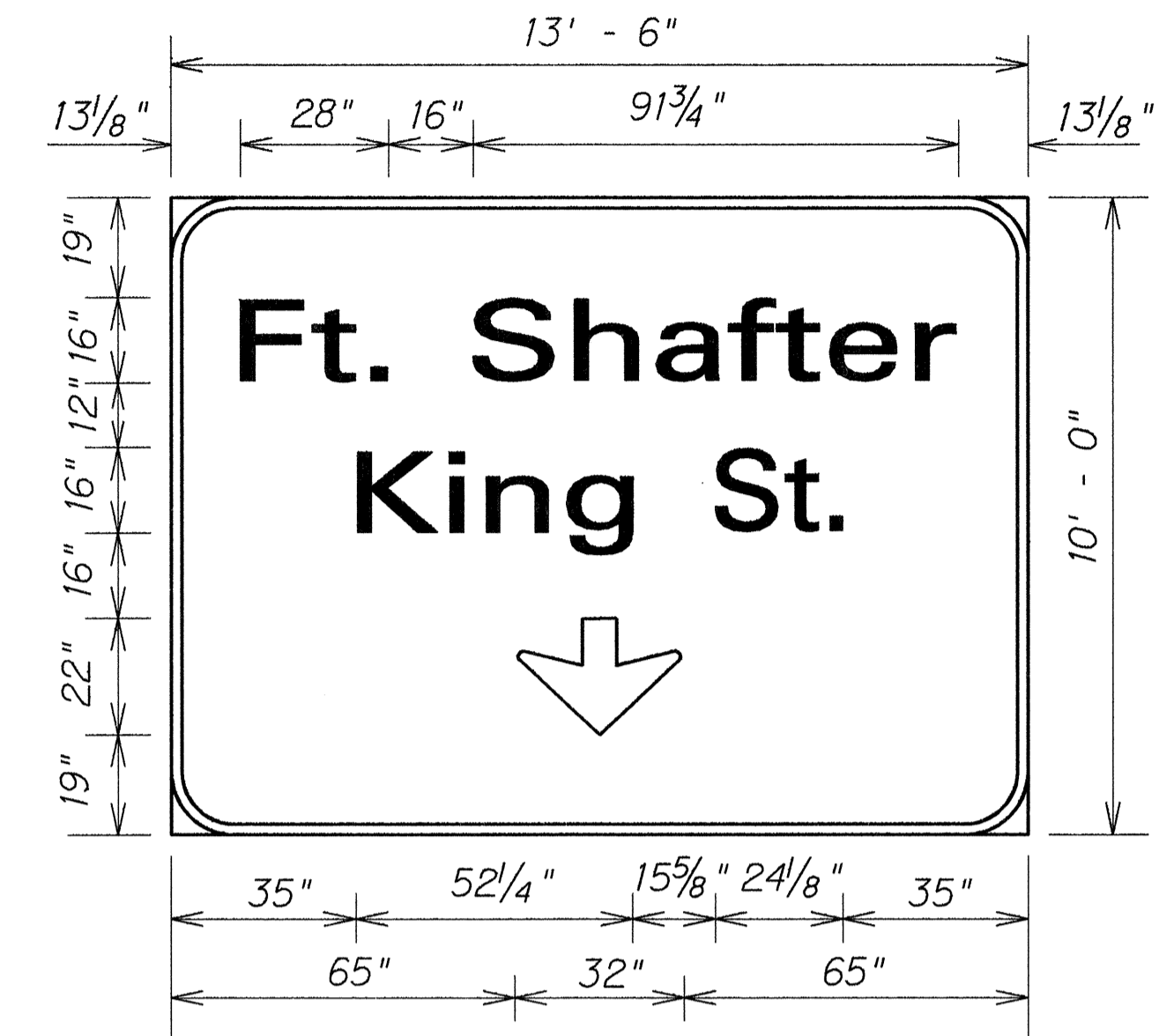
DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1' - 0" Date: Sept. 1991
SHEET No. 733 OF 44 SHEETS

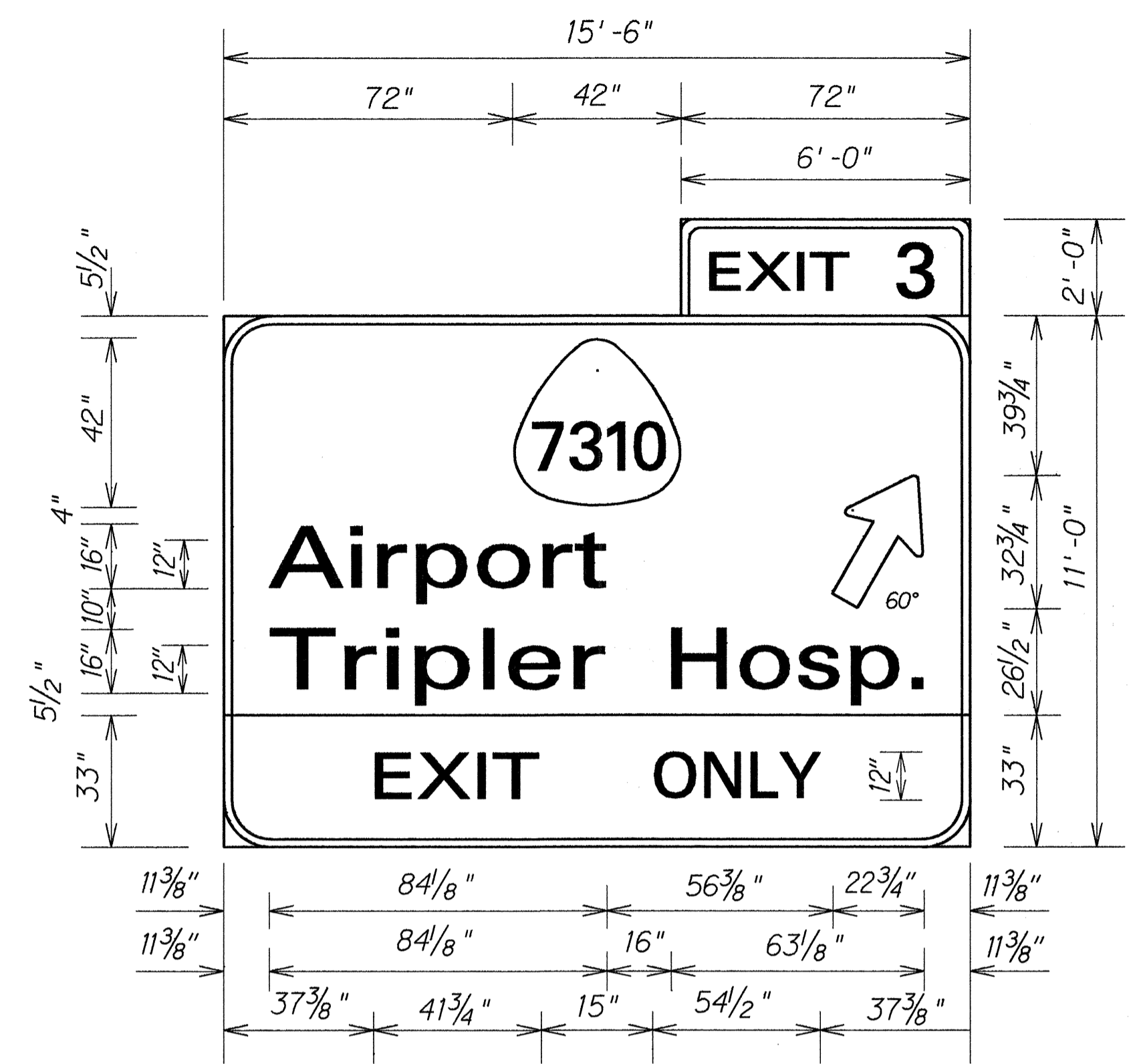
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	60	70



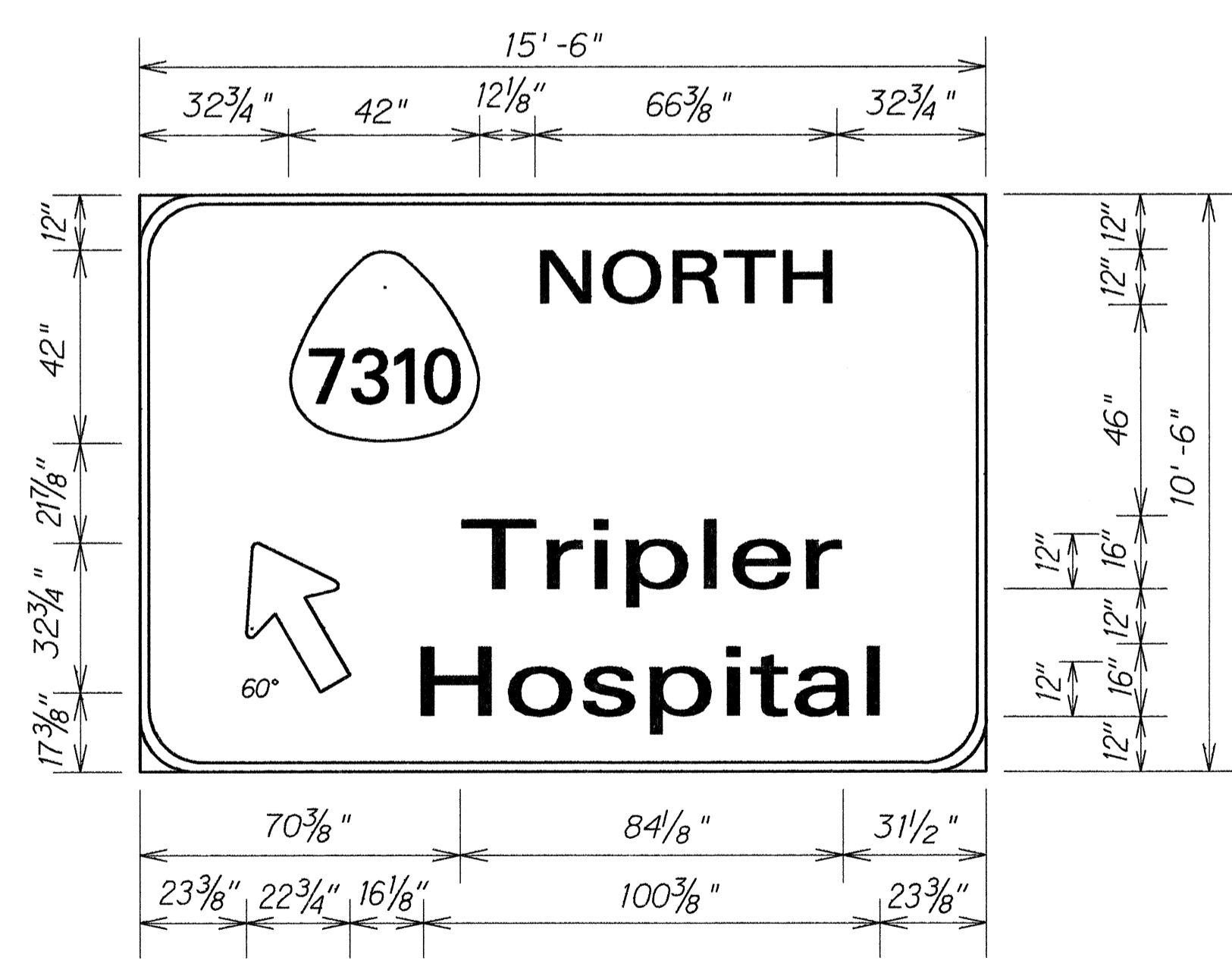
SIGN E-20(L)
Scale: $\frac{3}{8}$ " = 1'-0"



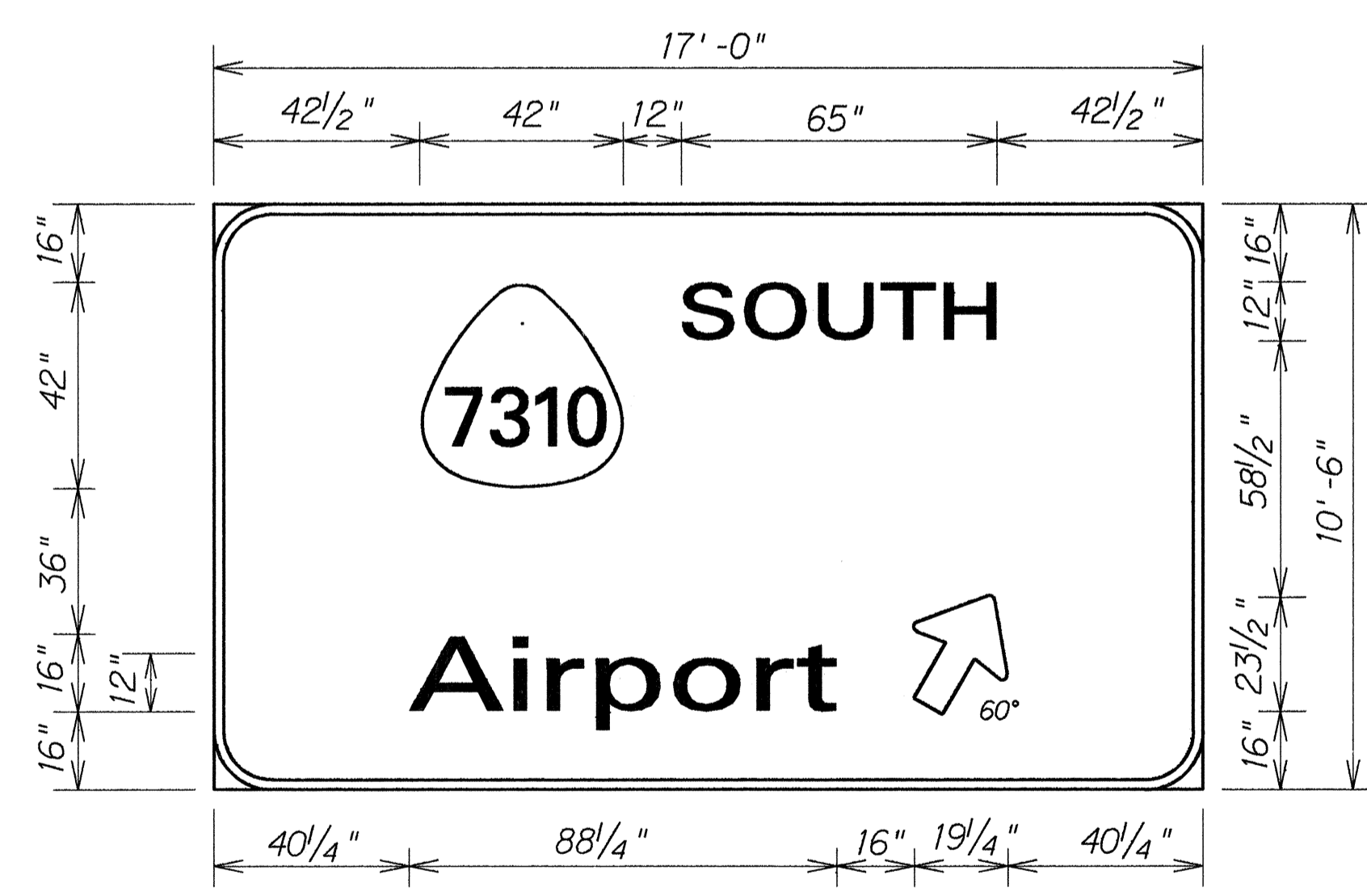
SIGN E-20(C)
Scale: $\frac{3}{8}$ " = 1'-0"



SIGN E-20 (R)
Scale: $\frac{3}{8}$ " = 1'-0"



SIGN E-21 (L)
Scale: $\frac{3}{8}$ " = 1'-0"

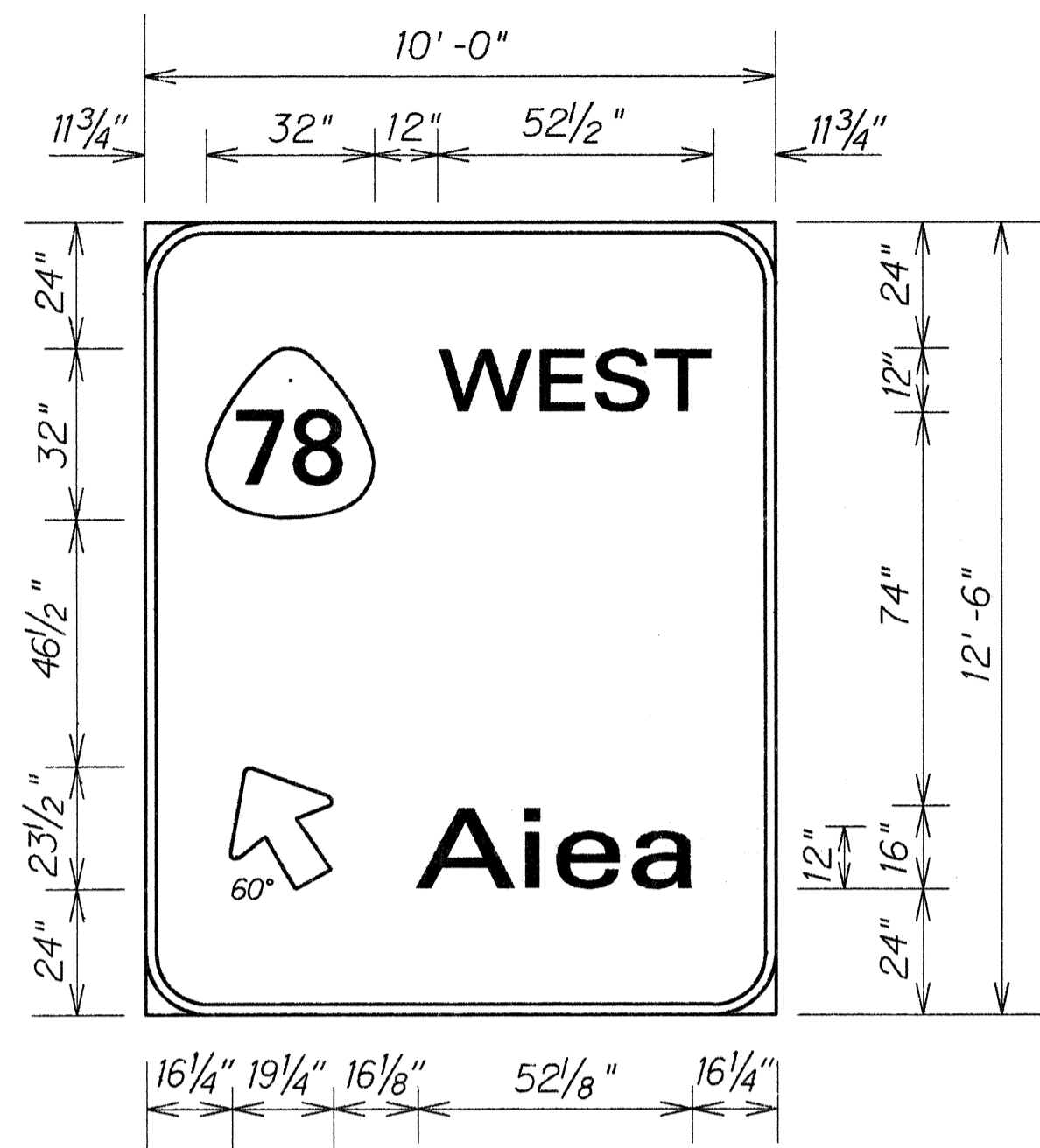


SIGN E-21 (R)
Scale: $\frac{3}{8}$ " = 1'-0"

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTED BY	_____
QUANTITIES BY	_____
PLANNED BY	_____
ORIGINAL PLAN	_____
NO.	_____

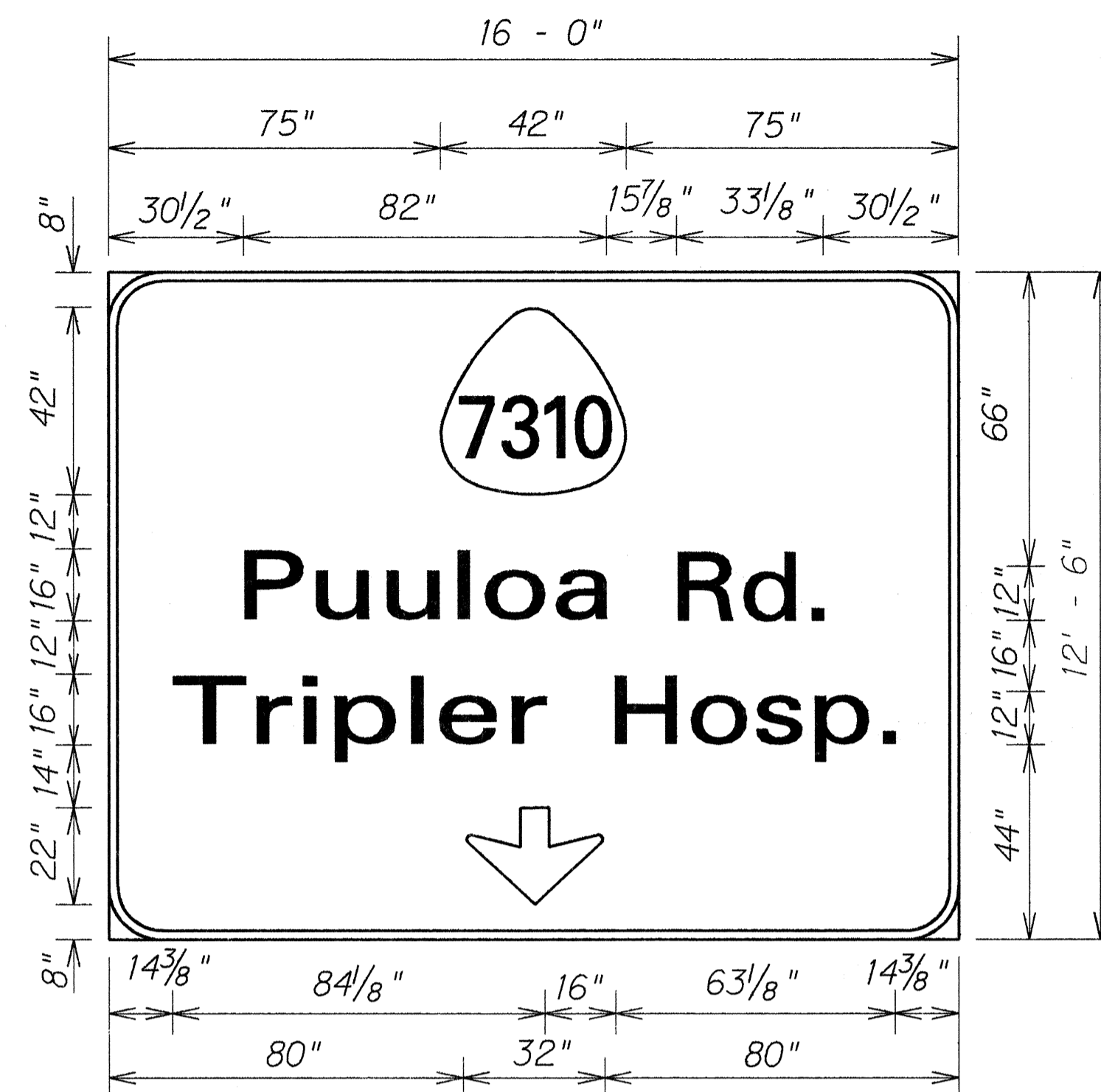
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1'-0" Date: Sept. 1991
SHEET No. 734 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	62	70



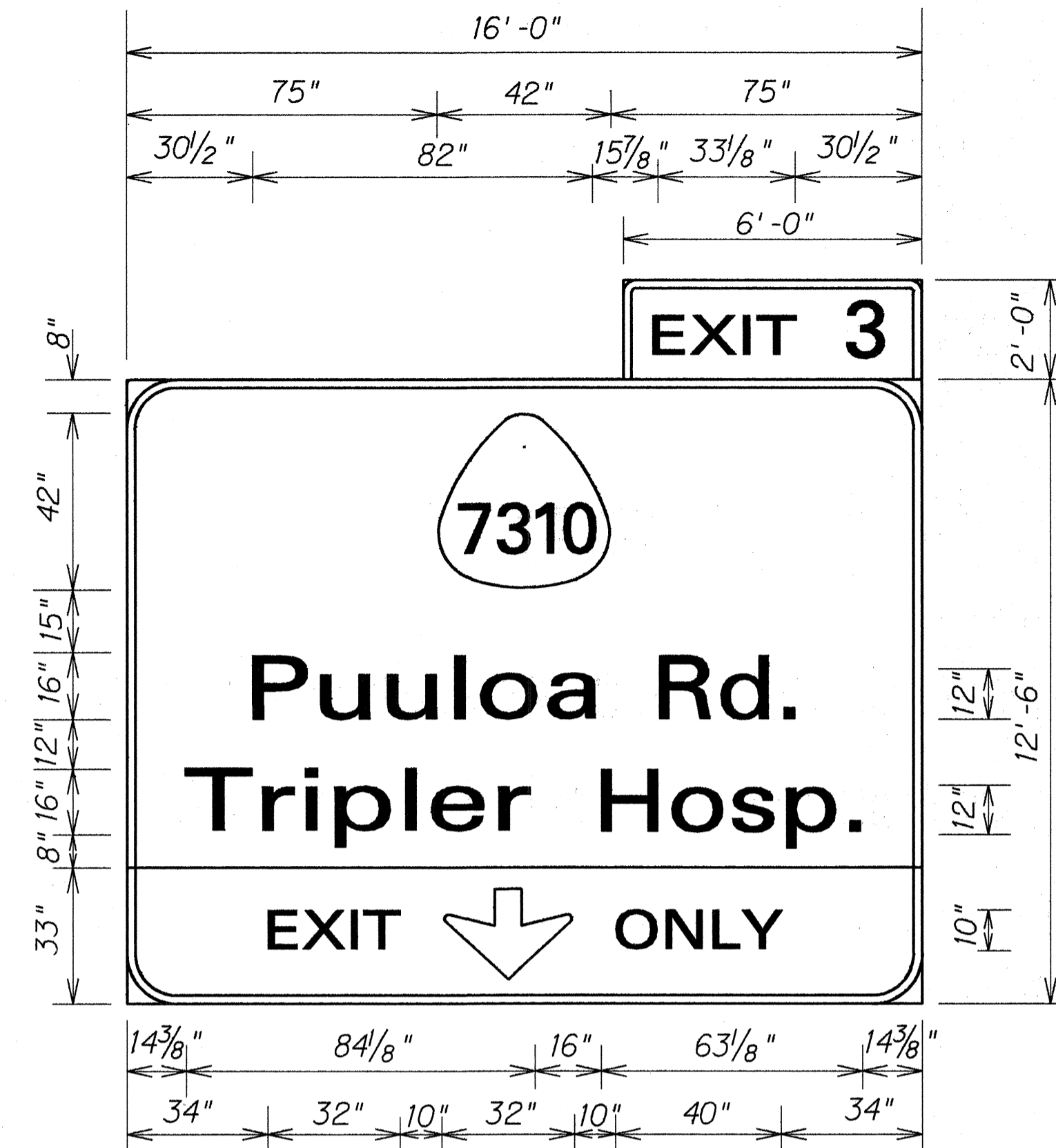
SIGN E-25 (L)

Scale: $\frac{3}{8}$ " = 1'-0"



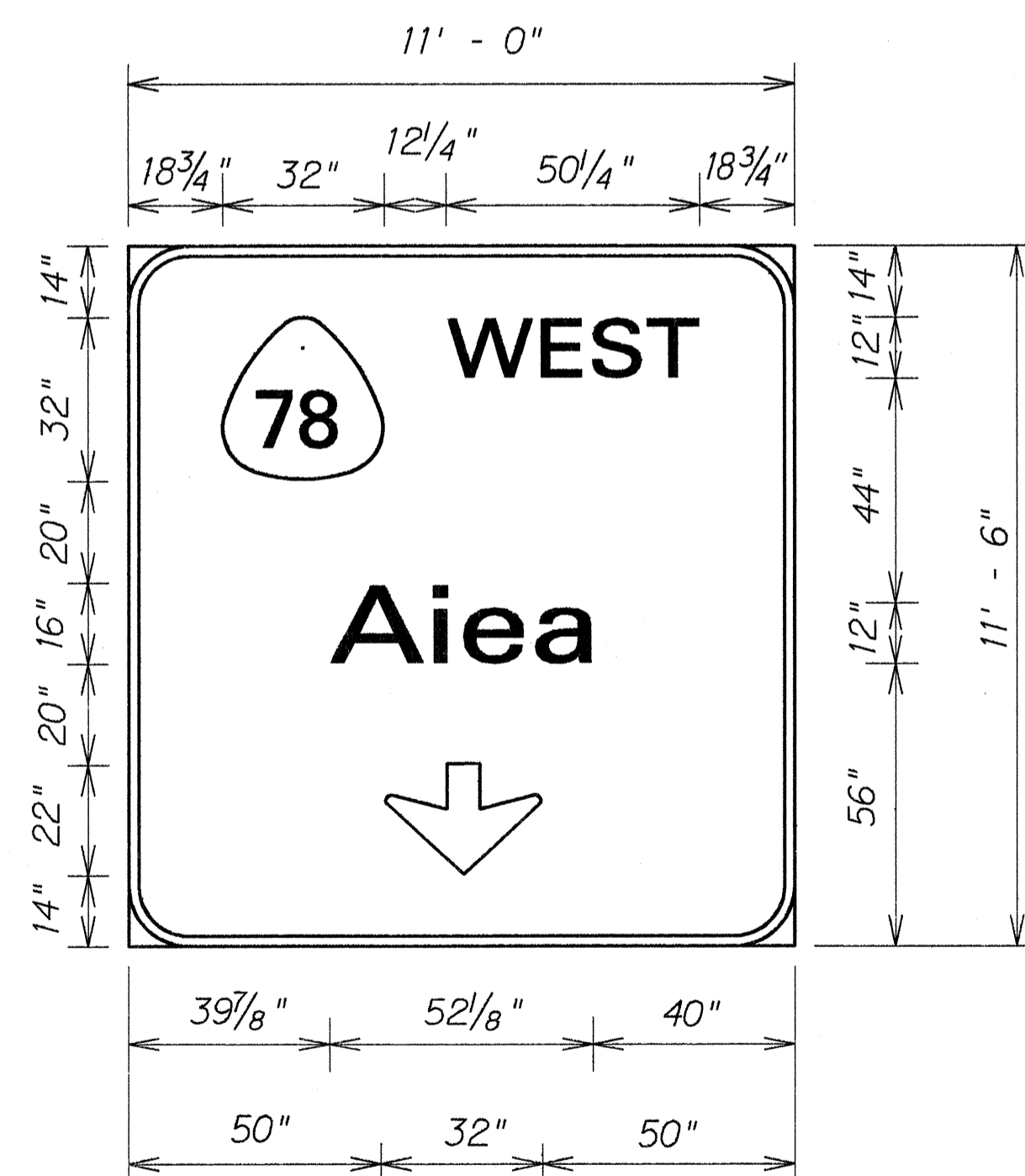
SIGN E-25(R)

Scale: $\frac{3}{8}$ " = 1'-0"



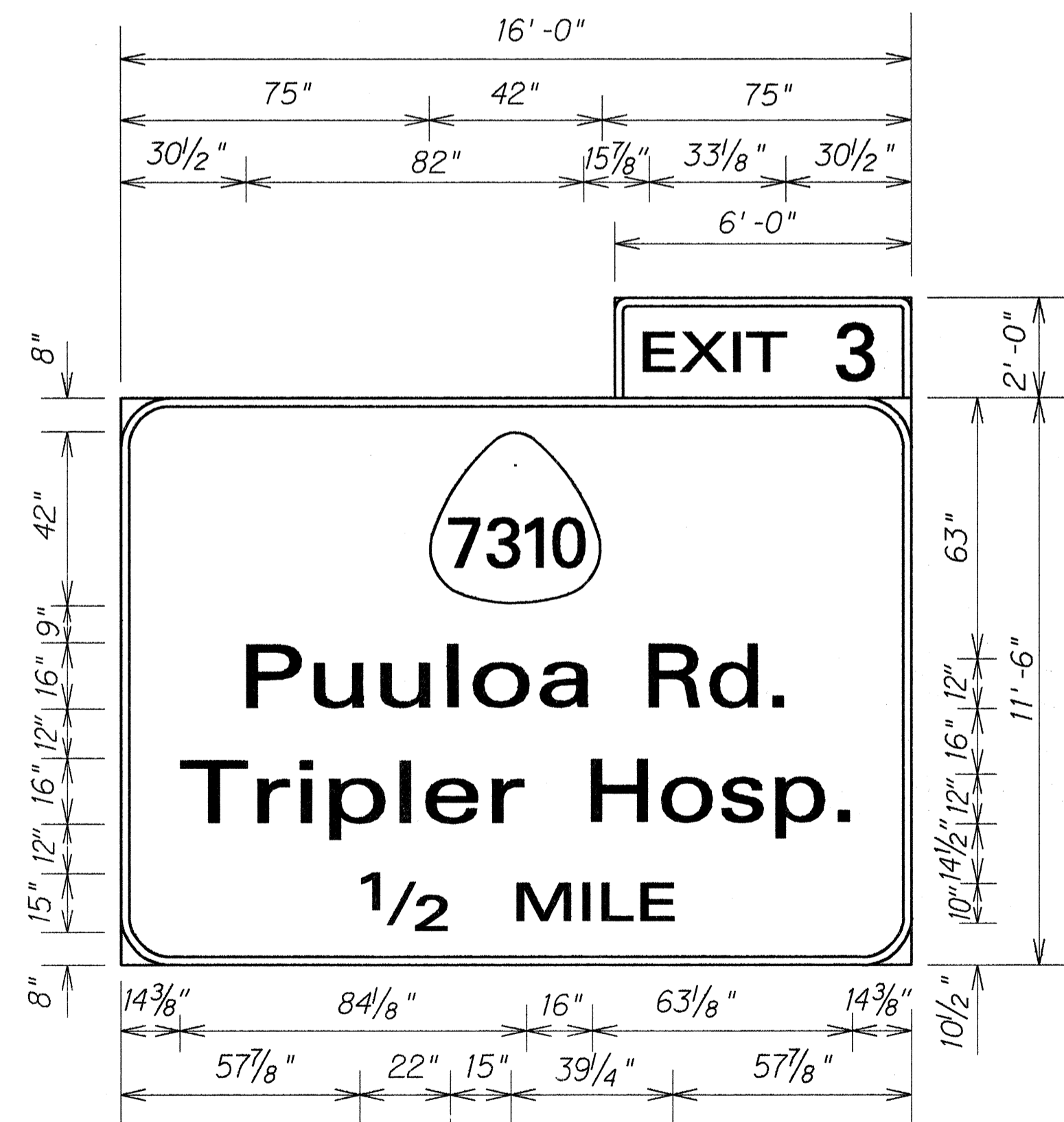
SIGN E-26

Scale: $\frac{3}{8}$ " = 1'-0"



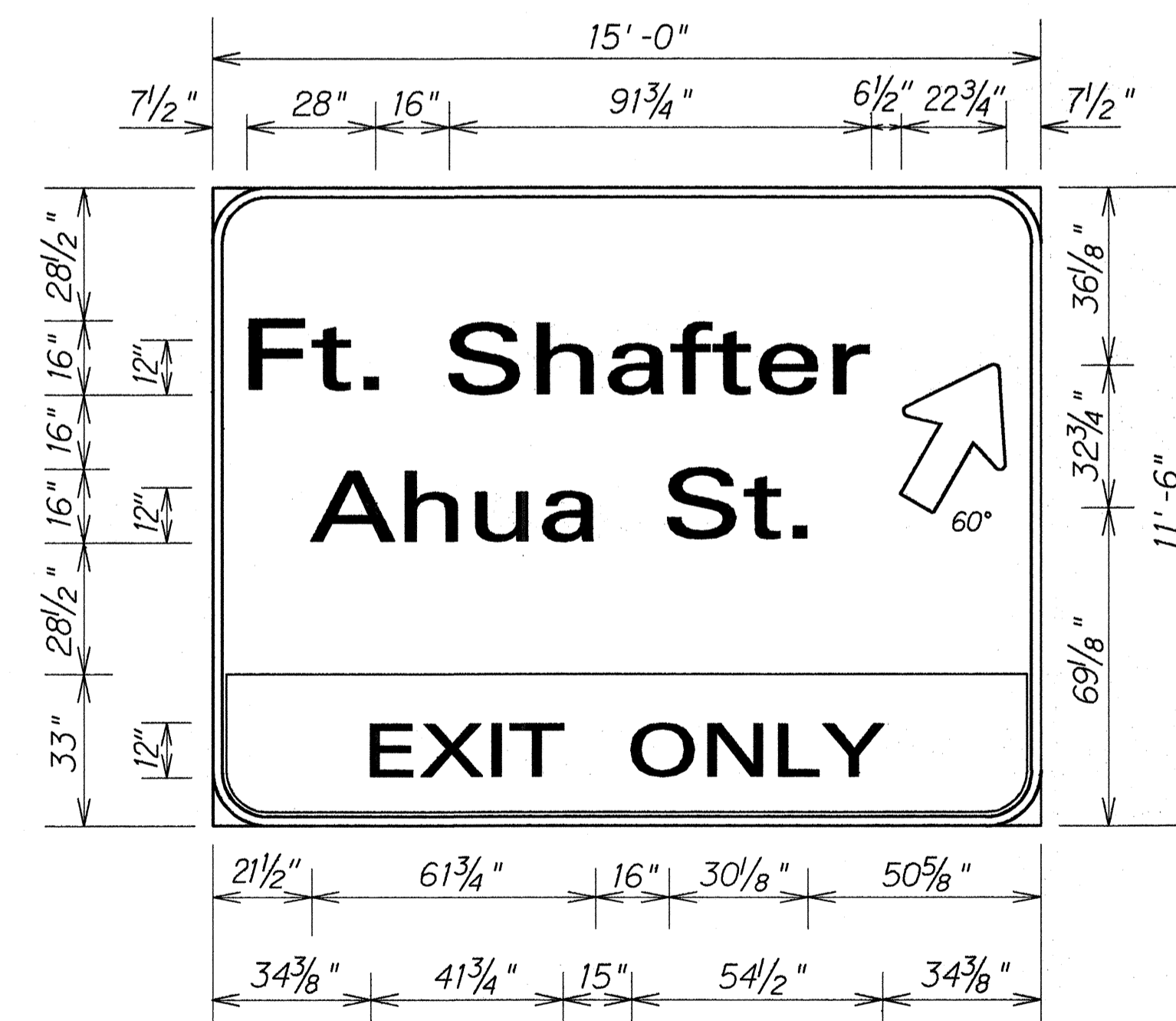
SIGN E-27(L)

Scale: $\frac{3}{8}$ " = 1'-0"



SIGN E-27 (C)

Scale: $\frac{3}{8}$ " = 1'-0"



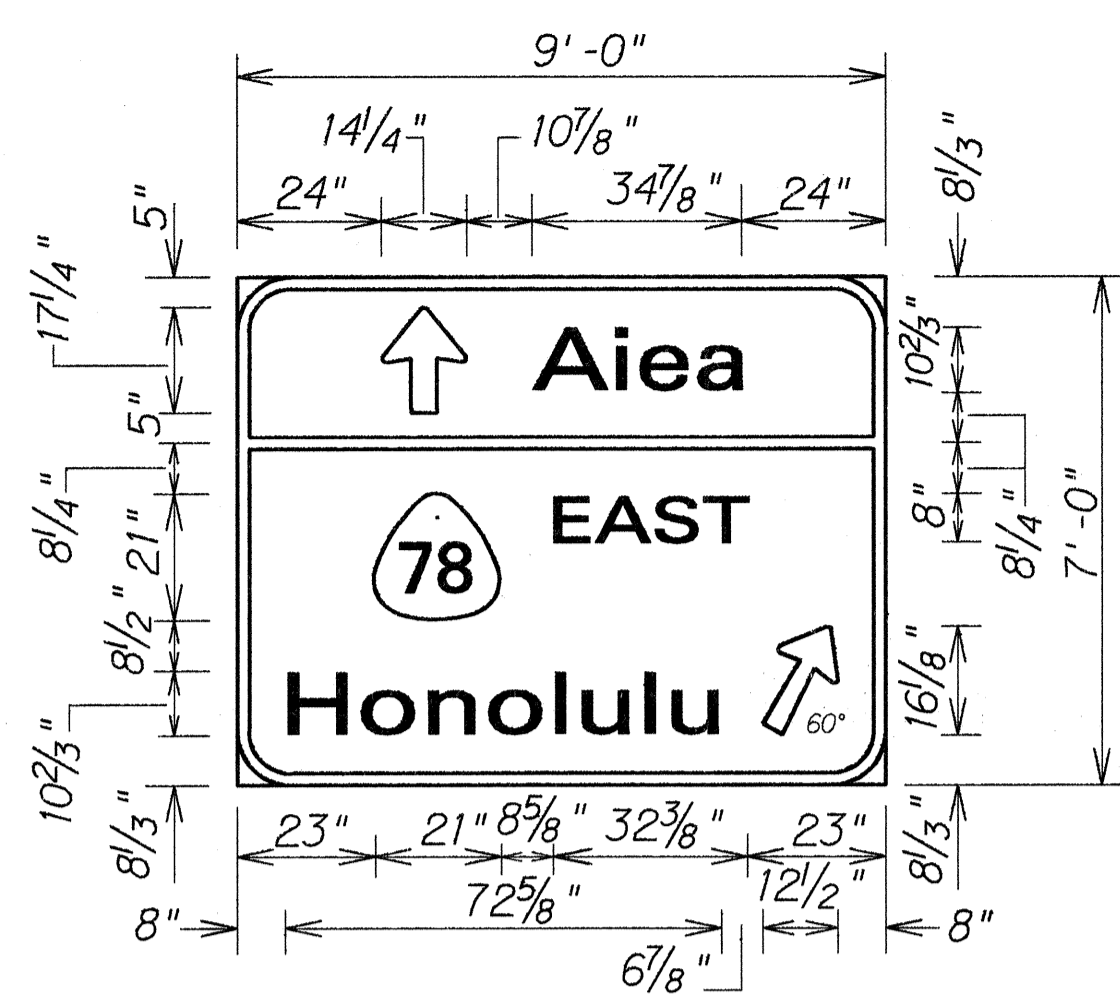
SIGN E-27 (R)

Scale: $\frac{3}{8}$ " = 1'-0"

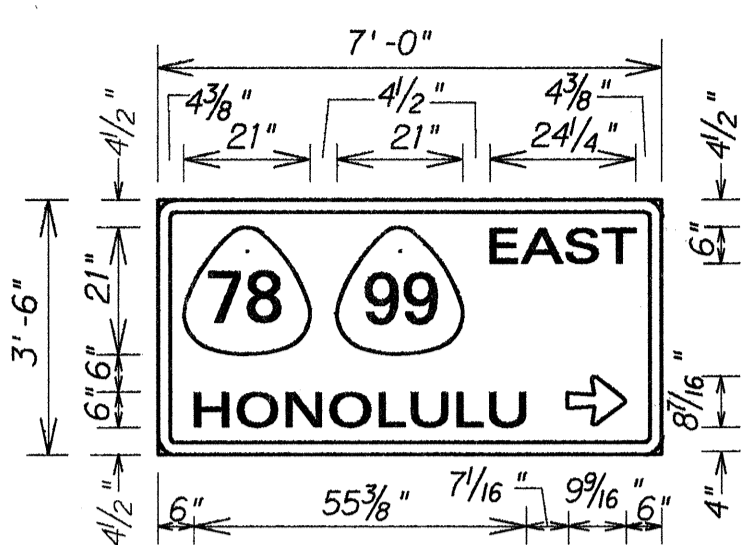
DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**EXPRESSWAY SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1'-0" Date: Sept. 1991
SHEET No. 736 OF 44 SHEETS

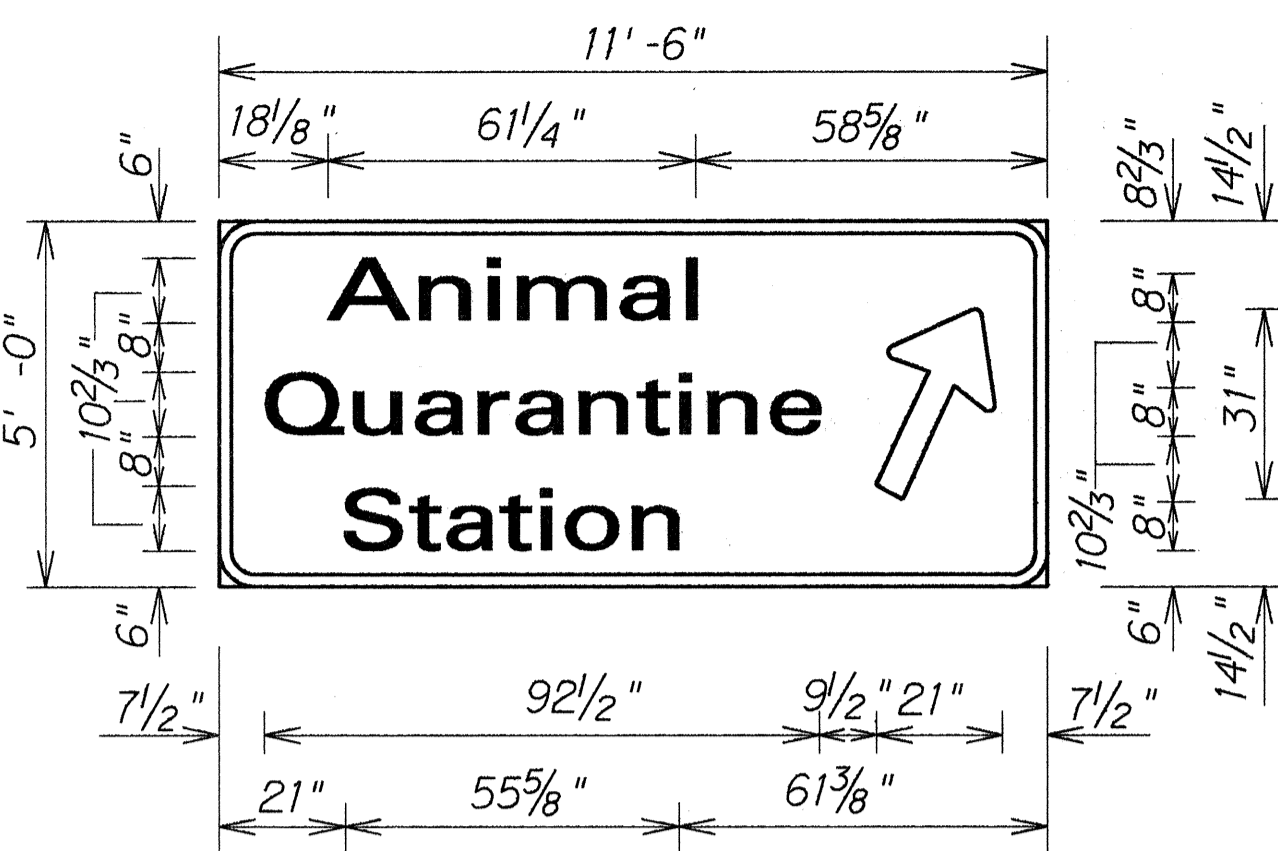
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	63	70



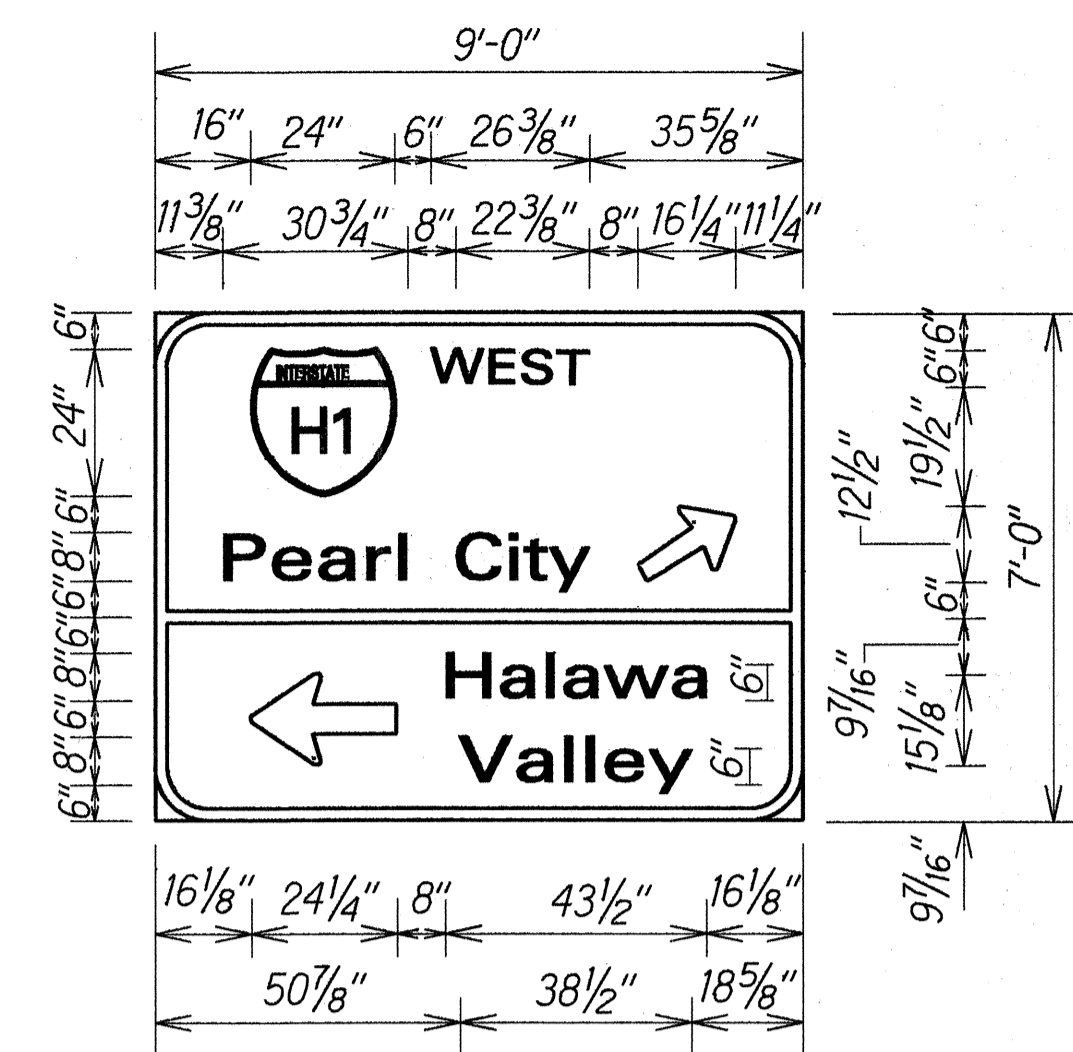
SIGN D-1
Scale: 3/8" = 1'-0"



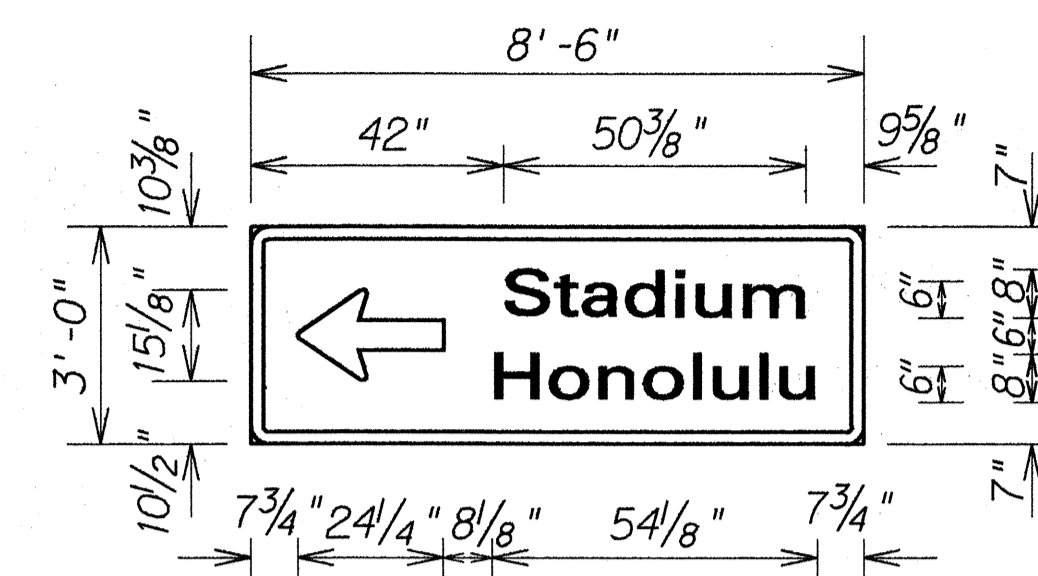
SIGN D-2
Scale: 3/8" = 1'-0"



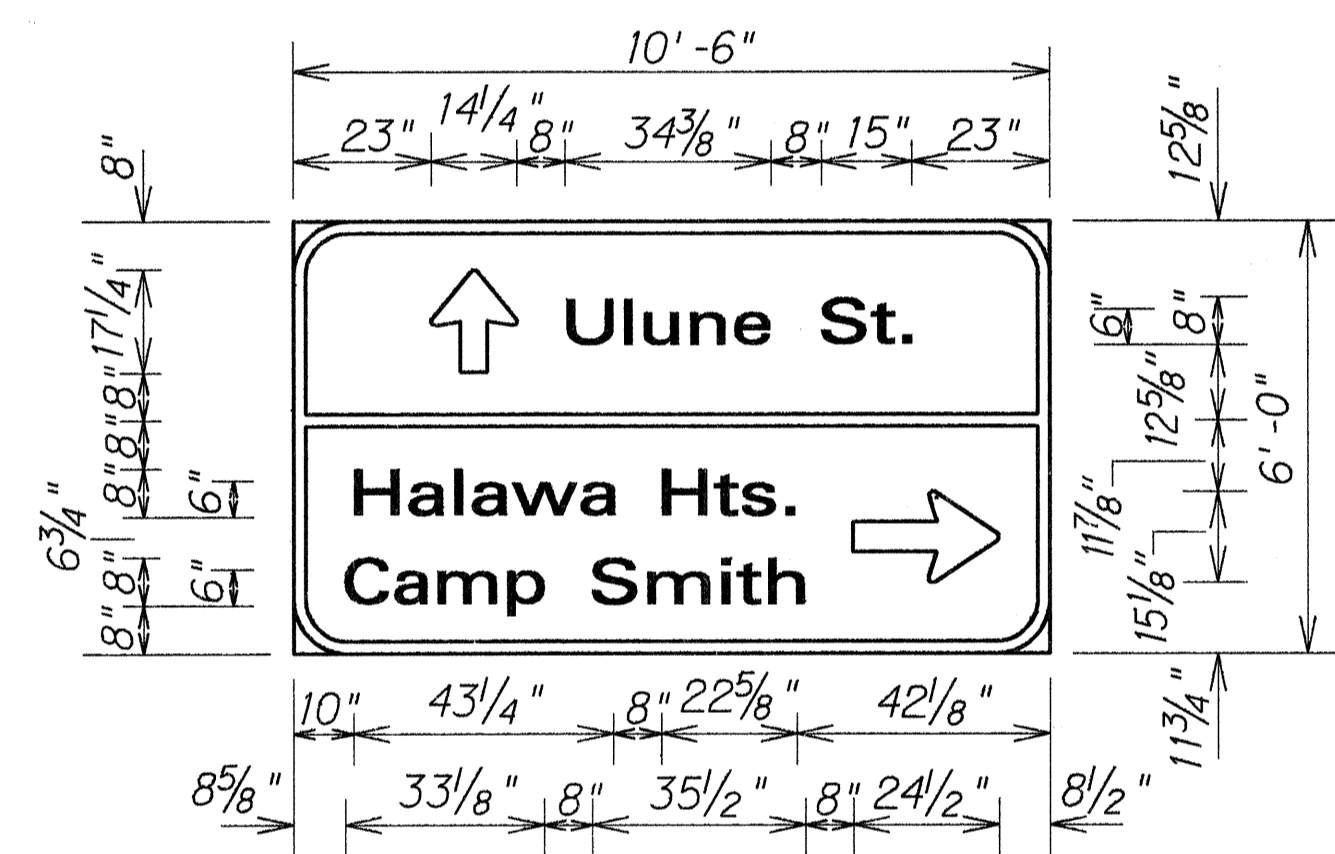
SIGN D-4
Scale: 3/8" = 1'-0"



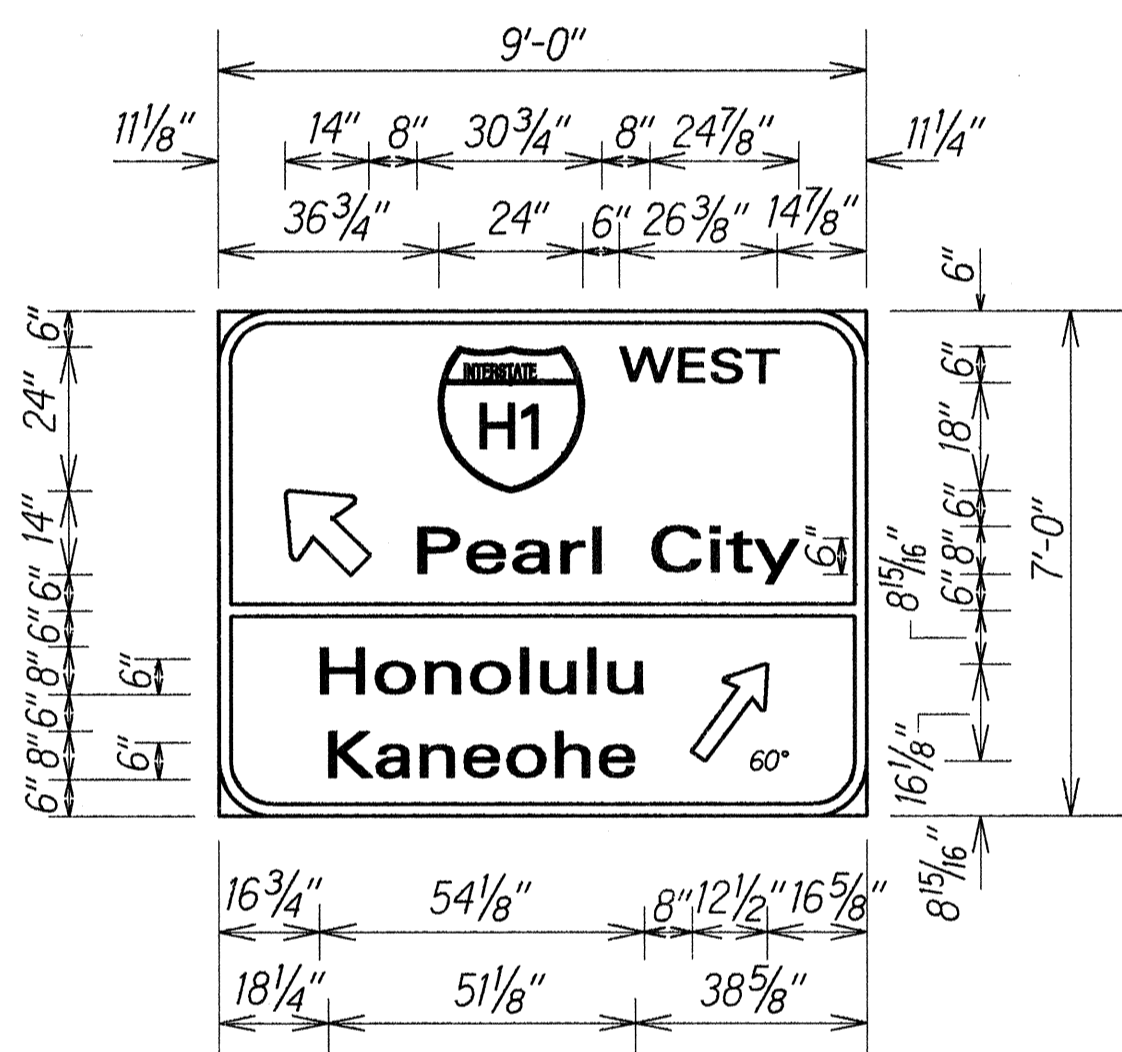
SIGN D-5
Scale: 3/8" = 1'-0"



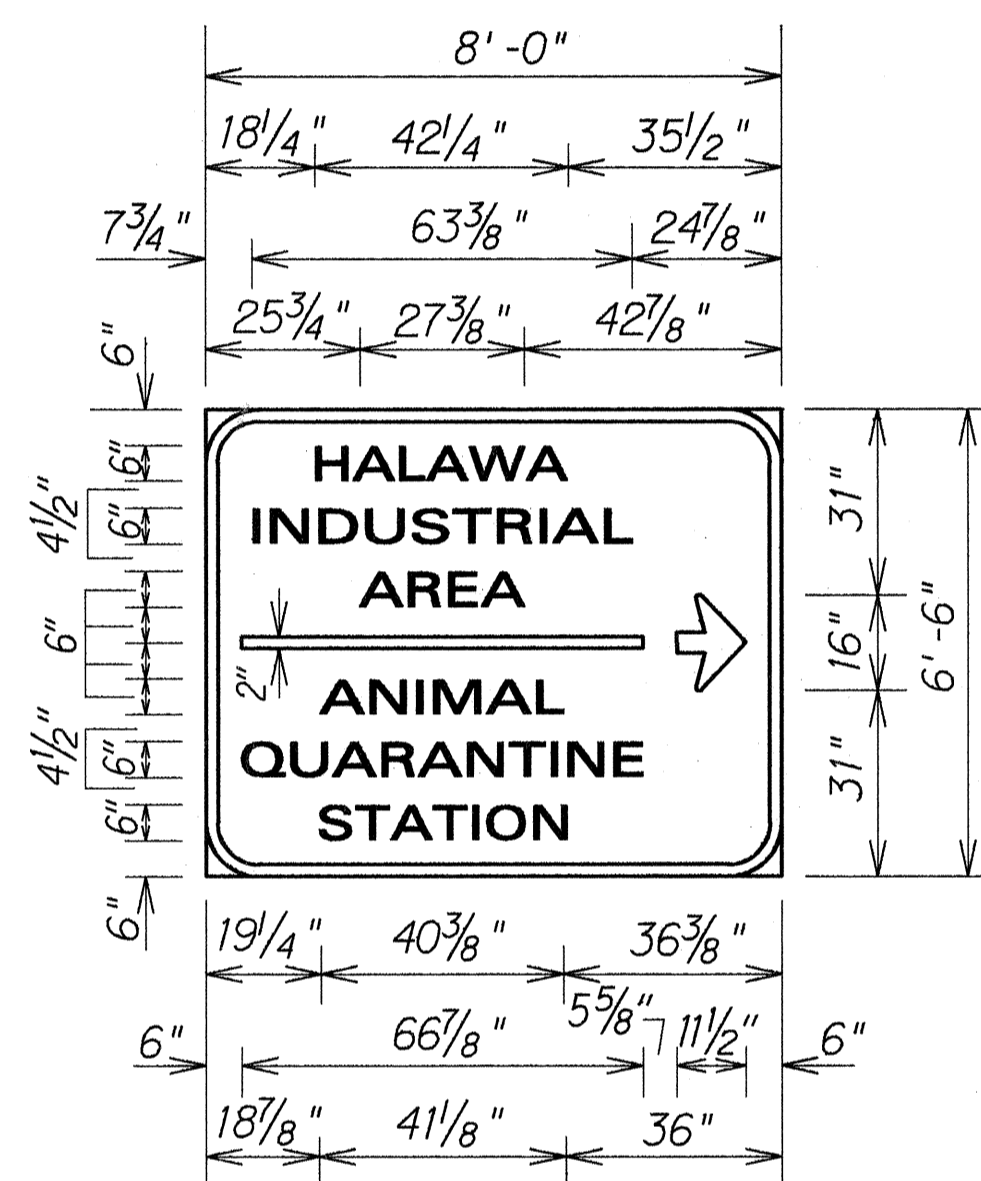
SIGN D-6
Scale: 3/8" = 1'-0"



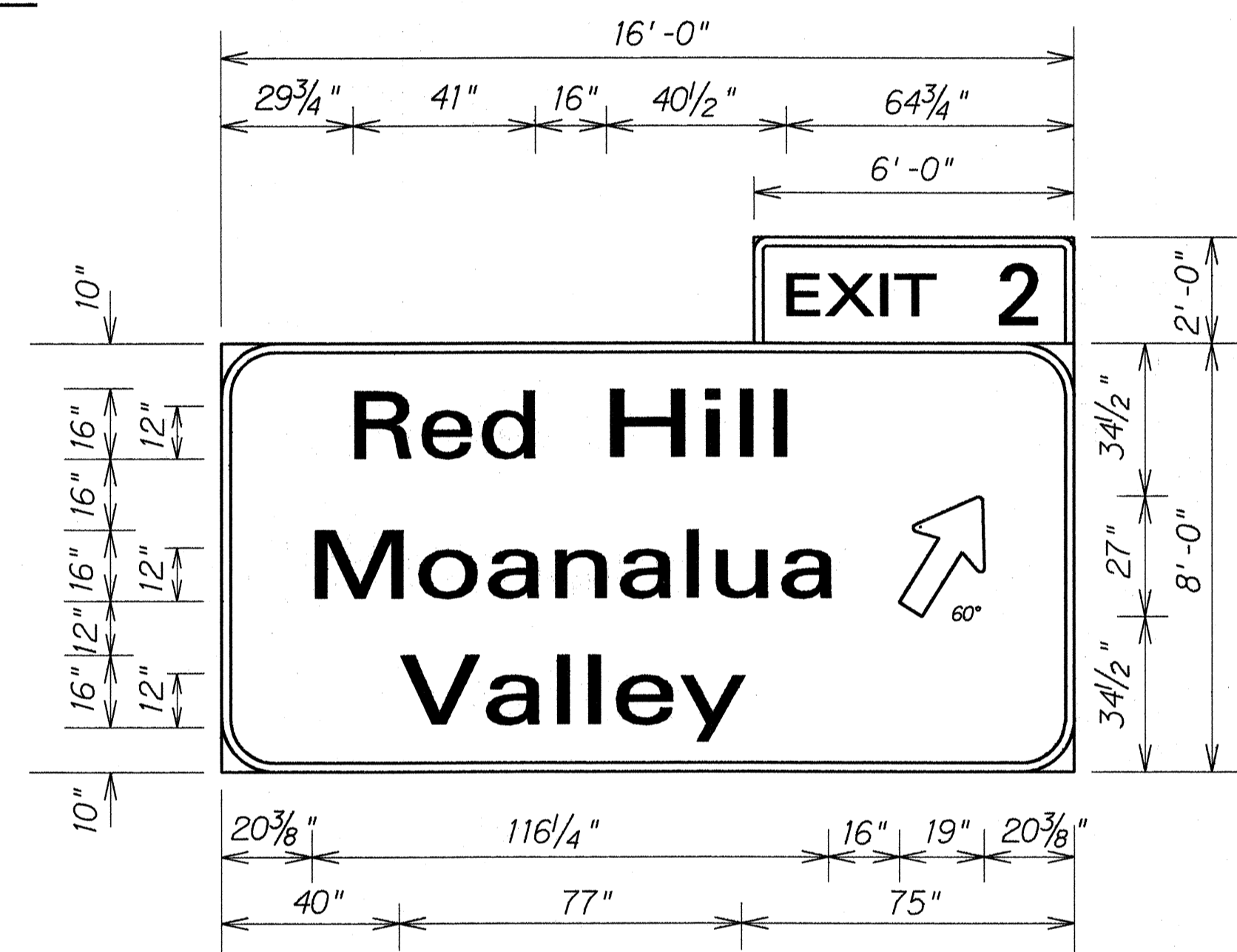
SIGN D-7
Scale: 3/8" = 1'-0"



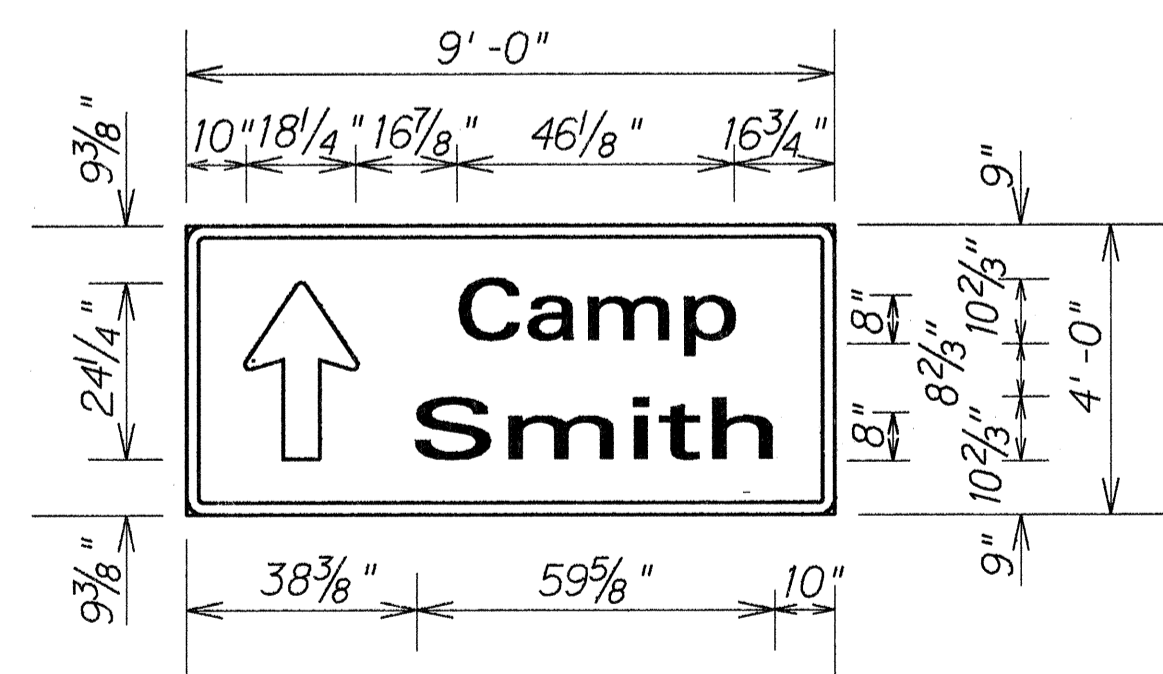
SIGN D-8
Scale: 3/8" = 1'-0"



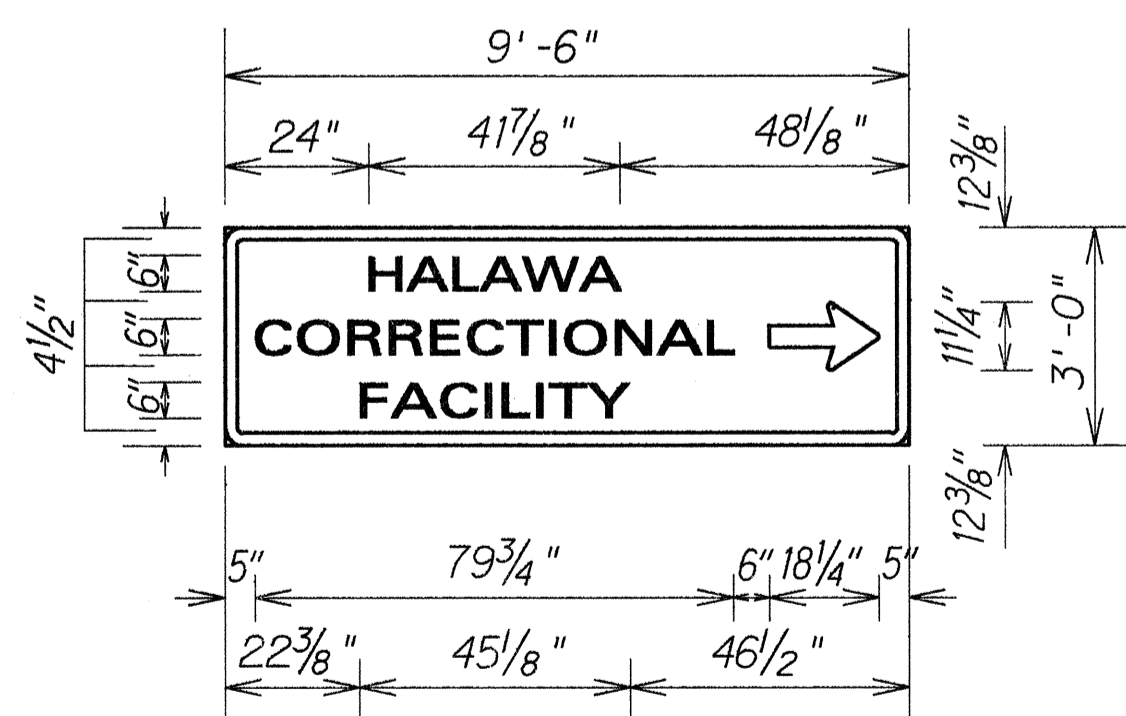
SIGN D-9
Scale: 3/8" = 1'-0"



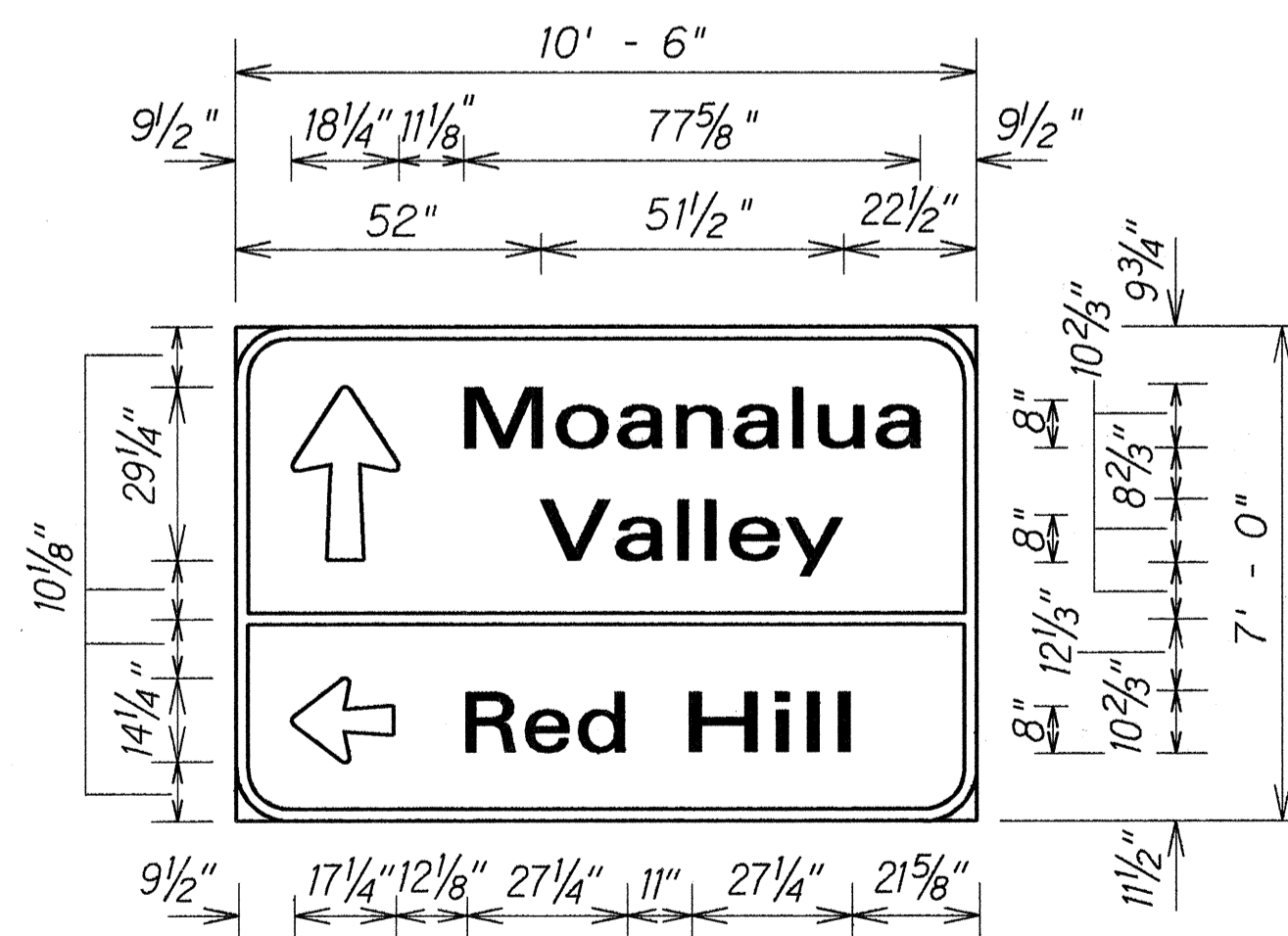
SIGN D-10
Scale: 3/8" = 1'-0"



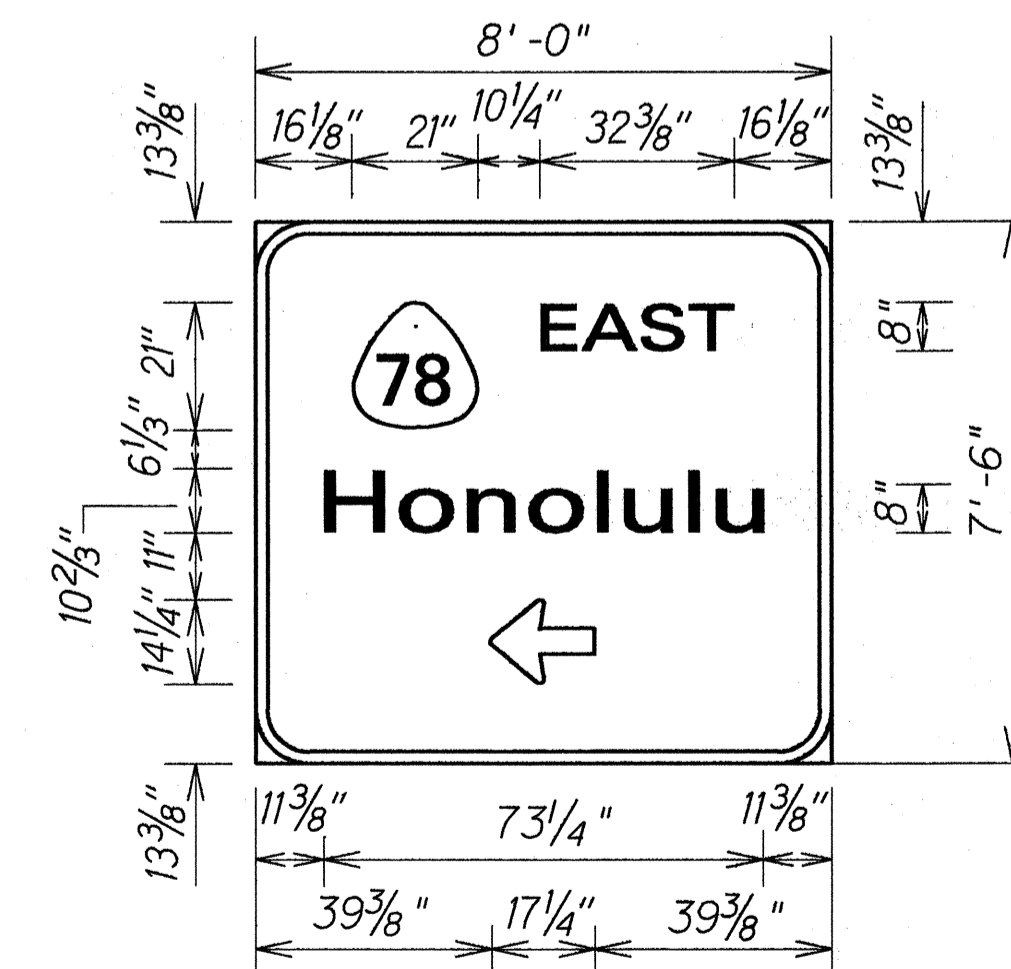
SIGN D-11
Scale: 3/8" = 1'-0"



SIGN D-12
Scale: 3/8" = 1'-0"



SIGN D-14
Scale: 3/8" = 1'-0"

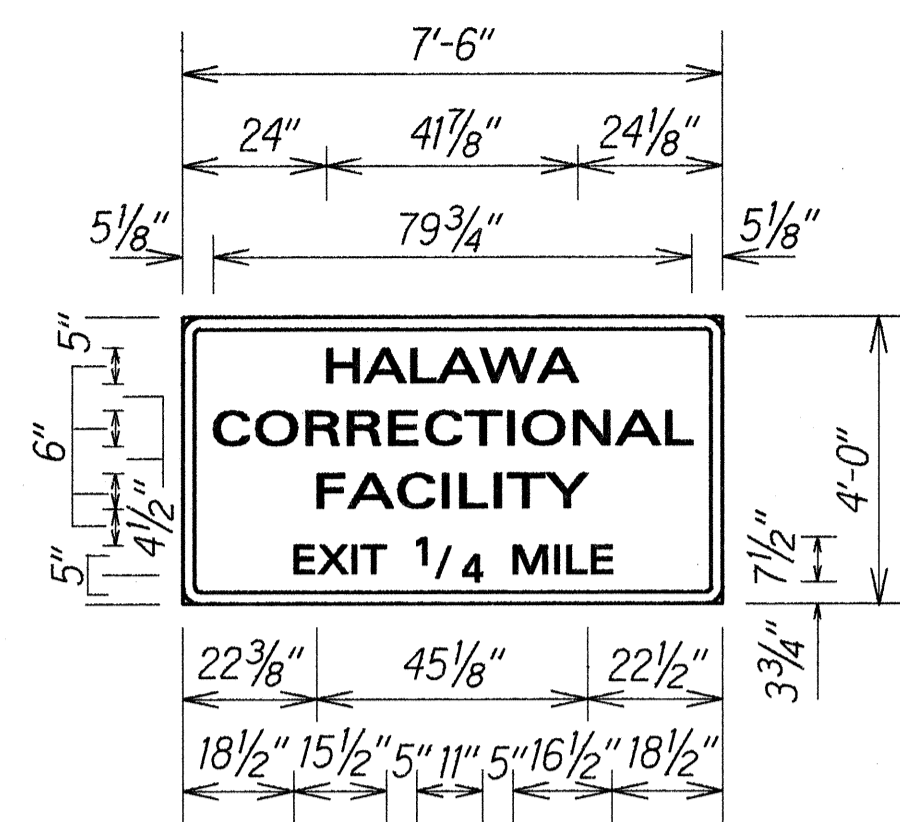


SIGN D-15
Scale: 3/8" = 1'-0"

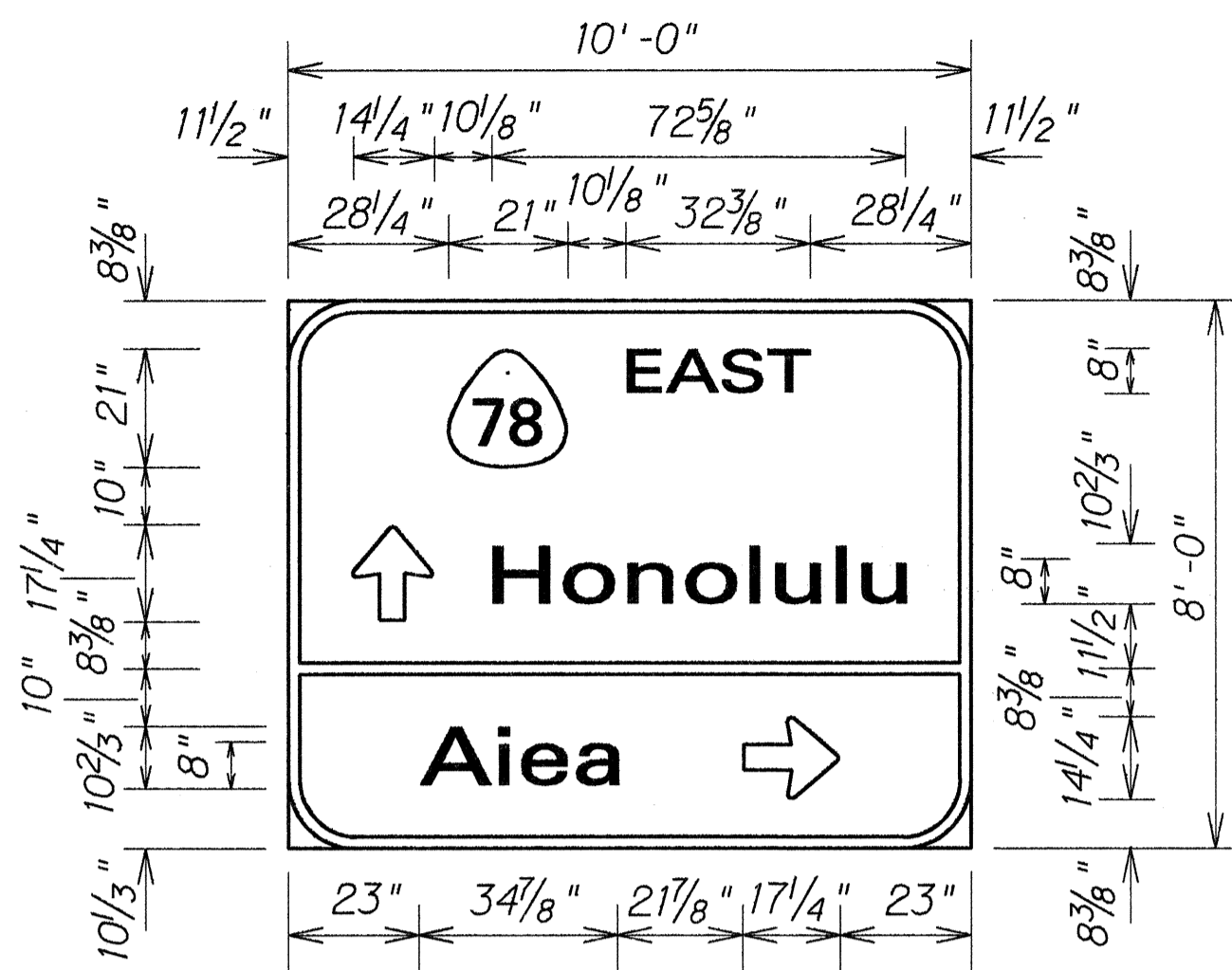
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**DESTINATION SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: 3/8" = 1'-0" Date: Sept. 1991
SHEET No. T37 OF 44 SHEETS

DATE	_____
DESIGNED BY	_____
PLANNED BY	_____
TRACED BY	_____
QUANTIFIED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
_____	_____
_____	_____

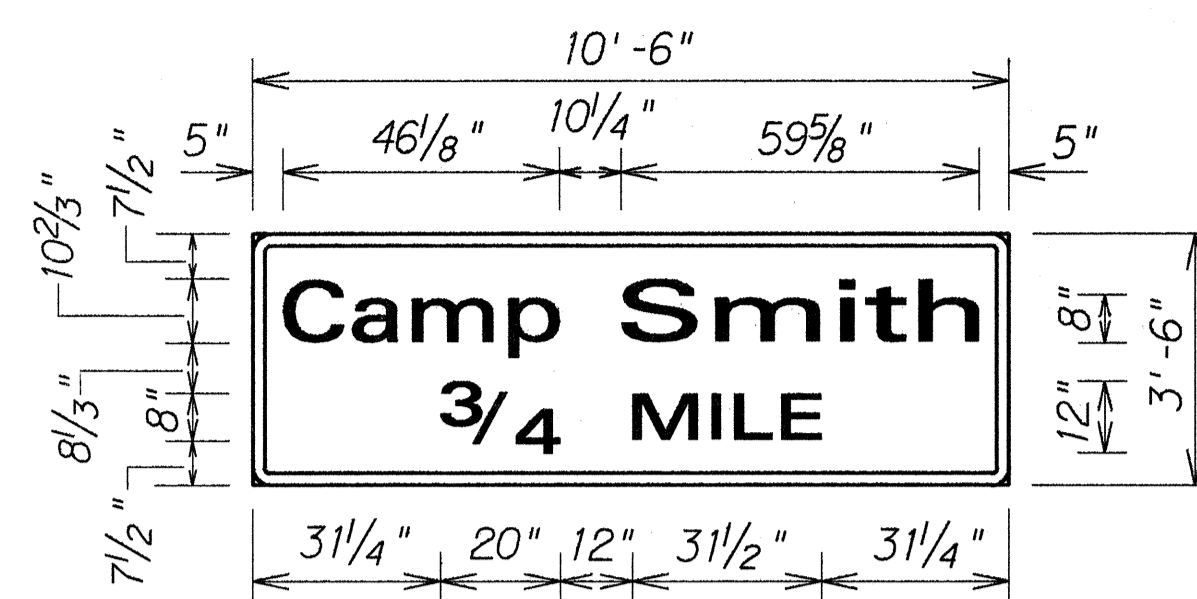
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	64	70



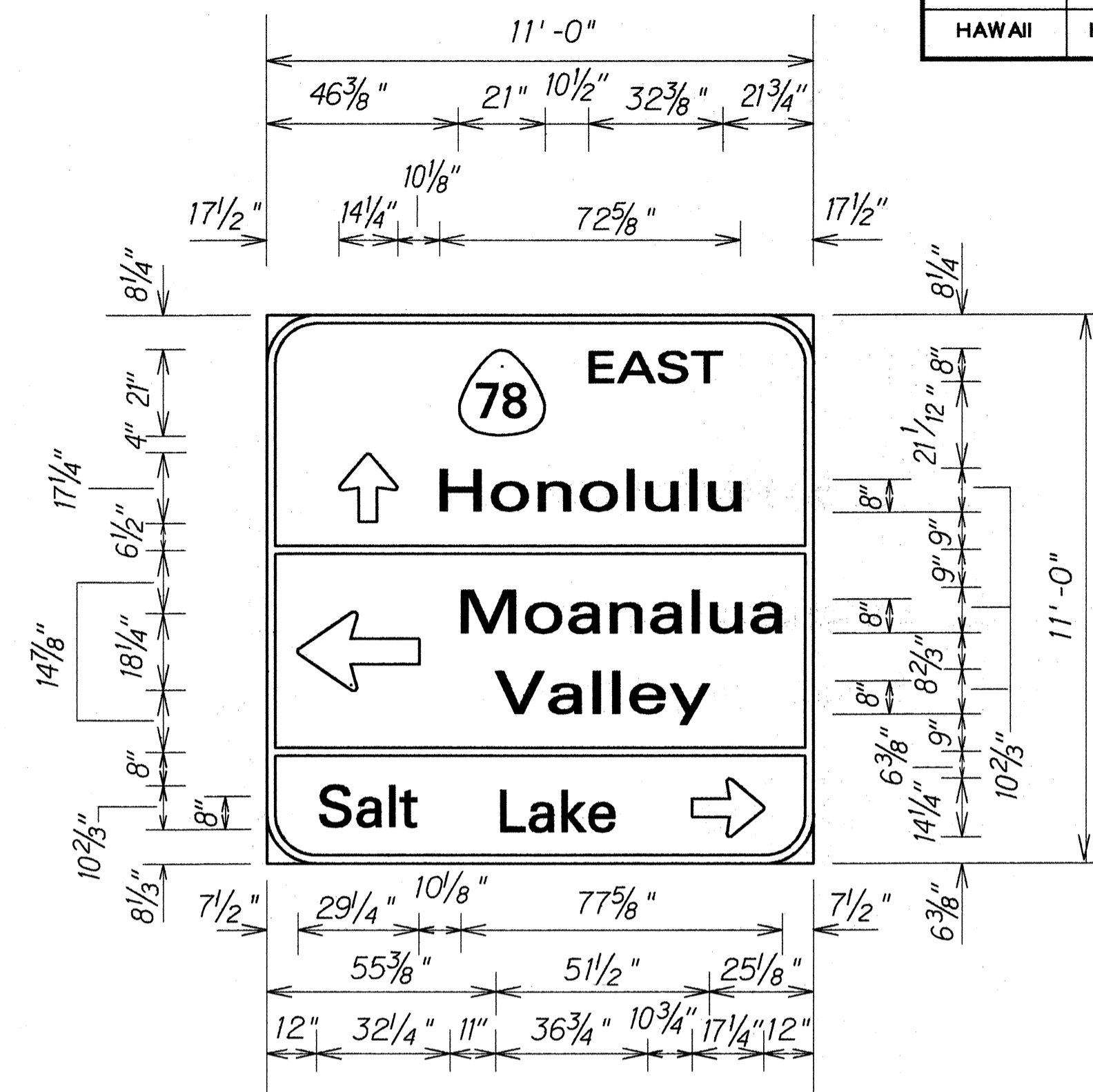
SIGN D-16
Scale: $\frac{3}{8}$ " = 1' - 0"



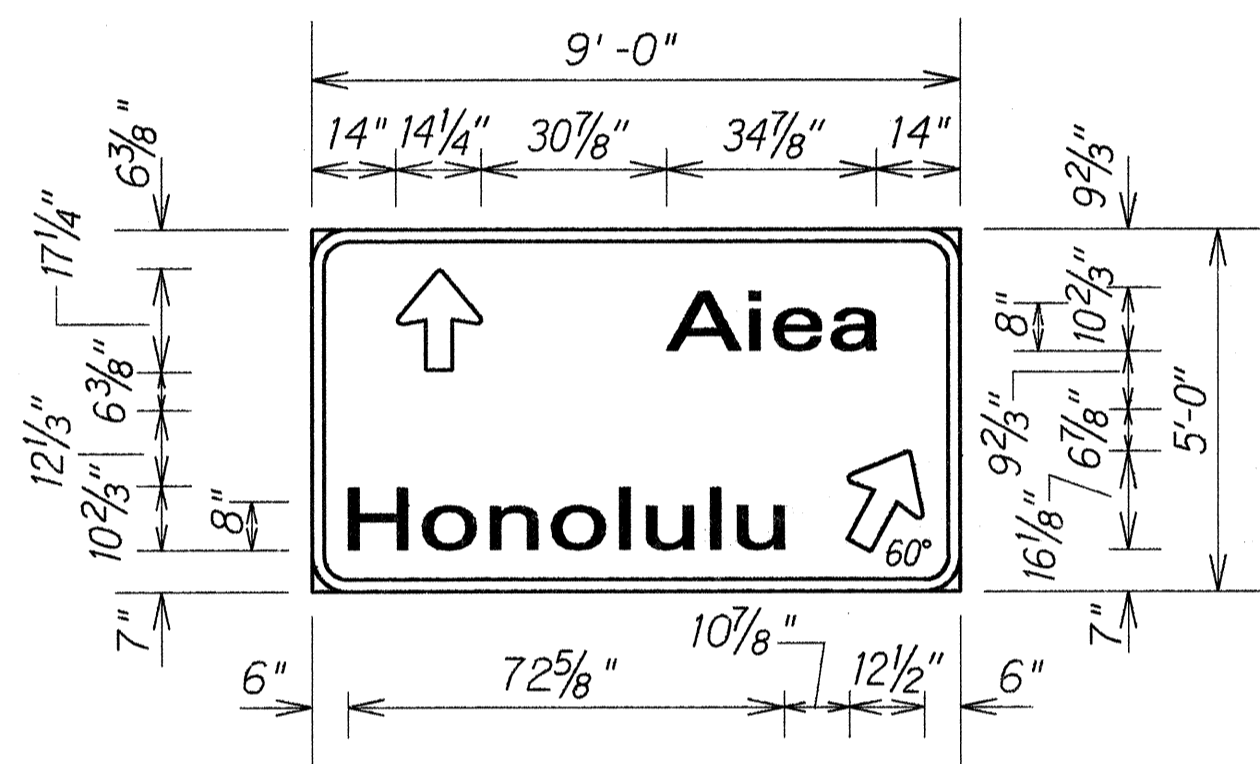
SIGN D-17
Scale: $\frac{3}{8}$ " = 1' - 0"



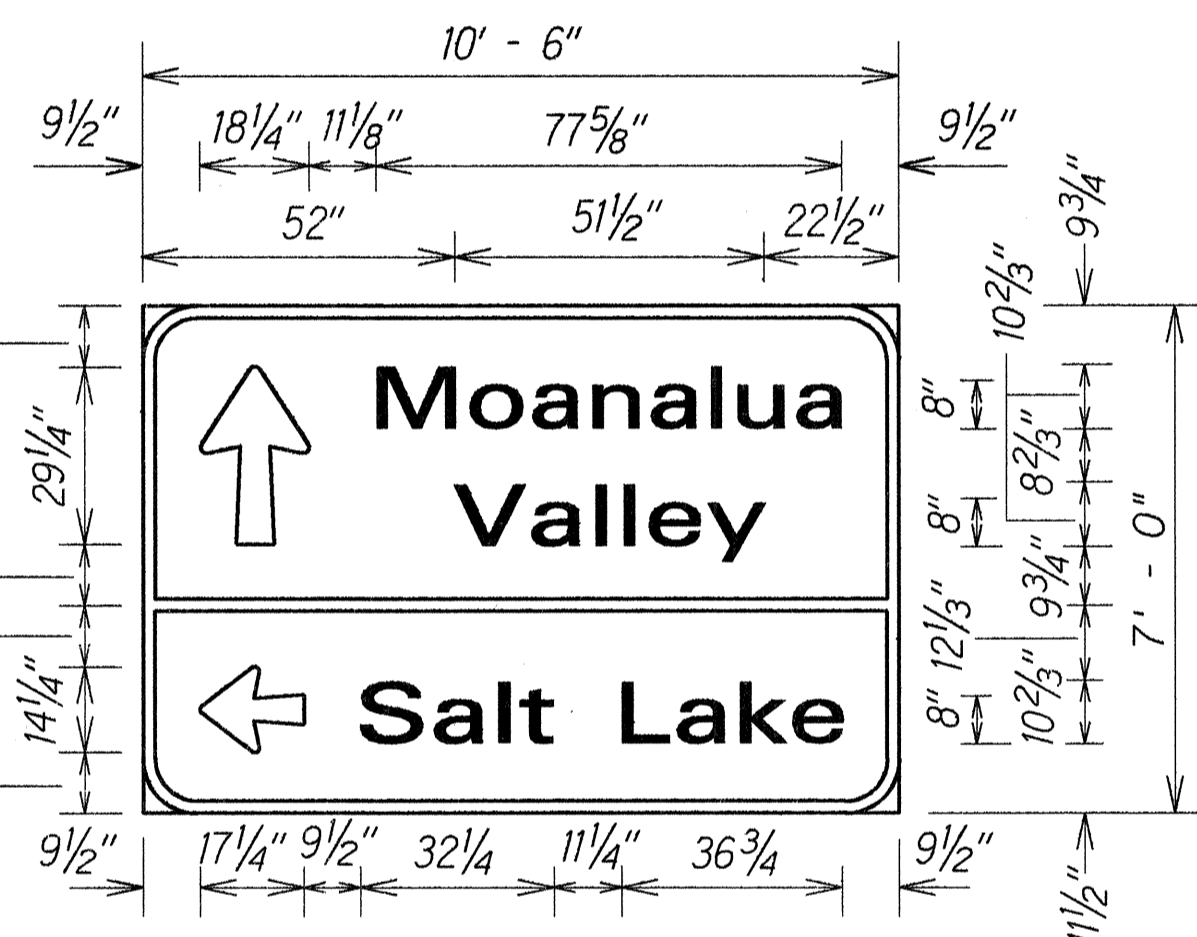
SIGN D-18
Scale: $\frac{3}{8}$ " = 1' - 0"



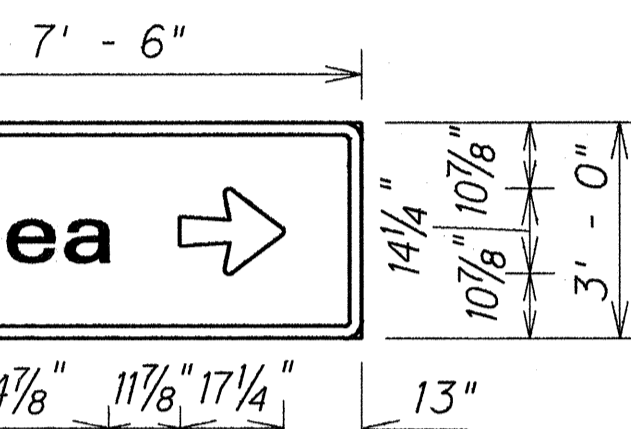
SIGN D-19
Scale: $\frac{3}{8}$ " = 1' - 0"



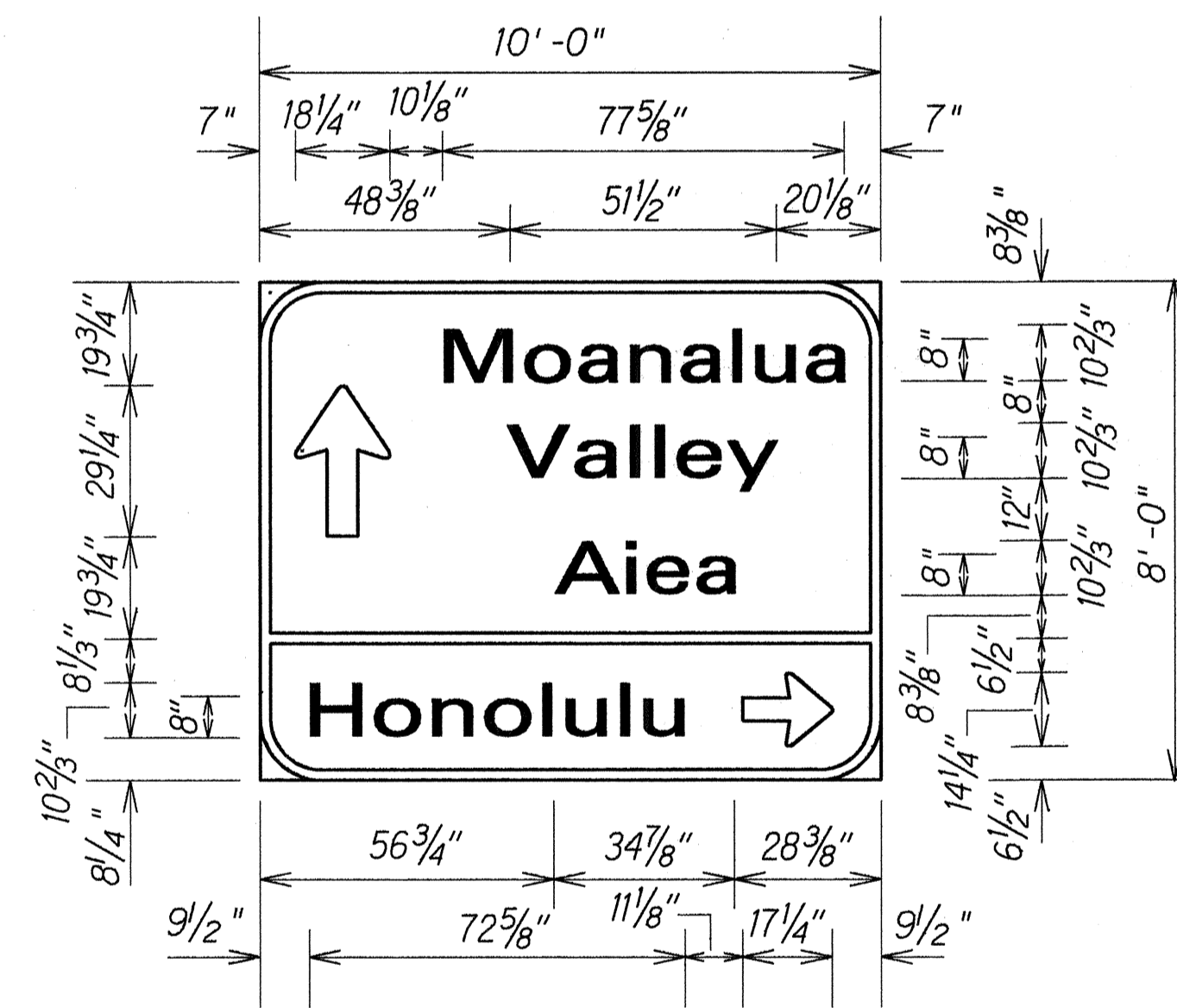
SIGN D-21
Scale: $\frac{3}{8}$ " = 1' - 0"



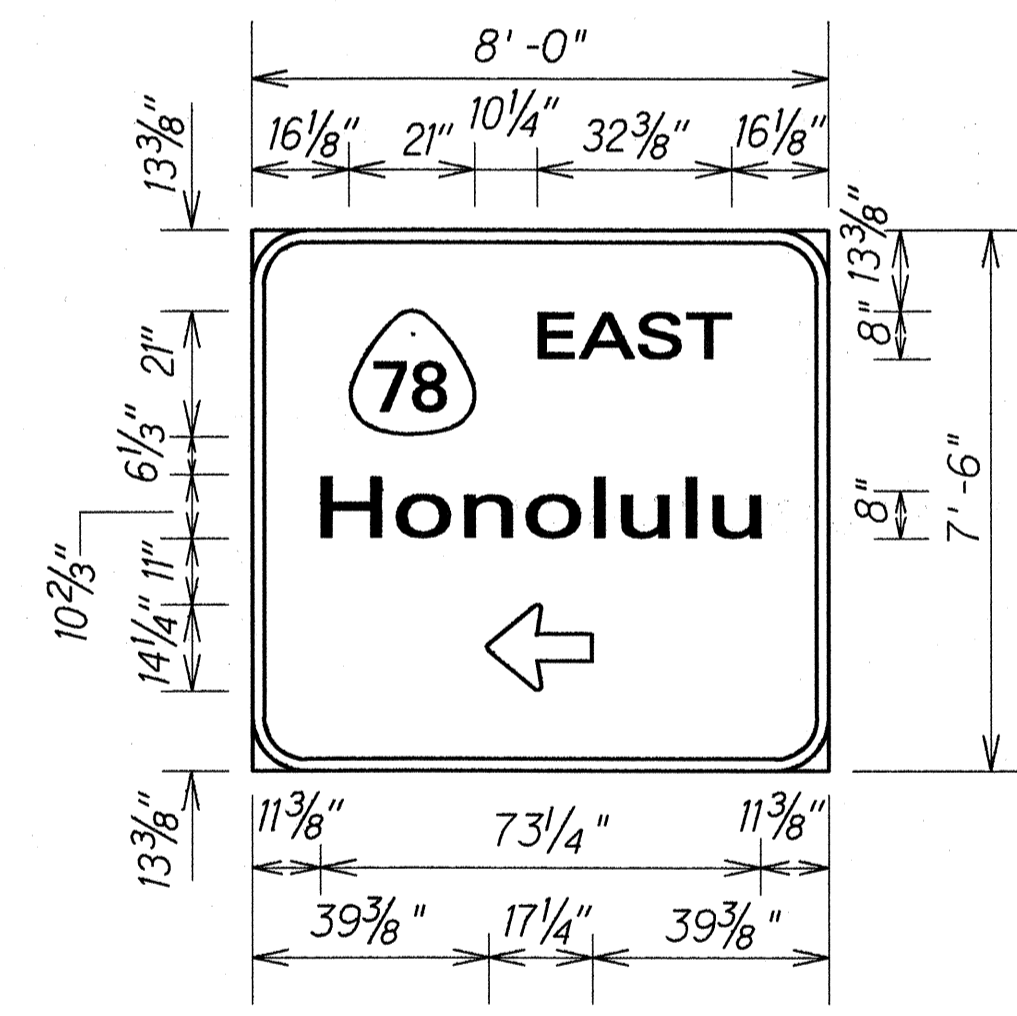
SIGN D-22
Scale: $\frac{3}{8}$ " = 1' - 0"



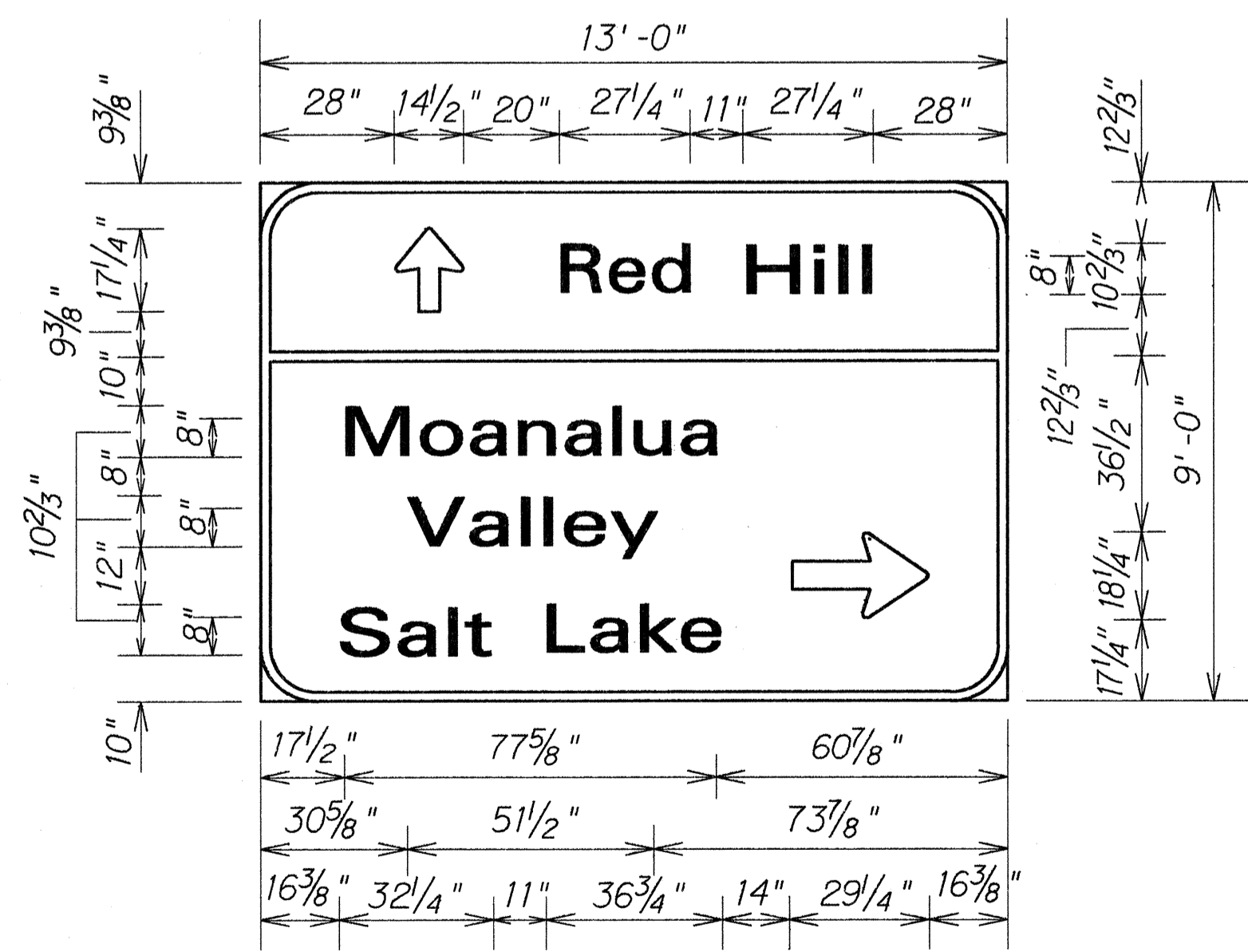
SIGN D-20
Scale: $\frac{3}{8}$ " = 1' - 0"



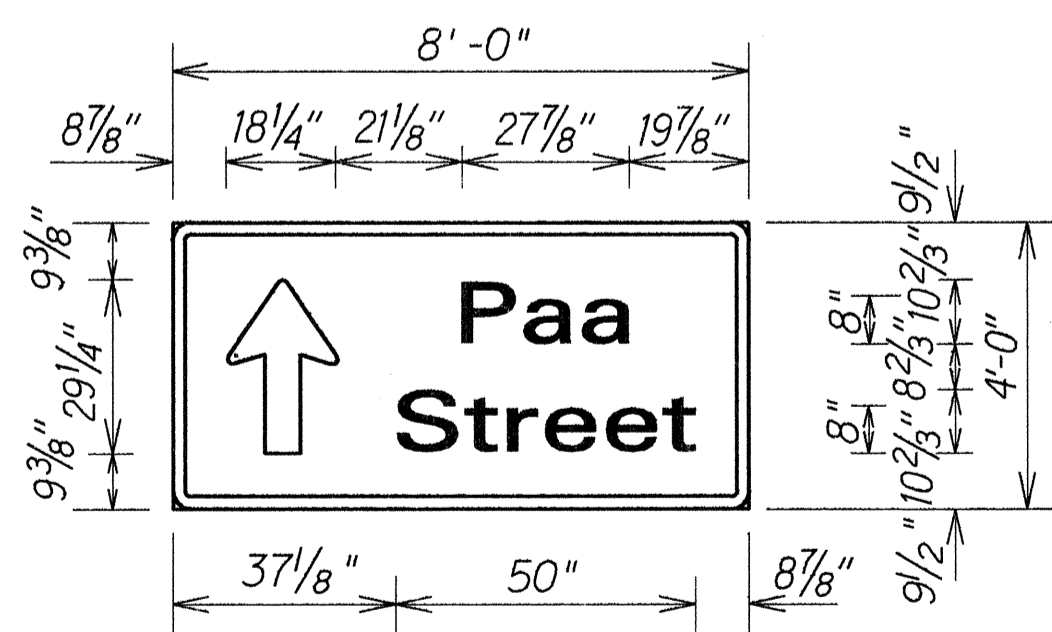
SIGN D-23
Scale: $\frac{3}{8}$ " = 1' - 0"



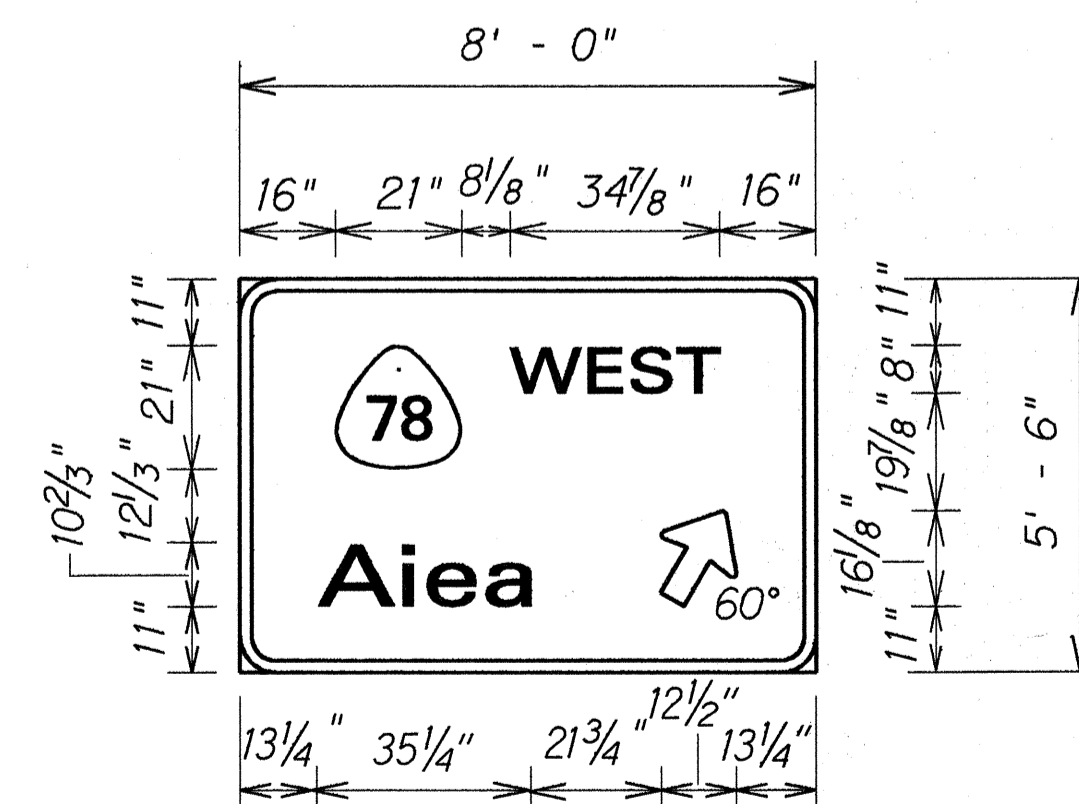
SIGN D-24
Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN D-25
Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN D-27
Scale: $\frac{3}{8}$ " = 1' - 0"

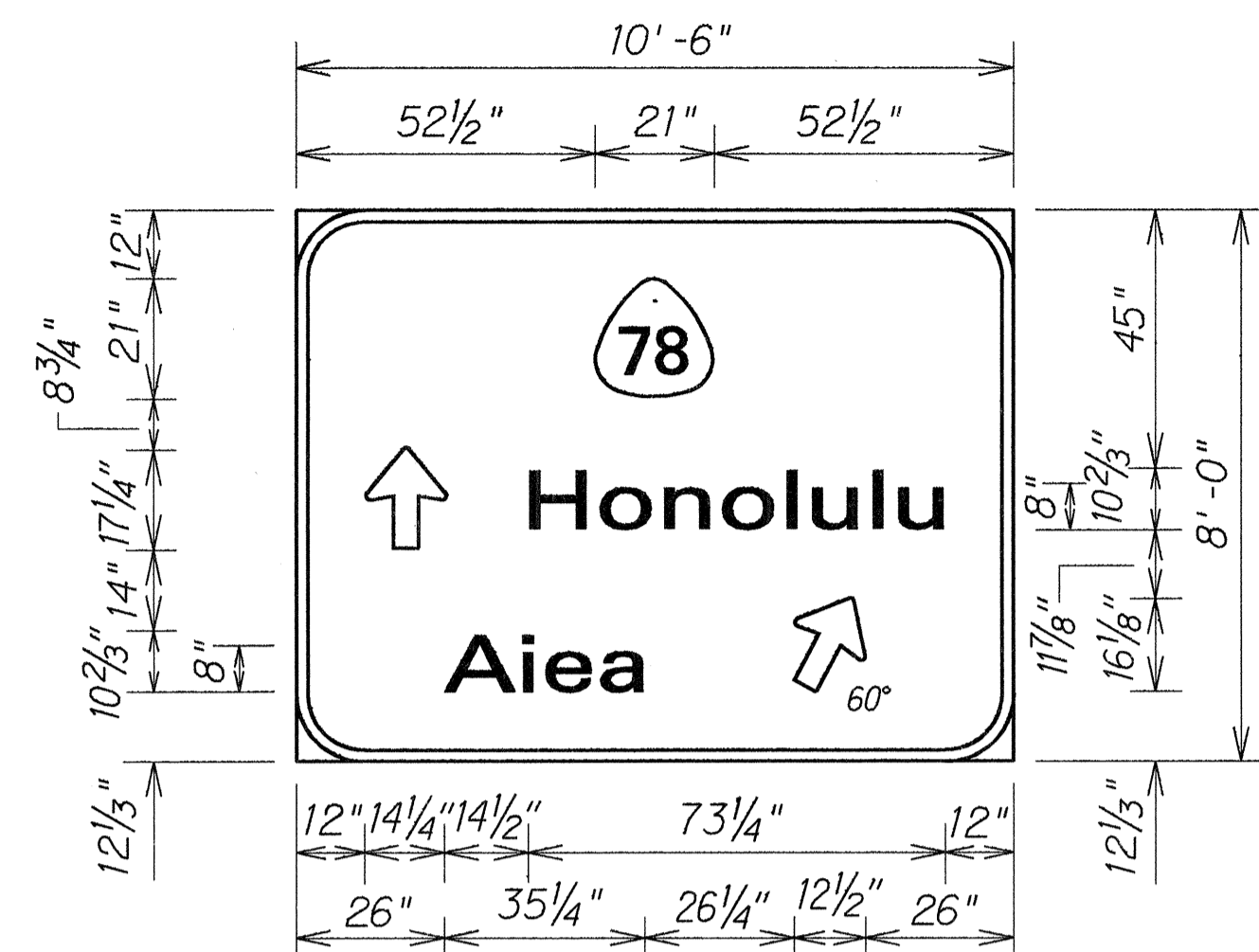


SIGN D-29
Scale: $\frac{3}{8}$ " = 1' - 0"

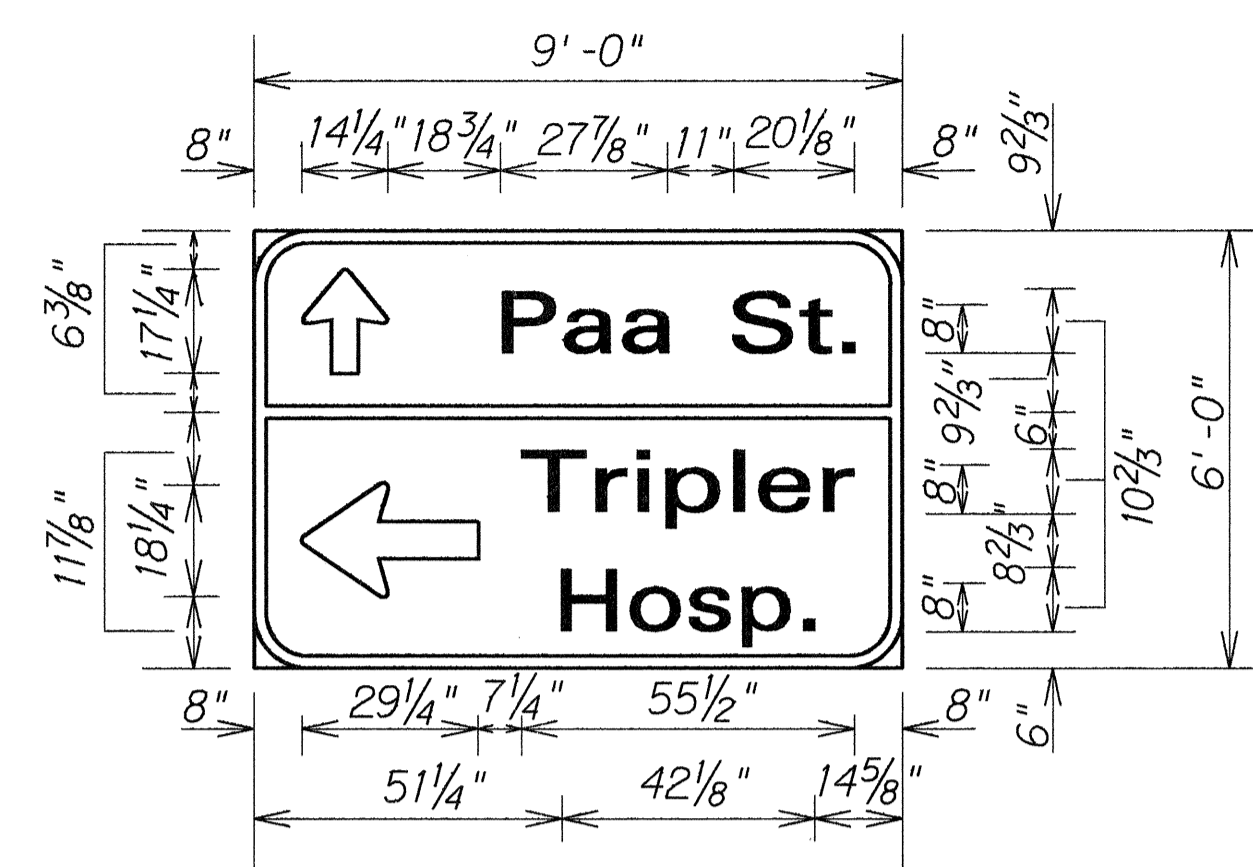
SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**DESTINATION SIGN
PANEL LAYOUTS**
MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M
Scale: $\frac{3}{8}$ " = 1' - 0" Date: Sept. 1991
SHEET No. 738 OF 44 SHEETS

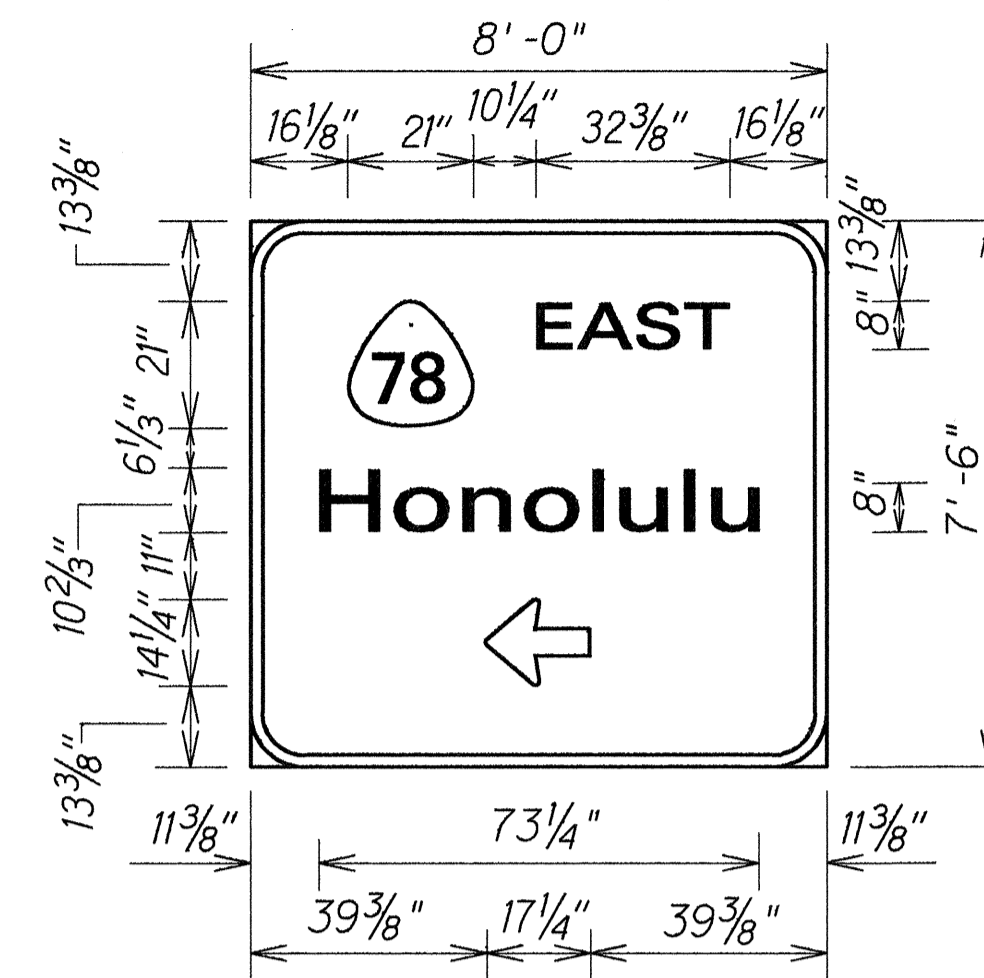
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	65	70



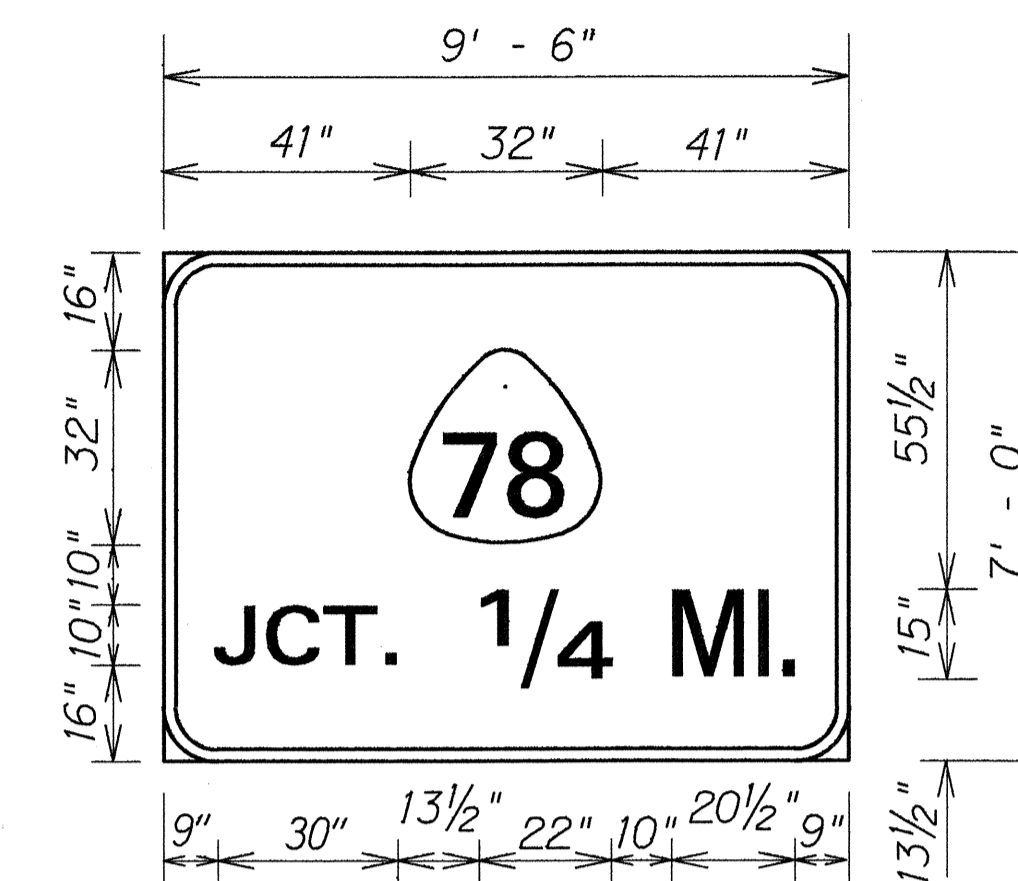
SIGN D-30
Scale: $\frac{3}{8}$ " = 1' - 0"



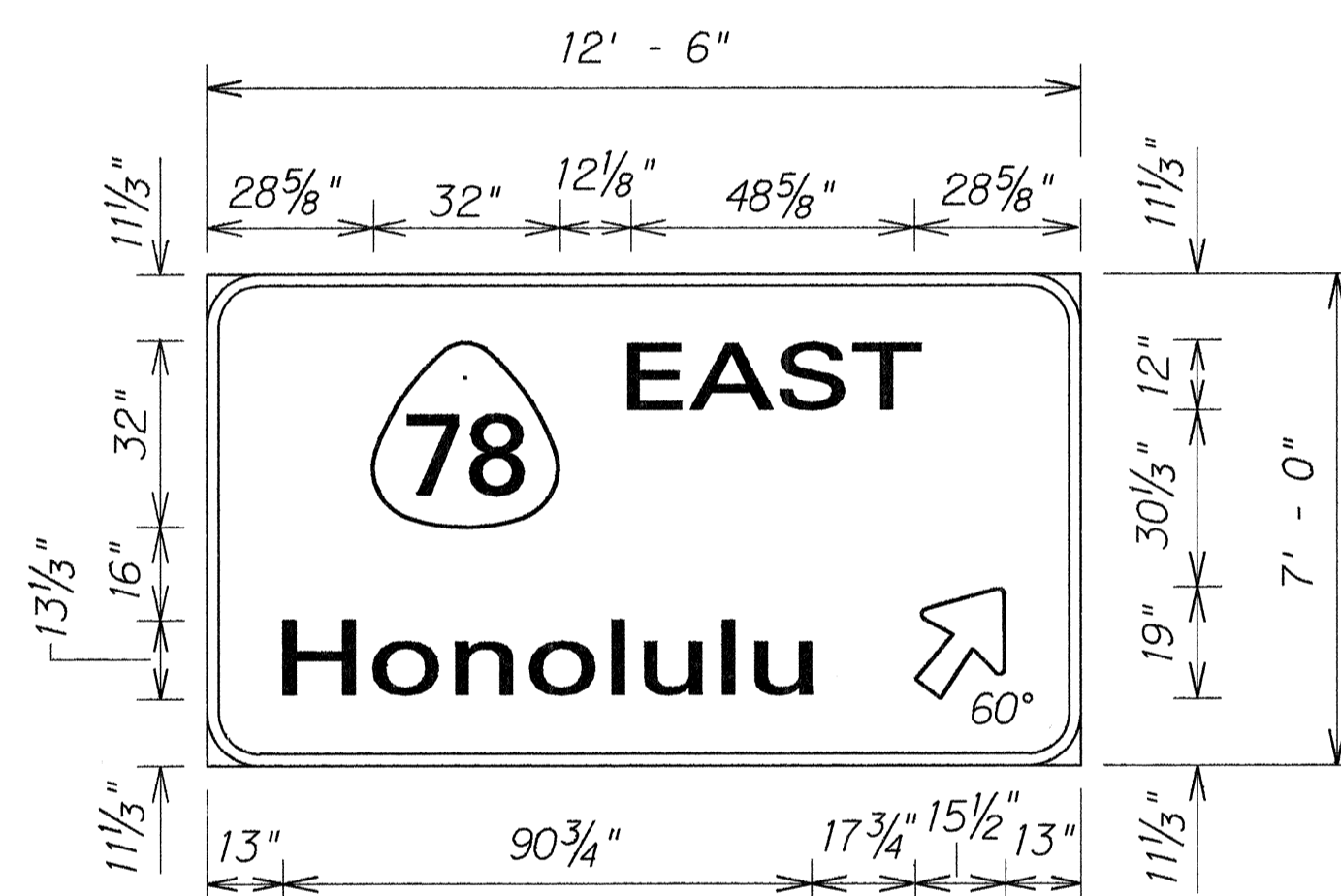
SIGN D-31
Scale: $\frac{3}{8}$ " = 1' - 0"



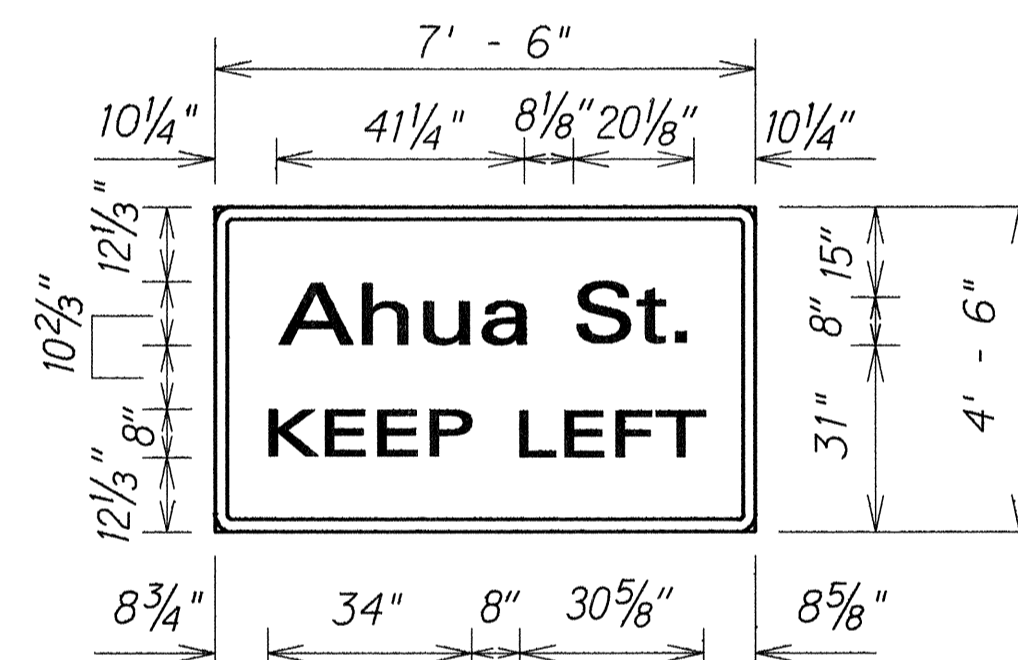
SIGN D-32
Scale: $\frac{3}{8}$ " = 1' - 0"



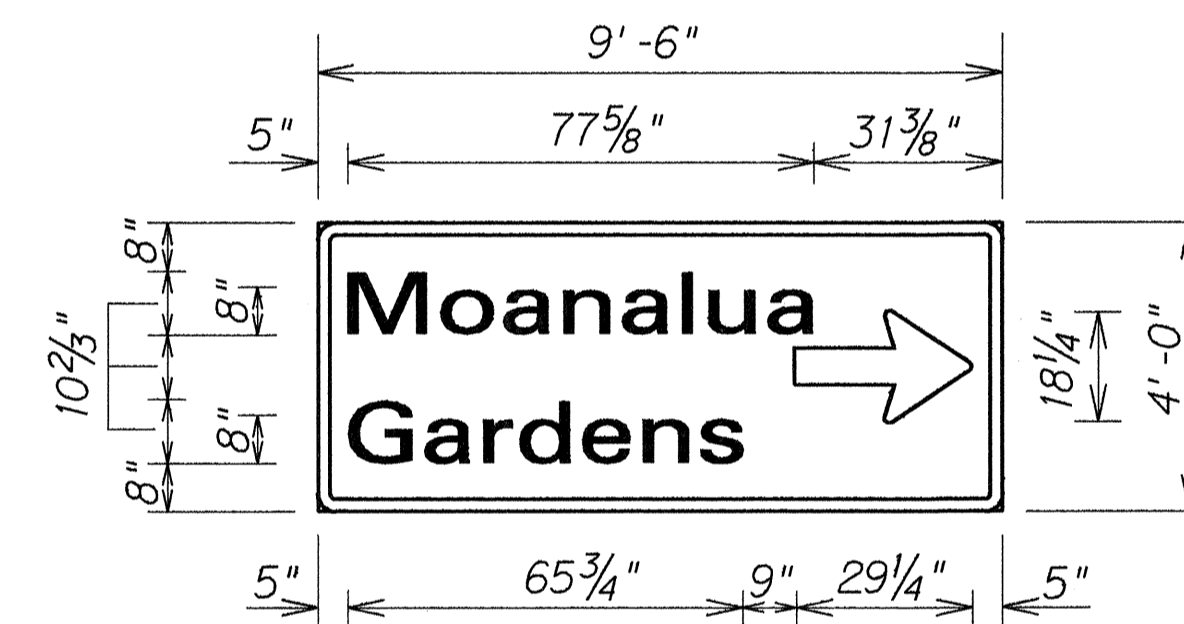
SIGN D-33
Scale: $\frac{3}{8}$ " = 1' - 0"



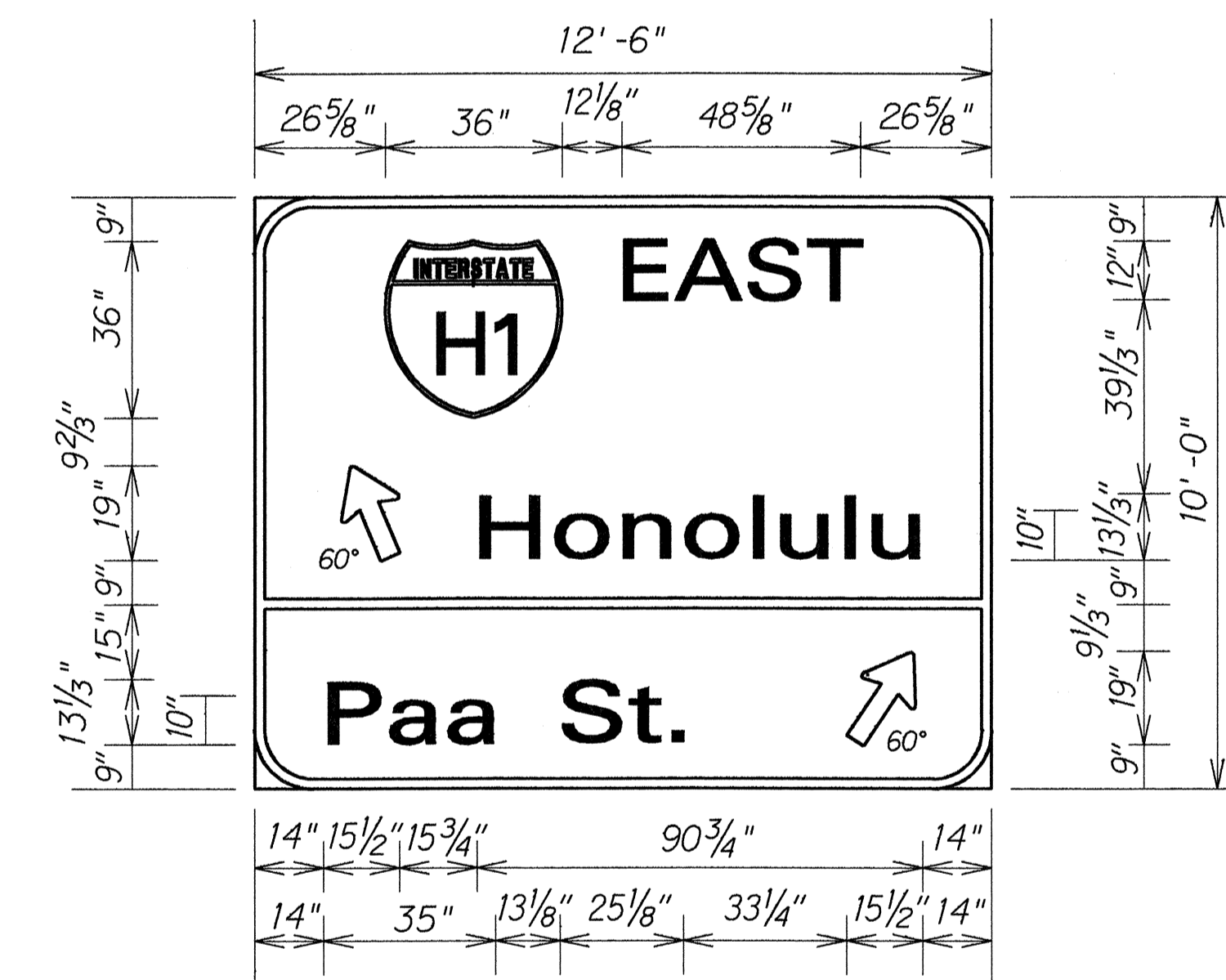
SIGN D-34
Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN D-35
Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN D-36
Scale: $\frac{3}{8}$ " = 1' - 0"



SIGN D-37
Scale: $\frac{3}{8}$ " = 1' - 0"

SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	

1/29/92	Revised Sign D-37 Interstate Shield Size.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**DESTINATION SIGN
PANEL LAYOUTS**

MOANALUA FWY. RESURFACING
Aiea I.C. to Moanalua Str. Br. (O.B. Lanes)
Project No. 78A-01-91M

Scale: $\frac{3}{8}$ " = 1' - 0" Date: Sept. 1991

SHEET No. 739 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	66	70

EXPRESSWAY SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	SIZE	NEW PANEL AREA (SQ. FT.)	OVERLAY AREA (SQ. FT.)	SIGN LUMINAIRE
E-1(L)	Kam. Hwy. Sta. 292+64	99 WEST Pearl City ↓ ↓	17'-0"x9'-6"		161.50	
E-1(C)	Kam. Hwy. Sta. 292+64	Aiea ↓ 78 EAST Honolulu ↓	22'-0"x9'-6"		209.00	
E-1(R)	Kam. Hwy. Sta. 292+64	Stadium ↓ ↓	17'-0"x6'-0"		102.00	
E-2(L)	Aiea Access Rd. Sta. 6+15	99 EAST Pearl Harbor ↓	12'-6"x8'-0"		100.00	2
E-2(R)	Aiea Access Rd. Sta. 6+15	78 EAST Honolulu ↗	11'-0"x8'-0"	88.00		2
E-3	Sta. 128+10 I.B. Rt.	H1 EAST Pearl Harbor Airport 1/4 MILE	16'-6"x11'-6"		189.75	2
E-4(L)	Sta. 134+05 O.B. Lt.	99 WEST Pearl City	10'-0"x6'-0"		60.00	2
E-4(R)	Sta. 134+05 O.B. Lt.	Stadium Aiea ↓	8'-0"x7'-0"	56.00		1
E-5(L)	Sta. 136+80 I.B.	78 EAST Honolulu ↓	12'-0"x9'-6"		114.00	
E-5(C)	Sta. 136+80 I.B.	Halawa Stadium 1/2 MILE	14'-6"x8'-0"		116.00	
E-5(R)	Sta. 136+80 I.B.	H1 EAST Pearl Harbor Airport ↗	20'-0"x9'-6"		190.00	
E-6(L)	Sta. 136+80 O.B.	99 WEST Pearlridge Pearl City ↓ ↓	17'-0"x9'-6"		161.50	
E-6(R)	Sta. 136+80 O.B.	Stadium Aiea EXIT ↓ ONLY	13'-0"x9'-6"		123.50	
E-7	Sta. 145+00 O.B.	Stadium Aiea RIGHT LANE	12'-6"x7'-6"	93.75		
E-8	Sta. 150+90 I.B.	Halawa Stadium 1/4 MILE	14'-6"x7'-6"		108.75	
E-9(L)	Sta. 158+90 I.B.	78 EAST Honolulu ↓ ↓	17'-0"x10'-0"		170.00	
E-9(R)	Sta. 158+90 I.B.	Halawa Hts. Halawa Valley Stadium EXIT ↓ ONLY	16'-0"x10'-0"	160.00		
E-10(L)	Sta. 166+04 O.B.	78 WEST Aiea Pearlridge ↓ ↓	17'-0"x12'-0"		204.00	
E-10(R)	Sta. 166+04 O.B.	H1 WEST Pearl City ↓ ↓	17'-0"x10'-0"		170.00	
E-11(L)	Sta. 174+05 O.B.	78 WEST Aiea Pearlridge ↓	12'-0"x11'-0"	132.00		
E-11(R)	Sta. 174+05 O.B.	H1 WEST Pearl City ↓ ↓	17'-0"x11'-0"		187.00	
E-12(L)	Ulune Ext. Sta. 34+35	Salt Lake Blvd. Stadium ↓ ↓	19'-0"x8'-0"		152.00	2
E-12(C)	Ulune Ext. Sta. 34+35	Halawa Hts. Camp Smith ↓	14'-6"x8'-0"		116.00	2
E-12(R)	Ulune Ext. Sta. 34+35	Halawa Valley ⇒	10'-0"x8'-0"		80.00	1
E-13(L)	Sta. 188+10 I.B.	78 EAST Honolulu ↓ ↓	17'-0"x10'-0"		170.00	
E-13(R)	Sta. 188+10 I.B.	Red Hill 1/2 MILE	12'-6"x8'-0"		100.00	
E-14	Ulune Ext. Sta. 11+85	Halawa Stadium Camp Smith ↓	18'-0"x8'-0"		144.00	
E-15	Sta. 201+60 I.B.	Red Hill 1/4 MILE	12'-6"x5'-6"		68.75	
E-16(L)	Sta. 208+06 O.B.	78 WEST Aiea Pearlridge ↓	12'-0"x11'-0"	132.00		
E-16(C)	Sta. 208+06 O.B.	H1 WEST Pearl City ↓ ↓	17'-0"x11'-0"		187.00	
E-16(R)	Sta. 208+06 O.B.	Halawa Stadium ↗ EXIT ONLY	18'-0"x11'-0"		198.00	
E-17(L)	Sta. 226+00 O.B.	78 WEST Aiea Pearlridge ↓	16'-6"x9'-0"	16.50	132.00	
E-17(C)	Sta. 226+00 O.B.	H1 WEST Pearl City ↓ ↓	15'-6"x8'-0"		124.00	
E-17(R)	Sta. 226+00 O.B.	Halawa Stadium ↗ EXIT ONLY	10'-6"x8'-0"		84.00	
E-18(L)	Sta. 276+00 I.B.	78 EAST Honolulu ↓ ↓	17'-0"x10'-0"		170.00	
E-18(C)	Sta. 276+00 I.B.	Ft. Shafter King St. ↓	13'-6"x10'-0"		135.00	
E-18(R)	Sta. 276+00 I.B.	Airport 7310 Tripler Hosp. EXIT ↓ ONLY	15'-6"x10'-0"		155.00	
E-19	Sta. 281+70 O.B.	Moanalua Valley Salt Lake Red Hill 1/4 MILE	19'-6"x9'-0"		175.50	
E-20(L)	Sta. 288+00 I.B.	78 EAST Honolulu ↓ ↓	17'-0"x10'-6"		178.50	
E-20(C)	Sta. 288+00 I.B.	Ft. Shafter King St. ↓	13'-6"x10'-0"		135.00	
E-20(R)	Sta. 288+00 I.B.	7310 Airport Tripler Hosp. ↗ EXIT ONLY	15'-6"x11'-0"	170.50		
E-21(L)	Ramp G Sta. 15+25	7310 NORTH ↗ Tripler Hospital	15'-6"x10'-6"		162.75	
E-21(R)	Ramp G Sta. 15+25	7310 SOUTH Airport ↗	17'-0"x10'-6"		178.50	
E-22(L)	Puuloa Rd. Sta. 43+00	7310 NORTH Tripler Hosp. ↓	13'-0"x10'-0"		130.00	2
E-22(C)	Puuloa Rd. Sta. 43+00	78 EAST Honolulu ↓	14'-0"x10'-0"		140.00	2
E-22(R)	Puuloa Rd. Sta. 43+00	78 WEST Aiea ↓ EXIT ONLY ↓	17'-0"x10'-0"		170.00	2
E-23(L)	Ramp C Sta. 13+25	7310 SOUTH ↗ Airport	12'-0"x10'-6"		126.00	2

SURVEY PLOTTED BY _____ DATE _____
 PLAN _____
 DESIGNED BY _____
 NOTE BOOK _____
 QUANTITIES BY _____
 CHECKED BY _____
 N.

NOTE:
Expressway Sign Summary
Continued on Sht. No. T41.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
EXPRESSWAY SIGN
SUMMARY
 MOANALUA FWY. RESURFACING
 (Outbound Lanes)
 PROJECT NO. 78A-01-91M
 Date: Sept. 1991

SHEET No. T40 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	67	70

EXPRESSWAY SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	SIZE	NEW PANEL AREA (SQ. FT.)	OVERLAY AREA (SQ. FT.)	SIGN LUMINAIRE
E-23(R)	Ramp C Sta. 13+25	7310 NORTH Tripler Hospital ↗	15'-6" x 10'-6"		162.75	2
E-24(L)	Sta. 310+00 I.B.	H1 EAST Honolulu ↓ ↓	17'-0" x 10'-0"		170.00	
E-24(R)	Sta. 310+00 I.B.	Ft. Shafter King St. ↗	15'-0" x 10'-0"		150.00	
E-25(L)	Kaia St. Sta. 10+75	78 WEST ↗ Aiea	10'-0" x 12'-6"		125.00	
E-25(R)	Kaia St. Sta. 10+75	7310 Puuloa Rd. Tripler Hosp. ↓	16'-0" x 12'-6"		200.00	
E-26	Sta. 323+50 O.B.	7310 Puuloa Rd. Tripler Hosp. EXIT ↓ ONLY	16'-0" x 12'-6"		200.00	
E-27(L)	Sta. 351+27 O.B.	78 WEST Aiea ↓	11'-0" x 11'-6"		126.50	
E-27(C)	Sta. 351+27 O.B.	7310 Puuloa Rd. Tripler Hosp. 1/2 MILE	16'-0" x 11'-6"		184.00	
E-27(R)	Sta. 351+27 O.B.	Ft. Shafter Ahua St. ↗ EXIT ONLY	15'-0" x 11'-6"		172.50	
TOTAL				848.75	7269.75	24

NOTE:
Expressway Sign Summary
Continued from Sht. No. T40.

CONSTRUCTION SIGN SUMMARY

SIGN NO.	MESSAGE	W/POST	W/O POST
CG20-2	END CONSTRUCTION	8	1
CW20-1d	ROAD CONSTRUCTION AHEAD	14	4
CG20-1(4)	ROAD CONSTRUCTION NEXT 4 MILES	1	
TOTAL		23	5

EXIT NUMBER SIGN SUMMARY

INSTALLED ABOVE SIGN NO.	DESCRIPTION	AREA (SQ. FT.)	
		NEW PANEL	OVERLAY
E-3	EXIT 1A		16.00
E-5(C)	EXIT 1B		16.00
E-5(R)	EXIT 1A		16.00
E-8	EXIT 1B		16.00
E-9(R)	EXIT 1B	16.00	
E-13(R)	EXIT 2	12.00	
E-15	EXIT 2	12.00	
D-10	EXIT 2	12.00	
E-18(R)	EXIT 3	12.00	
E-19	EXIT 2	12.00	
E-20	EXIT 3	12.00	
E-26	EXIT 3	12.00	
E-27	EXIT 3	12.00	
TOTAL		112.00	64.00

MILEPOST MARKER SUMMARY

M.P. NO.	LOCATION	QUANTITY	
		W/POST	W/O POST
1	Sta. 162+65± Lt. & Rt.	2	
2	Sta. 212+40± Lt.	1	
2	Sta. 216+00± Rt.		1
TOTAL		3	1

SURVEY PLOTTED BY _____ DATE _____
 DESIGNED BY _____
 NOTE BOOK _____
 CHECKED BY _____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**EXPRESSWAY SIGN &
 TRAFFIC SUMMARIES**
 MOANALUA FWY. RESURFACING
 Aiea I.C. to Moanalua Stream Bridge
 (Outbound Lanes)
 PROJECT NO. 78A-01-91M
 Date: Sept. 1991
 SHEET No. T41 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	68	70

DESTINATION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	SIZE	OVERLAY AREA (SQ. FT.)	NEW PANEL AREA (SQ. FT.)	
					W/O POST	W/POST(S)
D-1	Aiea Access Rd. O.B. Sta. 8+00 Rt.	⤴ Aiea 78 EAST Honolulu ⤴	9'-0"X7'-0"		63.00	
D-2	Moanalua Rd. Sta. 10+60	78 99 EAST Honolulu ⤴	7'-0"X3'-6"	24.50		
D-3	Ⓜ Sta. 140+20 I.B.	EXIT 1A ⤴	7'-6"X6'-0"			45.00
D-4	Ⓜ Sta. 158+50 I.B.	Animal Quarantine Station ⤴	11'-6"X5'-0"			57.50
D-5	Ramp G Sta. 10+20	H1 WEST Pearl City ⤴ ⤵ Halawa Valley	9'-0"X7'-0"		63.00	
D-6	Ulune Ext. Sta. 41+00 Rt.	⤵ Stadium Honolulu	8'-6"X3'-0"			25.50
D-7	Ulune Ext. Sta. 39+85 Rt.	⤴ Ulune St. Halawa Hts. Camp Smith ⤴	10'-6"X6'-0"			63.00
D-8	Service Rd. Sta. 15+40	H1 WEST ⤴ Pearl City Honolulu Kaneohe ⤴	9'-0"X7'-0"	63.00		
D-9	Ulune Ext. Sta. 35+50	HALAWA INDUSTRIAL AREA ⤴ ANIMAL QUARANTINE STATION	8'-0"X6'-6"			52.00
D-10	Ⓜ Sta. 207+95 I.B.	Red Hill Moanalua Valley ⤴	16'-0"X8'-0"	128.00		
D-11	Ⓜ Sta. 209+00 O.B.	⤴ Camp Smith	9'-0"X4'-0"			36.00
D-12	Ⓜ Sta. 210+75 O.B.	HALAWA CORRECTIONAL FACILITY ⤴	9'-6"X3'-0"			28.50
D-13	Ⓜ Sta. 215+60 I.B.	EXIT 2 ⤴	6'-0"X6'-0"			36.00
D-14	Ramp RH-1 Sta. 13+00	⤴ Moanalua Valley ⤵ Red Hill	10'-6"X7'-0"	73.50		
D-15	S. Frontage Rd. Sta. 0+40	78 EAST Honolulu ⤵	8'-0"X7'-6"	60.00		
D-16	Ramp RH-0 Sta. 12+50	HALAWA CORRECTIONAL FACILITY EXIT 1/4 MILE	7'-6"X4'-0"			30.00
D-17	Ala Kapuna St.	78 EAST ⤴ Honolulu Aiea ⤴	10'-0"X8'-0"	80.00		
D-18	Ⓜ Sta. 246+20 O.B.	Camp Smith 3/4 MILE	10'-6"X3'-6"			36.75
D-19	S. Frontage Rd. 26+50	78 EAST ⤴ Honolulu ⤵ Moanalua Valley Salt Lake ⤴	11'-0"X11'-0"			121.00
D-20	Moanalua-Lakeside Access Rd. Sta. 4+40	Aiea ⤴	7'-6"X3'-0"	22.50		
D-21	Ala Aolani Sta. 7+50	⤴ Aiea Honolulu ⤴	9'-0"X5'-0"			45.00
D-22	Ala Aolani Sta. 3+80	⤴ Moanalua Valley ⤵ Salt Lake	10'-6"X7'-0"	73.50		
D-23	Ala Napunani St.	⤴ Moanalua Valley Aiea Honolulu ⤴	10'-0"X8'-0"			80.00
D-24	Ramp ML-1 Sta. 0+80	78 EAST Honolulu ⤵	8'-0"X7'-6"	60.00		
D-25	N. Frontage Rd. Sta. 32+40	⤴ Red Hill Moanalua Valley Salt Lake ⤴	13'-0"X9'-0"	117.00		
D-26	Ⓜ Sta. 261+40± O.B.	EXIT 2 ⤴	6'-0"X6'-0"			36.00
D-27	Ⓜ Sta. 287+50± I.B.	⤴ Paa Street	8'-0"X4'-0"			32.00
D-28	Ⓜ Sta. 291+50± I.B.	EXIT 3 ⤴	6'-0"X6'-0"			36.00
D-29	Puuloa Rd. Sta. 64+90	78 WEST Aiea ⤴	8'-0"X5'-6"	44.00		
D-30	Puuloa Rd. Sta. 68+65	78 ⤴ Honolulu Aiea ⤴	10'-6"X8'-0"	84.00		
D-31	Ramp H Sta. 19+60	⤴ Paa St. ⤵ Tripler Hosp.	9'-0"X6'-0"			54.00
D-32	Puuloa Rd. Sta. 54+40	78 EAST Honolulu ⤵	8'-0"X7'-6"	60.00		
D-33	Puuloa Rd. Sta. 32+00	78 JCT. 1/4 MI.	9'-6"X7'-0"	66.50		
D-34	Ramp F Sta. 6+25	78 EAST Honolulu ⤴	12'-6"X7'-0"	87.50		
D-35	Ramp C Sta. 16+50	Ahua St. KEEP LEFT	7'-6"X4'-6"	33.75		
D-36	Ramp C Sta. 18+30	Moanalua Gardens ⤴	9'-6"X4'-0"			38.00
D-37	Ramp J Sta. 21+00	H1 EAST ⤴ Honolulu Paa St. ⤴	12'-6"X10'-0"	125.00		
D-38	Ⓜ Sta. 319+50	EXIT 3 ⤴	6'-0"X6'-0"			36.00
TOTAL				1,202.75	126.00	888.25

SURVEY PLOTTED BY _____ DATE _____
 DESIGNED BY _____
 CHECKED BY _____
 ORIGINAL PLAN _____
 NOTE BOOK _____
 QUANTITIES BY _____
 CHECKED BY _____
 N. _____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
DESTINATION SIGN SUMMARY
 MOANALUA FWY. RESURFACING
 Aiea I.C. to Moanalua Stream Bridge
 (Outbound Lanes)
 PROJECT NO. 78A-01-91M
 Date: Sept. 1991
 SHEET No. 742 OF 44 SHEETS

TRAFFIC SIGN SUMMARY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	69	70

SIGN NO.	MESSAGE	QUANTITY				
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.		
		W/POST	W/O POST	W/POST	W/O POST	WALL MOUNT
R1-1	STOP	2				
R1-2	YIELD	1	3			
R1-2-A	YIELD			1	1	
R1-4	ALL WAY		1			
R2-1(25)	SPEED LIMIT 25	1	1			
R2-1(35)	SPEED LIMIT 35		1			
R2-1(35)-A	SPEED LIMIT 35			6	2	
R2-1(40)-A	SPEED LIMIT 40			1		
R2-1(50)-A	SPEED LIMIT 50				5	
R3-2	NO LEFT TURN SYMBOL		1			
R3-4b	NO LEFT OR U TURN SYMBOL		1			
R3-5(L)	ONLY		1			
R3-8A(L)	ONLY	1	1			
R3-8A(R)	ONLY	1				
R3-35		1	1			
R3-47	LANE USE CONTROL SIGN				1	
R4-7	KEEP RIGHT SYMBOL	1	1			
R4-7a	KEEP RIGHT	1				
R5-1	DO NOT ENTER	1	1			
R6-1(L)	ONE WAY	1				
R6-1(R)	ONE WAY	2	2			
R7-4-A	NO STOPPING OR STANDING	10				
R7-107a	The Bus SYMBOL	1	4			
R7-201a	TOW AWAY SYMBOL		12			
R8-3a	NO PARKING SYMBOL	4	13			
R16-4	NO RIGHT TURN ON RED		1			
R16-5	UNLICENSED VEHICLES BICYCLES, CYCLES UNDER 5 HP, PEDESTRIANS KEEP OUT FREEWAY			1	1	
R17-3	ON LEFT ARROW ONLY NO U TURN		1			
R17-3(R)	ON RIGHT ARROW ONLY		2			
S1-1	SCHOOL ADVANCE SYMBOL	1				
W1-2(L)		1				
W1-2(R)		2	1			
W1-2(R)-A				1		
W3-1a	STOP AHEAD SYMBOL		1			
W3-3	SIGNAL AHEAD SYMBOL	1				
W4-1(R)	MERGE SYMBOL	2	1			
W4-1(R)-A	MERGE SYMBOL			1		1
W4-2(R)		1				
W4-3	ADDED LANE SYMBOL	1				
W6-2	DIVIDED HIGHWAY ENDS SYMBOL		1			
W9-1	RIGHT LANE ENDS	1				
W9-2(L)	LANE ENDS MERGE LEFT	1				
W11A-2	CROSSING SYMBOL	1				
W11-2	ADVANCE CROSSING SYMBOL		1			
W12-2(15'-6")	LOW CLEARANCE		2			
W12-2(15'-9")	LOW CLEARANCE		1			
W13-1(25)	25 M.P.H.		1			
W18-1	RIGHT LANE EXIT ONLY				1	
TOTAL		40	57	11	11	1

SURVEY PLOTTED BY _____ DATE _____
 DESIGNED BY _____
 NOTE BOOK _____
 QUANTITIES BY _____
 CHECKED BY _____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TRAFFIC SIGN SUMMARY
 MOANALUA FWY. RESURFACING
 Aiea I.C. to Moanalua Stream Bridge
 (Outbound Lanes)
 PROJECT NO. 78A-01-91M
 Date: Sept. 1991
 SHEET No. T43 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-91M	1992	70	70

PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A _____	5900 EA.
TYPE CL _____	3700 EA.
TYPE DL _____	220 EA.
TYPE HL _____	1000 EA.
TYPE J _____	_____
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	_____
4-INCH PAVEMENT STRIPE (YELLOW) _____	_____
8-INCH PAVEMENT STRIPE (WHITE) _____	2400 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	_____
12-INCH PAVEMENT STRIPE (YELLOW) _____	_____
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	1820 L.F.
PAVEMENT ARROW _____	112 EA.
PAVEMENT WORD _____	15 EA.
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	51,100 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	45,000 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	13,500 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	3,000 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) _____	100 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	500 L.F.
THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (YELLOW) _____	250 L.F.
4-INCH PAVEMENT STRIPE (WHITE) _____	2700 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	5300 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	700 L.F.
CROSSWALK MARKINGS _____	53 LANE

HOV SIGN SUMMARY

SIGN NO.	LOCATION	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POST	W/O POST
R3-10d	⊕ STA. 153+80 I.B.				1
R3-10e	⊕ STA. 157+80 I.B.				1
R3-20	⊕ STA. 157+80 I.B.		1		
R3-11a	⊕ STA. 167+95 I.B.				1
R3-18	⊕ STA. 175+20 I.B.				1
R3-19	⊕ STA. 182+00 I.B.				1
R3-18	⊕ STA. 190+85 I.B.				1
R3-11a	⊕ STA. 199+90 I.B.				1
R3-18	⊕ STA. 208+80 I.B.				1
R3-19	⊕ STA. 215+40 I.B.				1
R3-18	⊕ STA. 224+50 I.B.				1
R3-11a	⊕ STA. 231+70 I.B.				1
R3-18	⊕ STA. 240+70 I.B.				1
R3-19	⊕ STA. 247+60 I.B.				1
R3-18	⊕ STA. 254+50 I.B.				1
R3-11a	⊕ STA. 261+40 I.B.				1
R3-18	⊕ STA. 268+30 I.B.				1
R3-19	⊕ STA. 275+05 I.B.				1
R3-18	⊕ STA. 279+70 I.B.				1
R3-12a	⊕ STA. 288+00 I.B.		1		
TOTAL			2		18

ROUTE MARKER SUMMARY

SIGN ASSEMBLY	LOCATION	SIGN NO. AND MESSAGE	TYPE A ASSEMBLY		TYPE B ASSEMBLY	
			W/POST	W/O POST	W/POST	W/O POST
IRM-1	Ulune Ext. Sta. 36+70± Lt.	IM3-4 WEST IM-1(24) H1 IM6-1(L) ←	1			
SRM-1	Ramp RH-0 Sta. 13+60± Rt.	M3-3 WEST M1-6(78) 78 M6-3 ↑	1			
SRM-2	Ala Aolani St. Sta. 6+50± Lt.	M3-3 WEST M1-6(78) 78 M6-3 ↑ M3-2 EAST M1-6(78) 78 M6-2(R) ↘			1	
TOTAL			2		1	

REFLECTOR MARKER SUMMARY

TYPE	QUANTITY									
	W/O POST		W/FLEXIBLE POST		W/STEEL POST		MOUNT ON CONCRETE RETAINING WALL		MOUNT ON BRIDGE RAILING	
	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE
RM-2			100	190	20	100		40	40	50
RM-3	1									
RM-9	7									

SURVEY PLOTTED BY _____ DATE _____
 ORIGINAL PLAN _____
 NOTE BOOK _____
 DESIGNED BY _____
 QUANTITIES BY _____
 CHECKED BY _____
 N.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
MISCELLANEOUS TRAFFIC SUMMARIES
MOANALUA FWY. RESURFACING
Ala I.C. to Moanalua Stream Bridge
(Outbound Lanes)
 PROJECT NO. 78A-01-91M
 Date: Sept. 1991
 SHEET No. T44 OF 44 SHEETS