

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	20	32

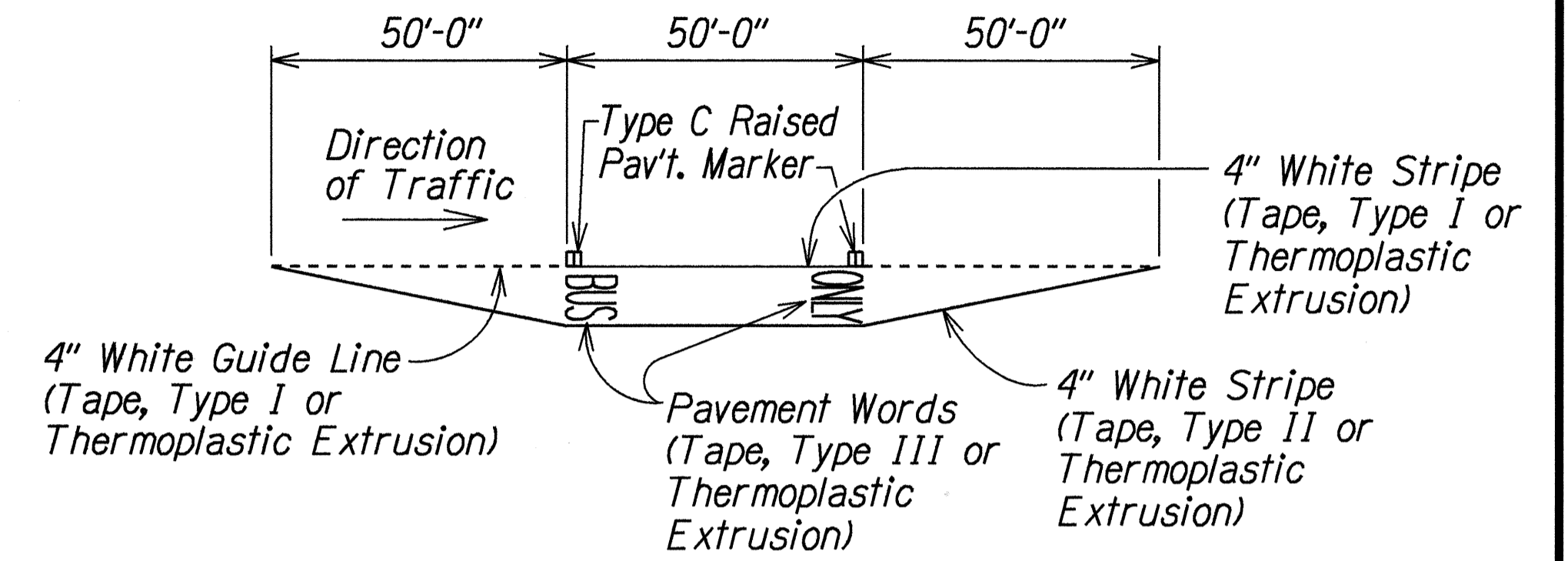
LEGEND

- 4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 40'-0" o.c.
- 4 each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- Lane Change Restriction Marking
4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
- 4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)
- Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)
- Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
- Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
- Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment (Tape, Type III or Thermoplastic Extrusion)
- Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)
- Pavement Word (Tape, Type III or Thermoplastic Extrusion)
- 4 Each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
Type H Raised Pavement Markers (Reflective Surface facing no-passing direction)
4" Single Solid Yellow Stripe (Tape, Type I or Thermoplastic Extrusion)
- Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)

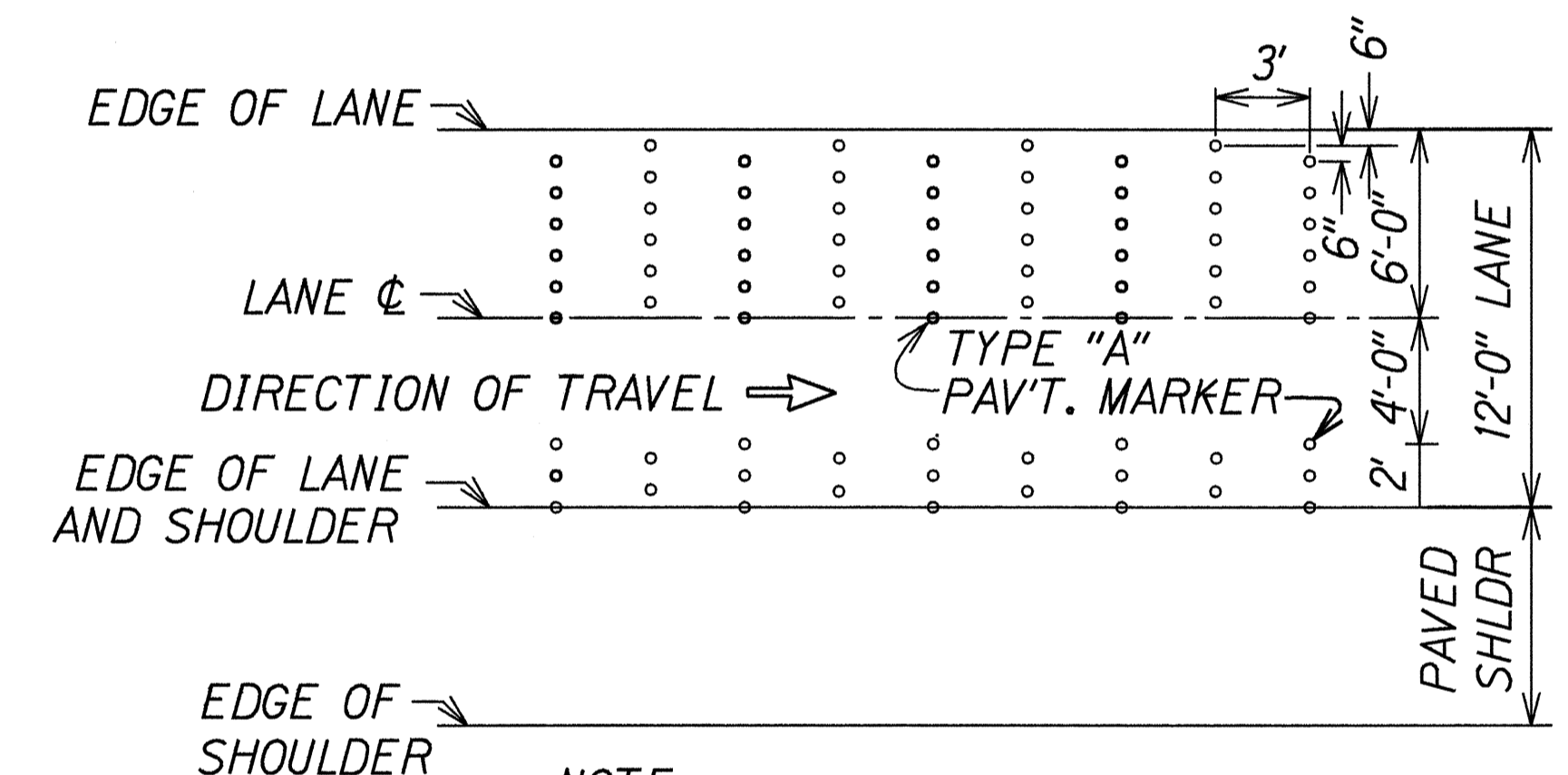
SURVEY PLOTTED BY: DATE: 12/1/95
 DRAWN BY: JAW
 NOTE BOOK: 102/mey
 DESIGNED BY: S. Kishitani
 CHECKED BY: Aglar/Regadin

NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the legend or plans.
8. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
9. Backing for all new Regulatory and Warning Signs shall not be spliced.
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. Removal of Existing Delineators and Posts shall be considered incidental to the various signing items.
16. The exact locations of the new loop detectors shall be determined in the field by the Engineer
17. 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.
18. Install Type II Object Marker on all utility poles or trees that are within the State Highway right-of-way and within 30 feet of the roadway edge of pavement shall be marked as directed by the Engineer.



TYPICAL BUS BAY STRIPING
Not to Scale



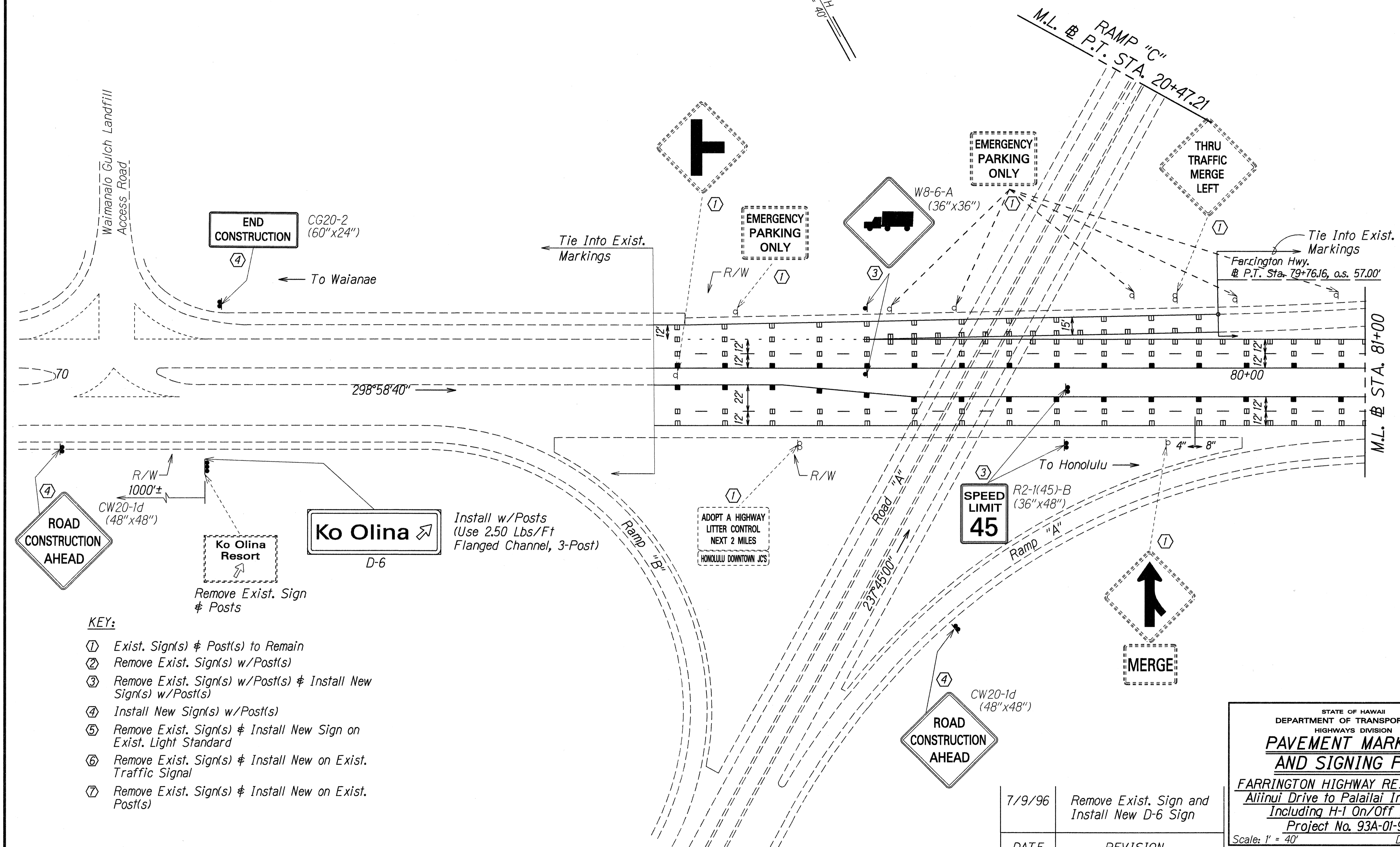
- NOTE:**
1. Rumble Strip will be paid under Type A Pav't Markers.
 2. See Pav't Marking Plans for location.

TYPICAL RUMBLE STRIP DETAIL
Scale: 1"=4'-0"

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING
LEGEND, DETAILS & NOTES
 FARRINGTON HIGHWAY RESURFACING
 Aliinui Drive to Palailai Interchange,
 Including H-1 On/Off Ramps
 Project No. 93A-01-96M
 Scale: As Shown Date: Feb, 1996
 SHEET No. 11 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	C.O. 21	32

TRUE NORTH
SCALE: 1" = 40'



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
 - ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
 - ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

SURVEY PLOTTED BY	DATE
DRAWN BY	
NOTES BOOK	
QUANTITIES BY	
CHECKED BY	

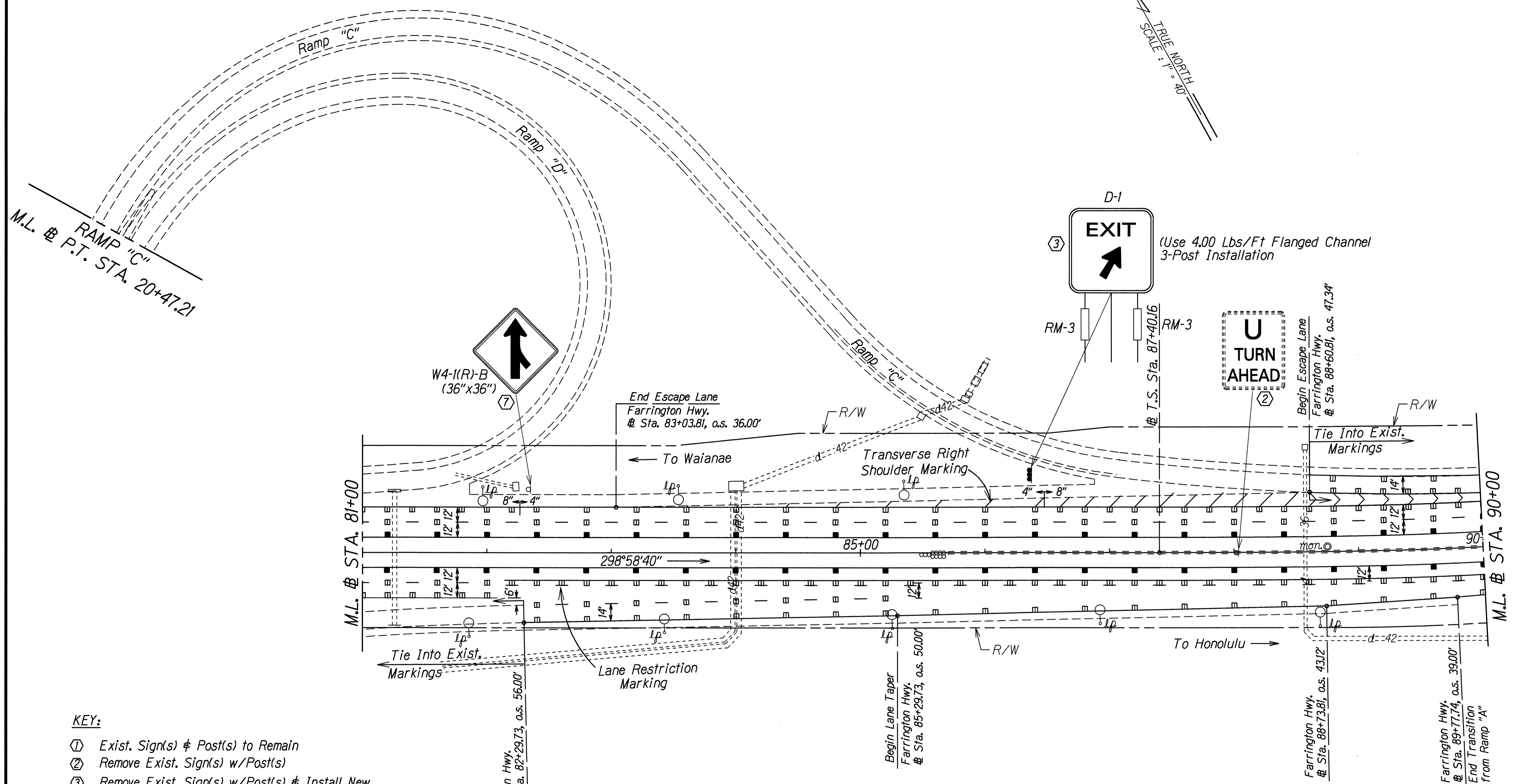
7/9/96	Remove Exist. Sign and Install New D-6 Sign
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PAVEMENT MARKING
AND SIGNING PLAN**

FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M
Scale: 1" = 40' Date: Feb, 1996
SHEET No. T2 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	22	32



KEY:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) w/Post(s)
- ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
- ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
- ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	01-7-95
DRAWN BY M. Takahashi	
NOTES BOOK	
DESIGNED BY G. Kaka	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

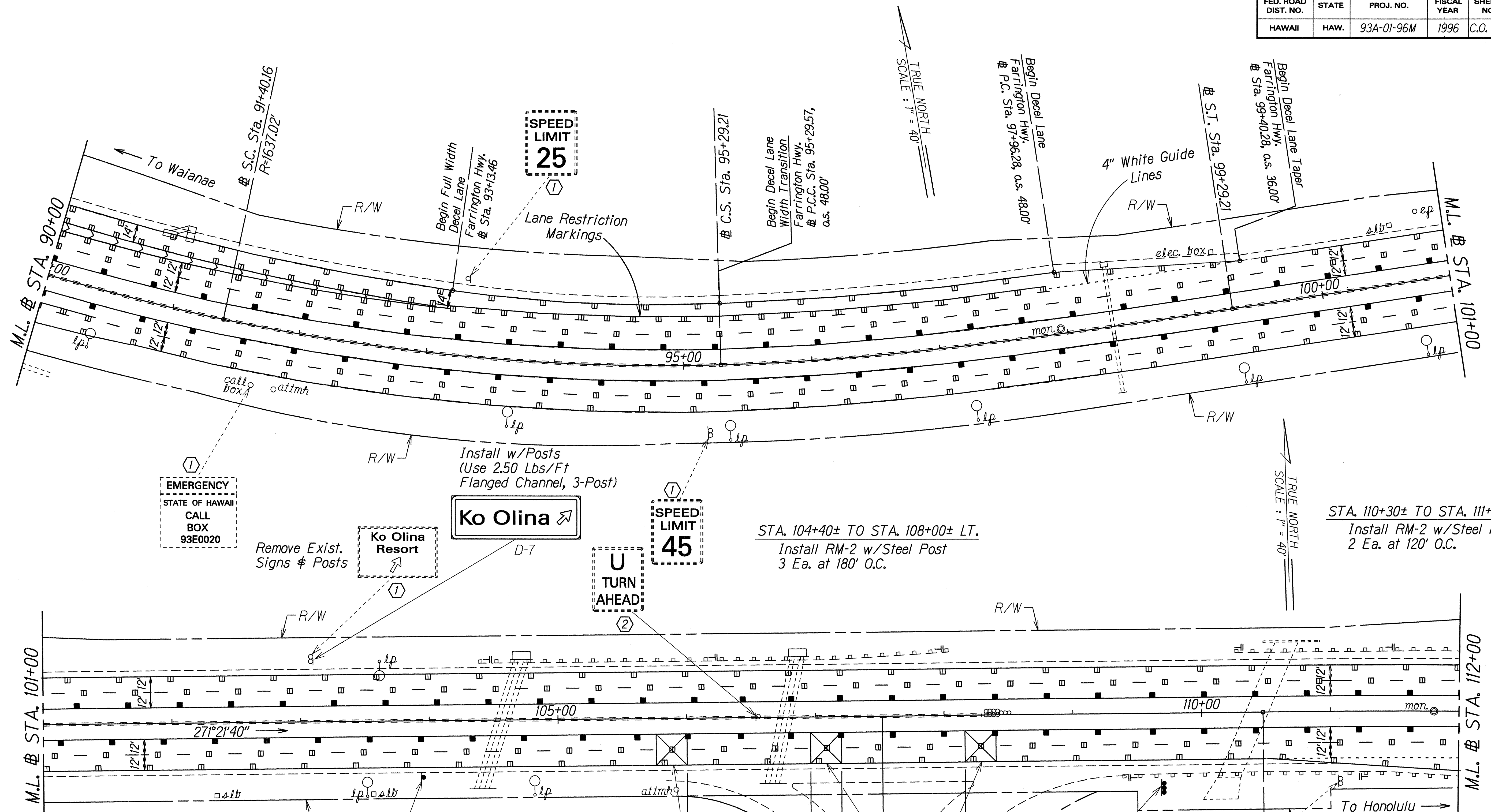
**PAVEMENT MARKING
AND SIGNING PLAN**

**FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M**

Scale: 1" = 40' Date: Feb., 1996

SHEET No. 73 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	C.O. 23	32



KEY:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) w/Post(s)
- ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
- ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
- ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

SURVEY PLOTTED BY: DATE: 2/7/96
 DRAWN BY: M. Takahashi
 NOTE BOOK: 102.may
 QUANTITIES BY: G. Kishida
 CHECKED BY: sgf/arp/ps/cgn

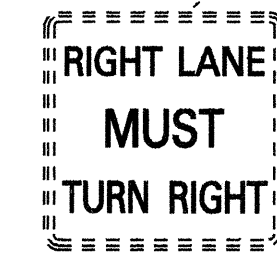
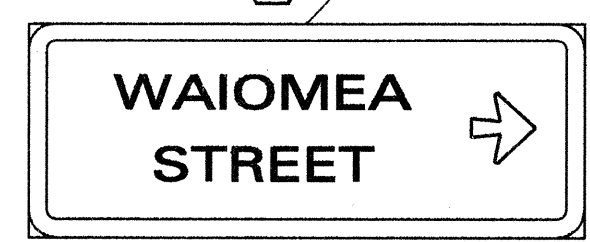
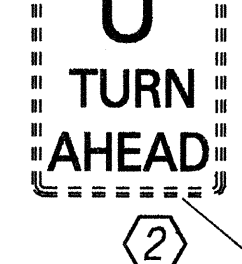
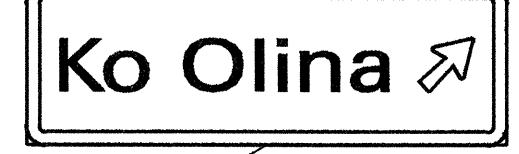
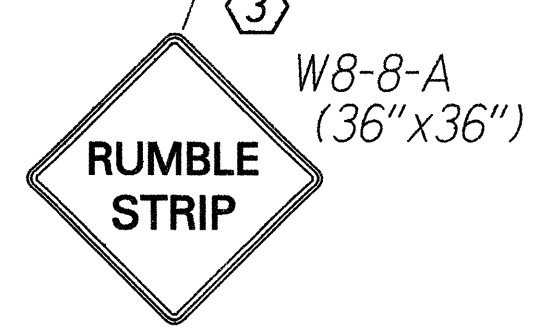
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**PAVEMENT MARKING
 AND SIGNING PLAN**
 FARRINGTON HIGHWAY RESURFACING
 Aliiunui Drive to Palai'ai Interchange,
 Including H-1 On/Off Ramps
 Project No. 93A-01-96M
 Scale: 1" = 40' Date: Feb., 1996
 SHEET No. 74 OF 13 SHEETS

DATE	REVISION
7/9/96	Remove Exist. Sign and Install New D-7 Sign

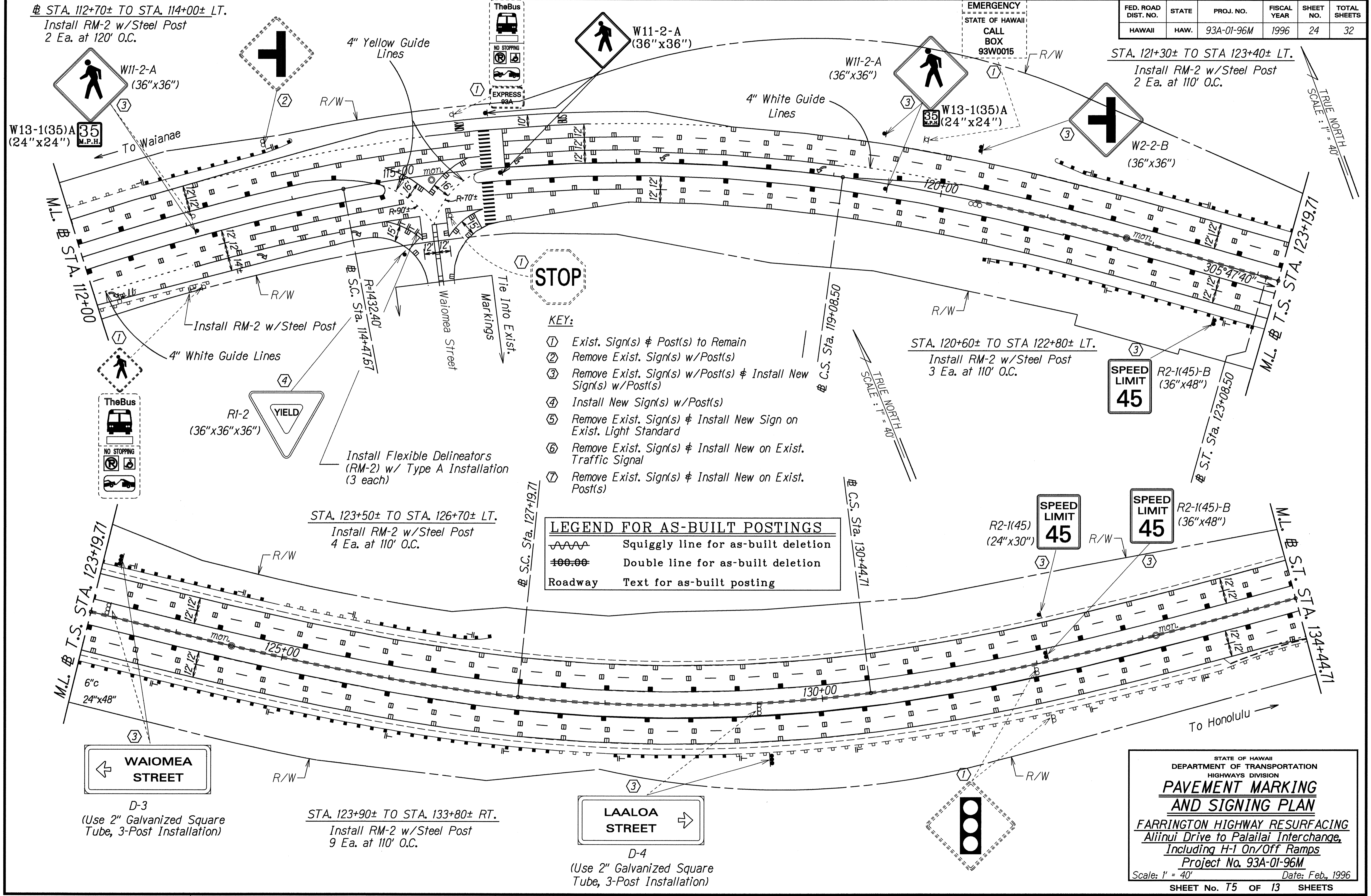
STA. 109+50± TO STA. 111+30± RT.
 Install RM-2 w/Steel Post
 2 Ea. at 180' O.C.

STA. 104+40± TO STA. 108+00± LT.
 Install RM-2 w/Steel Post
 3 Ea. at 180' O.C.

STA. 110+30± TO STA. 111+90± LT.
 Install RM-2 w/Steel Post
 2 Ea. at 120' O.C.



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	24	32



STA. 112+70± TO STA. 114+00± LT.
Install RM-2 w/Steel Post
2 Ea. at 120' O.C.

STA. 121+30± TO STA. 123+40± LT.
Install RM-2 w/Steel Post
2 Ea. at 110' O.C.

STA. 120+60± TO STA. 122+80± LT.
Install RM-2 w/Steel Post
3 Ea. at 110' O.C.

STA. 123+50± TO STA. 126+70± LT.
Install RM-2 w/Steel Post
4 Ea. at 110' O.C.

STA. 123+90± TO STA. 133+80± RT.
Install RM-2 w/Steel Post
9 Ea. at 110' O.C.

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
 - ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
 - ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

SURVEY PLOTTED BY: DATE: 11-7-95
 DRAWN BY: M. Inatulu
 CHECKED BY: G. Kashi
 NOTE BOOK: 102089
 QUANTITIES BY: S. J. Padgett
 CHECKED BY: S. J. Padgett

WAIOMEA STREET

D-3
(Use 2" Galvanized Square Tube, 3-Post Installation)

LAALOA STREET

D-4
(Use 2" Galvanized Square Tube, 3-Post Installation)

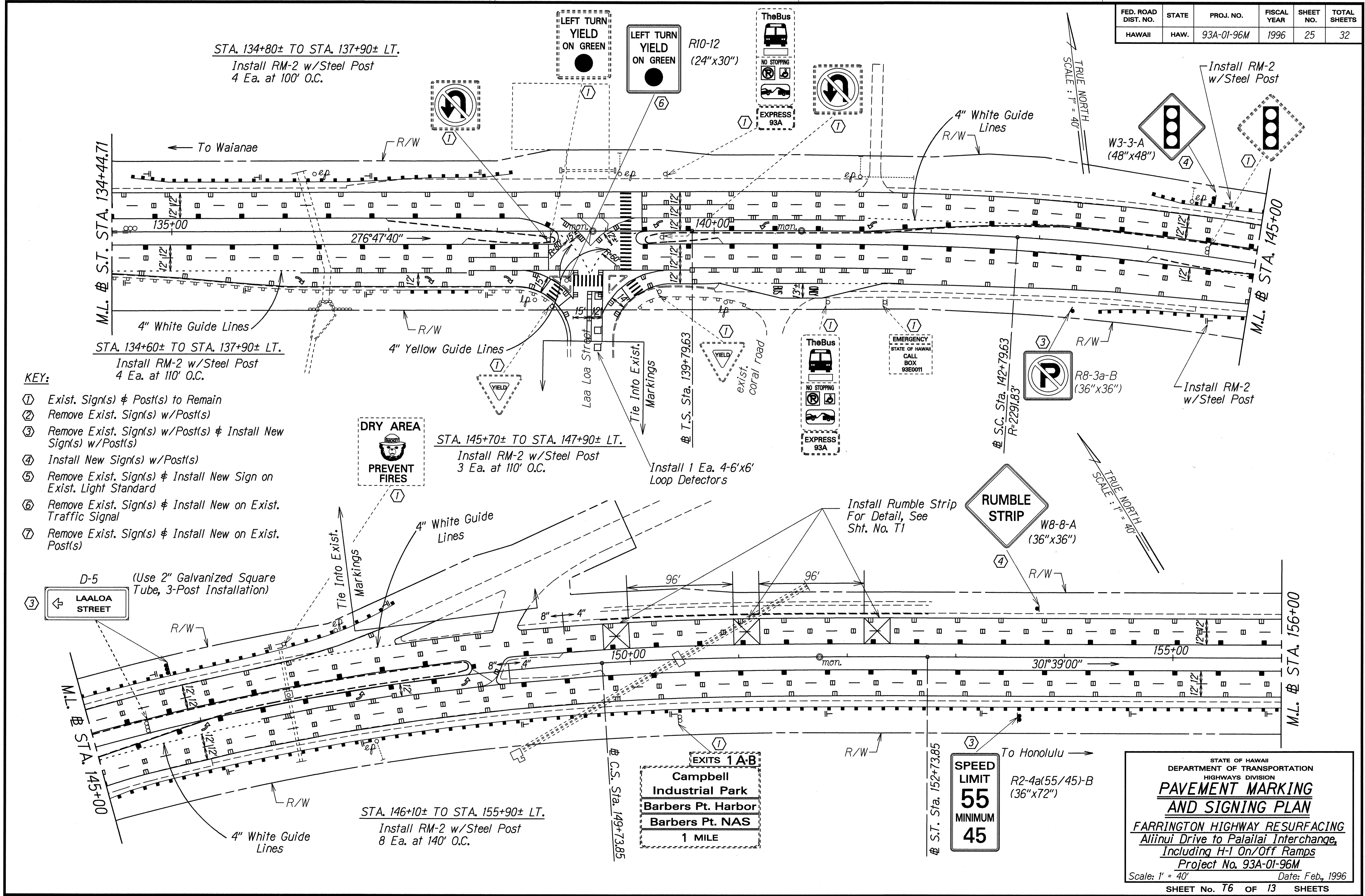
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING AND SIGNING PLAN

FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M
Scale: 1" = 40' Date: Feb., 1996

SHEET No. 75 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	25	32



KEY:

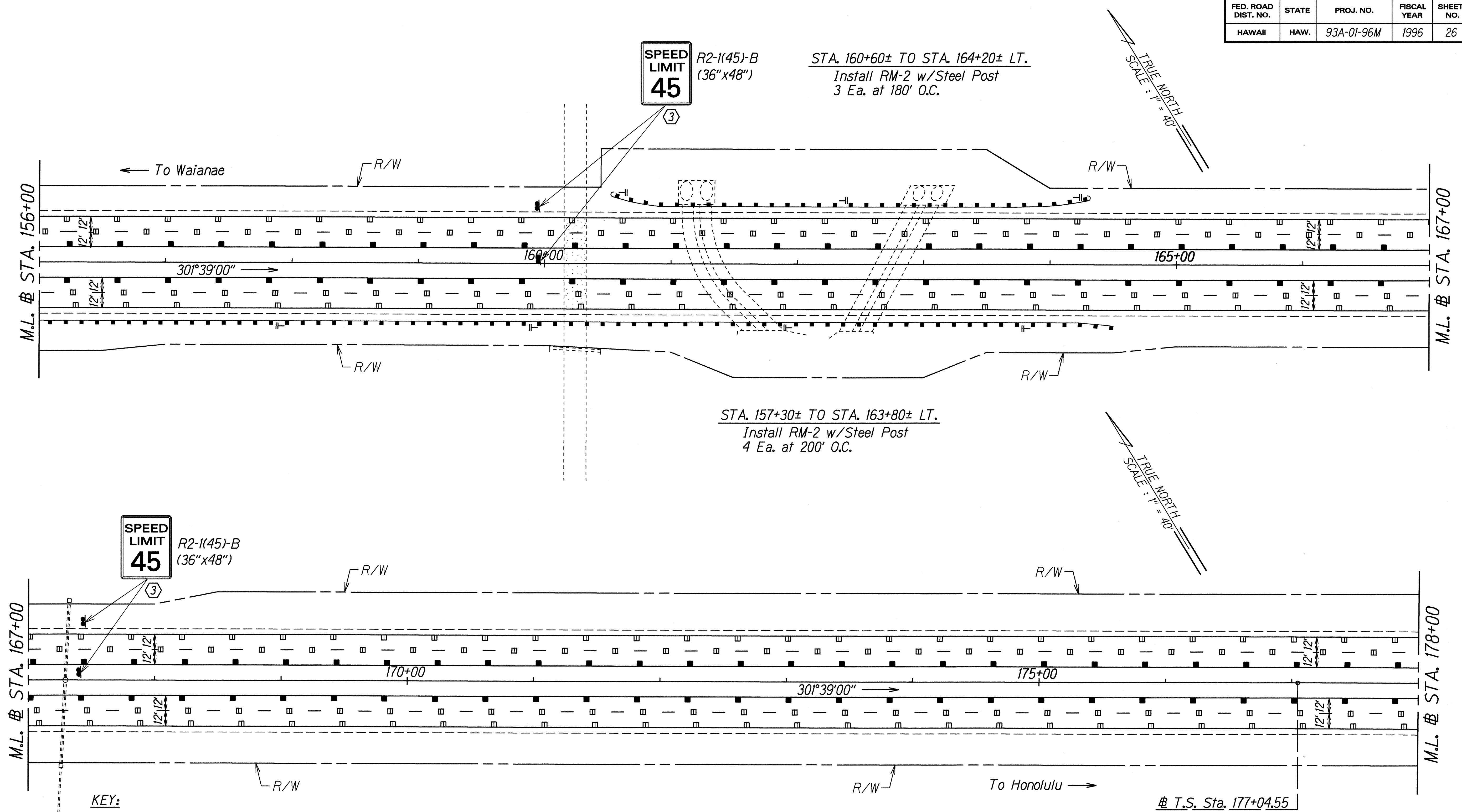
- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) w/Post(s)
- ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
- ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
- ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

③ D-5 (Use 2" Galvanized Square Tube, 3-Post Installation)
LAALO A STREET

SURVEY PLOTTED BY: DATE: 01-7-96
 DRAWN BY: M. Takafuji
 CHECKED BY: G. Kakehi
 NOTE BOOK: 102.mey
 DESIGNED BY: G. Kakehi
 CHECKED BY: G. Kakehi

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**PAVEMENT MARKING
 AND SIGNING PLAN**
 FARRINGTON HIGHWAY RESURFACING
 Allinui Drive to Palalai Interchange,
 Including H-1 On/Off Ramps
 Project No. 93A-01-96M
 Scale: 1" = 40' Date: Feb., 1996
 SHEET No. T6 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	26	32

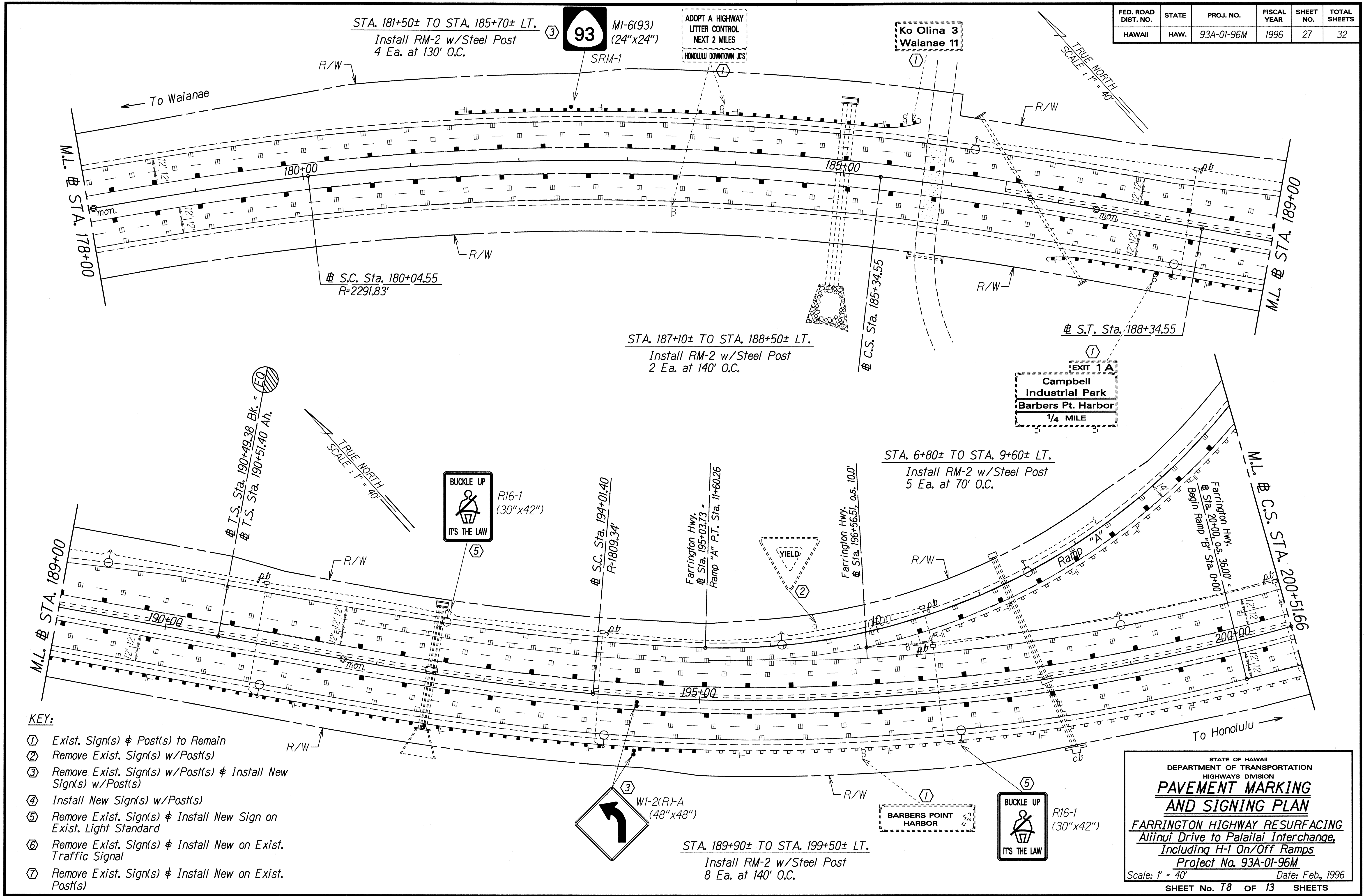


- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
 - ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
 - ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

SURVEY PLOTTED BY: DATE: 01-7-95
 DRAWN BY: M. Takahashi
 NOTE BOOK: 102, Hwy
 DESIGNED BY: G. Kishitani
 CHECKED BY: A. Igarashi

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**PAVEMENT MARKING
 AND SIGNING PLAN**
 FARRINGTON HIGHWAY RESURFACING
 Aliinui Drive to Palailai Interchange,
 Including H-1 On/Off Ramps
 Project No. 93A-01-96M
 Scale: 1" = 40' Date: Feb., 1996
 SHEET No. T7 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	27	32



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
 - ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
 - ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

ORIGINAL PLAN
 SURVEY PLOTTED BY
 DATE: 01-27-95
 DRAWN BY: M. Takafuji
 CHECKED BY:
 NOTE BOOK
 102.may
 QUANTIFIED BY:
 CHECKED BY:
 4/8/95/pt/dgn

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**PAVEMENT MARKING
 AND SIGNING PLAN**
 FARRINGTON HIGHWAY RESURFACING
 Aliinui Drive to Palailai Interchange,
 Including H-1 On/Off Ramps
 Project No. 93A-01-96M
 Scale: 1" = 40' Date: Feb., 1996
 SHEET No. 27 OF 32 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	28	32

RAMP A STA. 0+40± TO STA. 2+30± RT.
Install RM-2 w/Steel Post
3 Ea. at 100' O.C.

RAMP C STA. 1+00± TO STA. 1+90± RT.
Install RM-2 w/Steel Post
4 Ea. at 30' O.C.

KEY:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) w/Post(s)
- ③ Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Remove Exist. Sign(s) & Install New Sign on Exist. Light Standard
- ⑥ Remove Exist. Sign(s) & Install New on Exist. Traffic Signal
- ⑦ Remove Exist. Sign(s) & Install New on Exist. Post(s)

①
CAMPBELL INDUSTRIAL PARK BARBERS POINT HARBOR

①
Campbell Industrial Park Barbers Point Harbor
KEEP RIGHT

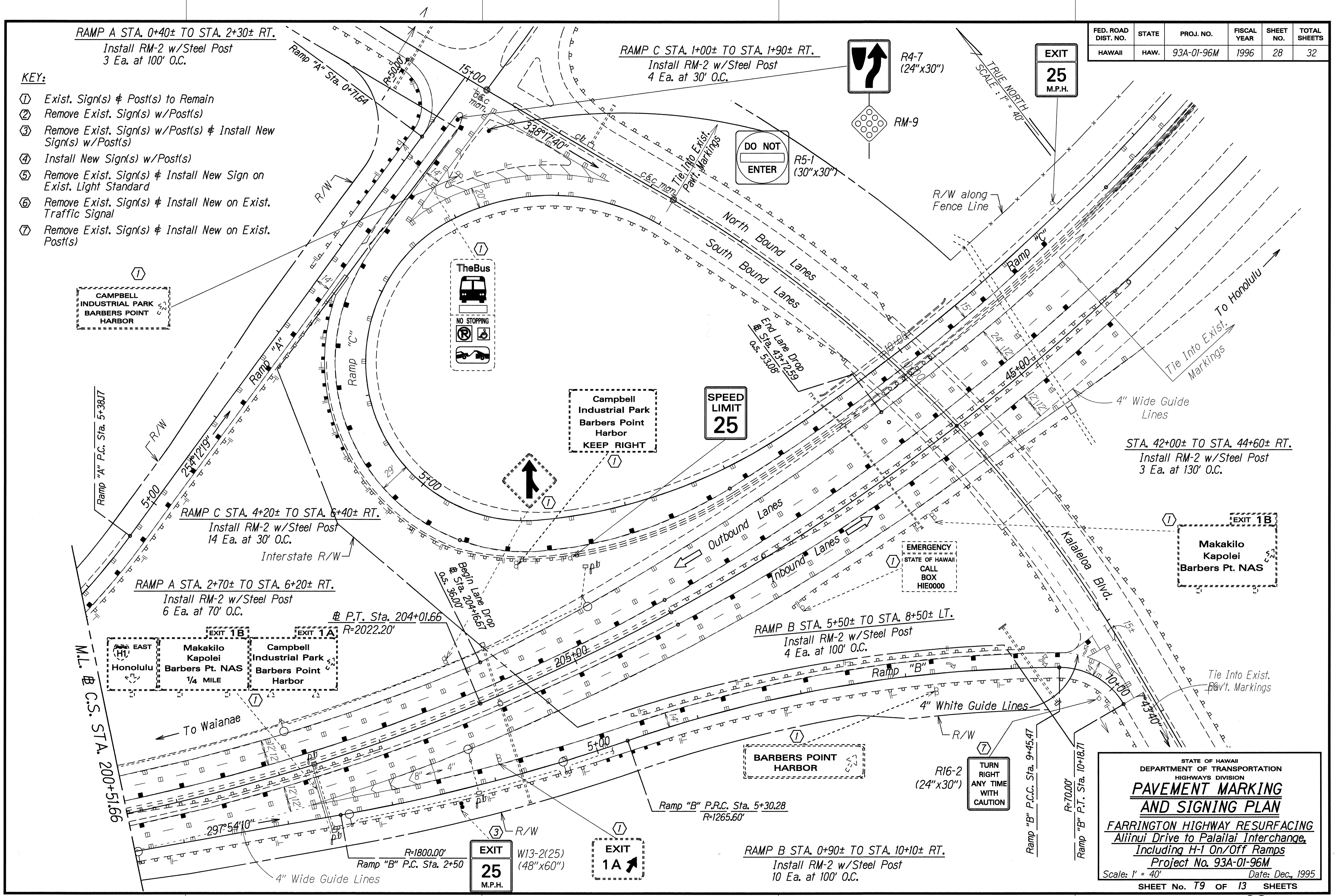
①
Makakilo Kapolei Barbers Pt. NAS

①
EAST
Makakilo Kapolei Barbers Pt. NAS
Honolulu 1/4 MILE
Campbell Industrial Park Barbers Point Harbor

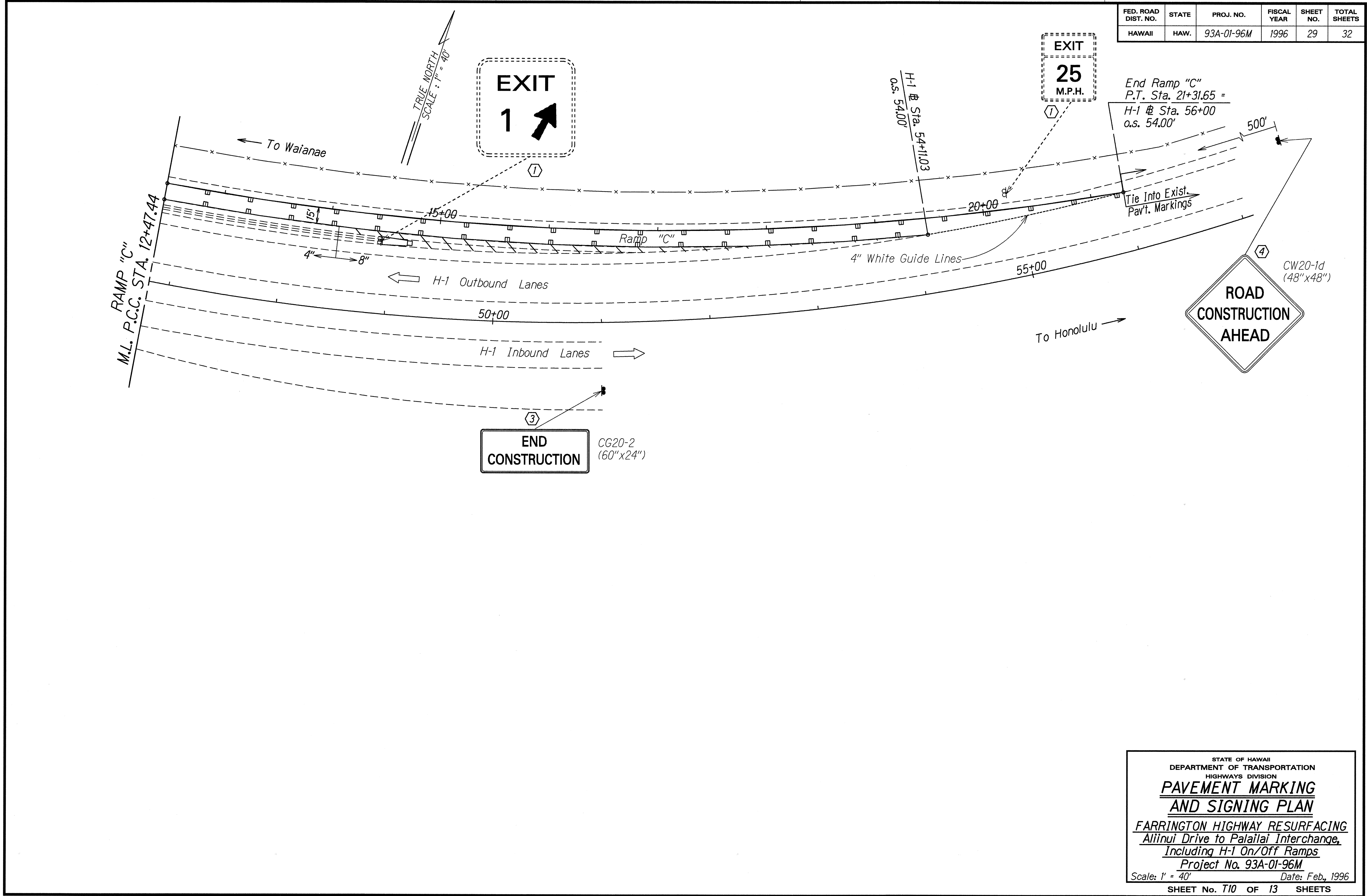
①
BARBERS POINT HARBOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING AND SIGNING PLAN
FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M
Scale: 1" = 40' Date: Dec, 1995
SHEET No. T9 OF 13 SHEETS

DATE: 01-7-95
SURVEY PLOTTED BY: []
DRAWN BY: M. Takahashi
NOTES BOOK: 102.may
DESIGNED BY: G. Kishida
CHECKED BY: []



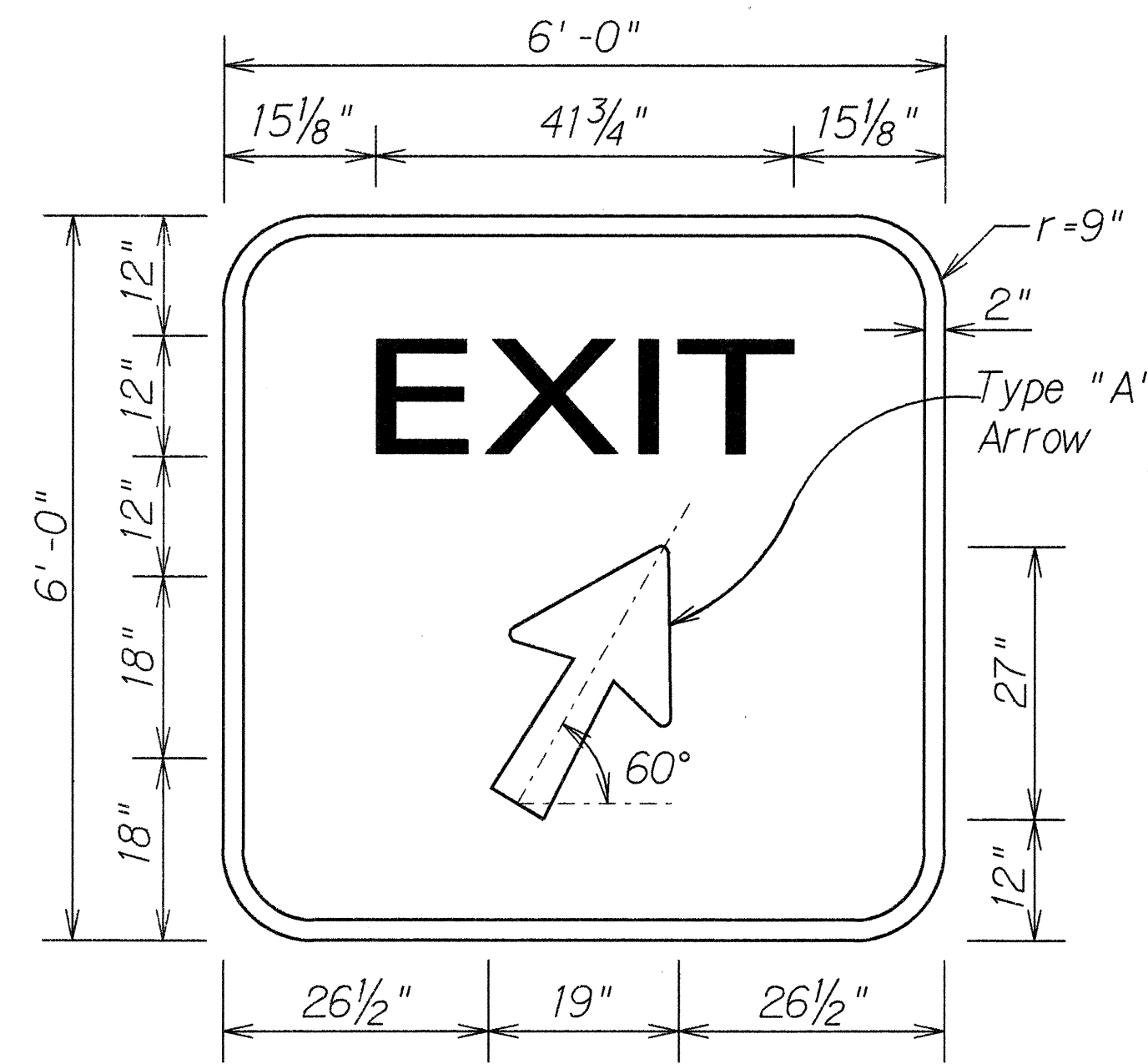
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	29	32



SURVEY PLOTTED BY: _____ DATE: 2/20/96
 DRAWN BY: M. Takahashi
 CHECKED BY: C. E. E. E.
 ORIGINAL PLAN: _____
 NOTE BOOK: 102.may
 CHECKED BY: 4/8/96/192.dgn

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**PAVEMENT MARKING
 AND SIGNING PLAN**
 FARRINGTON HIGHWAY RESURFACING
 Aliinui Drive to Palailai Interchange,
 Including H-1 On/Off Ramps
 Project No. 93A-01-96M
 Scale: 1" = 40' Date: Feb., 1996
 SHEET No. 110 OF 13 SHEETS

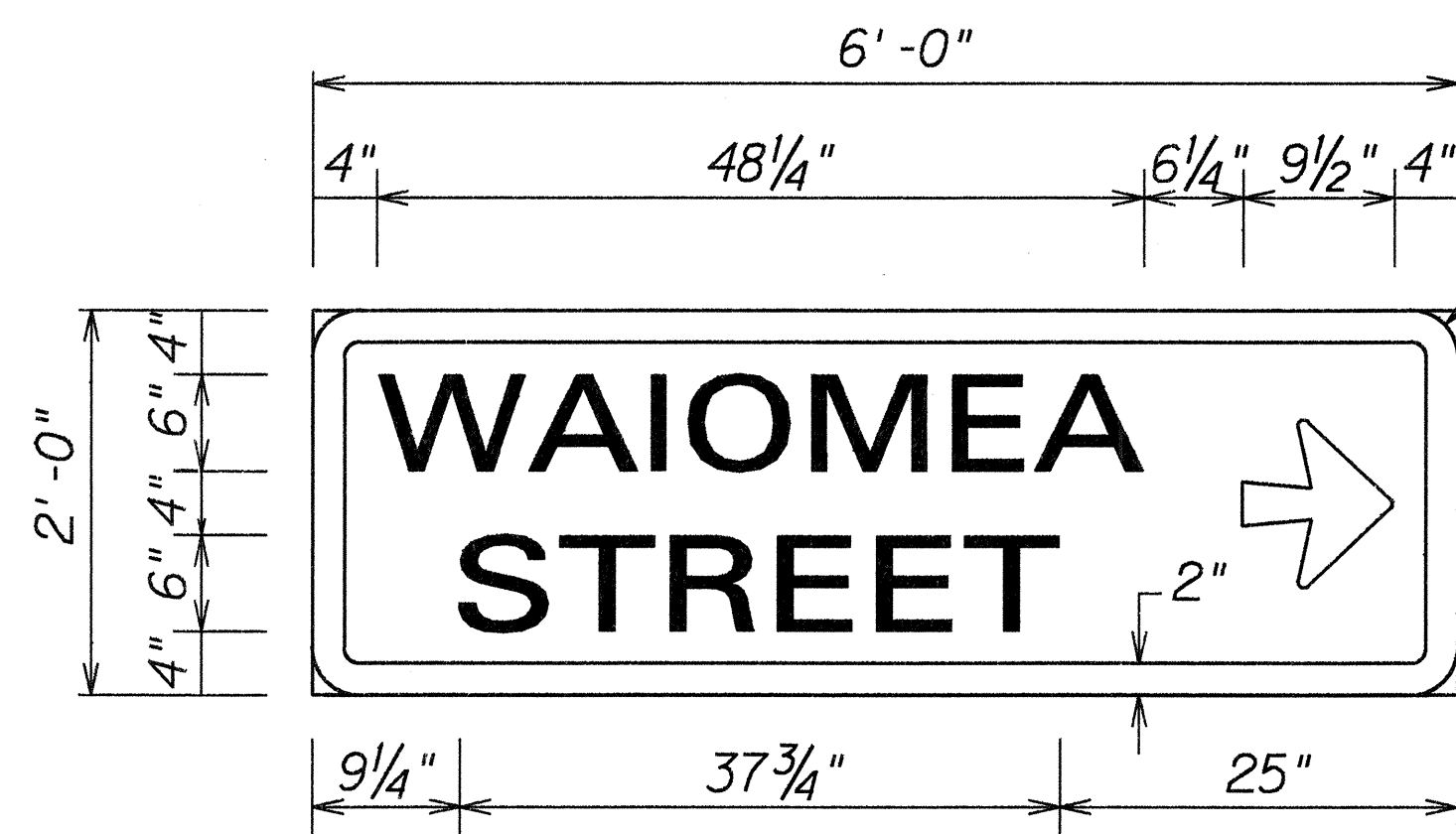
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HAWAII	HAW.	93A-01-96M	1996	C.O. 30	32



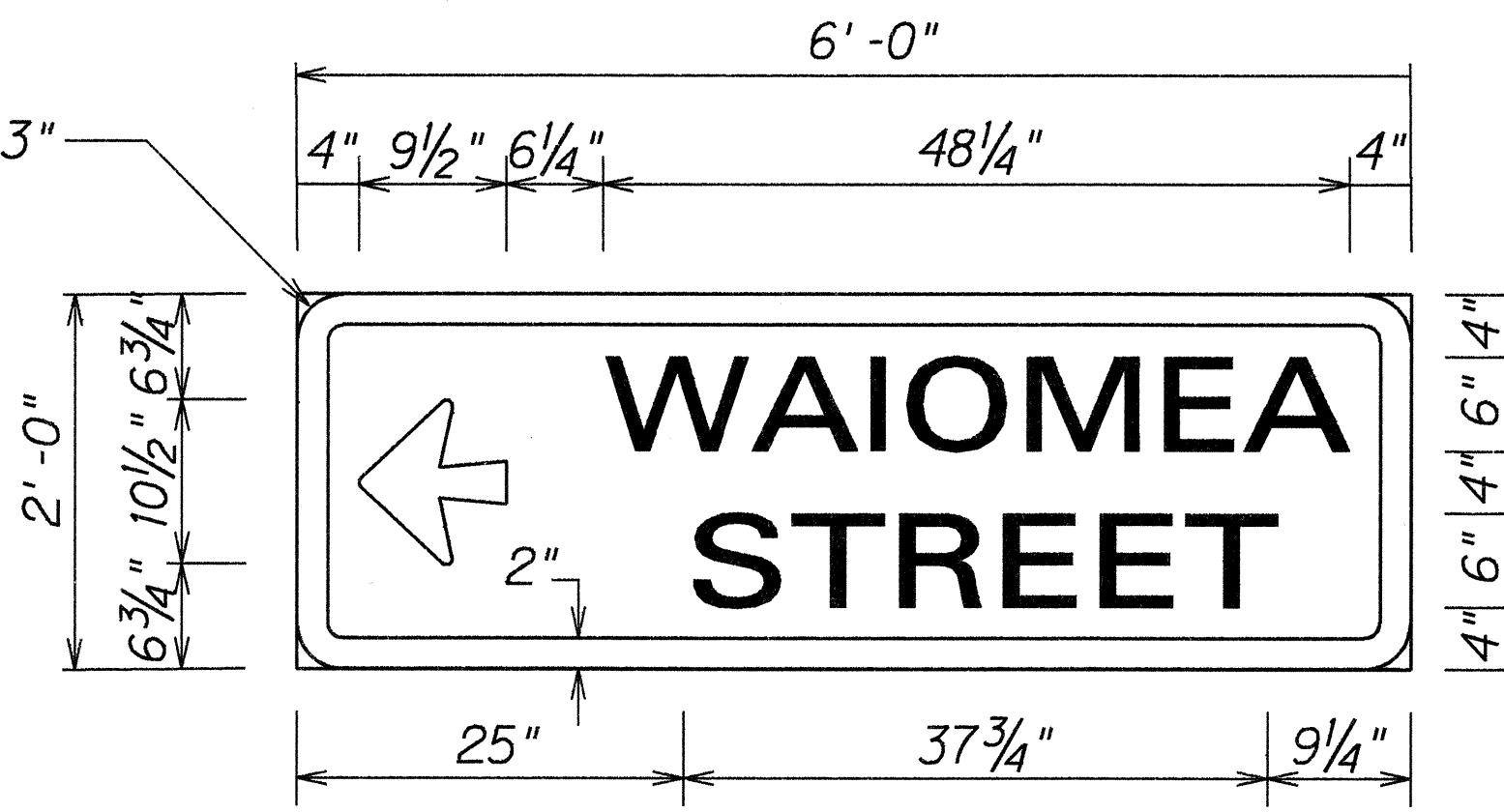
D-1
Scale: 3/4" = 1' - 0"



D-6 & D-7
Scale: 1" = 1' - 0"



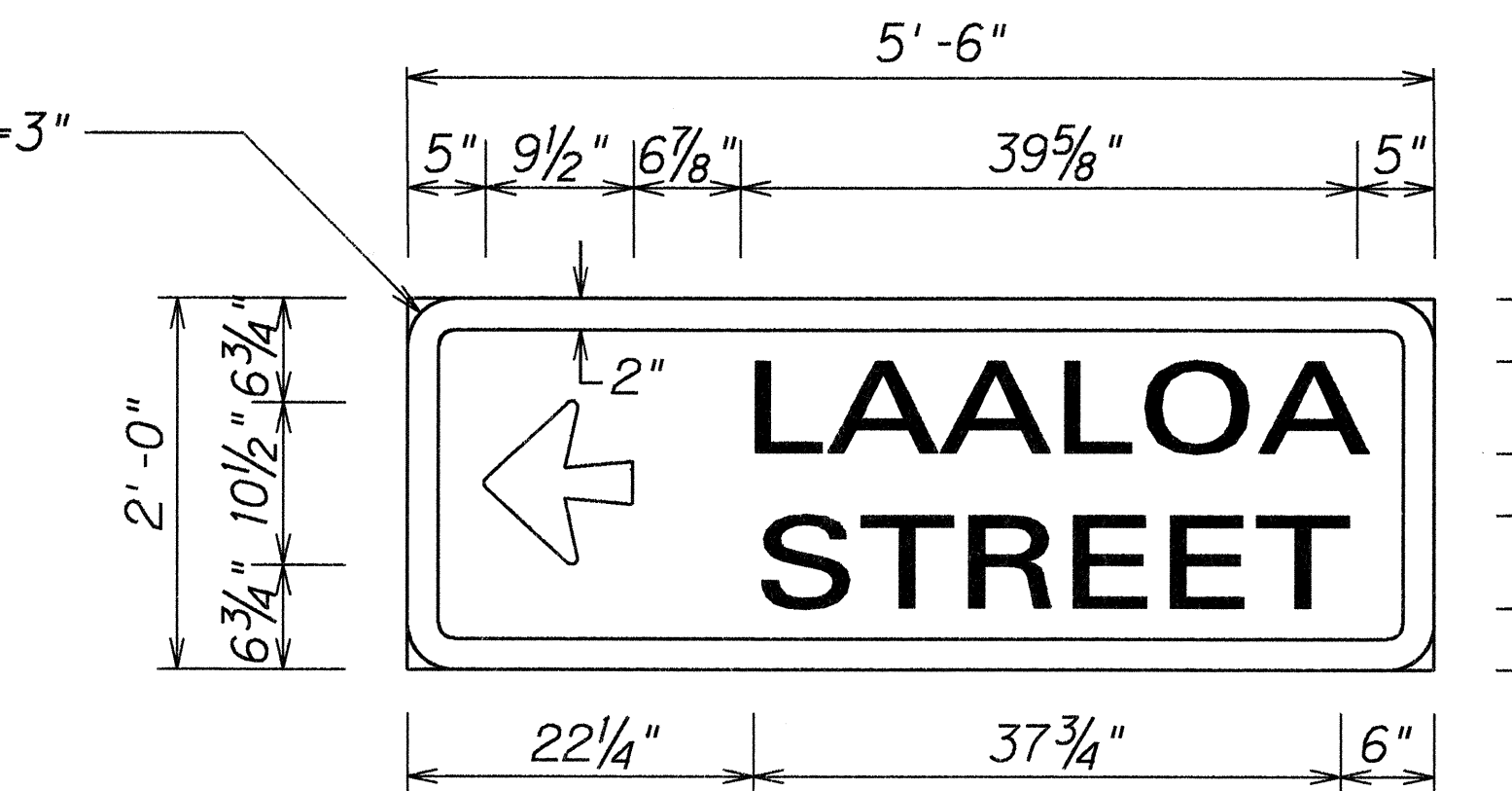
D-2
Scale: 1" = 1' - 0"



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



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



D-5
Scale: 1" = 1' - 0"

GENERAL NOTES

- All signs shall conform to section 621 of the Special Provisions and the latest editions amendments of the following FHWA publications:
 - "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
 - "Standard Highway Signs"
 - "Standard Alphabets for Highway Signs"
- Borders, messages, arrows, symbols and shield conform to details as shown on the plans and as specified in the MUTCD.
- Signs messages shall be as indicated on the plans.
- All panels shall be reflectorized in accordance with Section 712.20 of the Standard Specifications.

DATE	2/13/96
SURVEY PLOTTED BY	
PLAN	
DRAWN BY	M. Takahashi
NOTE BOOK	
162 mg	
QUANTITIES BY	
CHECKED BY	

DATE	REVISION
7/9/96	Added D-6 & D-7 Sign

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION





STREET NAME SIGN DETAIL
FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M
Scale as Shown Date: Feb, 1996

SHEET No. 711 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	31	32

CONSTRUCTION SIGN SUMMARY				
SIGN NO.	LOCATION	MESSAGE	W/POSTS	
CW20-1d	# STA. 70+00± RT.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	# STA. 71+50± LT.	END CONSTRUCTION	1	
CW20-1d	RAMP A. STA. 11+50± LT.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	# STA. 51+00± RT.	END CONSTRUCTION	1	
CW20-1D	# STA. 60+00± LT.	ROAD CONSTRUCTION AHEAD	1	
TOTAL			5	

PAVEMENT MARKING SUMMARY		
DESCRIPTION	QUANTITY	
PAVEMENT MARKERS		
TYPE A _____	3,750	EA.
TYPE C _____	1,850	EA.
TYPE D _____	5	EA.
TYPE H _____	750	EA.
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION		
4-INCH PAVEMENT STRIPE (WHITE) _____	2,800	L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	840	L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	100	L.F.
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION		
4-INCH PAVEMENT STRIPE (WHITE) _____	30,500	L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	30,000	L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	5,700	L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	840	L.F.
TAPE - TYPE III OR THERMOPLASTIC EXTRUSION		
4-INCH PAVEMENT STRIPE (WHITE) _____	2,200	L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	240	L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	200	L.F.
CROSSWALK MARKINGS _____	16	LANES
PAVEMENT ARROW _____	15	EA.
PAVEMENT WORD _____	4	EA.

TRAFFIC SIGN SUMMARY					
SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POSTS	W/O POSTS
R2-1(45)	SPEED LIMIT 45	1			
R2-1(45)-B	SPEED LIMIT 45			8	
R2-4a(55/45)-B	SPEED LIMIT 55 MINIMUM 45			1	
R4-7	KEEP RIGHT SYMBOL	1			
R5-1	DO NOT ENTER	1			
R8-3a-B		1			
R10-12	LEFT TURN YIELD ON GREEN ●		1		
R16-1	BUCKLE UP SYMBOL		2		
R16-2	TURN RIGHT ANY TIME WITH CAUTION	1			
W1-2(R)-A				2	
W2-2-B		1			
W3-3-A	SIGNAL AHEAD SYMBOL			1	
W4-1(R)-B			1		
W8-6-A	TRUCK CROSSING SYMBOL	2			
W8-8-A	RUMBLE STRIP	2			
W11-2-A	ADVANCE PEDESTRIAN CROSSING SYMBOL	3			
W13-2(25)	EXIT 25 M.P.H.			1	
TOTAL		13	4	13	

ROUTE MARKER SUMMARY				
SIGN ASSEMBLY	LOCATION	SIGN NO. AND MESSAGE	TYPE A ASSEMBLY	
			W/POST	W/O POST
SRM-1	# STA. 182+50± LT.	93	1	
TOTAL			1	

DESTINATION SIGN SUMMARY				
SIGN NO.	LOCATION	MESSAGE	SIZE	NEW PANEL AREA (SQ. FT.) W/POSTS
D-1	# STA. 86+40± LT.	EXIT ↗	6'-0" x 6'-0"	36.00
D-2	# STA. 109+70± RT.	WAIOMEA STREET →	6'-0" x 2'-0"	12.00
D-3	# STA. 123+40±	← WAIOMEA STREET	6'-0" x 2'-0"	12.00
D-4	# STA. 129+40±	LAALOA STREET →	5'-6" x 2'-0"	11.00
D-5	# STA. 145+50±	← LAALOA STREET	5'-6" x 2'-0"	11.00
TOTAL				82.00

TYPE	QUANTITY					
	W/O POST		W/FLEXIBLE POST		W/STEEL POST	
	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE
RM-2				7		115
RM-3	2					
RM-9	1					

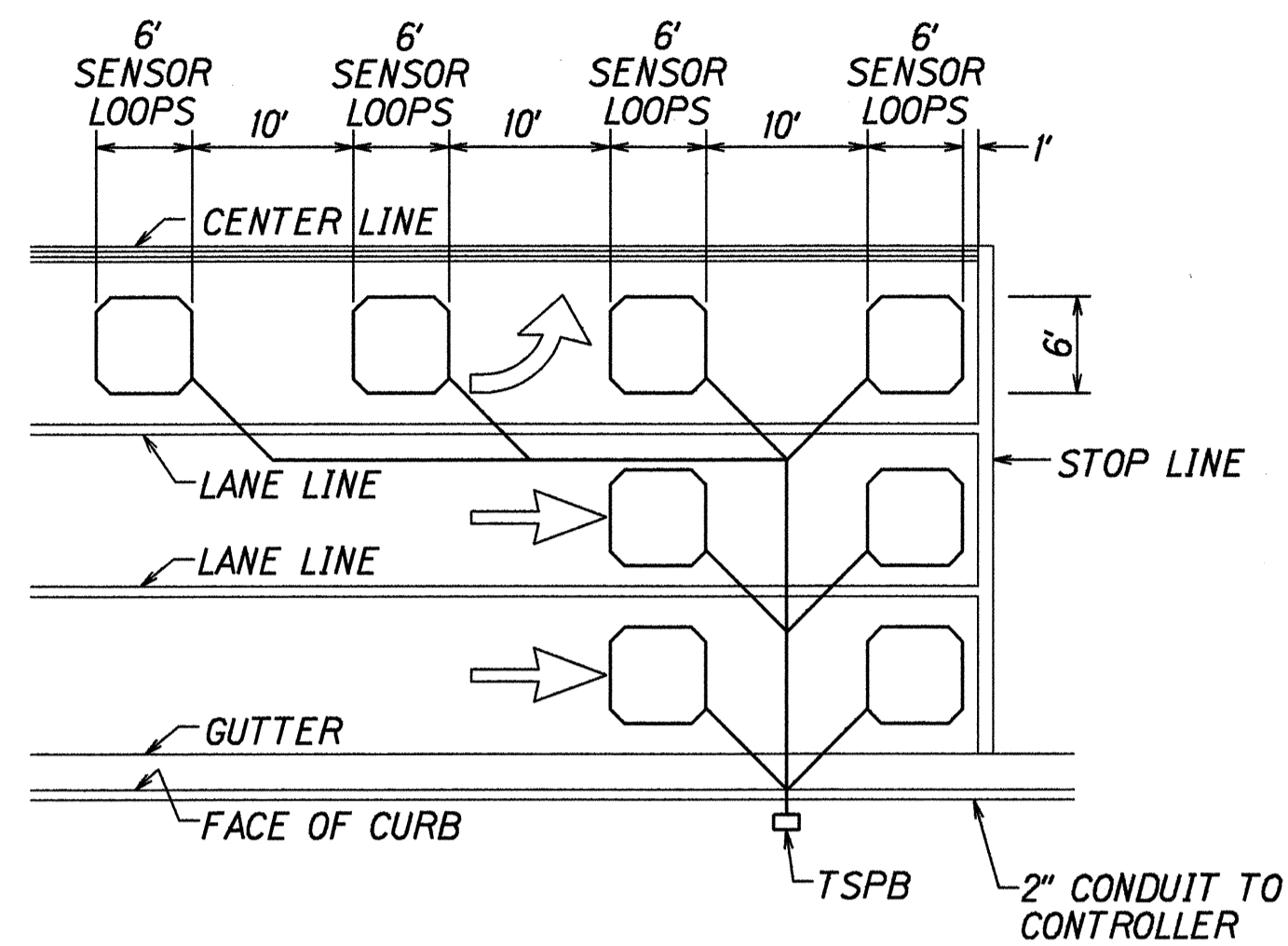
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS TRAFFIC SUMMARY
FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M
Scale: As Shown Date: Feb., 1996

SHEET No. T12 OF 13 SHEETS

SURVEY PLOTTED BY: DATE: 2/21/96
 ORIGINAL PLAN: DRAWN BY: M. Ikehata
 NOTE BOOK: DESIGNED BY: G. Kishida
 102.may: CHECKED BY: G. Isumigami

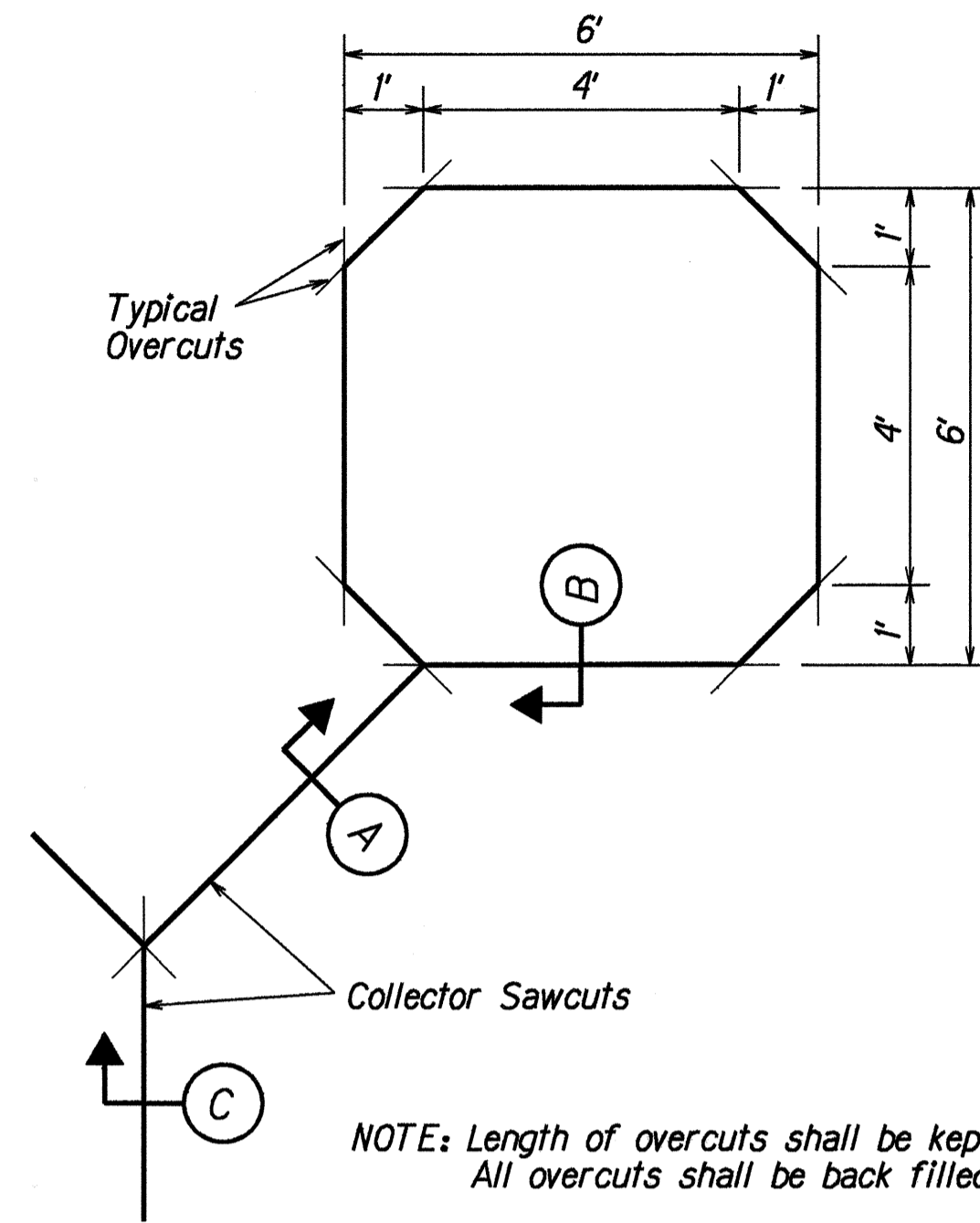
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-96M	1996	32	32



NOTES:

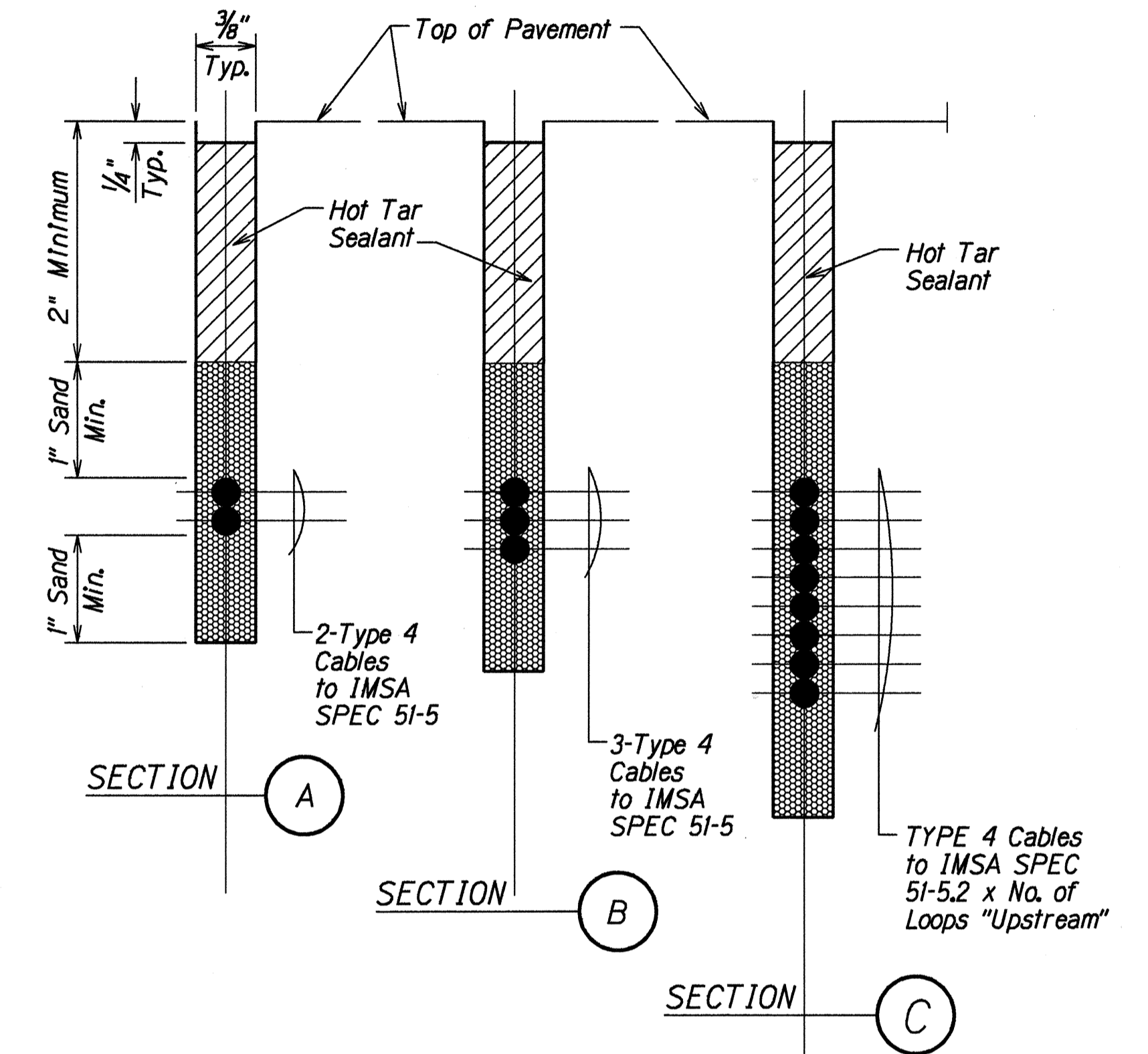
1. Center sensor loops in lanes.
2. Collector cables shall be twisted 2 turns per foot.
3. Number of loops and locations vary. See project plans.
4. Number and locations of collector sawcuts may be varied in the field to suit.

TYPICAL SENSOR LOOP LAYOUT

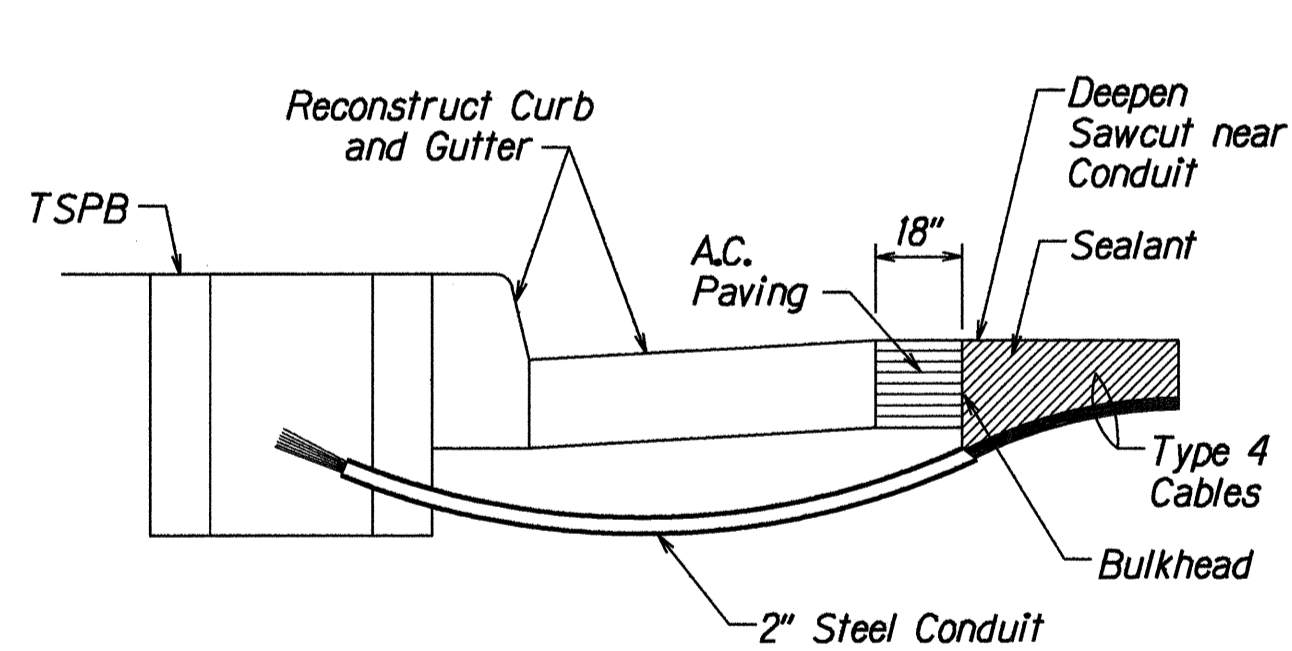


NOTE: Length of overcuts shall be kept to a minimum. All overcuts shall be back filled with hot tar.

TYPICAL SENSOR LOOP SAWCUT DETAIL



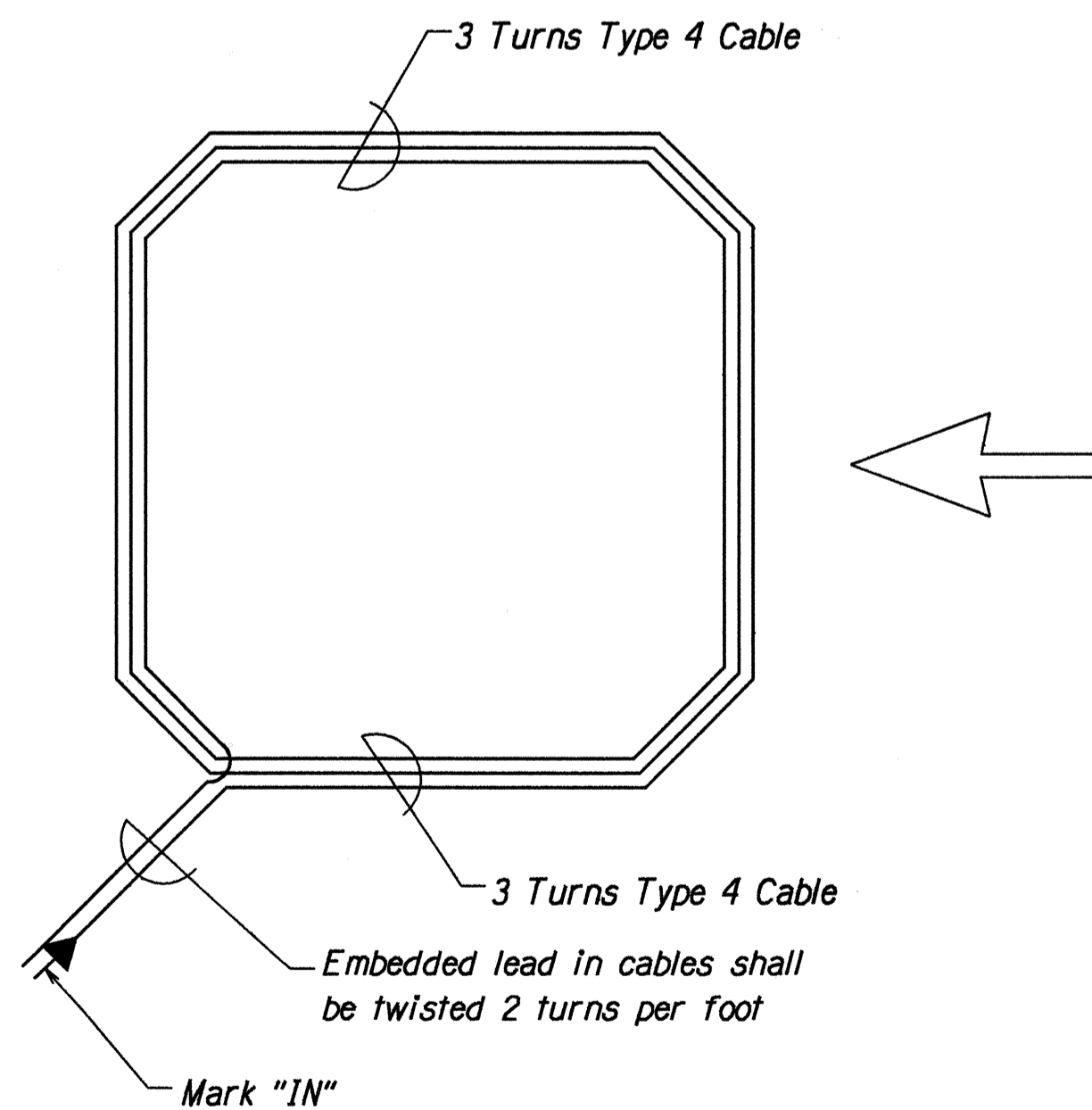
TYPICAL SECTION THROUGH SENSOR LOOP



NOTES ON CONSTRUCTION AT END OF SAWCUT

1. Seal roadway end of conduit after installation of conductors.
2. Install bulkhead across conduit trench.
3. Place hot tar in sawcut.
4. Backfill over conduit with new A.C.
5. Reconstruct curb and gutter as required.

DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY



TYPICAL SENSOR LOOP WIRING DIAGRAM

TYPES OF CABLES

- TYPE 1 Signal Loop Cable: Stranded No. 14, 26 conductors
- TYPE 2 Detector Lead-In Cable and Pedestrian Push Button Circuit Cable: Stranded, No. 14, 2 Conductors
- TYPE 3 Interconnect Cable: Solid No. 20, 12 Pairs
- TYPE 4 Loop Sensor Cable: Solid No. 12, Single Conductor to IMSA SPEC 51-5
- TYPE 5 Cable from Signal Loop to Signal Head: Stranded, No. 14, Single Conductor
- TYPE 6 Service Cable: Solid, No. 6, 3 Conductors

ORIGINAL PLAN	DATE	12/04/95
SURVEY PLOTTED BY		
DRAWN BY		
DESIGNED BY		
CHECKED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LOOP DETECTOR DETAILS
FARRINGTON HIGHWAY RESURFACING
Aliinui Drive to Palailai Interchange,
Including H-1 On/Off Ramps
Project No. 93A-01-96M

Not to Scale Date: Feb., 1996

SHEET No. T13 OF 13 SHEETS