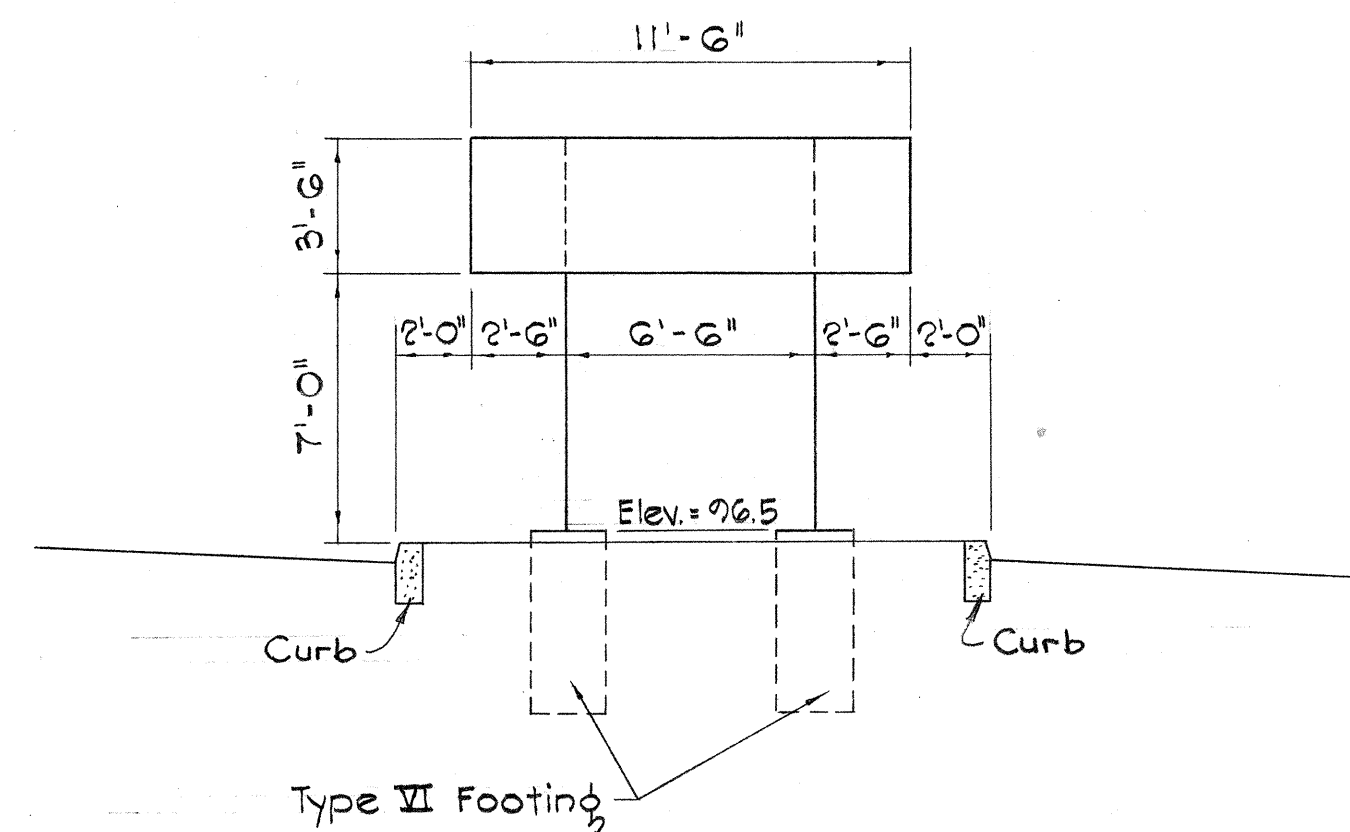
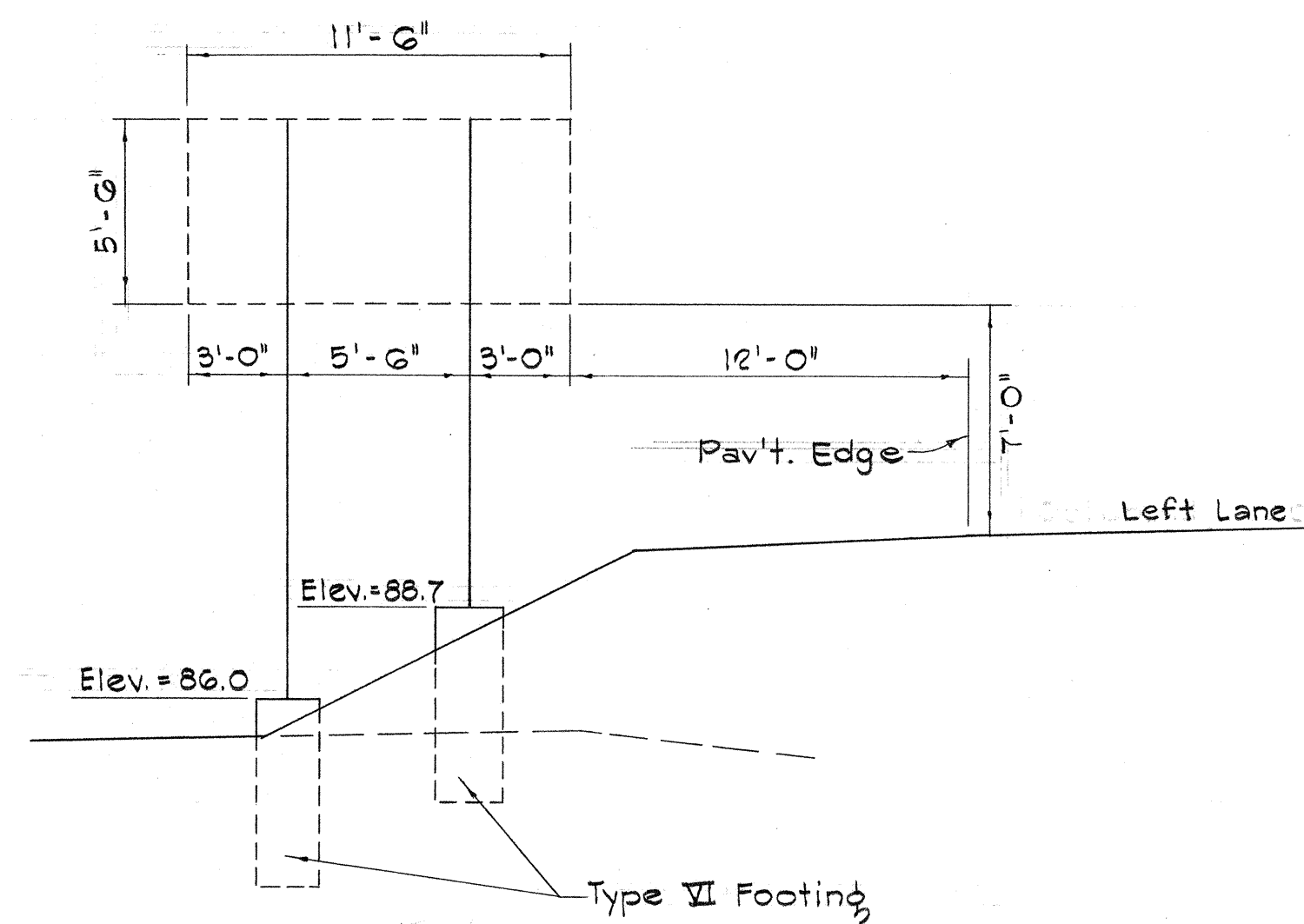


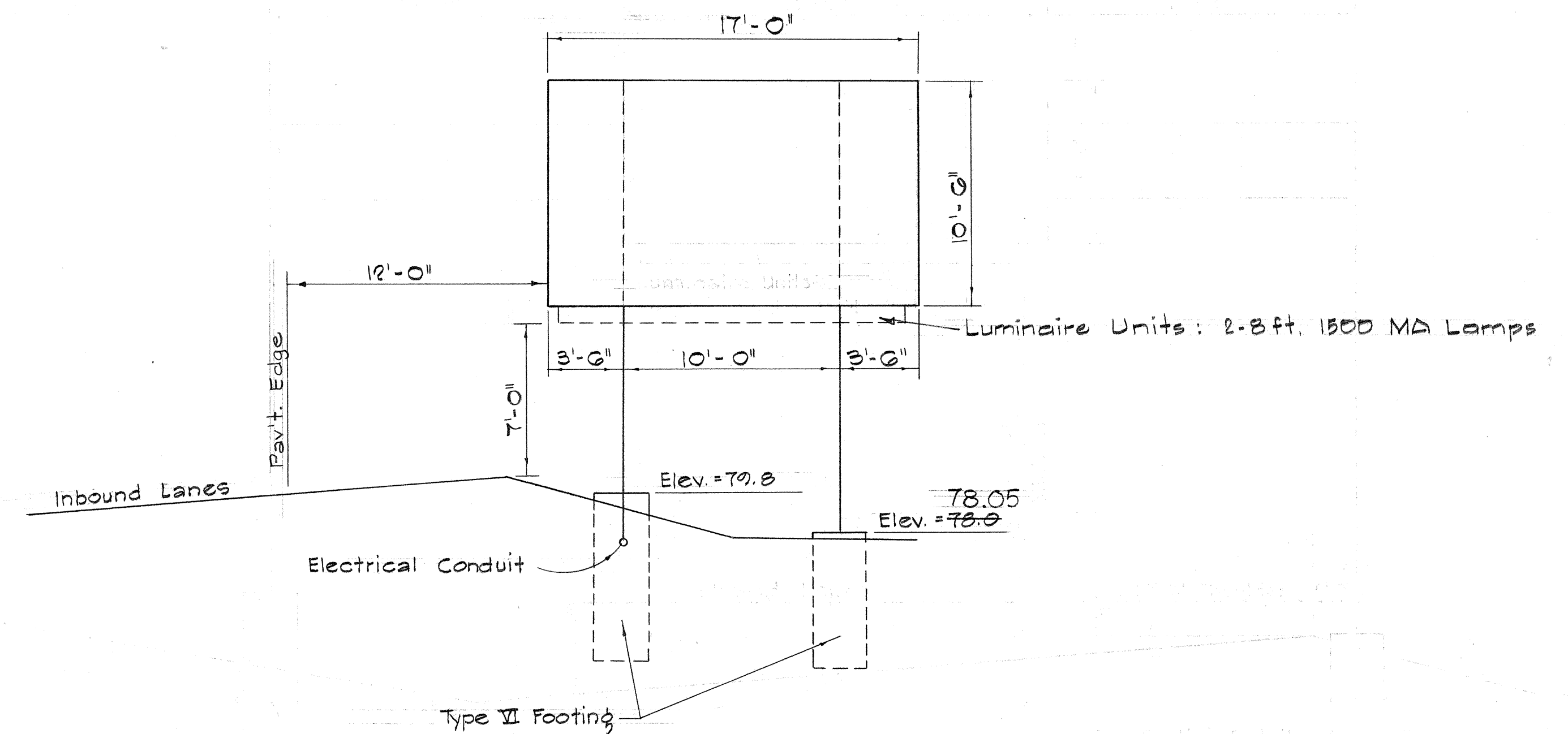
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(20)	1965	25	55



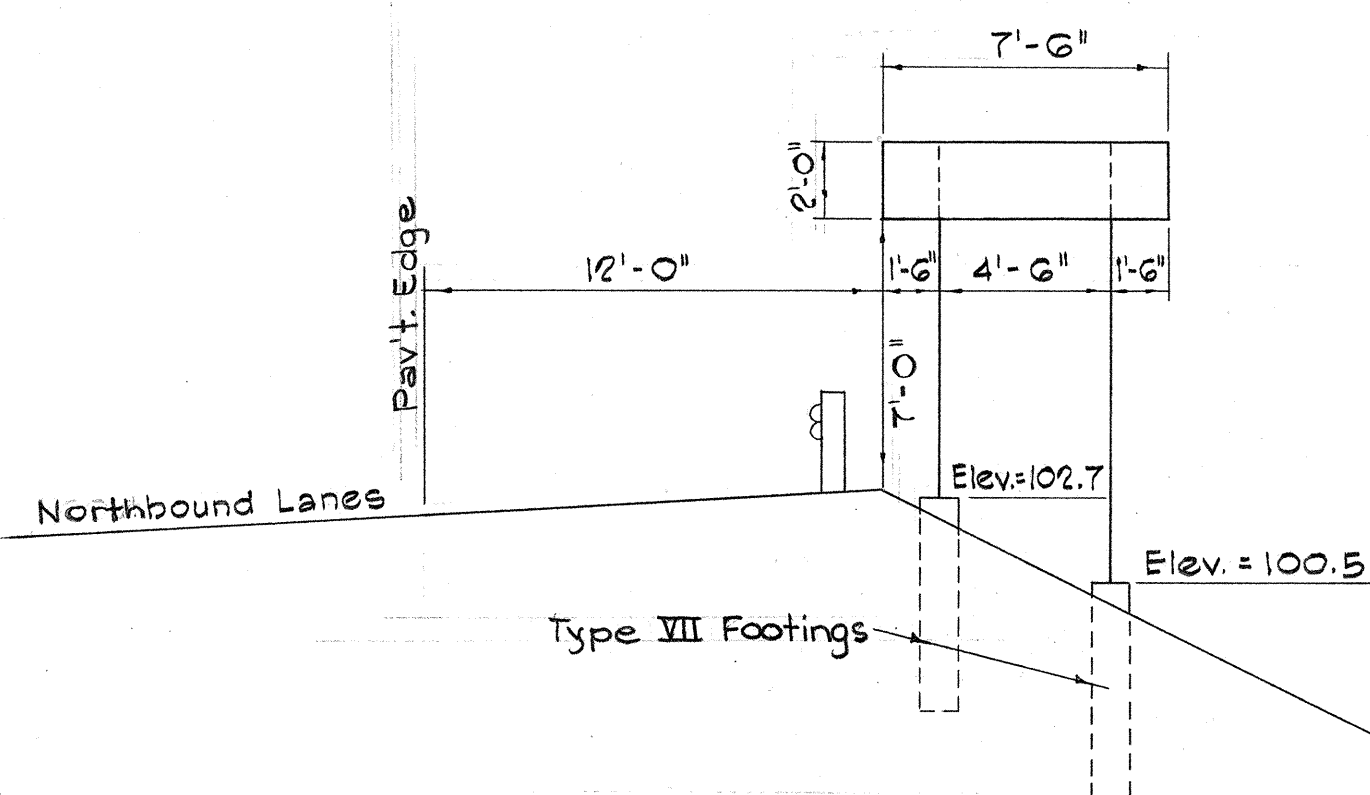
SIGN D-2
Road "C" Sta. 7+84



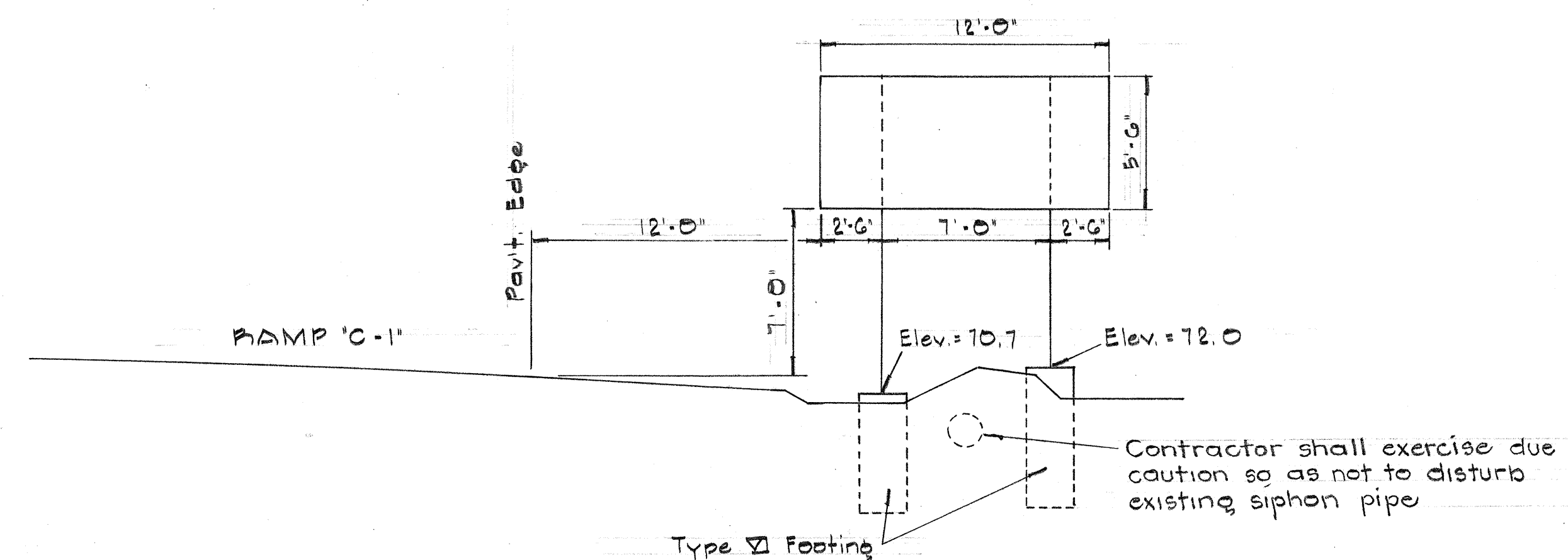
SIGN D-4
Road "B" Sta. 2+50



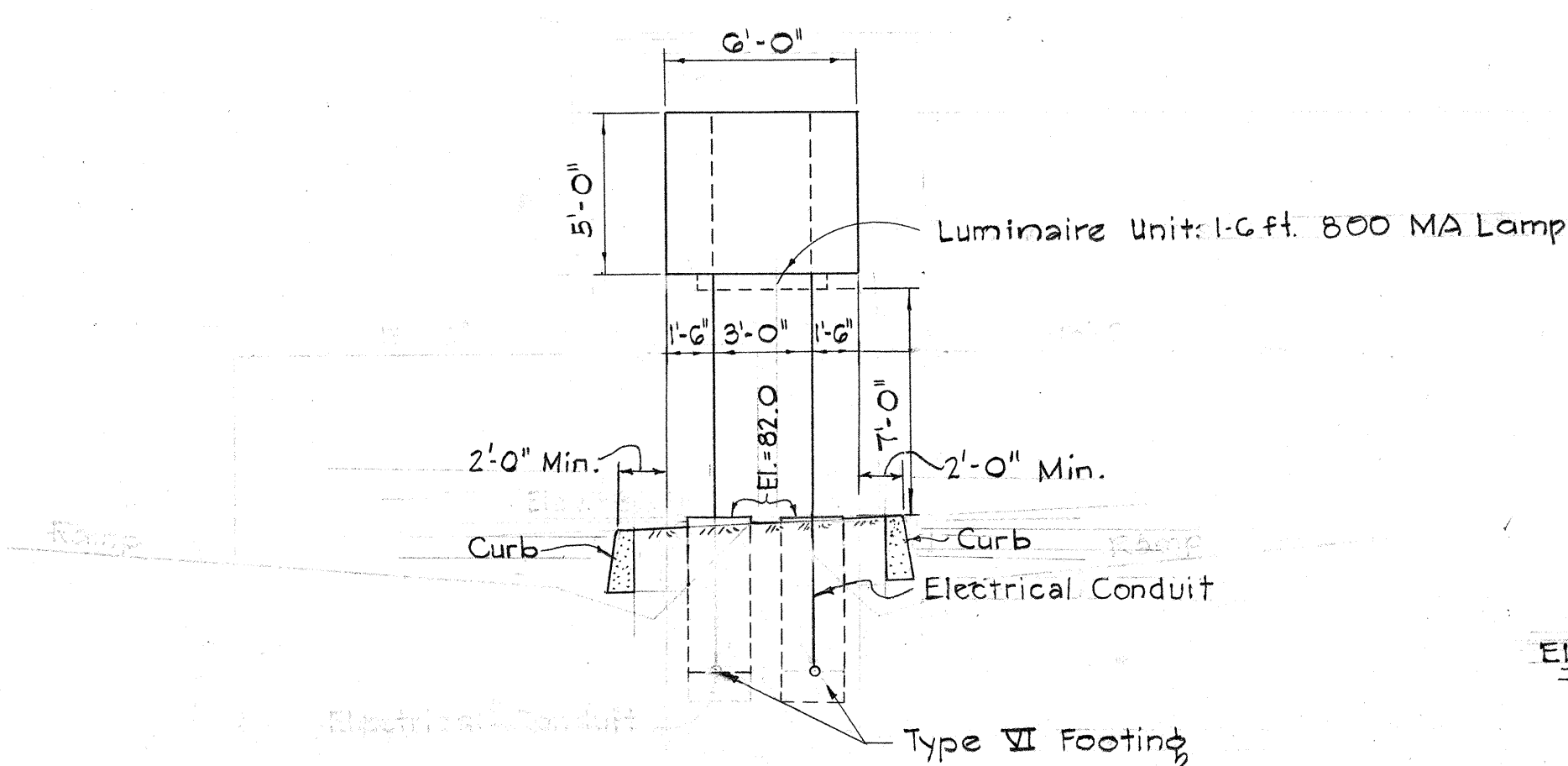
SIGN E-4
Interstate Route H-1 Sta. 43+00



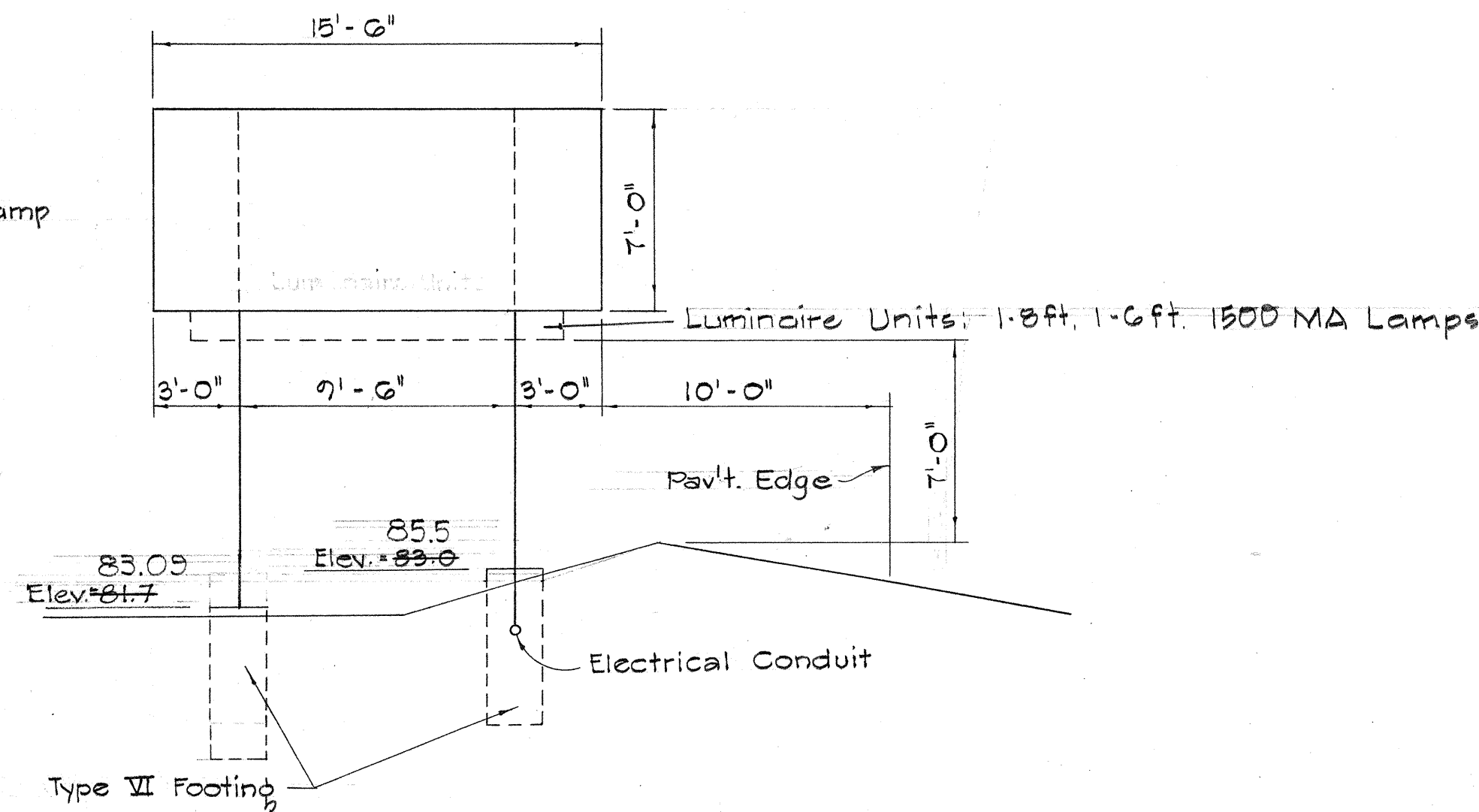
SIGN D-5
Road "A" Sta. 12+00



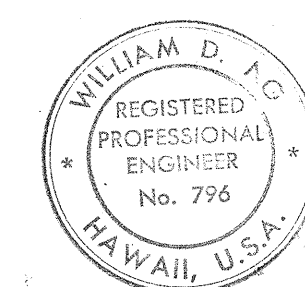
SIGN D-3
Ramp "C-1" Sta. 2+40



SIGN E-3
Road "C" Sta. 2+03.36



SIGN E-5
Road "C" Sta. 2+70



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

Belt, Collins & Associates Ltd.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

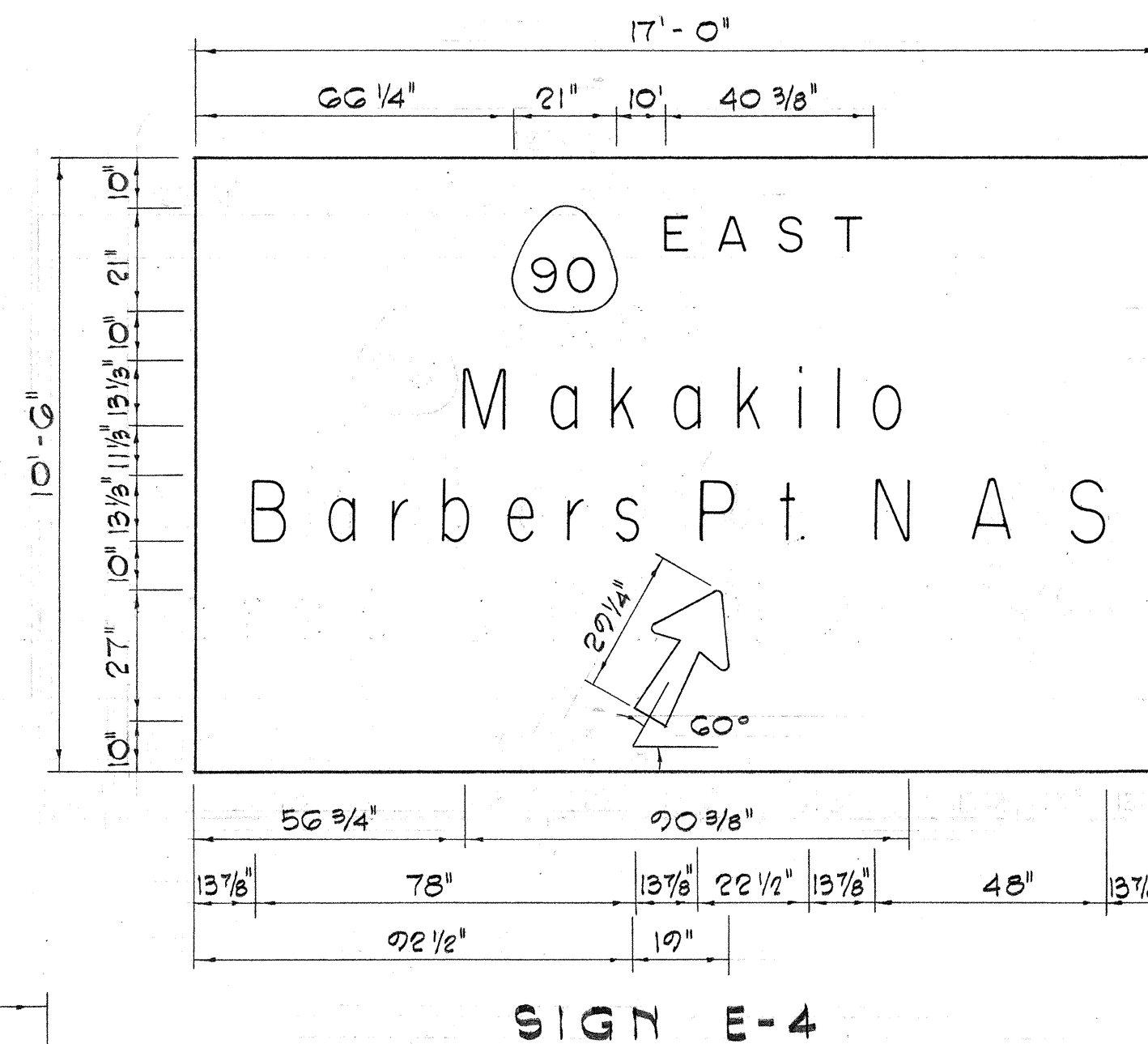
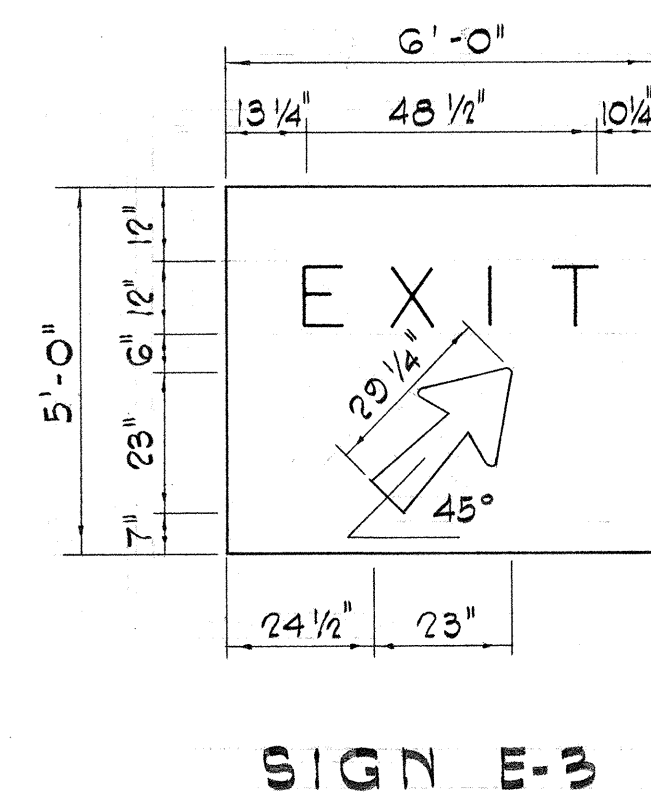
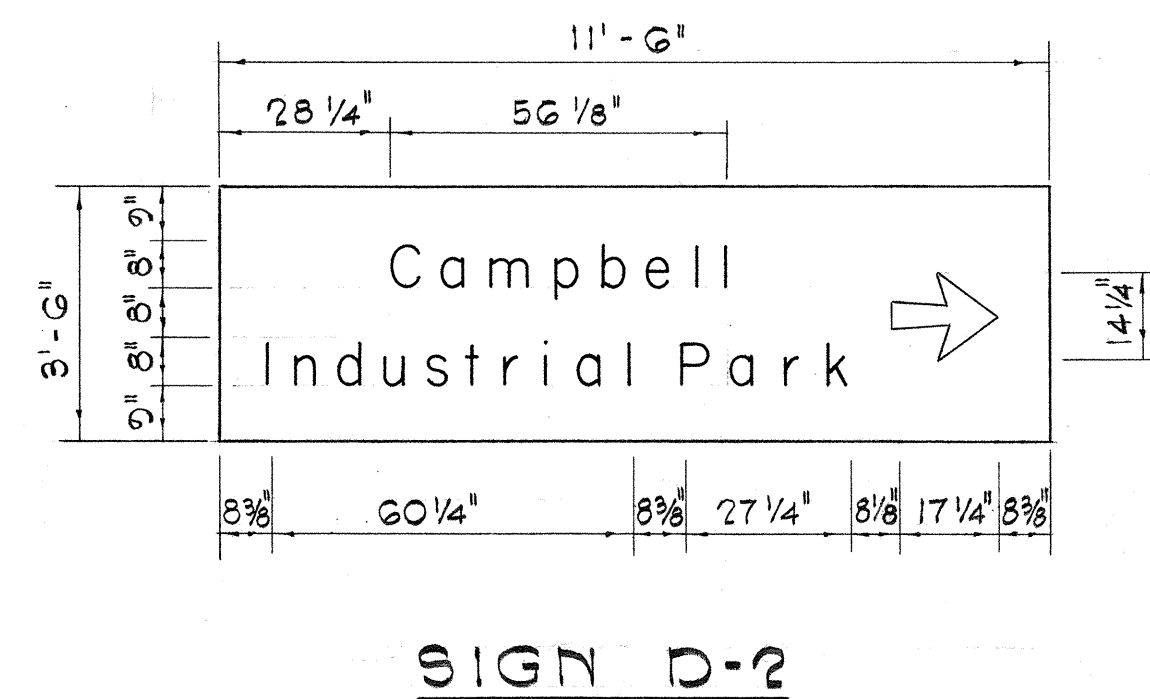
DESTINATION & EXPRESSWAY SIGNS
PANEL & POST

INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(20)

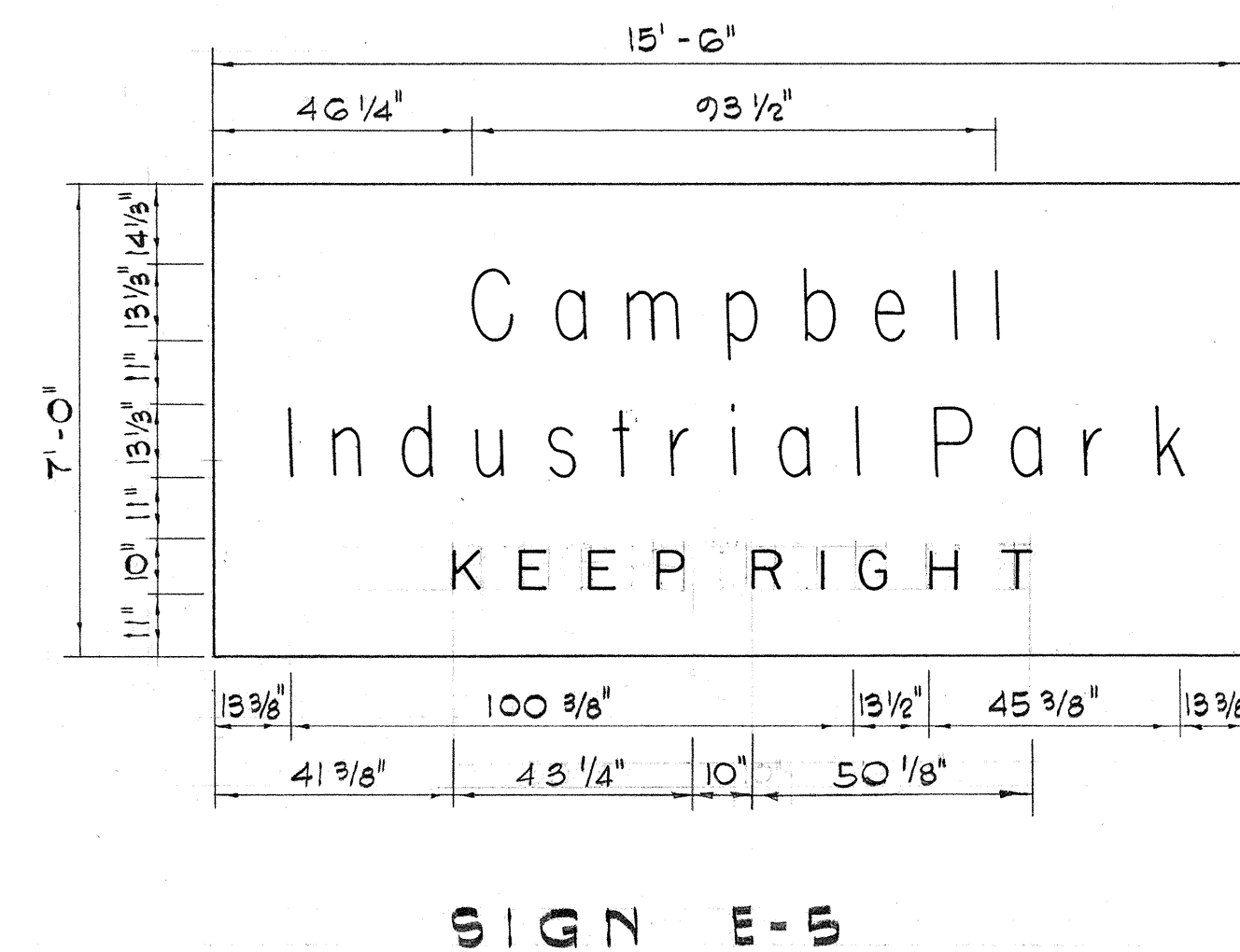
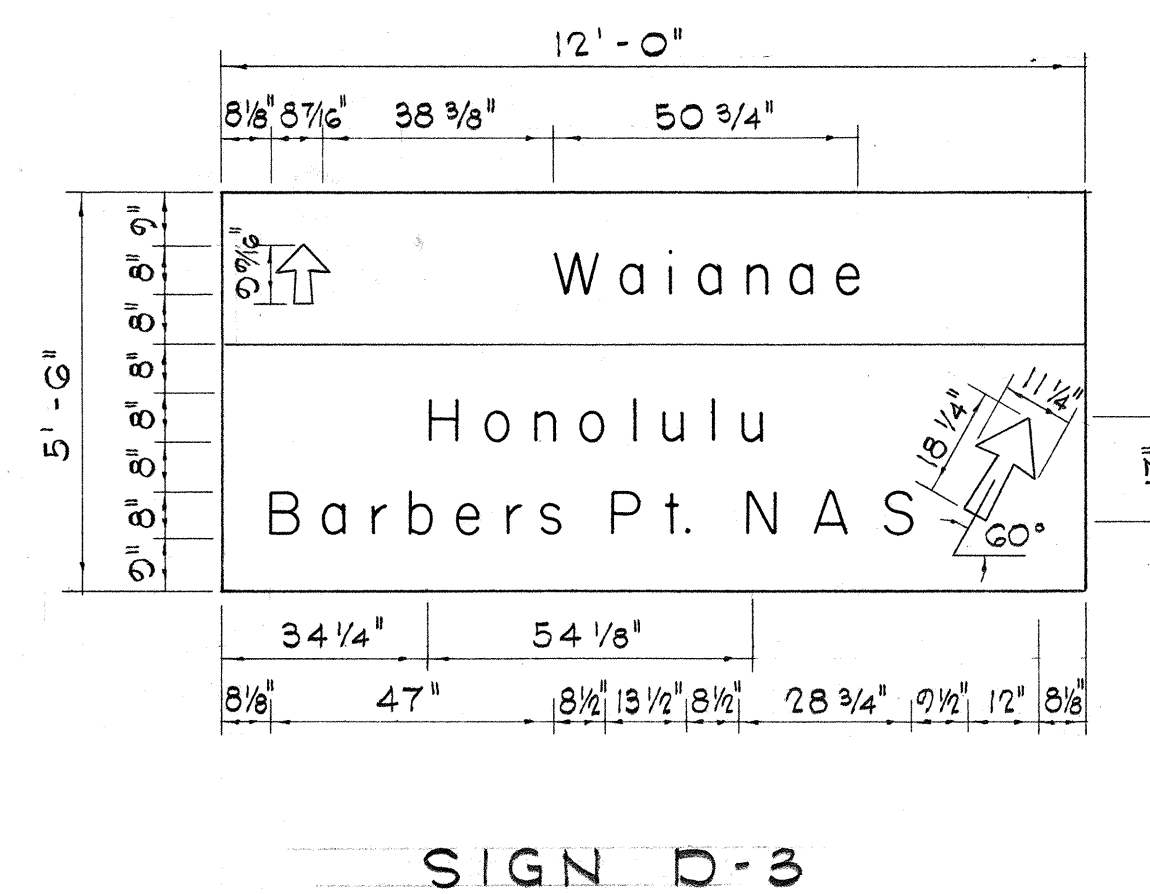
Scale: 1"=5'-0" July, 1964

SHEET NO. 1 OF 3 SHEETS

ORIGINAL	DATE
PLAN	
NOTED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	



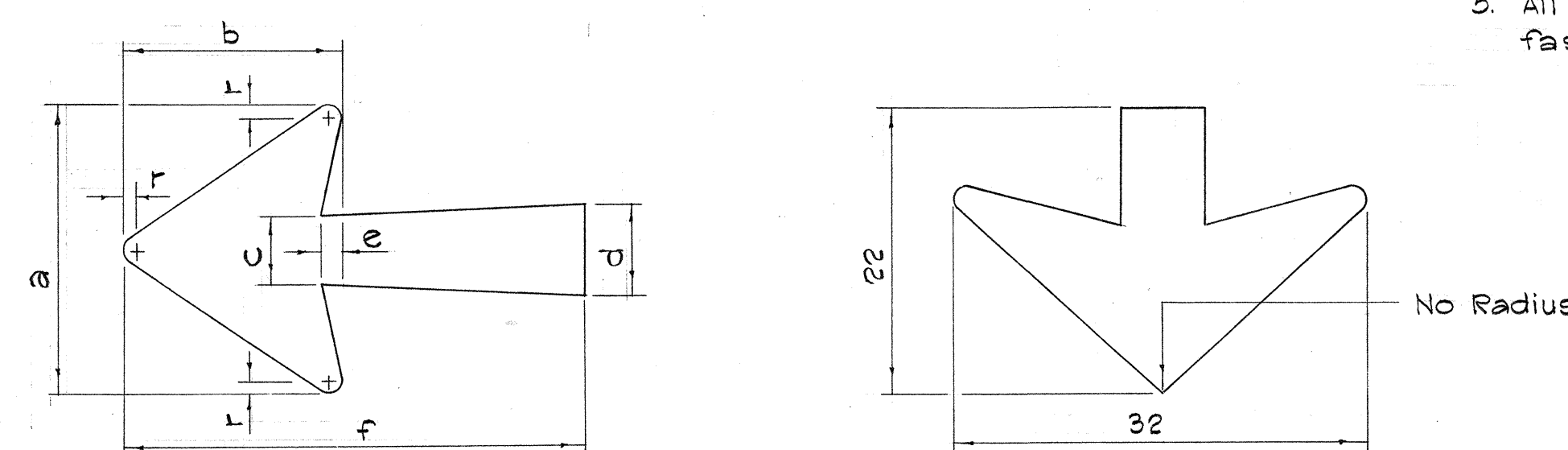
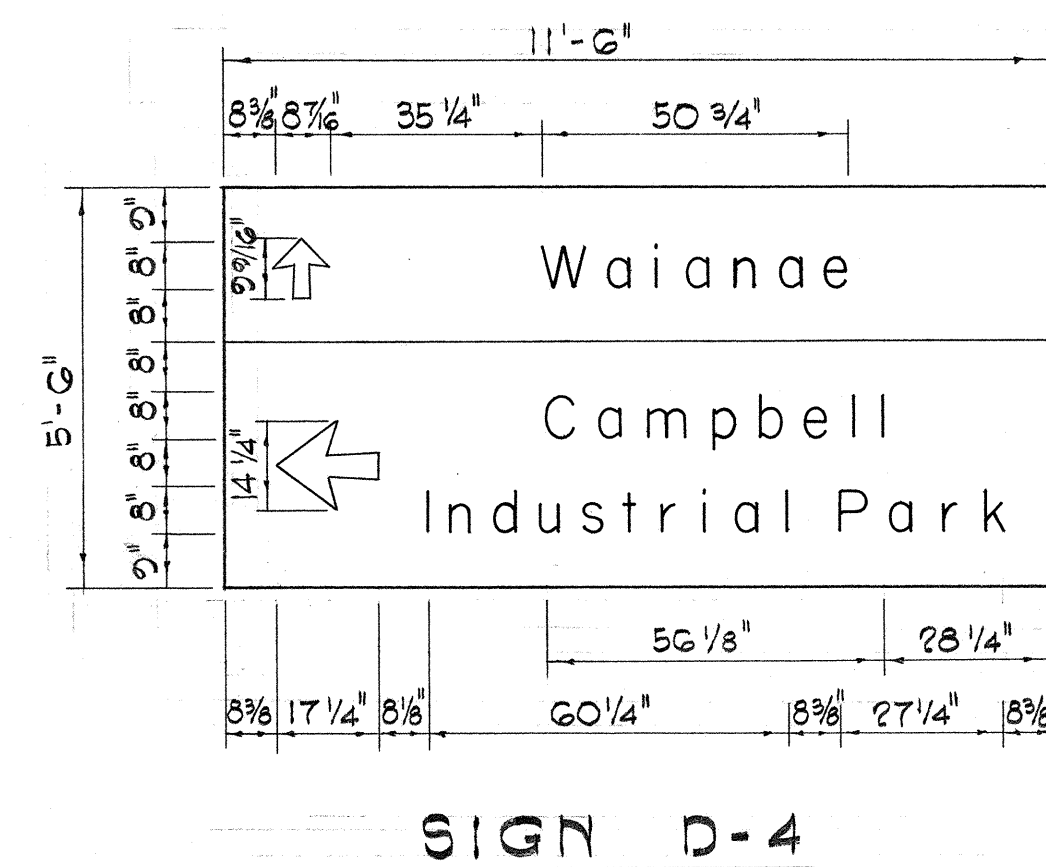
SUMMARY OF EXPRESSWAY AND DESTINATION SIGNS		
PROJECT NO		I-HI-1(20)
Sign No	Message	Area(sq.ft.)
E-3	Exit	30.00
E-4	Makakilo; Barbers Pt. NAS	178.50
E-5	Campbell Industrial Park, KEEP RIGHT	108.50
D-2	Campbell Industrial Park	40.25
D-3	Waianae, Honolulu, Barbers Pt. NAS	66.00
D-4	Waianae; Campbell Industrial Park	63.25
D-5	Waianae	15.00
TOTAL		501.50



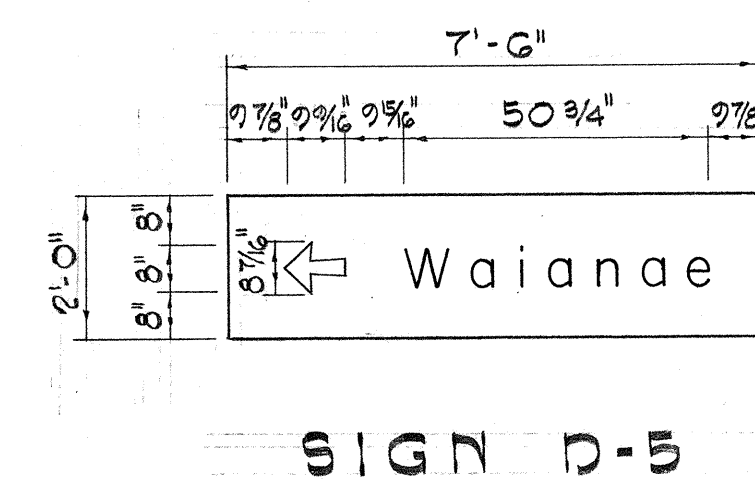
ARROW SIZE	DIMENSIONS IN INCHES						
	a	b	c	d	e	f	r
8 7/16 x 2 7/16	8 7/16	5 7/16	2 3/16	2 15/16	5/8	2 7/16	1/2
21 7/8 x 25	21 7/8	14 1/4	5	6 3/4	1 3/4	25	1
11 1/4 x 18 1/4	11 1/4	8 3/4	3 1/8	3 7/8	7/8	18 1/4	5/8
18 1/4 x 27 1/4	18 1/4	14	4 1/2	6	1 1/2	27 1/4	3/4
22 1/4 x 35 5/8	22 1/4	17	5 3/8	7 1/8	1 3/4	35 5/8	1
32 x 22	32	16	6 1/2	6 1/2	3	22	1

GENERAL NOTES

- Sign message shall be lettered in upper case according to "Standard Alphabets for Highway Signs," Bureau of Public Roads, 1952, and lower case according to "Standard Lower Case Alphabets for Highway Signs," Bureau of Public Roads, 1962. Use Series "E" modified letters unless otherwise noted.
- Arrows shall conform with details as shown on plans.
- All borders and State Route Markers shall conform with detail sheet "Destination and Expressway Signs, State Route Marker and Border Details."
- Letters, numerals, symbols and borders shall be reflectorized cut-outs or demountable copies. Destination signs will use reflectorized cut-outs.
- All reflectorized cut-outs and demountable copies shall be fastened on sign panel with blind rivets. See Special Provision.



TYPICAL ARROW DETAILS

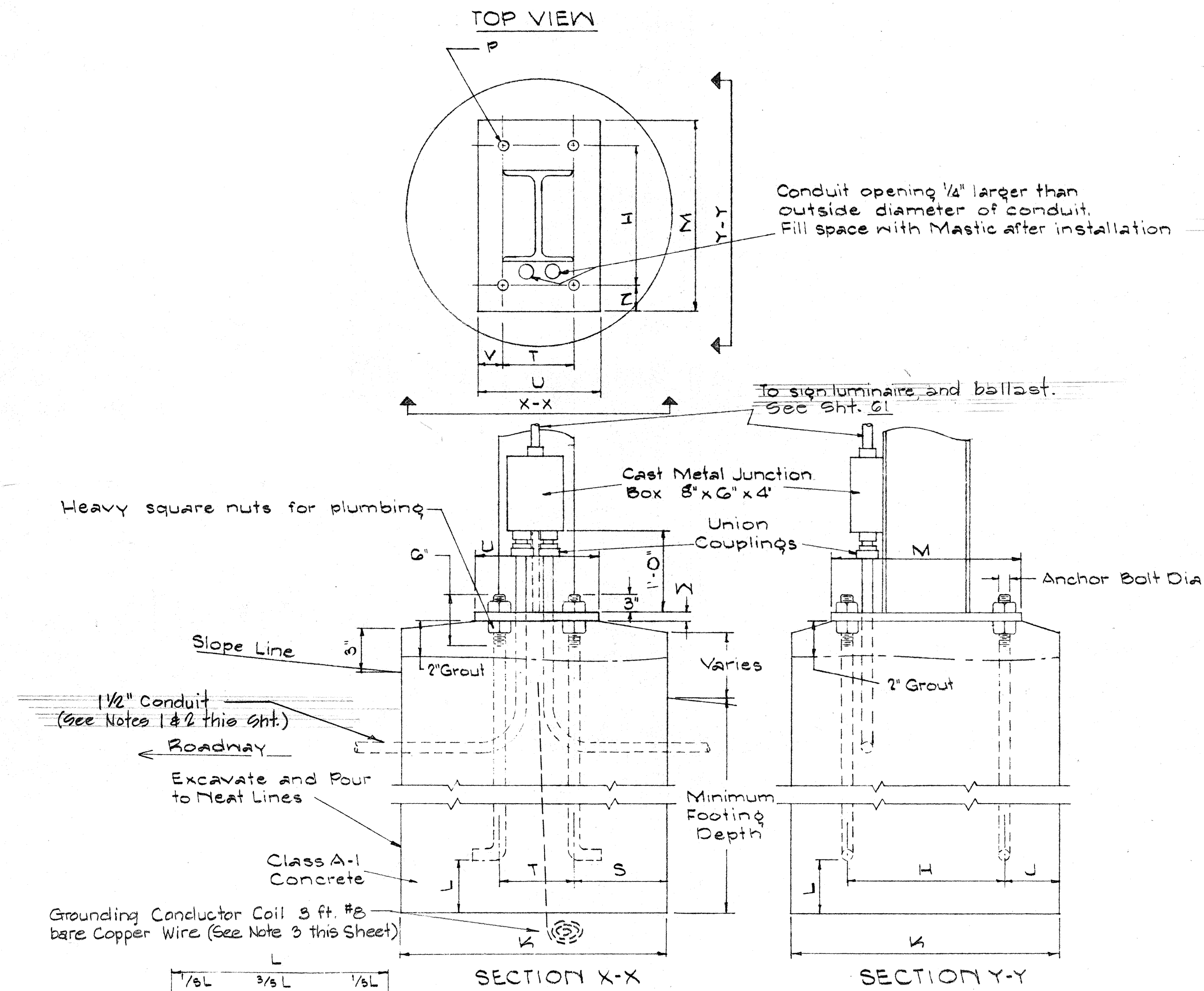


Belt, Collins & Associates Ltd.

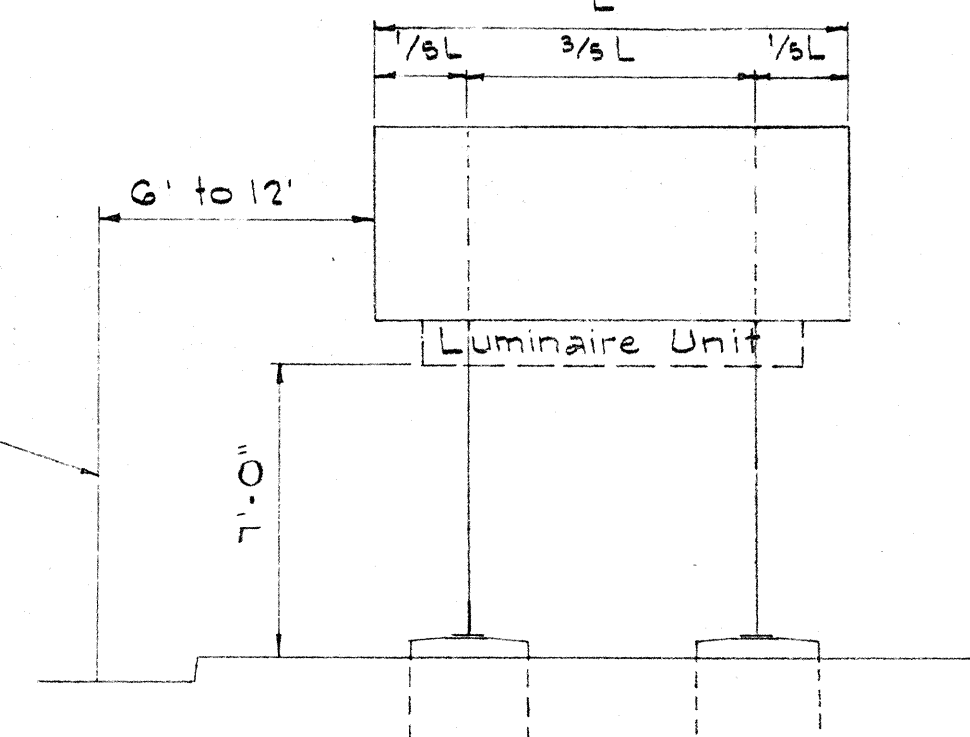
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DESTINATION & EXPRESSWAY SIGNS
PANEL LAYOUT
INTERSTATE ROUTE H-1
F.A.I. Proj. No I-HI-1(20)
Scale: 3/8"=1'-0" Date: July, 1964
SHEET No. 2 OF 3 SHEETS

SUPPORT STRUCTURE DATA FOR GROUND MOUNTED SIGNS																				
POST SIZE	MAXIMUM SIGN AREA	POST LGT. TOP OF FOUND. TO CENTER OF SIGN *	DIMENSIONS SEC. Y-Y						DIMENSIONS SEC. X-X						ANCHOR BOLT DIA.	MIN. FOOTING DEPTH (FEET)		TYPE OF WELD TO BASE PLATE		
			H	J	K	L	M	N	O	P	S	T	U	V		W	CUT		FILL	
6 J 8.5	50 sq.ft.	9'	14"	5"	24"	6"	17 1/4"	1 3/8"	1 1/4"	24"	1 1/4"	9"	6"	10"	2"	1"	1 1/8" +	4 1/2'	4 1/2'	3/8" 
8 J 10	50 sq.ft.	14'																		
8 J 10	70 sq.ft.	10'																5'		
8 WF 24	110 sq.ft.	11'																5'	6'	
8 WF 35	180 sq.ft.	16'	16 1/2"	6 3/4"	30"	6"	20"	19 1/4"	1 3/8"	30"	1 3/8"	11 3/4"	6 1/2"	10"	19 1/4"	1"	1 1/4" +	6'	7'	

Note: For signs with panel areas less than 30 sq. ft. but greater than 10 sq. ft. use 3" I 5.7# Steel I Beam.
 * For moment calculations only. Post to be from top of foundation to top of sign.



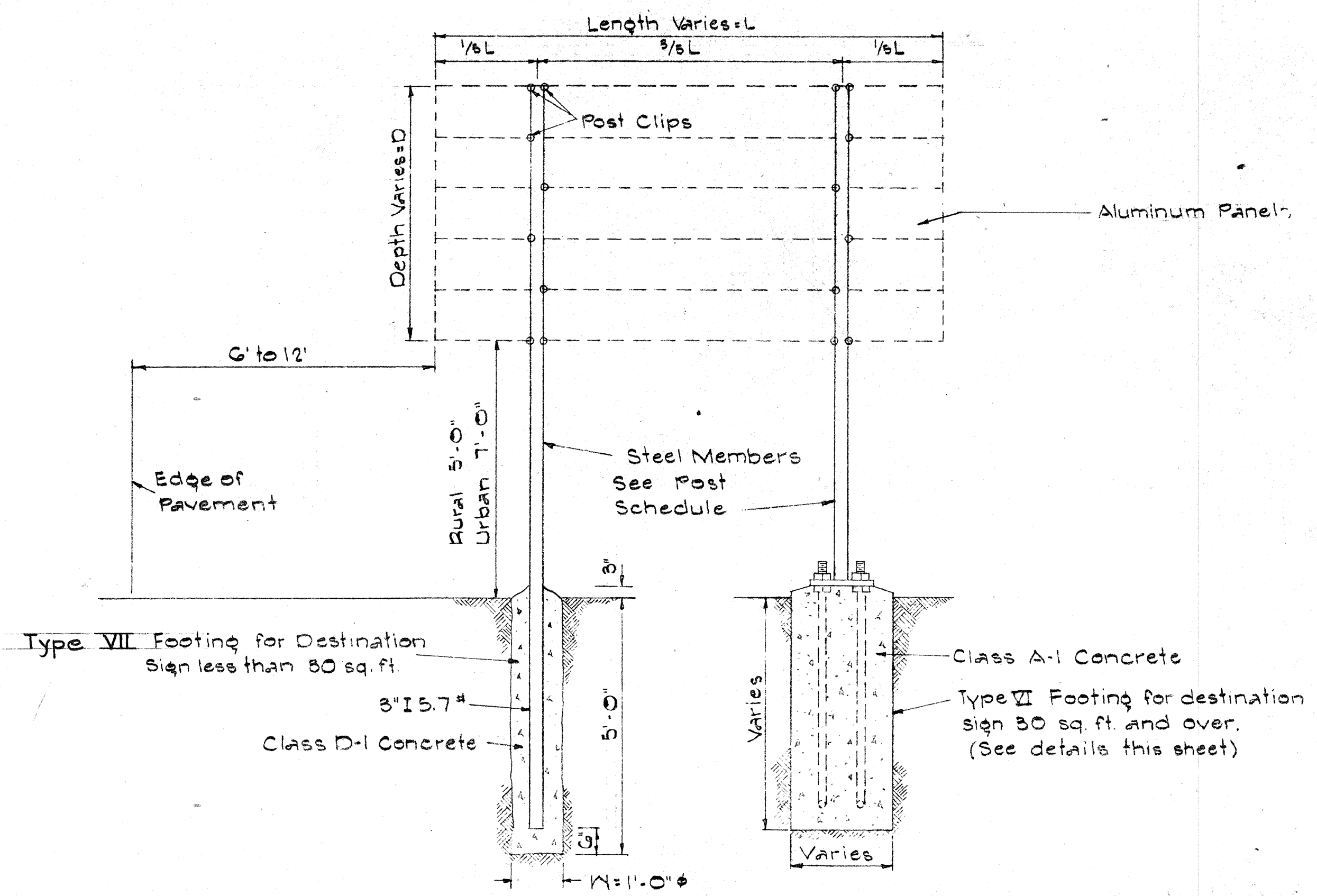
FOUNDATION DETAILS FOR GROUND MOUNTED EXPRESSWAY SIGN EXTRUDED ALUMINUM TYPE VI FOOTING



TYPICAL GROUND MOUNTED EXPRESSWAY SIGN TYPE A

- NOTES:
1. Conduit details are shown only for ground mounted illuminated Expressway Signs.
 2. Total number of conduits shall be as indicated on the drawings. Conduits shall slope away from post foundation and shall stub-out a minimum of 5'-0" for direct burial cable entry.
 3. Grounding conductor shall be bonded to sign support.
 4. For ballast mounting detail, see sheet 61.

GROUND MOUNTED TYPE - DESTINATION SIGN					
Sign No	Station	Steel Members		Base Plate	Footing
		Left	Right		
D-3	A.C. 1+350	8 J 10		10"x1" x 17 1/4"	VI 4-1 1/8" Dia.



TYPICAL DESTINATION SIGN PANEL & POST

GROUND MOUNTED TYPE - EXPRESSWAY SIGNS					
Sign No	Station	Steel Members		Base Plate	Footing
		Left	Right		
E-3	Rd. C 1+93.36	8 J 10		10"x1" x 17 1/4"	VI 4-1 1/8" Dia.
E-4	I.R.H. 43+00	8 WF 35		10"x1" x 20"	VI 4-1 1/4" Dia.
E-5	Rd. C 2+70	8 WF 24		10"x1" x 17 1/4"	VI 4-1 1/8" Dia.

GROUND MOUNTED TYPE - DESTINATION SIGNS					
Sign No	Station	Steel Members		Base Plate	Footing
		Left	Right		
D-2	Rd. C 7+83 1/2	6 J 8.5		10"x1" x 17 1/4"	VI 4-1 1/8" Dia.
D-4	Rd. A 12+00	8 J 10		10"x1" x 17 1/4"	VI 4-1 1/8" Dia.
D-5	Rd. B 2+50	3 I 5.7		None	VII None

Pelt, Collins & Associates Ltd.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DESTINATION & EXPRESSWAY SIGNS
 DETAILS & SCHEDULES
 TYPE A SIGN SUPPORT
 TYPE VI FOOTING
 INTERSTATE ROUTE H-1
 F.A.I. Proj. No I-HI-1(20)
 July, 1964

SHEET No. 3 OF 3 SHEETS