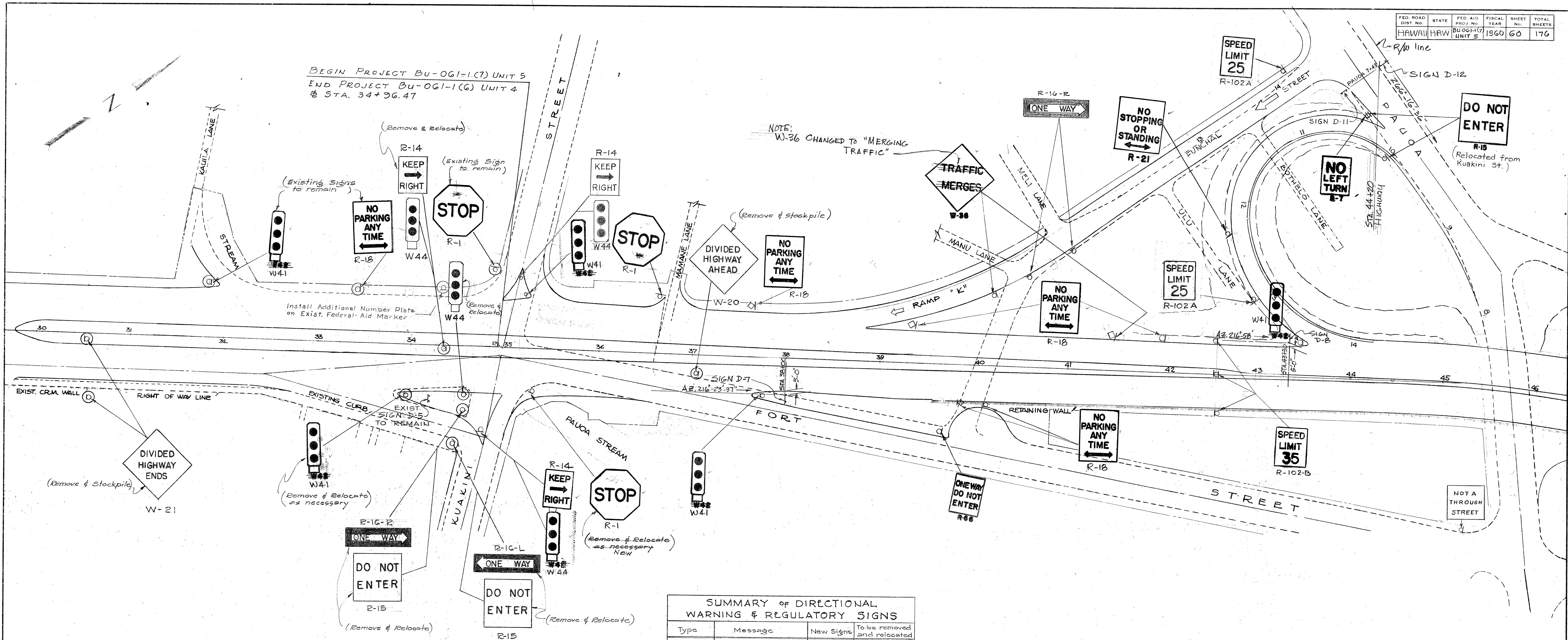




NOTE:

1. All existing Directional, Warning & Regulatory Signs within this Project shall be re-used where practicable.
2. Pavement Markings by others.
3. Existing Directional, Regulatory & Warning Signs to be removed shall be removed and stockpiled.

SYMBOLS:

- * * 0 Sign mounted on galvanized pipe.
- ⊙ Sign mounted on Monotube Light Standard.
- ⊙ Exist. signs to remain, unless noted otherwise.
- * * See Standard Details.

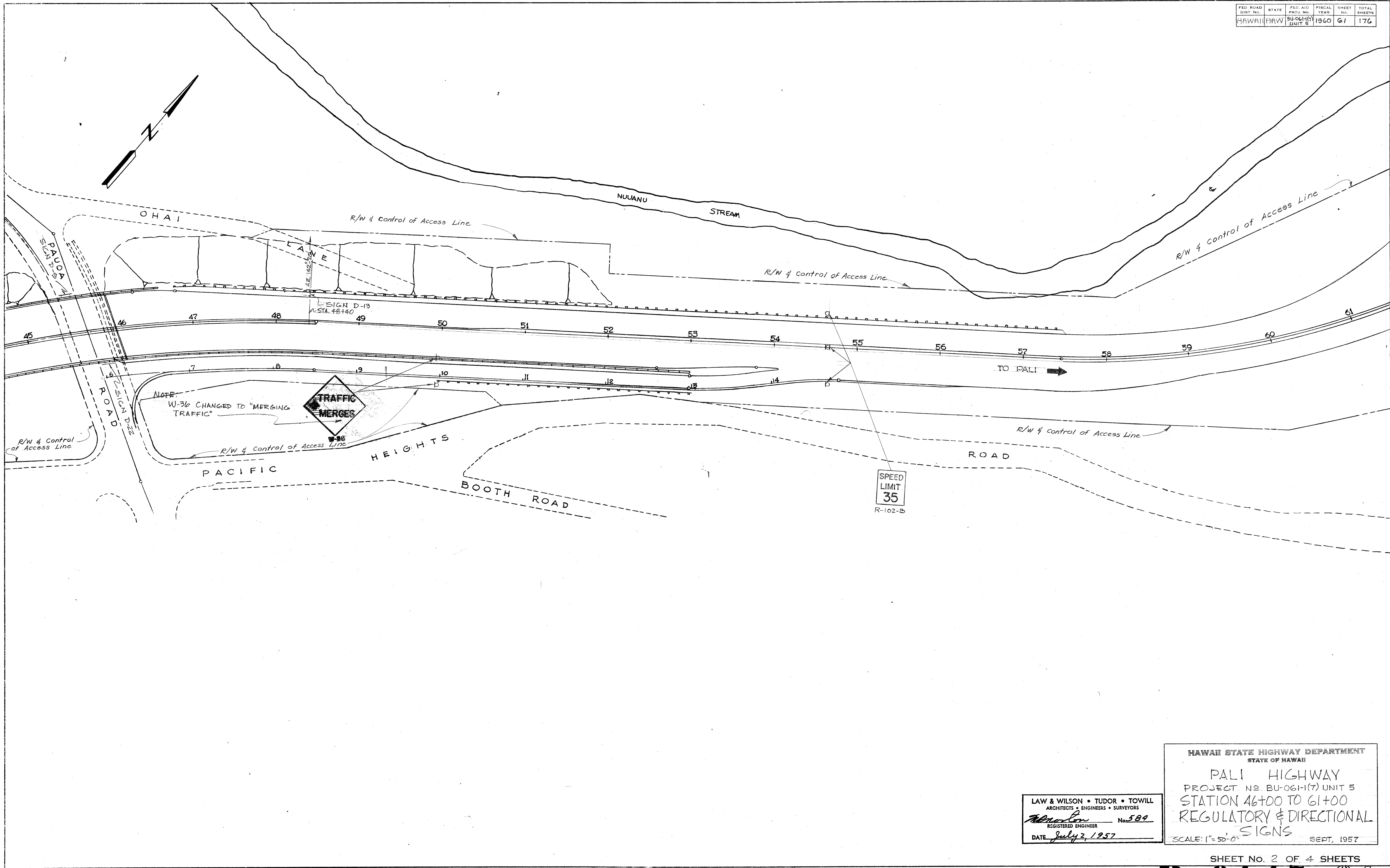
SUMMARY of DIRECTIONAL WARNING & REGULATORY SIGNS			
Type	Message	New Signs	To be removed and relocated
R-1	Stop	6	+ 0
R-7	No Left Turn	1	
R-14	Keep Right	3	+ 0
R-15	Do Not Enter	1	2
R-6	No Right Turn	1	
R-16-R	One-Way (Right Arrow)	2	1
R-18	No Parking Anytime	3	
R-21	No Stopping or Standing	1	
R-32	Yield Right of Way	1	
R-66	One Way Do Not Enter	1	
W-13	Stop Ahead	1	
W-20	Divided Highway Ahead		
W-36	Merging Traffic	8	
W-41	Reflectors	+ 0	1
W-42	Reflectors	2	
W-44	Reflectors	3	+ 0
W-21	Divided Highway Ends		
R-102-B	Speed Limit 35	+ 6	13
R-102-A	Speed Limit 25	3	
R-105-B	Begin 35 Mile Speed		
	Not A Through Street	1	
	Total	69-68	14

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

LAW & WILSON • TUDOR • YOWILL
 ARCHITECTS • ENGINEERS • SURVEYORS
Lawson
 REGISTERED ENGINEER No. 584
 DATE July 2, 1957

HAWAII STATE HIGHWAY DEPARTMENT
 STATE OF HAWAII
 PALI HIGHWAY
 PROJECT NO. BU-061-1(7) UNIT 5
 STATION 32+00 TO 46+00
 REGULATORY & DIRECTIONAL SIGNS
 SCALE: 1"=50'-0" SEPT, 1957

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	PAW	BU-061(7) UNIT 5	1960	61	176



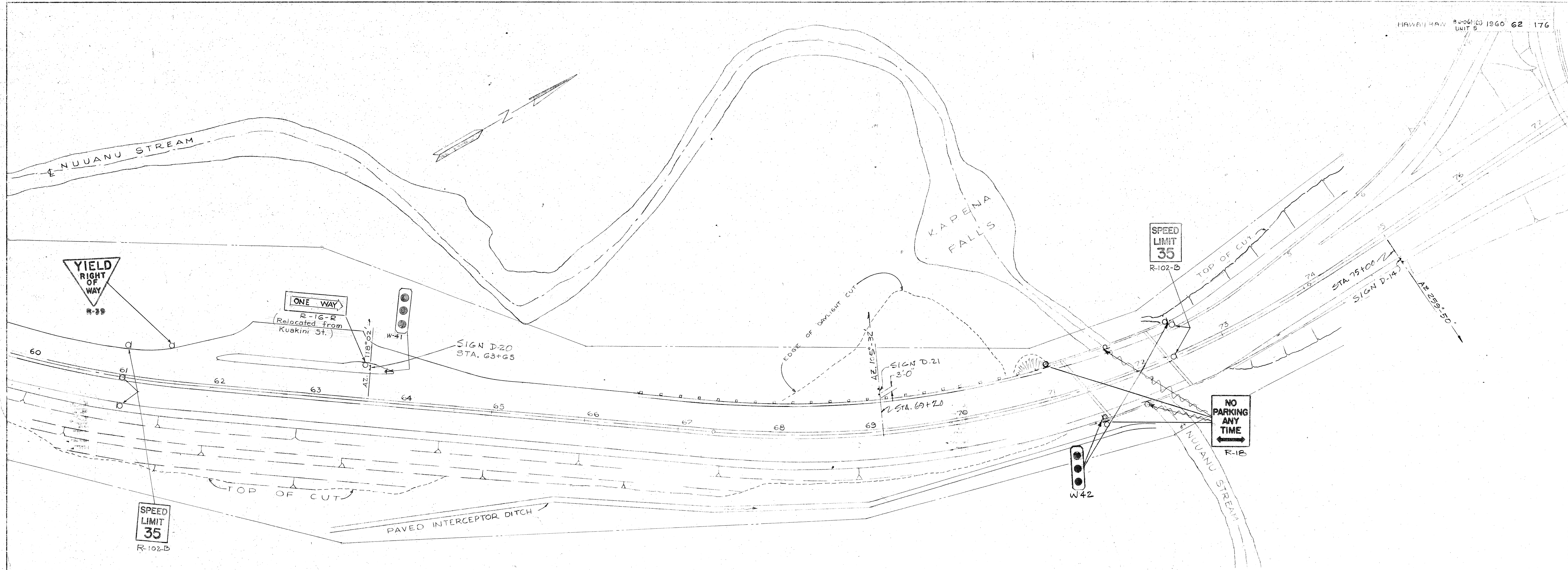
ORIGINAL PLAN	DESIGNED BY	DATE
NOTE BOOK NO.	DRAWN BY	
	QUANTITIES CHECKED BY	
	CHECKED BY	

LAW & WILSON • TUDOR • TOWILL
ARCHITECTS • ENGINEERS • SURVEYORS
Richard L. Wilson REGISTERED ENGINEER No. 584
DATE July 2, 1957

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO. BU-061-1(7) UNIT 5
STATION 46+00 TO 61+00
REGULATORY & DIRECTIONAL SIGNS
SCALE: 1"=50'-0" SEPT, 1957

SHEET No. 2 OF 4 SHEETS

B.S147.61



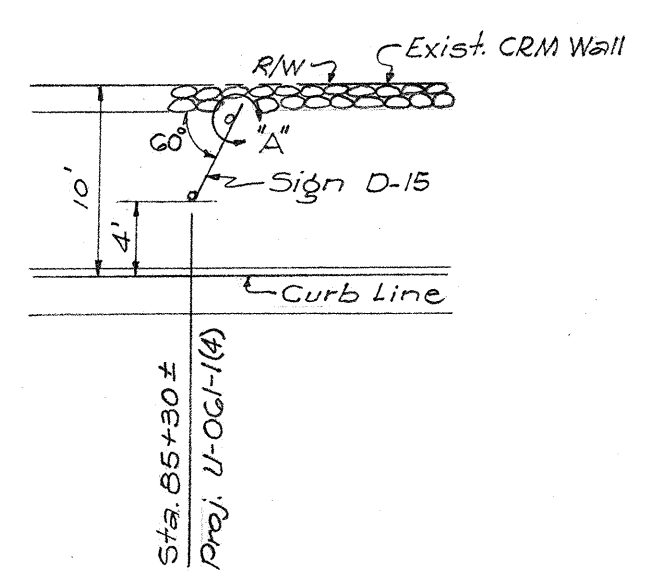
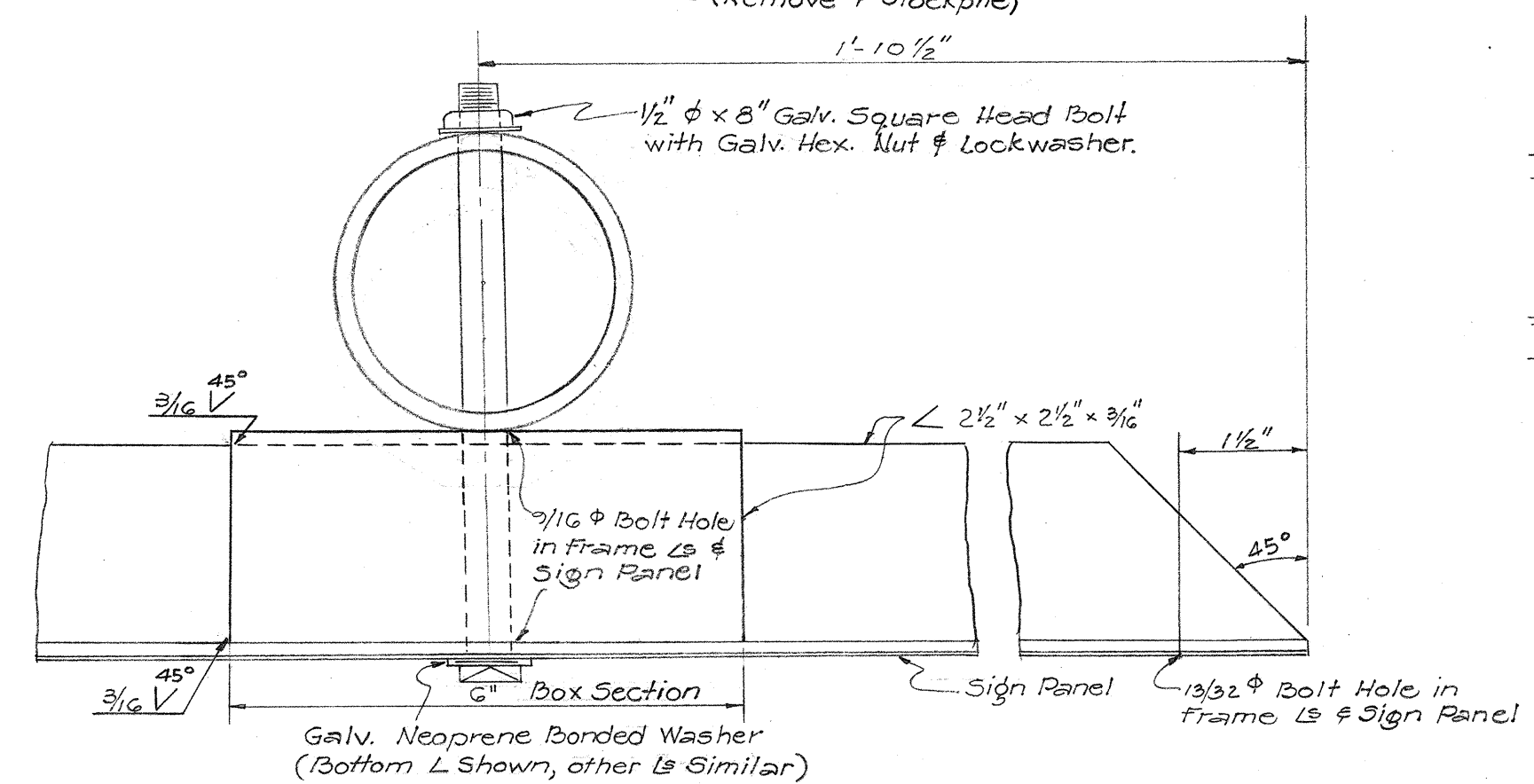
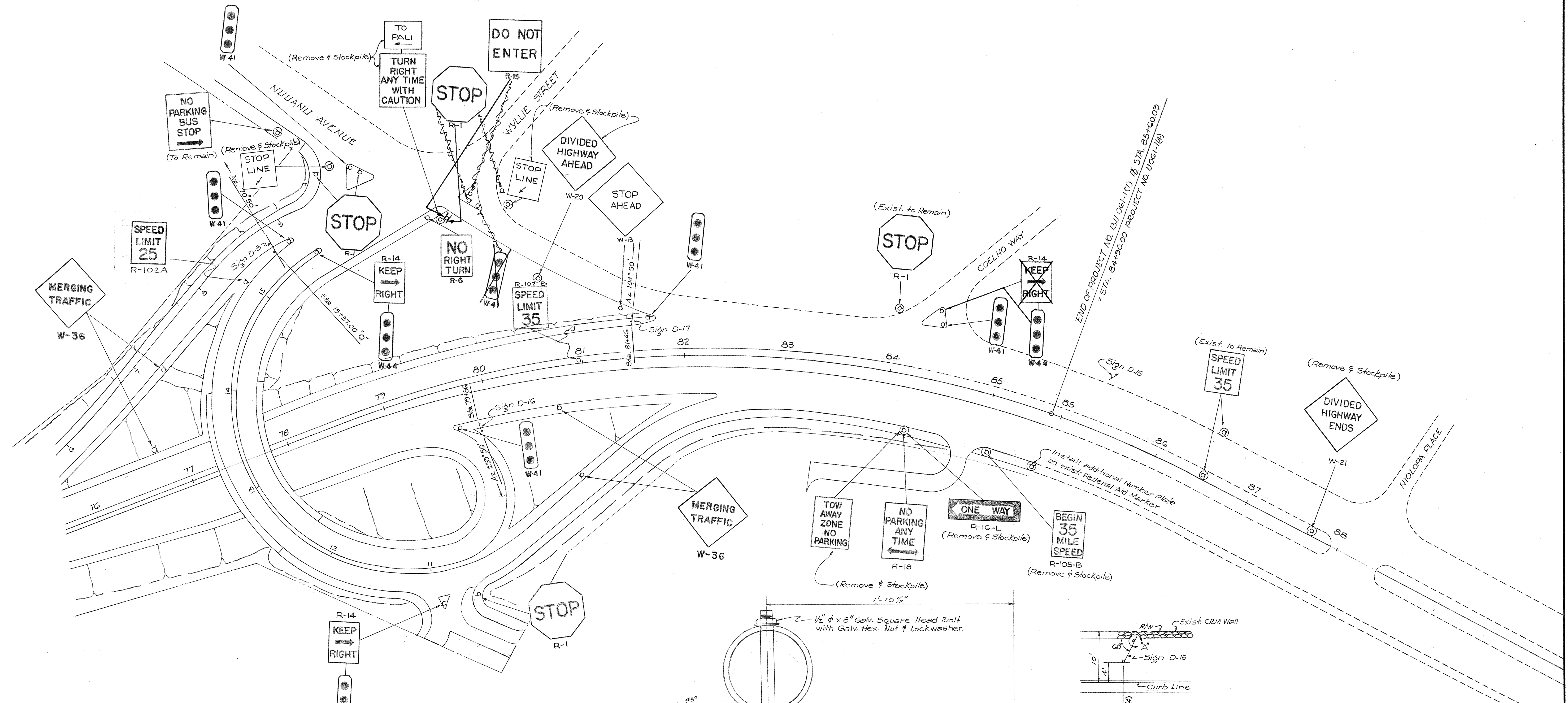
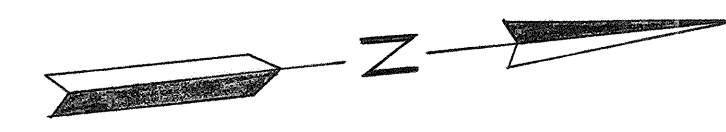
DATE	BY
DESIGNED BY	CHKD BY
DRAWN BY	DATE
NOTED BY	DATE
NO.	NO.

LAW & WILSON • TUDOR • TOWILL
ARCHITECTS • ENGINEERS • SURVEYORS
Edward L. Wilson
REGISTERED ENGINEER No. 589
DATE July 2, 1957

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO. BU-061(7) UNIT 5
STATION 61+00 TO 77+00
REGULATORY & DIRECTIONAL
SCALE: 1"=50' 0" SIGNS SEPT. 1957

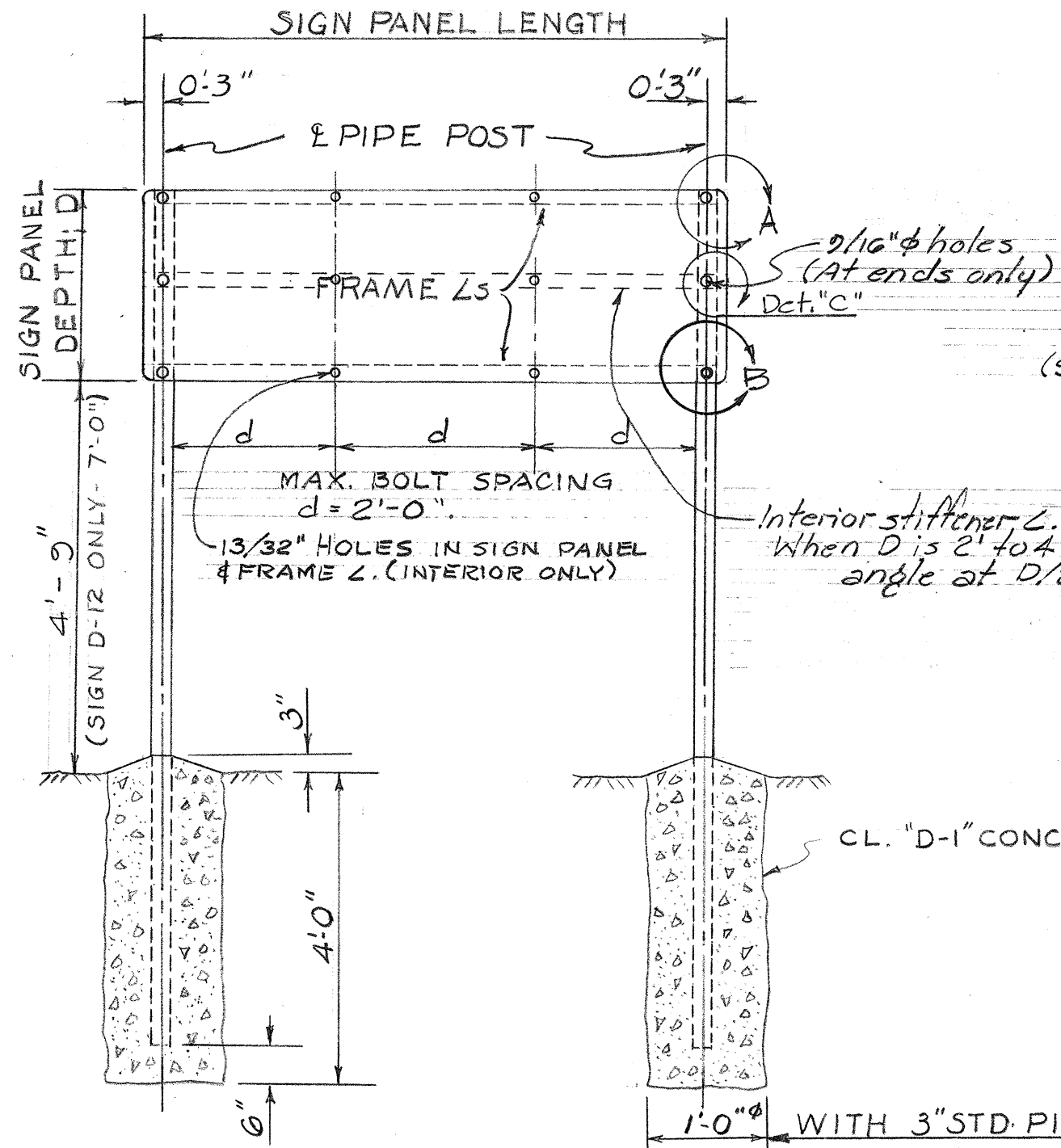
SHEET NO. 3 OF 4 SHEETS

B.S147.62



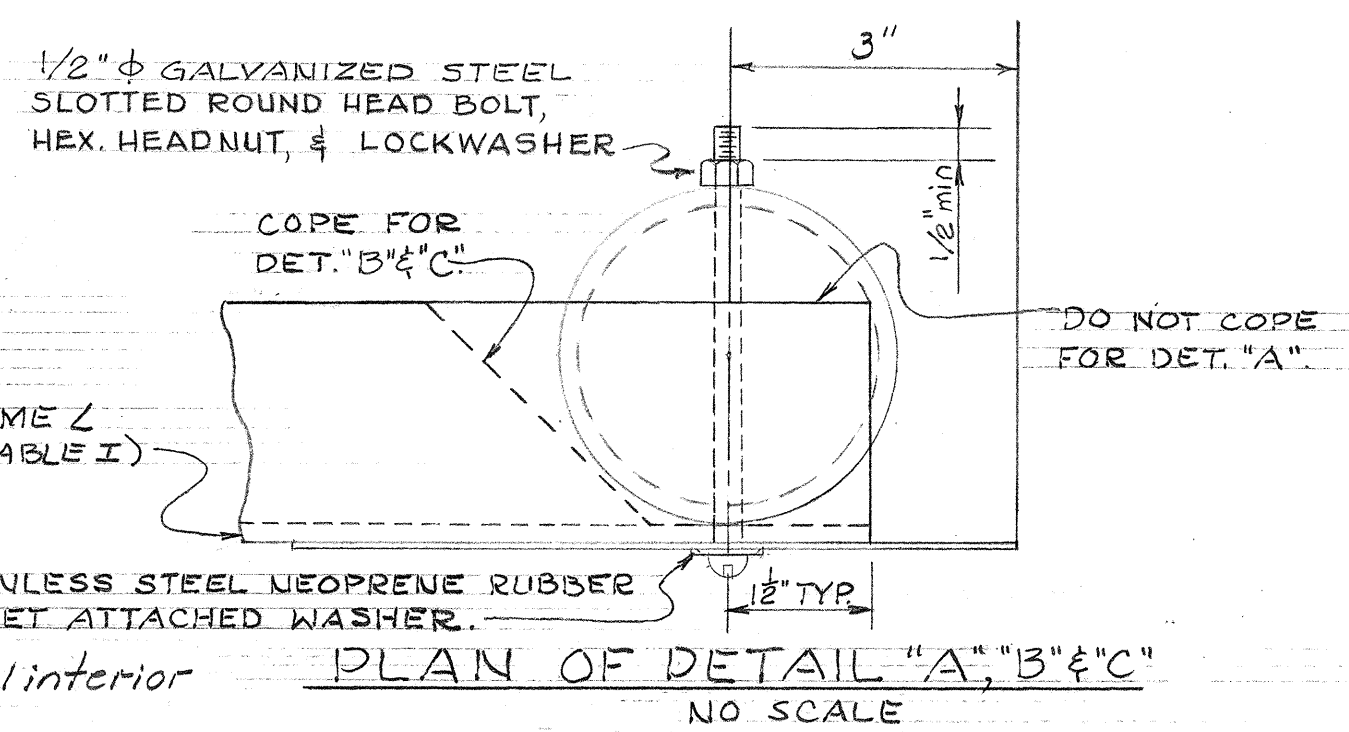
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES CHECKED BY	
NO.	

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO. BU 061-1(7) UNIT 5
REGULATORY & DIRECTIONAL SIGNS
STATION 77+00 TO 87+00
SCALE: 1"=50'-0" NOVEMBER 1959

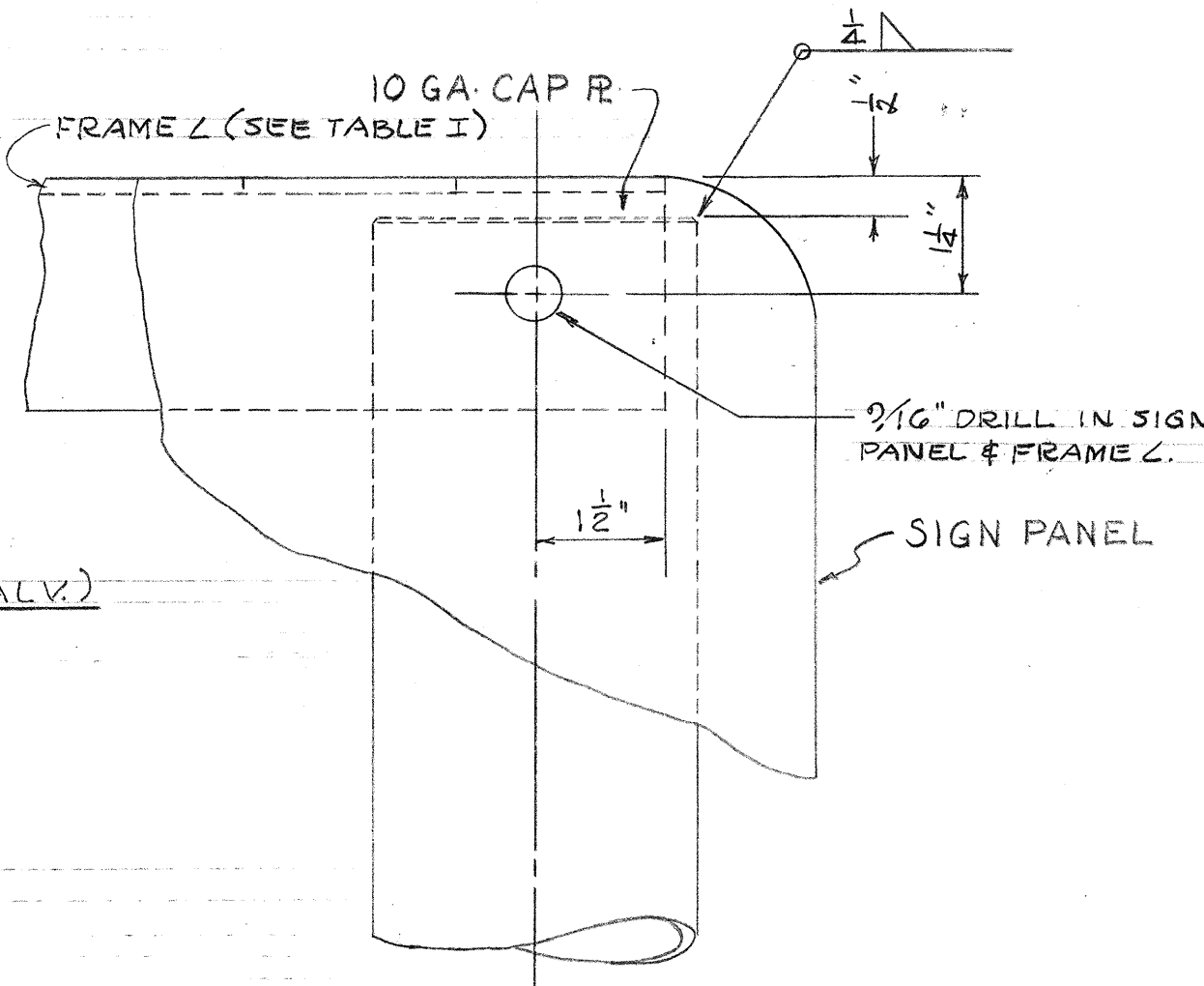


TYPICAL
G-25 SIGNS (SEE TABLE I)
ELEVATION
No Scale

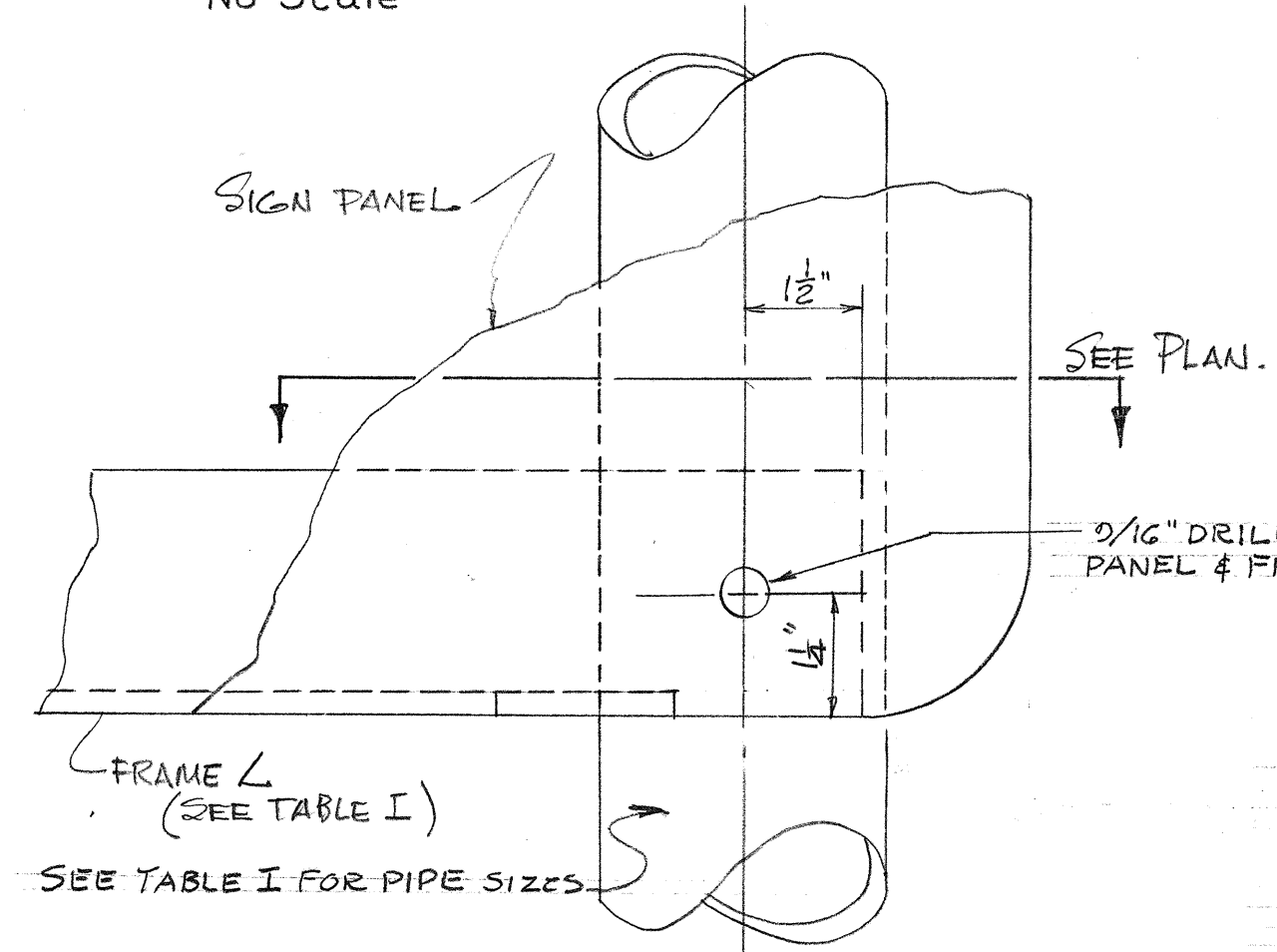
DESIGN DATA
1. Wind Load: 35 p.s.f.



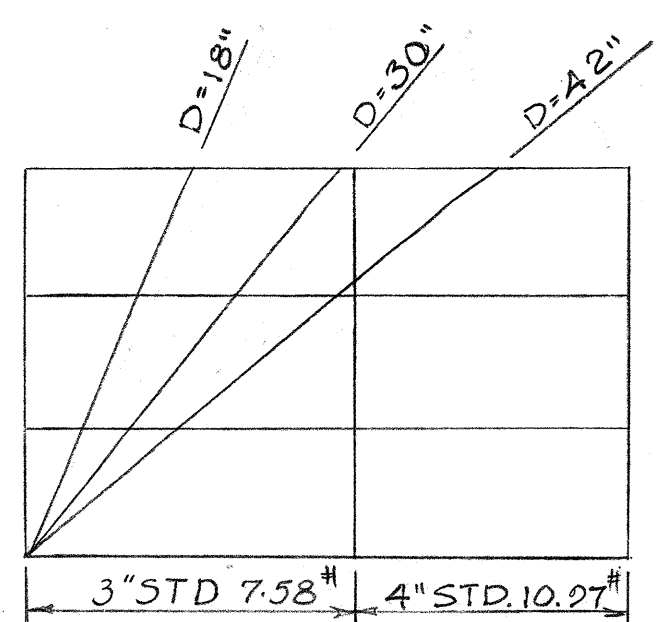
PLAN OF DETAIL "A", "B" & "C"
NO SCALE



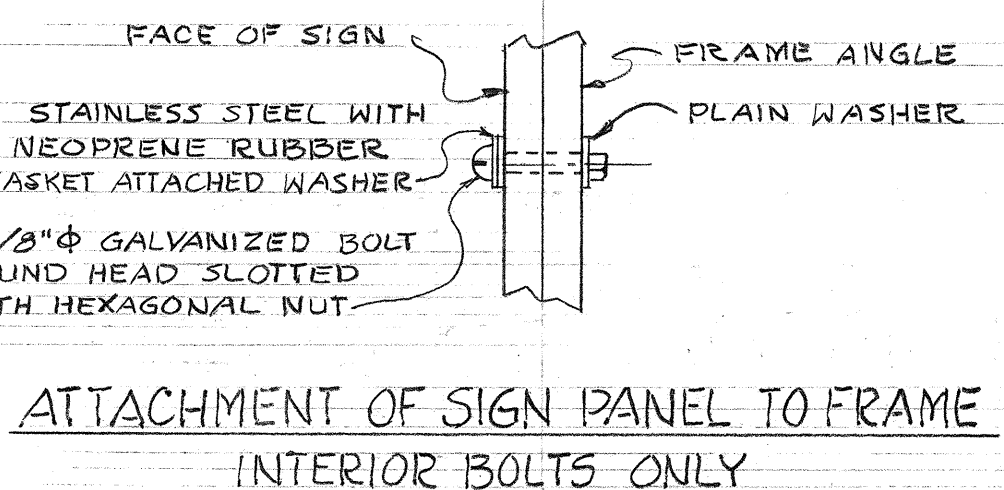
DETAIL "A"
No Scale



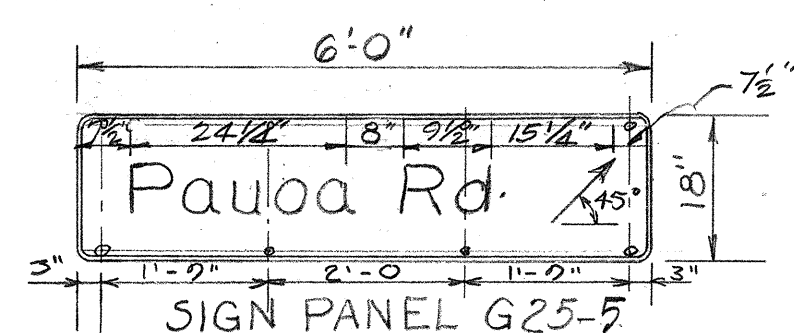
DETAIL "B" - ELEVATION
SCALE: 1/2" = 1'-0"



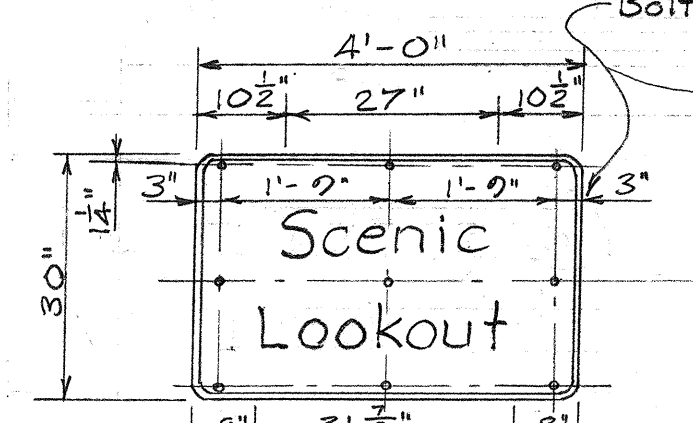
REQUIRED PIPE POST



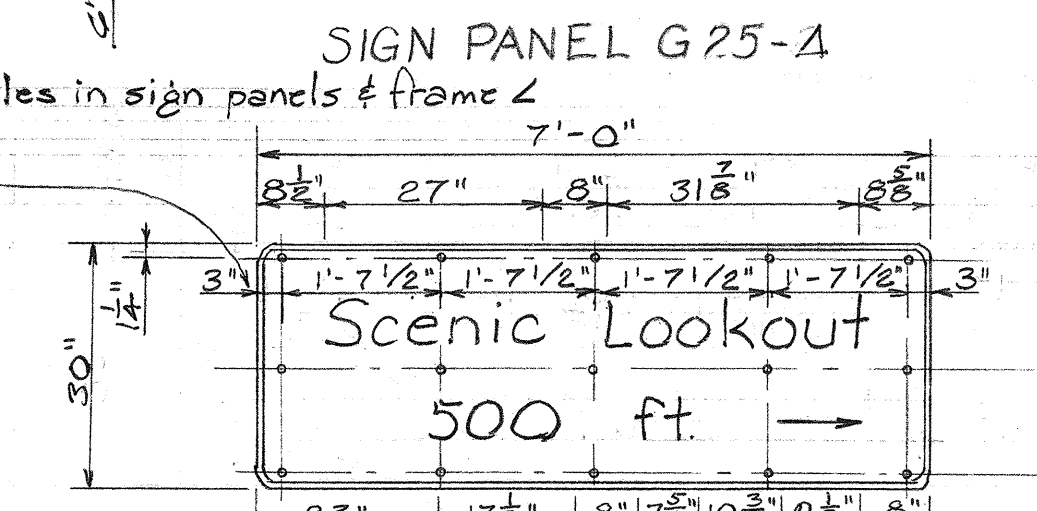
ATTACHMENT OF SIGN PANEL TO FRAME
INTERIOR BOLTS ONLY



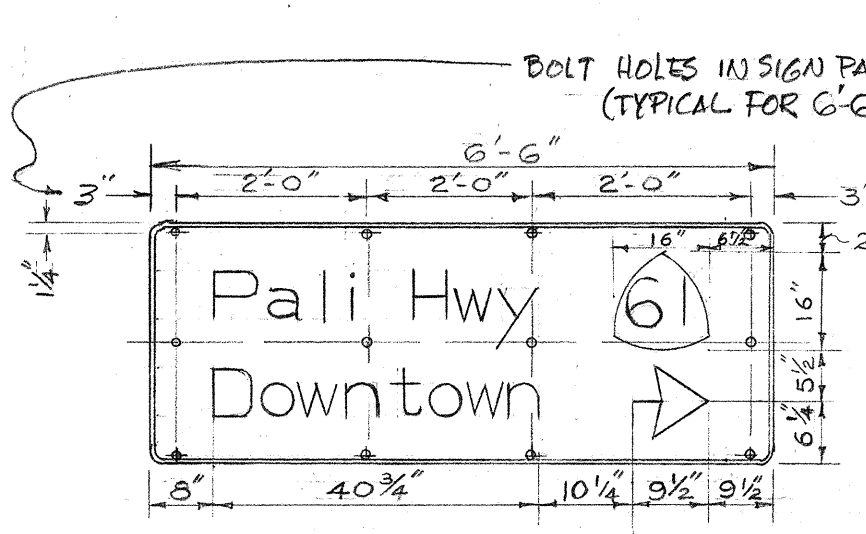
SIGN PANEL G25-5



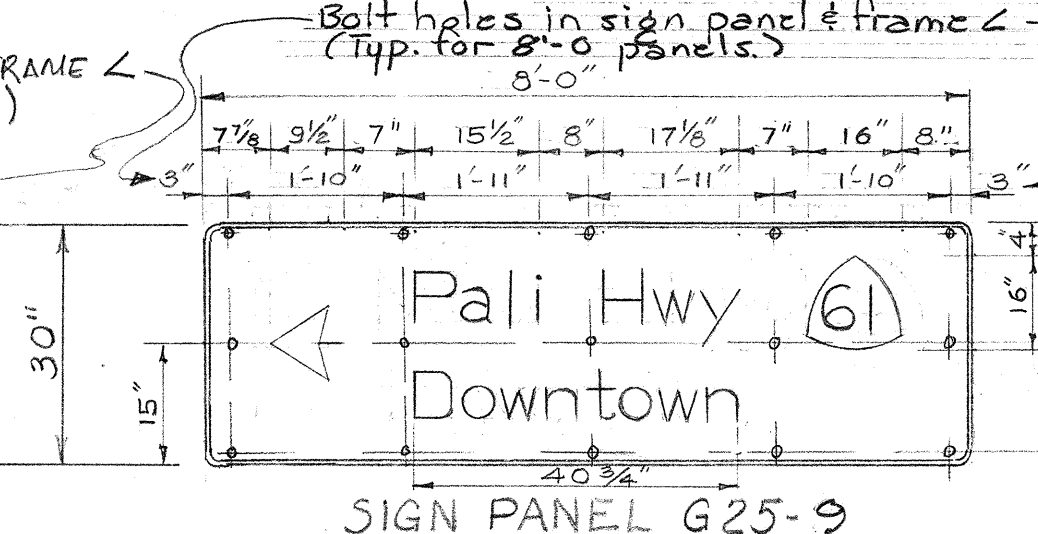
SIGN PANEL G25-17



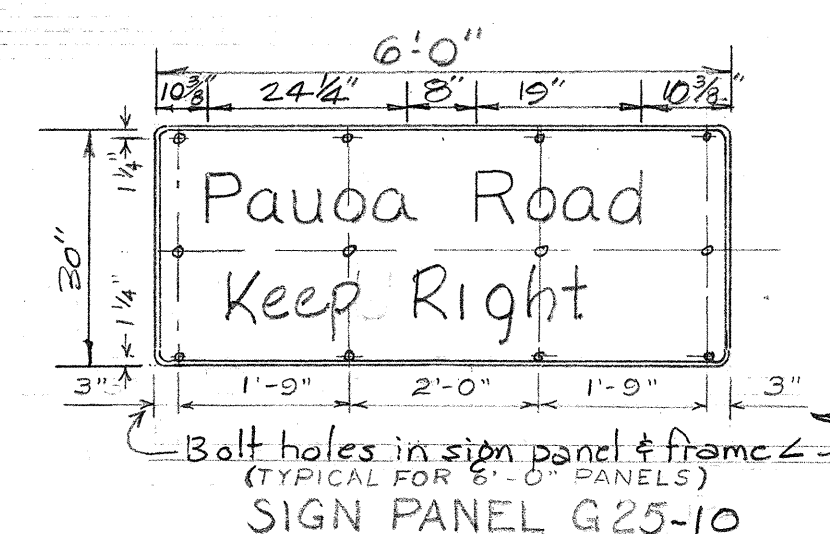
SIGN PANEL G25-18



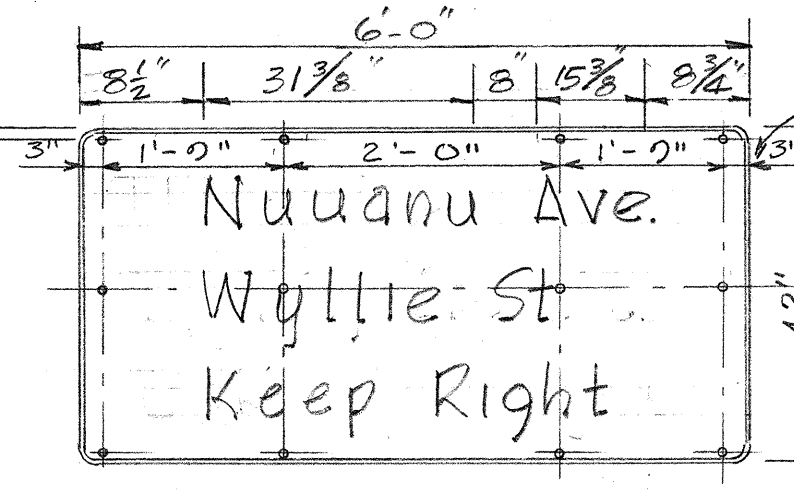
SIGN PANEL G25-8



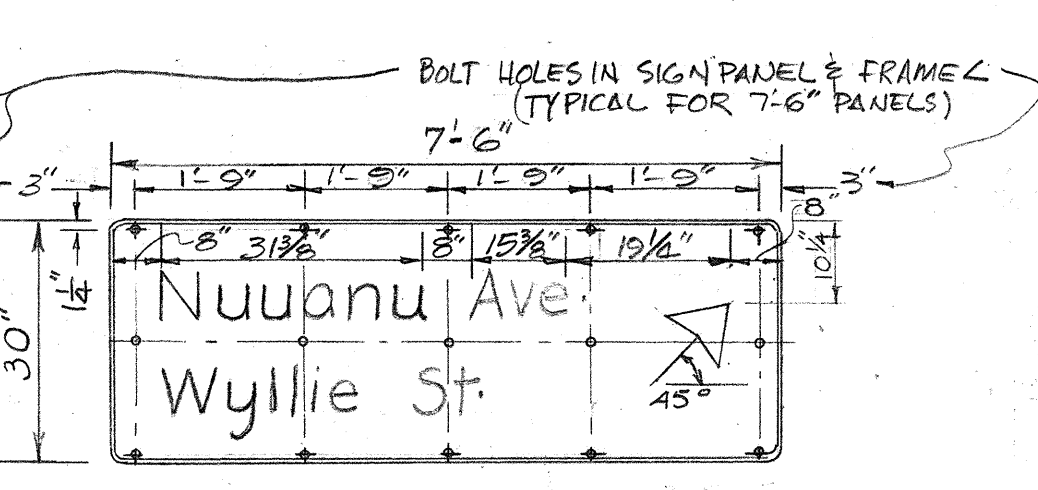
SIGN PANEL G25-9



SIGN PANEL G25-10



SIGN PANELS G25-11 & 12
(Make two.) *



SIGN PANELS G25-13 & 14
(Make two.)

G 25 SERIES SIGN PANELS

Not to Scale

GENERAL NOTES

1. G Upper case Series E letters and A lower case letters. See Standard Details.
2. Arrows shall conform with "Standard Arrows for Directional Signs".
3. Thickness of sign plate shall be No. 16 U.S. Standard Gauge.
4. Signs shall be bolted to post and frame at corners with 1/2" round head slotted Galv. bolts and hex. nuts with stainless-steel washer with neoprene rubber gasket attached on face of signs. For number and exact location of 1/16" holes, see plans.
5. Sign finish shall be porcelain enamel as specified in the latest Department Specification.
6. Signs shall have white letters on a black semi-matte background; non-embossed, and letters reflectorized with reflective sheeting.
7. All sign frame members shall be hot dip galv.
8. Class "D-1" concrete for footing will not be paid for separately but shall be considered incidental to the item of destination signs.
9. Pipe post shall be galvanized pipe conforming to A.S.T.M. Designation A53-58, Grade B.
10. All welding shall conform to the latest specifications for Welded Highway and Railway Bridges of the American Welding Society.
11. Reflective sheeting material shall be applied by heat and vacuum applicator over the white porcelain enamel letters, arrows, shields and borders.
12. All interior bolts of sign plates shall be 3/8" x 3/8" slotted head galvanized and hexagon nut with a stainless-steel washer with a neoprene gasket attached on face of sign plate. See det.
13. All G-25 signs shall be fabricated on one sheet of metal plate.
- * 14. Special Detail for mounting Sign D-15 only shown on Sht No. B. 8147-63.

LAW & WILSON • TUDOR • TOWILL
ARCHITECTS • ENGINEERS • SURVEYORS
No. 584
REGISTERED ENGINEER
DATE July 2, 1957

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO. BU-06H(7) UNIT 5
G-25 SIGN PANELS
DETAILS.
SCALE: AS NOTED
SEPT. 1957

SHEET NO. 1 OF 6 SHEETS

B. 8147. 64

DATE: _____
DESIGNED BY: _____
CHECKED BY: _____
ORIGINAL PLAN: _____
NOTE BOOK: _____
No. _____

Provide truss type 3"x3"x3/8" L...
Center between crossarms.

Symm. about ϵ

Outfiling Sign Panel Frame.
See Det. SH-14, 17, G, 2.

36'-0"

D = 12'-0"
2 equal spaces

6'-0"

2'-0"

2'-0"

6'-0"

D = 12'-0"
2 equal spaces

70"

CROSS ARMS

DETAIL "A"

1 1/4" blind half coupling wire outlet each arm.

6" $\pm$

CROSS ARM CONNECTION, SAME AS DET "A" ABOVE

SIGN PANEL G-24 9-5

ϵ SIGN PANEL

2 FLUORESCENT LUMINAIRES @ 6'-0"
D: 12'-0"

F = 18'-0"

23'-0"

D = 12'-0"

2 FLUORESCENT LUMINAIRES @ 6'-0"

2 SIGN PANEL

F = 18'-0"

16'-7"

Pole

5' $\pm$

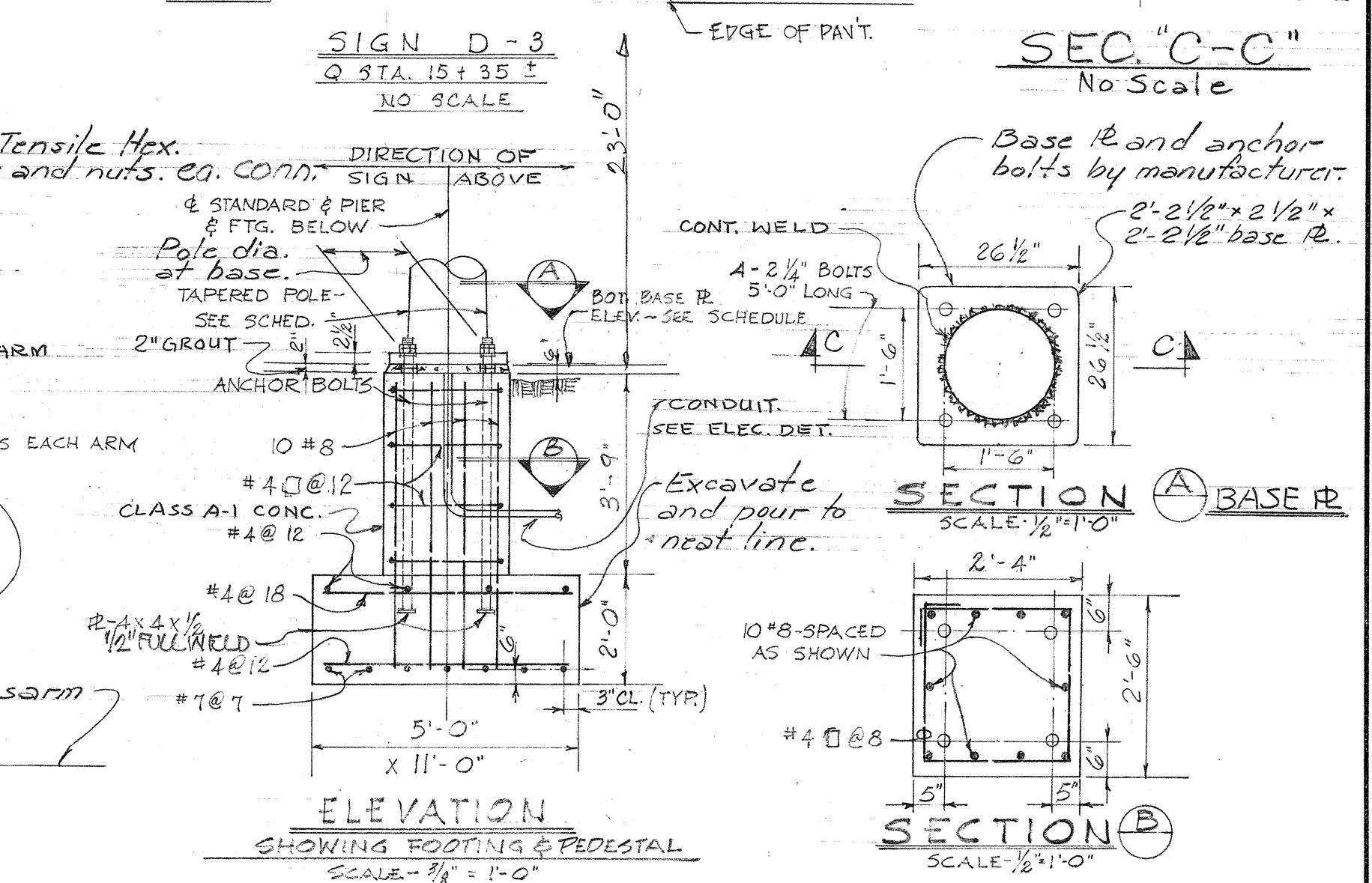
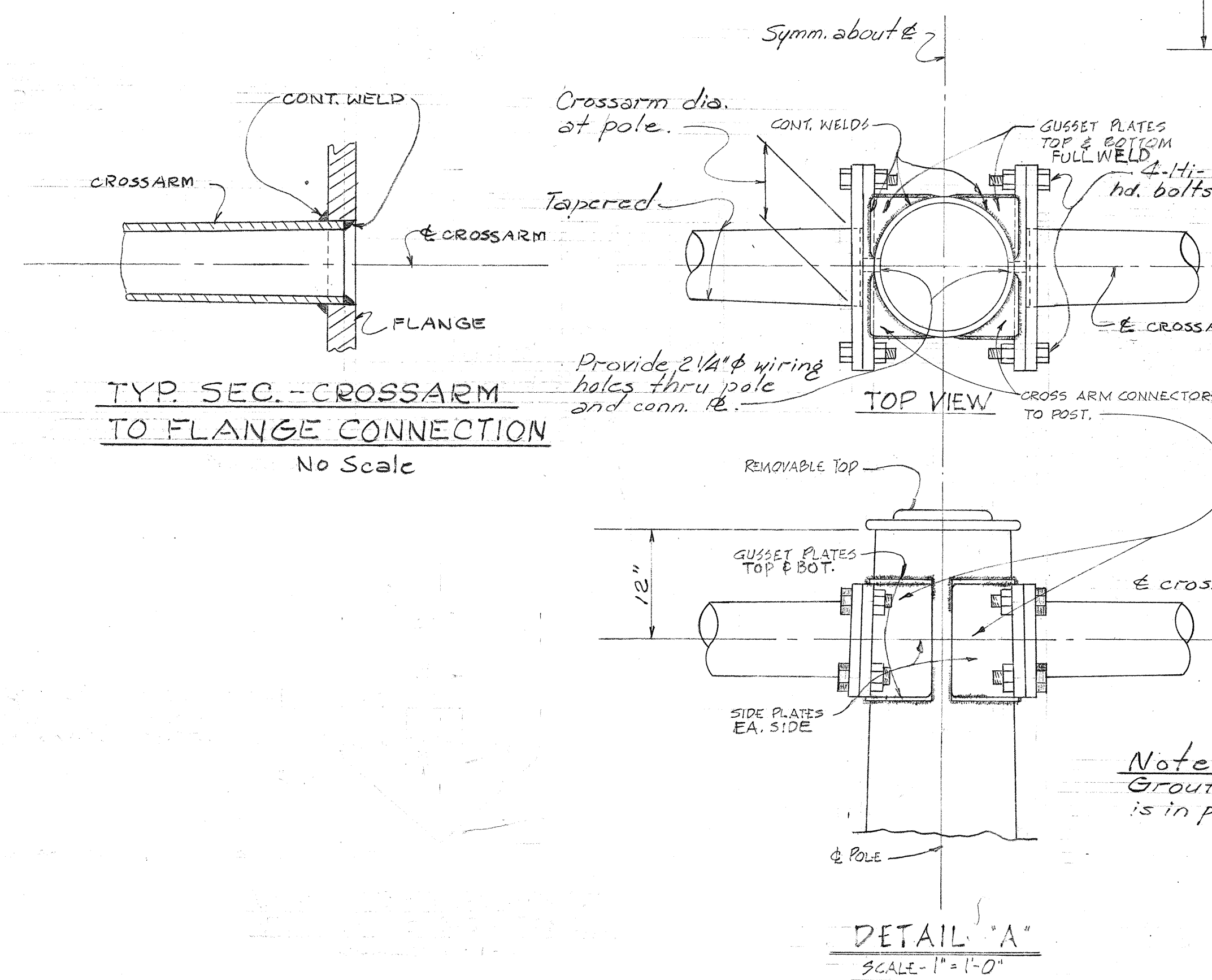
6' $\pm$

A"x6 1/2"
Hand hole with frame & cover.

"Q" RAMP

Cont'weld.
See Spec' Provision.

For luminaire supports
see sht 4. G7.

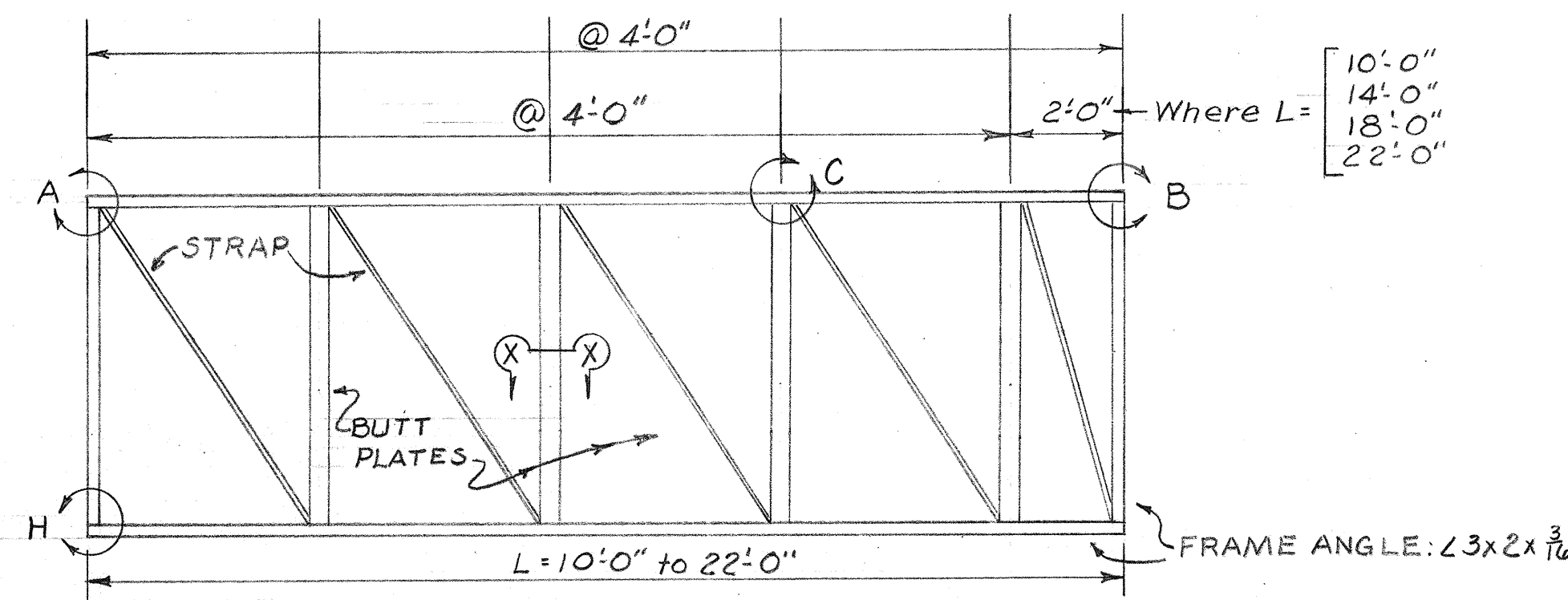


LAW & WILSON • TUDOR • TOWILL
ARCHITECTS • ENGINEERS • SURVEYORS
M. W. Norton No. *584*
REGISTERED ENGINEER
DATE *July 2, 1957*

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII

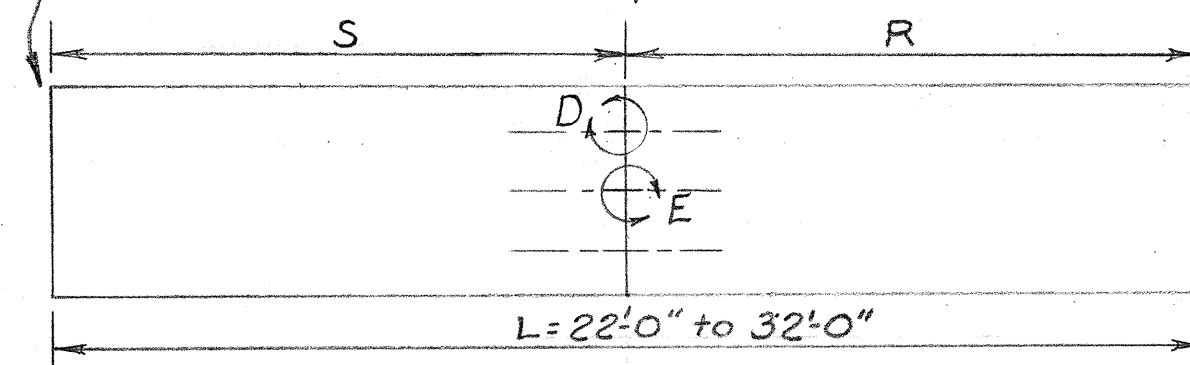
PALI HIGHWAY
PROJECT NO. BU-061-H(7) UNIT 5
G-24 SIGN PANELS,
FRAME LAYOUT & DETAILS

SEPT. 1957



SIGN PANEL FRAME

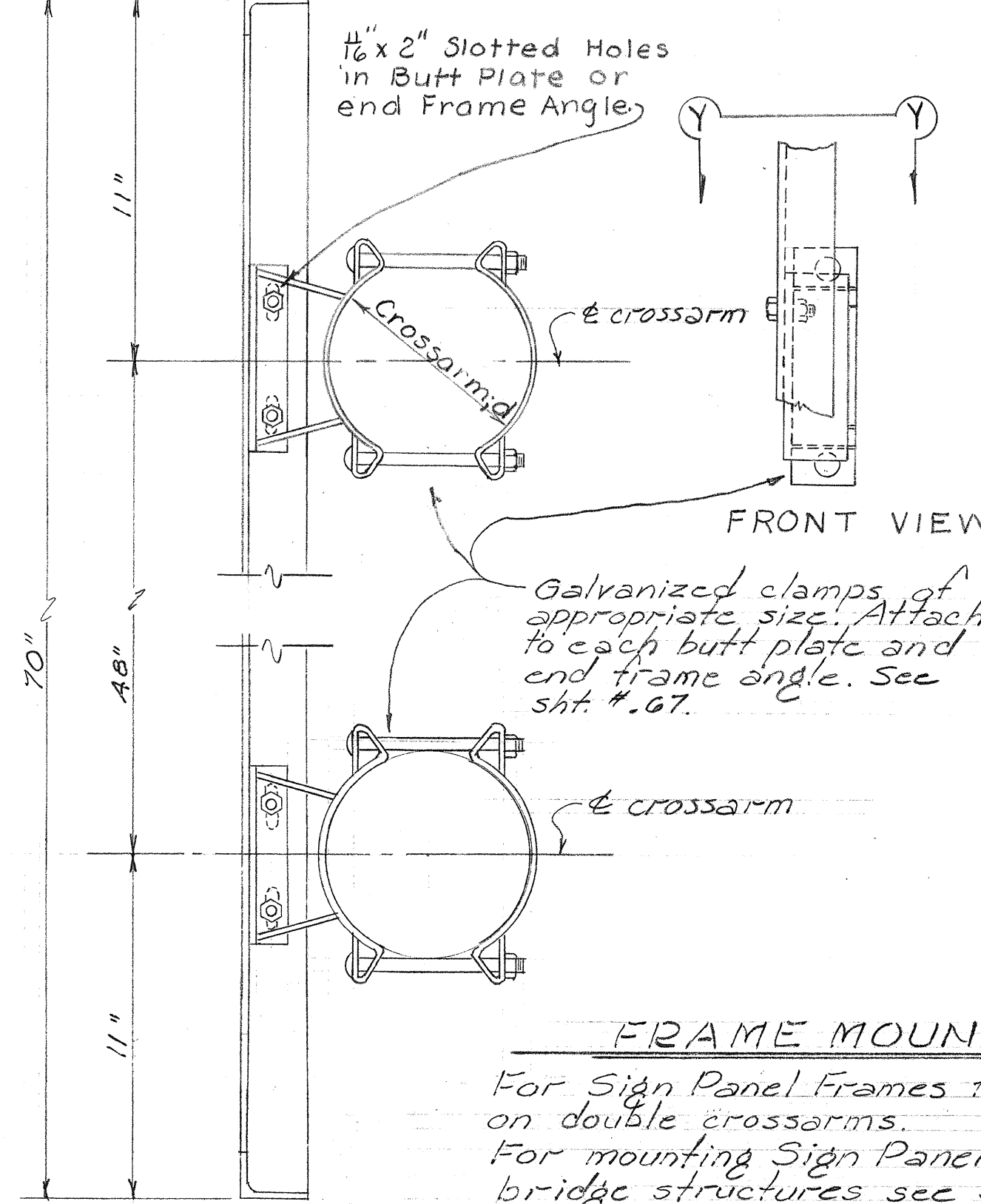
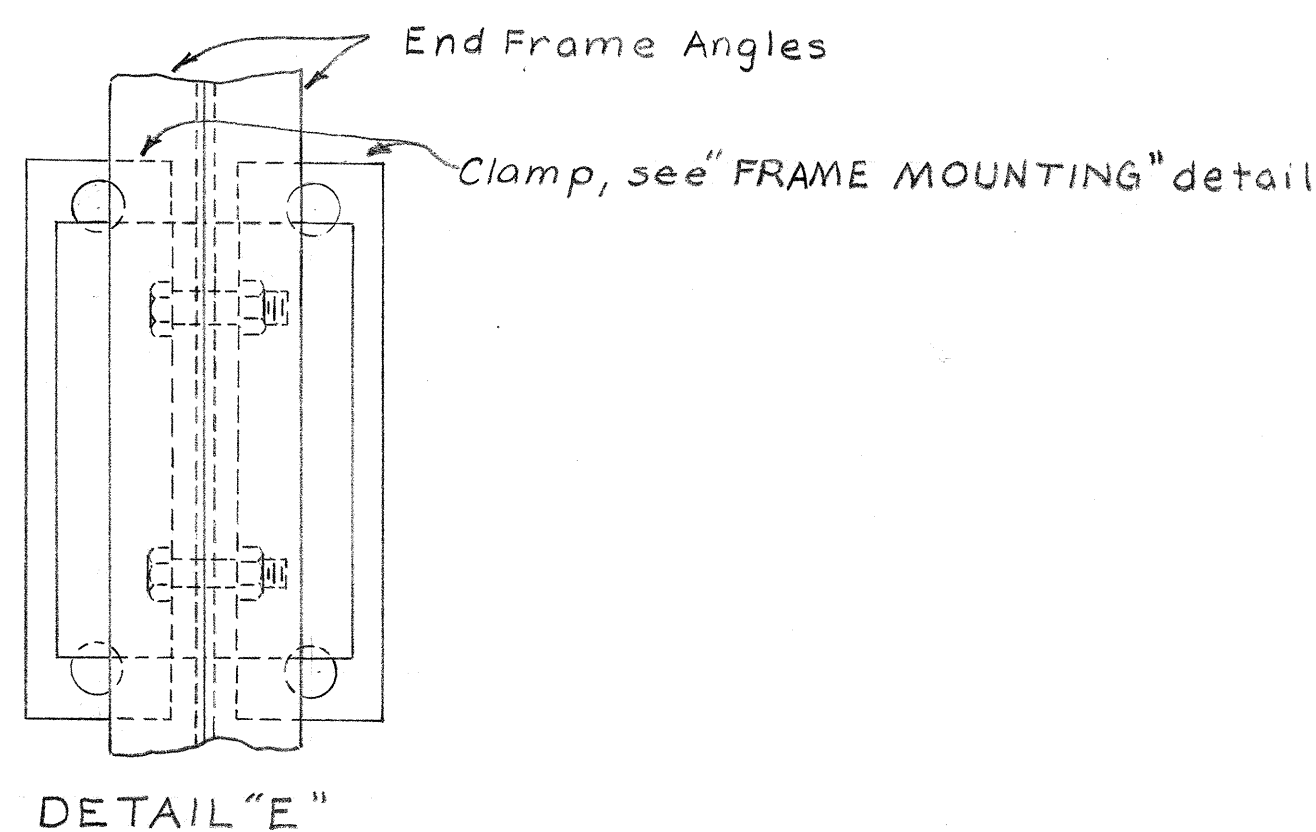
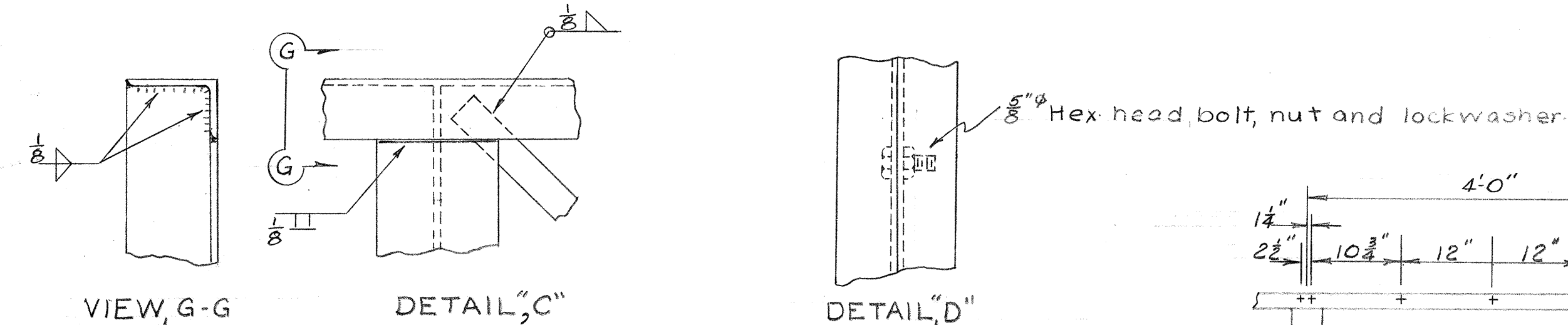
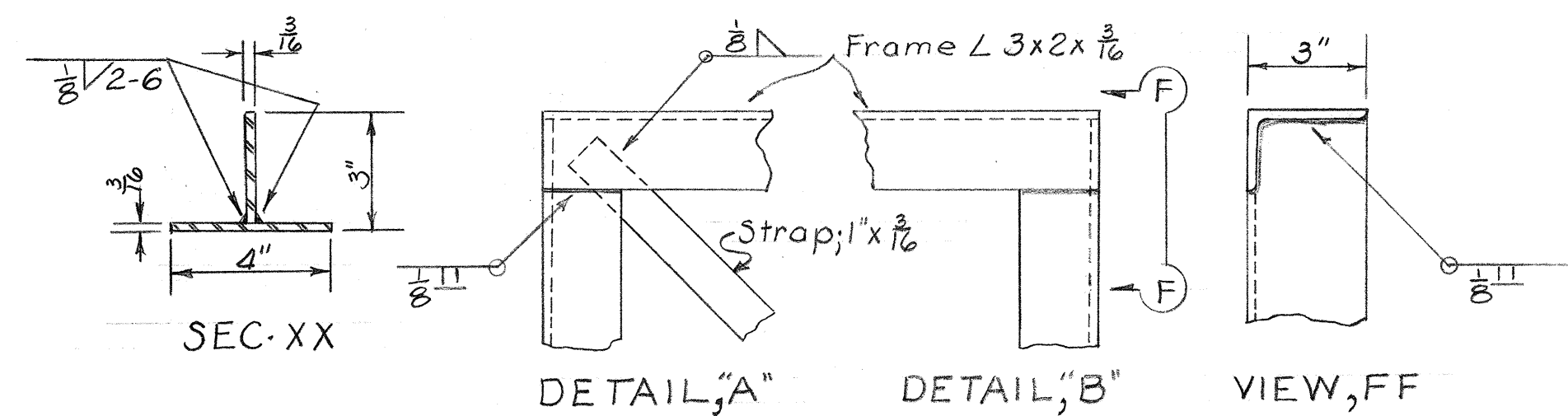
Note: Sign Panel Frames L=22'-0" to 32'-0" may be fabricated as two short frames and field spliced.



L	S	R
22'-0"	12'-0"	10'-0"
24'-0"	12'-0"	12'-0"
26'-0"	12'-0"	14'-0"
28'-0"	12'-0"	16'-0"
30'-0"	12'-0"	18'-0"
32'-0"	12'-0"	20'-0"

NOTES

1. Frames shall be all welded construction.
2. Tolerance on 3/8" panel mounting holes = 1/32". Holes shall be drilled by template.
3. Frames shall be painted with finish coat of approved green paint. See General Notes.
4. Sign Panel Frame to be made for each G-24 series sign panel.

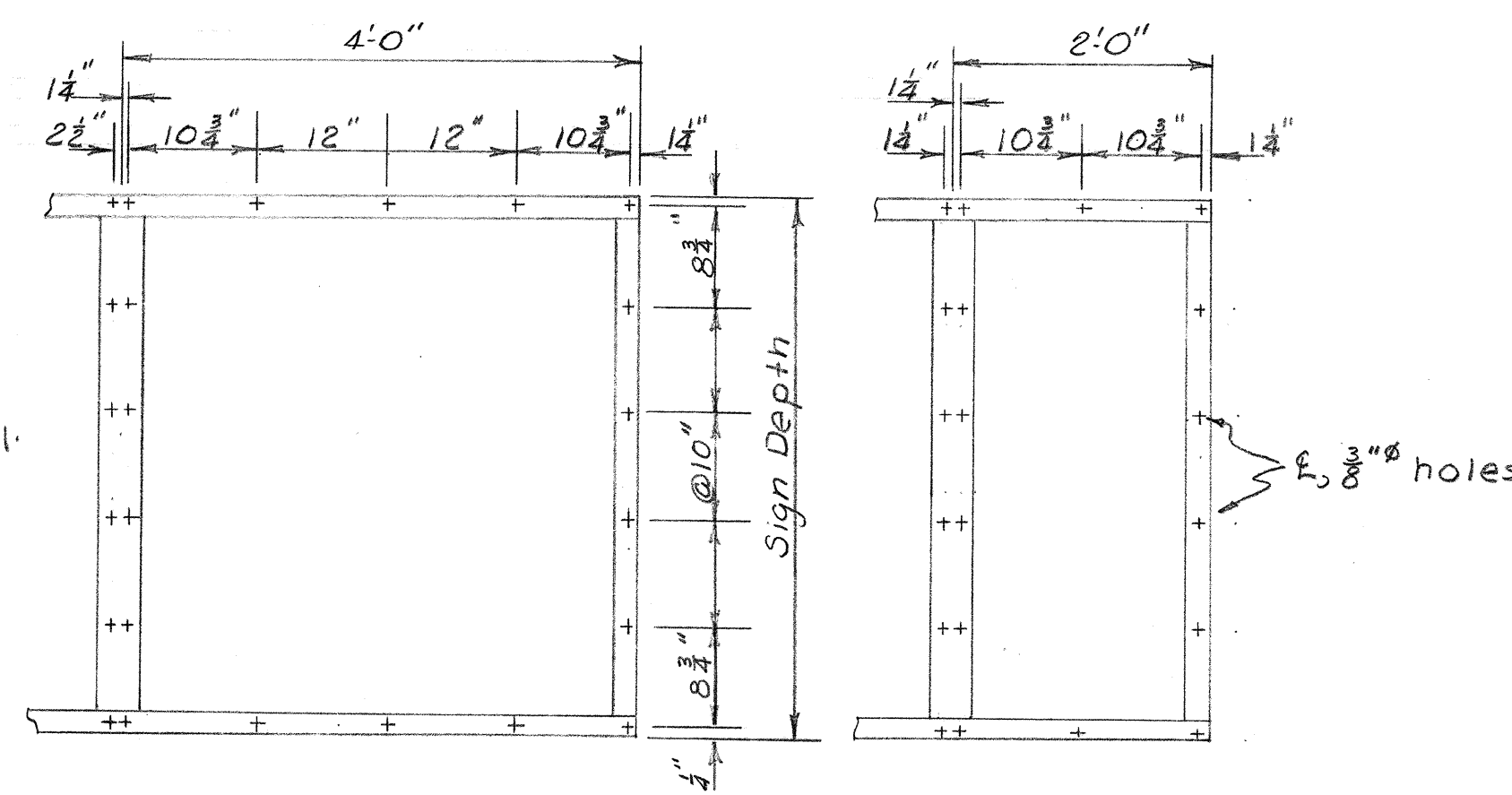


FRAME MOUNTING

For Sign Panel Frames to be mounted on double crossarms.
For mounting Sign Panel Frames on bridge structures see sheet #.68.

SIDE VIEW-FRAME MOUNTING

Not to Scale



PANEL MOUNTING HOLE SPACING

GENERAL NOTES

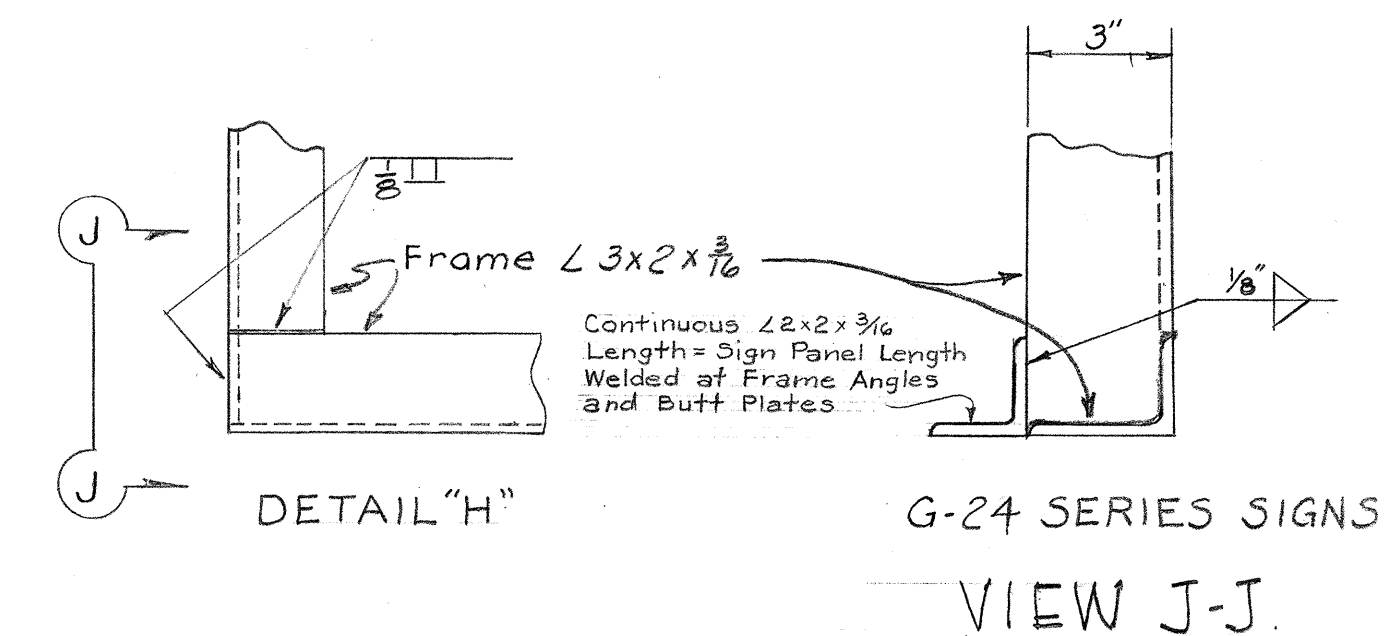
DESIGN DATA
1. Wind Load = 35 psf.

MATERIALS

Concrete:
All concrete Class A-1.
Reinforcement Steel:
See General Specs.
Structural Steel:
Structural steel shall be structural carbon steel, ASTM designation A-7.
Light Standard Sheet Steel:
See Special Provision.
Galvanized Steel Pipe:
See Standard Specification.
Fastenings and Anchor Bolts:
See Special Provision.

CONSTRUCTION METHODS

Welding:
See Special Provision.
Painting and Galvanizing:
See Special Provision.



G-24 SERIES SIGNS

VIEW J-J

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII

PALI HIGHWAY
PROJECT NO. BU-061(7) UNIT 5
G-24 SIGN PANEL FRAMES
DETAILS

SEPT. 1957

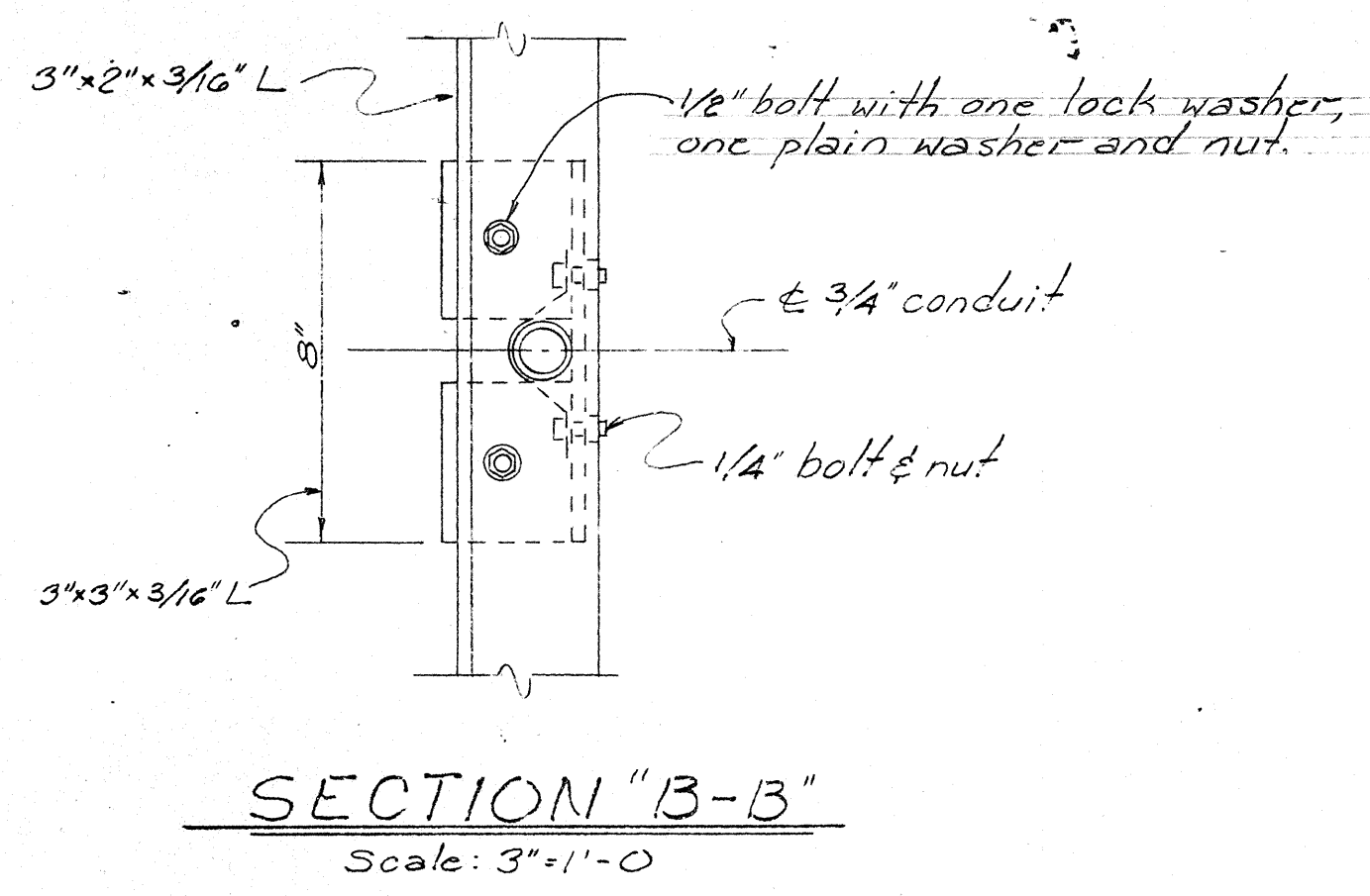
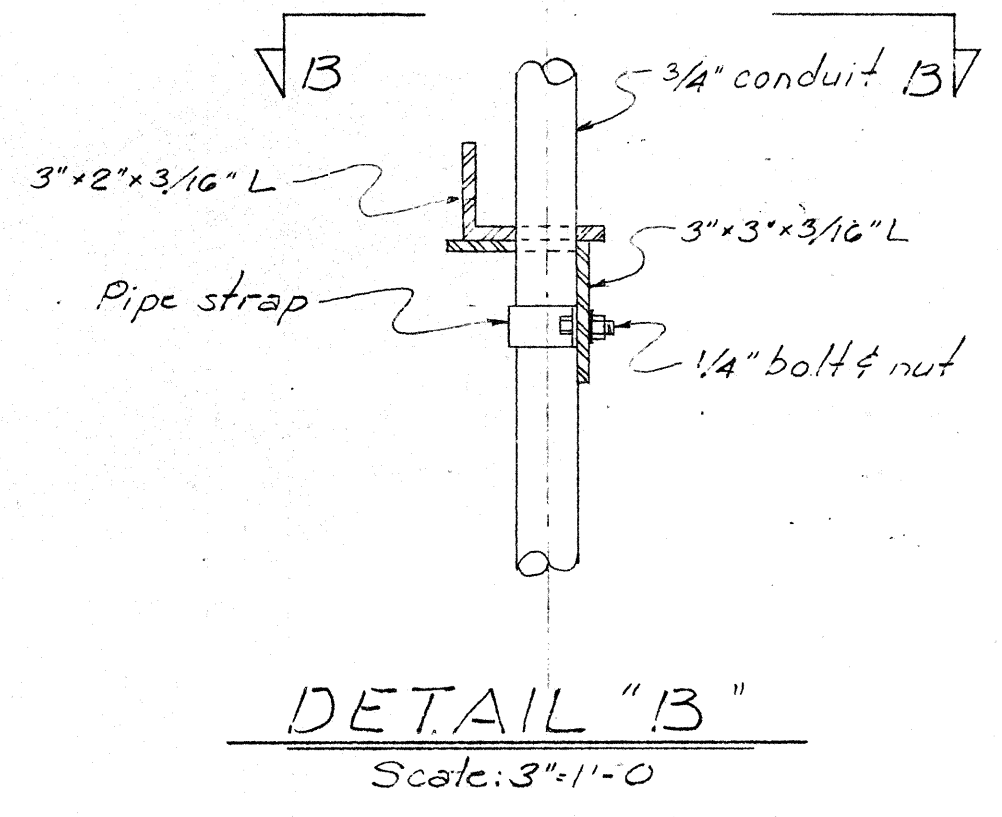
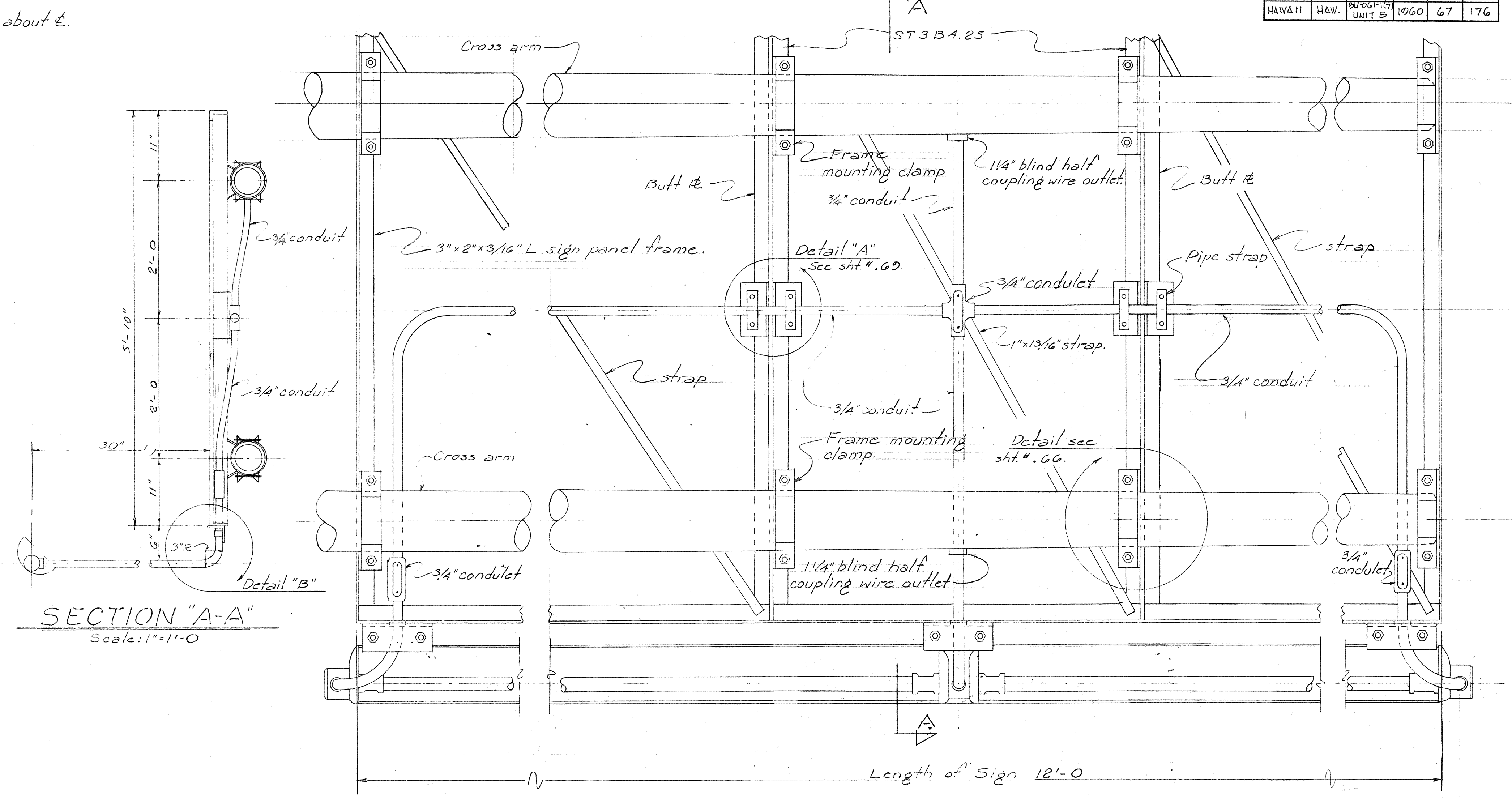
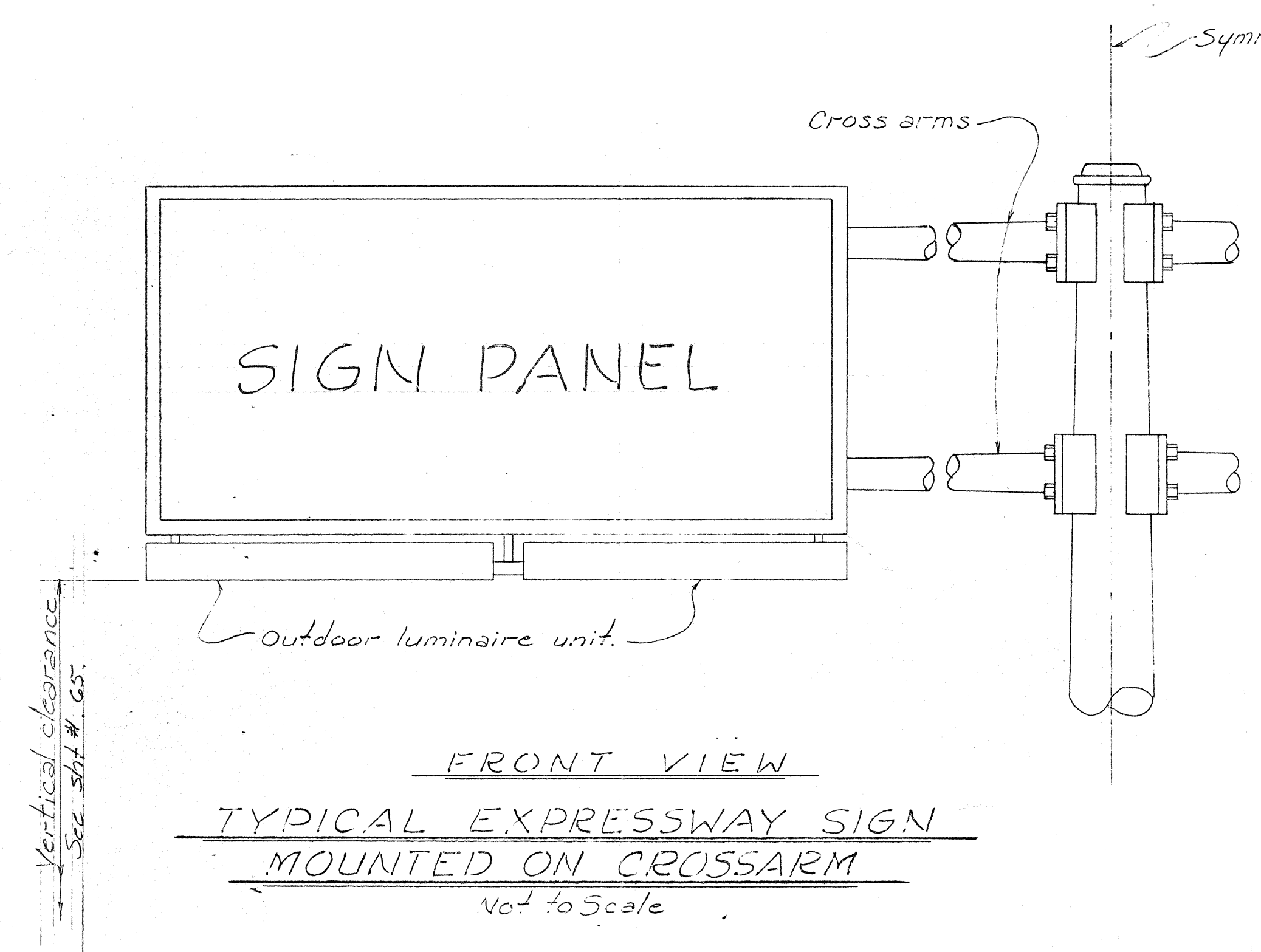
LAW & WILSON • TUDOR • TOWILL
ARCHITECTS • ENGINEERS • SURVEYORS
REGISTERED ENGINEER No. 589
DATE July 2, 1957

SHEET NO. 3 OF 6 SHEETS

B. S147.66

DATE
DESIGNED BY
TRACED BY
QUANTITIES BY
CHECKED BY
NOTE BOOK No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BU-OGI-1(7) UNIT 5	1960	67	176



DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
QUANTITIES CHECKED BY	
NOTE BOOK NO.	

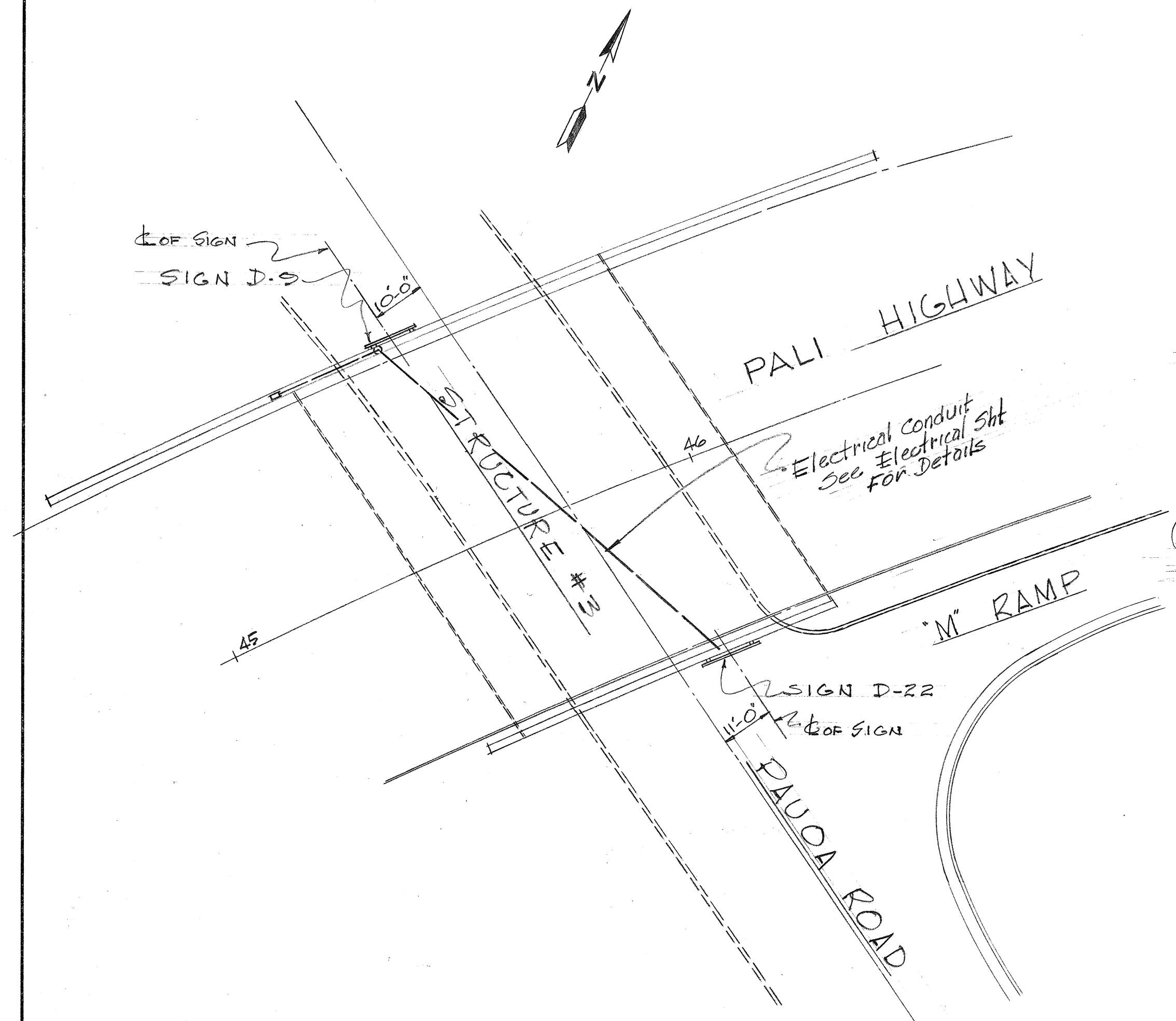
HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO. BU-OGI-1(7) UNIT 5
EXPRESSWAY SIGN D-3
FLUORESCENT LUMINAIRE SUPPORTS
FEB. 1960

SHEET No. 4 OF 6 SHEETS

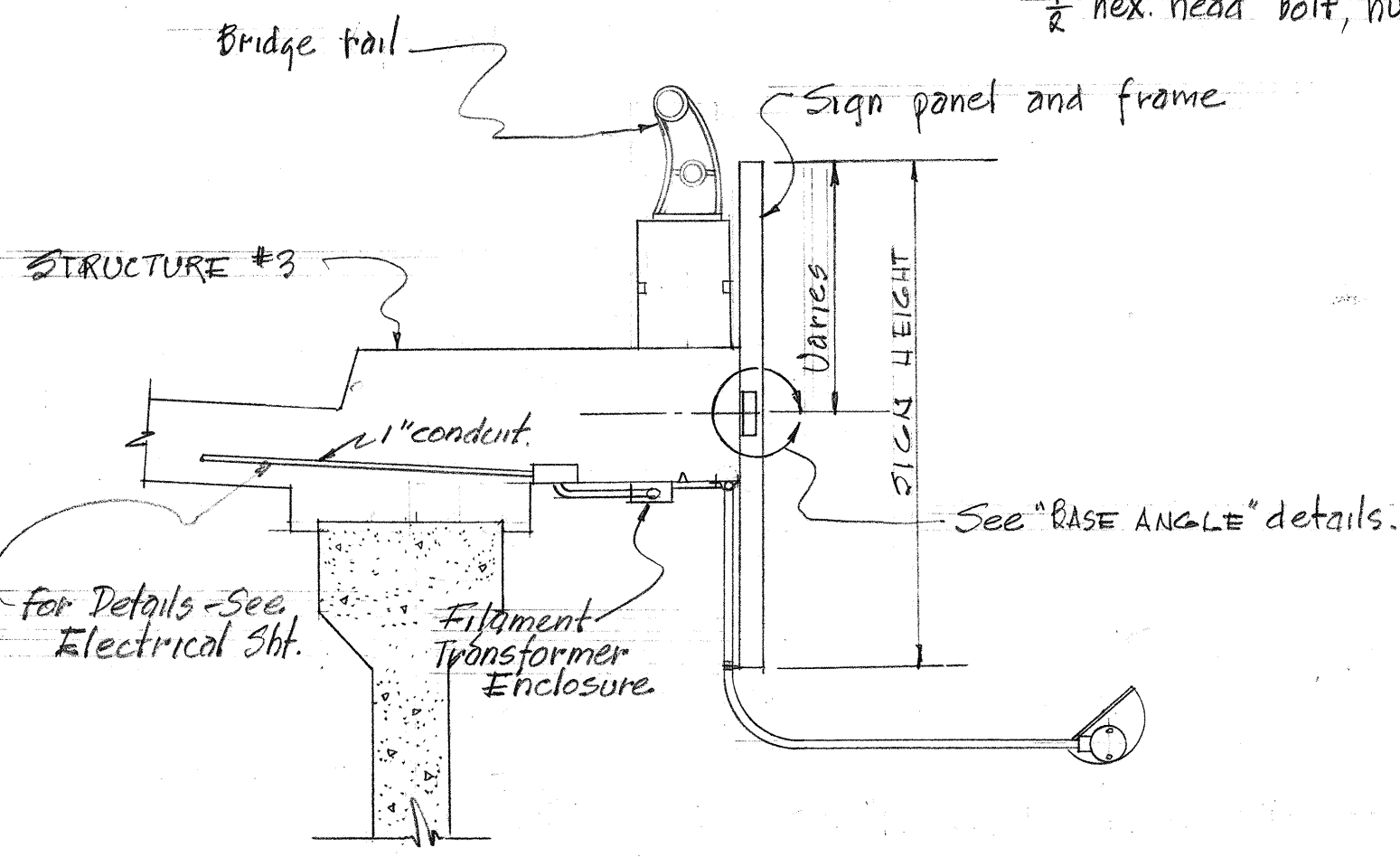
B.S 147.67
BU-OGI-1(7)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	BU-061-1(7) UNIT 5	1960	68	176

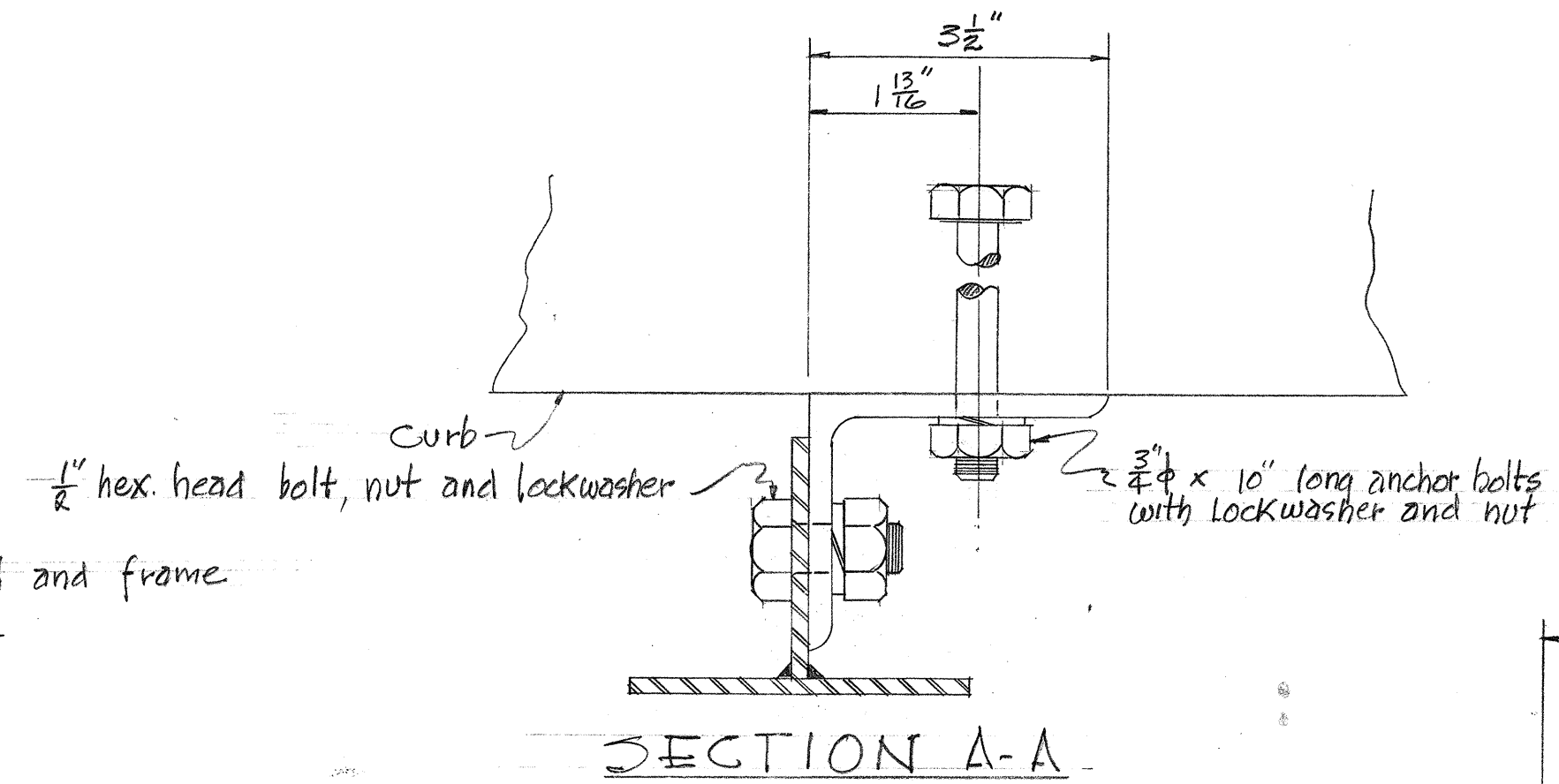
6/23/60



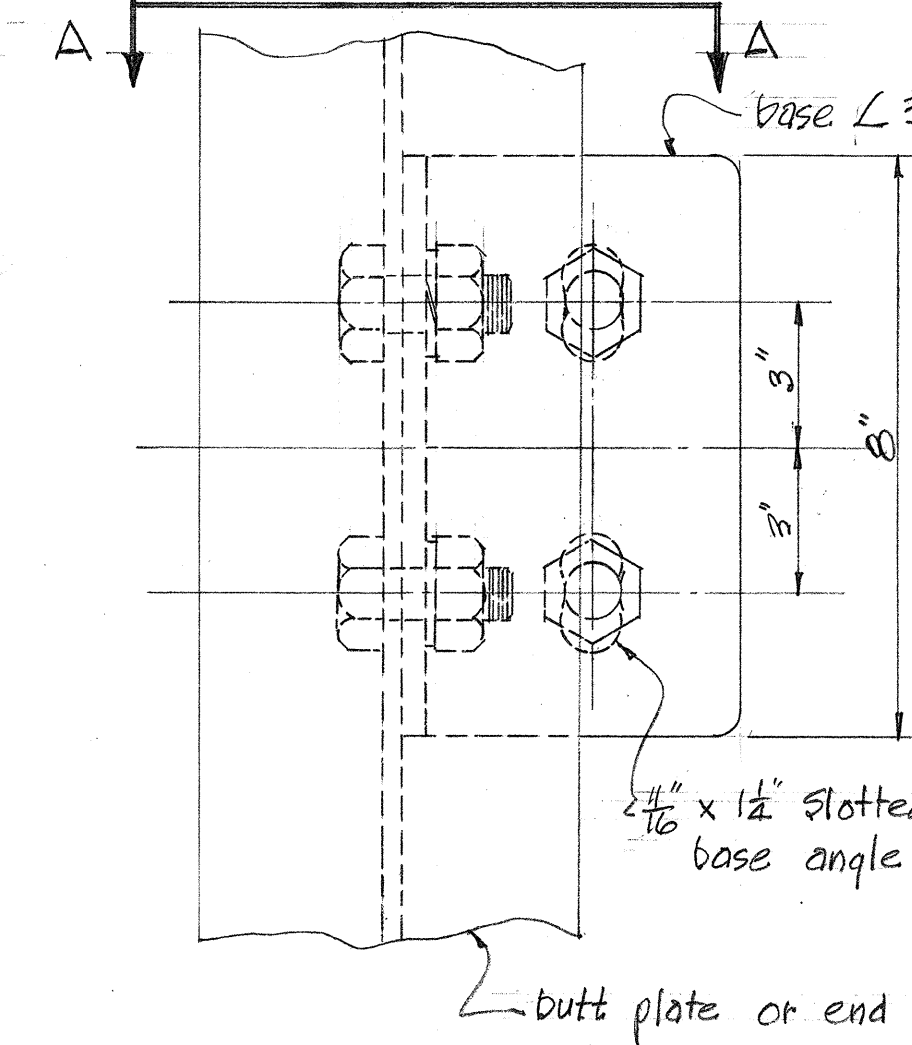
PLAN
SCALE: 1"=20'-0"



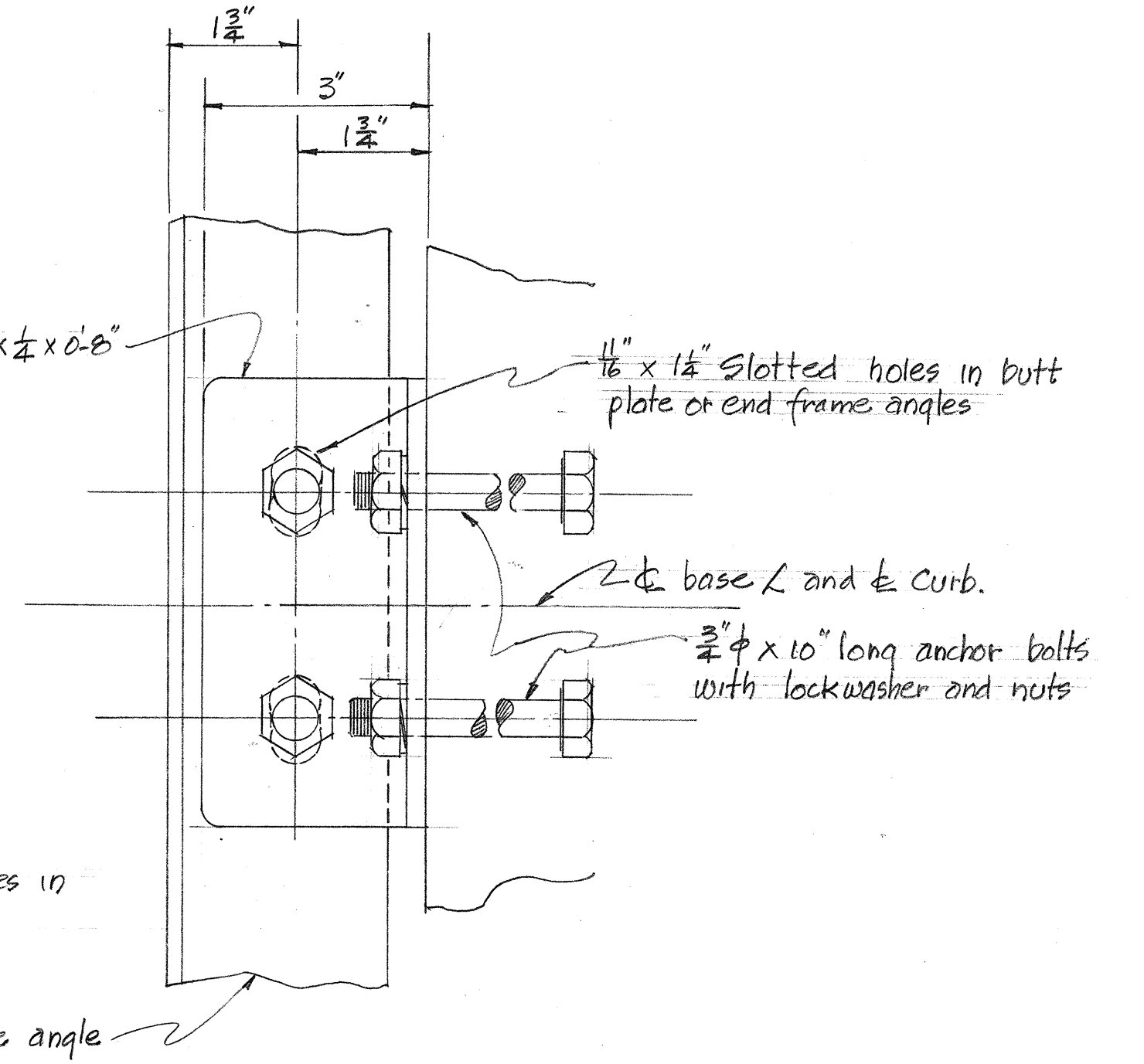
METHOD OF MOUNTING SIGNS
NO SCALE



SECTION A-A



FRONT VIEW

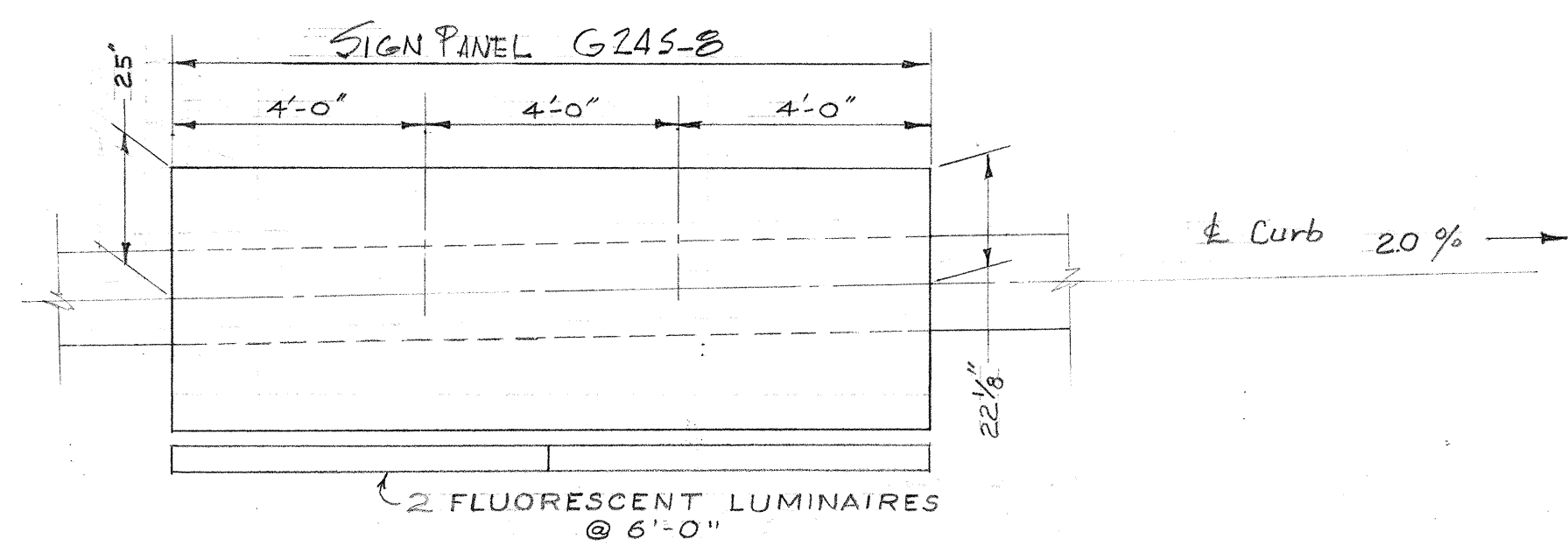


SIDE VIEW

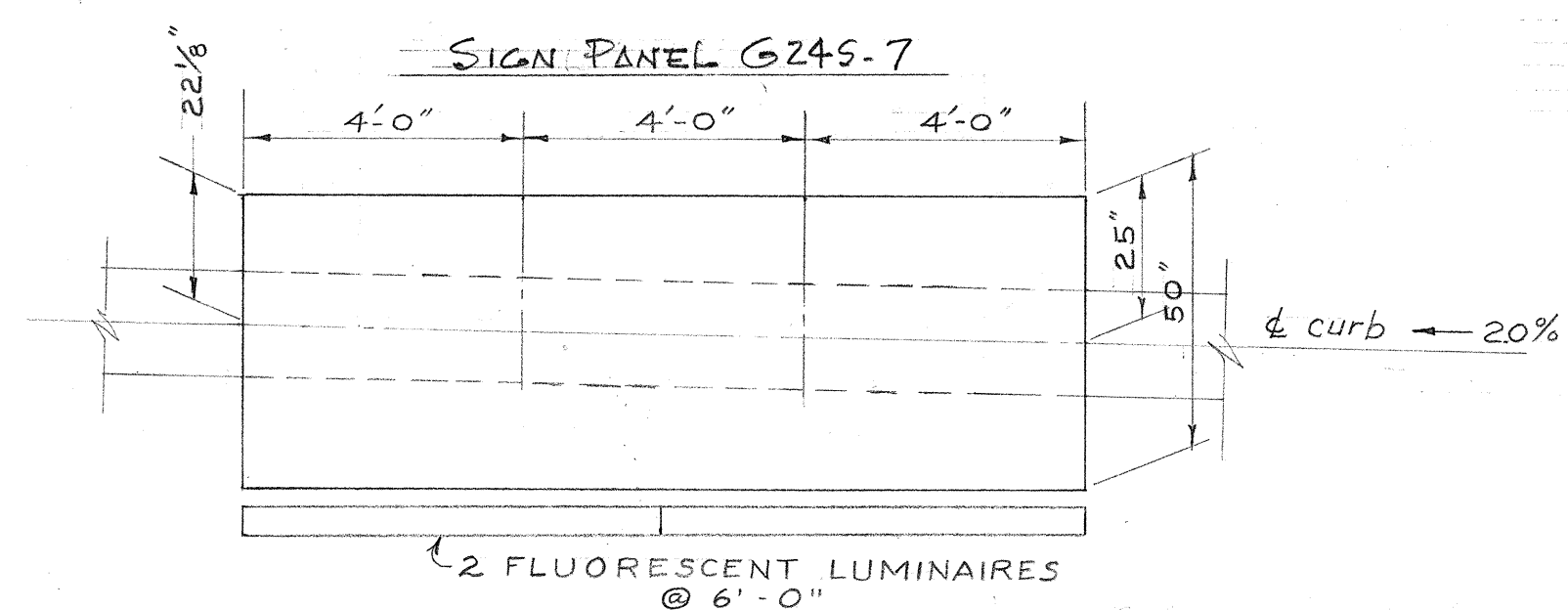
BASE ANGLE
NO SCALE

Note:

All connection bolts, nuts and washers to be galvanized steel. See Specs.



SIGN D-22
SCALE: 3/8"=1'-0"



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

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK NO.	TRACED BY	
	QUANTITIES CHECKED BY	
	CHECKED BY	

LAW & WILSON • TUDOR • TOWILL
ARCHITECTS • ENGINEERS • SURVEYORS
REGISTERED ENGINEER
DATE July 2, 1957

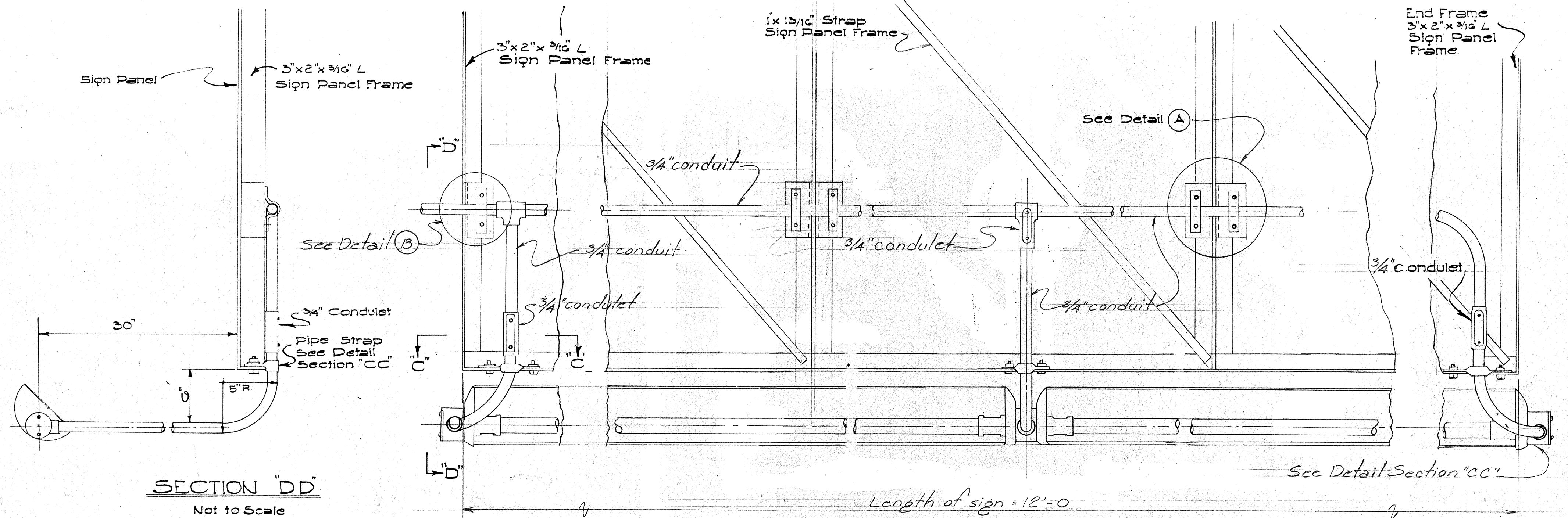
HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO BU-061-1(7) UNIT 5
STRUCTURE MOUNTED SIGNS
DETAILS
SEPT 1957

SHEET NO. 5 OF 6 SHEETS

B. S147. GS

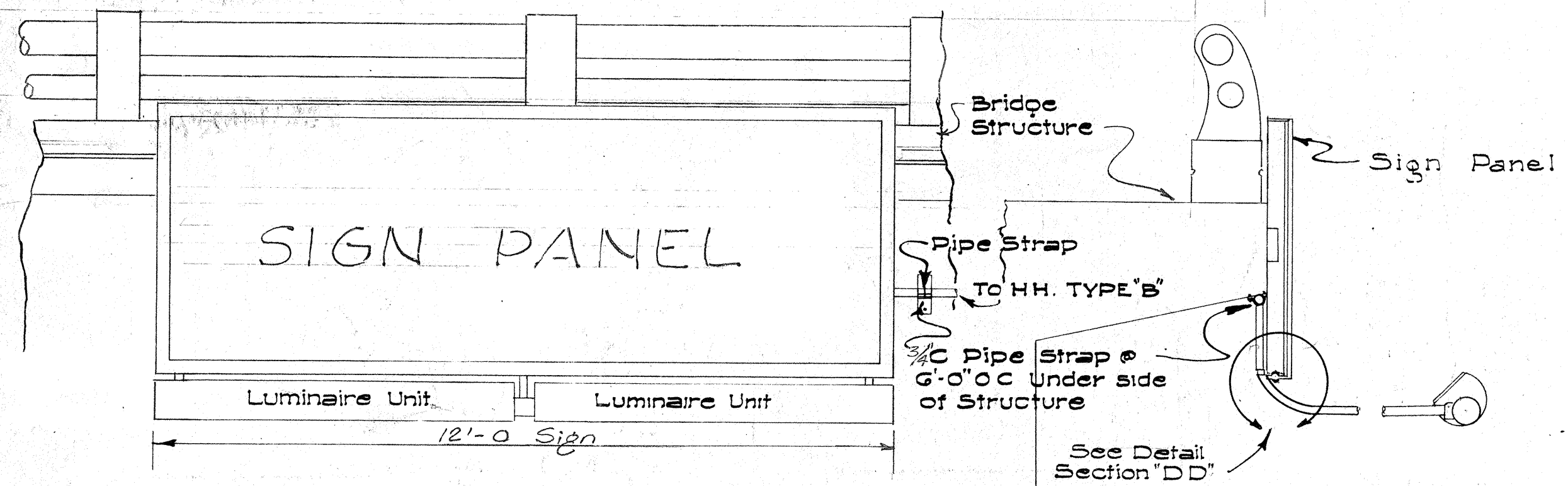
2/17/57

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BU-061-1(7) UNIT 5	1960	69	176



SECTION "DD"
Not to Scale

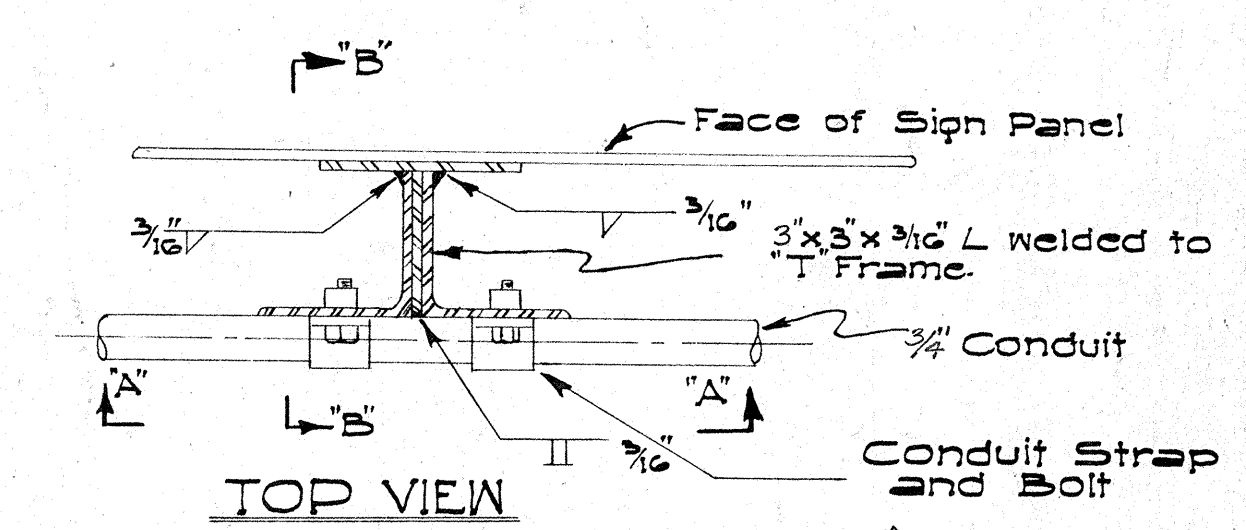
BACK VIEW SHOWING LUMINAIRE SUPPORTS
Not to Scale



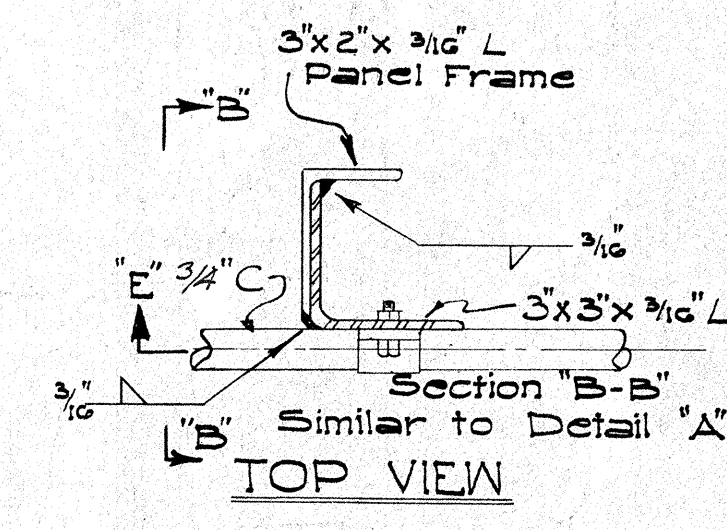
FRONT VIEW SIDE VIEW

TYPICAL EXPRESSWAY SIGN MOUNTED ON BRIDGE STRUCTURE
Not to scale

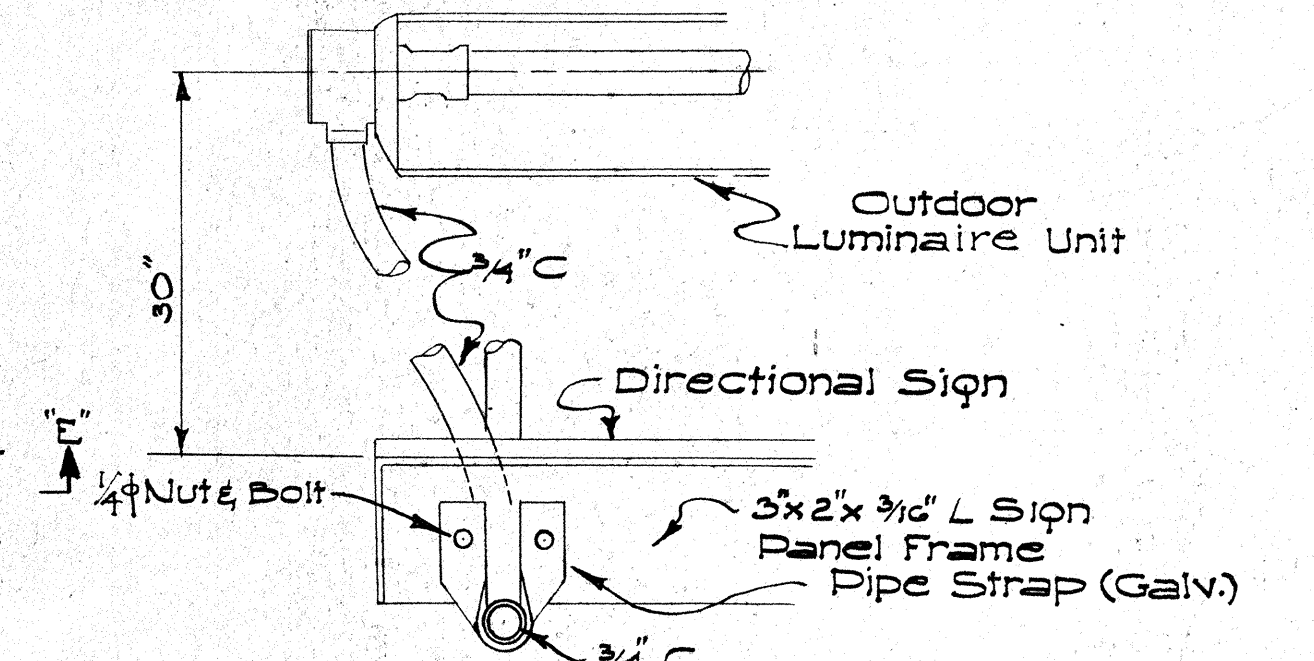
NOTE: 1. Fluorescent Floodlight Fixtures shall be installed as recommended by the manufacturers.



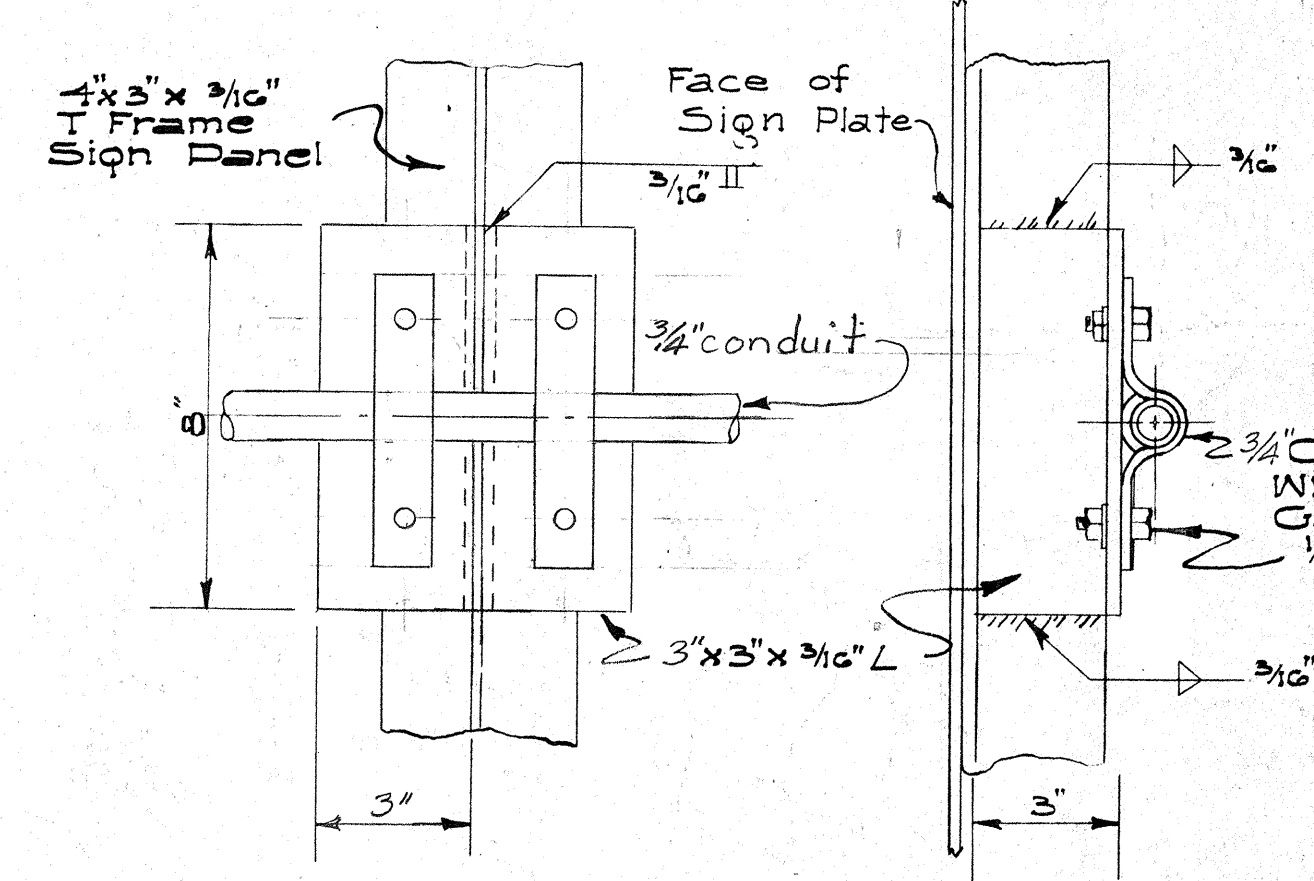
TOP VIEW



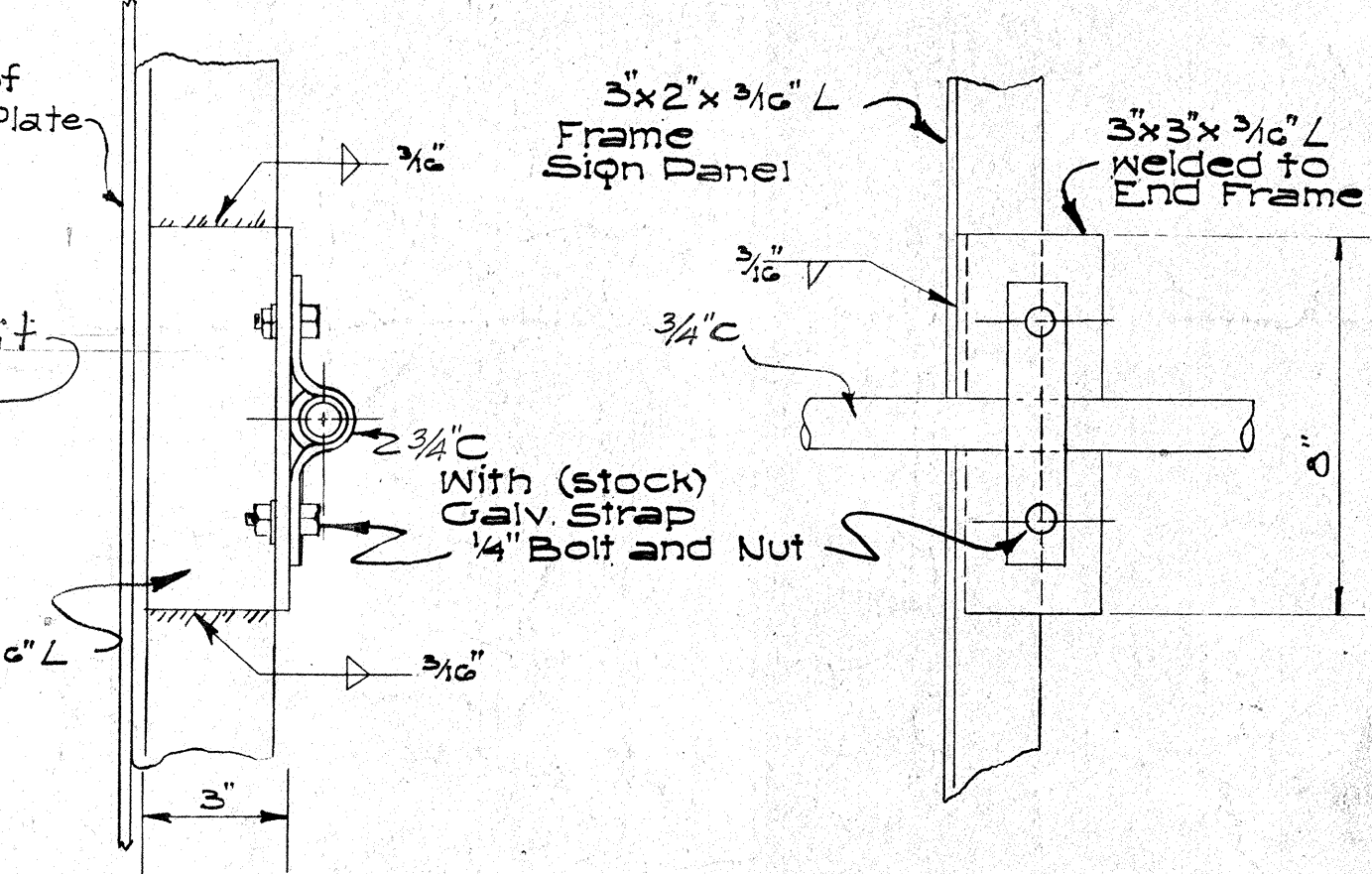
TOP VIEW



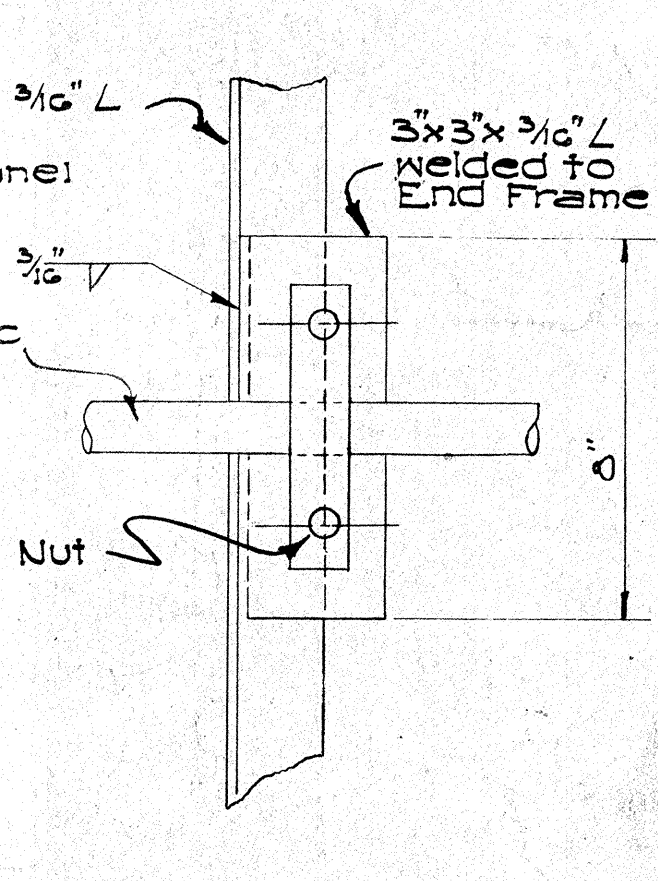
DETAIL SECTION "CC"
Scale 3/4"=1'-0"



SECTION "A-A"
DETAIL A



SECTION "B-B"
Scale: 3/4"=1'-0"



SECTION "E-E"
DETAIL B

APPROVED: *[Signature]* DATE: AUG 22, 1959
STATE HIGHWAY ENGINEER

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
PALI HIGHWAY
PROJECT NO. BU-061-1(7) UNIT 5
EXPRESSWAY SIGNS D-2 & D-22
FLUORESCENT LUMINAIRE SUPPORTS
FEB 1960
SHEET NO 6 OF 6 SHEETS

B. S. 147. (69)

ORIGINAL PLAN
DESIGNED BY: J. A. Mardel
DRAWN BY: J. A. Mardel
CHECKED BY: J. A. Mardel
DATE: 7/11/57