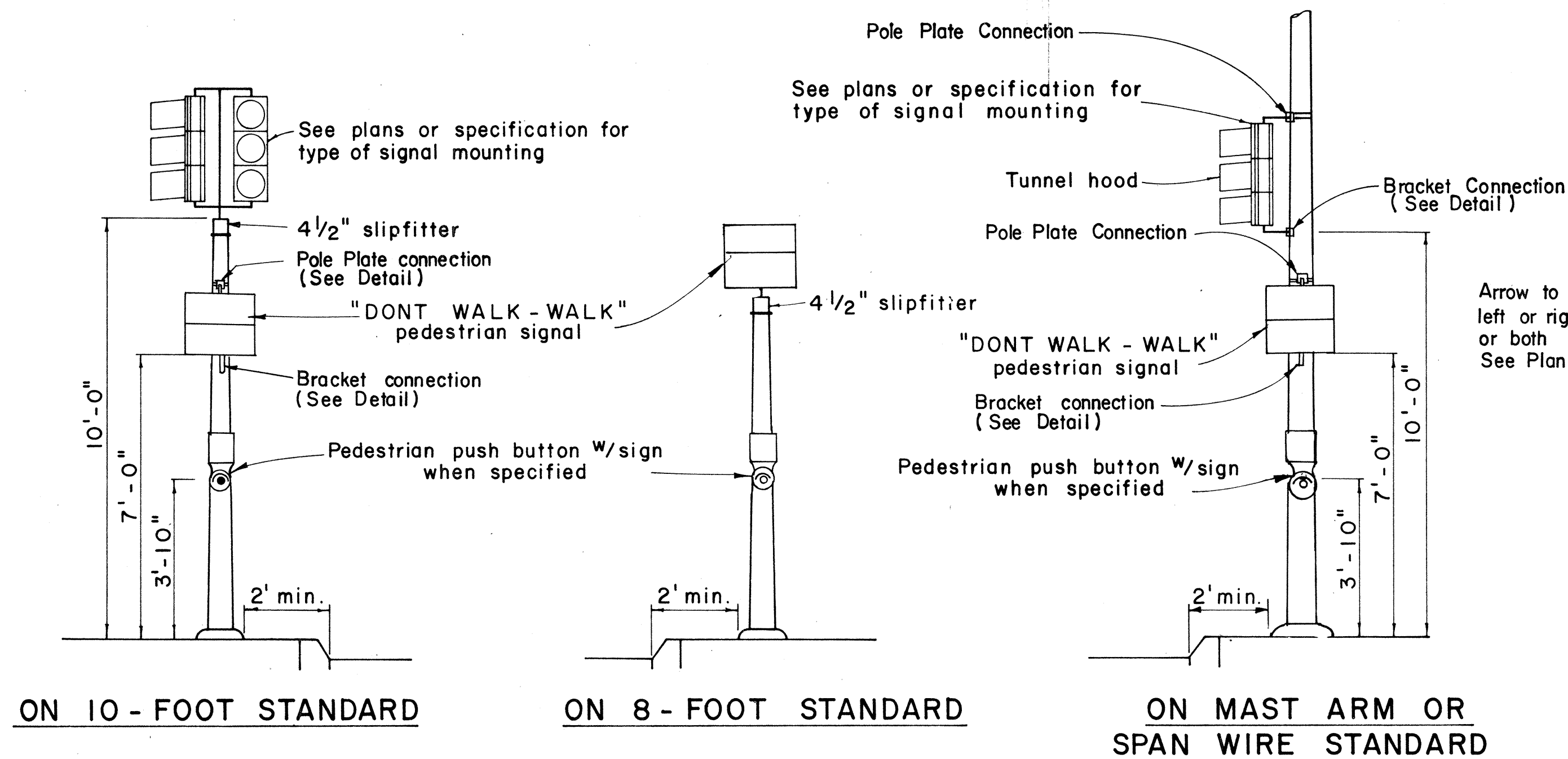
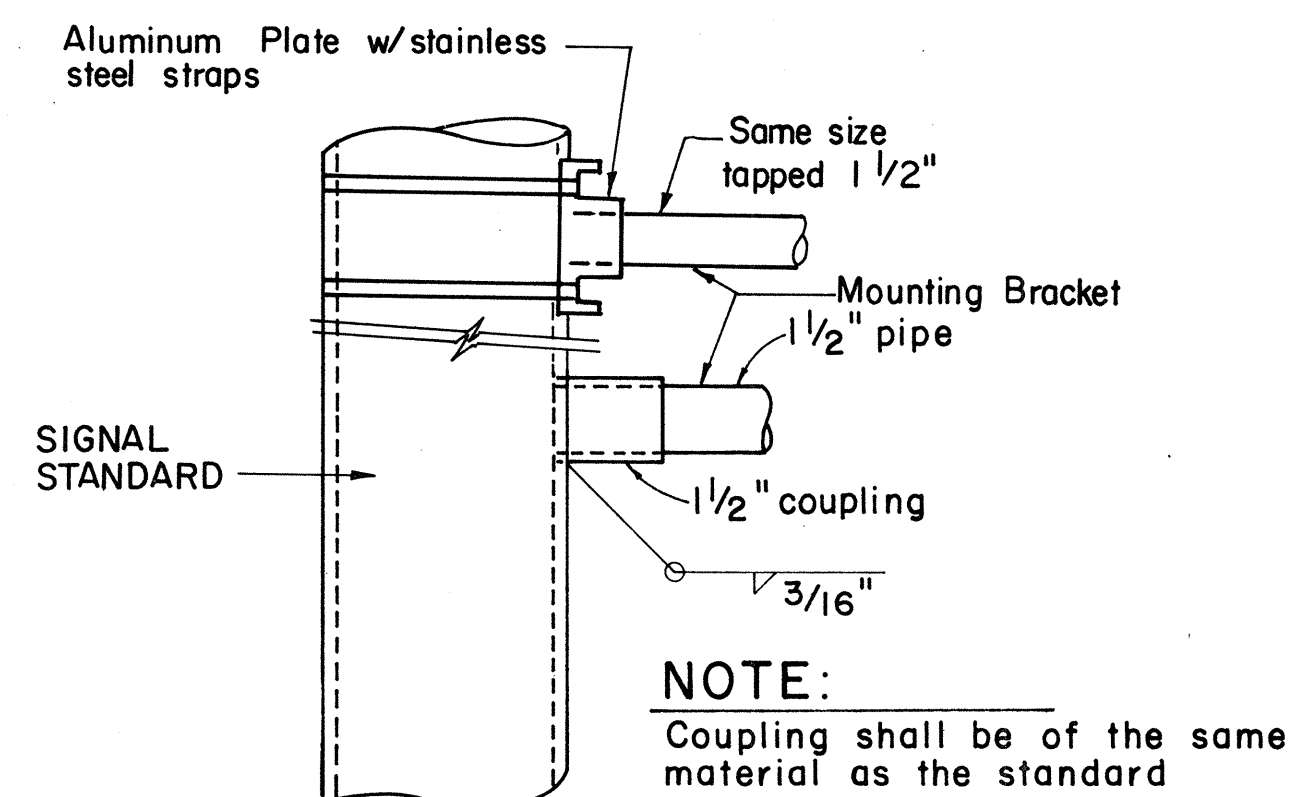


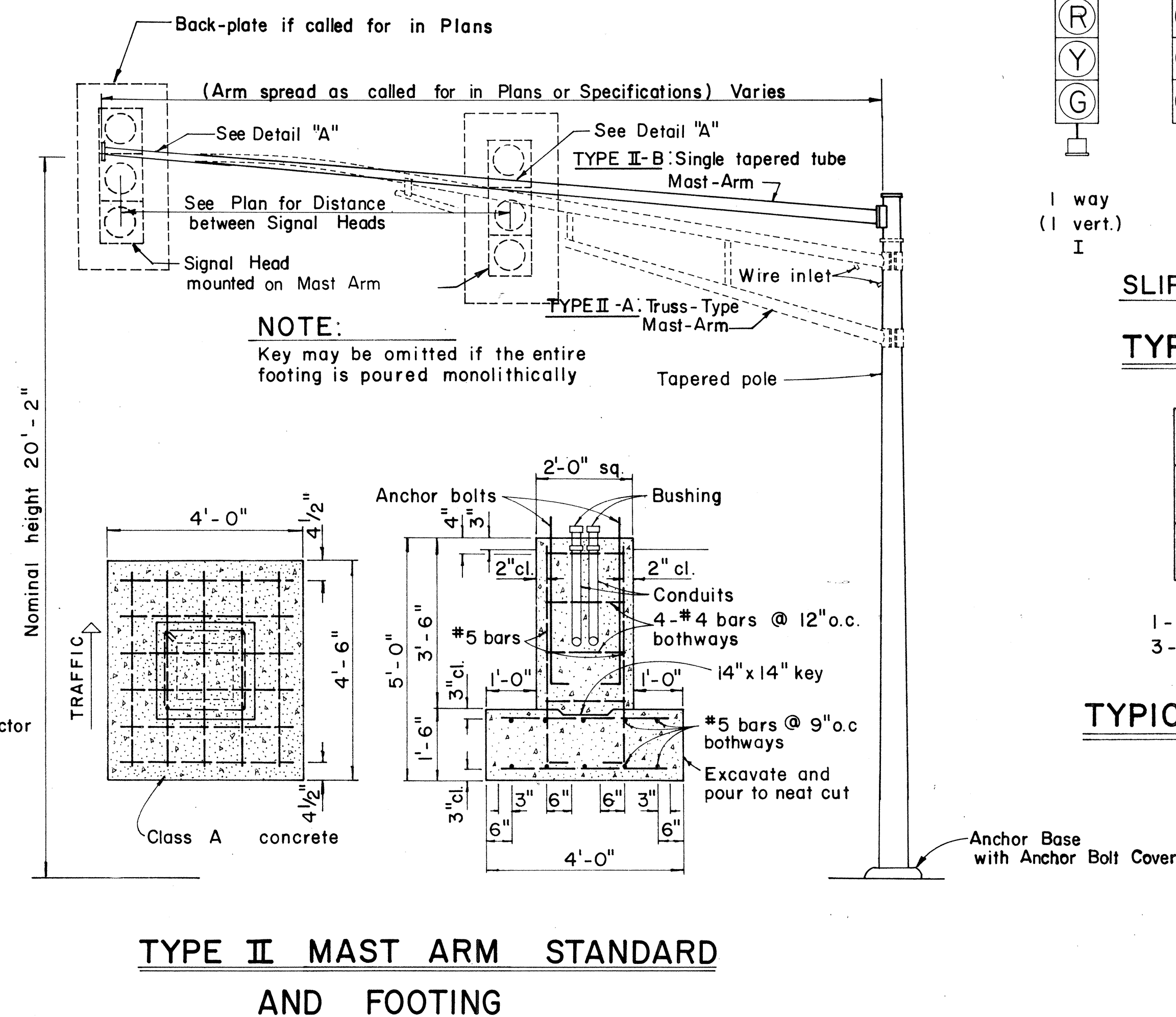
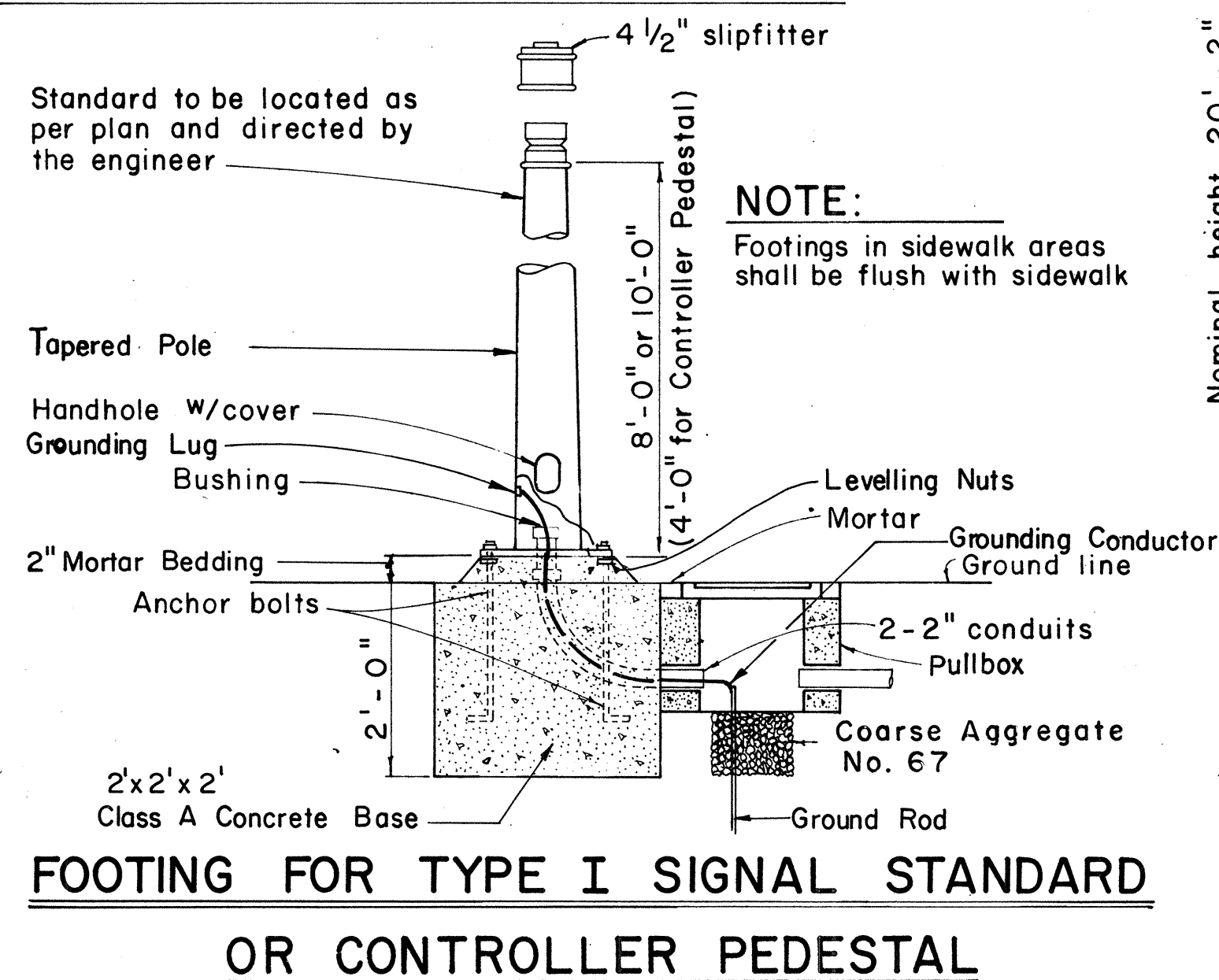
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1 (20)	1974	10	18



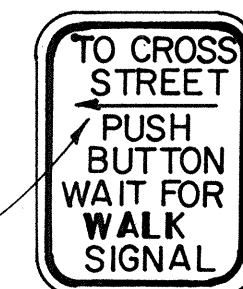
TYPICAL EQUIPMENT MOUNTINGS



DETAIL OF BRACKET AND POLE PLATE CONNECTIONS



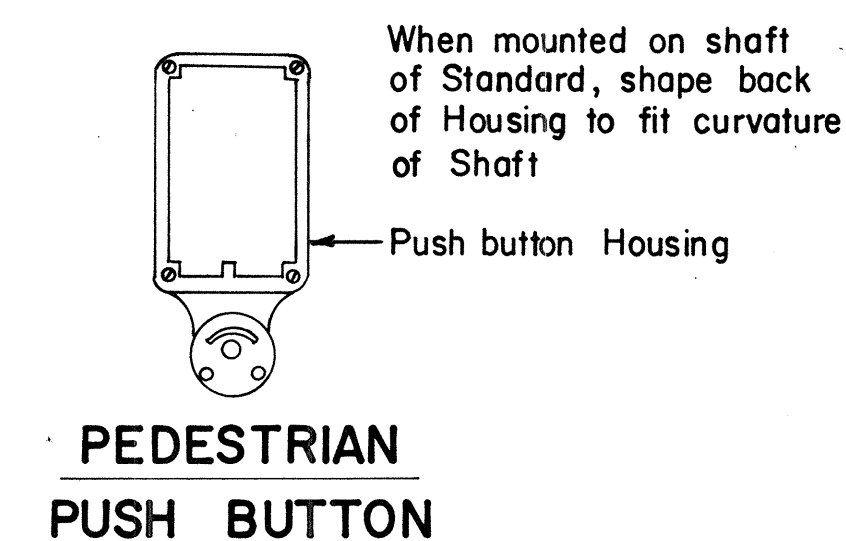
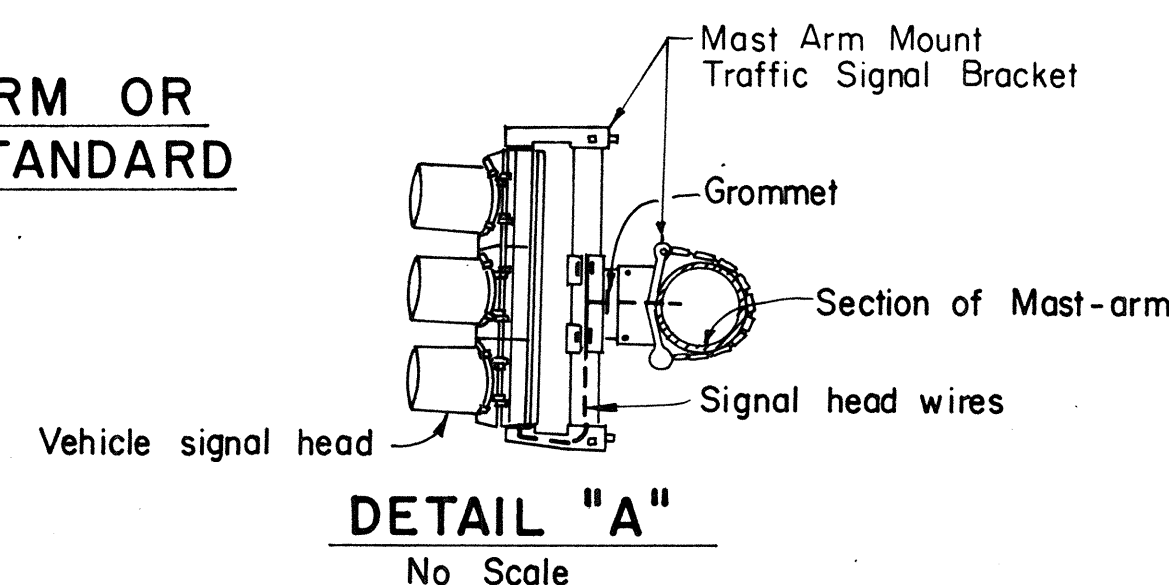
TRAFFIC SIGN AS SPECIFIED IN PLAN
"TO CROSS STREET (ARROW) PUSH BUTTON
WAIT FOR WALK SIGNAL" (RIO-4a)



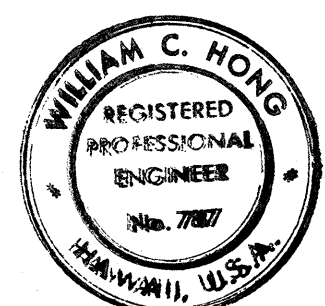
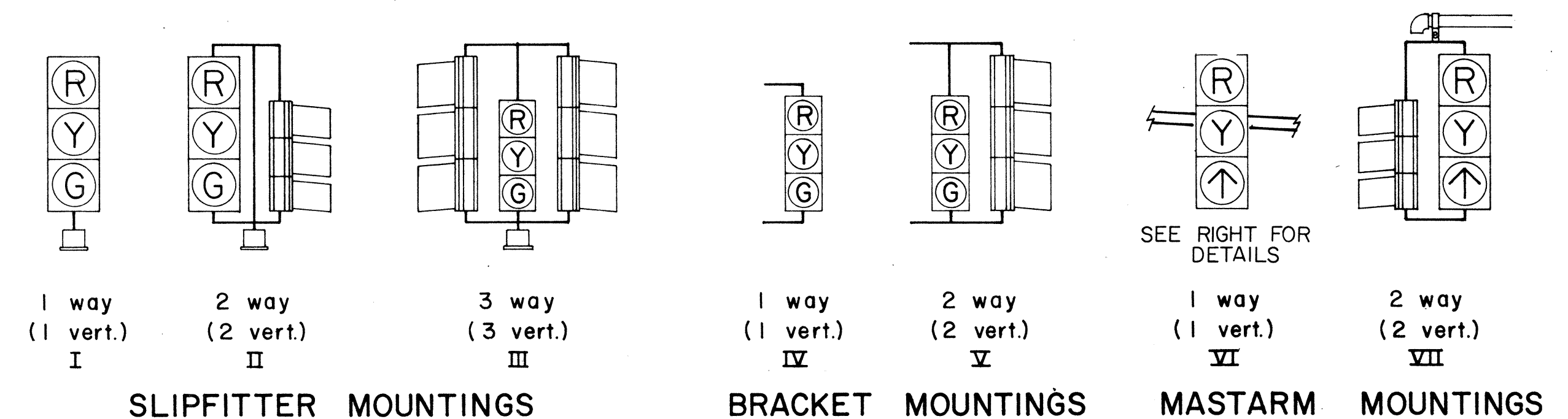
RIO-4a
9" x 12"

NOTE:

1. Conduits shall protrude 2" max. above finished surface of foundation.
2. Conduits shall slope away from pole foundation.
3. Post and base shall be painted with one coat of approved weather proof dark green enamel.



PEDESTRIAN PUSH BUTTON POST AND FOOTING



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL SYSTEM

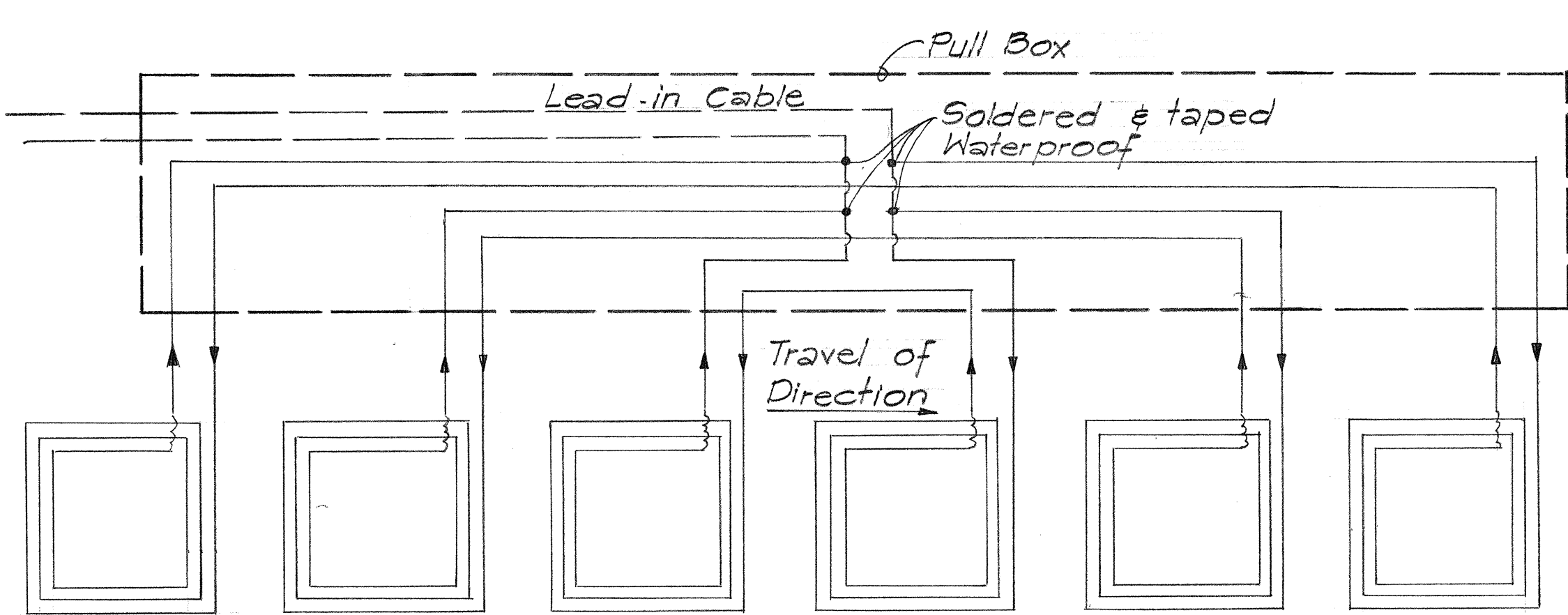
TYPICAL DETAILS

Not to Scale

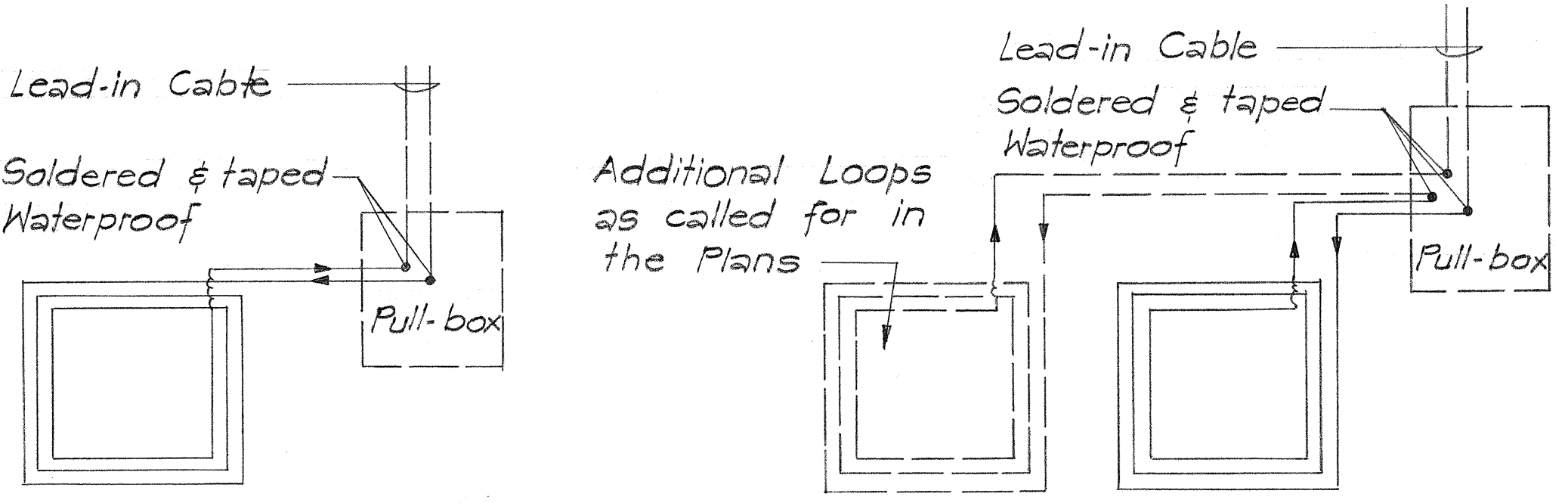
SHEET No. 1 OF 4 SHEETS

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(20)	1974	11	18



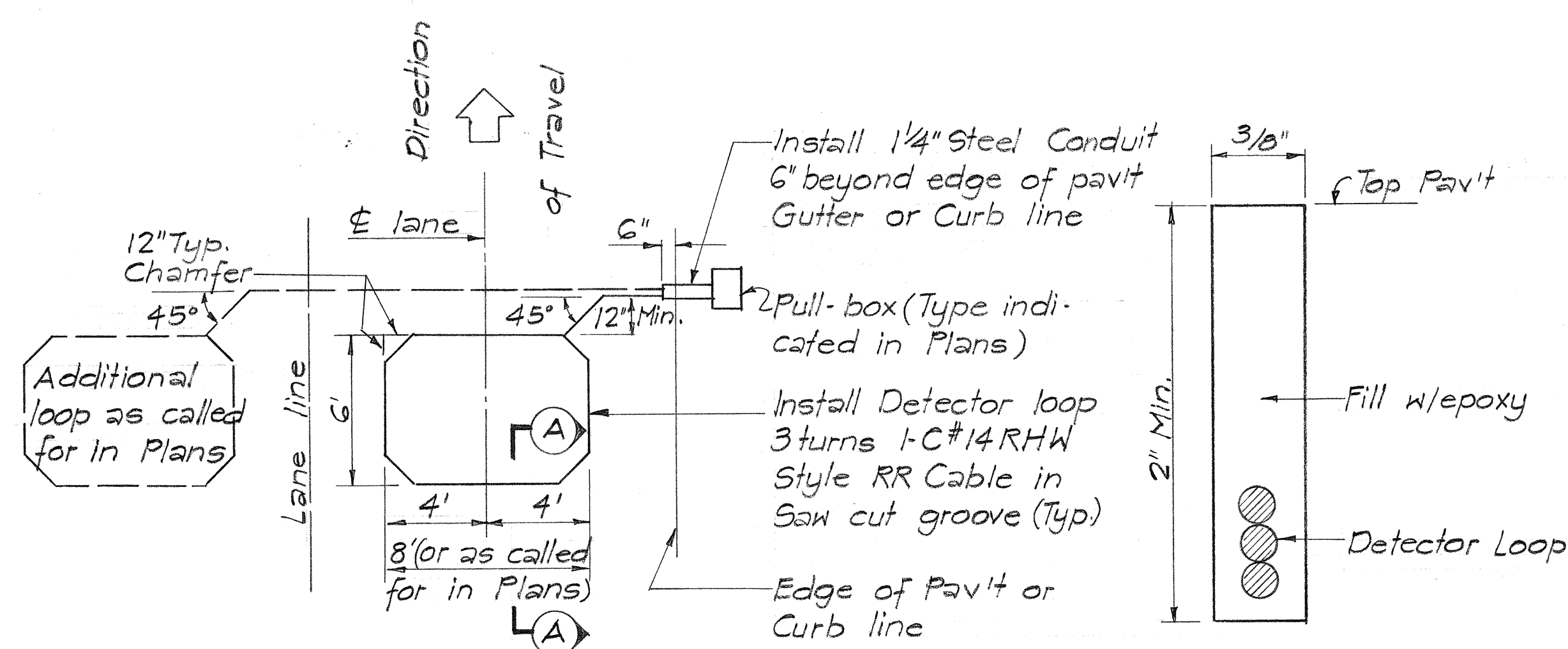
TYPICAL SERIES - PARALLEL LOOP CONNECTION IN LEFT TURN LANES



SINGLE

SERIES

TYPICAL LOOP CONFIGURATIONS
No scale



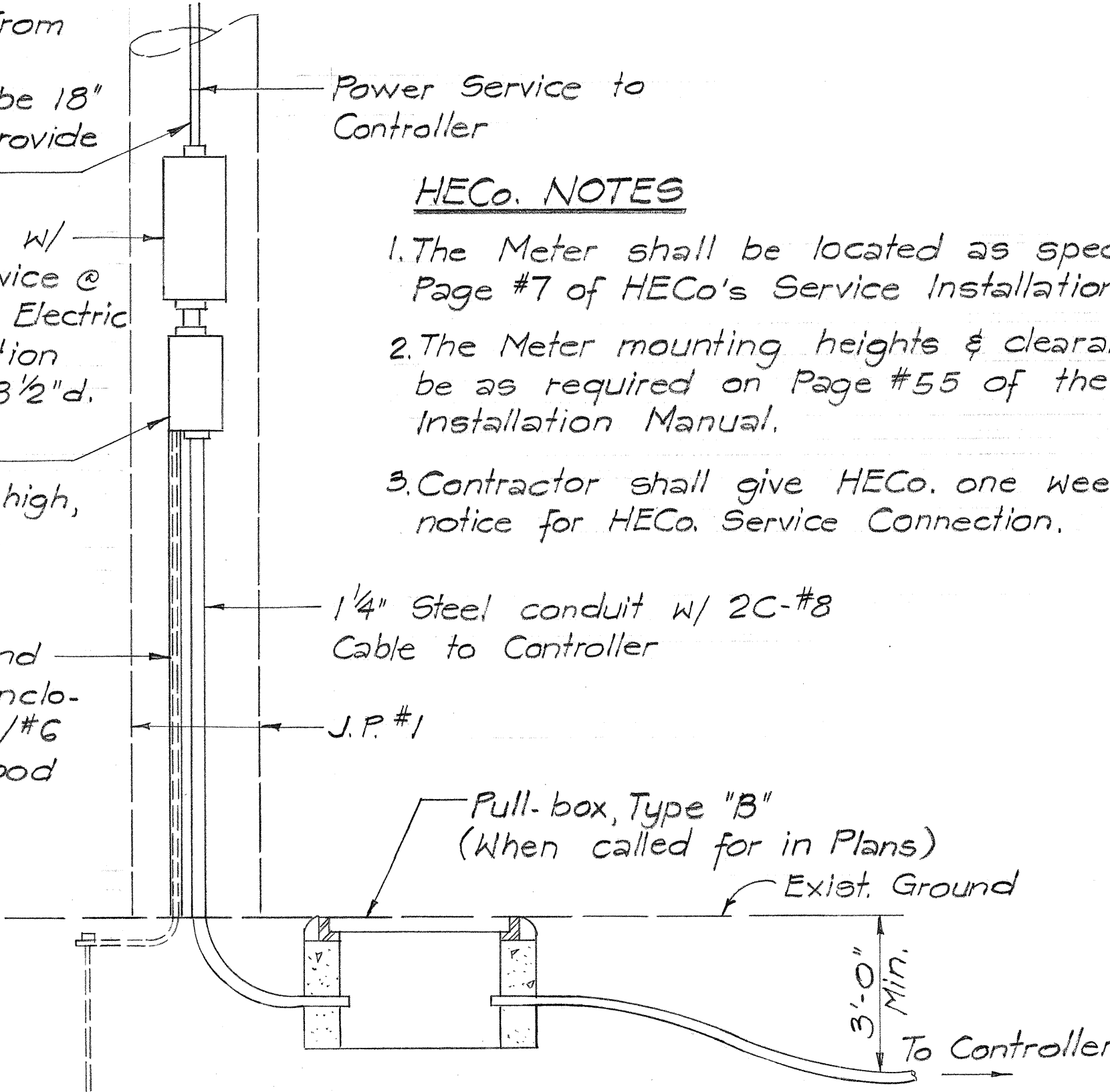
PLAN - MULTIPLE LOOP LAYOUT
Scale 1" = 5'

SECTION A-A (TYPICAL)
Detector loop Saw-cut
No Scale

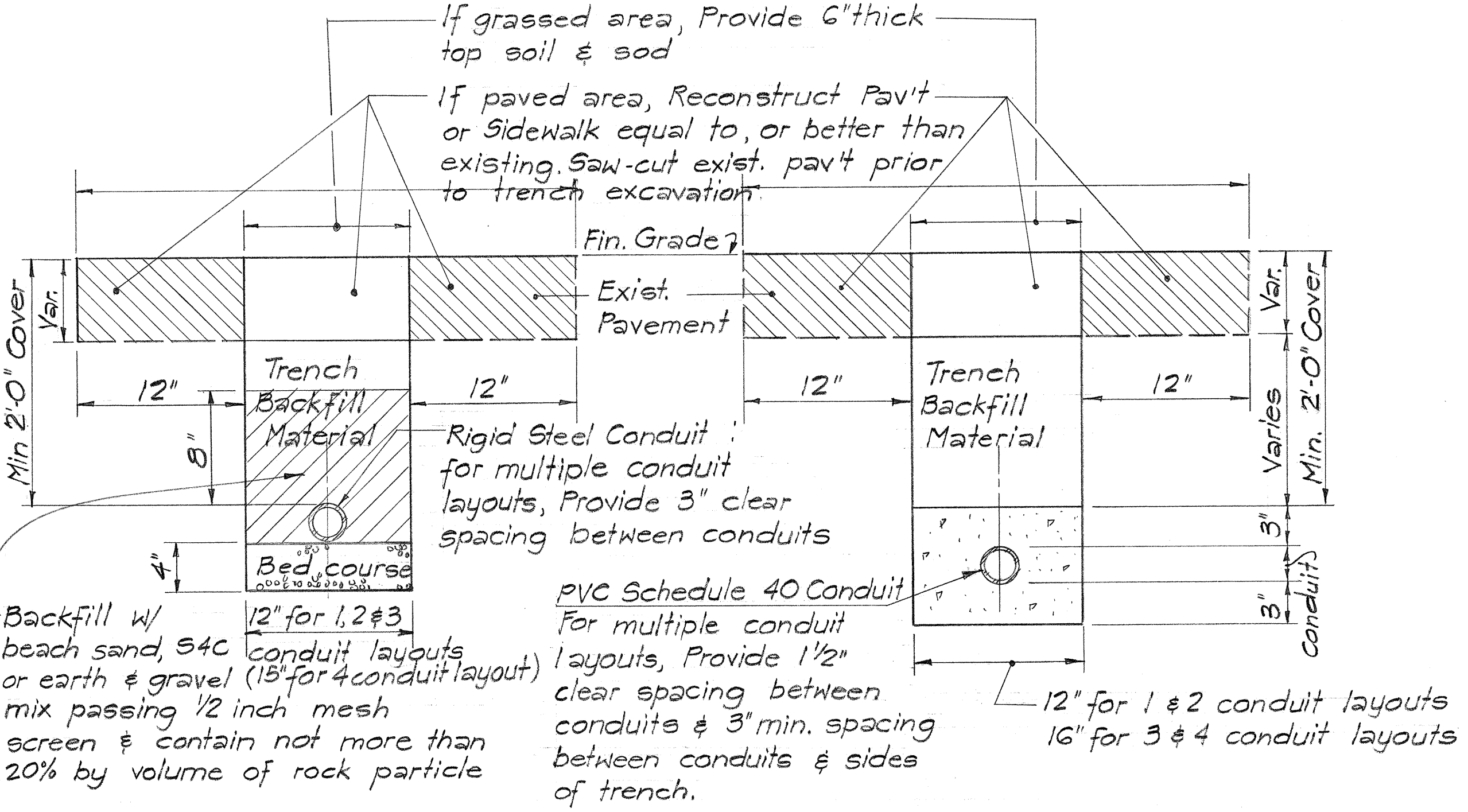
DETECTION LOOP
Scale as shown

120-1φ 2W Service from HECO. Secondary Weather Head to be 18" below Sec. Gain. Provide 3' cable slack
4 Jaw Meter socket w/ manual closing Device @ 17'-0" (See Hawaiian Electric Co. Service Installation manual) 17"h., 8"w., 3 1/2"d.
30A 1P "E" Frame ACB-NEMA 3-13 1/4" high, 7 1/4" wide, 4 7/8" deep.

Provide 5/8"x8' ground rod. Connect to Enclosures & Neutral w/#6 wire covered w/wood moulding



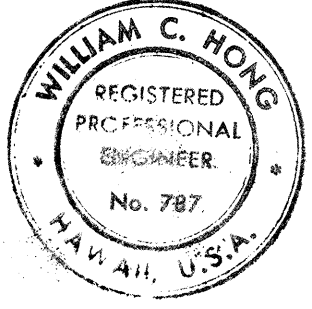
TYPICAL SERVICE & METERING AT J.P. #1
Scale 3/4" = 1'-0"



TYPICAL TRENCH SECTION RIGID STEEL CONDUIT
Scale 1 1/2" = 1'-0"

TYPICAL TRENCH SECTION PVC CONCRETE ENCASED CONDUIT
Scale 1 1/2" = 1'-0"

- NOTES:**
1. Install 2-2" rigid steel conduits between all signal standards & Pull-boxes unless otherwise called for. Conduits between Controller base & Controller pull-box shall be rigid steel conduits. See Plans for Sizes & No. of Conduits
 2. All PVC schedule 40 conduits shall be concrete encased as detailed.



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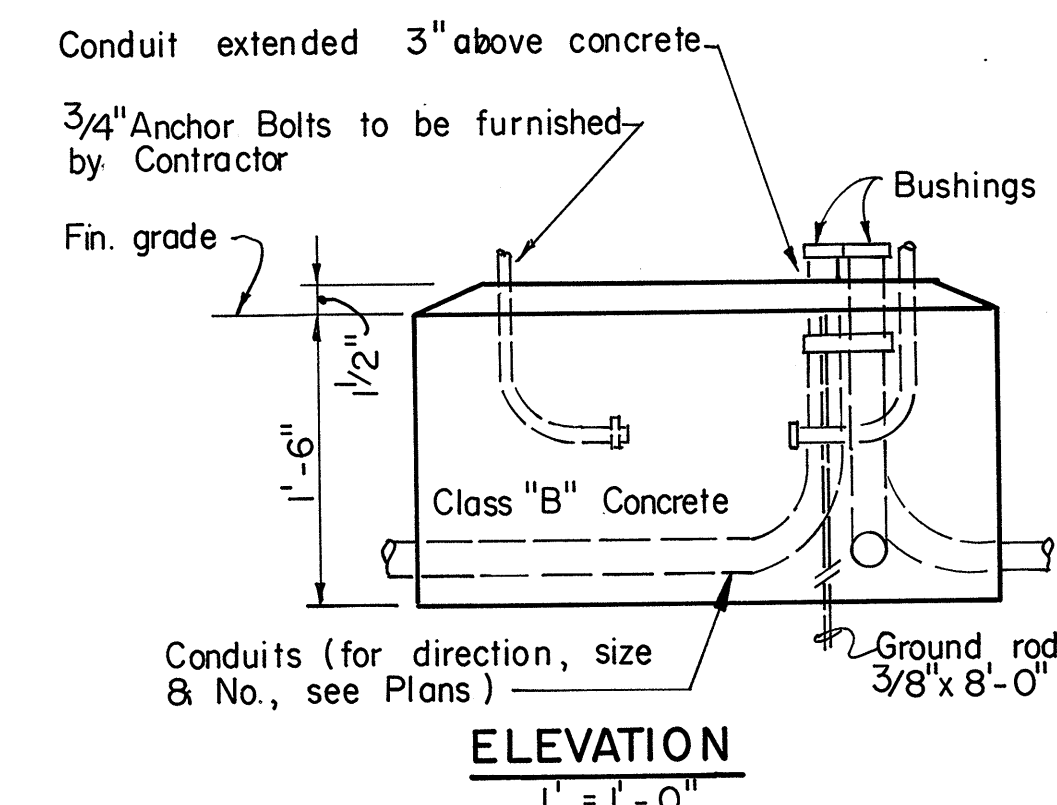
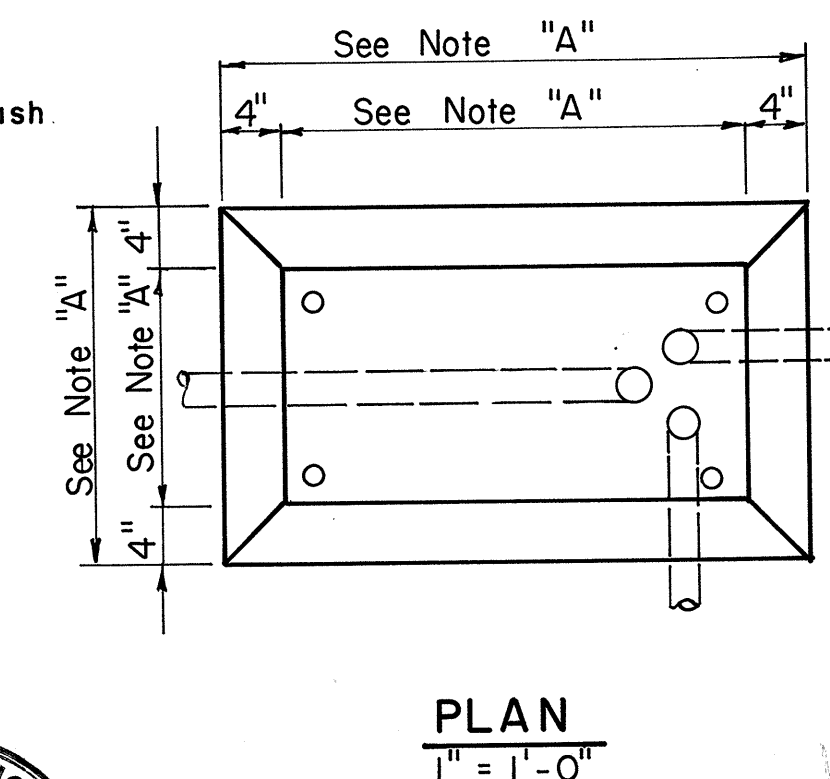
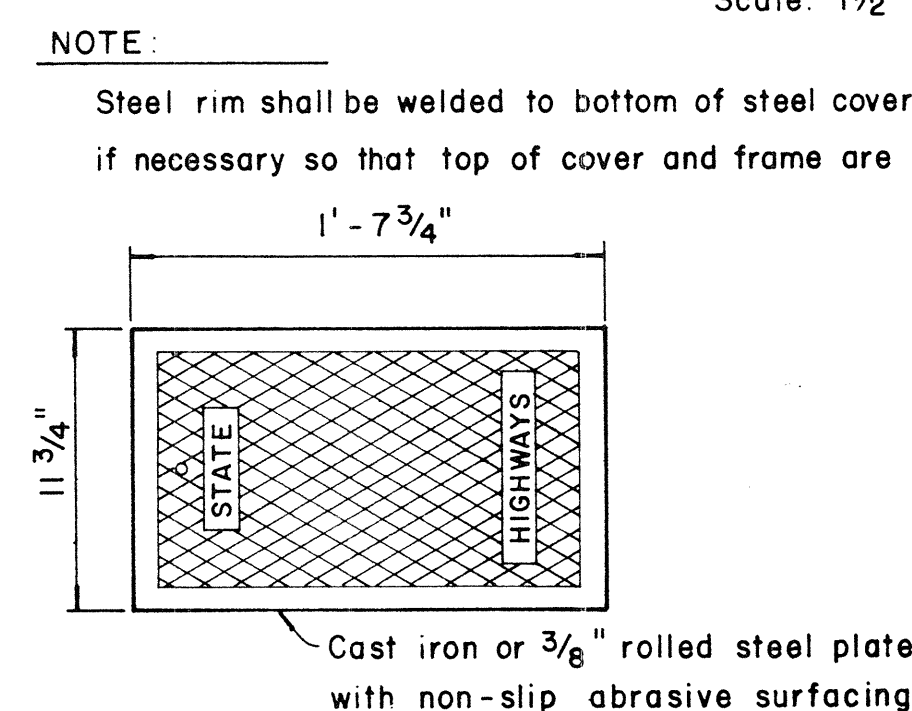
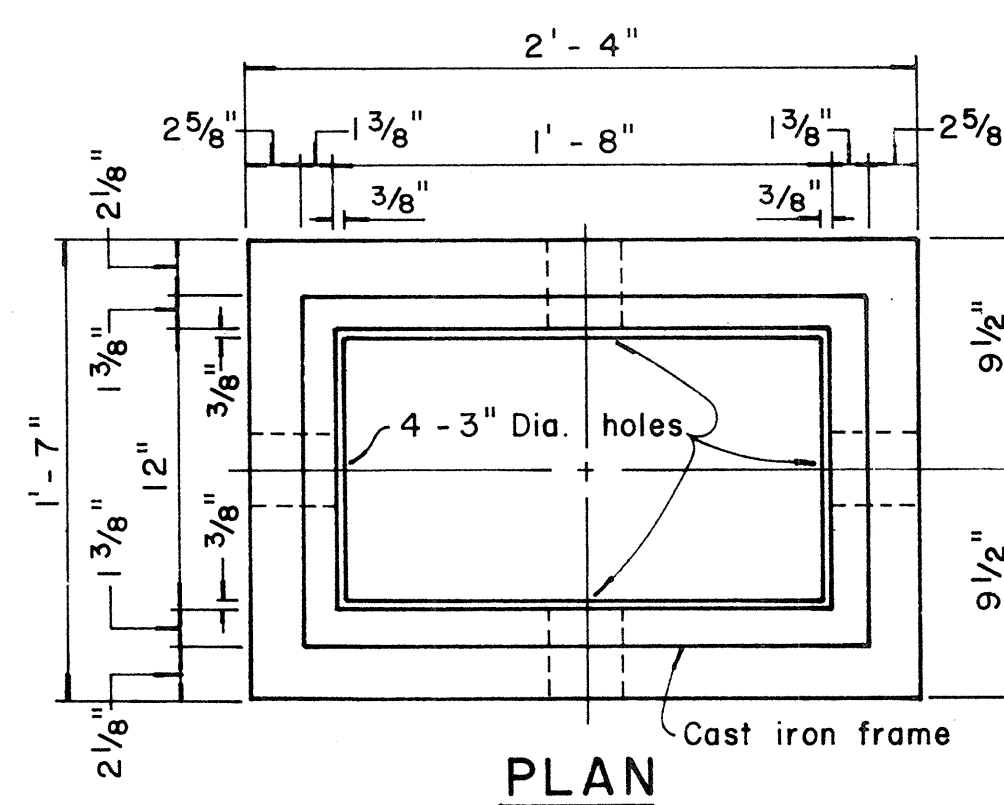
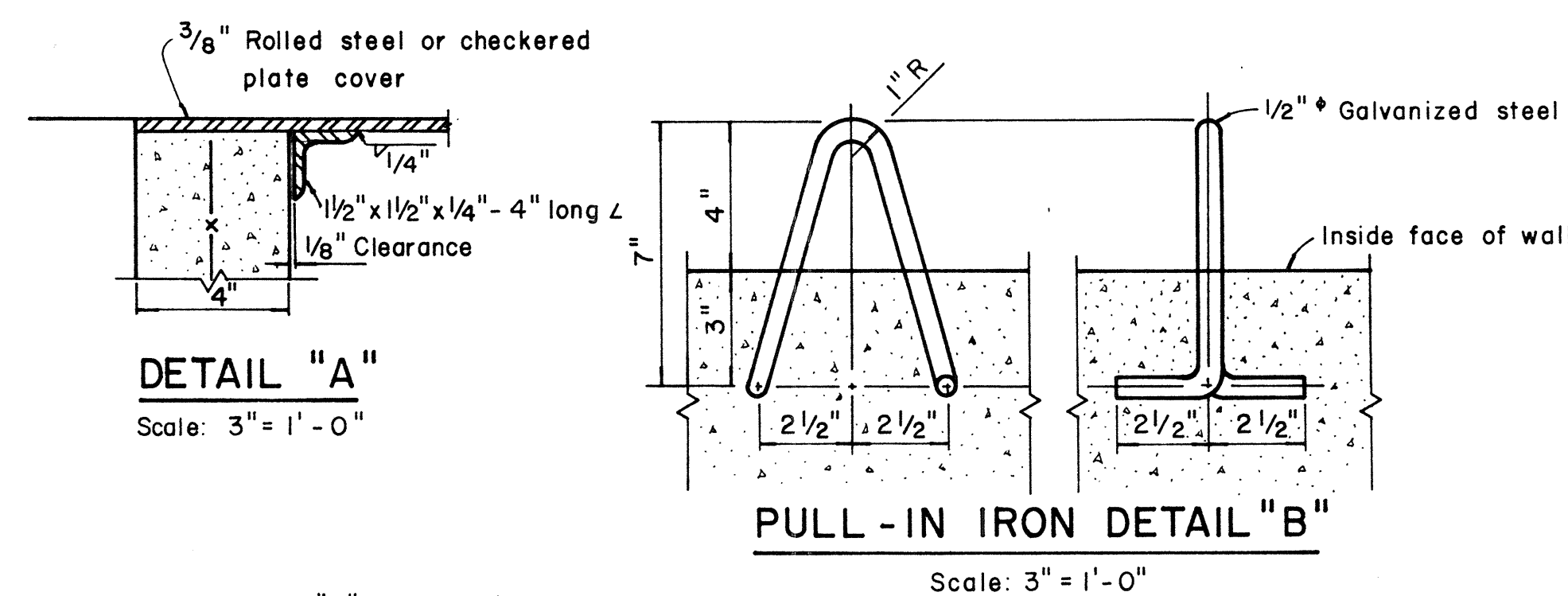
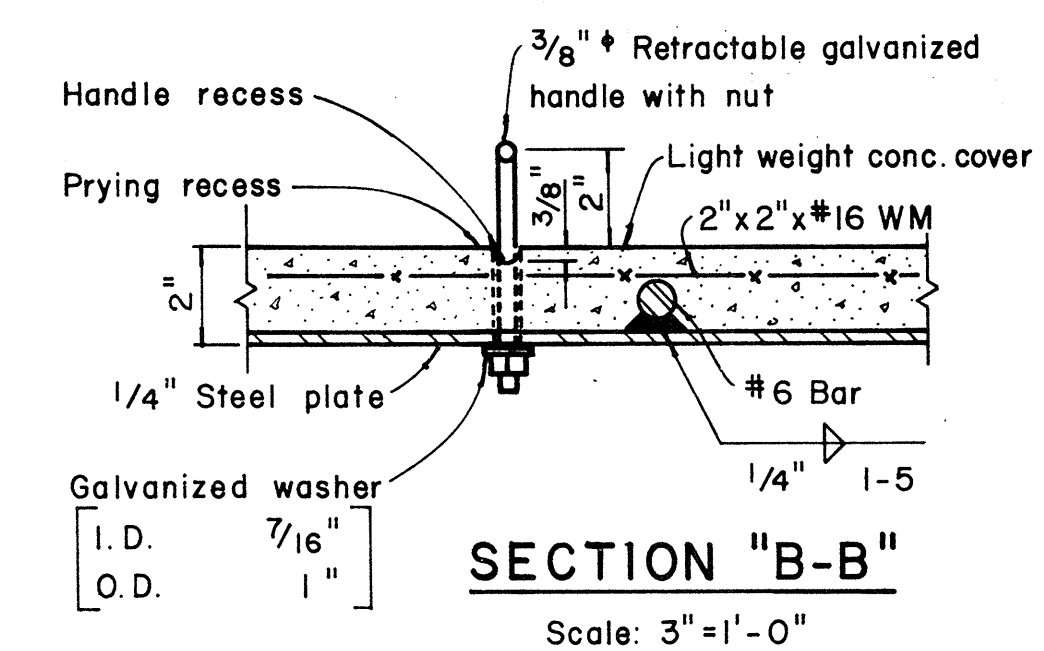
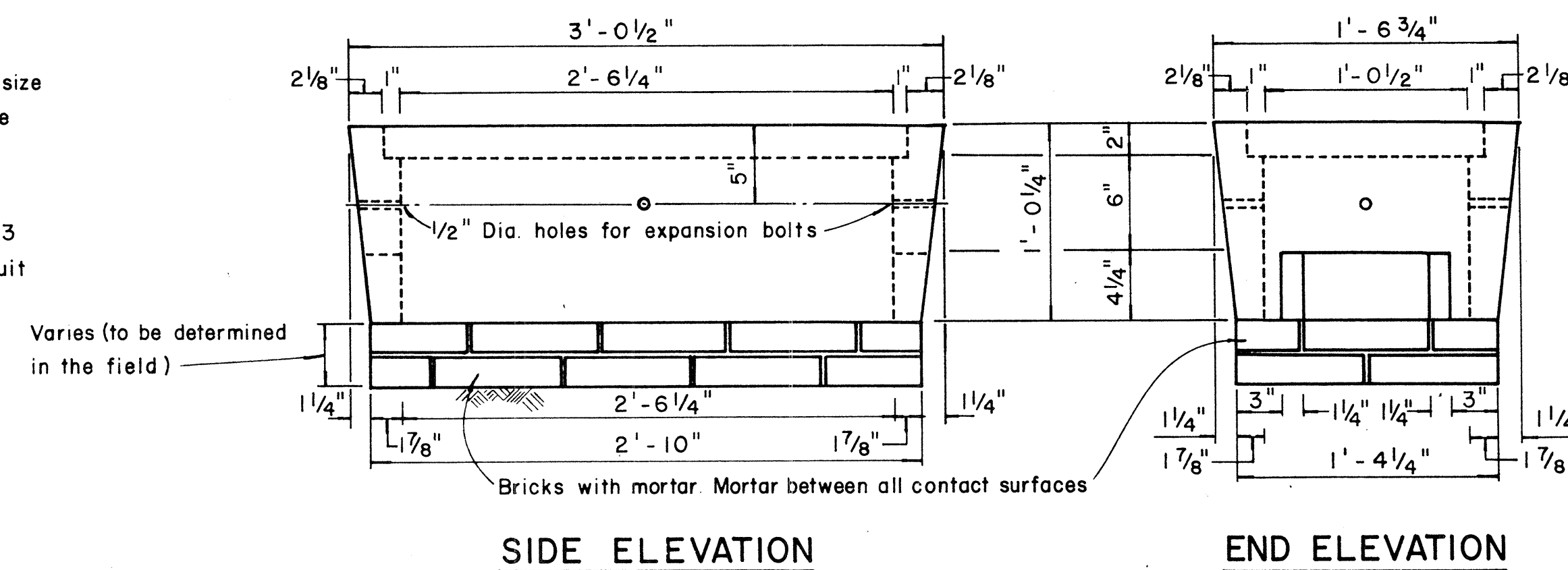
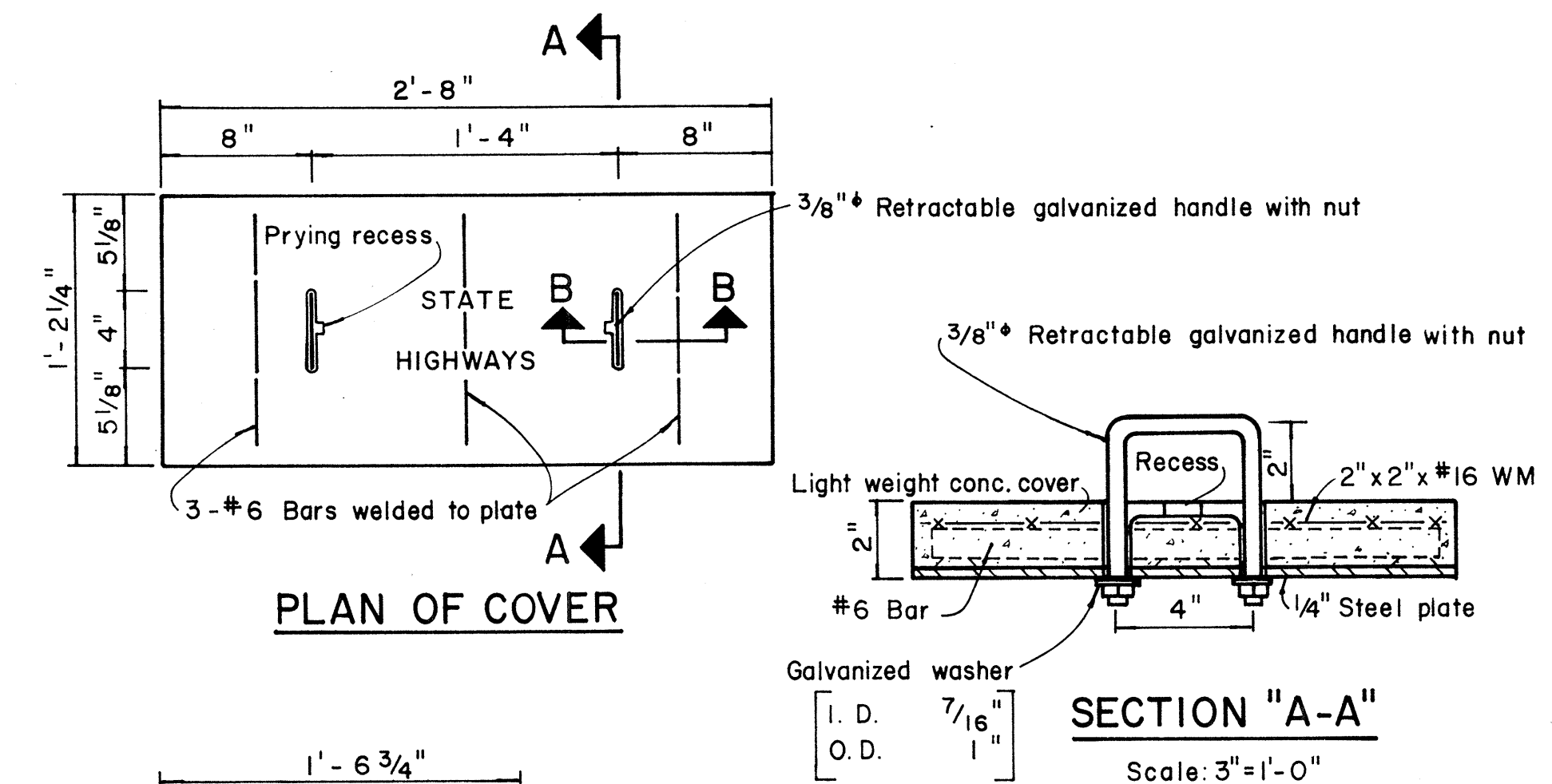
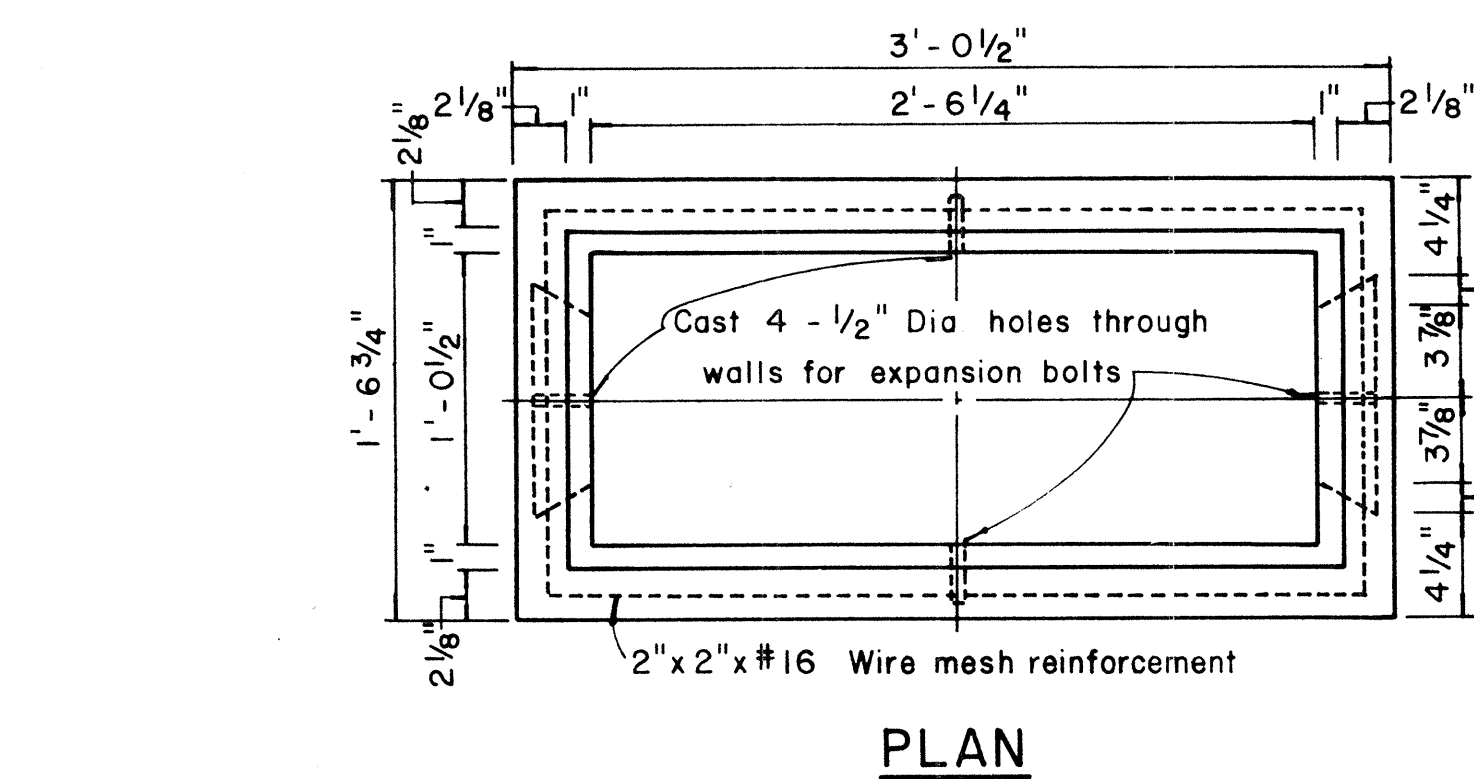
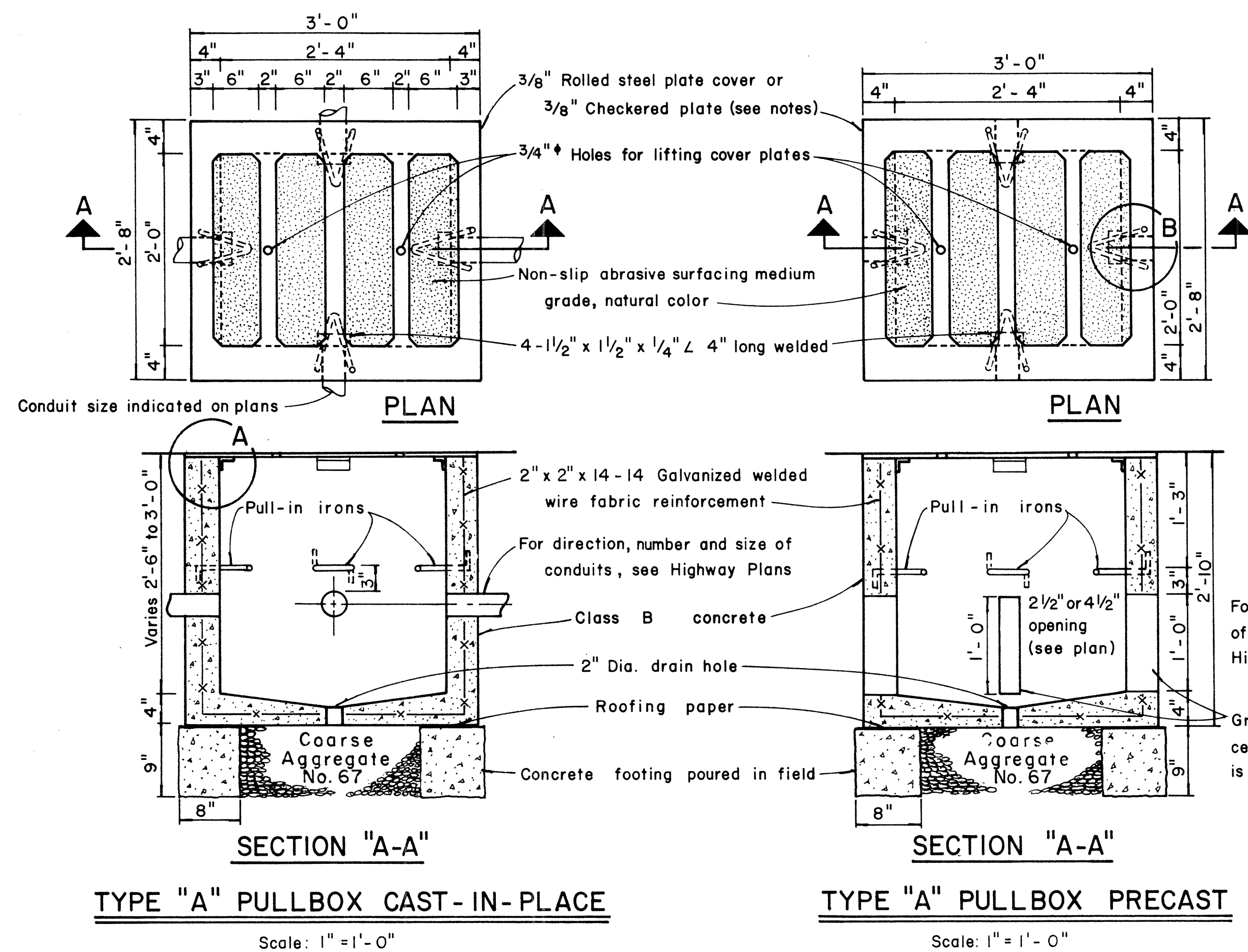
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL SYSTEM
TYPICAL DETAILS

INTERSECTION IMPROVEMENTS
Fed. Aid Proj. No. F-061-1 (20)
Scale: As shown Date: Sept. 1974
SHEET NO. 2 OF 4 SHEETS

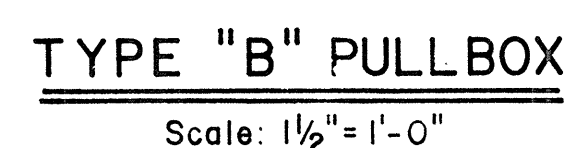
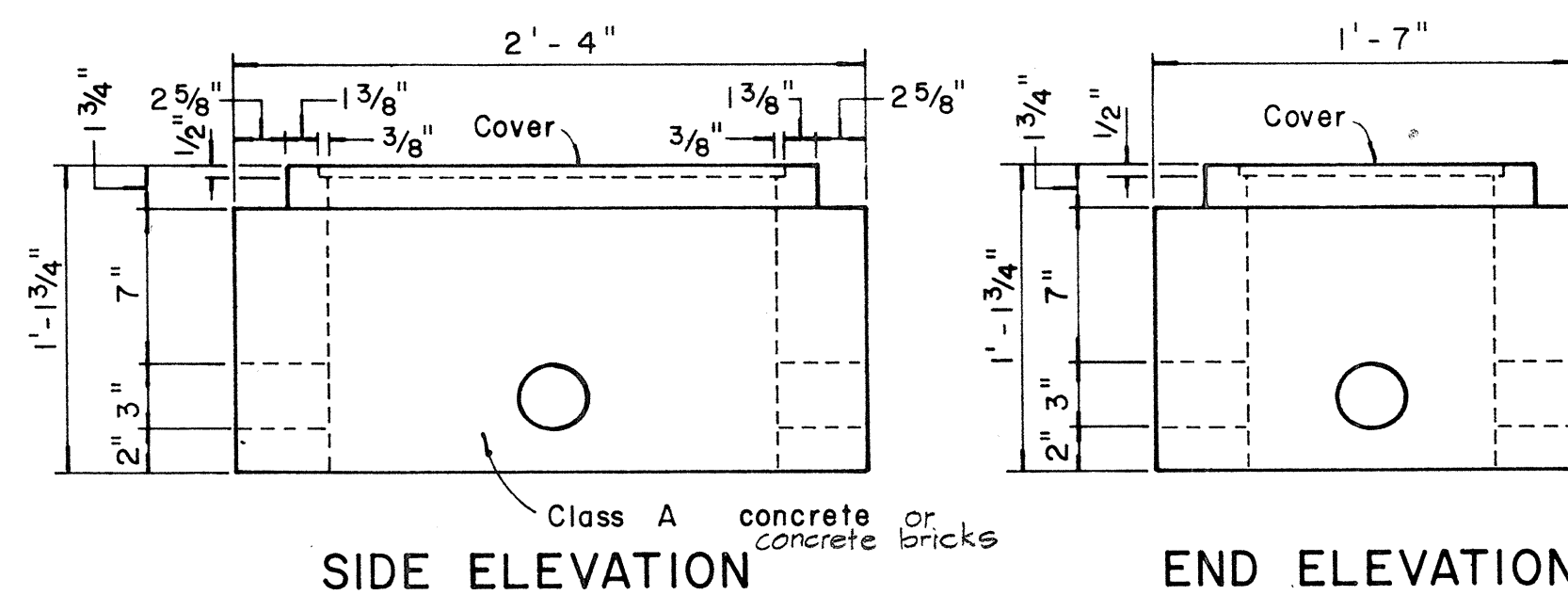
SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(20)	1974	12	18



- NOTES: (FOR TYPE "A" PULLBOX)

1. $\frac{3}{8}$ " Rolled steel plate cover with non-slip abrasive surfacing medium grade, natural color shall be used on all pullboxes located on sidewalk areas where pedestrians are walking.
2. $\frac{3}{8}$ " Checkered plate cover shall be used on all pullboxes located in median areas and other locations where there are no pedestrians walking.
3. Pull irons shall be placed opposite each conduit slot.
4. Covers on all pullboxes located in sidewalk areas shall be set flush with the concrete sidewalk.
5. Each pullbox shall have a pair of pull irons opposite each other for lifting purposes.



NOTE:

Steel rim shall be welded to bottom of steel cover
if necessary so that top of cover and frame are flush.

TYPE "C" PULLBOX
Scale: $1\frac{1}{2}" = 1' - 0"$

NOTES

A. Dimensions to be determined by the size of the Controller Cabinet to be furnished under this Contract.

B. Details of Conduits, Anchor Bolts, etc. are approximate only. Exact details shall be secured by the Contractor from Manufacturer.

CONTROLLER CABINET FOUNDATION

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS

PULLBOXES & CABINET FOUNDATION

INTERSECTION IMPROVEMENTS

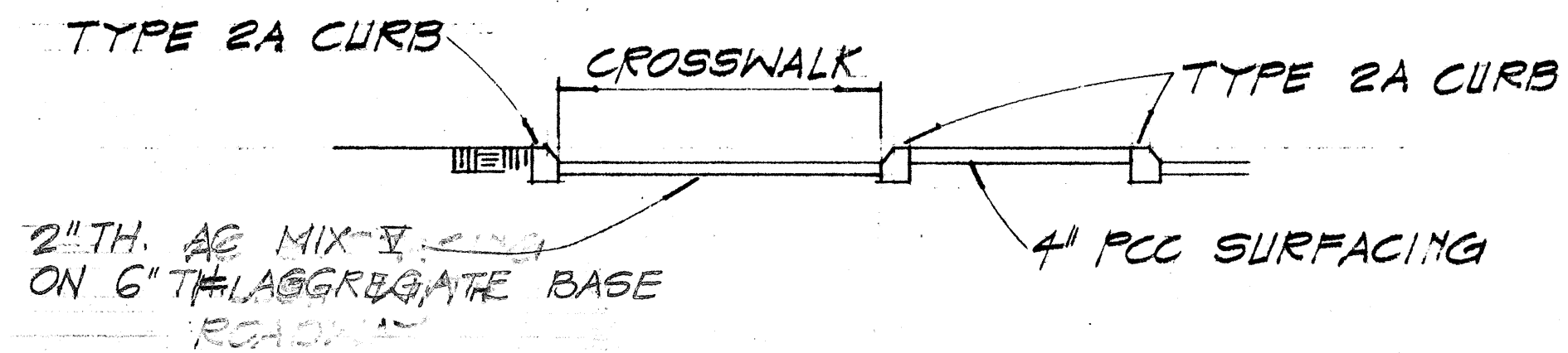
Fed. Aid Proj. No. F-061-1 (20)

Scale as noted

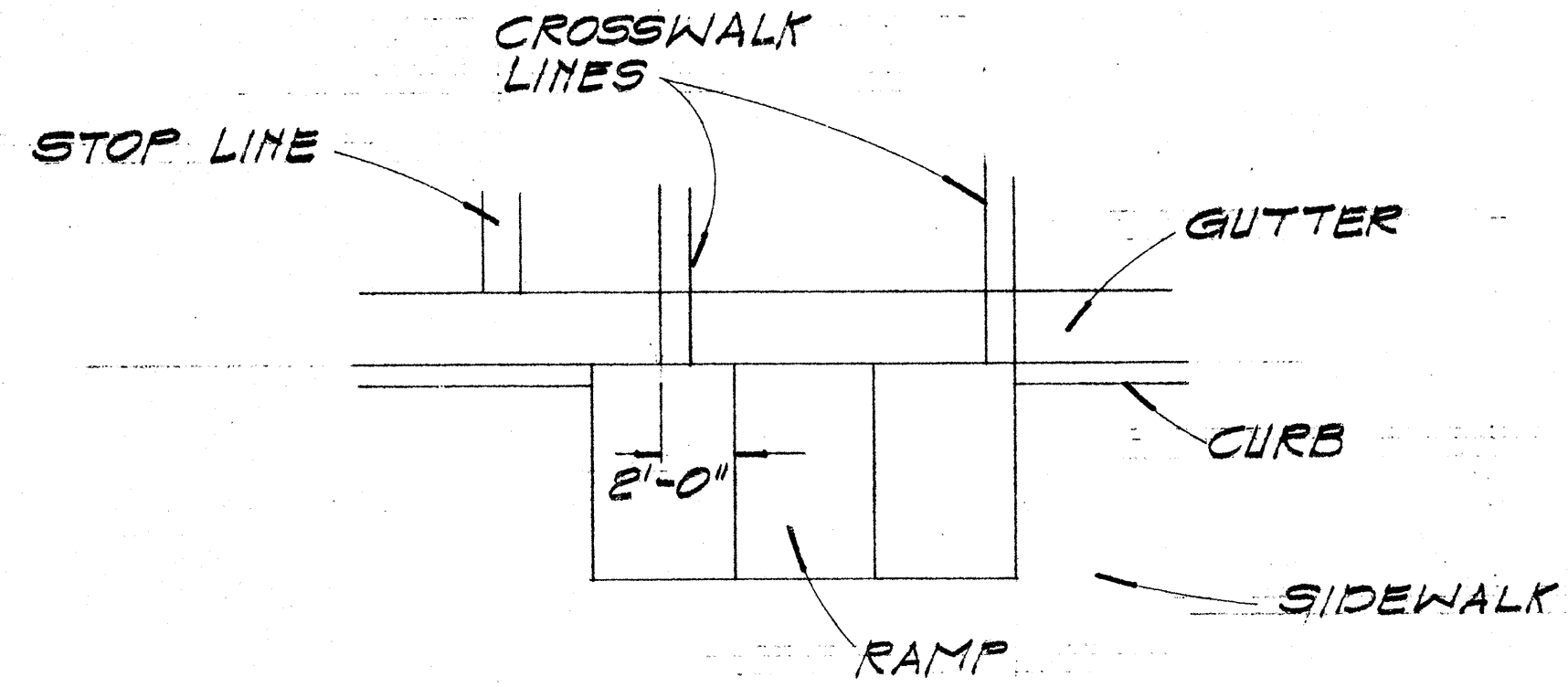
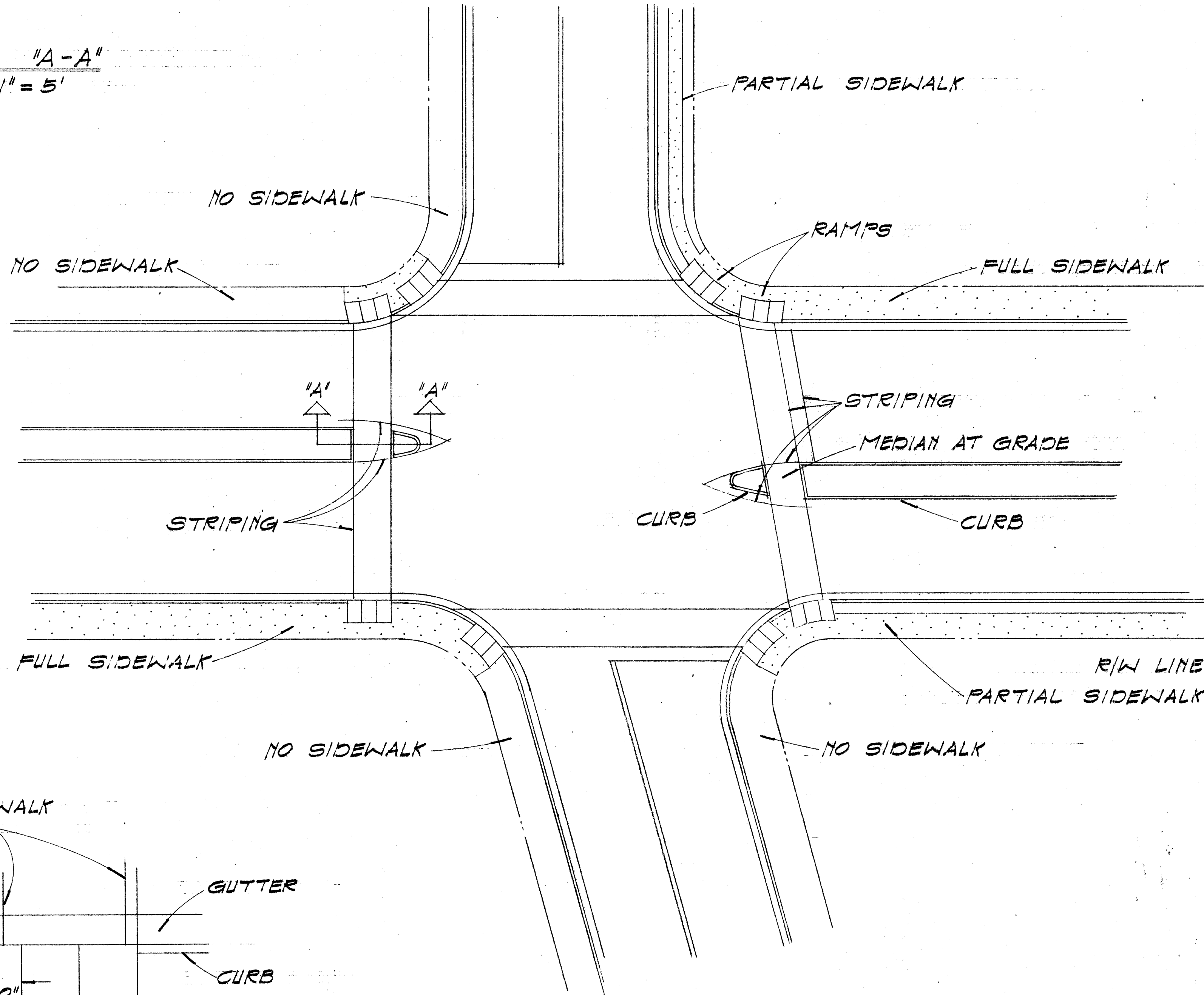
Date: Sept. 1974

SHEET No. 3 OF 4 SHEETS

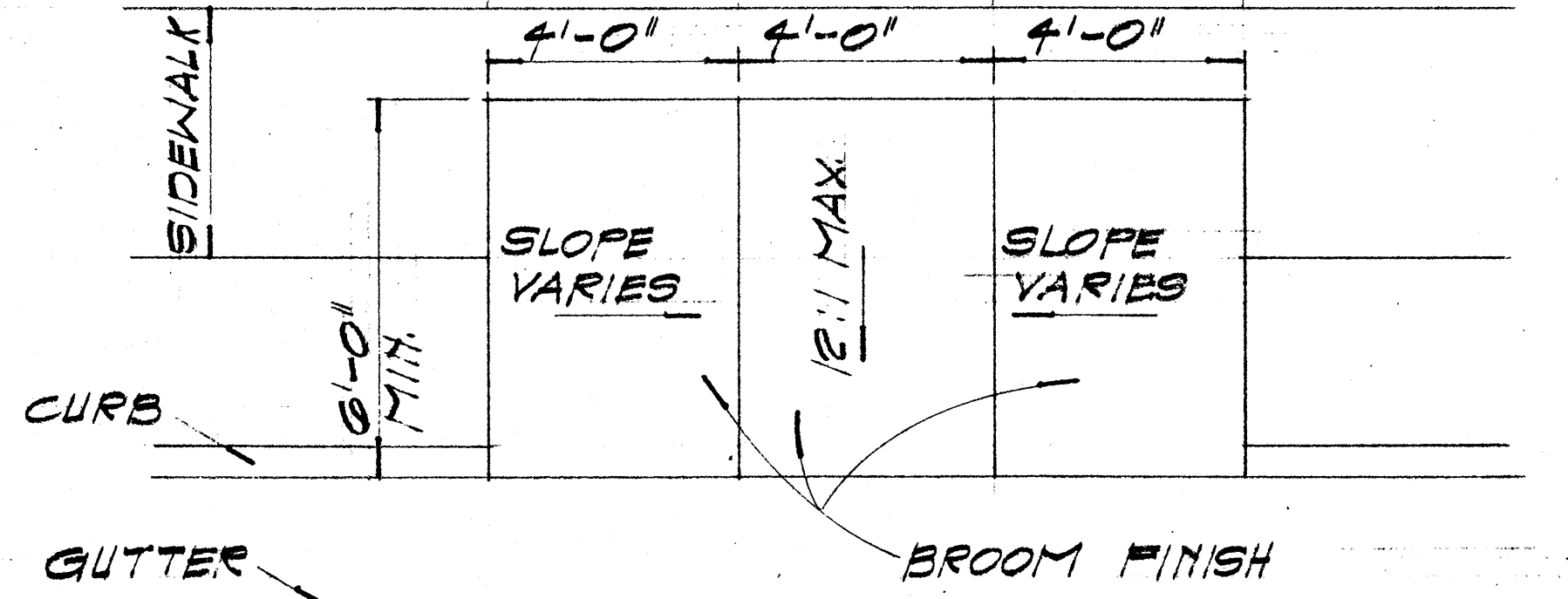
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(20)	1974	13	13



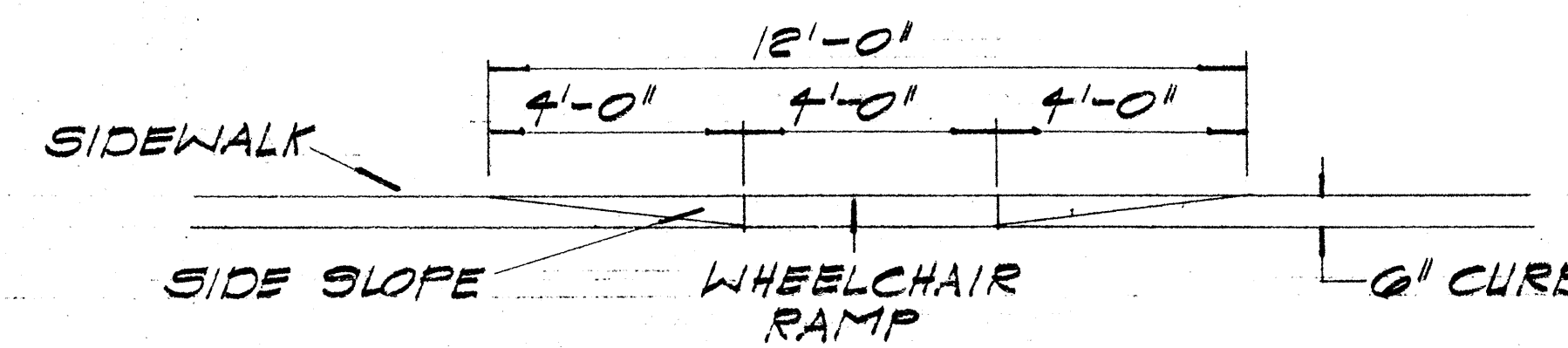
SECTION "A-A"
SCALE: 1" = 5'



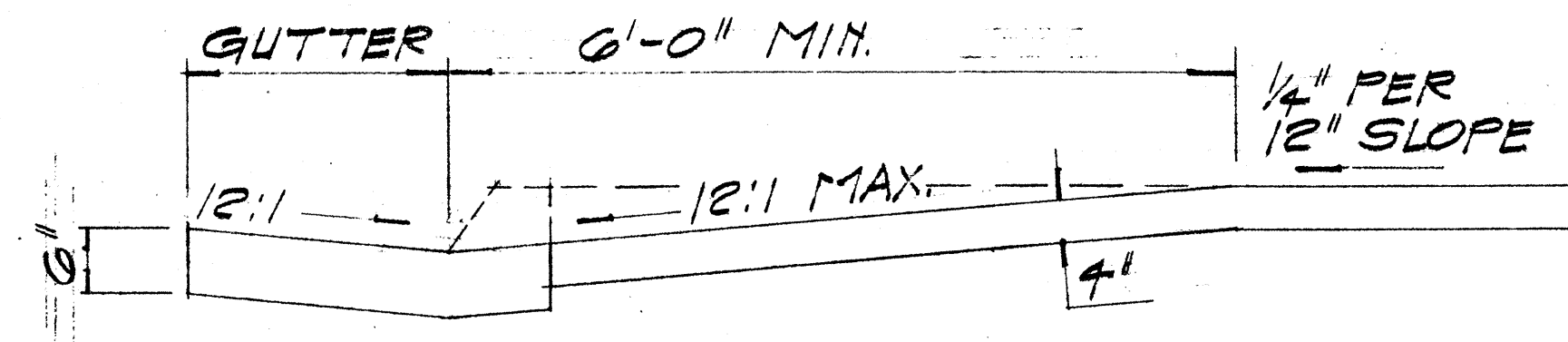
TYPICAL INSTALLATION
AT CROSSWALKS
SCALE: 1" = 5'



PLAN
SCALE: 3/8" = 1'-0"

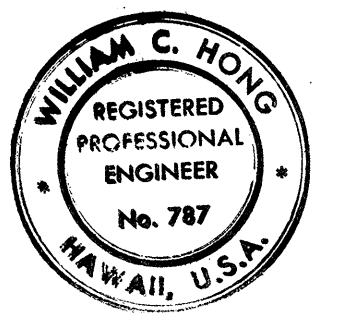


ELEVATION
SCALE: 3/8" = 1'-0"



TYPICAL SECTION
SCALE: 3/4" = 1'-0"

- NOTE:
- CONCRETE FOR WHEEL CHAIR RAMPS AND SIDEWALKS SHALL BE CLASS "B"
 - THE FOLLOWING SHALL BE CONSIDERED INCIDENTAL TO THE COSTS OF CONSTRUCTING THE RAMPS.
 - NEW CONCRETE SIDEWALKS BETWEEN RAMPS AND BETWEEN RAMP AND PROPERTY LINE
 - ADJUSTING EXISTING PULL-BOXES INTERCEPTED BY THE RAMPS TO NEW RAMP GRADES.
 - LOWERING OF CURBING
 - ALL EXCAVATION AND BACKFILL



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TYPICAL INSTALLATION
OF WHEEL CHAIR RAMPS**

INTERSECTION IMPROVEMENTS
Fed. Aid Proj. No. F-061-1 (20)
SCALE: AS SHOWN

ORIGINAL	DATE
PLAN	
NOTE BOOK	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	