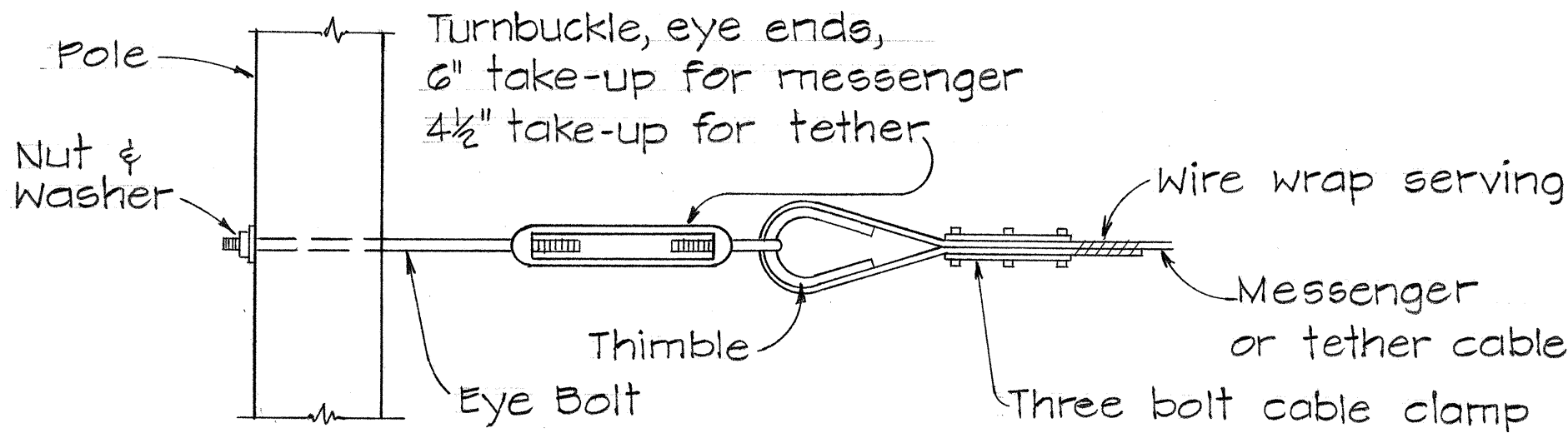


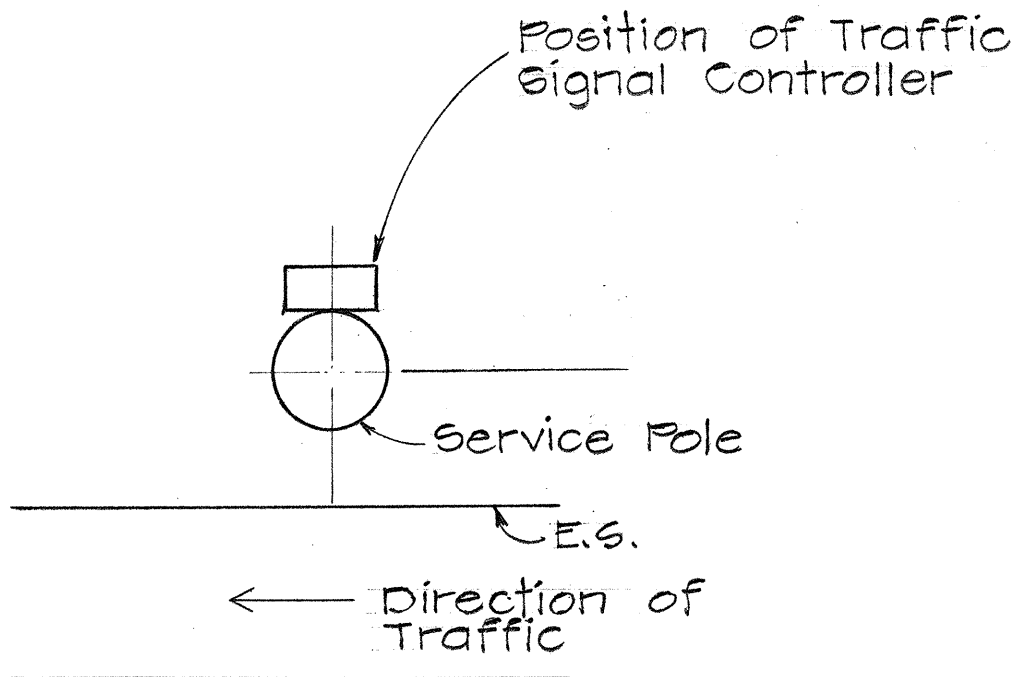
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0380 (7)	1975	4	7



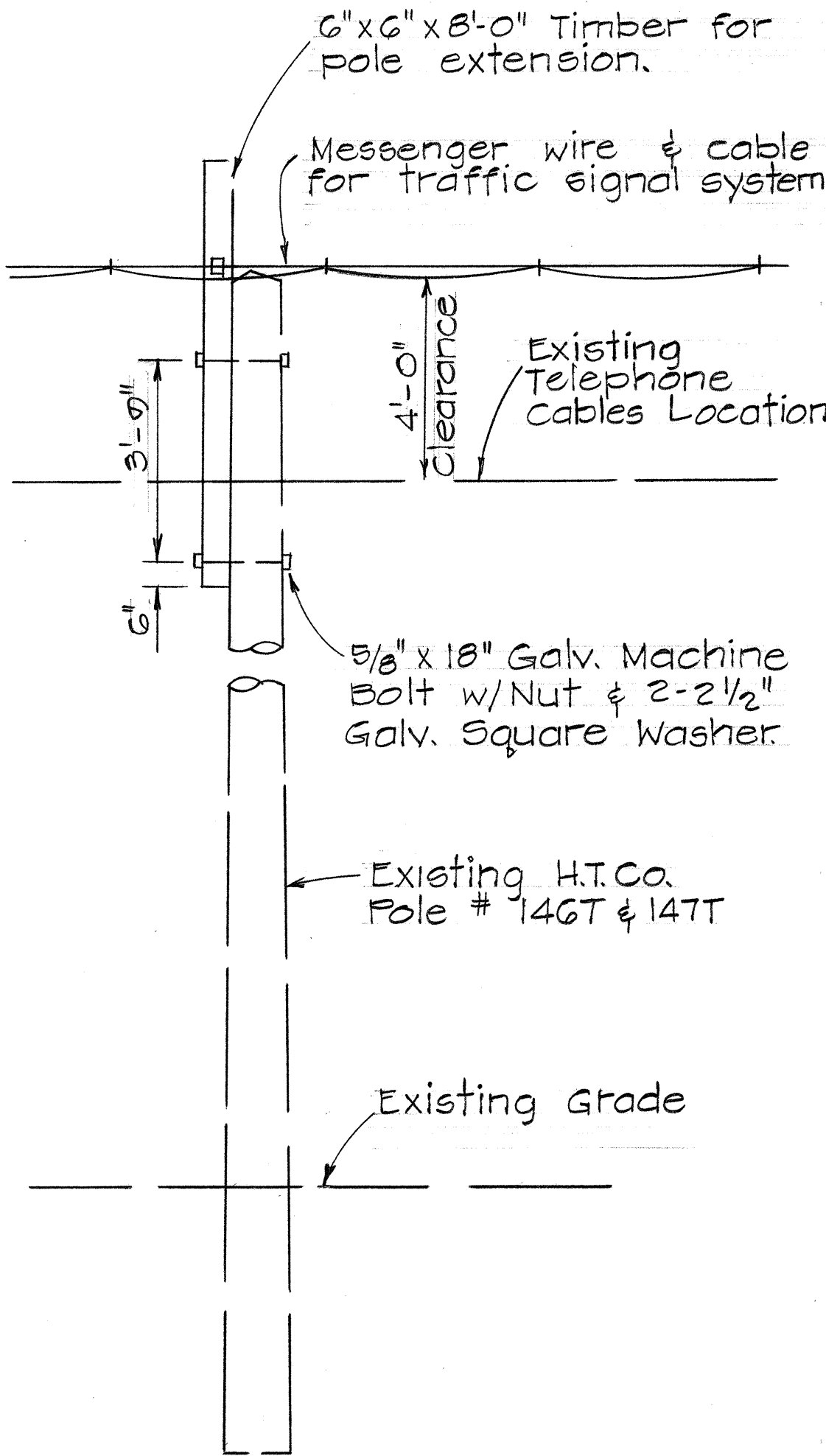
NOTE:

- Messenger and tether cables shall conform to A.S.T.M A-475-G2, extra high strength, class "C" coating.
- All cable fittings shall be galvanized.
- All fittings shall be designed for full strength of connected cable.

DETAIL "A"
Not to Scale



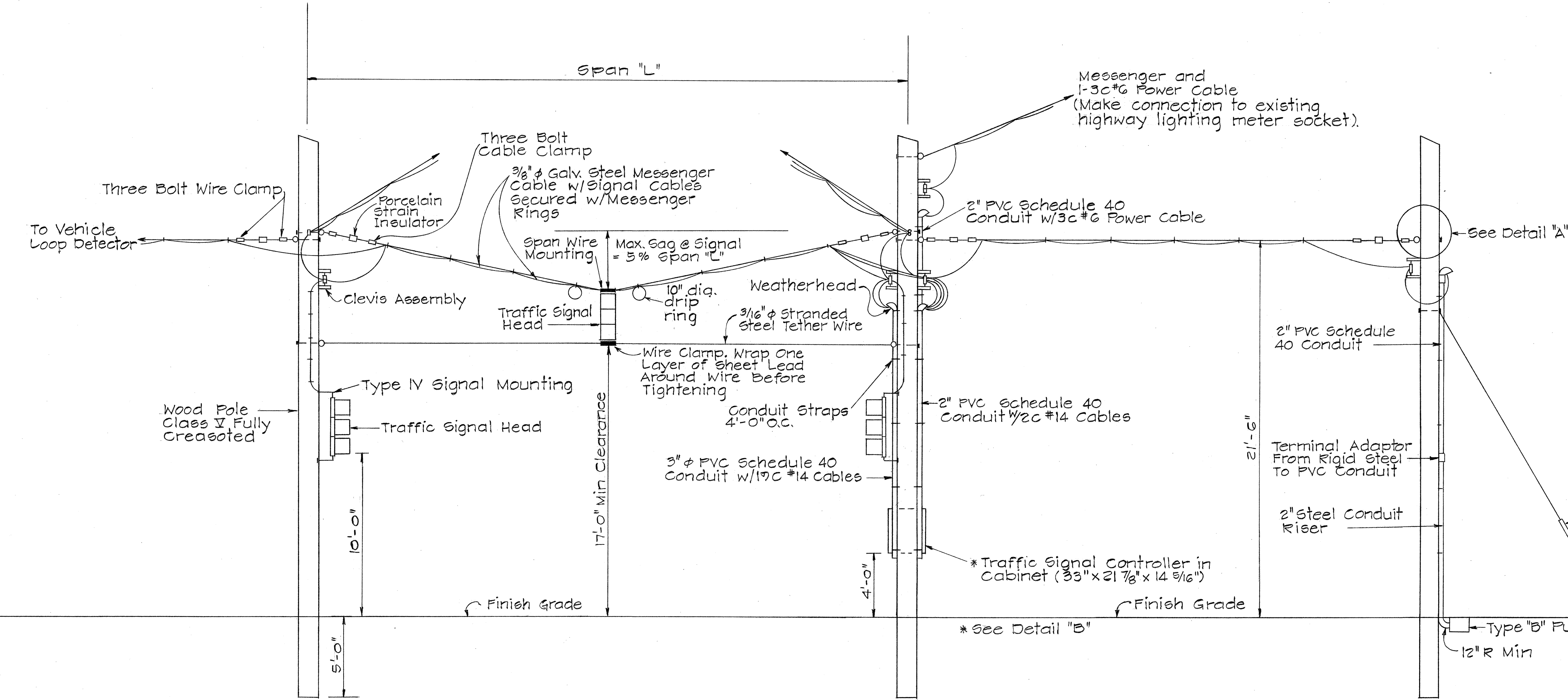
DETAIL "B"
Not to Scale



DETAIL FOR H.T.Co. POLE 146T & 147T
NOT TO SCALE

NOTE:

- Pole extensions shall be of the type normally stocked & used for similar purpose by the local utility companies.



TYPICAL POLE AND OVERHEAD CABLE DETAILS
Not to Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC SIGNAL SYSTEM
MISCELLANEOUS DETAILS
KUIHELANI HWY & PUUNENE AVE.
F.A.S.P. NO. 5-0380 (7)

SCALE: AS SHOWN DATE: MARCH, 1975
SHEET NO. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0380(7)	1975	5	9

GENERAL NOTES

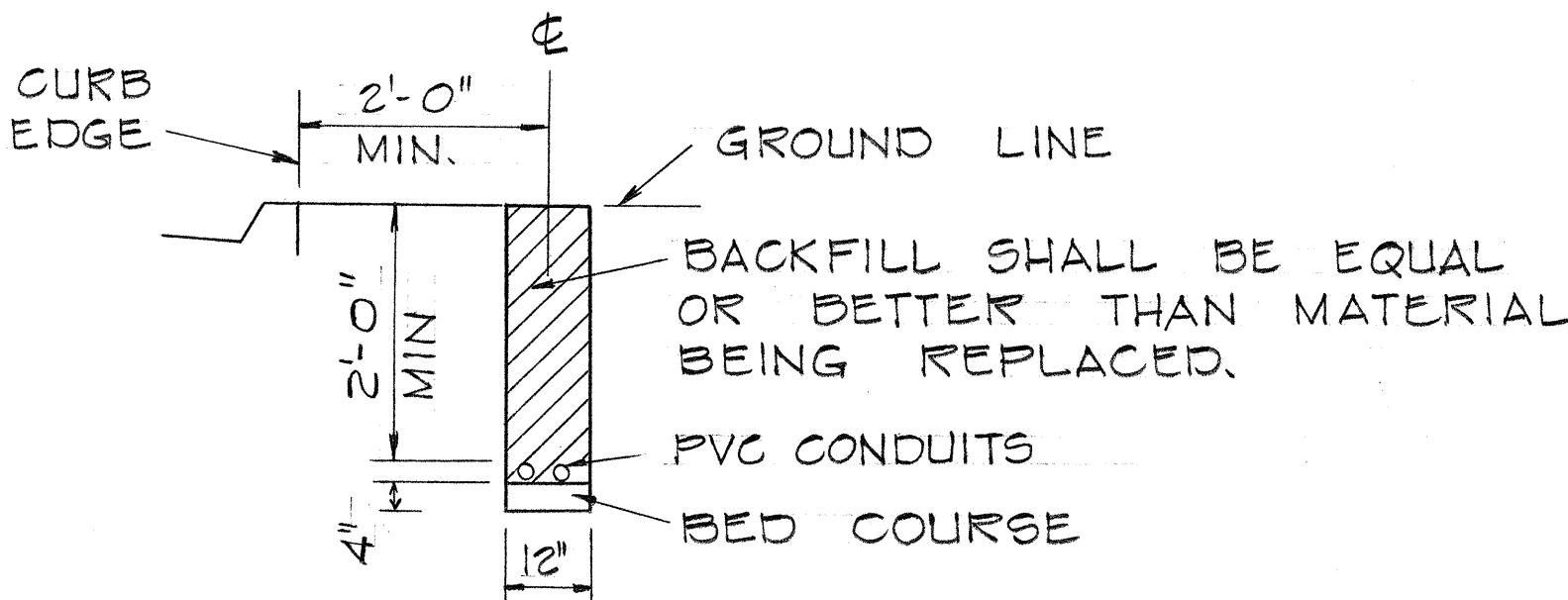
- THE EXACT LOCATION OF TRAFFIC SIGNALS, POLES, PULLBOXES, CONDUITS & LOOP DETECTORS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ALL NEW CONDUITS UNDER ROADWAY (INCLUDING DRIVEWAYS) SHALL BE PVC SCHEDULE 80. CONTRACTOR SHALL HAVE THE OPTION OF USING PVC SCHEDULE 40 FOR NEW CONDUITS NOT UNDER ROADWAY.
- LOCATION OF EXISTING UNDERGROUND STRUCTURES SUCH AS CULVERTS, PIPELINES, CONDUITS, CABLES, ETC., AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. OTHER EXISTING UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL CHECK & VERIFY THE LOCATION OF SAME.
- A SOLID #8 BARE COPPER WIRE SHALL BE PULLED WITH THE 19C #14 CONTROL CABLE FOR EQUIPMENT GROUND. COSTS SHALL BE INCIDENTAL TO INSTALLATION OF 19C #14 CABLE.
- ALL DUCT LINES UNDER ROADWAY (INCLUDING ASPHALT CONCRETE DRIVEWAYS) SHALL HAVE THEIR BACKFILL SURFACED WITH ASPHALT CONCRETE TYPE V HOT MIX, THICKNESS TO MATCH EXISTING. IF DUCTLINE IS IN GRASSED AREA, SURFACE BACKFILL WITH 6" THICK TOP SOIL AND SOD. SODDED AREAS TO BE MAINTAINED UNTIL ADEQUATE GROWTH IS ATTAINED.
- ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT SHALL BE COMPLETELY WIRED IN THE CABINET & SHALL CONTROL THE TRAFFIC SIGNAL LIGHTS AS CALLED FOR IN THE PLANS.
- IF A SIGNAL IS G AND WILL BECOME R DURING THE NEXT PHASE, IT SHALL BE Y DURING THE CLEARANCE INTERVAL.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS WITH MAUI ELECTRIC AND PAY FOR ALL CHARGES FOR POWER SERVICES. CONTRACTOR SHALL GIVE MAUI ELECTRIC ONE WEEK ADVANCE NOTICE FOR MAUI ELECTRIC SERVICE CONNECTION.
- ALL SIGNING, PAVEMENT MARKING AND TRAFFIC SIGNAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," FEDERAL HIGHWAY ADMINISTRATION (1971)
- TO ACCOMODATE OVERHEAD TRAFFIC SIGNAL CABLES, THE CONTRACTOR SHALL TRIM ALL TREES AS DIRECTED BY THE ENGINEER. ALL COSTS SHALL BE INCIDENTAL TO THE VARIOUS TRAFFIC SIGNAL CABLES.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL SYSTEM
MISCELLANEOUS DETAILS

KUIHELANI HWY. & PUUNENE AVE
F.A.S.P. NO. 5-0380(7)

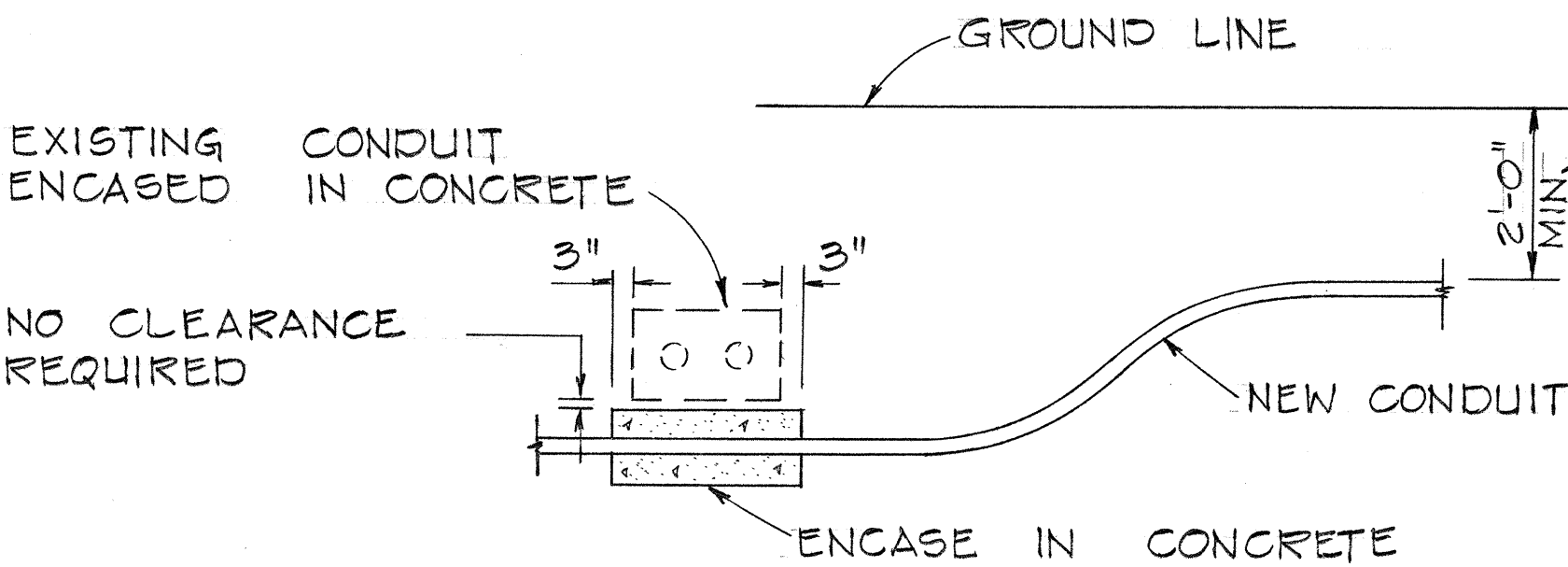
SCALE: AS SHOWN DATE: MARCH, 1975
SHEET NO. 2 OF 3 SHEETS



CONDUIT DETAIL

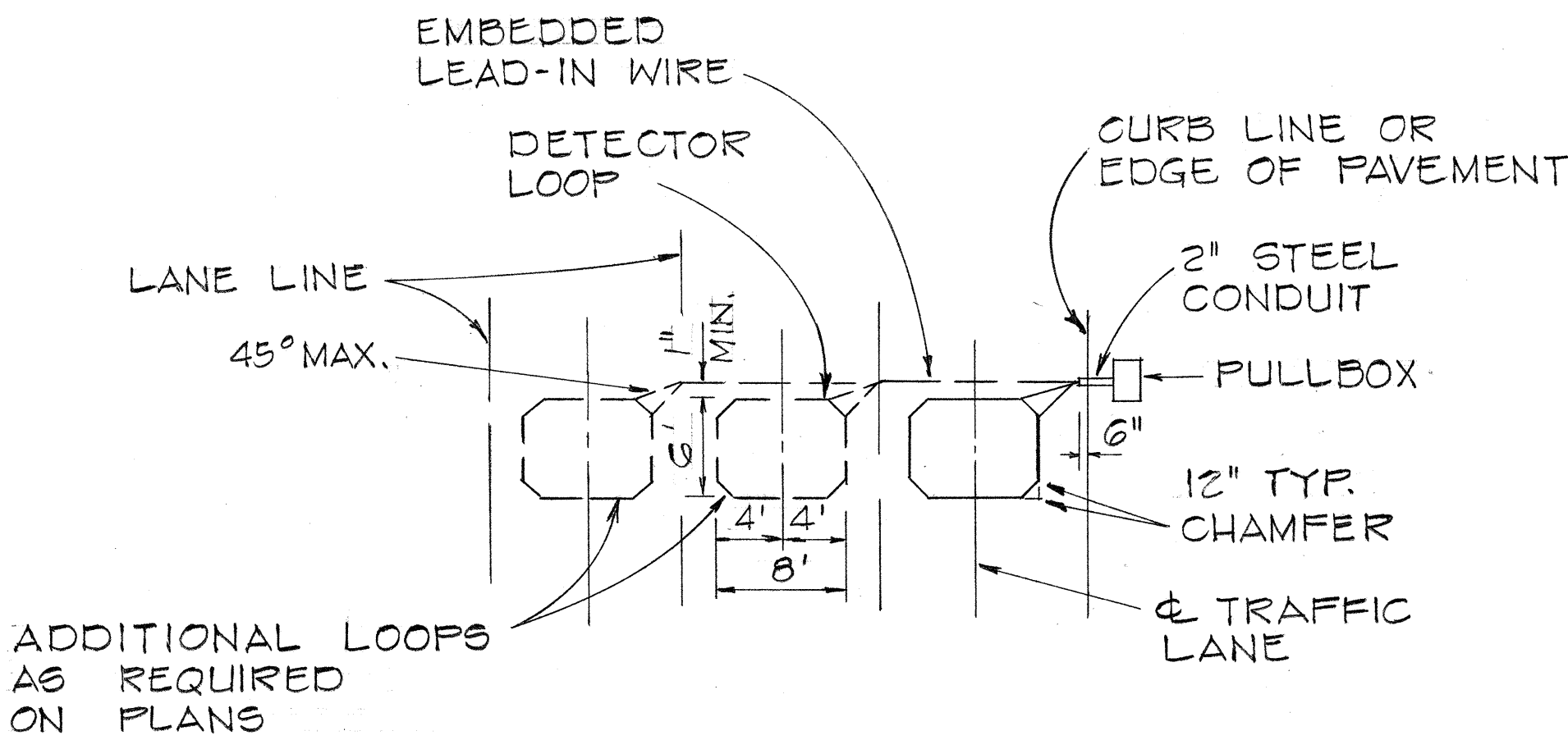
NOT TO SCALE

SEE GENERAL NOTE #5



CONDUIT BY-PASS DETAIL

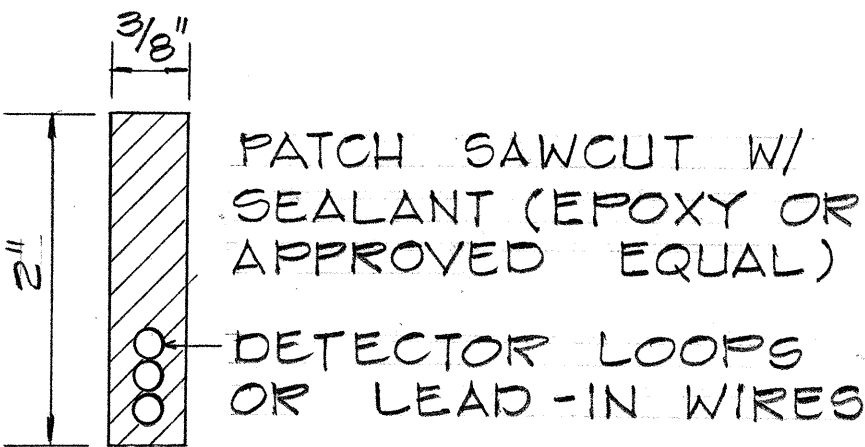
NOT TO SCALE



THRU LANES

NOTE:

- INSTALL DETECTOR LOOP 3 TURNS OF 1-16 #14 RHW STYLE RR CABLE IN SAWCUT.
- EMBEDDED LEAD-IN WIRE SHALL BE TURNED 2 TURNS PER FT.
- WIRING IN PULLBOX SHALL BE AS RECOMMENDED BY THE LOOP DETECTOR MANUFACTURER.



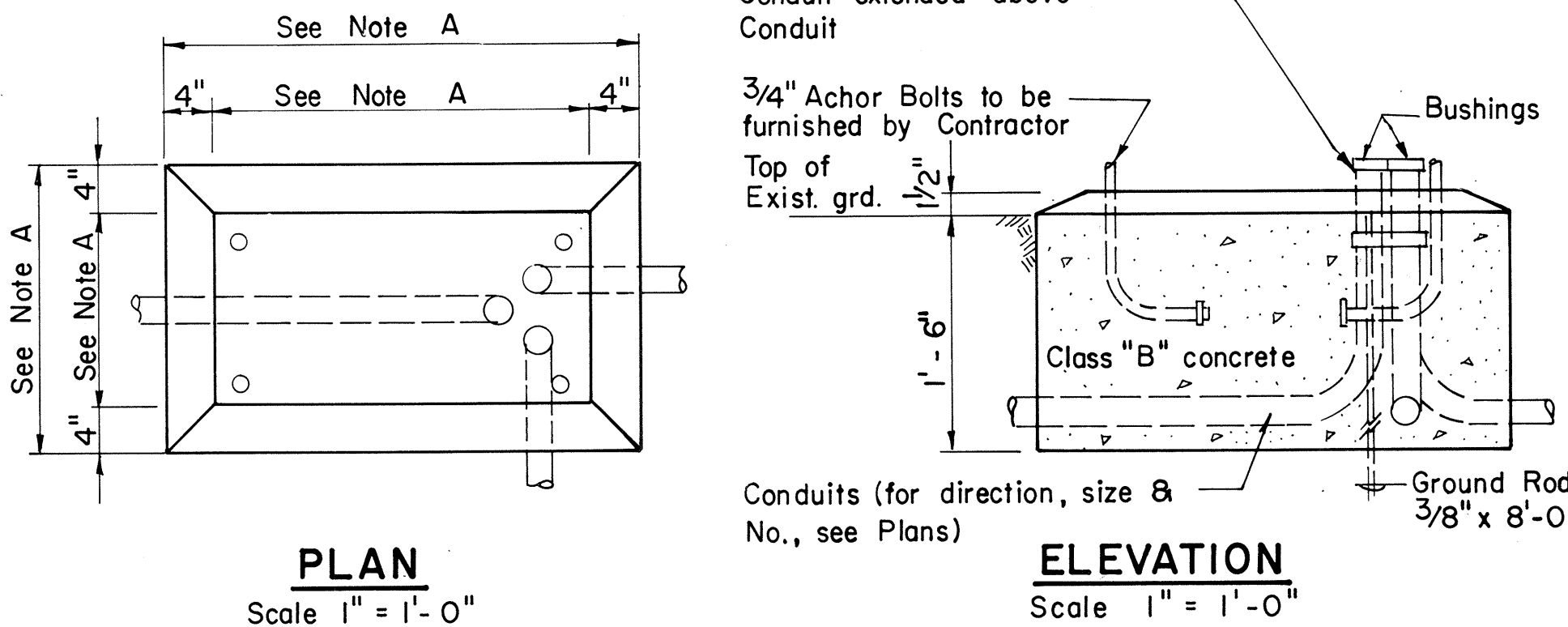
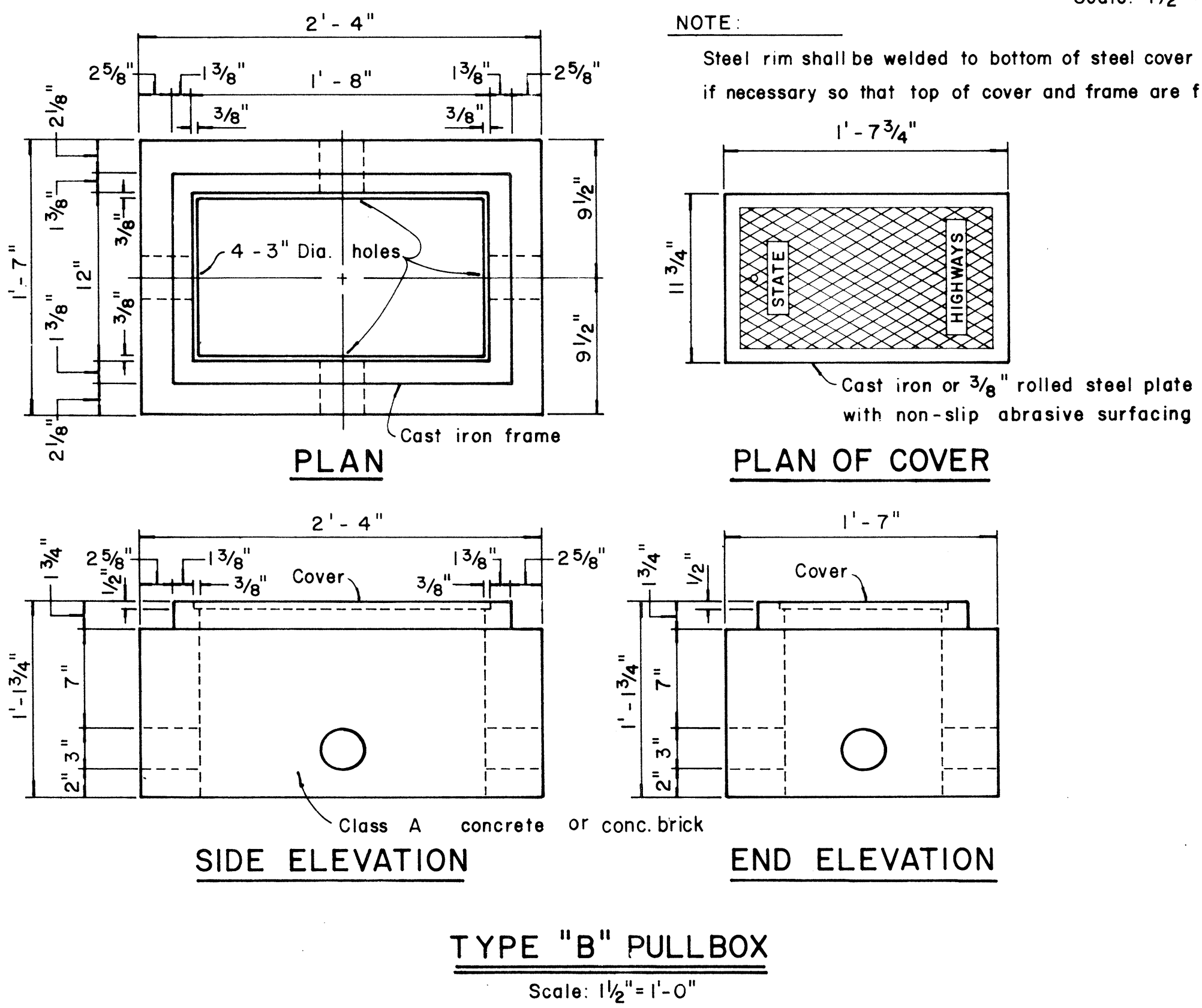
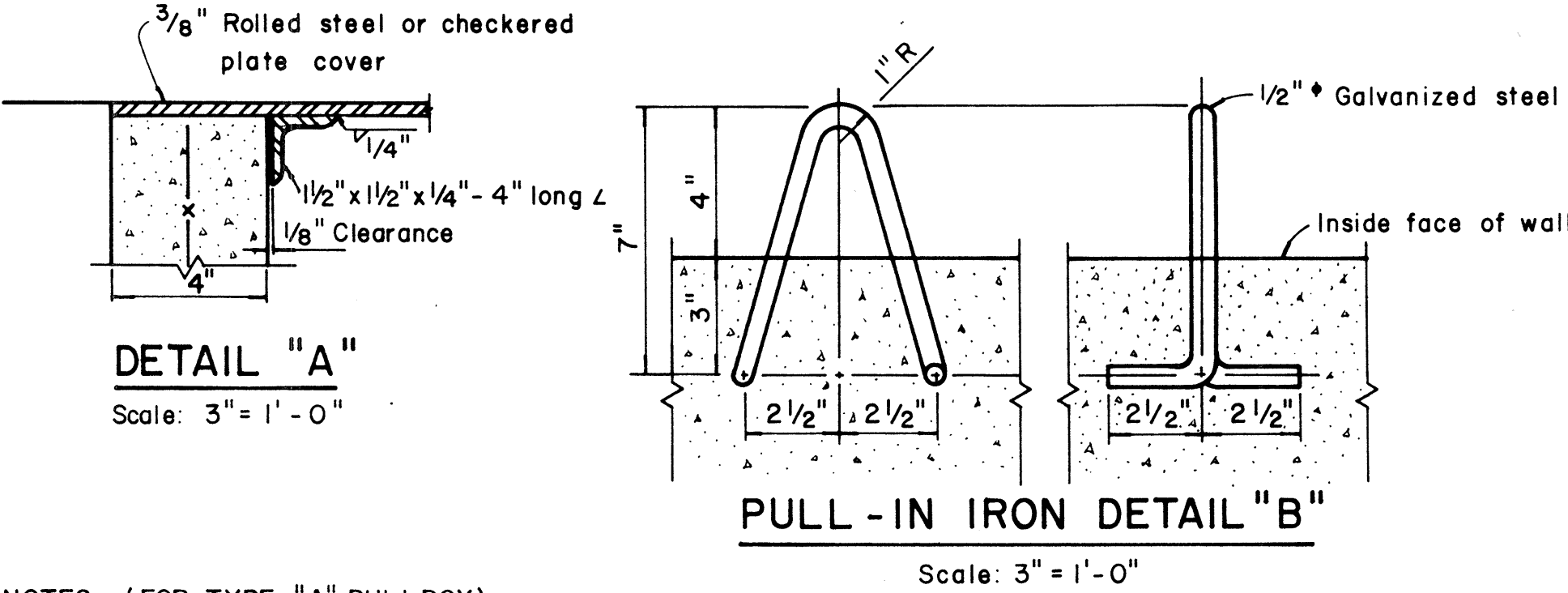
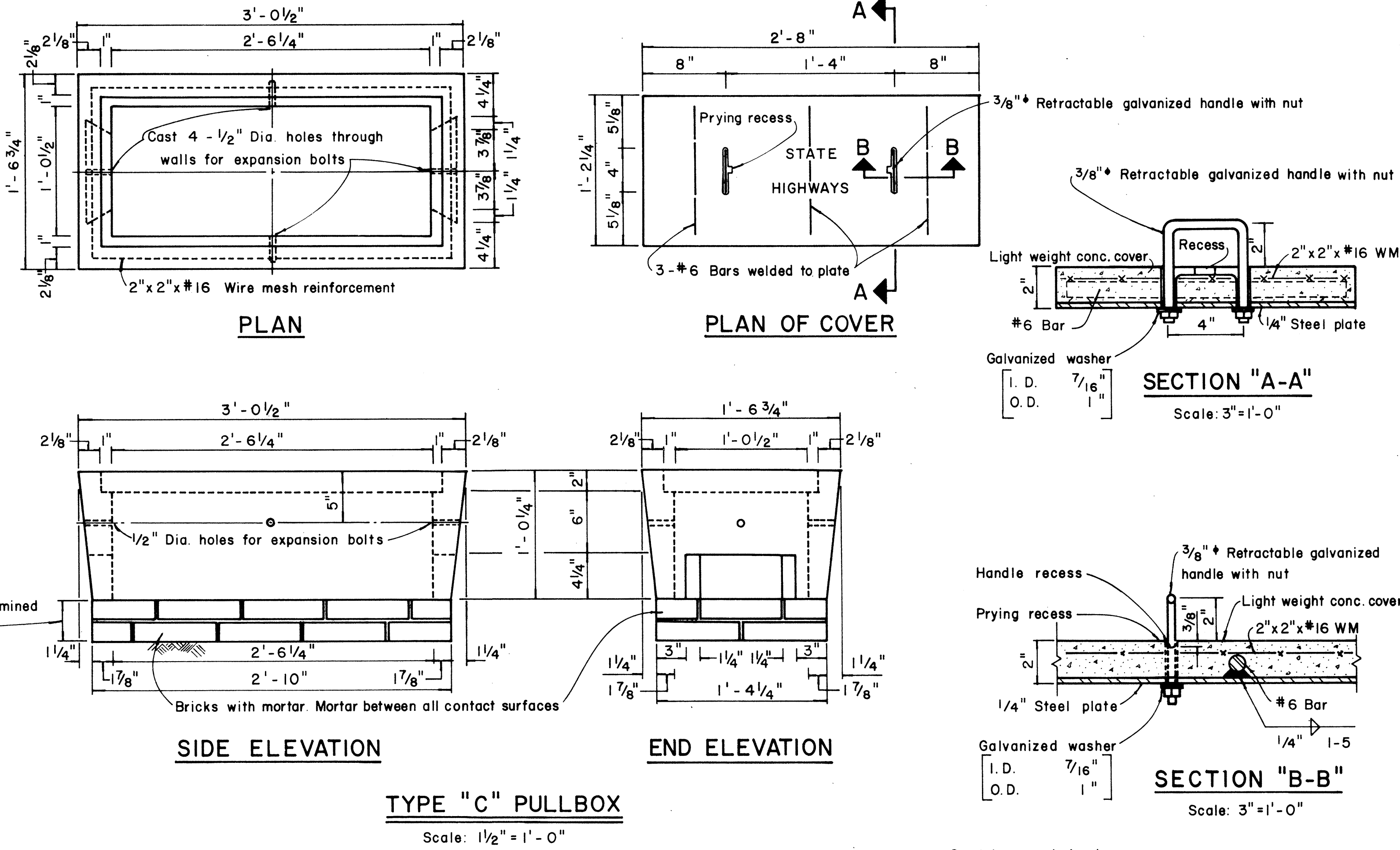
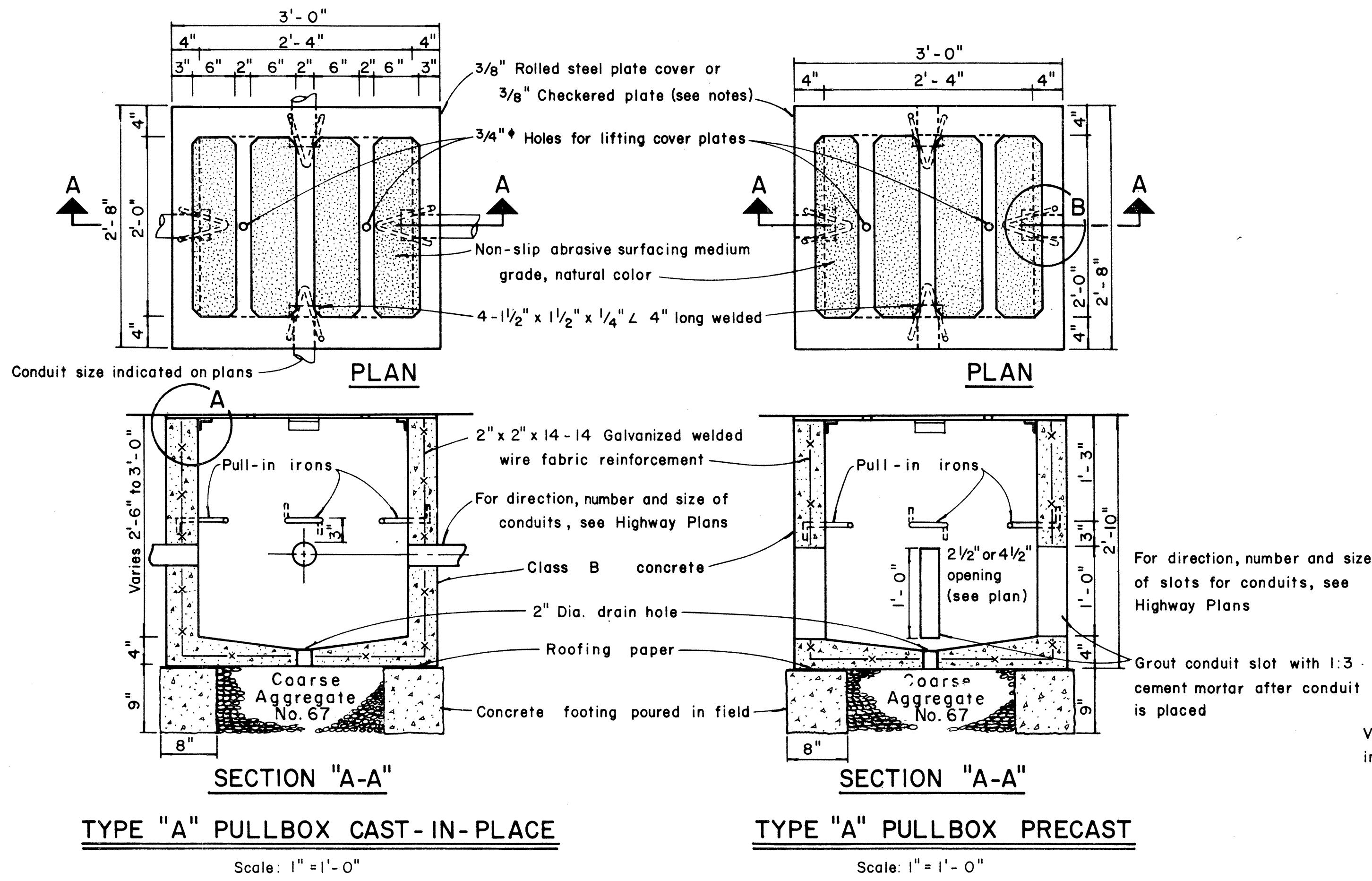
TYPICAL SAWCUT

LOOP DETECTOR DETAILS

NOT TO SCALE

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED 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.	5-0380(7)	1975	6	7



- NOTES: (FOR TYPE "A" PULLBOX)
- 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.
 - 3/8" Checkered plate cover shall be used on all pullboxes located in median areas and other locations where there are no pedestrians walking.
 - Pull irons shall be placed opposite each conduit slot.
 - Covers on all pullboxes located in sidewalk areas shall be set flush with the concrete sidewalk.
 - Each pullbox shall have a pair of pull irons opposite each other for lifting purposes.

- NOTES
- Dimensions to be determined by the size of the Controller Cabinet to be furnished under this Contract.
 - Details of Conduits, Anchor Bolts, etc. are approximate only. Exact details shall be secured by the Contractor from Manufacturer.

CONCRETE BASE FOR CONTROLLER CABINET

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL DETAILS

PULLBOXES

Scale as noted

Date: April, 1975

SHEET No. 3 OF 3 SHEETS

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