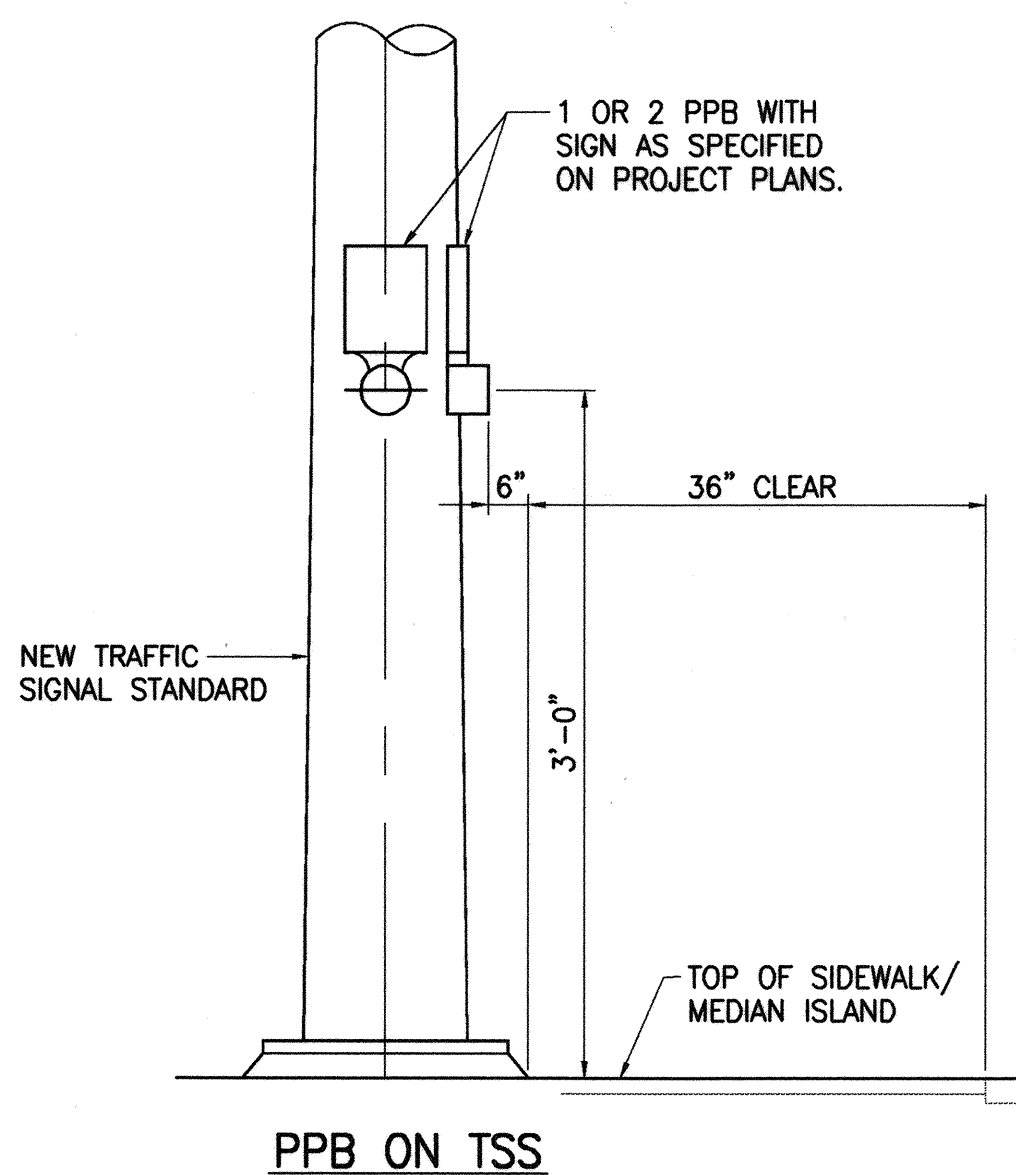
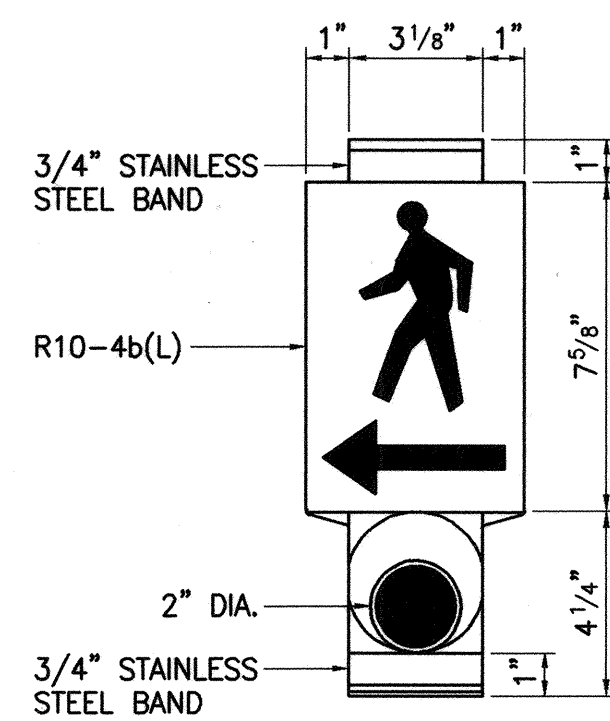


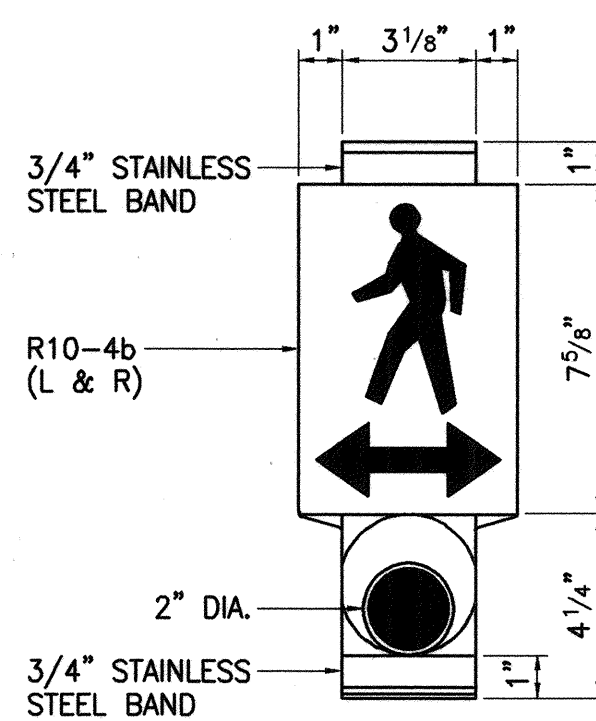
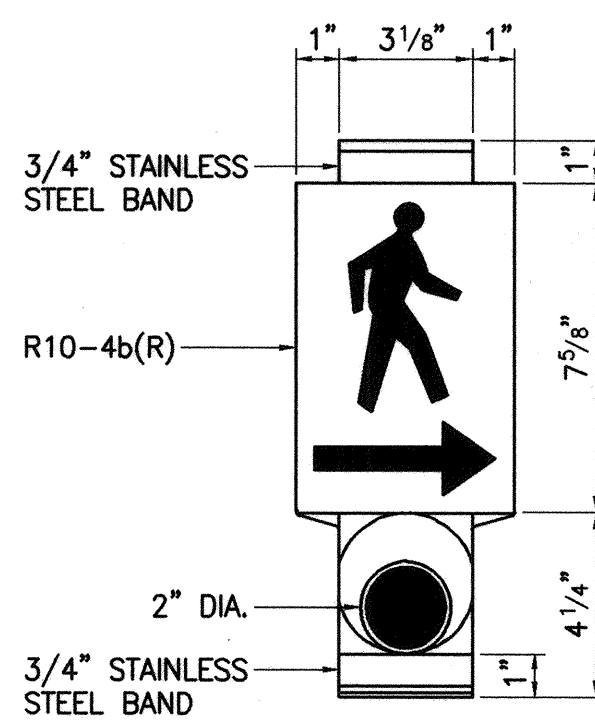
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-032-1(6)	2000	48	53



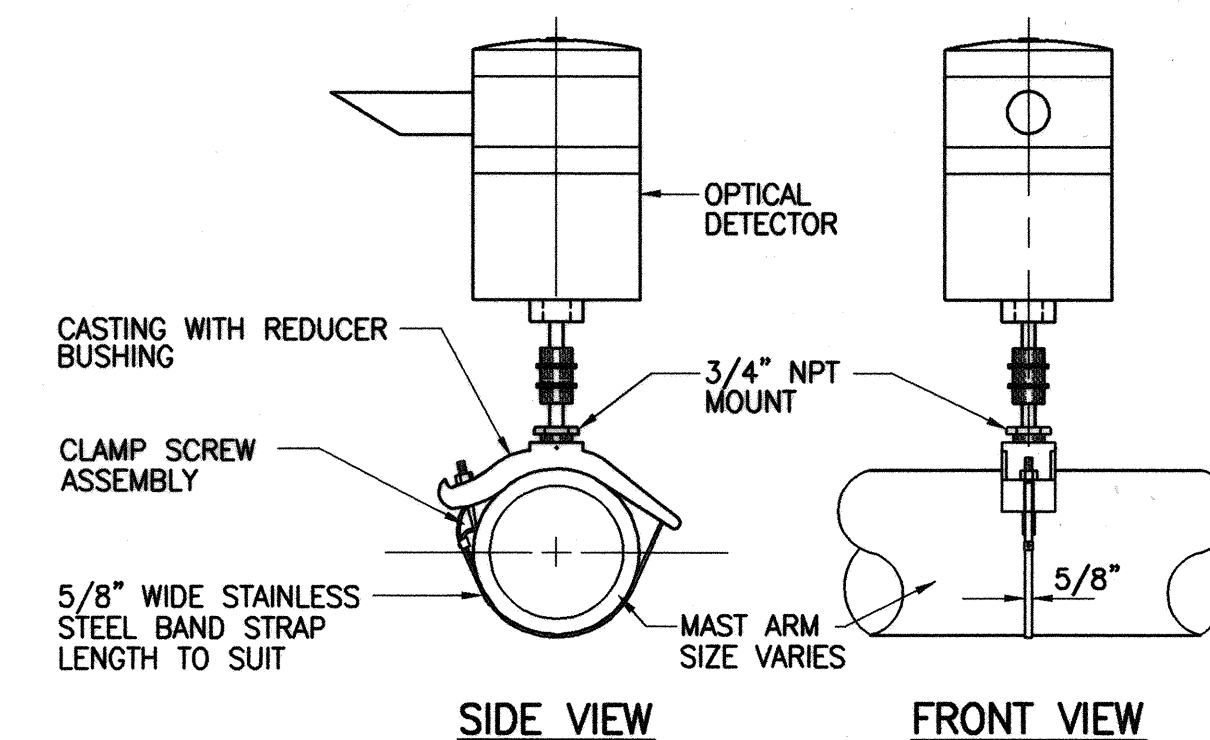
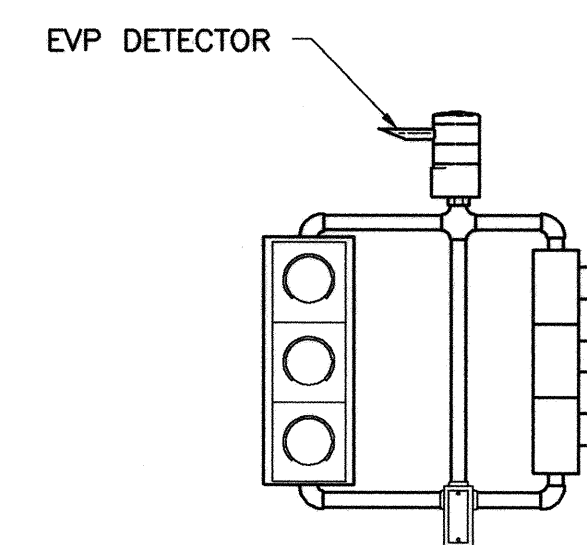
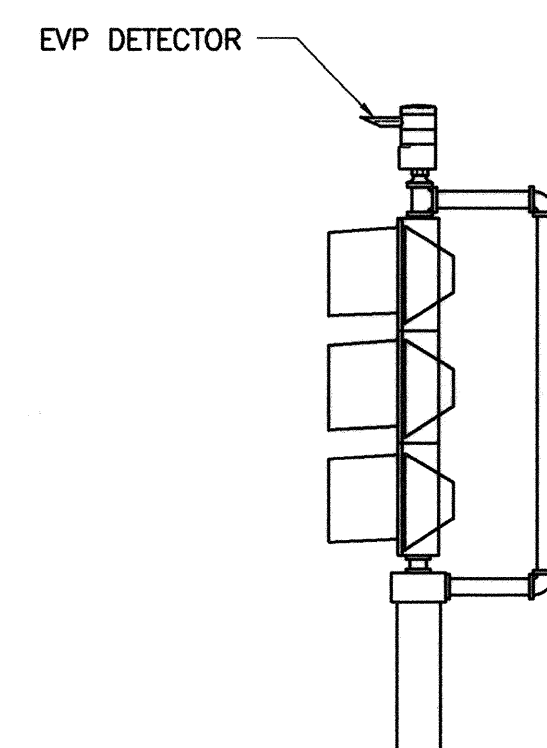
NOTE: ON PLAN SHEET, USE APPLICABLE DETAIL.



THE COLOR SCHEME SHALL BE:
WHITE - MAN, ARROW AND PUSH BUTTON
BLACK - BACKGROUND

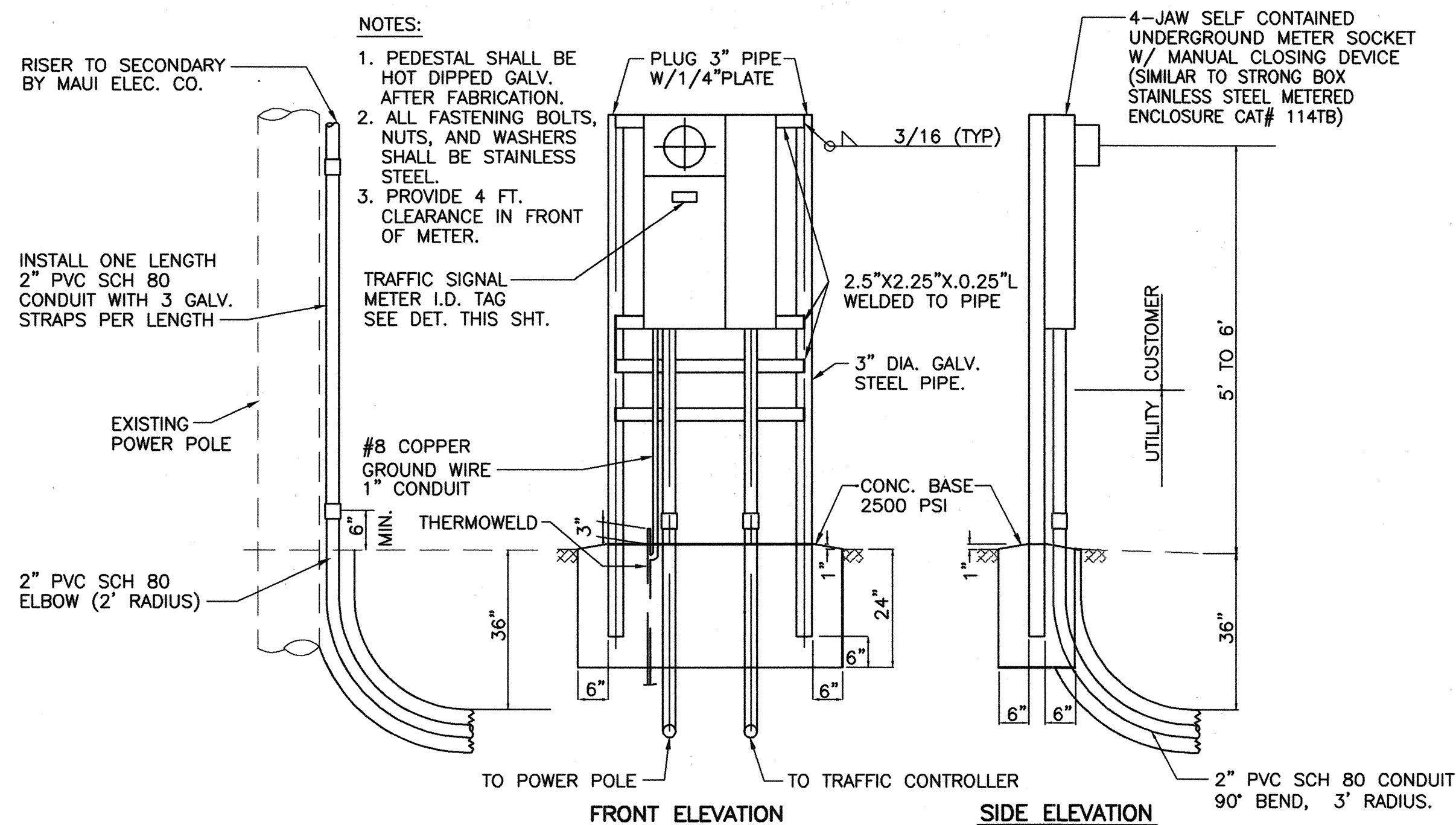


PEDESTRIAN PUSH BUTTON DETAILS
NOT TO SCALE



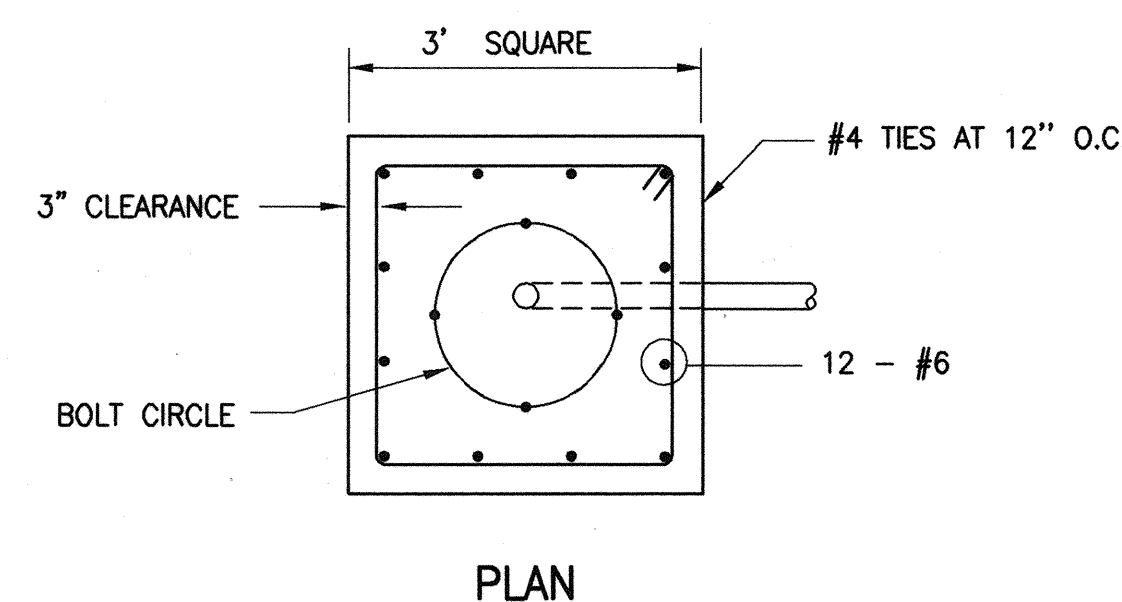
- NOTES:
- OPTICAL DETECTOR SHALL BE "MODEL 711 PREEMPTION DETECTOR", OR APPROVED EQUAL, UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
 - SUPPORT SADDLE ASSEMBLY SHALL BE "ASTRO MINI-BRAC, AB-0132-29", OR APPROVED EQUAL, UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.

OPTICAL DETECTOR FOR MAST ARM MOUNTING
NOT TO SCALE

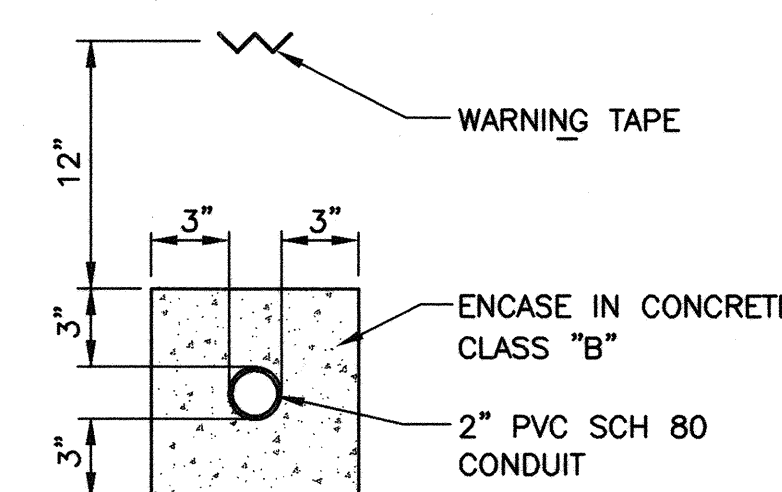


METER PEDESTAL FOR UNDERGROUND SERVICE
NOT TO SCALE

- NOTES:
- CONCRETE SHALL BE CLASS "B".
 - DESIGN LATERAL PRESSURE: 1,500 PSF.
 - CONDUIT BEND IS INCIDENTAL TO CONCRETE BASE.

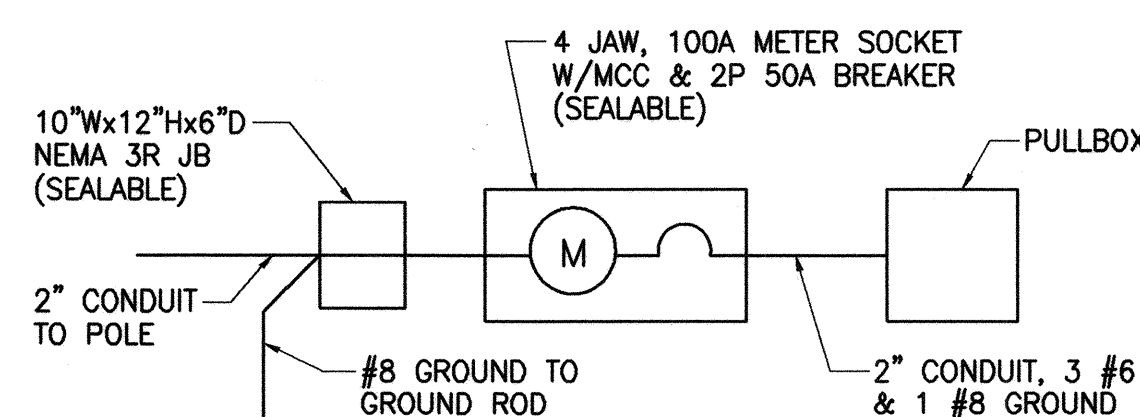


CONCRETE FOUNDATION FOR TYPE II TRAFFIC SIGNAL MAST ARM 48' LONG
NOT TO SCALE



MAUI ELECTRIC CONDUIT DETAIL
NOT TO SCALE

- NOTES
- MAUI ELECTRIC CO. SHALL FURNISH AND INSTALL CABLE BETWEEN SECONDARY AND METER SOCKET.
 - CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO CONTROLLER, PROVIDE BREAKER, GROUND AND CONCRETE-ENCASED 2" PVC SCH. 80 CONDUIT.
 - ALL CONDUITS TO CONTAIN A POLYOLEFIN PULL LINE (JET LINE CAT. #232 OR EQUIVALENT).
 - CONTRACTOR SHALL PROVIDE MAUI ELECTRIC CO. ONE WEEK ADVANCE NOTICE FOR ANY WORK TO BE DONE BY MAUI ELECTRIC CO.



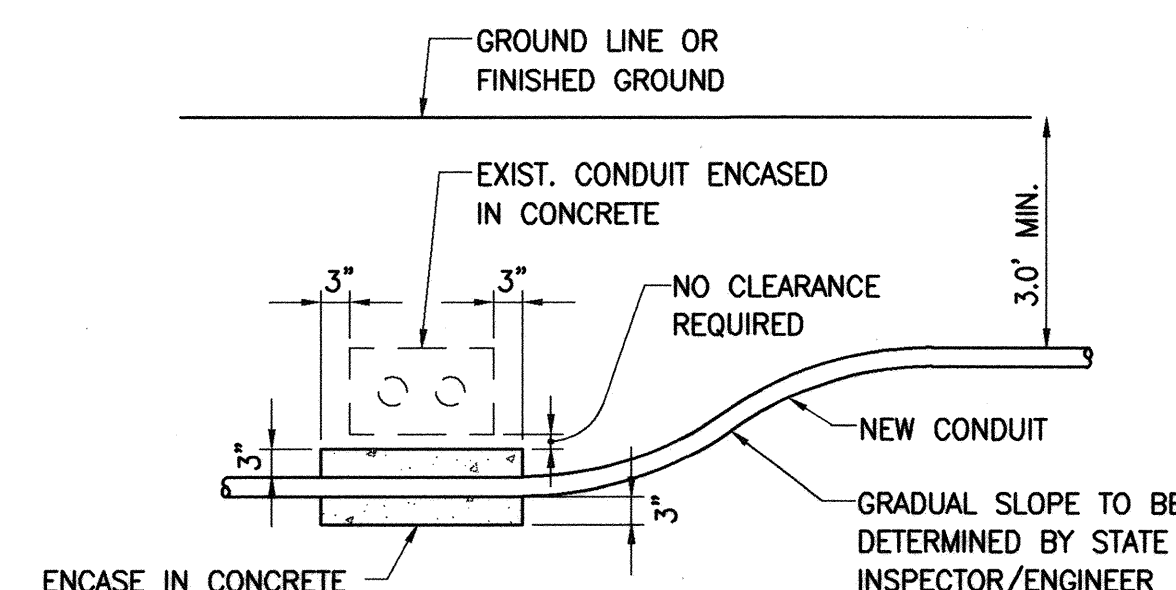
ONE-LINE DIAGRAM
NOT TO SCALE

SERVICE DATA

- SERVICE VOLTAGE: 1 PHASE 3 WIRE 120/240 V
- LOAD DATA: CONNECTED -5KVA ESTIMATED DEMAND-2KVA
- SERVICE CONDUCTORS: 3-#6 CU

- NOTES:
- USE 3-PLY LAMINATED FLEXIBLE PLASTIC, BLACK-WHITE-BLACK THICKNESS: BLACK CAP SHEET - 0.010", WHITE BASE SHEET - 0.052", BLACK BASE SHEET - 0.010".
 - ATTACH TO METER BOX USING SCOTCH 3M BRAND VERY HIGH BOND (VHB) DOUBLE COATED ACRYLIC FOAM TAPE OR EQUIVALENT.
 - LETTERS/NUMBERS SHALL BE 1/16" STROKE, (WHITE IN COLOR).
 - LETTERS/NUMBERS SHALL BE INSCRIBED BY CUTTING THROUGH "BLACK CAP SHEET" TO EXPOSE WHITE LETTERS/NUMBERS.

METER I.D. TAG DETAIL
NOT TO SCALE



CONDUIT BY-PASS DETAIL
NOT TO SCALE

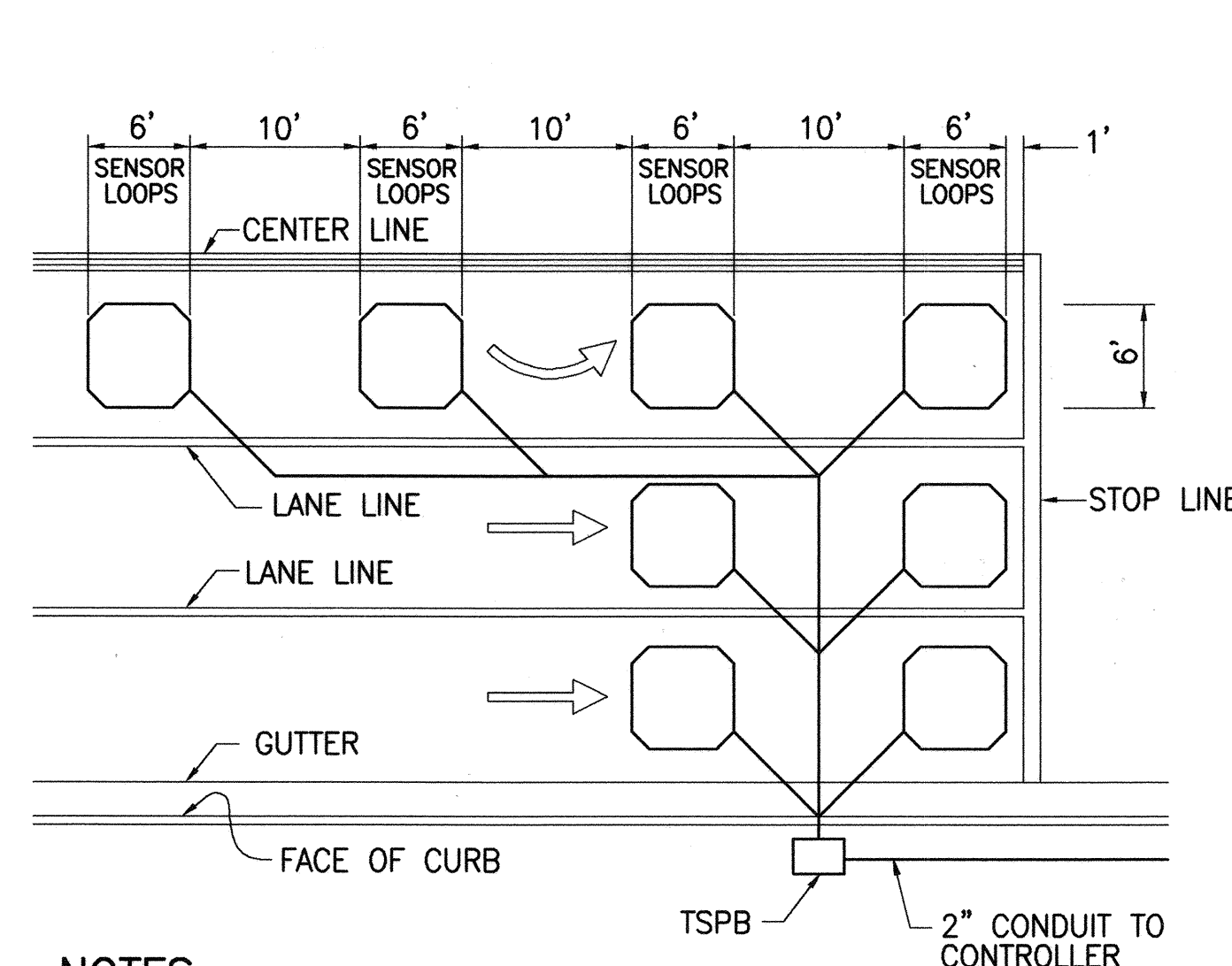
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

**KAAHUMANU AVENUE
TRAFFIC SIGNAL MODERNIZATION
HIGH STREET TO WHARF STREET
FEDERAL AID PROJECT NO. NH-STP-032-1(6)**

SCALE: AS NOTED
DATE: AUG. 1999

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-032-1(6)	2000	49	53

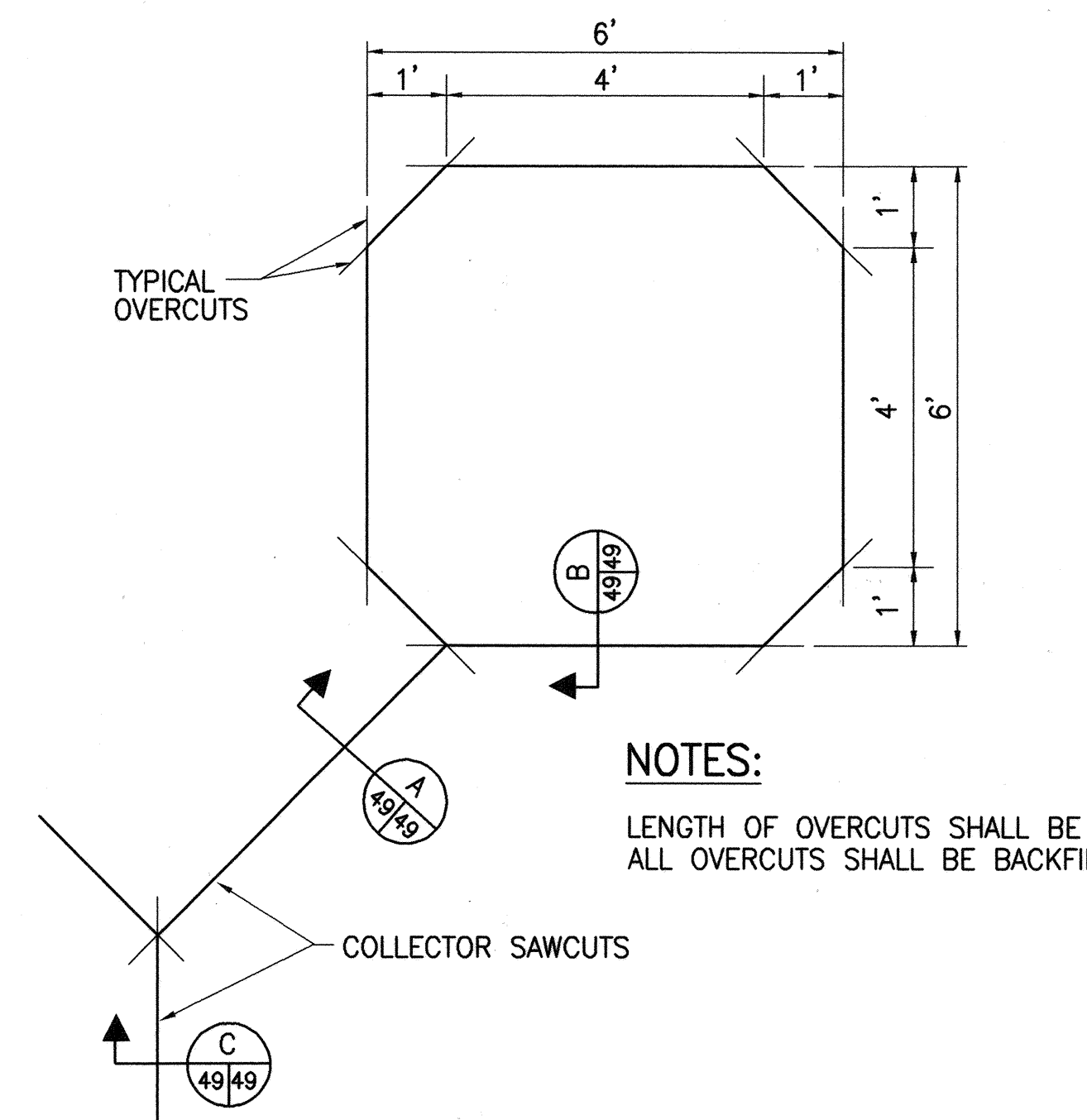


NOTES:

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.

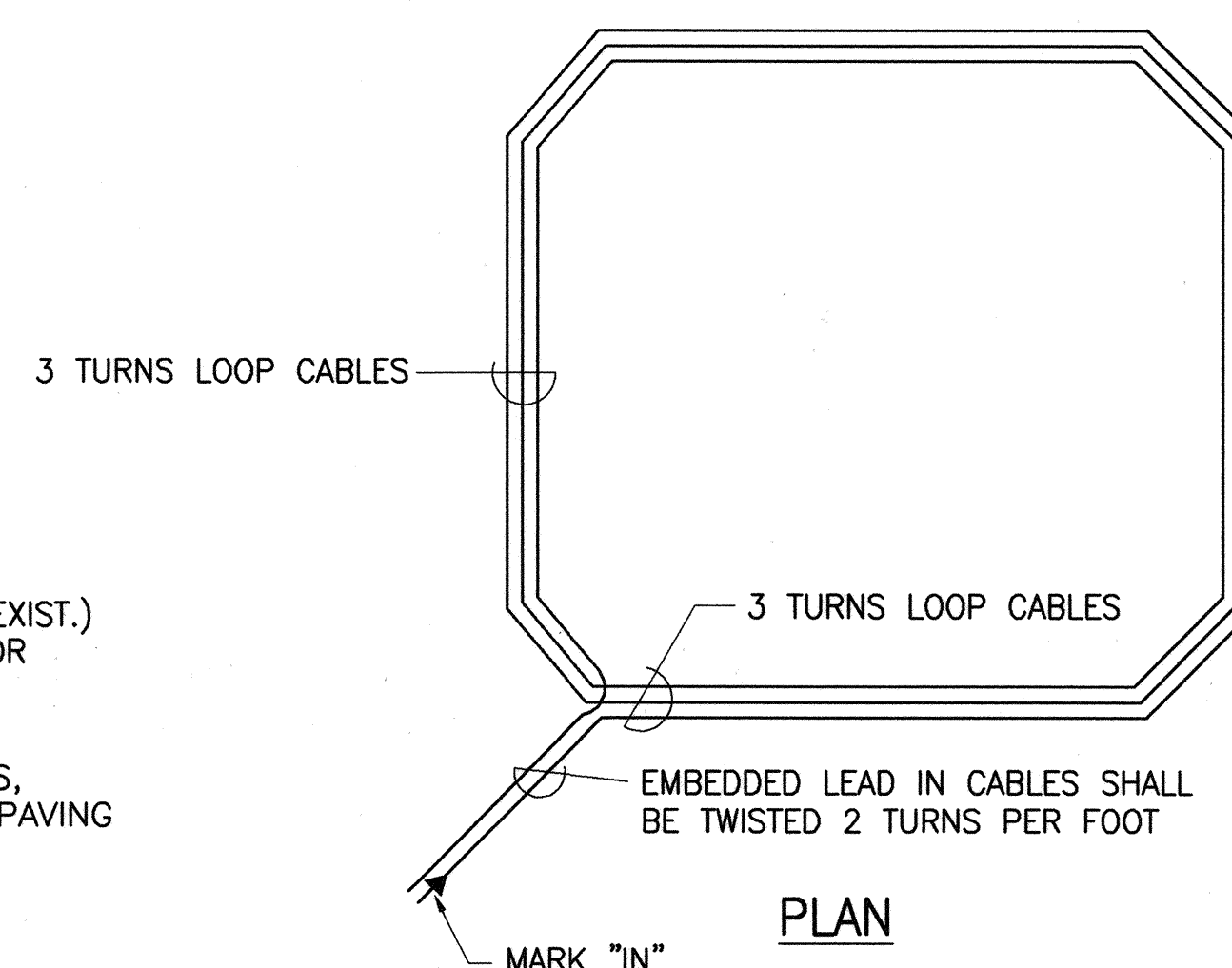
TYPICAL SENSOR LOOP LAYOUT

NOT TO SCALE



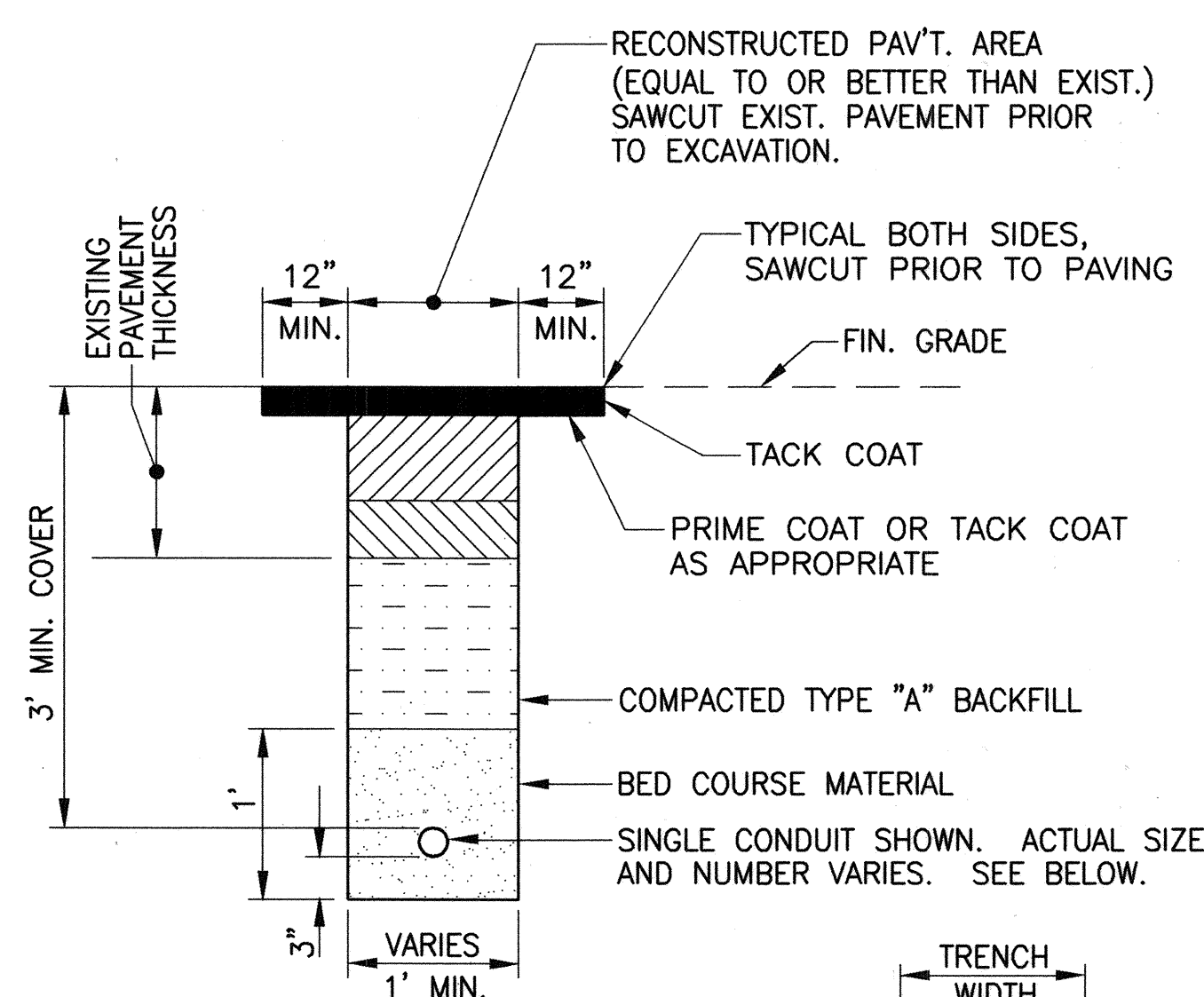
TYPICAL SENSOR LOOP SAWCUT DETAIL

NOT TO SCALE



TYPICAL SENSOR LOOP WIRING DIAGRAM

NOT TO SCALE

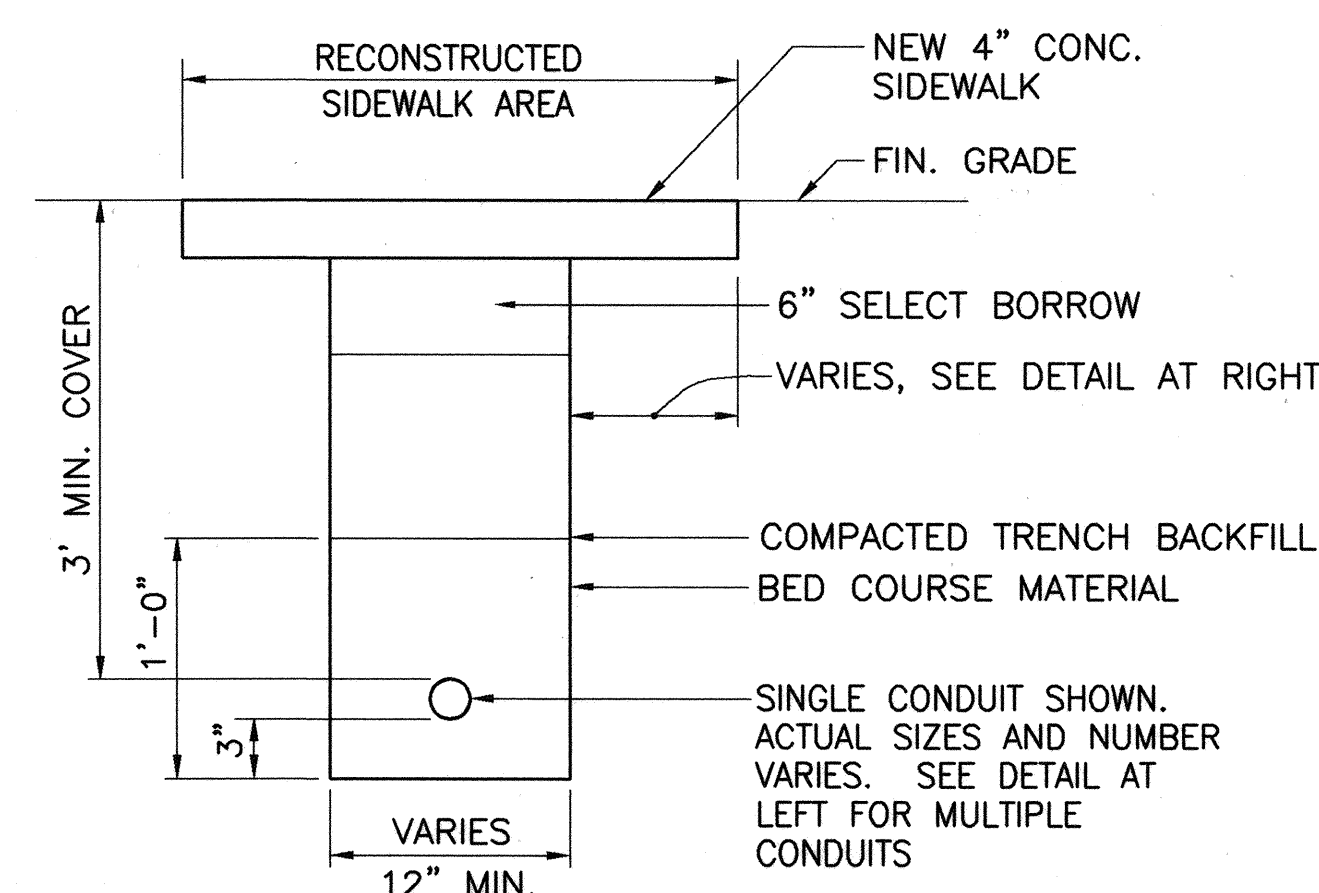
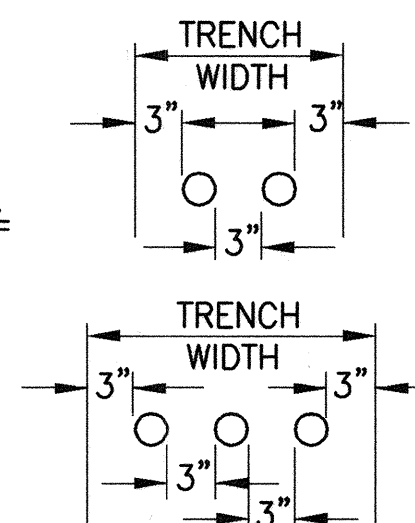


TYPICAL TRENCH DETAIL IN PAVEMENT AREAS

NOT TO SCALE

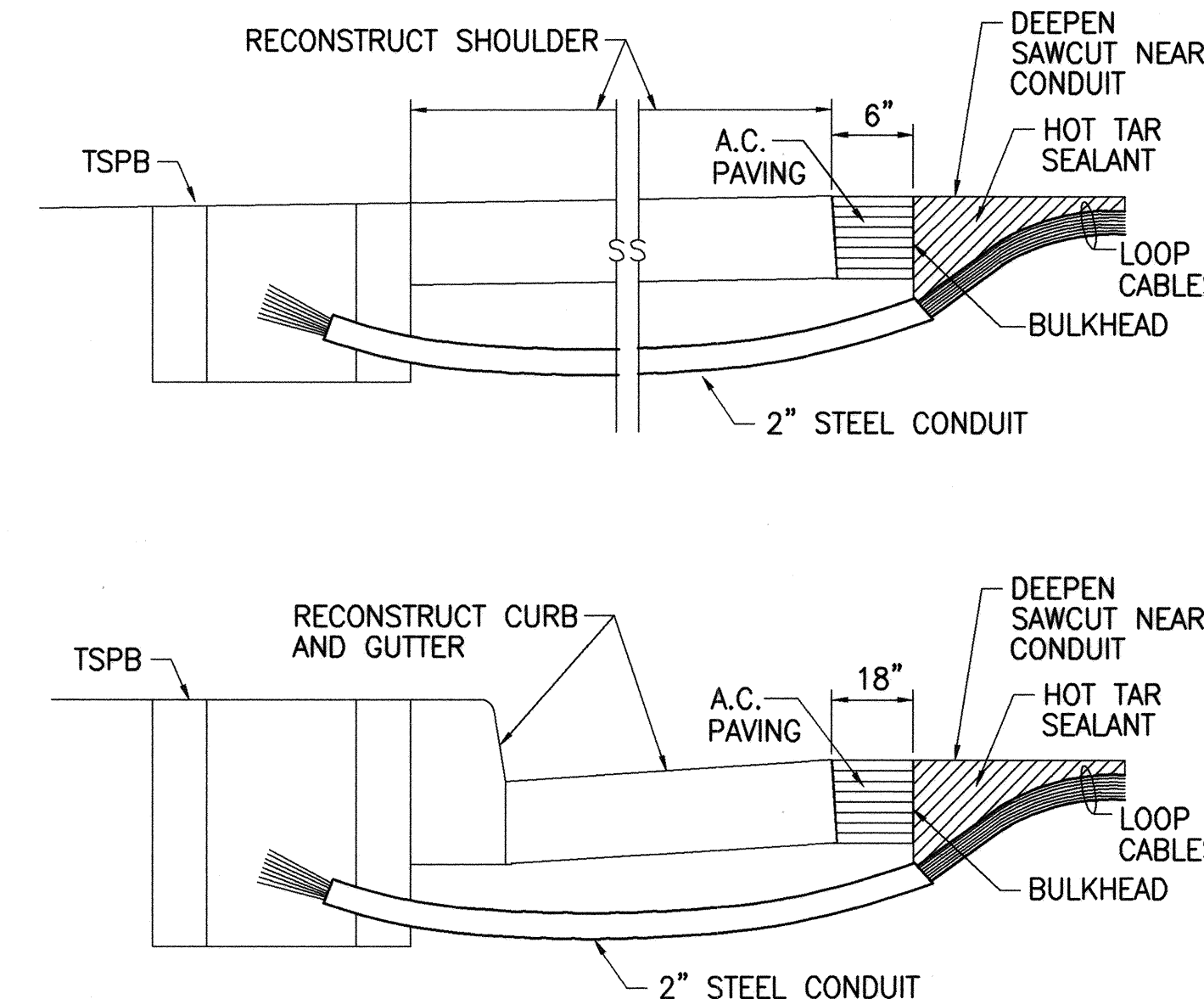
NOTES:

1. DETAIL FOR MULTIPLE CONDUIT TRENCHES SHALL BE SIMILAR. PROVIDE 3\"/>



TYPICAL TRENCH DETAIL IN SIDEWALK AREAS

NOT TO SCALE

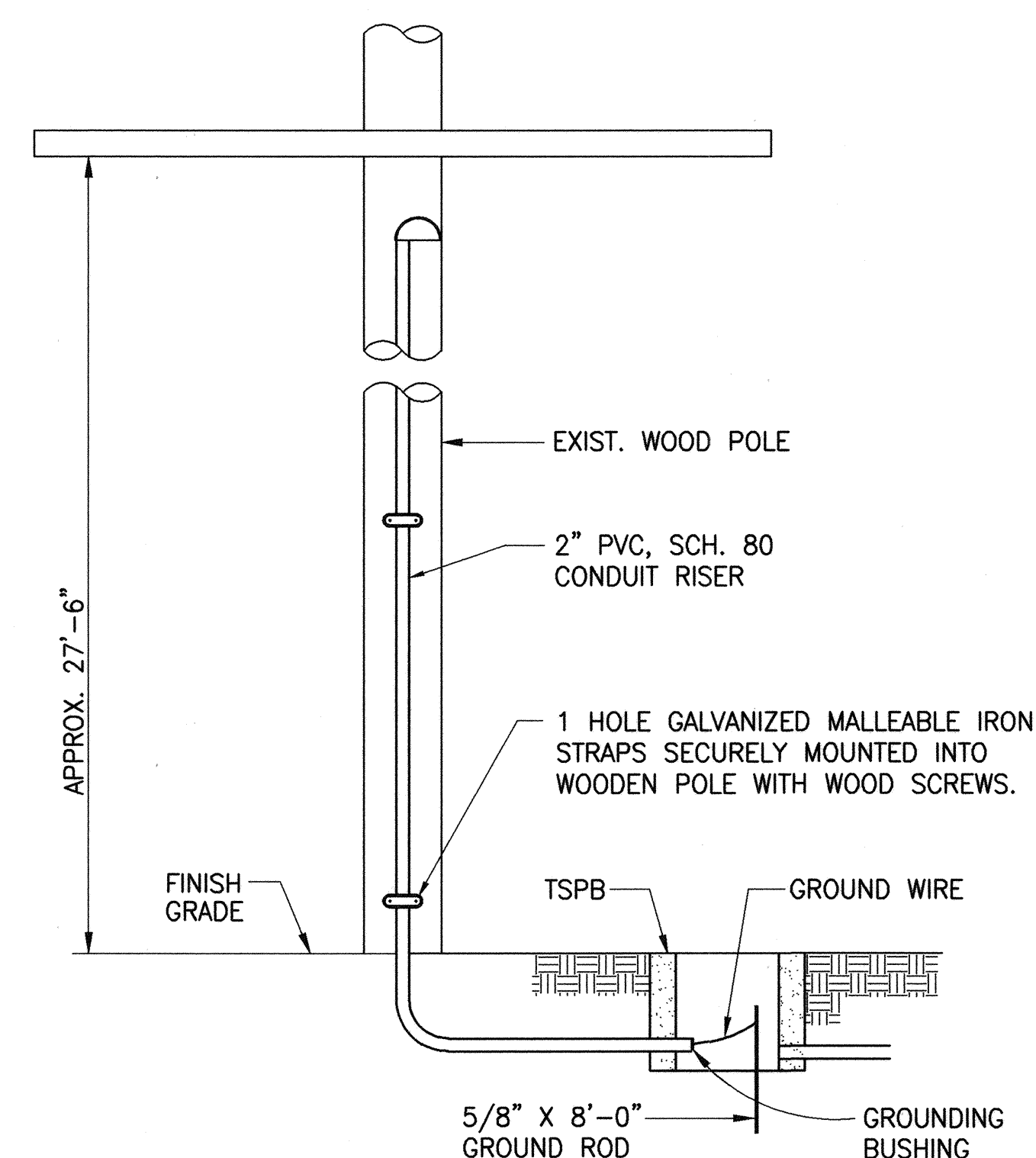


NOTES ON CONSTRUCTION AT END OF SAWCUT

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.

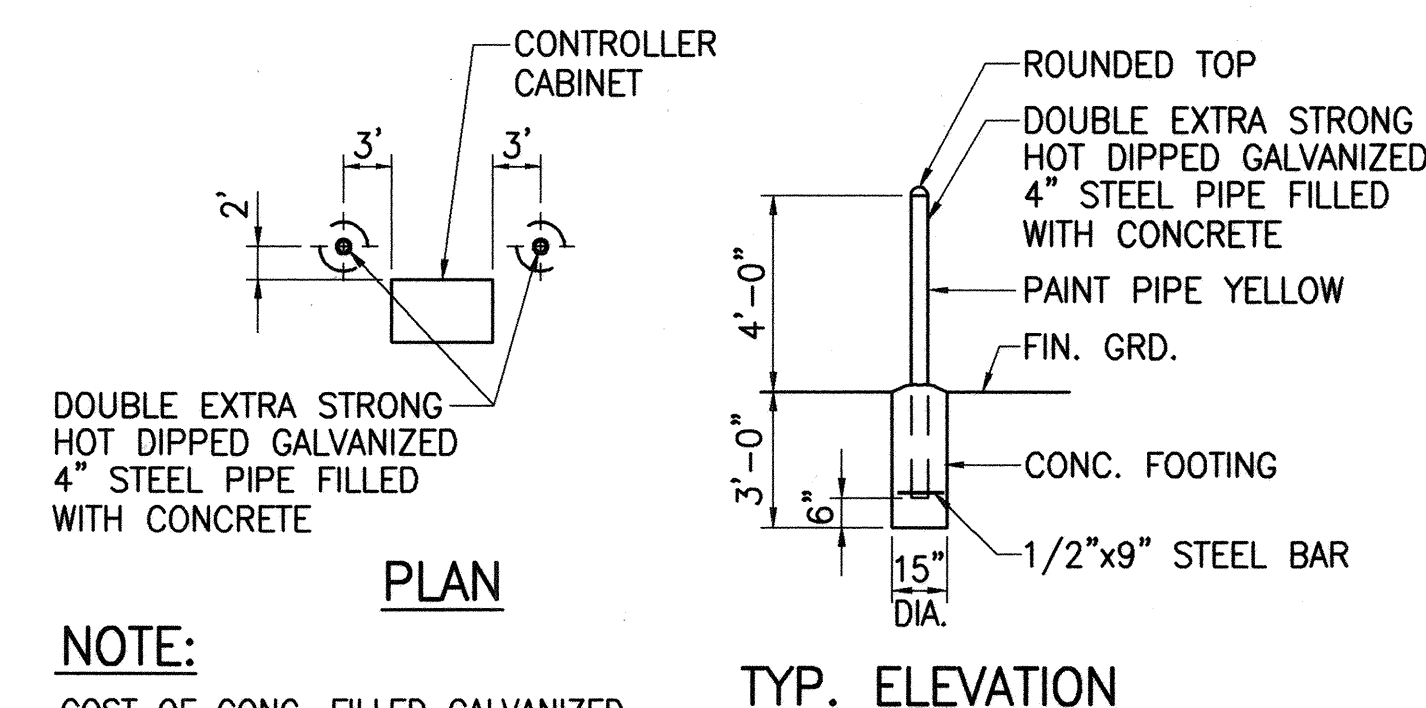
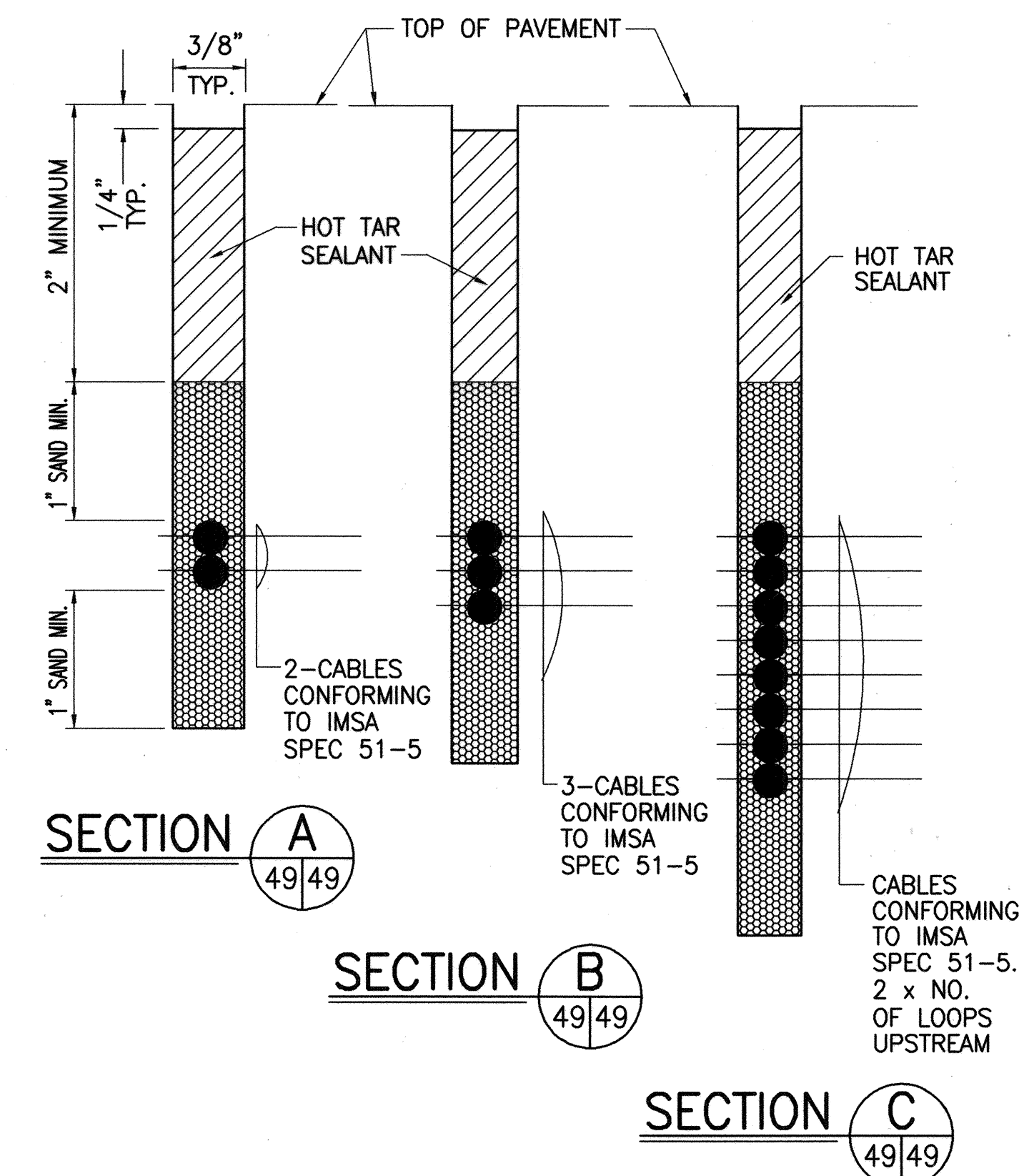
DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY

NOT TO SCALE



INTERCONNECT ON EXISTING WOOD POLE

NOT TO SCALE



NOTE:

COST OF CONC. FILLED GALVANIZED POSTS SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK.

PIPE GUARD DETAIL

NOT TO SCALE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
MISCELLANEOUS DETAILS	
KAAHUMANU AVENUE TRAFFIC SIGNAL MODERNIZATION HIGH STREET TO WHARF STREET FEDERAL AID PROJECT NO. NH-STP-032-1(6)	
SCALE: AS NOTED	DATE: AUG. 1999
SHEET No. 2 OF 2 SHEETS	