

PLANS SYMBOLS

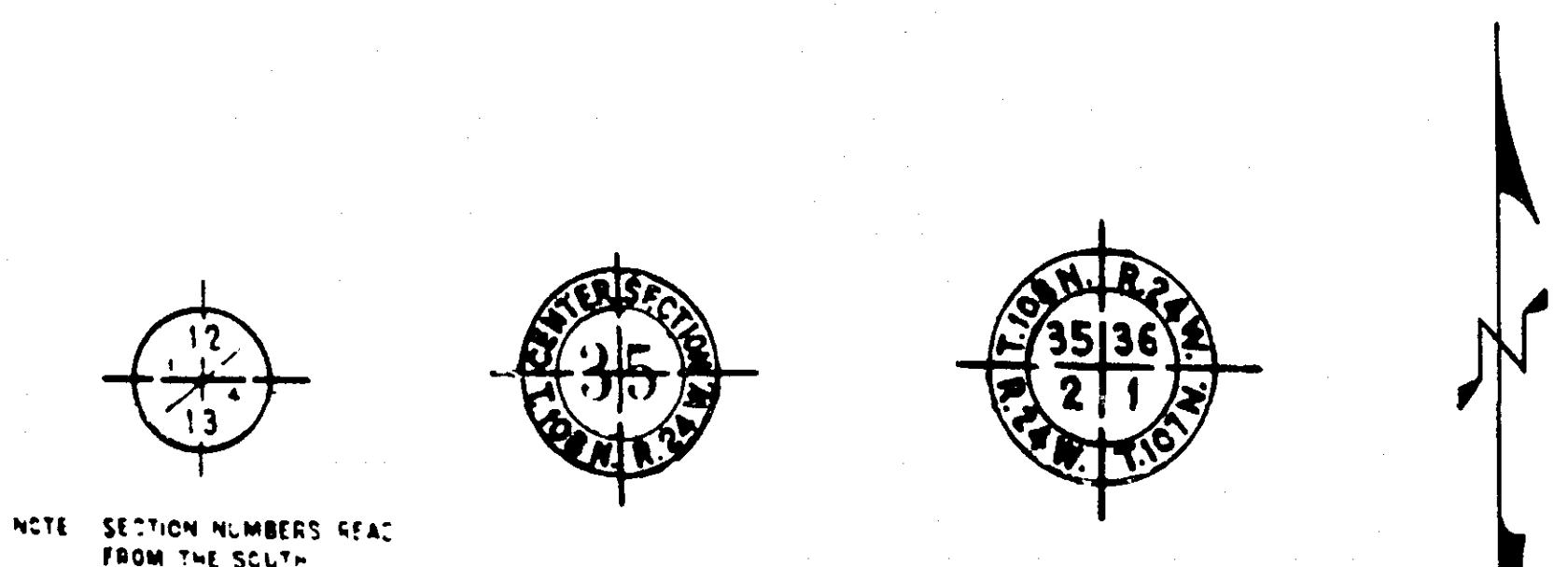
STATE LINE	----
COUNTY LINE	----
TOWNSHIP OR RANGE LINE	----
SECTION LINE	----
QUARTER LINE	----
SIXTEENTH LINE	----
PRESENT RIGHT-OF-WAY LINE	----
CONTROL OF ACCESS LINE	----
PROPERTY LINE (Except Land Lines)	----
VACATED PLATTED PROPERTY	----
CORPORATE OR CITY LIMITS	----
TRUNK HIGHWAY CENTER LINE	----
RETAINING WALL	----
RAILROAD	----
RAILROAD RIGHT-OF-WAY LINE	----
RIVER OR CREEK	----
DRY RUN	----
DRAINAGE DITCH	----
DRAIN TILE	----
CULVERT	----
DROP INLET	----
GUARD RAIL	----
BARBED WIRE FENCE	----
WOVEN WIRE FENCE	----
CHAIN LINK FENCE	----
RAILROAD SNOW FENCE	----
STONE WALL OR FENCE	----
HEDGE	----
RAILROAD CROSSING SIGN	----
RAILROAD CROSSING BELL	----
ELECTRIC WARNING SIGN	----
CROSSING GATE	----
MEANDER CORNER	----

SPRINGS	----
MARSH	----
TIMBER	----
ORCHARD	----
BRUSH	----
NURSERY	----
CATCH BASIN	----
FIRE HYDRANT	----
CATTLE GUARD	----
OVERPASS (Highway Over)	----
UNDERPASS (Highway Under)	----
BRIDGE	----
BUILDING (One Story Frame)	----
F. FRAME	----
C. CONCRETE	----
S. STONE	----
T. TILE	----
B. BRICK	----
ST. STUCCO	----
IRON PIPE OR ROD	----
MONUMENT (STONE, CONCRETE, OR METAL)	----
WOODEN HUB	----
GRAVEL PIT	----
SAND PIT	----
BORROW PIT	----
ROCK QUARRY	----

UTILITIES SYMBOLS

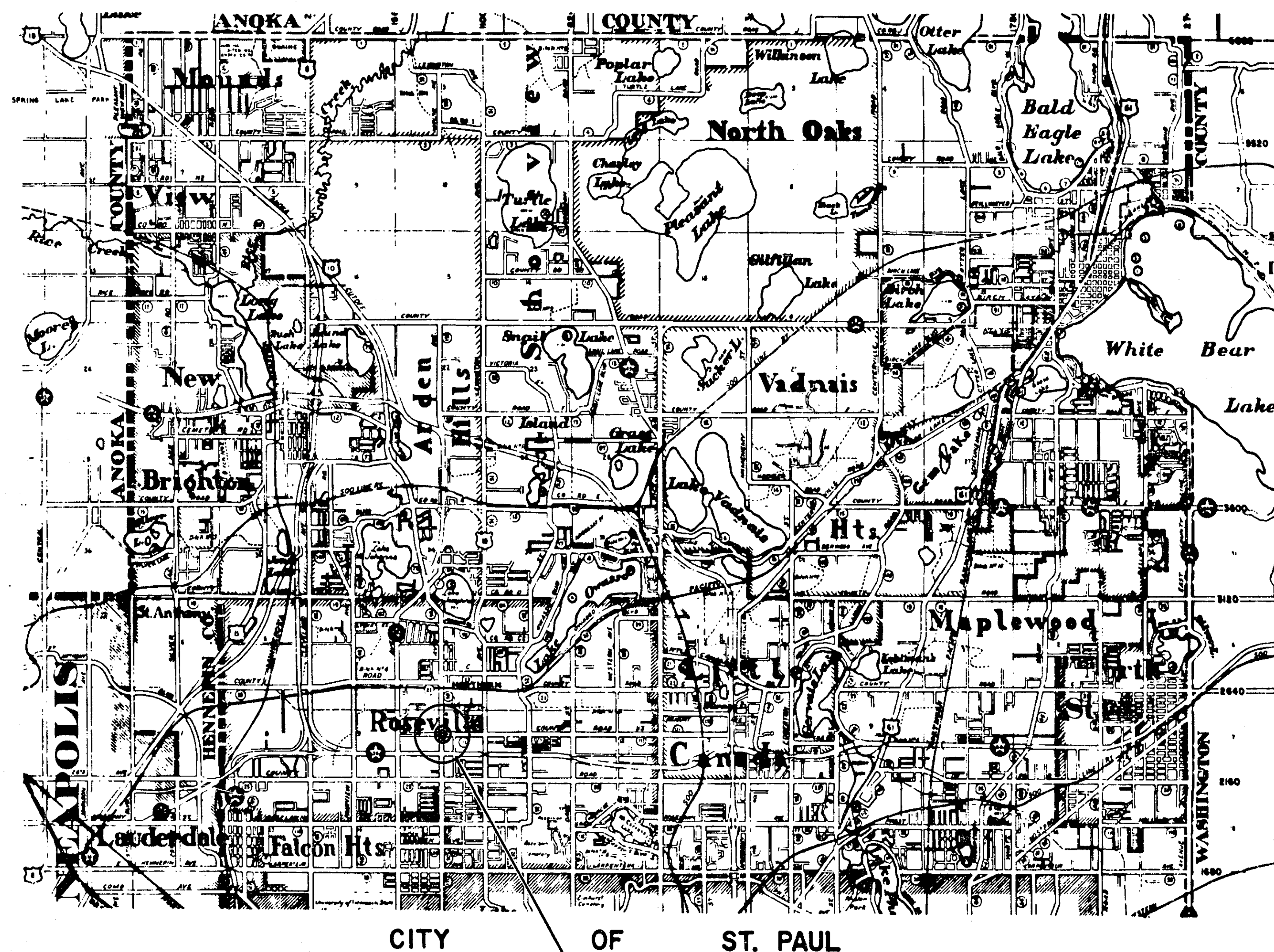
POWER POLE LINE	----
TELEPHONE OR TELEGRAPH POLE LINE	----
JOINT TELEPHONE AND POWER ON POWER POLES	----
ON TELEPHONE POLES	----
ANCHOR	----
STEEL TOWER	----
STREET LIGHT	----
PEDESTAL (TELEPHONE CABLE TERMINAL)	----
GAS MAIN	----
WATER MAIN	----

CONDUIT	----
TELEPHONE CABLE IN CONDUIT	----
ELECTRIC CABLE IN CONDUIT	----
TELEPHONE MAINHOLE	----
ELECTRIC MAINHOLE	----
BURIED TELEPHONE CABLE	----
BURIED ELECTRIC CABLE	----
AERIAL TELEPHONE CABLE	----
SEWER, (SANITARY OR STORM)	----
SEWER MAINHOLE	----



PIT DATA

PIT NO.	Located in
PIT NO.	Dead Maul
PIT NO.	Located in
PIT NO.	Dead Maul



CO. PROJ. NO. 69-50-III-S

OFFICE OF COUNTY ENGINEER

RAMSEY COUNTY

PLAN OF TRAFFIC CONTROL SYSTEM FOR THE INTERSECTION OF

HAMLIN AVE & COUNTY RD. "B2"

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-4	DETAIL
5	INTERSECTION LAYOUT
6	FIELD WIRING DIAGRAM

DESIGNED BY W. V. Chasovsk DATE 6-27-69
DIRECTOR OF SAFETY

RECOMMENDED FOR APPROVAL Dean R. Ambler DATE 7-8-69
COUNTY ENGINEER

APPROVED _____ DATE _____
CHAIRMAN OF THE RAMSEY COUNTY BOARD

APPROVED _____ DATE _____
MAYOR, VILLAGE OF ROSEVILLE

APPROVED _____ DATE _____

MINNESOTA STATE HIGHWAY DEPARTMENT

RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____
DISTRICT STATE AID ENGINEER

APPROVAL _____ DATE _____
STATE AID ENGINEER

NOT BUILT

THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION
DATED JANUARY 1, 1968 AS AMENDED BY SUPPLEMENTAL
SPECIFICATIONS DATED JULY 1, 1969 SHALL GOVERN.

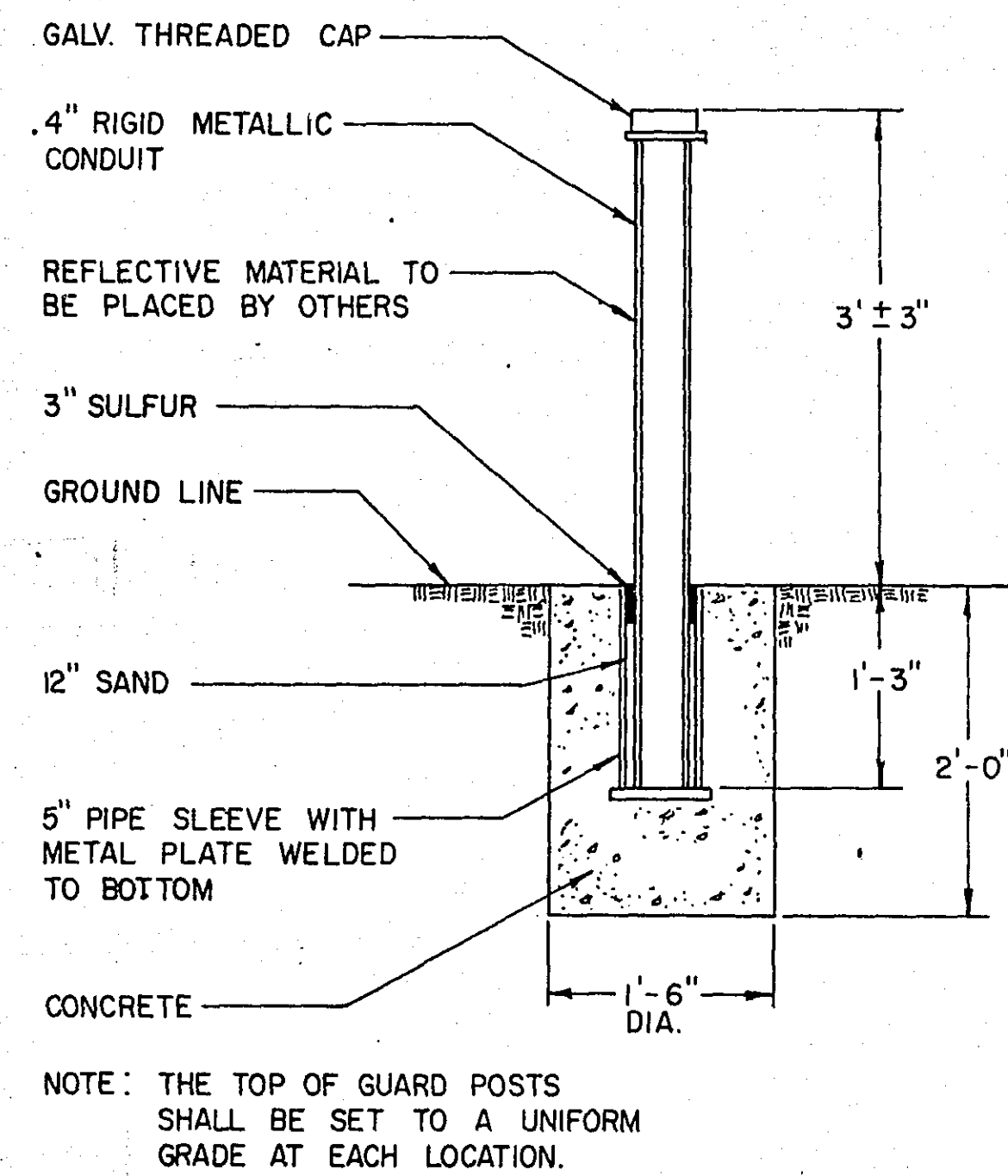
CO. PROJ. NO. 69-50-III-S

Sheet No. 1 of 6 Sheets

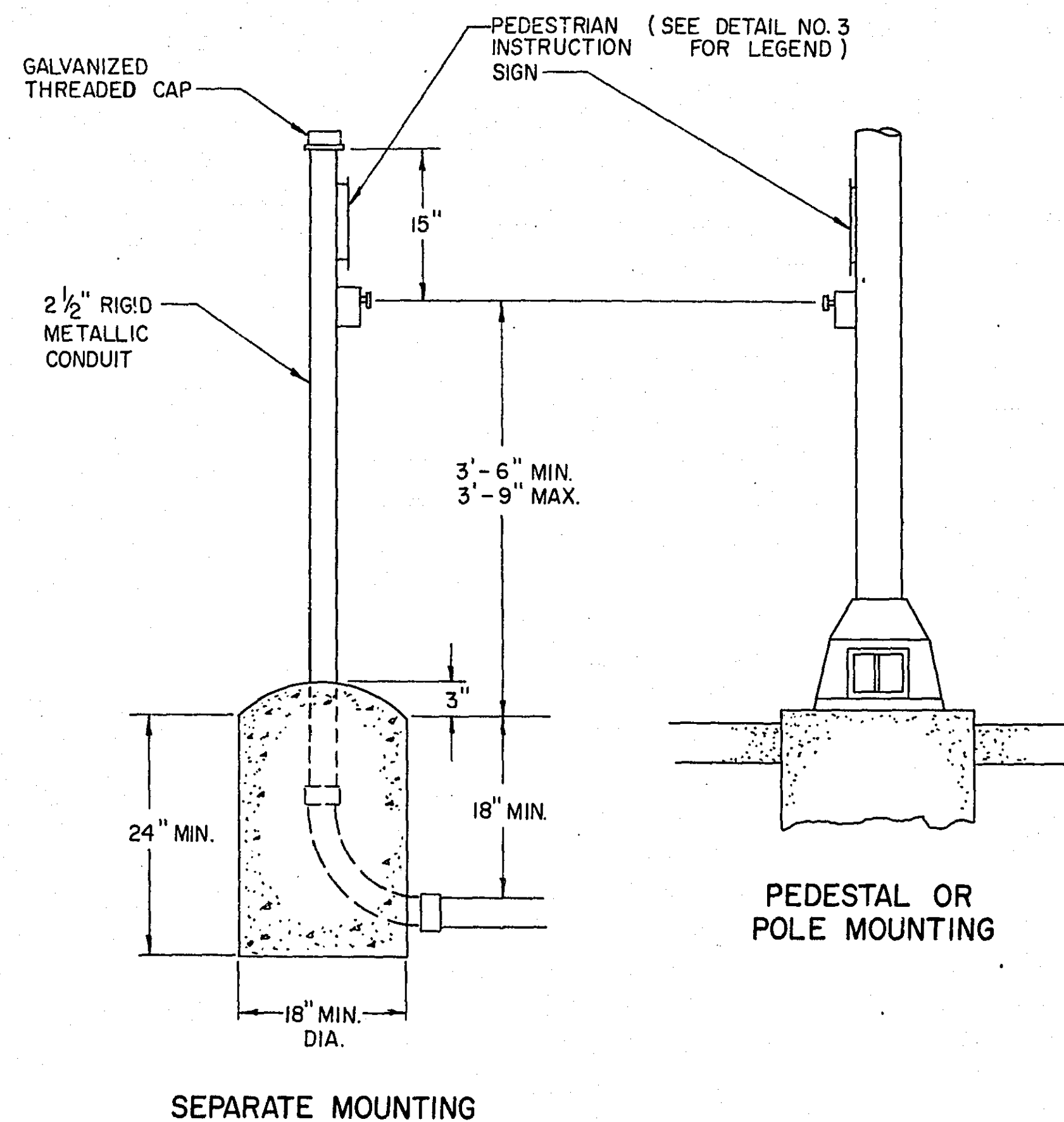
MINNESOTA
RAMSEY CO. ENGR.

17-109

GUARD POST

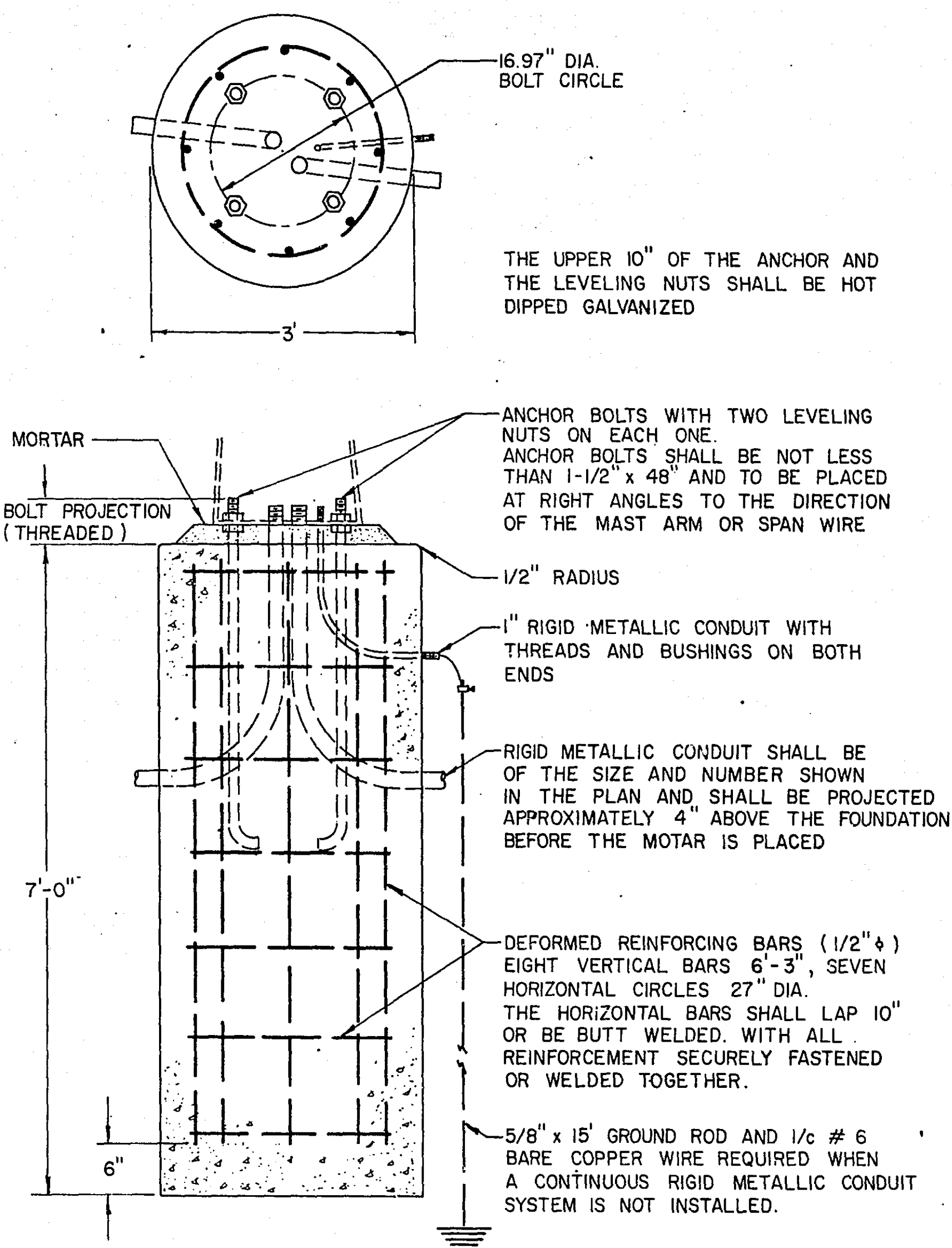


PEDESTRIAN PUSH BUTTON DETAIL NO. 1

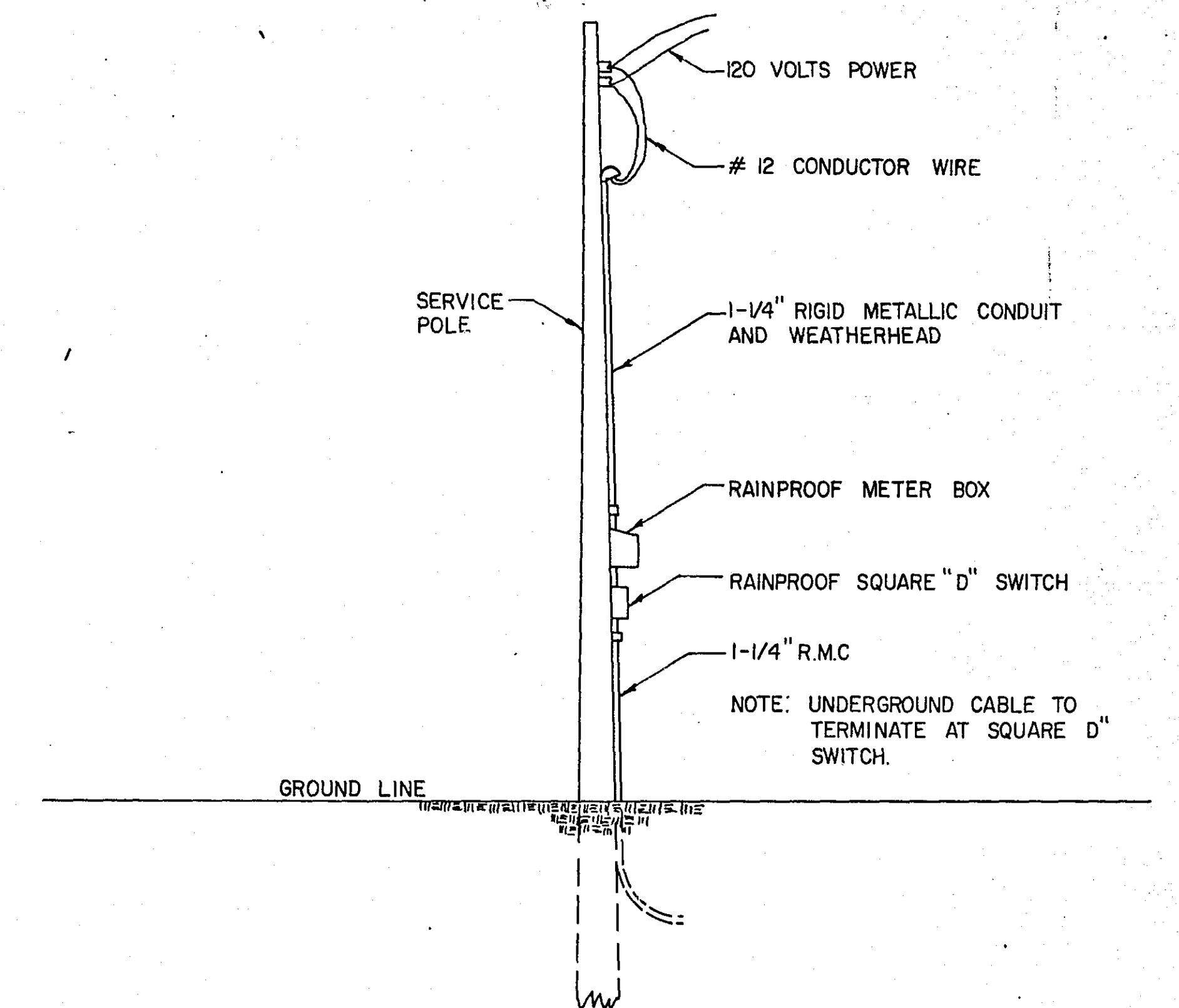


CONCRETE FOUNDATION

FOR MAST ARM TRAFFIC SIGNAL POLE

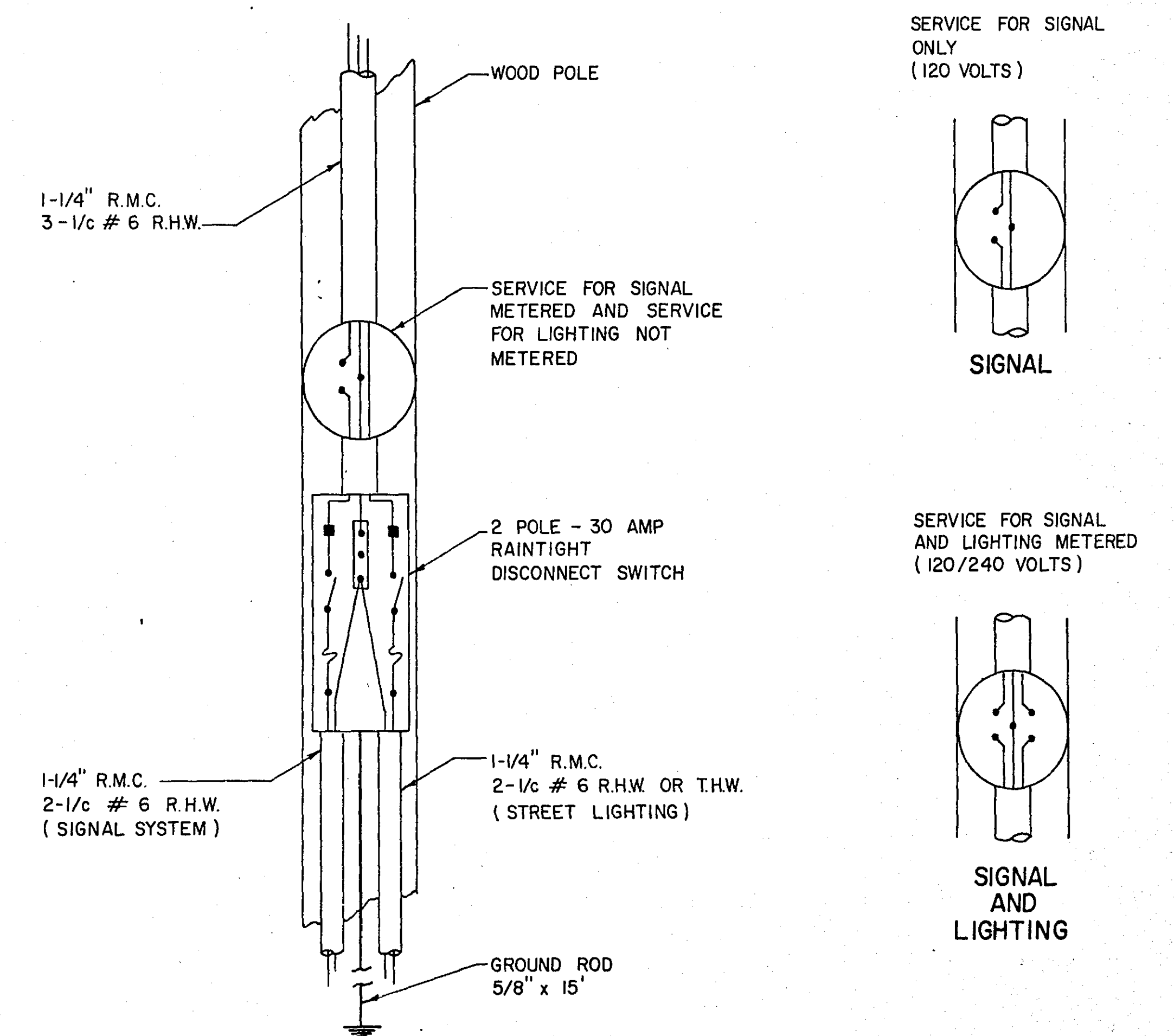
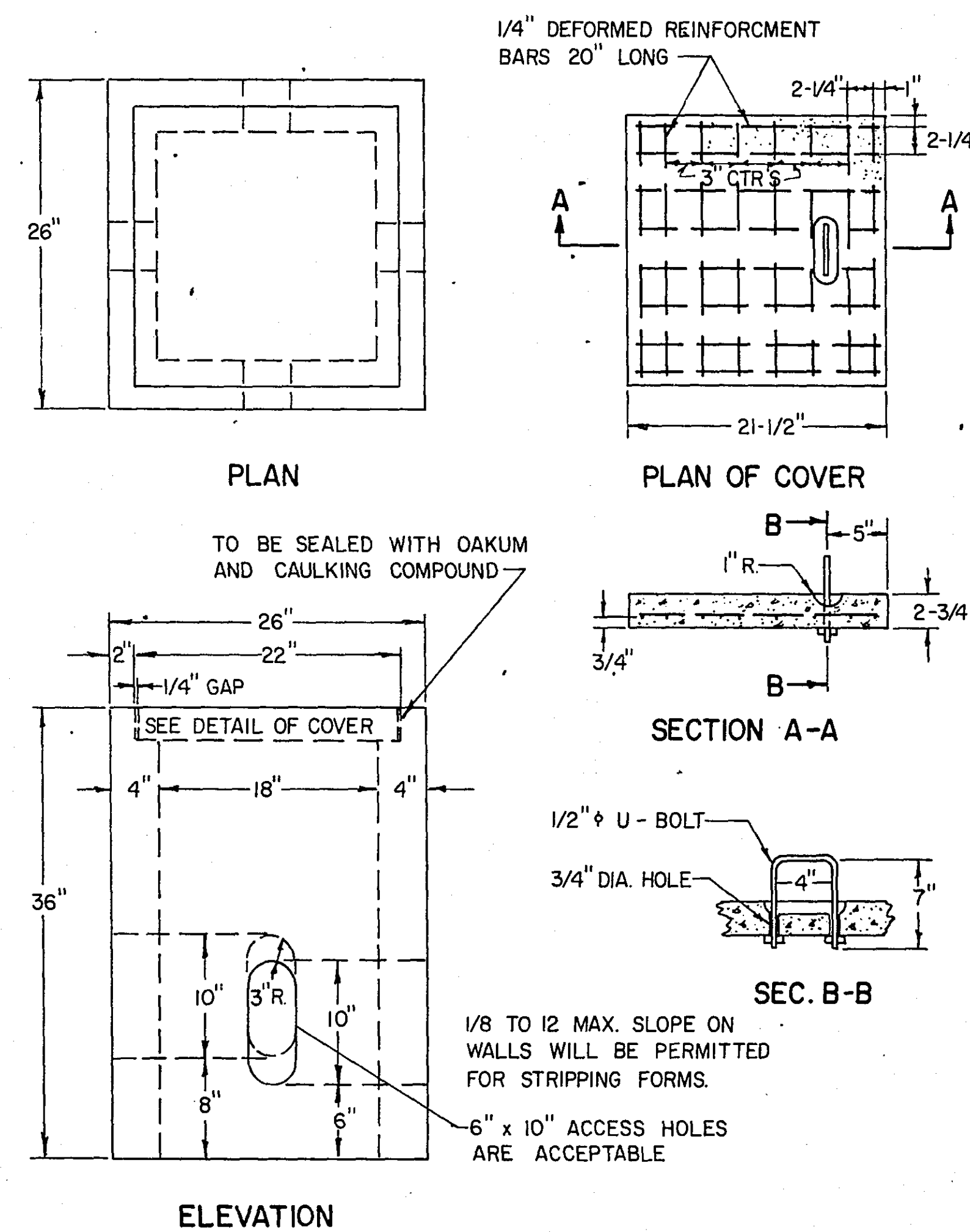
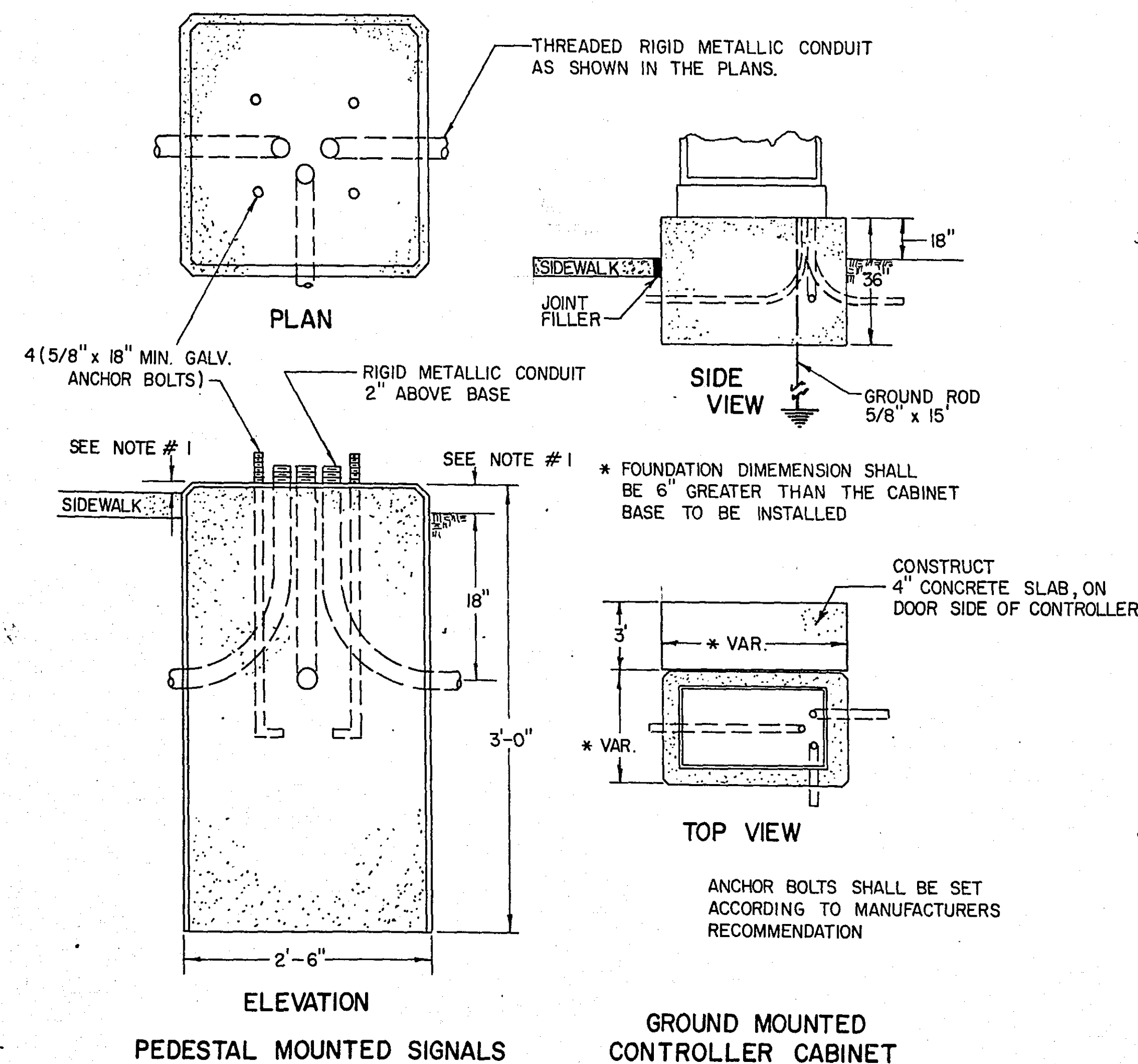


POLE FOR POWER CONNECTION



NOTE # 1

DISTANCE FROM GROUND LINE VARIABLE FROM 1/4" IN THE SIDEWALK AREA TO 2" IN THE SHOULDER OR BLVD. AREA.



CONCRETE FOUNDATIONS

PRECAST CONCRETE HANDHOLE OR PULLBOX

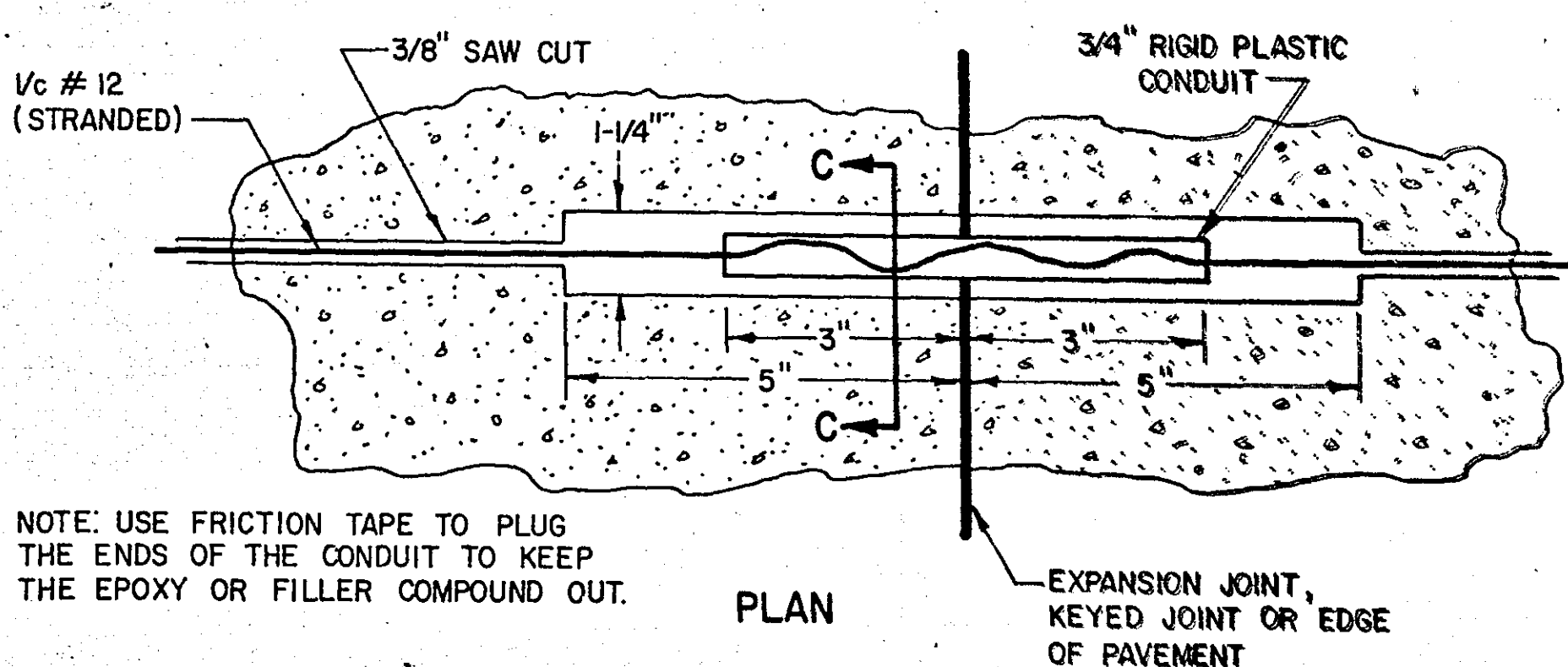
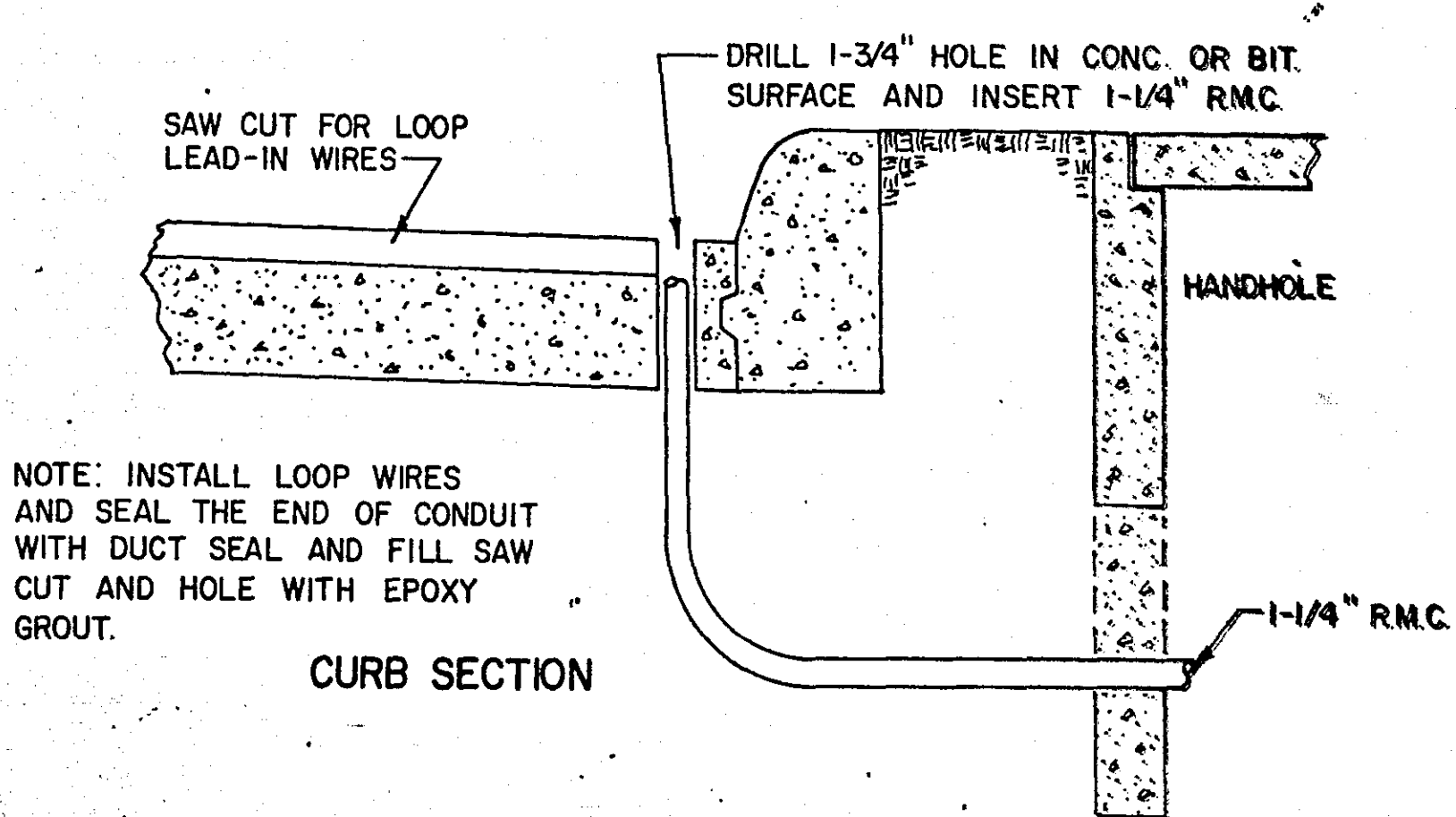
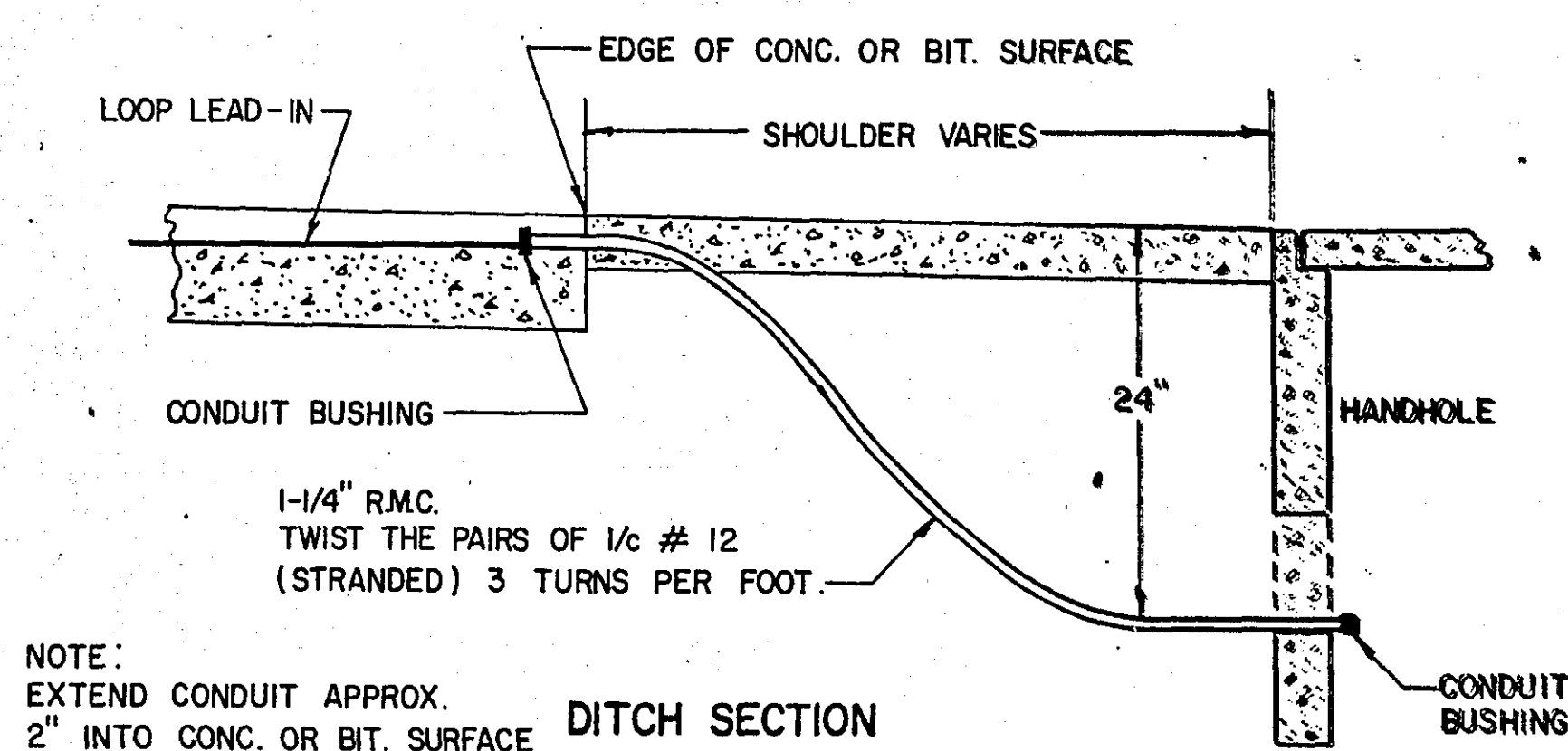
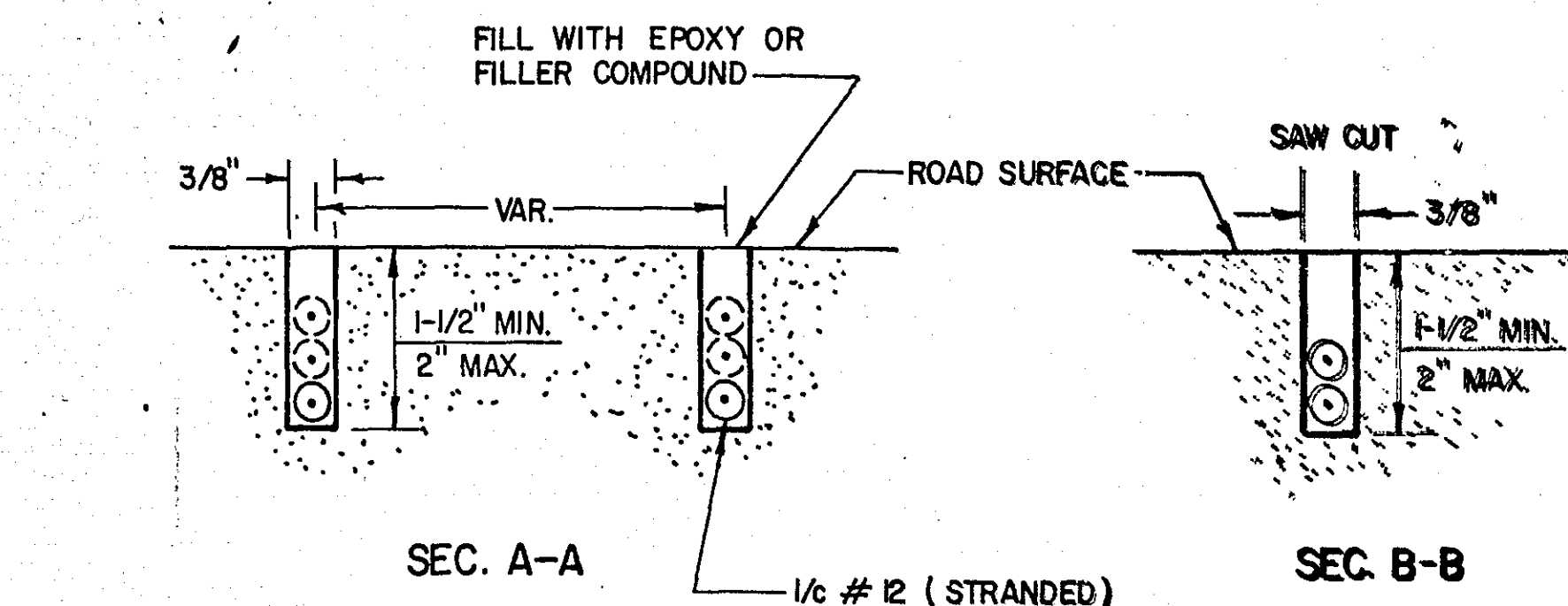
CO. PROJ. NO. 69-50-III-S

SHEET NO. 2 OF 6 SHEETS

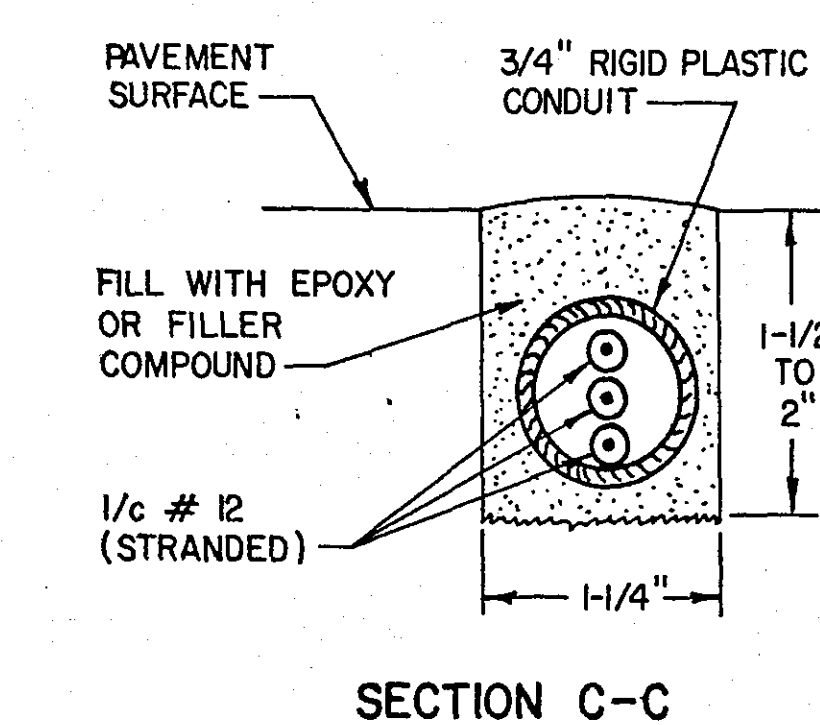
MICROFILMED
RAMSEY CO. ENGR.

17-109

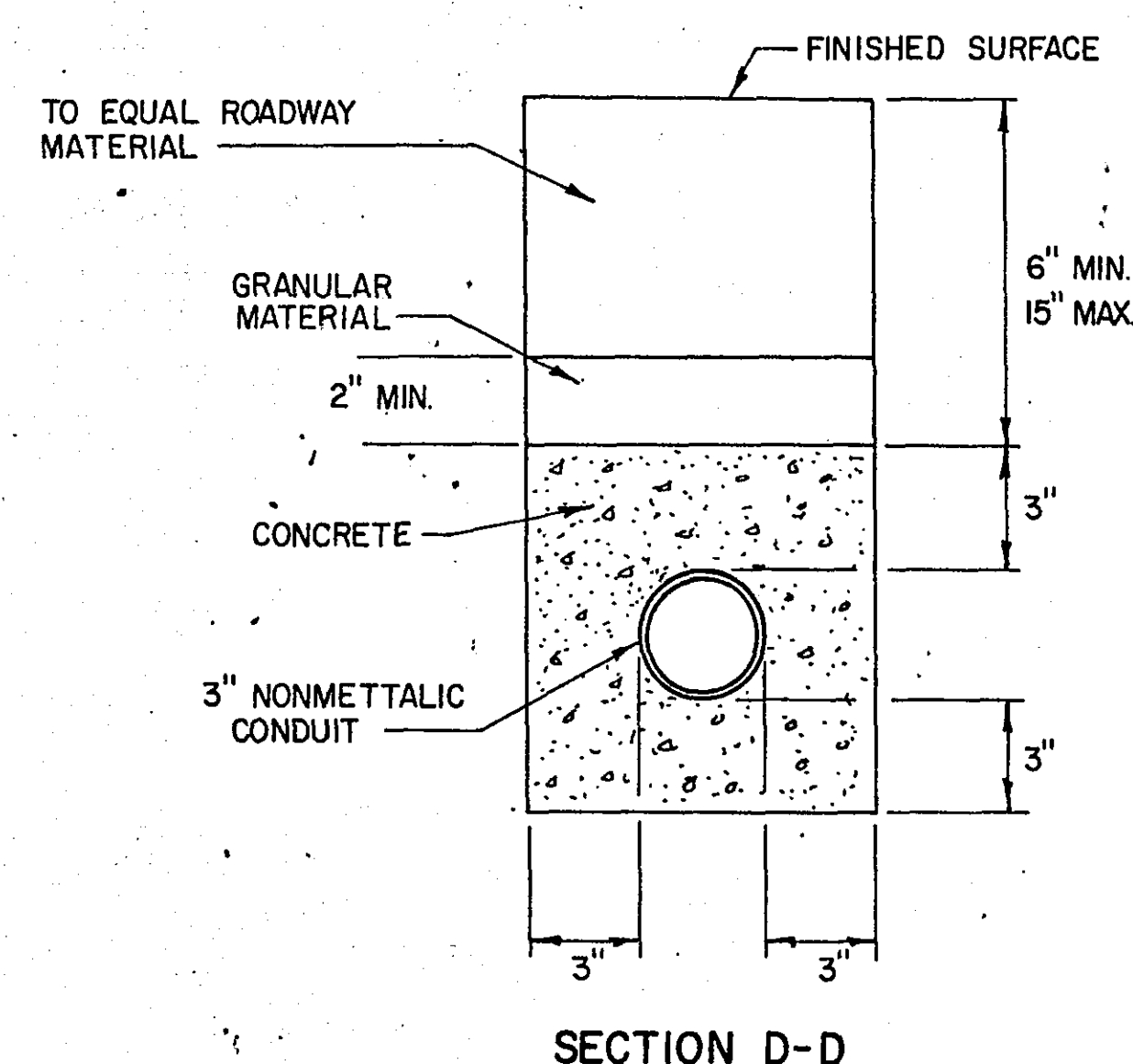
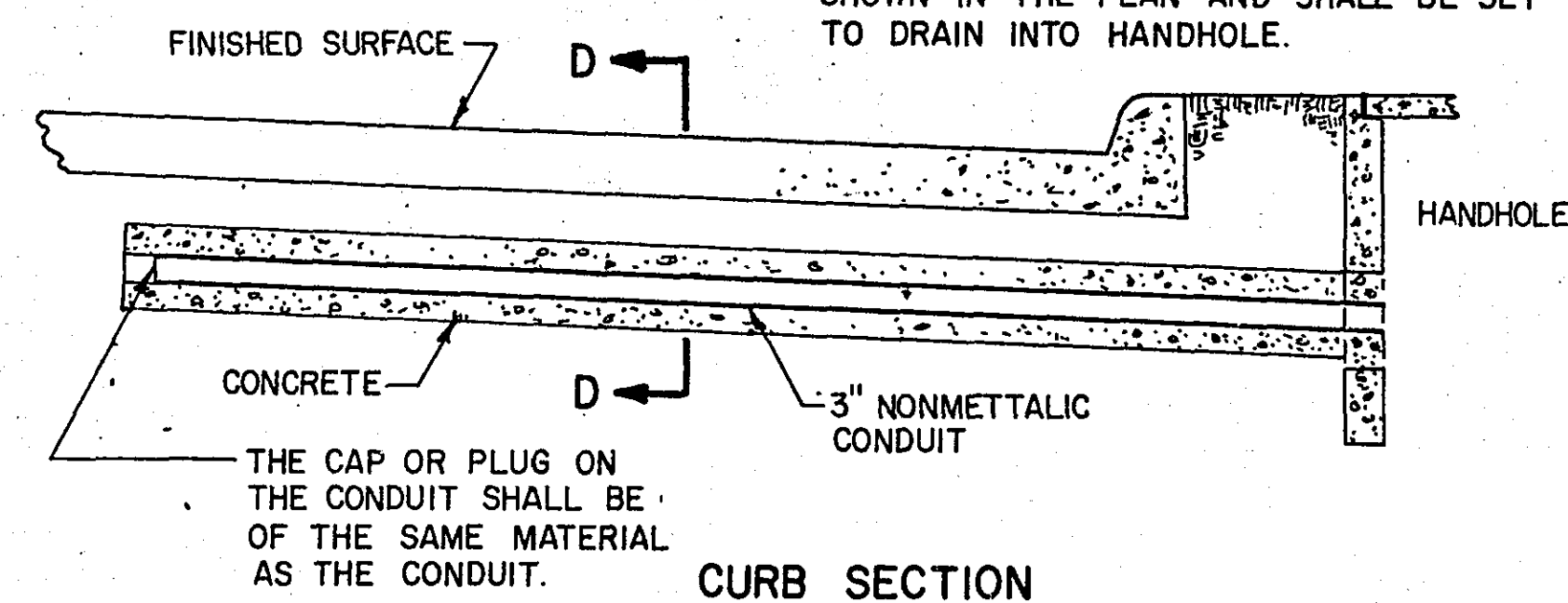
NOTE: NUMBER OF TURNS &
SIZE OF LOOP SHALL BE DETERMINED
IN THE FIELD BY THE ENGINEER.



NOTE:
THE CONDUCTORS SHALL BE SINGLE-CONDUCTOR
12 (STRANDED) INSULATED WITH FILLED
CHEMICALLY CROSS-LINKED POLYETHYLENE AND
SHALL BEAR THE U.L. LISTING LABELS FOR
TYPE R.H.W. AND TYPE R.H.H.



NOTE: CONDUIT LENGTH SHALL BE AS SHOWN IN THE PLAN AND SHALL BE SET TO DRAIN INTO HANDHOLE.



EQUIPMENT & INDICATIONS

RED - RED
YEL - YELLOW
GRN - GREEN
LTA - LEFT TURN ARROW
THA - THRU ARROW
RTA - RIGHT TURN ARROW
TRA - THRU AND RIGHT ARROW
WLK - WALK
NEU - NEUTRAL
DWK - DON'T WALK
SW - SWITCH
SWD - SWITCHED
LUM - LUMINAIRE
PA1(eg) - PEDESTRIAN INDICATION - "A" PHASE
PBB2(eg) - PUSH BUTTON - "B" PHASE
C3(eg) - SIGNAL HEAD - "C" PHASE
DA4(eg) - DETECTOR - "A" PHASE
H.H. - HANDHOLE
G.R.R. - GROUND ROD
SERV. - SERVICE
DNL - DOWNLIGHT
P.E.C. - PHOTOELECTRIC CELL
ST. LHT. - STREET LIGHT
CH. - CHECK
S.O.P. - SOURCE OF POWER
E.Q.G. - EQUIPMENT GROUND
SPR - SPARE CONDUCTOR

The diagrams show four rectangular buttons, each with a width of 8 inches and a height of 5 inches. The buttons are arranged in a 2x2 grid. Each button contains the text 'TO CROSS' followed by a location name, a right-pointing arrow, and the text 'PUSH BUTTON'. The location names are 'HAMLINE' for the top-left and bottom-right buttons, and 'COUNTY RD. B2' for the top-right and bottom-left buttons. The text '2 EACH' is centered below each button.

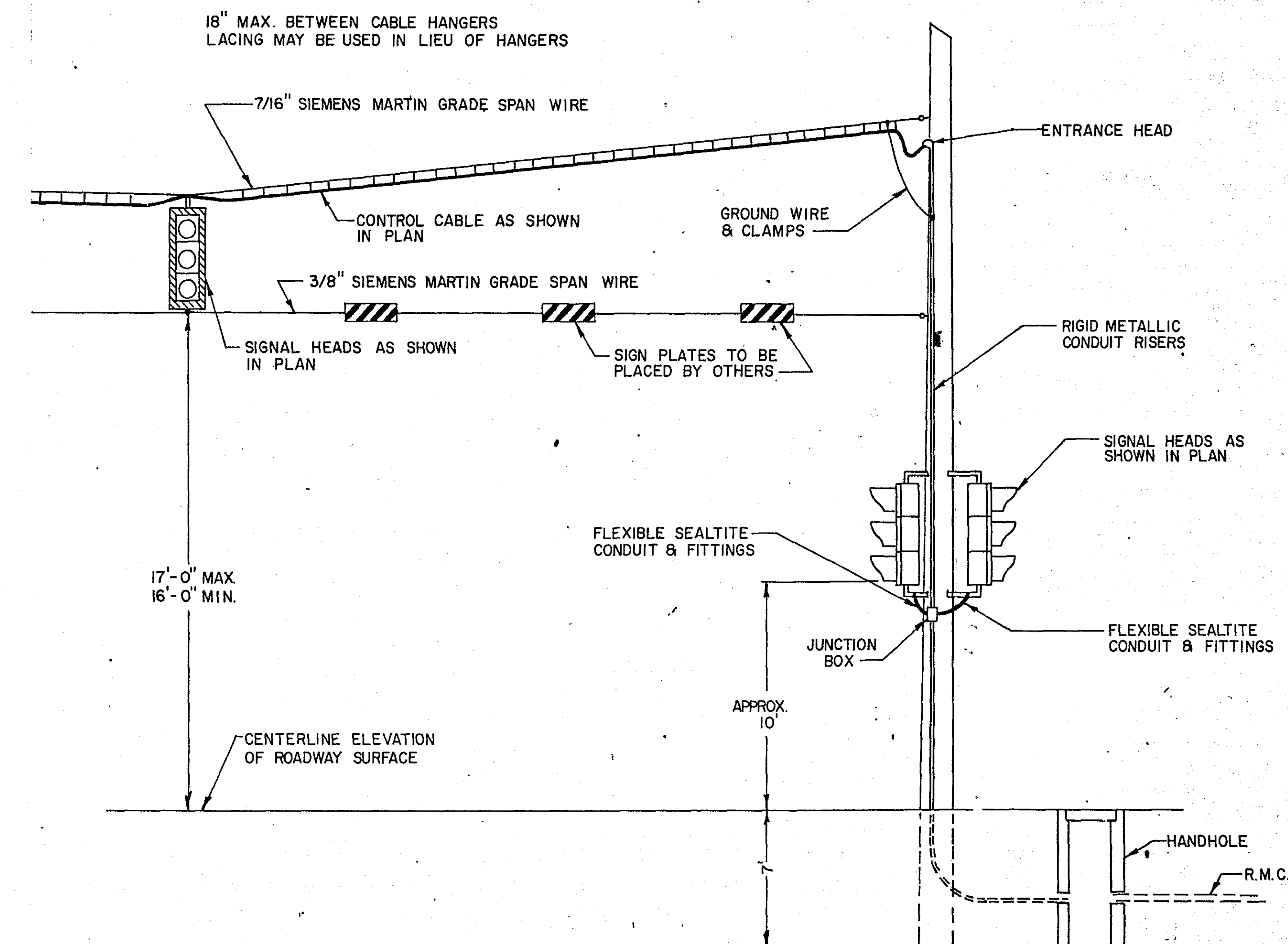
TO CROSS
HAMLINE
→
PUSH BUTTON
2 EACH

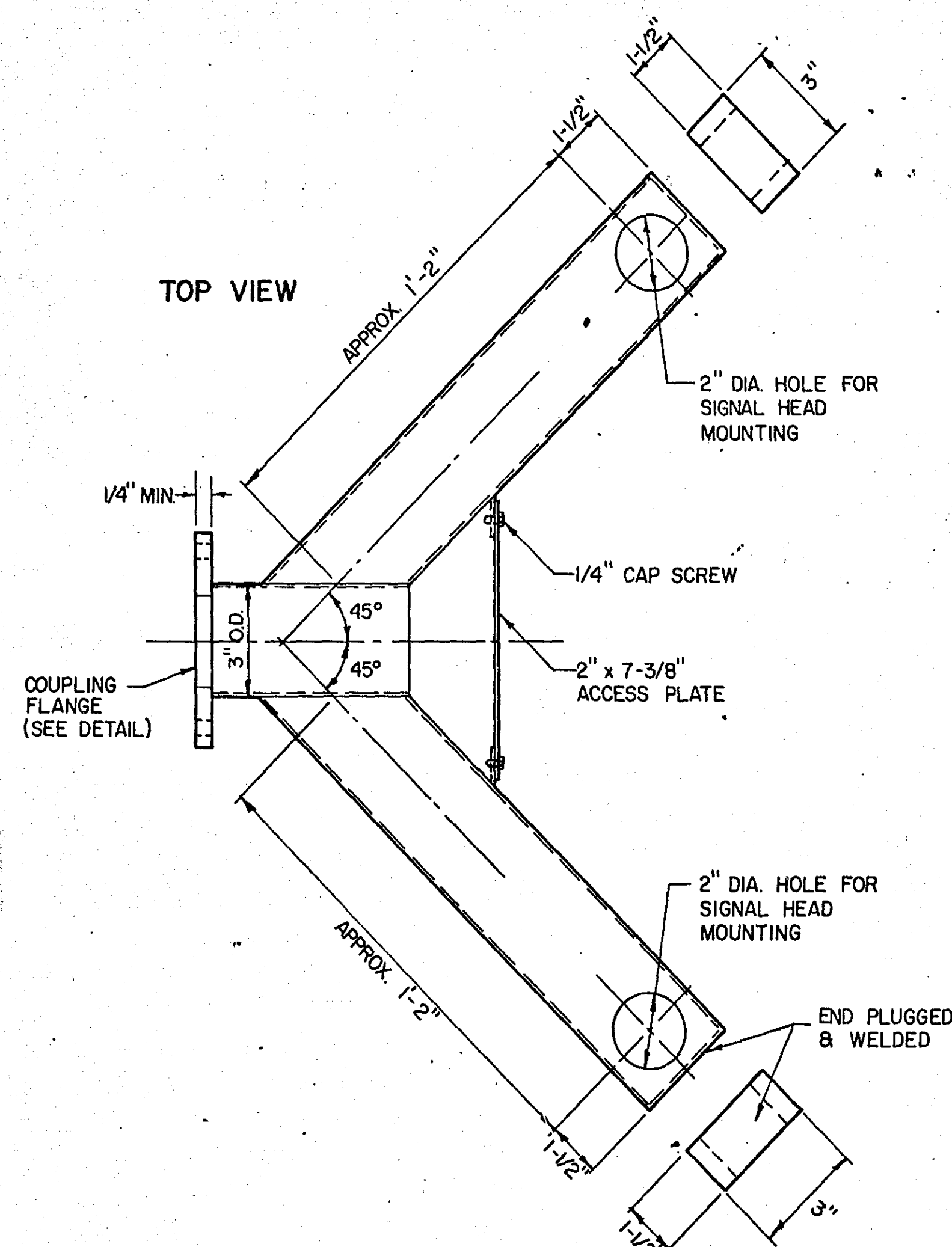
TO CROSS
HAMLINE
←
PUSH BUTTON
2 EACH

TO CROSS
COUNTY RD. B2
→
PUSH BUTTON
2 EACH

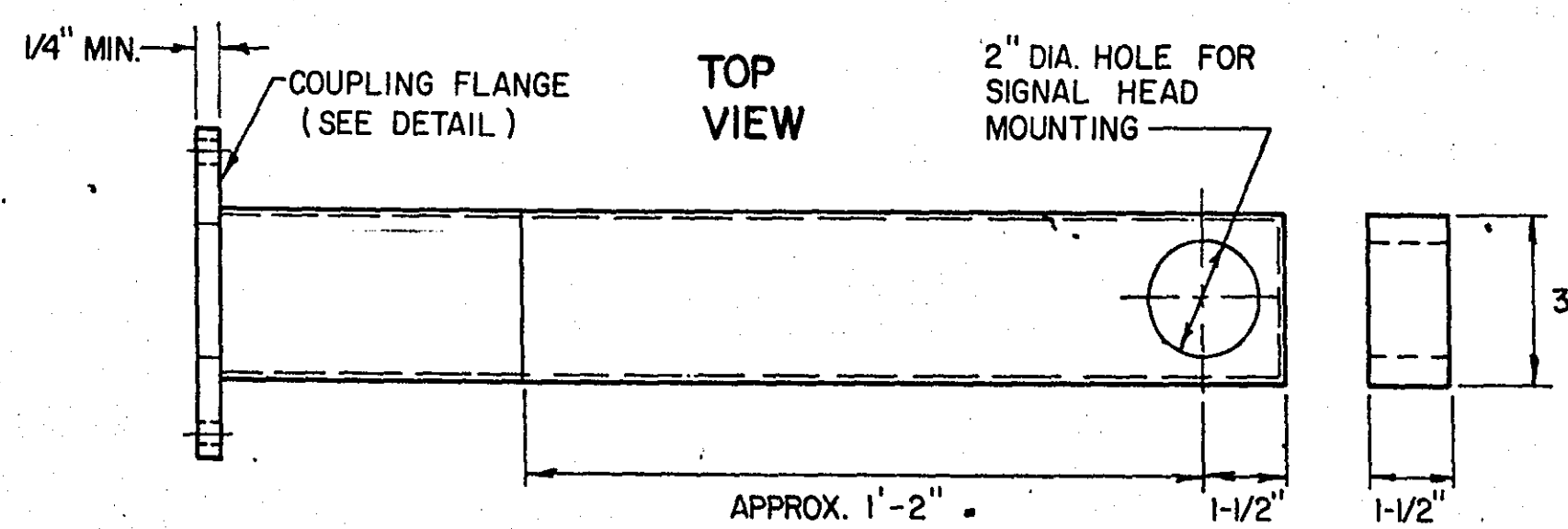
TO CROSS
COUNTY RD. B2
←
PUSH BUTTON
2 EACH

18" MAX. BETWEEN CABLE HANGERS
LACING MAY BE USED IN LIEU OF HANGERS

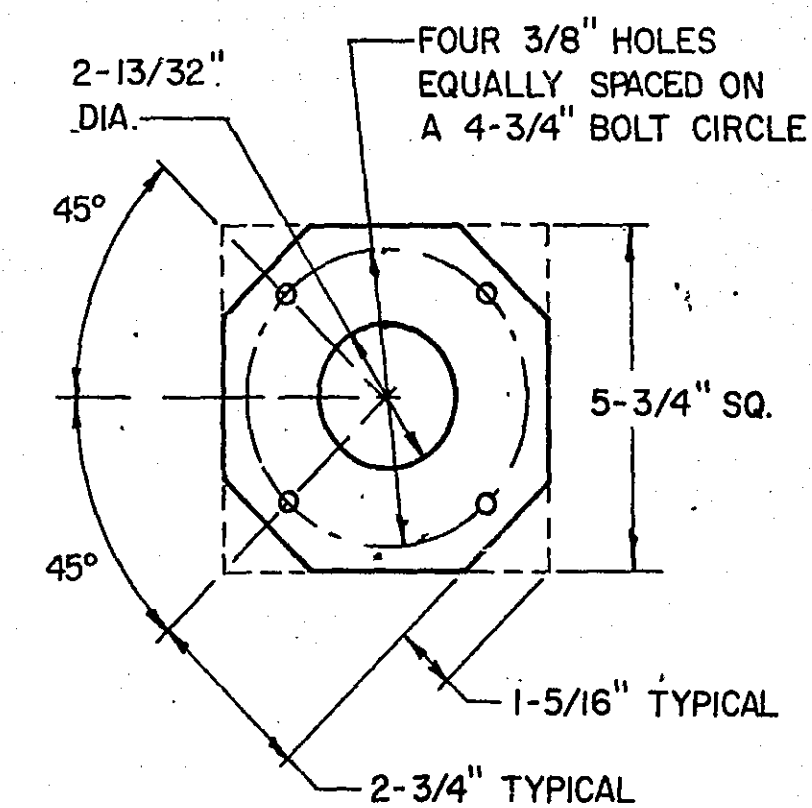




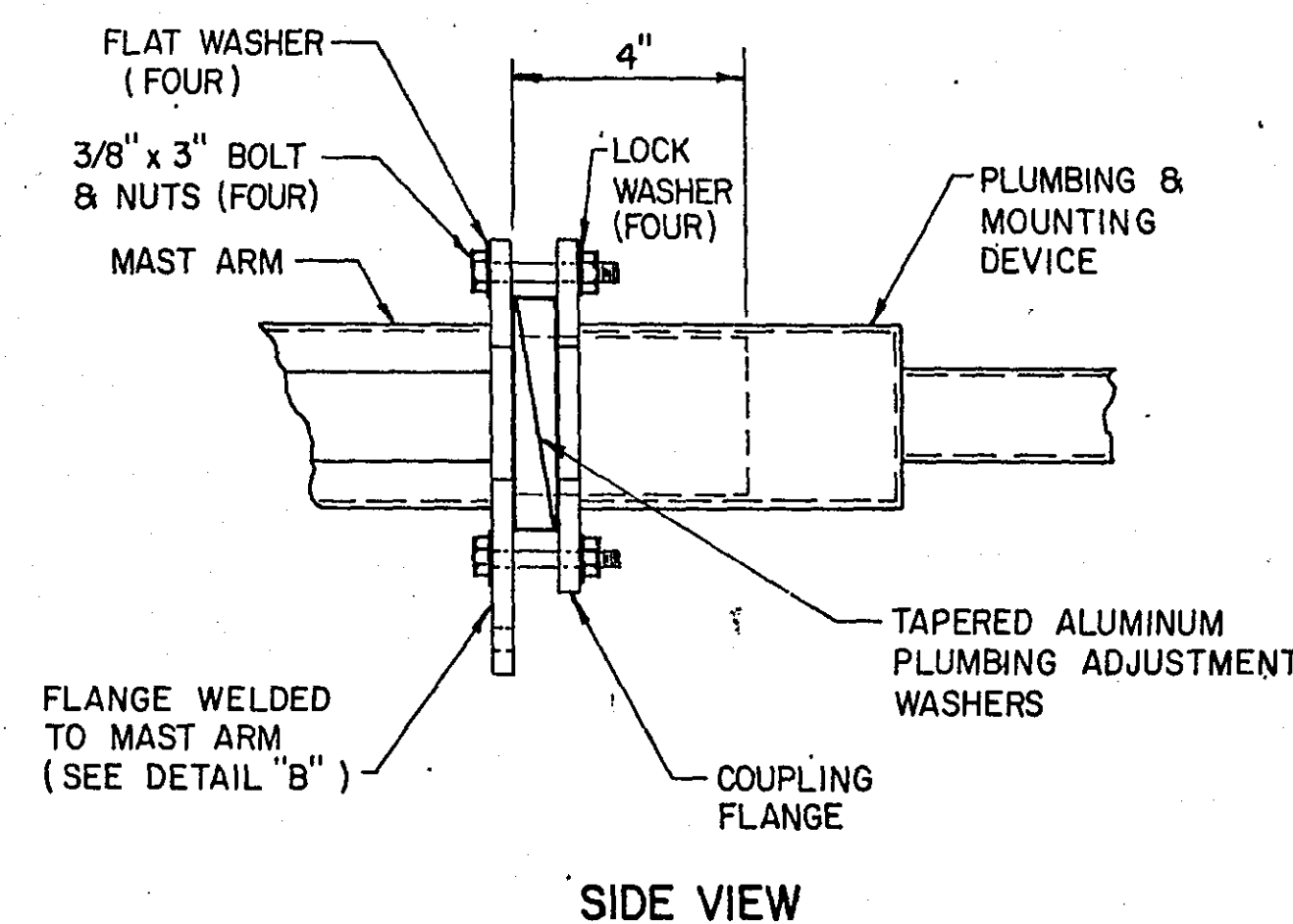
**TWO-WAY TRAFFIC SIGNAL
PLUMBING AND MOUNTING DEVICE**
SPECIFICATION REFERENCE M.H.D. 1703



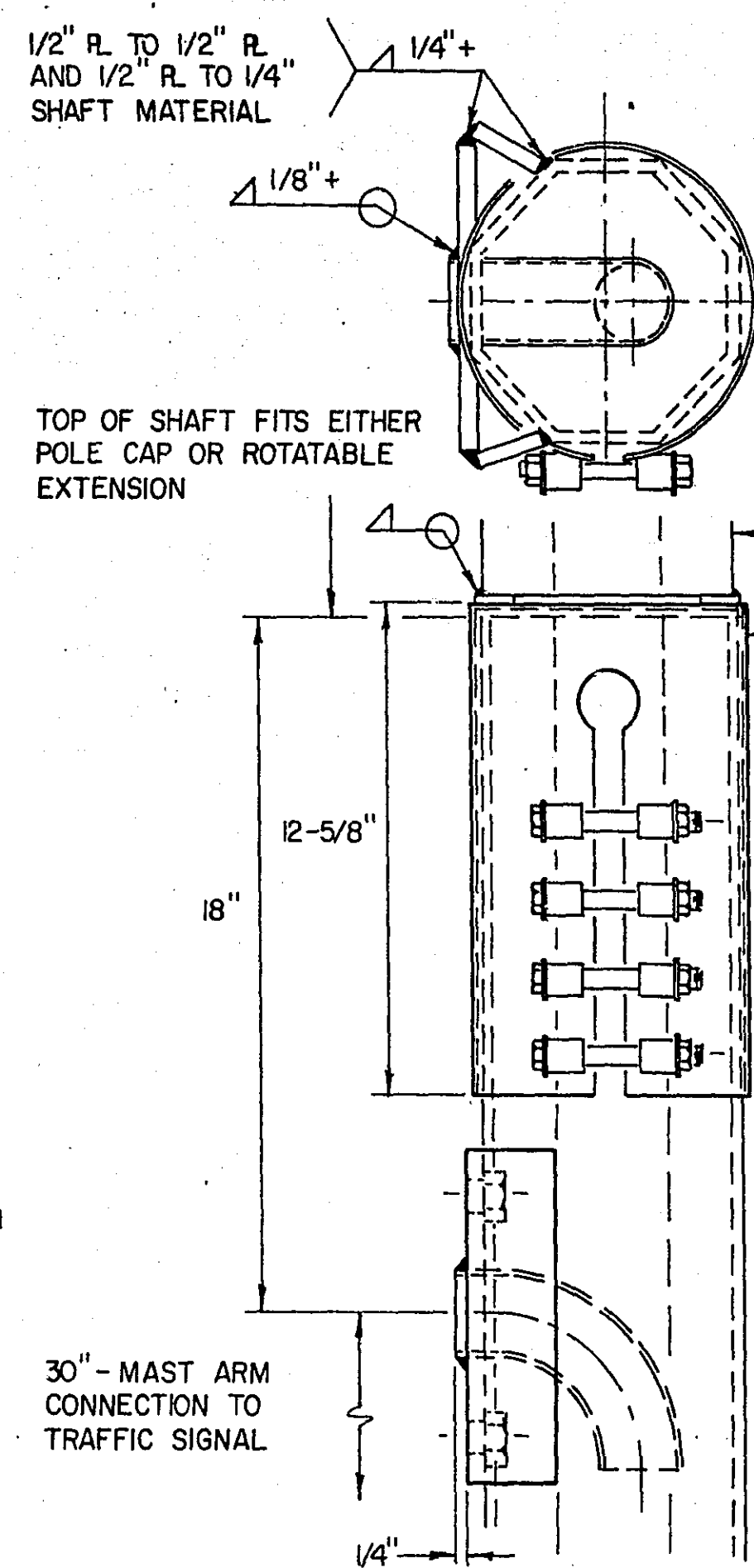
**ONE-WAY TRAFFIC SIGNAL
PLUMBING AND MOUNTING DEVICE**
SPECIFICATION REFERENCE M.H.D. 1703



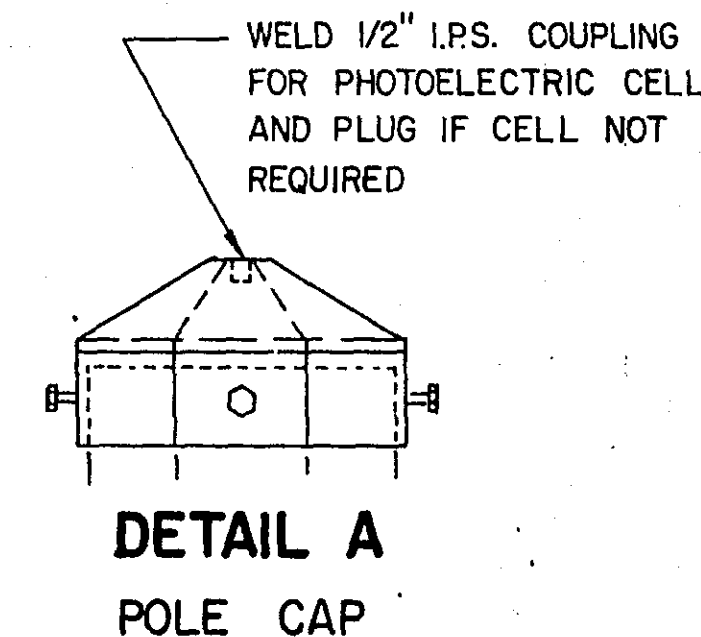
**COUPLING FLANGE
DETAIL**
(ONE-WAY AND TWO-WAY SIGNAL)



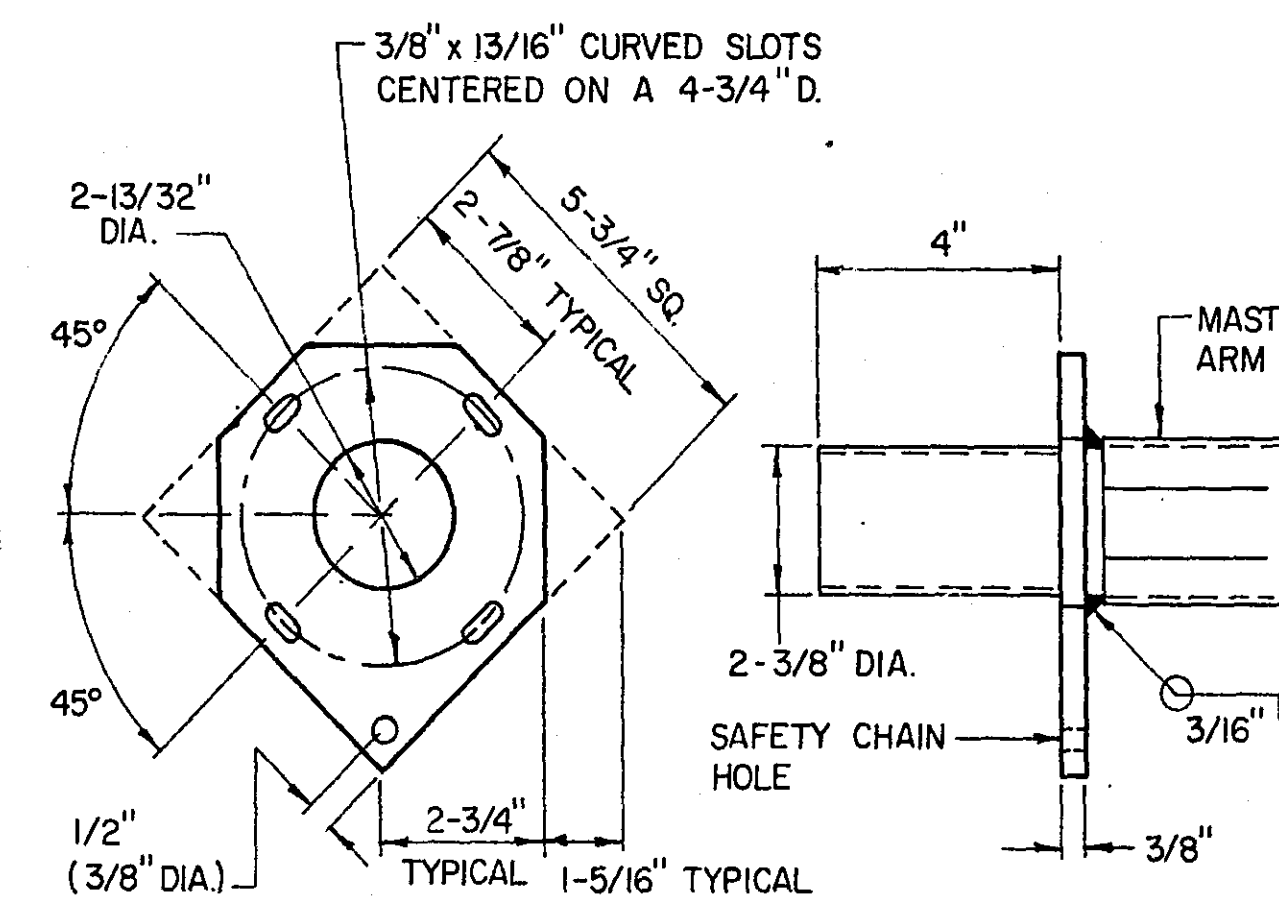
ASSEMBLY DETAIL
(ONE-WAY AND TWO-WAY SIGNAL)
SPECIFICATION REFERENCE M.H.D. 1703



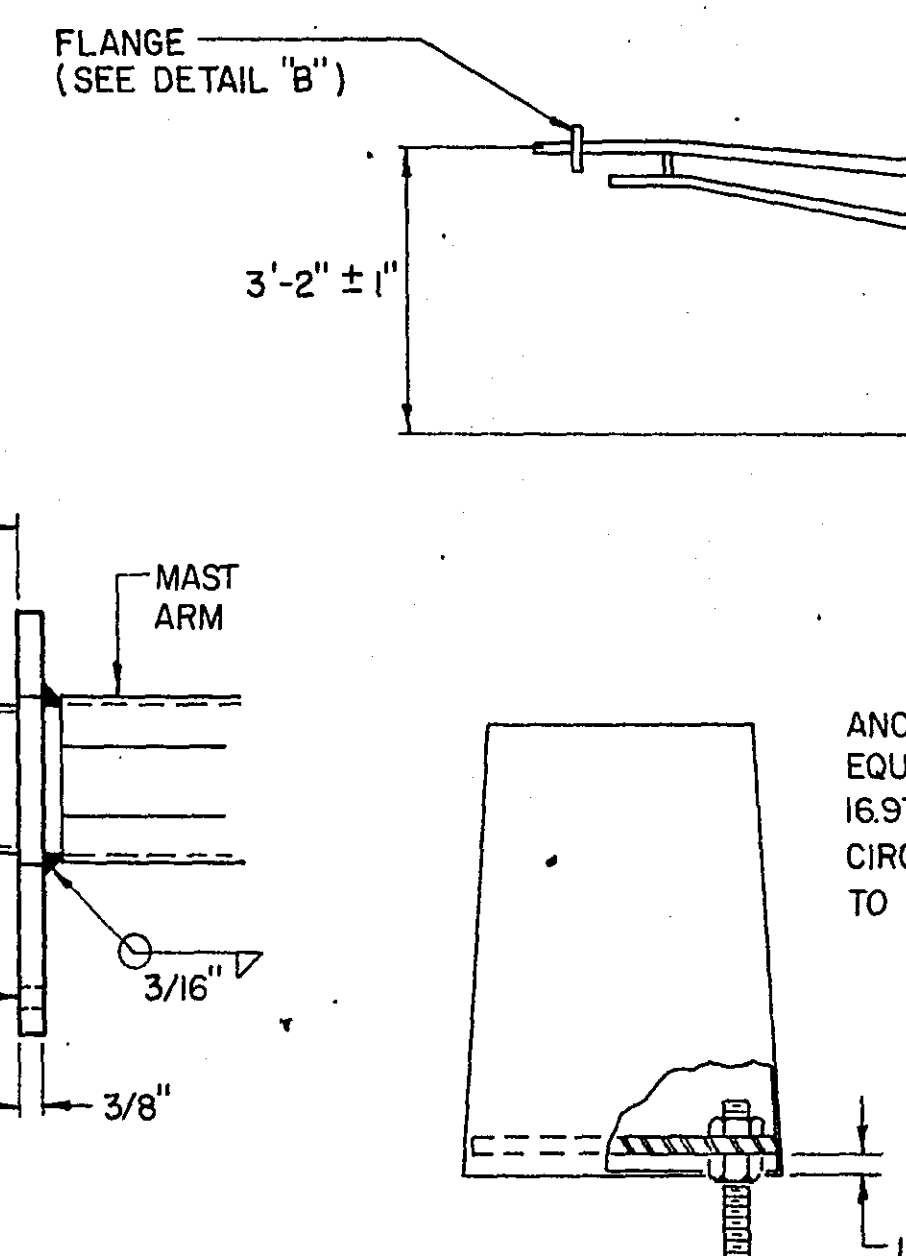
DETAIL C
ROTATABLE LUMINAIRE
EXTENSION AND MAST
ARM CONNECTION



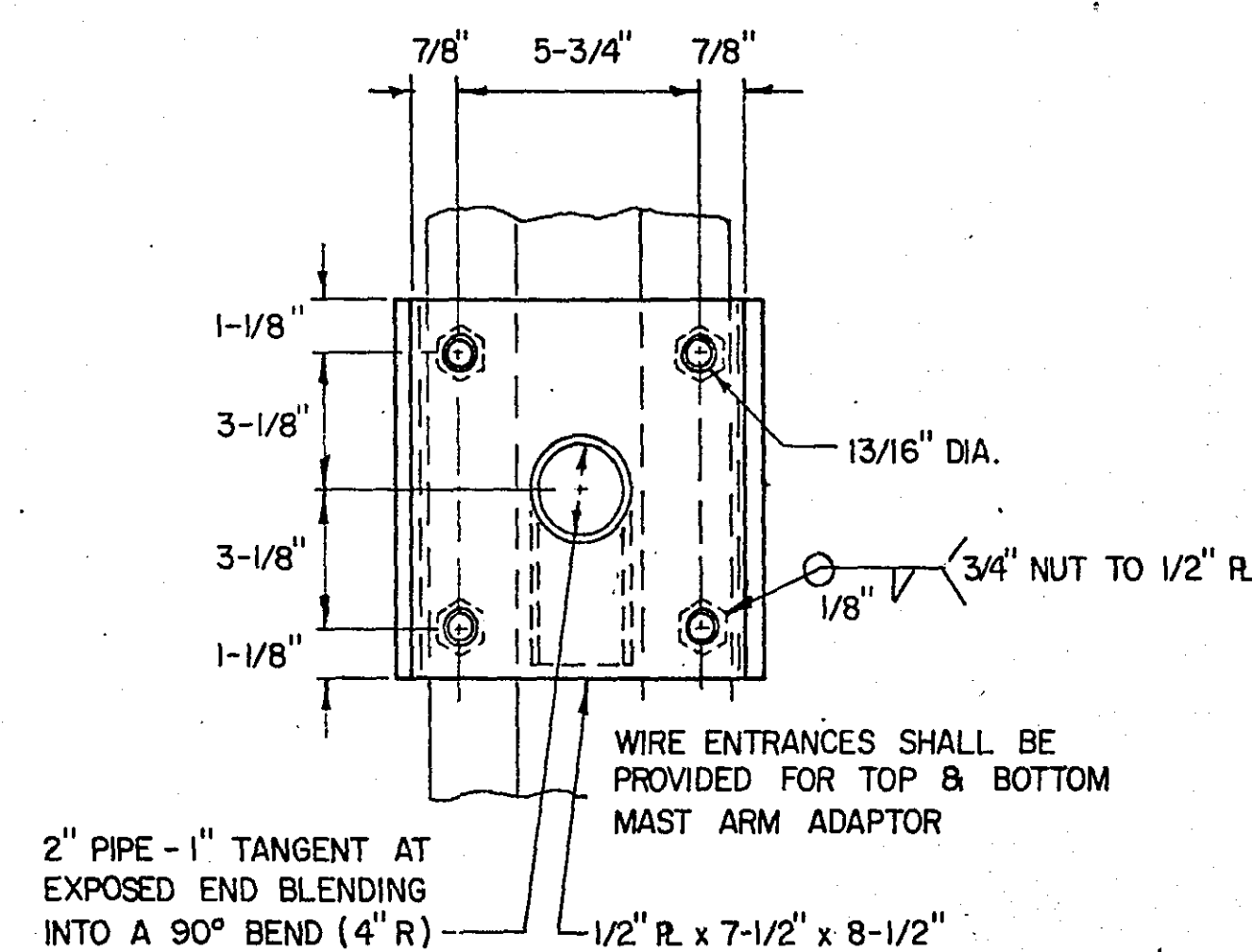
DETAIL A
POLE CAP



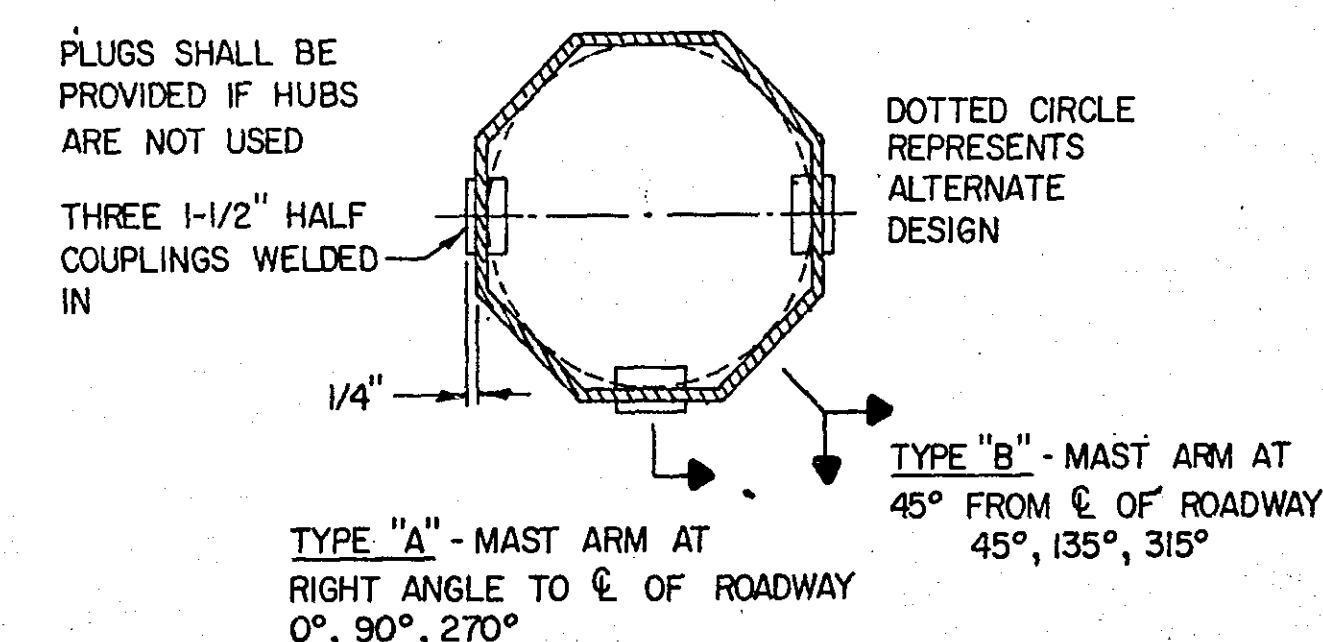
DETAIL B
FLANGE



DETAIL F
TRANSFORMER BASE CONNECTION

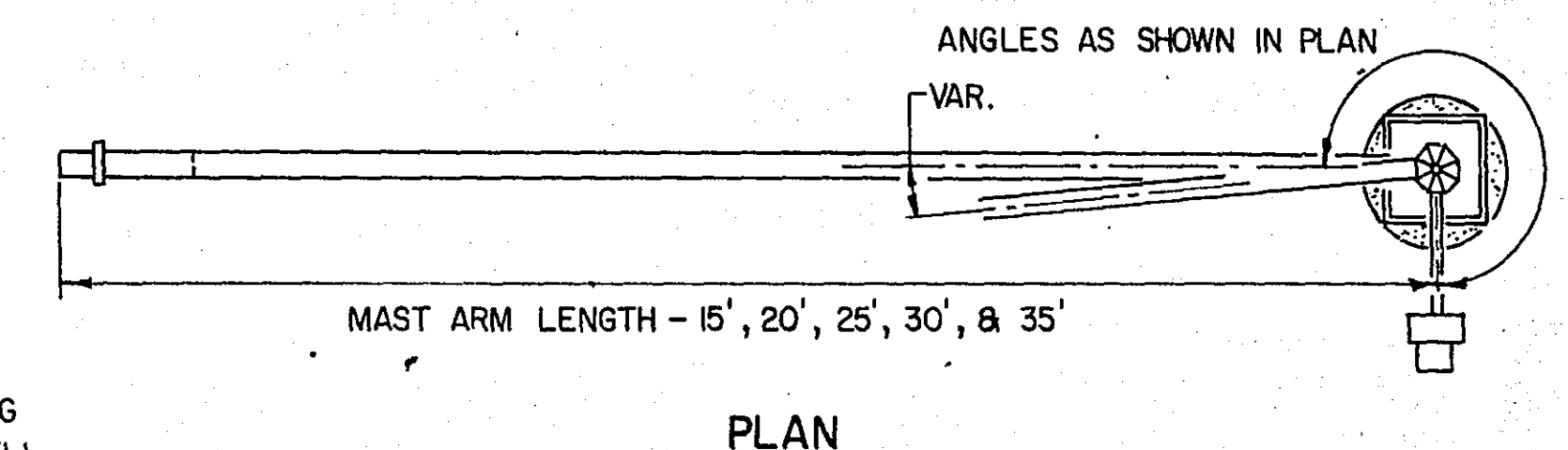
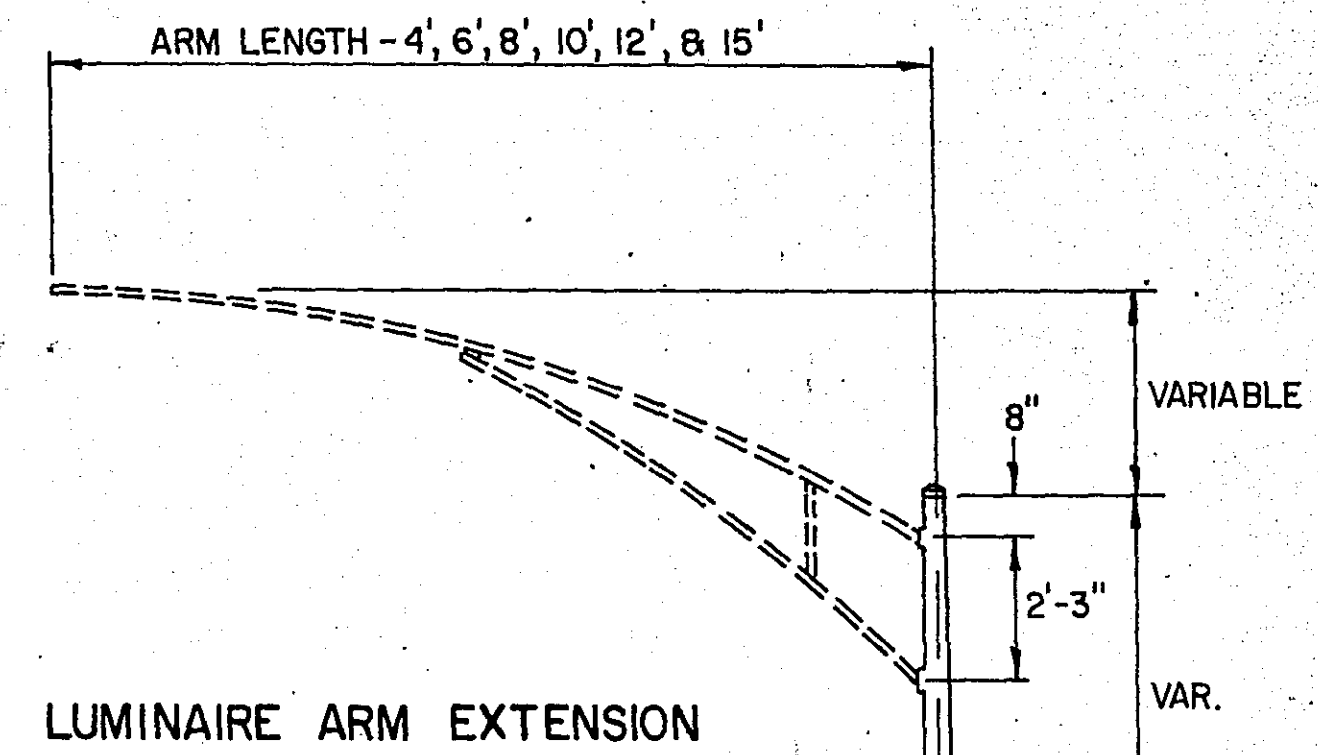


DETAIL D
MAST ARM ADAPTOR



SECTION E-E
POLE-MOUNTED SIGNAL HUB

- NOTES:
TYPE A-20-D30 OR 40-12 TYPE A-20-T30 OR 40-20
(1) (2) (3) (4) (1) (2) (3) (4)
1. LETTER TYPE INDICATES POLE MAST ARM POSITION WITH RESPECT TO THE C. OF ROADWAY.
 2. NUMBER FOLLOWING TYPE LETTER INDICATES SIGNAL MAST ARM LENGTH.
 3. SECOND LETTER INDICATES LUMINAIRE TRUSS -TYPE ARM EXTENSION OR DAVIT -TYPE ARM EXTENSION. SECOND LETTER FOLLOWED BY NUMBERS INDICATES LUMINAIRE MOUNTING HEIGHT.
 4. NUMBER FOLLOWING INDICATES LENGTH OF LUMINAIRE TRUSS ARM OR DAVIT ARM.



- (1) DIMENSIONS SHOWN SHOULD PROVIDE FOR A DISTANCE OF 30' OR 40' FROM TRANSFORMER BASE BOTTOM TO TOP OF LUMINAIRE. DIMENSIONS MAY VARY AS SPECIFIED BY THE RAMSEY COUNTY HIGHWAY DEPT.

FOR LUMINAIRE, USE TRUSS -TYPE ARM OR DAVIT -TYPE ARM SHAFT EXTENSION AS SPECIFIED

ROTATABLE LUMINAIRE EXTENSION AND MAST ARM CONNECTION (SEE DETAIL "C")

POLE CAP (SEE DETAIL "A")
VAR. (1)

3' x 5" HAND HOLE

20'-4-1/4"

16'-1" ± 1"

9'-9" ± 1"

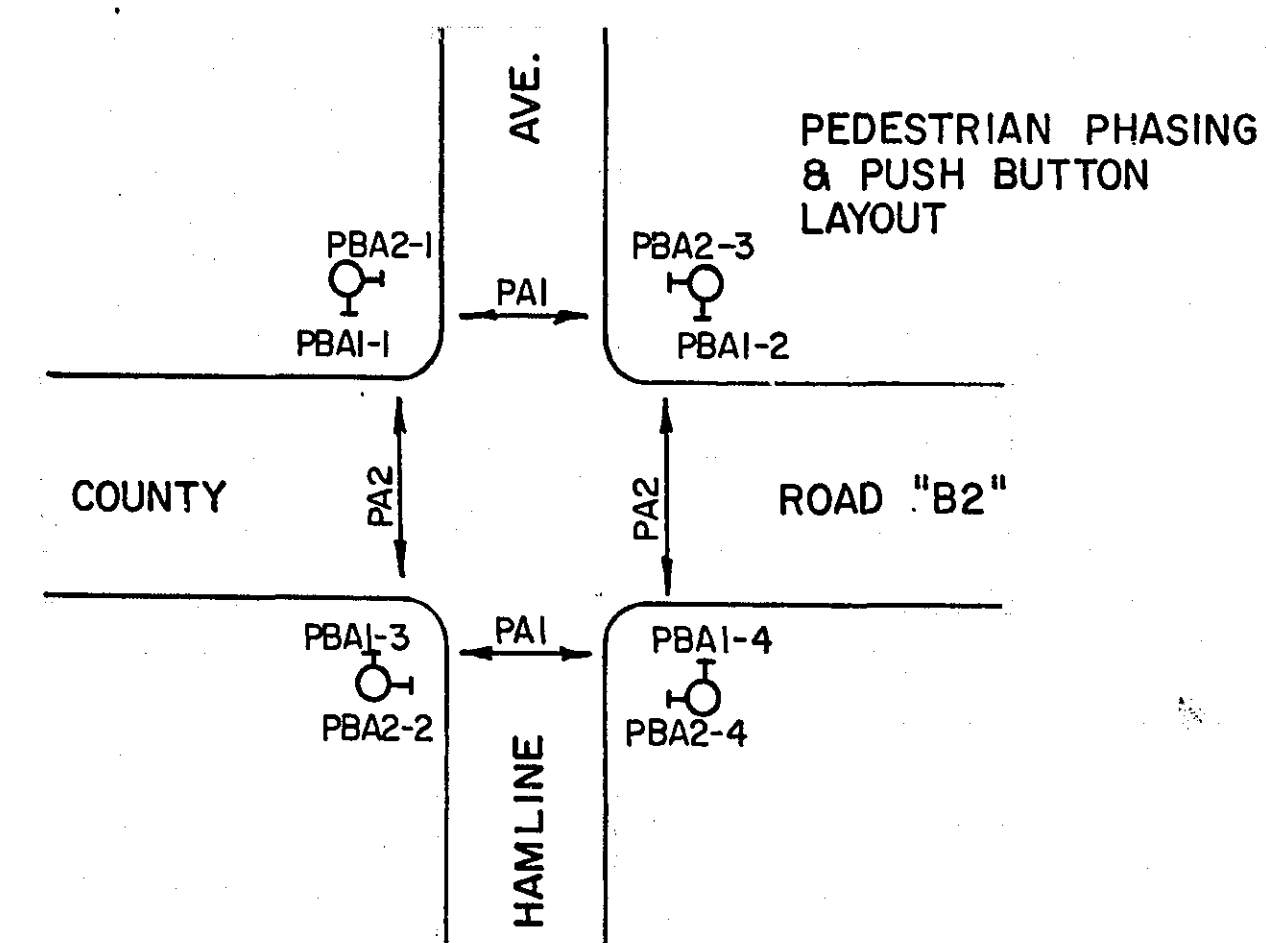
11'-0" ± 1"

1/2" I.P.S. HOLE DRILLED & TAPPED (180°) FOR STREET LIGHT CHECK SWITCH AND PLUG (IF SWITCH NOT REQUIRED)

TRANSFORMER BASE CONNECTION (SEE DETAIL "F")

ELEVATION

POLE AND MAST ARM

[illegible]

40' WOOD POLE, CLASS 2
1-DOWN GUY, METAL GUARD
& EXPANDING ANCHOR —

COUNTY

TYPE A-20
1-ONE WAY SIGNAL (OVERHEAD MTD.)
1-ONE WAY SIGNAL (POLE MTD. 270°)
2-SETS PEDESTRIAN INDICATIONS
2-PEDESTRIAN PUSH BUTTONS _____

1 1/4" R.M.C.

8' X 30' LOOP DETECTOR

STATION	LOCATION	DESCRIPTION
HAMLIN		
77+30	RT. 28'	PULLBOX 9
78+31	LT. 73'	PULLBOX 6
78+31	LT. 157'	PULLBOX 7
78+53	RT. 28'	PULLBOX 8
78+56	LT. 34'	SIGNAL NO. 2
78+65.5	RT. 40'	SIGNAL NO. 3
78+66	LT. 41'	PULLBOX 5
79+17	RT. 43'	PULLBOX 3
79+17	RT. 157'	PULLBOX 4
79+36	RT. 18'	SIGNAL NO. 4
79+30	LT. 44.5'	SIGNAL NO. 1
79+48	LT. 23'	PULLBOX 1
79+48	LT. 45'	CONTROL & CABINET
80+66	LT. 28'	PULLBOX 2
79+36	LT. 37'	40' WOOD POLE

