

PLANS SYMBOLS

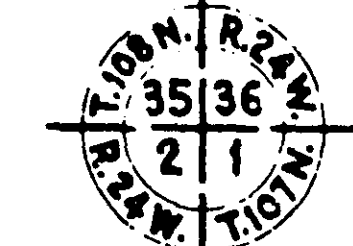
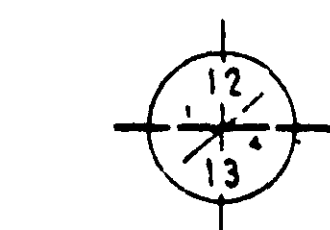
STATE LINE	----
COUNTY LINE	----
TOWNSHIP OR RANGE LINE	----
SECTION LINE	----
QUARTER LINE	----
SIXTEENTH LINE	----
RIGHT-OF-WAY LINE	----
PRESENT RIGHT-OF-WAY LINE	----
CONTROL OF ACCESS LINE	----
PROPERTY LINE (Except Land Lines)	----
VACATED PLATTED PROPERTY	----
CORPORATE OR CITY LIMITS	----
TRUNK 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)	----
P-FRAME	----
S-STONE	----
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 OR 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	----

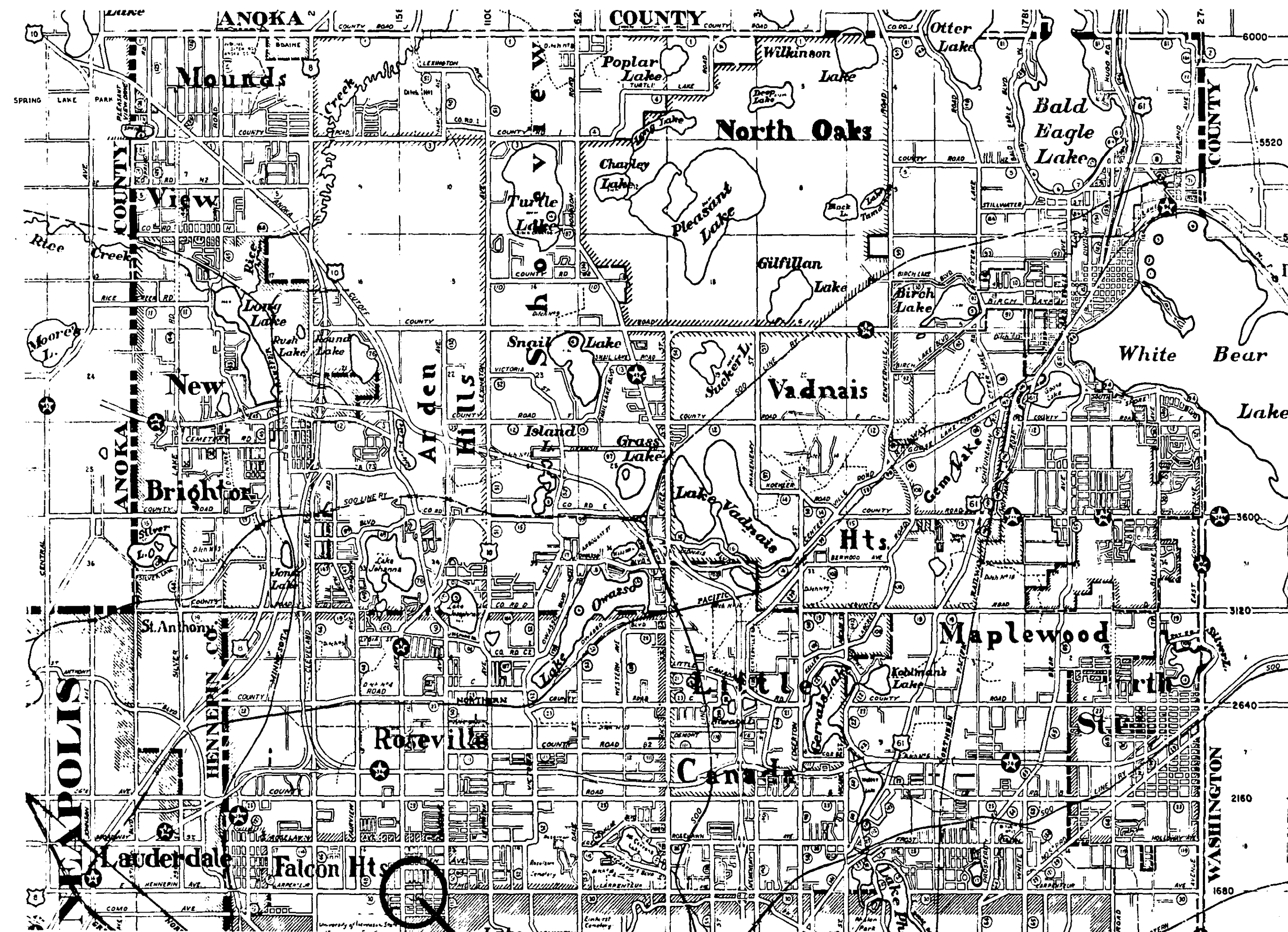


NOTE: SECTION NUMBERS READ FROM THE SOUTH

PIT DATA

PIT NO.	Located in Dead Haul
PIT NO.	Located in Dead Haul
PIT NO.	Located in Dead Haul
PIT NO.	Located in Dead Haul

SPECIFICATIONS
THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1964 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED FEBRUARY 1, 1966 SHALL GOVERN.



PROJ. 62-630-10

OFFICE OF COUNTY ENGINEER RAMSEY COUNTY

PLAN OF TRAFFIC CONTROL SYSTEM FOR THE INTERSECTION OF LARPENTEUR AVE. AND ARONA AVE.

DESCRIPTION: 673 FEET EAST OF THE SOUTHWEST CORNER OF SECTION 15, T.29N., R.23W.

S.A.P. NO. 62-630-10

SCALES	PLAN, inch =	Foot
	PROFILE, Horiz. inch =	Foot Vert. inch = 5 Feet
	WORKING PLANS	Horiz. inch = Foot Vert. inch = Foot
	LAYOUT, 1 inch =	2640 Feet

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2 & 3	DETAILS
4	FIELD WIRING DIAGRAM
5	INTERSECTION LAYOUT

THIS PLAN
CONTAINS 5 SHEETS

DESIGNED BY	<i>W. V. Schmitt</i>	DATE	<i>Feb 9 1967</i>
DIRECTOR OF SAFETY			
RECOMMENDED FOR APPROVAL	<i>David R. Orlick</i>	DATE	<i>2-10-67</i>
COUNTY ENGINEER			
APPROVED	<i>Thomas R. Pryor</i>	DATE	
CHAIRMAN OF THE RAMSEY COUNTY BOARD			
APPROVED	<i>A. C. Johnson</i>	DATE	<i>Feb 9 1967</i>
MAYOR, VILLAGE OF FALCON HEIGHTS			
MINNESOTA STATE HIGHWAY DEPARTMENT			
RECOMMENDED FOR APPROVAL	<i>C. E. Weichselbaum</i>	DATE	<i>1-16-67</i>
RECOMMENDED FOR APPROVAL	<i>R. F. Berglund</i>	DATE	<i>1-16-67</i>
DISTRICT STATE HIGHWAY ENGINEER			
APPROVAL	<i>for R. F. Berglund</i>	DATE	<i>3-16-67</i>
STATE HIGHWAY ENGINEER			

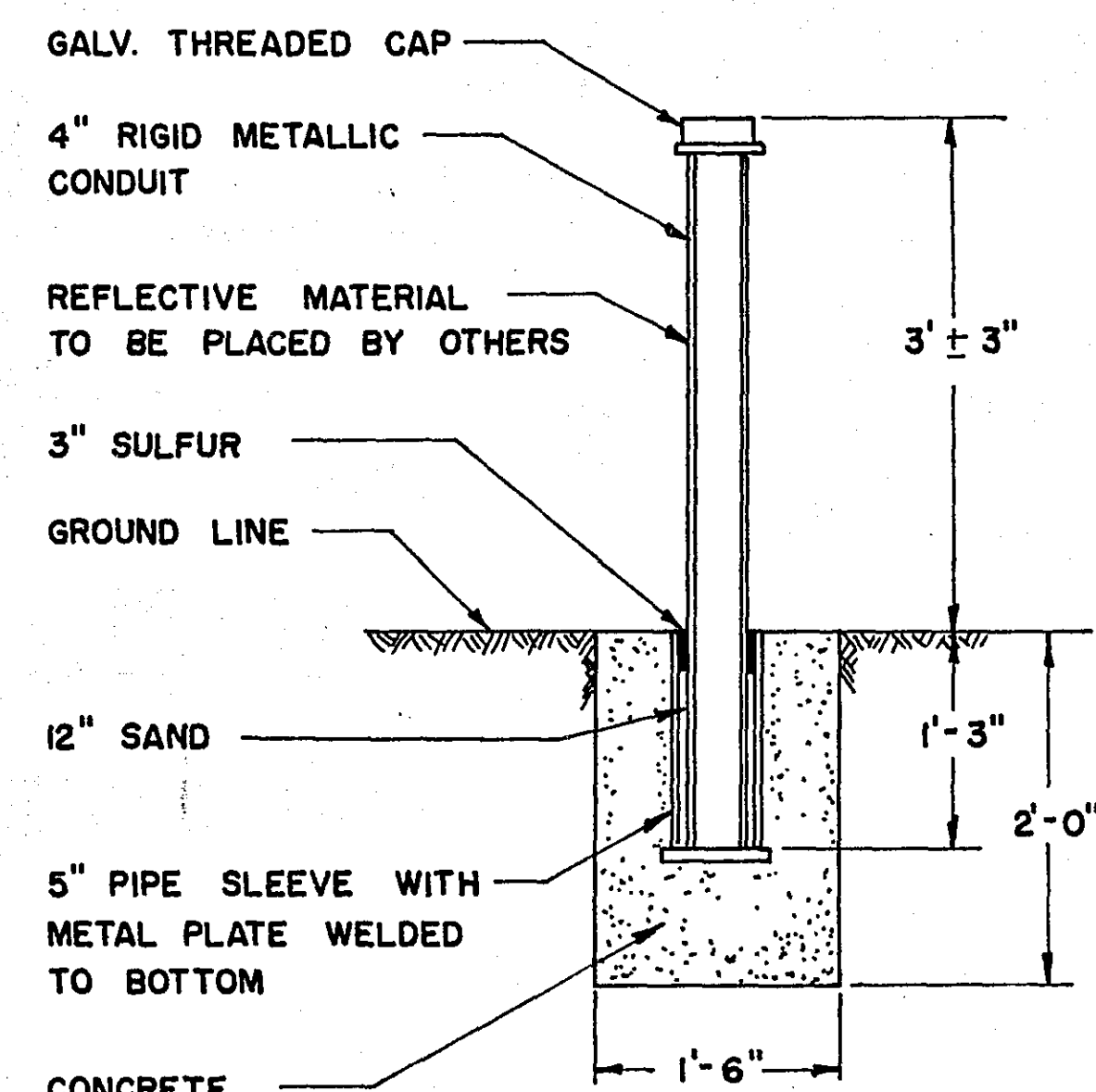
S.A.P. NO. 62-630-10

Sheet No. 1 of 5 Sheets

6872

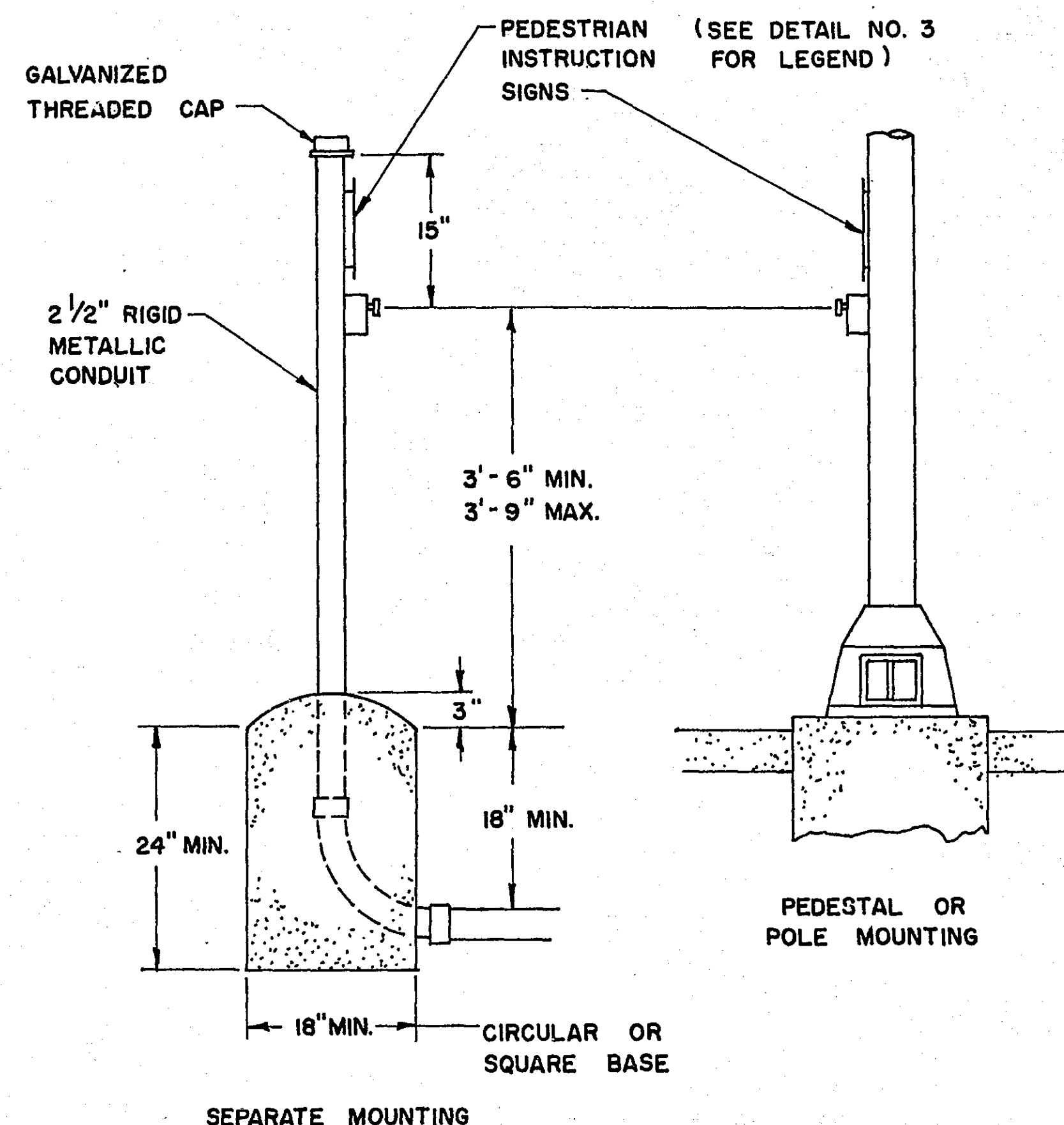
17-102

GUARD POST

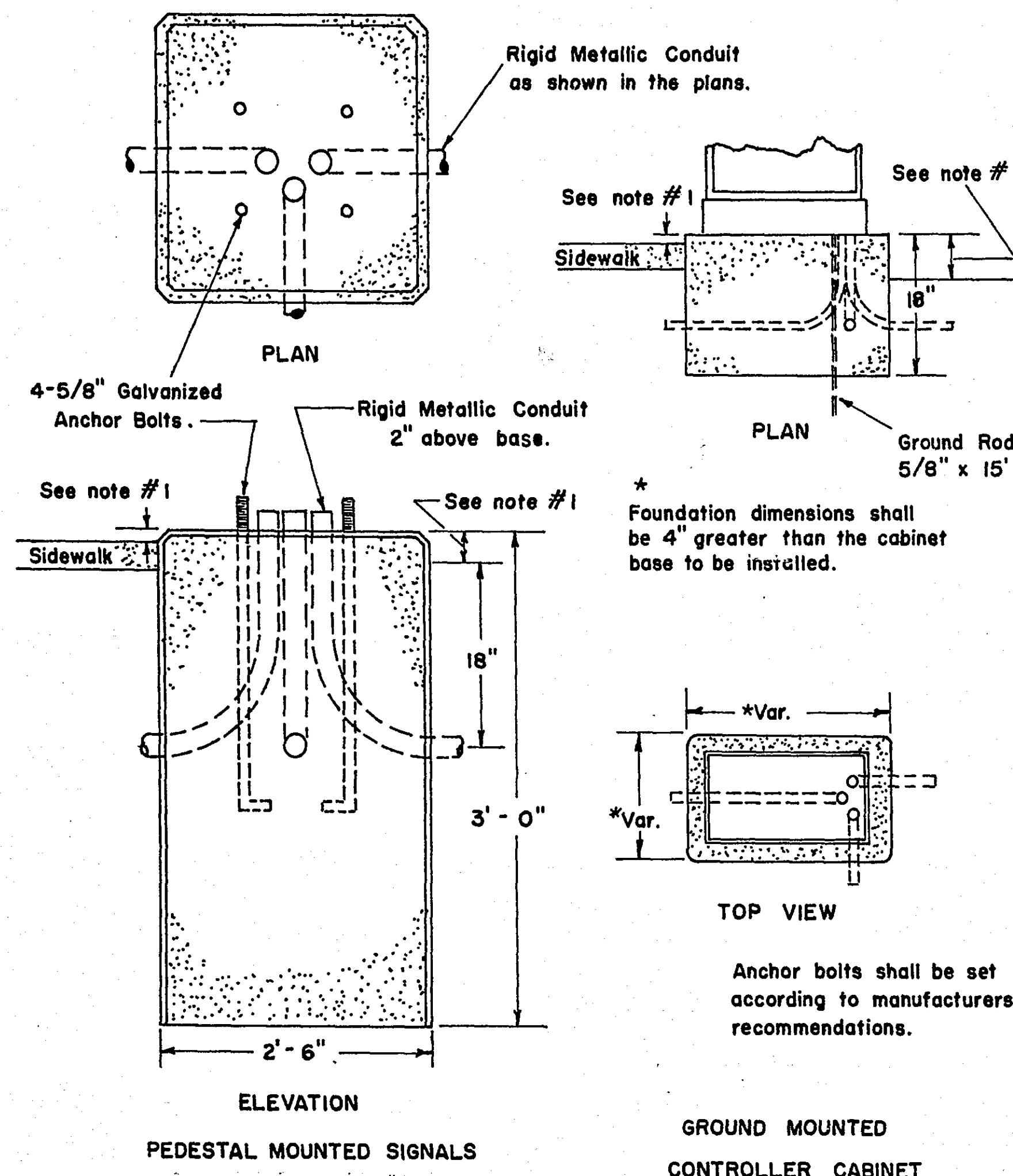


NOTE: THE TOP OF GUARD POSTS SHALL BE SET TO A UNIFORM GRADE AT EACH LOCATION.

PEDESTRIAN PUSH BUTTON DETAIL NO. 1



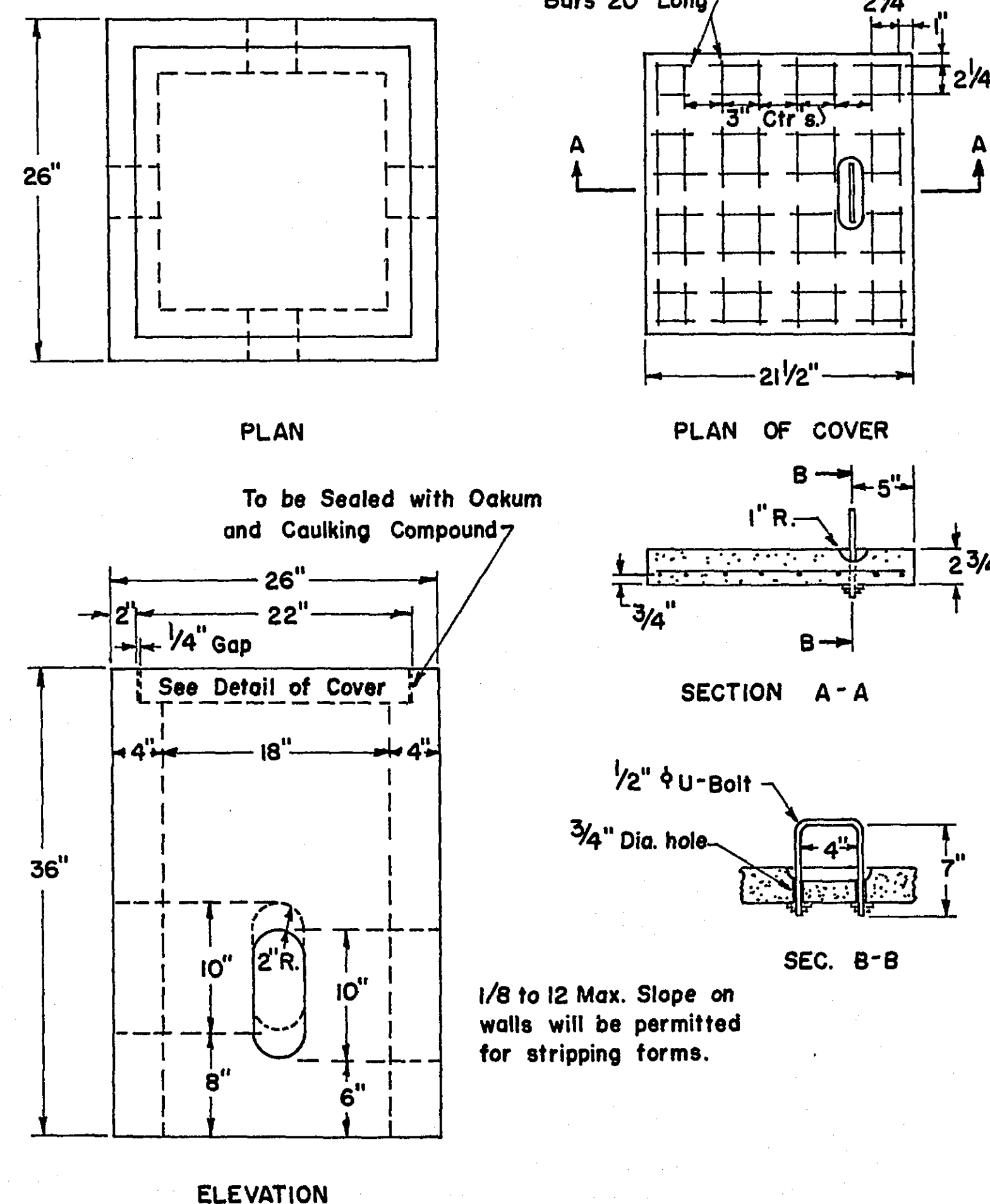
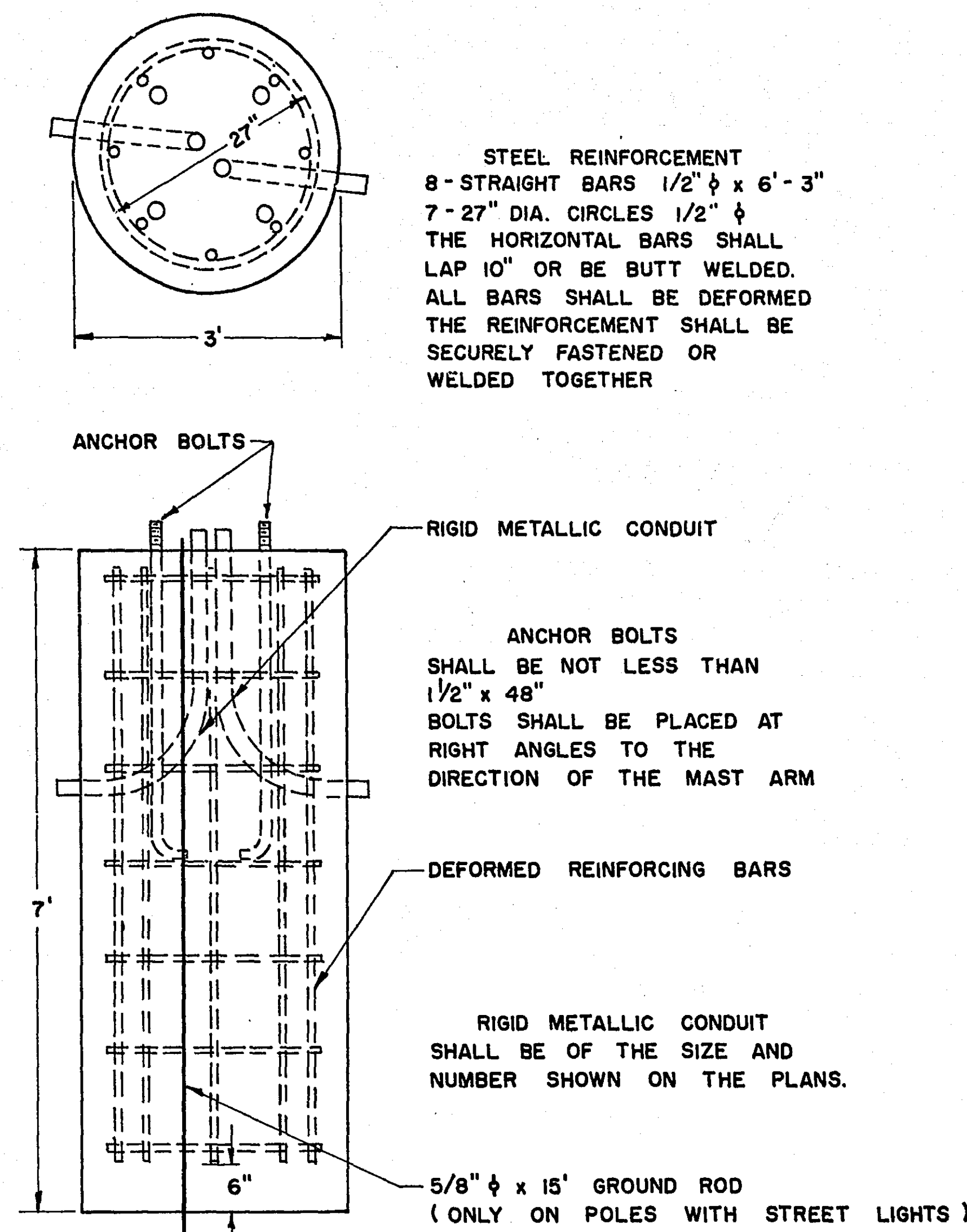
NOTE #1
Distance from ground line variable from 1/4" in the sidewalk area to 8" in the shoulder or blvd. areas.



CONCRETE FOUNDATIONS

CONCRETE FOUNDATION

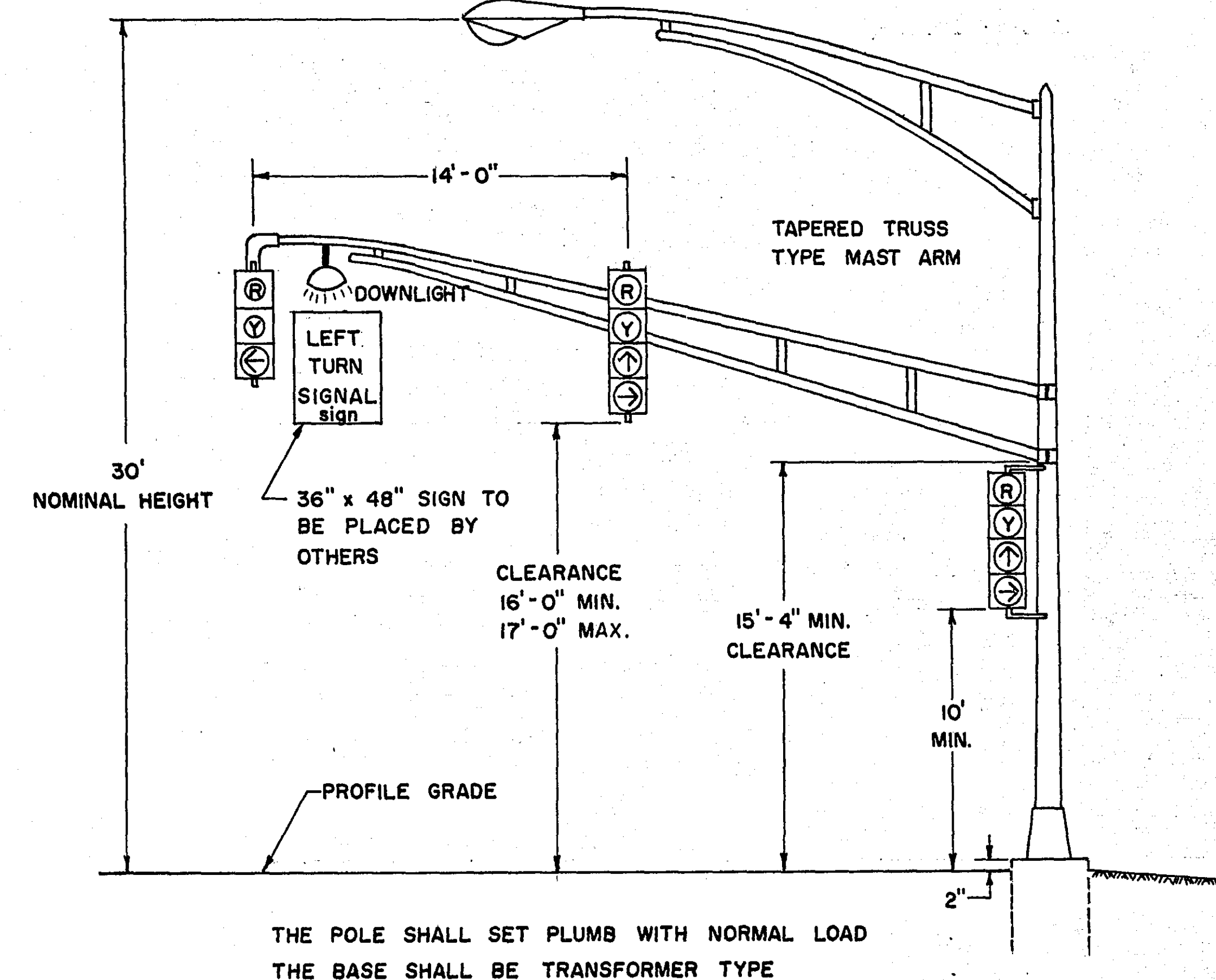
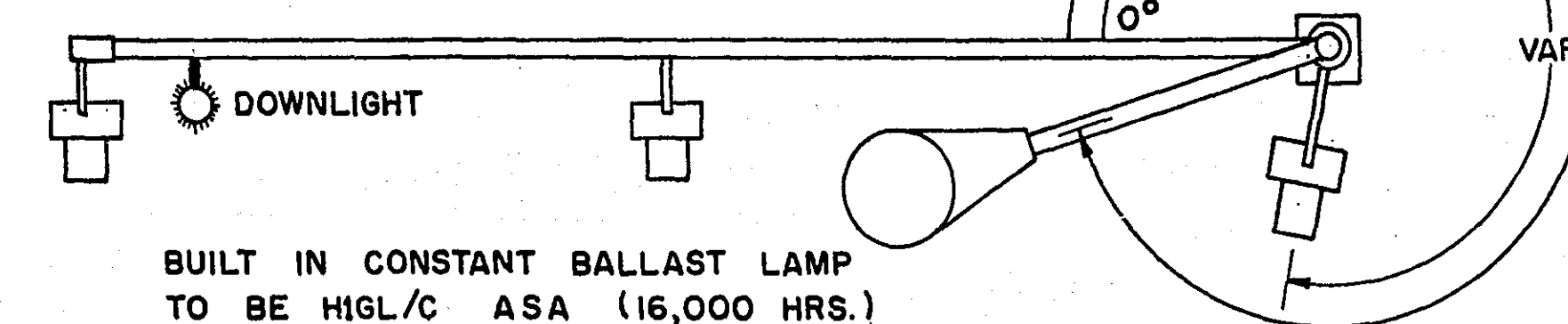
FOR MAST ARM TRAFFIC SIGNAL POLE



MAST ARM TRAFFIC SIGNAL POLE

SCALE NONE

STANDARD LAMP SPECIFICATION
IES TYPE 3 LUMINAIRE
400 WATT MERCURY (COLOR CORRECTED) LAMP.
(SEE SPECIAL PROVISIONS)



MICROFILMED
RAMSEY CO. ENGR.

PRECAST CONCRETE HANDHOLE OR PULLBOX

S.A.P. 62-630-10

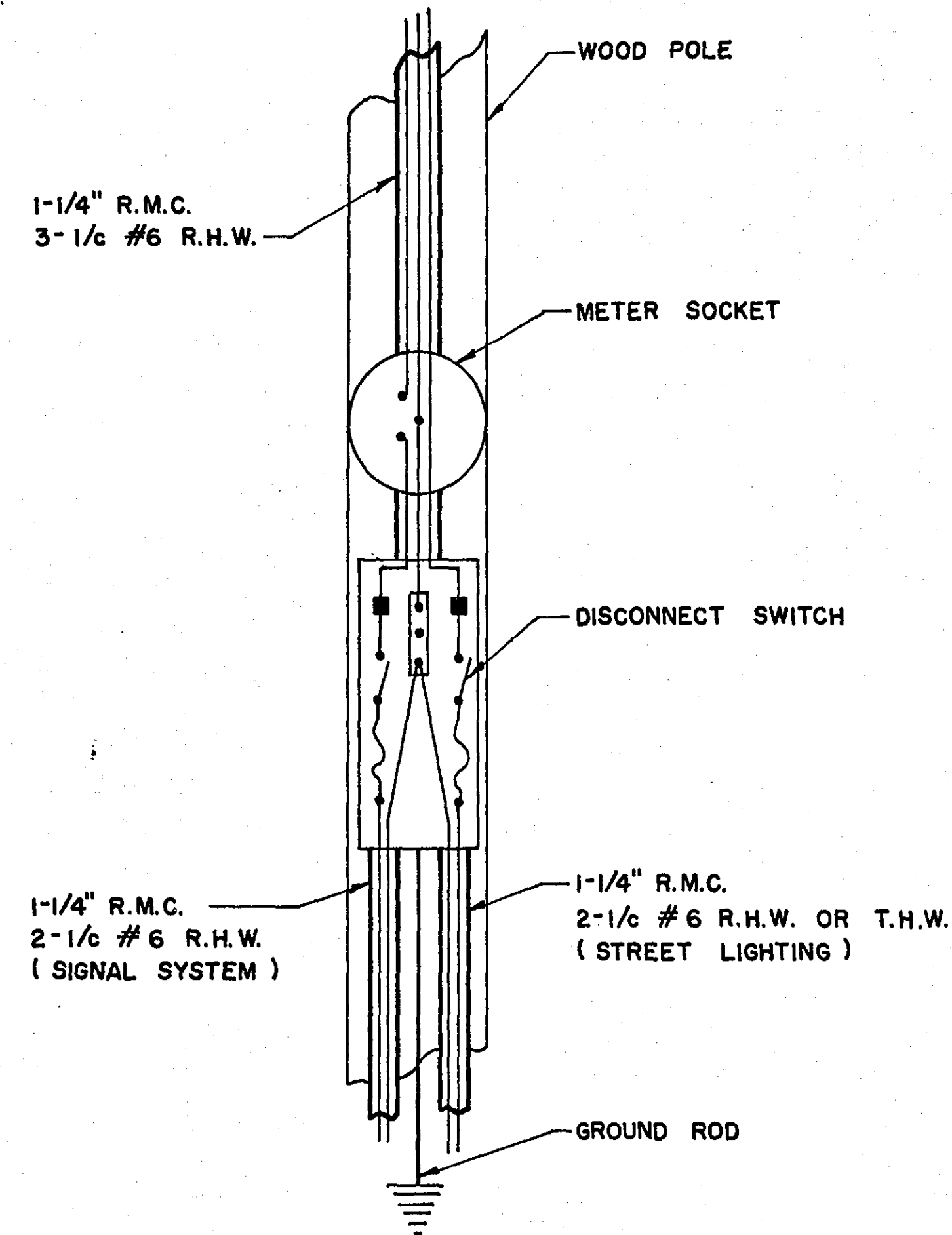
Sheet No. 2 of 5 Sheets

6872 17-102

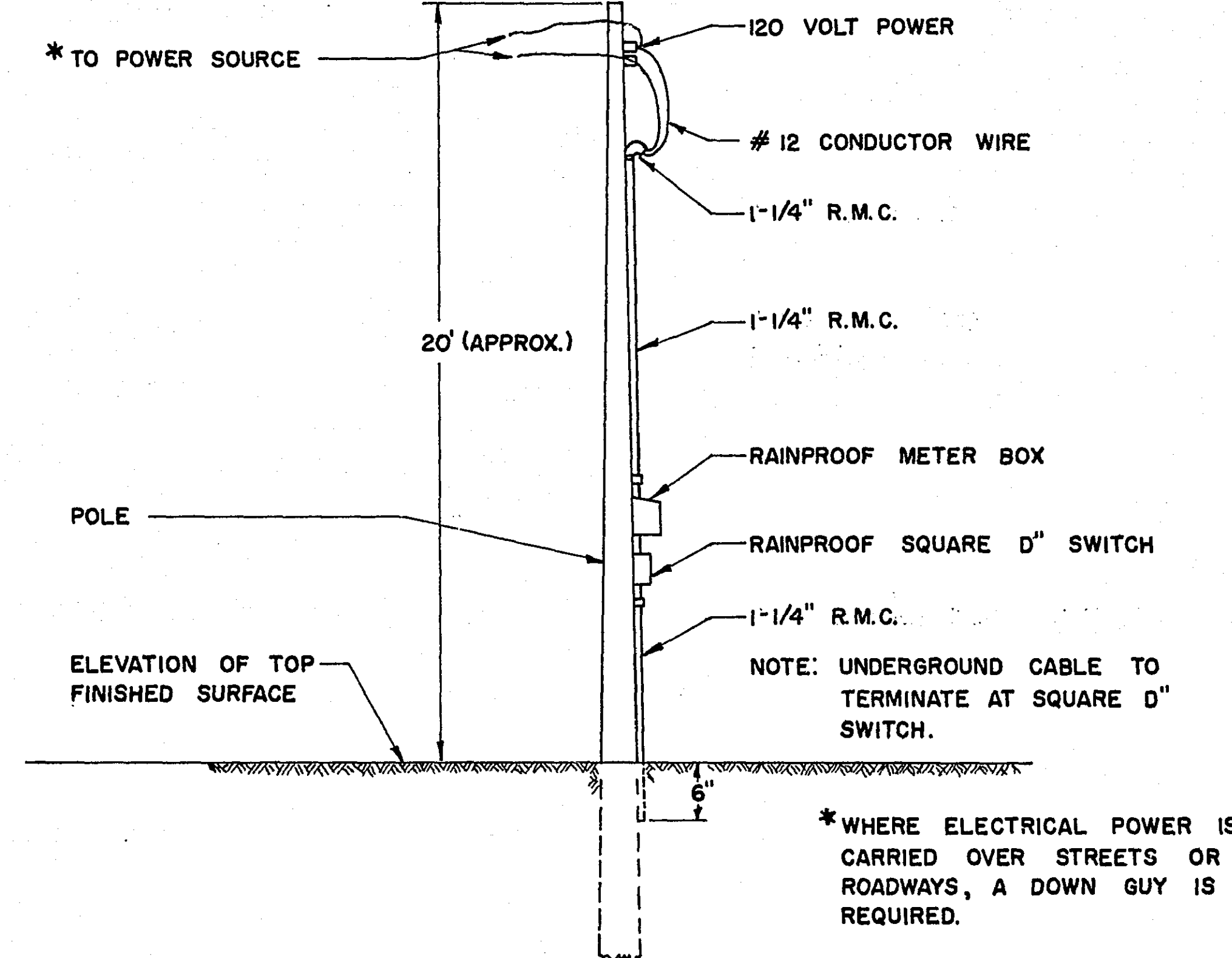
METER AND DISCONNECT DETAIL

SCALE: NONE

HOOKUP FOR LIGHTING AND
SIGNAL (120/240 VOLTS)



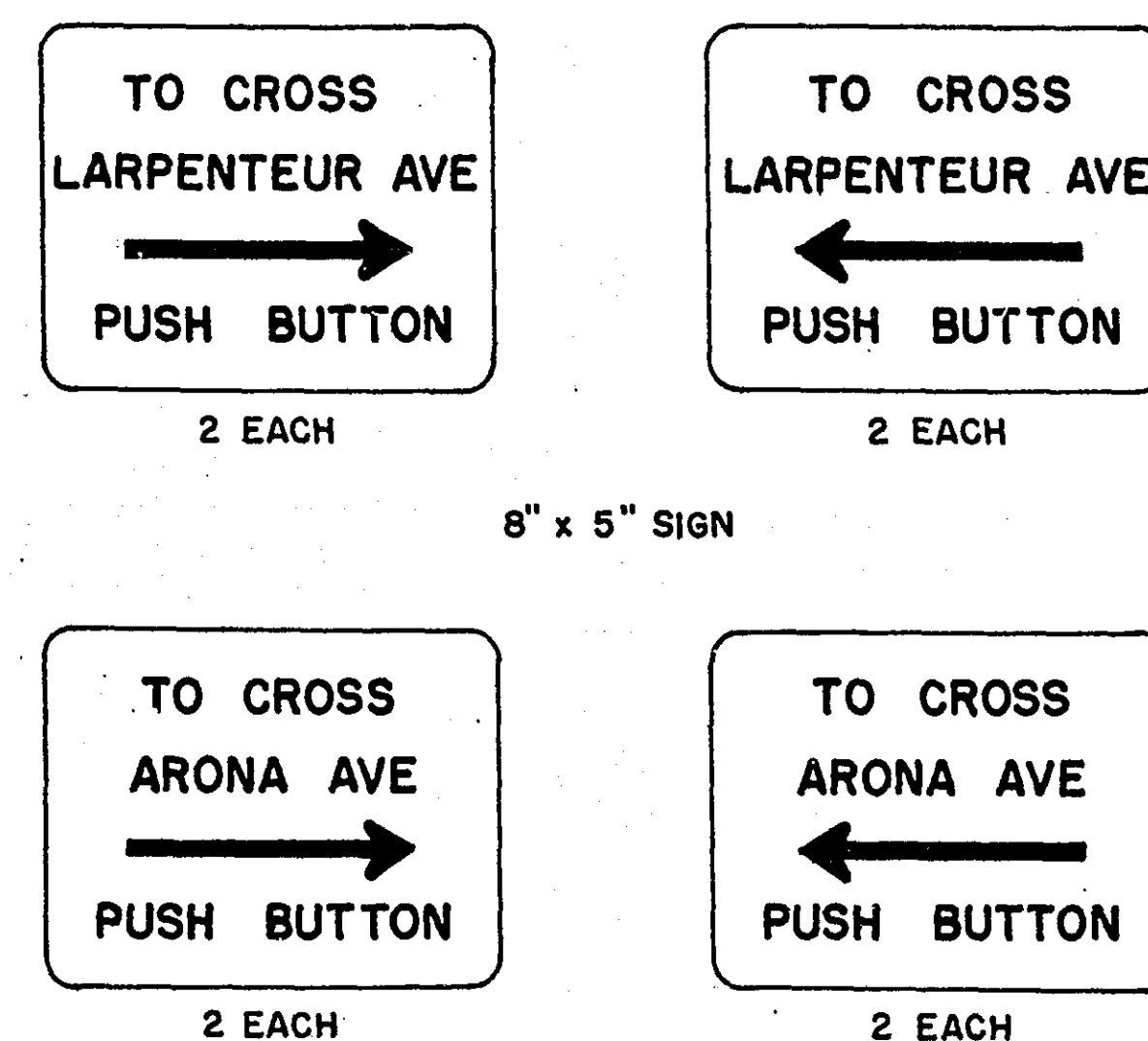
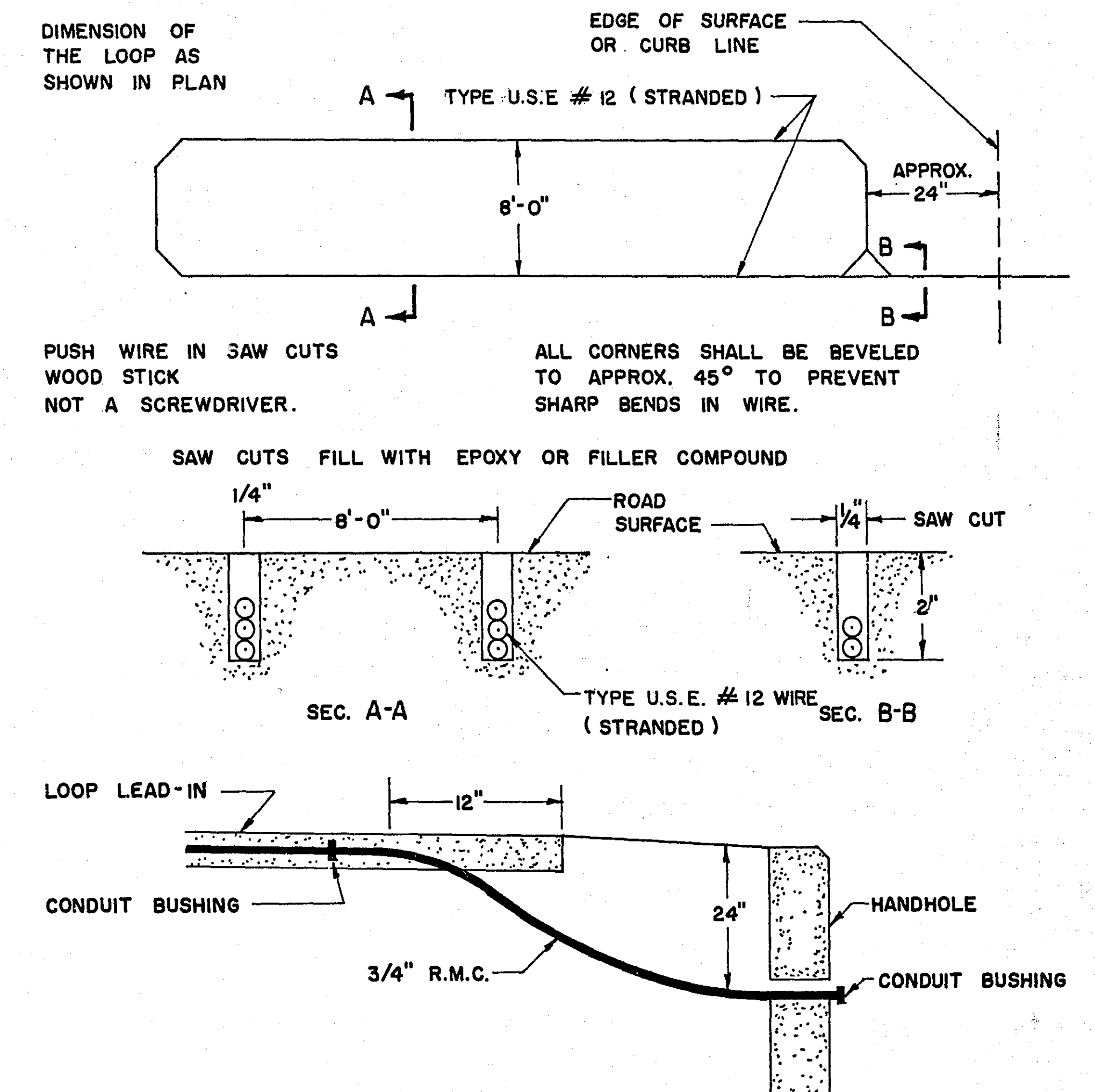
POLE FOR POWER CONNECTION



DETECTION LOOP INSTALLATION

DETAIL NO. 2

SCALE: NONE



DETAIL NO. 3 PEDESTRIAN INSTRUCTION SIGNS

SCALE: NONE

S.A.P. 62-630-10

Sheet No. 3 of 5 Sheets

MICROFILMED
RAMSEY CO. ENGR.

6872 17-102

LEGEND OF SYMBOLS	
	CONTROLLER
	PEDESTAL
	HANDHOLE (PULLBOX)
	RIGID METALLIC CONDUIT (R.M.C.)
	MAST ARM & POLE
	SIGNAL FACE
	SIGNAL FACE WITH BACKGROUND SHIELD
	MAST ARM & LUMINAIRE
	PEDESTRIAN INDICATION
	PEDESTRIAN PUSH BUTTON
	SOURCE OF POWER
	METAL GUARD POSTS

8' x 16'
DIRECTIONAL LOOP DETECTOR
MANUFACTURE OF EQUIPMENT SHALL
FURNISH INSTALLATION DIAGRAM
(SEE SPECIAL PROVISIONS)

1" R.M.C.
4- 3/c # 12

3" R.M.C.
3- 12/c # 12
1- 3/c # 12
2- 1/c # 6 TYPE R.H.W. OR T.H.W.

2- PEDESTRIAN PUSH BUTTONS
(SEE DETAIL NO. 1)

30' MAST ARM AND POLE WITH SHAFT EXTENSION
15' MAST ARM AND LUMINAIRE (320°)
2- ONEWAY SIGNALS (OVERHEAD)
1- TOWAY SIGNAL (POLE MTD. 270°)
2- SETS PEDESTRIAN INDICATIONS

3" R.M.C.
2- 12/c # 12
2- 3/c # 12
2- 1/c # 6 TYPE R.H.W. OR T.H.W.

8' x 35'
LOOP DETECTOR
(SEE DETAIL NO. 2)

3" R.M.C.
3- 3/c # 12
1- 12/c # 12

1- 10' SIGNAL PEDESTAL (TRANSFORMER BASE)
1- ONEWAY SIGNAL
2- PEDESTRIAN PUSH BUTTONS
2- SETS PEDESTRIAN INDICATIONS

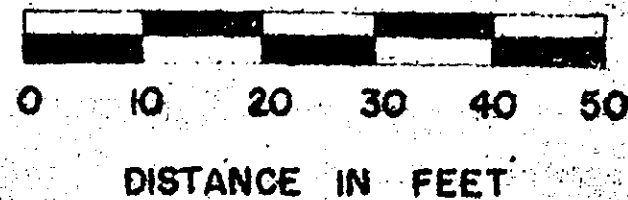
2" R.M.C.
2- 3/c # 12
1- 12/c # 12

8' x 35'
LOOP DETECTOR
(SEE DETAIL NO. 2)

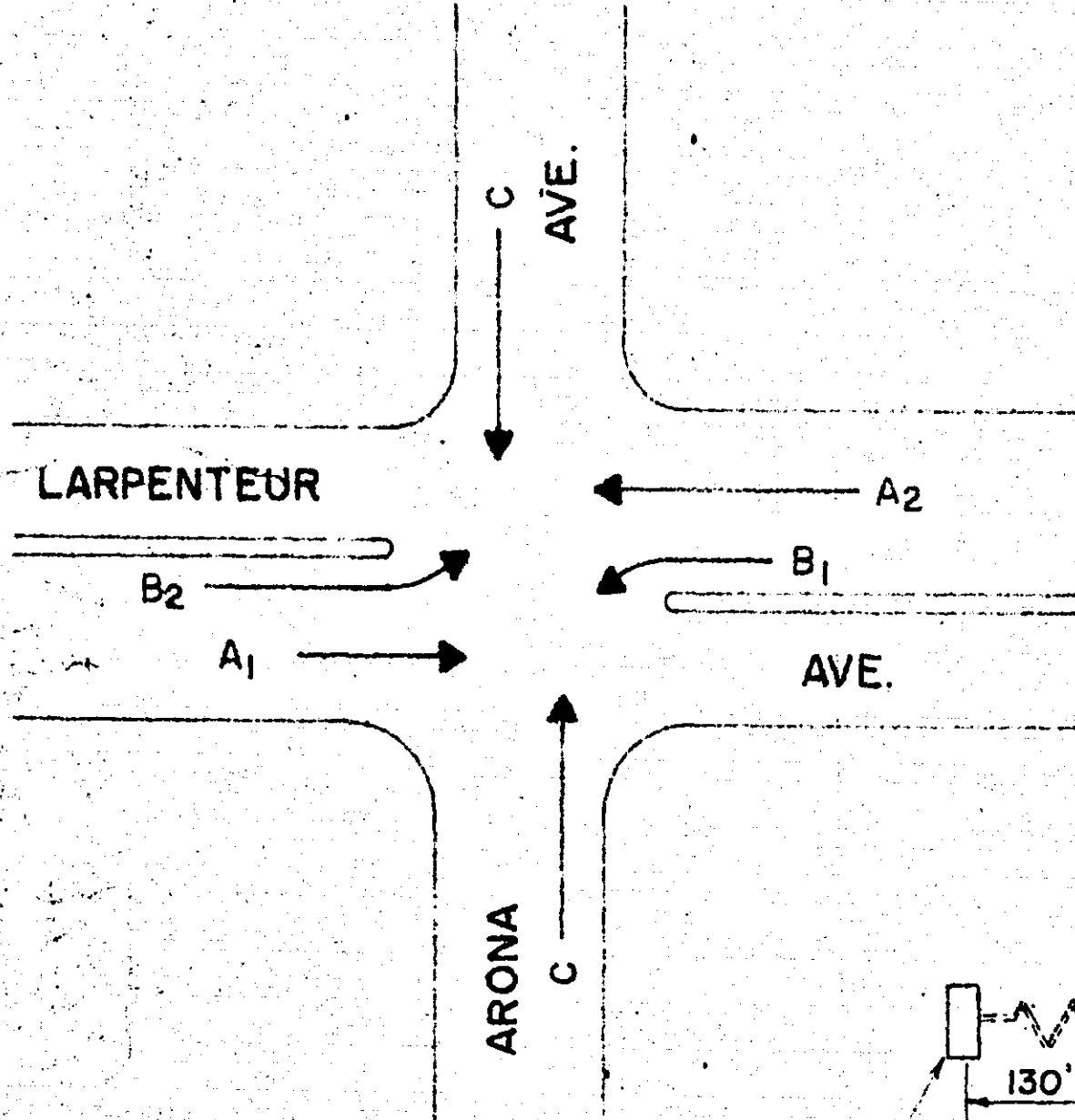
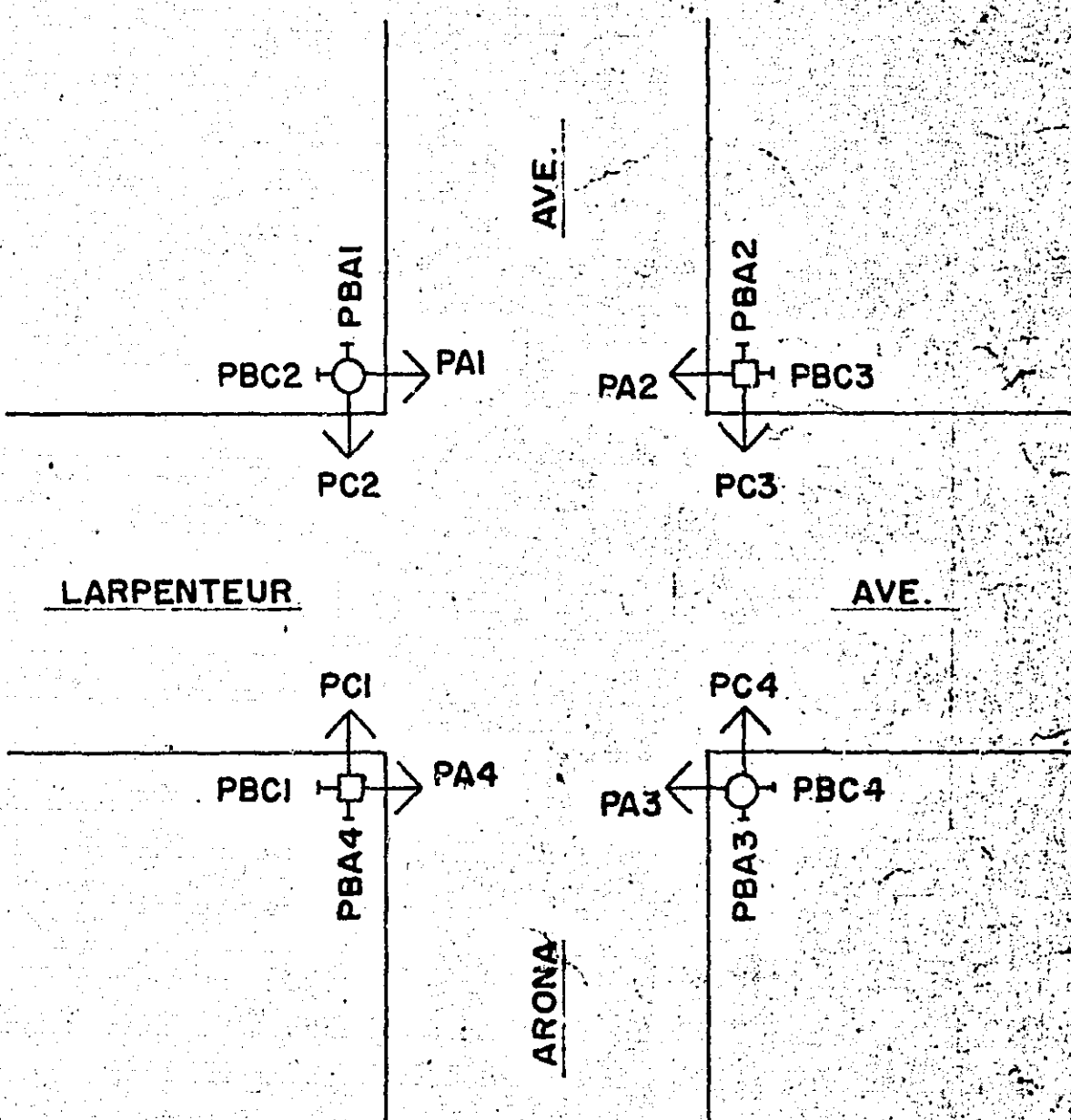
1/4" R.M.C.
1- 3/c # 12

8' x 25'
LOOP DETECTOR
(SEE DETAIL NO. 2)

LARPEN TEUR AVE. & ARONA AVE.



PED. IND. & PUSHBUTTON
LAYOUT



FACE	PHASE	FLASH	INDICATION SIZE					
			R	Y	G	←	↑	→
B1	B1	Y	8"	8"	-	12"	-	-
B2	B2	Y	8"	8"	-	12"	-	-
A1	A1	R	12"	12"	-	-	12"	12"
A2	A1	R	12"	12"	-	-	12"	12"
A3	A2	R	12"	12"	-	-	12"	12"
A4	A2	R	12"	12"	-	-	12"	12"
C1	C	R	12"	12"	12"	-	-	-
C2	C	R	12"	12"	12"	-	-	-
C3	C	R	12"	12"	12"	-	-	-
C4	C	R	12"	12"	12"	-	-	-

2" R.M.C.
1- 3/c # 12
1- 12/c # 12 NO SPLICES
540' FROM CONTROLLER CABINET
AT ARONA AVE. TO CONTROLLER
CABINET AT SNELLING AVE.

8' x 20'
LOOP DETECTOR
(SEE DETAIL NO. 2)

1" R.M.C.
2- 1/c # 12 TYPE U.S.E. (STRANDED)

CONTROLLER AND CABINET
(SEE SPECIAL PROVISIONS)
4- METAL GUARD POST

2- 3" R.M.C.

4- 12/c # 12
11- 3/c # 12
2- 1/c # 6 TYPE R.H.W. OR T.H.W.

2" R.M.C.
4- 3/c # 12
2- 12/c # 12

1- 10' SIGNAL PEDESTAL (TRANSFORMER BASE)
1- ONEWAY SIGNAL
2- PEDESTRIAN PUSH BUTTONS
2- SETS PEDESTRIAN INDICATIONS

1" R.M.C.
2- 1/c # 12 TYPE U.S.E. (STRANDED)

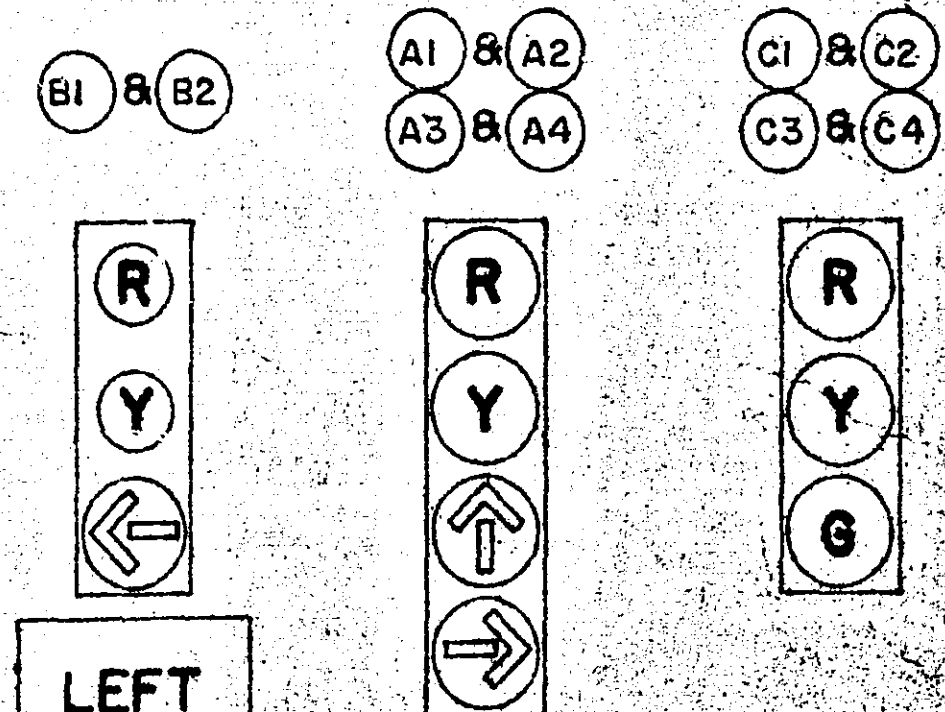
35' MAST ARM AND POLE WITH SHAFT EXTENSION
15' MAST ARM AND LUMINAIRE (320°)
2- ONEWAY SIGNALS (OVERHEAD)
1- TOWAY SIGNAL (POLE MTD. 270°)
2- SETS PEDESTRIAN INDICATIONS
2- PEDESTRIAN PUSH BUTTONS
1- PHOTOELECTRIC CELL (DOWNLIGHTS)

3" R.M.C.
2- 12/c # 12
3- 3/c # 12
2- 1/c # 6 TYPE R.H.W. OR T.H.W.

8' x 16'
LOOP DETECTOR
(SEE DETAIL NO. 2)

3" R.M.C.
2- 12/c # 12
5- 3/c # 12
2- 1/c # 6 TYPE R.H.W. OR T.H.W.

SIGNAL FACE INDICATIONS



LEFT
TURN
SIGNAL

SIGN TO BE PLACED BY OTHERS.

MICROFILMED
RAMSEY CO. ENGR.