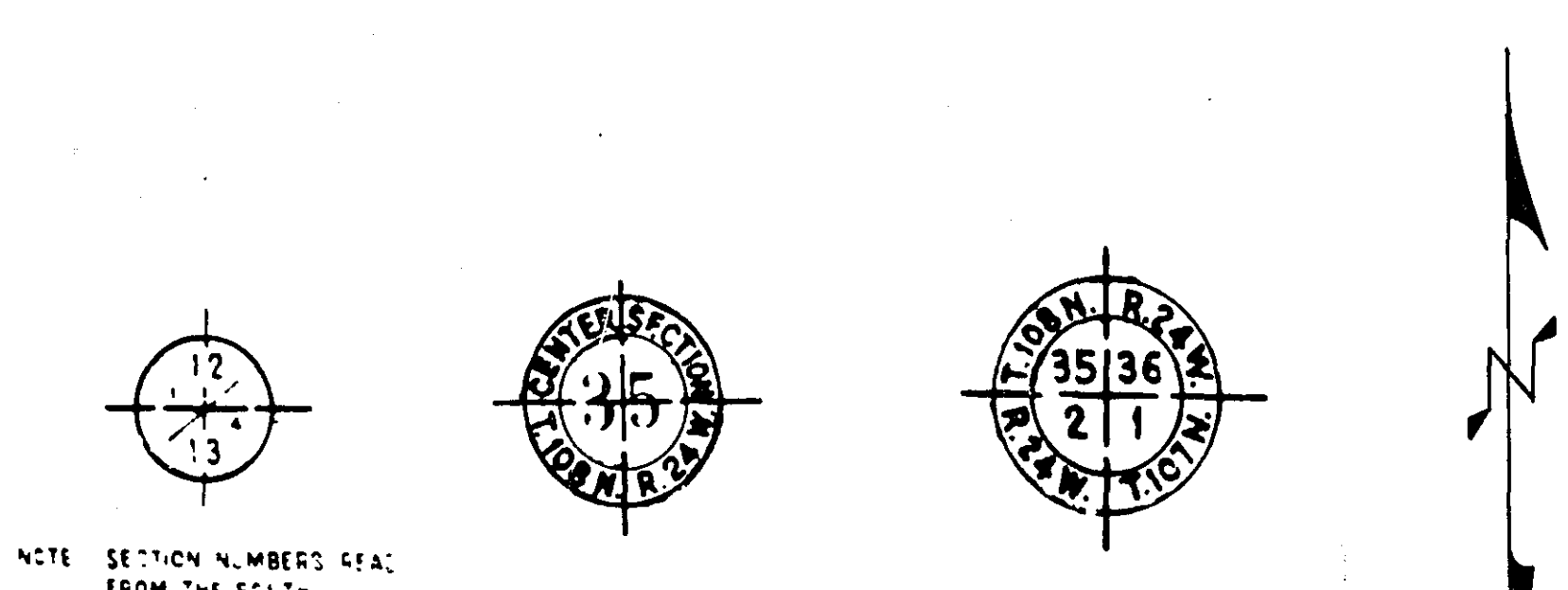


PLANS SYMBOLS

STATE LINE	SPRINGS
COUNTY LINE	MARSH
TOWNSHIP OR RANGE LINE	TIMBER
SECTION LINE	ORCHARD
QUARTER LINE	BRUSH
SIXTEENTH LINE	NURSERY
RIGHT OF WAY LINE	CATCH BASIN
PRESENT RIGHT OF WAY LINE	FIRE HYDRANT
CONTROL OF ACCESS LINE	CATTLE GUARD
PROPERTY LINE (Except Land Lines)	OVERPASS (Highway Over)
VACATED PLATTED PROPERTY	UNDERPASS (Highway Under)
CORPORATE OR CITY LIMITS	BRIDGE
TRUNK HIGHWAY CENTER LINE	BUILDING (One Story Frame)
RETAINING WALL	P FRAME C CONCRETE
RAILROAD	S STONE T TILE
RAILROAD RIGHT OF WAY LINE	B BRICK ST STUCCO
RAILROAD RIGHT OF WAY LINE	IRON PIPE OR ROD
RIVER OR CREEK	MONUMENT (STONE, CONCRETE, OR METAL)
DRY RUN	WOODEN HUB
DRAINAGE DITCH	GRAVEL PIT
DRAIN TILE	SAND PIT
CULVERT	BORROW PIT
DROP INLET	ROCK QUARRY
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	

UTILITIES SYMBOLS

POWER POLE LINE	CONDUIT
TELEPHONE OR TELEGRAPH POLE LINE	TELEPHONE CABLE IN CONDUIT
JOINT TELEPHONE AND POWER ON POWER POLES	ELECTRIC CABLE IN CONDUIT
ON TELEPHONE POLES	TELEPHONE MANHOLE
ANCHOR	ELECTRIC MANHOLE
STEEL TOWER	BURIED TELEPHONE CABLE
STREET LIGHT	BURIED ELECTRIC CABLE
PEDestal (TELEPHONE CABLE TERMINAL)	AERIAL TELEPHONE CABLE
GAS MAIN	SEWER, (SANITARY OR STORM)
WATER MAIN	SEWER MANHOLE



PIT DATA

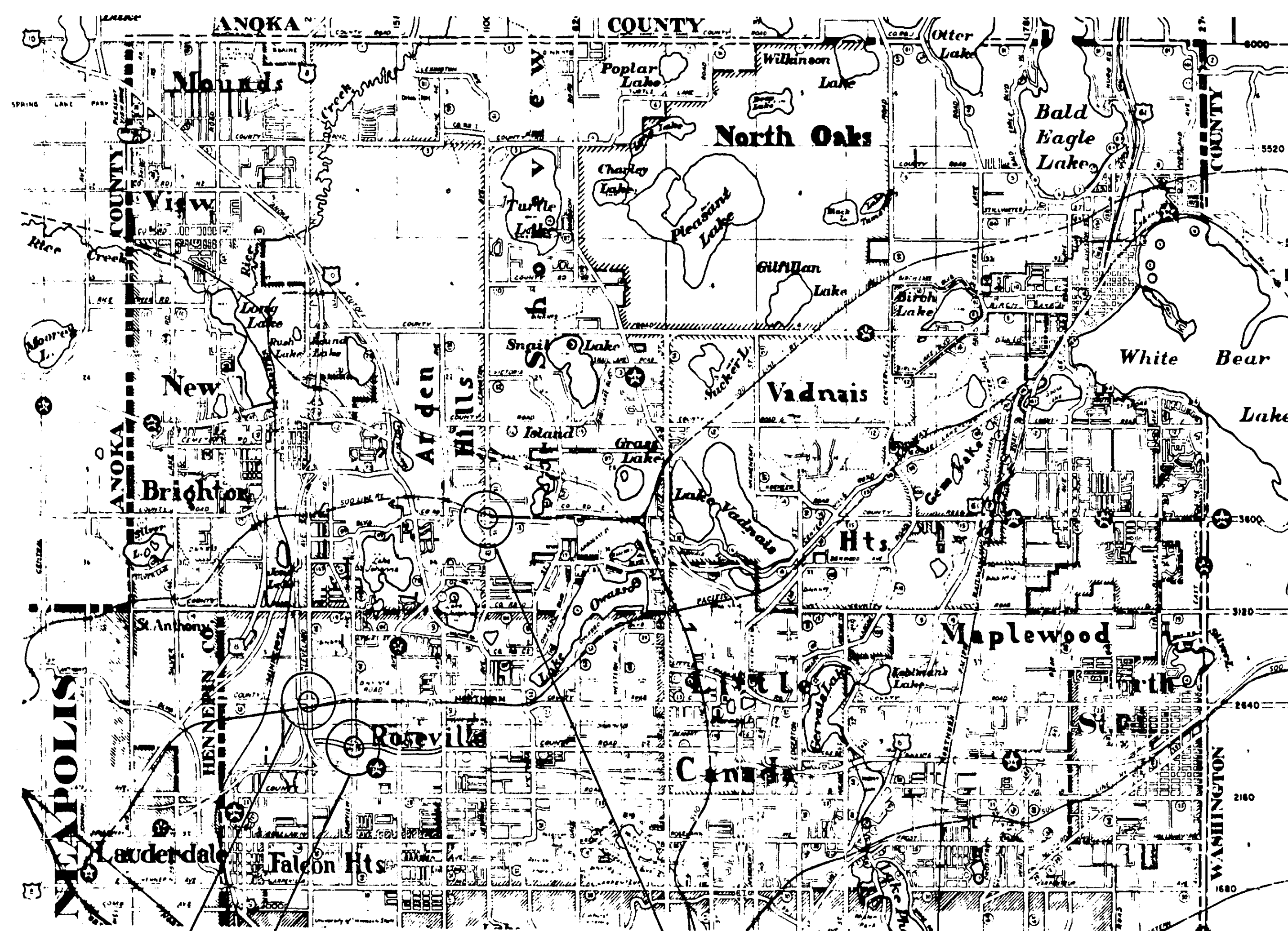
PIT NO.	Located in
PIT NO.	Dead Haul
PIT NO.	Located in
PIT NO.	Dead Haul

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1972 SHALL GOVERN.

OFFICE OF COUNTY ENGINEER RAMSEY COUNTY

PLAN OF TRAFFIC CONTROL SYSTEM FOR THE INTERSECTIONS OF

FED. PROJ. NO. EHS T 5007 (005)	S.P. NO. 62-648-06	FAIRVIEW AVE. & COUNTY RD. "B2"	(A)
	S.P. NO. 62-623-12	CLEVELAND AVE. & COUNTY RD. "C"	(B)
FED. PROJ. NO. EHS T 5007 (006)	S.P. NO. 62-615-03	LEXINGTON AVE. & COUNTY RD. "E"	(C)



CITY OF ST. PAUL

INTERSECTION (A)
INTERSECTION (B)
INTERSECTION (C)

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Date 6-20-72 Reg. No. 5031

RECOMMENDED FOR APPROVAL [Signature] DATE 6/6/72
RECOMMENDED FOR APPROVAL [Signature] DATE 6/6/72
RECOMMENDED FOR APPROVAL [Signature] DATE 6/6/72
RECOMMENDED FOR APPROVAL [Signature] DATE 6/6/72
RECOMMENDED FOR APPROVAL [Signature] DATE 6/6/72
APPROVED [Signature] DATE 6/11/72

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	DETAILS
3	INTERSECTION (A) LAYOUT
4-5	FIELD WIRING DIAGRAM
6	INTERSECTION (B) LAYOUT
7-8	FIELD WIRING DIAGRAM
9	INTERSECTION (C) LAYOUT
10-11	FIELD WIRING DIAGRAM

DESIGNED BY [Signature] DATE 6/6/72

RECOMMENDED FOR APPROVAL [Signature] DATE 6/12/72

APPROVED [Signature] DATE 6/12/72

APPROVED [Signature] DATE 6/12/72

APPROVED [Signature] DATE 6/12/72

MINNESOTA STATE HIGHWAY DEPARTMENT

RECOMMENDED FOR APPROVAL [Signature] DATE 7-28-72

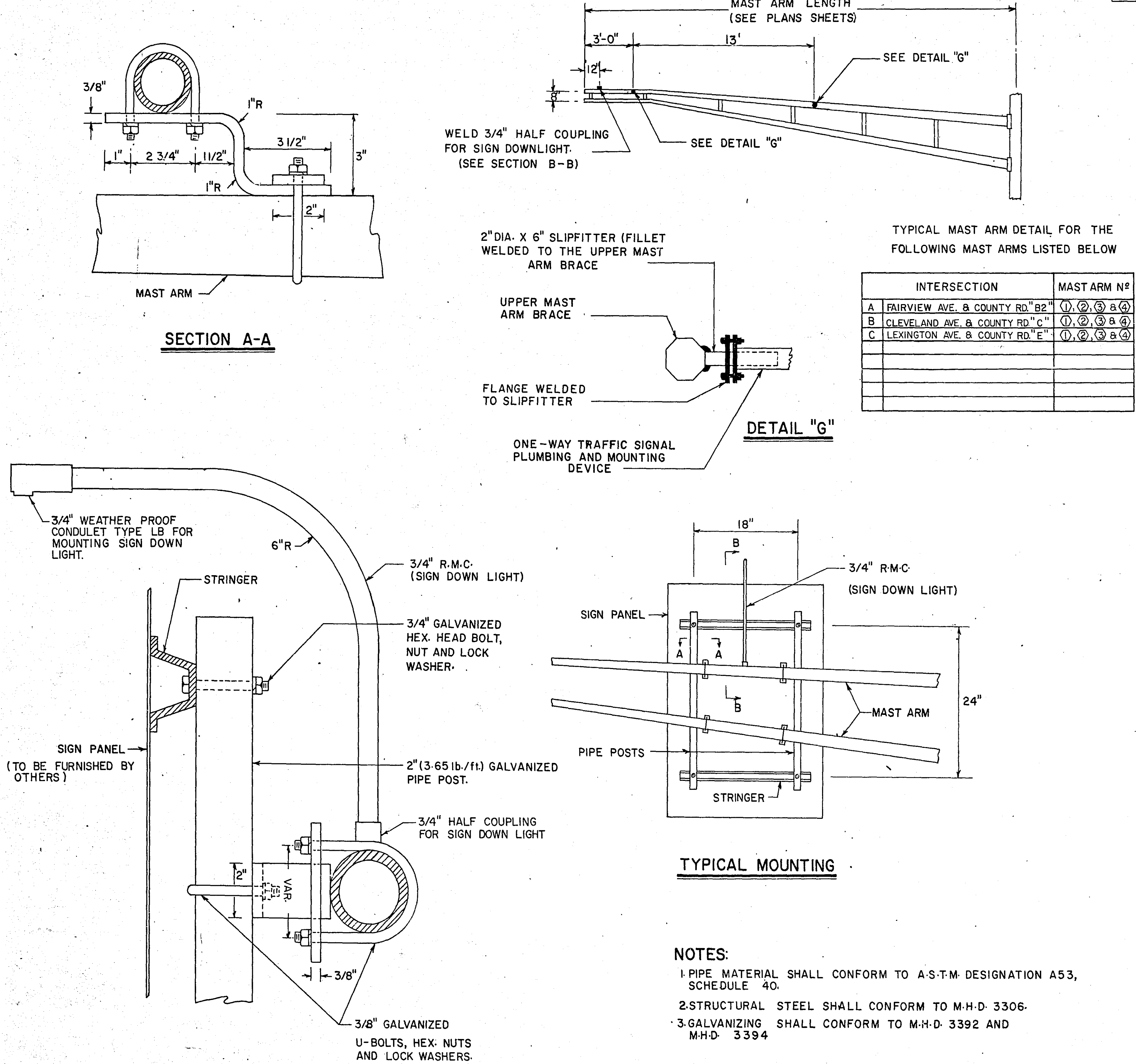
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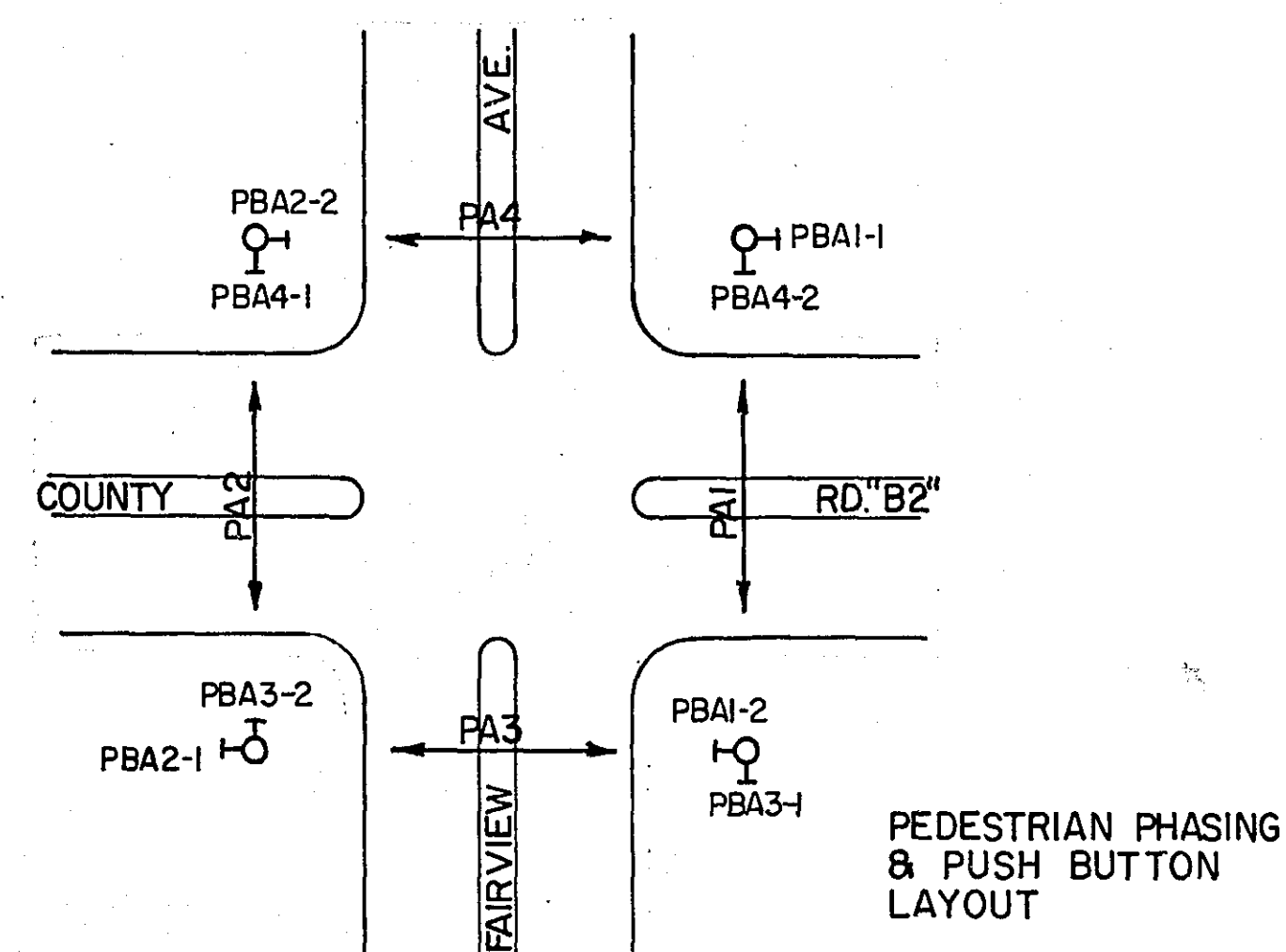
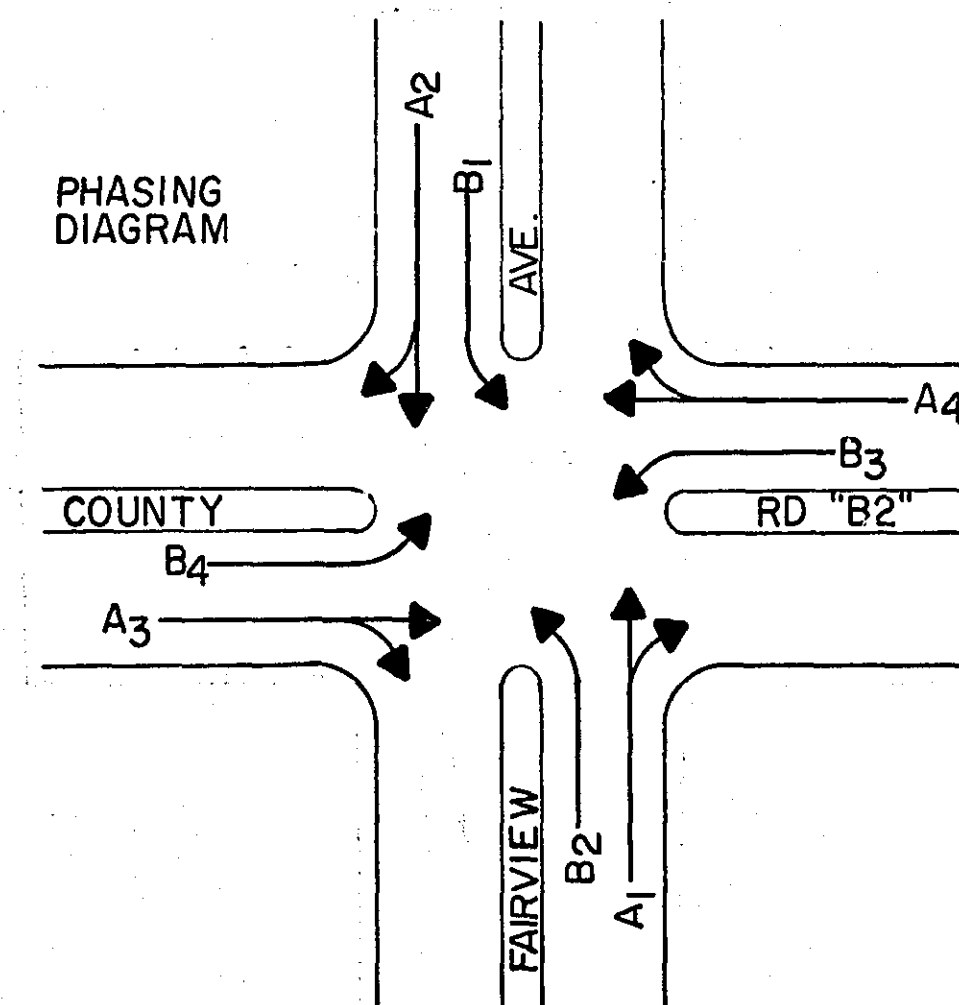
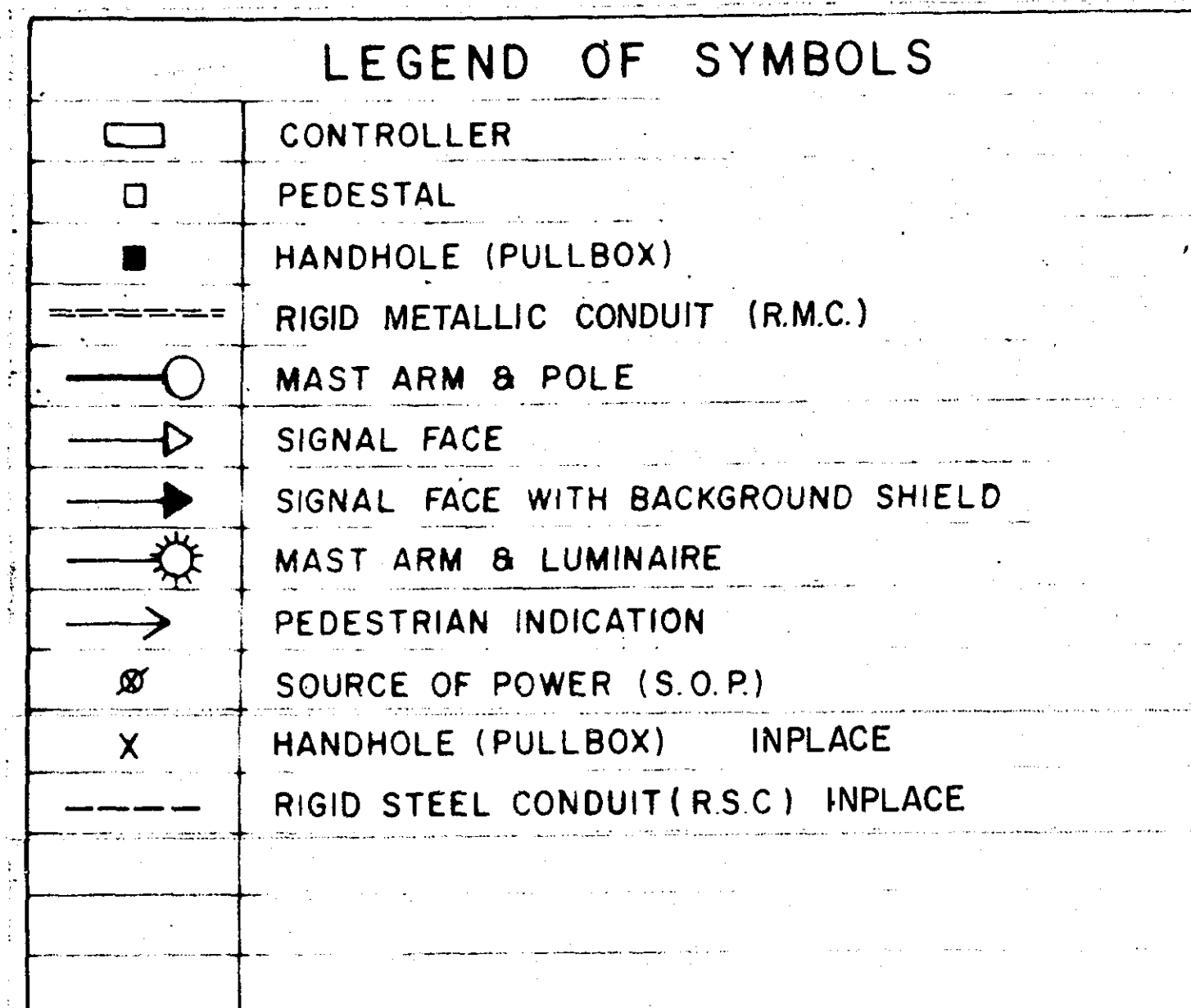
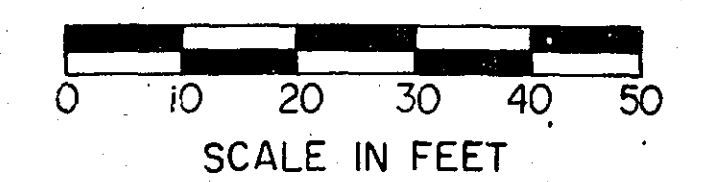
APPROVAL [Signature] DATE 7/2/72

STATEMENT OF ESTIMATED QUANTITIES				
PROJECT NO.	ITEM NO.	ITEM	UNIT	QUANT.
62-648-06	2565.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SYSTEM A	SIGNAL SYSTEM	1
62-623-12	2565.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SYSTEM B	SIGNAL SYSTEM	1
62-615-03	2565.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SYSTEM C	SIGNAL SYSTEM	1

STANDARD PLATES	
PLATE NO.	TITLE
8110 B	TRAFFIC SIGNAL BRACKETING (POLE MOUNTED)
8111 A	TRAFFIC SIGNAL BRACKETING (PEDESTAL MOUNTED)
8112 B	PEDESTAL FOUNDATION
8115 B	PEDESTRIAN PUSH BUTTON INSTALLATION
8116 C	STEEL GUARD POST
8117 C	PRECAST CONCRETE HANDHOLE
8118 B	SERVICE EQUIPMENT AND POLE
8119 B	GROUND MOUNT CABINET FOUNDATION
8122 B	PEDESTAL AND PEDESTAL BASE
8123 A	POLE AND MAST ARM
8124 B	SIGNAL HEAD MOUNTS
8130 B	SAW CUT LOOP DETECTORS

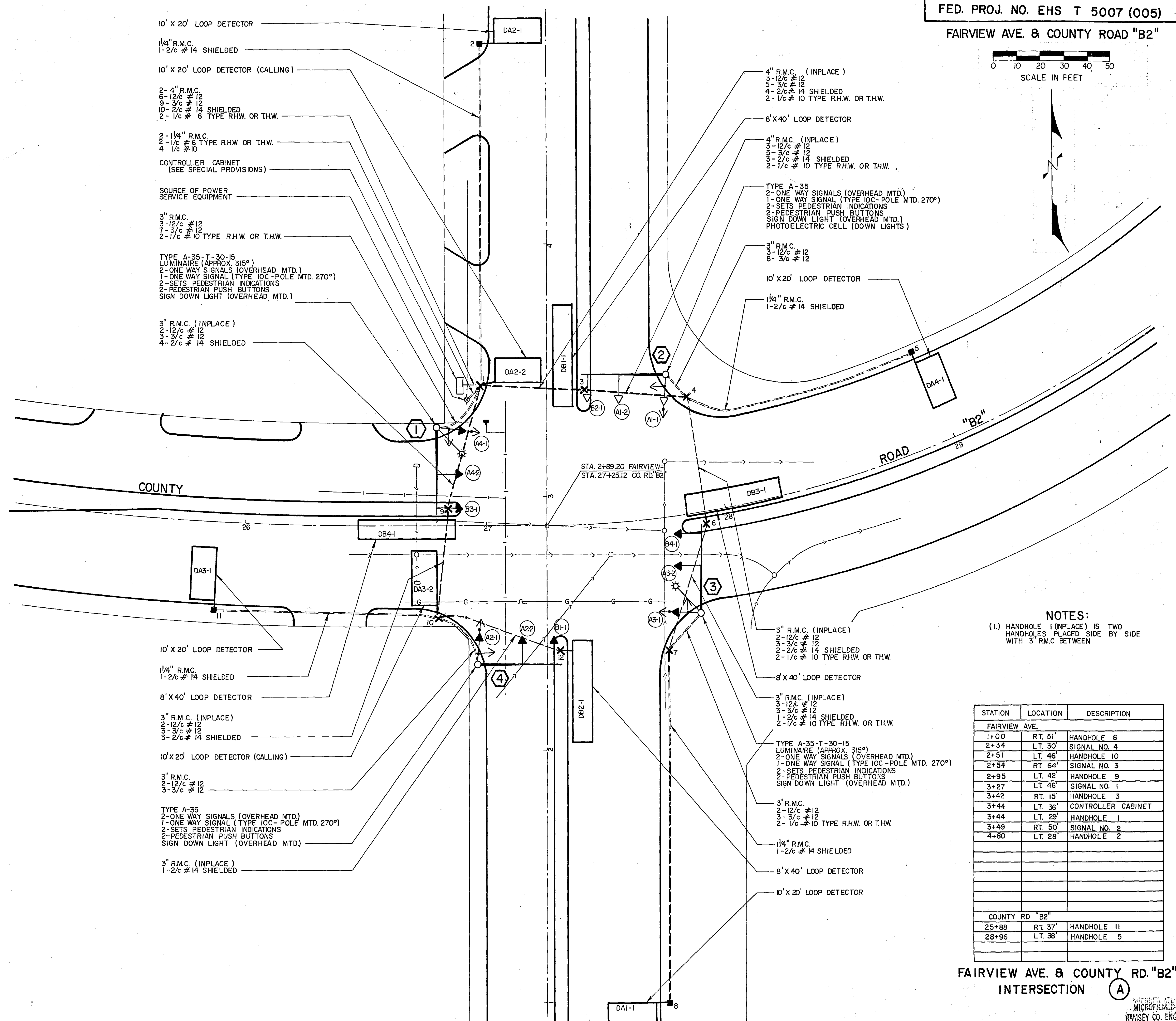
MAST ARM DETAILS





FACE	PHASE	FLASH	INDICATION SIZE					
			R	Y	G	←	↑	→
A1-1	A1	R	12"	12"	12"	—	—	—
A1-2	A1	R	12"	12"	12"	—	—	—
A2-1	A2	R	12"	12"	12"	—	—	—
A2-2	A2	R	12"	12"	12"	—	—	—
A3-1	A3	R	12"	12"	12"	—	—	—
A3-2	A3	R	12"	12"	12"	—	—	—
A4-1	A4	R	12"	12"	12"	—	—	—
A4-2	A4	R	12"	12"	12"	—	—	—
* B1-1	B1	R	12"	12"	—	12"	—	—
* B2-1	B2	R	12"	12"	—	12"	—	—
* B3-1	B3	R	12"	12"	—	12"	—	—
* B4-1	B4	R	12"	12"	—	12"	—	—

* SEE SPECIAL PROVISIONS
(SPECIAL SIGNAL FACES)

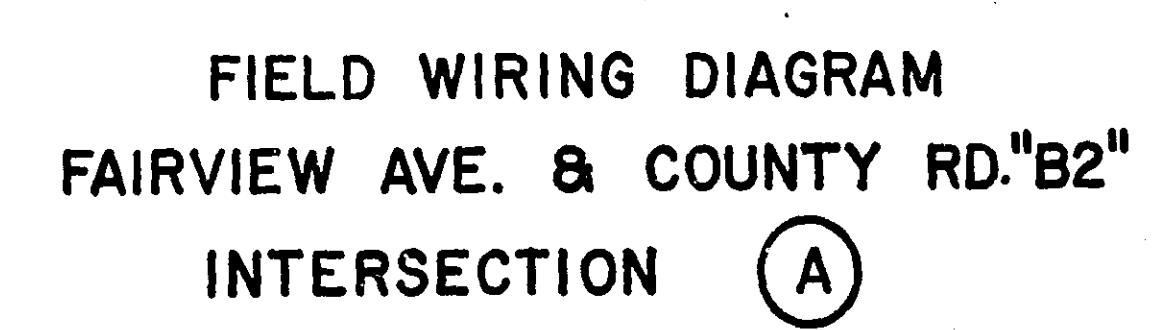


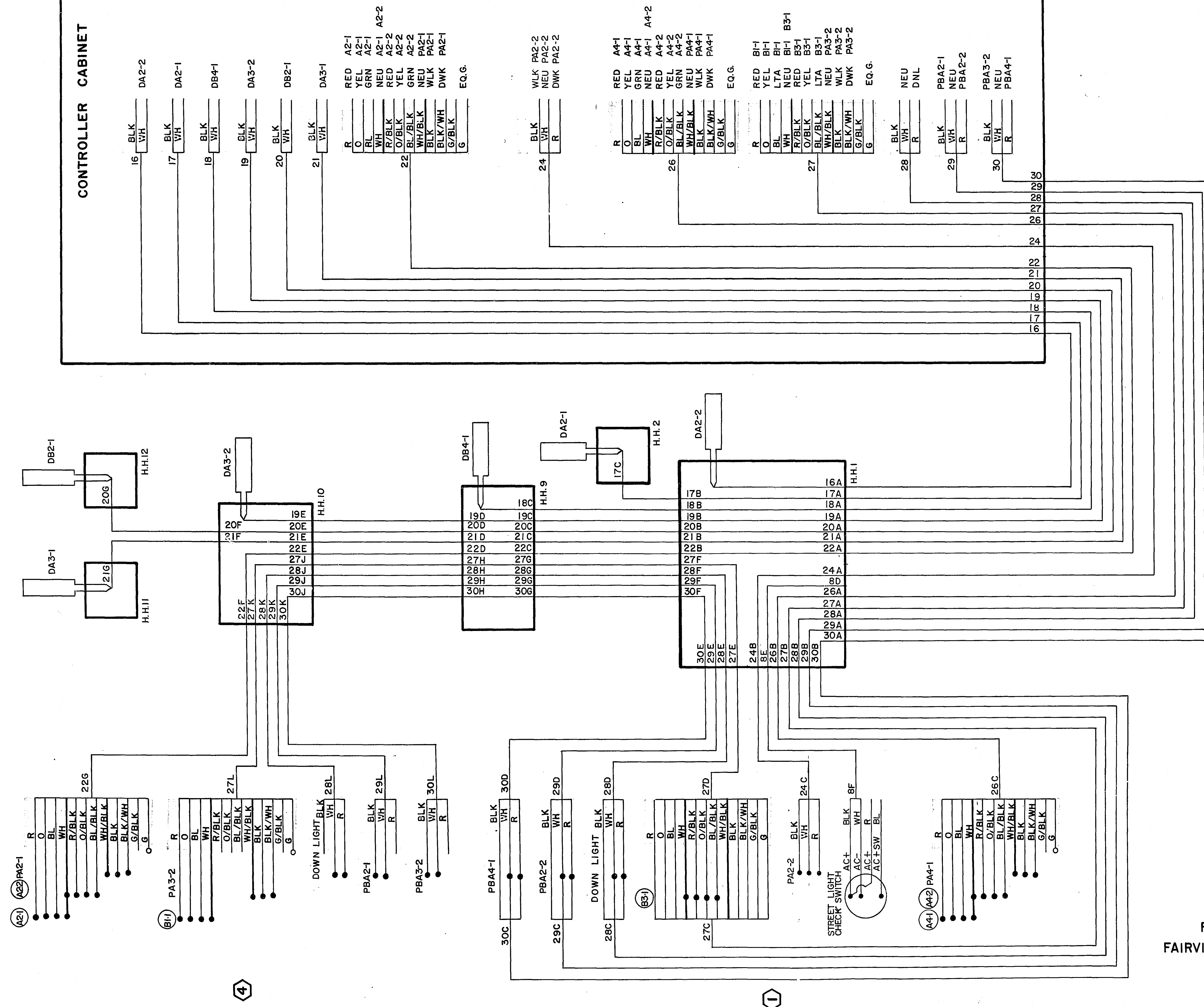
NOTES:
(1.) HANDHOLE 1 (INPLACE) IS TWO HANDHOLES PLACED SIDE BY SIDE WITH 3" R.M.C. BETWEEN

STATION	LOCATION	DESCRIPTION
FAIRVIEW AVE.		
1+00	RT. 51'	HANDHOLE 8
2+34	LT. 30'	SIGNAL NO. 4
2+51	LT. 46'	HANDHOLE 10
2+54	RT. 64'	SIGNAL NO. 3
2+95	LT. 42'	HANDHOLE 9
3+27	LT. 46'	SIGNAL NO. 1
3+42	RT. 15'	HANDHOLE 3
3+44	LT. 36'	CONTROLLER CABINET
3+44	LT. 29'	HANDHOLE 1
3+49	RT. 50'	SIGNAL NO. 2
4+80	LT. 28'	HANDHOLE 2
COUNTY RD "B2"		
25+88	RT. 37'	HANDHOLE 11
28+96	LT. 38'	HANDHOLE 5

FAIRVIEW AVE. & COUNTY RD. "B2"
INTERSECTION (A)

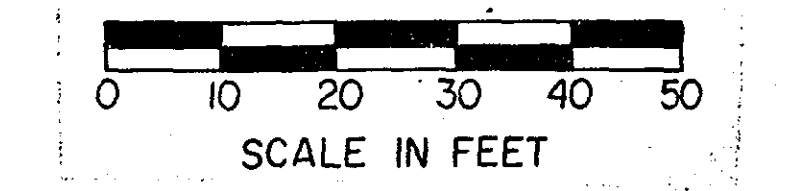
MICROFILMED
RAMSEY CO. ENGR.





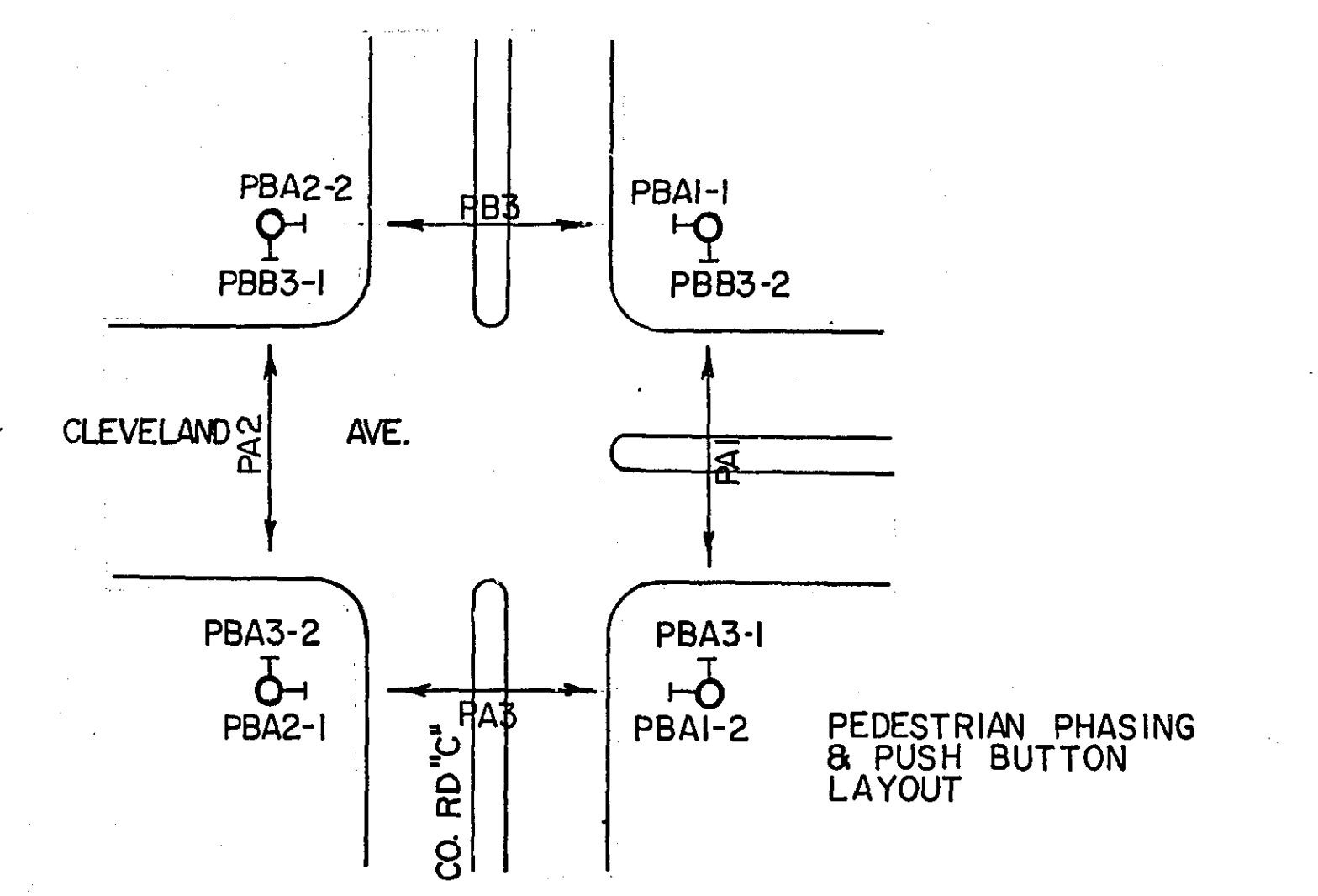
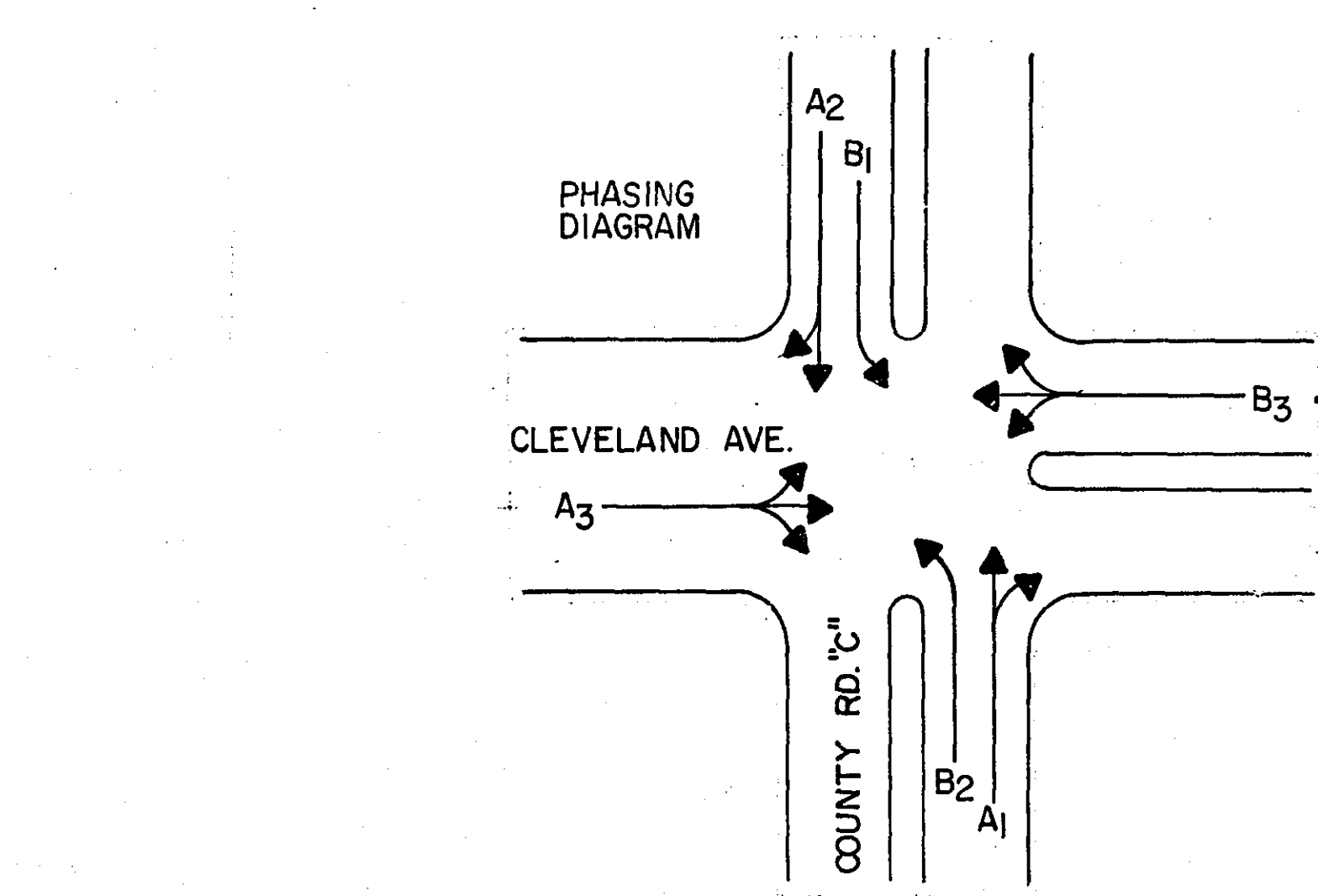
LEGEND OF SYMBOLS	
	CONTROLLER
	PEDESTAL
	HANDHOLE (PULLBOX)
	RIGID METALLIC CONDUIT (R.M.C.)
	MAST ARM & POLE
	SIGNAL FACE
	SIGNAL FACE WITH BACKGROUND SHIELD
	MAST ARM & LUMINAIRE
	PEDESTRIAN INDICATION
	SOURCE OF POWER (S.O.P.)
	HANDHOLE (PULLBOX) INPLACE
	RIGID METALLIC CONDUIT (R.M.C.) INPLACE

CLEVELAND AVE. & COUNTY RD. "C"



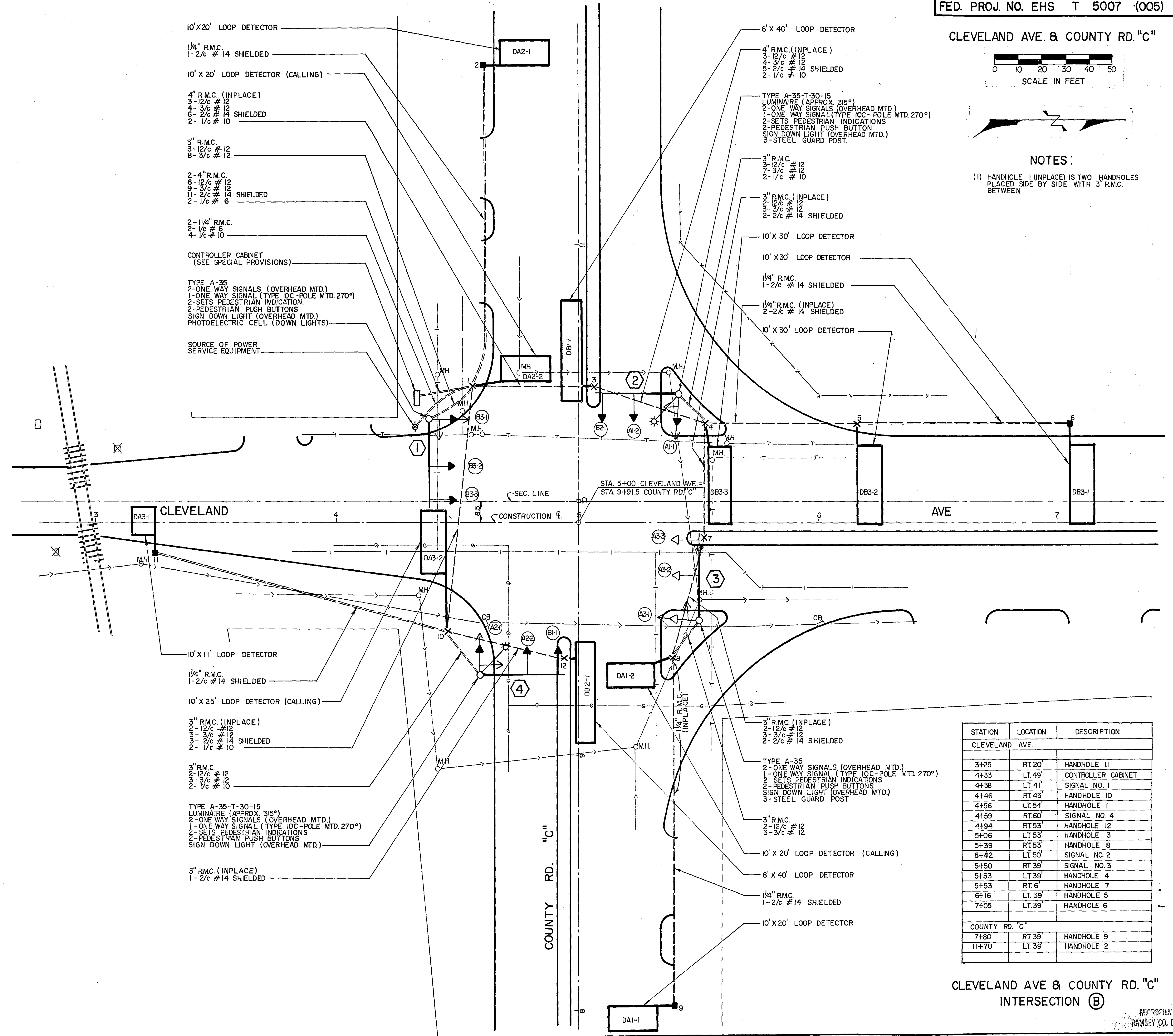
NOTES:

- (1) HANDHOLE 1 (INPLACE) IS TWO HANDHOLES PLACED SIDE BY SIDE WITH 3" R.M.C. BETWEEN



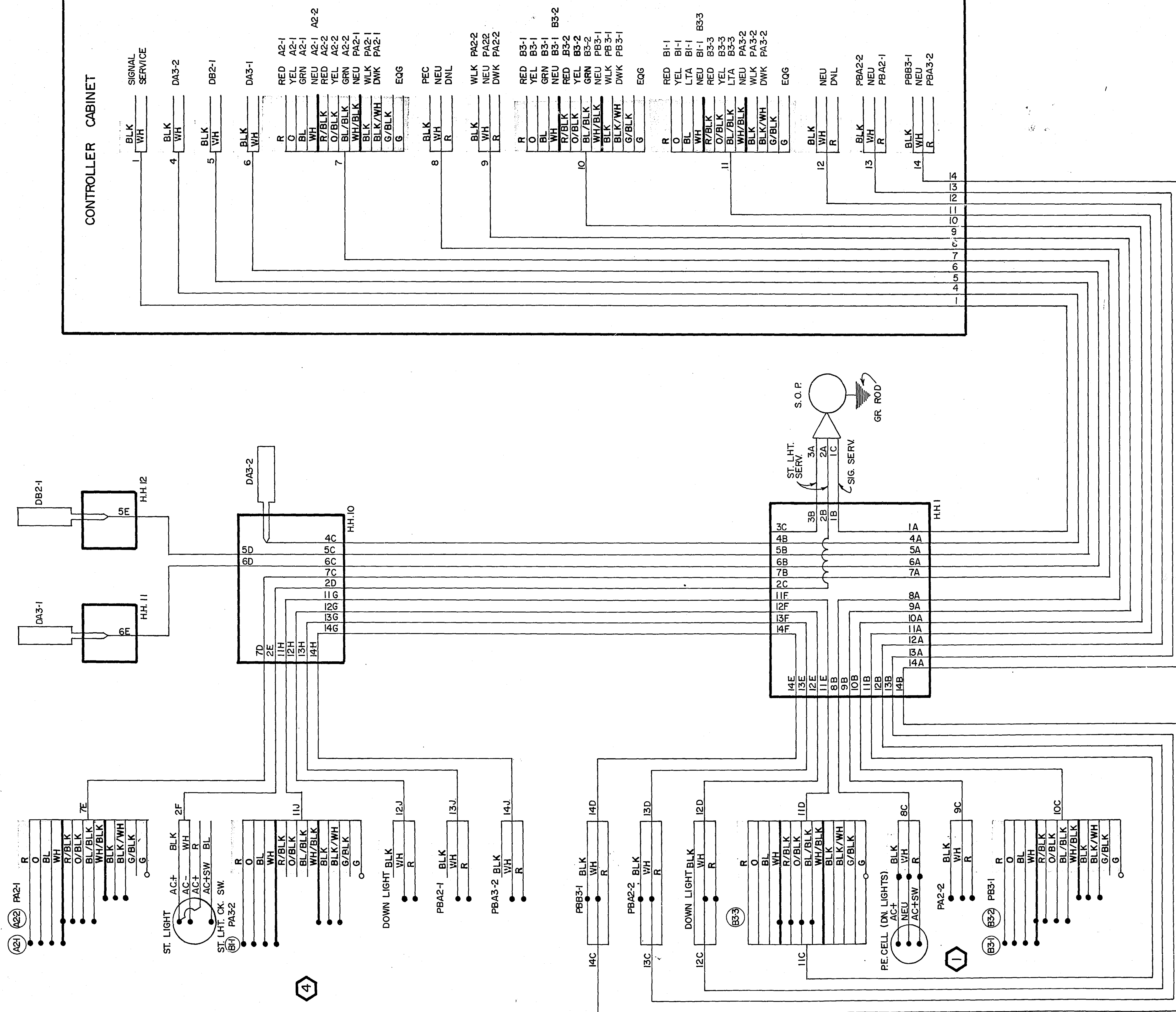
FACE	PHASE	FLASH	INDICATION SIZE					
			R	Y	G	←	↑	→
A1-1	A1	R	12"	12"	12"	-	-	-
A1-2	A1	R	12"	12"	12"	-	-	-
A2-1	A2	R	12"	12"	12"	-	-	-
A2-2	A2	R	12"	12"	12"	-	-	-
* A3-1	A3	R	12"	12"	12"	-	-	-
* A3-2	A3	R	12"	12"	12"	-	-	-
* A3-3	A3	R	12"	12"	-	12"	-	-
* B1-1	B1	R	12"	12"	-	12"	-	-
* B2-1	B2	R	12"	12"	-	12"	-	-
B3-1	B3	R	12"	12"	12"	-	-	-
B3-2	B3	R	12"	12"	12"	-	-	-
* B3-3	B3	R	12"	12"	-	12"	-	-

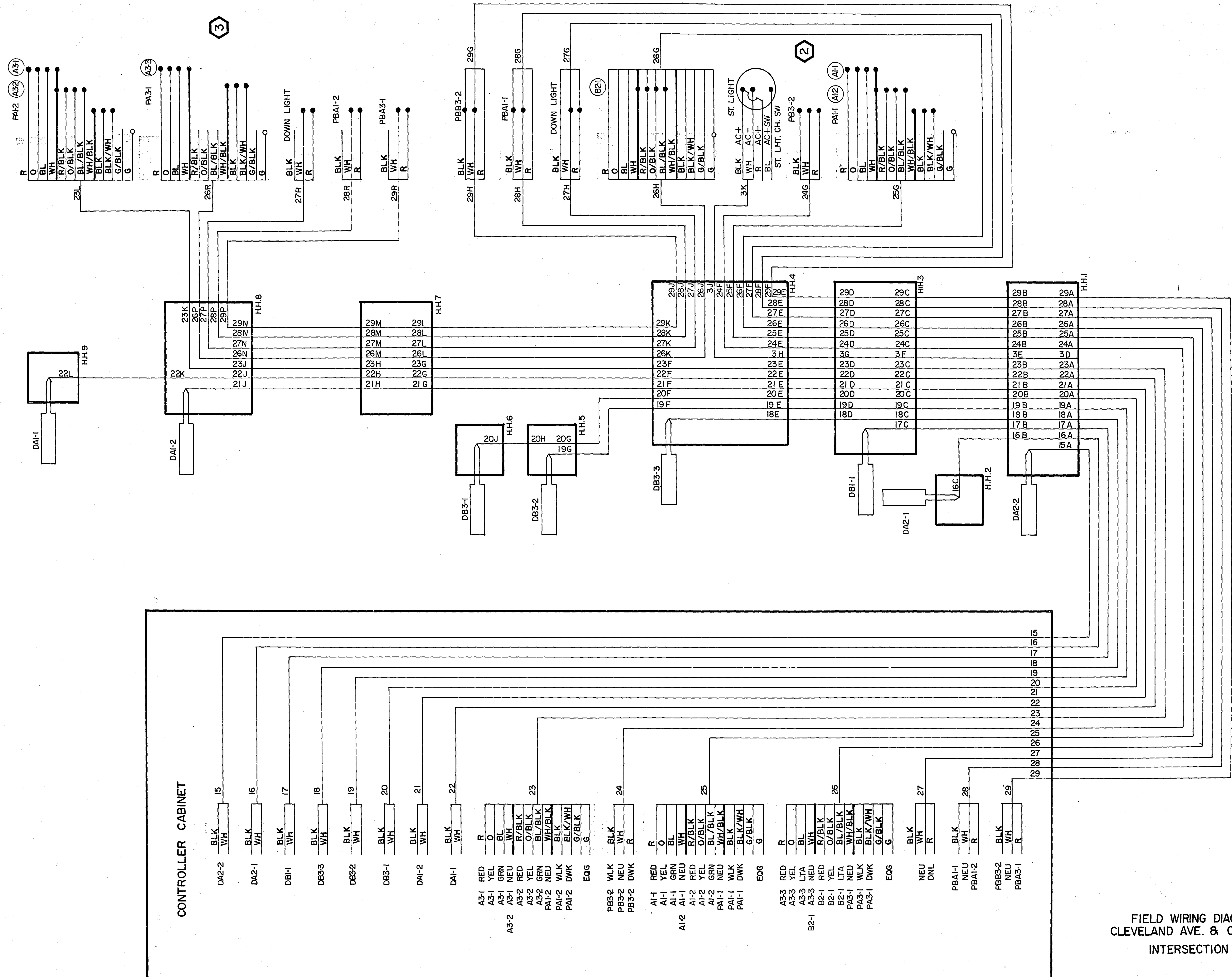
* SEE SPECIAL PROVISIONS (SPECIAL SIGNAL FACES)



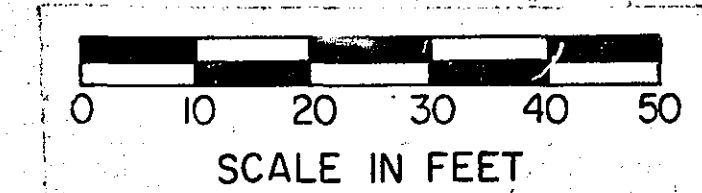
STATION	LOCATION	DESCRIPTION
CLEVELAND AVE.		
3+25	RT. 20'	HANDHOLE 11
4+33	LT. 49'	CONTROLLER CABINET
4+38	LT. 41'	SIGNAL NO. 1
4+46	RT. 43'	HANDHOLE 10
4+56	LT. 54'	HANDHOLE 1
4+59	RT. 60'	SIGNAL NO. 4
4+94	RT. 53'	HANDHOLE 12
5+06	LT. 53'	HANDHOLE 3
5+39	RT. 53'	HANDHOLE 8
5+42	LT. 50'	SIGNAL NO. 2
5+50	RT. 39'	SIGNAL NO. 3
5+53	LT. 39'	HANDHOLE 4
5+53	RT. 6'	HANDHOLE 7
6+16	LT. 39'	HANDHOLE 5
7+05	LT. 39'	HANDHOLE 6
COUNTY RD. "C"		
7+80	RT. 39'	HANDHOLE 9
11+70	LT. 39'	HANDHOLE 2

CLEVELAND AVE & COUNTY RD. "C" INTERSECTION (B)





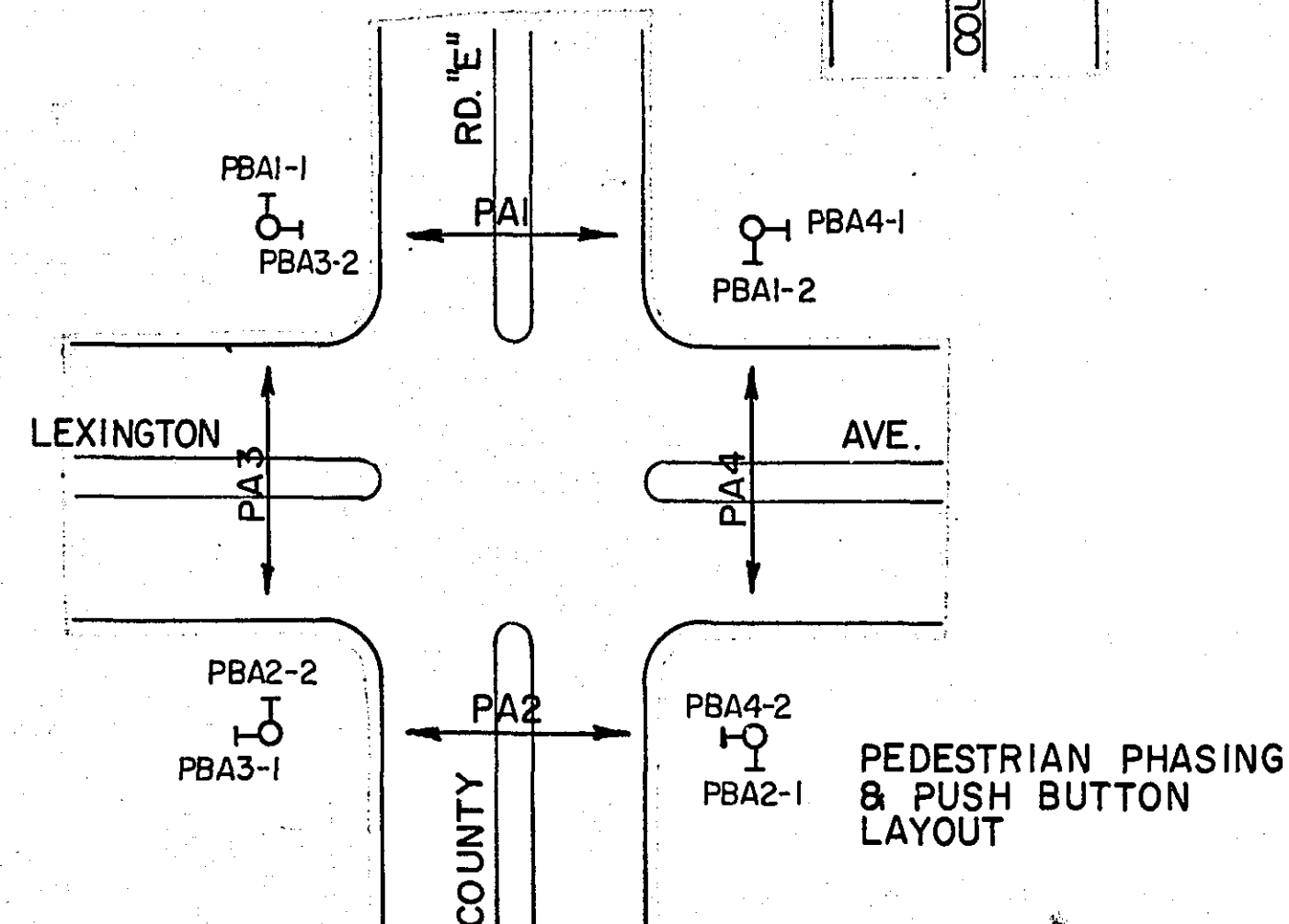
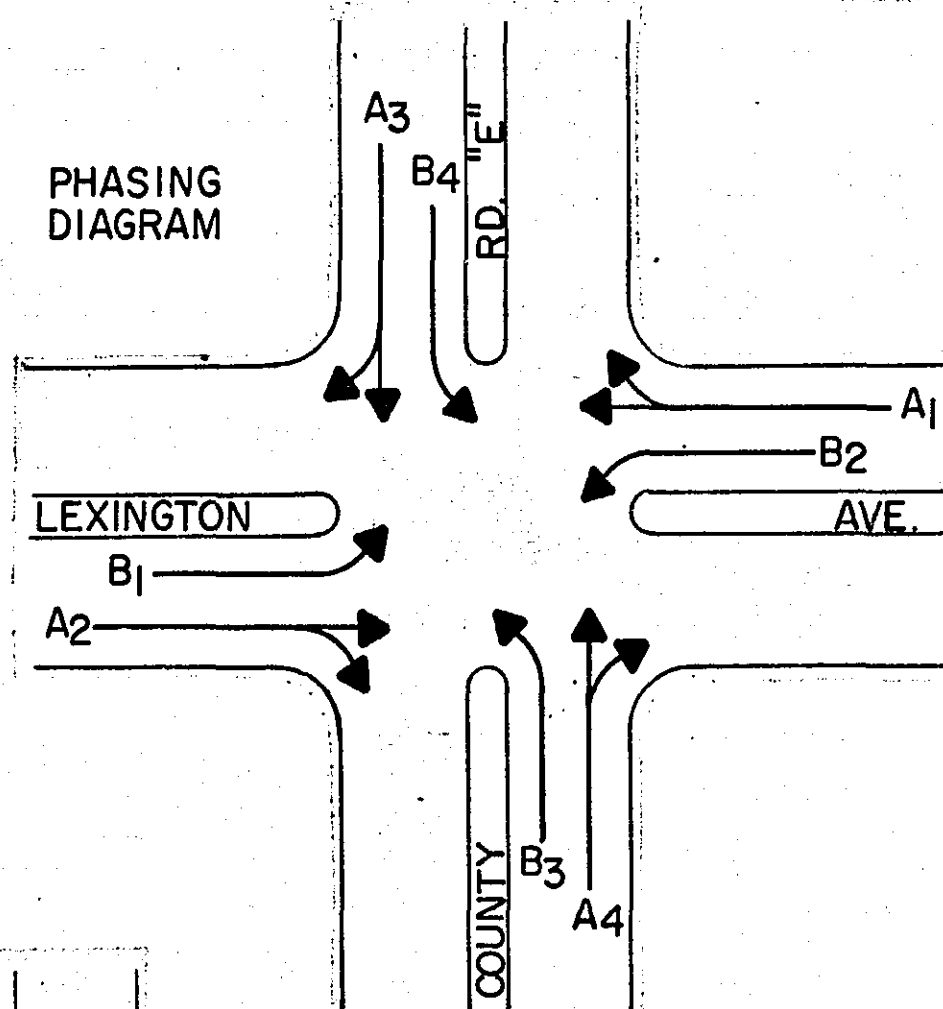
FIELD WIRING DIAGRAM
CLEVELAND AVE. & COUNTY RD "C"
INTERSECTION (B)



NOTES:

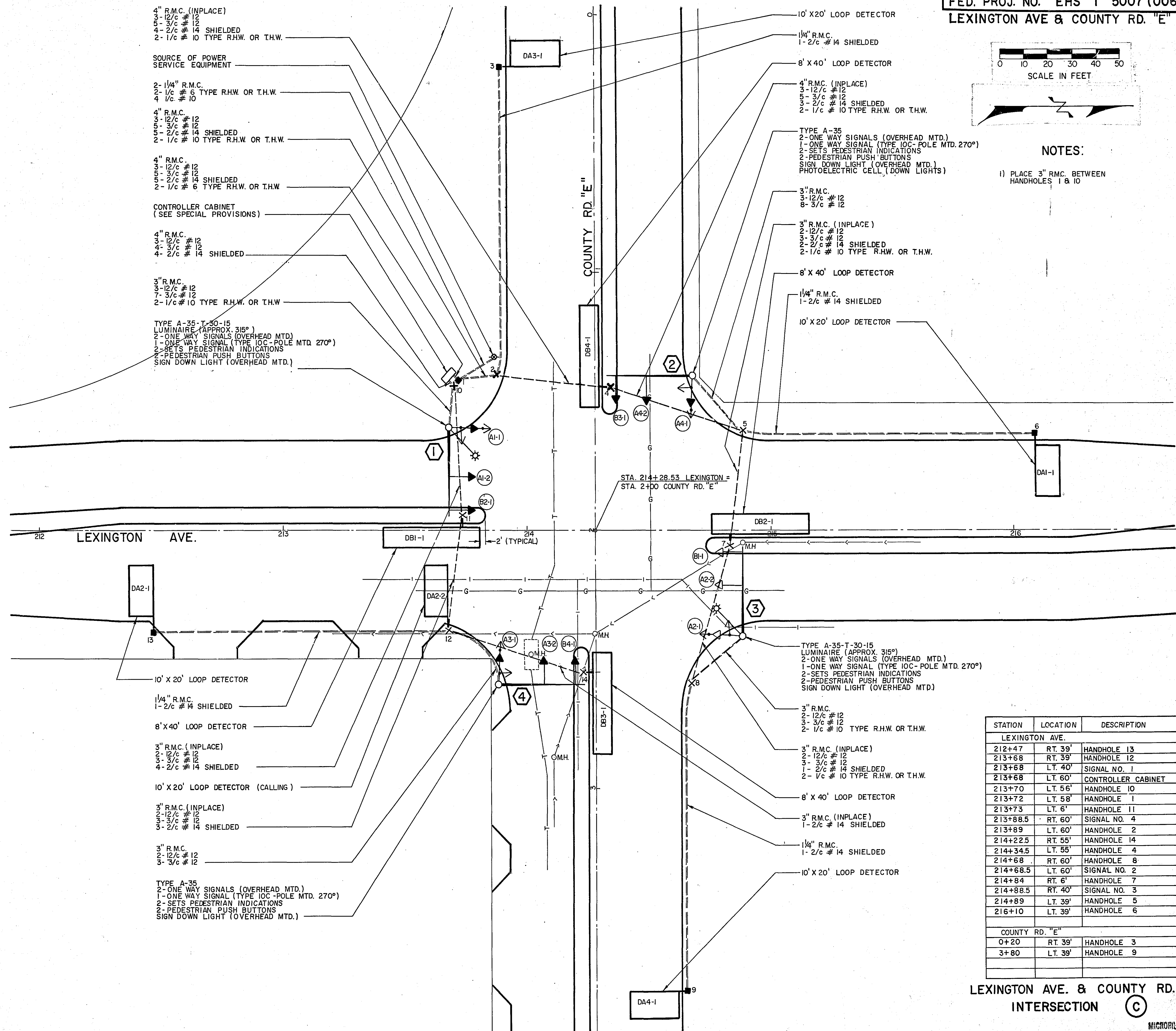
- 1) PLACE 3" R.M.C. BETWEEN HANDHOLES 1 & 10

LEGEND OF SYMBOLS	
[Symbol]	CONTROLLER
[Symbol]	PEDESTAL
[Symbol]	HANDHOLE (PULLBOX)
[Symbol]	RIGID METALLIC CONDUIT (R.M.C.)
[Symbol]	MAST ARM & POLE
[Symbol]	SIGNAL FACE
[Symbol]	SIGNAL FACE WITH BACKGROUND SHIELD
[Symbol]	MAST ARM & LUMINAIRE
[Symbol]	PEDESTRIAN INDICATION
[Symbol]	SOURCE OF POWER (S.O.P.)
[Symbol]	HANDHOLE (PULLBOX) INPLACE
[Symbol]	RIGID METALLIC CONDUIT (R.M.C.) INPLACE



FACE	PHASE	FLASH	INDICATION SIZE					
			R	Y	G	←	↑	→
A1-1	A1	R	12"	12"	12"	-	-	-
A1-2	A1	R	12"	12"	12"	-	-	-
A2-1	A2	R	12"	12"	12"	-	-	-
A2-2	A2	R	12"	12"	12"	-	-	-
A3-1	A3	R	12"	12"	12"	-	-	-
A3-2	A3	R	12"	12"	12"	-	-	-
A4-1	A4	R	12"	12"	12"	-	-	-
A4-2	A4	R	12"	12"	12"	-	-	-
* B1-1	B1	R	12"	12"	12"	12"	12"	12"
* B2-1	B2	R	12"	12"	12"	12"	12"	12"
* B3-1	B3	R	12"	12"	12"	12"	12"	12"
* B4-1	B4	R	12"	12"	12"	12"	12"	12"

* SEE SPECIAL PROVISIONS
(SPECIAL SIGNAL FACES)



STATION	LOCATION	DESCRIPTION
LEXINGTON AVE.		
212+47	RT. 39'	HANDHOLE 13
213+68	RT. 39'	HANDHOLE 12
213+68	LT. 40'	SIGNAL NO. 1
213+68	LT. 60'	CONTROLLER CABINET
213+70	LT. 56'	HANDHOLE 10
213+72	LT. 58'	HANDHOLE 11
213+73	LT. 6'	HANDHOLE 11
213+88.5	RT. 60'	SIGNAL NO. 4
213+89	LT. 60'	HANDHOLE 2
214+225	RT. 55'	HANDHOLE 14
214+34.5	LT. 55'	HANDHOLE 4
214+68	RT. 60'	HANDHOLE 8
214+68.5	LT. 60'	SIGNAL NO. 2
214+84	RT. 6'	HANDHOLE 7
214+88.5	RT. 40'	SIGNAL NO. 3
214+89	LT. 39'	HANDHOLE 5
216+10	LT. 39'	HANDHOLE 6
COUNTY RD. "E"		
0+20	RT. 39'	HANDHOLE 3
3+80	LT. 39'	HANDHOLE 9

LEXINGTON AVE. & COUNTY RD. "E"
INTERSECTION

