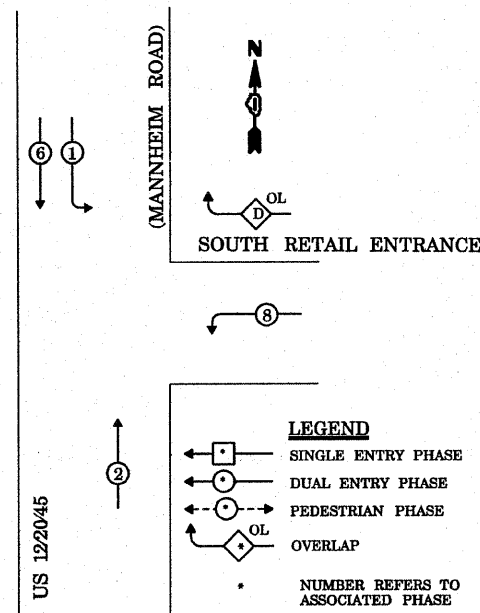


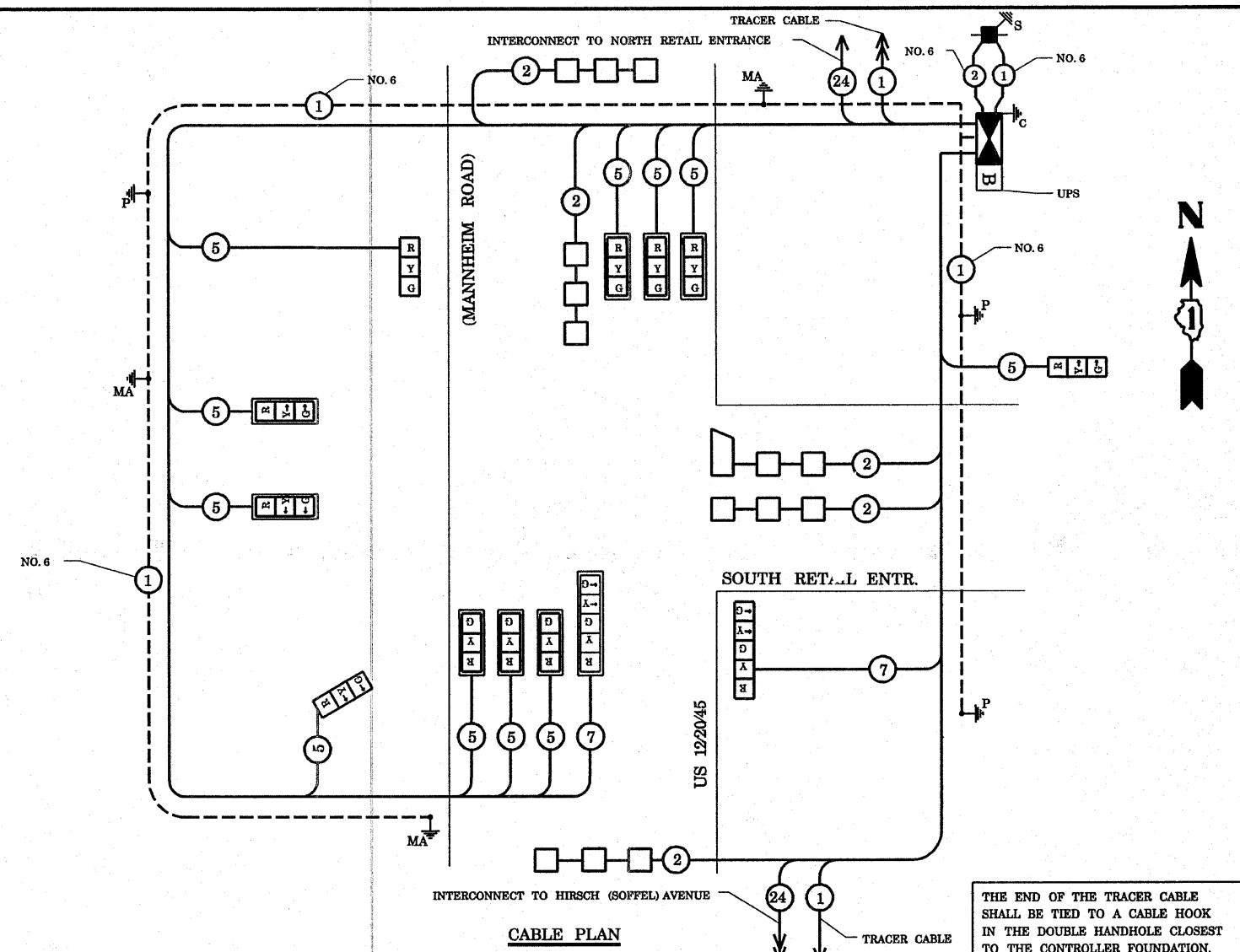
**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

NOTE:  
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



**CABLE PLAN**

**SUMMARY OF QUANTITIES**

QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM
697	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
697	SQ FT	SIDEWALK REMOVAL	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	12	FOOT	CONCRETE FOUNDATION, TYPE A
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	4	FOOT	CONCRETE FOUNDATION, TYPE C
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	30	FOOT	CONCRETE FOUNDATION, TYPE E 30" DIAMETER
15	SQ FT	SIGN PANEL - TYPE 2	15	FOOT	CONCRETE FOUNDATION, TYPE E 36" DIAMETER
101	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	1	EACH	DRILL EXISTING HANDHOLE
202	SQ FT	THERMOPLASTIC PAVEMENT MARKING REMOVAL	9	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
571	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	5	EACH	INDUCTIVE LOOP DETECTOR
13	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	516	FOOT	DETECTOR LOOP, TYPE I
10	FOOT	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
39	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
101	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	6	EACH	REMOVE EXISTING HANDHOLE
100	FOOT	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	6	EACH	REMOVE EXISTING CONCRETE FOUNDATION
98	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	8	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	REMOVE EXISTING JUNCTION BOX	3	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
5	EACH	HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	HEAVY-DUTY HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	DOUBLE HANDHOLE	1	EACH	TEMPORARY TRAFFIC SIGNAL TIMINGS
685	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	1	EACH	SERVICE INSTALLATION, POLE MOUNT
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1	EACH	UNINTERRUPTIBLE POWER SUPPLY
1	EACH	TRANSCEIVER - FIBER OPTIC			
1740	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C			
428	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C			
1020	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1-PAIR			
113	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C			
430	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C			
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.			
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.			

**CABLE PLAN LEGEND**

PROPOSED	EXISTING	DESCRIPTION
[Symbol]	[Symbol]	8" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATE SIGN, FIBER OPTIC "NO RIGHT TURN"
[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
[Symbol]	[Symbol]	GROUND ROD AT POST OR MAST ARM POLE
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
[Symbol]	[Symbol]	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR
[Symbol]	[Symbol]	VIDEO DETECTOR
[Symbol]	[Symbol]	CLOSED CIRCUIT TV
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13		17	0.50	110.50
(YELLOW)	13		25	0.25	81.25
(GREEN)	13		15	0.25	48.75
ARROW	4		12	0.10	4.80
PED. SIGNAL			25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN				0.05	-
FLASHER				0.05	-
ENERGY COSTS TO: VILLAGE OF MELROSE PARK					TOTAL= 345.30
ENERGY SUPPLY CONTACT: MR. MIKE BELL					
PHONE: (708)410-5314					
COMPANY: COMMONWEALTH EDISON					