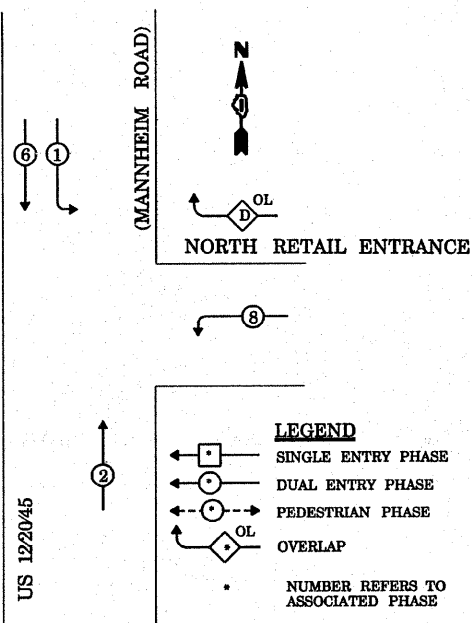


**CONTROLLER SEQUENCE**



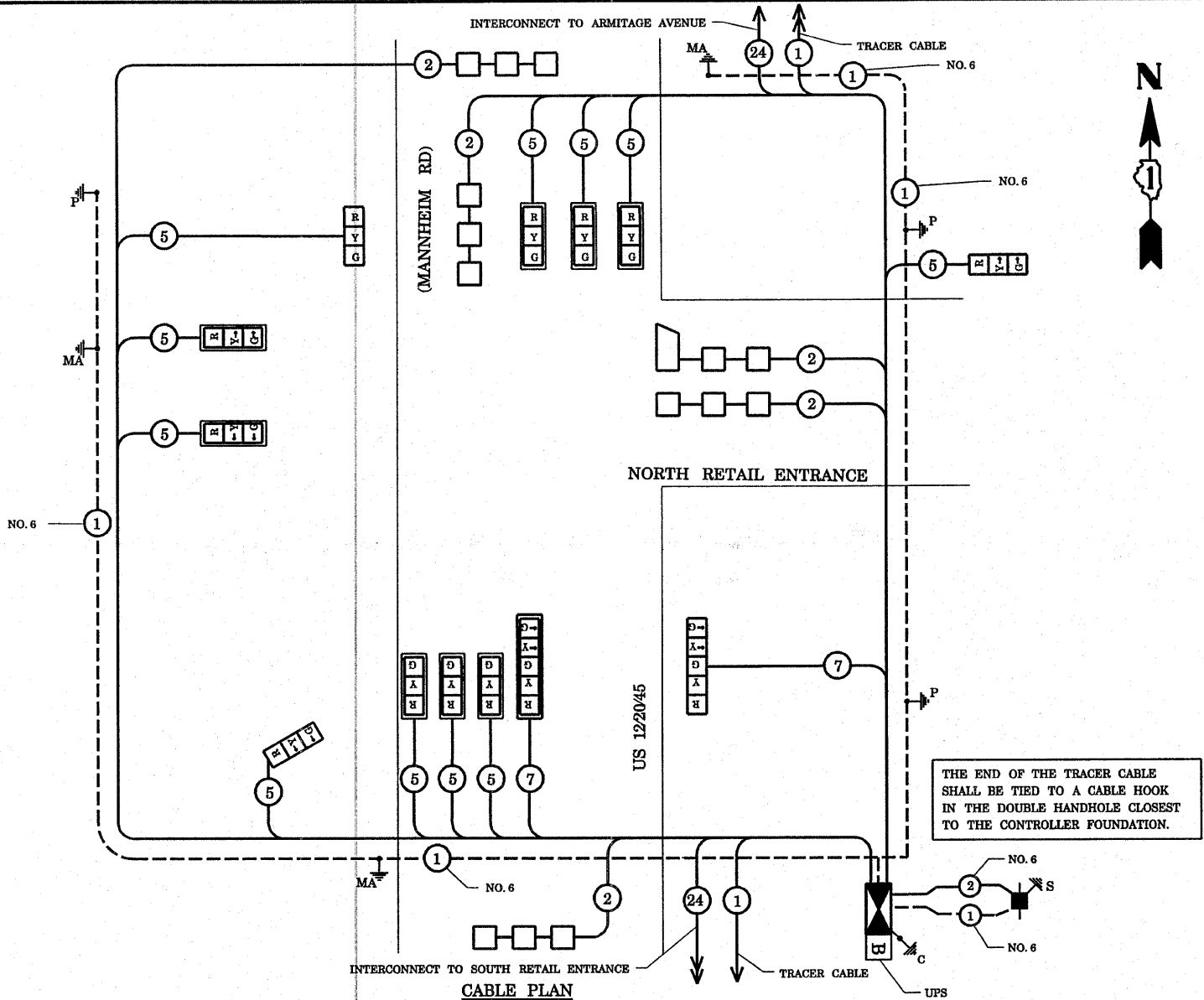
**PHASE DESIGNATION DIAGRAM**

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 LEGEND**

- | PROPOSED | EXISTING |   |
|----------|----------|---|
| [Symbol] | [Symbol] | 8" (200mm) 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 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] | ILLUMINATED 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  |



**CABLE PLAN SUMMARY OF QUANTITIES**

QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM
356	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK, 6 INCH	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
356	SQ FT	SIDEWALK REMOVAL	2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	12	FOOT	CONCRETE FOUNDATION, TYPE A
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	4	FOOT	CONCRETE FOUNDATION, TYPE C
15	SQ FT	SIGN PANEL - TYPE 2	30	FOOT	CONCRETE FOUNDATION, TYPE E 30" DIAMETER
110	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	15	FOOT	CONCRETE FOUNDATION, TYPE E 36" DIAMETER
220	SQ FT	THERMOPLASTIC PAVEMENT MARKING REMOVAL	1	EACH	DRILL EXISTING HANDHOLE
712	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	9	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
63	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	5	EACH	INDUCTIVE LOOP DETECTOR
75	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	548	FOOT	DETECTOR LOOP, TYPE 1
10	FOOT	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
56	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
98	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	6	EACH	REMOVE EXISTING HANDHOLE
96	FOOT	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	7	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	REMOVE EXISTING JUNCTION BOX	8	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	HANDHOLE	3	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	HEAVY-DUTY HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	DOUBLE HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
910	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	1	EACH	TEMPORARY TRAFFIC SIGNAL TIMINGS
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1	EACH	SERVICE INSTALLATION, POLE MOUNT
1	EACH	TRANSCIEVER - FIBER OPTIC	1	EACH	UNINTERRUPTIBLE POWER SUPPLY
2920	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 6C			
418	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C			
1151	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1-PAIR			
30	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C			
375	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C			
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.			

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					-
ENERGY COSTS TO: VILLAGE OF MELROSE PARK TOTAL=					345.30