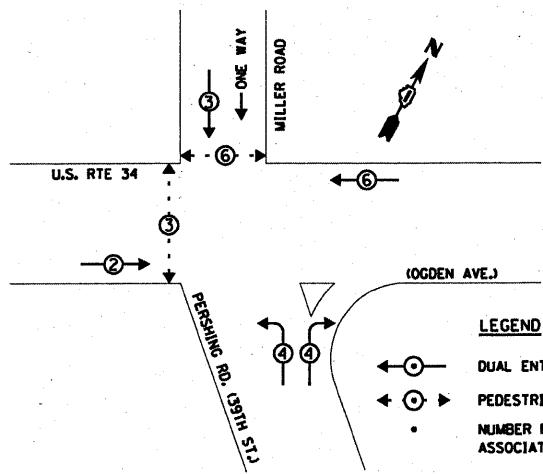


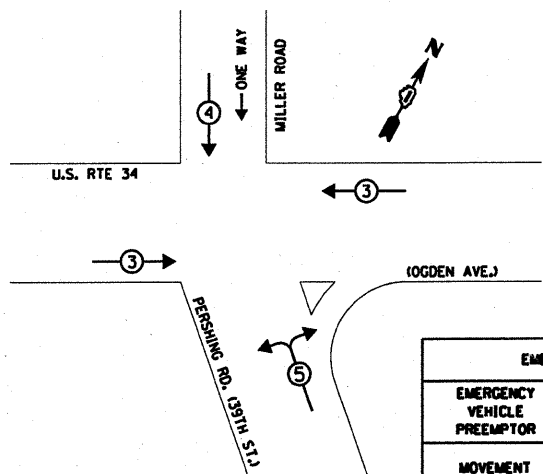
**CONTROLLER SEQUENCE**



**LEGEND**  
 ○ DUAL ENTRY PHASE  
 ○ PEDESTRIAN PHASE  
 ○ NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

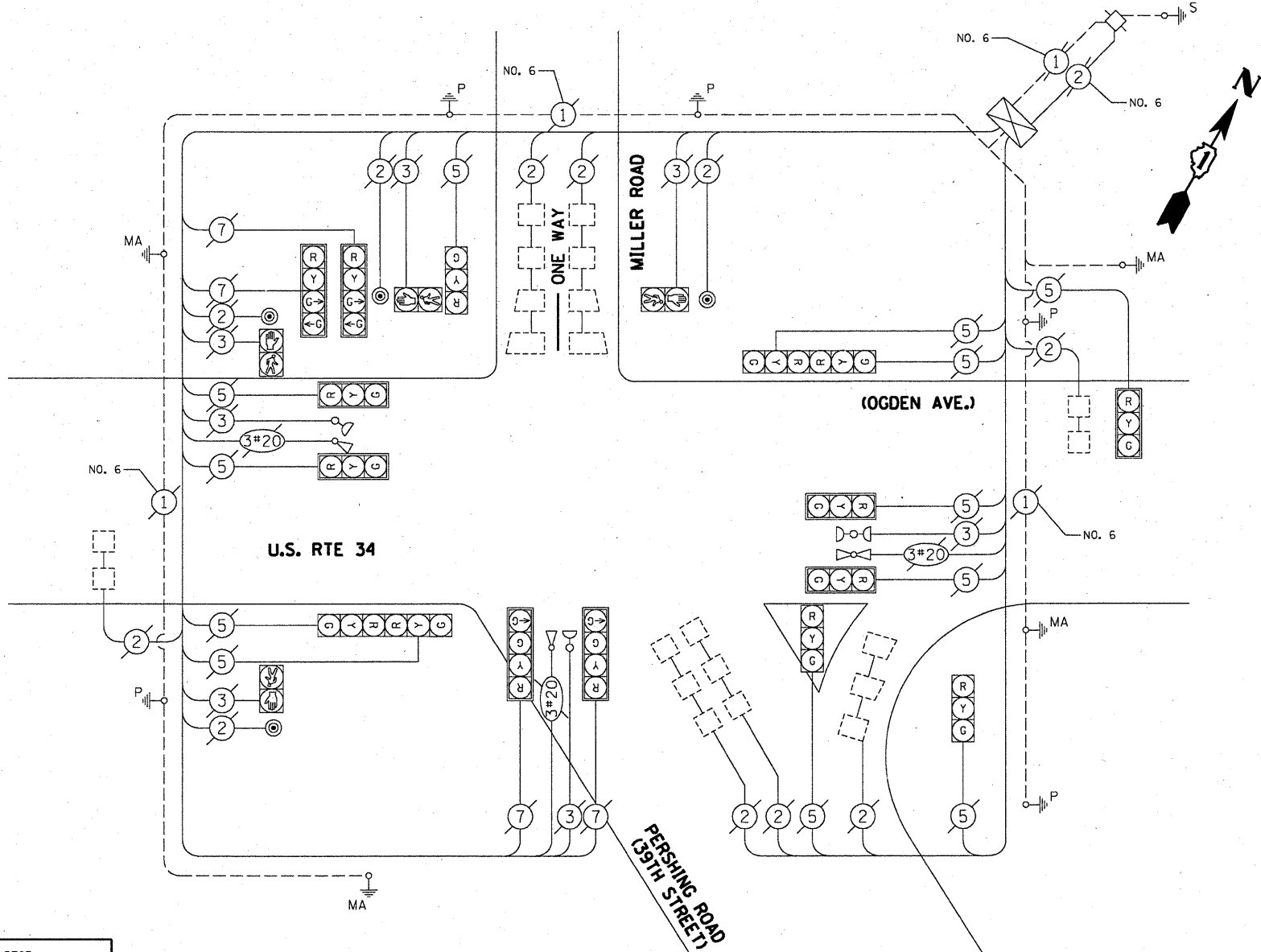
**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↔	↓	↶

**CABLE PLAN LEGEND**

- |                 |                 |                                                                                                             |
|-----------------|-----------------|-------------------------------------------------------------------------------------------------------------|
| <b>PROPOSED</b> | <b>EXISTING</b> |                                                                                                             |
| ⊠               | ⊠               | 8" (200mm) TRAFFIC SIGNAL SECTION                                                                           |
| ⊠               | ⊠               | 12" (300mm) TRAFFIC SIGNAL SECTION                                                                          |
| ⊠               | ⊠               | 12" (300mm) PEDESTRIAN SIGNAL SECTION                                                                       |
| ⊠               | ⊠               | 12" (300mm) PEDESTRIAN SIGNAL SECTION                                                                       |
| ⊠               | ⊠               | CONTROLLER CABINET                                                                                          |
| ⊠               | ⊠               | SERVICE INSTALLATION                                                                                        |
| ⊠               | ⊠               | TELEPHONE CONNECTION                                                                                        |
| ⊠               | ⊠               | MAGNETIC DETECTOR                                                                                           |
| ⊠               | ⊠               | PUSHBUTTON DETECTOR                                                                                         |
| ⊠               | ⊠               | VEHICLE DETECTOR, INDUCTION LOOP                                                                            |
| ②               | ②               | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| ⊠               | ⊠               | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD                                                   |
| ⊠               | ⊠               | RAILROAD CONTROL CABINET                                                                                    |
| ⊠               | ⊠               | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"                                                                |
| ⊠               | ⊠               | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"                                                               |
| H/C             | H/C             | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER                                                      |
| P               | P               | GROUND ROD AT POST OR MAST ARM POLE                                                                         |
| S               | S               | GROUND ROD AT ELECTRIC SERVICE INSTALLATION                                                                 |
| ①               | ①               | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)                                                          |
| ②④              | ②④              | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F                                                   |
| ⊠               | ⊠               | MICROWAVE VEHICLE SENSOR                                                                                    |
| ⊠               | ⊠               | VIDEO DETECTOR                                                                                              |
| ⊠               | ⊠               | CLOSED CIRCUIT TV                                                                                           |
| ⊠               | ⊠               | EMERGENCY VEHICLE LIGHT DETECTOR                                                                            |
| ⊠               | ⊠               | CONFIRMATION BEACON                                                                                         |
| ⊠               | ⊠               | UNINTERRUPTIBLE POWER SUPPLY                                                                                |
| ⊠               | ⊠               | PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER                                                                 |



**CABLE PLAN**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	16	17		0.50	136.00
(YELLOW)	16	25		0.25	100.00
(GREEN)	20	15		0.25	75.00
ARROW	-	12		0.10	-
PED. SIGNAL	4	25		1.00	100.00
CONTROLLER	1	100		1.00	100.00
ILLUM. SIGN	-			0.05	-
FLASHER	-			0.05	-
ENERGY COSTS TO:				TOTAL =	511.00

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m) =	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)