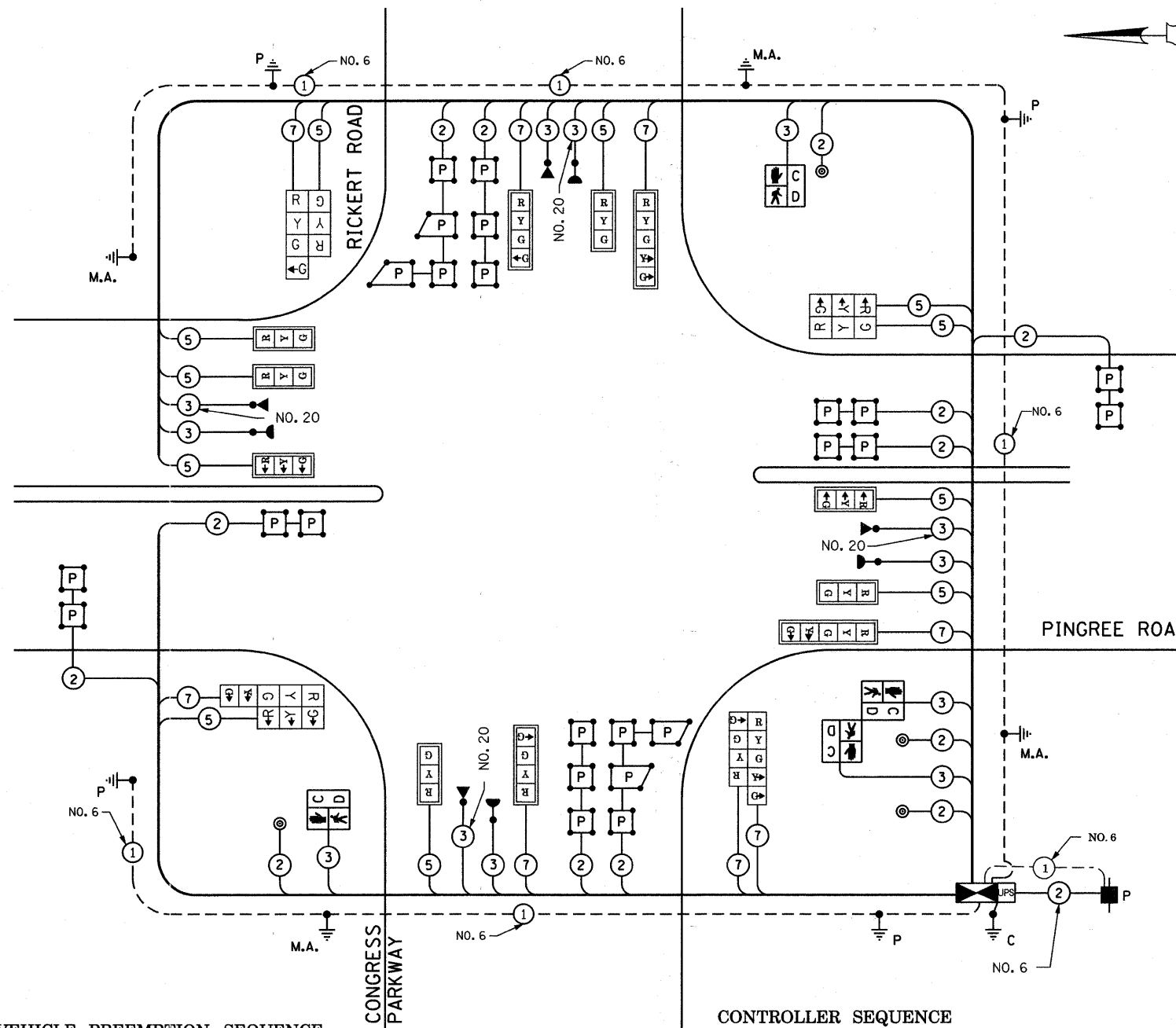


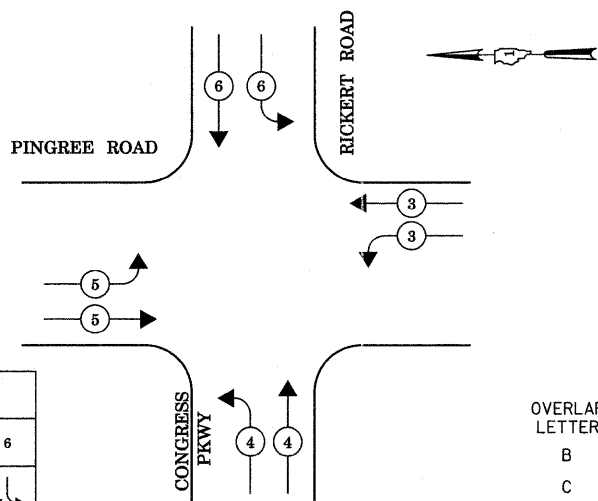
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
30	SQ FT	SIGN PANEL - TYPE 1
22.5	SQ FT	SIGN PANEL - TYPE 2
576	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
113	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
121	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
315	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
677	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
411	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1300	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2388	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1267	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1805	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
48	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
60	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
7	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED
11	EACH	TRAFFIC SIGNAL BACKPLATE
9	EACH	INDUCTIVE LOOP DETECTOR
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9	EACH	REMOVE EXISTING HANDHOLE
837	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
754	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
861	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

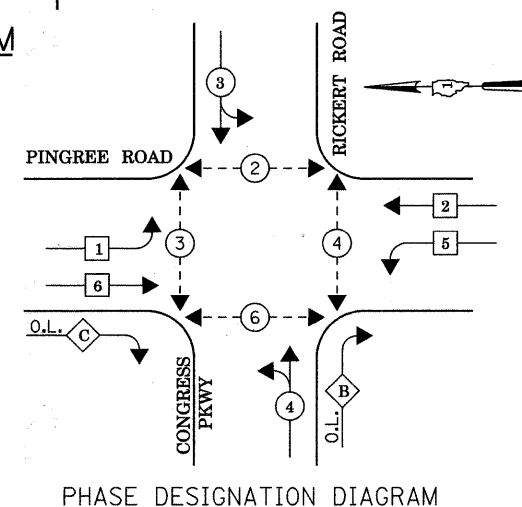
• 100% COST TO CITY OF CRYSTAL LAKE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE DIAGRAM



LEGEND

- ⊕ DUAL ENTRY PHASE
- ⊙ SINGLE ENTRY PHASE
- ◇ O.L. OVERLAP
- ⊛ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
 B = 4 + 5
 C = 6 + 4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
		INCAND.	LED		
SIGNAL (RED)	19	135	17	0.50	161.5
(YELLOW)	19	135	25	0.25	118.75
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER ILLUM. SIGN	1	100	100	1.00	100
				0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 542.35

PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	←	↑	→	↓