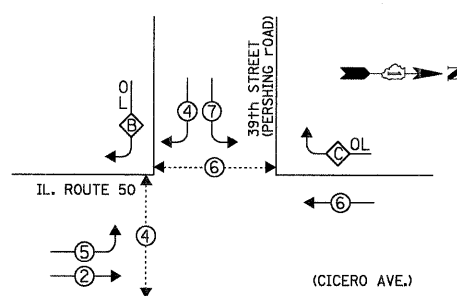


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVIVED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_

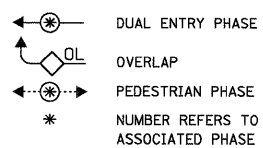
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 SURVIVED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-6500

**CONTROLLER SEQUENCE**



**LEGEND**

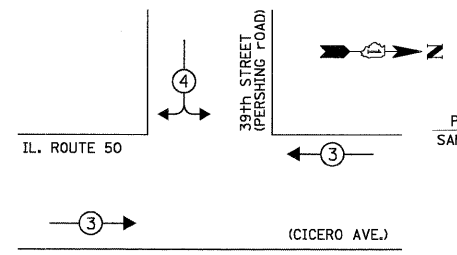


**PHASE DESIGNATION DIAGRAM**

**RIGHT TURN OVERLAP PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B =	4	5
C =	6	7

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTOR	MOVEMENT
3	← →
4	↔

**I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	17	0.50	127.50	
(YELLOW)	15	25	0.25	93.75	
(GREEN)	15	15	0.25	56.25	
ARROW	12	12	0.10	14.40	
PED. SIGNAL	4	25	1.00	100.00	
CONTROLLER	1	100	1.00	100.00	
ILLUM. SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
FLASHER			0.50		

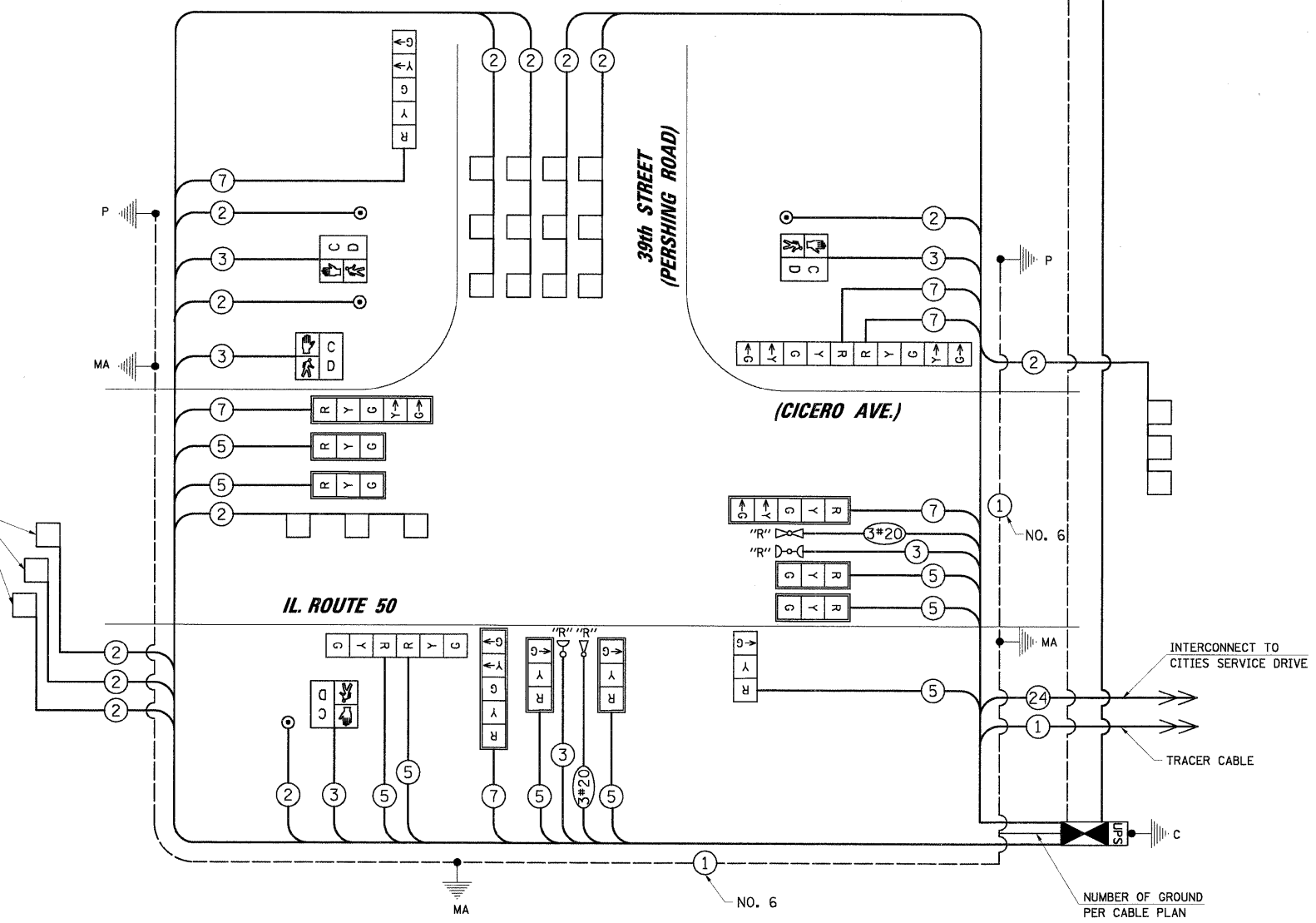
ENERGY COSTS TO: TOTAL = 491.90

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2' = (6m-H-0.6m) =
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

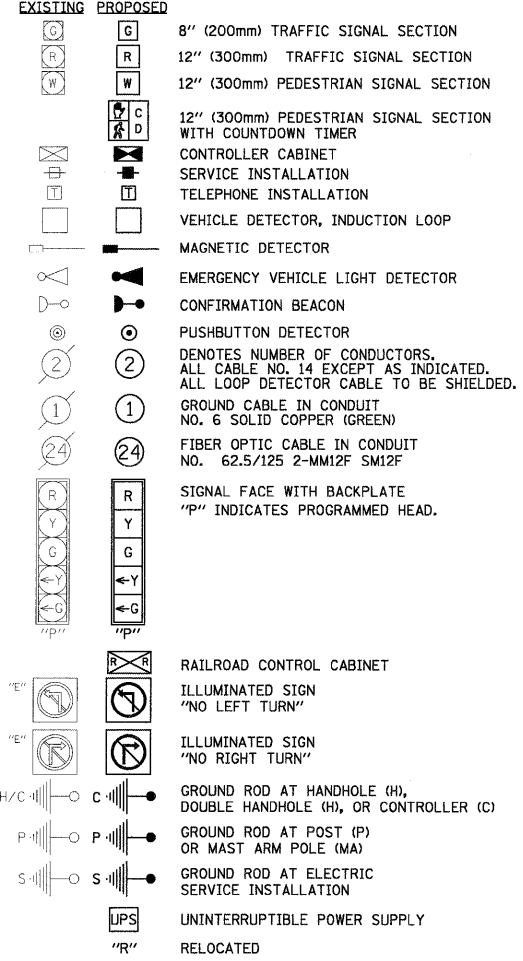
**CABLE PLAN**



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

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

**CABLE PLAN LEGEND**



**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	551
DETECTABLE WARNINGS	SQ FT	54
SIDEWALK REMOVAL	SQ FT	551
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	75
MEDIAN REMOVAL AND REPLACEMENT, SPECIAL	SQ FT	104
SIGN PANEL - TYPE 1	FOOT	42.5
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	102
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	96
POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	198
POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	46
PAVEMENT MARKING REMOVAL	SQ FT	236
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	63
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	35
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	33
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	280
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	63
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	206
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	904
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	953
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1903
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1867
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1296
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	2147
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	238
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	756
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	10
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	842
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	347