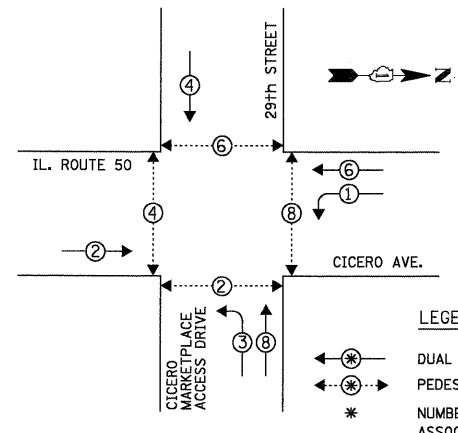


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVIVED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 STRUCTURE NOTATION CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVIVED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 STRUCTURE NOTATION CHECKED: \_\_\_\_\_

CHRISTOPHER B. BURKE ENGINEERING LTD.  
 3575 West Higgins Road, Suite 600  
 Naperville, Illinois 60563  
 (630) 823-6500

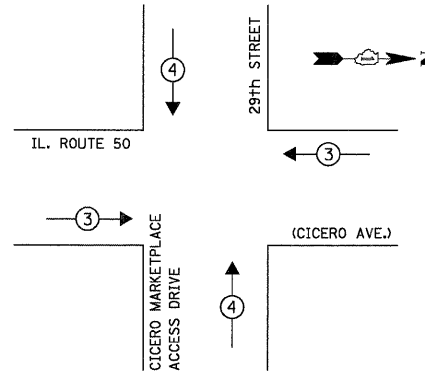
**CONTROLLER SEQUENCE**



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

**PHASE DESIGNATION DIAGRAM**

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



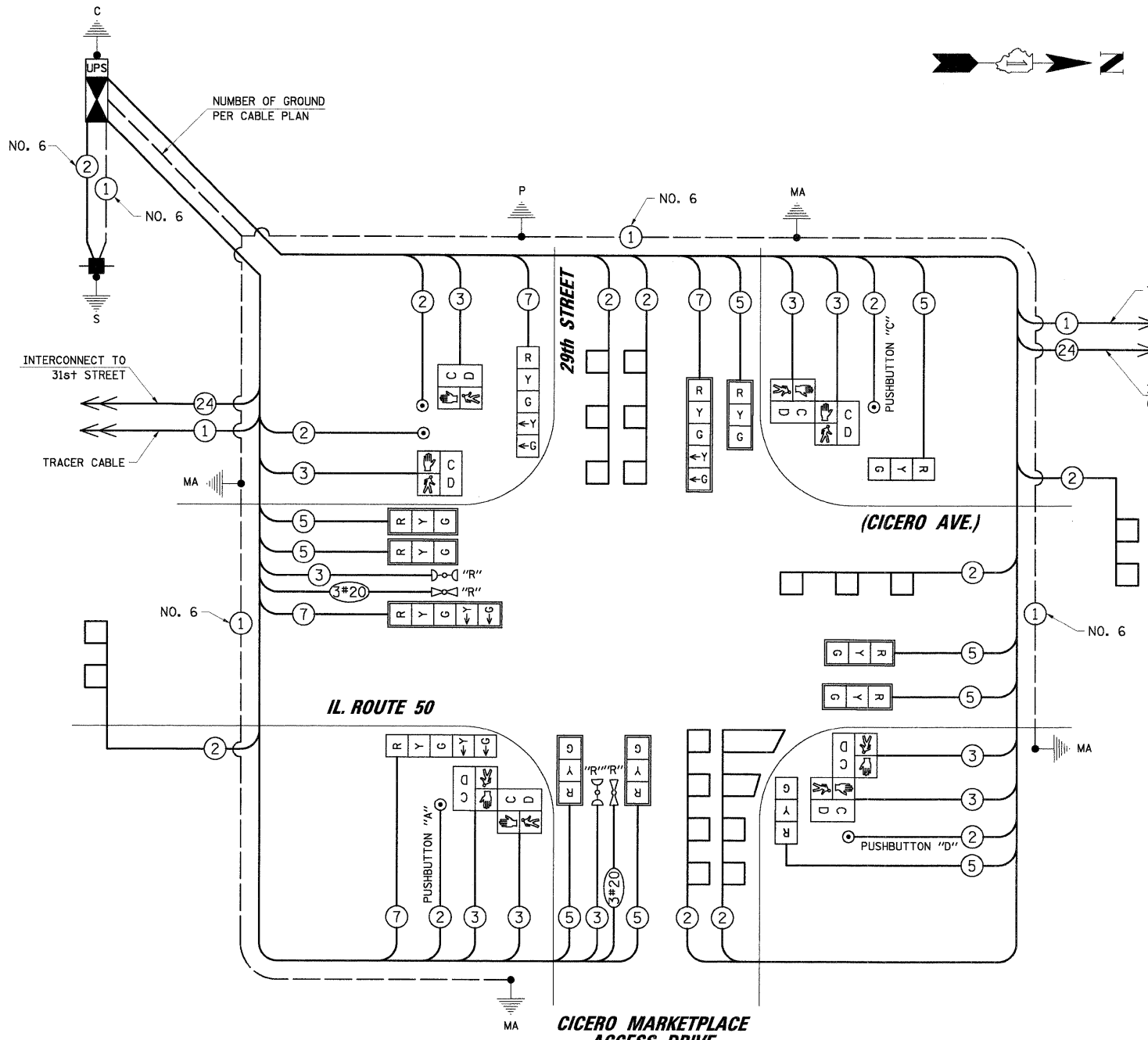
PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	↑	

**CABLE PLAN LEGEND**

- EXISTING PROPOSED
- 8" (200mm) TRAFFIC SIGNAL SECTION
  - 12" (300mm) TRAFFIC SIGNAL SECTION
  - 12" (300mm) PEDESTRIAN SIGNAL SECTION
  - 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
  - CONTROLLER CABINET
  - SERVICE INSTALLATION
  - TELEPHONE INSTALLATION
  - VEHICLE DETECTOR, INDUCTION LOOP
  - MAGNETIC DETECTOR
  - EMERGENCY VEHICLE LIGHT DETECTOR
  - CONFIRMATION BEACON
  - PUSHBUTTON DETECTOR
  - DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
  - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
  - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MMI2F SM12F
  - SIGNAL FACE WITH BACKPLATE
  - "P" INDICATES PROGRAMMED HEAD.
  - RAILROAD CONTROL CABINET
  - ILLUMINATED SIGN "NO LEFT TURN"
  - ILLUMINATED SIGN "NO RIGHT TURN"
  - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
  - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
  - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
  - UNINTERRUPTIBLE POWER SUPPLY RELOCATED
  - "R"

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1820
DETECTABLE WARNINGS	SQ FT	130
SIDEWALK REMOVAL	SQ FT	1753
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	242
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	210
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	51
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 12"	FOOT	300
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 24"	FOOT	62
PAVEMENT MARKING REMOVAL	SQ FT	232
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	51
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	25
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	558
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	222
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	308
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	585
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1503
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1525
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	483
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1 PR	FOOT	1100
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	25
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	4
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	764
PEDESTRIAN PUSH-BUTTON	EACH	5
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	9
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	558
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	365



**NOTE:**  
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

**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**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	13	17	0.50		110.50
(YELLOW)	13	25	0.25		81.25
(GREEN)	13	15	0.25		48.75
ARROW	8	12	0.10		9.60
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	25	0.05		-
VIDEO SYSTEM	-	-	1.00		-
FLASHER	-	-	0.50		-

ENERGY COSTS TO: TOTAL = 550.10

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'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m±L-0.6m)±
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)

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

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**  
 IL. ROUTE 50 (CICERO AVE.) AND 29th STREET / CICERO MARKETPLACE ACCESS DRIVE  
 CICERO, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	2008-080-1	COOK	76	15
				CONTRACT NO. 60F82