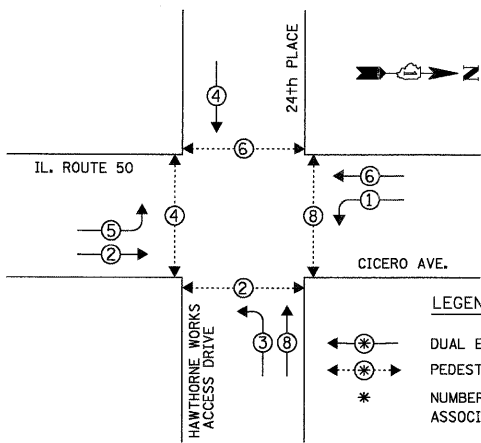


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ ALIGNED: \_\_\_\_\_ CHECKED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_ RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_ NO. \_\_\_\_\_ NO. \_\_\_\_\_  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 3575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (817) 823-0500  
 DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ GRADES CHECKED: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_ B.M. NOTED: \_\_\_\_\_  
 NO. \_\_\_\_\_ NO. \_\_\_\_\_ NO. \_\_\_\_\_

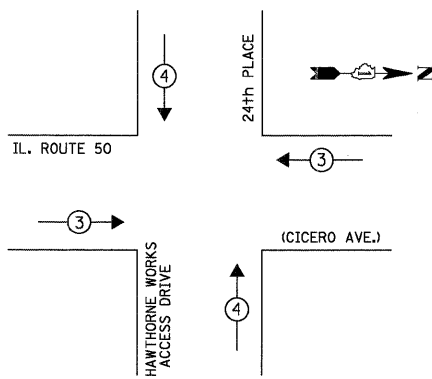
**CONTROLLER SEQUENCE**



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

**PHASE DESIGNATION DIAGRAM**

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

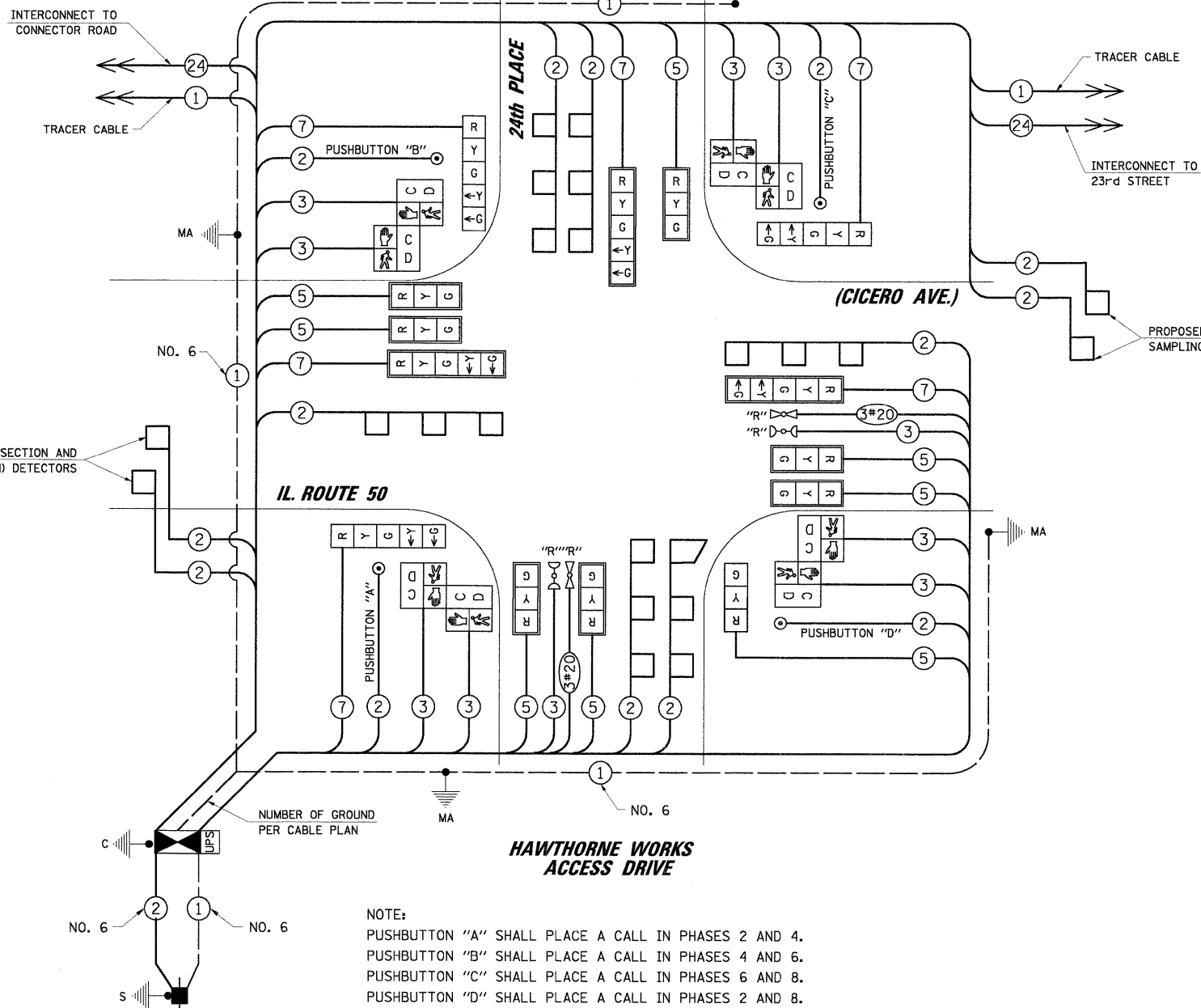


PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE XINCAND.	LED	% OPERATION	
SIGNAL (RED)	14	17	0.50		119.00
(YELLOW)	14	25	0.25		87.50
(GREEN)	14	15	0.25		52.50
ARROW	12	12	0.10		14.40
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 =	573.40

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



**NOTE:**  
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 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**
- EXISTING: 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.
  - PROPOSED: 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-MM12F 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) OR MAST ARM POLE (MA), GROUND ROD AT POST (P) OR MAST ARM POLE (MA), GROUND ROD AT ELECTRIC SERVICE INSTALLATION, UNINTERRUPTIBLE POWER SUPPLY, RELOCATED.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1503
DETECTABLE WARNINGS	SQ FT	90
SIDEWALK REMOVAL	SQ FT	1387
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	86
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	498
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	114
PAVEMENT MARKING REMOVAL	SQ FT	293
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	65
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	37
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	834
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	342
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	200
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	546
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1426
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1325
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1054
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1 PR	FOOT	2002
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	309
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	751
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	7
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	722
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	302