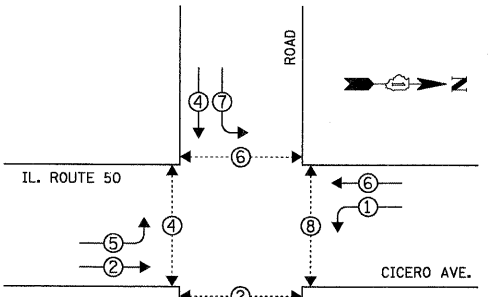


CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Chicago, Illinois 60688
 (847) 821-0500

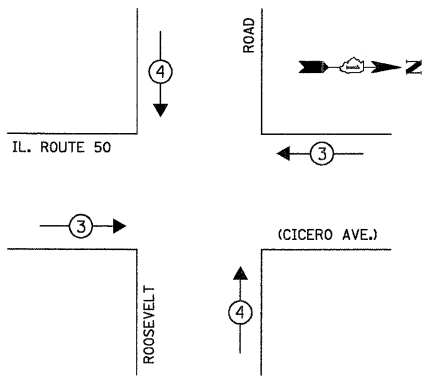
CONTROLLER SEQUENCE



LEGEND
 ←→ DUAL ENTRY PHASE
 ←→ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

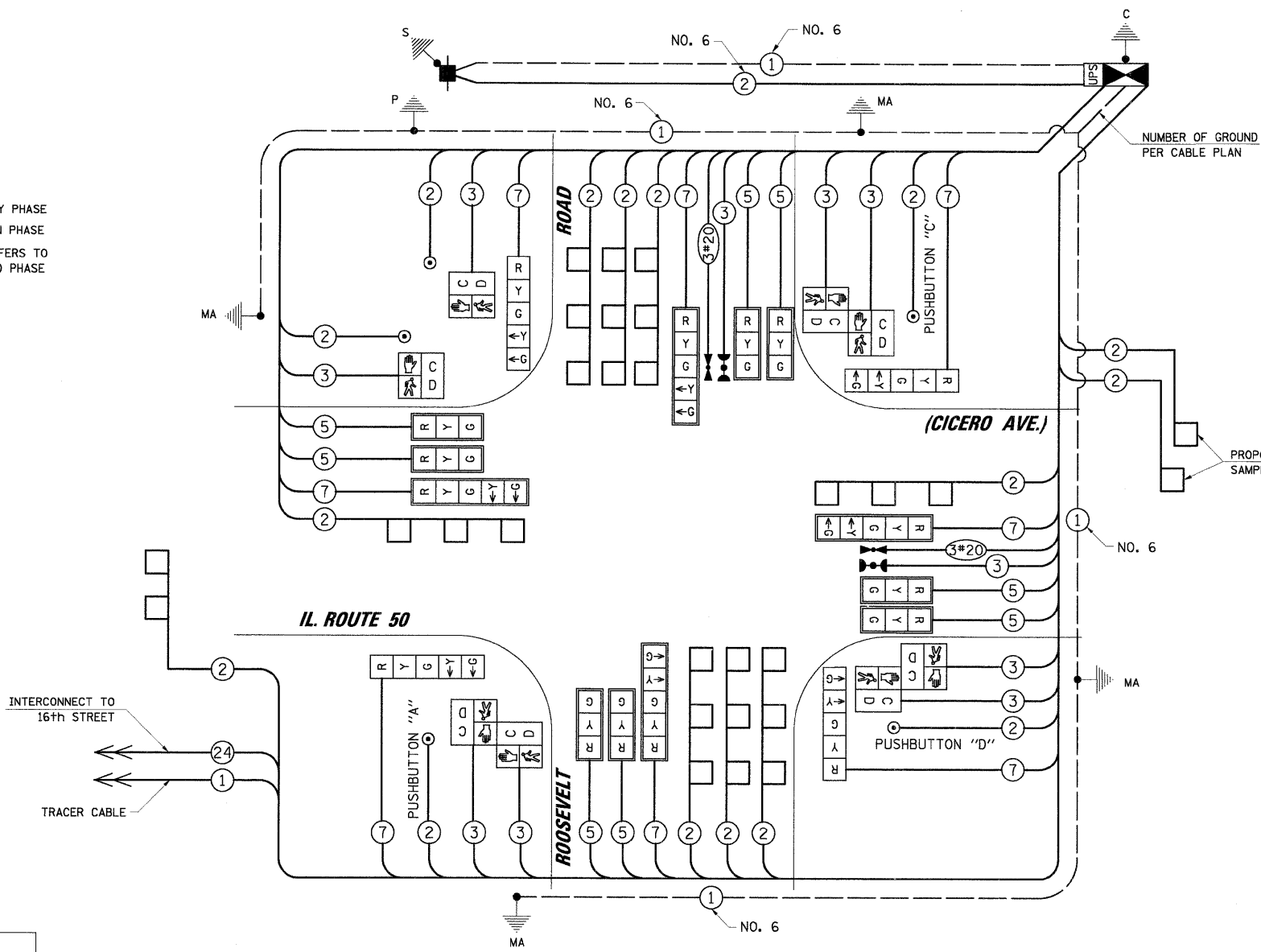
EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

CABLE PLAN LEGEND

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



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

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1395
DETECTABLE WARNINGS	SQ FT	141
SIDEWALK REMOVAL	SQ FT	1395
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	143
SIGN PANEL - TYPE 1	SQ FT	18
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	456
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	124
PAVEMENT MARKING REMOVAL	SQ FT	487
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	50
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	42
CONDUIT IN TRENCH, 6" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	710
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	326
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	204
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	703
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1723
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1336
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1321
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	1772
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	164
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	3
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
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
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	12
INDUCTIVE LOOP DETECTOR	EACH	11
DETECTOR LOOP, TYPE I	FOOT	862
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	13
REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
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	604
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	295

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	16		12	0.10	19.20
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 =	615.20

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

FILE NAME =	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -
N:\dot\0804\Task G-P IL 50\Task G -	L 50 @ Roosevelt\CAB_IL50+Roosevelt.dgn	DRAWN - FPB	REVISED -
	PLOT SCALE = N.T.S.	CHECKED - MJT	REVISED -
	PLOT DATE = 12/18/2008	DATE -	REVISED -

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 ROOSEVELT ROAD
 CICERO, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	2008-080-1	COOK	76	51
CONTRACT NO. 60F82				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			