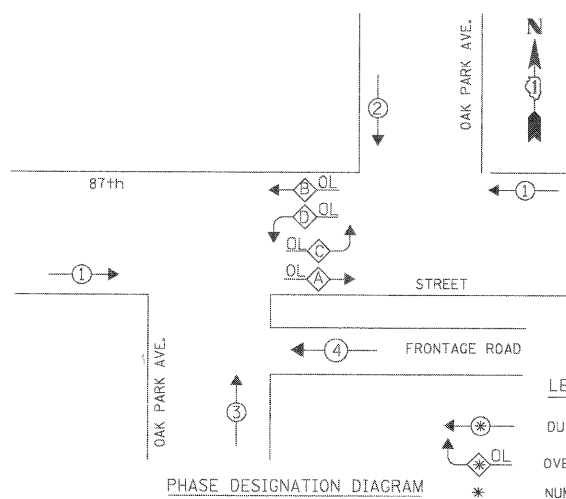


CONTROLLER SEQUENCE



OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 3 + 4	+ 1
B	= 2	+ 1
C	=	3 + 4
D	=	2

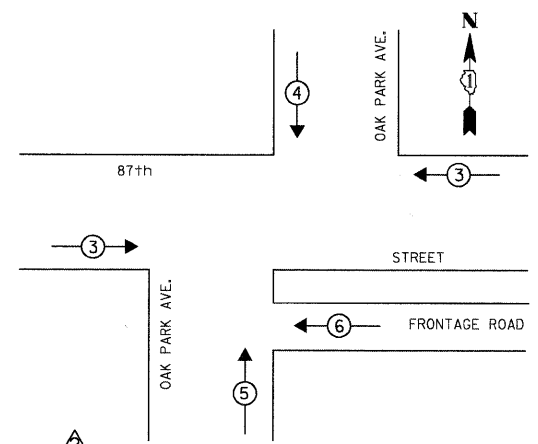
NOTE:  
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

CARE IS TO BE TAKEN BY THE CONTRACTOR TO AVOID DAMAGE TO THE EXISTING TRAFFIC SIGNAL CONDUIT, DETECTORS, AND EQUIPMENT. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED CONDUIT OR EQUIPMENT AT NO COST TO THE COUNTY OR VILLAGE.

CABLE PLAN LEGEND

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

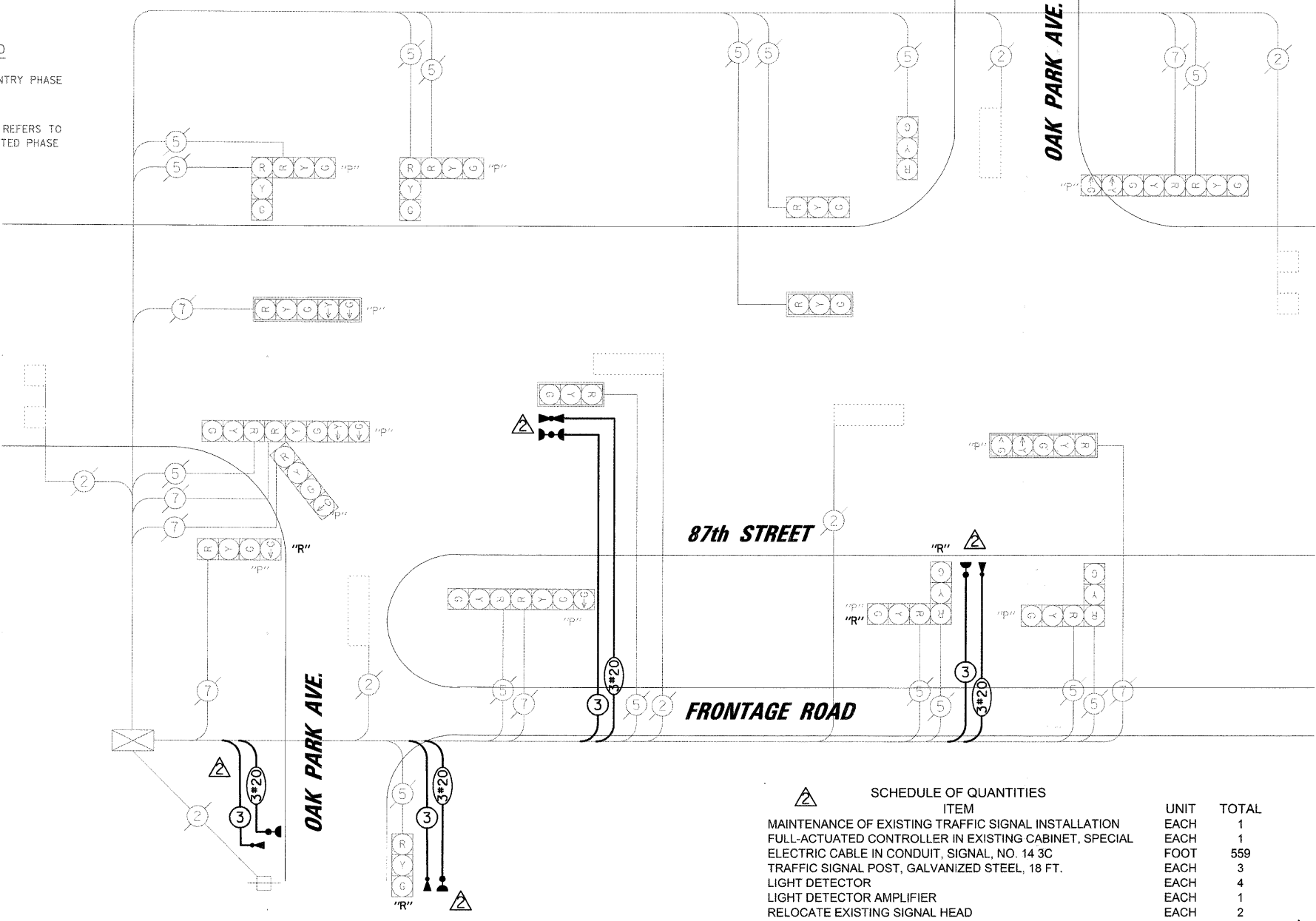


PROPOSED EMERGENCY VEHICLE PREEMPTORS

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

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	23	135	0.50	1552.50
(YELLOW)	23	135	0.25	776.25
(GREEN)	25	135	0.25	843.75
ARROW	8	135	0.10	108.00
PED. SIGNAL	-	90	1.00	-
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	252	0.05	-
FLASHER	-	-	0.50	-



SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	559
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT.	EACH	3
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	559
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	EACH	1

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM AND MUNICIPAL REQUIREMENTS

ENERGY COSTS TO: TOTAL = 3381.00  
**COOK COUNTY HIGHWAY DEPARTMENT**  
 69 WEST WASHINGTON ROOM 2139  
 CHICAGO, ILLINOIS 60602-3134  
 ENERGY SUPPLY: CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_

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)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m±L-0.6m)±
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

CLIENT: \_\_\_\_\_

NO.	DATE	NATURE OF REVISION	CHKD.
6-27-08		INSTALLATION OF EMERGENCY VEHICLE PREEMPTION	

DSGN.	FCP
DWN.	MJT
CHKD.	
SCALE:	N.T.S.
DATE:	11/10/2008

TITLE: **SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**  
 87th STREET AND OAK PARK AVENUE  
 OAK LAWN, ILLINOIS

PROJECT NO. 080363  
 SHEET 18 OF 48  
 DRAWING NO. \_\_\_\_\_

N:\OakLawn\080363\Traffic\VEVP\_87th-OakPark.dgn