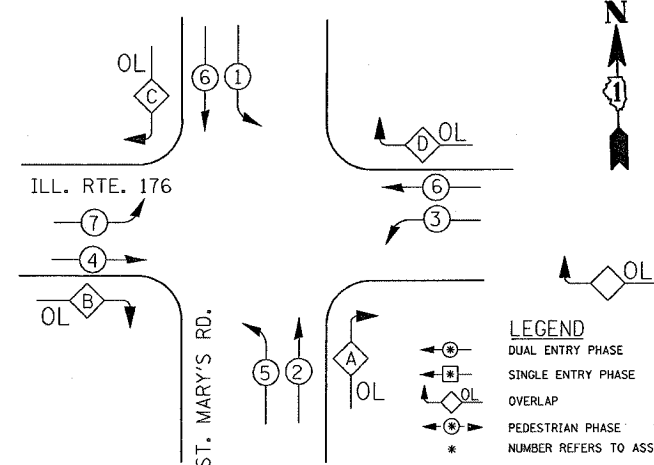


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	2004-125 TS	LAKE	18	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62890				

**CABLE PLAN LEGEND**

- |                 |                 |   |
|-----------------|-----------------|---|
| <b>EXISTING</b> | <b>PROPOSED</b> |   |
|                 |                 | 8" (200mm)  |
|                 |                 | 12" (300mm)   |
|                 |                 | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
|                 |                 | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
|                 |                 | CONTROLLER CABINET  |
|                 |                 | SERVICE INSTALLATION  |
|                 |                 | TELEPHONE CONNECTION  |
|                 |                 | 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 MM12F SM12F   |
|                 |                 | COAXIAL CABLE   |
|                 |                 | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD   |
|                 |                 | RAILROAD CONTROL CABINET  |
|                 |                 | 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   |
|                 |                 | VIDEO DETECTOR  |

**CONTROLLER SEQUENCE**



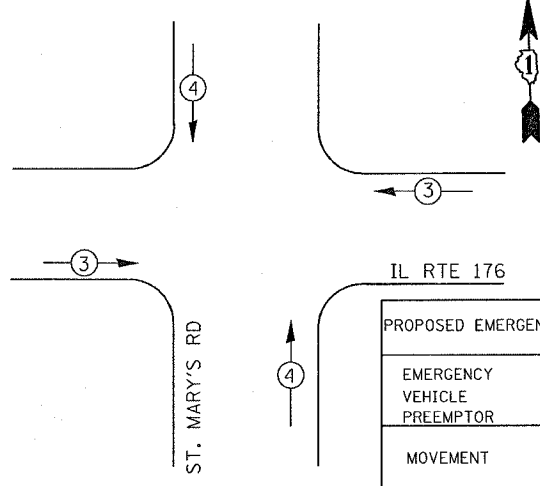
**LEGEND**  
 DUAL ENTRY PHASE  
 SINGLE ENTRY PHASE  
 OVERLAP  
 PEDESTRIAN PHASE  
 \* NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

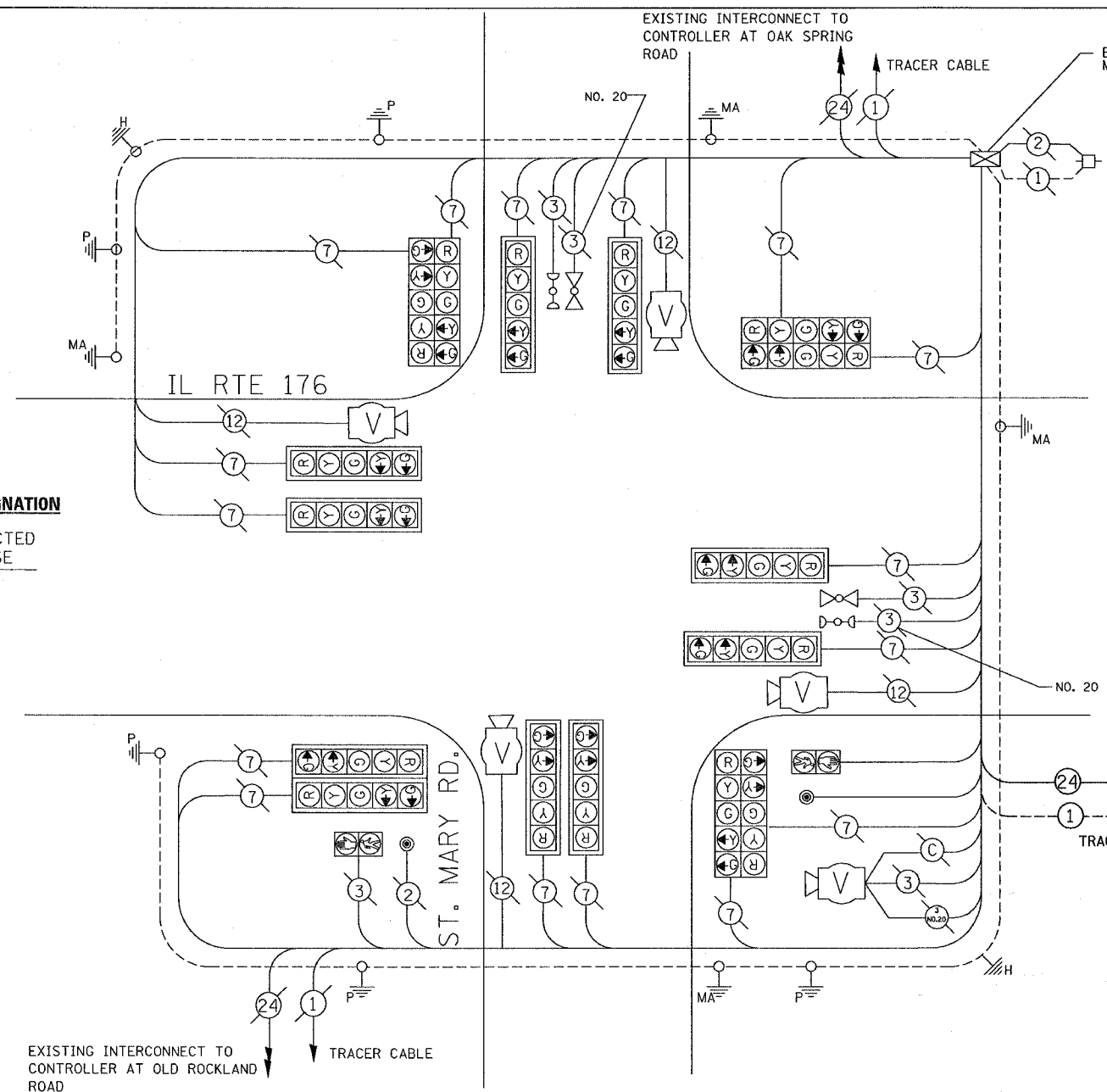
**RIGHT TURN OVERLAP PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	3
B	= 4 +	5
C	= 6 +	7
D	= 8 +	1

**EMERGENCY VEHICLE PREEMPTION DIAGRAM**



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



**SCHEDULE OF QUANTITIES**

**CABLE PLAN**

QUANTITY	UNIT	ITEM
.2	EACH	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
.2	EACH	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601
.2	EACH	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
.2	EACH	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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)
		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)

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	32	135	12	0.10	38
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	

FLASHER 0.50

ENERGY COSTS TO: TOTAL = 484

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096

CONTACT: PAUL CRUZ  
 PHONE: 847-816-5331  
 COMPANY: COMMONWEALTH EDISON

NOTE: THE PROPOSED TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "ECONOLITE".

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES  
 ILL RTE 176 @ ST. MARY'S ROAD

SCALE: VERT. NONE  
 HORIZ. DATE 01-05-2005

DRAWN BY: JSM  
 DESIGNED BY: JSM  
 CHECKED BY: JAD