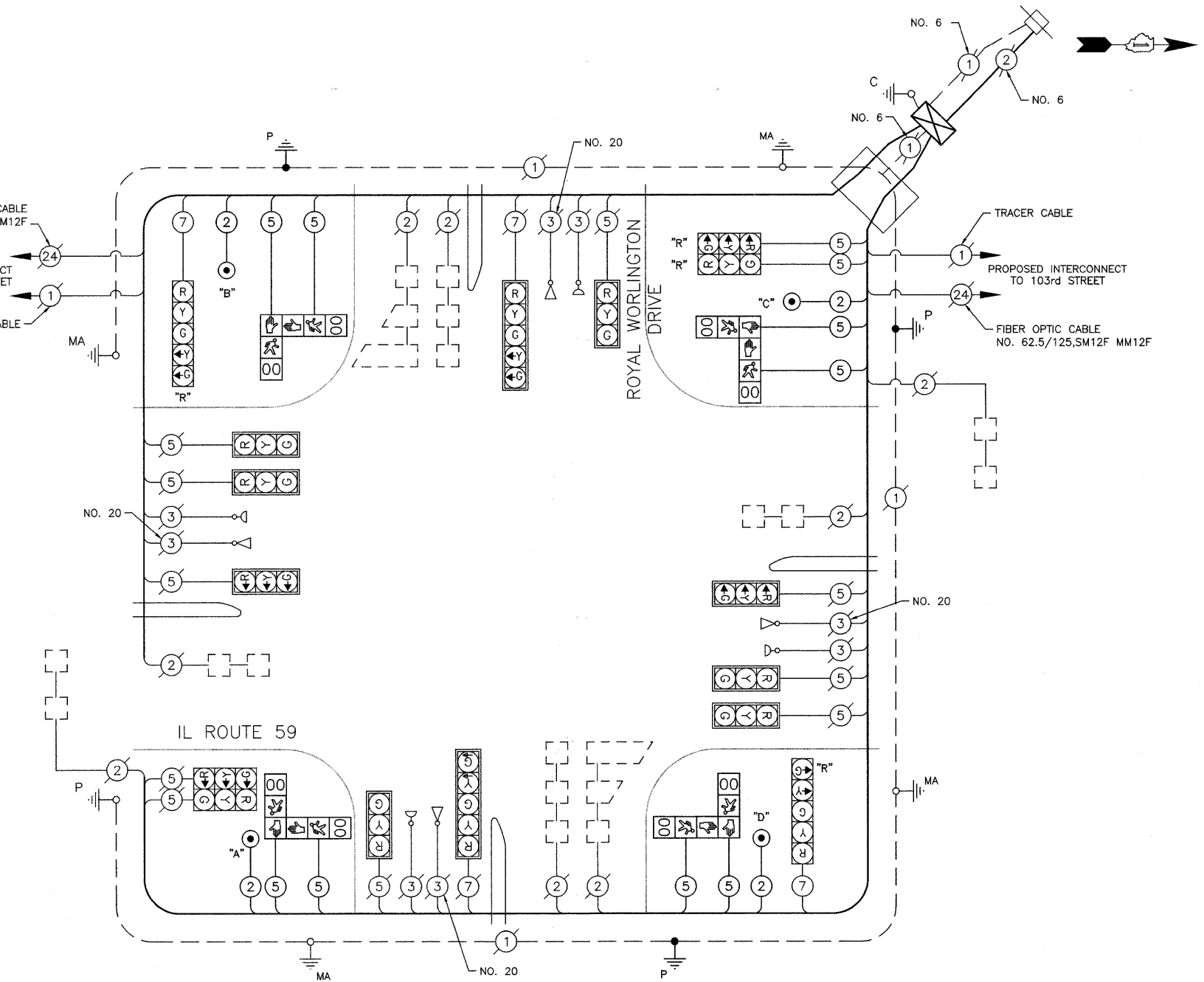


EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↕

**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 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 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)   |
|          |          | GROUND ROD AT POST (P) OR MAST ARM POLE (MA)   |
|          |          | GROUND ROD AT ELECTRIC SERVICE INSTALLATION  |
|          |          | EXISTING EQUIPMENT TO BE RELOCATED   |



**CABLE PLAN**  
NOT TO SCALE

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

**SCHEDULE OF QUANTITIES**

PAY ITEM	UNIT	QNTY.
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	120
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	602
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1386
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	317
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	169
CONCRETE FOUNDATION, TYPE A	FOOT	12
DRILL EXISTING HANDHOLE	EACH	5
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
RELOCATE EXISTING SIGNAL HEAD	EACH	3
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	3
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	450
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	50	136
SIGNAL (YELLOW)	16	135	25	25	100
SIGNAL (GREEN)	16	135	15	25	60
ARROW	8	135	12	10	10
PED SIGNAL	8	90	25	100	200
CONTROLLER	1	100	100	100	100
<b>TOTAL =</b>					<b>606</b>

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 (2.0)
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)

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, IL 60196-1096

DESIGNED OJT	REVISED -
DRAWN OJT	REVISED -
CHECKED JJE	REVISED -
DATE 6/08/2009	REVISED -



**CABLE PLAN**  
**IL ROUTE 59 AND ROYAL WORLINGTON DRIVE**  
SCALE: NOT TO SCALE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	07-00136-00-SW	WILL & DUPAGE	88	31
FED. ROAD DIST. NO. 1 ILLINOIS			CONTRACT NO. 63224	

