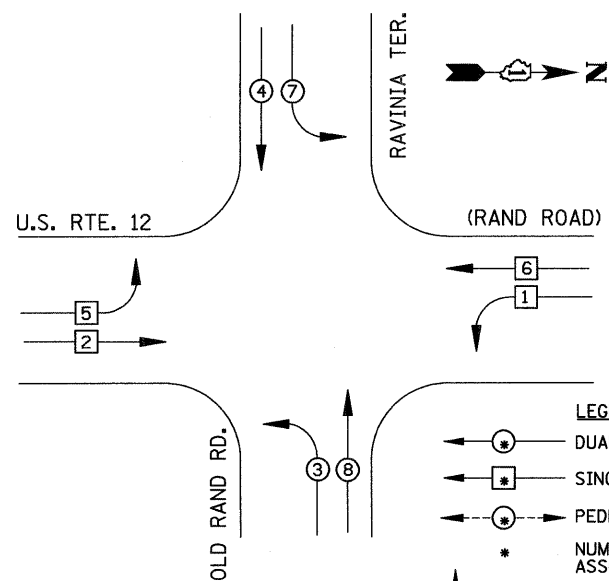
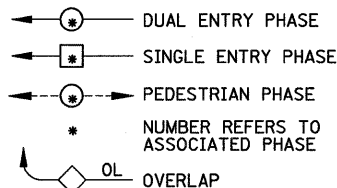


**CONTROLLER SEQUENCE**

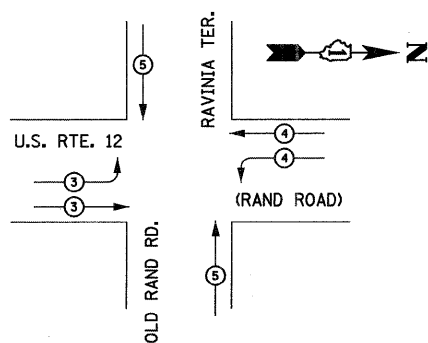


**LEGEND**



**PHASE DESIGNATION DIAGRAM**

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



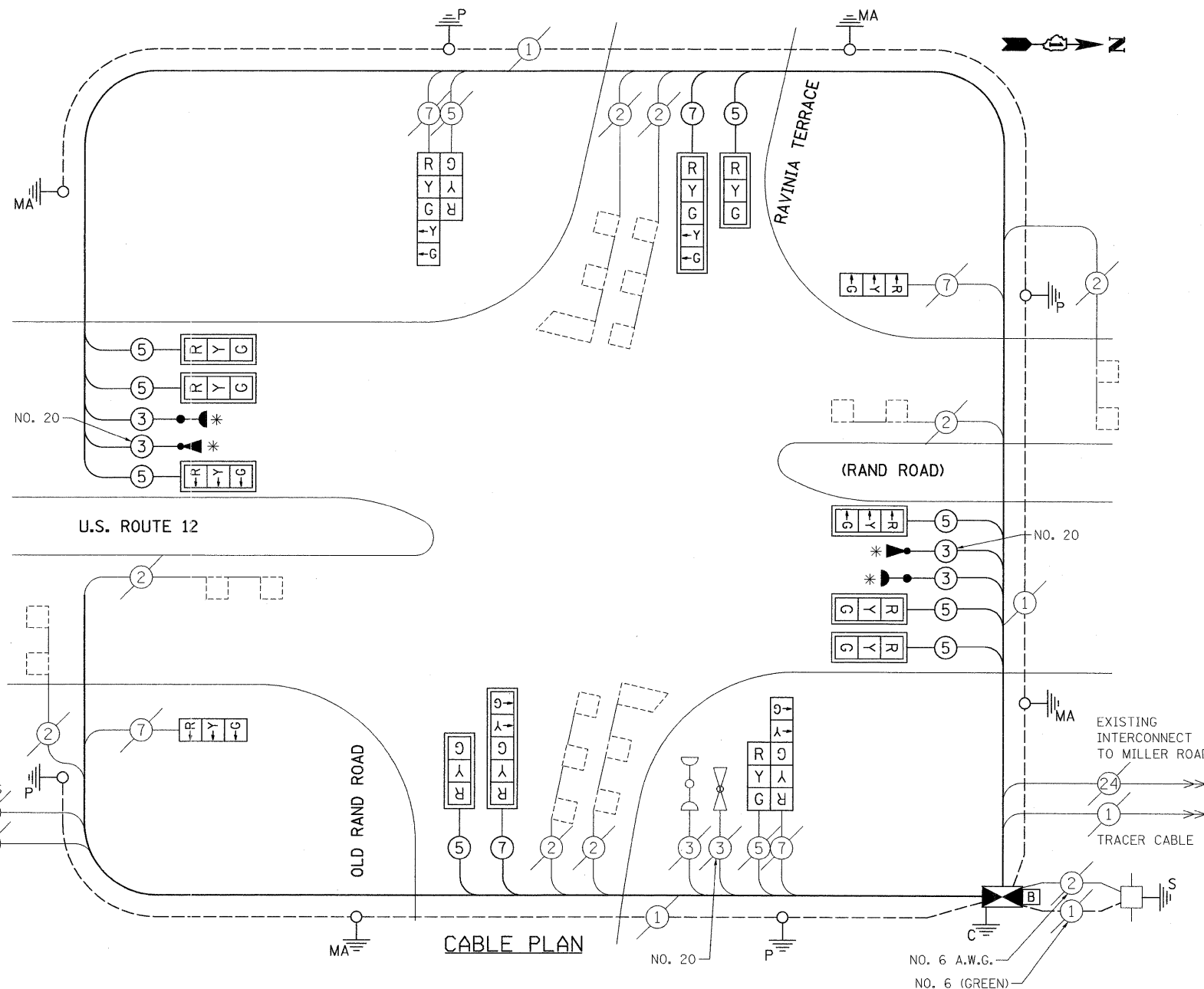
PROPOSED EMERGENCY VEHICLE PREEMPTOR				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	
MOVEMENT	↔	↔	↔	

**CABLE PLAN LEGEND**

- |          |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|          |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| EXISTING | PROPOSED |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
- 2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
- 1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
- 24 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
- UNINTERRUPTIBLE POWER SUPPLY

EXISTING INTERCONNECT TO K MART ACCESS

TRACER CABLE



**SCHEDULE OF QUANTITIES**

MOBILIZATION	L SUM	0.125
ENGINEERS FIELD OFFICE, TYPE A	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.125
SIGN PANEL, TYPE 1	SQ FT	20
SIGN PANEL, TYPE 2	SQ FT	23
RELOCATE SIGN PANEL, TYPE 1	SQ FT	15
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	146
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	146
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	465
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1873
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	470
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1492
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	12.85
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL II	EACH	1
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	465
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

\* 100% COST TO THE VILLAGE OF LAKE ZURICH

**NOTE:**  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

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	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	

ENERGY COSTS TO: TOTAL = 405.6

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W. CENTER COURT  
SCHAUMBURG, IL 60196

ENERGY SUPPLY CONTACT: DOTTIE PROSEN  
PHONE: (847) 816-5323  
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	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

FILE NAME = \MICROST\352056\ 11-RAVINIA CAB.DGN

USER NAME = JLA

DESIGNED - KK

DRAWN - JLA

CHECKED - BPT

DATE - 12-10-08

REVISED -

REVISED -

REVISED -

REVISED -

PLOT SCALE = 1"=20'

PLOT DATE = 12-10-08

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM**  
U.S. ROUTE 12 (RAND ROAD) AT OLD RAND ROAD /RAVINIA TER.

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:

**CEMCON, Ltd.**  
Consulting Engineers, Land Surveyors & Planners  
2280 White Oak Circle, Suite 100  
Aurora, Illinois 60504-9675  
Ph: 630.862.2100 Fax: 630.862.2199  
E-Mail: codd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2008-069 TS	LAKE	26	11

CONTRACT NO. 60F62

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT