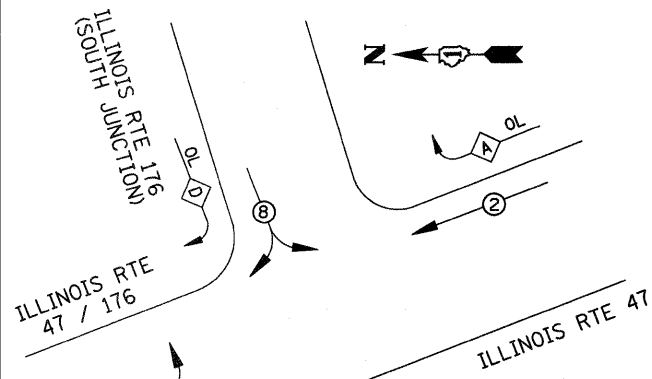
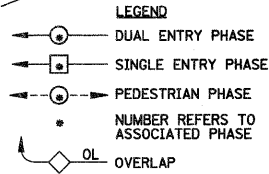


**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**



**RIGHT TURN OVERLAP DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 8
D	= 8	+ 1

**SCHEDULE OF QUANTITIES**

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
MASTER CONTROLLER	EACH	1
TRANSCIVER - FIBER OPTIC	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	435
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	23
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	11
DETECTOR LOOP, TYPE 1	FOOT	602
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	23
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL I	SQ FT	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	521

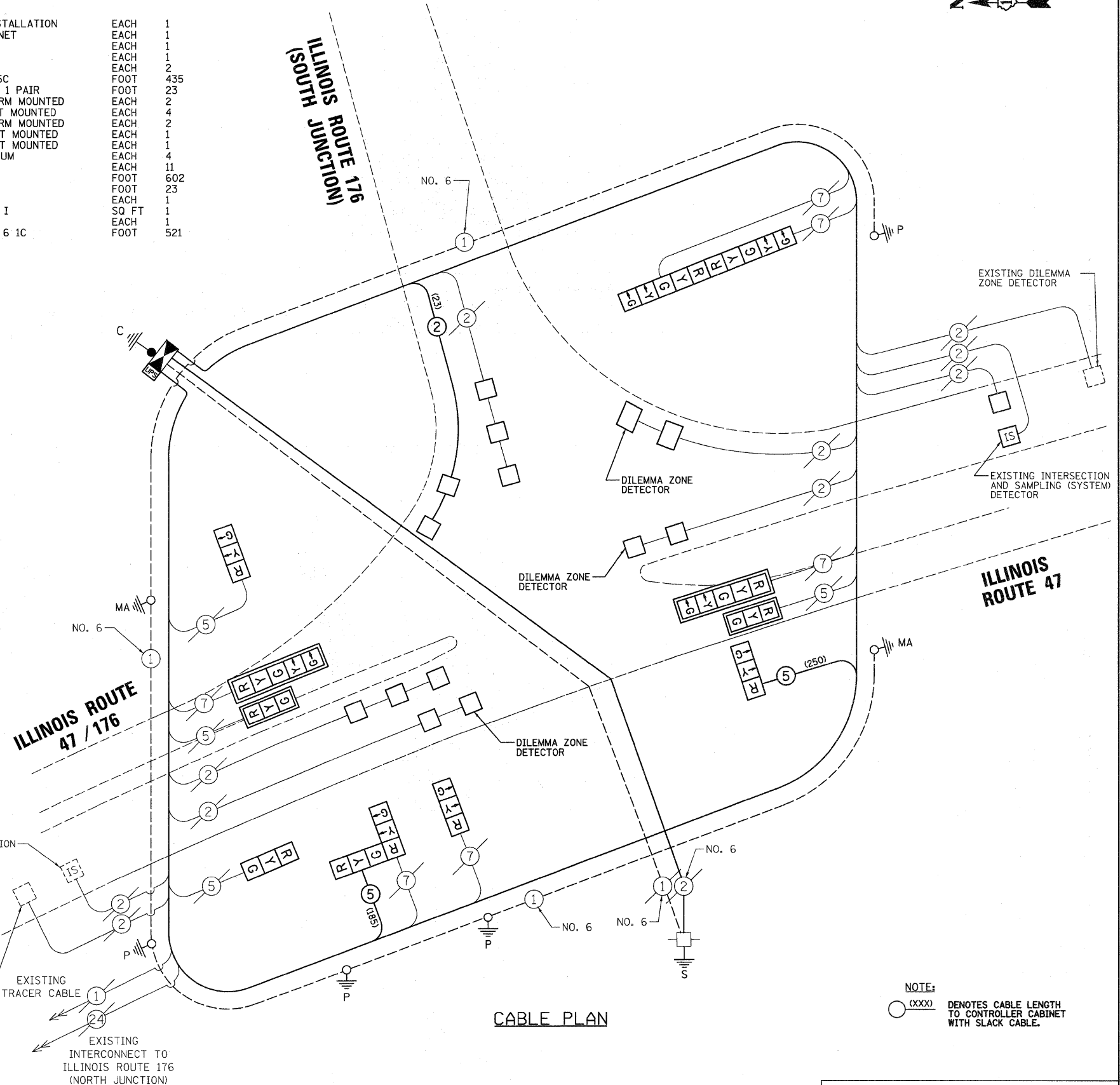
**RESTORATION OF WORK AREA**

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.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
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 = 331.6  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W. CENTER COURT  
SCHAUMBURG, IL 60196  
ENERGY SUPPLY CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
COMPANY: COMED

FILE NAME =	USER NAME = RDS	DESIGNED - KK	REVISED -
\\MICROST\352093\ RTE 47 EAST CAB.DGN		DRAWN - RDS	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 12-17-10	DATE - 12-17-10	REVISED -



**CABLE PLAN**

NOTE: (XXX) DENOTES CABLE LENGTH TO CONTROLLER CABINET WITH SLACK CABLE.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**  
ILLINOIS ROUTE 47 / 176 AT ILLINOIS ROUTE 176 (SOUTH JUNCTION)

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 60504-9875  
Ph: 630.882.2100 Fax: 630.882.2199  
E-Mail: add@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	105 N-4	McHENRY	60	32

CONTRACT NO. 60K18  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT