

SCHEDULE OF QUANTITIES

ITEM	UNIT	QTY
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EA	4
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FT	1020
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FT	24
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FT	478
HANDHOLE	EA	5
HEAVY-DUTY HANDHOLE	EA	4
DOUBLE HANDHOLE	EA	2
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EA	1
TRANSCIVER - FIBER OPTIC	EA	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FT	195
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FT	1578
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FT	1331
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FT	1536
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FT	2817
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2/C	FT	72
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EA	3
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EA	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EA	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EA	1
STEEL MAST ARM ASSEMBLY AND POLE, 68 FT.	EA	1
CONCRETE FOUNDATION, TYPE A	FT	12
CONCRETE FOUNDATION, TYPE C	FT	4
CONCRETE FOUNDATION, TYPE E 36 INCH DIAMETER	FT	28
CONCRETE FOUNDATION, TYPE E 42 INCH DIAMETER	FT	46
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EA	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EA	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EA	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EA	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EA	11
INDUCTIVE LOOP DETECTOR	EA	11
LIGHT DETECTOR	EA	2
LIGHT DETECTOR AMPLIFIER	EA	1
PEDESTRIAN PUSH-BUTTON	EA	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EA	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EA	1
REMOVE EXISTING HANDHOLE	EA	6
REMOVE EXISTING CONCRETE FOUNDATION	EA	7
PREFORMED DETECTOR LOOP	FT	694
TEMPORARY TRAFFIC SIGNAL TIMING	EA	1
SERVICE INSTALLATION - POLE MOUNTED	EA	1
UNINTERRUPTIBLE POWER SUPPLY SPECIAL	EA	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FT	630
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FT	448

* DENOTES 100% LOCAL AGENCY COST
 ** DENOTES ITEMS ASSOCIATED WITH THE TRAFFIC SIGNAL AT US RTE 14 AND COLLEGE ENTRANCE NO. 1 (TO BE REMOVED BY THIS CONTRACT)

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

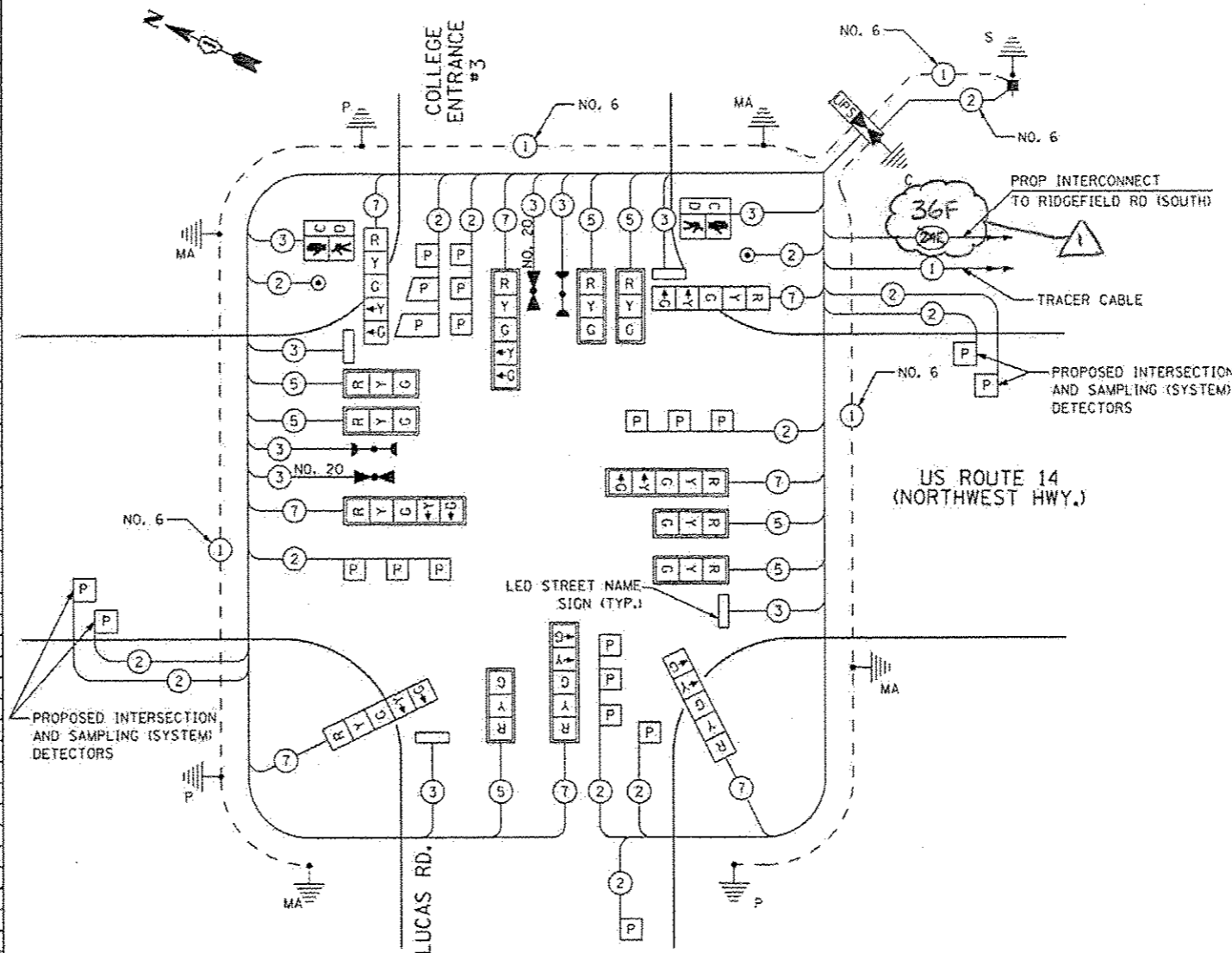
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	15	135	17	0.50	127.50
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50.00
CONTROLLER	1	100	100	1.00	100.00
FLASHER			25	0.50	
LED SIGN	1		90	0.50	45.00
LED SIGN (6'x)	3		120	0.50	180.00

ENERGY COSTS TO: TOTAL = 671.7

CITY OF CRYSTAL LAKE

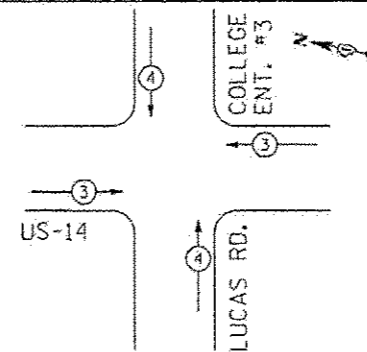
100 WEST WOODSTOCK ST
 CRYSTAL LAKE, ILLINOIS 60014

ENERGY SUPPLY CONTACT: MIKE WIDHALM
 PHONE: (815) 263-5624
 COMPANY: COMED

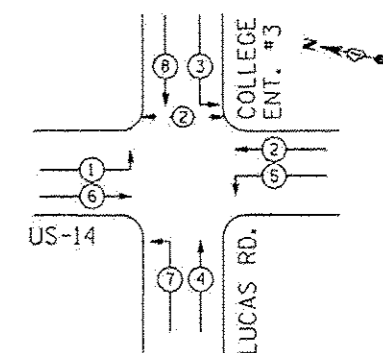


CABLE PLAN

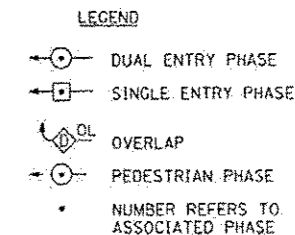
EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



LEGEND

- → DUAL ENTRY PHASE
- → SINGLE ENTRY PHASE
- → OVERLAP
- → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

NOTE: THE EMERGENCY PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" BRAND TO MATCH THE EXISTING CITY SYSTEM.

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

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC WORK AREA SHALL BE INCLUDED IN THE COST OF 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.

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	↔ ↑↓

EJM ENGINEERING, INC.
 411 South Wells Street Suite 1000
 Chicago, Illinois 60607

FILE NAME: ...10182517-SHT-TSD1A.dgn	USER NAME: wmanion	DESIGNED: GR	REVISED: GR
		DRAWN: GR	REVISED: GR
		CHECKED: RS	REVISED: RS
		DATE: 10/15/2013	REVISED: 10/15/2013

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE. 14 AND COLLEGE ENTRANCE NO. 3

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	21R-3	MCHENRY	431	291
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				CONTRACT NO. 62517