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
	TRANSCEIVER - 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)

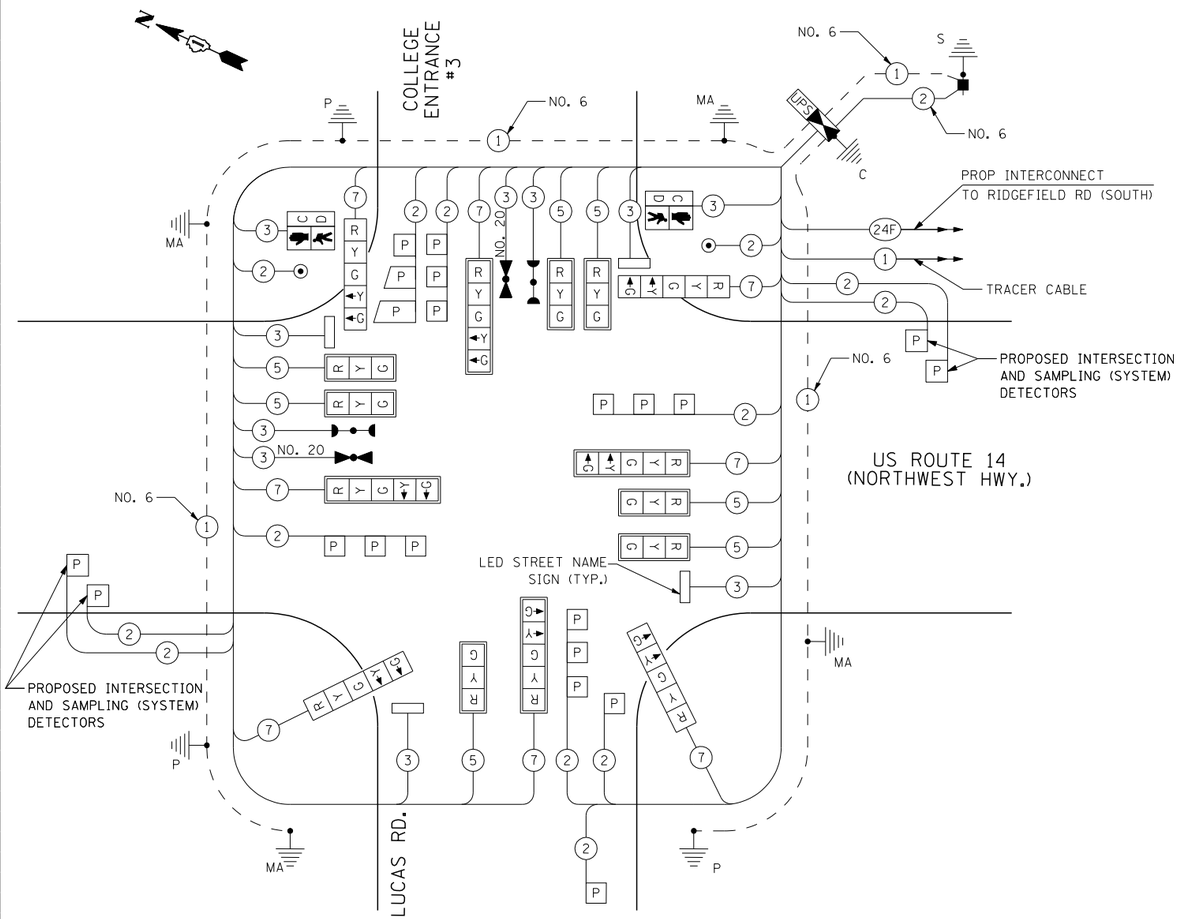
I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

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'+)	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

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



CABLE PLAN

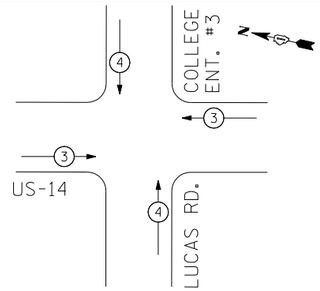
NOTE:
THE EMERGENCY PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" BRAND TO MATCH THE EXISTING CITY SYSTEM.

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.

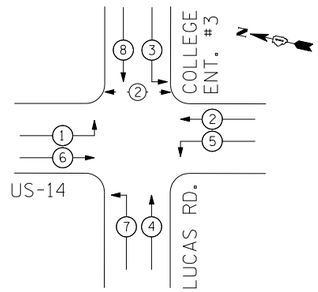
RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC, 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.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇄	⇅

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

FILE NAME = ...\D162517-SHT-TS01A.dgn	USER NAME = rswanson	DESIGNED - GR	REVISED -
		DRAWN - GR	REVISED -
	PLOT SCALE = 20:1	CHECKED - RS	REVISED -
	PLOT DATE = 6/6/2014	DATE - 10/15/2013	REVISED -

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	27R-3	MCHENRY	431	291
		CONTRACT NO. 62517		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		