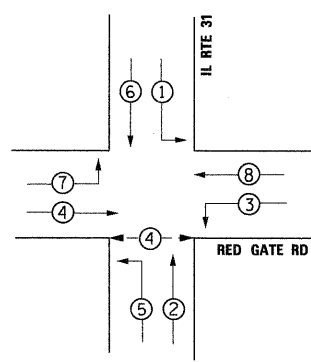
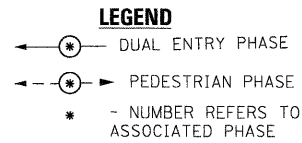


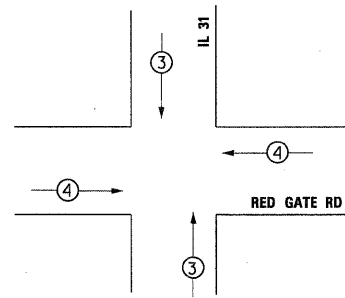
**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**



**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	↑	→

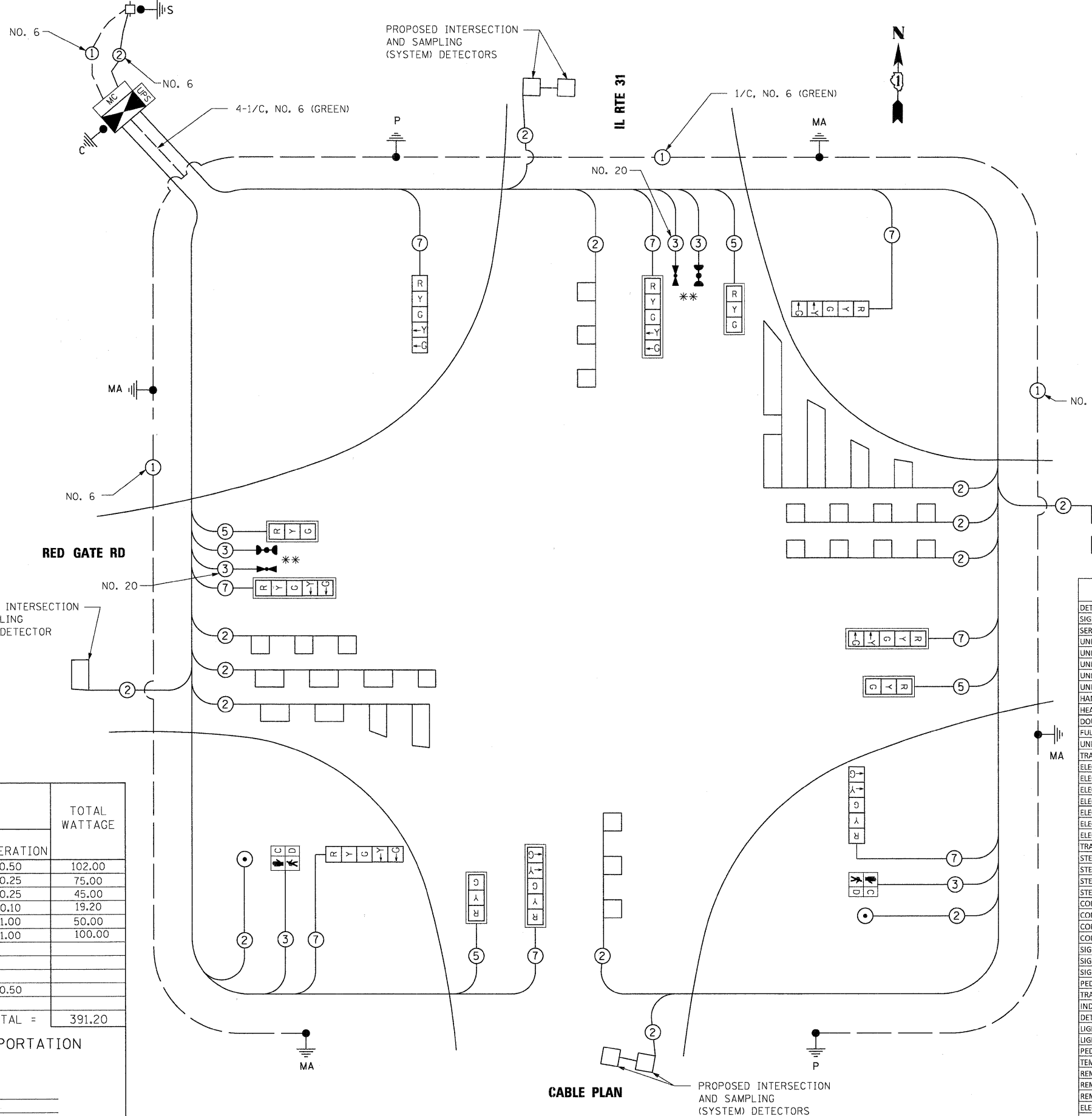
I.D.O.T  
TRAFFIC SIGNAL INSTALLATION  
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.00
(YELLOW)	12	-	25	0.25	75.00
(GREEN)	12	-	15	0.25	45.00
ARROW	16	-	12	0.10	19.20
PED. SIGNAL	2	-	25	1.00	50.00
CONTROLLER	1	-	100	1.00	100.00
FLASHER				0.50	

ENERGY COSTS TO: TOTAL = 391.20

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

201 W. CENTER COURT  
SCHAMBURG, ILLINOIS 60196  
ENERGY SUPPLY CONTACT: GLYNN AMBURGEY  
PHONE: 630-377-4407  
COMPANY: CITY OF ST. CHARLES



**CABLE PLAN**

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

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

**NOTE:**  
ALL DETECTOR LOOPS AT THIS INTERSECTION ARE TYPE I.

\*\* 100% OF EVP COSTS TO ST. CHARLES FIRE DEPARTMENT

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 MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**SUMMARY OF QUANTITIES**

DESCRIPTION	UNIT	TOTAL QUANTITY
DETECTABLE WARNINGS	SQ.FT	50
SIGN PANEL - TYPE 1	SQ.FT	31.5
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,430
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	36
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	55
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	348
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	267
HANDHOLE	EACH	6
HEAVY DUTY HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
TRANSMITTER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	597
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	597
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	954
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,554
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR, TWISTED SHIELDED	FOOT	2,873
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	162
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	501
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 64 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42
SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE I	FOOT	1,625
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	357
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

PLOT DATE = 11/29/2011  
 USER NAME = tblank  
 FILE NAME = ...\\df1e-abc-shr-ta-1l31-cable.dgn  
 PLOT DATE = 11/29/2011

DESIGNED - BC	REVISED -
DRAWN - BC	REVISED -
CHECKED - MPM	REVISED -
DATE - 10/23/2011	REVISED -



**CITY OF ST. CHARLES**

**TRAFFIC SIGNAL CABLE PLAN  
IL 31 AT RED GATE RD**

SCALE: SHEET NO. 9 OF 12 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00092-00-BR	KANE	440	195
CONTRACT NO. 63650				
ILLINOIS FED. AID PROJECT				