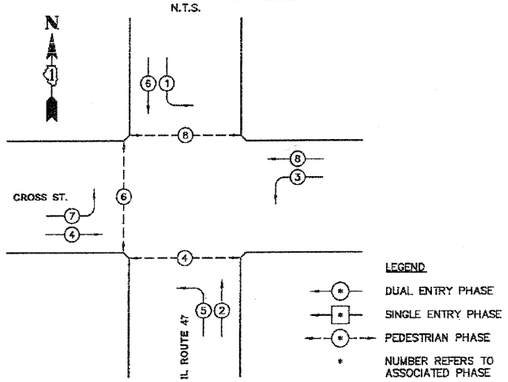
CONTROLLER SEQUENCE

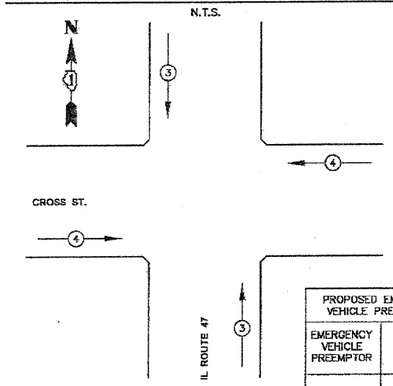
N.T.S.



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

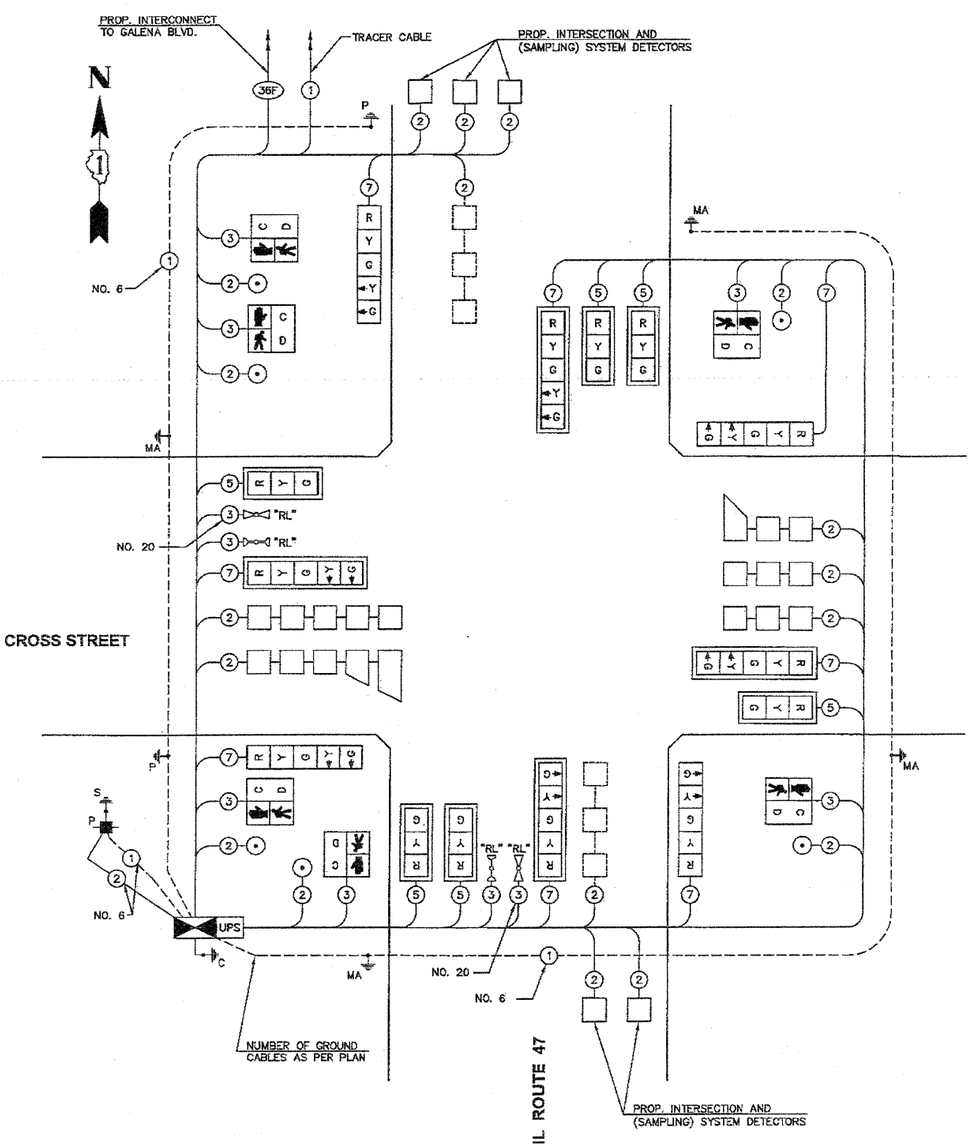
N.T.S.



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

CABLE PLAN

N.T.S.



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

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

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM DESCRIPTION
29	SQ FT	SIGN PANEL - TYPE 1
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
692	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
105	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
44	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
372	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
5	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
912	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1,252	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1,250	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1,517	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
3,683	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
46	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
560	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
48	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
3	EACH	DRILL EXISTING HANDHOLE
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
12	EACH	INDUCTIVE LOOP DETECTOR
965	FOOT	DETECTOR LOOP, TYPE I
6	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
306	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
1	EACH	FULL-ACTUATED CONTROLLER AND CABINET, TYPE IV, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATIONS	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	–		25	0.05	–
FLASHER				0.50	–
				TOTAL =	528.20

ENERGY COST – BILLED TO: VILLAGE OF SUGAR GROVE
(ADDRESS) 10 MUNICIPAL DRIVE
SUGAR GROVE, IL 60554

ENERGY SUPPLY – CONTACT: TOM PERKINS
PHONE: 630-723-2127
COMPANY: COMED

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CONSULTING ENGINEERS
52 Wheeler Road
Sugar Grove, Illinois 60554
630.466.6700 / www.eeiweb.com

USER NAME =	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE =	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 47 AND CROSS STREET

SCALE: N.T.S. | SHEET NO. 5 OF 9 SHEETS | STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	10-00023-00-ES	KANE	70	35
		CONTRACT NO.63700		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT NO. M-9003(717)

Plotted: March 28, 2012 @ 2:18 PM By: Kris Pinos - Tab: 35 Cable Plan - 22x34

Path: H:\SSI\FROJ\S910102\DWG\DWG FINAL ENG\S610102-SIGNAL