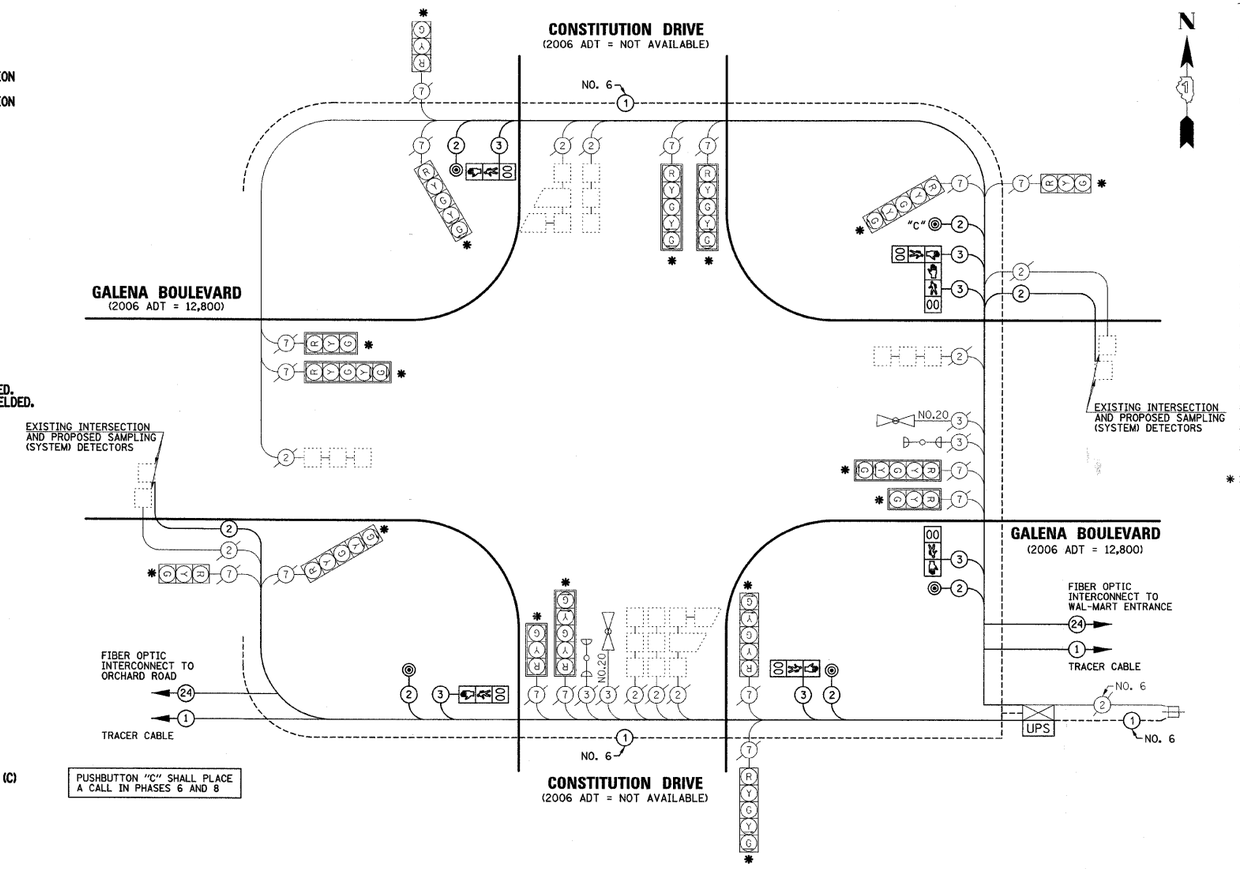
CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
	00	12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		LUMINAIRE
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G Y G "E" "P"	R Y G -Y -G "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"E" R R	R R	RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		WIRELESS ANTENNA
H/C	H/C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P/MA	P/MA	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
UPS	UPS	UNINTERRUPTABLE POWER SUPPLY
	*	LED STREET NAME SIGN
V	V	VIDEO DETECTION CAMERA



SCHEDULE OF QUANTITIES

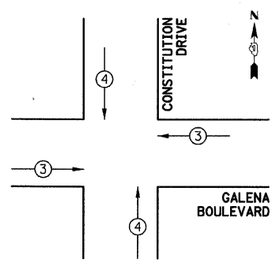
PAY ITEM DESCRIPTION	UNIT	CONSTITUTION DRIVE
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	117
DETECTABLE WARNINGS	SQ FT	16
SIDEWALK REMOVAL	SQ FT	93
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	223
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	905.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	947.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	766.5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	5
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1088
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	506.5
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	10
SIGNAL HEAD, LED, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	5
SIGNAL HEAD, LED, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	5

* SIGNAL HEAD, LED RETROFIT

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	20		12	0.10	24
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
				TOTAL =	595

ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

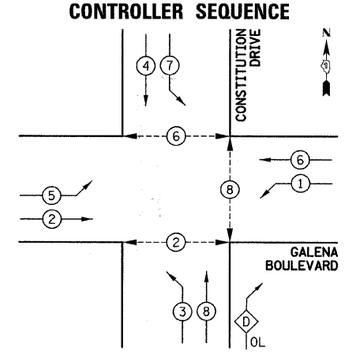


EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT		

FOUNDATION (DEPTH)		FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST		4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER		4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
D - CONTROLLER		4 (1.2)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)
E - M.A. LENGTH			CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<30'	30" (900mm)	10 (3.0)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	36" (750mm)	13.5 (4.1)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	11 (3.4)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)	13 (4.0)			POST MOUNTED	6 (1.8)
≥50'	36" (900mm)	15 (4.6)				

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

CONTROLLER SEQUENCE LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

PLAN	SURVEYED	PLOTTED	GRADES CHECKED	BLDG. NOTES	STRUCTURE NOTATNS CHKD	PROFILE

NOTE BOOK NO.		BY	DATE

FILE NAME =	USER NAME = _USER_	DESIGNED -	REVISED -
y:\jobs\smith\2007\070690 AURO - Traffic Signals\070690.01 AURO Galena Blvd Traffic Signal Modernization	PLOT SCALE = $SCALE$	DRAWN BAH	REVISED -
	PLOT DATE = 4/15/2009	CHECKED APS	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND
PHASE DESIGNATION DIAGRAM
CONSTITUTION DRIVE

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	05-00257-00-TL	KANE	39	9
		CONTRACT NO. 63105		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT