

SUMMARY OF QUANTITIES

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Y031-F									
				LAKE STREET	RIVER STREET	STOLP AVENUE	BROADWAY AVENUE	LINCOLN AVENUE	ROOT STREET	UNION STREET	OHIO STREET	INTERCONNECT	
* 42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	1047	486								561	
* 42400800	DETECTABLE WARNINGS	SQ FT	97	55								42	
* 44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	145	58								87	
* 44000600	SIDEWALK REMOVAL	SQ FT	855	439								416	
* 60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	145	58								87	
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4										
67100100	MOBILIZATION	L SUM	1										
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1										
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1										
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1										
72000100	SIGN PANEL - TYPE 1	SQ FT	153.25	20.00		26.25		20.00	42.50			44.50	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	200							200			
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	460	460									
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	34	34									
78300100	PAVEMENT MARKING REMOVAL	SQ FT	366	366									
80400100	ELECTRICAL SERVICE INSTALLATION	EACH	4			1		1	1			1	
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	4146	716				26	207	57		47	3093
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	382	57		81		84	43			117	
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	335	39		51		55	91			99	
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1373	138		41		24	61	43		23	1043
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	125	55				39	24			7	
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	790	217		123		165	127			158	
81400100	HANDHOLE	EACH	12	3					1				8
81400300	DOUBLE HANDHOLE	EACH	4	1				1	1			1	
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2112.5			468.5		582	250			812	
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	5047	848		132		159	428	134		253	3093
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	5						1			4	
82500310	LIGHTING CONTROLLER TYPE, POLE MOUNTED, 240VOLT, 160 AMP	EACH	2					1				1	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	6	1	1	1	1		1	1			
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	3	1				1				1	
85700500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	3			1			1	1			
85900100	TRANSCIEVER	EACH	8										8
87301216	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3468	1026		425		496	528	459		534	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	10003.5	2023.5	223	1518.5		2103	1751	974		1410.5	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	6689.5	801.5		1203.5		1413.5	1502.5			1768.5	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2247.5	797.5				386.5				1063.5	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3739.5	1809.5					756	1174			
87301615	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	1677			349		552				776	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	575.5	221.5		48		94	41.5	84.5		86	
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2	1				1					
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	10	1		3		2	3			1	
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	2	2									
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4					1				3	
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1						1				
87702840	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 22 FT.	EACH	1									1	
87702850	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	1									1	
87702890	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1									1	
87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1						1				
87702920	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1									1	
87704030	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 20 FT. (SPECIAL)	EACH	1			1							

* SPECIALTY ITEMS Δ Revised 2-19-10

PLAN	DATE
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	

PROFILE	DATE
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	

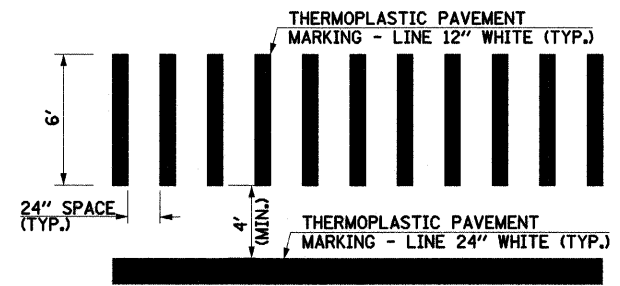
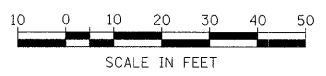
SUMMARY OF QUANTITIES

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Y031-F									
				LAKE STREET	RIVER STREET	STOLP AVENUE	BROADWAY AVENUE	LINCOLN AVENUE	ROOT STREET	UNION STREET	OHIO STREET	INTERCONNECT	
87704050	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT. (SPECIAL)	EACH	2	1				1					
87704060	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1			1							
87704070	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT. (SPECIAL)	EACH	3	1		1		1					
87704080	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL)	EACH	2	1				1					
87704100	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)	EACH	1	1									
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	76	16		12		16	16			16	
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	12	4				4				4	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	157.5	37		30		33.5	10			47	
87900200	DRILL EXISTING HANDHOLE	EACH	77	13		15		10	16	10		11	2
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	18	3		4		3	2			6	
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8	1		3		3	1				
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2	2									
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4	4									
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4					1				3	
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7			2		1	3			1	
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4					1				3	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	24	4		4		4	4	4		4	
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	26	7		4		4	2			9	
88500100	INDUCTIVE LOOP DETECTOR	EACH	14	5					4	5			
88600100	DETECTOR LOOP, TYPE I	FOOT	808.4	195.6					247	365.8			
88700200	LIGHT DETECTOR	EACH	10	2		2		2	2			2	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	5	1		1		1	1			1	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	24	4		4		4	4	4		4	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	22554.5	3373.5		2474		4740	3205	2290		6472	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	6	1		1		1	1	1		1	
89502380	REMOVE EXISTING HANDHOLE	EACH	5	1				2	1			1	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	31	8		5		7	3			8	
XD322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	5142										5142
XD324007	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1										1
XD324256	FIBER OPTIC CABLE SPLICE	EACH	1										1
XD325035	PAINT NEW COMBINATION MAST ARM AND POLE, UNDER 40 FT	EACH	5						1			4	
XD325134	WIRELESS INTERCONNECT (COMPLETE)	EACH	1										1
842 00500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	5		2	2		1					
XD325810	WIRELESS ETHERNET RADIO	EACH	5			1		1					3
XB050010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1			1							
XB050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	4	1				1	1			1	
XB510300	PAINT TRAFFIC SIGNAL POST	EACH	19	4		3		4	4			4	
XB620020	UNINTERRUPTABLE POWER SUPPLY	EACH	5	1		1		1	1			1	
XB710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	5142										5142
XB730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	2898.5	653		348.5		489.5	423	390		594.5	
X02174	LIGHT POLE, SPECIAL (DECORATIVE ORNAMENTAL)	EACH	4		2	1		1					
XD003584	VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	644.5		228	64		127.5	225				
XD003552	VIDEO DETECTION SYSTEM	EACH	3			1		1				1	
X013025b	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED	FOOT	2352.5	392.5	218	283.5		518	639			301.5	
XD006937	L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	8	3		2		3					
XD006923	GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	22	4		4		3	4			7	
XD006927	RELOCATE INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	1			1							
XD007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	4		1	1		1	1				
XD007487	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT (SPECIAL)	EACH	6			3		3					
XX007952	TERMINAL SERVER	EACH	1										1
XX007992	ETHERNET SWITCH	EACH	1										1
XX007993	CENTRALIZED SYSTEM FIELD INTEGRATION / SETUP	L SUM	1										1

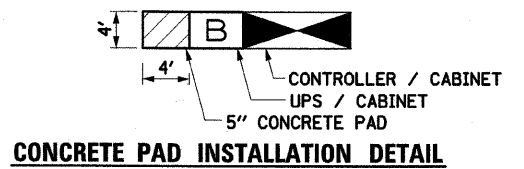
Revised 2-19-10

PLAN	REVISIONS	DATE
NOTE BOOK	PLOTTED	
	ALIGNMENT CHECKED	
	CONTRACT CHECKED	
	CADD FILE NAME	

PROFILE	REVISIONS	DATE
NOTE BOOK	PLOTTED	
	GRADES CHECKED	
	REMARKS CHECKED	
	PROF. TITLE NOTATION CHK'D	

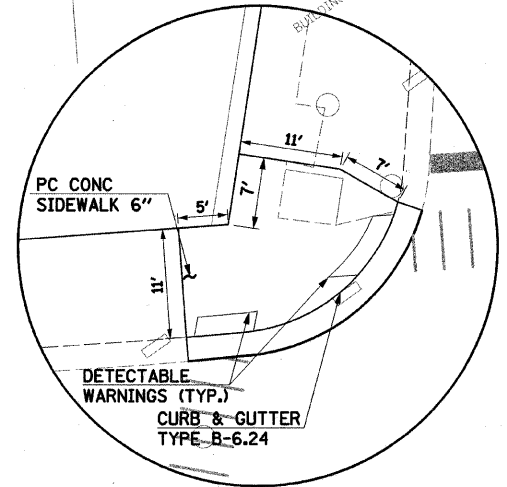
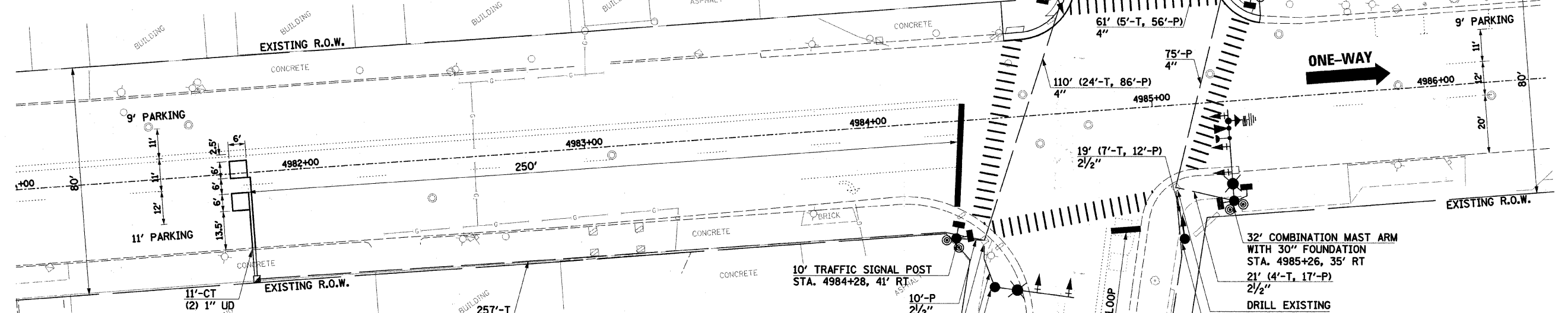


TYPICAL STRIPING DETAIL AT CROSSWALKS

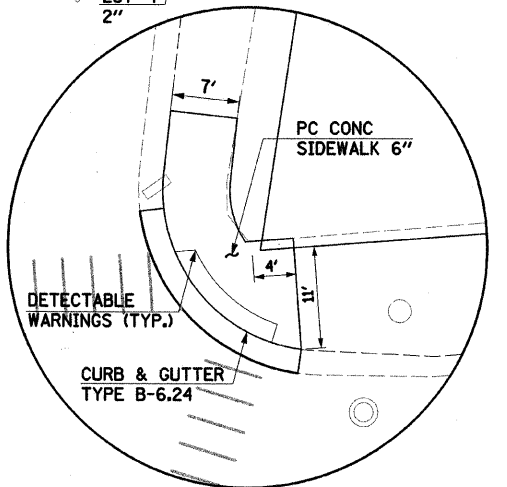


CONCRETE PAD INSTALLATION DETAIL

NOTE: THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION. THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.



NW CORNER DETAIL



NE CORNER DETAIL

NOTE: SIDEWALK CURB & GUTTER REMOVAL SHALL BE PROVIDED AS NECESSARY.

PROPOSED TRAFFIC SIGNS

- R6-2-2430 (2 EACH)** **ONE WAY** (Right Arrow)
 - LOCATIONS:
 - NORTHBOUND MAIST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD.
 - TRAFFIC SIGNAL POST IN SOUTHEAST CORNER FACING SOUTH.
- R6-2-2430 (2 EACH)** **ONE WAY** (Left Arrow)
 - LOCATIONS:
 - SOUTHBOUND MAIST ARM, 3' WEST OF THE OUTER 3-SECTION SIGNAL HEAD.
 - TRAFFIC SIGNAL POST IN NORTHWEST CORNER FACING NORTH.

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

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA.

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 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	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAIST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAIST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAIST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTABLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		

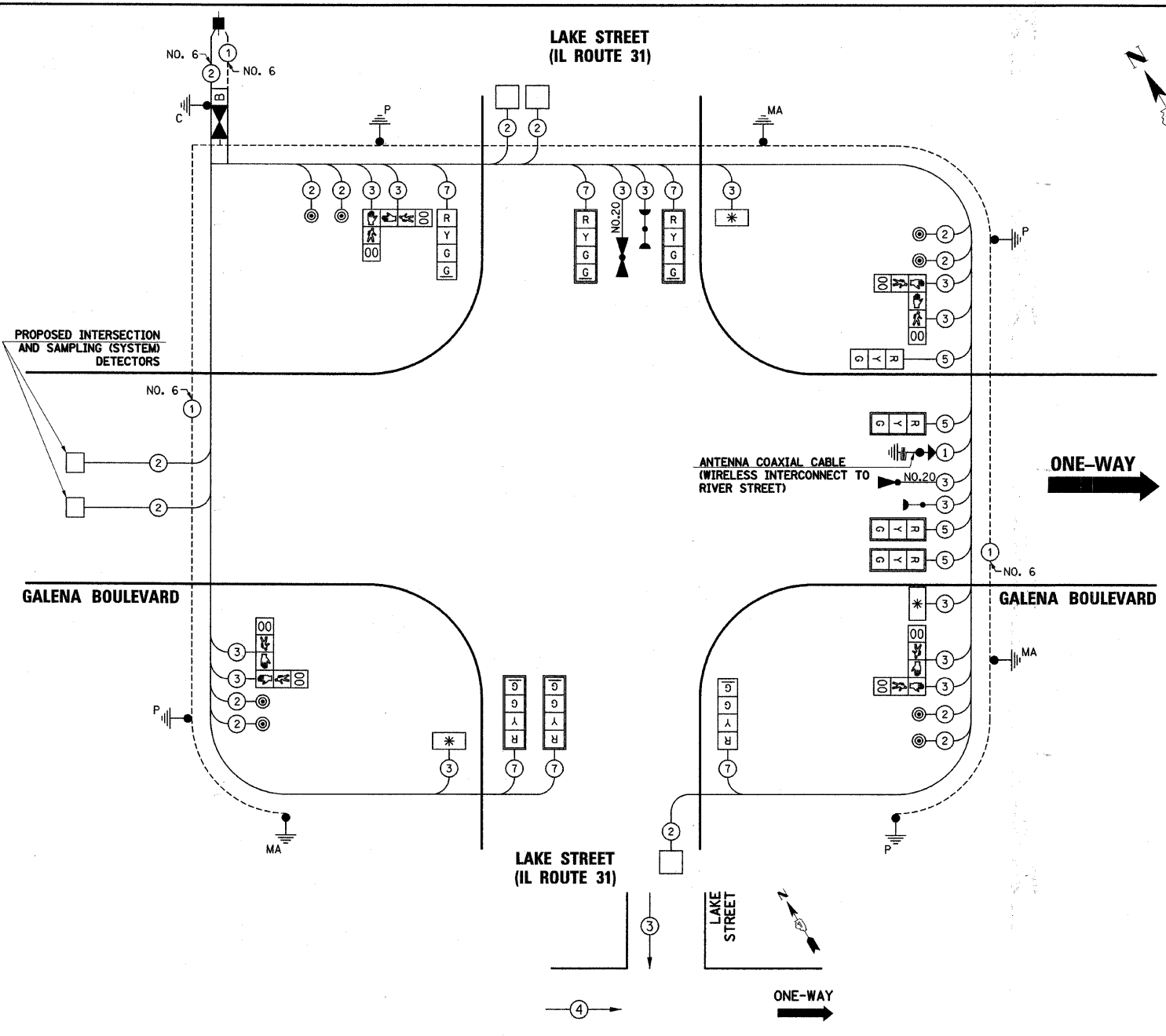
- NOTES:
- THE WIRELESS ANTENNA SHALL BE MOUNTED ON THE EASTBOUND MAIST ARM, 3' SOUTH OF THE OUTER 3-SECTION SIGNAL HEAD OR AS DIRECTED BY THE ENGINEER (SEE MOUNTING DETAIL).
 - A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.

PLAN	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	CAID FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	BY	
	NO. NOTED	
	STRUCTURE NOTATIONS	
	CRPD	

CABLE PLAN LEGEND

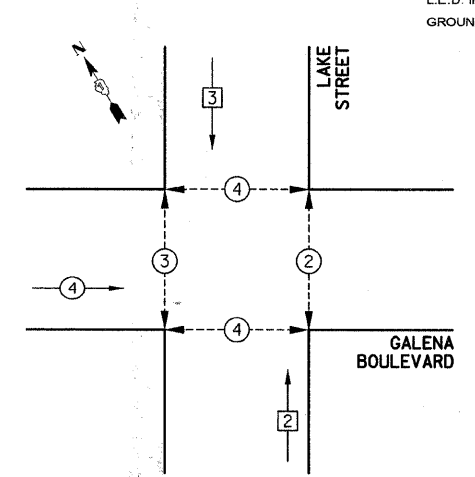
- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION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



SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	LAKE STREET
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	486
DETECTABLE WARNINGS	SQ FT	55
COMBINATION CURB AND GUTTER REMOVAL	FOOT	58
SIDEWALK REMOVAL	SQ FT	439
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	58
SIGN PANEL - TYPE 1	SQ FT	20
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	460
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	34
PAVEMENT MARKING REMOVAL	SQ FT	366
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	716
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	57
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	138
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	55
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	217
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	848
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1026
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2023.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	801.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	797.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1809.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	221.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	37
DRILL EXISTING HANDHOLE	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	195.6
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3373.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	4
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	653
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED	FOOT	392.5
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	4

CONTROLLER SEQUENCE



CONTROLLER SEQUENCE LEGEND

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

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

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA.

EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS			
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT	↓	→	↑

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	10		17	0.50	85
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	6		12	0.10	7.2
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
TOTAL =					607.2

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

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)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)			POST MOUNTED	6 (1.8)
≥50'	36" (900mm)				

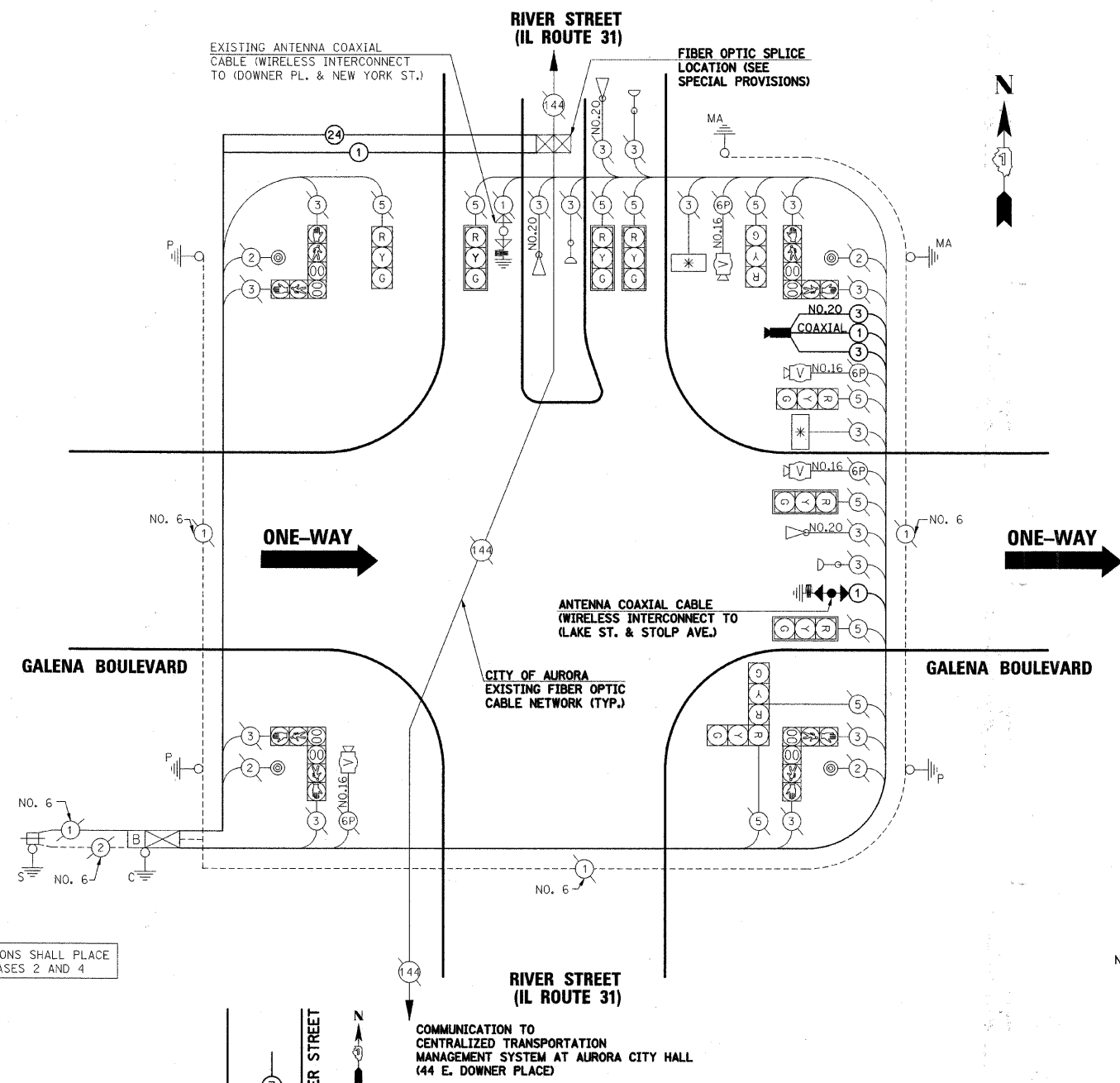
PHASE DESIGNATION DIAGRAM

CABLE PLAN LEGEND

- EXISTING** **PROPOSED**
- 8" (200mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - CONTROLLER CABINET
 - SERVICE INSTALLATION
 - TELEPHONE INSTALLATION
 - VEHICLE DETECTOR, INDUCTION LOOP
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - LUMINAIRE
 - DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
 - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SMI2F
 - SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
 - RAILROAD CONTROL CABINET
 - ILLUMINATED SIGN "NO LEFT TURN"
 - ILLUMINATED SIGN "NO RIGHT TURN"
 - WIRELESS ANTENNA
 - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
 - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - UNINTERRUPTIBLE POWER SUPPLY
 - LED STREET NAME SIGN
 - VIDEO DETECTION CAMERA
 - PAN/TILT/ZOOM CAMERA

DATE	
BY	
PLAN	
SURVEYED	
ALIGNED	
CHECKED	
RT. OF WAY CHECKED	
ADD. FILE NAME	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
GRADES CHECKED	
B.M. NOTED	
STRUCTURE NOTATIONS	
CPROD	
NO.	



ALL PUSHBUTTONS SHALL PLACE A CALL IN PHASES 2 AND 4

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	RIVER STREET
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	223
REMOVE EXISTING LIGHT POLE	EACH	2
LIGHT POLE, SPECIAL	EACH	2
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	228
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED	FOOT	218
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
ARROW			12	0.10	
PED. SIGNAL	8		25	1.00	200.0
CONTROLLER	1		100	1.00	100.0
UPS	1		25	1.00	25.0
LED SIGN	2		60	0.50	60.0
VIDEO SYSTEM	1		15	1.00	15.0
LUMINAIRE	2		250	0.50	125.0
TOTAL =					691.6

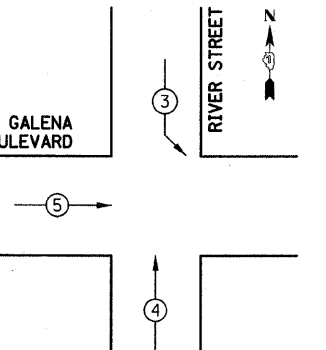
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

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

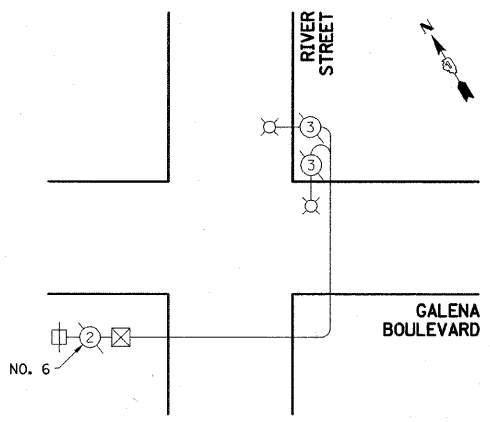
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m+L-0.6m)	
E - M.A. LENGTH		CONTROLLER CAB.	1 (0.5)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

PROPOSED EMERGENCY VEHICLE PREEMPTORS			
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT			

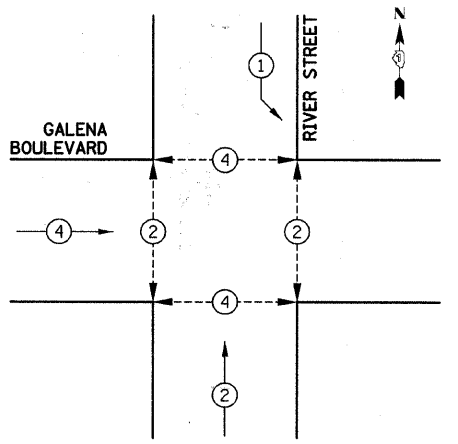
EMERGENCY VEHICLE PREEMPTION SEQUENCE



LIGHTING CABLE PLAN



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

CONTROLLER SEQUENCE LEGEND	
	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
	OVERLAP
	NUMBER REFERRING TO ASSOCIATED PHASE
	PEDESTRIAN PHASE