

SCHEDULE OF QUANTITIES

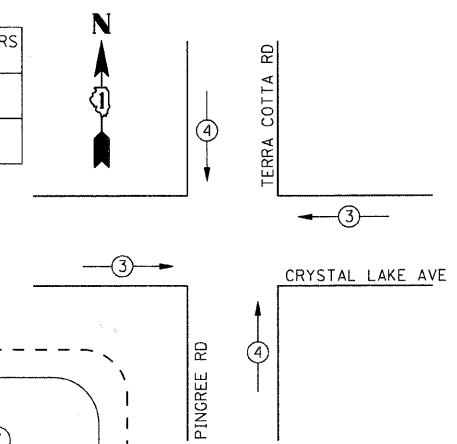
72000100	SIGN PANEL - TYPE 1	SQ FT	33
72000200	SIGN PANEL - TYPE 2	SQ FT	30
81000600	CONDUIT IN TRENCH, 2" DIA, GALVANIZED STEEL	FOOT	500
81000700	CONDUIT IN TRENCH, 2 1/2" DIA, GALVANIZED STEEL	FOOT	142
81001100	CONDUIT IN TRENCH, 5" DIA, GALVANIZED STEEL	FOOT	16
81018500	CONDUIT PUSHED, 2" DIA, GALVANIZED STEEL	FOOT	263
81018600	CONDUIT PUSHED, 2 1/2" DIA, GALVANIZED STEEL	FOOT	80
81018700	CONDUIT PUSHED, 3" DIA, GALVANIZED STEEL	FOOT	84
81018900	CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL	FOOT	87
81400100	HANDHOLE	EACH	5
81400200	HEAVY-DUTY HANDHOLE	EACH	4
81400300	DOUBLE HANDHOLE	EACH	2
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	986
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2/C	FOOT	425
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3/C	FOOT	791
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5/C	FOOT	833
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7/C	FOOT	1,675
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,797
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2/C	FOOT	49
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.	EACH	1
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	4
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
87800400	CONCRETE FOUNDATION, TYPE E, 30-INCH DIAMETER	FOOT	51
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8
88500100	INDUCTIVE LOOP DETECTOR	EACH	11
88600100	DETECTOR LOOP, TYPE 1	FOOT	1,129
88700200	LIGHT DETECTOR	EACH	4
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1
88800100	PEDESTRIAN PUSH BUTTON	EACH	4
X8050010	SERVICE INSTALLATION, GROUND MOUNTED	EACH	1
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C	FOOT	1,346
XX005660	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED SHIELDED	FOOT	333

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

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

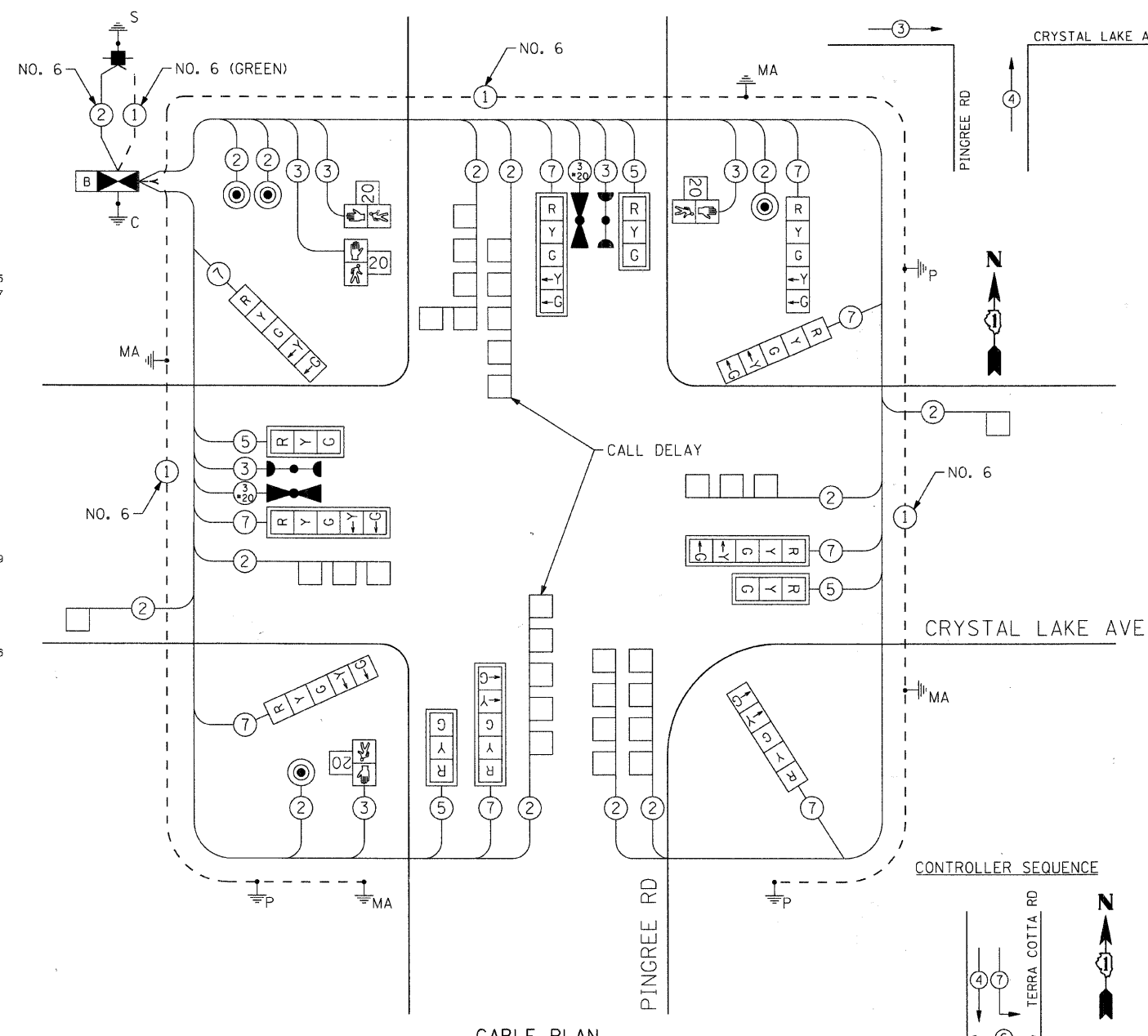
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← →

EMERGENCY VEHICLE PREEMPTION SEQUENCE



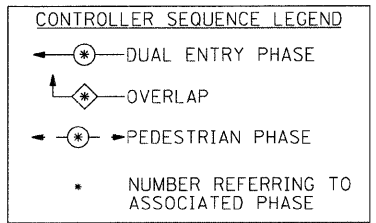
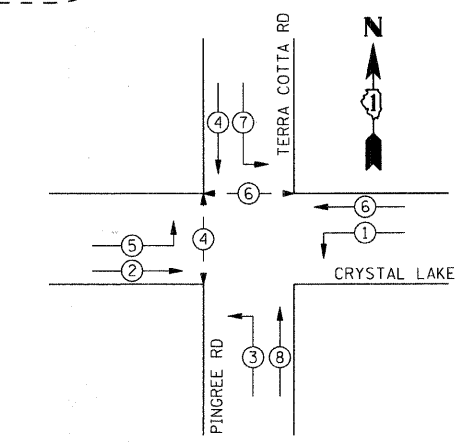
CABLE PLAN LEGEND

- |          |          |   |
|----------|----------|---|
| EXISTING | PROPOSED |   |
| (R)      | (R)      | 12" TRAFFIC SIGNAL SECTION  |
| (W)      | (W)      | 12" PEDESTRIAN SIGNAL SECTION   |
| (20)     | (20)     | 12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER  |
| (C)      | (C)      | CONTROLLER CABINET  |
| (S)      | (S)      | SERVICE INSTALLATION  |
| (T)      | (T)      | TELEPHONE INSTALLATION  |
| (V)      | (V)      | VEHICLE DETECTOR, INDUCTION LOOP  |
| (M)      | (M)      | MAGNETIC DETECTOR   |
| (E)      | (E)      | EMERGENCY VEHICLE LIGHT DETECTOR  |
| (B)      | (B)      | CONFIRMATION BEACON   |
| (P)      | (P)      | PUSHBUTTON DETECTOR   |
| (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)      | (R)      | RAILROAD CONTROL CABINET  |
| (V)      | (V)      | VIDEO DETECTION CAMERA  |
| (R)      | (R)      | SIGNAL FACE WITH BACKPLATE  |
| (P)      | (P)      | "P" INDICATES PROGRAMMED HEAD   |
| (MA/P)   | (MA/P)   | GROUND ROD AT POST (P) OR MAST ARM POLE (MA)  |
| (H/C)    | (H/C)    | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)  |
| (S)      | (S)      | GROUND ROD AT ELECTRIC SERVICE INSTALLATION   |
| (B)      | (B)      | UNINTERRUPTIBLE POWER SUPPLY  |



CABLE PLAN

CONTROLLER SEQUENCE



I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	13		17	0.50	110.5
(YELLOW)	13		25	0.25	81.25
(GREEN)	13		15	0.25	48.75
ARROW (YELLOW)	9		12	0.10	10.8
ARROW (GREEN)	9		12	0.10	10.8
PEDESTRIAN SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
TOTAL =					487.1

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=
E - M.A. LENGTH		SIGNAL POST	2 (1.0)	(6m+L-0.6m)	
<30'	30" (750mm)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<40'	30" (750mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	36" (900mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<50'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
>50'	36" (900mm)	POST MOUNTED	6 (1.8)		

<p>SEC Group, Inc. Engineering Surveying Planning Landscape Architecture Midwest • Midwest • New Lenox • Chicago www.secgroupinc.com</p>	USER NAME = char-ke	DESIGNED - JJS	REVISED -	<b>MCHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b>	<b>CABLE PLAN AND PHASE DESIGNATION DIAGRAM</b> <b>CRYSTAL LAKE AV AT PINGREE RD</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = N.T.S.	CHECKED - CP	REVISED -			0116	08-00327-01-CH	MCHENRY	56	33	
	PLOT DATE = 2/13/2009	DATE - 2/13/09	REVISED -			CONTRACT NO. 63144		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
	SCALE: N.T.S.		SHEET NO. 6 OF 7 SHEETS			STA. TO STA.					

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