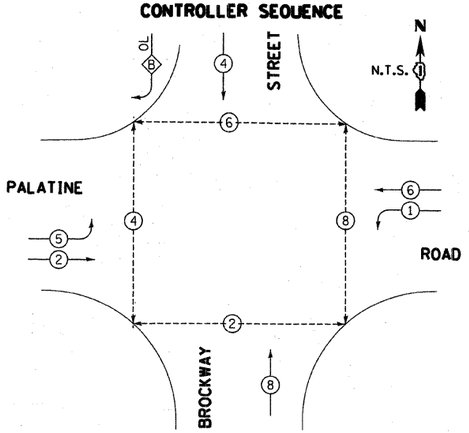
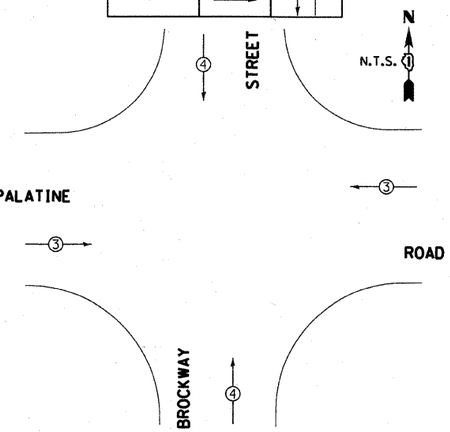
CONTRACT NO. 63083				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1285	02-00075-00-PV	COOK	161	88
STA. ----------	TO STA. ----------			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑



EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE x INCAND.	WATTAGE LED	x % OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER			25	0.50	
ENERGY COST TO:				TOTAL =	573.4

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

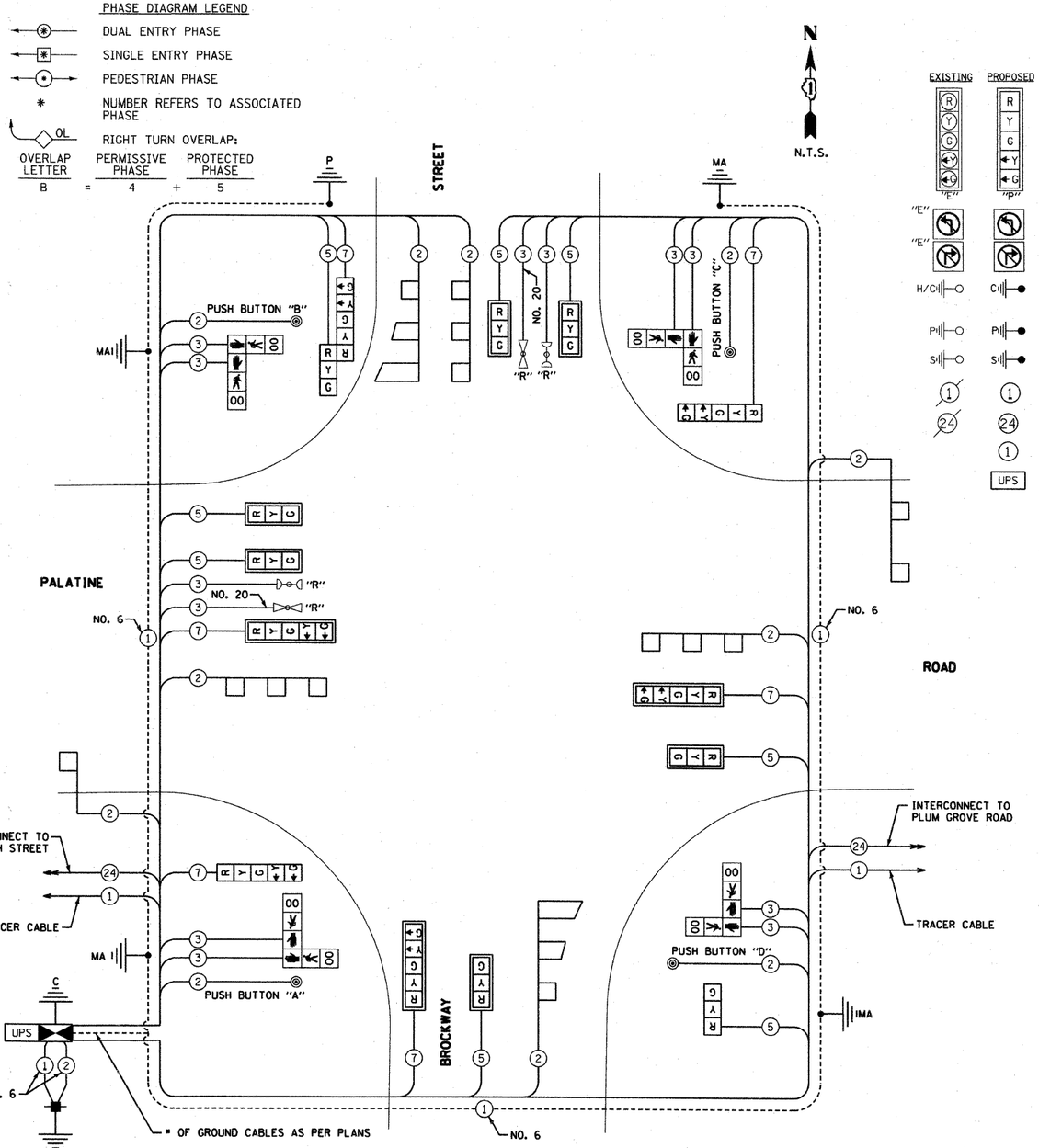
ENERGY SUPPLY: CONTACT: ELLI SARALLO
PHONE: (630) 424-5124
COMPANY: COMMONWEALTH EDISON

PLOT DATE = $DATE$
FILE NAME = $$2D$$
PLOT SCALE = $SCALE$
USER NAME = $USER$

PHASE DIAGRAM LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- OL RIGHT TURN OVERLAP:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5



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

CABLE PLAN

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)
TYPE C - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20+L-2=	(6+L-0.6)=
30", TYPE E	15 (4.6)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13	(4.0)
36", TYPE E	15 (4.6)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4	(1.2)
		FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5	(4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5	(4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6	(1.8)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

CABLE PLAN LEGEND

EXISTING	PROPOSED	
		SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"	"P"	
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
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
1		NO. 14 1/C TRACER CABLE
UPS		UNINTERRUPTIBLE POWER SUPPLY

EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
	PD	DENOTES PREFORMED DETECTOR LOOP
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.

SCHEDULE OF QUANTITIES

SIGN PANEL - TYPE 1		SQ FT	34.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED	STEEL	FOOT	399
CONDUIT IN TRENCH, 2 1/2" DIA.,	GALVANIZED STEEL	FOOT	37
CONDUIT IN TRENCH, 3" DIA., GALVANIZED	STEEL	FOOT	47
CONDUIT IN TRENCH, 4" DIA., GALVANIZED	STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED	STEEL	FOOT	126
CONDUIT PUSHED, 4" DIA., GALVANIZED	STEEL	FOOT	294
HANDHOLE		EACH	4
HEAVY-DUTY HANDHOLE		EACH	3
DOUBLE HANDHOLE		EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK		FOOT	495
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL		EACH	1
TRANSCEIVER - FIBER OPTIC		EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL	NO. 14 2C	FOOT	538
ELECTRIC CABLE IN CONDUIT, SIGNAL	NO. 14 3C	FOOT	1,659
ELECTRIC CABLE IN CONDUIT, SIGNAL	NO. 14 5C	FOOT	1,554
ELECTRIC CABLE IN CONDUIT, SIGNAL	NO. 14 7C	FOOT	945
ELECTRIC CABLE IN CONDUIT, LEAD-IN,	NO. 14 1 PAIR	FOOT	1,348
ELECTRIC CABLE IN CONDUIT, SERVICE,	NO. 6 2 C	FOOT	22
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.		EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.		EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.		EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.		EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.		EACH	1
CONCRETE FOUNDATION, TYPE A		FOOT	4
CONCRETE FOUNDATION, TYPE C		FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER		FOOT	48
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED		EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED		EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED		EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED		EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED		EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER		EACH	4
TRAFFIC SIGNAL BACKPLATE		EACH	9
INDUCTIVE LOOP DETECTOR		EACH	7
DETECTOR LOOP, TYPE I		FOOT	1,481
PEDESTRIAN PUSH-BUTTON		EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION		EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT		EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT		EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT		EACH	1
REMOVE EXISTING HANDHOLE		EACH	15
REMOVE EXISTING CONCRETE FOUNDATION		EACH	11
SERVICE INSTALLATION - GROUND MOUNTED		EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C		FOOT	938
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED		FOOT	511
UNINTERRUPTABLE POWER SUPPLY		EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING		EACH	1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF PALATINE
PALATINE ROAD & PLUM GROVE ROAD RECONSTRUCTION
SMITH STREET TO US 14 (NORTHWEST HIGHWAY)

PALATINE ROAD AND BROCKWAY STREET CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES

SCALE: NTS — DRAWN BY DMB
DATE OCTOBER 19, 2009 — CHECKED BY RY

TD-10

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