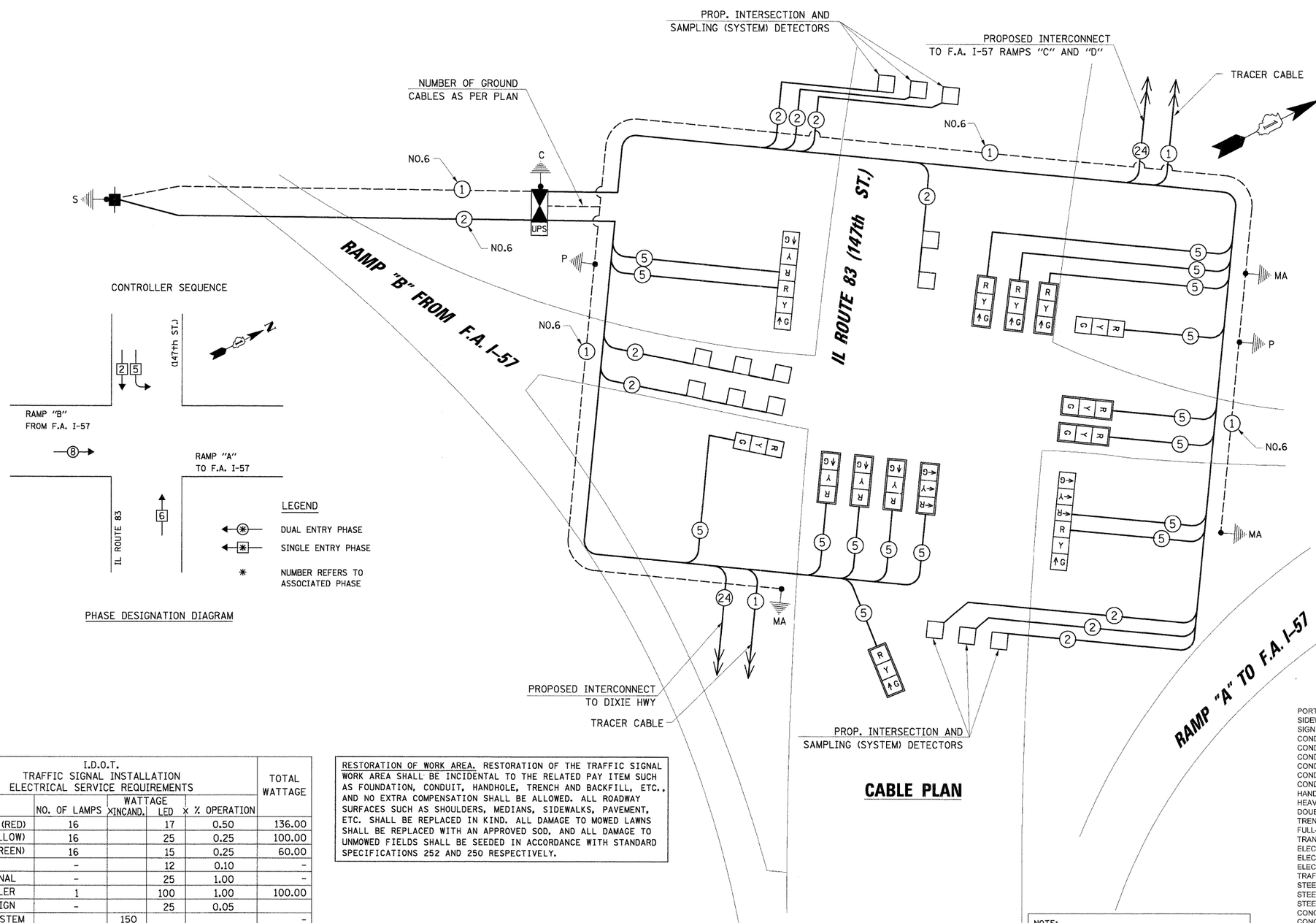

CONTROLLER SEQUENCE

LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- ✱ NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	
C	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
	C D	PEDESTRIAN COUNTDOWN SIGNAL HEAD
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		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 Y G ←Y ←G	R Y G ←Y ←G	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
"P"	"P"	
"E" R R	R R	RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTIBLE POWER SUPPLY
"R"	"R"	RELOCATED

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	25
SIDEWALK REMOVAL	SQ FT	25
SIGN PANEL - TYPE 1	SQ FT	10
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	822
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	71
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	9
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	93
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	80
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	195
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1047
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2895
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	2269
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	528
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	537
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	993

I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE XINCAND.	WATTAGE LED	x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	-		12	0.10	-
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	
VIDEO SYSTEM		150			-
					-
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	396.00

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.

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.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: STEVE FITZGERALD
PHONE: (708) 235-2327
COMPANY: COMED

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 W/ UPS	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. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

FILE NAME = N:\Idot\080040\TASK G - IL 83\Traffic\CAB_I-57 eRamp.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB	REVISED -
	PLOT SCALE = N.T.S.	CHECKED - MJT	REVISED -
	PLOT DATE = 11/24/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL. ROUTE 83 (147th ST.) AND F.A. I-57 RAMPS "A" AND "B"
POSEN, ILLINOIS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2008-054 TS	COOK	40	27
		CONTRACT NO. 60F06		

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

PROFILE | SURVEYED | PLOTTED | GRADES CHECKED | STRUCTURE NOTAT'NS CH'KD | NOTE BOOK NO. | BY | DATE

PLAN | SURVEYED | PLOTTED | ALIGNMENT CHECKED | ROADWAY PLANS CHECKED | CADD FILE NAME | NOTE BOOK NO. | BY | DATE

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500