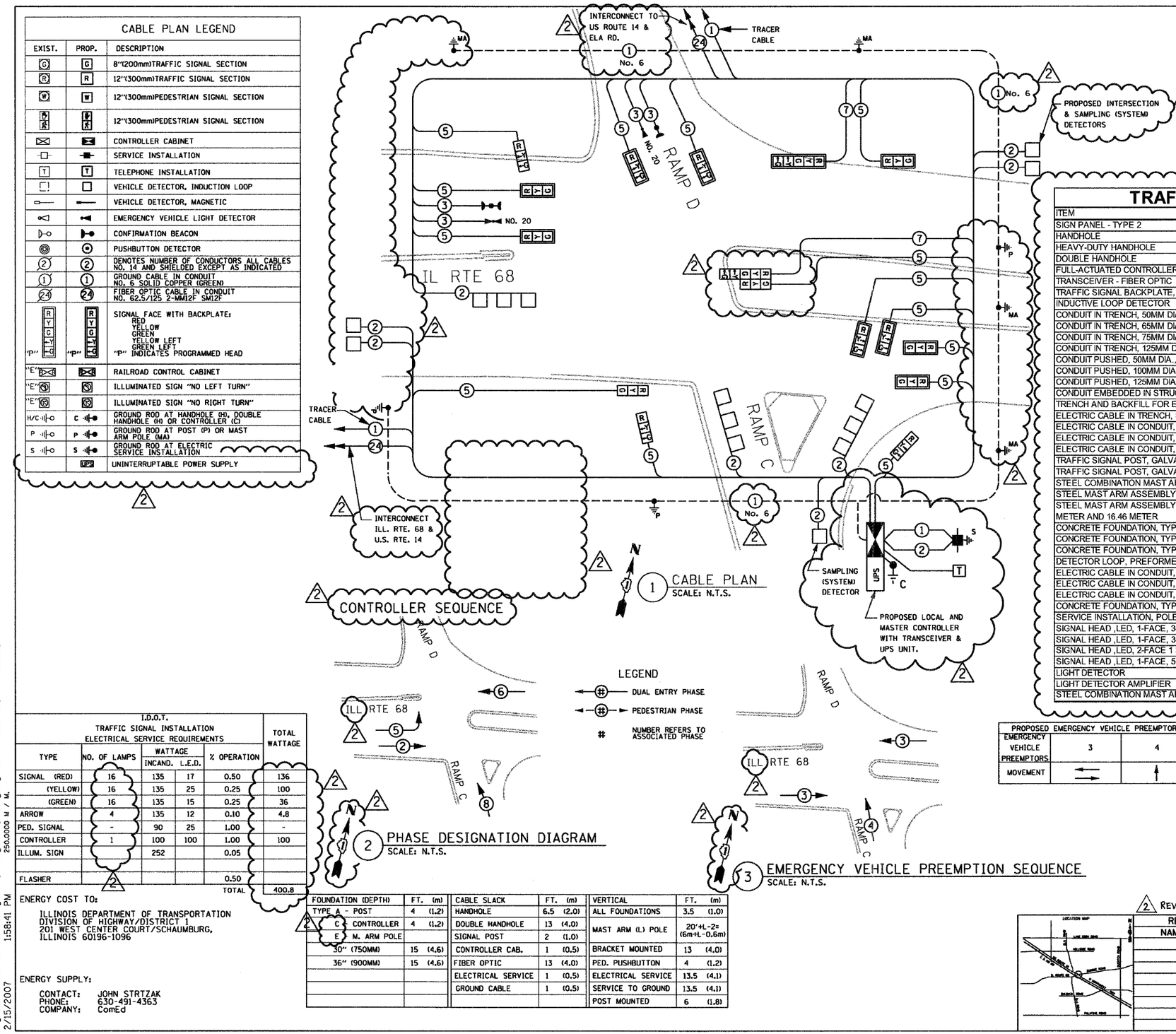
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	121
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-R & 70HB-R-1 62897

CABLE PLAN LEGEND

EXIST.	PROP.	DESCRIPTION
G	G	8"(200mm)TRAFFIC SIGNAL SECTION
R	R	12"(300mm)TRAFFIC SIGNAL SECTION
W	W	12"(300mm)PEDESTRIAN SIGNAL SECTION
		12"(300mm)PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		VEHICLE DETECTOR, MAGNETIC
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS ALL CABLES NO. 14 AND SHIELDED EXCEPT AS INDICATED
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
"P" R Y G	"P" R Y G	SIGNAL FACE WITH BACKPLATE: RED, YELLOW, GREEN, YELLOW LEFT, GREEN LEFT. "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "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
	UPS	UNINTERRUPTABLE POWER SUPPLY



1 CABLE PLAN
SCALE: N.T.S.

2 PHASE DESIGNATION DIAGRAM
SCALE: N.T.S.

3 EMERGENCY VEHICLE PREEMPTION SEQUENCE
SCALE: N.T.S.

TRAFFIC SIGNALS QUANTITIES

ITEM	UNIT	IL 68 RAMP C&D
SIGN PANEL - TYPE 2	SQ METER	4.64
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	7
CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	202.8
CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	67.6
CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	11.5
CONDUIT IN TRENCH, 125MM DIA., GALVANIZED STEEL	METER	7
CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	44.1
CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	96.3
CONDUIT PUSHED, 125MM DIA., GALVANIZED STEEL	METER	18.5
CONDUIT EMBEDDED IN STRUCTURE, 65MM DIA., PVC	METER	23.8
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	288.9
ELECTRIC CABLE IN TRENCH, SERVICE, NO. 6 2 C	METER	21.4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	712
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	223.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	530.77
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.25 METER	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 8.53 METER	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 9.14 METER	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 8.53 METER AND 16.46 METER	EACH	1
CONCRETE FOUNDATION, TYPE A	METER	3.6
CONCRETE FOUNDATION, TYPE C	METER	1.2
CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	14.2
DETECTOR LOOP, PREFORMED	METER	190
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	METER	224.42
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3/C TWISTED SHIELDED	METER	224.48
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	252.4
CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	4.6
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD ,LED, 2-FACE 1 3-SECTION ,1 5-SECTION, BRACKET	EACH	1
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.36 METER	EACH	1

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	36
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER	2			0.50	
				TOTAL	400.8

ENERGY COST TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG,
ILLINOIS 60196-1096

ENERGY SUPPLY:
CONTACT: JOHN STRTZAK
PHONE: 630-491-4363
COMPANY: ComEd

FOUNDATION (DEPTH)	FT. (m)
TYPE A - POST	4 (1.2)
C CONTROLLER	4 (1.2)
E M. ARM POLE	
30" (750MM)	15 (4.6)
36" (900MM)	15 (4.6)

CABLE SLACK	FT. (m)
HANDHOLE	6.5 (2.0)
DOUBLE HANDHOLE	13 (4.0)
SIGNAL POST	2 (1.0)
CONTROLLER CAB.	1 (0.5)
FIBER OPTIC	13 (4.0)
ELECTRICAL SERVICE	1 (0.5)
GROUND CABLE	1 (0.5)

VERTICAL	FT. (m)
ALL FOUNDATIONS	3.5 (1.0)
MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
BRACKET MOUNTED	13 (4.0)
PED. PUSHBUTTON	4 (1.2)
ELECTRICAL SERVICE	13.5 (4.1)
SERVICE TO GROUND	13.5 (4.1)
POST MOUNTED	6 (1.8)

2 REV 2-15-07

TS-09 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
RAMPS C & D
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

SCALE N.T.S.
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P#06119.000 - IL 68 over US 14
2/15/2007 1:58:41 PM
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Working Files\Drawing Files\Sht\TE-TS-09 - Cable Diagram - East.dgn