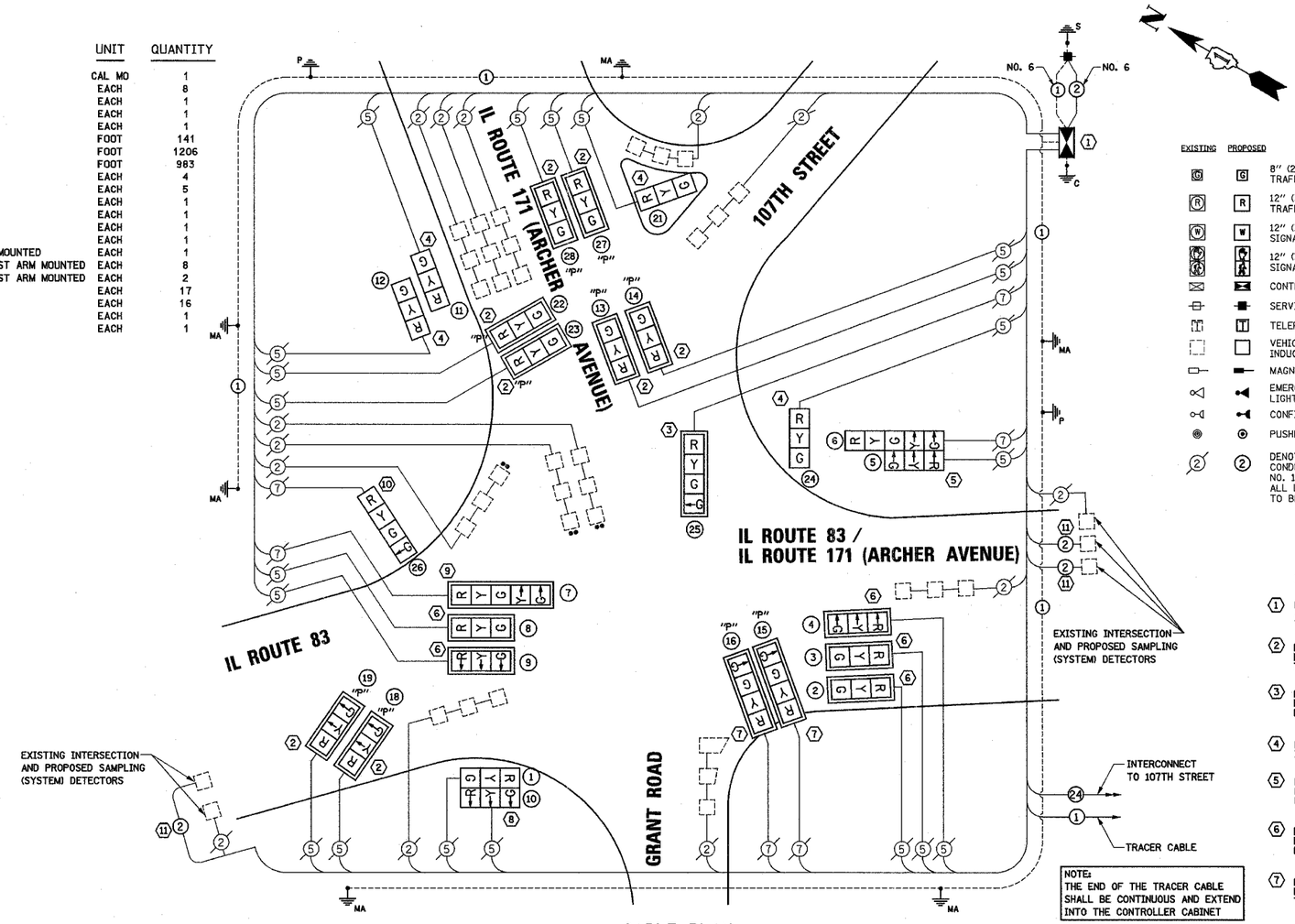
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
577	2006-004TS	COOK/DUPAGE	19	13
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B19

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	8
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER-FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6, 2C	FOOT	141
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1 PAIR	FOOT	1206
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6, 1C	FOOT	983
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	17
INDUCTIVE LOOP DETECTOR	EACH	16
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1



CABLE PLAN

•• PHASE 3 PRESENCE DETECTORS

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

CABLE PLAN LEGEND

EXISTING	PROPOSED	
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 CONNECTION
		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 LOOOP DETECTOR CABLE TO BE SHIELDED.

EXISTING	PROPOSED	
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
R Y G	R Y G +Y +G	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"	"E"	RAILROAD CONTROL CABINET
"E"	"E"	ILLUMINATED SIGN "NO LEFT TURN"
"E"	"E"	ILLUMINATED SIGN "NO RIGHT TURN"
H/G	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
		MICROWAVE VEHICLE SENSOR

CONSTRUCTION NOTES:

1. REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
2. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION. INSTALL NEW SIGNAL HEAD, L.E.D., PROGRAMMED 1-FACE, 3-SECTION, MAST ARM MOUNTED, AND TRAFFIC SIGNAL BACKPLATE.
3. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 4-SECTION. INSTALL NEW SIGNAL HEAD, L.E.D. 1-FACE, 4-SECTION, MAST ARM MOUNTED, AND TRAFFIC SIGNAL BACKPLATE.
4. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED.
5. REMOVE EXISTING SIGNAL HEAD, 2-FACE, 1-5 SECTION, 1-3 SECTION, BRACKET MOUNTED, INSTALL NEW SIGNAL HEAD, L.E.D., 2-FACE, 1-5 SECTION, 1-3 SECTION, BRACKET MOUNTED.
6. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION. INSTALL NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED, AND TRAFFIC SIGNAL BACKPLATE.
7. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 4-SECTION. INSTALL NEW SIGNAL HEAD, L.E.D., PROGRAMMED 1-FACE, 4-SECTION, MAST ARM MOUNTED, AND TRAFFIC SIGNAL BACKPLATE.
8. REMOVE EXISTING SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED, INSTALL NEW SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED.
9. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 5-SECTION. INSTALL NEW SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED, AND TRAFFIC SIGNAL BACKPLATE.
10. REMOVE EXISTING SIGNAL HEAD, 1-FACE, 4-SECTION, BRACKET MOUNTED, INSTALL NEW SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, BRACKET MOUNTED.
11. INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14, 1 PAIR.
12. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

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

TYPE	NO. LAMPS X	WATTAGE INCAND.	WATTAGE LED	X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	26	135	17	0.50	221
(YELLOW)	26	135	25	0.25	162.5
(GREEN)	26	135	15	0.25	97.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100.0
				TOTAL =	590.6

ENERGY COSTS - BILLED TO: ILLINOIS DEPT. OF TRANSPORTATION
(ADDRESS) 201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY - CONTACT: DOLORES KREMNITZER
PHONE: (815) 724-5716
COMPANY: COM ED

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)
D - FOUNDATION	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=	
C - M. ARM POLE			SIGNAL POST	2	(1.0)			
24" (600mm)	10	(3.0)	CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13	(4.0)
30" (750mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	PED. PUSHBUTTON	4	(1.2)
			ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5	(4.1)
			GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5	(4.1)
						POST MOUNTED	6	(1.8)

SELTON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES

IL ROUTE 171 (ARCHER AVENUE)
AT IL ROUTE 83
LEMONT, ILLINOIS

SCALE: N.T.S.
DATE 08-15-06

DRAWN BY BR
DESIGNED BY VO
CHECKED BY TJM