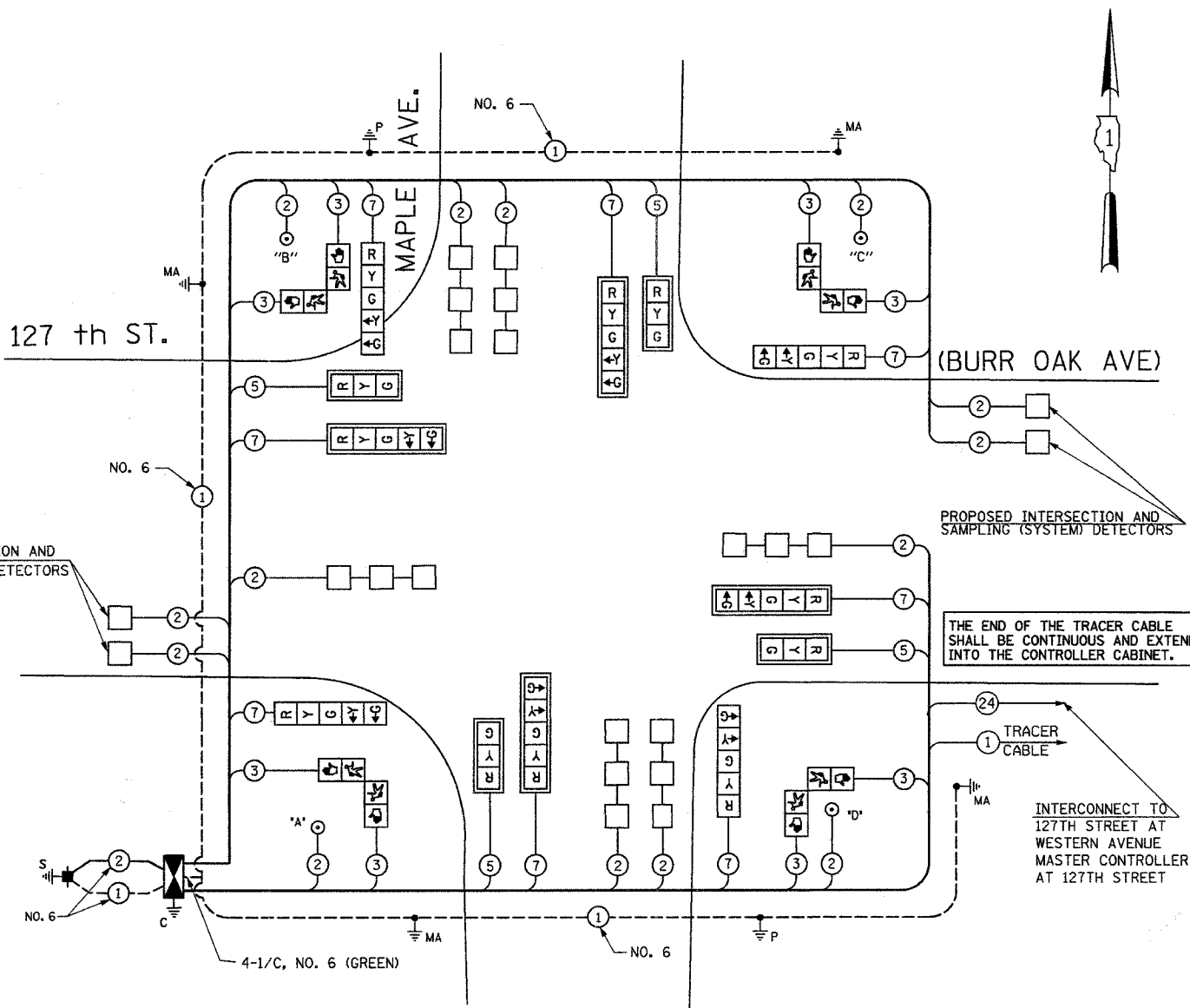


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	3034N-1	COOK	71	29
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

**SCHEDULE OF QUANTITIES**

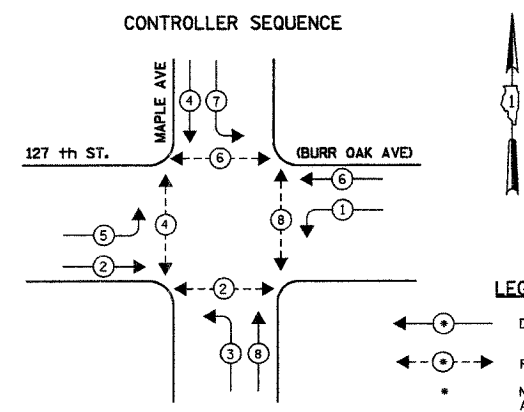
QUANTITY	UNIT	ITEM
13.5	SQ FT	SIGN PANEL - TYPE 1
30	SQ FT	SIGN PANEL - TYPE 2
667	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
104	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
30	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
98	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
205	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
795	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
566	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1204	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
722	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1368	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2317	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
113	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE D
60	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
8	EACH	TRAFFIC SIGNAL BACKPLATE
10	EACH	INDUCTIVE LOOP DETECTOR
713	FOOT	DETECTOR LOOP, TYPE 1
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	SERVICE INSTALLATION, POLE MOUNT
637	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
4	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED



**CABLE PLAN**

**PUSH-BUTTON NOTE:**  
 PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

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



**PHASE DESIGNATION DIAGRAM**

**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
W	W	CONTROLLER CABINET
W	W	SERVICE INSTALLATION
W	W	TELEPHONE INSTALLATION
W	W	VEHICLE DETECTOR, INDUCTION LOOP
W	W	MAGNETIC DETECTOR
W	W	EMERGENCY VEHICLE LIGHT DETECTOR
W	W	CONFIRMATION BEACON
W	W	PUSH-BUTTON DETECTOR
W	W	2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
W	W	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
W	W	24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
W	W	SIGNAL FACE WITH BACKPLATE. 'P' INDICATES PROGRAMMED HEAD.
W	W	RAILROAD CONTROL CABINET
W	W	ILLUMINATED SIGN, FIBER OPTIC 'NO LEFT TURN'
W	W	ILLUMINATED SIGN, FIBER OPTIC 'NO RIGHT TURN'
W	W	H/C GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
W	W	P GROUND ROD AT POST OR MAST ARM POLE
W	W	S GROUND ROD AT ELECTRIC SERVICE INSTALLATION
W	W	LOCAL AND MASTER CONTROLLER
W	W	MICROWAVE VEHICLE SENSOR

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	OPERATION		
SIGNAL (RED)	12	135	17	0.50	102.0
	12	135	25	0.25	75.0
	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	541.42

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-CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	15 (4.0)	MAST ARM (L) POLE	20'-4'-2"
E-MAST ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	(6m)-1-0.6m
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)	PEDESTRIAN 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)

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 OMC, ILLINOIS 60631 TEL. (773) 714-5910

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES**  
 127th STREET (BURR OAK AVE.) AT MAPLE AVENUE  
 SCALE: N.T.S.  
 DATE: 7/17/06  
 DRAWN BY: DSS/RDP  
 DESIGNED BY: PKG  
 CHECKED BY: PKG/KGP