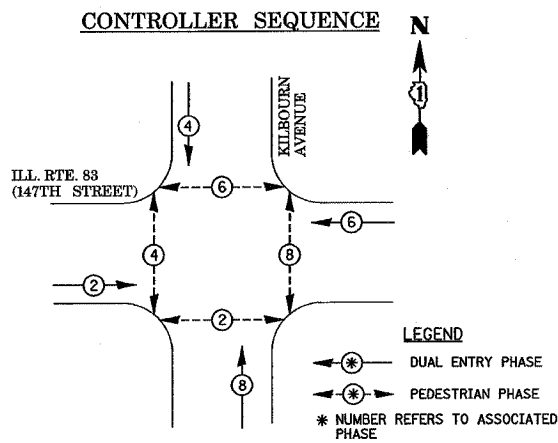


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	2004-021TS	COOK	25	13
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62740

### SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1.5
SIGN PANEL - TYPE 1	SQ FT	30
CONDUIT IN TRENCH, 2" DIA, GALVANIZED STEEL	FOOT	486
CONDUIT IN TRENCH, 2" DIA, GALVANIZED STEEL	FOOT	87
CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL	FOOT	172
CONDUIT ATTACHED TO STRUCTURE, 2" DIA, GALVANIZED STEEL	FOOT	24
HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	573
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	426
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	442
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	956
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 6C	FOOT	1706
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	681
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	19
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	10
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE 1	FOOT	304
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	184

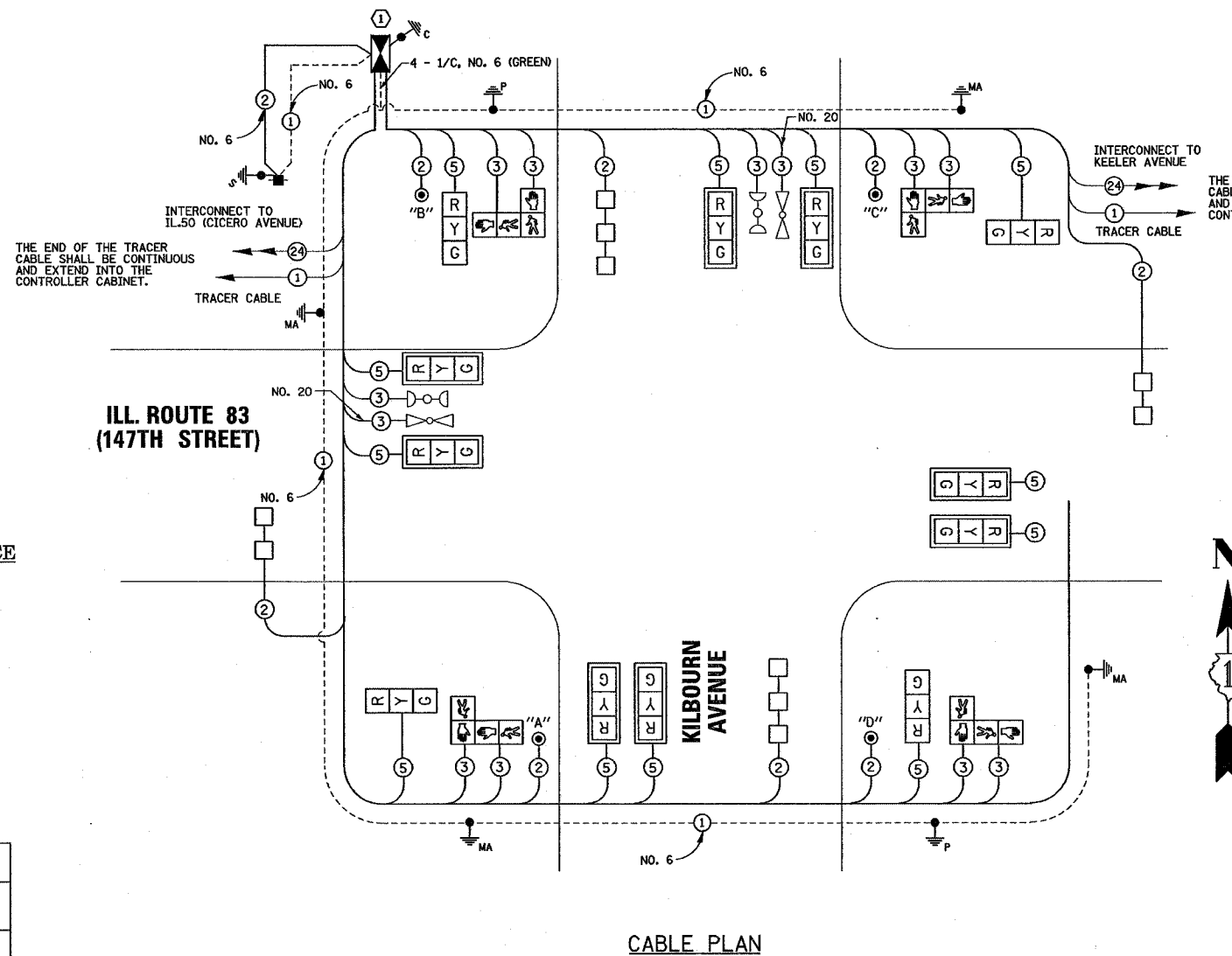
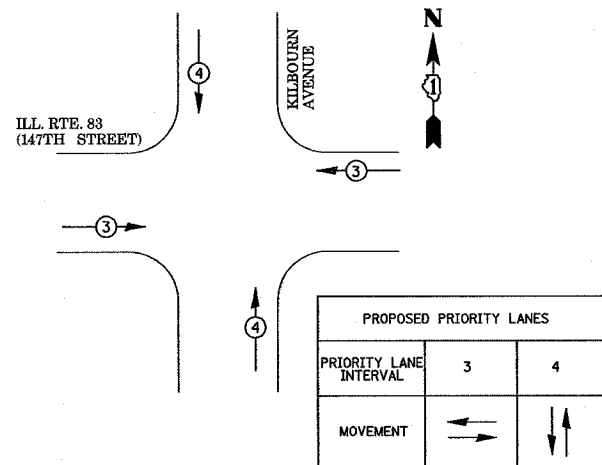


### PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS  
PERMITTED LEFT TURN PHASING

### EMERGENCY VEHICLE PREEMPTION SEQUENCE

FOR DUAL ENTRY OPERATION - ALL LEGS



### CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED

### CONSTRUCTION NOTES:

- ① REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW CONTROLLER AND TYPE IV CABINET, SPECIAL. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET AND RELOCATE DETECTOR UNIT ON NEW MAST ARM. RELOCATION OF THE EMERGENCY PRIORITY SYSTEM EQUIPMENT SHALL BE INCLUDED IN THE NEW CONTROLLER UNIT PRICE.

### PUSH-BUTTON NOTES:

- 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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	XX OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	-	135	12	0.10	-
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	-	84		0.05	-
FLASHER	0			0.50	0.00
TOTAL =					522.0

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	13 (4.0)	MAST ARM (L) POLE	20' + L - 2' =
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
		24" (600mm)	10 (3.0)	BRACKET MOUNTED	13 (4.0)
		30" (750mm)	15 (4.6)	PED. PUSHBUTTON	4 (1.2)
				ELECTRIC SERVICE	13.5 (4.1)
				SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

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

**SETON ENGINEERING**  
SERVICE CORPORATION  
CIVIL ENGINEERS

19 S. BOWHILL STREET  
PALATINE, ILLINOIS 60067  
VOICE: 847-776-7200 FAX: 847-776-7239

SETON PROJECT # 2002001-207-211

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES

ILL. ROUTE 83 (147TH STREET) AT KILBOURN AVENUE, MIDLOTHIAN, ILLINOIS

SCALE: N.T.S. DATE 09-20-2004

DRAWN BY CWC  
DESIGNED BY VO  
CHECKED BY TJM