

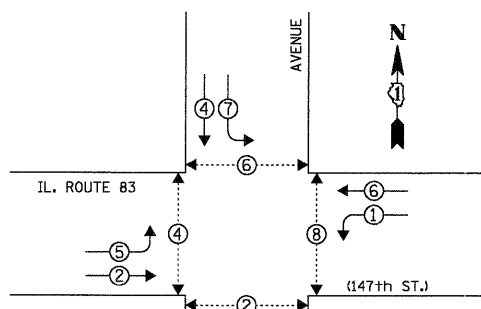
DATE: \_\_\_\_\_  
 PLAN NO.: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 ALIGNMENT CHECKED: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 CADD FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
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 DATE: \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 8575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-9500

**CONTROLLER SEQUENCE**

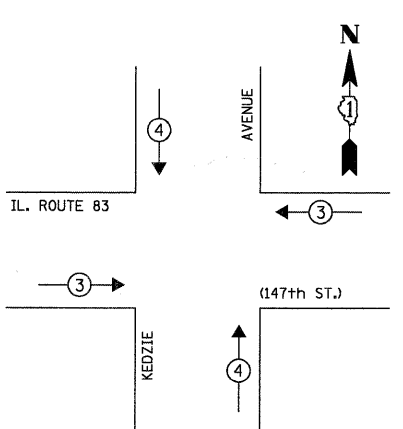


**LEGEND**

- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



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

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.

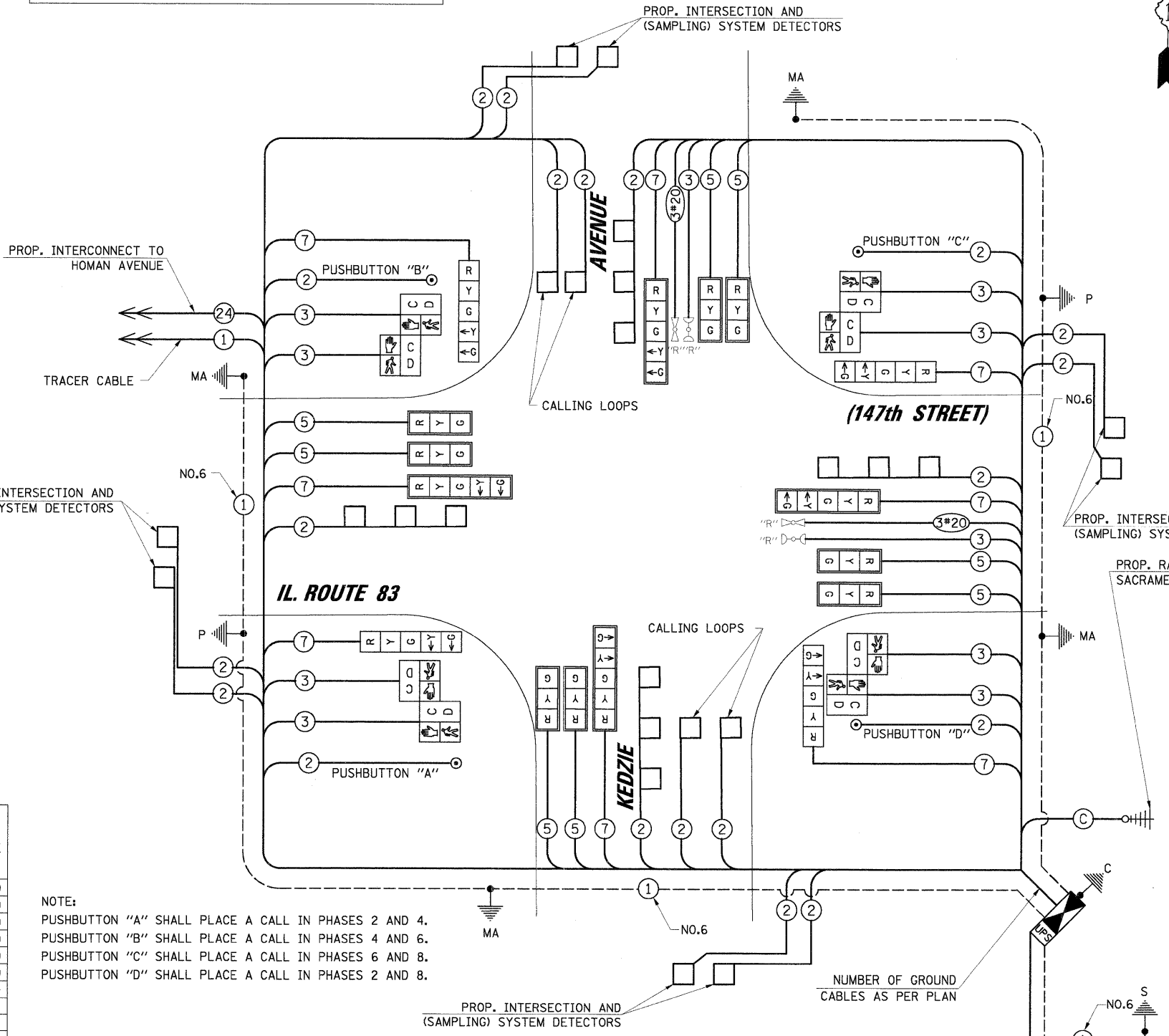
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
(Symbol)	(Symbol)	8" (200mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(Symbol)	(Symbol)	PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Symbol)	(Symbol)	CONTROLLER CABINET SERVICE INSTALLATION
(Symbol)	(Symbol)	TELEPHONE INSTALLATION
(Symbol)	(Symbol)	VEHICLE DETECTOR, INDUCTION LOOP
(Symbol)	(Symbol)	MAGNETIC DETECTOR
(Symbol)	(Symbol)	EMERGENCY VEHICLE LIGHT DETECTOR
(Symbol)	(Symbol)	CONFIRMATION BEACON
(Symbol)	(Symbol)	PUSHBUTTON DETECTOR
(Symbol)	(Symbol)	2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(Symbol)	(Symbol)	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(Symbol)	(Symbol)	24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
(Symbol)	(Symbol)	SIGNAL FACE WITH BACKPLATE "R" INDICATES PROGRAMMED HEAD.
(Symbol)	(Symbol)	RAILROAD CONTROL CABINET
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO LEFT TURN"
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO RIGHT TURN"
(Symbol)	(Symbol)	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) OR MAST ARM POLE (MA)
(Symbol)	(Symbol)	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
(Symbol)	(Symbol)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(Symbol)	(Symbol)	UNINTERRUPTIBLE POWER SUPPLY RELOCATED
(Symbol)	(Symbol)	COAXIAL CABLE
(Symbol)	(Symbol)	RADIO INTERCONNECT

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1500
DETECTABLE WARNINGS	SQ FT	117
SIDEWALK REMOVAL	SQ FT	1500
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	76
MEDIAN REMOVAL AND REPLACEMENT, SPECIAL	SQ FT	218
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	163
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	80
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	711
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	43
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	27
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	32
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	637
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	378
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	7
HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	872
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	653
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1676
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1528
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1501
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	4212
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	278
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	89
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	18
DETECTOR LOOP, TYPE I	FOOT	889
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
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	820
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	346



NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6. PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% 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	16	12	0.10		19.20
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	25	0.05		-
FLASHER	-	-	-	0.50	-

ENERGY COSTS TO: TOTAL = 615.20

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)

**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

FILE NAME = N:\do\808040\TASK 0 - IL 83\Traffic\CB\_Kedzie.dgn  
 USER NAME = FPAICONE  
 DESIGNED - ABR  
 DRAWN - FPB  
 CHECKED - MJT  
 PLOT SCALE = N.T.S.  
 PLOT DATE = 11/24/2008

REVISED -  
 REVISED -  
 REVISED -  
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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**  
 IL ROUTE 83 (147th STREET) AND KEDZIE AVENUE  
 MIDLOTHIAN, 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	10

CONTRACT NO. 60F06  
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT