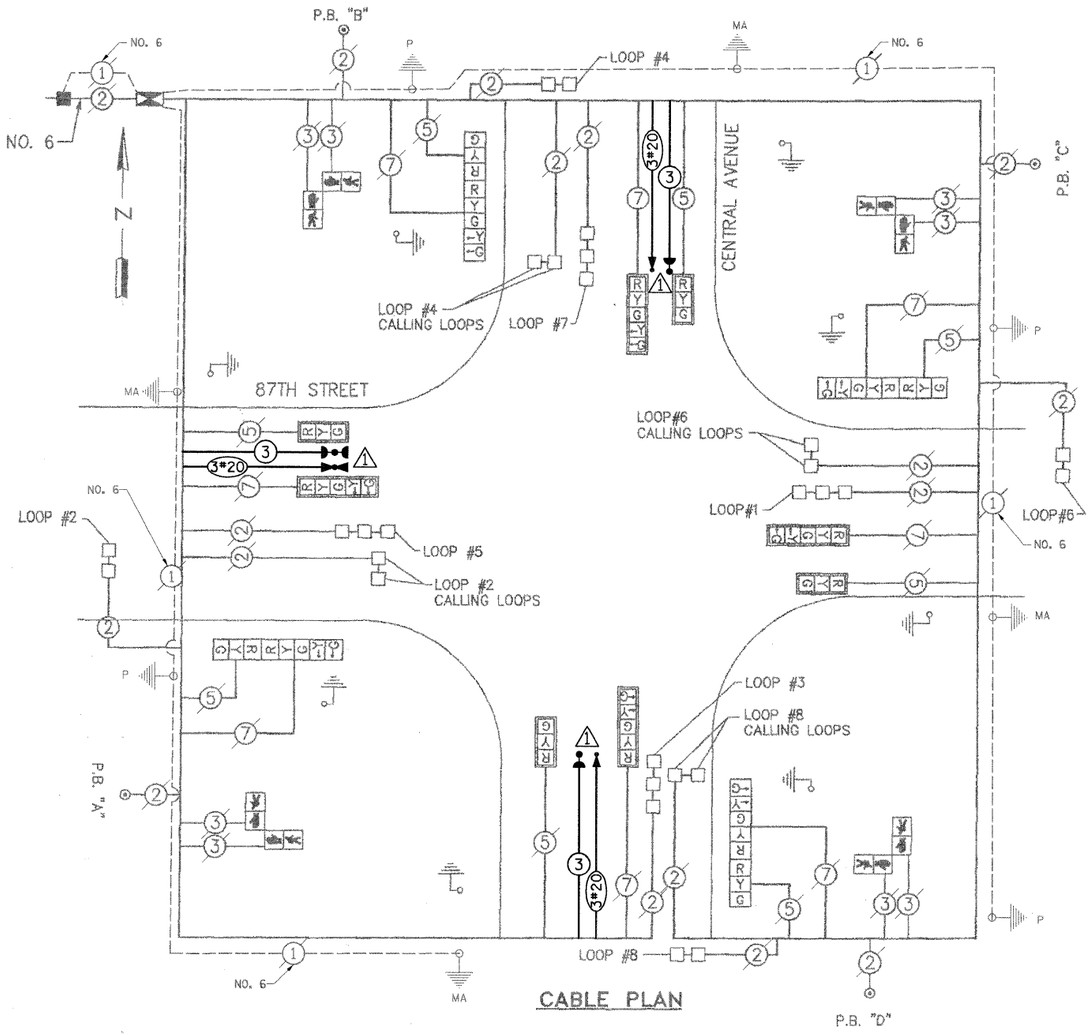
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	48	16
CONTRACT NO. 63087				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



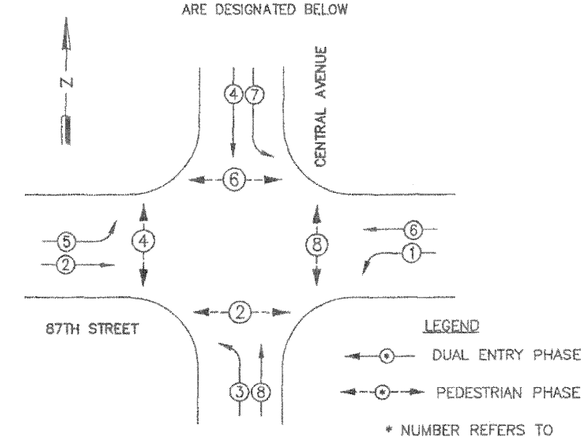
CABLE PLAN

CABLE PLAN LEGEND

TRAFFIC SIGNAL SECTION	R
CONTROLLER CABINET	
SERVICE INSTALLATION	
VEHICLE DETECTOR LOOP	
DENOTES NUMBER OF CONDUCTORS ALL CABLE NO. 14 EXCEPT AS INDICATED ALL LOOP DETECTOR CABLE TO BE SHIELDED	5
SIGNAL FACE WITH BACKPLATE	R Y G
PEDESTRIAN SIGNAL HEAD	
PEDESTRIAN PUSH BUTTON	
GROUND ROD	
EMERGENCY VEHICLE LIGHT DETECTOR CONFIRMATION BEACON	1

STANDARD CONTROLLER SEQUENCE

REFERRING TO IDOT STANDARD DRAWING 857001 THE VEHICULAR PHASES USED ARE DESIGNATED BELOW



PHASE DESIGNATION DIAGRAM

DUAL ENTRY-ALL LEGS
PROTECTED/PERMITTED LEFT TURN PHASING

1

CARE IS TO BE TAKEN BY THE CONTRACTOR TO AVOID DAMAGE TO THE EXISTING TRAFFIC SIGNAL CONDUIT, DETECTORS, AND EQUIPMENT. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED CONDUIT OR EQUIPMENT AT NO COST TO THE COUNTY OR VILLAGE.

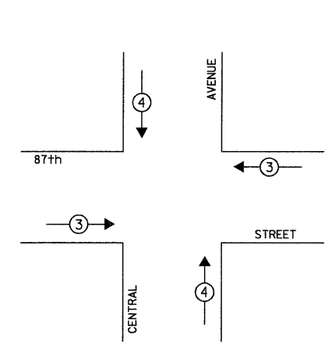
1

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM AND MUNICIPAL REQUIREMENTS

1

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.

1 EMERGENCY VEHICLE PREEMPTION SEQUENCE



1

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

NOTE:

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

1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	x % OPERATION	
SIGNAL (RED)	16	135		0.50	1080.00
(YELLOW)	16	135		0.25	540.00
(GREEN)	16	135		0.25	540.00
ARROW	16	135		0.10	216.00
PED. SIGNAL	8	90		1.00	720.00
CONTROLLER	1	100		1.00	100.00
ILLUM. SIGN	-	252		0.05	-
FLASHER				0.50	-
ENERGY COSTS TO:				TOTAL =	3196.00

COOK COUNTY HIGHWAY DEPARTMENT
69 WEST WASHINGTON ROOM 2139
CHICAGO, ILLINOIS 60602-3134

ENERGY SUPPLY: CONTACT: _____
PHONE: _____
COMPANY: _____

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)	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)
36" (900mm)	15	(4.6)	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)

1 SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	576
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	576
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	EACH	1

1 INSTALLATION OF EMERGENCY VEHICLE PREEMPTION

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

NO.	DATE	REVISION	BY
1	6-27-08	CBBEL	

COOK COUNTY HIGHWAY DEPARTMENT

COUNTY SIGNAL IMPROVEMENTS
87TH STREET AT CENTRAL AVENUE
CABLE PLAN AND SIGNAL QUANTITIES

McDonough Associates Inc.
Engineers/Architects

DESIGNED BY: NKU
CHECKED BY: JPO
DRAWN BY: NKU

SCALE: N.T.S.

N:\OakLawn\080363\Traffic\EVP_87th-Central.dgn