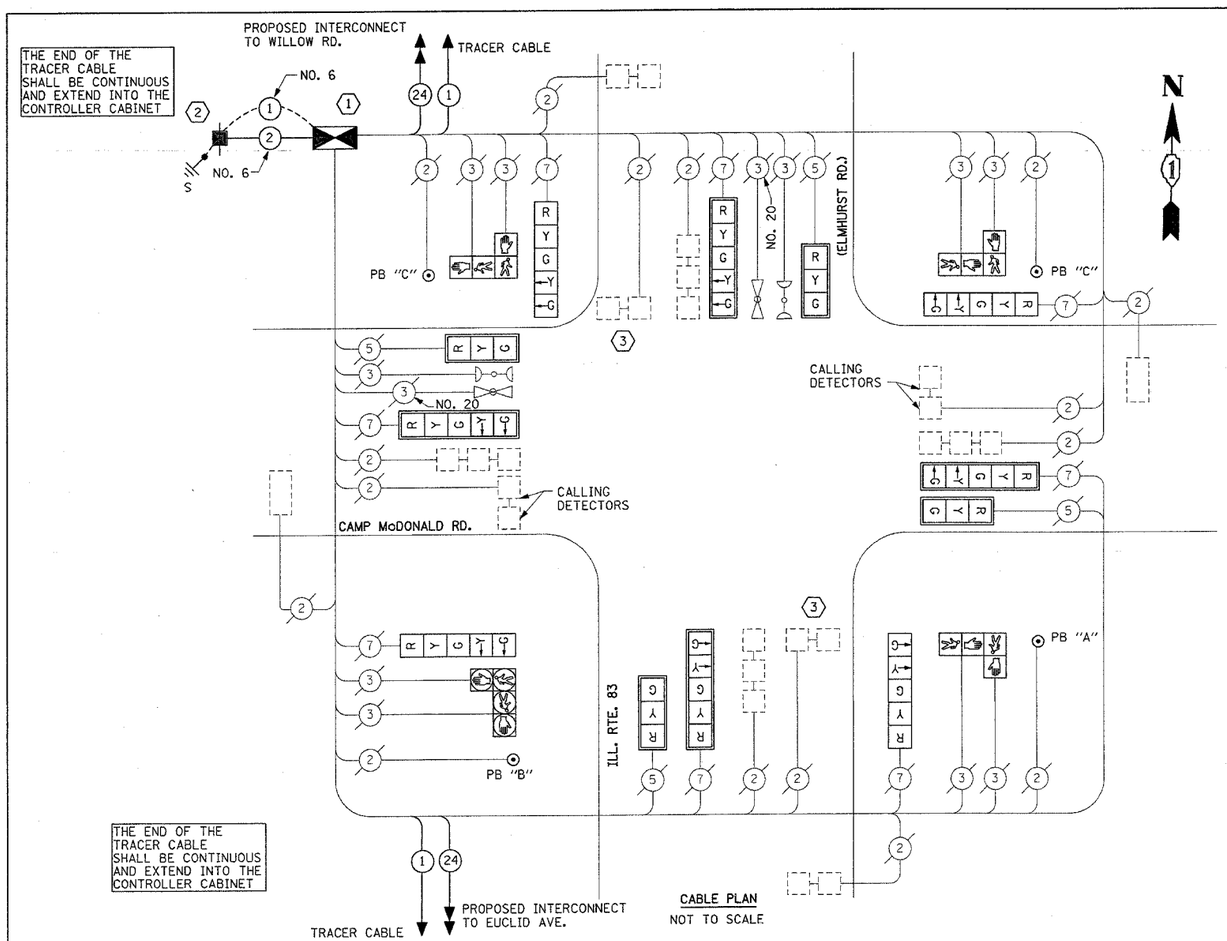
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2004-017TS	COOK	38	29
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT #62736



CABLE PLAN
NOT TO SCALE

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
		VEHICLE DETECTOR, INDUCTION LOOP
T	T	TELEPHONE INSTALLATION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G Y G "P"	R Y G Y G "P"	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/C	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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QNTY.
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	0.11
TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	0.11
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.11
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.11
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	199
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	199
INDUCTIVE LOOP DETECTOR	EACH	10
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	405
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
SIGNAL HEAD, L.E.D., 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 5-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN PUSHBUTTON	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8

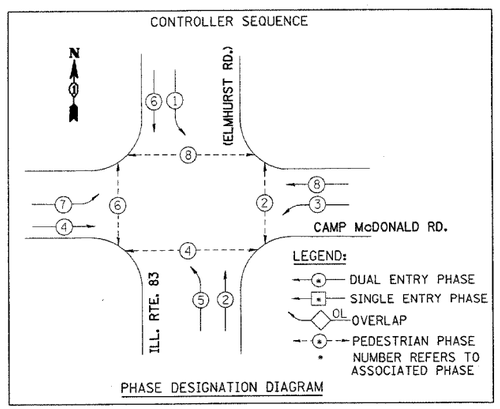
NOTE:
THE PROPOSED TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS INTERSECTION IS "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	X WATTAGE INCAND	X WATTAGE LED	% 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	16	135	12	0.10	19.20
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84	35	0.05	
FLASHER		135	25	0.50	
				TOTAL =	541.20

ENERGY COST TO: Illinois Department of Transportation
Division of Highways / District 1
201 W Center Court/Schaumburg, Illinois 60196-1096

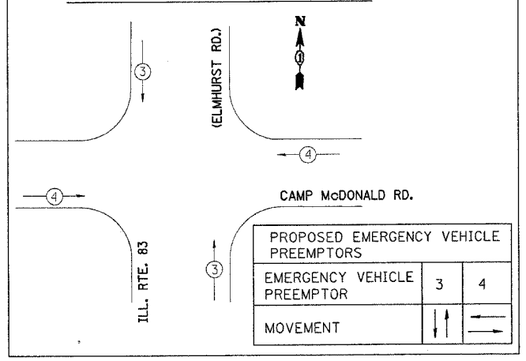
ENERGY SUPPLY: CONTACT: MS. JUDY SCHOMER
PHONE: (847) 870-2063
COMPANY: ComEd

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



FOUNDATION (DEPTH)	(FT.)	(m)	CABLE SLACK	(FT.)	(m)	CABLE SLACK	(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= (6m+L-0.6m)=	
E - 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)

CONSTRUCTION NOTES:

1. REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW CONTROLLER AND TYPE IV CABINET. RE-USE EXISTING FOUNDATION. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT TO NEW CONTROLLER CABINET INCLUDED IN COST OF THE NEW CONTROLLER AND CABINET.
2. REMOVE EXISTING SERVICE CABLE AND SERVICE. INSTALL NEW SERVICE, SERVICE CABLE AND GROUND CABLE.
3. ABANDON EXISTING DETECTORS AND REMOVE EXISTING 2/C TWISTED SHIELDED CABLE FROM CONDUIT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
ILL. ROUTE 83 (ELMHURST RD.) AT CAMP McDONALD ROAD

SCALE: NONE
DATE: JUNE 28, 2004
DRAWN BY:
DESIGNED BY:
CHECKED BY:

$FILE$
$DATE$
6/30/2004
c:$projects$traffic$t013000$1183.m32
kanthaphixaybc