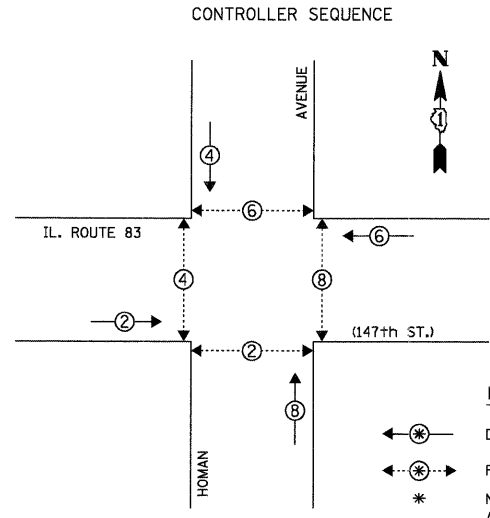


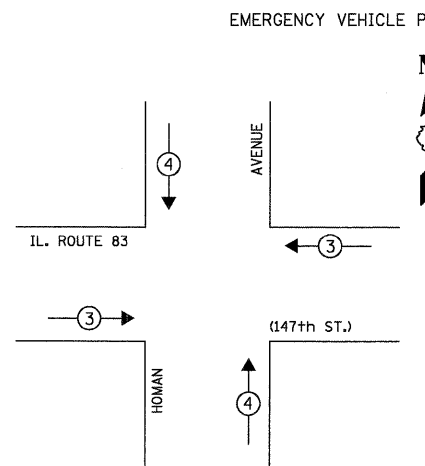
DATE: _____
 SURVEYED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____
 DATE: _____
 BY: _____
 PROFILE: _____
 GRADES CHECKED: _____
 SHALTIMBER: _____
 NO. _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Chicago, Illinois 60638
 (847) 823-0500



LEGEND
 ← ⊙ → DUAL ENTRY PHASE
 ← ⊙ ⊙ → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

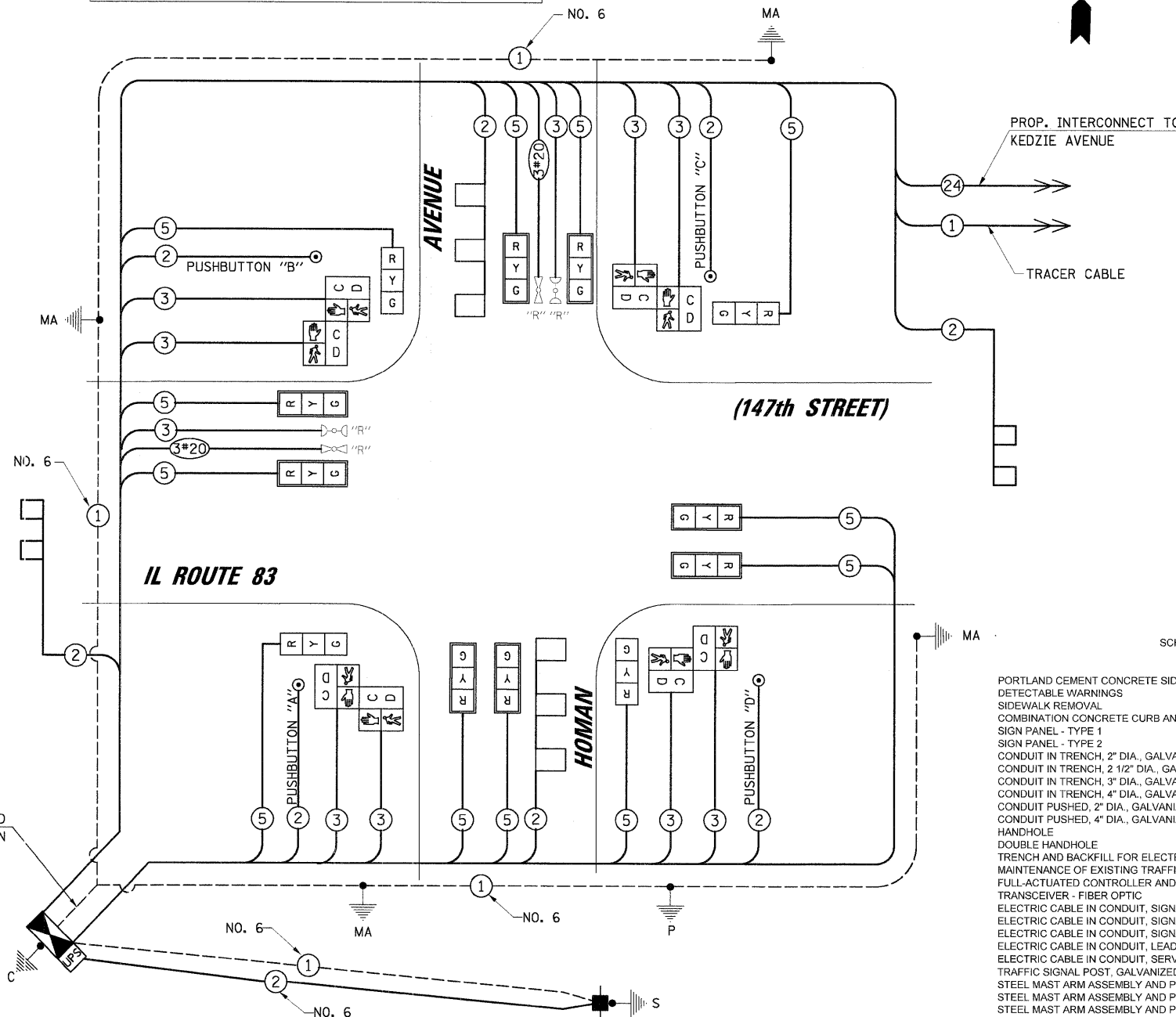
PHASE DESIGNATION DIAGRAM



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:
 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.

CABLE PLAN

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

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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
(C/D)	(C/D)	PEDESTRIAN COUNTDOWN SIGNAL HEAD
(CAB)	(CAB)	CONTROLLER CABINET
(S)	(S)	SERVICE INSTALLATION
(T)	(T)	TELEPHONE INSTALLATION
(V)	(V)	VEHICLE DETECTOR, INDUCTION LOOP
(M)	(M)	MAGNETIC DETECTOR
(E)	(E)	EMERGENCY VEHICLE LIGHT DETECTOR
(B)	(B)	CONFIRMATION BEACON
(P)	(P)	PUSHBUTTON DETECTOR
(N)	(N)	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
(P)	(P)	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
(R)	(R)	RAILROAD CONTROL CABINET
(L)	(L)	ILLUMINATED SIGN "NO LEFT TURN"
(R)	(R)	ILLUMINATED SIGN "NO RIGHT TURN"
(H)	(H)	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
(UPS)	(UPS)	UNINTERRUPTIBLE POWER SUPPLY
(R)	(R)	RELOCATED

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	836
DETECTABLE WARNINGS	SQ FT	86
SIDEWALK REMOVAL	SQ FT	836
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	144
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	25
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	283
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	34
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	25
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	435
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	234
HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	438
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, SIGNAL NO. 14 2C	FOOT	419
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1242
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 6C	FOOT	1603
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	899
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	202
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE I	FOOT	337
PEDESTRIAN PUSH-BUTTON	EACH	4
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	4
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	552
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	356

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	17	0.50	102.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	-	12	0.10	-	
PED. SIGNAL	8	25	1.00	200.00	
CONTROLLER	1	100	1.00	100.00	
ILLUM. SIGN	-	25	0.05	-	
FLASHER	-	-	-	-	-

ENERGY COSTS TO: TOTAL = 522.00

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

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' ± -2' =
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m ± -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)

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 HUMAN AVENUE
 MIDLOTHIAN, ILLINOIS

SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	F.A.U. RTE. 1602	SECTION 2008-054 TS	COUNTY COOK	TOTAL SHEETS 40	SHEET NO. 6
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CONTRACT NO. 60F06
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT