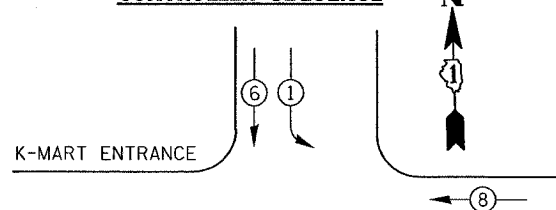
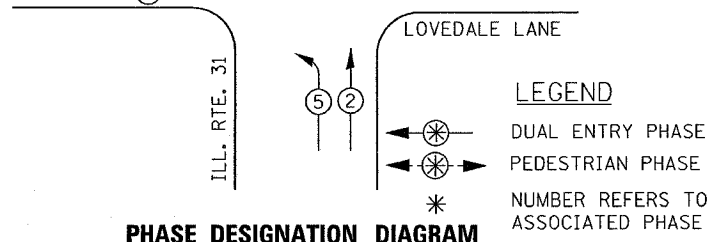


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	2005-003 TS	KANE	20	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62907				

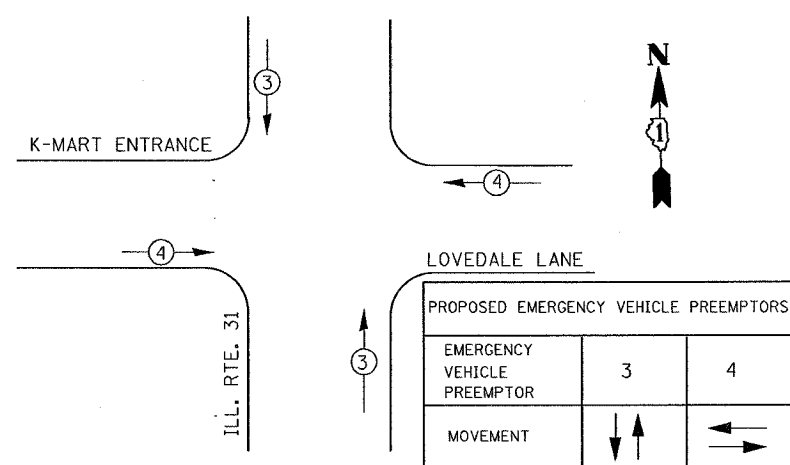
CONTROLLER SEQUENCE



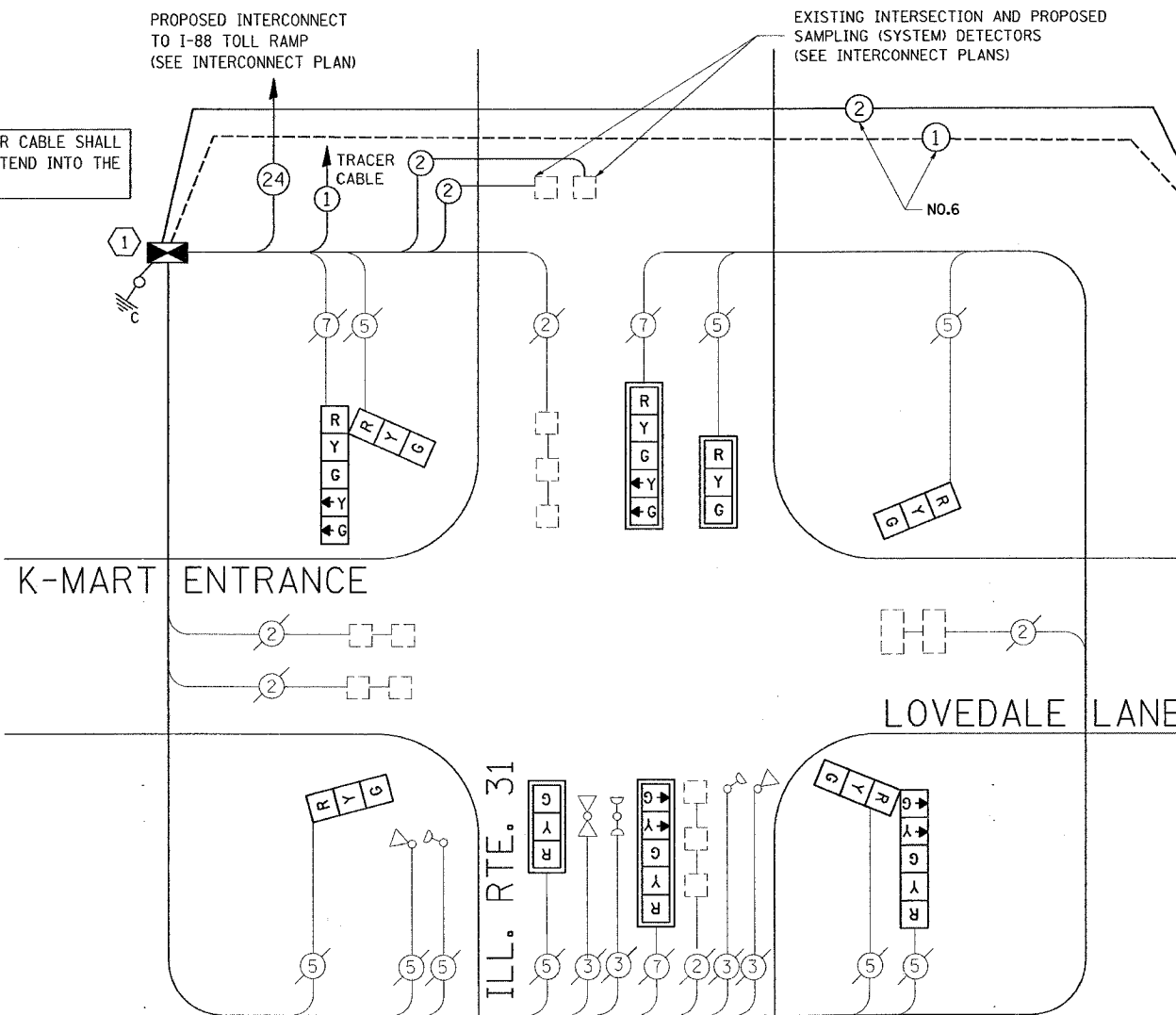
PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION DIAGRAM



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



CABLE PLAN LEGEND

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	.20
TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	LSUM	.20
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	.20
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	.20
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET(SPECIAL)	EACH	1
TRANSCIVER-FIBER OPTIC	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED.	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED.	EACH	2
SIGNAL HEAD, L.E.D., 2-FACE, 1 5-SECTION, 1 3-SECTION BRACKET MOUNTED.	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED.	EACH	2
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1 C	FOOT	100
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	820
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2 C	FOOT	100
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	100
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
TRAFFIC SIGNAL BACKPLATE	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	9

CABLE PLAN

EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) DETECTORS (SEE INTERCONNECT PLANS)

CONSTRUCTION NOTES:

- 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.
- REMOVE EXISTING SERVICE CABLE AND SERVICE. INSTALL NEW SERVICE, SERVICE CABLE AND GROUND CABLE.

NOTE: RELOCATION OF THE LIGHT DETECTOR AMPLIFIER(S) FROM THE OLD CONTROLLER CABINET TO THE NEW CABINET IS NECESSARY. THE COST OF THIS WORK SHALL BE INCLUDED IN COST OF THE NEW CONTROLLER AND CABINET.

NOTE: THE PROPOSED TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	10	135	17	0.50	85.00
(YELLOW)	10	135	25	0.25	62.50
(GREEN)	10	135	15	0.25	37.50
ARROW	8	135	12	0.10	9.60
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 294.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: 847-816-5331
PHONE: 847-816-5331
COMPANY: COMMONWEALTH EDISON

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)
		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)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
ILL. RTE. 31 @
K-MART/LOVEDALE LANE
SCALE: 1"=20'
DATE 6/29/2005
DRAWN BY BCK
DESIGNED BY BCK
CHECKED BY BCK

PLOT DATE = 6/29/2005
 FILE NAME = c:\p\projects\2005\ts\ill31\31.mxd
 PLOT SCALE = 20.000000 / IN.
 USER NAME = kshaphuegib