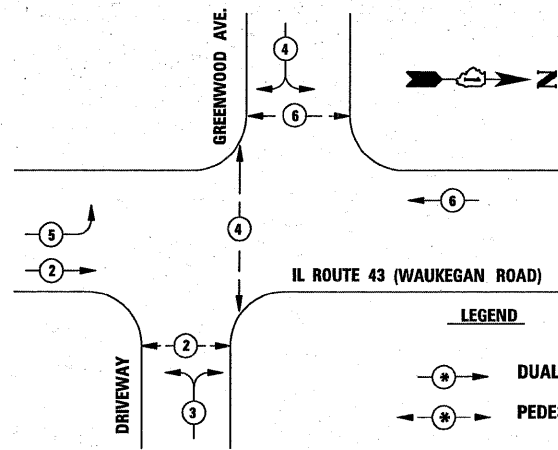
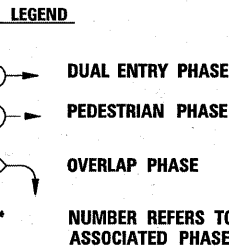


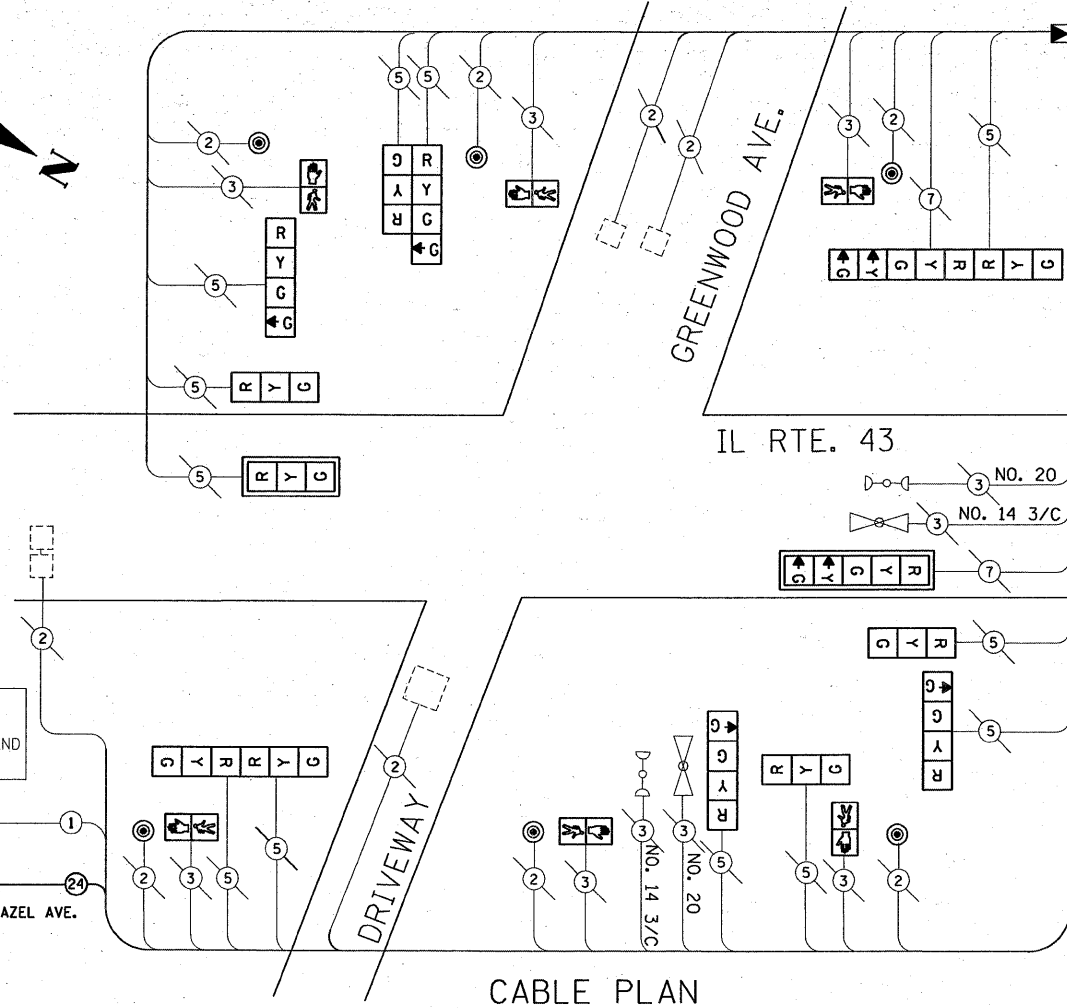
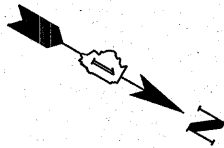
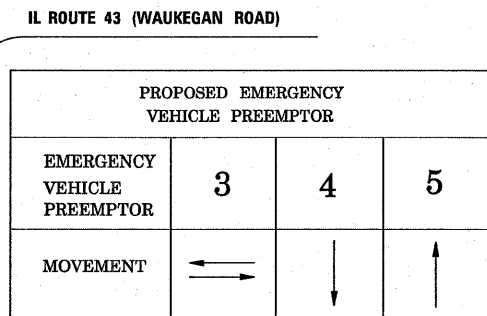
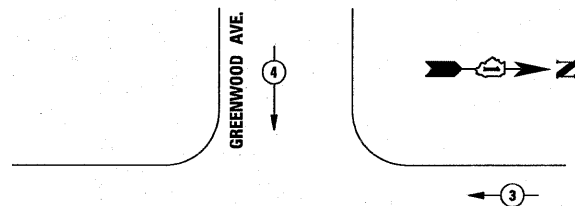
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



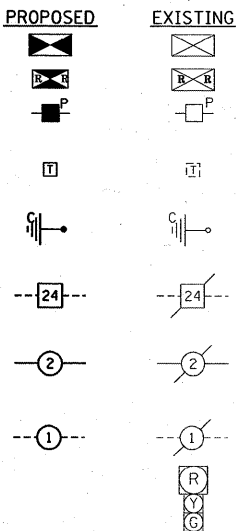
EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

CABLE PLAN LEGEND

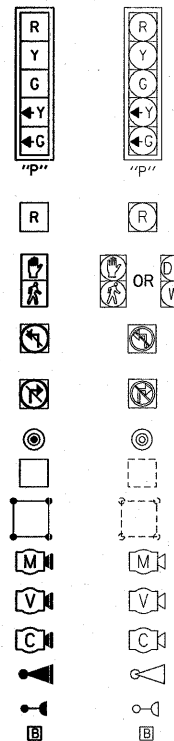
- CONTROLLER CABINET
- RAILROAD CONTROL CABINET
- SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT
- TELEPHONE CONNECTION
- GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE
- FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED
- ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED
- GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)
- 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE



SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD

- 12" (300mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- PUSHBUTTON DETECTOR
- DETECTOR LOOP
- PREFORMED DETECTOR LOOP
- MICROWAVE VEHICLE SENSOR
- VIDEO DETECTOR
- CLOSED CIRCUIT TV
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- UN-INTERRUPTIBLE POWER SUPPLY (UPS)

PROPOSED EXISTING



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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	0.25
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER - FIBER OPTIC	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	25
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	25
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL II	EACH	1

① CONSTRUCTION NOTES:
REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW CONTROLLER AND TYPE IV CABINET, SPECIAL, RE-USE EXISTING FOUNDATION. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. RELOCATION OF THE EXISTING EMERGENCY PRIORITY SYSTEM SHALL BE INCLUDED IN THE NEW CONTROLLER UNIT PRICE.

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE ADJACENT SYSTEM.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE LED	% OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.00
(YELLOW)	14	135	25	0.25	87.50
(GREEN)	14	135	15	0.25	52.50
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	6	90	25	1.00	150.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	

FLASHER 0.50
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION, 201 WEST CENTER COURT, SCHALMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: PHONE: 847 816-5248, COMPANY: COMED
TOTAL = 519.00

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 - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m + L - 0.6m) =
C - M. ARM POLE	10 (3.0)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

FILE NAME = USER NAME = nguyenam
DESIGNED - SN
DRAWN - SN
CHECKED - DAD
PLOT SCALE = 20,0000' / IN.
PLOT DATE = 1/23/2008

DATE - 1/15/2008
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE SEQUENCE AND SCHEDULE OF QUANTITIES
IL 43 (WAUKEGAN RD.) @ GREENWOOD RD.
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2706	2006-020 TS	LAKE	29	13
C-91-351-06		CONTRACT NO. 60B48		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				