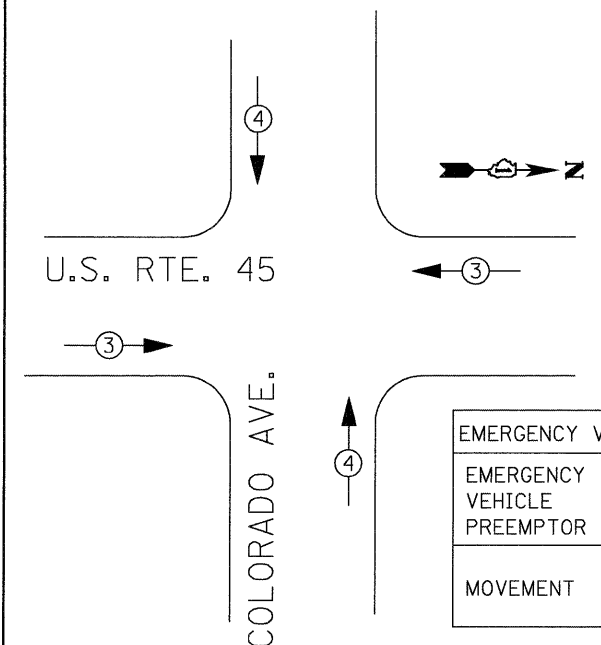


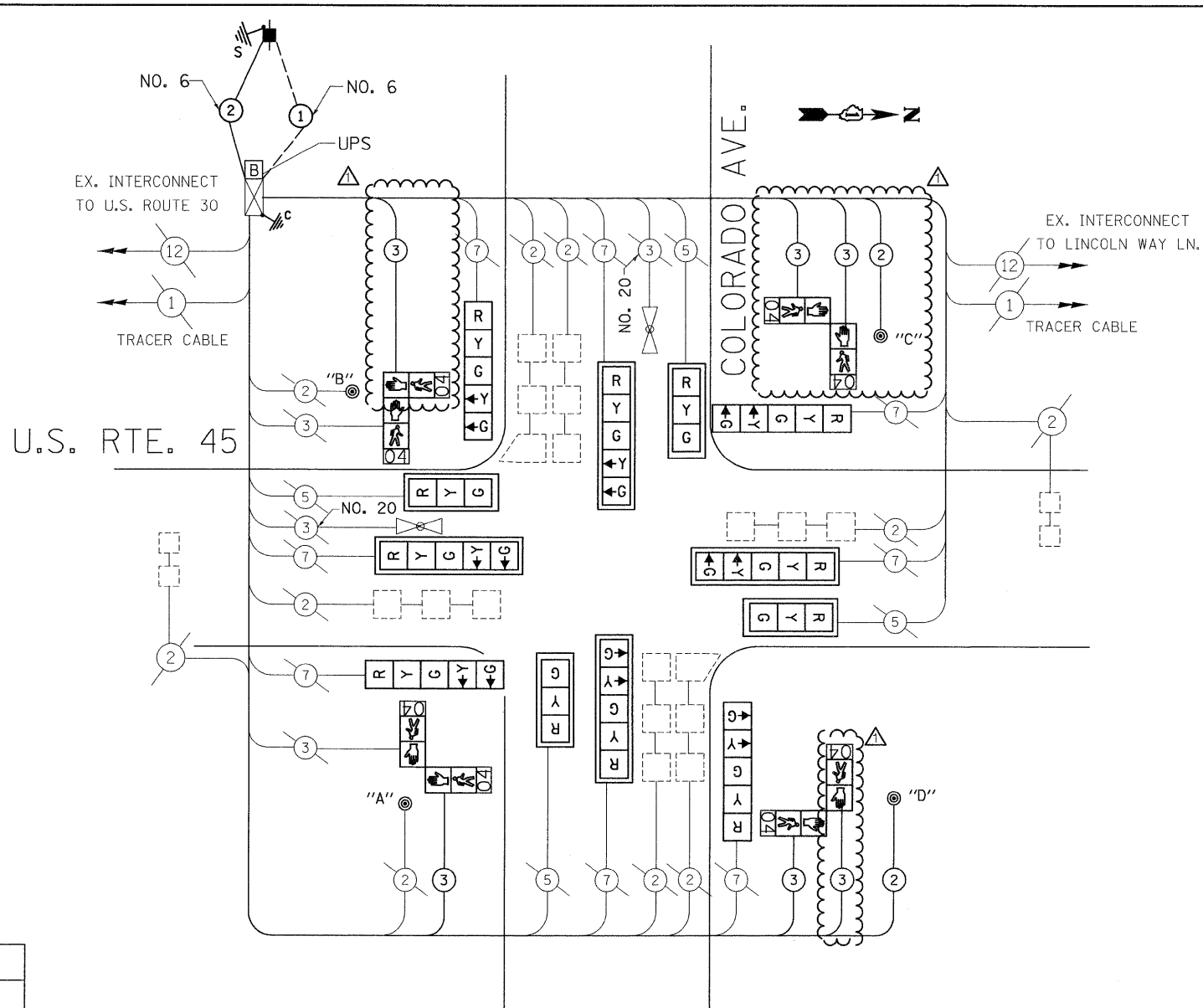
PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↑ ↓

**LEGEND**  
 \* DUAL ENTRY PHASE  
 \* SINGLE ENTRY PHASE  
 OL OVERLAP  
 \* PEDESTRIAN PHASE  
 \* NUMBER REFERS TO ASSOCIATED PHASE



**CABLE PLAN LEGEND**

	PROPOSED	EXISTING
CONTROLLER CABINET	[Symbol]	[Symbol]
RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE	[Symbol]	[Symbol]
FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED	[Symbol]	[Symbol]
ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS NOTED	[Symbol]	[Symbol]
GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)	[Symbol]	[Symbol]
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD	[Symbol]	[Symbol]
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE	[Symbol]	[Symbol]
12" (300mm) TRAFFIC SIGNAL SECTION	[Symbol]	[Symbol]
12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
VIDEO DETECTOR	[Symbol]	[Symbol]
CLOSED CIRCUIT TV	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
UNINTERRUPTIBLE POWER SUPPLY	[Symbol]	[Symbol]

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
TERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	474
TERMOPLASTIC PAVEMENT MARKING LINE 24"	FOOT	120
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	54
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	54
SIGNAL HEAD, L.E.D. 1-FACE, 3 SECTION, MAST ARM MNTD.	EACH	4
SIGNAL HEAD, L.E.D. 1-FACE, 5 SECTION, MAST ARM. MNTD.	EACH	4
SIGNAL HEAD, L.E.D. 1-FACE, 5 SECTION, BRKT. MNTD.	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16FT.	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8

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'-H-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)

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRKT. MNTD. WITH COUNTDOWN TIMER	EACH	4
TERMOPLASTIC PAVEMENT MARKING REMOVAL	FOOT	96
CONDUIT IN TRENCH, 2" DIA., GALV. STEEL	FOOT	25
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	438
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	118
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	EACH	8
DRILL EXISTING HANDHOLE	EACH	2
MODIFY EXISTING CONTROLLER	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	25

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	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 CONTROLLER	1	30	25	1.00	200.00
ILLUM. SIGN		84		0.05	100.00
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 541.20
ENERGY SUPPLY CONTACT:					
PHONE: 708-410-5069					
COMPANY: COM. EDISON					