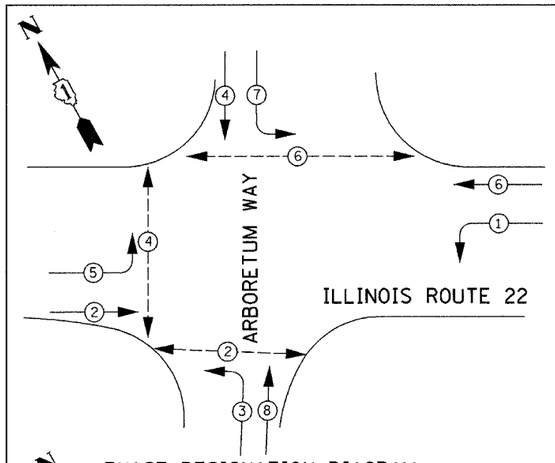
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-5	LAKE	562	347
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

D-91-552-99 60881

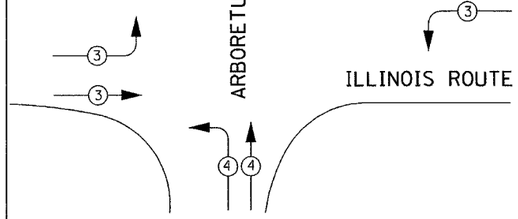


PHASE DESIGNATION DIAGRAM

LEGEND

DUAL ENTRY PHASE

* NUMBER REFERS TO ASSOCIATED PHASE



EMERGENCY VEHICLE PREEMPTION SEQUENCE

LEGEND

SINGLE ENTRY PHASE

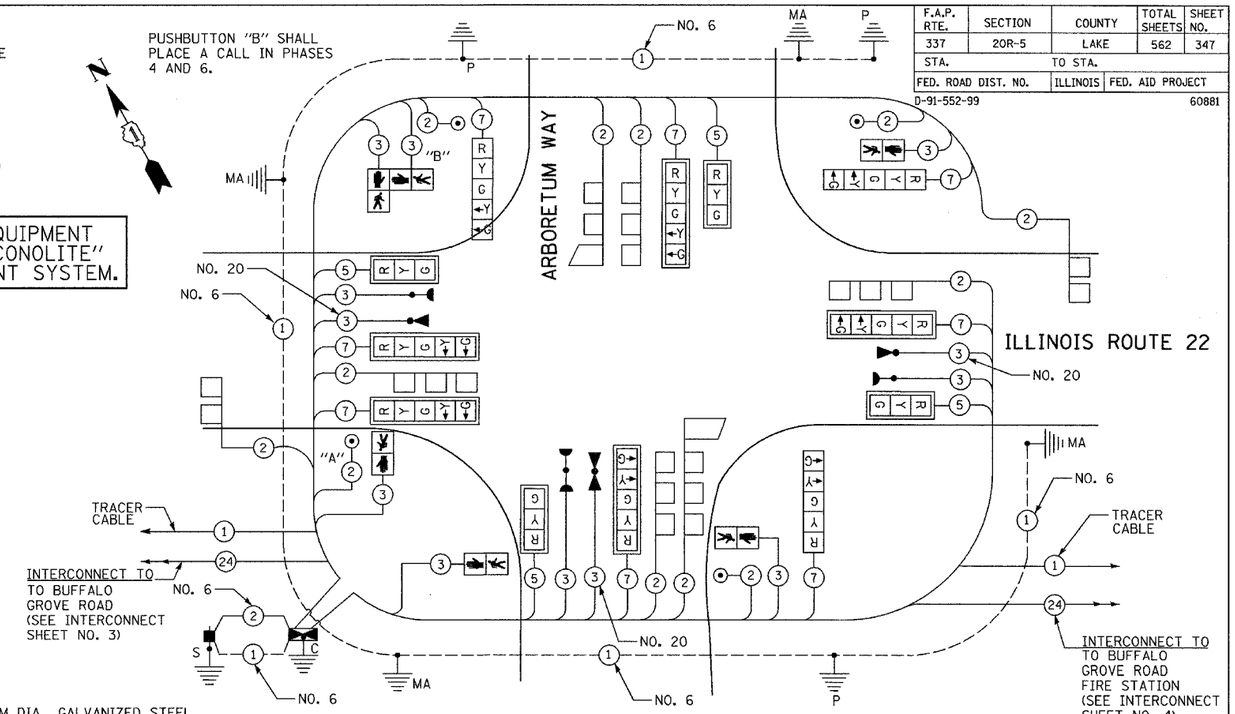
DUAL ENTRY PHASE

OVERLAP

* NUMBER REFERS TO ASSOCIATED PHASE

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

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		



CABLE PLAN

NOT TO SCALE

SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM DESCRIPTION
1.7	SQ M	SIGN PANEL - TYPE 1
2.8	SQ M	SIGN PANEL - TYPE 2
151	METER	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL
33	METER	CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL
17	METER	CONDUIT IN TRENCH, 100MM DIA., GALVANIZED STEEL
11	METER	CONDUIT PUSHED, 65MM DIA., GALVANIZED STEEL
89	METER	CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL
7	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
201	METER	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER IN TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER - FIBER OPTIC
221	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 2C
489	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 3C
267	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 5C
469	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 7C
507	METER	ELECTRIC CABLE IN CONDUIT, LEAD IN, NO.14, 1 PAIR
13	METER	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6, 2C
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 8.53 METER AND 9.75 METER
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 9.75 METER
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 10.97 METER
1.2	METER	CONCRETE FOUNDATION, TYPE D
16.4	METER	CONCRETE FOUNDATION, TYPE E, 750MM DIAMETER
9	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED
8	EACH	INDUCTIVE LOOP DETECTOR
*3	EACH	LIGHT DETECTOR
*1	EACH	LIGHT DETECTOR AMPLIFIER
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	SERVICE INSTALLATION, POLE MOUNT
238	METER	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C (GREEN)
*174	METER	ELECTRIC CABLE IN CONDUIT, NO. 20, 3/C, TWISTED, SHIELDED
4	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
5	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, BRACKET MOUNTED
296	METER	PREFORMED DETECTOR LOOP
6	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION

*NOTE: 100% OF COST TO THE VILLAGE OF BUFFALO GROVE.

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
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.

EXISTING	PROPOSED	
R Y G Y G "P"	R Y G Y G "P"	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
H/C	H/C	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
P	P	GROUND ROD AT POST OR MAST ARM POLE
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
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

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

TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.05	

ENERGY COSTS TO: TOTAL = 491.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: DOTTI PROSEN
PHONE: (847) 816-5529
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)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L-2 = (6mH-0.6m)
E - MAST 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)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL RTE 22 (FAP 337)
IL RTE 83 TO US 45 / IL 21 (MILWAUKEE AVE)
SCHEDULE OF QUANTITIES
CABLE PLAN AND PHASE
DESIGNATION DIAGRAM
ILLINOIS ROUTE 22 AT ARBORETUM WAY

SCALE: NONE
DATE: 03-22-2004
DRAWN BY: AMB
DESIGNED BY: AMB
CHECKED BY: JPS

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

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