

F.A.P. RTE. 337	SECTION 20R-5	COUNTY LAKE	TOTAL SHEETS 562	SHEET NO. 336
STA. TO STA.		60881		
FED. ROAD DIST. NO. 0-91-552-99		ILLINOIS	FED. AID PROJECT NO. 4 (GREEN)	

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
D	= 8	+ 1

• NUMBER REFERS TO ASSOCIATED PHASE

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

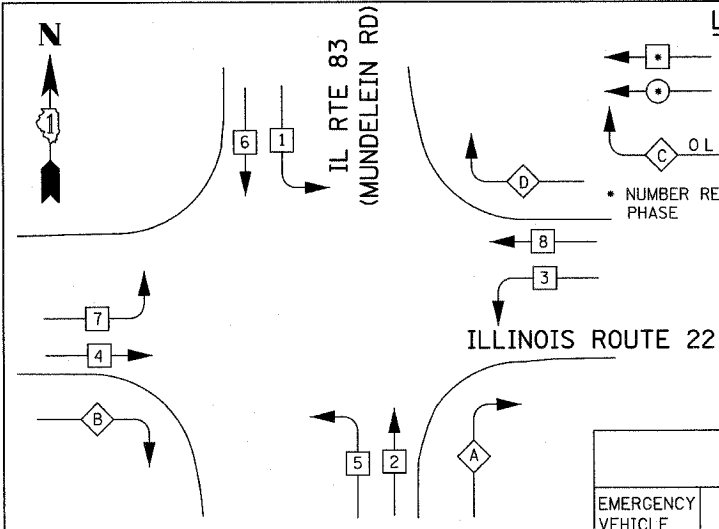
EMERGENCY VEHICLE PREEMPTOR	3	5	4	6
MOVEMENT	←	↓	→	←

SCHEDULE OF QUANTITIES

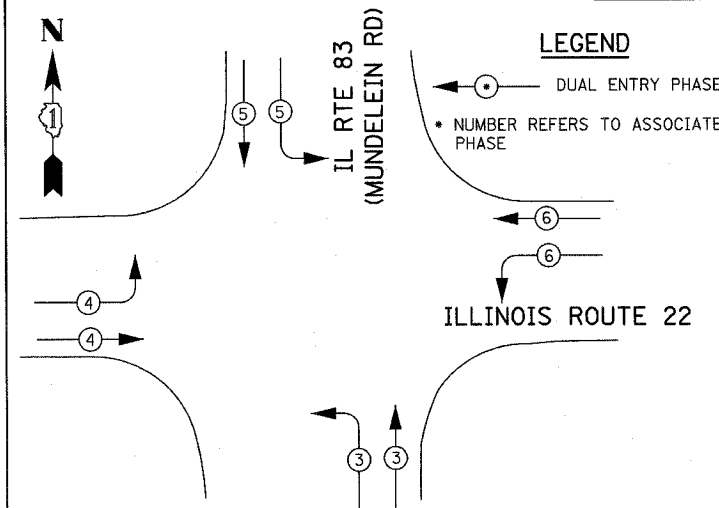
QTY	UNIT	ITEM DESCRIPTION
1.4	SQ M	SIGN PANEL - TYPE 1
2.8	SQ M	SIGN PANEL - TYPE 2
252	METER	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL
46	METER	CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL
4	METER	CONDUIT IN TRENCH, 100MM DIA., GALVANIZED STEEL
48	METER	CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL
136	METER	CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
302	METER	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER IN TYPE IV CABINET, SPECIAL
1	EACH	TRANSCIVER - FIBER OPTIC
344	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 3C
1242	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 5C
407	METER	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 7C
1589	METER	ELECTRIC CABLE IN CONDUIT, LEAD IN, NO.14, 1 PAIR
16	METER	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6, 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 4.25 METER
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 7.31 METER
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 8.53 METER
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 12.19 METER
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 12.80 METER
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 16.46 METER
1.2	METER	CONCRETE FOUNDATION, TYPE A
1.2	METER	CONCRETE FOUNDATION, TYPE D
10.1	METER	CONCRETE FOUNDATION, TYPE E, 750MM DIAMETER
16.6	METER	CONCRETE FOUNDATION, TYPE E, 900MM DIAMETER
2	EACH	DRILL EXISTING MANHOLE OR HANDHOLE
18	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED
18	EACH	INDUCTIVE LOOP DETECTOR
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	SERVICE INSTALLATION, POLE MOUNT
507	METER	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C (GREEN)
342	METER	ELECTRIC CABLE IN CONDUIT, NO. 20, 3/C, TWISTED, SHIELDED
1	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
12	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
6	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
257	METER	DETECTOR LOOP, TYPE 1
96	METER	PREFORMED DETECTOR LOOP
8	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION

*NOTE: 100% OF COST TO THE LONG GROVE FIRE PROTECTION DISTRICT.

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)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	FIBER OPTIC	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)



PHASE DESIGNATION DIAGRAM



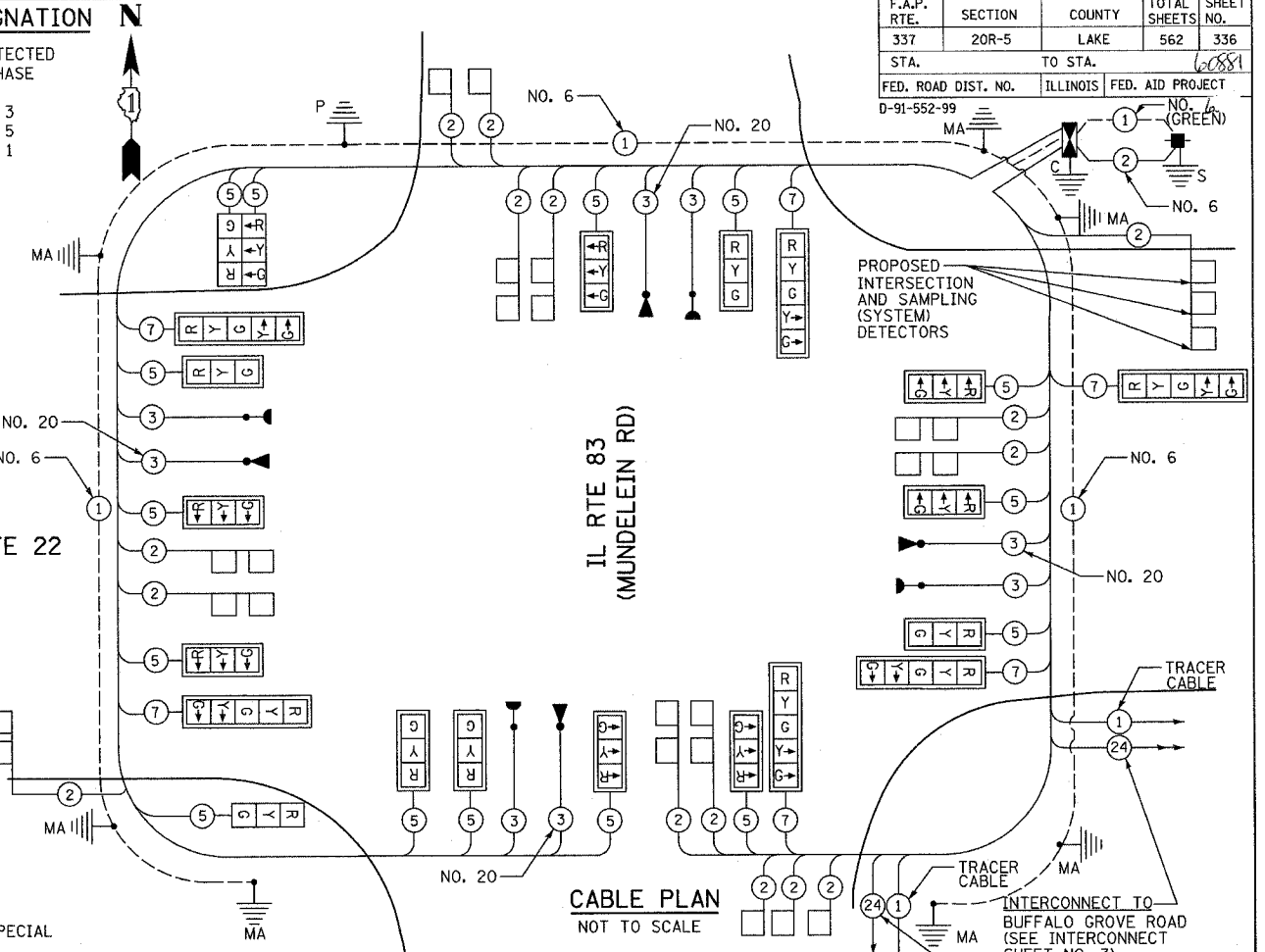
EMERGENCY VEHICLE PREEMPTION SEQUENCE

TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	21	135	17	0.50	178.5
(YELLOW)	21	135	25	0.25	131.25
(GREEN)	21	135	15	0.25	78.75
ARROW	12	135	12	0.10	12
PED. SIGNAL	0	90	25	1.00	0
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.05	

ENERGY COSTS TO: TOTAL = 488.5

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



CABLE PLAN NOT TO SCALE

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
P	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
E	E	RAILROAD CONTROL CABINET
E	E	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
E	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

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL RTE 83 TO US 45 / IL 21 (MILWAUKEE AVE)
SCHEDULE OF QUANTITIES
CABLE PLAN AND PHASE
DESIGNATION DIAGRAM
ILLINOIS ROUTE 22 AT IL 83 (MUNDELEIN ROAD)
SCALE: NONE
DATE: 03-22-2004
DRAWN BY: AMB
DESIGNED BY: AMB
CHECKED BY: JPS

DATE	BY
DATE	BY

FINAL SURVEY PLOTTED
NOTE BOOK TEMPLATE
AREAS CHECKED

DATE	BY
DATE	BY

ORIGINAL SURVEY PLOTTED
NOTE BOOK TEMPLATE
AREAS CHECKED