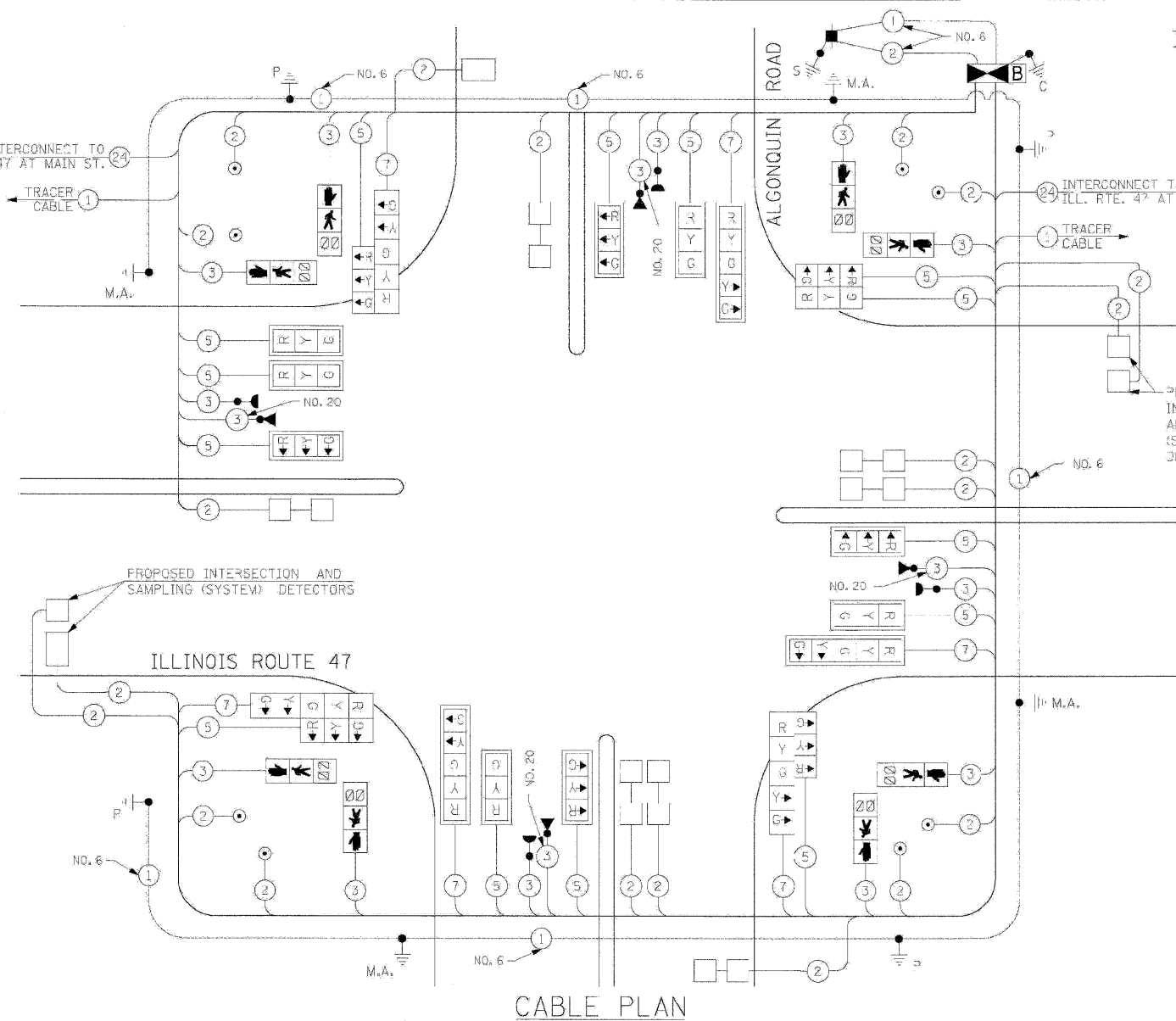


F.A.P. RT. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	*	MCHENRY	502	302
STA. 9+35.22		TO STA. 142+08.53		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

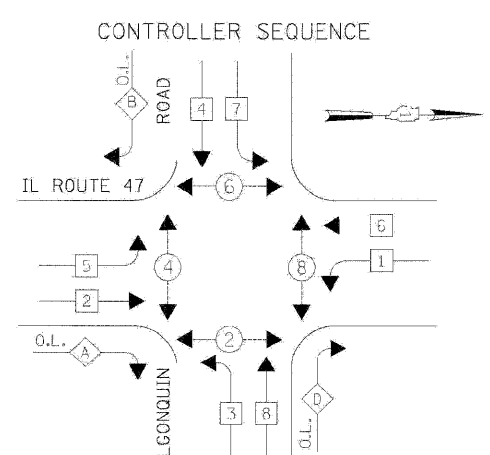
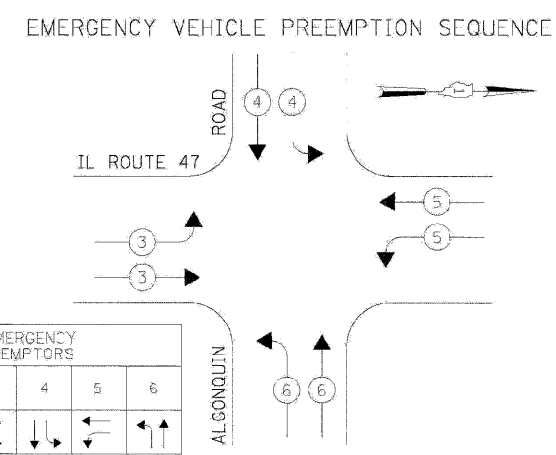
QUANTITY	UNIT	ITEM
73	SQ FT	SIGN PANEL - TYPE 1
1051	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
85	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
59	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
87	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
10	FOOT	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL
274	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
455	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
6	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
1105	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCIEVER - FIBER OPTIC
1575	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 20
2636	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 30
3105	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 50
1462	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 70
3754	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1/2 PAIR
45	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 20
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
45	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
25	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
9	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
12	EACH	TRAFFIC SIGNAL BACKPLATE
12	EACH	INDUCTIVE LOOP DETECTOR
* 4	EACH	LIGHT DETECTOR
* 1	EACH	LIGHT DETECTOR AMPLIFIER
8	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
573	FOOT	PREFORMED DETECTOR LOOP
4	EACH	PAINT NEW TRAFFIC SIGNAL POST
4	EACH	PAINT NEW MAST ARM POLE, 40 FEET AND OVER
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
911	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 10
* 989	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/0, TWISTED, SHIELDED

* 100% COST TO VILLAGE OF HUNTLEY



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
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 WITH COUNTDOWN TIMER
Ⓜ	Ⓜ	CONTROLLER CABINET
■	■	SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
□	□	VEHICLE DETECTOR, INDUCTION LOOP
—	—	MAGNETIC DETECTOR
Ⓜ	Ⓜ	EMERGENCY VEHICLE LIGHT DETECTOR
Ⓜ	Ⓜ	CONFIRMATION BEACON
Ⓜ	Ⓜ	PUSH-BUTTON DETECTOR
②	②	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED, ALL LOOP DETECTOR CABLE TO BE SHIELDED.
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
Ⓜ	Ⓜ	SIGNAL FACE WITH BACKPLATE, *P* INDICATES PROGRAMMED HEAD.
Ⓜ	Ⓜ	RAILROAD CONTROL CABINET
Ⓜ	Ⓜ	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
Ⓜ	Ⓜ	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
Ⓜ	Ⓜ	LOCAL AND MASTER CONTROLLER
Ⓜ	Ⓜ	MICROWAVE VEHICLE SENSOR
B	B	UPS-BATTERY BACK-UP



PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	2	3
B	4	6
D	8	1

LEGEND

Ⓜ	DUAL ENTRY PHASE
Ⓜ	SINGLE ENTRY PHASE
Ⓜ	OVERLAP
Ⓜ	PEDESTRIAN PHASE
*	NUMBER REFERS TO ASSOCIATED PHASE

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO LAMPS	WATTAGE	OPERATION	TOTAL WATTAGE	
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	29	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	12	135	12	0.10	144
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	3.00	100
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =	684.4	

ILLINOIS DEPARTMENT OF TRANSPORTATION
231 WEST CENTER STREET
SPRINGFIELD, ILLINOIS 62761-1096
ENERGY SUPPLY CONTACT: NATIE OLIVA
PHONE: (847) 608-2338
COMPANY: COMMONWEALTH EDISON

PROPOSED EMERGENCY VEHICLE PREEMPTORS

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)
C-CONTROLLER W/UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' H-2'
D-CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6) H-0.6(m) =	
E-MAST ARM POLE		CONTROLLER CAB.	1 (0.3)	BRACKET MOUNTED	13 (4.0)
30" (760mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
38" (960mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.3)	ELECTRIC SERVICE	13.5 (4.1)
42" (1065mm)	25 (7.6)	GROUND CABLE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

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

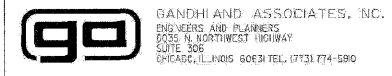
ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
ILLINOIS ROUTE 47 AT ALGONQUIN ROAD

REVISIONS	NAME	DATE

SCALE: N.T.S.
DATE: APRIL 17, 2009

DESIGNED BY: ME/MA/YB
CHECKED BY: PKG/RRM



GANDHI AND ASSOCIATES, INC.
ENGINEERING AND PLANNING
2005 N. NORTHWEST HIGHWAY
SUITE 306
CHICAGO, ILLINOIS 60631 TEL: (773) 774-5900

PLOT DATE: 7/20/2009
FILE NAME: 8111-CADD-DR-019-302-135.dwg
PLOT SCALE: 1:1
USER NAME: 3838

911448
7/20/2009
2:21:14 PM