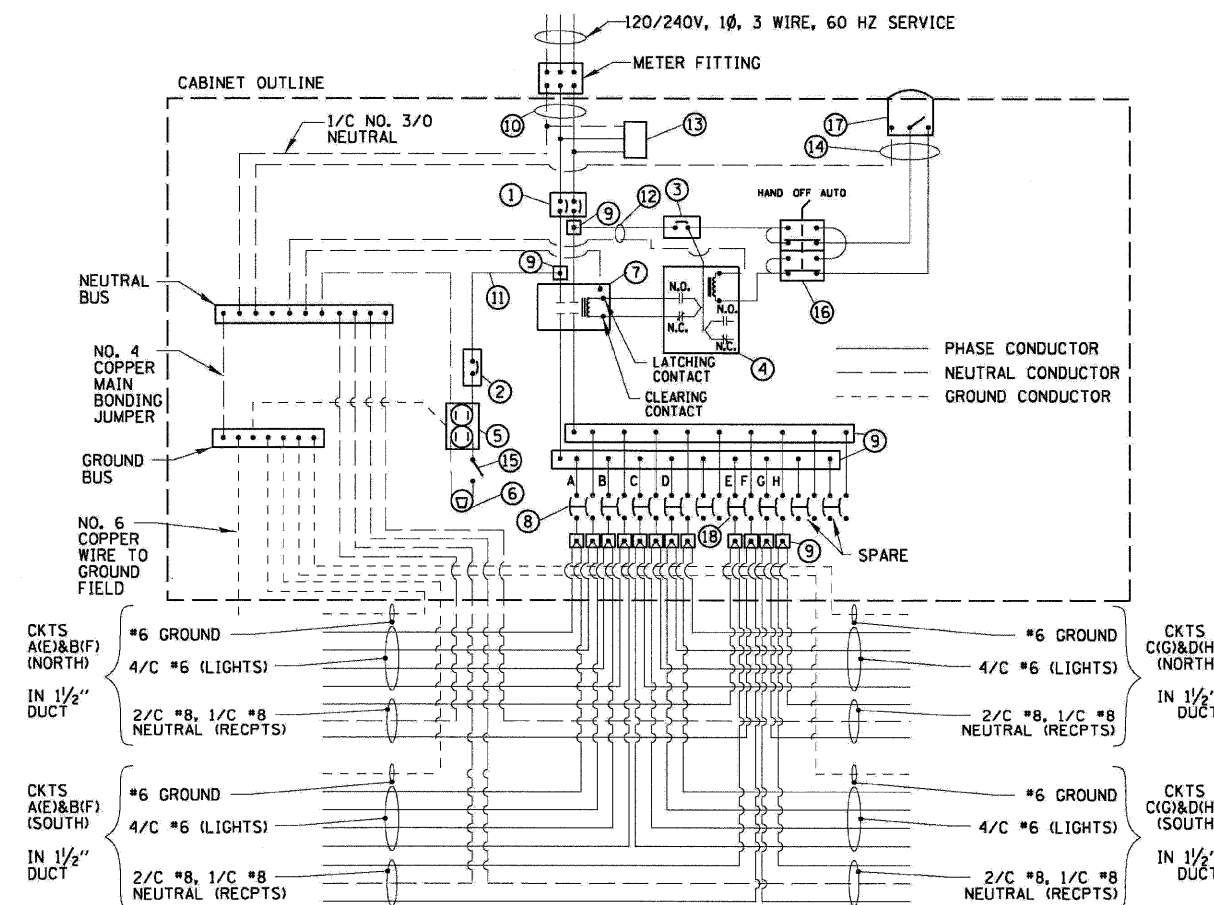


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	*	MCHENRY	502	321
STA. 9+35.22		TO STA. 142+08.53		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

ITEM	SPECIFICATION	MANUFACTURER/MODEL NO. OR EQUAL
1	MAIN CIRCUIT BREAKER	200 AMPERE, 2P, 240V SERVICE RATING, 22KAIC
2	LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 22KAIC
3	PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 22KAIC
4	AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS
5	CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER
6	CABINET LIGHT AND BOX	120V WEATHERPROOF LAMPHOLDER MOUNTED IN A CAST ALUMINUM BOX & EXT. GRADE 100W LAMP
7	CONTACTOR	200 AMPERE, 2 POLE, 120 V COIL, MECH HELD
8	LUMINAIRE CIRCUIT BREAKERS	5 - 40 AMPERE, 2P, 240V RATING, 22KAIC
9	POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQUIRED
10	SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 3/0
11	LAMPHOLDER WIRE	2-600V XLP NO. 12
12	CONTROL WIRE	2-600V XLP NO. 12
13	SURGE ARRESTOR	10 K AMPERE RATING
14	PHOTOELECTRIC CONTROL WIRE	3-600V XLP NO. 12
15	DOOR SWITCH	20A/120V, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH
16	HAND-AUTO-OFF CONTROL SWITCH	20 A, 3 POS. MTD IN CAST ALUM. ENCLOSURE
17	PHOTOCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC
18	POLE RECEPT. CIRCUIT BREAKER	4 - 20 AMPERE, 2P, 240V RATING, 22KAIC

- NOTES: 1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR "LIGHTING CONTROLLER" INCLUDING CABINET AND FOUNDATION.
2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
3. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."
4. ALL EQUIPMENT SHALL BE MOUNTED ON A 1/2" THICK ARBORON TIRE BACK PANEL.

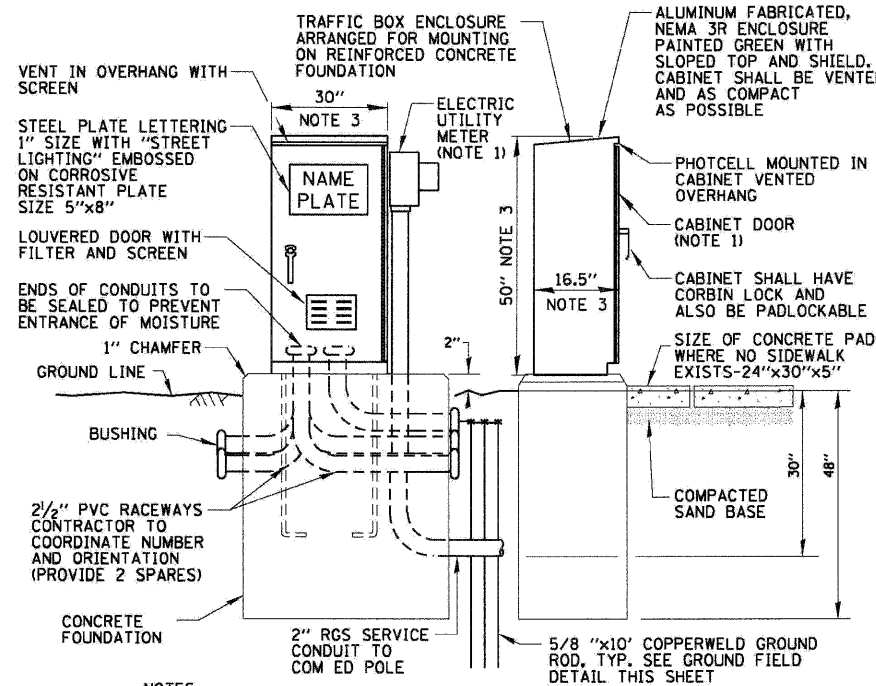
LIGHTING CONTROLLER #1, #2 & #3 COMPONENT SCHEDULE



LIGHTING CONTROLLER #1, #2 & #3 WIRING DETAIL

N.T.S.

CIRCUIT ID	50W ROADWAY LUMINAIRE		400W ROADWAY LUMINAIRE		FESTOON RECEPTACLE		TOTAL CIRCUIT LOAD	
	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/RECT. (WATTS)	(WATTS)	AMPS (VOLTS)
A	12	70 W	6	480 W	--	180 W	3720 W	15.5A (240V)
B	12	70 W	6	480 W	--	180 W	3720 W	15.5A (240V)
C	12	70 W	6	480 W	--	180 W	3720 W	15.5A (240V)
D	12	70 W	6	480 W	--	180 W	3720 W	15.5A (240V)
E	--	70 W	--	480 W	6	180 W	1080 W	9.0A (120V)
F	--	70 W	--	480 W	6	180 W	1080 W	9.0A (120V)
G	--	70 W	--	480 W	6	180 W	1080 W	9.0A (120V)
H	--	70 W	--	480 W	6	180 W	1080 W	9.0A (120V)
TOTAL	48	N/A	24	N/A	24	N/A	19.2 KW	80.0A (240V)



- NOTES:
- SEE LIGHTING PLAN DRAWINGS FOR METER & DOOR ORIENTATION.
 - ALL ITEMS SHOWN ABOVE (INCLUDING FOUNDATION & GROUND FIELD) SHALL BE INCLUDED IN THE PRICE BID FOR "LIGHTING CONTROLLER", EXCEPT FOR THE SERVICE CONDUIT WHICH WILL BE PAID FOR SEPARATELY.
 - CABINET DIMENSIONS SHOWN ARE APPROXIMATE. CABINET SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE.

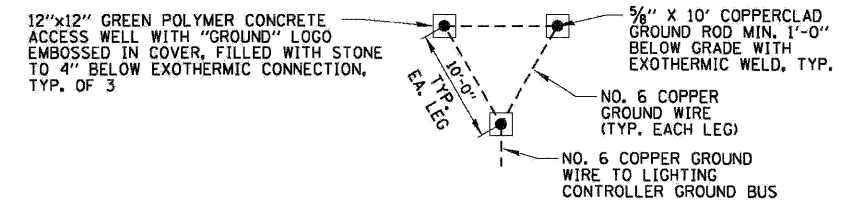
PROPOSED LIGHTING CONTROLLER #1, #2 & #3 CABINET AND FOUNDATION

N.T.S.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CIRCUIT ID	50W ROADWAY LUMINAIRE		400W ROADWAY LUMINAIRE		FESTOON RECEPTACLE		TOTAL CIRCUIT LOAD	
	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/RECT. (WATTS)	(WATTS)	AMPS (VOLTS)
A	14	70 W	8	480 W	--	180 W	4820 W	20.1A (240V)
B	14	70 W	8	480 W	--	180 W	4820 W	20.1A (240V)
C	16	70 W	9	480 W	--	180 W	5440 W	22.7A (240V)
D	12	70 W	7	480 W	--	180 W	4200 W	17.5A (240V)
E	--	70 W	--	480 W	7	180 W	1260 W	10.5A (120V)
F	--	70 W	--	480 W	7	180 W	1260 W	10.5A (120V)
G	--	70 W	--	480 W	8	180 W	1440 W	12.0A (120V)
H	--	70 W	--	480 W	6	180 W	1080 W	9.0A (120V)
TOTAL	56	N/A	32	N/A	28	N/A	24.3 KW	101.4A (240V)

CIRCUIT ID	50W ROADWAY LUMINAIRE		400W ROADWAY LUMINAIRE		FESTOON RECEPTACLE		TOTAL CIRCUIT LOAD	
	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/RECT. (WATTS)	(WATTS)	AMPS (VOLTS)
A	16	70 W	9	480 W	--	180 W	5440 W	22.7A (240V)
B	18	70 W	10	480 W	--	180 W	6060 W	25.2A (240V)
C	18	70 W	10	480 W	--	180 W	6060 W	25.2A (240V)
D	16	70 W	9	480 W	--	180 W	5440 W	22.7A (240V)
E	--	70 W	--	480 W	8	180 W	1440 W	12.0A (120V)
F	--	70 W	--	480 W	9	180 W	1620 W	13.5A (120V)
G	--	70 W	--	480 W	9	180 W	1620 W	13.5A (120V)
H	--	70 W	--	480 W	8	180 W	1440 W	12.0A (120V)
TOTAL	68	N/A	38	N/A	34	N/A	29.1 KW	121.3A (240V)



GROUND FIELD DETAIL (TYP.)

N.T.S.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p>ILLINOIS ROUTE 47 ROADWAY LIGHTING DETAILS (1 OF 3)</p> <p>SCALE: N.T.S. DRAWN BY: AJD DATE: 2/11/2009 CHECKED BY: AJD</p>