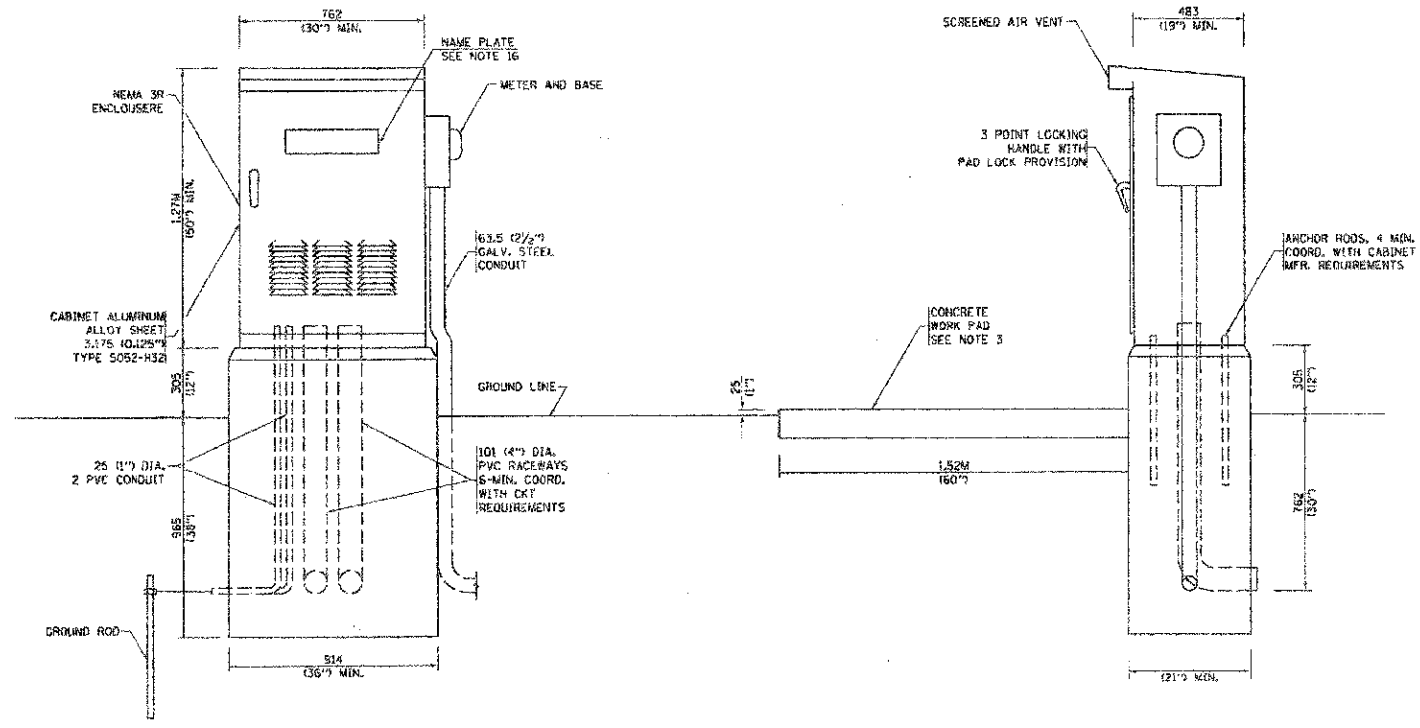


PANEL WIRING DIAGRAM

PANEL EQUIPMENT

BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 125AMP, FRAME, 100AMP, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 200 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 100AMP, FRAME, 50 AMP, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP, FRAME, 15AMP, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER (TIME SWITCH).
F	2	20 A., 120 V. FUSE.
G	1	3.0 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 HZ.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 6.35 (1/4) X 25.4 (1) X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 101.6 (4") X 101.6 mm (4") BOX.
M	1	COPPER GROUND BUS 6.35 (1/4) X 25.4 (1) X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS
N	1	BRACKET MOUNTED SURGE ARRESTER FOR 480/240V, 3W, SERVICE GE "TRANQUEL" CAT# 9L15ECB001



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 50.8 mm (2") TOP SOIL LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 914.4 mm (36") x 18,288 mm (60") x 101 mm (4") MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 6.35 mm (1/4) DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
- CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL"
- 304.8 (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "LAKE COUNTY DIVISION OF TRANSPORTATION".

MODIFIED BE-215

- MODIFIED 09/16/09
- MODIFIED 12/28/09

FILE NAME = L:\AL\PROJECTS\122480\122480.dwg



USER NAME = Jeff Sedig	DESIGNED - MNB	REVISED -
PLOT SCALE = 48,0000 / 1	DRAWN - MNB	REVISED -
PLOT DATE = 11/12/2012	CHECKED - CMC	REVISED -
	DATE - 10/22/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING AND CCTV PLAN
ELECTRIC DETAILS
LIGHTING CONTROLLER SINGLE DOOR

SCALE: N.T.S.	SHEET NO. 5 OF 9 SHEETS	STA. N/A TO STA. N/A	F.A.U. RITE 0192	SECTION 06-00153-07-CH	COUNTY LAKE	TOTAL SHEETS 120	SHEET NO. 52
			FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 63682