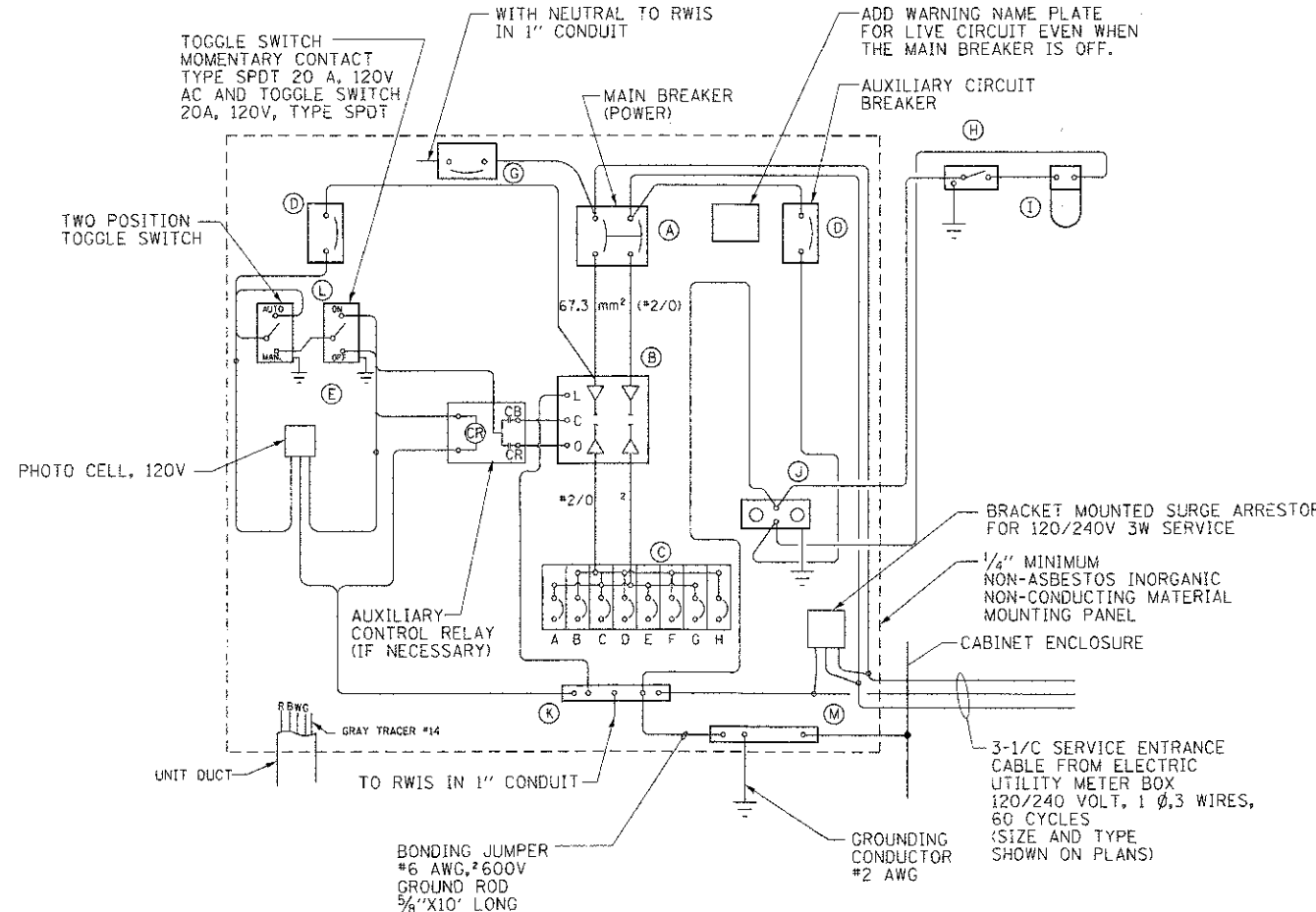


PANEL EQUIPMENT

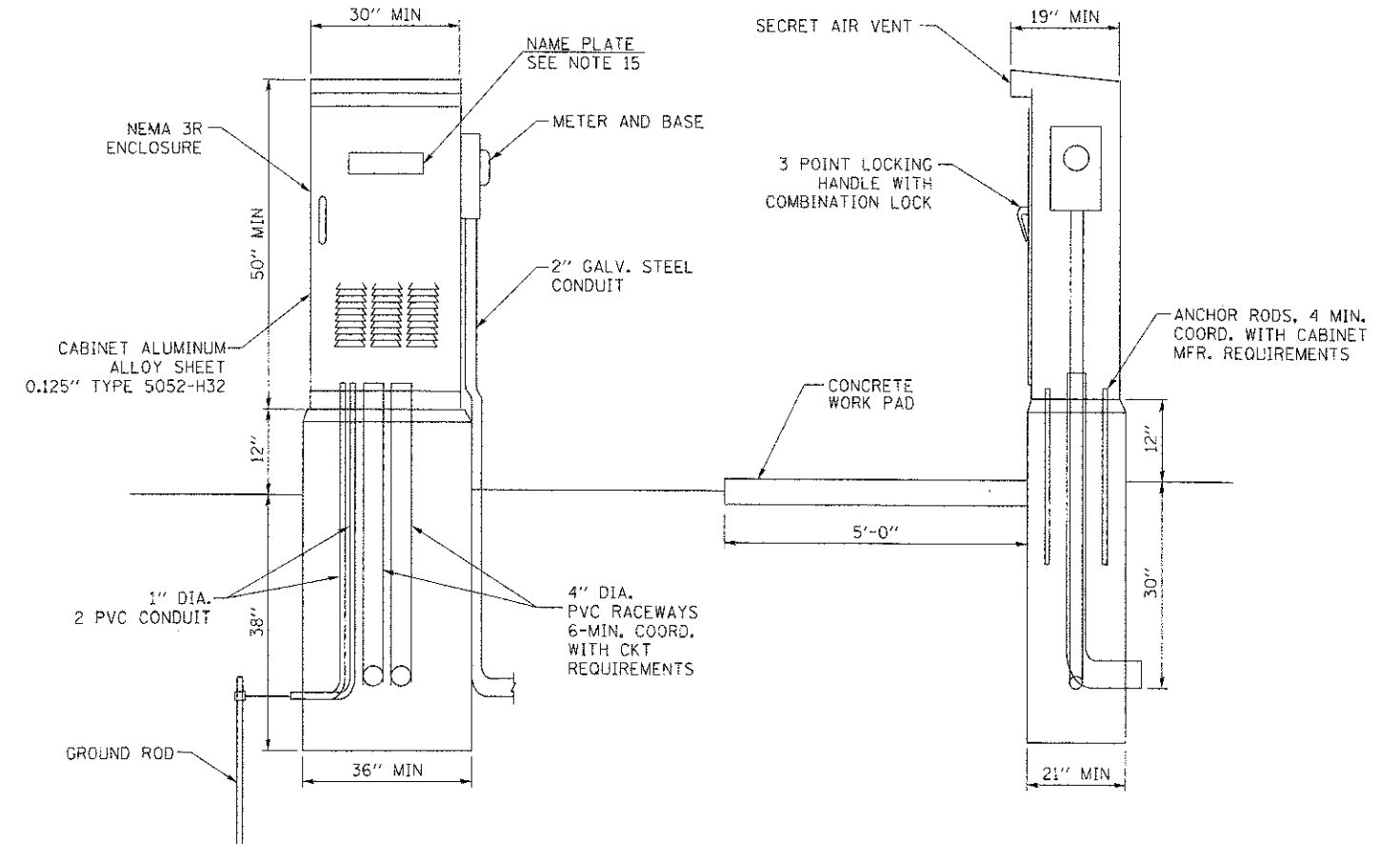
BILL OF MATERIAL		
ITEM	QTY.	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100AMP. FRAME, 100AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 240 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUITS 240 VOLT, ASCO 920.
C	8	CIRCUIT BREAKERS, 1 POLE, 277V., 100AMP. FRAME 50AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-14,000 AMP. AT 120 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP. FRAME, 15AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-14,000 AMP. AT 120 V.
E	1	PHOTECCELL, 120V
G	1	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP. FRAME, 20AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-14,000 AMP. AT 120 V.
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 NEUTRAL BUS 6.35 mm (1/4") X 25.4 mm (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS.
L	1	TOGGLE SWITCHES MOUNTED IN 101.6 mm (4") X 101.6 mm (4") BOX.
M	1	COPPER GROUND BUS 6.35 mm (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS.
N	1	SURGE ARRESTOR



WIRING DIAGRAM

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- 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 mm (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
- SERVICE DISCONNECT SHOULD HAVE UL LABEL AND THE EQUIPMENT SHOULD BE SUITABLE FOR SERVICE ENTRANCE EQUIPMENT.



COMPANY NAME: AMES Engineering, Inc.
PROJECT CONTACT: jstena
DATE PLOTTED: 7/23/2012 11:56:43 AM
FILE NAME: 090071-Ltg-09.dgn
PLOT DRIVER: default
PEN TABLE: standard-trans.tbl

<p>AMES Engineering, Inc. CONSULTING ENGINEERS 1341 Warren Avenue Downers Grove, IL 60515 (630) 737-1987 (F); (630) 470-8881 (H) www.amesengineering.com</p>	USER NAME = jstena FILE NAME = 090071-Ltg-09.dgn PLOT SCALE = N.T.S. PLOT DATE = 7/23/2012	DESIGNED - BL DRAWN - RV/MSA CHECKED - SA DATE - 7/23/12	REVISED - REVISED - REVISED - REVISED -
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MCHENRY COUNTY
DIVISION OF TRANSPORTATION

LIGHTING CONTROLLER
CHARLES J. MILLER ROAD ROADWAY IMPROVEMENTS

SCALE: N.T.S. SHEET NO. 9 OF 9 SHEETS STA. TO STA.

F.A.U. RTE. 3860	SECTION 09-00372-00-PW	COUNTY MCHENRY	TOTAL SHEETS 123	CONTRACT NO. 63633
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LTG-09