NOTES: ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN. ALL EXTERNAL HARDWARE SHALL

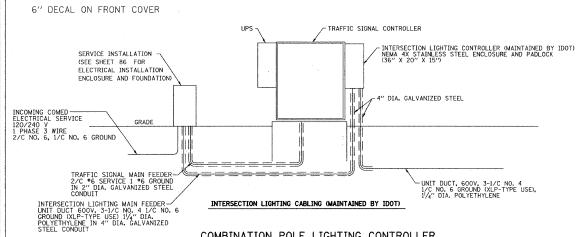
- BE STAINLESS STEEL. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED
- CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- ALL WIRING SHALL BE COLOR CODED AS INDICATED. 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".
- 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS TRAFFIC SIGNAL CONTROLS" UNLESS OTHERWISE SPECIFIED.

TOGGLE SWITCH MOMENTARY CONTACT TYPE SPDT 20 A. 120V AC AND TOGGLE SWITCH 20A, 120V, TYPE SPDT

CONTROLLER "XQ"

CIRCUIT BREAKER -- MAIN BREAKER (B) 1/4" (6.35) MINIMUM (C) NON-ASBESTOS INORGANIC NONCONDUCTING MATERIAL MOUNTING PANEL. (L-1621) AT OLD ORCHARD ROAD AND U.S. ROUTE 41-ALIXTI TARY (IF NECESSARY) -CABINET ENCLOSURE SPARE (F)

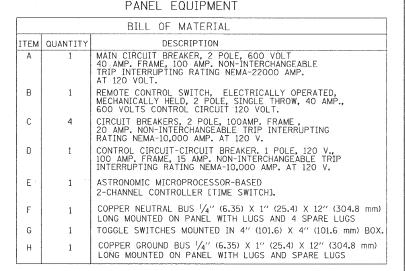
PANEL WIRING DIAGRAM

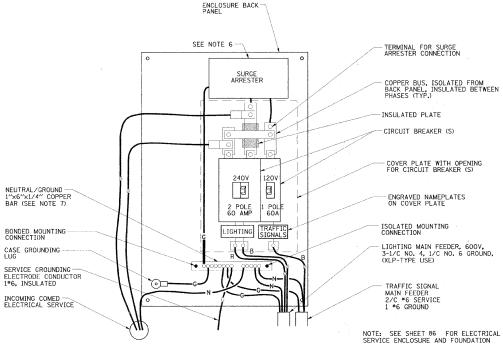


-TWO POSITION

TOGGLE SWITC

(D)





GROUND-MOUNTED ELECTRICAL SERVICE PANEL DIAGRAM

NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER.
- 2. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE
- 3. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP.
- 4. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/ TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- 5. THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT BAZO MICROSECONDS, RATED -40 TO 60 DEGREES C, WITH LED OPERATING INDICATORS. AND SHALL BE U. LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.
- 6. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRLZA OR APPROVED SOLUTIONS.
- 7. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- 9. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.

TOTAL SHEE NO.

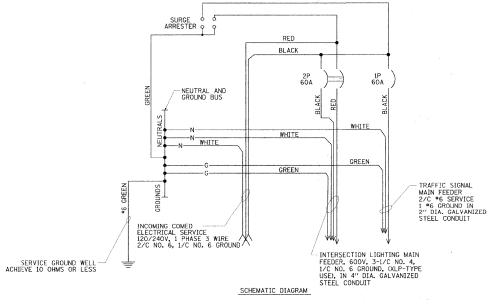
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CONTRACT NO. 63566

COOK

AID PROJECT

- A 2-COLOR ENGRAYED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAYED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- 11. LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.



COMBINATION LIGHTING AND TRAFFIC SIGNAL ELECTRICAL SERVICE DIAGRAMS

STEEL CONDUIT	COMBINATION POLE LIGHTING CONTROLLER							
FILE NAME =	USER NAME * CEComin :	DESIGNED	FA	REVISED	**	Γ		
gr\ch88\0045\road\sheets\645-TS-207A_CONTR.sht		DRAWN	FA	REVISED	4			
	PLOT SCALE = 20.000 '/ IN.	CHECKED	KMM	REVISED	-	1		
	PLOT DATE - 7/25/2011	DATE	07/22/2011	REVISED	-	l		

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

COMBINAT	ION POLE LIGI	ITING CONTROLLE	R AND COMBINATION	F.A.P. RTE.	SECTION
LIGHTIN	G & TRAFFIC	SIGNAL ELECTRICA	L SERVICE DIAGRAM	350	00-00243-00-CH
LE: N.T.S.	SHEET NO. 26 OF	33 SHEETS STA.	TO STA.	FED. RO	AD DIST. NO. 7 ILLINOIS FED.

Systems HELD ROAD, S INOIS 60173 Tran

/ INTERSECTION LIGHTING MAIN FEEDER 600V, 3-1/C NO. 4 1/

NO. 6 GROUND (XLP TYPE USE IN 4" DIA. GALVANIZED STEEL CONDUIT