

**480V POLE MOUNT CONTROLLER-COMPLETE**  
**2 WIRE GROUNDED NEUTRAL**

MFG. CENTRAL SYSTEMS & CONTROLS CORP. #20026032012  
MFG. DEWSBERY INC. # 60320122002

I. Quantity

The base bid shall include the indicated number of 480 volt pole mount controller as hereinafter specified, located as shown on the drawings and determined in the field by the engineer.

II. Material

A. Enclosure DWG #01S0128

The single door pole mount enclosure shall be approximately 28" high, 18" wide, and 8 3/4" deep. The cabinet and door shall be made of 14Ga Type 304 stainless steel with a 14 Ga. stainless steel continuous welded hinge. The enclosure shall have a natural mill finish. A closed cell neoprene gasket shall be around the entire door for water integrity. The flange mounting disconnect operator shall be stainless steel or chrome plated for NEMA 4X application, capable of being locked in either position with a dual cover interlock mechanism. The cabinet & door shall have a grounding lug. The enclosure shall meet or exceed the requirements of a NEMA 4X rating. The mounting flanges shall have 3 mounting holes in the top flange and three mounting holes in the bottom flange as shown in drawing 01S0059.

B. Control Panel

1. 100 ampere, 3 pole, 600 volt, (Cutler Hammer) single throw disconnect switch with 100 amp time delay fuses, cooper shorting buss with lug for #2 cooper 7 strand (see DWG 01S0067).
2. NEMA rated 100 ampere, 3 pole, 600 volt, contactor with 120 volt operating coil, control transformer, type SBE, 480/120 volts, 60 cycle, .2 KVA and 2 amp control fuse holder on secondary side and 1amp on primary side.
3. All fuses to be type H. (Blade Fuses)
4. Internal mounted Hand, Off, Auto selector switch.
5. Insulated solid copper neutral bus capable of terminating the specified number and size wires.
6. Terminal block shall be provided for photoelectric relay connection. Block shall accept #10 copper wire .
7. Control wiring - The conductors between the fuse disconnect and the conductor shall be 7 strand copper #4, 600 volt type THW. All other conductors shall be 7 strand copper #12, 600V type MTW.

8. The controller shall be wired as shown on drawing 01S0067
9. The mounting panel size shall be 25" x 15".
10. The controller shall be assembled with standard hardware for ease of maintenance.
11. The panel shall be Central Systems & Controls Corp. Mfg. # 20026031042, Dewsbury Inc. # 60310422002 approved interchangeable equal.

C. Miscellaneous Material

1. Ground Rod - The ground rod shall be 1/2 x 10' copperweld.
2. Grounding Wire - All grounding wire shall be #4 AWG bare solid copper.
3. Photoelectric Relay - The photoelectric relay shall be cadmium sulphide with locking type receptacle, pole mounted 120 volt operation. The turn on and off levels shall be adjustable for 0.3 to 6.0 foot candles. Contacts shall be rated for a minimum load of 1200 watts. The photoelectric relay shall be General Electric, Tork, Lumatrol or approved equal
4. Service Entry Cable - The service entry cable shall be #2, 7 strand copper type XHHW.
5. Hardware - All mounting hardware shall be stainless steel, brass or hot dipped galvanized.

III. Installation

1. The installation for an overhead street lighting system shall be as shown on drawing 01S0104
2. The installation for an underground street lighting system shall be as shown on drawing 01S0092.
3. The ground wires shall be protected to a height of 8' by wood molding.
4. The contractor shall furnish and install all secondary, control circuits and grounding equipment.
5. Mounting Bracket – refer to Dwg # 01S0129
6. Controllers shall not be installed facing flow of traffic
7. Lightning Arrestor shall be installed

8. The controller shall be fused according to the load amperage on the table below. Fuse reducers shall be Bussmann or approved equal

<b>Load Amperage</b>	<b>Fuse Size</b>	<b>Fuse Reducer</b>
1 - 12	15 A	Buss #216
13 - 25	30 A	Buss #216
26 - 37	45 A	Buss #616
38 - 50	60 A	Buss #616
51 - 66	80 A	N/A
67 - 83	100 A	N/A

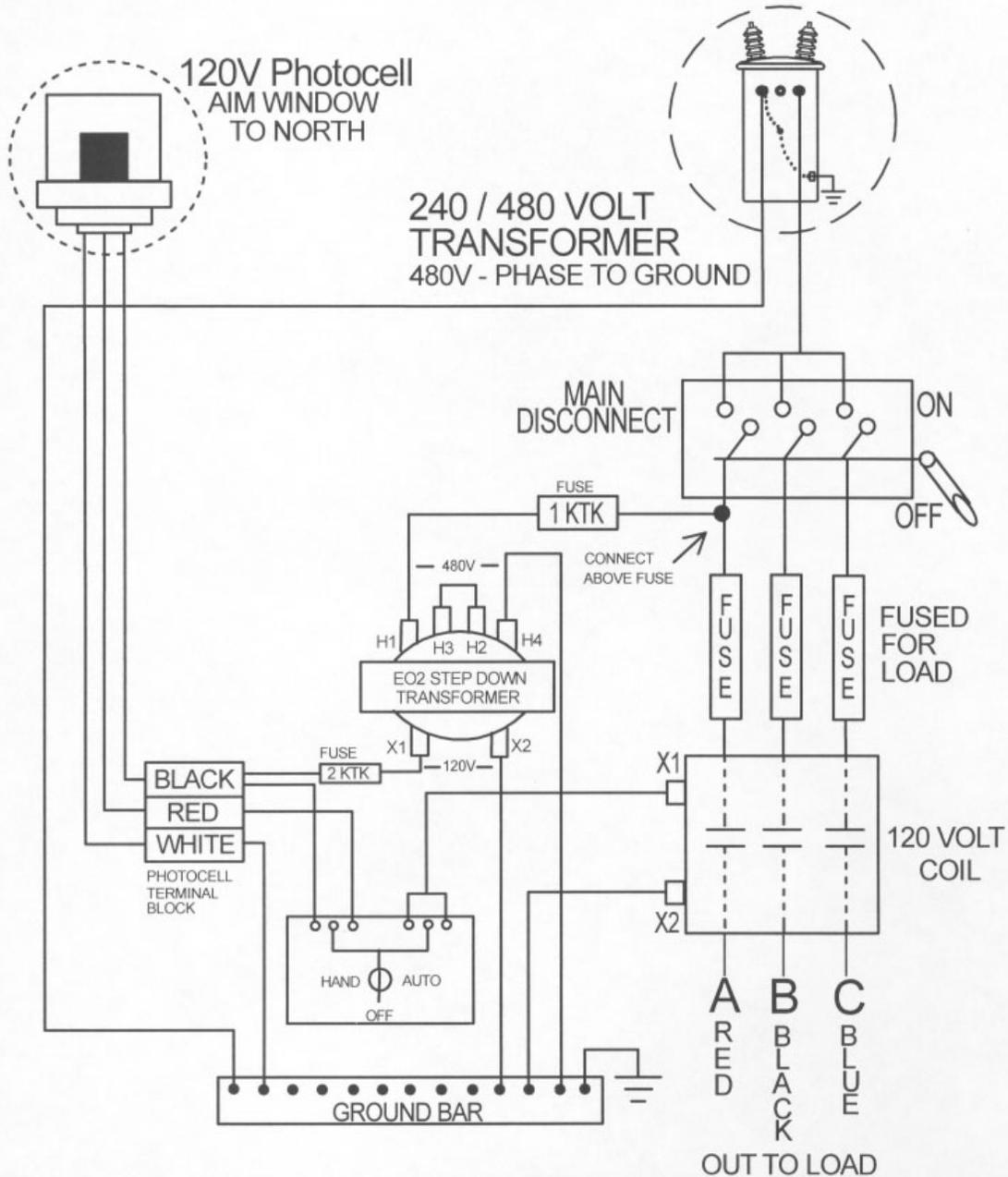
IV. Drawings

A. Drawings included in this specification are 01S0059; 01S0067; 01S0092; 01S0104; 01S0129; 01S0128

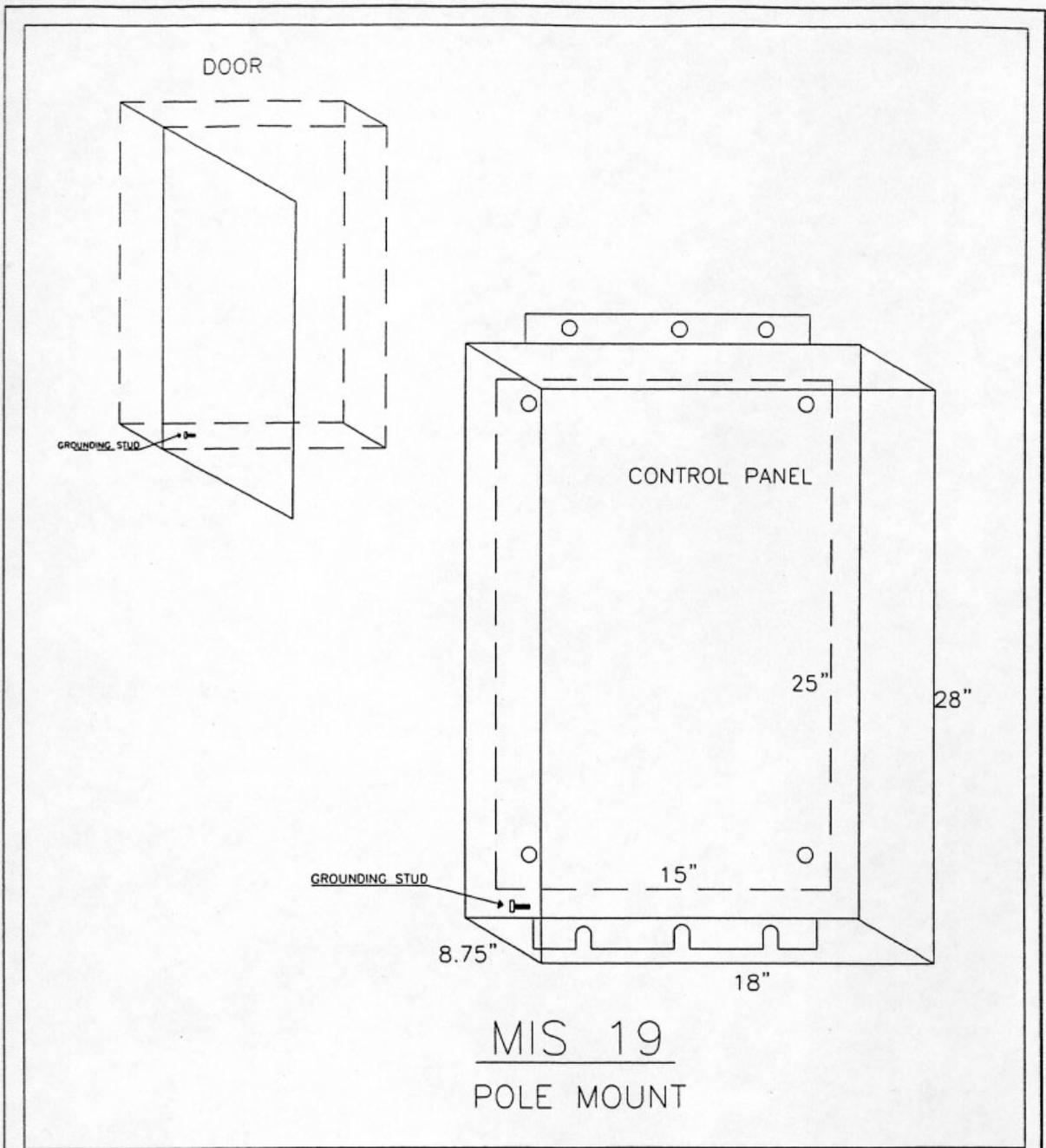
V. Quotation

The pole mount 480 volt controller shall be quoted on as a unit price each in the appropriate place of this document.

# GROUNDING 480V WYE STREETLIGHT CONTROLLER



			<b>MELP</b> MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM CITY OF COLUMBUS, OHIO DEPT. OF UTILITIES - DIVISION OF ELECTRICITY		
			STREETLIGHT CONTROLLER WIRING DIAGRAM FOR GROUNDING 480V FEED		
			APPROVED BY:	C.O. NO.	
DATE	INITIALS	DESCRIPTION REVISIONS	DATE: 11/22/04	DRAWN BY: BEACHLER	DWG. NO. 01S0067



STUD ADDED 3/25/04 CLV

REVISIONS

**MELP**

MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM  
CITY OF COLUMBUS, OHIO  
DEPT. OF UTILITIES - DIVISION OF ELECTRICITY

ENCLOSURE FOR  
POLE MOUNT CONTROLLER

SCALE NONE

DRAWN CLV

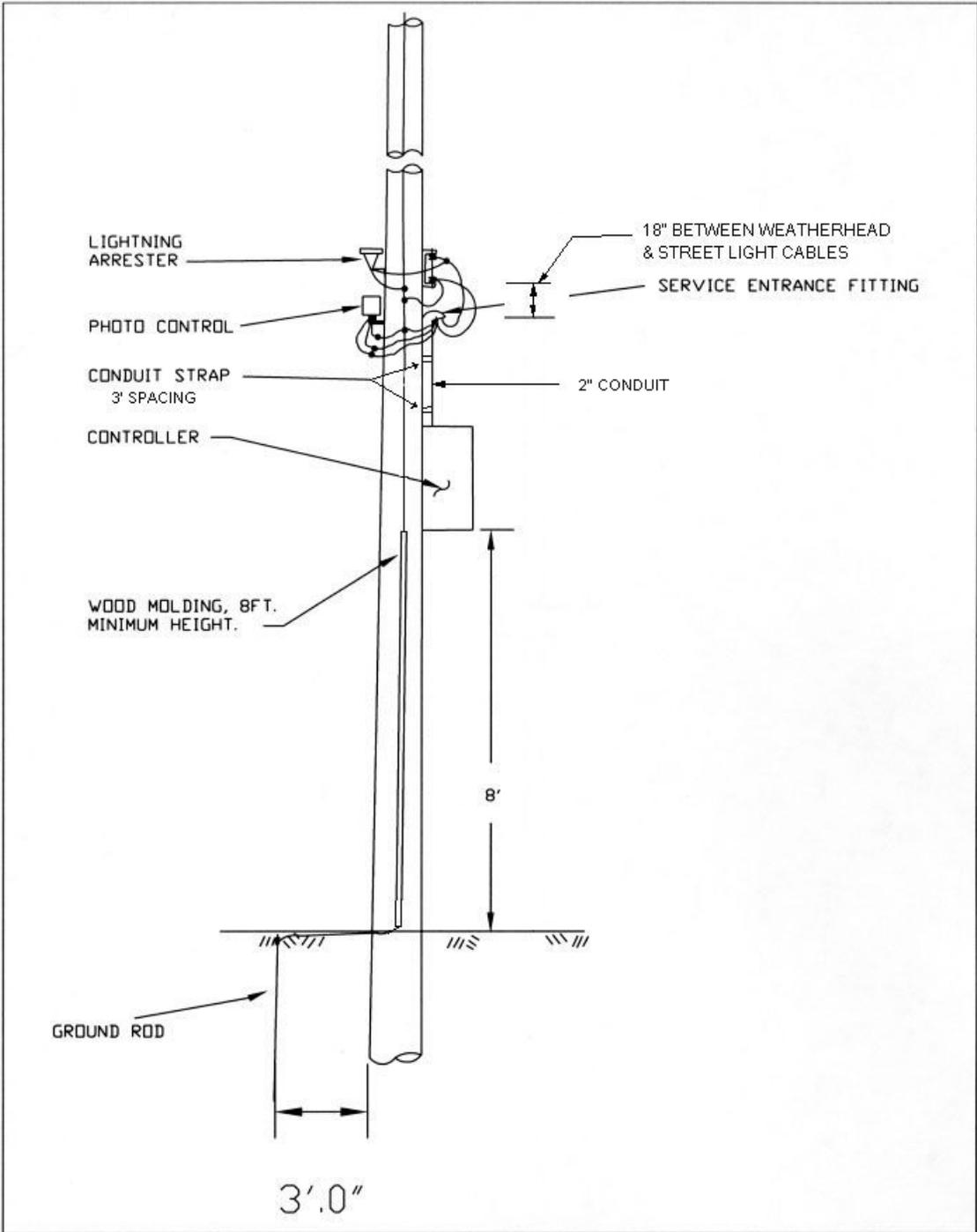
DRAWING NO.

0150128

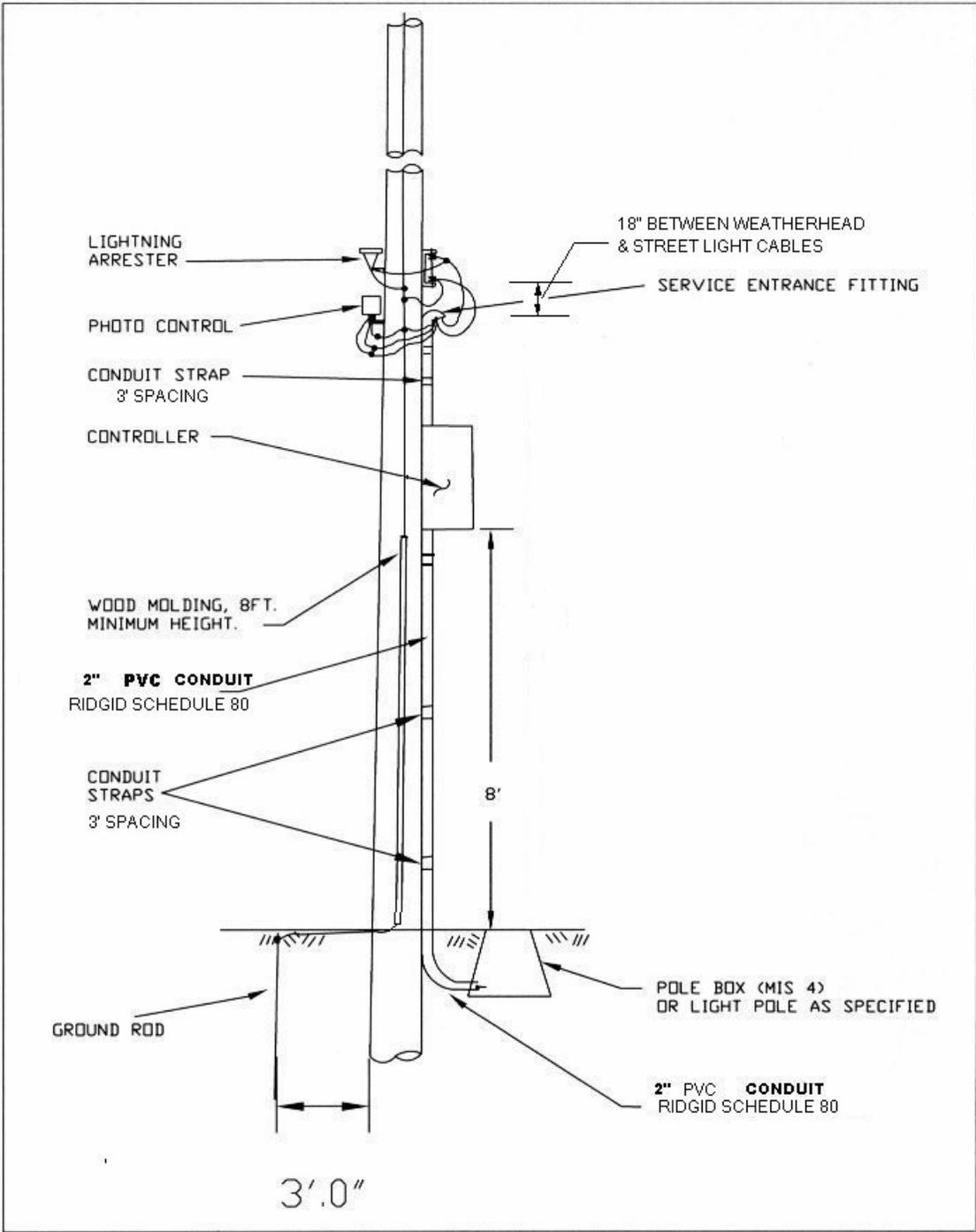
C. O. NUMBER

APPROVED

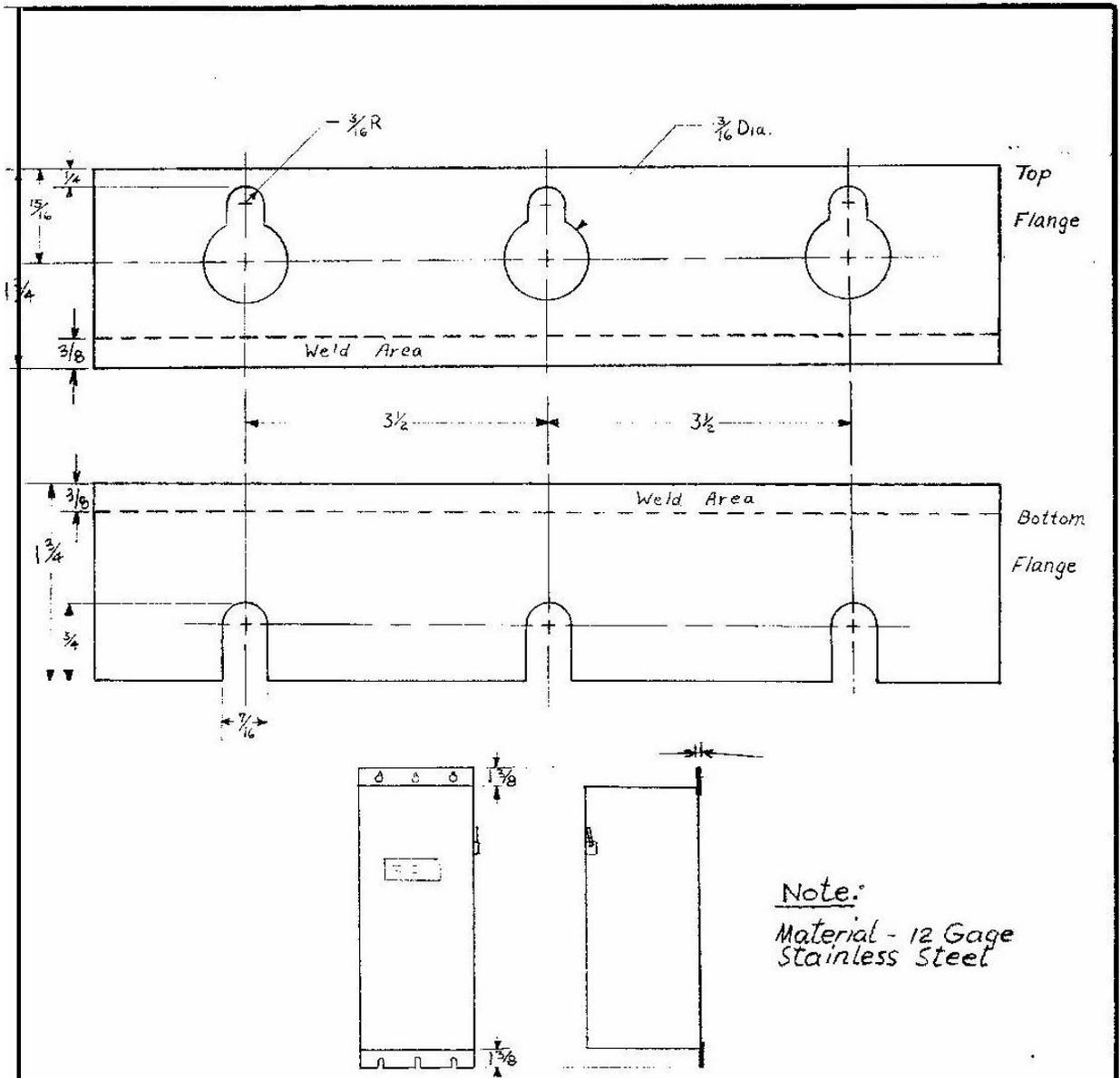
SHEET 1 OF 1



REVISIONS	BA 3/91 CLV 4/04 GR 3'0		
	<b>MEL&amp;P</b> MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM CITY OF COLUMBUS, OHIO DEPT. OF UTILITIES & AVIATION - DIV. OF ELECTRICITY		
	480V CONTROL SITE FOR OVERHEAD ST. LIGHT SYSTEM		
	SCALE NONE	DRAWN M.D. 4-89	DRAWING NO. 01S0104
C. D. NUMBER	APPROVED	SHEET 1 OF 1	



REVISIONS	BA 3/91 CLV 4/04 GR 3'0 CLV 12407		
	<b>MELP</b> MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM CITY OF COLUMBUS, OHIO DEPT. OF UTILITIES & AVIATION - DIV. OF ELECTRICITY		
	<b>CONTROL SITE          FOR UNDERGROUND ST. LIGHT SYSTEM</b>		
SCALE	NONE	DRAWN	M.O. 4-89
C. D. NUMBER		APPROVED	
		DRAWING NO. 01S0092 SHEET 1 OF 1	



**MELP**

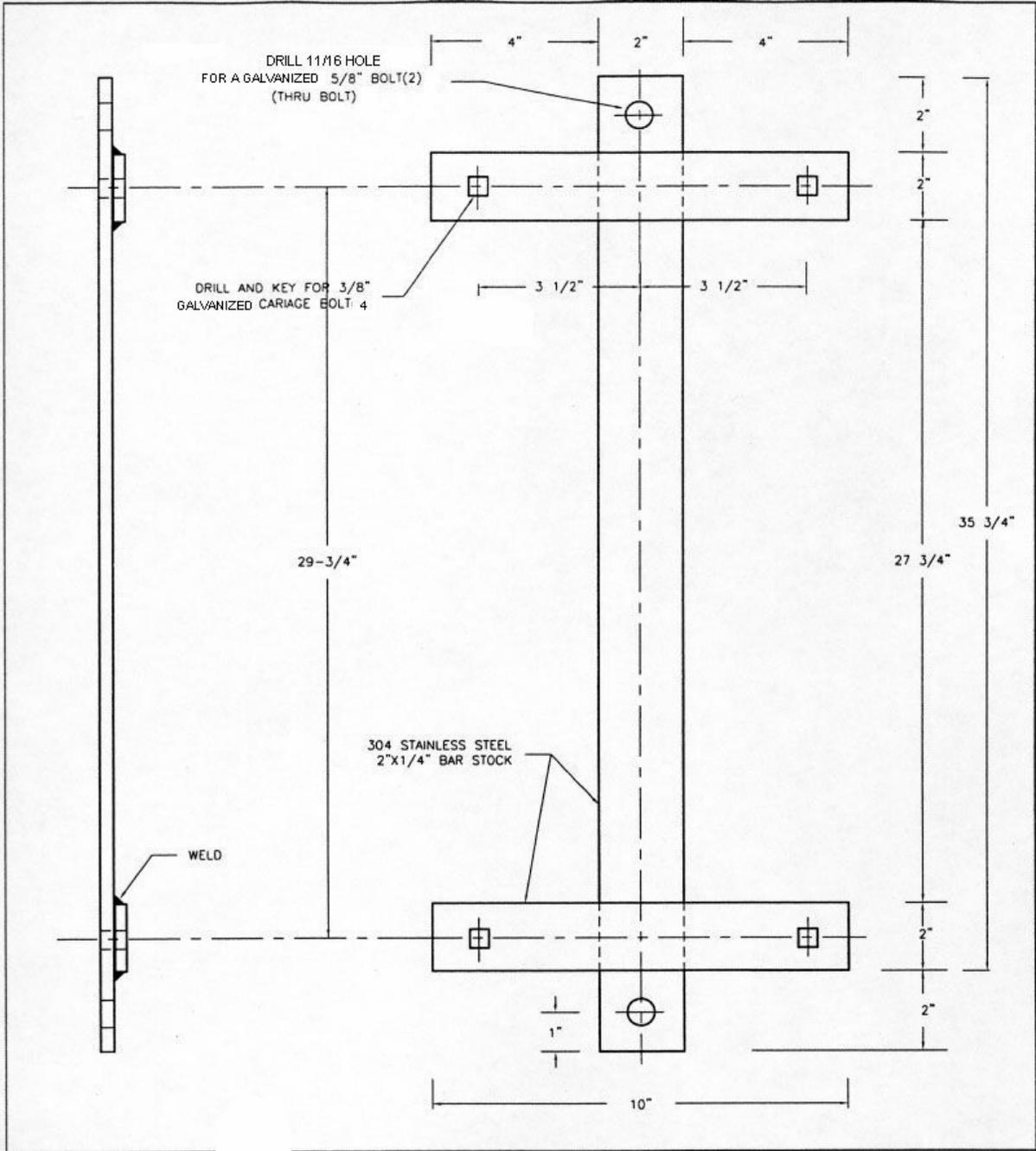
MUNICIPAL ELECTRIC LIGHT & POWER SYSTEM  
CITY OF COLUMBUS, OHIO  
DEPT. OF PUBLIC SERVICE DIV. OF ELECTRICITY

Street Lighting Controller -

Mounting Hole Detail

REVISIONS

SCALE	None	DRAWN	EE 3-73	DRAWING NO.	0150059
PROJECT NO.		APPROVED	DB 3-73	SHEET	1 of 1



REVISIONS	<p><b>MEL&amp;P</b> MUNICIPAL ELECTRIC LIGHT &amp; POWER SYSTEM          CITY OF COLUMBUS, OHIO          DEPT. OF UTILITIES - DIVISION OF ELECTRICITY</p>		
	<p><b>MOUNTING BRACKET          POLE MOUNT CONTROLLER</b></p>		
	SCALE NONE	DRAWN MO 5/02	DRAWING NO. 01S0129
	C. O. NUMBER	APPROVED	SHEET 1 of 1

REMOVE CENTER HOLES 4/18/04