

I. MATERIALS AND INSTALLATION

A. SELF-CONTAINED METER AND METER SOCKET

THE SELF-CONTAINED METER SHALL BE A FORM 2S, POLY PHASE METER, 120-480V, FIVE DIAL, 0.1-0.2 ACCURACY, LIQUID CRYSTAL DISPLAY WITH DATA HEIGHT OF 0.4" WITH ELECTRONIC LOAD INDICATORS, STARTING WATTS OF 5 WATTS, POLYCARBON COVER, MEASUREMENT OF ENERGY CONSUMPTION UTILIZING THE HALL EFFECT, SOLID STATE, SENTINEL WATT HOUR DEMAND, 15 MINUTE INTERVAL, KH=1.0, COMPATIBLE WITH PC-PRO+ ADVANCED CONFIGURATION SOFTWARE.

THE SELF-CONTAINED METER SHALL BE APPROVED EQUAL IN QUALITY, DESIGN AND PERFORMANCE TO MANUFACTURER ITRON; PRODUCT NAME: SENTINEL.

THE METER SOCKET SHALL HAVE A SINGLE POSITION CARRYING A 100 AMP SERVICE, 600 VOLT RATED, 4 TERMINAL, RINGLESS TYPE, SINGLE PHASE, UL LISTED, SURFACE MOUNTABLE, AND USED FOR UNDERGROUND AND OVERHEAD SERVICE. THE METER SOCKET ENCLOSURE SHALL BE GALVANIZED STEEL AND HAVE A POWDER COATED GREY FINISH.

THE METER SOCKET SHALL BE APPROVED EQUAL IN QUALITY, DESIGN, SIZE AND PERFORMANCE TO MANUFACTURER MILLBANK ENERGY AT WORK, CATALOG NUMBER U4175-RL-BLG, 100A 4T RL OU.

THE CONTRACTOR SHALL FURNISH AND INSTALL THE METER SOCKET AND METER. THE DIVISION OF POWER (DOP) WILL FURNISH AND INSTALL THE TAMPER LOCK. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE TAMPER LOCK DIRECTLY WITH THE DOP METER SHOP BY PROVIDING A 48 HOUR ADVANCE NOTICE BY CALLING 614-645-8176.

B. GROUNDING

THE METER SOCKET AND COVER SHALL BE GROUNDED AS PER NEC SPECIFICATIONS. SEE SHEET 3 FOR GROUNDING DETAILS.

C. STREETLIGHT CONTROLLER CABINET ACCESS HOLE

SECURE THE METER SOCKET TO THE SIDE OF THE STREETLIGHT CONTROLLER CABINET BY CONSTRUCTING A 1-1/2 INCH DIAMETER HOLE INTO THE SIDE OF THE STREETLIGHT CONTROLLER CABINET IN ALIGNMENT WITH THE METER SOCKET KNOCKOUT OPENING BY USING A HYDRAULIC PUNCH DRIVER. THE CONTRACTOR SHALL TAKE CARE WHEN PERFORMING THE WORK TO AVOID DAMAGE TO THE STREETLIGHT CONTROLLER AND ITS ELECTRICAL SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CORRECTIVE ACTION IF DAMAGE HAS OCCURRED. THE CONTRACTOR SHALL REPORT ANY DAMAGE IMMEDIATELY TO THE FIELD ENGINEER.

A 1-1/2 INCH GALVANIZED CONDUIT CHASE NIPPLE SHALL BE PLACED INTO THE 1-1/2 INCH ACCESS HOLE TO SECURE THE METER SOCKET TO THE STREETLIGHT CONTROLLER CABINET.

THE ACCESS HOLE BETWEEN THE METER SOCKET AND STREETLIGHT CONTROLLER CABINET SHALL BE WATERTIGHT. (SEE SHEET 3, FIGURE 7 FOR FURTHER INSTALLATION DETAILS)

THE 1-1/2 INCH RIGID CONDUIT NIPPLE AND LOCKNUT SHALL BE APPROVED FOR OUTSIDE USE, ACCOMMODATE A KNOCKOUT SIZE OF 1-1/2 INCHES, HAVE A UL AND CSA LISTING, SHALL BE GALVANIZED STEEL, CORROSIVE RESISTANT AND ENSURES GROUND CONTINUITY.

THE CONTRACTOR SHALL INSTALL THE METER AND METER SOCKET AS SHOWN ON SHEETS 2 AND 3.

D. ARC FLASH LABEL

THE REQUIRED ARC FLASH LABEL SHALL BE AFFIXED TO THE FACE OF THE COVER OF THE METER SOCKET.

II. ELECTRICAL SAFETY

1. DISCONNECT POWER TO ANY ELECTRICAL DEVICES BEING SERVICED OR INSTALLED. PRIOR TO REMOVING OR SERVICING THE METER UNDER LOAD, THE STREETLIGHT CONTROLLER SHALL BE SHUTOFF IN THE OFF POSITION AND PROPERLY LOCKED AND TAGGED OUT (LOTO). NO WORK SHALL BE PERFORMED ON THE METER PRIOR TO SHUTTING OFF THE LOAD TO THE STREETLIGHT CONTROLLER.
2. ENSURE ALL METALLIC ENCLOSURES OR PANELS ARE GROUNDED PRIOR TO ENERGIZING.
3. ENSURE ALL CONNECTIONS ARE TIGHT AND NO INSULATION IS CAUGHT IN THE TERMINAL.
4. LOCKOUT/TAGOUT (LOTO) PROCEDURES SHALL BE FOLLOWED AT ALL TIMES. (SEE MIS-1). THE CONTRACTOR SHALL ATTEND THE DIVISION OF POWER (DOP) CONTRACTOR SAFETY TRAINING PRIOR TO PERFORMING ANY ELECTRICAL WORK ON FACILITIES BELONGING TO THE DOP.
5. ALL WORK SHALL BE INSTALLED BY A LICENSED/STATE OF OHIO CERTIFICATION AND BONDED ELECTRICIAN.
6. THE CONTRACTOR SHALL FOLLOW OHIO SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.

III. BASIS OF PAYMENT

ITEM	UNIT	DESCRIPTION
MIS-57	EACH	METER, SELF CONTAINED WITH METER SOCKET, 100 AMP

MIS-57	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	METER, SELF CONTAINED WITH METER SOCKET, 100 AMP		
	DRAWN BY: DLJ	DATE: 1/1/2018	
	APPROVED: <i>[Signature]</i>		
SCALE: NONE	SHEET: 1 OF 3	57	

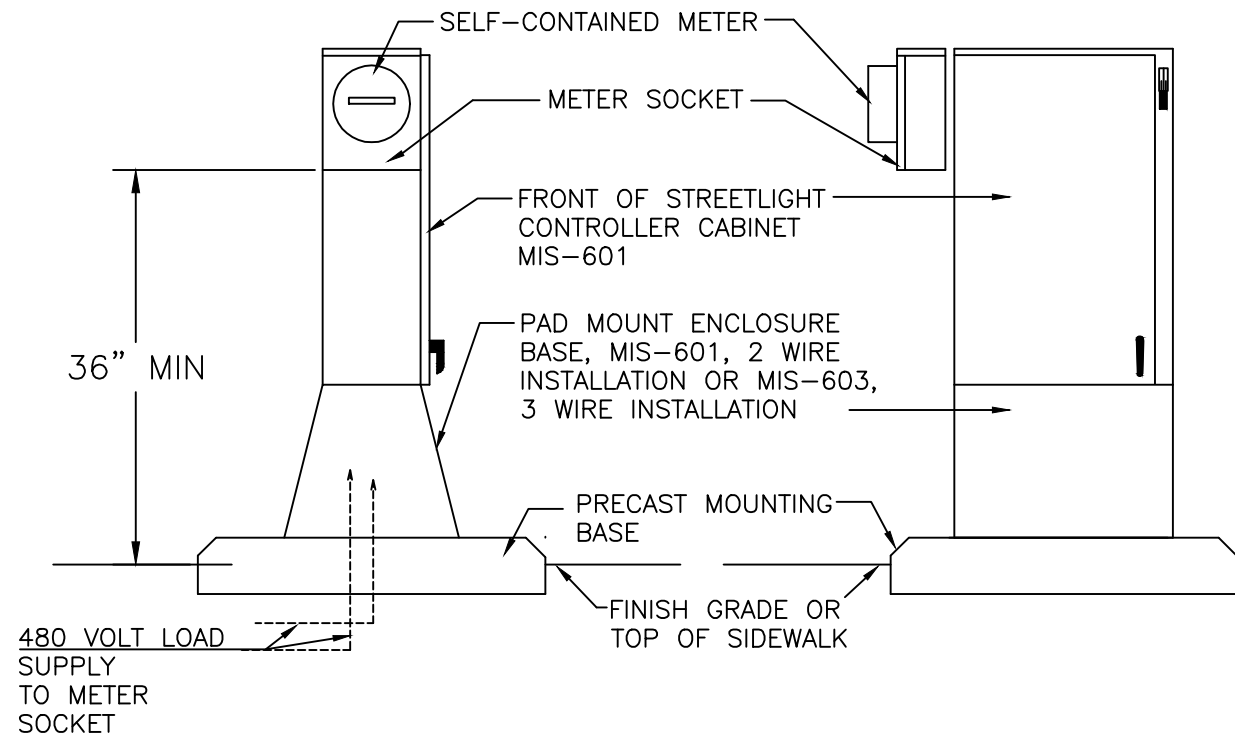


FIGURE 1
SELF-CONTAINED METER AND
PAD MOUNTED STREETLIGHT
CONTROLLER FOR UNDERGROUND
SERVICE

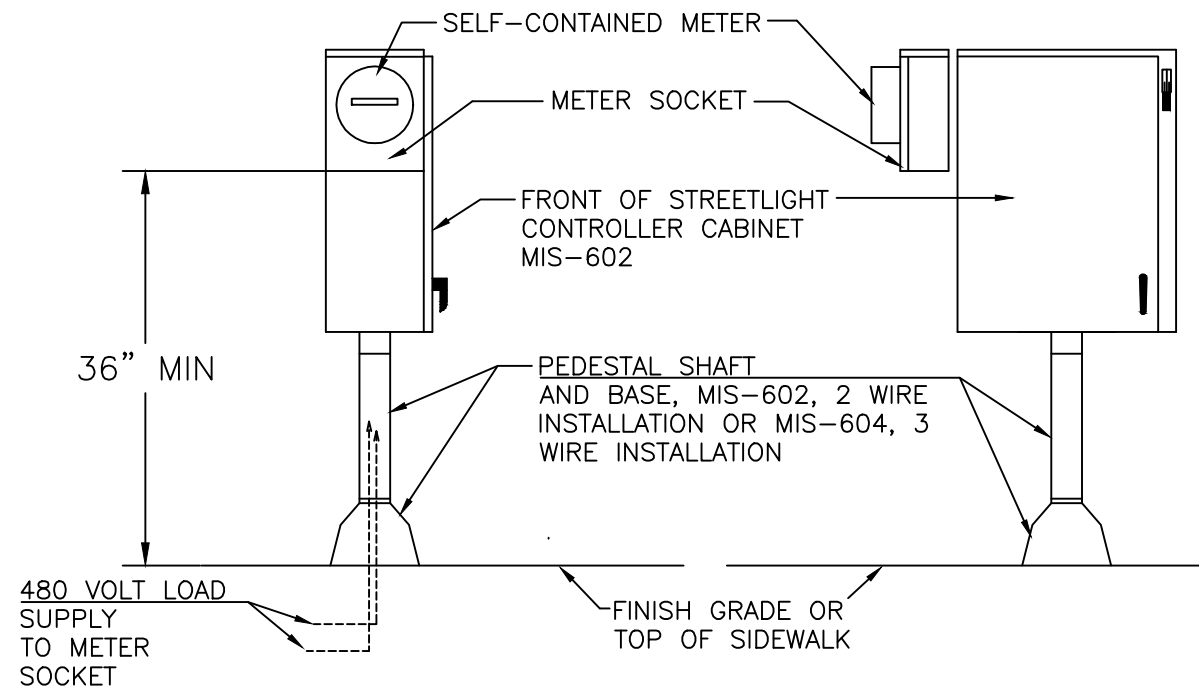


FIGURE 2
SELF-CONTAINED METER AND
PEDESTAL MOUNTED STREETLIGHT
CONTROLLER FOR UNDERGROUND
SERVICE

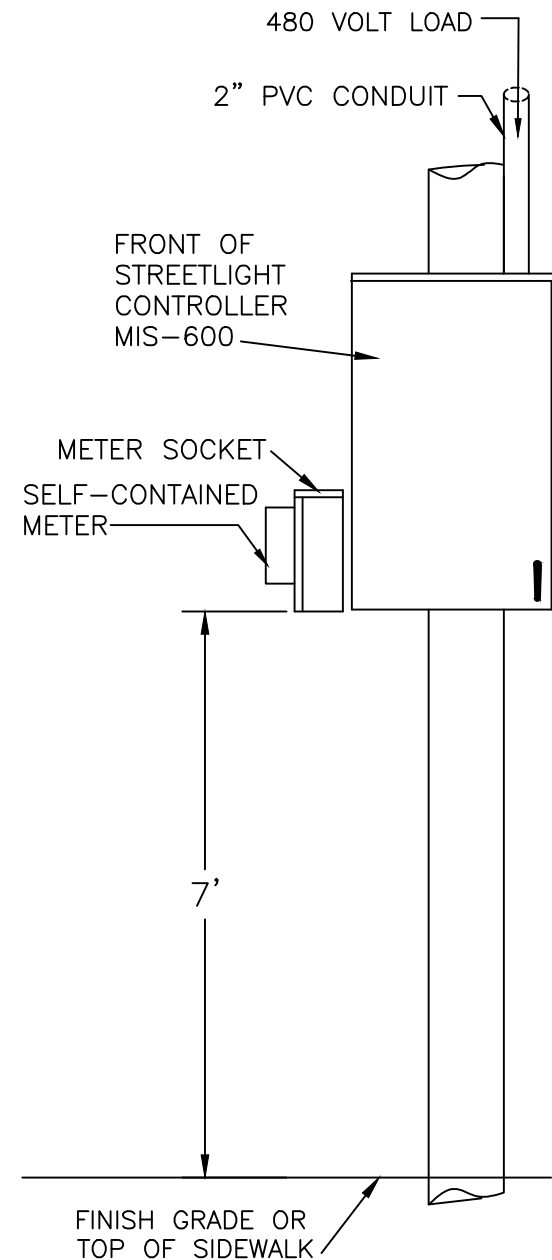


FIGURE 3
SELF-CONTAINED METER AND
POLE MOUNTED STREETLIGHT
CONTROLLER FOR OVERHEAD
SERVICE

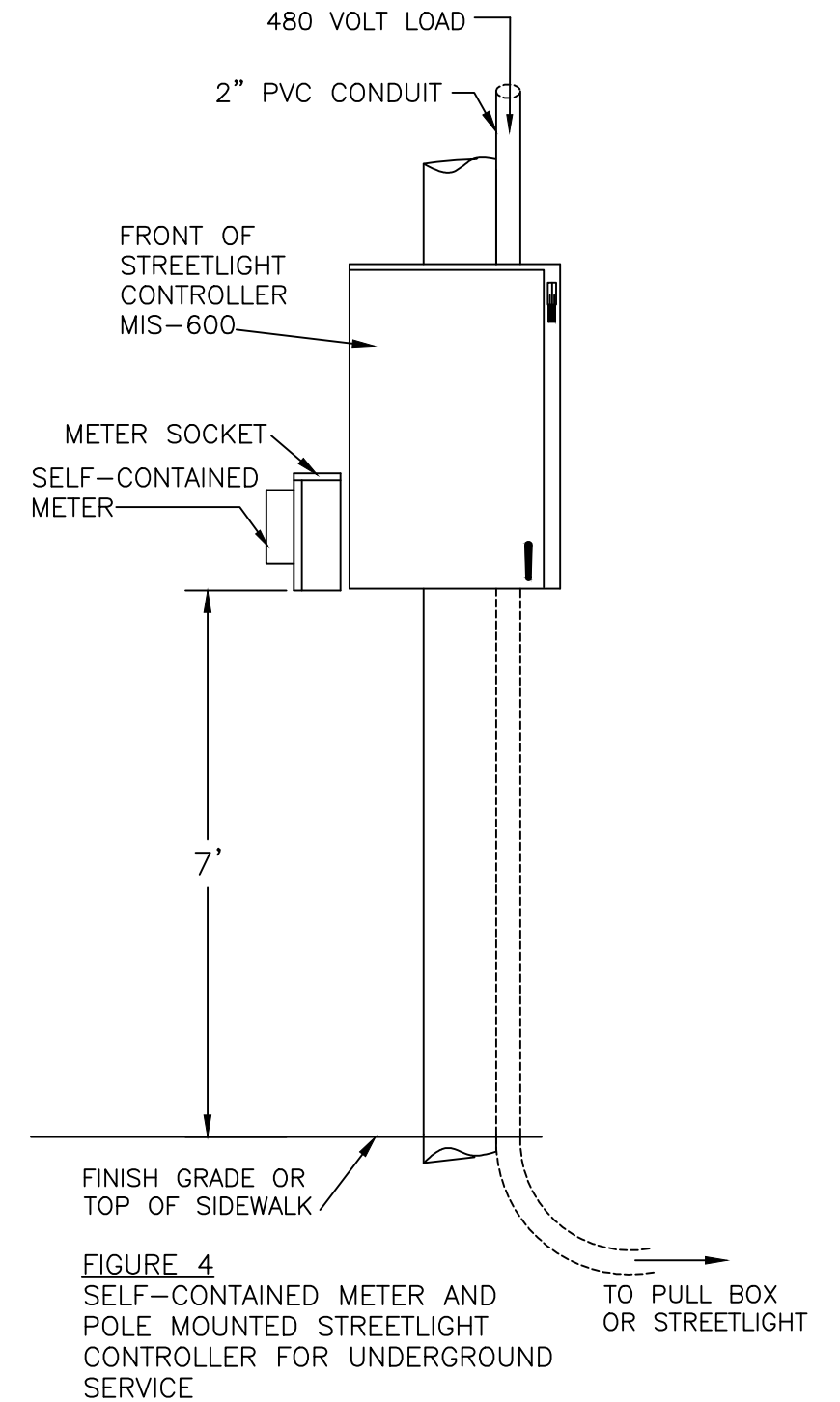


FIGURE 4
SELF-CONTAINED METER AND
POLE MOUNTED STREETLIGHT
CONTROLLER FOR UNDERGROUND
SERVICE

DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
MIS-57		
METER, SELF CONTAINED WITH METER SOCKET, 100 AMP		
DRAWN BY: DLJ	DATE: 1/1/2018	
APPROVED: <i>[Signature]</i>		
SCALE: NONE	SHEET: 2 OF 3	57

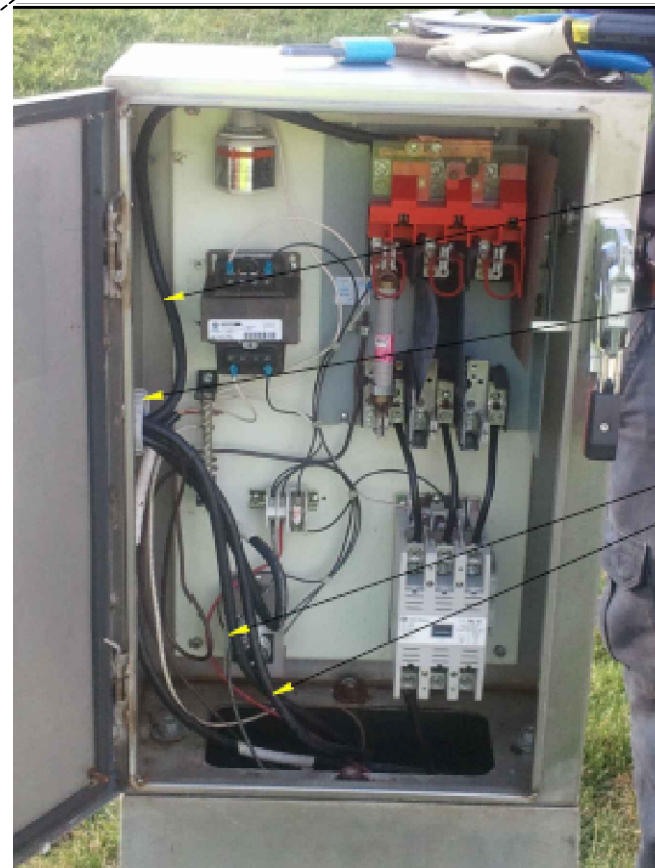


FIGURE 5
ELECTRICAL CONNECTIONS

METER SOCKET TO CONTROLLER CONNECTIONS
 1-1/2 INCH ACCESS HOLE
 480 VOLT LOAD SUPPLY TO METER SOCKET

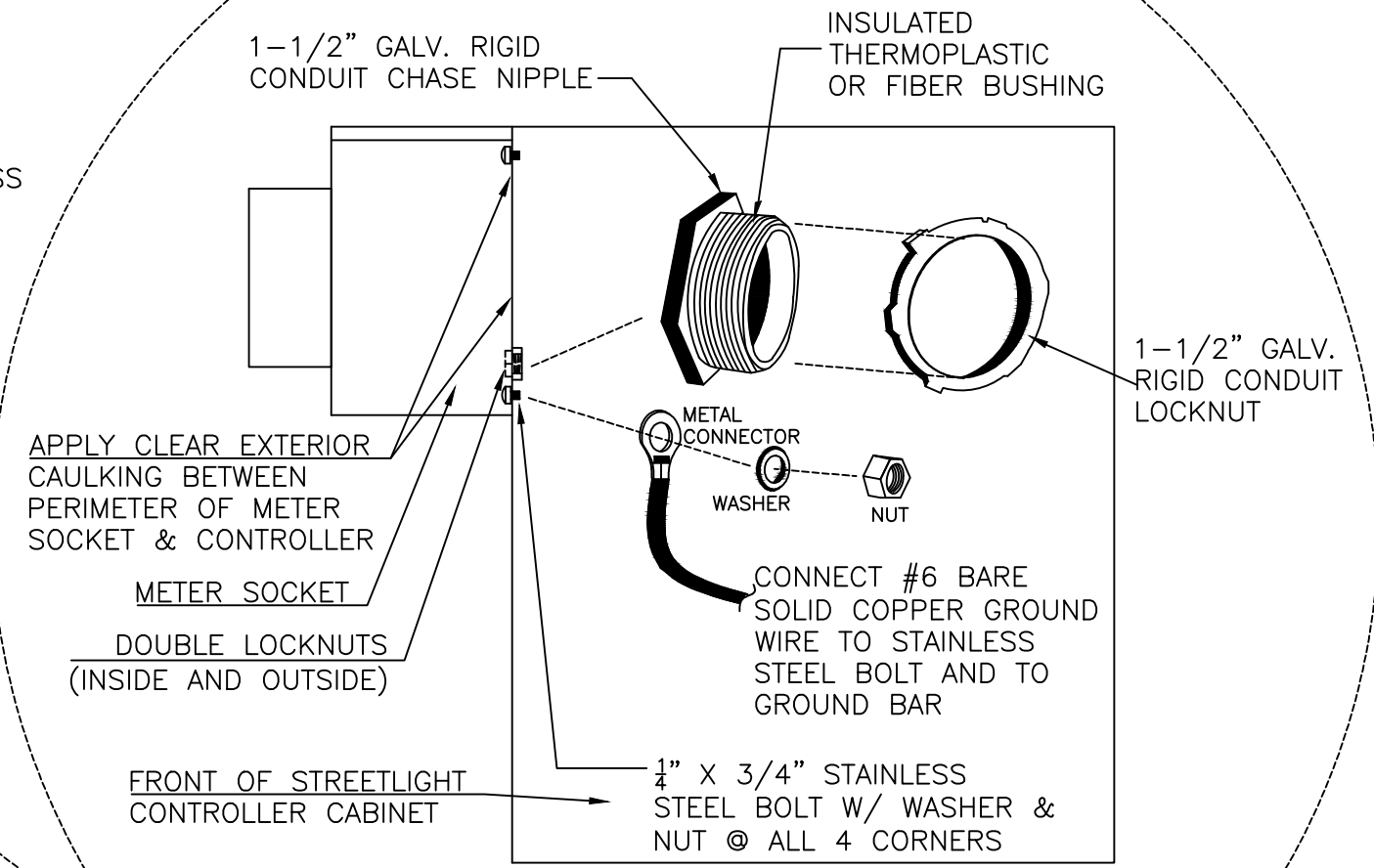


FIGURE 7
METER SOCKET CONNECTIONS TO 1-1/2 INCH ACCESS HOLE OF STREETLIGHT CABINET

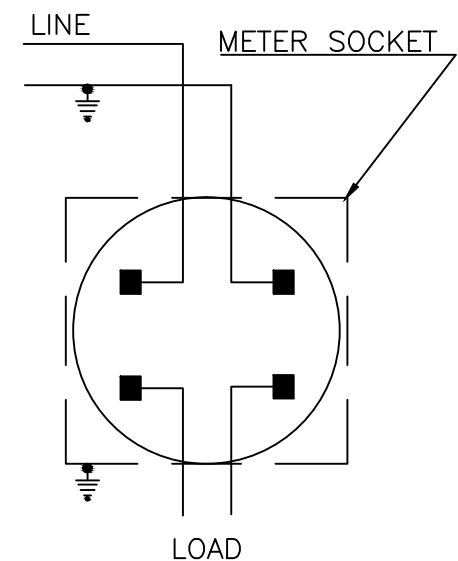


FIGURE 6
FORM 2S METER - SINGLE PHASE WITHOUT MULTIPLIERS

<h1>MIS-57</h1>	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	METER, SELF CONTAINED WITH METER SOCKET, 100 AMP		
	DRAWN BY: DLJ	DATE: 1/1/2018	
	APPROVED: <i>Amy R. Wilby</i>		
SCALE: NONE	SHEET: 3 OF 3	57	