

I. MATERIALS

- A. THE CT CABINET SHALL BE CONSTRUCTED OF G90 GALVANIZED STEEL, 36" X 36" X 12" IN SIZE WITH A SINGLE HINGED DOOR CONFIGURATION AND A NEMA 3R RATING. FINISH SHALL BE POWDER COAT GRAY PAINT. THE CT CABINET SHALL HAVE A 3" TREATED PLYWOOD PANEL INSTALLED ON THE REAR WALL OF THE CABINET BY THE MANUFACTURER, AND SHALL INCLUDE A PAD-LOCKABLE HASP FOR SECURED ACCESS. THE CONTRACTOR SHALL OBTAIN APPROVED PART NUMBERS FOR THE CT CABINET BY CONTACTING AEP.
- B. THE UNISTRUT IS TO BE 1-5/8" x 3-1/4", 12 GUAGE CHANNEL WITH 1-1/8" x 9/16" SLOTS AND SHALL BE UNISTRUT MIDWEST PART # P1001T HG OR APPROVED EQUAL.
- C. THE 2" SCHEDULE 80 PVC CONDUIT AND FITTINGS OUT TO THE LIGHTING CONTROLLER SHALL BE CANTEX OR APPROVED EQUAL.
- D. THE 1-1/4" SCHEDULE 80 CONDUIT AND LOCKNUTS ARE TO BE CANTEX OR APPROVED EQUAL.
- E. THE GROUND ROD SHALL BE ½" X 10', COPPER CLAD BLACKBURN #5010, GALVAN OR APPROVED EQUAL.
- F. THE GROUND ROD CLAMP SHALL BE BLACKBURN #JAB 1/2H, GALVAN G-5 OR APPROVED EQUAL.
- G. THE GROUND WIRE SHALL BE #6 CU. BARE SOLID COPPER.
- H. THE GROUND LUG SHALL BE A # 14 1 / 0 SINGLE HOLE LUG BURNDY # KA25U OR APPROVED EQUAL
- . THE ELECTRIC METER, METER SOCKET, LOCK & CT SHALL BE PROVIDED TO THE CONTRACTOR BY AMERICAN ELECTRIC POWER .

II. INSTALLATION

THE CT CABINET SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR FOR USE WITH NEW 480 VOLT AEP POWERED STREET LIGHTING CIRCUITS.

THE INSIDE BACK OF THE CABINET SHALL BE ENTIRELY COVERED BY $\frac{3}{4}$ TREATED PLYWOOD FOR MOUNTING THE CURRENT TRANSFORMERS.

A GROUNDING LUG SHALL BE PROVIDED TO GROUND THE CABINET. THE WHITE POLARITY MARK (DOT) ON THE CT SHALL BE TOWARD THE ENERGY SOURCE OR LINE SIDE.

THE CONTRACTOR SHALL MOUNT THE METER SOCKET CABINET (PROVIDED BY AEP) NEXT TO THE CT CABINET AND INSTALL 1-1/4" CONDUIT BETWEEN THE TWO. IF THE METER SOCKET CANNOT BE INSTALLED NEXT TO THE CT CABINET, IT MAY BE LOCATED UP TO 20 FEET AWAY WITH PRIOR APPROVAL BY AEP METER SERVICES . 1-1/4" CONDUIT SHALL CONNECT THE SOCKET AND CT CABINET.

THE CT CABINET AND METER SOCKET SHALL BE GROUNDED. THE METER SOCKET AND CT CABINET SHALL BE BONDED THROUGH A SEPARATE EQUIPMENT-GROUNDING CONDUCTOR CONNECTED TO THE GROUNDED SERVICE CONDUCTOR. IN MOST CASES, THIS IS THE NEUTRAL CONDUCTOR. IF A GROUNDED SERVICE CONDUCTOR DOES NOT EXIST, THEN GROUNDING AND BONDING OF METERING EQUIPMENT MUST BE ESTABLISHED THROUGH A GROUNDING ELECTRODE SYSTEM ESTABLISHED AT THE POINT OF SERVICE. THE GROUNDING OF THE METER SOCKET AND INSTRUMENT TRANSFORMER ENCLOSURE WILL BE SUPPLEMENTED WITH THE USE OF A DRIVEN GROUND ROD IN ADDITION TO BONDING TO THE GROUNDED SERVICE CONDUCTOR.

AEP SHALL INSTALL THE SECONDARY WIRING BETWEEN THE CT AND THE METER SOCKET. THE CONDUCTOR SPLICE SHALL BE MADE WITH BOLTED CONNECTIONS FURNISHED AND INSTALLED BY THE CONTRACTOR.

BURIAL DEPTH IS THE DISTANCE BETWEEN FINAL GRADE AND THE TOP OF THE BURIED CABLE OR CONDUIT. THE BURIAL DEPTH SHALL NOT BE LESS THAN 2'-6".
AEP WILL BE RESPONSIBLE FOR DESIGNATING THE LOCATION FOR THE TRENCH AND THE METER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING THE RISER ASSEMBLY. THE RISER ASSEMBLY SHALL CONSIST OF AN INSULATING BUSHING, LOCKNUT, THREADED ADAPTER, AND SCHEDULE 80 PVC CONDUIT WITH BELL END AND CLAMP. INSTALLATION OF ALL EQUIPMENT TO BE IN ACCORDANCE WITH AEP CONSTRUCTION STANDARDS.

III. BASIS OF PAYMENT

ITEM UNIT DESCRIPTION

MIS-59 EACH CT METER CABINET; 480 VOLT AEP FED LIGHTING CIRCUITS

DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO

MIS-59

CT METER CABINET, 480 VOLT AEP POWERED STREET LIGHTING CIRCUITS

DRAWN BY: SAW DATE: 9/26/25

APPROVED:

SCALE: NONE SHEET: 1