

I. MATERIALS

- A. THE GROUND ROD SHALL BE A MINIMUM OF 1/2" X10' COPPER CLAD, PORCELAIN PRODUCT #8430; BLACKBURN #5010, GALVAN OR APPROVED EQUAL.
- B. THE GROUND ELECTRODE WIRE (WIRE FROM GROUND ROD TO THE POLE) SHALL BE #6 AWG SOLID COPPER.
- C. THE GROUND ROD CLAMP SHALL BE 1/2" COPPER ALLOY, HEX OR SQUARE HEAD SCREW WITH 1/2"-13UNC; JOSLYN #J8591H; BLACKBURN #JAB 1/2H OR APPROVED EQUAL.
- D. THE CRIMP COMPRESSION CONNECTORS SHALL BE COPPER, BURNDY YC4C4, PENN UNION OR APPROVED EQUAL.
- E. THE COPPER COMPRESSION TERMINAL LUG SHALL BE ONE HOLE TYPE TO FIT 1/4" MACHINE BOLT. THE SEAMLESS COPPER TUBING SHALL BE A MINIMUM OF 1" AND BE MARKED FOR #4 CONDUCTOR. THE LUG SHALL BE HOT TIN DIPPED TO PROVIDE CORROSION RESISTANCE AND BE HOMAC L4-14, BURNDY OR APPROVED EQUAL.
- F. THE FUSE KIT SHALL BE BUCHANAN 82S-EAFB1-C, HOMAC FYU-2, OR APPROVED EQUAL THE FUSE KIT FOR THE PHASE (HOT) WIRE SHALL HAVE A SUPER LAG TYPE FUSE. USE KTK-3 AMP FUSE FOR LED LUMINAIRE.
- G. THE POLE AND BRACKET WIRE SHALL BE #10AWG COPPER, 7 STRAND, THERMOSETTING CHEMICALLY CROSS LINKED POLYETHYLENE INSULATION, 600 VOLT AWG-XHHW. THE HOT WIRE SHALL BE BLACK, NEUTRAL SHALL BE WHITE AND GROUND WIRE FROM LUMINAIRE GREEN.
- H. THE CABLE GRIP SHALL BE FOR INSULATED WIRE.
- I. TAPE SHALL BE 1/2" VINYL TAPE. THE TAPE SHALL BE CODED RED OR WHITE, SCOTCH #35, TAPE-RITE CO. OR APPROVED EQUAL.

II. INSTALLATION

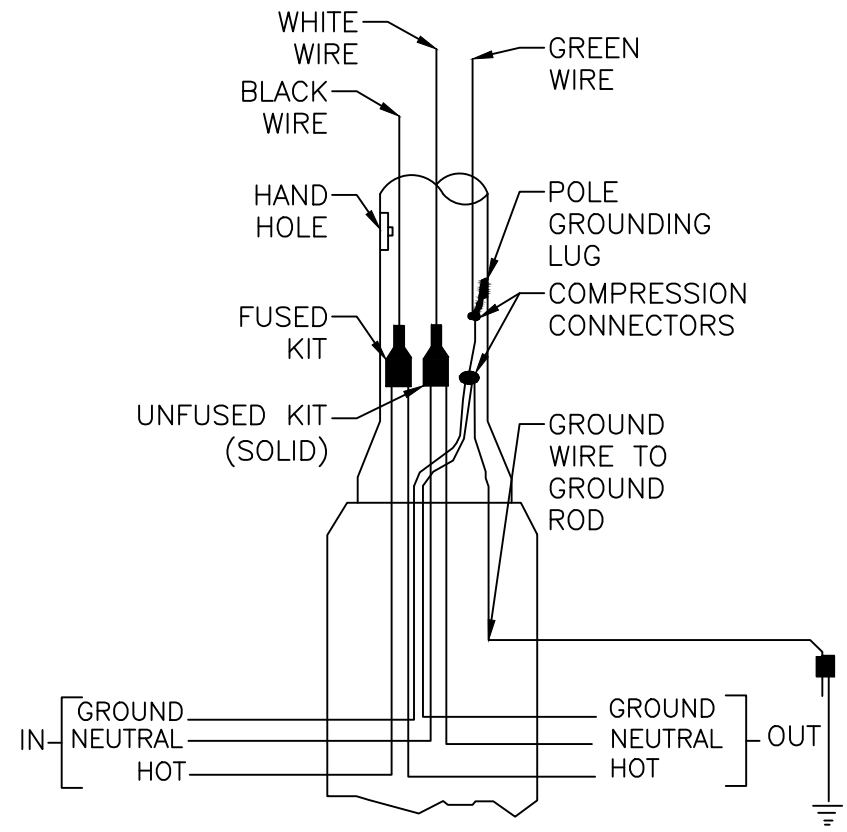
- A. THE GROUND ROD SHALL BE INSTALLED IN UN-DISTURBED EARTH. TESTING SHALL INDICATE 25 OHMS OR LESS. WHEN OHMS READING IS OVER 25, MORE GROUND RODS SHALL BE INSTALLED TO ACHIEVE 25 OHMS OR LESS.
- B. THE #6 BARE COPPER GROUND WIRE FROM POLE SHALL BE CONNECTED TO THE GROUND ROD WITH A GROUND ROD CLAMP. THE GROUND WIRE SHALL BE CRIMPED TO THE TERMINAL LUG AND BOLTED TO THE POLE, AND TIGHTENED UNTIL SECURE. USE YC4C4 CRIMP CONNECTION FOR EQUIPMENT GROUND CONDUCTORS RUNNING WITH CIRCUIT BETWEEN POLES (GREEN #8 AWG, XHHW-2, 600V COPPER) TO #6 BARE COPPER WIRE. SEE "DETAIL 1".
- C. THE BARE GROUND WIRE SHALL BE CONNECTED TO THE GROUND ROD WITH A GROUND ROD CLAMP. THE GROUND WIRE SHALL BE WRAPPED AROUND AN ANCHOR BOLT AND TIGHTENED WITH THE ANCHOR NUT AND WASHER UNTIL SECURE. SEE "DETAIL 2".
- D. THE #4, PHASE (HOT) WIRE AND THE BLACK, #10 POLE WIRE SHALL BE CONNECTED TO THE TERMINAL BLOCK FUSE KIT. RED TAPE SHALL BE WRAPPED FIVE (5) TIMES AROUND THE HOT WIRE BELOW THE FUSE KIT.
- E. THE #10 BLACK WIRE SHALL RUN FROM THE FUSE KIT THROUGH THE POLE SHAFT TO THE LUMINAIRE.

- F. THE #4, PHASE (NEUTRAL) WIRE AND THE WHITE, #10 POLE WIRE SHALL BE CONNECTED TO THE TERMINAL BLOCK UN FUSED KIT. WHITE TAPE SHALL BE WRAPPED FIVE (5) TIMES AROUND THE NEUTRAL WIRE BELOW THE FUSE KIT.
- G. THE GREEN #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #6 GROUND WIRE, THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- H. THE #10 BLACK, GREEN AND WHITE POLE WIRES SHALL BE SUPPORTED BY THE CABLE GRIP NEAR THE MAST ARM OR LUMINAIRE ENTRANCE.

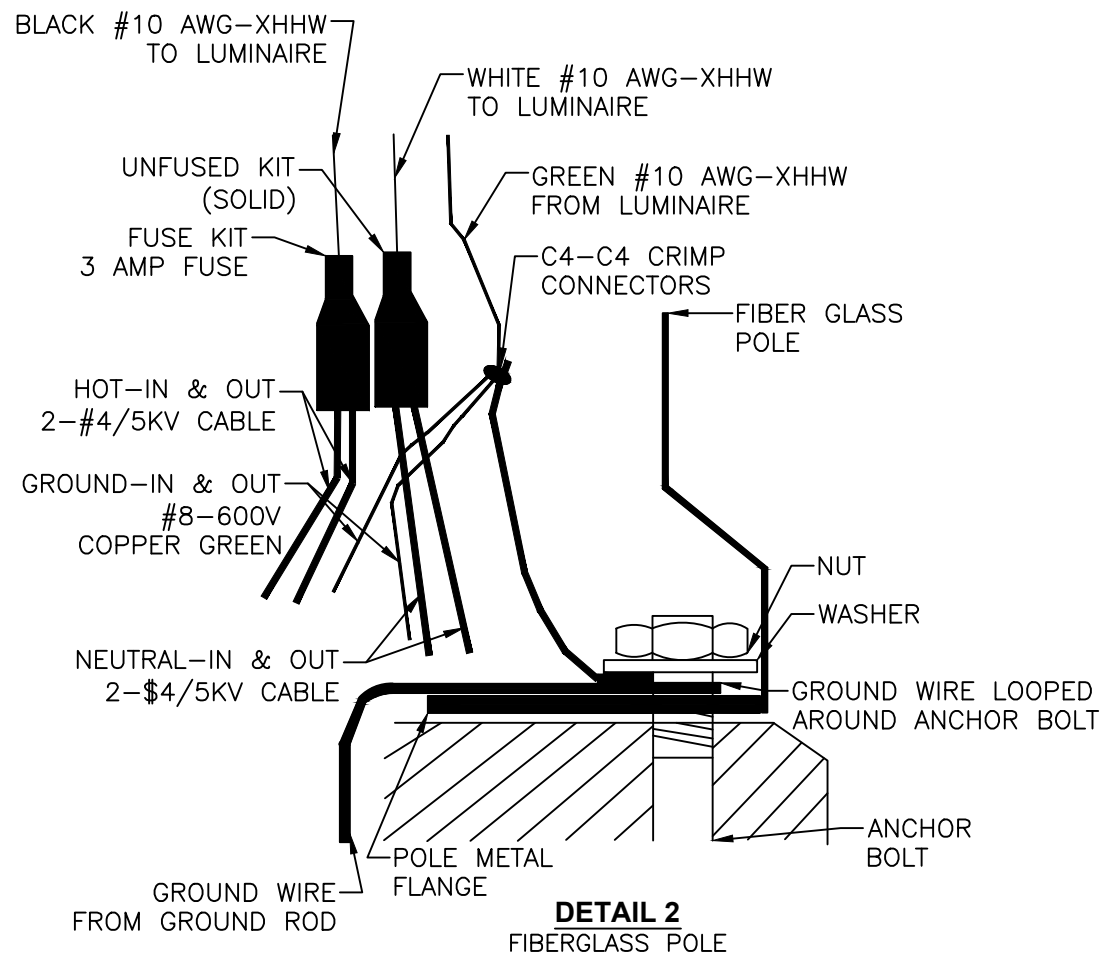
III. BASIS OF PAYMENT

ITEM	UNIT	DESCRIPTION
MIS-501	EACH	POLE TO BE WIRED, 3 WIRE

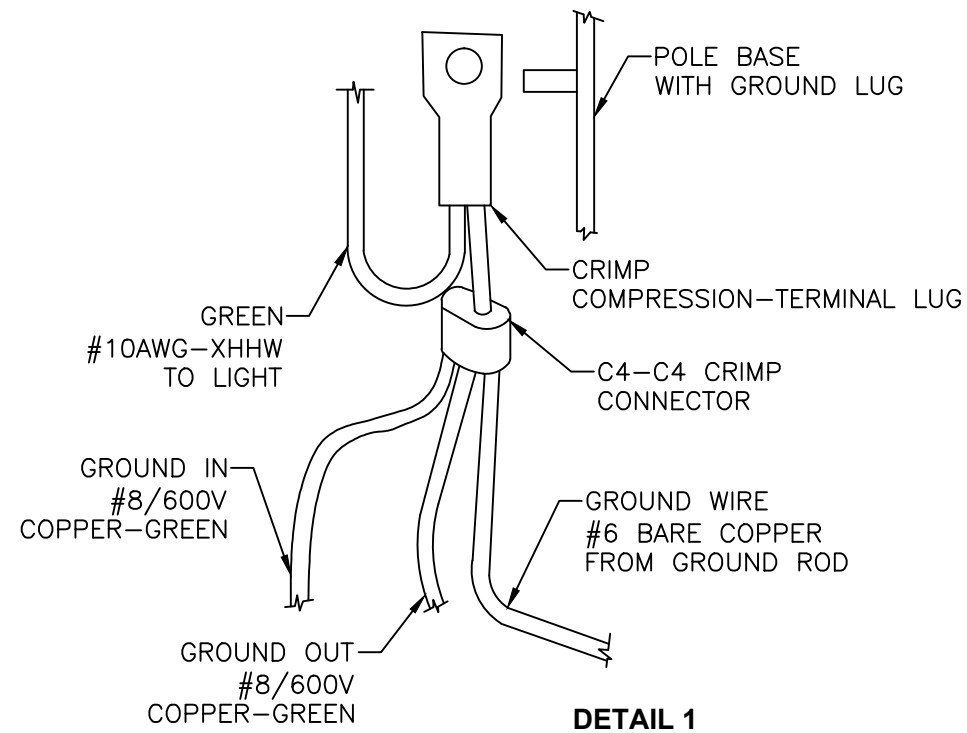
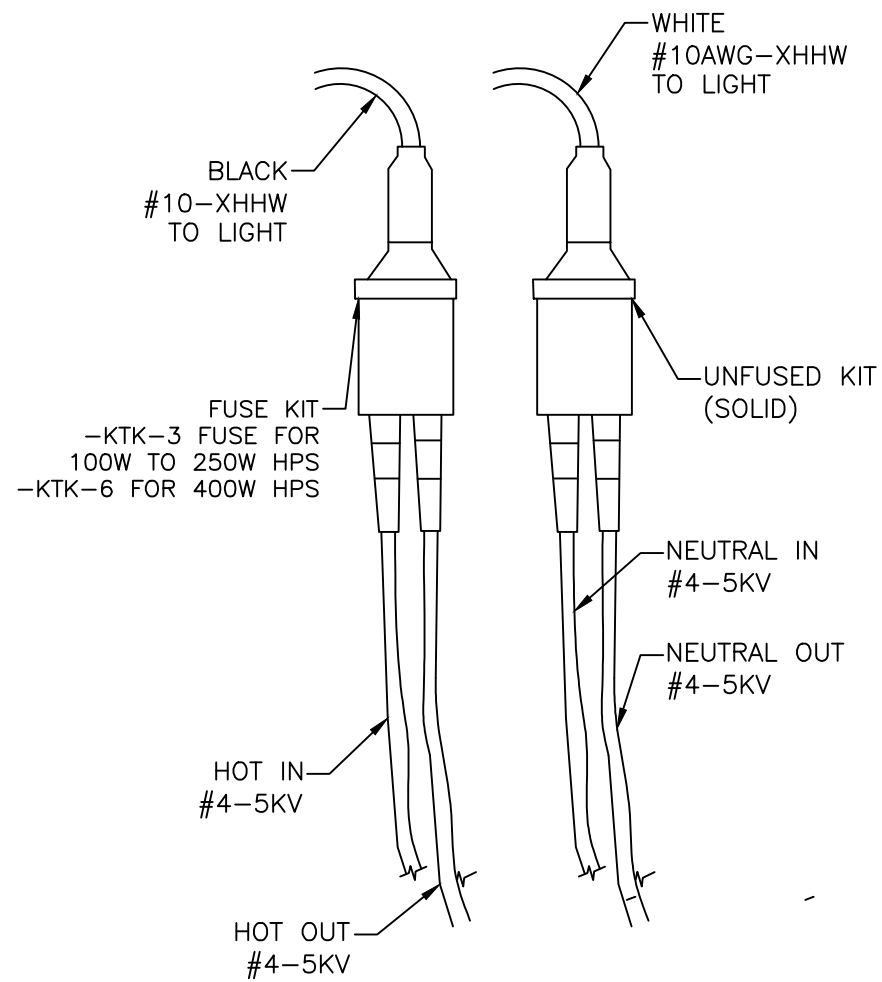
MIS-501	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	POLE TO BE WIRED, 3 WIRE		
	DRAWN BY: BEN	DATE: 1/1/2018	
	APPROVED: <i>[Signature]</i>		
SCALE: NONE	SHEET: 1 OF 2	501	



480 VOLTS, 3 WIRE, GROUNDED NEUTRAL



DETAIL 2
FIBERGLASS POLE



DETAIL 1
METAL POLE

<h1>MIS-501</h1>	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	POLE TO BE WIRED, 3 WIRE		
	DRAWN BY: BEN	DATE: 1/1/2018	
	APPROVED: <i>[Signature]</i>		
SCALE: NONE	SHEET: 2 OF 2	501	