

I. APPLICATION

A. THE POLE TO BE WIRED 2-WIRE SPECIFICATION IS TO BE UTILIZED WHEN CONNECTING TO EXISTING 2 WIRE STREET LIGHTING CIRCUITS.

II. MATERIALS

- A. THE GROUND ROD SHALL BE 1/2" X 10' COPPERCLAD, PORCELAIN PRODUCT #8430; BLACKBURN #5010, GALVAN OR APPROVED EQUAL.
- B. THE GROUND WIRE TO THE POLE SHALL BE #6 AWG SOLID COPPER.
- C. THE GROUND ROD CLAMP SHALL BE 1/2" COPPER ALLOY, WITH 1/2"-13UNC HEX OR SQUARE HEAD SCREW ; JOSLYN #J8591H; BLACKBURN #JAB 1/2H OR APPROVED EQUAL.
- D. THE CRIMP COMPRESSION CONNECTORS SHALL BE COPPER, BURNDY YC2C4 AND YC4C4, PENN UNION OR APPROVED EQUAL.
- E. THE COPPER COMPRESSION TERMINAL LUG SHALL 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 OR APPROVED EQUAL. THE FUSE KIT FOR THE PHASE (HOT) WIRE SHALL HAVE A KTK-3 AMP FUSE WITH LUMINAIRE WATTAGES 250 OR LESS. 400 WATT LUMINAIRE SHALL USE A KTK-6 AMP FUSE.
- G. THE POLE AND BRACKET WIRE SHALL BE #10AWG COPPER, 7 STRAND, THERMOSETTING CHEMICALLY CROSSLINKED POLYETHYLENE INSULATION, 600 VOLT AWG-TYPE XHHW. THE HOT WIRE SHALL BE BLACK. THE NEUTRAL SHALL BE WHITE AND THE GROUND FROM LUMINAIRE SHALL BE GREEN.
- H. THE CABLE GRIP SHALL BE SUITABLE 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.

III. INSTALLATION

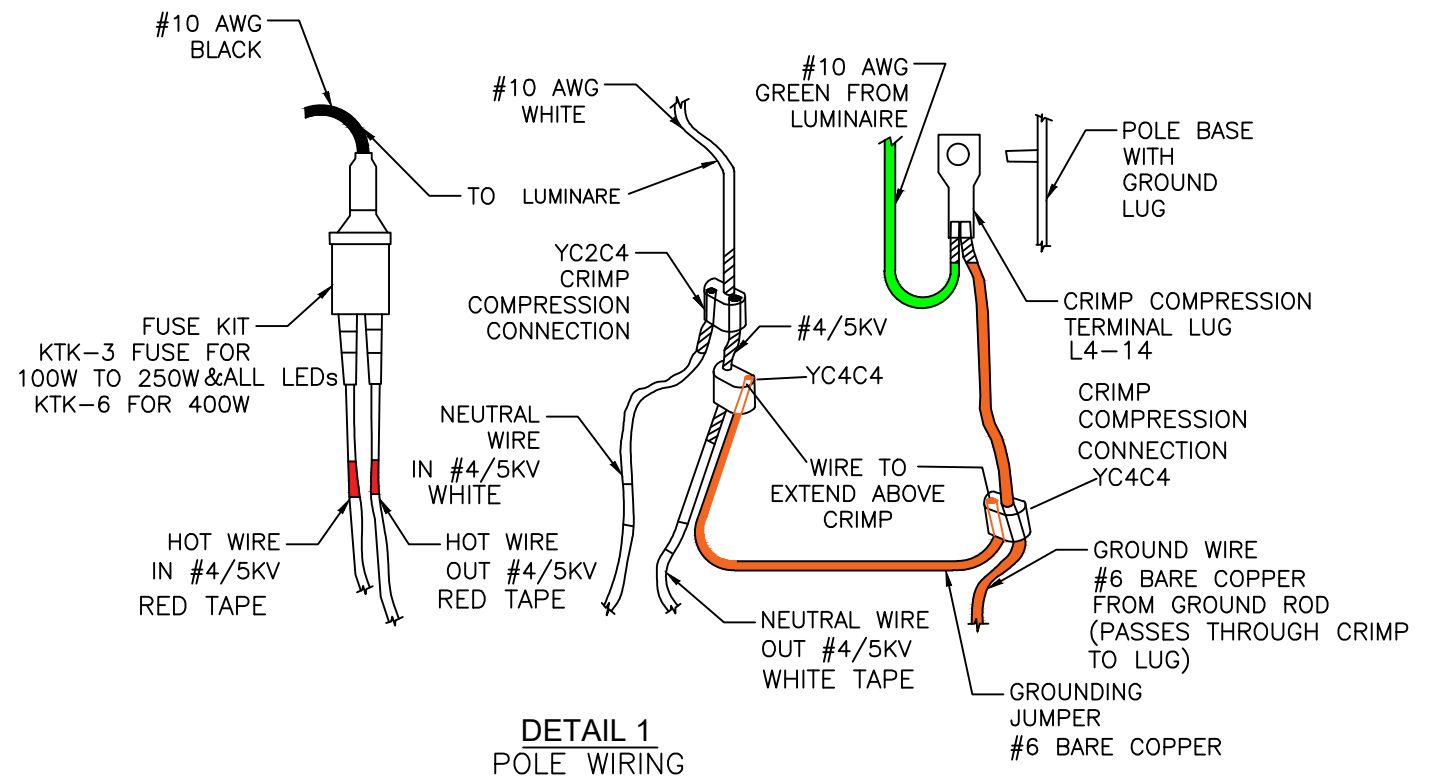
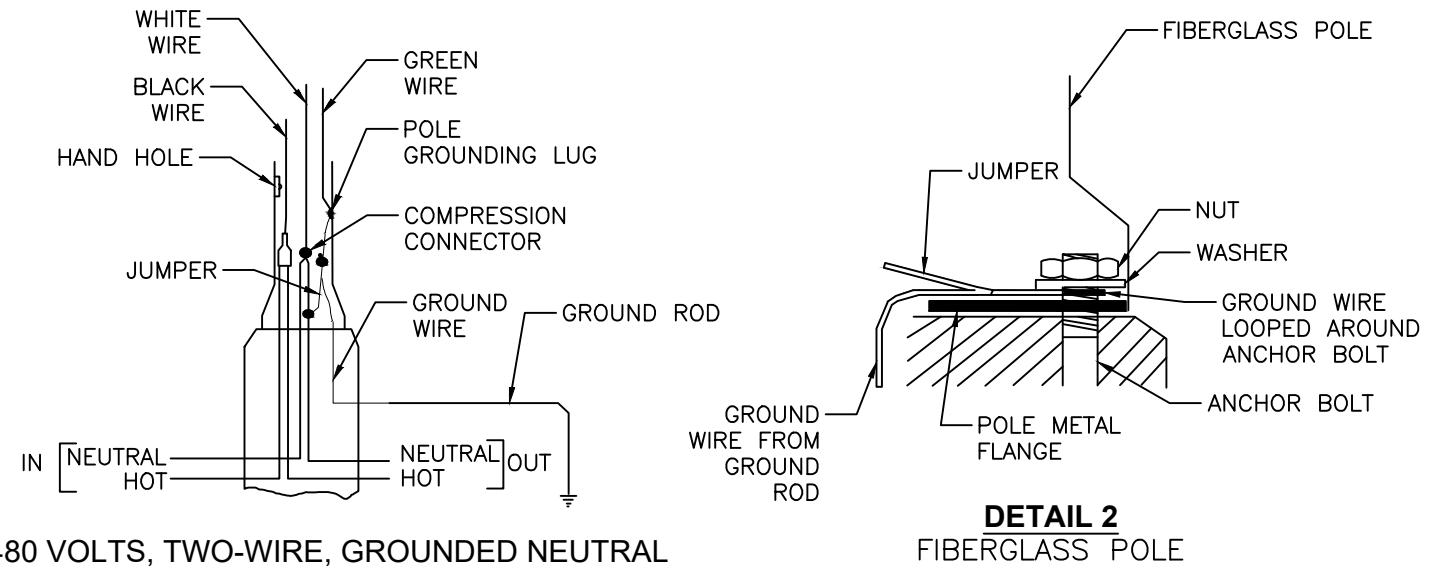
- A. THE GROUND ROD (AS PER THE APPROPRIATE FOUNDATION MIS SPECIFICATION) SHALL BE INSTALLED IN UN-DISTURBED EARTH. TESTING SHALL INDICATE 25 OHMS OR LESS. OHMS READINGS SHALL BE TAKEN ON THE # 6 AWG SOLID COPPER WIRE ATTACHED TO THE GROUND ROD BELOW THE YC4C4 CRIMP. THEY ARE NOT TO BE TAKEN ON THE #6 AWG JUMPER WIRE.
- B. TO GROUND A METAL POLE-THE BARE GROUND WIRE 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 WITH A NUT AND WASHER UNTIL SECURE. A JUMPER GROUND WIRE SHALL BE CRIMPED TO THE MAIN GROUND WIRE AND BONDED TO THE #4 NEUTRAL (BLACK WITH WHITE TRACER) BY USING A CRIMP CONNECTION. WHITE TAPE SHALL BE WRAPPED AROUND THE #4 NEUTRAL WIRE FIVE (5) TIMES BELOW THE CRIMP. SEE "DETAIL 1".
- C. TO GROUND A FIBERGLASS POLE, 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". A JUMPER GROUND WIRE SHALL BE CRIMPED TO THE MAIN GROUND WIRE AND BONDED TO THE #4 NEUTRAL (BLACK WITH WHITE TRACER) BY USING A CRIMP. WHITE TAPE SHALL BE WRAPPED AROUND THE #4 NEUTRAL WIRE FIVE (5) TIMES BELOW THE CRIMP. SEE "DETAIL 2".

IN LIEU OF WRAPPING THE GROUND WIRE AROUND THE ANCHOR BOLT OF THE FIBERGLASS POLES AS NOTED ABOVE, THE CONTRACTOR MAY ATTACH THE GROUND WIRE TO THE BOLT CONNECTING THE METAL PLATE (IF INSTALLED) TO THE FIBERGLASS POLE WITH THE USE OF A BURNDY YAZV6CTC38FX (OR APPROVED EQUAL) COMPRESSION TERMINAL LUG. ALL OTHER CONNECTIONS ARE TO BE COMPLETED AS NOTED.

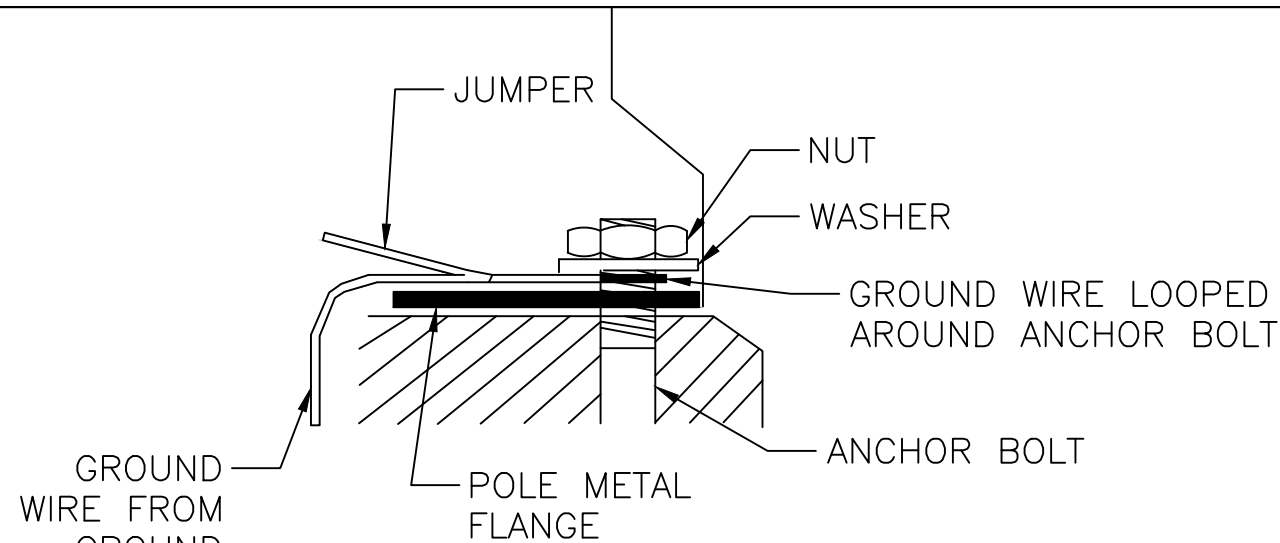
- D. THE #4, PHASE (HOT) WIRE AND THE BLACK, #10 POLE WIRE SHALL BE CONNECTED TO THE TERMINAL BLOCK & FUSE KIT. RED TAPE SHALL BE WRAPPED FIVE (5) TIMES AROUND THE HOT WIRE BELOW THE FUSE KIT.
- E. THE #10 BLACK WIRE SHALL RUN FROM THE FUSE KIT THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- F. THE WHITE #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #4 NEUTRAL (BLACK WITH WHITE TRACER) AND THE GROUND WIRE, THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- G. THE GREEN #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #4 NEUTRAL (BLACK WITH WHITE TRACER) AND THE 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.

IV. BASIS OF PAYMENT

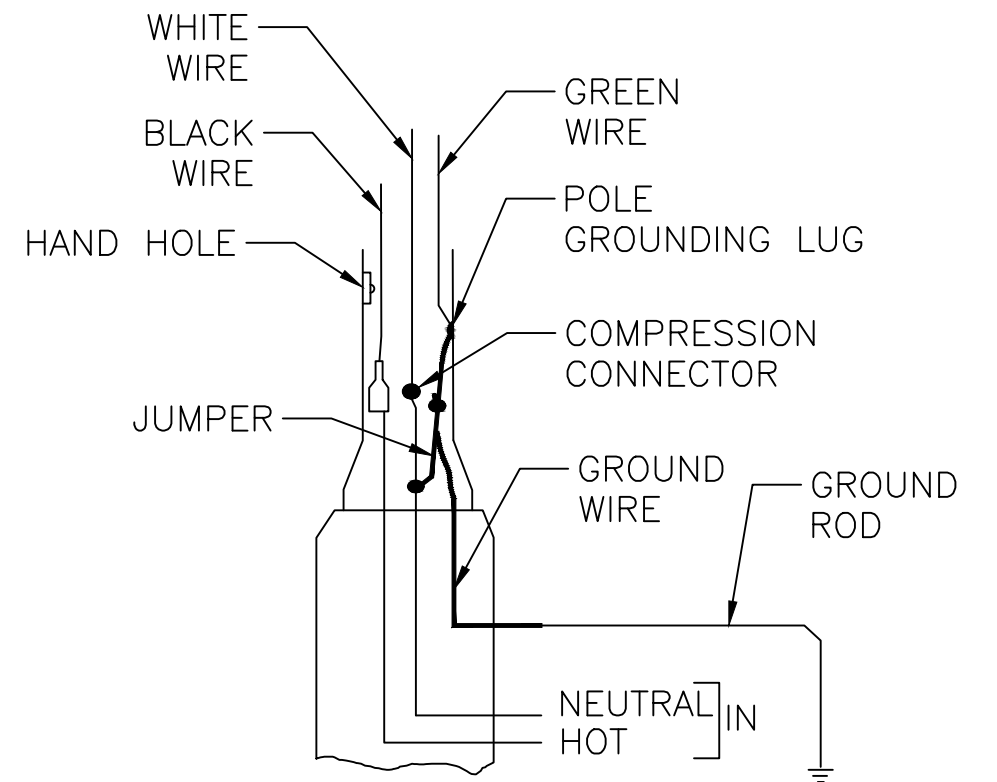
ITEM	UNIT	DESCRIPTION
MIS-500	EACH	POLE TO BE WIRED, 2-WIRE



MIS-500	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	POLE TO BE WIRED, 2-WIRE		
	DRAWN BY: SAW	DATE: 6/4/24	
	SCALE: NONE	SHEET: 1 OF 2	500

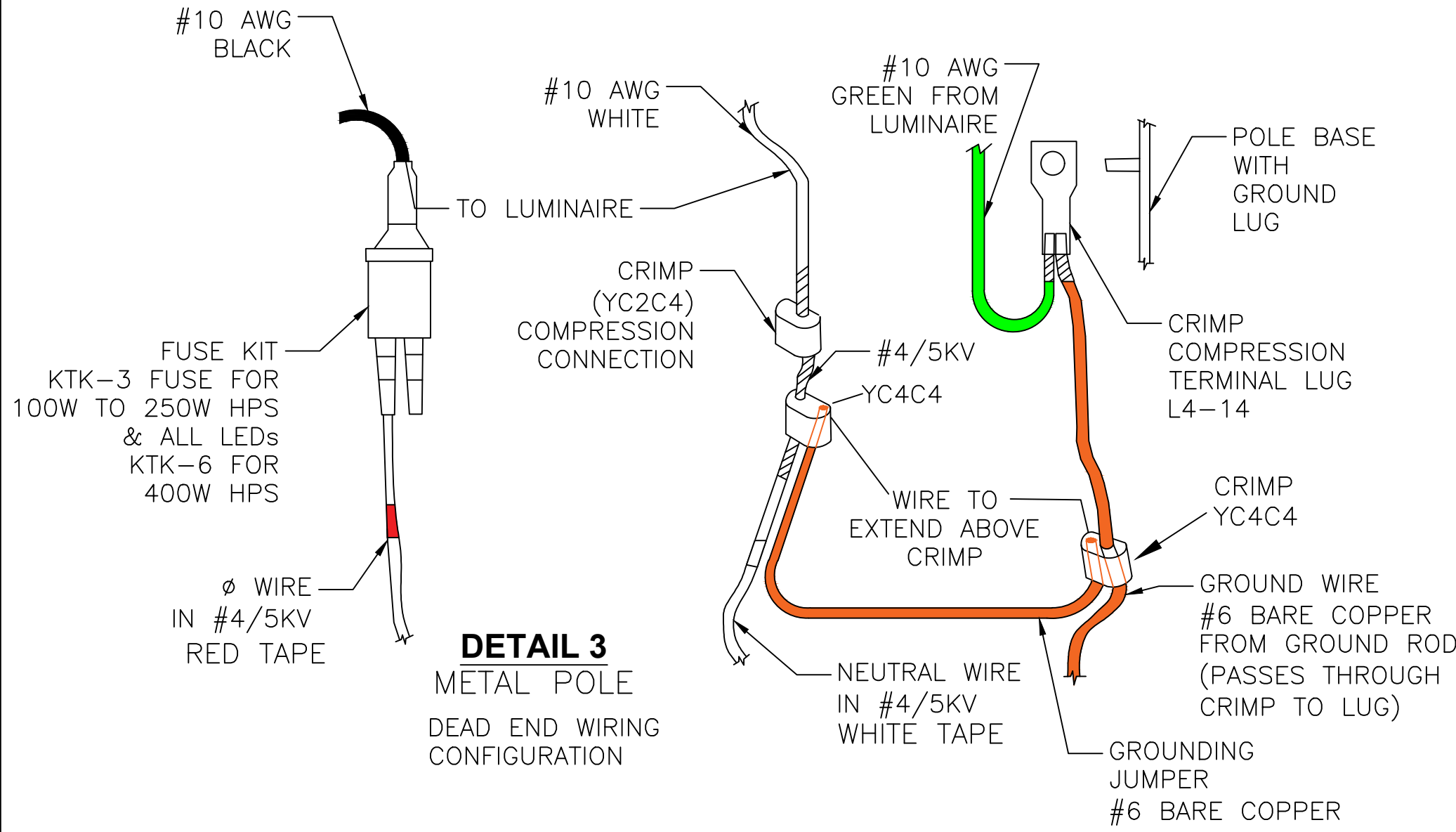


DETAIL 4
FIBERGLASS POLE



**480 VOLTS, TWO-WIRE,
GROUNDED NEUTRAL**

DEAD END WIRING CONFIGURATION



DETAIL 3
METAL POLE
DEAD END WIRING CONFIGURATION

MIS-500

DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
POLE TO BE WIRED, 2-WIRE		
DRAWN BY: SAW	DATE: 6/4/24	
SCALE: NONE	SHEET: 2 OF 2	500