

Transmission & Distribution
Material & Installation Specification

Overhead Transmission Circuit Grounding
3'-0" Insulator Spacing

I. Quantity

The base bid shall include the indicated number of overhead circuit ground units furnished and installed as hereinafter specified.

II. Material

- A. Ground Rod - The ground rod shall be 1/2" diameter x 10' long copperweld, ERICO, Joslyn, Chance or approved equal.
- B. Ground Rod Connectors - The ground rod connectors shall be ERICO #CC12F compression coupling or approved equal for connection between ground rods and shall be type GR exothermic welding for connection between ground wire and ground rod.
- C. Ground Wire Molding - The ground wire molding shall be treated wood, 8' long, 1" wide, Joslyn #EE-1/2 or approved equal.
- D. Staples - The staples used to secure the molding and ground wire to the pole shall be rolled diamond point copper coated.
- E. Ground wire - Refer to drawing TDMIS-8.
- F. Connector - Refer to drawing TDMIS-8.

III. Installation

- A. The installation shall be as shown on drawing TDMIS-8.
- B. The ground wire shall be connected to the static wire, and down guy wire using compression connector and #4 minimum soft drawn stranded copper.

- C. The ground wire shall be connected to the ground rod, fastened to the pole with staples and extend 6" above the top of pole.
- D. Grounding electrodes - Refer to TDMIS-8 and TDMIS-1607.
- E. The top of the ground rod shall be installed not less than 12" below grade and 36" minimum from wall of excavation in undisturbed soil.
- F. The staples shall be spaced 2' apart except from the ground line to a distance of 8' above the ground line and 4' to the pole top where the staples shall be spaced 6" apart.
- G. The molding shall be installed over the ground wire, flush with the grade.
- H. All equipment mounted on pole shall be connected to pole ground wire.

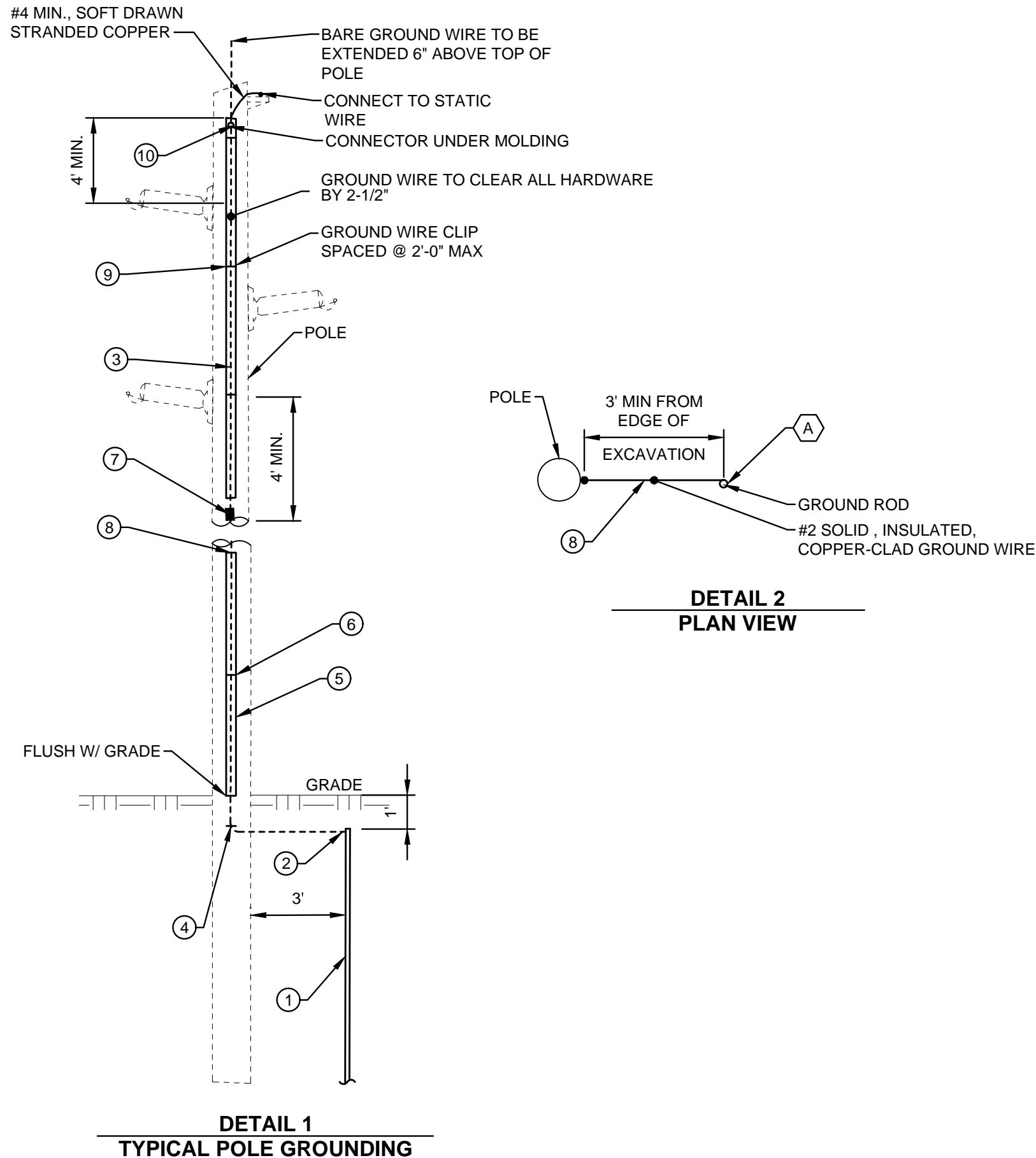
IV. Method of measurement

Shall include all conductor, hardware, electrode, welds, labor, testing (TDMIS-1607) and documentation.

V. Basis of payment

Items	Unit	Description
TDMIS-8	Each	Complete grounding system module
TDMIS-8	Each	Additional ground rod to conform the requirement in TDMIS-1607

CITY OF COLUMBUS DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER OVERHEAD TRANSMISSION CIRCUIT GROUNDING 3'-0" INSULATOR SPACING		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-8
APPROVED: <i>[Signature]</i>		
	SHEET 1 of 2	



CODED NOTES:

A IF GROUND RESISTANCE IS ABOVE 25Ω THEN ADDITIONAL GROUND ROD ARE TO BE ADDED AS DETAILED AND DRIVEN TO A DEPTH THAT ACHIEVES LESS THAN 25Ω.

ITEM LIST			
ITEM #	DESCRIPTION	PART #	QTY.
①	ROD, GROUND, 1/2"X10'	20341	1
②	TYPE GR EXOTHERMIC WELD	*	1
③	WIRE, GROUND, INSULATED, # 4 SOLID COPPER	20329	18'-0"
④	STAPLE, GROUND WIRE, 3/8"X1-3/4" LENGTH	20343	AS REQ.
⑤	MOLDING, WOOD, 8'	20441	1
⑥	STAPLE, 1-1/16"X3" LENGTH	20342	AS REQ.
⑦	CONNECTOR, COMPRESSION	20104	1
⑧	WIRE, GROUND, COPPER CLAD STEEL, INSULATED	*	AS REQ.
⑨	CLAMP, INSULATED GROUND WIRE, 3/4"	21111	10
⑩	CONNECTOR, COMPRESSION, COPPER H-TAP - SIZE AS REQUIRED	*	AS REQ.

CITY OF COLUMBUS, OHIO
DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER

OVERHEAD TRANSMISSION CIRCUIT
GROUNDING 3'-0" INSULATOR SPACING
M69GND3

DRAWN BY: AEC DATE: 01/01/2018

APPROVED: *[Signature]*

SCALE: NTS

SHEET: 2 OF 2

TDMIS-8