

A. APPLICABLE STANDARDS FOR SUBSTATION GROUNDING DESIGN

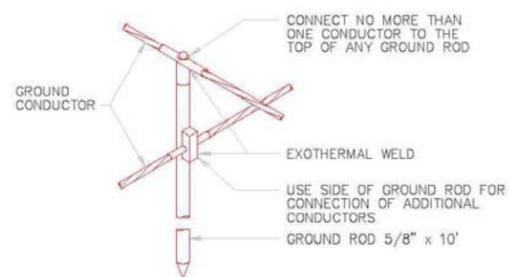
- ANSI/IEEE Std 80-1986 IEEE Guide for Safety in AC Substation Grounding
- NESC (NATIONAL ELECTRIC SAFETY CODE) All Applicable Sections.

B. TYPICAL GROUND GRID INFORMATION (taken from ANSI/IEEE Std 80-1986)

- Typical conductor spacing 10-50 ft. Grid should be equally spaced.
- Typical grids depths 12-18 inches.

C. SUBSTATION GROUND GRID STANDARD MATERIAL

IN STOCK ITEM	4/0 BARE CU WIRE	28010700070
IN STOCK ITEM	5/8" X 10"	28315600010
NOT STOCK ITEM	EXOTHERMAL WELD	N/A



GROUND GRID TO GROUND ROD EXOTHERMAL CONNECTION
NO SCALE

D. EQUIPMENT GROUNDING STANDARD MATERIAL

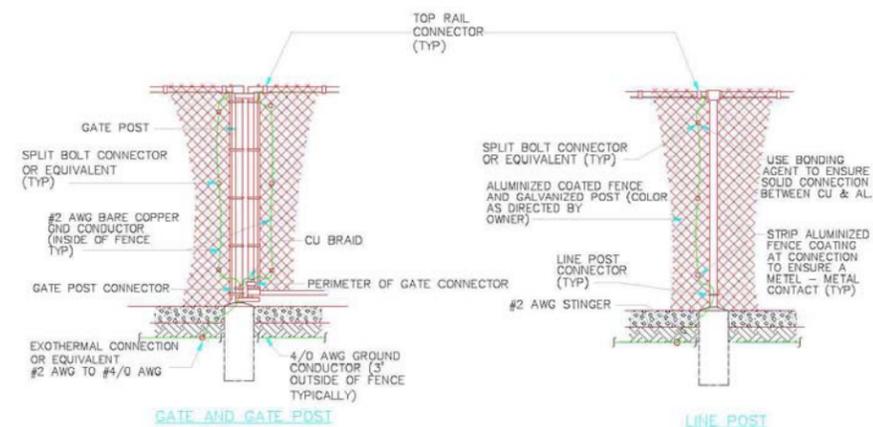
- CONNECTORS ARE NON-STOCK ITEMS
 BURNDY HYGROUND SYSTEM OR EVALUATED EQUIVALENT
 REQUIRED TOOLS & DIES DPUE HAS PURCHASED
 BURNDY HYPRESS Y750BH
 BURNDY Y700DC-1B
 BURNDY Die#U289RT
 BURNDY Die # U997
 BURNDY UPRECRIMP 58

NOTE: If specified connectors cannot be crimped with the above noted tools and dies the necessary tools and dies will need to be purchased.

E. FENCE GROUNDING STANDARD MATERIAL AND INSTALLATION

NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	GENERAL SUBSTATION GROUNDING REQUIREMENTS	DATE: 11/13/96 Page 1 of 2 C60-1110
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IN STOCK ITEM	#2 BARE CU WIRE	28011200030
NOT STOCK ITEM	SPLIT BOLT CONNECTOR	N/A
NOT STOCK ITEM	TOP RAIL CONNECTOR	N/A
NOT STOCK ITEM	PERIMETER GATE CONNECTOR	N/A
NOT STOCK ITEM	GATE POST CONNECTOR	N/A
NOT STOCK ITEM	COPPER BRAID	N/A
NOT STOCK ITEM	LINE POST CONNECTOR	N/A
NOT STOCK ITEM	EXOTHERMAL WELD	N/A



NOTE: GROUND LINE POSTS EVERY 30 FEET. CORNER POSTS ARE NOT GROUNDED. ALL GROUND CONNECTORS SHALL BE CONSTRUCTED TO ACCOMMODATE THE CU GROUND WIRE AND THE ALUMINIZED FENCE FABRIC. ALL CONNECTORS TO BE TIN PLATED.

GATE AND GATE POST

LINE POST

FENCE GROUNDING
NO SCALE

NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	GENERAL SUBSTATION GROUNDING REQUIREMENTS	DATE: 11/13/96 Page 2 of 2 C60-1110
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PROJECT TITLE					ROUTE 59 ROAD IMPROVEMENTS									
PROJECT DESCRIPTION										DETAILS AND STANDARDS				
ENGINEER	BCC	DRAFTING DATE	5-11-12	MAP #	4211,4212,4223	SCALE	N.T.S.							
GIS DESIGN BY	DL	DRAFTED BY	PSM	REVISIONS DATE	N/A	AT&T JOINT AGREEMENT #	PROJECT #			EU-12				
CHECKED BY		APPROVED BY		CAD FILE	0060648001D154.DWG	SHEET #	54 OF 63							
Naperville					Department of Public Utilities Electric Division					WORK REQUEST # 60468				