

## Inspector Quantlist Report 20190416

Diary Number: \_\_\_\_\_ Inspector Name: \_\_\_\_\_

TRACS Number: \_\_\_\_\_ Date: \_\_\_\_\_

### Division VII: Traffic Control Facilities

### Title: **Electrical Grounding**

Route Name:
Reference Number:
Station:
Offset:
Sheet Number:

Attribute Numbers	Compliance	Narratives	References
0.		The contractor has submitted six copies (or submitted electronic format/docuSign) of a complete project material submittal for approval at the preconstruction conference.	Standard Specifications 106.05 Standard Specifications 730-4 Standard Specifications 732-2.01
1.		All materials match the approved submittals and contract documents.	Standard Specifications 732-2.01
2.		The ground was tested with the resistant tester to figure the grounding rod requirements.	Standard Specifications 734-3.03 (C) NEC 1987.250-89-3
3.		A minimum 5/8 inch x 10 foot approved copper plated rod (copper weld type or approved equal) has been installed a minimum 9 feet into the ground for each metallic enclosures (the ground rod may be located in a pull box).	NEC 2008: Article 250.52 Standard Specifications 732-3.03
4.		The resistance to ground measured equals 25 ohms or less and documented in Inspector daily diary.	NEC 2008: Article 250 Standard Specifications 732-3.03 Traffic Signals and Lighting Standard Drawing 3-1, Note 16
5.		The service equipment neutral and the system grounding bond have been connected to the ground rod with a copper-plated bolt or a brass bolt on the ground clamp or as approved.	NEC 2008: Article 200 and 250 Standard Specifications 732-3.03
6.		Pole foundations have 25 feet of number 4 AWG bare copper conductor coiled and placed at the bottom of the excavation before the concrete is poured.	Standard Specifications 732-3.03

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7.		The conductor is connected to the pole grounding screw in the hand hole with an approved lug connector.	NEC 2008: Article 200 and 250 Standard Specifications 732-3.03
8.		The ground resistance test is performed for each installed ground rod prior to final connection of the utility service.	Standard Specifications 732-3.03
9.		All grounding rods and foundation grounds to be tested is installed a minimum of 10 days prior to ground resistance test.	NEC 2008: Article 250 Standard Specifications 732-3.03
10.		Ground resistance test is performed when the ground to the metallic enclosures (cabinets, pedestals, poles, conduit and cable sheaths) are disconnected.	NEC 2008: Article 200 and 250 Standard Specifications 732-3.03
11.		The ground resistance test is performed while the soil is dry, according to the manufacturer's instructions and OSHA requirements, and in the presence of the Engineer and test results shall be written down, dated, and given to the Engineer for approval.	NEC 2008: Article 250 Standard Specifications 732-3.03
12.		Two auxiliary copper clad test rods are driven into the ground for the ground resistance test a minimum of 36 inches at the two locations.	NEC 2008: Article 250 Standard Specifications 732-3.03
13.		If additional ground rods are needed for the ground resistance test, they are spaced at least 15 feet, as approved by the Engineer, from the original ground and bonded to it.	NEC 2008: Article 250 Standard Specifications 732-3.03
14.		All metallic enclosures [cabinets, pedestals, poles, conduit, and cable sheaths] are bonded to form a continuous grounded system.	NEC 2008: Article 250 Standard Specifications 732-3.03
15.		All changes are documented by the inspector and noted in the as-built plans.	Construction Bulletin 09-04 Construction Manual 105.11 Standard Specifications 732-3.01
16.		Quantlist Minimum Frequency is being followed as one per week.	Construction Bulletin 07-01