

Inspector Quantlist Report 20190423

Diary Number: _____ Inspector Name: _____

TRACS Number: _____ Date: _____

Division VII: Traffic Control Facilities
Title: Electrical Conductors

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

Attribute Numbers	Compliance	Narratives	References
0.		All stakeholders have participated in the pre-activity meeting (can be combined with other pre-activity).	Construction Manual 108.04
1.		Certificates of compliance with all required information are submitted for the conductors prior to being used on the project.	Standard Specifications 106.05 Standard Specifications 730-4 Standard Specifications 732-2.01
2.		The sampling for testing procedures was followed and conforms to Underwriters' Laboratories, Inc. (UL) Standards.	Standard Specifications 732-2.02
3.		The contractor has cleaned with a mandrel and blown out with compressed air all existing conduits, all conduits embedded in concrete structures and all new conduits prior to installing cable.	Standard Specifications 732-3.01
4.		All single conductors, except loop lead-ins, have permanent markings on the outer surface of the entire length showing all required information (manufacturer's name or trademark, conductor size, voltage rating, etc.).	Standard Specifications 732-2.01
5.		The wire is solid for Number 10 American Wire Gauge (AWG) and smaller.	Standard Specifications 732-2.01
6.		Wire and cable for traffic signals, highway lighting and other electrical systems are UL listed and rated for 600-volt operation.	Standard Specifications 732-2.01
7.		A UL label is on each reel, coil, and container of wire or cable (documented in the daily diary).	Construction Manual 105.11 Standard Specifications 732-2.01

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8.		All underground ballast primary leads are protected with fused in-line connectors.	Standard Specifications 732-3.02 (A)
9.		In-line connectors are watertight, non-locking and rated for 600 volt AC.	Standard Specifications 732-3.02 (A)
10.		The conductors are stranded for number 8 AWG and larger.	Standard Specifications 732-2.01
11.		Conductors are pulled into runs in a smooth continuous manner, avoiding contact with sharp surfaces, as to protect conductors at all times.	Standard Specifications 730-3 Standard Specifications 732-3.02 (A)
12.		There is a minimum of 36 inches of slack from the conduit bell end in the pull box.	Standard Specifications 732-3.02 (A)
13.		The conductor ends are taped to provide moisture protection before pulling into conduit.	Standard Specifications 732-3.02 (A)
14.		Submittal approved lubricants are used in all conduits.	Standard Specifications 732-3.02 (A)
15.		The total number of conductors, detectable pull tape and grounding conductors that are designated per the plans for a specific run are pulled into the conduit at the same time.	Standard Specifications 108.07
16.		For conduit that is designated as "future use", the number 8 or number 10 AWG bare bond wire is installed with at least 2 feet of pull wire doubled back into the conduit, with the conduit properly capped.	Standard Specifications 732-3.01
17.		All wire is marked and tagged as approved by the Engineer.	Standard Specifications 732-2.01 Standard Specifications 732-3.02 (C)
18.		All conductors for traffic signal and highway lighting systems conform to the requirements as shown on the Conductor Table in the Standard Specifications or Special Provisions.	Standard Specifications 732-2.01
19.		Five conductor AWS number 14 International Municipal Signal Association (IMSA) Cables (marked 19-1) are used for ramp metering signals.	Standard Specifications 732-2.01 (B)(3)
20.		The Contractor only spliced conductors in pull boxes, terminal compartments, pedestals, or cabinets.	Standard Specifications 732-3.02 (B)
21.		A metal-disc mandrel with a diameter of 90% of the conduit I.D. (80% HDPE) to insure integrity of conduit system from pull point to pull point.	Manufacture Requirements
22.		The 2-4-2 insulation installation plan on power conductor splices is being applied in accordance with the specifications (2 layers of electrical rubber tape, 4 layers of plastic electrical tape, and 2 layers of friction tape) for voltage that does not exceed 600 volts AC.	Standard Specifications 732-3.02 (B)
23.		Three coats of liquid waterproof splicing compound are applied to the crimped splice for voltage that does not exceed 600 volts AC.	Standard Specifications 732-3.02 (B)
24.		All the bell ends are installed on the ends of the	Standard Specifications

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		conduit before the contractor pulls the conductors or fiber optic cable.	732-3.01
25.		All conductors are tagged to identify their circuit number or function, with wire marking tags that correlate with the project plans, tables or listings.	Standard Specifications 732-3.02 (C)
26.		All Conductor and or cable changes have been documented by the Contractor and or inspector and are to be included in the Contractor's as-built plan set.	Construction Bulletin 09-04 Standard Specifications 732-3.01
27.		All changes in location and size of conductor or cable are approved by the Engineer.	Standard Specifications 732-3.01
28.		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
29.		Splices for high-voltage series lighting conductors will be made from an approved splice kit. The splices will consist of either molded rubber plug-in connectors or epoxy resin mold type splice insulating kits and will be rated at five kilovolts.	Standard Specifications 732-3.02(B)
30.		Quantlist Minimum Frequency is being followed with a minimum of one per week.	Construction Bulletin 07-01