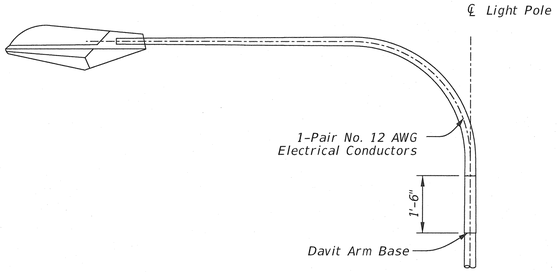
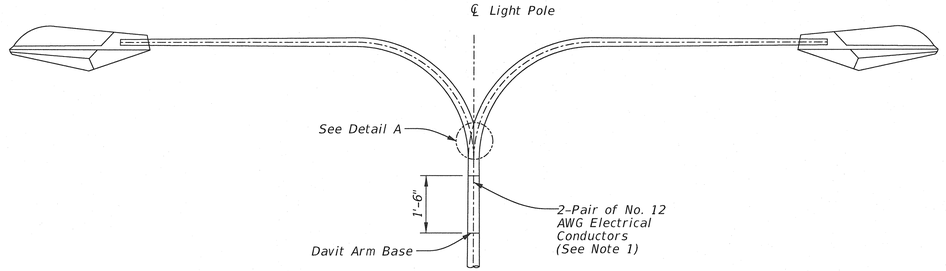
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$

SCALE: $SCALESHORT$$
USER: $USER$$

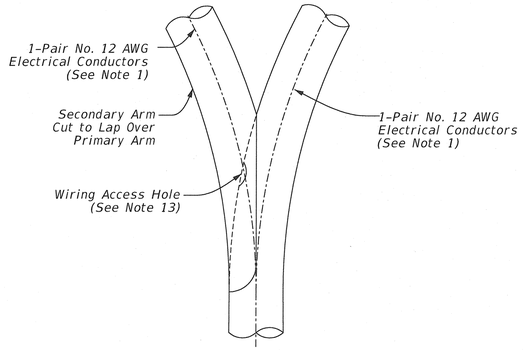
FILE: $$$$$$$$$$$$$DGNSPEC$$$$$$$$$$$$
DATE: $DATE$ TIME: $TIME$



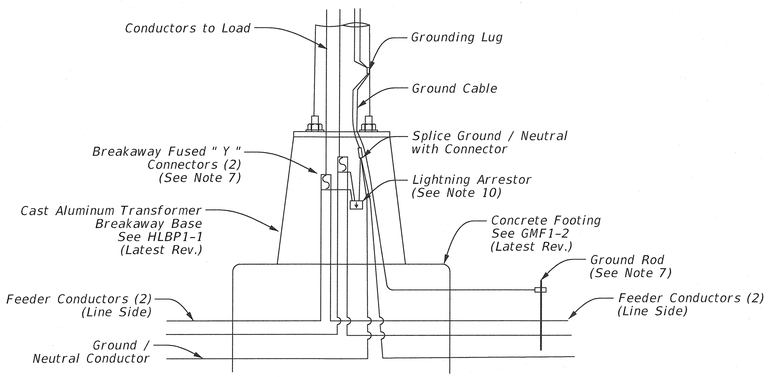
Typical Wiring For Single Luminaire Poles



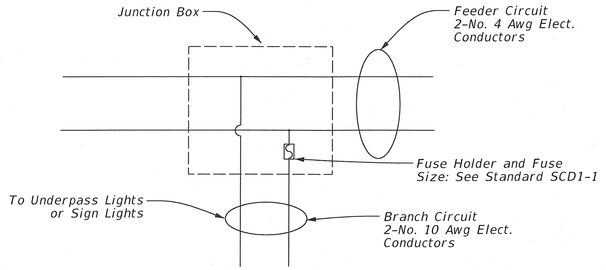
Typical Wiring For Twin Luminaire Poles



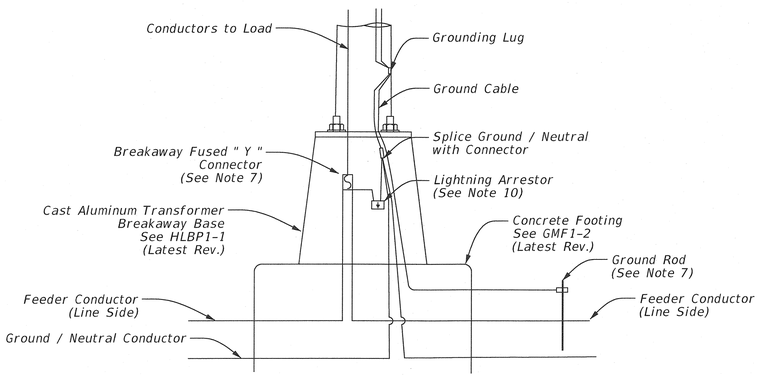
Detail A



Typical 240 V, Three Wire, Grounded Neutral Detail



Typical Wiring Diagram to Underpass Or
Bridge Mounted Overhead Sign Lights



Typical 480 V, Two Wire, Grounded Neutral Detail

General Notes:

1. Conductor shall be in accordance with Section 811, "Electrical Conductors Highway Lighting," of the 2009 Standard Specifications, and all connections and splices shall be in accordance with Standard SCD1-1 (Latest Revision).
2. The branch circuit conductors shall be solid or stranded copper No. 10 or No. 12 AWG Type THW or THWN 75 degrees Celsius, 600 volt unless otherwise specified. An alternate type insulation may be used if approved by the Engineer prior to installation.
3. The feeder circuit conductors shall be stranded copper No. 4 AWG Type XHHW 75 degrees Celsius, 600 volt unless otherwise specified in the plans. An alternate type insulation may be used if approved by the Engineer prior to installation.
4. The lightning arrestor shall be UL 96 and UL 467 compliant and installed in accordance with NFPA 780 and UL 96A requirements. Lightning arrestor shall be single pole for 480 volt circuits or two pole for 240 volt circuits, rated 600 or 650 volts, with a 3/4" NPT pipe nipple, locknut, bushing washer and 18" long copper leads. The lightning arrestor device shall use metal oxide varistors (MOV). An alternate arrestor device may be used if approved by the Engineer prior to installation.
5. If twin luminaires are specified, one pair of conductors shall be installed for each luminaire, starting from the base of the pole and extending to the luminaire.
6. Provide sufficient slack (approx. 3'-0" above the footing) in all cables to permit pulling the splice kits outside of pole through the handhole of a shoe base pole or the door of a transformer base pole.
7. Fuses installed in light pole bases shall be rated at 15 Amps and placed in a breakaway type fuse holder. For more information regarding splice connectors and grounding requirements refer to Standard SCD1-1 and GMF1-2 (Latest Revision) and the NEC.
8. Conductors, ground rods, etc... shall be of the same size and type as specified in the plans. All similar electrical system components supplied for the project shown in the plans shall be of the same type and manufacturer.
9. All costs related to splices, connectors, fuses, ground rods, etc... shall be subsidiary to other items of work.
10. Lightning arrestors shall be installed as follows :
    (A) At first pole nearest the point of service for each circuit.
    (B) At each pole on the end of a circuit.
    (C) Between (A) and (B) at intervals not to exceed 1,000 feet.
    (D) Tape lightning arrestor to the insulated cable with plastic tape or heavy duty wire ties.
11. All costs of installing the lightning arrestor shall be subsidiary to other items of work.
12. The neutral conductor shall be marked for identification in accordance with the NEC and the following color code:
    (A) 3-Wire - 240V = 1-Black, 1-Red, 1-White or Gray
    (B) 2-Wire - 480V = 1-Black, 1-White or Gray.
13. Hole shall be at least 2" diameter. Deburr edges inside and out.

Approved By
Bridge Engineer: _____ Date: 3-24-16

Approved By
Traffic Engineer: _____ Date: 3/14/2016

Traffic Standard

Typical Electrical Wiring Details

2009 Specifications

TEWD1-2	00
T-321	