
ORIGINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: July 21, 2022

Originator: Richard Stepp

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Standard Plans:

Index Number: 715-001

Sheet Number (s): 1 of 3

Index Title: Conventional Lighting

Summary of the changes:

Sheet 1: Added a detail to define luminaire tilt angle for designers and contractors; Added reference to Index 715-002 and 715-003 to the Metal Pole Detail; Changed sheet title to "Wiring and Installation Details" to capture the installation details beyond wiring.

Commentary / Background:

The Turnpike Design Handbook (TDH) had previously required designers to include a project-specific plans detail to explain the luminaire "tilt". As part of the TDH migration, a detail to define tilt angle is being placed into this Index in order to meet this need without requiring a project-specific plans detail. Luminaire tilt angle is a common term for lighting designers using ANSI/IES RP-8-18 national guidance and AGI32 lighting design software, but tilt angle was previously not defined for contractors. Last, this "tilt" variable is being added to the standard Lighting Table per FDM 943.

Other Affected Offices / Documents: (Provide name of person contacted)

- | Yes | No | |
|--------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Standard Specifications – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance – |

Origination Package Includes: (Submit package to Rick Jenkins)

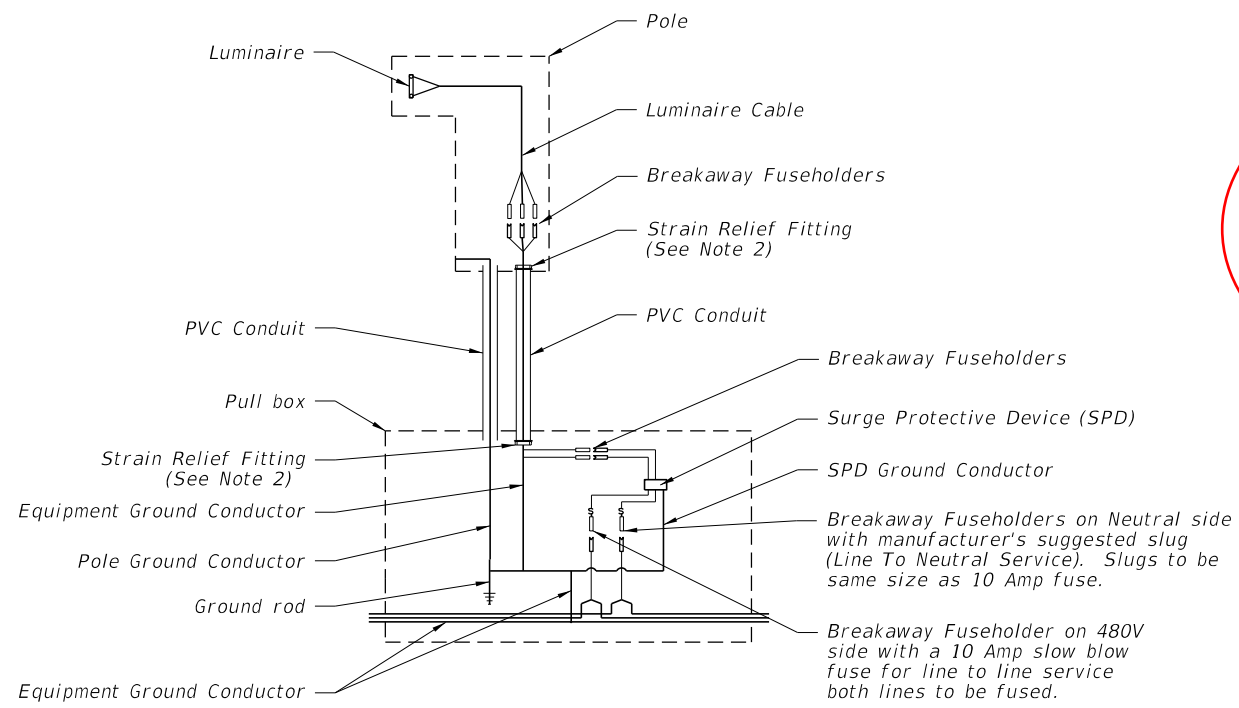
- | Yes | N/A | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Revised or Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Support Documents |

Implementation:

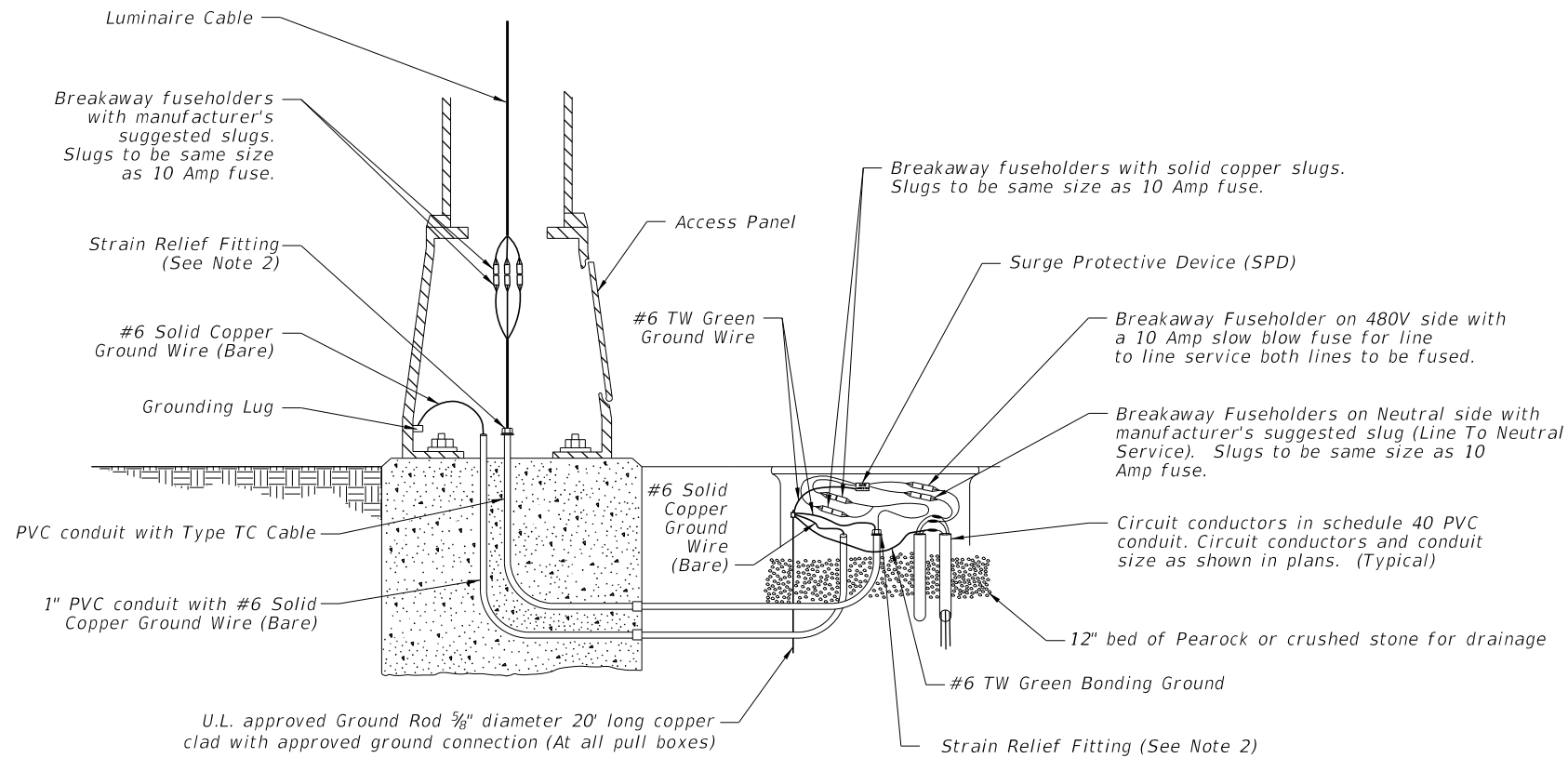
- | | |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release) |

Contact the Roadway Design Office for assistance in completing this form

Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us

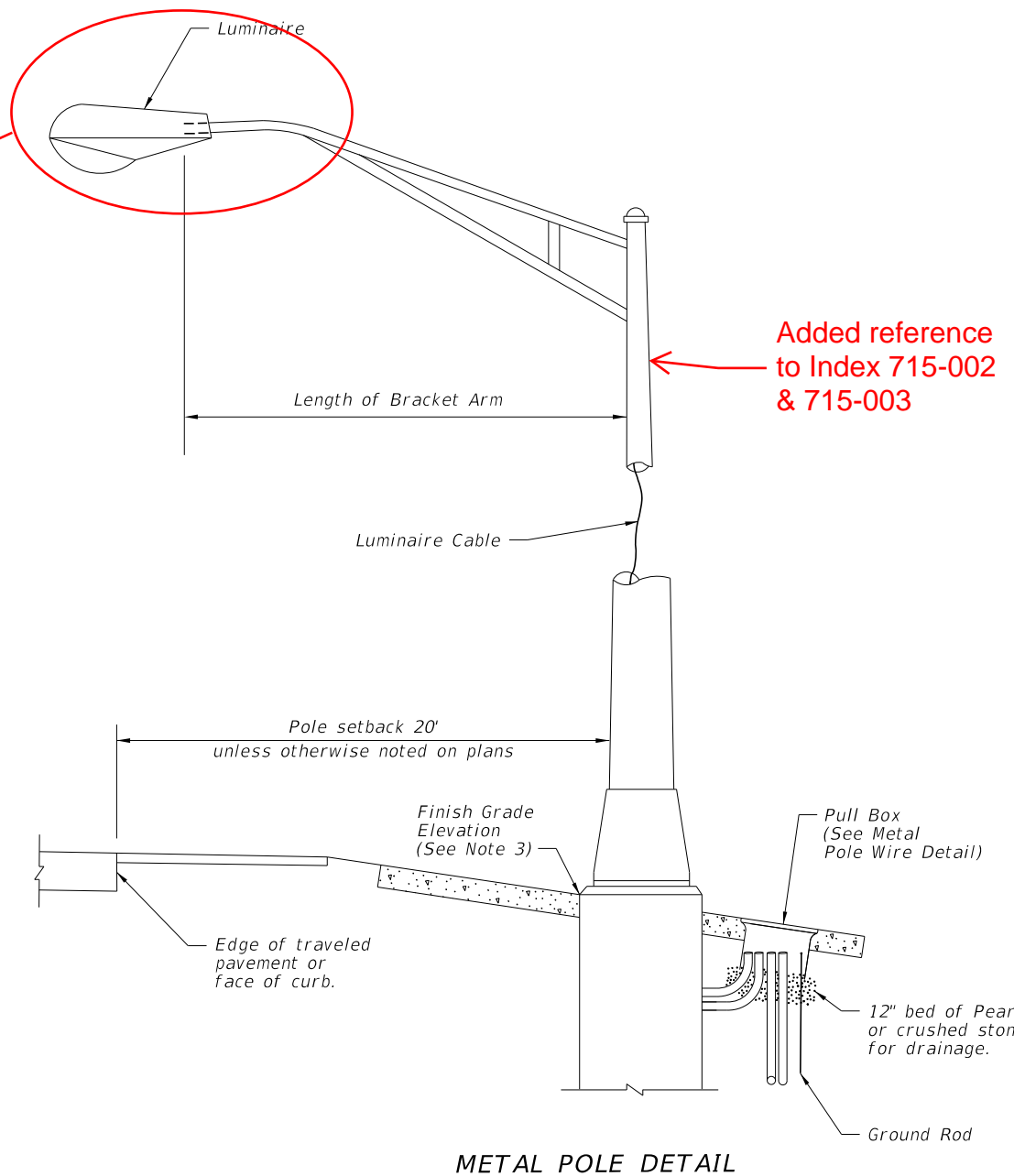


WIRING DIAGRAM



METAL POLE WIRING DETAIL

Added "Luminaire Tilt Detail"



METAL POLE DETAIL

NOTES:

1. Concrete Barrier and Bridge Mounted Poles: Place wiring system following conduit layouts and requirements of Index 715-002. Follow additional requirements of Specification 992. For wiring and devices shown inside of pull boxes on this sheet, place inside of embedded junction boxes instead. Place the vertical breakaway fuseholders inside the pole, at the handhole location.

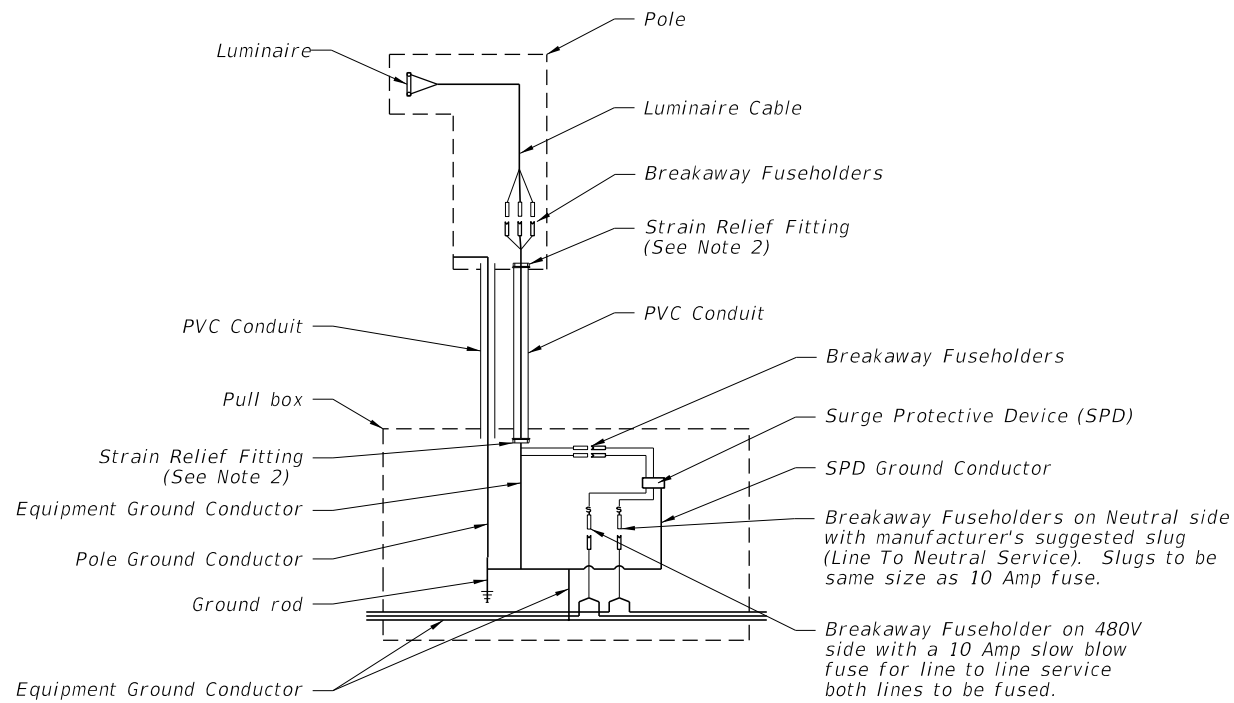
2. Provide enough cable length to allow for removal of fuseholders from the transformer base, pole base, or pullbox for maintenance. Remove slack from the luminaire cable to provide tension on the fuseholders in breakaway pole designs. Pull excess cable into pull box tighten strain relief fittings or cable clamps at both ends of conduit to prevent cable from slipping.

3. Align the top, outside edge of the concrete foundation with the finish grade elevation on the side nearest the traffic lane. Relative to the finish grade elevation, this foundation alignment has a vertical tolerance of plus 2 inches to minus 0 inches.

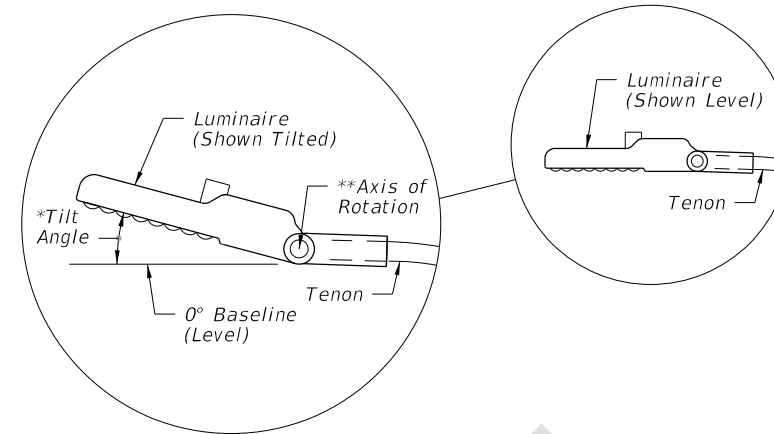
Changed to "WIRING AND INSTALLATION DETAILS"
~~WIRING DETAILS~~

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LAST REVISION 11/01/21	DESCRIPTION: 11/01/22	FDOT	FY 2022-23 2023-24	CONVENTIONAL LIGHTING	INDEX 715-001	SHEET 1 of 3
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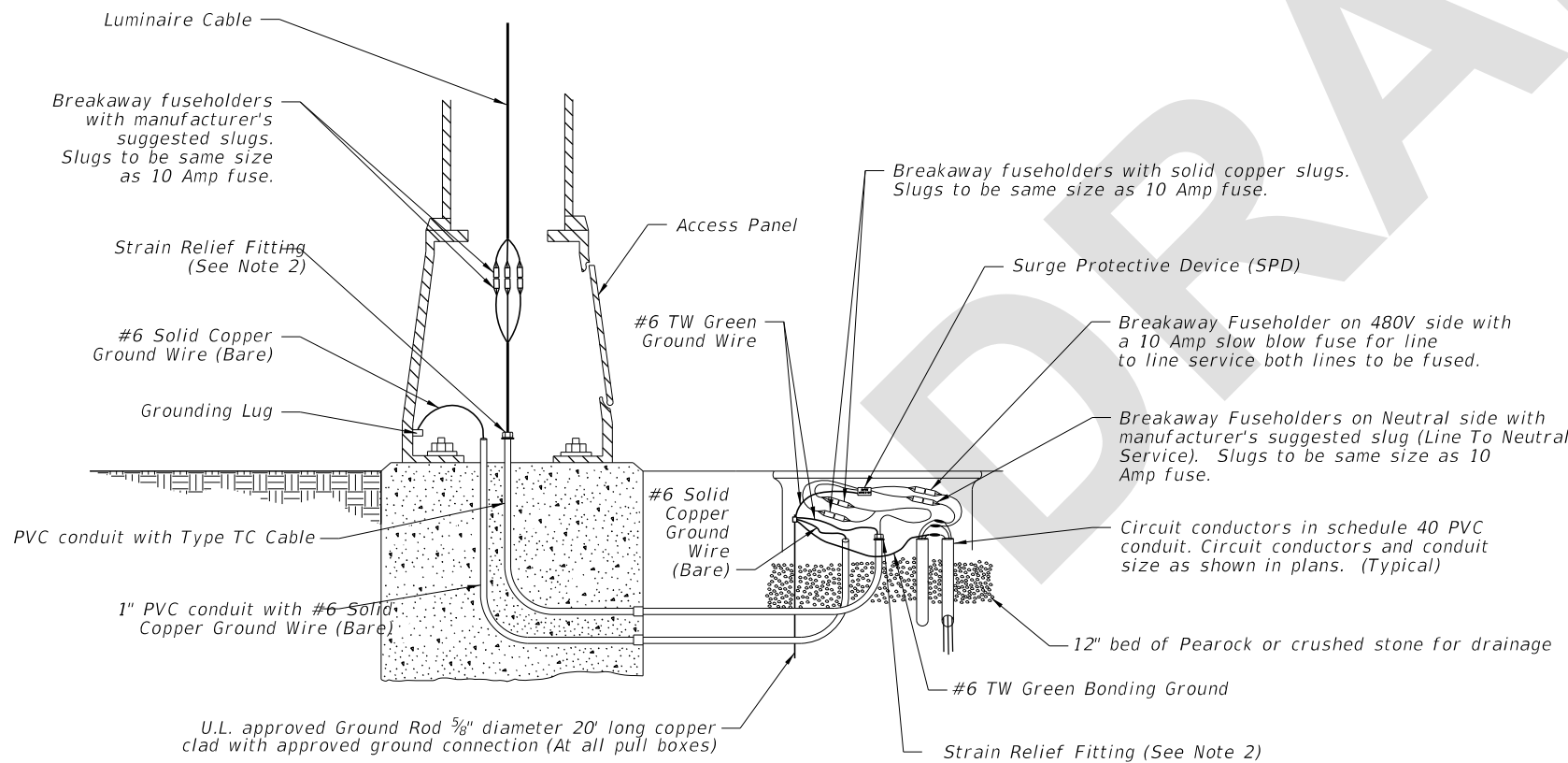


WIRING DIAGRAM

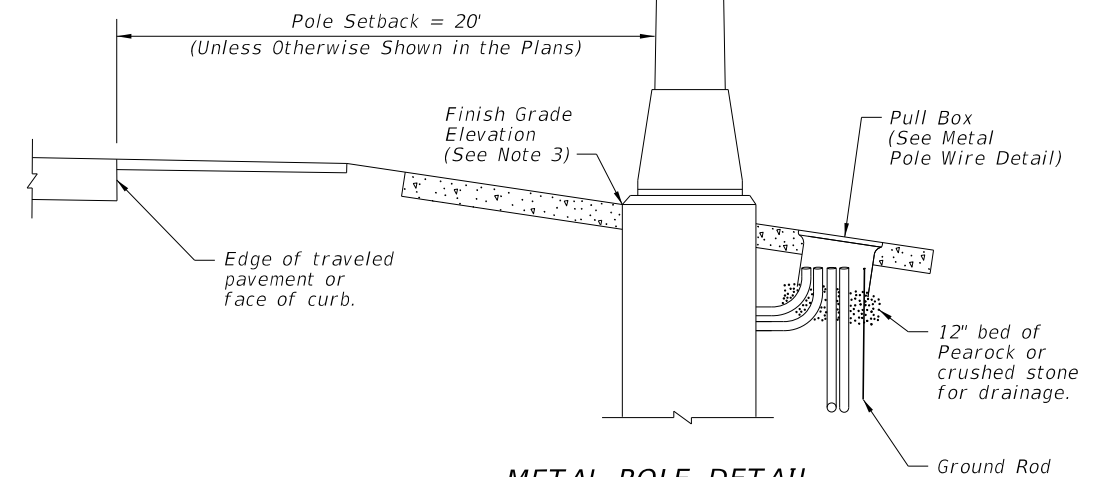


LUMINAIRE TILT DETAIL (Side View)

*Tilt angle is 0° (level) unless otherwise shown in the Plans
 **Axis of rotation is level and perpendicular to the tenon.
 The location shown is approximate and may be either a hinge or a tenon connection adjustment.



METAL POLE WIRING DETAIL



METAL POLE DETAIL

NOTES:

1. Concrete Barrier and Bridge Mounted Poles: Place wiring system following conduit layouts and requirements of Index 715-002. Follow additional requirements of Specification 992. For wiring and devices shown inside of pull boxes on this sheet, place inside of embedded junction boxes instead. Place the vertical breakaway fuseholders inside the pole, at the handhole location.
2. Provide enough cable length to allow for removal of fuseholders from the transformer base, pole base, or pullbox for maintenance. Remove slack from the luminaire cable to provide tension on the fuseholders in breakaway pole designs. Pull excess cable into pull box tighten strain relief fittings or cable clamps at both ends of conduit to prevent cable from slipping.
3. Align the top, outside edge of the concrete foundation with the finish grade elevation on the side nearest the traffic lane. Relative to the finish grade elevation, this foundation alignment has a vertical tolerance of plus 2 inches to minus 0 inches.

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LAST REVISION 11/01/22	DESCRIPTION:
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