

# FY 2025-26 Standard Plans Update Training

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# Current Standard Plans

## Standard Plans - FY 2025-26

See the [FDOT Design Manual \(FDM\), Chapter 115](#), for additional information on the use of Standard Plans within FDOT Contract Plans. Subscribe to our [FDOT Contact Management Subscription Service](#) to receive the most current notices, bulletins, memoranda, and other important information.

Skip to [Standard Plans for Bridge Construction](#)

Last Updated: 11/01/2024

| Standard Plans for Road Construction          |  |   |                        |                             |                           |
|---|--|---|------------------------|-----------------------------|---------------------------|
| Standard Plans Index                          | Interim Revision, Errata, or Developmental (Dev) | Index Title   | Design Standards Index | Standard Plans Instructions | Design Tools/ 3D Exhibits |
| <b>Support Detail</b>                         |  |   |                        |                             |                           |
| <a href="#">eBook</a>                         |  | Standard Plans for Road Construction - Complete eBook |                        |                             |                           |
| <a href="#">Cover/Certification Statement</a> |  | Cover Sheet / Certification Statement                 |                        |                             |                           |
| <a href="#">Abbrev.</a>                       |  | Abbreviations Sheet                                   |                        |                             |                           |
| <a href="#">TOC Road</a>                      |  | Table of Contents - Road Construction                 |                        |                             |                           |
| <a href="#">Revisions</a>                     |  | Revision History Log                                  |                        | <a href="#">SPI</a>         |                           |



## 102 Series – Temporary Traffic Control (TTC)

### Design Criteria

*Manual on Uniform Traffic Control Devices (MUTCD); FDOT Design Manual (FDM); AASHTO Roadside Design Guide, 4th Edition; AASHTO Manual for Assessing Safety Hardware, 2016 Edition (MASH)*

### Design Assumptions and Limitations

This **Standard Plans Instructions** cover **Standard Plans, Index 102-600 (General Information for Traffic Control Through Work Zones)** and **Indexes 102-601 through 102-628**. These indexes cover the general requirements for Temporary Traffic Control (TTC) (A.K.A, Maintenance of Traffic, MOT) and various Department specific Standard **TTC Applications** and adaptations of the **MUTCD, Part 6. Index 102-600** and **Specification 102** apply to all applications of **TTC**, regardless to whether or not any other Indexes in the **Standard Plans, 102 Series** are used.

**Indexes 102-601 through 102-628** provide rudimentary typical applications for various common work zone traffic control operations. These applications often must be used in combination or can be used to develop project specific **TTC Plans** for complex projects.

For design criteria see **Index 102-600, FDM 240 (Transportation Management Plan), FDM 241 (Lane Closure Analysis), FDM 242 (Traffic Pacing Design), and FDM 243 (Portable Changeable Message Signs)**. Additionally, meet the minimum standards of the **MUTCD**.

See the following **Standard Plans Instructions** for additional information for **TTC**:

- **Index 102-100** - Temporary Barrier
- **Index 102-655** - Traffic Pacing
- **Indexes 102-660 and 102-661** - Sidewalk and Bicycle Lane Closures
- **Index 102-665** - Temporary Openings on Limited Access Roadways
- **Index 102-680** - Haul Road Crossing.

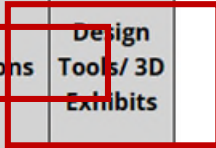
### Plan Content Requirements

See **FDM 922**.

### Payment

See the **BOE** and **Specifications 102** for information on payment, pay item use, and compensation.

|                             |                           |
|-----------------------------|---------------------------|
|                             |                           |
| Standard Plans Instructions | Design Tools/ 3D Exhibits |
|                             |                           |
|                             |                           |
|                             |                           |
|                             |                           |
| <a href="#">SPI</a>         |                           |
|                             |                           |
| <a href="#">SPI</a>         |                           |
| <a href="#">SPI</a>         |                           |
|                             |                           |
|                             |                           |
| <a href="#">SPI</a>         | <a href="#">XLS</a>       |
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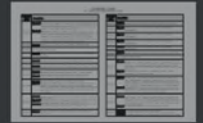


# Revision Log

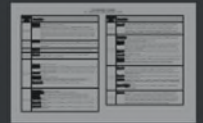
## STANDARD PLANS FY 2025-26 REVISIONS LOG



1



2



3

| Standard Plans Index | Description  |
|----------------------|--|
| 102-201              | <b>Sheet 2:</b> Added Paved Surface to Thrie Beam to Bridge Guardrail Transition detail and updated dimensions to accommodate; Added additional callouts to Guardrail End Transition detail; Lengthened the plate size in the 1/4" Guardrail Back Plate Detail, clarified the dimensions and added notes.                            |
| 102-600              | <b>Sheet 3:</b> Updated HIGH-VISIBILITY SAFETY APPAREL note to refer to "ANSI/ISEA 107-2015".<br><b>Sheet 4:</b> Updated flag color in the Hand-Signaling Devices note to "red or fluorescent orange-red in color".<br><b>Sheet 6:</b> Changed the color code of sign W3-5 from "B/O" to "BW/O". Changed W16-1P sign to match MUTCD. |
| 102-615              | <b>Sheet 4:</b> Added new sign option (W9-3) under "Center Lane Closed Ahead" sign and renumbered "Center Lane Closed Ahead" sign to MOT-7-25.   |
| 102-661              | <b>Sheet 1:</b> Updated sign names based on new MUTCD 11th edition<br><b>Sheet 2:</b> Updated sign names based on new MUTCD 11th edition; Updated signs W16-1P detail. Updated "Bikes Merge" sign; Updated the PCMS Display notes.   |
| 400-011              | <b>Sheet 1:</b> Updated Bill of Reinforcing Bar B to extend hook leg. Added note to KEYWAY & WALL JOINT DETAIL to skew bars as required to maintain cover.   |
| 400-289              | <b>Sheet 3:</b> Updated reinforcing in the PARTIAL PLAN TOP SLAB of SINGLE BARREL BOX CULVERT so it does not appear to extend into the footer below.<br><b>Sheet 5:</b> Added some clarity to Note 2 and DETAIL "C" about the proper work point location (WP).   |
| 415-001              | <b>Sheet 1:</b> Updated Type 14 and 15 to remove radii.  |
| 415-010              | <b>Sheet 1:</b> Updated Type 14 and 15 to remove radii.  |
| 455-101              | <b>Sheet 1:</b> Added a note to General Note 4 indicating that all the strand diameters are nominal.   |

| Standard Plans Index | Description  |
|----------------------|--|
| 455-118              | <b>Sheet 2:</b> Adjusted Strand Pattern diameter decimal places.   |
| 455-124              | <b>Sheet 2:</b> Adjusted Strand Pattern diameter decimal places.   |
| 455-130              | <b>Sheet 2:</b> Adjusted Strand Pattern diameter decimal places.   |
| 460-470              | <b>Sheet 1:</b> Added screw anchor details to the notes.<br><b>Sheet 3:</b> Added screw anchor option details to SECTION B-B.  |
| 460-472              | <b>Sheets 1-4:</b> Added Note to detail descriptions indicating that what is shown is an option using adhesive anchors and a screw anchor is an alternative.   |
| 460-473              | <b>Sheet 2:</b> Added a note to SECTION B-B caption that what is shown is the Adhesive anchor option and screw anchor are also an option.<br><b>Sheet 4:</b> Added a note to Plan title in Schemes 5 and 6 caption that what is shown is the Adhesive anchor option and screw anchor are also an option. Adjusted the column location to correct for missing blocks. |
| 460-474              | <b>Sheets 1-4:</b> Added a note to the details captioning that what is shown is the Adhesive anchor option.  |
| 460-475              | <b>Sheets 1-4:</b> Added a note to the details captioning what is shown is the Adhesive anchor option.   |
| 471-030              | <b>Sheet 1:</b> Updated the FENDER SYSTEM ENERGY CAPACITY for 30 ft-kip to a Maximum of 50 ft-kip.   |
|                      | <b>Sheet 2:</b> In the Elevation view, added "Begin/End Median Barrier Sta." callout at the Traffic Railing connection<br><b>Sheet 11:</b> Changed Bar 5C2 to Bar 4C2  |



# Standard Plans Cover Sheet

**OLD**

**NEW**





**FY 2024-25 STANDARD PLANS  
FOR ROAD CONSTRUCTION**


*Effective for Projects with Lettings in the Fiscal Year (FY) from  
July 1, 2024 through June 30, 2025*

State of Florida Department of Transportation  
Office of Design  
Mail Station 32  
605 Suwannee Street  
Tallahassee, Florida 32399-0450

FY 2024-25 Standard Plans for  
Road and Bridge Construction  
Topic No. 625-010-003

FDOT Roadway Design Office  
Topic No: 625-010-003



**2025-26 STANDARD PLANS  
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| Publications                                | Support                  | Interim Revisions       | Implementation Bulletin  | Effective Date |
|---|--------------------------|-------------------------|--------------------------|----------------|
| <a href="#">Standard Plans - FY 2025-26</a> | <a href="#">CADD/CEL</a> | <a href="#">Interim</a> | <a href="#">RDB24-05</a> | 07/01/2025     |
| <a href="#">Standard Plans - FY 2024-25</a> | <a href="#">CADD/CEL</a> | <a href="#">Interim</a> | <a href="#">RDB23-04</a> | 07/01/2024     |
| <a href="#">Standard Plans - FY 2023-24</a> | <a href="#">CADD/CEL</a> | <a href="#">Interim</a> | <a href="#">RDB22-06</a> | 07/01/2023     |
| <a href="#">Standard Plans - FY 2022-23</a> | <a href="#">CADD/CEL</a> | <a href="#">Interim</a> | <a href="#">RDB21-11</a> | 07/01/2022     |

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### Roadway Lighting

[Coming Soon](#)



### Roadside Barriers

[Coming Soon](#)

## Track the Status of Revisions FY 2025-26

**Review Package** = Origination Form, Red Lines, and Draft Implementation.

**Response Package** = Comments, Responses to Comments, and Draft Implementation (as needed).

**N/C** = No Comments were received during review.

**Pending** = Awaiting FHWA Approval.

| Review Package          | Index Title  | Internal Comments Response | Industry Comments Response | FHWA Approval            |
|-------------------------|--|----------------------------|----------------------------|--------------------------|
| <a href="#">455-101</a> | Square CFRP & SS Prestressed Concrete Pile-Typical Details and Notes | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">455-112</a> | 12" Square CFRP & SS Prestressed Concrete Pile                       | N/C                        | <a href="#">Response</a>   | <a href="#">Approved</a> |
| <a href="#">455-114</a> | 14" Square CFRP & SS Prestressed Concrete Pile                       | N/C                        | <a href="#">Response</a>   | <a href="#">Approved</a> |
| <a href="#">455-118</a> | 18" Square CFRP & SS Prestressed Concrete Pile                       | N/C                        | <a href="#">Response</a>   | <a href="#">Approved</a> |
| <a href="#">455-124</a> | 24" Square CFRP & SS Prestressed Concrete Pile                       | N/C                        | <a href="#">Response</a>   | <a href="#">Approved</a> |
| <a href="#">455-130</a> | 30" Square CFRP & SS Prestressed Concrete Pile                       | N/C                        | <a href="#">Response</a>   | <a href="#">Approved</a> |
| <a href="#">711-001</a> | Pavement Markings  | <a href="#">Response</a>   | <a href="#">Response</a>   | <a href="#">Approved</a> |
|                         |  |                            |                            |                          |
| <a href="#">102-201</a> | Temporary Acrow 300 Series Detour Bridge General Notes and Details   | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">102-615</a> | Multilane Roadway, Intersection Work                                 | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">521-001</a> | Concrete Barrier   | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">521-005</a> | Concrete Barrier at Toll Sites                                       | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">521-650</a> | Light Pole Pedestal - Wall Coping                                    | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">536-002</a> | Guardrail Transitions and Connections for Existing Bridges           | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">635-005</a> | Fiber Optic Splice Vault   | <a href="#">Response</a>   | <a href="#">Response</a>   | <a href="#">Approved</a> |
| <a href="#">695-001</a> | Traffic Monitoring Site  | N/C                        | N/C                        | <a href="#">Approved</a> |
| <a href="#">700-010</a> | Single Column Ground Signs   | <a href="#">Response</a>   | N/C                        | <a href="#">Approved</a> |
| <a href="#">700-102</a> | Special Sign Details   | <a href="#">Response</a>   | <a href="#">Response</a>   | <a href="#">Approved</a> |

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If you require additional information, click on the presenter's name to contact them directly by email. Thank you for your time and allowing us to serve your training needs.

*Last Update: 02/07/2024*

|   |  |   |
|---|--|---|
| <a href="#">FDOT Design Manual</a><br>EDM                                     | <a href="#">Standard Plans</a><br>for Road and Bridge Construction                           |   |
| <a href="#">Alternative Intersections</a><br>Roundabouts & Diverging Diamonds | <a href="#">Audible and Vibratory Treatments</a><br>Rumble Strips and Profiled Thermoplastic | <a href="#">Guardrail</a><br>How It Works!            |
| <a href="#">Lighting</a><br>Roadway Lighting Color Temperature by Context     | <a href="#">MASH Roadside Barriers</a><br>Design Lessons Learned                             | <a href="#">Temporary Traffic Controls</a><br>Updates |
| <a href="#">January 2017 Entries</a><br>and Prior                             |  |   |

## Standard Plans Update

| <u>Description</u>   | <u>PDF</u>          | <u>Video</u>            | <u>Presenter/Contact</u>   |
|--|---------------------|-------------------------|--|
| <p><b>Standard Plans Update for FY 2024-25 (Full Version)</b><br/>           Overview of the major changes for the <i>FY 2024-25 Standard Plans</i> for Road and Bridge Construction</p> | <a href="#">PDF</a> | <a href="#">YouTube</a> | <a href="#">Rick Jenkins</a><br><a href="#">Richard Stepp</a><br><a href="#">Joshua Turley</a><br><a href="#">Victor Johnson</a><br><a href="#">Shae Gibbs</a> |

FY 2023-24

Expand ▼

FY 2022-23

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FY 2021-22

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FY 2020-21

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FY 2019-20

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FY 2018-19

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FY 2017-18

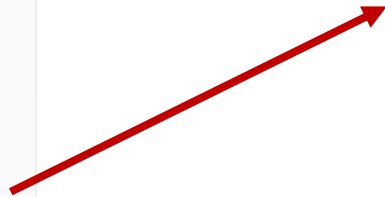

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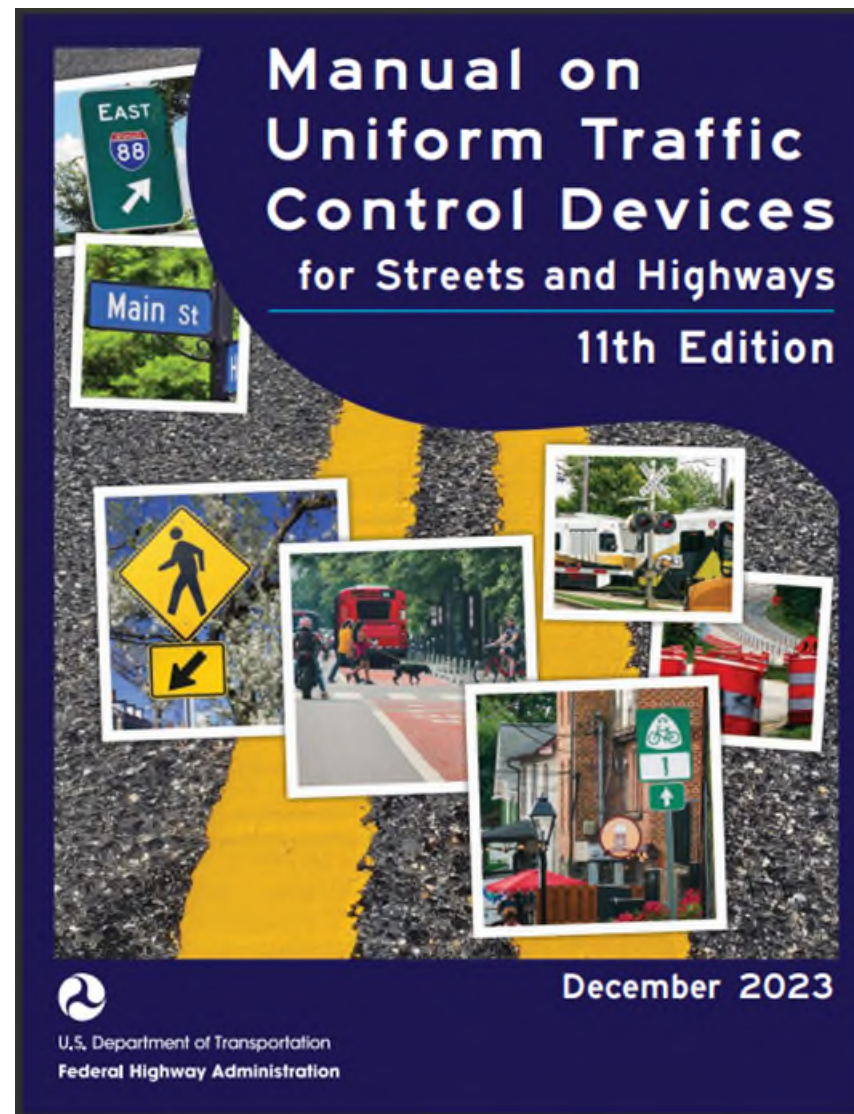


# FY 2025-26 Standard Plans Update Training

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*NEW MUTCD 11<sup>th</sup> edition!!*



## Standard Plans – Primary Updates:

- 1) ***Index 102-600 General Information for Traffic Control Through Work Zones***
  - *Sheet 6: Changed W16-1P sign to match MUTCD.*
- 2) ***Index 102-615 – Multilane Roadway, Intersection Work***
  - *Sheet 4: Added new sign option (W9-3) under "Center Lane Closed Ahead" sign*
- 3) ***Index 102-661 – Bicycle Facility Closures***
  - *Sheet 1: Updated sign names based on new MUTCD 11th edition*
  - *Sheet 2: Updated sign names based on new MUTCD 11th edition. Updated signs W16-1P detail. Updated "Bikes Merge" sign. Updated Note 2 to reflect new sign name. Updated PCMS messages for consistency.*

## Standard Plans – Primary Updates:

### **1) Index 700-102 Special Sign Details**

- *Sheet 6: Added FTP-45-25*
- *Sheet 8: Updated the width of FTP-73-06 to 6'-6"; Updated FTP-68A-06 and FTP-68B-06 symbology, spacing, and MUTCD reference*
- *Sheet 9: Updated the width of FTP-74-06, FTP-75-06, and FTP 76-06 to 6'-6"*
- *Sheet 10: Added FTP-100-25*
- *Sheet 12: Deleted MOT-20-21, MOT-22-21, MOT-24-21, MOT-25-21, MOT-26A-22, and MOT-26B-22; Added MOT-27-25*

### **2) Index 700-120 Enhanced Highway Signing Assemblies**

- *Sheet 7: Deleted Sheet per 11th Edition MUTCD, Section 2A.12.*
- *Sheet 8: Deleted Sheet per 11th Edition MUTCD, Section 2A.12.*
- *Sheet 10: Added LEDs in the middle of each sign edge, for a total of 8 LEDs.*
- *Sheet 13: Added LEDs in the middle of each sign edge, for a total of 8 LEDs.*
- *Sheet 14: Added LEDs in the middle of each sign edge, for a total of 16 LEDs*



## Standard Plans – Primary Updates:

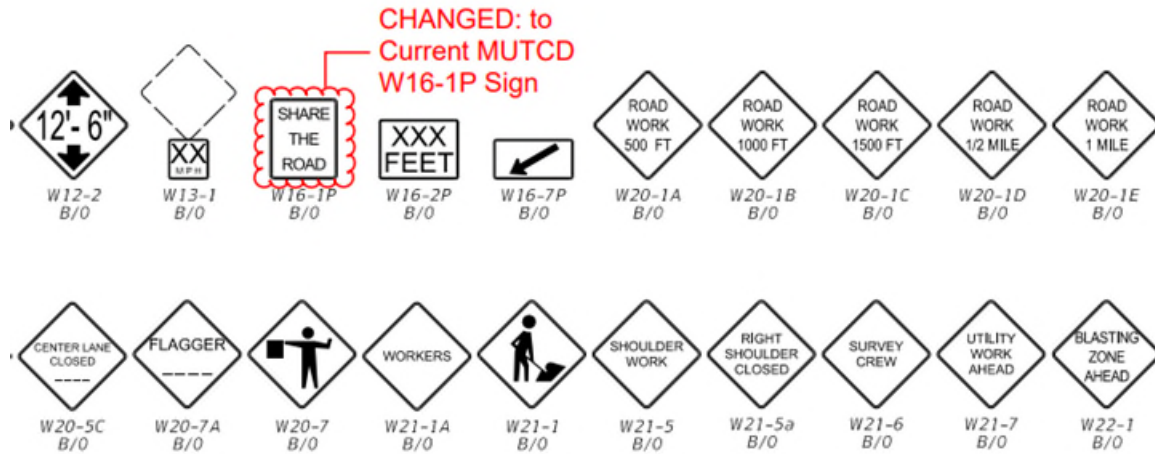
### **1) Index 700-010 Single Column Ground Signs**

- *Sheet 7: Updated the flip sign to allow for multiple sign panels; Removed the diamond sign panel; Updated Note 1 to "Install sign with the ESU sign panel in the undeployed (up) position."; Added Note 5 "Multi sign panel assembly only use one of the following approved signs, actual sign may need to be scaled: FTP 43-06, FTP 47-06, and FTP 66-21."; Added ESU to sheet title*

### **2) Index 711-001 Pavement Markings**

- *Sheet 4: Updated Buffered Express Lane Striping Detail to replace "Express" with "Managed" in title and callouts; Deleted "Buffered" in detail title and callout; Replaced "Buffer" with "Separation" in callout; Deleted extraneous lines from the detail; Updated Note 3 to replace "Express Lane" with "Tubular"*

# Sheet 2: MUTCD Update



- Changed W16-1P sign to match MUTCD.

ffic Control (TTC) warning signs

nge colored work zone signs.

ained on this sheet are provided he development of the 102 Series velopment of traffic control plans. ion refer to the STANDARD MUTCD. Special signs for traffic te Traffic Plans Engineer.

the purpose of identifying cell ary (TCZ.Cel).

ld be referenced for the official ffic control plans.

**COLOR CODES:**

Legend and/or Symbol Background

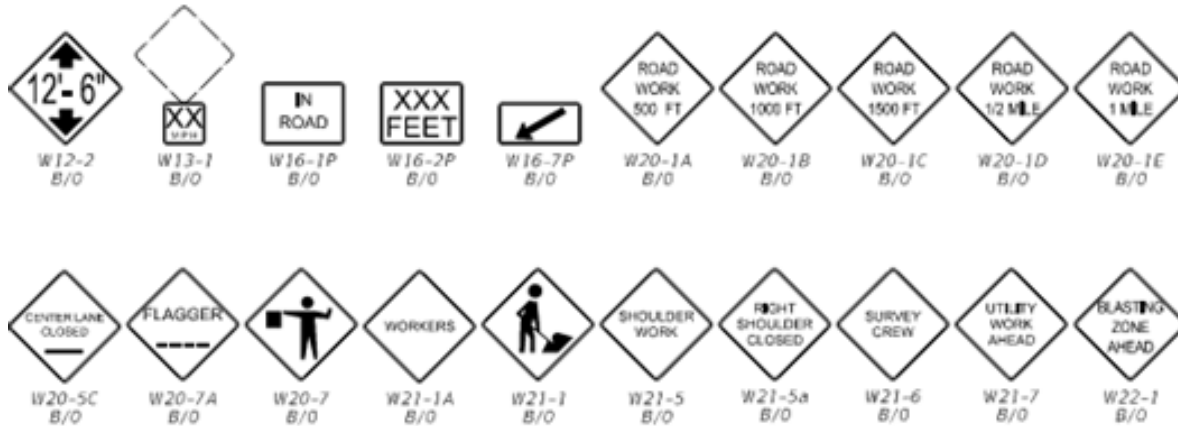
- R-Red (Reflectorized)
- Y-Yellow (Reflectorized)
- G-Green (Reflectorized)
- O-Orange (Reflectorized)
- B-Black (Non-Reflectorized)
- W-White (Reflectorized)

**COMMONLY USED WARNING AND REGULATORY SIGNS IN WORK ZONES**

GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES

| INDEX   | SHEET   |
|---------|---------|
| 102-600 | 6 of 11 |

# Sheet 2: MUTCD Update



ic Control (TTC) warning signs

ge colored work zone signs.

signed on this sheet are provided  
 the development of the 102 Series  
 elopment of traffic control plans.  
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 \*fic control plans.

**COLOR CODES:**

Legend and/or  
 Symbol Background

- R-Red (Reflectorized)
- Y-Yellow (Reflectorized)
- G-Green (Reflectorized)
- O-Orange (Reflectorized)
- B-Black (Non-Reflectorized)
- W-White (Reflectorized)

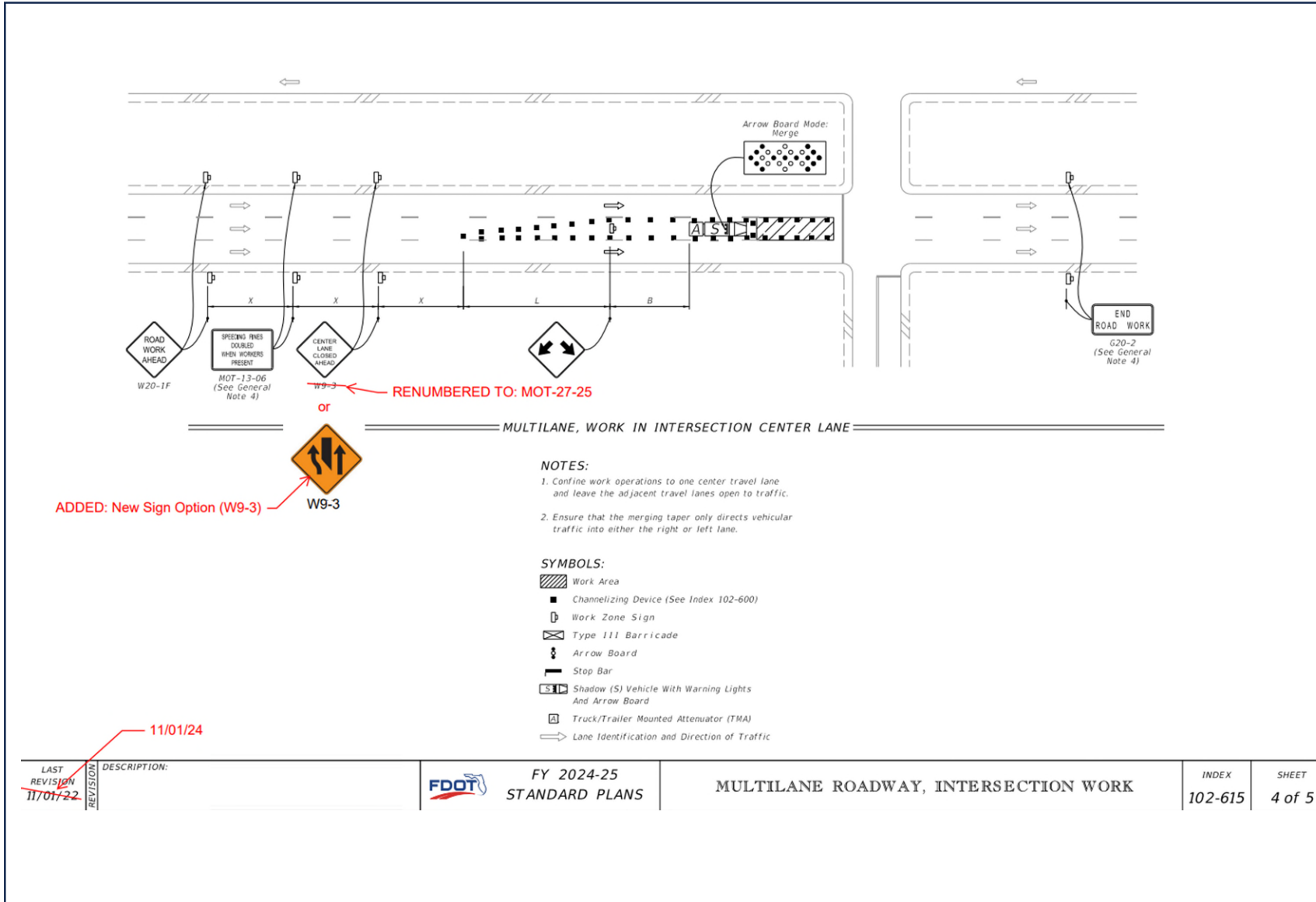
- Changed W16-1P sign to match MUTCD.

**COMMONLY USED WARNING AND REGULATORY SIGNS IN WORK ZONES**

GENERAL INFORMATION FOR TRAFFIC  
 CONTROL THROUGH WORK ZONES

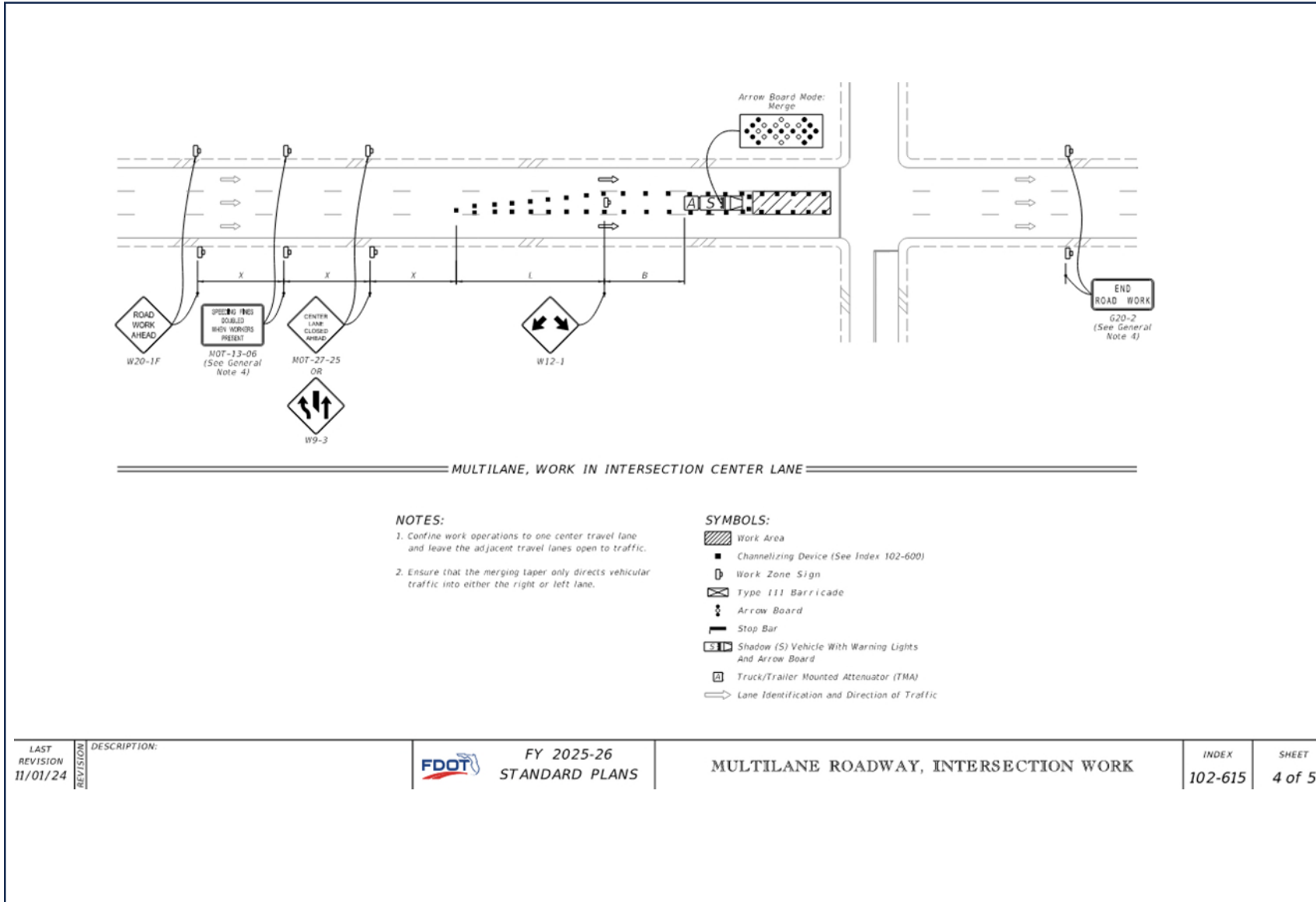
|         |         |
|---------|---------|
| INDEX   | SHEET   |
| 102-600 | 6 of 11 |

## Sheet 4: MUTCD Update



- Added new sign option (W9-3) under "Center Lane Closed Ahead" sign

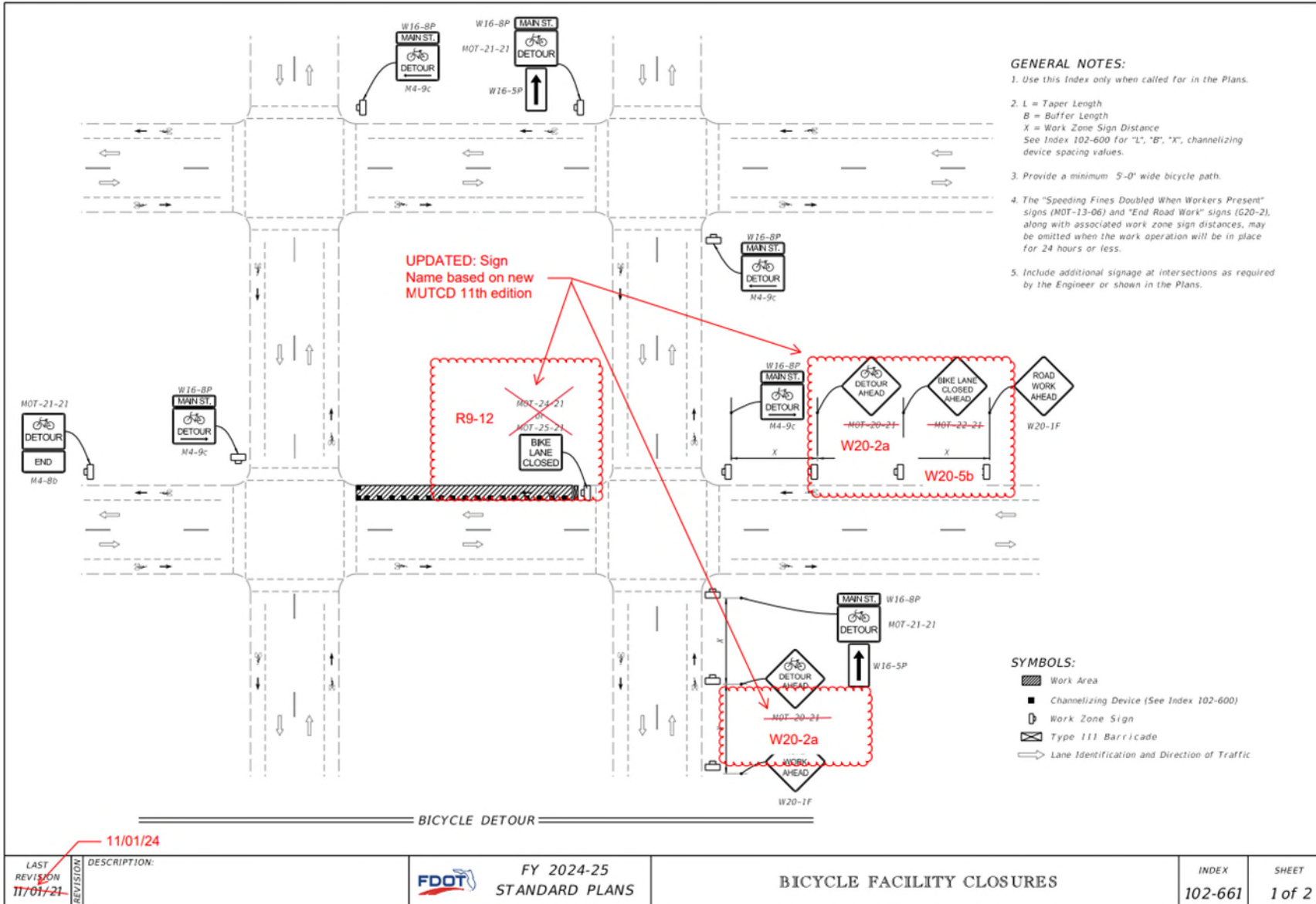
## Sheet 4: MUTCD Update



- Added new sign option (W9-3) under "Center Lane Closed Ahead" sign



## Sheet 1: MUTCD Update



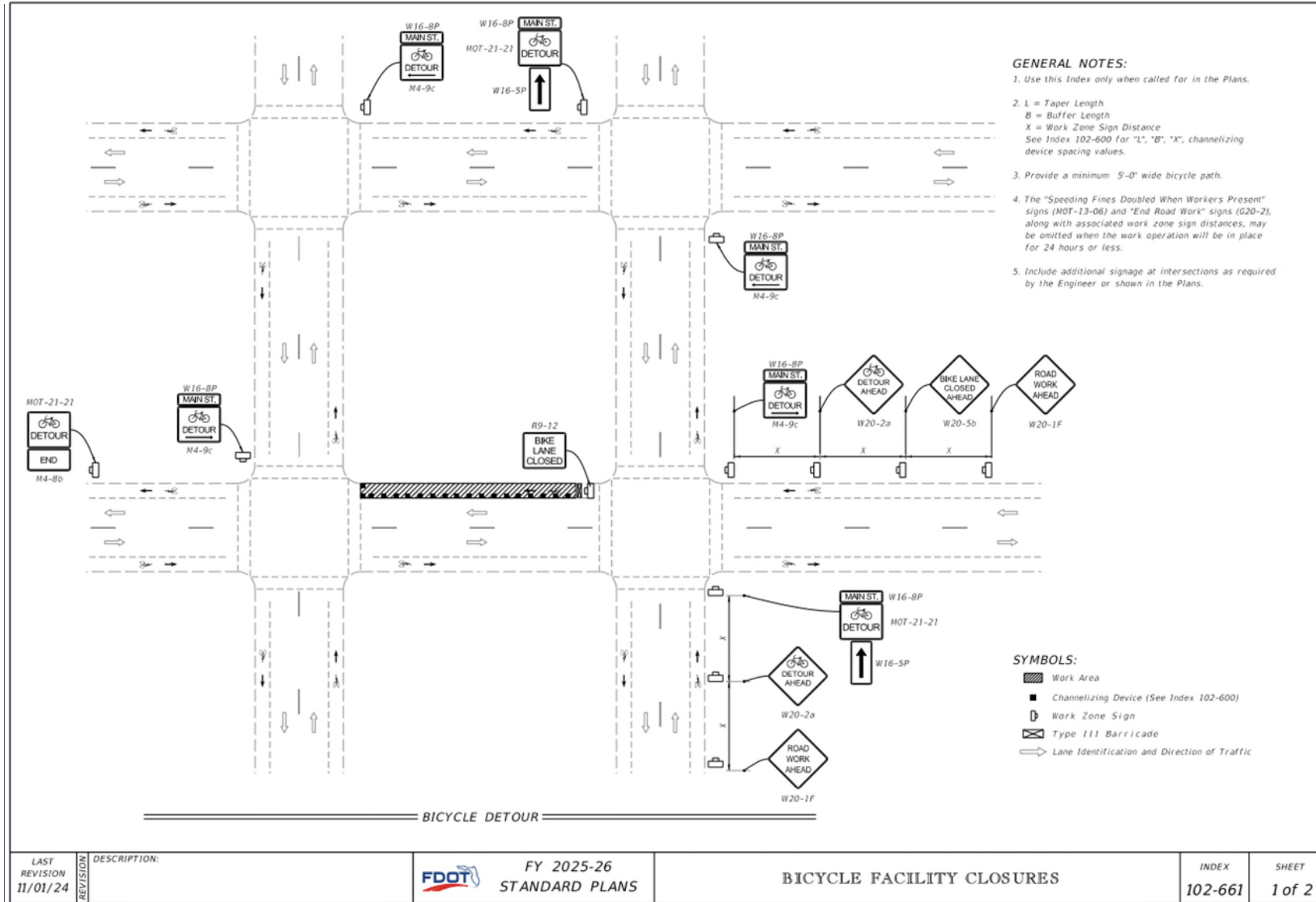
- Updated sign names based on new MUTCD 11th edition

- MOT-24-21, MOT-25-21**

- MOT-20-21**

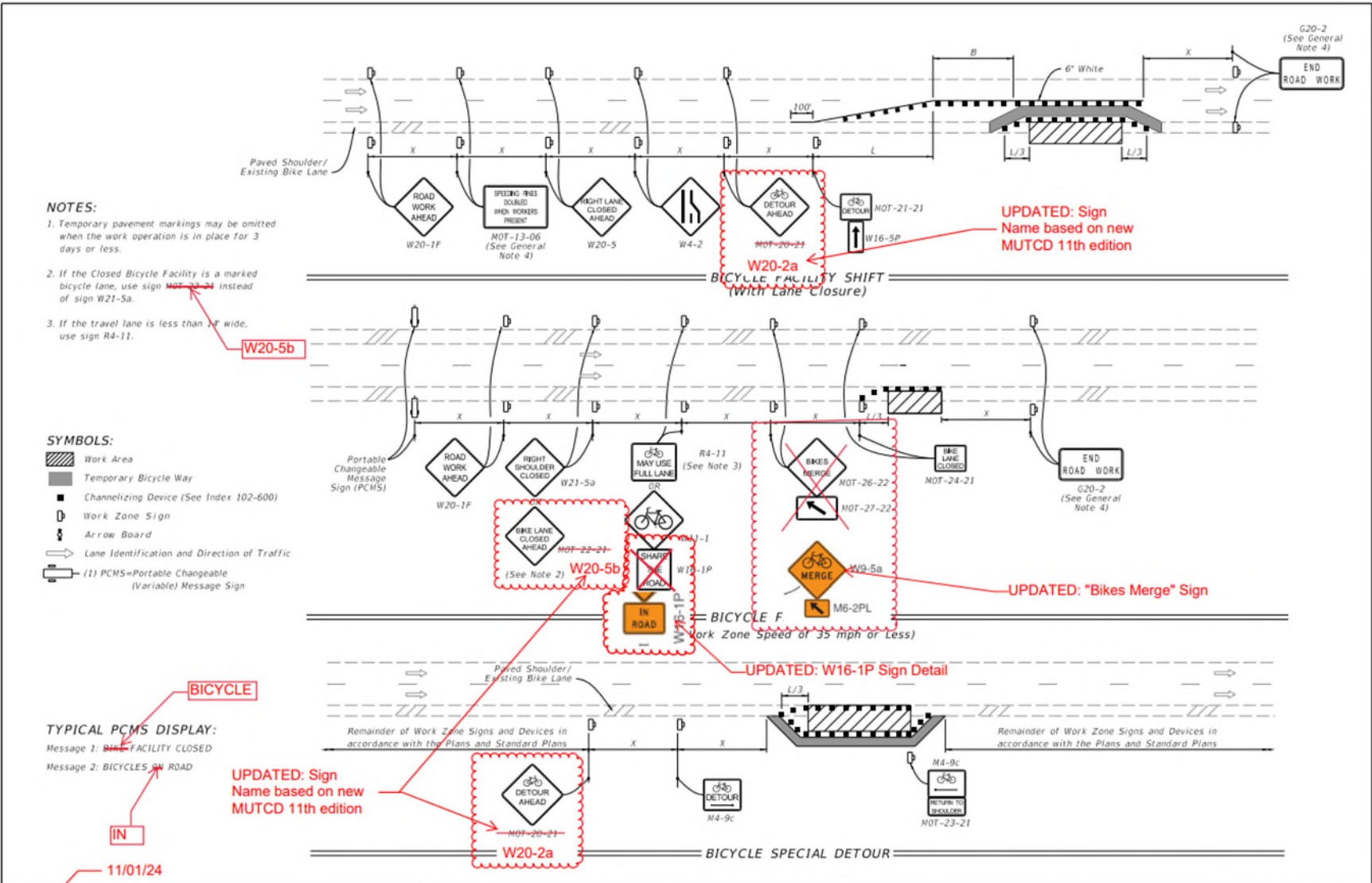
- MOT-22-21**

## Sheet 1: MUTCD Update



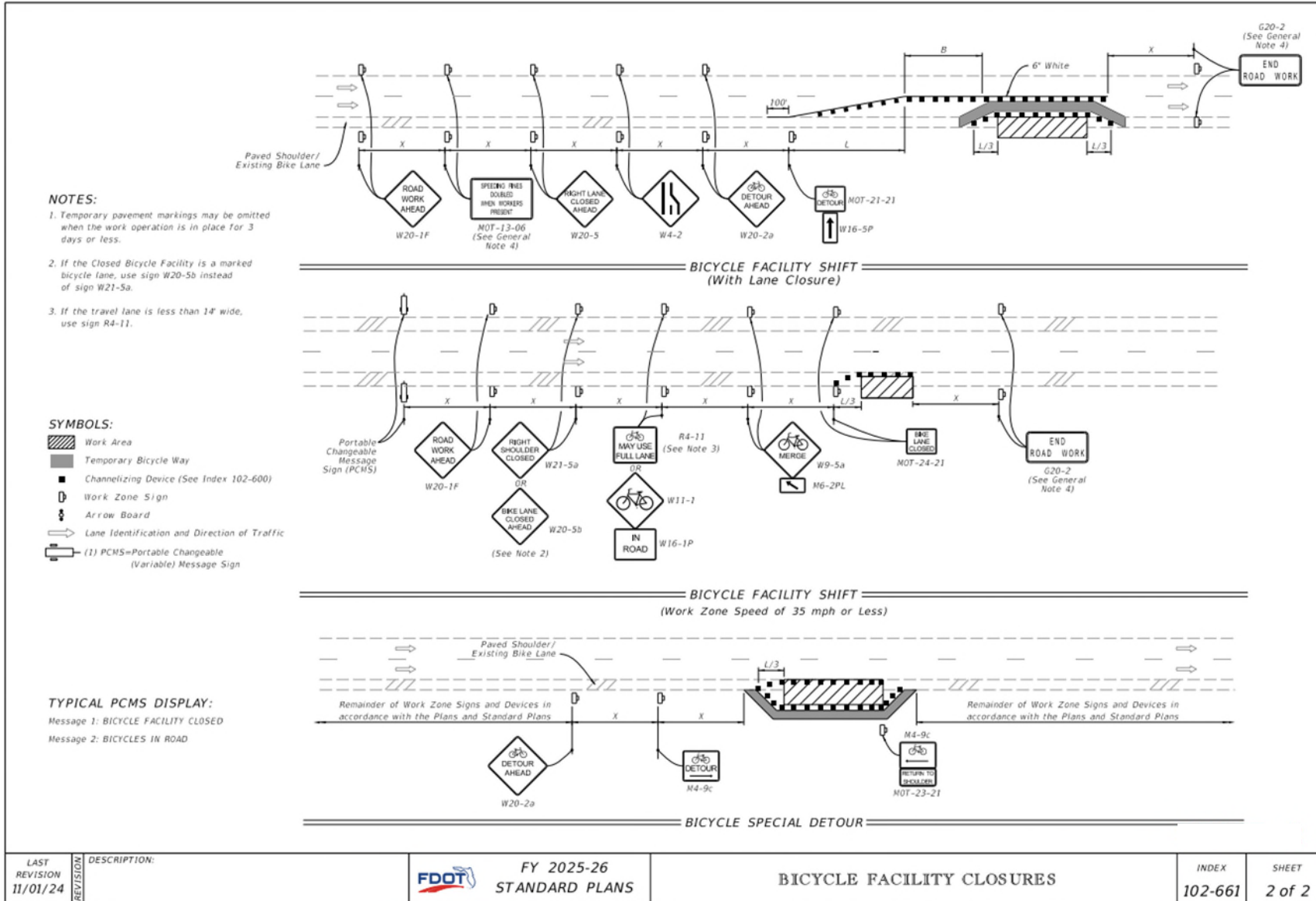
- Updated sign names based on new MUTCD 11th edition

## Sheet 2: MUTCD Update



- Updated sign names based on new MUTCD 11th edition. Updated signs W16-1P detail.
- Updated "Bikes Merge" sign. Updated Note 2 to reflect new sign name.
- Updated PCMS messages for consistency.

## Sheet 2: MUTCD Update



- Updated sign names based on new MUTCD 11th edition. Updated signs W16-1P detail.
- Updated "Bikes Merge" sign. Updated Note 2 to reflect new sign name.
- Updated PCMS messages for consistency.



## Sheet 6: MUTCD Update

|   |  |   |  |
|---|--|---|--|
| <p><b>FTP-41-21</b><br/>2'-0" x 3'-0"<br/>4" Radii 1/2" Border</p>            | <p><b>FTP-42-06</b><br/>4' x 2'-0"<br/>2" Radii<br/>Top 4' Series C Legend</p>             | <p><b>FTP-43-06</b><br/>4' x 4'<br/>6" Radii 1" Border<br/>Top 4' Series D Legend</p>     | <p><b>FTP-44-06</b><br/>9' x 6'<br/>8" Radii 1/2" Border</p>   |
| <p><b>FTP-44A-25</b><br/>4' x 3'<br/>5" Radii 1/2" Border</p>                 | <p><b>Added FTP-45-25</b></p> <p><b>FTP-45-06</b><br/>4' x 2'<br/>5" Radii 1/2" Border</p> | <p><b>FTP-47-06</b><br/>2' x 2'-0"<br/>2" Radii 1/2" Border<br/>2" Series D Legend</p>    | <p><b>FTP-48-06</b><br/>3'-0" x 3'-0"<br/>6" Radii<br/>4" Series C Legend</p> <p><b>MOVED to Sheet 7</b></p> |
| <p><b>FTP-49-06</b><br/>3'-0" x 5'-0"<br/>6" Radii<br/>4" Series C Legend</p> | <p>Detail for <b>FTP-48-06</b> and <b>FTP-49-06</b></p>                                    | <p><b>FTP-50-06</b><br/>4'-6" x 2'-0"<br/>3" Radii 1/2" Border<br/>4" Series C Legend</p> | <p><b>FTP-51-06</b><br/>3' x 2'<br/>3" Radii 1/2" Border</p>   |
| <p>LAST REVISION: 7/1/21, 11/01/23</p>  | <p>FY 2024-25, 2025-26<br/>STANDARD PLANS</p>  | <p>SPECIAL SIGN DETAILS</p>   | <p>INDEX SHEET<br/>700-102 6 of 12</p>   |

- Added FTP-45-25



## Sheet 6: MUTCD Update

|   |   |  |   |
|---|---|--|---|
| <p><b>FTP-41-21</b><br/>2'-6" x 3"<br/>4" Radii 1/2" Border</p> <p>2" and 4" Series C Legend<br/>White Background<br/>Black Legend and Border</p> | <p><b>FTP-42-06</b><br/>4" x 2'-6"<br/>3" Radii<br/>Top 4" Series C Legend</p> <p>Bottom 2" Series EN Legend<br/>White Background<br/>Blue Legend and Border</p>  | <p><b>FTP-43-06</b><br/>4" x 4"<br/>6" Radii 1" Border<br/>Top 4" Series D Legend</p> <p>Bottom 6" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>         | <p><b>FTP-44-06</b><br/>9" x 6"<br/>9" Radii 1/2" Border</p> <p>8" Series D Legend<br/>White Background<br/>Black Legend and Border</p>   |
| <p><b>FTP-44A-25</b><br/>4" x 3"<br/>5" Radii 1/2" Border</p> <p>4" Series C Legend<br/>White Background<br/>Black Legend and Border</p>          | <p><b>FTP-45-25</b><br/>4'-0" x 4'-0"<br/>1.5" Radii<br/>0.4" Border</p> <p>2.5" Series C Legend<br/>2" Series C Legend<br/>1.5" Series C Legend and<br/>White Background<br/>Black Legend and Border</p> | <p><b>FTP-46-06</b><br/>3" x 4"<br/>3" Radii 1/2" Border<br/>3" Series D Legend<br/>White Background<br/>Green Florida Symbol<br/>Black Legend, Border and Man Belt Symbol</p> | <p><b>FTP-47-06</b><br/>2" x 2'-6"<br/>3" Radii 3/4" Border<br/>2" Series D Legend<br/>White Background<br/>Green Florida Symbol<br/>Black Legend, Border and Man Belt Symbol</p> |
| <p><b>FTP-48-06</b><br/>3'-6" x 5"<br/>6" Radii<br/>4" Series C Legend<br/>Green Background<br/>White Legend, Border and Symbol</p>               | <p><b>FTP-49-06</b><br/>3'-6" x 5'-6"<br/>6" Radii<br/>4" Series C Legend<br/>Green Background<br/>White Legend, Border and Symbol<br/>Municipality Name Optional</p>                                     | <p>Detail for <b>FTP-48-06</b> and <b>FTP-49-06</b></p>  | <p><b>FTP-50-06</b><br/>4'-0" x 2"<br/>3" Radii 1/2" Border<br/>4" Series C Legend<br/>Yellow Background<br/>Black Legend and Border</p>  |

- Added [FTP-45-25](#)

## Sheet 8: MUTCD Update

|   |   |   |  |
|---|---|---|--|
| <p><b>FTP-65-06</b><br/>2' x 1'-0"<br/>2" Radii 1/2" Border<br/>2" Series D Legend<br/>White Background<br/>Black Legend and Border</p>                       | <p><b>FTP-66-21</b><br/>2' x 1'-0"<br/>2" Radii 1" Border<br/>0" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>                                      | <p><b>FTP-67-21</b><br/>3' x 1'-0"<br/>2" Radii 2" Border<br/>8" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>                        | <p>DETAIL for <b>FTP-66</b> and <b>FTP-67</b></p>  |
| <p><b>FTP-68A-06</b><br/>0' x 1'-2"<br/>1.5" Radii 1/2" Border<br/>Series B Legend<br/>White Background<br/>Black Legend and Border</p> <p>Updated symbol</p> | <p><b>FTP-68B-06</b><br/>0' x 1'-2"<br/>1.5" Radii 1/2" Border<br/>Series B Legend<br/>White Background<br/>Black Legend and Border</p> <p>Updated symbol and spacing</p> | <p><b>FTP-69-06</b><br/>2'-0" x 2'-6"<br/>2" and 3" Series D Legend<br/>White Background<br/>Black Legend and Border</p>                                    | <p><b>FTP-70-06</b><br/>2'-0" x 2'-6"<br/>2.25" Radii 1/2" Border<br/>3" Series C and 2" Series C Legend<br/>Blue Background<br/>White Legend and Border</p> |
| <p><b>FTP-71-06</b><br/>4' x 4'<br/>2" Radii 3/4" Border<br/>8" Series C Legend<br/>Yellow Background<br/>Black Legend and Border</p>                         | <p><b>FTP-72-06</b><br/>2' x 2'<br/>2" Radii 1/2" Border</p> <p>Updated dimensions and moved to Sheet 9</p>   | <p><b>FTP-73-06</b><br/>2'-0" x 2'-6"<br/>8" Series D Legend<br/>Blue Background<br/>White Legend and Border</p> <p>6'-6" x 2'-6" to match above change</p> | <p>See MUTCD R10-31 For Letter Size, Spacing, and Symbol Sizing and Color.</p>   |

- Updated the width of FTP-73-06 to 6'-6"
- Updated FTP-68A-06 and FTP-68B-06 symbology, spacing, and MUTCD reference

## Sheet 8: MUTCD Update

|   |   |   |   |
|---|---|---|---|
| <p><b>FTP-62-06</b><br/>3' x 3'<br/>2" Radii 3/4" Border 4" and 3" Series C Legend<br/>Yellow Background Black Legend and Border</p>              | <p><b>FTP-65-06</b><br/>2' x 1'-6"<br/>2" Radii 3/4" Border<br/>4" Series D Legend<br/>White Background<br/>Black Legend and Border</p>   | <p><b>FTP-66-21</b><br/>4' x 5'<br/>3" Radii 1" Border<br/>6" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>   | <p><b>FTP-67-21</b><br/>5.5' x 6'<br/>3" Radii 1" Border<br/>8" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>     |
| <p>DETAIL for <b>FTP-66</b> AND <b>FTP-67</b></p>   | <p>Sign Mounting Holes Can Be Punched Or Field Drilled With No Obstruction To Text Or Symbols From Holes Or Bolts.</p> <p><b>FTP-68A-06</b><br/>9" x 1'-3"<br/>1.5" Radii 3/4" Border<br/>Series B Legend<br/>White Background<br/>Black Legend and Border</p> <p>See MUTCD R10-3f for Letter Size, Spacing, and Symbol Sizes and Color</p> | <p>Sign Mounting Holes Can Be Punched Or Field Drilled With No Obstruction To Text Or Symbols From Holes Or Bolts.</p> <p><b>FTP-68B-06</b><br/>9" x 1'-6"<br/>1.5" Radii 3/4" Border<br/>Series B Legend<br/>White Background<br/>Black Legend and Border</p> <p>See MUTCD R10-3f for Letter Size, Spacing, and Symbol Sizes and Color</p> | <p><b>FTP-68C-21</b><br/>9" x 1'-6"<br/>1.5" Radii 3/4" Border<br/>Series D Legend<br/>White Background<br/>Black Legend and Border</p> |
| <p><b>FTP-69-06</b><br/>2'-6" x 2'-6"<br/>4" Radii 3/4" Border<br/>2" and 3" Series D Legend<br/>White Background<br/>Black Legend and Border</p> | <p><b>FTP-70-06</b><br/>3'-6" x 2'-6"<br/>2.25" Radii 3/4" Border<br/>5" Series C and 7" Series C Legend<br/>Blue Background<br/>White Legend and Border</p>  | <p><b>FTP-71-06</b><br/>4' x 4'<br/>2" Radii 3/4" Border<br/>8" Series C Legend<br/>Yellow Background<br/>Black Legend and Border</p>   | <p><b>FTP-72-06</b><br/>3' x 3'<br/>2" Radii 3/4" Border<br/>6" Series C Legend<br/>Yellow Background<br/>Black Legend and Border</p>   |
| <p>LAST REVISION: 11/01/24</p>  | <p>DESCRIPTION:</p>   | <p>FY 2025-26<br/>STANDARD PLANS</p>  | <p>INDEX: 700-102<br/>SHEET: 8 of 12</p>  |

- Updated the width of **FTP-73-06** to 6'-6"
- Updated **FTP-68A-06** and **FTP-68B-06** symbology, spacing, and MUTCD reference



## Sheet 9: MUTCD Update

**FTP-74-06**  
5'-6" x 2'-0"  
2" Series D Legend  
Blue Background  
White Legend and Border  
*MOVED TO SHEET 8*

**FTP-75-06**  
5'-6" x 1'-7"  
2" Series D Legend  
Blue Background  
White Legend

**FTP-76-06**  
5'-6" x 1'-7"  
2" Series D Legend  
Blue Background  
White Legend

**FTP-77-06**  
2' x 2'  
0" Radii 1/2" Border  
0" Series C Legend  
White Background with Blue Circle Background  
White Legend and Black Border

**FTP-78-06**  
2' x 2'  
3" Radii 1/2" Border  
0" Series D Legend  
White Background with Blue Circle Background  
White Legend and Black Border

**FTP-79-06**  
4' x 5'  
6" Radii 1/2" Border  
6" and 12" Series D Legend  
Top Yellow Background with Black Legend and Black Border  
Bottom White Background with Black Legend and Border

**FTP-80-06**  
3' x 4'  
3" Radii 1/2" Border  
0" and 10" Series D Legend  
Top Yellow Background with Black Legend and Black Border  
Bottom White Background with Black Legend and Border

**FTP-81-06**  
2' x 2'-4"  
3" Radii 1/2" Border  
0" and 6" Series D Legend  
Top Yellow Background with Black Legend and Black Border  
Bottom White Background with Black Legend and Border

**FTP-82-08**  
2' x 2'  
1.5" Radii  
5" Series D Legend  
White Background  
Black Legend and Border

**FTP-82-08**  
Details

| ARROW HEAD |       |
|------------|-------|
| A          | 3.125 |
| B          | 3.625 |
| C          | 6.375 |
| D          | 3     |
| E          | 6.25  |

| ARROW BODY |       |       |       |   |      |      |
|------------|-------|-------|-------|---|------|------|
| A          | B     | C     | D     | E | F    | G    |
| 6.25       | 3.125 | 3.125 | 3.125 | 3 | 9.25 | 20.5 |

**FTP-83-08**  
10'-0" x 5'-0"  
8" Radii  
10" Series E Legend  
Green Background  
White Legend

**FTP-84-09**  
3' x 3'  
1.5" Radii  
5" Series D Legend  
Yellow Background  
Black Legend and Border

- Updated the width of FTP-74-06, FTP-75-06, and FTP 76-06 to 6'-6"



## Sheet 9: MUTCD Update

| <p><b>FTP-73-06</b><br/>6'-6" X 2'-6"<br/>4" Radii 1/2" Border<br/>8" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>  | <p><b>FTP-74-06</b><br/>6'-6" X 2'-6"<br/>4" Radii 1/2" Border<br/>6" Series D Legend<br/>Blue Background<br/>White Legend and Border</p>                              | <p><b>FTP-75-06</b><br/>6'-6" X 1'-3"<br/>1" Radii<br/>6" Series D Legend<br/>Blue Background<br/>White Legend</p>   | <p><b>FTP-76-06</b><br/>6'-6" X 1'-3"<br/>1" Radii<br/>8" Series D Legend<br/>Blue Background<br/>White Legend</p>  |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
|--|--|--|---|---|------|-------|---|-------|---|-------|---|----|---|------|------------|--|--|--|--|--|--|---|---|---|---|---|---|---|------|-------|-------|-------|---|------|------|---|
| <p><b>FTP-77-06</b><br/>2' X 3'<br/>3" Radii 3/4" Border<br/>4" Series C Legend<br/>White Background with Blue Circle Background<br/>White Legend and Black Border</p>   | <p><b>FTP-78-06</b><br/>2' X 2'<br/>2" Radii 1/2" Border<br/>2" Series D Legend<br/>White Background with Blue Circle Background<br/>White Legend and Black Border</p> | <p><b>FTP-79-06</b><br/>4' X 5'<br/>6" Radii 3/4" Border<br/>6" and 12" Series D Legend<br/>Top Yellow Background with Black Legend and Black Border<br/>Bottom White Background with Black Legend and Border</p>  | <p><b>FTP-80-06</b><br/>2' X 4'<br/>5" Radii 1/2" Border<br/>6" and 10" Series D Legend<br/>Top Yellow Background with Black Legend and Black Border<br/>Bottom White Background with Black Legend and Border</p> |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| <p><b>FTP-81-06</b><br/>2' X 2'-6"<br/>3" Radii 1/2" Border<br/>4" and 6" Series D Legend<br/>Top Yellow Background with Black Legend and Black Border<br/>Bottom Yellow Background with Black Legend and Border</p> | <p><b>FTP-82-08</b><br/>2' X 3'<br/>1.5" Radii<br/>5" Series D Legend<br/>White Background<br/>Black Legend and Border</p>   | <p><b>FTP-82-08</b><br/>Details</p> <table border="1"> <thead> <tr> <th colspan="2">ARROW HEAD</th> </tr> </thead> <tbody> <tr><td>A</td><td>3.125</td></tr> <tr><td>B</td><td>3.625</td></tr> <tr><td>C</td><td>6.375</td></tr> <tr><td>D</td><td>.5</td></tr> <tr><td>E</td><td>.625</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="7">ARROW BODY</th> </tr> </thead> <tbody> <tr><td>A</td><td>B</td><td>C</td><td>D</td><td>E</td><td>F</td><td>G</td></tr> <tr><td>6.25</td><td>3.125</td><td>3.125</td><td>3.125</td><td>5</td><td>9.25</td><td>20.5</td></tr> </tbody> </table> | ARROW HEAD  |   | A    | 3.125 | B | 3.625 | C | 6.375 | D | .5 | E | .625 | ARROW BODY |  |  |  |  |  |  | A | B | C | D | E | F | G | 6.25 | 3.125 | 3.125 | 3.125 | 5 | 9.25 | 20.5 | <p><b>FTP-83-08</b><br/>10'-0" X 5'-0"<br/>8" Radii<br/>10" Series E Legend<br/>Green Background<br/>White Legend</p> |
| ARROW HEAD   |  |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| A  | 3.125  |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| B  | 3.625  |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| C  | 6.375  |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| D  | .5   |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| E  | .625   |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| ARROW BODY   |  |  |   |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| A  | B  | C  | D   | E | F    | G     |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| 6.25   | 3.125  | 3.125  | 3.125   | 5 | 9.25 | 20.5  |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |
| <p>LAST REVISION: 11/01/24</p>   | <p>DESCRIPTION: FDOT FY 2025-26 STANDARD PLANS</p>   | <p>SPECIAL SIGN DETAILS</p>  | <p>INDEX: 700-102 SHEET: 9 of 12</p>  |   |      |       |   |       |   |       |   |    |   |      |            |  |  |  |  |  |  |   |   |   |   |   |   |   |      |       |       |       |   |      |      |   |

- Updated the width of FTP-74-06, FTP-75-06, and FTP 76-06 to 6'-6"

## Sheet 10: MUTCD Update

|  |  |  |  |
|--|--|--|--|
| <p><b>FTP-85-13</b><br/>2'-6" x 3'-6"<br/>1.875" Radii 1/2" Border</p> | <p><b>FTP-86-21</b><br/>9" x 2'-2"<br/>1.5" Radii No Border</p>    | <p><b>FTP-87-21</b><br/>15'-0" x 8'-6"<br/>12" Radii 2" Border</p> | <p><b>FTP-88-21</b><br/>15'-0" x 8'-6"<br/>12" Radii 2" Border</p> |
| <p><b>FTP-89-21</b><br/>16'-6" x 8'-6"<br/>12" Radii 2" Border</p>     | <p><b>FTP-90-22</b><br/>3'-0" x 3'-0"<br/>1.5" Radii No Border</p> | <p><b>FTP-91-22</b><br/>3'-0" x 3'-0"<br/>1.5" Radii No Border</p> | <p><b>MOT-1-22</b><br/>4' x 4'<br/>3" Radii 1/2" Border</p>        |
| <p><b>MOT-4-22</b><br/>4' x 4'<br/>3" Radii 1/2" Border</p>            | <p><b>MOT-5-22</b><br/>4' x 4'<br/>3" Radii No Border</p>          | <p><b>MOT-6-22</b><br/>4' x 4'<br/>3" Radii No Border</p>          | <p><b>MOT-7-22</b><br/>4' x 4'<br/>3" Radii 1/2" Border</p>        |

- Added FTP-100-25

## Sheet 10: MUTCD Update

|   |  |  |  |
|---|--|--|--|
| <p><b>FTP-84-09</b><br/>3' x 3'<br/>1.5" Radii</p> <p>5" Series D Legend<br/>Yellow Background<br/>Black Legend and Border</p>  | <p><b>FTP-85-13</b><br/>2'-6" x 3'<br/>1.875" Radii 1/2" Border</p> <p>3.5" Series C Legend<br/>White Background<br/>Black Legend and Border</p>               | <p><b>FTP-86-21</b><br/>9' x 2'-3'<br/>1.5" Radii No Border</p> <p>Series C Legend and Series D Legend<br/>White on Yellow<br/>Black Legend and Border</p>             | <p><b>FTP-87-21</b><br/>15'-6" x 8'-6"<br/>12" Radii 2" Border</p> <p>Series D Legend<br/>Series EM Legend<br/>Blue Background<br/>White Legend and Border</p>         |
| <p><b>FTP-88-21</b><br/>15'-6" x 8'-6"<br/>12" Radii 2" Border</p> <p>Series D Legend<br/>Series EM Legend<br/>Blue Background<br/>White Legend and Border</p>                      | <p><b>FTP-89-21</b><br/>16'-6" x 8'-6"<br/>12" Radii 2" Border</p> <p>Series D Legend<br/>Series EM Legend<br/>Blue Background<br/>White Legend and Border</p> | <p><b>FTP-90-22</b><br/>3'-0" x 3'-0"<br/>1.5" Radii 1/2" Border</p> <p>3" Series C Legend and 5" Series D Legend<br/>White Background<br/>Black Legend and Border</p> | <p><b>FTP-91-22</b><br/>3'-0" x 3'-0"<br/>1.5" Radii 1/2" Border</p> <p>3" Series C Legend and 5" Series D Legend<br/>White Background<br/>Black Legend and Border</p> |
| <p><b>FTP-100-25</b><br/>2'-0" x 6'<br/>1.5" Radii<br/>0.4" Border<br/>0.4" Indent</p> <p>3" Series C Legend and<br/>Bright Yellow Green Background<br/>Black Legend and Border</p> |  |  |  |
| <p>LAST REVISION: 11/01/24</p>  | <p>DESCRIPTION:</p>  | <p>FY 2025-26<br/>STANDARD PLANS</p>   | <p>INDEX: 700-102<br/>SHEET: 10 of 12</p>  |

- Added FTP-100-25



## Sheet 12: MUTCD Update

|   |  |   |   |
|---|--|---|---|
| <p><b>G20-1</b><br/>4' x 2'<br/>1.5" Radii 1/2" Border</p> <p>Orange Background<br/>Black Legend and Border</p>                           | <p><b>G20-2</b><br/>4' x 2'<br/>1.5" Radii 1/2" Border</p> <p>Orange Background<br/>Black Legend and Border</p>                                  | <p><b>MOT-20-21</b><br/>4' x 4'<br/>1" Radii 1/2" Border</p> <p>8" Series C Legend<br/>Orange Background<br/>Black Legend and Border</p>        | <p><b>MOT-21-21</b><br/>2' x 2'-0"<br/>1.5" Radii 1/2" Border</p> <p>3" Series D Legend<br/>Orange Background<br/>Black Legend and Border</p>   |
| <p><b>MOT-22-21</b><br/>4' x 4'<br/>1" Radii 1/2" Border</p> <p>7" Series C Legend<br/>Orange Background<br/>Black Legend and Border</p>  | <p><b>MOT-23-21</b><br/>1'-6" x 1'-6"<br/>1.5" Radii 1/2" Border</p> <p>3" Series B Legend<br/>Orange Background<br/>Black Legend and Border</p> | <p><b>MOT-24-21</b><br/>2'-0" x 2'-0"<br/>1.5" Radii 1/2" Border</p> <p>4" Series C Legend<br/>White Background<br/>Black Legend and Border</p> | <p><b>MOT-25-21</b><br/>2'-0" x 2'-0"<br/>1.5" Radii 1/2" Border</p> <p>4" Series B Legend<br/>White Background<br/>Black Legend and Border</p> |
| <p><b>MOT-26A-22</b><br/>4' x 4'<br/>1" Radii 1/2" Border</p> <p>8" Series D Legend<br/>Orange Background<br/>Black Legend and Border</p> | <p><b>MOT-26B-22</b><br/>2'-0" x 2'-0"<br/>1.5" Radii 1/2" Border</p> <p>Orange Background<br/>Black Legend and Border</p>                       | <p><b>MOT-27-24</b><br/>4' x 4'<br/>1" Radii 1/2" Border</p> <p>8" Series C Legend<br/>Orange Background<br/>Black Legend and Border</p>        | <p>Added sign<br/><b>MOT-27-25</b></p>  |
| <p>LAST REVISION: 11/01/24</p> <p>DESCRIPTION:</p>  | <p>FY 2024-25<br/>STANDARD PLANS</p>   | <p>INDEX<br/>700-102</p>  | <p>SHEET<br/>12 of 12</p>   |

- Deleted MOT-20-21, MOT-22-21, MOT-24-21, MOT-25-21, MOT-26A-22, and MOT-26B-22
- Added MOT-27-25



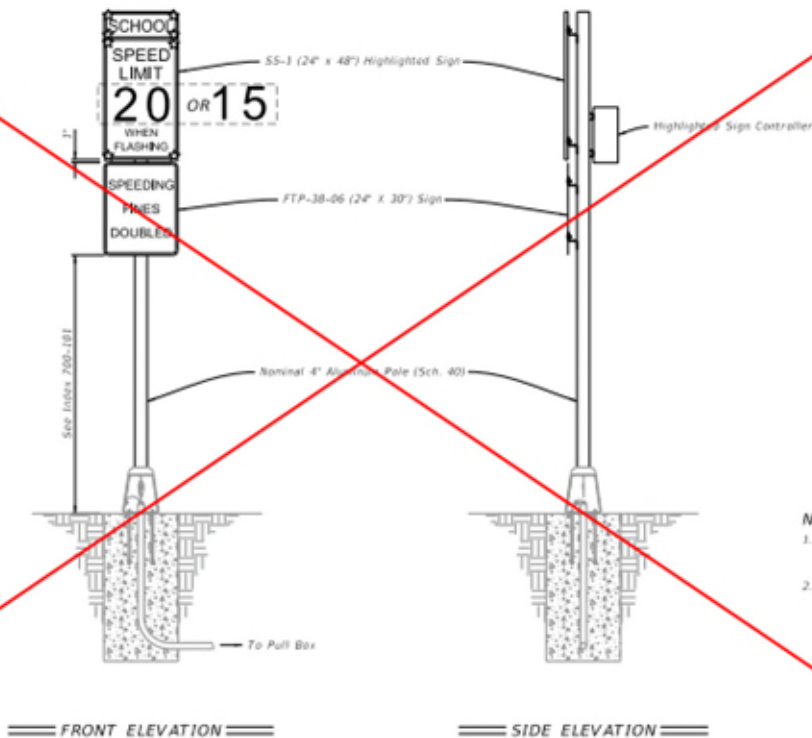
## Sheet 12: MUTCD Update

|  |   |   |   |
|--|---|---|---|
| <p><b>MOT-15-06</b><br/>4' x 4'<br/>2" Radii 1/2" Border</p> <p>6" Series D Legend<br/>Orange Background<br/>Black Legend and Border</p>         | <p><b>MOT-16-06</b><br/>4'-6" x 2'-6"<br/>4" Radii 1/2" Border</p> <p>5" Kids Series Legend<br/>Orange Background<br/>Black Legend and Border</p> | <p><b>MOT-17-06</b><br/>4'-6" x 2'-6"<br/>4" Radii 1/2" Border</p> <p>5" Kids Series Legend<br/>Orange Background<br/>Black Legend and Border</p> | <p><b>MOT-18-10</b><br/>4' x 4'<br/>2" Radii 1/2" Border</p> <p>6" Series D Legend<br/>Orange Background<br/>Black Legend and Border</p>      |
| <p><b>MOT-19-11</b><br/>2' x 2'-6"<br/>1.13" Radii 1/2" Border</p> <p>4" Series C Legend<br/>White Background<br/>Red Legend and Border</p>      | <p><b>G20-1</b><br/>4' x 2'<br/>1.5" Radii 1/2" Border</p> <p>Orange Background<br/>Black Legend and Border</p>                                   | <p><b>G20-2</b><br/>4' x 2'<br/>1.5" Radii 1/2" Border</p> <p>Orange Background<br/>Black Legend and Border</p>                                   | <p><b>MOT-21-21</b><br/>2' x 1'-6"<br/>1.5" Radii 1/2" Border</p> <p>3" Series D Legend<br/>Orange Background<br/>Black Legend and Border</p> |
| <p><b>MOT-23-21</b><br/>1'-6" x 1'-0"<br/>1.5" Radii 1/2" Border</p> <p>3" Series B Legend<br/>Orange Background<br/>Black Legend and Border</p> | <p><b>MOT-27-25</b><br/>4' x 4'<br/>3" Radii 1/2" Border</p> <p>6" Series C Legend<br/>Orange Background<br/>Black Legend and Border</p>          |   |   |
| <p>LAST REVISION 11/01/24</p>  | <p>DESCRIPTION:</p> <p> FY 2025-26 STANDARD PLANS</p>   | <p>INDEX</p> <p>700-102</p>   | <p>SHEET</p> <p>12 of 12</p>  |

- Deleted MOT-20-21, MOT-22-21, MOT-24-21, MOT-25-21, MOT-26A-22, and MOT-26B-22
- Added MOT-27-25

## Sheet 7: MUTCD Update

**DELETED SHEET:**  
 The 11th Edition MUTCD, Section 2A.12 (12) states:  
 Flashing LED units shall not be used within the legend or border of a  
 Speed Limit sign to indicate that the displayed speed limit is in effect.



**NOTES:**  
 1. Type A4 Assembly (conventionally powered) is shown.  
 Type B4 Assemblies (solar powered) similar.  
 2. Foundation reinforcement not shown.

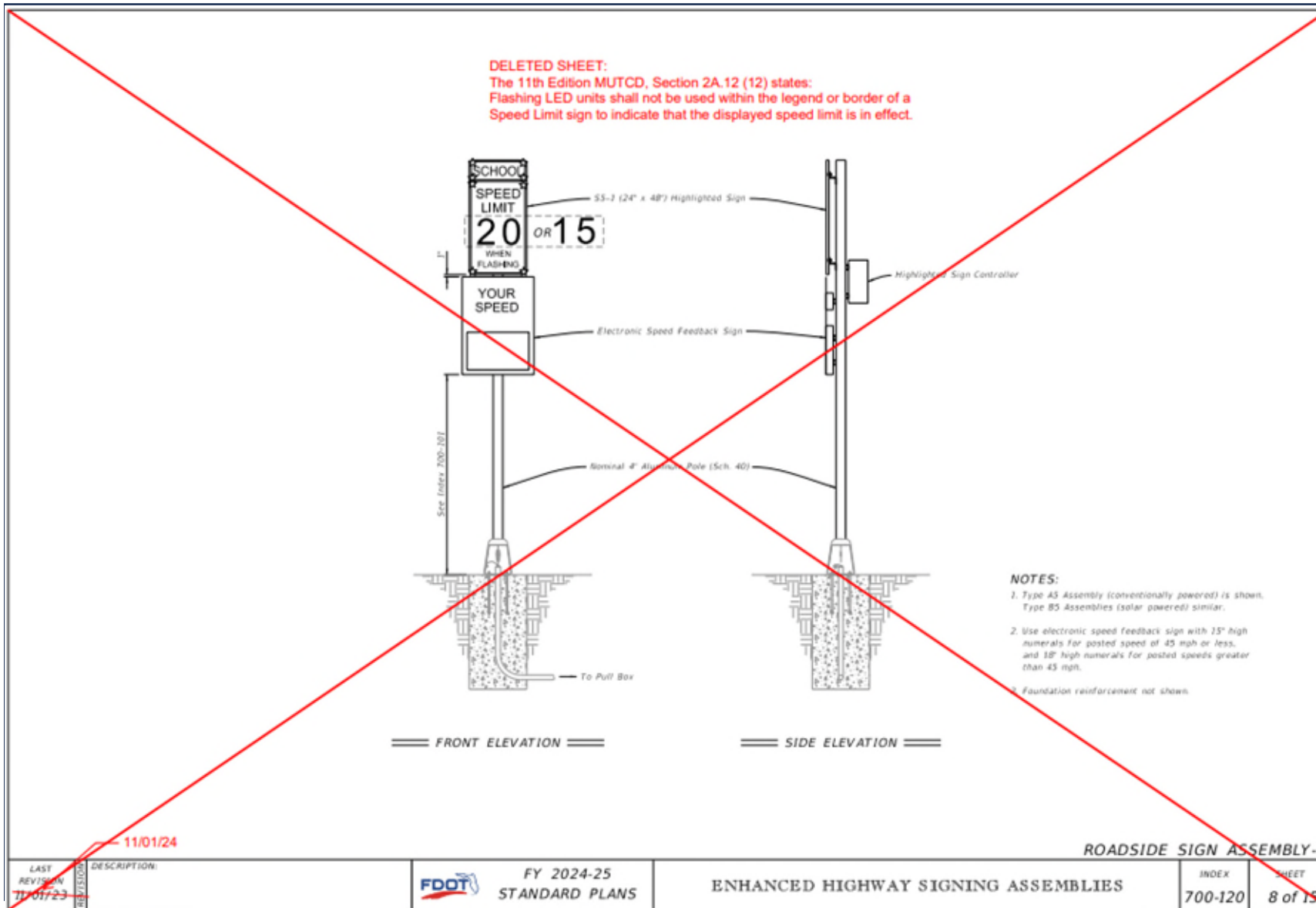
- Deleted Sheet per 11th Edition MUTCD, Section 2A.12.

11/01/24

ROADSIDE SIGN ASSEMBLY-4

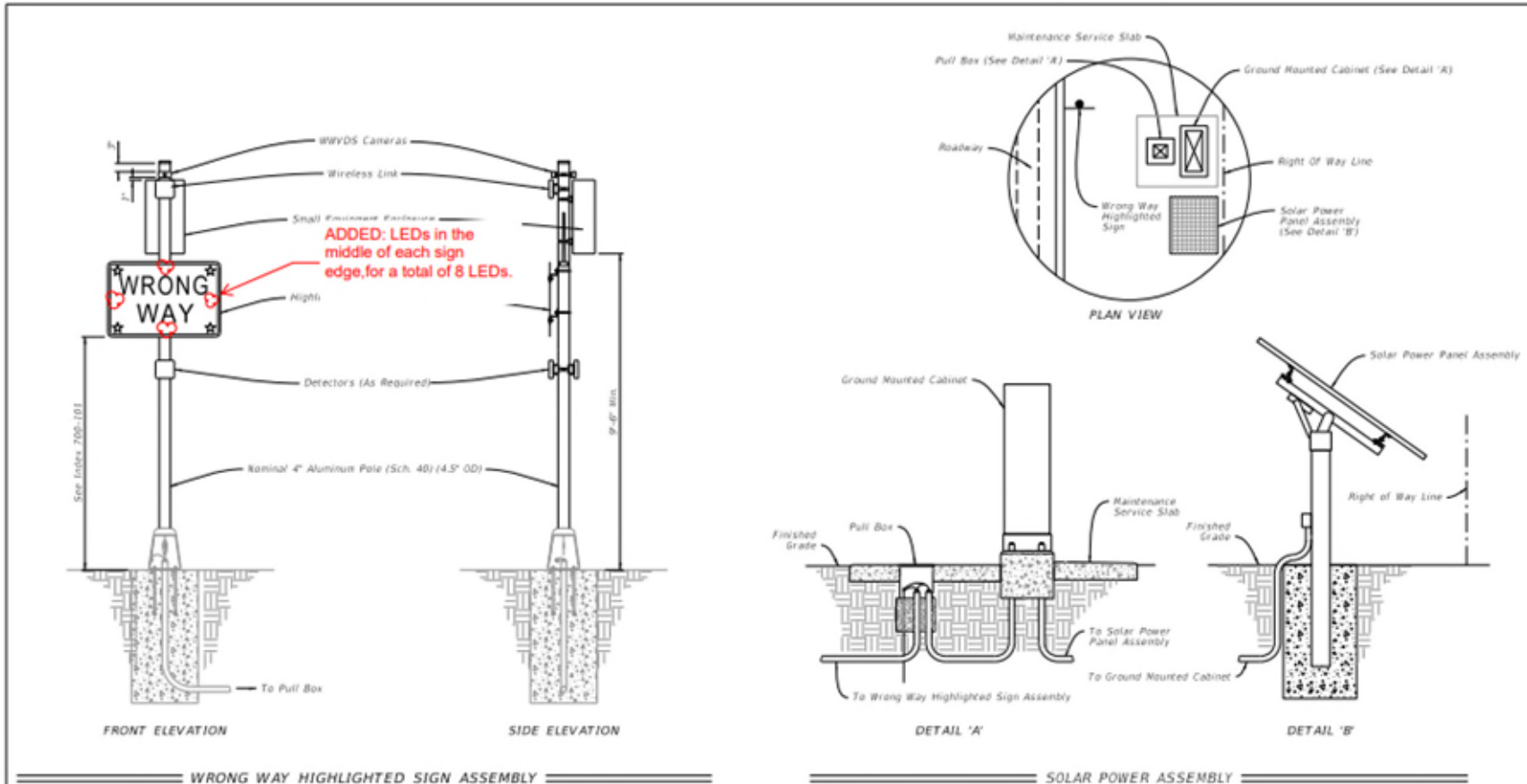
|                          |              |                              |                                     |                  |                  |
|--------------------------|--------------|------------------------------|-------------------------------------|------------------|------------------|
| LAST REVISION<br>7/10/23 | DESCRIPTION: | FY 2024-25<br>STANDARD PLANS | ENHANCED HIGHWAY SIGNING ASSEMBLIES | INDEX<br>700-120 | SHEET<br>7 of 15 |
|--------------------------|--------------|------------------------------|-------------------------------------|------------------|------------------|

## Sheet 8: MUTCD Update



- Deleted Sheet per 11th Edition MUTCD, Section 2A.12.

## Sheet 10: MUTCD Update



- Added LEDs in the middle of each sign edge, for a total of 8 LEDs.

**NOTES:**

1. Install Wrong Way Vehicle Detection System (WWDVS) devices including cameras, detectors, wireless links, antennas, enclosures, and electronics in accordance with the manufacturer's instructions.
2. When a solar powered configuration (Type B7) is called for in the Plans, install a ground mounted cabinet and solar power panel assembly. Install the solar charge controller and batteries in the same ground mounted cabinet. Provide a separate pole for mounting the solar panel (DETAIL 'B' shown for illustration purposes only) and install in accordance with manufacturer's instructions. Locate the Solar Power Assembly as close to the right of way as possible. Orient the solar panel to face South.
3. Foundation reinforcement not shown.
4. Install cabinets in accordance with Index 676-010.

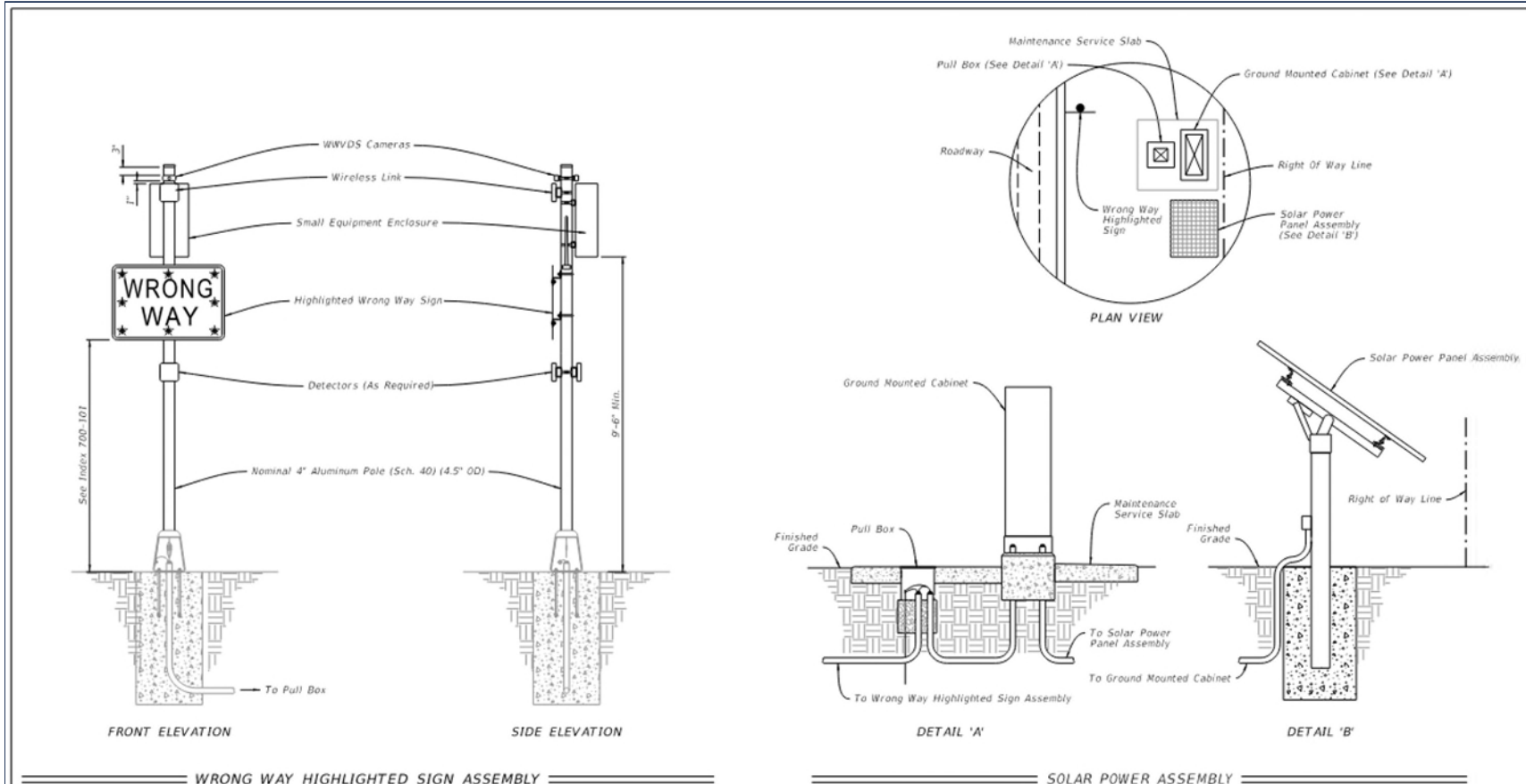
CHANGED TO: 5

8 of 13  
ROADSIDE SIGN ASSEMBLY 7

|                           |                          |                              |                                     |                  |                   |
|---------------------------|--------------------------|------------------------------|-------------------------------------|------------------|-------------------|
| LAST REVISION<br>11/01/23 | DESCRIPTION:<br>11/01/24 | FY 2024-25<br>STANDARD PLANS | ENHANCED HIGHWAY SIGNING ASSEMBLIES | INDEX<br>700-120 | SHEET<br>10 of 15 |
|---------------------------|--------------------------|------------------------------|-------------------------------------|------------------|-------------------|



## Sheet 10: MUTCD Update



- Added LEDs in the middle of each sign edge, for a total of 8 LEDs.

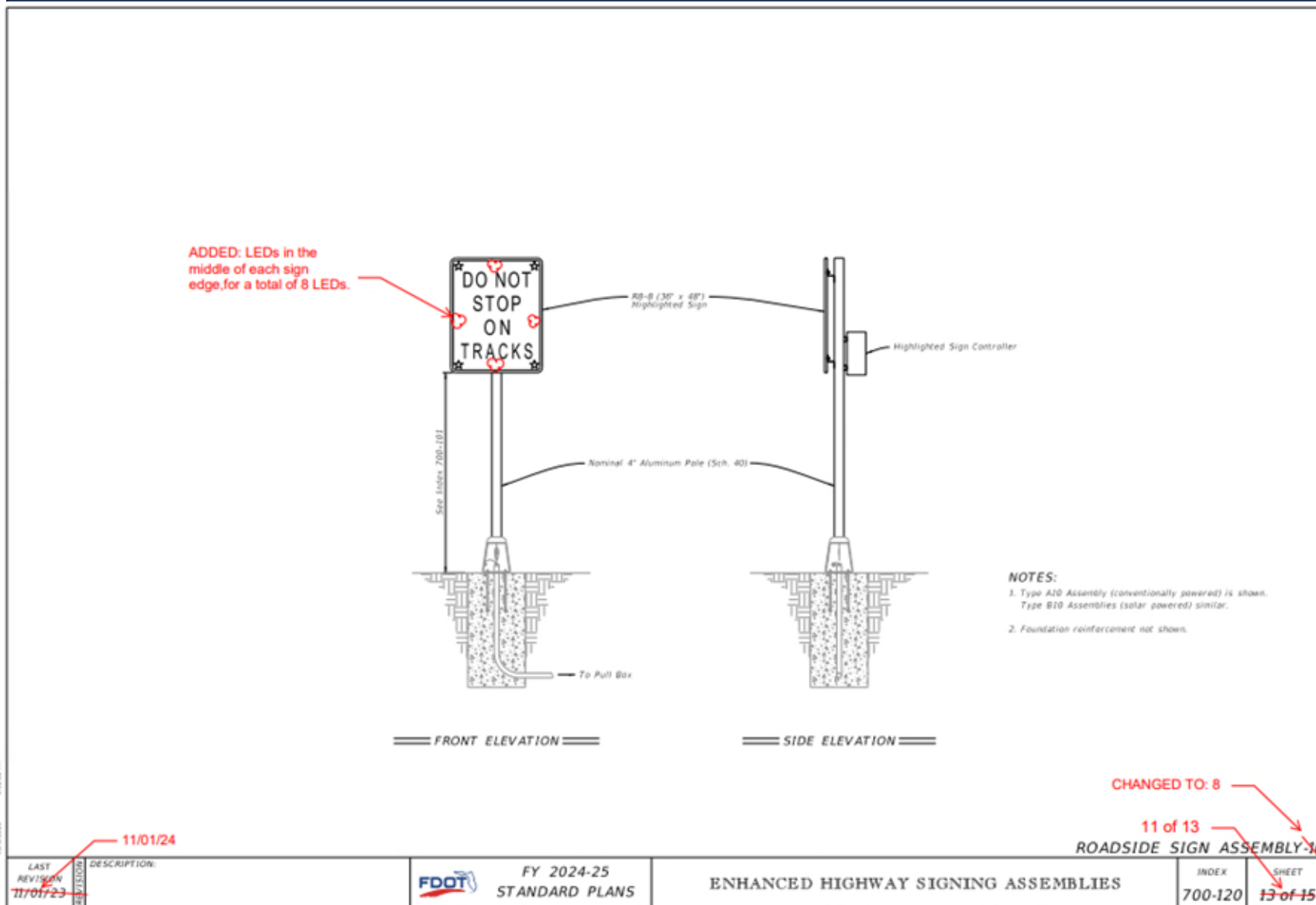
**NOTES:**

1. Install Wrong Way Vehicle Detection System (WWVDS) devices including cameras, detectors, wireless links, antennas, enclosures, and electronics in accordance with the manufacturer's instructions.
2. When a solar powered configuration (Type B7) is called for in the Plans, install a ground mounted cabinet and solar power panel assembly. Install the solar charge controller and batteries in the same ground mounted cabinet. Provide a separate pole for mounting the solar panel (DETAIL 'B' shown for illustration purposes only) and install in accordance with manufacturer's instructions. Locate the Solar Power Assembly as close to the right of way as possible. Orient the solar panel to face South.
3. Foundation reinforcement not shown.
4. Install cabinets in accordance with Index 676-010.

ROADSIDE SIGN ASSEMBLY-5

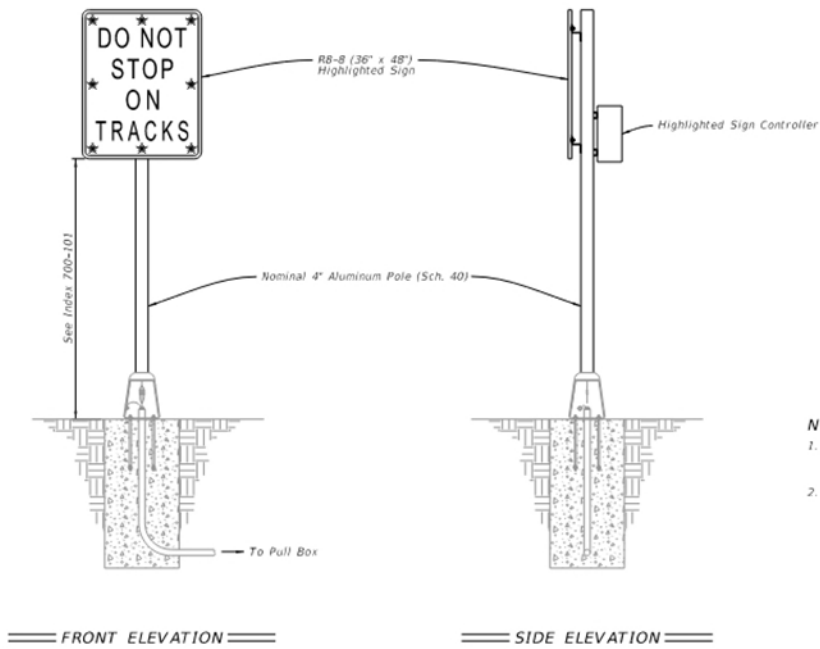
|                           |              |                              |                                     |                  |                  |
|---------------------------|--------------|------------------------------|-------------------------------------|------------------|------------------|
| LAST REVISION<br>11/01/24 | DESCRIPTION: | FY 2025-26<br>STANDARD PLANS | ENHANCED HIGHWAY SIGNING ASSEMBLIES | INDEX<br>700-120 | SHEET<br>8 of 13 |
|---------------------------|--------------|------------------------------|-------------------------------------|------------------|------------------|

## Sheet 13: MUTCD Update



- Added LEDs in the middle of each sign edge, for a total of 8 LEDs.

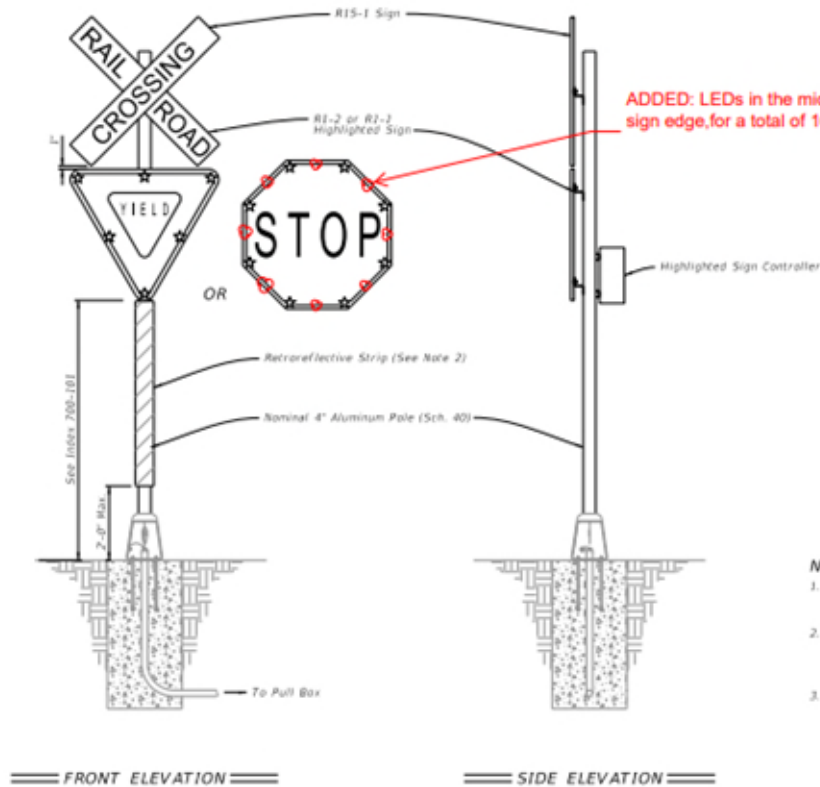
## Sheet 13: MUTCD Update



**NOTES:**  
 1. Type A10 Assembly (conventionally powered) is shown.  
 Type B10 Assemblies (solar powered) similar.  
 2. Foundation reinforcement not shown.

- Added LEDs in the middle of each sign edge, for a total of 8 LEDs.

## Sheet 14: MUTCD Update



ADDED: LEDs in the middle of each sign edge, for a total of 16 LEDs.

**NOTES:**

1. Type A11 Assembly (conventionally powered) is shown. Type B11 Assemblies (solar powered) similar.
2. Install red retroreflective strip on front and white retroreflective strip on back in accordance with Specification 700.
3. Foundation reinforcement not shown.

- Added LEDs in the middle of each sign edge, for a total of 16 LEDs.

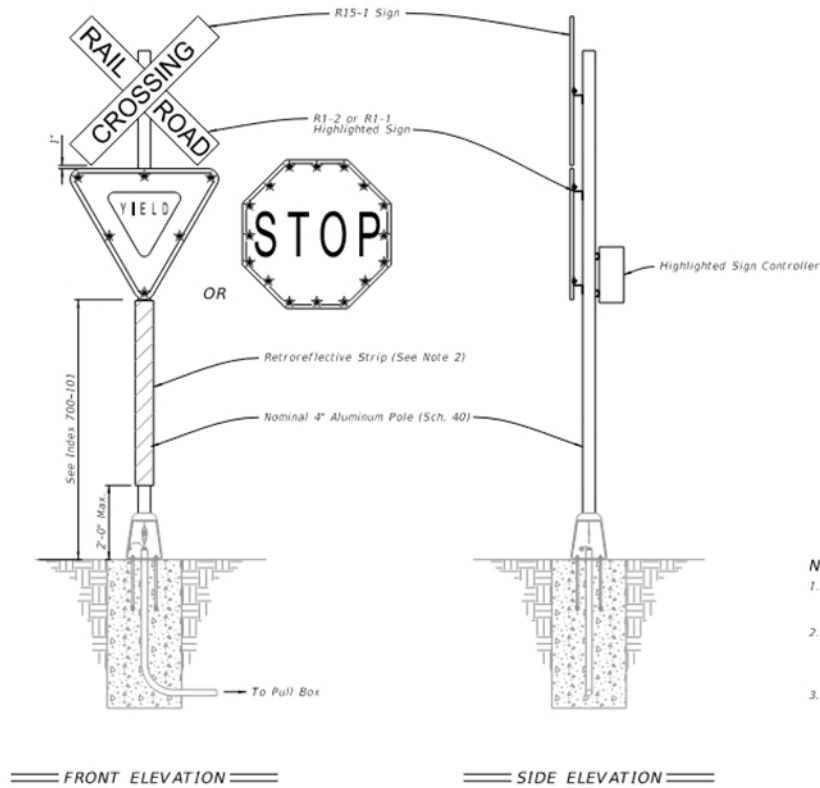
CHANGED TO: 9

12 of 13  
ROADSIDE SIGN ASSEMBLY II

|                           |                         |                                      |                                     |                  |                   |
|---------------------------|-------------------------|--------------------------------------|-------------------------------------|------------------|-------------------|
| LAST REVISION<br>11/01/23 | DESCRIPTION<br>11/01/24 | FDOT<br>FY 2024-25<br>STANDARD PLANS | ENHANCED HIGHWAY SIGNING ASSEMBLIES | INDEX<br>700-120 | SHEET<br>14 of 15 |
|---------------------------|-------------------------|--------------------------------------|-------------------------------------|------------------|-------------------|



## Sheet 14: MUTCD Update



**NOTES:**

1. Type A11 Assembly (conventionally powered) is shown. Type B11 Assemblies (solar powered) similar.
2. Install red retroreflective strip on front and white retroreflective strip on back in accordance with Specification 700.
3. Foundation reinforcement not shown.

- *Added LEDs in the middle of each sign edge, for a total of 16 LEDs.*

ROADSIDE SIGN ASSEMBLY-9

LAST REVISION  
11/01/24

REVISION

DESCRIPTION:



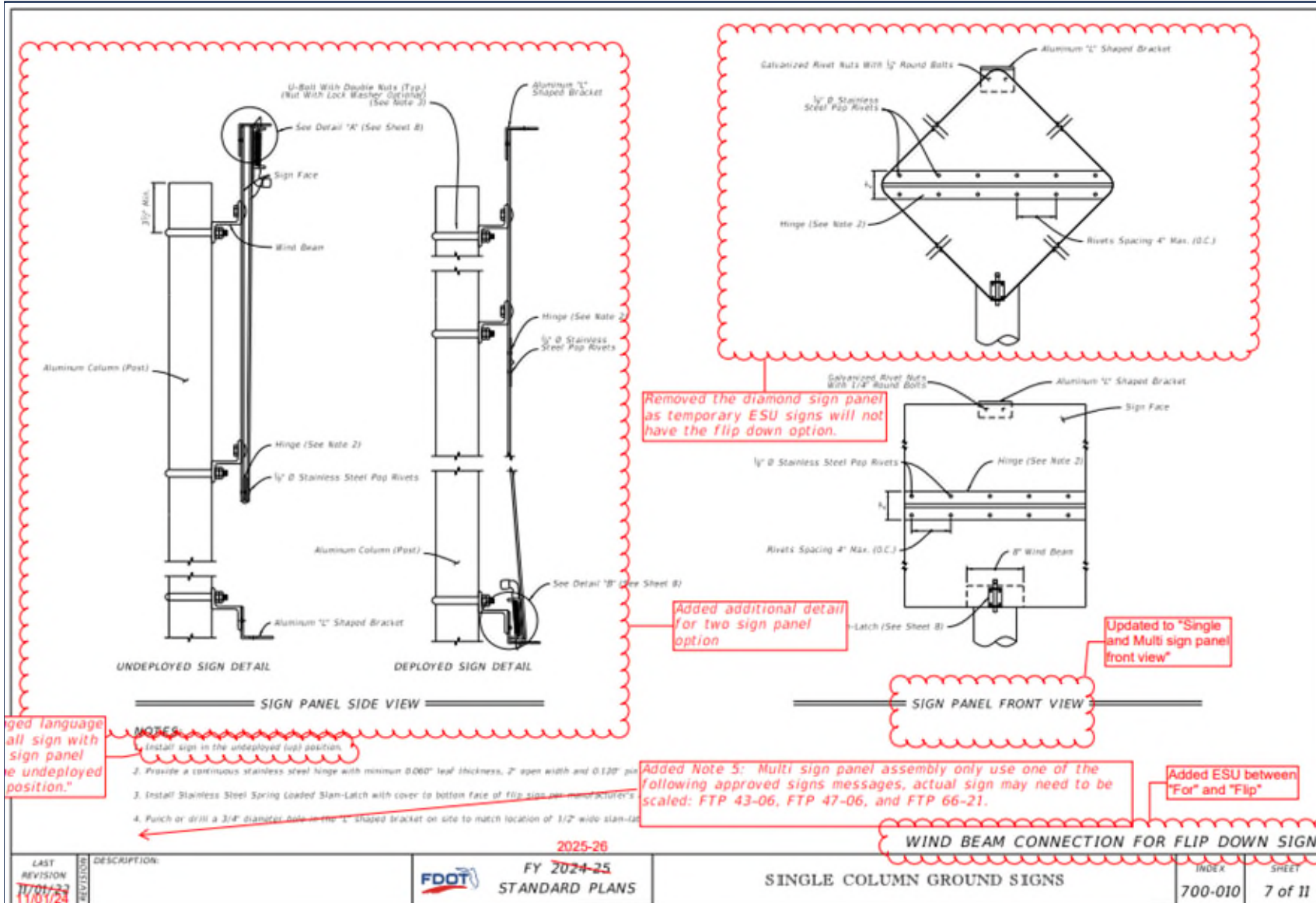
FY 2025-26  
STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

INDEX  
700-120

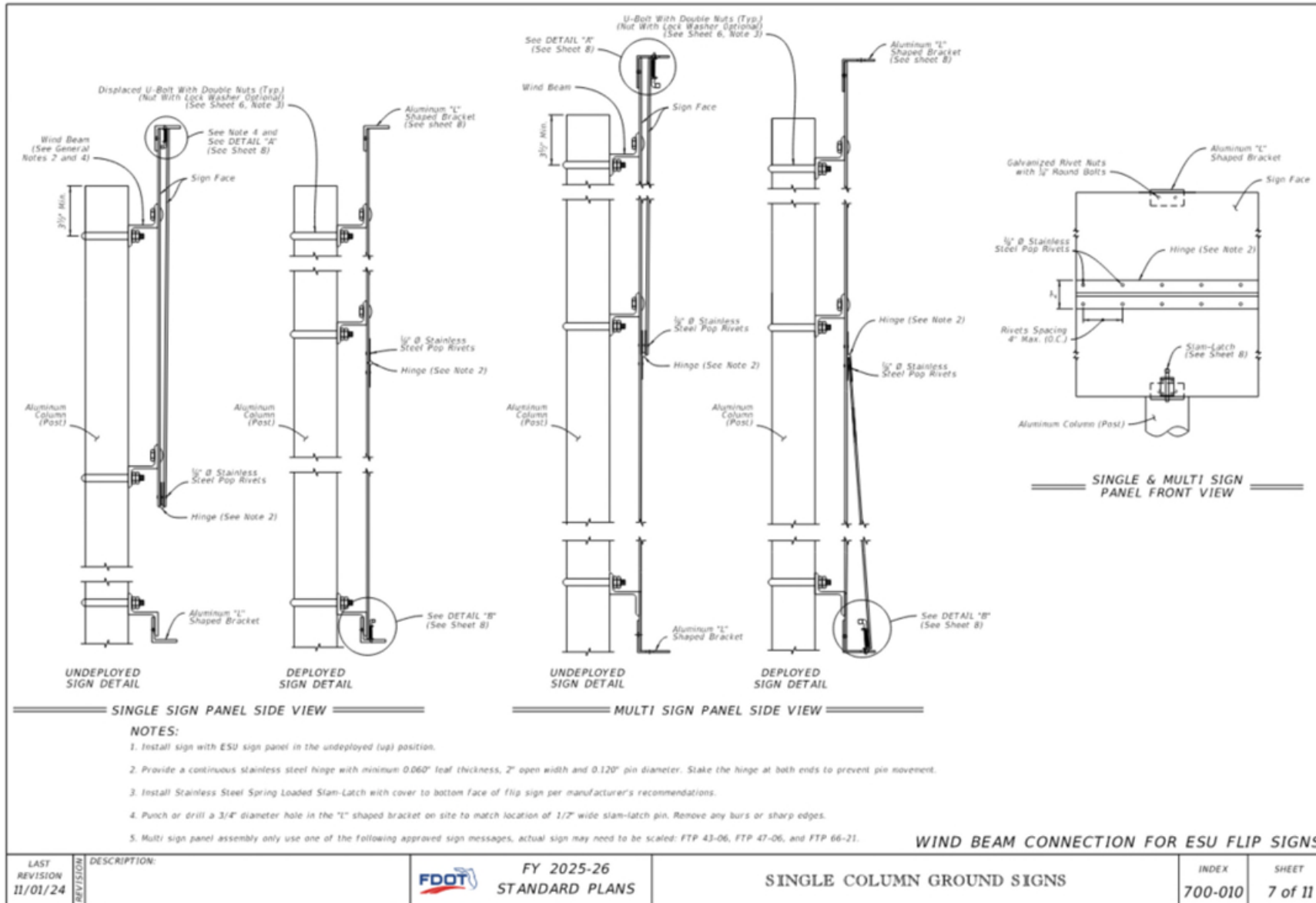
SHEET  
12 of 13

## Sheet 7: Update to Flip Signs



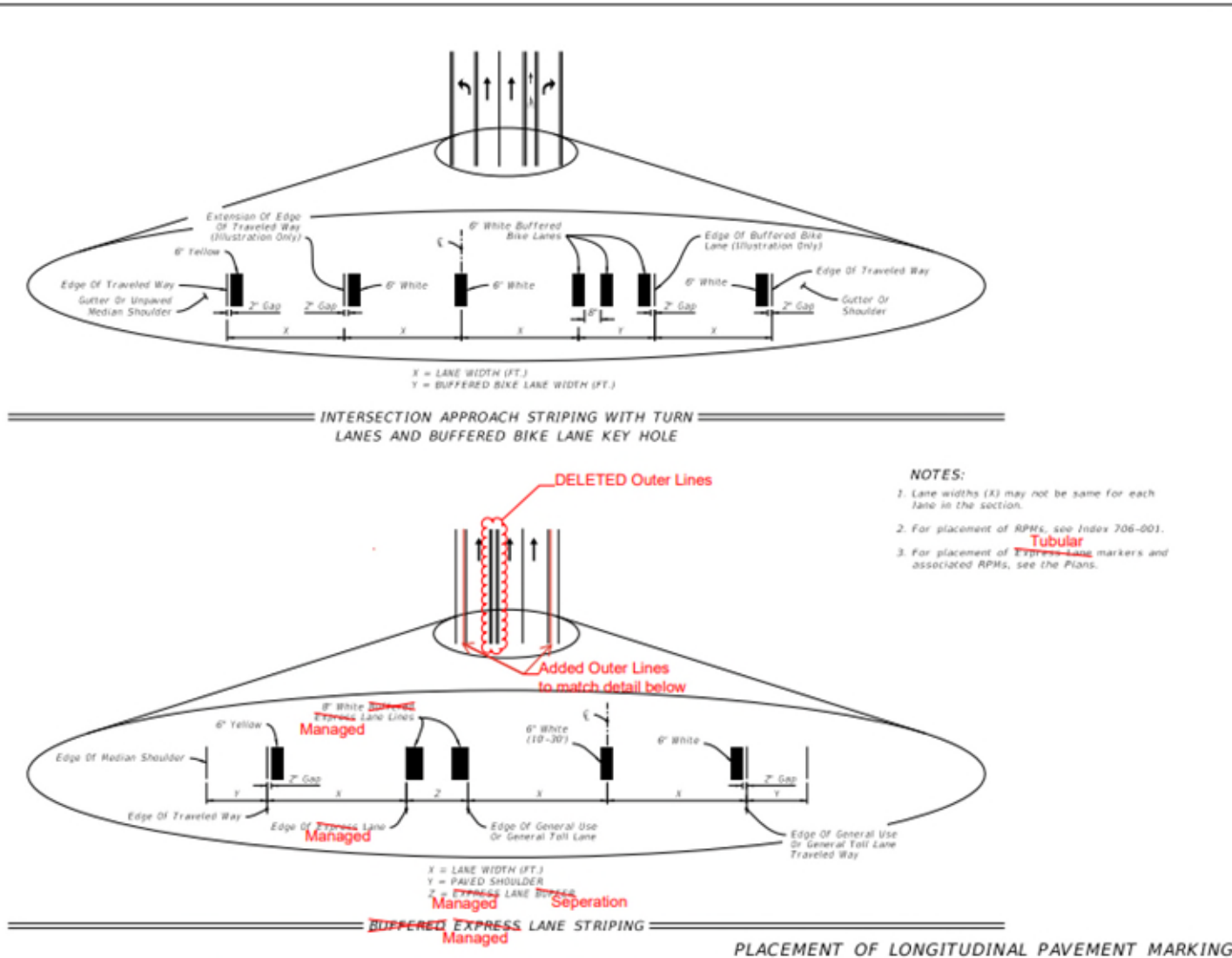
- Updated the flip sign to allow for multiple sign panels
- Removed the diamond sign panel
- Updated Note 1 to "Install sign with the ESU sign panel in the undeployed (up) position."
- Added Note 5 "Multi sign panel assembly only use one of the following approved signs, actual sign may need to be scaled: FTP 43-06, FTP 47-06, and FTP 66-21."
- Added ESU to sheet title.

## Sheet 7: Update to Flip Signs



- Updated the flip sign to allow for multiple sign panels
- Removed the diamond sign panel
- Updated Note 1 to "Install sign with the ESU sign panel in the undeployed (up) position."
- Added Note 5 "Multi sign panel assembly only use one of the following approved signs, actual sign may need to be scaled: FTP 43-06, FTP 47-06, and FTP 66-21."
- Added ESU to sheet title.

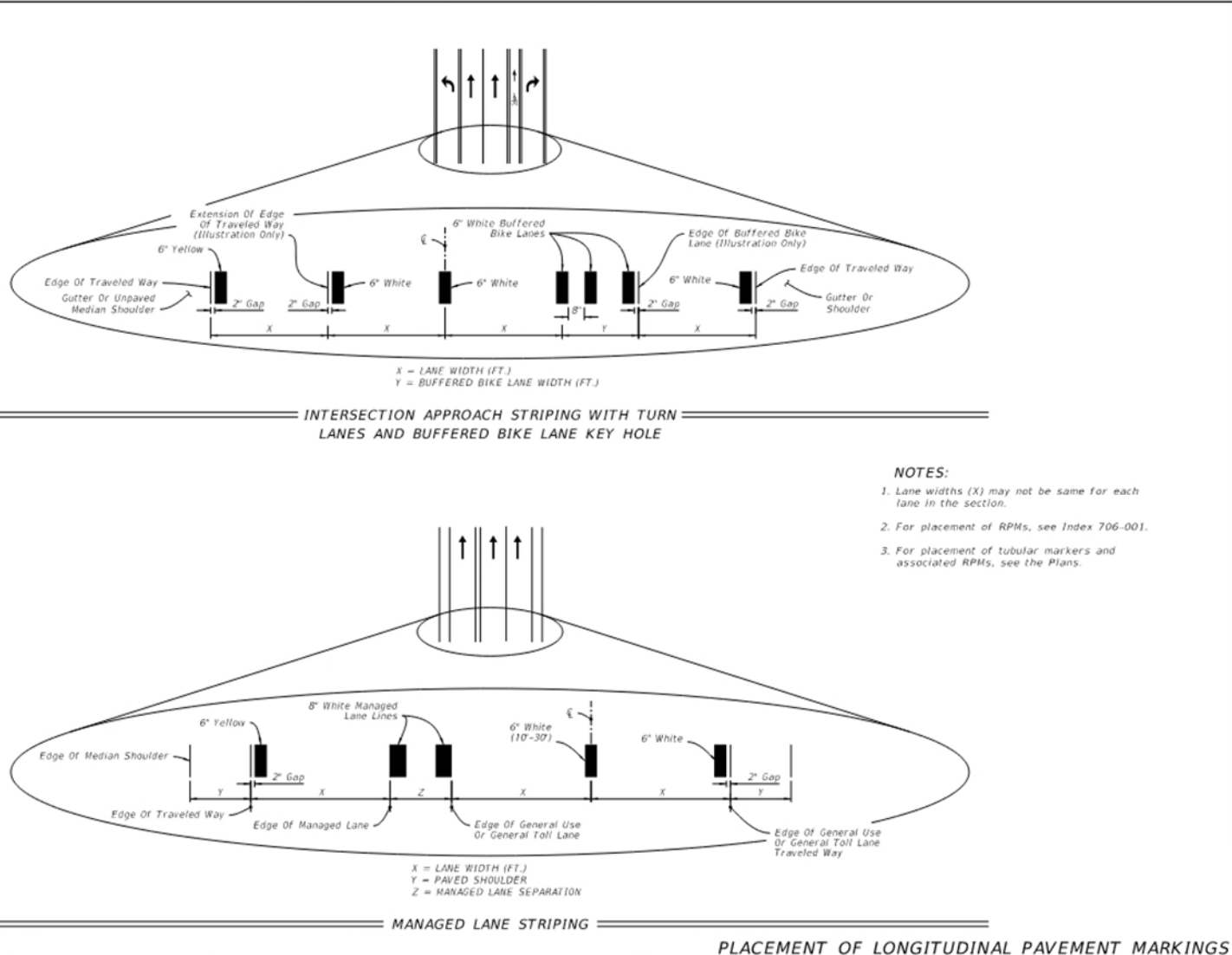
## Sheet 4: Managed Lane



- Updated Buffered Express Lane Striping Detail to replace "Express" with "Managed" in title and callouts
- Deleted "Buffered" in detail title and callout
- Replaced "Buffer" with "Separation" in callout
- Deleted extraneous lines from the detail
- Updated Note 3 to replace "Express Lane" with "Tubular"



## Sheet 4: Managed Lane



- NOTES:**
1. Lane widths (X) may not be same for each lane in the section.
  2. For placement of RPMs, see Index 706-001.
  3. For placement of tubular markers and associated RPMs, see the Plans.

- Updated Buffered Express Lane Striping Detail to replace "Express" with "Managed" in title and callouts
- Deleted "Buffered" in detail title and callout
- Replaced "Buffer" with "Separation" in callout
- Deleted extraneous lines from the detail
- Updated Note 3 to replace "Express Lane" with "Tubular"

# Contact Us:



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# FY 2025-26 Standard Plans Update Training

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## Standard Plans – Primary Updates:

- 1) **Index 102 Series - Temporary Barriers:**
  - *SPI Additions – Single-Slope connections; Constrained conditions*
- 2) **Index 521-001 – Concrete Barrier:**
  - *Constructability Update, Curb & Gutter Barrier elevations*
  - *SPI Additions – Reduced Shoulders*
- 3) **Index 521-005 – Concrete Barrier at Toll Sites: *New from Developmental***
- 4) **Index 536-002 – Guardrail Connections for Existing Bridges:**
  - *Constructability Updates – Tolerance of Longitudinal Placement*
  - *SPI Additions – Responsibilities of the EOR*
- 5) **Index 635-005 – Fiber Optic Splice Vault: *New from Developmental***
- 6) **Index 715-002 – Standard Aluminum Lighting:**
  - *CADD Refresh, Miscellaneous updates; New arm options*
- 7) **Index 715-003 – Utility Conflict Pole:**
  - *New – Spread footing foundation*





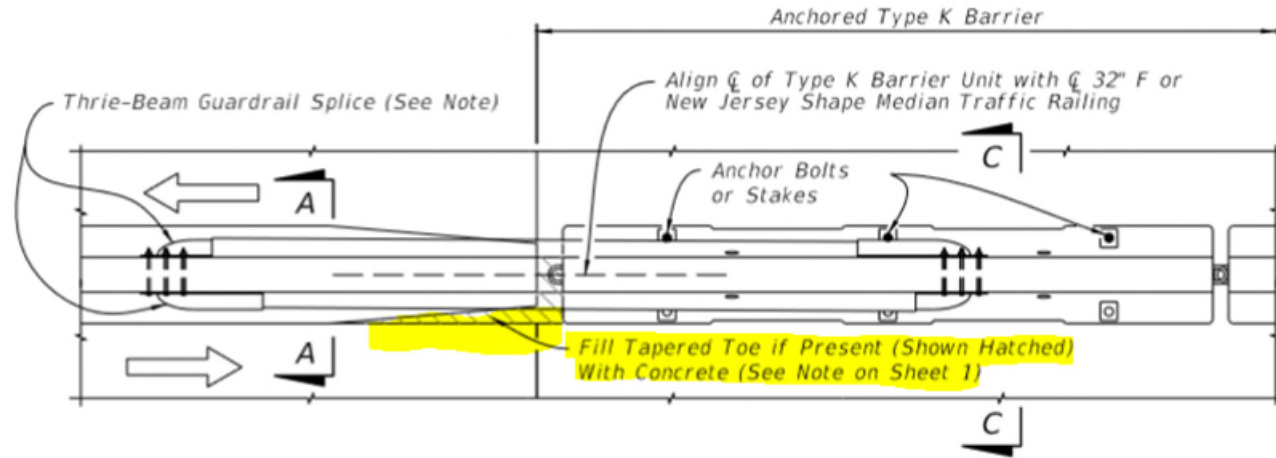
## Standard Plans – Primary Updates:

- ➔ 1) **Index 102 Series - Temporary Barriers:**
- *SPI Additions – Single-Slope connections; Constrained conditions*



## Standard Plans Instructions (SPI) Part A: General Single-Slope Barrier & Traffic Railing Use

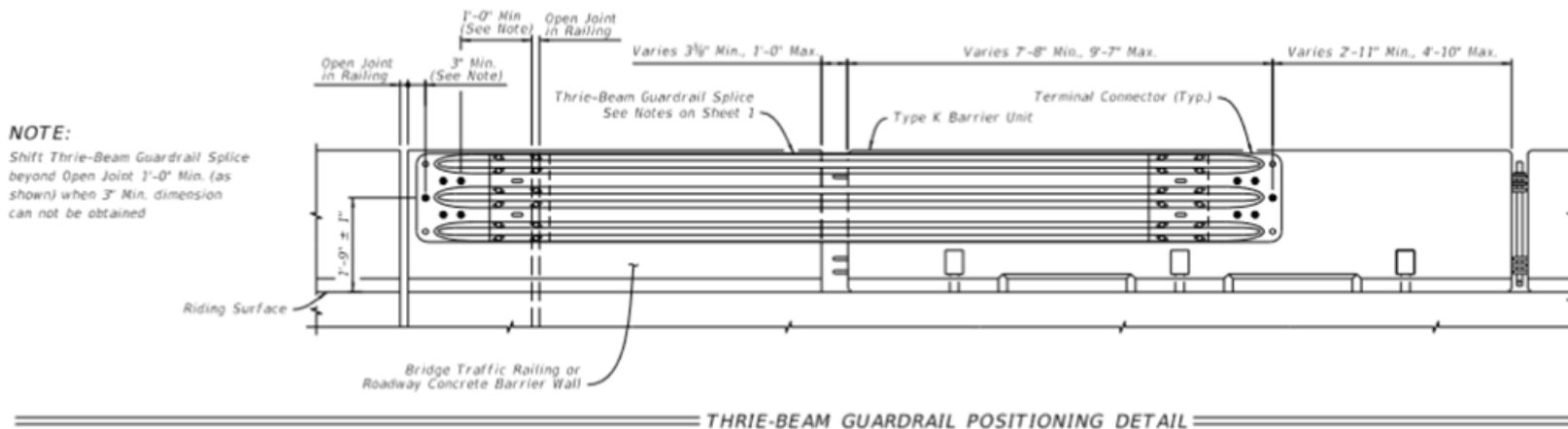
- Single-Slope shapes may also be connected to Temporary Type K Barriers



- In the Plans, reference the “Thrie-Beam Guardrail Positioning Detail” on Sheet 10

- Also, ensure that ...Installation Note 3 is followed for connecting to trailing ends of Single-Slope Barriers & Traffic Railings:

- fill tapered toes with concrete as shown)

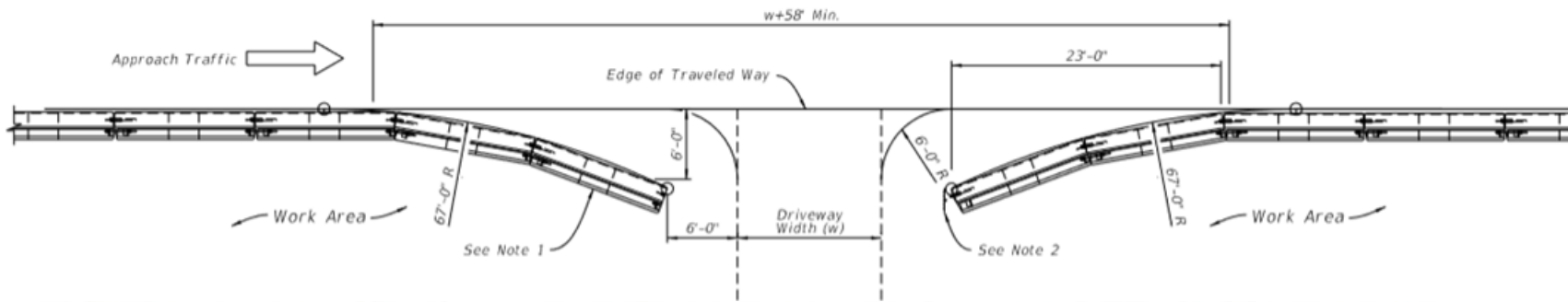


**NOTE:**  
Shift Thrie-Beam Guardrail Splice beyond Open Joint 1'-0" Min. (as shown) when 3" Min. dimension can not be obtained

THRIE-BEAM GUARDRAIL POSITIONING DETAIL

## Standard Plans Instructions (SPI) Part B: Shielding Hazards General Placement - Constrained Conditions

For constrained conditions that prevent meeting the full LON, such as those required for median openings, side streets, or driveways, extend barrier to the farthest extent possible while providing for the safe movement of traffic. For taller barriers, follow requirements for Clear Sight Triangles per **FDM 212.11**. Use applicable end treatments or driveway layouts per the **Standard Plans** drawings.



For greatest redirective capacity, include a minimum length of 200 feet of temporary barrier in unconstrained conditions. Unless anchored (Type K barrier option only), extend temporary barrier installations a minimum of 100 feet past the work zone or hazard in unconstrained conditions. If constrained conditions are present, provide the maximum barrier length possible per above. For Type K barriers, any installation with a total length less than 200 feet must be anchored.

- Meet full “Length of Need” requirements where possible...
- If constrained conditions are present, follow the updated SPI guidance, shown at the left...

(Drawing is from  
Index 102-120  
Low-Profile Barrier)

## Standard Plans – Primary Updates:

1) **Index 102 Series - Temporary Barriers:**

- *SPI Additions – Single-Slope connections; Constrained conditions*



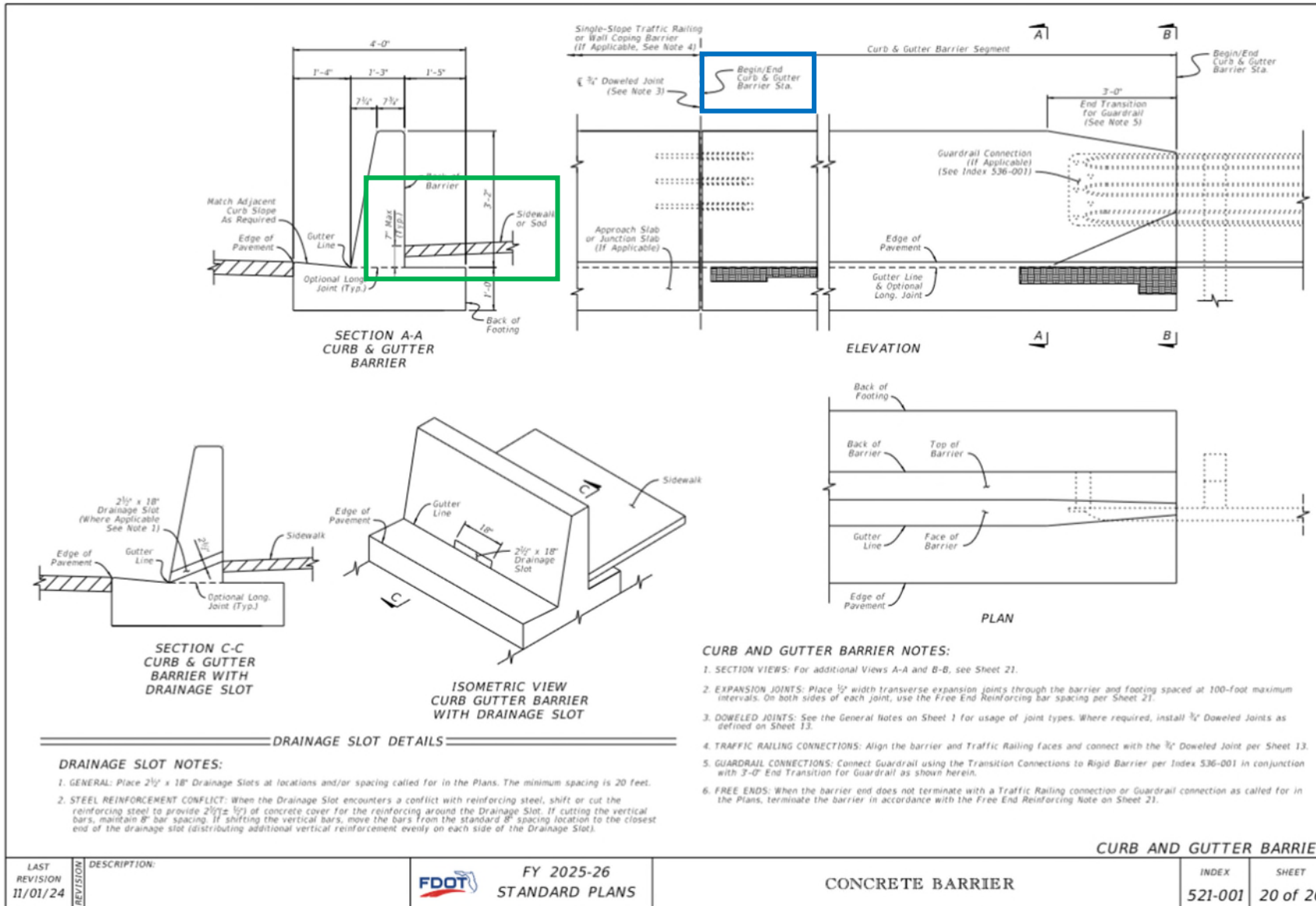
2) **Index 521-001 – Concrete Barrier:**

- *Constructability Update, Curb & Gutter Barrier elevations*
- *SPI Additions – Reduced Shoulders*





## Sheet 20: Curb and Gutter Barrier – Finish Grade / Sidewalk Max. Elevation Added



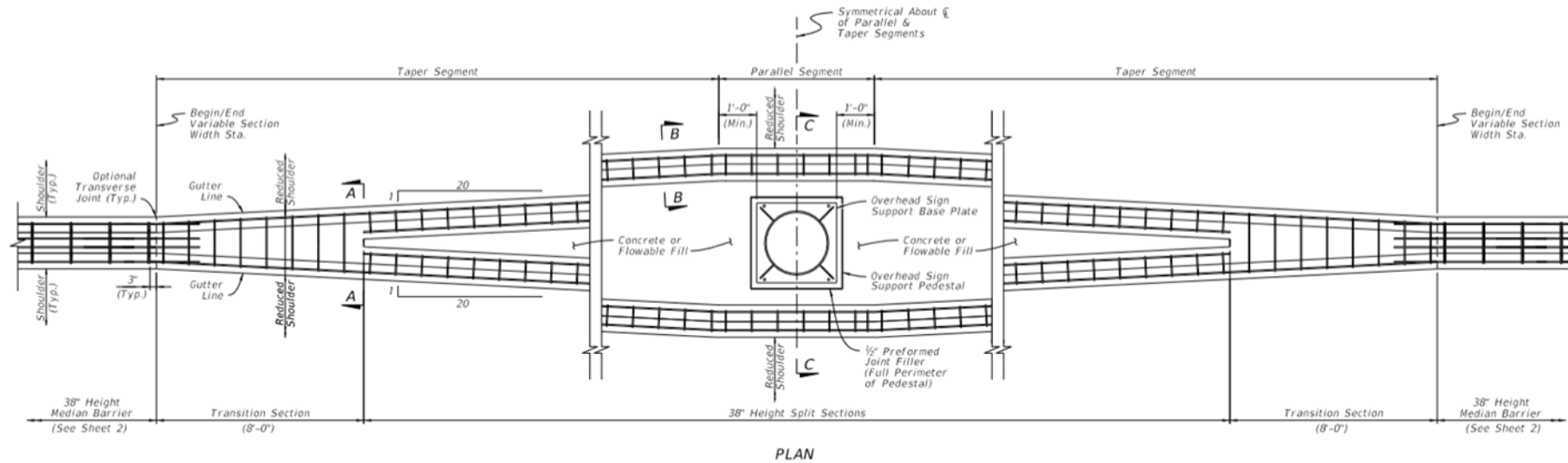
- Finish grade elevation, including sidewalks, is... **7" Max.** above footing (at point touching barrier)

- This provides 31" pedestrian "railing", similar to guardrail allowance in **FDM 222**

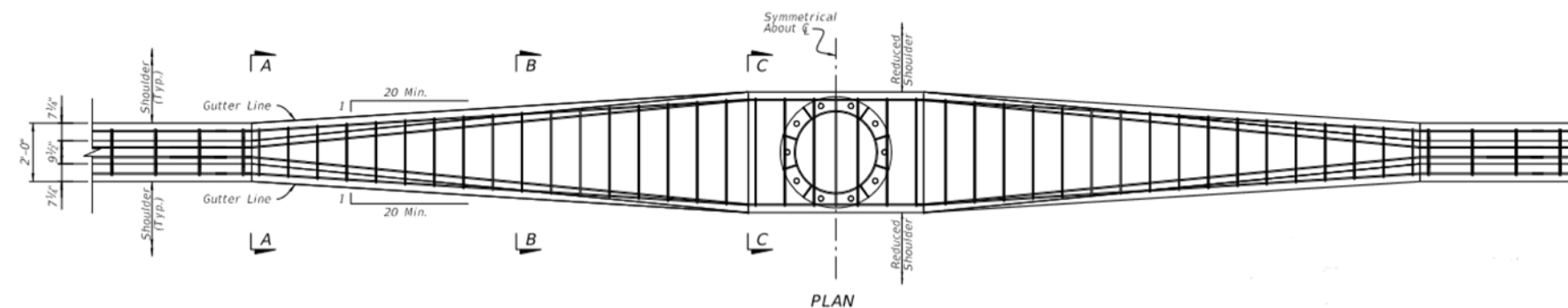
- Begin/End Barrier Callouts added near Traffic Railing connections throughout 521-001 (corresponds to Project-Specific Plans)

## Standard Plans Instructions (SPI) Part F. Variable Section Width Segments: Reduced Shoulder Widths...

- **New Guidance provided to address reduced shoulder widths:**
- Project-specific evaluation is needed for reduced shoulder widths:
  - Consider “Emergency Shoulder Use” (ESU) needs per **FDM 211**
  - Consider general “Useable Shoulder Width” needs
  - Coordinate with District Design Office
  - **Reduced shoulder usage generally requires Design Exception per **FDM 122****



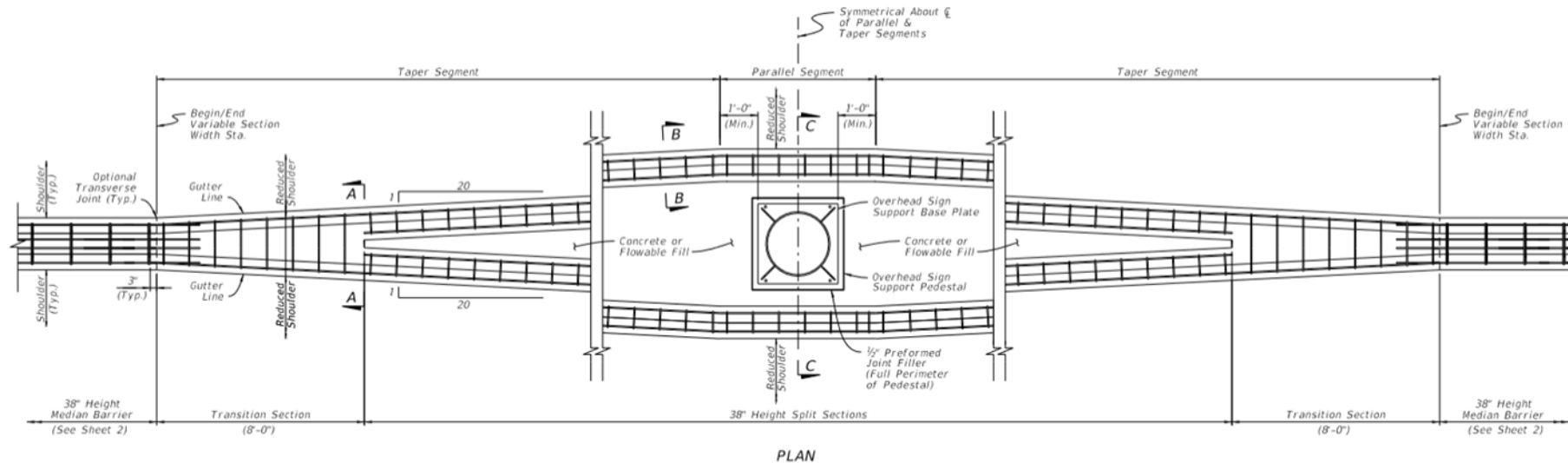
PLAN



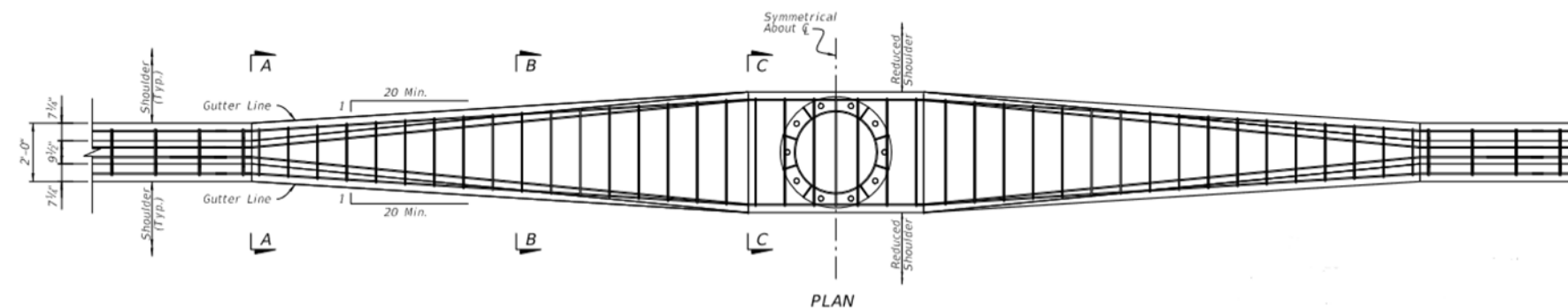
PLAN

## Standard Plans Instructions (SPI) Part F. Variable Section Width Segments: Reduced Shoulder Widths...

- **New Guidance provided to address reduced shoulder widths:**
- Project-specific evaluation is needed for reduced shoulder widths:
  - Consider “Emergency Shoulder Use” (ESU) needs per **FDM 211**
  - Consider general “Useable Shoulder Width” needs
  - Coordinate with District Design Office
  - **Reduced shoulder usage generally requires Design Exception per **FDM 122****



PLAN



PLAN

## Standard Plans – Primary Updates:

1) **Index 102 Series - Temporary Barriers:**

- *SPI Additions – Single-Slope connections; Constrained conditions*

2) **Index 521-001 – Concrete Barrier:**

- *Constructability Update, Curb & Gutter Barrier elevations*
- *SPI Additions – Reduced Shoulders*

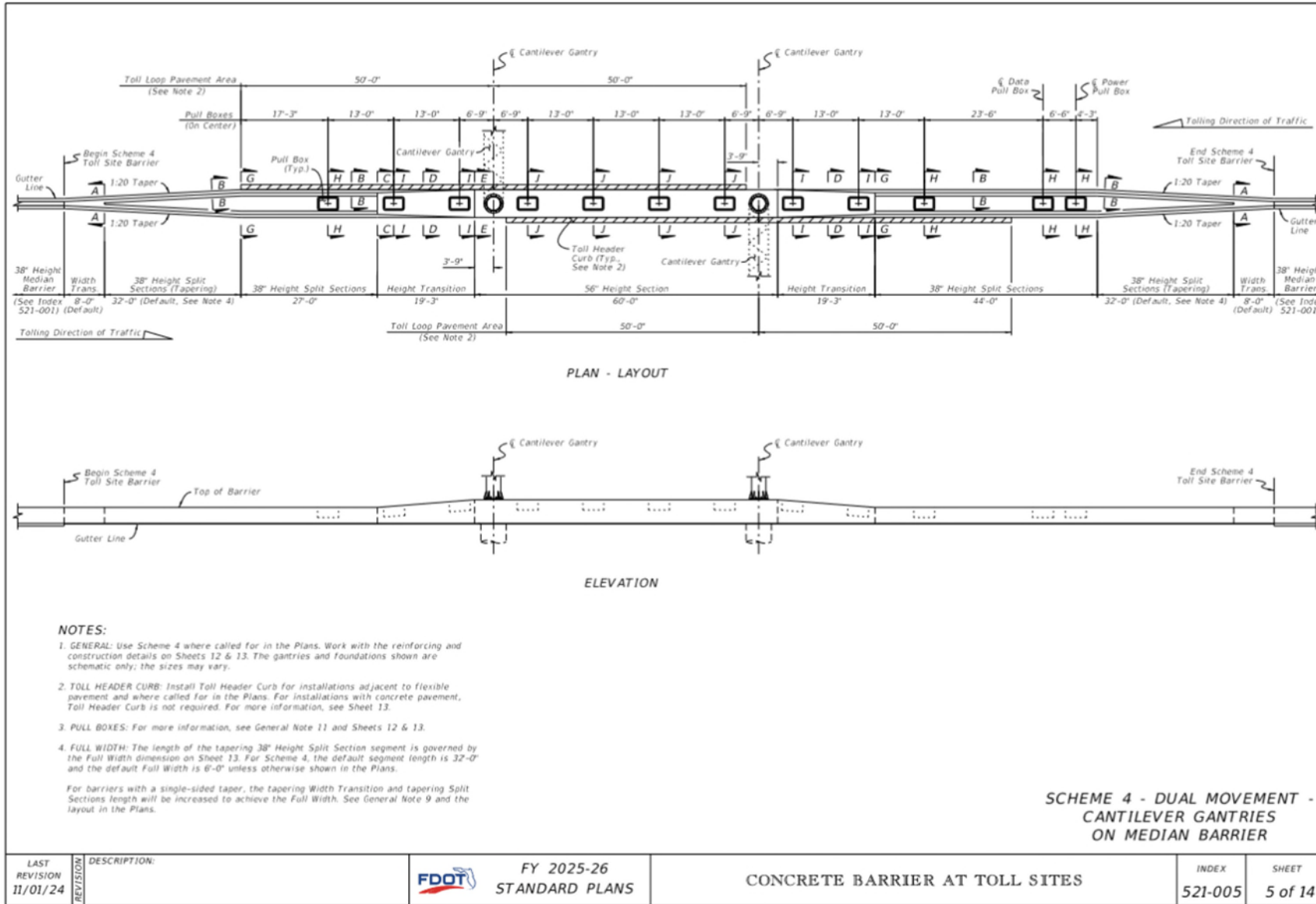


3) **Index 521-005 – Concrete Barrier at Toll Sites: *New from Developmental***





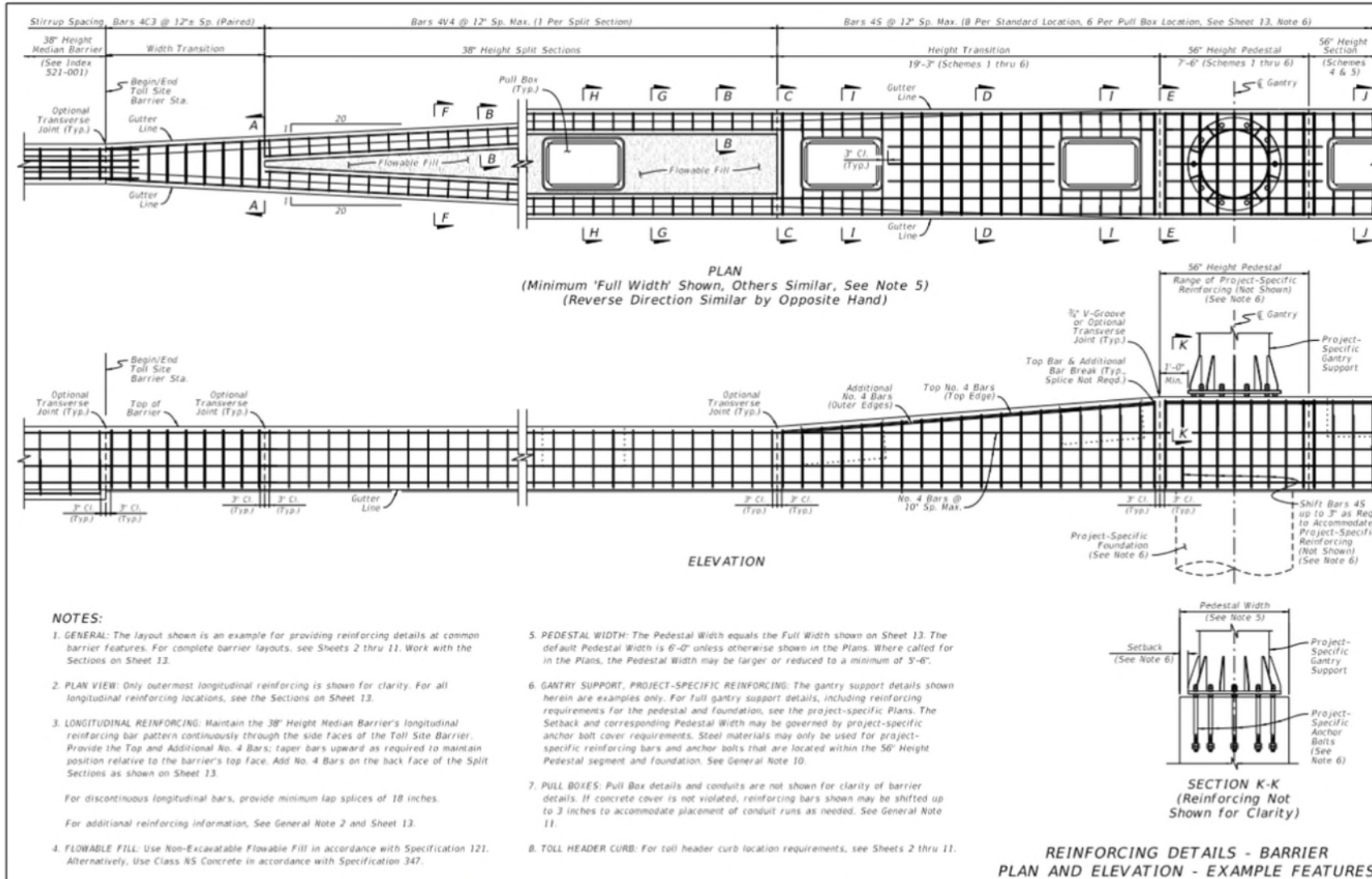
## New Standard Plans (From Developmental)



- Previously introduced with our FY2023-24 Standard Plans Update Training

- As a reminder...
  - Primarily used for **Florida's Turnpike Enterprise (FTE) Toll Sites**
  - Provides 10 layout "schemes" for various pull box and gantry support placement configurations

## Reinforcing Details - Glass Fiber Reinforced Polymer (GFRP)



- Uses non-metallic GFRP reinforcement to avoid interference with toll site detection equipment
- Full reinforcing details are provided in this standard

## Standard Plans Instructions – *All New*

Standard Plans Instructions

Topic No. 625-010-003

Index 521-005 Concrete Barrier at Toll Sites

FY 2025-26

### Index 521-005 Concrete Barrier at Toll Sites

#### Design Criteria

**FDOT Design Manual (FDM); FTE General Tolling Requirements; AASHTO Roadside Design Guide**, 4th Edition; **AASHTO Manual for Assessing Safety Hardware (MASH)**, Test Level 4 Criteria; **AASHTO LRFD Bridge Design Specifications**, 7th Edition.

#### Design Assumptions and Limitations

For general Concrete Barrier information and additional related guidance, see the **Standard Plans Instructions (SPI) for Index 521-001**.

**Index 521-005** provides requirements for installation of median concrete barrier configurations through toll site facilities, including the locations for pull boxes, toll header curb, gantry supports, and barrier reinforcement. This Index is primarily intended for use on **Florida's Turnpike Enterprise (FTE)** toll site facilities with coordinating information found in the **General Tolling Requirements (GTR)**. This Index may also be used for toll sites in other Districts at the District's discretion.

Based on the location needs and guidance provided in the **GTR**, the Engineer of Record (EOR) must select a barrier scheme option as provided in **Index 521-005**. Additionally, the EOR must provide project-specific design information, including the applicable items listed in the Plans Content Requirements below.

- **The Standard Plans work in coordination with the FTE General Tolling Requirements (GTR)**
- Engineer of Record (EOR) chooses scheme number in the plans, draws basic layout to scale and ensures alignment...



## Standard Plans Instructions – *All New*

### B. Project-Specific Design Information:

Provide details and notes for defining all items required to coordinate with the General Notes in **Index 521-005**. These items include:


1. Minor Grade Separations: See the **SPI for Index 521-001**
2. Single-sided Tapers: Detail as described in the General Notes. Extend the barrier length, show this visually in the plan views, and label accordingly.
3. Project-specific Gantries and Supports: A structural EOR must provide the gantry design, including the barrier's project-specific reinforcement and foundation design. For additional design coordination information, see the General Notes and referenced sheet details.
4. Pull Boxes and Conduit: Call out pull boxes and provide conduit placement details where required per the **FTE, GTR, and Standard Specifications**.
5. General Toll Site Electronics Equipment: Provide electronics placement details as needed per the requirements of the **FTE and GTR**.
6. Toll Header Curb: Call for where required for flexible pavement, per **Index 521-005, Index 520-001, and the Standard Specifications**.

*....Work with the GTR and FTE toll site experts!*

- **Part B: Project-Specific Design Information**
- Toll sites are relatively advanced, so there are significant **project-specific design requirements for the toll site EOR:**
  1. Minor Grade separations
  2. Single-sided tapers
  3. Project-specific gantries and supports
  4. Pull boxes and conduit
  5. Electronics Equipment
  6. Toll Header Curb

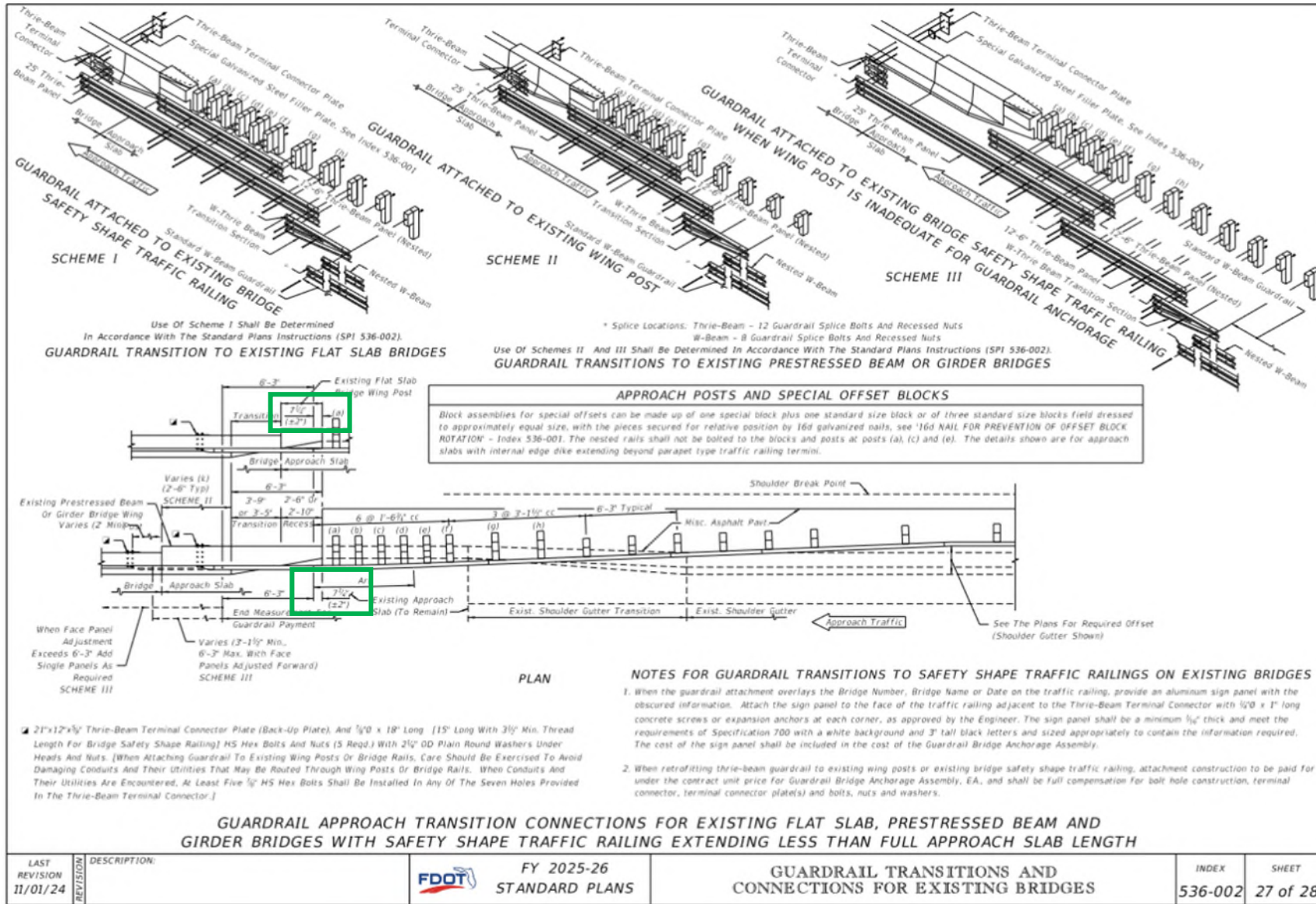


## Standard Plans – Primary Updates:

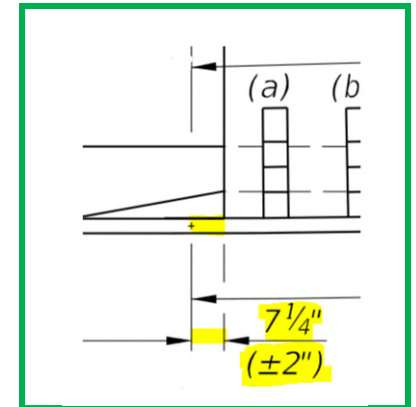
- 1) **Index 102 Series - Temporary Barriers:**
  - *SPI Additions – Single-Slope connections; Constrained conditions*
- 2) **Index 521-001 – Concrete Barrier:**
  - *Constructability Update, Curb & Gutter Barrier elevations*
  - *SPI Additions – Reduced Shoulders*
- 3) **Index 521-005 – Concrete Barrier at Toll Sites: *New from Developmental***
- 
**4) Index 536-002 – Guardrail Connections for Existing Bridges:**
  - *Constructability Updates – Tolerance of Longitudinal Placement*
  - *SPI Additions – Responsibilities of the EOR*



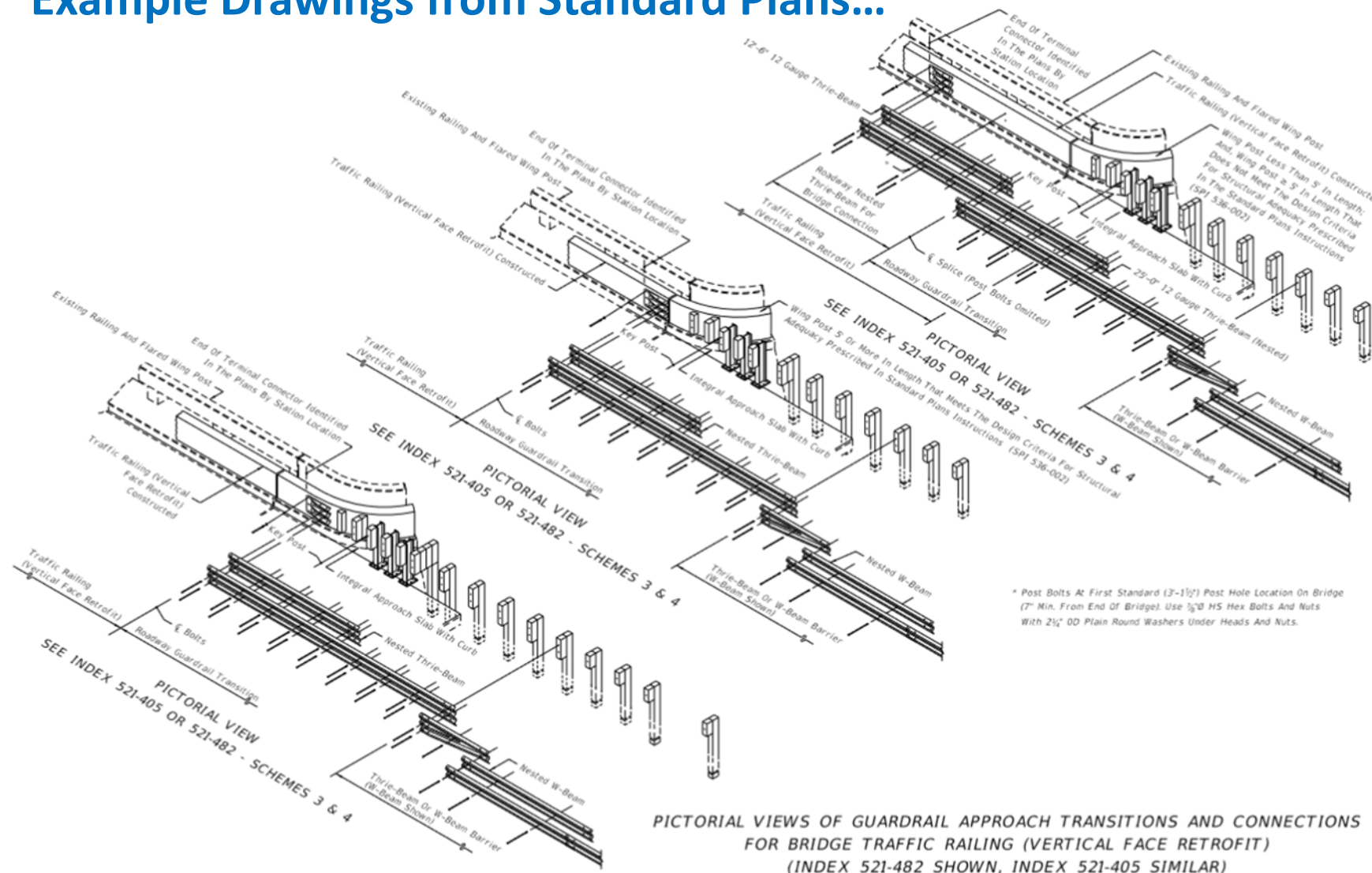
## Sheet 27 & 28: Guardrail Transition Connections (Approach and trailing)



- Tolerance added for distance between end of concrete barrier and center of guardrail splice. Result:
  - Entire guardrail system has longitudinal tolerance of ( $\pm 2''$ )



## Standard Plans Instructions (SPI) – EOR Must Choose Schemes Example Drawings from Standard Plans...




PICTORIAL VIEWS OF GUARDRAIL APPROACH TRANSITIONS AND CONNECTIONS FOR BRIDGE TRAFFIC RAILING (VERTICAL FACE RETROFIT) (INDEX 521-482 SHOWN, INDEX 521-405 SIMILAR)

**‘Design Assumptions and Limitations’ further clarifies...**

- EOR must provide project-specific Traffic Railing and Connection Scheme information in the Plans.
- For example...
  - “Railing: Index 521-405”
  - “Connection: Index 536-002, Sheet 22, Scheme 3”



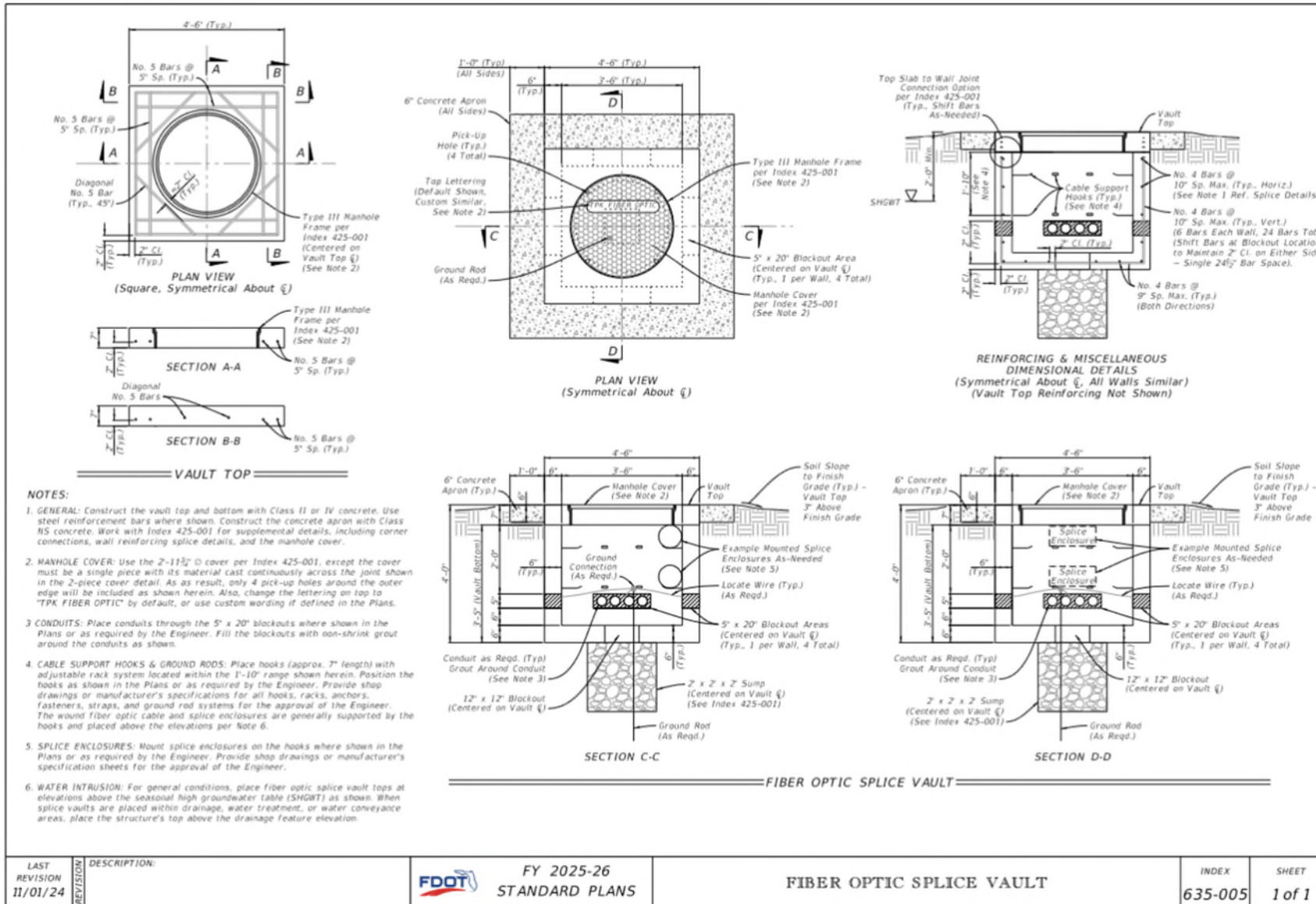
## Standard Plans – Primary Updates:

- 1) **Index 102 Series - Temporary Barriers:**
  - *SPI Additions – Single-Slope connections; Constrained conditions*
- 2) **Index 521-001 – Concrete Barrier:**
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  - *SPI Additions – Reduced Shoulders*
- 3) **Index 521-005 – Concrete Barrier at Toll Sites: *New from Developmental***
- 4) **Index 536-002 – Guardrail Connections for Existing Bridges:**
  - *Constructability Updates – Tolerance of Longitudinal Placement*
  - *SPI Additions – Responsibilities of the EOR*
-  5) **Index 635-005 – Fiber Optic Splice Vault: *New from Developmental***





## New Standard Plans (From Developmental)



- Previously introduced with FY 2024-25 Standard Plans Update Training...

- Primarily used for FTE medians to facilitate fiber optic access points and connections

- SDO Designed for H-20 load

- Uses Type III Manhole per Index 425-001

## Standard Plans Instructions – *All New!*

Standard Plans Instructions  
Index 635-005 Fiber Optic Splice Vault

Topic No. 625-010-003  
FY 2025-26

### Index 635-005 Fiber Optic Splice Vault

#### Design Criteria

*AASHTO Standard Specification for Highway Bridges* and *AASHTO LRFD Bridge Design Specifications*

#### Design Assumptions and Limitations

*Index 635-005* provides requirements for installation of partially buried Fiber Optic Splice Vaults on medians or roadsides. See [Specification 635](#) for additional information. This Index is primarily intended for use on Florida's Turnpike Enterprise corridors, but it may also be used for other District corridors at the District's discretion. To accommodate different usage locations, change the Manhole Cover wording per the Plans Content Requirements below.

With consideration for mowing and maintenance vehicles, *Index 635-005* is designed for *AASHTO H-20* loadings.

At the discretion of the Engineer of Record, project-specific splice vaults may be used as an alternative to *Index 635-005*. These structural designs must be signed and sealed by a Professional Engineer licensed in the State of Florida.

#### Plan Content Requirements

Call out the Fiber Optic Splice Vaults where needed in contract plans set. Visually, show these vaults to scale, and define the corner point locations as needed to establish the orientation in the plan view.

The default lettering on the manhole cover top is, "TPK FIBER OPTIC". To change this wording, place a project-specific call-out in the Plans (e.g., *Manhole Custom Wording: "FDOT DISTRICT 5"*). For more information, see *Index 635-005*, Note 2.

### *Highlights!*

- Design Assumptions
  - Primarily used for FTE
  - May be used in other Districts
  - Project-specific designs may be used if 'signed and sealed' by PE
    - H-20 Loading
- Plan Content Requirements
  - Call out vault in plan view with orientation
  - Default lettering on Manhole top may be changed with Plans callout

## Standard Plans – Primary Updates:

- 1) **Index 102 Series - Temporary Barriers:**
  - *SPI Additions – Single-Slope connections; Constrained conditions*
- 2) **Index 521-001 – Concrete Barrier:**
  - *Constructability Update, Curb & Gutter Barrier elevations*
  - *SPI Additions – Reduced Shoulders*
- 3) **Index 521-005 – Concrete Barrier at Toll Sites: *New from Developmental***
- 4) **Index 536-002 – Guardrail Connections for Existing Bridges:**
  - *Constructability Updates – Tolerance of Longitudinal Placement*
  - *SPI Additions – Responsibilities of the EOR*
- 5) **Index 635-005 – Fiber Optic Splice Vault: *New from Developmental***
- 6) **Index 715-002 – Standard Aluminum Lighting:**
  - *CADD Refresh, Miscellaneous updates; New arm options*





## All Sheets: General CADD Overhaul

| SHEET | CONTENTS  |
|-------|---|
| 1     | Index Contents: General Notes   |
| 2     | Elevations  |
| 3     | Arm & Damper Details  |
| 4     | Shaft Foundation Option with Light Pole & Base Details                            |
| 5     | Spread Footing Foundation Option  |
| 6     | Base Plate Details for Median Barrier Mounted Aluminum Light Pole                 |
| 7     | Spread Footing Details for Median Barrier Mounted Aluminum Light Pole             |
| 8     | Cylindrical Foundation Details for Median Barrier Mounted Aluminum Light Pole     |
| 9     | Details for Traffic Railing (Median 36" Single-Slope) Mounted Aluminum Light Pole |

### GENERAL NOTES:

1. **LOADING:** Poles are designed to support the following:
  - a. Luminaire Effective Projected Area (EPA): 1.55 SF
  - b. Weight: 75 lb.
2. **SHOP DRAWINGS:** This Index is considered fully detailed; only submit shop drawings for minor modifications not included in the Plans.
3. **MATERIALS:**
  - a. Pole, Pole Connection Extrusions and Arm Extrusions: ASTM B221, Alloy 6063-T6 or Alloy 6061-T6
  - b. Bars, Plates, Stiffeners and Backer Ring: ASTM B221, Alloy 6063-T6
  - c. Caps and Covers: ASTM B-26, Alloy 319-F
  - d. Steel Bearing Plate: ASTM A709 or ASTM A36 Grade 36
  - e. Aluminum Weld Material: ER 4043
  - f. Transformer and Frangible Base Materials: ASTM B26 or ASTM B108, Alloy 356-T6
  - g. Bolts, Nuts and Washers:
    - i. Shoe Base Bolts: ASTM F3125, Grade A325, Type 1
    - ii. Nuts: ASTM A563 Grade DH Heavy-Hex
    - iii. Washer: ASTM F436 Type 1
  - h. Anchor Bolts, Nuts, and Washers:
    - i. Anchor Bolts: ASTM F1554 Grade 55
    - ii. Nuts: ASTM A563 Grade A Heavy-Hex
    - iii. Plate Washer: ASTM A36
  - i. Stainless Steel Fasteners: ASTM F593 Alloy Group 2, Condition A, CW1 or SH1
  - j. Nut Covers: ASTM B26 (319-F)
  - k. Concrete: Class II
  - l. Reinforcing Steel: Specification 415
4. **FABRICATION:**
  - a. Weld Arm and Pole (Alloy 6063) in the T4 temper using 4043 filler. Age the Arm and Pole artificially to the T6 temper after welding.
  - b. Transverse welds are only allowed at the base.
  - c. Roadway Light Pole Taper: Taper as required to provide a round top O.D. of 6" and a base O.D. of 8" for 20' and 25' mounting heights and 10" O.D. for poles with 30' to 50' mounting heights. Portions of the pole near the base shoe and at the arm connections may be held to simplify fabrication.
  - d. Median Barrier Mounted Light Pole Taper: Taper as required to provide a 6" O.D. round top with an 11" x 7" O.D. oblong base. Portions of the pole near the base and at the arm connections may be held constant at 11" x 7" oblong and 6" round respectively to simplify fabrication.
  - e. Provide "J", "S" or "C" hook at top of pole for electrical wires.
  - f. Equip poles located on bridges, walls and concrete median barriers/Traffic Railings with a vibration damper.
  - g. Perform all welding in accordance with AWS D1.2.
  - h. Embedded Junction Box (EJB):
    - i. Weld all seams continuously and grind smooth.
    - ii. Hot Dip Galvanize after Fabrication.
    - iii. Provide a watertight cover with neoprene gasket and secure cover with galvanized screws.

### GENERAL NOTES (CONTINUED):

5. **POLE CAPACITY:** For Median Barrier Mounted Aluminum Light Poles, the fabricator must demonstrate the ability to produce a crack free pole.
 

The fabricator's Department-approved QC Plan must contain the following information prior to fabrication:

  - a. Tests demonstrating a pole with a 1/2" wall thickness achieves an ultimate moment capacity of 36 kip-ft in the strong axis and 30 kip-ft in the weak axis.
  - b. Tests demonstrating a pole with a 5/16" wall thickness achieves an ultimate moment capacity of 44 kip-ft in the strong axis and 37 kip-ft in the weak axis.
  - c. Test results showing the pole does not buckle at the shape transition area under the ultimate moment capacity loads.
  - d. Complete details and calculations for the reinforced 4" x 6" (Min.) handhole located 1'-6" above the base plate.
6. **IDENTIFICATION TAG:** (Submit details for approval.)
  - a. 2" x 4" (Max.) aluminum identification tag.
  - b. Locate on the inside of the transformer base and visible from the door opening.
  - c. Secure to transformer base with 1/2" diameter stainless steel rivets or screws.
  - d. Include the following information on the ID Tag:
    - i. Financial Project ID
    - ii. Pole Height
    - iii. Manufacturer's Name
7. **COATINGS/FINISH:**
  - a. Pole and Arm Finish: 50 grit satin rubbed.
  - b. Galvanize Steel Bolts, Screws, Nuts and Washers: ASTM F2329
  - c. Hot Dip Galvanize EJB and other steel items including poles and plate washers: ASTM A123
8. **CONSTRUCTION:**
  - a. Foundation: Specification 455, except payment for the Foundation is included in the cost of the pole.
  - b. Frangible Base, Base Shoe, and Clamp:
    - i. Certify that the Clamp, Frangible Transformer Base, and Base Shoe Design are capable of providing the required capacity.
    - ii. Certify the Base conforms to the current FHWA required AASHTO Frangibility Requirements, tested under NCHRP Report 350 Guidelines (e.g. Akron Foundry TB1-17).
    - iii. Do not erect pole without Luminaire attached.
9. **EMBEDDED JUNCTION BOX (EJB):** Install EJBs per Note 4 and in accordance with Specification 635, as shown on the following Sheets.
10. **WIND SPEED BY COUNTY:**

120 MPH  
Alachua, Baker, Bradford, Calhoun, Clay, Columbia, Dixie, Duval, Gadsden, Gilchrist, Hamilton, Jackson, Jefferson, Lafayette, Leon, Liberty, Nassau, Madison, Putnam, Suwannee, Taylor, Union and Wakulla Counties.

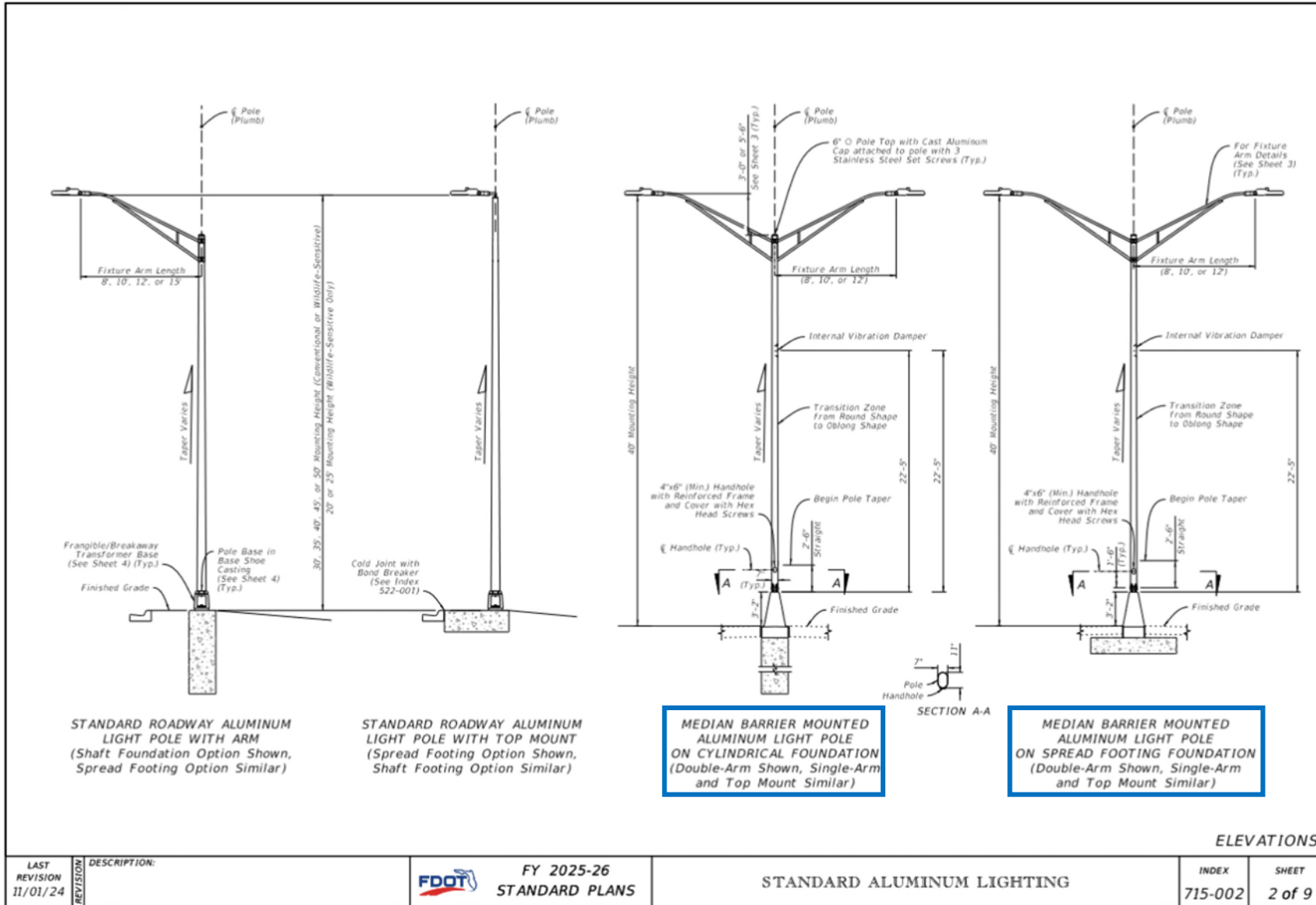
140 MPH  
Bay, Citrus, De Soto, Flagler, Franklin, Glades, Gulf, Hardee, Hendry, Hernando, Highlands, Hillsborough, Holmes, Lake, Levy, Manatee, Marion, Okaloosa, Okeechobee, Orange, Osceola, Pasco, Pinellas, Polk, Santa Rosa, Seminole, St. Johns, Suinter, Volusia, Walton and Washington Counties.

160 MPH  
Brevard, Broward, Charlotte, Collier, Escambia, Indian River, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Lucie Counties.

- **Redrawn for correct scale in all DGNs...**
- **Added Table of Contents**



## Sheet 2: Elevations




- Added LED luminaire graphics throughout all sheets...
- Barrier-Mounted Poles: **Added Single-Arm and Top Mount luminaire options**

ELEVATIONS

|                           |              |                              |                            |                  |                 |
|---------------------------|--------------|------------------------------|----------------------------|------------------|-----------------|
| LAST REVISION<br>11/01/24 | DESCRIPTION: | FY 2025-26<br>STANDARD PLANS | STANDARD ALUMINUM LIGHTING | INDEX<br>715-002 | SHEET<br>2 of 9 |
|---------------------------|--------------|------------------------------|----------------------------|------------------|-----------------|

## Standard Plans – Primary Updates:

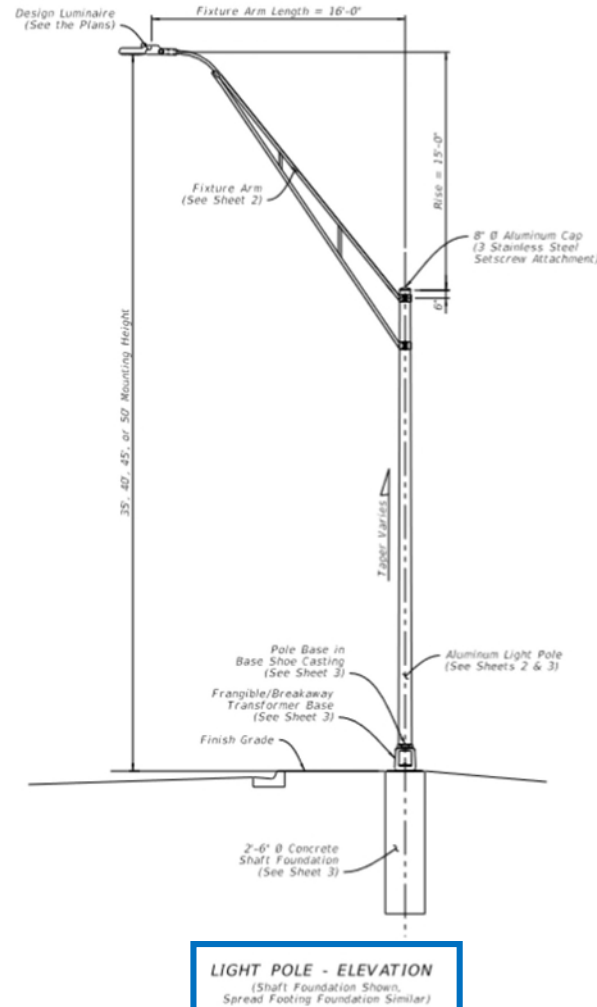
- 1) **Index 102 Series - Temporary Barriers:**
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- 2) **Index 521-001 – Concrete Barrier:**
  - *Constructability Update, Curb & Gutter Barrier elevations*
  - *SPI Additions – Reduced Shoulders*
- 3) **Index 521-005 – Concrete Barrier at Toll Sites: *New* from Developmental**
- 4) **Index 536-002 – Guardrail Connections for Existing Bridges:**
  - *Constructability Updates – Tolerance of Longitudinal Placement*
  - *SPI Additions – Responsibilities of the EOR*
- 5) **Index 635-005 – Fiber Optic Splice Vault: *New* from Developmental**
- 6) **Index 715-002 – Standard Aluminum Lighting:**
  - *CADD Refresh, Miscellaneous updates; New arm options*
- 
**7) Index 715-003 – Utility Conflict Pole:**
  - ***New** – Spread footing foundation*



## Sheet 1: Light Pole – Elevation: **New Spread Footing Option**

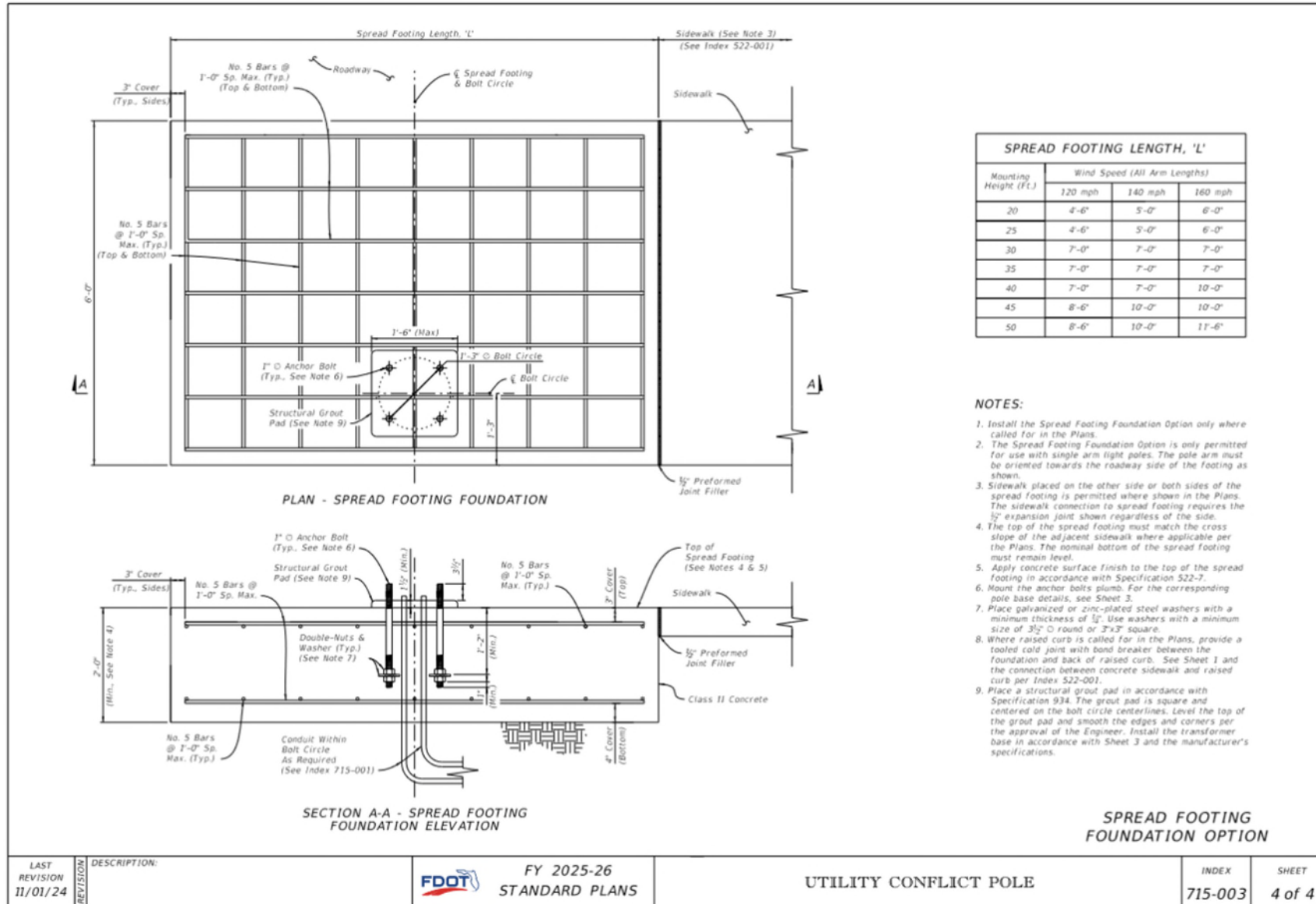
### GENERAL NOTES:

1. LUMINAIRE LOAD: Poles are designed to support the following:
  - A. Luminaire Effective Projected Area (EPA): 1.55 SF
  - B. Luminaire Weight: 75 lb.
2. SHOP DRAWINGS: This Index is considered fully detailed; only submit shop drawings for minor modifications not included in the Plans.
3. MATERIALS:
  - A. Pole, Arm Tubes, Strut Tubes, Bars, Plates, Stiffeners: ASTM B221, Alloy 6063-T6 or Alloy 6061-T6
  - B. Pole Connection Extrusion Clamp: ASTM B221, Alloy 6061-T6
  - C. Caps and Covers: ASTM B-26, Alloy 319-F
  - D. Aluminum Weld Material: ER 4043
  - E. Transformer and Frangible Base Materials: ASTM B26 or ASTM B108, Alloy 356-T6
  - F. Base Bolts, Nuts and Washers:
    - a. Shoe Base Bolts: ASTM F3125, Grade A325, Type 1
    - b. Nuts: ASTM A563 Grade DH Heavy-Hex
    - c. Washer: ASTM F436 Type 1
  - G. Anchor Bolts, Nuts, and Washers:
    - a. Anchor Bolts: ASTM F1554 Grade 55
    - b. Nuts: ASTM A563 Grade A Heavy-Hex
  - H. Clamp Hardware: See Sheet 2
  - I. Stainless Steel Cap Fasteners: ASTM F593 Alloy Group 2, Condition A, C81 or SH1
  - J. Nut Covers: ASTM B26 (319-F)
  - K. Concrete: Class II
  - L. Reinforcing Steel: Specification 415
4. FABRICATION:
  - A. Weld Arm and Pole Alloy in the T4 temper using 4043 filler. Age the Arm and Pole artificially to the T6 temper after welding.
  - B. Transverse welds are only allowed at the base.
  - C. Light Pole Properties: Taper as required to provide a round top O.D. of 8" and a base O.D. of 10" for all pole heights. Portions of the pole near the base shoe and at the arm connections may be held constant to simplify fabrication. Maintain pole wall thickness of 0.313" Min.
  - D. Fixture Arm Tube Properties: See Sheet 2.
  - E. Provide 'J', 'S' or 'C' hook at top of pole for electrical wires.
  - F. Perform all welding in accordance with AWS D1.2.
  - G. Identification Tag: (Submit details for approval.)
    - a. 2" x 4" (Max.) aluminum identification tag.
    - b. Locate on the inside of the transformer base and visible from the door opening.
    - c. Secure to transformer base with 1/4" diameter stainless steel rivets or screws.
    - d. Include the following information on the ID Tag:
      1. Financial Project ID
      2. Pole Height
      3. Manufacturer's Name
5. COATINGS/FINISH:
  - A. Pole and Arm Finish: 50 grit satin rubbed.
  - B. Galvanize Steel Bolts, Screws, Nuts and Washers: ASTM F2329
  - C. Hot Dip Galvanize miscellaneous steel items: ASTM A123
6. CONSTRUCTION:
  - A. Foundation: Specification 455, except payment for the foundation is included in the cost of the pole.
  - B. Frangible Base, Base Shoe, and Pole Connection Extrusion Clamp:
    - a. Certify that the Pole Connection Extrusion Clamp, Frangible Transformer Base, and Base Shoe Design are capable of providing the required capacity, assuming a design wind speed of 160 MPH.
    - b. Certify the Base conforms to the FHWA required AASHTO Frangibility Requirements, tested under NCHRP Report 350 Guidelines (e.g. Akron Foundry 1B1-17).
    - c. Do not erect pole without Luminaire attached.



- **Added Spread Footing Option in Elevation View**

## All-New Sheet 4: Spread Footing Foundation Option



- **Added Spread Footing Foundation Option...**
  - Saves space in constrained conditions (typically urban)
  - Avoids underground utility conflicts
  - Doubles as a sidewalk surface
  - Designed to meet **FDM 222** clearance needs for pedestrians
- Light pole orients towards roadway



## Training Announcement:

**FLORIDA LTAP CENTER**



### ***FDOT Roadside Safety - Barrier Design (11.5 PDH)***

- *FDM 215 - Roadside Safety (Usage Needs, Length of Need, General Requirements, etc.)*
- *Standard Plans 536-001 Guardrail, 521-001 Concrete Barrier, 521-002 Pier Protection Barrier*

***Video Webinar Now Online!...***

<https://floridaltap.org/recorded-webinar-fdot-roadside-safety-barrier-design-training/>

<https://floridaltap.org/>



# Contact Us:



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*Live questions answered in chat box!*

# FY 2025-26 Structures Standard Plans Update Training

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## Standard Plans – Primary Updates:

- 1) **460-470 – TRAFFIC RAILING – (THREE-BEAM RETROFIT)**
  - *Sheet 1: Added screw anchor details to the notes.*
  - *Sheet 3: Added screw anchor option details to SECTION B-B*
- 2) **471-030 – FENDER SYSTEM – PRESTRESSED CONCRETE PILES & FRP WALES**
  - *Sheet 1: Updated the FENDER SYSTEM ENERGY CAPACITY.*
- 3) **521-660 – LIGHT POLE PEDESTAL - BRIDGE**
  - *Sheet 4: Labeled the anchor bolt nuts in DETAIL "A"; Added a note for DETAIL "A" regarding minimum anchor bolt embedment and bottom concrete cover; Removed anchor bolt table; Revised Note 4 to now include maximum deck height, pole height, and pole arm length*
- 4) **630-010 – CONDUIT DETAILS - EMBEDDED**
  - *Sheet 3: Added a detail to show how to space the rebar around EJB's.*
- 5) **715-002 – STANDARD ALUMINUM LIGHTING**
  - *Sheet 6: Updated anchor bolt labels in Detail A; Updated Note 2 language and corrected which nut may be half height.*



## Sheet 1: Added screw anchor details to the notes.

- **Added screw anchor option in the notes**

### TRAFFIC RAILING NOTES

This Traffic Railing Retrofit has been structurally evaluated to be equivalent or greater in strength to a design which has been successfully crash tested in accordance with NCHRP Report 350 TL-4 criteria.

**CONCRETE:** Concrete for Transition Blocks and Curbs shall be Class II (Bridge Deck).

**REINFORCING STEEL:** Reinforcing steel shall be ASTM A615, Grade 60.

**THRIE-BEAM GUARDRAIL:** Steel Thrie-Beam Elements shall meet the requirements for Class B (10 Gauge) Guardrail of AASHTO M 180, Type II (Zinc coated). The minimum panel length for Thrie-Beam Elements shall be 12'-6". Field drilled holes for Post connections shall be 3/4" by 2 1/2" slotted holes.

**GUARDRAIL BOLTS:** Guardrail bolts, nuts and washers shall be in accordance with AASHTO M180.

**GUARDRAIL POSTS AND BASE PLATES:** Posts and Base Plates shall be in accordance with ASTM A36 or ASTM A709 Grade 36.

**Screw Anchors shall meet the requirements for**

**Developmental Specification Dev937PIAS**

**ANCHOR BOLTS, NUTS AND WASHERS:** Adhesive-Bonded Anchors and Anchor Bolts shall be fully threaded rods in accordance with ASTM F1554 Grade 105 or ASTM A193 Grade B7. At the Contractor's option, Anchor Bolts for through bolting may be in accordance with ASTM A449. All Nuts shall be single self-locking hex nuts and in accordance with ASTM A563 or ASTM A194. Flat Washers shall be in accordance with ASTM F436 and Plate Washers (for long slotted holes only) shall be in accordance with ASTM A36 or ASTM A709 Grade 36. After the nuts have been snug tightened, the anchor bolt threads shall be distorted to prevent removal of the nuts. Distorted threads and the exposed trimmed ends of anchors shall be coated with a galvanizing compound in accordance with the Specifications.

**Screw Anchors shall be mechanically galvanized. All other**

**COATINGS:** Nuts, Bolts, Anchors, Washers, Guardrail Posts, Anchor Plates and Base Plates shall be hot-dip galvanized in accordance with the Specifications. Guardrail Post Assemblies shall be hot-dip galvanized after fabrication.

**ADHESIVE-BONDED ANCHORS AND DOWELS:** Adhesive Bonding Material Systems for Anchors and Dowels shall comply with Specification Section 937 and be installed in accordance with Specification Section 416. The field testing proof loads required by Specification Section 416 shall be 15,000 lbs. for 7/8" Ø anchor bolts; 55,000 lbs. for the 1 1/4" anchor bolts with 13" embedment; and 30,500 lbs. for the 1 1/4" Ø anchor bolts with 5" embedment.

**SCREW ANCHORS: Screw Anchors shall be listed on the Innovative or Approved Products List (IPL or APL). No proof testing is required.**

**BRIDGES ON CURVED ALIGNMENTS:** The details presented in these Indexes are shown for bridges on tangent alignments. Details for bridges on horizontally curved alignments are similar.

**POST SPACING:** Posts shall be located along the length of the bridge at typical 6'-3" or 3'-1 1/2" spaces. Utilize the Modified Post Spacing at Intermediate Deck Joints Details as required to clear deck joints. Establish post spacing along the bridge and Roadway Guardrail Transition beginning with the Key Post. The variable post spacings located near begin and end bridge may be utilized to optimize the typical post spacing. Variable lengths of guardrail overlap are also permitted to optimize the typical post spacing. Symmetry of post spacing is not necessary.

**THRIE-BEAM EXPANSION SECTION:** Thrie-Beam Expansion Sections shall be installed at locations shown in the Plans. Install nuts for splice bolts finger-tight at 2 1/2" slots in thrie beam expansion sections. Nuts shall fully engage bolts with a minimum of one bolt thread extending beyond the nuts. Distort the first thread on the outside of the nut to prevent loosening. Tighten guardrail bolts in 3/4" slots at guardrail post(s) that lie between the slotted expansion splice and bridge deck joint so that the bolt heads are in full contact with thrie-beam elements, but not so tight as to impede movement due to expansion.

**BEARING PADS:** Provide plain Neoprene pads with a durometer hardness of 60 or 70 and meeting the requirements of Specification Section 932, for ancillary structures.

**ELEVATION MARKERS:** Elevation Markers need not be replaced when portions of the existing traffic railing carrying existing elevation markers are removed.

**BARRIER DELINEATORS:** Install Barrier Delineators at the top of the guardrail offset blocks in accordance with Specification Section 705. Match the Barrier Delineators color (white or yellow) to the near edgeline.

**PEDESTRIAN SAFETY TREATMENTS:** Pedestrian Safety Treatment is required when called for in the Plans. See Index 536-001 for details.

**BRIDGE NAME PLATE:** If a portion of the existing Traffic Railing is to be removed that carries the bridge name, number and or date, or if the installation of the Traffic Railing (Thrie Beam Retrofit) will obscure the bridge name, number and or date, then replace the information that has been removed or obscured, with 3" tall black lettering on white nonreflective sheeting applied to the top of the adjacent guardrail. The information must be clearly visible from the right side of the approaching travel lane. The sheeting and adhesive backing shall comply with Specification Section 994 and may comprise of individual decals of letters and numbers.

**PAYMENT:** Payment will be made under Metal Traffic Railing (Thrie-Beam Retrofit) which shall include all materials and labor required to fabricate and install the barrier and lapped guardrail where necessary to maintain post spacing. Transition Blocks and Curbs, Bridge Name Plate and Barrier Delineators and installation of Elevation Markers, where required, will not be paid for directly but shall be considered as incidental work.

|                                       |              |                              |  |                  |                 |
|---------------------------------------|--------------|------------------------------|--|------------------|-----------------|
| LAST REVISION<br>11/01/19<br>11/01/24 | DESCRIPTION: | FY 2023-24<br>STANDARD PLANS | TRAFFIC RAILING - (THRIE-BEAM RETROFIT)<br>TYPICAL DETAILS & NOTES | INDEX<br>460-470 | SHEET<br>1 of 3 |
|---------------------------------------|--------------|------------------------------|--|------------------|-----------------|

## Sheet 3: Added screw anchor option details to SECTION B-B

- Added screw anchor option in various details

**POST DIMENSION TABLE**

| POST     | CURB HEIGHT (DIM. A) | DIM. X  | DIM. Y |
|----------|----------------------|---------|--------|
| Post "A" | 5" to 7"             | 11 1/2" | 2'-0"  |
| Post "B" | > 7" to 10"          | 9 1/2"  | 1'-10" |
| Post "C" | > 10" to 1'-0"       | 7 1/2"  | 1'-8"  |

**ANCHOR PLATE DETAIL**

**PLATE WASHER DETAIL**

**OFFSET BLOCK DETAIL**

**SECTION B-B**

**THRIE-BEAM GUARDRAIL SPLICE**

**TYPICAL SECTION THRU THRIE-BEAM GUARDRAIL (EXPANSION SECTION SIMILAR)**

**5/8" OVAL SHOULDER BUTTON HEAD BOLT**

| L                | THREAD LENGTH | APPLICATION  |
|------------------|---------------|--|
| 1 1/2"           | Full Length   | Rail Splice Bolt, Post Bolt for Index 460-471, 460-473 & 460-476 |
| Varies (8" Min.) | 4" Min.       | Post Bolt for Index 460-472, 460-473, 460-474, 460-475 & 460-476 |

**ANCHOR PLATE DETAIL**

**PLATE WASHER DETAIL**

**OFFSET BLOCK DETAIL**

**SECTION B-B**

**THRIE-BEAM GUARDRAIL SPLICE**

**TYPICAL SECTION THRU THRIE-BEAM GUARDRAIL (EXPANSION SECTION SIMILAR)**

**5/8" OVAL SHOULDER BUTTON HEAD BOLT**

**5/8" MODIFIED HEAVY HEX NUT (RECESSED NUT)**

**ANCHOR PLATE DETAIL**

**PLATE WASHER DETAIL**

**OFFSET BLOCK DETAIL**

**SECTION B-B**

**THRIE-BEAM GUARDRAIL SPLICE**

**TYPICAL SECTION THRU THRIE-BEAM GUARDRAIL (EXPANSION SECTION SIMILAR)**

**5/8" OVAL SHOULDER BUTTON HEAD BOLT**

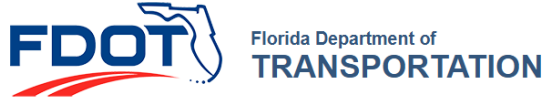
**5/8" MODIFIED HEAVY HEX NUT (RECESSED NUT)**



# 460-470 – TRAFFIC RAILING – (THRIE-BEAM RETROFIT)

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102 - Maintenance of Traffic

### Resource Links:

- FDOT Standard Specifications for Road and Bridge Construction
- FDOT Standard Plans for Road and Bridge Construction
- Developmental Design Standards (DDS)
- Developmental Design Specifications (DDS)
- Traffic Engineering & Research Lab Matrices
- Construction, Bulletins-Memorandums

### Product Types

- Automated Flagger Assistance Device (AFAD)
- Barricade Type I
- Barricade Type I MASH-16
- Barricade Type II MASH-16
- Barricade Type II NCHRP-350
- Barricade Type III MASH-16
- Barricade Type III NCHRP-350
- Cones
- Crash Cushions MASH TL-2, (for Work Zone Only)
- Crash Cushions MASH TL-3, (for Work Zone Only)
- Crash Cushions NCHRP-350, (for Work Zone Only)
- DEV - Smart Work Zone, Arrow Board
- DEV - Smart Work Zone, Camera
- DEV - Smart Work Zone, Central Processor
- DEV - Smart Work Zone, Location Device
- DEV - Smart Work Zone, Portable Changeable Message Sign
- DEV - Smart Work Zone, Portable Variable Speed Limit Sign
- DEV - Smart Work Zone, Portable Variable Speed Limit Sign with Electronic Speed Feedback Sign
- DEV - Smart Work Zone, Vehicle Detector
- DEV - Temporary Portable Access Mats
- DEV - Work Zone Collision Detection and Avoidance System
- Glass Screen

## Sheet 1: Updated the FENDER SYSTEM ENERGY CAPACITY.

- Updated the Maximum Energy Capacity

**GENERAL NOTES:**

**U.S. COAST GUARD NOTIFICATION:** Notify the local office of the U.S. Coast Guard at least 30 days prior to beginning of construction of the Fender System.

**14" SQUARE PRESTRESSED CONCRETE PILES –** Provide 14" Square Prestressed Concrete Piles of sufficient length to achieve a minimum embedment of 20' into soil having a blow count greater than or equal to 6 ( $N \geq 6$ ). Pile splices and build-ups are not permitted. Use only 14" Square Prestressed Concrete Piles with 8 - 1/2" diameter Low Relaxation Strands fabricated in accordance with Index 455-014.

**PLASTIC LUMBER AND STRUCTURAL COMPOSITE LUMBER WALES:** Provide only Plastic Lumber (Thermoplastic Structural Shapes) and Structural Composite Lumber (Reinforced Thermoplastic Structural Shapes) Wales in accordance with Specification Section 973. Wales shall be continuous and spliced only at locations shown on the plans.

**PLASTIC LUMBER DECKING FOR CATWALKS:** Provide Plastic Lumber decking for catwalks when called for in the Plans in accordance with Specification Section 973.

Install Plastic Lumber Decking according to manufacturer's recommendations using stainless steel #10 x 3" (minimum) deck screws.

**FIBERGLASS OPEN GRATING FOR CATWALKS:** Provide Fiberglass Open Grating for catwalks when called for in the Plans. Fiberglass Open Grating shall be a heavy duty design suitable for exterior installations. Maximum gap opening on the walkway surface shall be 1 1/2". Design live loads and deflections shall be a 50 psf uniformly distributed load with a maximum deflection of 3/8" or L/120 at the center of a simple span and a concentrated load of 250 pounds with a maximum deflection of 1/4" at the center of a simple span. Color of Fiberglass Open Grating shall be gray or black.

Install Fiberglass Open Grating according to manufacturer's recommendations using stainless steel hardware, screws, bolts, nuts and washers. Attach Fiberglass Open Grating to Wales and Deck Supports at a 2'-0" maximum spacing so as to resist pedestrian live loads and uplift forces from wind, buoyancy and wave action.

**CLEARANCE GAUGE AND LIGHT:** Clearance Gauge to be furnished and installed by the Contractor. Clearance Gauge width and numeral height is dependent on visibility distance. The required visibility distance shall be determined by the United States Coast Guard District Commander. Provide and install Clearance Gauge Light in accordance with Specification Section 510 and Index 510-001.

**NAVIGATION LIGHTS:** Provide and install Navigation Lights in accordance with Specification Section 510, Index 510-001 and/or project specific details. Provide and maintain Temporary Navigation Lights during construction until permanent Navigation Lights are operational.

**BOLTS, THREADED BARS, NUTS, SCREWS AND WASHERS:** Furnish stainless steel Bolts in accordance with ASTM F593 Type 316. Furnish stainless steel Threaded Bars in accordance with ASTM A193 Grade 888. Furnish stainless steel Nuts in accordance with ASTM F594 Type 316. Furnish stainless steel Screws in accordance with ASTM F593 Type 305. Furnish stainless steel Washers compatible with Bolts, Threaded Rods and Nuts under heads and nuts. Torque Nuts on 1" diameter Bolts and Threaded Bars to 150 lb-ft. Keep threads on Bolts, Threaded Bars and Nuts free from dirt, coarse grime and sand to prevent galling and seizing during tightening.

**SPLICE PLATES:** Furnish Splice Plates in accordance with ASTM A240 Type 316.

**WIRE ROPE:** Provide wire rope meeting one of the following requirements:

- 1/2" diameter 6x19, 6x25 or 6x37 class IWRC Type 316 stainless steel wire rope with a minimum breaking strength of 18,000 lbs.
- 1/2" diameter 6x19 galvanized wire rope with ultraviolet ray resistant polypropylene impregnation having an end diameter of 5/8" with a minimum breaking strength of 22,000 lbs. Protect all ends with heat shrinkable end caps compatible with the rope's polypropylene that provide an effective water-tight seal.

FENDER SYSTEM ENERGY CAPACITY:  
Maximum Energy Capacity = 50 ft-kip

UPDATED: 50 ft-kip

MOVED

**GENERAL NOTES**

|                                       |              |                              |   |                  |                 |
|---------------------------------------|--------------|------------------------------|---|------------------|-----------------|
| LAST REVISION<br>07/01/14<br>11/01/24 | DESCRIPTION: | FY 2023-24<br>STANDARD PLANS | FENDER SYSTEM -<br>PRESTRESSED CONCRETE PILES & FRP WALES | INDEX<br>471-030 | SHEET<br>1 of 7 |
|---------------------------------------|--------------|------------------------------|---|------------------|-----------------|



## Sheet 4:

**REINFORCING STEEL NOTES:**

- When Pedestal is attached to Pedestrian/Bicycle Railing - Index 521-820 or an 8" wide concrete curb and the Bridge Deck or Approach Slab thickness is less than 1'-1 1/2", Bars 4F3 shall have leg length and bar length shown in parentheses.
- The number of bars shown in parentheses is for Bars 4F4 when Pedestal is attached to Pedestrian/Bicycle Railing - Index 521-820 or an 8" wide concrete curb, and the Bridge Deck or Approach Slab thickness is less than 1'-1 1/2".
- Lap Splices for Bars 4F1, 4F2 & 4F3 shall be a minimum of 1'-4". Lap Splices for Bars 4F4 & 4F5 shall be minimum of 1'-8".
- Bars 4J1 and 4J2 are not required when Pedestal thickness is less than 1'-5 1/2". Field trim height of bars to maintain cover when Pedestal thickness is less than 2'-0". Field trim length of Bars 4J2 on Retaining Wall Coping to maintain cover.
- All bar dimensions in the bending diagrams are out to out.

**CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS**

**BILL OF REINFORCING STEEL**

| MARK | SIZE | NO. REQD.                               | LENGTH           | NOTES |
|------|------|---|------------------|-------|
| F1   | 4    | 16                                      | 5'-8"            | c     |
| F2   | 4    | 4                                       | 4'-8"            | c     |
| F3   | 4    | 4                                       | 4'-2"<br>(3'-6") | a, c  |
| F4   | 4    | 8<br>(6)<br>[4 for Option 3]            | 8'-9"            | b, c  |
| F5   | 4    | 4                                       | 6'-9"            | c     |
| F6   | 4    | 4                                       | 2'-11"           | -     |
| F7   | 4    | 4                                       | 3'-8"            | -     |
| F8   | 4    | 12                                      | 4'-8"            | -     |
| G    | 4    | 8<br>[5 for Option 3] [24 for Option 3] | 6'-0"            | -     |
| H1   | 4    | 2                                       | 15'-8"           | -     |
| H2   | 4    | 2                                       | 13'-10"          | -     |
| J1   | 4    | 8                                       | 4'-8"            | d     |
| J2   | 4    | 12                                      | 4'-0"            | d     |

( ) See Reinforcing Steel Note a & b.

**LIGHT POLE PEDESTAL NOTES**

- Concrete and Reinforcing Steel required for the construction of the Pedestal shall meet the same requirements as the Traffic Railing or Pedestrian/Bicycle Railing the Pedestal is attached to.
- Light Pole Pedestal may be used with the following:  
 Index 521-422 - Traffic Railing (42" Vertical Shape),  
 Index 521-423 - Traffic Railing (32" Vertical Shape),  
 Index 521-427 - Traffic Railing (36" Single-Slope),  
 Index 521-428 - Traffic Railing (42" Single-Slope),  
 Index 521-820 - Pedestrian/Bicycle Railing,  
 Index 515-021 - Pedestrian/Bicycle Bullet Railing for Traffic Railing or  
 Index 515-509 - Traffic Railing /Noise Wall - Bridge.
- Unless otherwise noted, Traffic Railing (36" Single-Slope) is shown in all Views and Sections. The Pedestal details for other Traffic Railings or Pedestrian/Bicycle Railing are similar.
- Install Anchor Bolts plumb.
- For Conduit, Embedded Junction Boxes (EJB), Expansion/Deflection Fitting and adjacent Reinforcing Steel Details, see Utility Conduit Detail Sheets and Index 630-010.
- PAYMENT:** The cost of Wire Screen, Anchor Bolts, Nuts, Washers and Anchor Plates shall be included in the Bid Price for Light Poles. The cost of all Labor, Concrete and Reinforcing Steel required for the Construction of the Pedestals, and Miscellaneous Hardware required for the completion of the Electrical System, shall be included in the Bid Price for the Traffic Railing or Pedestrian/Bicycle Railing the Pedestal is attached to.

**ANCHOR BOLTS:**  
 Anchor Bolt design is based on the standard Roadway Aluminum Light Pole configurations shown on Index 745-092.  
 Anchor Bolt Diameter: See Table 1  
 Anchor Bolts: ASTM F1554 Grade 55.  
 Nuts: ASTM A563 Grade A, Heavy Hex  
 Washers: ASTM F436 Type 1.  
 Anchor Plate: ASTM A709 (Grade 36) or ASTM A36.  
 Coating: Galvanize all Nuts, Bolts Washers, in accordance with ASTM F2329.  
 Galvanize plates in accordance with ASTM A123.

The Contractor is responsible for ensuring the anchor bolt configuration is compatible with the light pole base plate. Submit modifications of the anchor bolt design to the Engineer for approval.

**TABLE 1 - DESIGN LIMITATIONS FOR ANCHOR BOLTS (1" Dia.)**

| WIND SPEED (MPH) | ANCHOR BOLT LENGTH (FT.) | BRIDGE DECK HEIGHT (FT.) | DESIGN MOUNTING HEIGHT (45 FT.) | DESIGN MOUNTING HEIGHT (50 FT.) |
|------------------|--------------------------|--------------------------|---------------------------------|---------------------------------|
| 130              | ≤ 15                     | 75                       | 75                              | 75                              |
| 150              | ≤ 15                     | 75                       | 75                              | 75                              |
| 170              | 8 & 10                   | 75                       | 75                              | 45**                            |
| 170              | 12 & 15                  | 75                       | 75                              | 25*                             |

\* Above natural ground or MLW.  
 \*\* Use 1 1/2" diameter anchor bolts for Bridge Deck Height greater than shown, in Table 1, up to 75'.

**ANCHOR PLATE DETAIL**

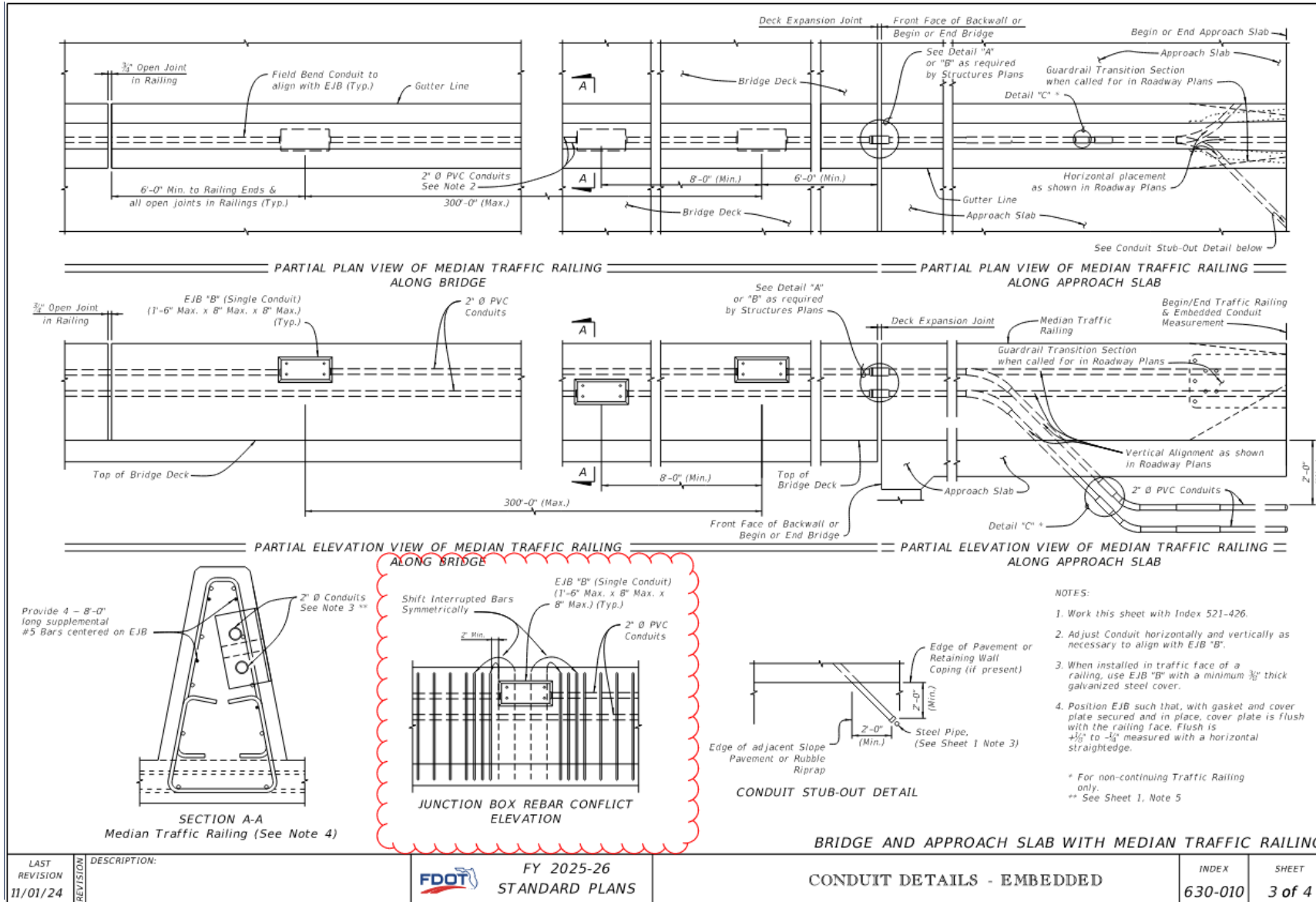
**DETAIL "A"**

CROSS REFERENCE:  
 For location of Detail "A" see Sheets 1,2 and 3.

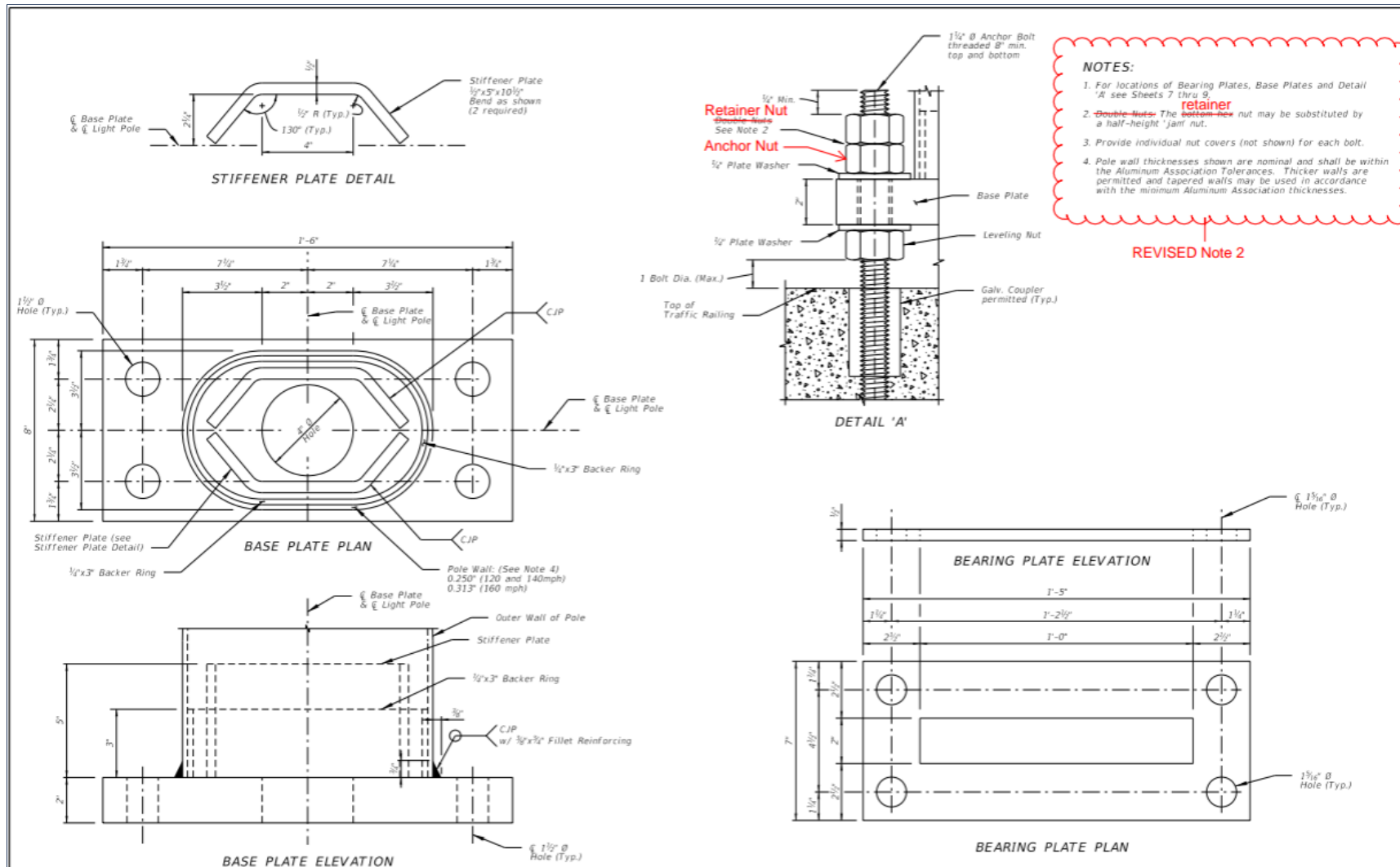
- Labeled the anchor bolt nuts in DETAIL "A"; Added a note for DETAIL "A" regarding minimum anchor bolt embedment and bottom concrete cover; Removed anchor bolt table; Revised Note 4 to now include maximum deck height, pole height, and pole arm length

## Sheet 3: Added a detail to show how to space the rebar around EJB's.

- New elevation detail



## Sheet 6:



- NOTES:**
1. For locations of Bearing Plates, Base Plates and Detail 'A' see Sheets 7 thru 9.
  2. **Double-Nut:** The ~~bottom~~ **retainer** nut may be substituted by a half-height 'jam' nut.
  3. Provide individual nut covers (not shown) for each bolt.
  4. Pole wall thicknesses shown are nominal and shall be within the Aluminum Association Tolerances. Thicker walls are permitted and tapered walls may be used in accordance with the minimum Aluminum Association thicknesses.

REVISED Note 2

- Updated anchor bolt labels in Detail A;
- Updated Note 2 language and corrected which nut may be half height.

|                                       |  |              |   |  |                  |                 |
|---------------------------------------|--|--------------|---|--|------------------|-----------------|
| LAST REVISION<br>11/01/23<br>11/01/24 |  | DESCRIPTION: | 2025-26<br>FY 2024-25<br>STANDARD PLANS | 2025-26<br>BASE PLATE DETAILS FOR MEDIAN BARRIER MOUNTED ALUMINUM LIGHT POLE | INDEX<br>715-002 | SHEET<br>6 of 9 |
| FDOT                                  |  |              |   | STANDARD ALUMINUM LIGHTING   |                  |                 |

# Contact Us:



## Additional Question?

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