



ADA for Design, Construction, and Maintenance

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Office of Forecasting and Performance



1

SAFETY & ACCESSIBILITY!

Brief History of the ADA

FDOT Design Manual (FDM)

FDOT Standard Plans

FDOT Standard Specifications

FDOT Maintenance Rating Program Handbook (MRP)





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Capitol Crawl



3

PERTINENT LEGISLATIVE HISTORY



Civil Rights Act.

– 1964 –Race, Color,National Origin

2

Architectural Barriers Act.

– 1968 –Accessible Buildings & Facilities 3

Rehabilitation Act (Sect 504).

– 1973 –No Discrimination due to Disability

4

Americans w/ Disabilities Act.

– 1990 –Title II – State &Local Governments

5

ADA Amend. Act.

– 2008 –Emphasized BroadCoverage

"IT'S A CIVIL RIGHT TO BE INDEPENDENT IN AMERICA!"
-- KATE GAINER

CAPITOL CRAWL

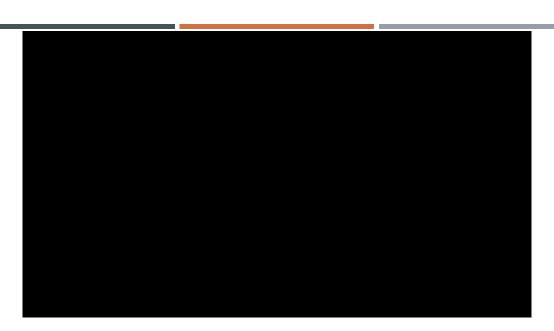
MARCH 12, 1990

Protestors tossed aside their wheelchairs, walkers, and crutches to ascend the steps of the United States Capitol -- dragging themselves up the stairs to demonstrate their daily struggles due to physical barriers.

George H.W. Bush July 26, 1990



5



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PRIMARY ELEMENTS FOR PEDESTRIANS

Try not to overcomplicate it!



Clearance "window" over the <u>full</u> walking surface 2

Protruding
Objects.
Signs, utilities,

Signs, utilities, equipment, landscape material 3

Running & Cross Slopes.

Parallel & Perpendicular to ped travel



Walking Surface.

Firm, Stable, Nonslip. Changes in level, horizontal openings



Pedestrian Signals.

Reach distances and effective communication

Nominal Vs. Substantive Safety & Accessibility?

FLORIDA SHS & U.S. NHS = FDM

FGB = FLORIDA LOCAL ROADS

7

SAFETY & ACCESSIBILITY!

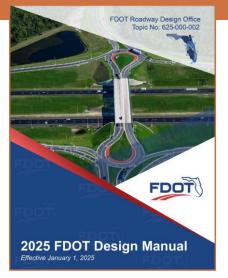
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FGB 8.A

Refer to latest editions and other chapters!

FDM 222 FL Greenbook Ch. 8

PEDESTRIAN FACILITIES

222.1 General - This chapter provides the **minimum** criteria to be used for the design of pedestrian facilities on the **State Highway System**.

The term "pedestrian" used in this chapter includes any person traveling on foot or in a wheelchair.

Pedestrians should be expected on <u>all</u> of **Florida's** state **roadways** except where restricted on Limited Access (LA) facilities.

Local too!





9

FGB 14

TECHNICAL Documentation * required * by INFEASIBILITY U.S. DOJ regulations!

222.1 General - Process a **Design Variation** when the design **criteria** for pedestrian facilities <u>in this manual</u> **are not met**. See FDM 122 for DVy on the SHS!

Reference the **following conditions** that support not providing a pedestrian facility in the **Design Variation** documentation:

- (1) The establishment of pedestrian facilities would be contrary to public safety.
- (2) The cost of providing pedestrian facilities would be excessively disproportionate to the need or probable use.
- (3) The presence of other available means for pedestrian traffic. Other available means should meet the following requirements:
 - (a) Meet the design criteria for pedestrian facilities on state roadways.
 - (b) Provide access to the same services, origination and destination sites, and transit connections as the project corridor.
 - (c) Not result in a significant increase in travel time or trip length, exposure to motorized traffic, or substantial elevation changes.
 - (d) Provide appropriate locations to cross limited access, arterial or collector roadways, or railroad corridors.

10

10

FGB 8.B.1

FGB 8.H



222.2 Pedestrian Facilities - Pedestrian **safety** an be **enhanced** through the following **measures**:

... and Accessibility!

- (1) Maintaining a **smooth**, clean walking surface, **free of obstructions**.
- (2) Responsive and appropriate traffic control devices, consistent with guidance in the Manual on Uniform Traffic Control Devices (MUTCD), including providing pedestrian-oriented directional signage.



(3) Sidewalks and other pedestrian walkways are continuous, and termini connect to existing sidewalk, pedestrian crossing, or access point. Functional End-Point!

(4) Providing adequate lighting.

Applies during TTC too!

11

FGB 8.B.1

FDOT SIDEWALK POLICY STATE HIGHWAY SYSTEM (SHS)

222.2.1 Sidewalk Provide sidewalk on all curbed roadways, except where **prohibited** by <u>Section</u> 316.130 (18), Florida Statute (F.S).

The inclusion of sidewalk on **short isolated sections** of **curbed** roadway **is not required** when:

 Within C1 and C2 context classification, and



• There are **no pedestrian facilities** leading to, or from the location.

12

FGB 1.B.2

FGB 8.C.2.a



222.2.1 Sidewalk - Provide sidewalk on **flush shoulder** and high speed **curbed** roadways within **C2T**, **C3C**, **C4**, **C5** or **C6** context classification; and within **C1**, **C2** or **C3R** where the **demand** for use is **demonstrated**.

For high speed curbed and flush shoulder roadways, **place sidewalk** in the following **order of desirability**:

- (1) As near the R/W line as possible.
- (2) Outside of the clear zone.
- (3) **Five feet** beyond the limits of the full width **shoulder**.
- (4) At the **limits** of the full width **shoulder**.



US-319 (FL-261), Tallahassee

13

FGB 8.C.2.a

FGB 8.G.1



WATCH OUT! FOR VULNERABLE USERS

222.2.1 Sidewalk - Sidewalk on **flush shoulder** roadways is **not to be constructed** directly **adjacent** to the <u>roadway</u> or <u>shoulder</u> **pavement**.

Nearing intersections, the sidewalk should be <u>transitioned</u> as necessary to provide a more <u>functional</u> <u>crossing</u> location that also meets <u>driver expectation</u>.

Further guidance on the placement of **stop** or **yield lines** and **crosswalks** is provided in the <u>MUTCD</u>, **Part 3** and <u>Standard</u> <u>Plans</u> 711-001.

FGB 10.C.1

222.2.1 Sidewalk - For RRR
Projects, other than meeting
detectable warning and curb
ramp requirements, unaltered
sidewalks that are not in
compliance with FDM criteria,
Standard Plans, or ADA
requirements are not required
to be reconstructed.

See language in FDM 114!





15

15

FGB 8.B.1

MORETHAN JUST LINEAR CONNECTIVITY!

222.2.1.1 Sidewalk Width - The standard sidewalk **width varies** by **context** classification as shown in *Table* **222.2.1**.

Continuous <=> Continuity!

See <u>FDM</u> **214** for information on sidewalks **across driveways**.

Think "homogenous" segments – just like AASHTO's Highway Safety Manual!

Table 222.2.1	Standard Sidewalk Widths

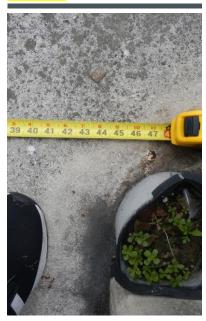
Co	ntext Classification	Sidewalk Width (feet)
C1	Natural	5
C2	Rural	5
C2T	Rural Town	6
С3	Suburban	6
C4	Urban General	6
C5	Urban Center	10
C6	Urban Core	12

Notes:

- (1) For C2T, C3 and C4, sidewalk width may be increased up to 8 feet when the demand is demonstrated.
- (2) For C5 and C6, when standard sidewalk width cannot be attained, provide the greatest attainable width possible, but not less than 6 feet.
- (3) For RRR projects, unaltered sidewalk with width 4 feet or greater may be retained within any context classification.
 - (4) See FDM 260.2.2 for sidewalk width requirements on bridges.

6

FGB 8.B.1



222.2.1.1 Sidewalk Width - Provide the following minimum unobstructed sidewalk width (excluding the width of the curb) when there is no practical alternative to placing a pole within the When FULL Compliance is <u>not</u> achievable... sidewalk:

- 36 inches for aboveground utilities. This 36-inch width may be reduced to 32 inches, not exceeding 24 inches in length, when there is no practical alternative vailable to avoid an obstruction.
- 48 inches for signal, light, sign poles

Exhaust all other options FIRST!



17

FGB 8.E



222.2.1.2 Vertical Clearance -Provide a minimum 7-foot vertical clearance over the entire walking surface.

See FDM 260.6 for pedestrian **bridge** vertical clearance requirements.







FGB 8.B.1

222.2.1.3 Grade and Cross Slope - When sidewalk is adjacent to the roadway (i.e., located back of curb or consistent separation from curb), sidewalk grades may mirror the roadway profile.

Mainline sidewalk ONLY!

When sidewalk is **not adjacent** to a traveled way, sidewalk **grades** are **not to exceed 5%**, unless accessible ramps* are provided.

Full ADA Ramp Criteria applies!

Florida Accessibility Code

5% [1:20] < *ADA Accessible Ramp Criteria ≤ 8.3% [1:12]



19

19

FGB 8.B.1

RUNNING & CROSS SLOPE

222.2.1.3 Grade and Cross Slope - There <u>should</u> be enough sidewalk **cross slope** to allow for adequate **drainage**; however, to **comply** with ADA requirements, the **maximum** cross slope is **2%**.

A clear **1-foot wide graded area** with a maximum 1:6 slope should be provided adjacent to the sidewalk.

Edge drop-offs should be avoided.

When drop-offs **cannot be avoided** and lie **within 2 feet** of the edge of sidewalk, they <u>should</u> be **shielded** as discussed in <u>FDM</u> 222.4.





222.2.2 Curb Ramps and Blended Transitions - <u>Standard Plans</u>, <u>Index 522-002</u> provides **requirements** and **details** for **curb ramps** and **landings** that are compliant with <u>Americans with</u> Disabilities Act Standards for Transportation Facilities.

A continuous accessible pedestrian route, including curb ramps and blended transitions (e.g., depressed corners, raised street crossings, flush roadway connections) are required along sidewalks and shared use paths.

Provide **curb ramps** to be the **same width** as the sidewalk where practicable.

MUST condition!



21

21

FGB 8.G.2



222.2.2 Curb Ramps and Blended Transitions - Include sidewalk curb ramps at the following locations:

Nice use of separate ramps!

- All intersections and driveways with curbed returns.
 Include a landing at the top of each ramp.
- On curbed roadways between intersections where a crosswalk has been established.





22

222.2.2 Curb Ramps and Blended Transitions - Pull boxes, manholes (and other utility covers), and other types of existing surface features in the location of a proposed curb ramp or detectable warning should be relocated.

When **relocation is not feasible**, <u>adjust the feature</u> to meet the ADA requirements for surfaces (including the provision of a **nonslip** top surface, and adjustment to be **flush** with and at the **same slope** as the adjacent surface).





23

23

FGB 8.G.2

ADATITLE II REQUIRES CLEAR COMMUNICATION

222.2.2 Curb Ramps and Blended Transitions - Curb ramps should be in line with the crossing and provide non-visual physically detectable elements (e.g., concrete edge lines or curb lines) to clearly indicate the direction of the crossing. Provide the flattest ramp slope practicable, not to exceed a maximum slope of 1:12 (8.3 percent).

Must Condition!

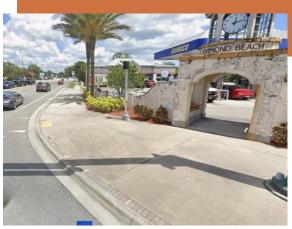
Provide a curb **ramp** or blended transition, as appropriate, at **both** ends of each crossing.

Crossings <u>are required</u> to meet the **same grade** and **cross slope** requirements as sidewalks.

Where **criteria** for <u>maximum</u> cross slope **cannot be met**, process a **Design Variation** and provide the **minimum attainable** cross slope.

When following the **profile grade of the roadway**, curb ramp slopes should **not exceed 15 feet** in length.





LEVEL LANDINGS AT PEDESTRIAN DETECTORS

Provide a landing at all pedestrian pushbutton locations.

Two MUST conditions!

The **landing** <u>must</u> provide a **clear area of 30 inches by 48 inches** directly in front of the pedestrian pushbutton to allow persons using a **wheeled mobility device** to actuate the button while **remaining stationary**.

Horizontally **center** the **48-inch dimension** on the **pushbutton**.

25

25

FGB 8.B.1

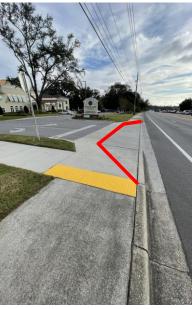
222.2.2.1 Driveways - See <u>FDM</u> **214** for **additional** information on pedestrian **accommodations** at driveways.

New and reconstructed driveways are to be in compliance with Standard Plans, Index 330-001 and 522-003.

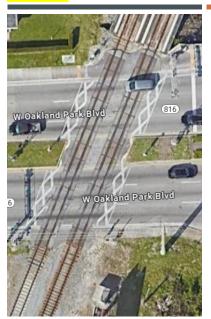
For RRR Projects, unaltered driveways that are not in compliance with <u>Standard</u> <u>Plans</u> or ADA requirements are not required to be reconstructed.

Don't forget about FDM 114!





26



222.2.4 At-Grade Railroad
Crossings - Provide an ADA
accessible route for pedestrians
at railroad crossings by
extending proposed or existing
sidewalks or shared use paths
through the rail crossing.

The **surface** of the crossing **must be**:

- Firm, **stable** and slip resistant,
- Level and flush with the top of rail at the outer edges of the rails, and
- Area between the rails **aligns** with the top of rail.





27

27



222.2.7 Pedestrian Signals - See <u>FDM</u> **232.6** for information on pedestrian signals.

Pedestrian detector assemblies and pedestrian control signals are detailed in the <u>Standard</u> <u>Plans</u>, *Indexes 653-001* and 665-001.

Accessible Pedestrian Signals (APS) in FDM 232.6.1!





28



222.3 Detectable Warnings - Detectable warnings are a distinctive **surface pattern** of domes **detectable by cane or underfoot** that **alert** people with vision impairments of their approach to street crossings.

...in direction of ped travel!

Install detectable warnings to cover the **full width** of the walking surface and **2 feet deep**.

DWS is not an alignment indicator!





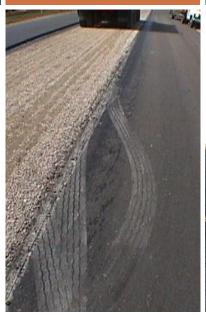
29

29

FDM 114 RESURFACING, RESTORATION,AND REHABILITATION (RRR)

114.1 General - Resurfacing, restoration, and rehabilitation (RRR) work is defined as work undertaken to extend the service life of an existing highway and enhance highway safety for all modes of travel.

This includes the **placement** of additional **surface materials** and **other work** necessary to return an existing roadway to a condition of <u>structural</u> and <u>functional</u> **adequacy**.





30

FDM 214 DRIVEWAYS

214.1 General - This chapter provides driveway design criteria and requirements for connections to the State Highway System.

The <u>FDOT Multimodal Access</u> <u>Management Guidebook</u> provides **further guidance** and information on **driveways** and **medians**.





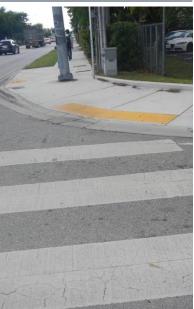
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31

FDM 215 ROADSIDE SAFETY

215.2.4 Lateral Offset - At times, it may be necessary to place poles (e.g., signal, light, sign) within the sidewalk.
Refer to <u>FDM</u> 222.2 for minimum unobstructed sidewalk width requirements.





32

FGB 11.E, F, & G

FDM 240 TRANSPORTATION MANAGEMENT PLAN

240.1 General - A Transportation Management Plan (**TMP**) is **required** for minimizing activity-related traffic **delay** and **crashes**.

The **goal** of a TMP is to **reduce congestion** during construction by **managing** traffic through the project area.





33

33

ADDITIONAL REFERENCES

240.1.1 TMP Reference Documents - Comply with the following **documents** for the development of TMPs:

- (1) Manual on Uniform Traffic Control Devices for Streets and Highways, (MUTCD), Part 6
- (2) Policy on Geometric Design of Highways and Streets, AASHTO
- (3) Roadside Design Guide, AASHTO, Chapter 9
- (4) Standard Plans, 102 Series and 711-002
- (5) FDOT Standard Specifications for Road and Bridge Construction (Standard Specifications)
- (6) Basis of Estimates Manual
- (7) FDOT Accessing Transit Handbook, Chapter 4.6.



- (8) AASHTO Guide for the Development of Bicycle Facilities, 4th Edition, Chapter 7
- (9) Traffic Analysis Handbook

34



240.1.2 TMP Components - A TMP consists of **strategies** to **manage** the work zone **impacts** of a project.

The **scope**, **content**, and degree of **detail** will vary based upon the **expected** work zone **impacts** of the project.

A TMP may include the following three **components**:

- Temporary Traffic Control Plan
- Transportation **Operations** Plan
- Public Information Plan



35

35



TEMPORARY TRAFFIC CONTROL PLAN

240.2 Temporary Traffic Control Plan - A Temporary Traffic Control Plan (TCP) is **required** for **all work zones** within, or adjacent to highways, roads and streets as specified by *Florida Statute* and *Federal Regulations*.

337.11(14) F.S. 23 CFR 630.1008

Typical **applications** of some **commonly** encountered situations are **shown** in the <u>MUTCD</u>.

Some of these typical applications have been modified by the Standard Plans, 102 Series.

Most work zones will **require further development** of the typical applications to address **project-specific** conditions.

EOR's responsibility!!

'Engineered' Solutions!



240.2.1.9 Bicycle,
Pedestrian, and Transit
Accommodation - Include
accommodations for the
following road users of all ages
and abilities in the TTCP:

- Pedestrians
- Bicyclists
- Transit users

Provide **accommodations** on <u>Florida National Scenic Trail</u> and SUN Trail.

ADA requirements **apply** during **TTC**.



Include provisions at the **same** level of **accessibility** as the existing facility or **greater**.

See <u>Standard Specifications</u>, Section 102 and <u>FDM</u> 222, 225 for more information.

37

37

LOCATION OF TEMPORARY ROUTES FOR PEDESTRIANS AND BICYCLISTS

240.2.1.9 – **Incorporate** the following requirements into the **TTCP**:

Location of Temporary Routes for Pedestrians and Bicyclists:

- (1) **Do not lead** pedestrians or bicyclists into direct **conflicts** with **vehicles**, **equipment**, or **operations**.
- (2) Keep **detour lengths** and **diversions** as **short** as practicable.
- (a) Detours **should not create** more than a **30% increase** in the **length** of the non-motorized facility, or not longer than **0.5 miles** for bicyclists or **0.25 miles** for pedestrians.



(b) To minimize the detour length, consider providing a temporary mid-block crosswalk instead of detouring pedestrians to the nearest signalized intersection or existing crosswalk.

38

LOCATION OF TEMPORARY ROUTES FOR PEDESTRIANS AND BICYCLISTS

240.2.1.9 – **Incorporate** the following requirements into the **TTCP**:

Location of Temporary Routes for Pedestrians and Bicyclists:

- (3) The order of **preference for routing**:
- (a) Maintain facility on the **same side** of the road.
- (b) Diversion to the **opposite side** of the road. **Return** to **original** side of road as soon as possible.
- (c) Detour to **another road**. **Return** to **original** road and side of road as soon as possible.



(d) Where the above options are not feasible or are **cost prohibitive**, **consider** the use of a vehicle **transport service**.

Show **accessible pickup** and **drop off** locations in the TTCP. **Coordinate** with District Design **Engineer** and District Construction **Engineer**.

39

39



240.2.1.9 – Transit Users:

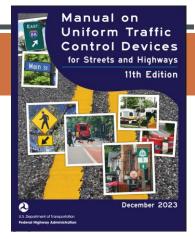
Ensure **provision** is made to allow **transit users** to **access** transit stops, and to board and depart transit vehicles **safely**.

Temporary transit access <u>must</u> include provisions at the same level of accessibility as the existing facility or greater.

See FDOT's <u>Accessing Transit</u>
<u>Handbook</u> for **guidance** on **transit**stops.



40



TTC – TEMPORARY TRAFFIC CONTROL DEVICES

240.2.2 Temporary Traffic Control Devices - The **MUTCD** contains detailed **instructions** on the use of traffic control **devices**.

Special design **considerations** applicable to **Florida** are discussed in the following sections.

Temporary traffic control **devices** should **not be placed** in locations where they will **block** or **interfere** with transit **stops**, **pedestrians**, or **bicycle** traffic.

41

41



240.2.2.5 Pedestrian Longitudinal Channelizing Devices - Include **accommodations** for the following **road users** of all ages and abilities in the **TTCP**:

Specify the use of pedestrian Longitudinal Channelizing Devices (LCDs) for the following situations:

See MUTCD 6F

- At **each closed** pedestrian way **location**, for the **full width** of the pedestrian way
- In locations where a **drop-off hazard exists** (see Standard Plans, 102 Series)
- In locations where the active **work zone** is **within 2 feet** of the sidewalk or pedestrian walkway
- Along both sides of a temporary pedestrian way
 - o Pedestrian **LCDs** are **not required** on sides where an existing or temporary **barrier** delineates the temporary pedestrian way.

240.3 Transportation Operations Plan - The Transportation **Operations** Plan (TOP) contains **strategies** to **improve** mobility, work zone **access**, and **safety**.



240.4 Public Information Plan - The Public Information Plan (PIP) describes how project information will be communicated to affected parties, traveling public, and project stakeholders prior to and during construction.



240.5 Temporary Traffic Control Training - The Department has prescribed **temporary traffic control training** requirements outlined in the Temporary Traffic Control (Maintenance of Traffic) Training Handbook.

43

43

SAFETY & ACCESSIBILITY!

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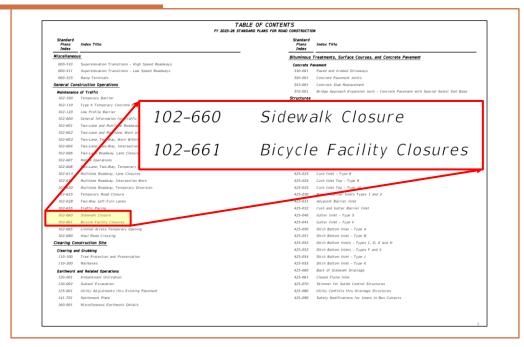
FDOT Standard Specifications

FDOT Maintenance Rating Program Handbook (MRP)



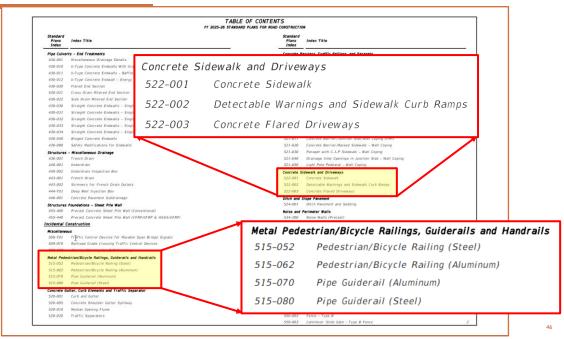


SPEC – TABLE OF CONTENTS

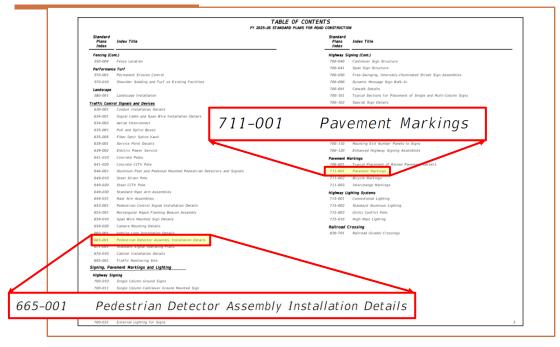


45

SPEC - TABLE OF CONTENTS



SPEC - TABLE OF CONTENTS



47

SPEC - REVISION LOG

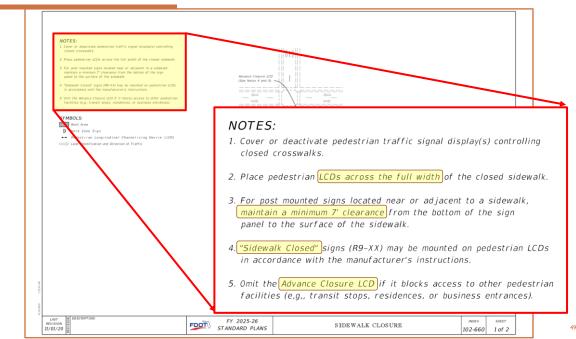
STANDARD PLANS FY 2025-26 REVISIONS LOG

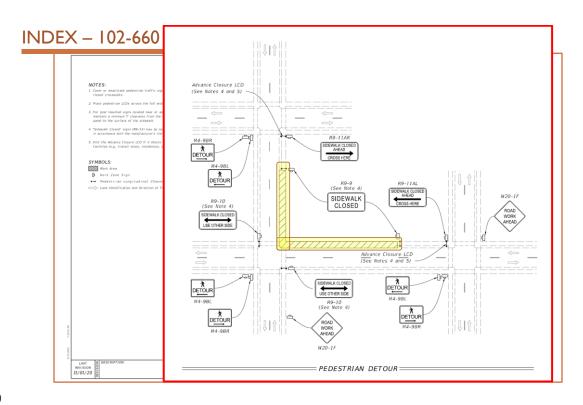
Standard Plans Index	Description		
102-201	Sheet 2: Added Paved Surface to Thrie Beam to Bridge Guardrail Transition detail and updated dimensions to accommodate: Added additional callouts to Guardrail End Transition detail; Lengthened the plate size in the 1/4 Guardrail Back Plate Detail, Clarified the dimensions and added notes.		
102-600	Sheet S. Updated HIGH-VISIBILITY SAFETY APPAREL note to refer to "ABJ/ISEA 107-2015". Sheet & Updated Hag color in the Hand-Signalling Devices note to "red or fluorescent orange-red in color." Sheet & Changed the color code of sign W3-5 from "B/0" to "BW/0". Changed W16-1P sign to match MUTCD.		
102-615	Sheet 4: 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	Sheet 1: Updated sign names based on new MUTCD 11th edition Sheet 2: Updated sign names based on new MUTCD 11th edition; Update signs W16-1P detail. Updated "Bikes Merge" sign: Updated the PCMS Display notes.		
400-011	Sheet 1: 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	Sheet 3: Updated reinforcing in the PARTIAL PLAN TOP SLAB of SINGLE BARREL BOX CULVERT so it does not appear to extend into the Tototer below. Sheet 5: Added some Clarity to Note 2 and DETAIL "C" about the proper work point (ocalion (NP).		
415-001	Sheet 1: Updated Type 14 and 15 to remove radii.		
415-010	Sheet 1: Updated Type 14 and 15 to remove radii.		
455-101	Sheet 1: Added a note to General Note 4 indicating that all the strand diameters are nominal.		
455-112	Sheet 2: Adjusted Strand Pattern diameter decimal places.		
455-114	Sheet 2: Adjusted Strand Pattern diameter decimal places.		

Standard Plans Index	Description
455-118	Sheet 2: Adjusted Strand Pattern diameter decimal places.
455-124	Sheet 2: Adjusted Strand Pattern diameter decimal places.
455-130	Sheet 2: Adjusted Strand Pattern diameter decimal places.
460-470	Sheet 1: Added screw anchor details to the notes. Sheet 3: Added screw anchor option details to SECTION B-B.
460-472	Sheets 1-4: 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	Sheet 2: Addred a note to SECTION 8-0- caption that what is shown is the Adhesive anction option and screw anchor are also an option. Sheet 4: Addred a note to Plan title in Schemes 5 and 6 caption that with a shown is the Adhesive anchor option and screw anchor are also an option. Adjusted the column location to correct for missing blocks.
460-474	Sheets 1-4: Added a note to the details captioning that what is shown is the Adhesive anchor option.
460-475	Sheets 1-4: Added a note to the details captioning what is shown is the Adhesive anchor option.
471-030	Sheet 1: Updated the FENDER SYSTEM ENERGY CAPACITY for 30 ft-kip to a Maximum of 50 ft-kip.
521-001	Sheet 2: In the Elevation view, added "Begin/End Median Barrier Sta." callout at the Traffic Railing connection Sheet 11: Changed Bar SC2 to Bar 4C2 Sheet 13: In the Elevation view, added "Begin/End Shidr. Barrier Sta." callout at the Traffic Railing connection Sheet 16: Changed Bar SC2 to Bar 4C2 Sheet 18: Changed Bar SC2 to Bar 4C2

48

INDEX - 102-660 SHEET 1 OF 2





INDEX — 102-660 SHEET 2 OF 2 | Description | Description

(Temporary Barrier Shown, Low Profile Barrier Similar)

FDOT FY 2025-26 STANDARD PLANS PEDESTRIAN SPECIAL DETOUR

SIDEWALK CLOSURE

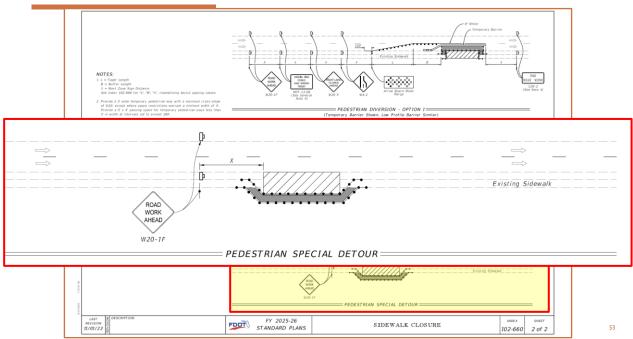
102-660 2 of 2

51

51

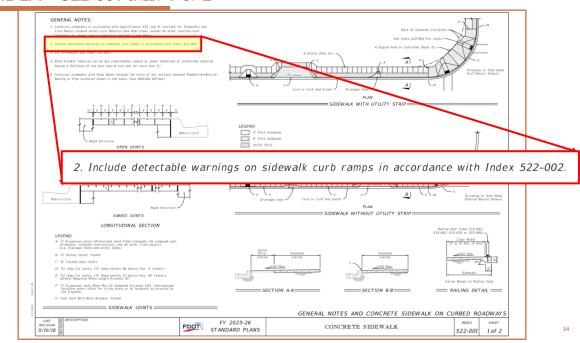
INDEX - 102-660 SHEET 2 OF 2 D ŀ D D Existing Sidewalk END ROAD WORK G20-2 (See Note 4) MOT-13-06 (See General Note 4) W20-1F W20-5 PEDESTRIAN DIVERSION - OPTION 2 (Work Zone Speed 45 mph or Less) FDOT FY 2025-26 STANDARD PLANS 102-660 2 of 2 52

INDEX - 102-660 SHEET 2 OF 2



53

INDEX - 522-001 SHEET 1 OF 2



INDEX

INDEX GENERAL NOTES:

- 1. Cross Slopes and Grades:
 - A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
 - B. Landings must have cross-slopes less than or equal to 0.02 in any direction.
 - C. Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
 - D. Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
- 2. Curb, Curb and Gutter and/or Sidewalk:
 - A. Refer to Index 522-001 for concrete thickness and sidewalk details.
 - B. Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
 - C. Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
- 3. Curb Ramp Alpha-Identification:
 - A. (Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
 - B. Alpha-identifications CR-I and CR-J are intentionally omitted.
- 4. Detectable Warnings:
 - A. Install detectable warnings in accordance with Specification 527.
 - B. Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
 - C. (If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.

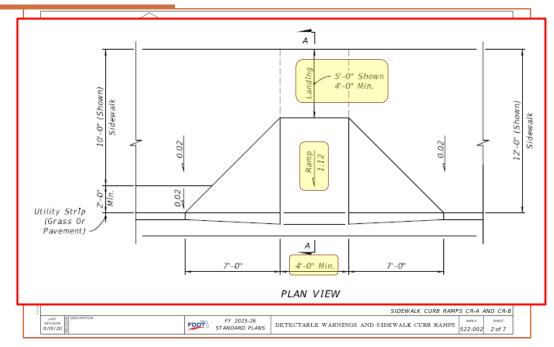
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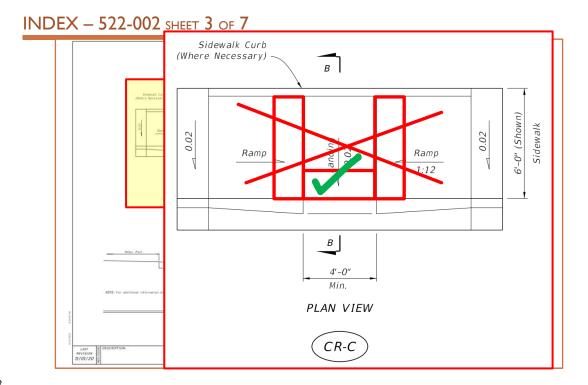
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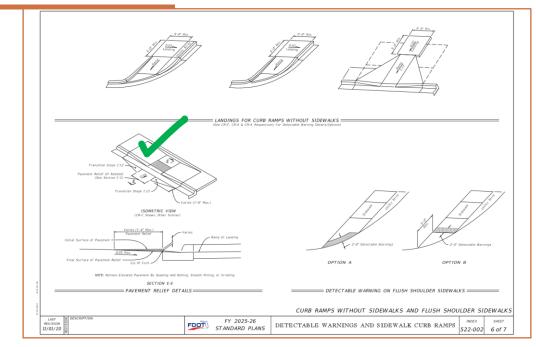


INDEX - 522-002 SHEET 2 OF 7



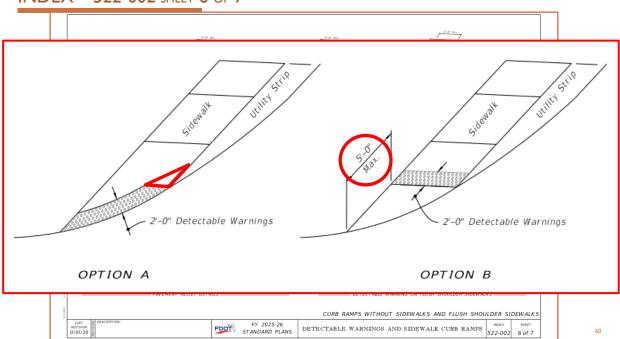


INDEX - 522-002 SHEET 6 OF 7



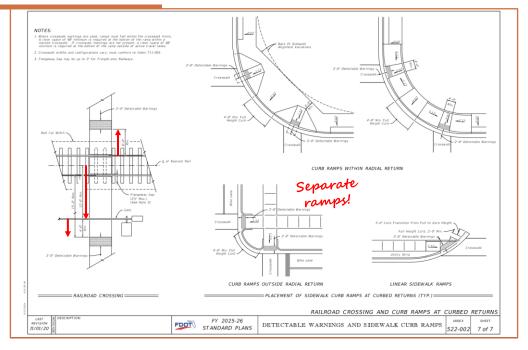
59

INDEX - 522-002 SHEET 6 OF 7



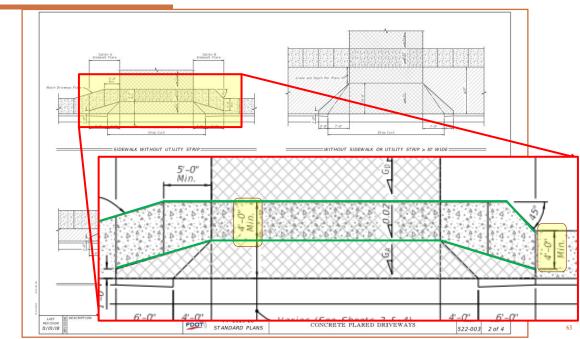
60

INDEX - 522-002 SHEET 7 OF 7

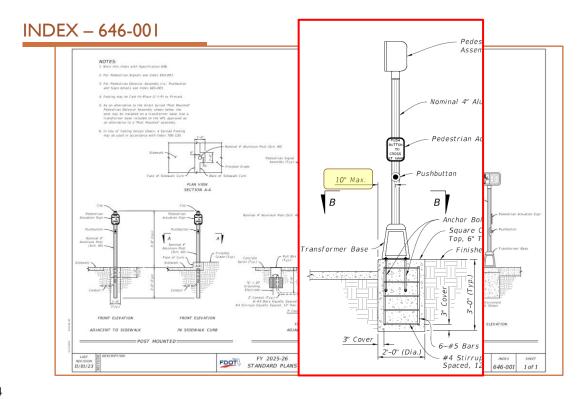




INDEX - 522-003 SHEET 2 OF 4

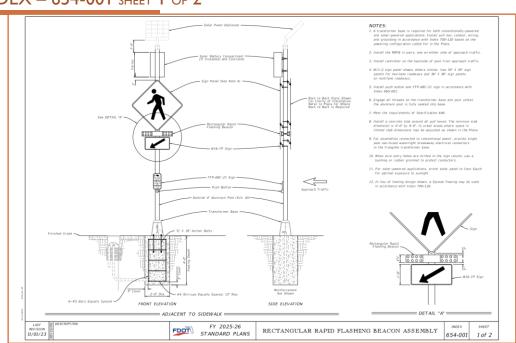


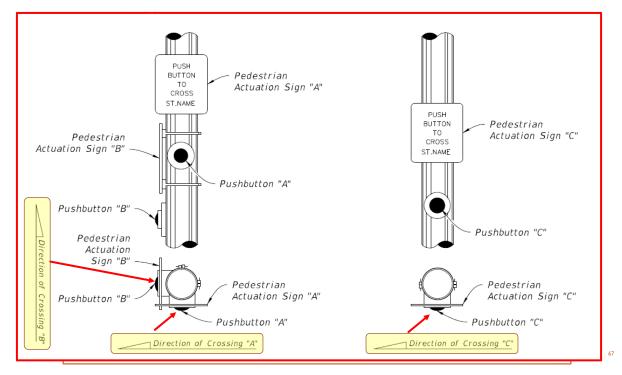
63





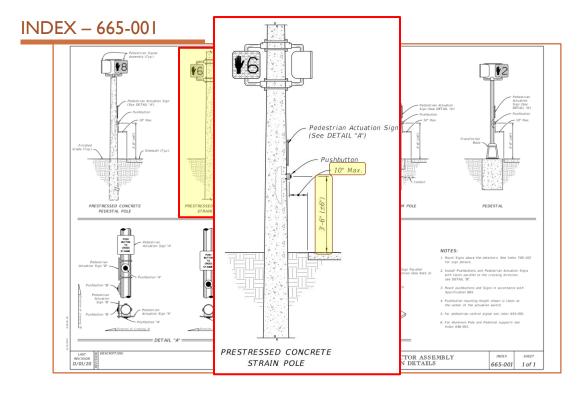
INDEX-654-001 sheet $I\ \text{OF}\ 2$





67

INDEX - 665-001 NOTES: Back Of Sidewalk 1. Mount Signs above the detectors. See Index 700-102 for sign details. Pushbutton and Sign Parallel 2. Install Pushbuttons and Pedestrian Actuation Signs to Crossing Direction (See Note 2) with faces parallel to the crossing direction, Sidewalk Curb 3. Mount pushbuttons and Signs in accordance with Specification 665. Acrossing Direction 4. Pushbutton mounting height shown is taken at the center of the actuation switch. 5. for pedestrian control signal see index 653-001. 6. For Aluminum Pole and Pedestal supports see Index 646-001. FY 2025-26 STANDARD PLANS INDEX SHEET 665-001 1 of 1 PEDESTRIAN DETECTOR ASSEMBLY INSTALLATION DETAILS 68







SAFETY & ACCESSIBILITY!

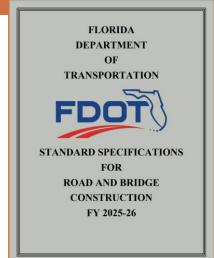
Brief History of the ADA

FDOT Design Manual (FDM)

FDOT Standard Plans

FDOT Standard Specifications

FDOT Maintenance Rating Program Handbook (MRP)



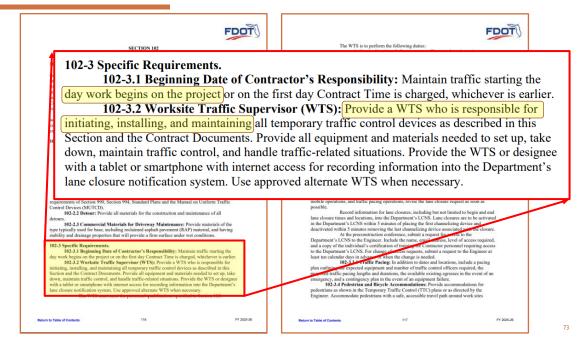


71

SECTION 102 – MAINTENANCE OF TRAFFIC

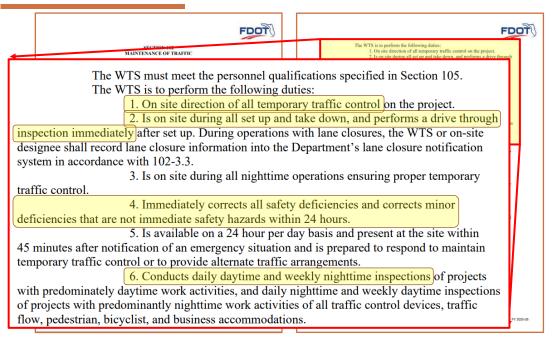
FDOT FDOT SECTION 102 MAINTENANCE OF TRAFFIC **SECTION 102** MAINTENANCE OF TRAFFIC 102-1 Description. Maintain traffic within the limits of the project for the duration of the construction period, including any temporary suspensions of the work. Construct and maintain detours. Provide facilities for access to residences, businesses, etc., along the project Furnish, install and maintain traffic control and safety devices during construction. Furnish and install work zone pavement markings for maintenance of traffic (MOT) in construction areas. Provide any other special requirements for safe and expeditious movement of traffic specified in the Temporary Traffic Control Plans. MOT includes all facilities, devices and operations as required for safety and convenience of the public within the work zone. Do not maintain traffic over those portions of the project where no work is to be accomplished or where construction operations will not affect existing roads. Do not obstruct or create a hazard to any traffic during the performance of the work, and repair any damage to existing pavement open to traffic.

SECTION 102 – MAINTENANCE OF TRAFFIC

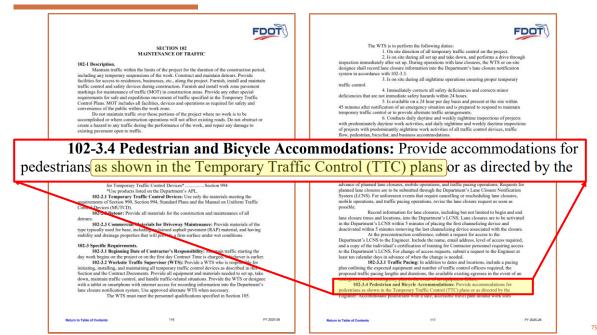


73

SECTION 102 – MAINTENANCE OF TRAFFIC

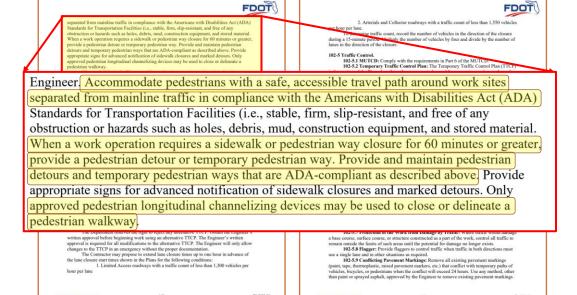


SECTION 102 – MAINTENANCE OF TRAFFIC

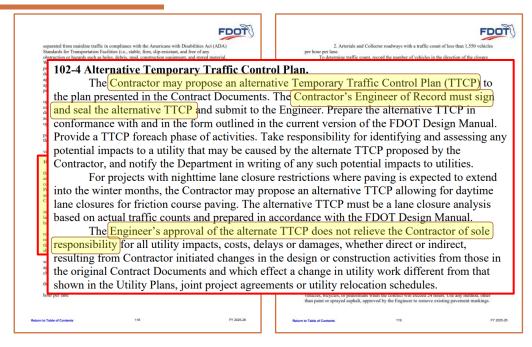


75

SECTION 102 – MAINTENANCE OF TRAFFIC

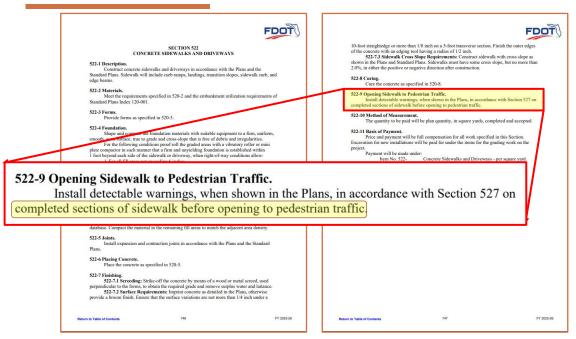


SECTION 102 – MAINTENANCE OF TRAFFIC

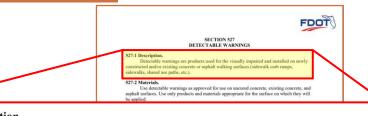


77

SECTION 522 – CONCRETE SIDEWALKS AND DRIVEWAYS

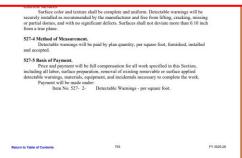


SECTION 527 – DETECTABLE WARNINGS



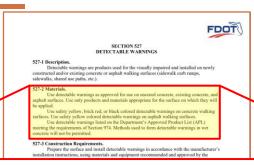
527-1 Description.

Detectable warnings are products used for the visually impaired and installed on newly constructed and/or existing concrete or asphalt walking surfaces (sidewalk curb ramps, sidewalks, shared use paths, etc.).



79

SECTION 527 – DETECTABLE WARNINGS



527-2 Materials.

Use detectable warnings as approved for use on uncured concrete, existing concrete, and asphalt surfaces. Use only products and materials appropriate for the surface on which they will be applied.

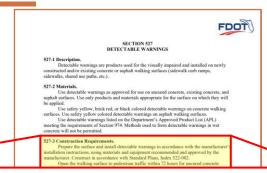
Use safety yellow, brick red, or black colored detectable warnings on concrete walking surfaces. Use safety yellow colored detectable warnings on asphalt walking surfaces.

Use detectable warnings listed on the Department's Approved Product List (APL) meeting the requirements of Section 974. Methods used to form detectable warnings in wet concrete will not be permitted.

m to Table of Contents 755

80

SECTION 527 – DETECTABLE WARNINGS



527-3 Construction Requirements.

Prepare the surface and install detectable warnings in accordance with the manufacturer's installation instructions, using materials and equipment recommended and approved by the manufacturer. Construct in accordance with Standard Plans, Index 522-002.

Open the walking surface to pedestrian traffic within 72 hours for uncured concrete surfaces. Immediately open the walking surface to pedestrian traffic for asphalt and existing concrete surfaces.

Surface color and texture shall be complete and uniform. Detectable warnings will be securely installed as recommended by the manufacturer and free from lifting, cracking, missing or partial domes, and with no significant defects. Surfaces shall not deviate more than 0.10 inch from a true plane.

81

SAFETY & ACCESSIBILITY!

Brief History of the ADA

FDOT Design Manual (FDM)

FDOT Standard Plans

FDOT Standard Specifications

FDOT Maintenance Rating Program Handbook (MRP)

MAINTENANCE RATING PROGRAM HANDBOOK

> DATA COLLECTION FOR MAINTENANCE RATING PROGRAM





82

83

MRP: DATA COLLECTION

CREW ORGANIZATION AND RESPONSIBILITIES

A Maintenance Rating Program survey team will be composed of a minimum of two persons. Each district will be responsible for implementing and maintaining the Maintenance Rating Program.

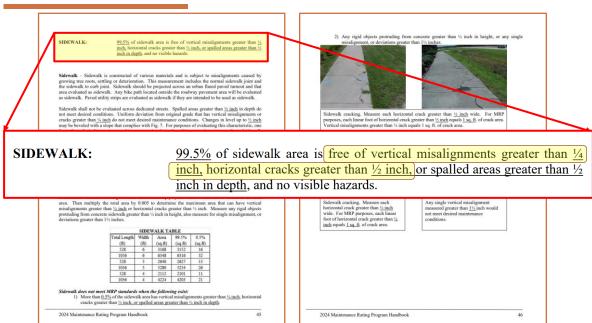
It is mandatory that the MRP survey team's first responsibility be the safety of the pedestrian and motoring public and themselves. On occasions, it may be necessary to schedule the survey of those samples with high traffic density during low traffic periods to provide proper safety. It may become necessary to request a safety crew (flag persons, cones, signs, flashing directional arrow) from the maintenance area in which the survey is taking place. The survey team shall walk together, facing traffic, as they evaluate each sample. Facing traffic is for safety of the survey team and walking together to prevent missing items that might be overlooked by one person and to permit accurate measurements.

Straignroage (+ if to 8 st) (intent or wood)
Leveling device (carpenter's level or string level)
Leveling device (carpenter's level or string level)
I hamfold optical level
Probling device (rod or sere-wdriver)
Legal size writing clipboard
Procket type calculator

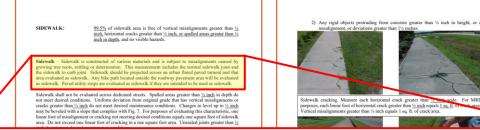
2024 Maintenance Rating Program Handbook
7

83

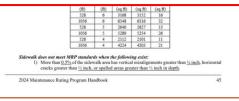
MRP STANDARDS: SIDEWALK



MRP STANDARDS: SIDEWALK



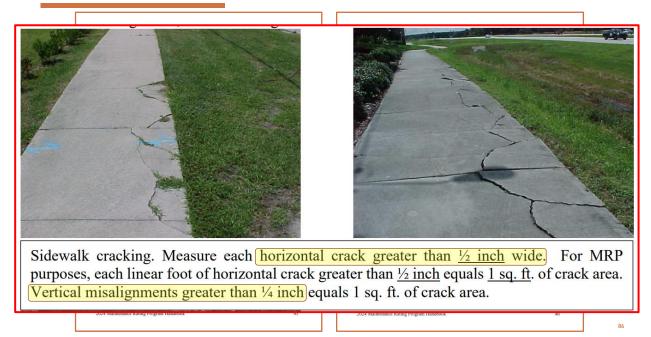
Sidewalk – Sidewalk is constructed of various materials and is subject to misalignments caused by growing tree roots, settling or deterioration. This measurement includes the normal sidewalk joint and the sidewalk to curb joint. Sidewalk should be projected across an urban flared paved turnout and that area evaluated as sidewalk. Any bike path located outside the roadway pavement area will be evaluated as sidewalk. Paved utility strips are evaluated as sidewalk if they are intended to be used as sidewalk.



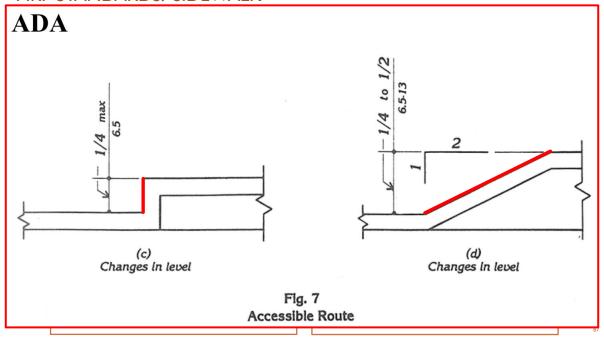
2024 Maintenance Rating Program Handbook 46

85

MRP STANDARDS: SIDEWALK



MRP STANDARDS: SIDEWALK



87

MRP STANDARDS: HANDRAIL



MRP STANDARDS: SIGNS

Sign Height:

1. Roads with curb and gutter:

7 feet minimum height measured from top of curb to bottom of sign (measure from sidewalk, if present).

2. Roads without curb and gutter:

<u>5 feet</u> minimum height measured from edge of driving lane to bottom of sign.

3. Limited access ramps:

<u>6 feet</u> minimum height measured from edge of driving lane to bottom of sign.

4. Limited access medians:

7 feet minimum height measured from edge of driving lane to bottom of sign.

5. Limited access roads:

7 feet minimum height measured from edge of driving lane to bottom of sign.

89

89

MRP STAN NOTES:

- 1) Highway signs shall be evaluated using two characteristics:
 - · Ground signs greater than 30 square feet (including all over-lane signs).
 - · Ground signs 30 square feet or less.
- 2) MRP definition of a secondary sign: A secondary sign is mounted below a primary sign and its message is not related to the primary sign message. Example: A "Do Not Block Intersection" sign mounted with a no U-turn sign below it.
- The height to the bottom of a secondary sign mounted below another sign may be one foot less than the appropriate height except where signs are over sidewalks (a route marking assembly consisting of a route marker with an auxiliary plate is treated as a single sign).
- Do not rate overhead school signs or county/city signs on signal cables.
- Do not rate logo signs.
- Do not rate wildflower signs.
- For purposes of these guidelines, a turn lane will be considered a driving lane. Merge, rest
 area, signs on islands and exit gore signs shall be evaluated according to the Standard Plans.
- 8) If it is obvious the minimum lateral clearance cannot be met, the sign shall be considered to meet acceptable maintenance conditions. The presence of sidewalk by itself shall not be considered a reason a sign cannot meet the minimum lateral clearance.
- 9) A sign less than 30 square feet mounted to a sign greater than 30 square feet is evaluated as part of the sign greater than 30 square feet.
- 10) For MRP purposes, two post installations with round aluminum tubing less than or equal to 3 ½ inches meets maintenance conditions.
- 11) Signs in the median, as outlined in the Standard Plans are not evaluated for lateral clearance.
- Do not rate slip bases for shims.
- Retroreflective strips for signs The retroreflective sign strips must be fastened in a manner that does not require drilling of holes in the column.

 Retroreflective sign strips must be 2 inches in width and a height of 5 feet for all signs except for when signs are mounted at 4 feet, then retroreflective sign strip will be 2 feet in height. Match the color of the retroreflective sheeting to the background color of the sign except for YIELD signs and DO NOT ENTER signs, where the color must be red.



91

MRP STANDARDS: VEGETATION AND AESTHETICS

FLORIDA DEPARTMENT OF TRANSPORTATION MAINTENANCE RATING PROGRAM STANDARDS

VEGETATION AND AESTHETICS

THE FOLLOWING CHARACTERISTICS MEET THE DESIRED MAINTENANCE CONDITIONS WHEN:

ROADSIDE MOWING: No more than 1% of vegetation exceeds (varies) inches high. This exc allowable seed stalks and decorative flowers allowed to remain for aesthetics

RURAL LIMITED ACCESS RURAL ARTERIAL URBAN LIMITED ACCESS URBAN ARTERIAL

VEGETATION AND AESTHETICS

ROADSIDE MOWING:

FACILITY TYPE

TREE TRIMMING:

LITTER REMOVAL:

No encroachment of trees, tree limbs or vegetation in or over travel way or clear zone, lower than 14½ feet of lower than 8½ feet over sidewalks and curb and gutter clear zones. No vegetation shall violate the horizontal clearance as defined by this standard.

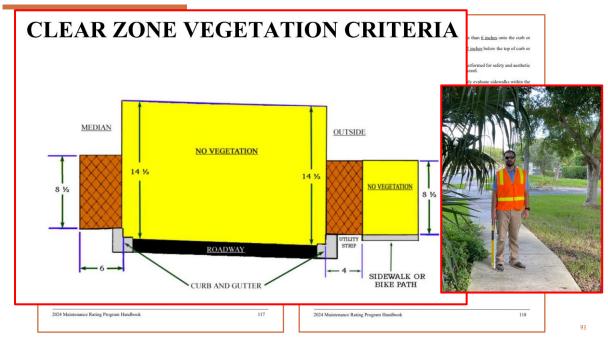
deviation of soil of more than <u>4 inches</u> above or <u>2 inches</u> below the top of curb adewalk for more than <u>10 continuous feet</u>.

The volume of litter does not exceed 3 <u>cubic feet</u> per acre excluding all tra pavement. No unauthorized graffiti/stickers within the state right-of-way owned property. No litter hazards are present in the roadway or on the shoulder, or clear recovery zone.

in the mowing area is 75% free of undesired vegetation. Unwanted vegetation growing on or out of Mechanically Stabilized Earth (MSE) and Sound W than 6 inches in length and in 8 separate locations, and / or no more than gazer feet of unwanted vegetation for any 50 square foot area of pare, pawemen joints, concrete traffic separators, cut-absphalt joints and un

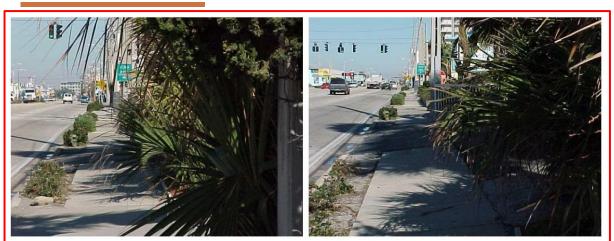
2024 Maintenance Rating Program Handbook

MRP STANDARDS: VEGETATION AND AESTHETICS



93

MRP STANDARDS: VEGETATION AND AESTHETICS



These pictures are examples of vegetation growing over the sidewalk. This obstructs the use of the sidewalk by pedestrians. If there is encroachment of vegetation onto the sidewalk more than 6 inch it does not meet MRP standards.



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SAFETY & ACCESSIBILITY!

How do you contact me?

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