Symbol
Preferential Lane
R1=3'-3.375"
R2=2'-3.563"
Arrow
Lane-Use
U Turn
R1=3'-3.375"
R2=2'-3.563"
Arrow
Lane-Use
U Turn and Through
by Opposite Hand)
R1=2'-11"
R2=1'-11"
Arrow
Lane-Use
Right Turn Similar
(Left Turn Shown -
Turn Lane-Use Arrow
R1=3'-3.375"
R2=2'-3.563"
Arrow
Lane-Use
Through Lane-Use
Arrow
12 S.F.
Turn Lane-Use Arrow
(Left Turn Shown
Right Turn Similar
by Opposite Hand)
17 S.F.
Wrong-Way Arrow
24 S.F.
NOTES:
1. When an arrow and a pavement message are
   used together, locate the arrow 25' downstream
   from the pavement message. Measure the distance
   from the base of the arrow to the base of the
   pavement message.
2. Place stop message 25' back from the stop line.
3. Dimensions are within 1" ±.
4. All grids are 4" x 4".

PAVEMENT ARROW AND MESSAGE DETAILS
**Solid Edge Line or Lane Line**

**Solid Channelizing Line**

**Two-Lane Passing Prohibited Lines**

**Double Solid Lines**

**12" Solid Pedestrian Crosswalk Line**

**24" Solid Stop Line**

**2'-4' Dotted Guide Line**

**6'-10' Dotted Extension Line**

**3'-9' Dotted Interchange Line**

**3'-9' Dotted Lane Drop Line**

**10'-30' Skip Line**

**10' White Skip With 10' Black Contrast and 20' Gaps**

**10' White Skip With 10' Black Contrast and 20' Gaps**

**YIELD LINES**

Yield Lines consist of five - 18" X 27" white triangles which face traffic. Equally space triangles within traffic lane. When a bike lane is present, add one additional triangle in the center of the bike lane.
PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

CURB AND GUTTER SHOWN

PAVEMENT MARKINGS

INDEX NO. 17346

SHEET NO. 3 of 17

DESCRIPTION:

FY 2017-18
DESIGN STANDARDS

REVISED
1/01/16

REVISION NO. 11/01/16

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

CURB AND GUTTER SHOWN
FLUSH SHOULDER SHOWN

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS
PAVEMENT MARKINGS AND DELINEATORS FOR MEDIAN CROSS-OVER

NOTE:

1. Apply yellow markings to the median noses.
2. Use yellow retro-reflective sheeting on both sides of the delineator. Install the post so that the top is 4' above the grade at the edge of the pavement.

PAVEMENT MARKINGS FOR INTERSECTIONS WITH MAJOR AND MINOR ROADS
Use Stop Line At Signalized Intersection Only

6" Yellow Skip
6" Yellow Solid

Radius Point

Min 75'

10' 10'
25' 8'
10' 10' 25' 8' 10' 10' 25' 8'

300' Max. Intervals Between Double Arrows
For use in congested urban areas where available storage lane length between intersections is limited and a permanent point of transition from the two-way turning lane to the exclusive turning lane can not be determined.

300' Max. Intervals Between Double Arrows
For use in rural & suburban areas where an adequate storage lane length can be specifically determined.

SCHEME ONE

SCHEME TWO

(TYPICAL CROSSWALK MARKINGS FOR CURB RAMPS)

12" White
For Crosswalk

12" White
For Crosswalk

12" White
For Crosswalk

12" White
For Crosswalk

TYPICAL CROSSWALK MARKINGS FOR CURB RAMPS

10' Standard
These markings may be used for locations with restricted left turn lengths, only when called for in plans.

**Restricted Left Turn Marking**

**Right Turn Lane Drop and Island Details**

**Typical Intersection 2 Thru Lanes Plus Left Turn Lane, with Crosswalk**

**Stop Bars, Crosswalks and Double Center Line Details**

**Notations:**
1. When public sidewalk curb ramps are present, refer Index No. 17344 and Index No. 304 for crosswalk widths.
2. Double yellow longitudinal center lines on all roadway approaches shall be extended back 100' for projects involving intersection improvements only.
3. When specified, 'stop' message shall be placed 25' back of stop lines.
**PAVEMENT MARKINGS**

**FOR TRAFFIC SEPARATION**

(TRAFFIC FLOWS IN OPPOSING DIRECTIONS)

**PAVEMENT MARKINGS FOR TRAFFIC CHANNELIZATION AT GORE**

(TRAFFIC FLOWS IN SAME DIRECTION)

---

**ONE WAY SIGNS ON DIVIDED HIGHWAY INTERSECTIONS**

Divided Highway signs (R6-3) may be on the same structure with the STOP and ONE WAY signs or on a separate structure.
TYPICAL TRANSITION MARKING
COLOR SHALL BE THE SAME AS RESPECTIVE EDGE LINE

LEFT ROADWAY CENTERED ON EXISTING ROADWAY

RIGHT ROADWAY CENTERED ON EXISTING ROADWAY

SCHEMES FOR TRANSITION - 2 LANE / 4 LANE ROADWAY
NOTES:

1. Messages shall meet requirements of Specification Section 971.6 and Section 711.

2. The thickness of the preformed message shall be 125 mils.

3. The message shall consist of white letters and numbers with black contrasting material. The black material shall meet the mat dimensions shown and have a minimum skid resistance value of 55 BPN.

4. The "EXIT NUMBER" position remains the same distance from the beginning of taper regardless of the number of lines of information.

MESSAGE SIZE AND SPACING

4" X 4" squares

MAT DIMENSIONS
**Railroad Crossing at 2-Lane Roadway**

- Stop Bar Perpendicular To Edge Of Travelway Or 8' From & Parallel To Gate When Present.
- 6" Yellow
- 24" White

**Railroad Crossing at 4-Lane Roadway**

- Stop Bar Perpendicular To Edge Of Travelway Or 8' From & Parallel To Gate When Present.
- 6" Dbl. Yellow
- 24" White

**Typical Pavement Markings for R/R Crossing**

- Width May Vary According To Lane Width
- See notes 1, 4 & 5 for sign placement.

**Pavement Markings for Termination of Two Way Left Turn at R/R Crossings**

- See Detail This Sheet For Placement of Railroad Pavement Markings.

**Notes:**

1. When computing pavement messages, quantities do not include transverse lines.
2. When dynamic devices are not present or are to be installed, the crossoverb shall be located at the future location of the RR gate or signal and gate in accordance with Index No. 17882.
3. Placement of sign W10-1 in a residential or business district, where low speeds are prevalent, The W10-1 sign may be placed a minimum distance of 100' from the crossing. Where street intersections occur between the RR pavement message and the tracks an additional W10-1 sign & additional Pavement message should be used.
4. Recommended location for FTP-61-06 or FTP-62-06 sign, 100 urban & 300' rural in advance of the crossing.
5. A portion of the pavement marking symbol should be directly opposite the W10-1 sign.

**Speed MPH** | **A in FT**
--- | ---
40 | 400
35 | 325
30 | 250
25 | 175
20 | 125
15 | 100
85 | 100

**Urban 10 Min**
GENERAL NOTES

1. For traffic and pedestrian signal installation, refer to Index No. 17721 through 17890.
2. For public sidewalk curb ramps, refer to Index No. 304.
3. For pavement marking and sign installation, refer to Indexes 11200 through 17356.
4. Crosswalk minimum widths: Intersection Crosswalk 6', Midblock Crosswalk 10'.
5. All crosswalk marking must be white.
6. Longitudinal markings in Special Emphasis Crosswalk must be 24" wide and spaced to avoid the wheel path of vehicles (see details). Center the longitudinal markings at each lane line. Place additional longitudinal markings at the center of each lane (12") between longitudinal markings is 60". The maximum spacing allowed between longitudinal markings is 60".

When the Crosswalk is skewed to the lane lines, the longitudinal markings should be parallel to the lane lines.

24" Longitudinal Bars in Special Emphasis Crosswalk must be preformed thermoplastic.

12" Transverse lines in the Special Emphasis Crosswalk may be standard thermoplastic or preformed thermoplastic.

1. For traffic and pedestrian signal installation, refer to Index No. 17721 through 17890.
2. For public sidewalk curb ramps, refer to Index No. 304.
3. For pavement marking and sign installation, refer to Indexes 11200 through 17356.
4. Crosswalk minimum widths: Intersection Crosswalk 6', Midblock Crosswalk 10'.
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When the Crosswalk is skewed to the lane lines, the longitudinal markings should be parallel to the lane lines.

24" Longitudinal Bars in Special Emphasis Crosswalk must be preformed thermoplastic.

12" Transverse lines in the Special Emphasis Crosswalk may be standard thermoplastic or preformed thermoplastic.
1. Plans shall indicate which crosswalk scheme is to be used.
2. The details shown do not depict the signing and markings for multi-lane roadways with divided medians. For these applications, additional signs shall be installed on the median side. Minimum width of Mid-Block Crosswalk is 10'.
3. All mid-block crosswalks shall use special emphasis crosswalk markings.
4. Crosswalk marking shall be preformed marking materials.

<table>
<thead>
<tr>
<th>APPROACH SPEED MPH</th>
<th>A-SUGGESTED DISTANCE (Ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 or Less</td>
<td>200</td>
</tr>
<tr>
<td>26 to 35</td>
<td>250</td>
</tr>
<tr>
<td>36 to 45</td>
<td>300</td>
</tr>
</tbody>
</table>

Crosswalk marking shall be performed marking materials.
DOUBLE LEFT TURNS

**Queue Length is measured from the median nose radial point or, when a stop bar is required, from the stop bar.**

<table>
<thead>
<tr>
<th>Design Speed (mph)</th>
<th>Clearance Distance</th>
<th>Brake To Stop Distance</th>
<th>Total Decel. Distance</th>
<th>Clearance Distance</th>
<th>Brake To Stop Distance</th>
<th>Total Decel. Distance</th>
<th>Clearance Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>175</td>
<td>120</td>
<td>15</td>
<td>130</td>
<td>120</td>
<td>15</td>
<td>130</td>
</tr>
<tr>
<td>40</td>
<td>170</td>
<td>125</td>
<td>15</td>
<td>135</td>
<td>125</td>
<td>15</td>
<td>135</td>
</tr>
<tr>
<td>45</td>
<td>165</td>
<td>130</td>
<td>15</td>
<td>135</td>
<td>125</td>
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<td>135</td>
</tr>
<tr>
<td>50</td>
<td>160</td>
<td>135</td>
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<td>125</td>
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</tr>
<tr>
<td>55</td>
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<td>60</td>
<td>150</td>
<td>145</td>
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<td>125</td>
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</tr>
<tr>
<td>65</td>
<td>145</td>
<td>150</td>
<td>15</td>
<td>135</td>
<td>125</td>
<td>15</td>
<td>135</td>
</tr>
</tbody>
</table>

The only pavement message is required for turn lanes, where the thru lane becomes turn lane.

Through Lane Becomes Exclusive Left Turn

Through Lane Becomes Optional Left Turn

ARROW SPACING

Arrow should be evenly spaced between first and last arrow. Turn lanes longer than 200’ add one arrow for each 100’ additional length.

NOTES:

1. The "Begin Lane Line" locations are based on the standard lengths shown in Design Standard 301. These locations must be adjusted on a case by case basis for turn lanes not meeting the standard lengths.
2. Yellow left turn edge marking may be used adjacent to raised curb or grass medians if lane use is not readily apparent to drivers approaching a left turn storage lane.
3. Refer to Design Standard Index 301 for roadway details.
4. This index also applies to right turn lanes.
PUBLIC SIDEWALK CURB RAMPS IN REST AREAS

**SIDEWALK CURB RAMPS IN REST AREAS**

1. **DESCRIPTION:**
   - **Revision No:**
   - **Sheet No:**
   - **Index No:**
   - **Date:** 10/14/2016
   - **Time:** 8:38:24 AM

2. **REVISIO N NO. SHEET NO. INDEX NO.**
   - **Design Standards FY 2017-18**
   - **Pavement Markings 11/01/16**
   - **15/17**
   - **17346**

3. **NOTES:**
   - **Public Sidewalk Curb Ramp**
   - **Sign No FTP-21-06**
   - **Sign No FTP-22-06**
   - **6" White**
   - **Yellow Curb (Optional)**
   - **No Parking Zone -**
   - **Drivers Eye Location**

4. **TYPICAL:**
   - **Public Sidewalk Curb Ramp**
   - **Sign No FTP-21-06**
   - **Sign No FTP-22-06**

5. **MINIMUM PARKING RESTRICTION FOR NONSIGNALIZED INTERSECTIONS**
   - **SPEED LIMIT**
   - **UP STREAM (A)**
   - **DOWN STREAM (B)**
   - **35**
   - **100**
   - **70**
   - **50**

6. **NOTES:**
   - 1. Distances measured longitudinally along the street from driver location of entering vehicle to end of parking restriction.
   - 2. Distances applicable to intersecting street, major driveways and other driveways to the extent practical.
   - 3. For nonsignalized intersections, the values above shall be compared with the values for signalized intersections and the maximum restrictions implemented. These restrictions apply to both accessible and nonaccessible parking.
   - 4. Parking lane lines shall be 6" white.
   - 5. Parking shall not be allowed within 20' of a crosswalk.
   - 6. Where curb and gutter is used, the gutter pan width may be included as part of the minimum width of parking lane, but desirably the lane width should be in addition to that of the gutter pan.

7. **GENERAL NOTES (Signalized & Nonsignalized):**
   - 1. For entrances to a one-way street, the downstream restriction may be reduced to 20'.
   - 2. Parking shall not be allowed within 20' of a crosswalk.
   - 3. All parking lane markings shall be 6" white.
   - 4. Parking lane lines shall be broken at driveways.
   - 5. Refer to Chapter 316, Fla. Statutes, for laws governing parking spaces.
   - 6. Where curb and gutter is used, the gutter pan width may be included as part of the minimum width of parking lane, but desirably the lane width should be in addition to that of the gutter pan.

8. ** type I**
   - **No Parking Zone - Yellow Curb (Optional)**
   - **Upstream Min.**
   - **Downstream Min.**
   - **22' Min. & 26' Max.**

9. ** type II**
   - **No Parking Zone - Yellow Curb (Optional)**
   - **All Spaces**
   - **22' Min. & 26' Max.**

10. ** type III**
    - **No Parking Zone - Yellow Curb (Optional)**
    - **All Spaces**
    - **22' Min. & 26' Max.**

11. **MINIMUM PARKING RESTRICTION FOR SIGNALIZED INTERSECTION**
    - **DISTANCE FROM CURB RADIUS (T) FOR SIGNALIZED INTERSECTION**
    - **35**
    - **50**

12. **NOTES:**
    - 1. Parking restrictions measured from curb radius point.
    - 2. Restrictions for accessible parking are the same as those applied to nonsignalized intersections.

13. **UNIVERSAL SYMBOL OF ACCESSIBILITY**
    - Use of pavement symbol in accessible parking spaces is optional when used the symbol shall be 3 or 5 sign and white in color.

14. **PAVEMENT MARKING FOR PUBLIC SIDEWALK CURB RAMPS IN REST AREAS**
    - **FOR ACCESSIBLE MARKINGS - SEE ABOVE**
    - **"DIMENSIONS"**
    - **4'**
    - **5'**
    - **6'**
    - **8'**
    - **10'**
    - **12'**
    - **15'**
    - **18'**
    - **20'**
    - **22'**
    - **24'**
    - **26'**
    - **28'**
    - **30'**
    - **32'**
    - **34'**
    - **36'**
    - **38'**
    - **40'**
    - **42'**
    - **44'**
    - **46'**
    - **48'**
    - **50'**
    - **52'**
    - **54'**
    - **56'**
    - **58'**
    - **60'**
    - **62'**
    - **64'**
    - **66'**
    - **68'**
    - **70'**
    - **72'**
    - **74'**
    - **76'**
    - **78'**
    - **80'**
    - **82'**
    - **84'**
    - **86'**
    - **88'**
    - **90'**
    - **92'**
    - **94'**
    - **96'**
    - **98'**
    - **100'**

15. **DISTANCES TO BE PROJECTED FROM CURB RADIOUS (T)**
    - **UPSTREAM (A)**
    - **DOWNSTREAM (B)**
    - **2 LANE**
    - **4 LANE**

16. **CURB RADIUS (Y)**
    - **DISTANCE FROM SIGNALIZED INTERSECTION**
    - **0-30**
    - **35**
    - **30**
    - **50**
    - **45**
    - **60**
    - **70**
    - **85**
    - **100**

17. **MINIMUM PARKING RESTRICTION FOR SIGNALIZED INTERSECTIONS**
    - **TYPE II**
    - **No Parking Zone - Yellow Curb (Optional)**
    - **All Spaces**
    - **22' Min. & 26' Max.**

18. **MINIMUM PARKING RESTRICTION FOR SIGNALIZED INTERSECTION**
    - **SPEED LIMIT**
    - **MPH**
    - **UP STREAM (A) DOWN STREAM (B) 3 LANE 4 LANE**
    - **35**
    - **100**
    - **70**
    - **50**

19. **NOTES:**
    - 1. Distances measured from curb radius point.
    - 2. Restrictions for accessible parking are the same as those applied to nonsignalized intersections.

20. **GENERAL NOTES (Signalized & Nonsignalized):**
    - 1. For entrances to a one-way street, the downstream restriction may be reduced to 20'.
    - 2. Parking shall not be allowed within 20' of a crosswalk.
    - 3. All parking lane markings shall be 6" white.
    - 4. Parking lane lines shall be broken at driveways.
    - 5. Refer to Chapter 316, Fla. Statutes, for laws governing parking spaces.
    - 6. Where curb and gutter is used, the gutter pan width may be included as part of the minimum width of parking lane, but desirably the lane width should be in addition to that of the gutter pan.
GENERAL NOTES:

1. Remove raised retroreflective pavement markers when in conflict with the installation of the centerline profiled thermoplastic pavement markings. The cost of removal is included in the cost of the profiled thermoplastic pavement marking.

2. Replacement of retroreflective pavement markers removed during the installation of the centerline profiled thermoplastic pavement markings will be paid for under Pay Item 786.
REFERENCE:
See Profiled Thermoplastic Markings General Notes on Sheet 13.

TYPICAL RURAL INTERSECTION

TYPICAL RURAL MEDIAN OPENING

TYPICAL RURAL DIRECTIONAL INTERSECTION

PROFILED THERMOPLASTIC MARKINGS MULTI-LANE ROADWAYS