ARLINGTON COUNTY

PAVEMENT MARKING

SPECIFICATIONS

MAY 2017
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1. General

Description

This document contains information and illustrations of the pavement marking plan design procedures for use in Arlington County.

The information is based on the current Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and Virginia Department of Transportation Supplement to the MUTCD and the Virginia Department of Transportation Road and Bridge Standards.

The intent of this document is to establish standard procedures for Engineers, Consultants, Planners and Designers working within Arlington County.

Related Arlington County Standards

Arlington County Bus Stop Design Standards
Arlington County Horizontal Standards
Arlington County Construction Standards

Submittals

Design and placement of all markings on County roads shall be approved by DES Transportation and Operations Bureau (TE&O) and are subject to TE&O Engineer’s discretion.
2. Design Criteria

A. Pavement markings are used on roadways to provide guidance and information for drivers, pedestrians and bicyclists.

The markings signify the delineation of traffic path and lateral clearance from traffic hazards for the safe movement of traffic. Various types of road markings include longitudinal markings, transverse markings, object markings and special markings to alert the driver of movement restrictions and hazardous locations.

1. Plans shall conform to current version of MUTCD and Virginia Supplement to MUTCD guidelines, Virginia Department of Transportation and Arlington County guidelines.

2. All markings shall be thermoplastic, TYPE B CLASS I, unless otherwise specified.

3. Minimum lane width for all lanes shall be ten (10) feet. Exceptions may be made at the Engineer’s discretion.

4. Lane dimensions shall be shown at road transitions and at the beginning and end of each sheet. Lane widths are measured from the center of the marking.

5. Length of turn lanes, tapers and flares shall be dimensioned.

6. Parking lanes shall be a minimum of seven (7) feet wide unless otherwise specified.

7. Standard bike lanes shall be a minimum of five (5) feet and a maximum of six (6) feet.

8. Stop bars shall be eighteen (18) inches wide and placed four (4) minimum feet from crosswalk.

9. Turn arrows shall generally be placed twenty five (25) feet from stop bar at beginning of full width turn lane then regular intervals thereafter.

10. Bike lane symbols shall be installed twenty five (25) feet from start of bike lane and three hundred thirty (330) feet apart thereafter, when possible, or at the start of a new block.

11. Shared bike lane symbols (sharrows) shall be placed in the center of the lane when the lanes are less than fourteen (14) feet wide, two hundred fifty (250) feet apart.

12. Crosswalks shall be at least ten (10) feet wide. The Engineer will determine whether the crosswalk shall be a standard or continental style.
3. Marking Plan Preparation

1. All plans shall be prepared on 24”X36” Arlington County _DOT base sheet located at S:\AutoCAD 2012 Standards\Templates

2. Plans shall be prepared using AutoCAD (current version) and stored on the Q: drive @ Q:\Data\Traffic\Data

3. All plans shall be 1”-25’ scale.

4. North arrows shall point to the top or right when possible.

5. All sheets shall be numbered consecutively, ‘Sheet __of__’

6. All plans shall include: general notes, construction notes and a legend.

7. All curbs, raised medians, edge of pavement, driveways, sidewalks, ADA ramps and fire hydrants shall be shown when possible.

8. All existing regulatory, warning and guide signs, including parking signs and bus stops, shall be shown. All existing signs shall be field verified.

9. All existing markings, including parking lanes, bike lanes and crosswalks shall be shown when street is not being paved.

10. Street names and speed limits shall be shown on the plan.

11. Matchlines and project limits shall be clearly shown and referenced on the plan.
Exhibits

MK – 1  Typical Crosswalk
MK – 1a Typical Crosswalk Details

PAVEMENT MARKINGS

- Pavement or stamped concrete crosswalk
- Standard crosswalk
- High density crosswalk

6" white line
10"
MK – 2 Typical Cross Section
MK – 3  Typical Speed Hump Markings

TYPICAL SPEED HUMPS AND YIELD MARKINGS

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TE&O Construction Standards Rev. 2.0 - 05/2017
MK – 4a  Typical Speed Hump Details

**SPEED HUMP DETAIL**

**SPEED TABLE DETAIL**

**YIELD MARKINGS DETAIL**

**SPEED HUMP AND YIELD MARKING DETAILS**
DISTANCE FROM STOP BAR TO END OF PARKING TO BE DETERMINED BY ENGINEER AFTER FIELD VISIT.

50'

TRAVEL LANES MINIMUM OF 10'

TYPICAL FOUR LANE SECTION WITH PARKING
MK – 6  Typical Four Lane Section With Parking And Bike Lanes
TYPICAL SECTIONS FOR BUFFERED BIKE LANES

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

MK-7

REVISION & DATE

DRAWING NO.
MK – 8  Typical Bike Box At Signalized Intersection
MK – 9  Typical Five Lane Section
MK – 10 Typical Near Side And Far Side Bus Stops

TYPICAL FAR SIDE AND NEAR SIDE BUS STOPS

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

MK-10

REVISION & DATE

DRAWING NO.

* REFER TO WMATA GUIDELINES AND ART BUS STANDARDS

ARLINGTON, VA 22201

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MK – 12  Typical Six Lane Section With Parking And Bike Lanes
### Standard Pavement Marking Legend:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Type B Class 1, White 4&quot; Width</td>
<td>Parking lanes, edge lines, lane lines</td>
</tr>
<tr>
<td>B</td>
<td>Type B Class 1, White 4&quot; Width, 10' Long, 30' Spacing</td>
<td>Dashed lane lines</td>
</tr>
<tr>
<td>C</td>
<td>Type B Class 1, White 4&quot; Width, 2 Long, 10' Spacing</td>
<td>Lane transitions, turn lane skips</td>
</tr>
<tr>
<td>D</td>
<td>Type B Class 1, White 18' Width</td>
<td>Stop bars</td>
</tr>
<tr>
<td>E</td>
<td>Type B Class 1, White 24' Width</td>
<td>Continental cross walks</td>
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<tr>
<td>F</td>
<td>Type B Class 1, White 8' Width</td>
<td>Turn lanes, transverse crosswalks, bike lanes</td>
</tr>
<tr>
<td>G</td>
<td>Type B Class 1, Yellow 4&quot; Width, 10' Long, 30' Spacing</td>
<td>Divided traffic, two way turn lanes</td>
</tr>
<tr>
<td>H</td>
<td>Type B Class 1, Yellow 4&quot; Width</td>
<td>Centerlines</td>
</tr>
<tr>
<td>I</td>
<td>Type B Class 1, White 4&quot; Width, Double Line, 4&quot; Spacing</td>
<td>Hatch lines, safety zones</td>
</tr>
<tr>
<td>J</td>
<td>Type B Class 1, White Single Arrow</td>
<td>Turn lanes</td>
</tr>
<tr>
<td>K</td>
<td>Type B Class 1, White Combination Arrow</td>
<td>Turn lanes</td>
</tr>
<tr>
<td>L</td>
<td>Type B Class 1, White # Letters</td>
<td>Pavement letters (stop, yield, bus, only etc.)</td>
</tr>
<tr>
<td>M</td>
<td>Type B Class 1, White 8' Width, 2 Long, 10' Spacing</td>
<td>Lane transitions, turn lane skips</td>
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<tr>
<td>N</td>
<td>Type B Class 1, White 12' Width, 20' Spacing @ 6 Degree</td>
<td>Gore markings</td>
</tr>
<tr>
<td>O</td>
<td>Type B Class 1, Yellow 12' Width, 20' Spacing @ 45 Degree</td>
<td>Gore markings</td>
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<tr>
<td>P</td>
<td>Type B Class 1, White 8' Width, 2 Long, 4' Spacing</td>
<td>Lane transitions</td>
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### Striping Legend

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
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<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
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</tbody>
</table>

### Standard Marking Legends

- **Arlington County, Virginia**
- Department of Environmental Services

**Drawing No.** MK-12a
**SIGN AND PAVEMENT MARKING NOTES:**

1. STREET WIDTH MEASUREMENTS ARE FROM FACE OF CURB TO FACE OF CURB. LANES ARE MEASURED FROM CENTER OF MARKING TO CENTER OF MARKING.

2. CONTACT DENNIS HOWELL OR HIS DESIGNEE AT 703-228-6598 OR (571) 437-1077 TO APPROVE MARKING LAYOUT 48 HRS. PRIOR TO INSTALLATION OF MARKINGS.

3. PAVEMENT MARKINGS TO BE IN ACCORDANCE WITH THE FOLLOWING AND ANY REVISIONS HERE TO:
   A) THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
   B) ARLINGTON COUNTY MARKING STANDARDS.

4. ALL MARKINGS SHALL BE THERMOPLASTIC PER ARLINGTON COUNTY MARKING STANDARDS.

5. STOP BARS SHALL BE A MINIMUM OF 4’ IN ADVANCE OF A MARKED CROSSWALK. IF THERE IS NO MARKED CROSSWALK, STOP BAR SHALL BE NO MORE THAN 30’ FROM THE NEAREST EDGE OF THE INTERSECTED TRAVELED WAY.

6. CROSSWALKS SHALL BE 10’ WIDE UNLESS OTHERWISE NOTED.

7. LEFT TURN ARROWS SHALL BE LOCATED 25’ BACK FROM STOP BAR. FOR ADDITIONAL ARROWS FOLLOW COUNTY MARKING STANDARDS.

8. ON-STREET PARKING LANE IS 7’ WIDE (UNLESS OTHERWISE NOTED) AND MARKED WITH 4’ WIDE WHITE LINES. BEGINNING AND END OF PARKING SHALL BE MARKED WITH AN END LINE PERPENDICULAR TO CURB EXCEPT AT NUBS OR WHERE OTHERWISE INDICATED.

9. SHARROWS SHALL BE PLACED IN CENTER OF LANE, 250’ APART UNLESS OTHERWISE SPECIFIED.

10. BIKE LANE SYMBOLS TO BE PLACED 330’ APART UNLESS OTHERWISE SPECIFIED.
## MARKING LINETYPES AND PROPERTIES

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<thead>
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<th>Line Type</th>
<th>Diagram</th>
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<tr>
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<tr>
<td>Skip Line</td>
<td>![Skip Line Diagram]</td>
</tr>
<tr>
<td>Mini Skip</td>
<td>![Mini Skip Diagram]</td>
</tr>
<tr>
<td>Stop Bar</td>
<td>![Stop Bar Diagram]</td>
</tr>
<tr>
<td>Crosswalk</td>
<td>![Crosswalk Diagram]</td>
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<tr>
<td>Centerline</td>
<td>![Centerline Diagram]</td>
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<tr>
<td>Hatch Lines/Safety Zone</td>
<td>![Hatch Lines/Safety Zone Diagram]</td>
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<tr>
<td>Yield Markings</td>
<td>![Yield Markings Diagram]</td>
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## STANDARD MARKING LINETYPES

**ARLINGTON COUNTY, VIRGINIA**
DEPARTMENT OF ENVIRONMENTAL SERVICES

**DRAWING NO.**
**REF-1**
# MARKING SYMBOLS

<table>
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<th>Symbol</th>
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<tbody>
<tr>
<td>Bike Symbol</td>
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</tr>
<tr>
<td>Sharrow</td>
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</tr>
<tr>
<td>Speed Hump</td>
<td></td>
</tr>
<tr>
<td>Bus Flag</td>
<td></td>
</tr>
<tr>
<td>Left Turn Arrow</td>
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</tr>
<tr>
<td>Right Turn Arrow</td>
<td></td>
</tr>
<tr>
<td>Lane reduction arrow</td>
<td></td>
</tr>
<tr>
<td>Left/Thru Arrow</td>
<td></td>
</tr>
<tr>
<td>Straight Arrow</td>
<td></td>
</tr>
<tr>
<td>STOP Marking</td>
<td></td>
</tr>
<tr>
<td>BUS Marking</td>
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</tr>
<tr>
<td>ONLY Marking</td>
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</tr>
<tr>
<td>Sign</td>
<td></td>
</tr>
<tr>
<td>Fire Hydrant</td>
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</table>

## STANDARD MARKING SYMBOLS

ARLINGTON COUNTY, VIRGINIA
Department of Environmental Services

DRAWING NO. REF-2

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