



ARLINGTON
VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

ARLINGTON COUNTY
PAVEMENT MARKING
SPECIFICATIONS

AUGUST 2014

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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, Engineering 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.

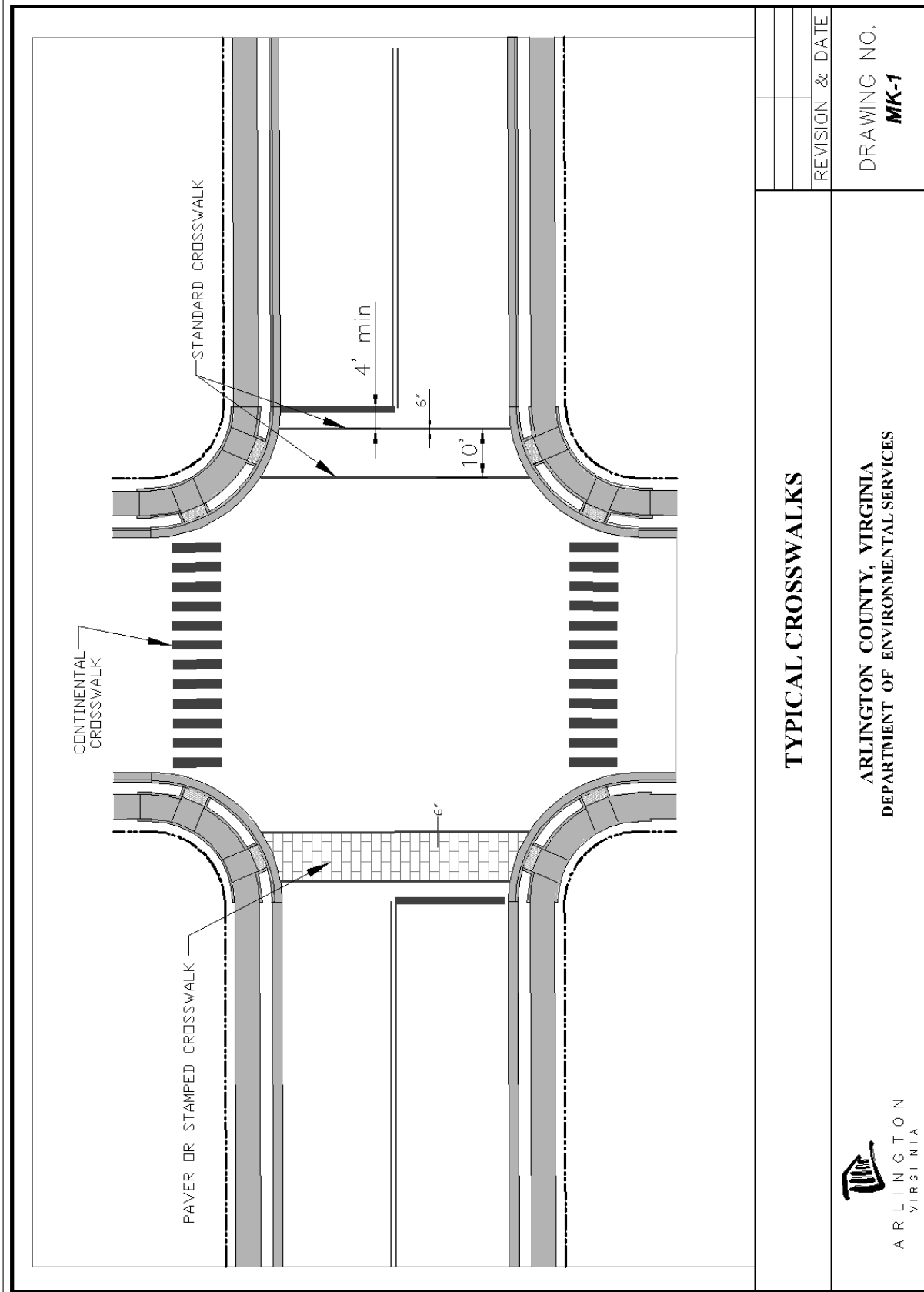
The markings signify the delineation of traffic path and lateral clearance from traffic hazards for the safe movement of traffic. Various types of road markings include longitudinal markings, transverse markings, object markings and special markings to alert the driver of movement restrictions and hazardous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

MK-1 Typical Crosswalk



TYPICAL CROSSWALKS


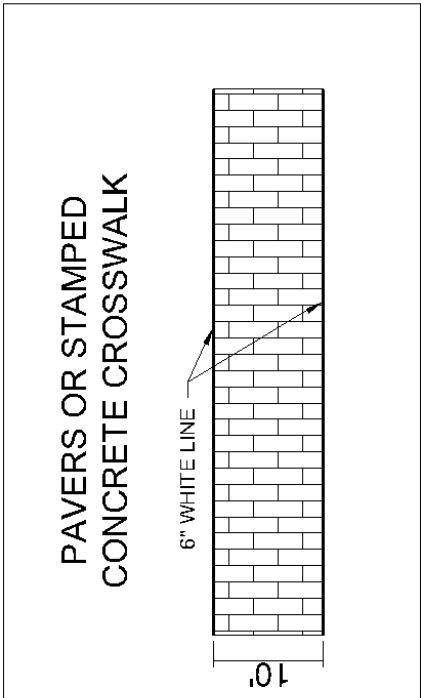
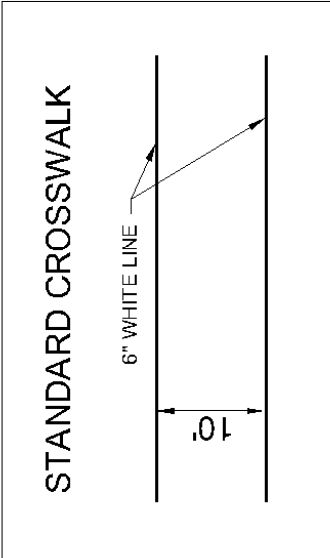

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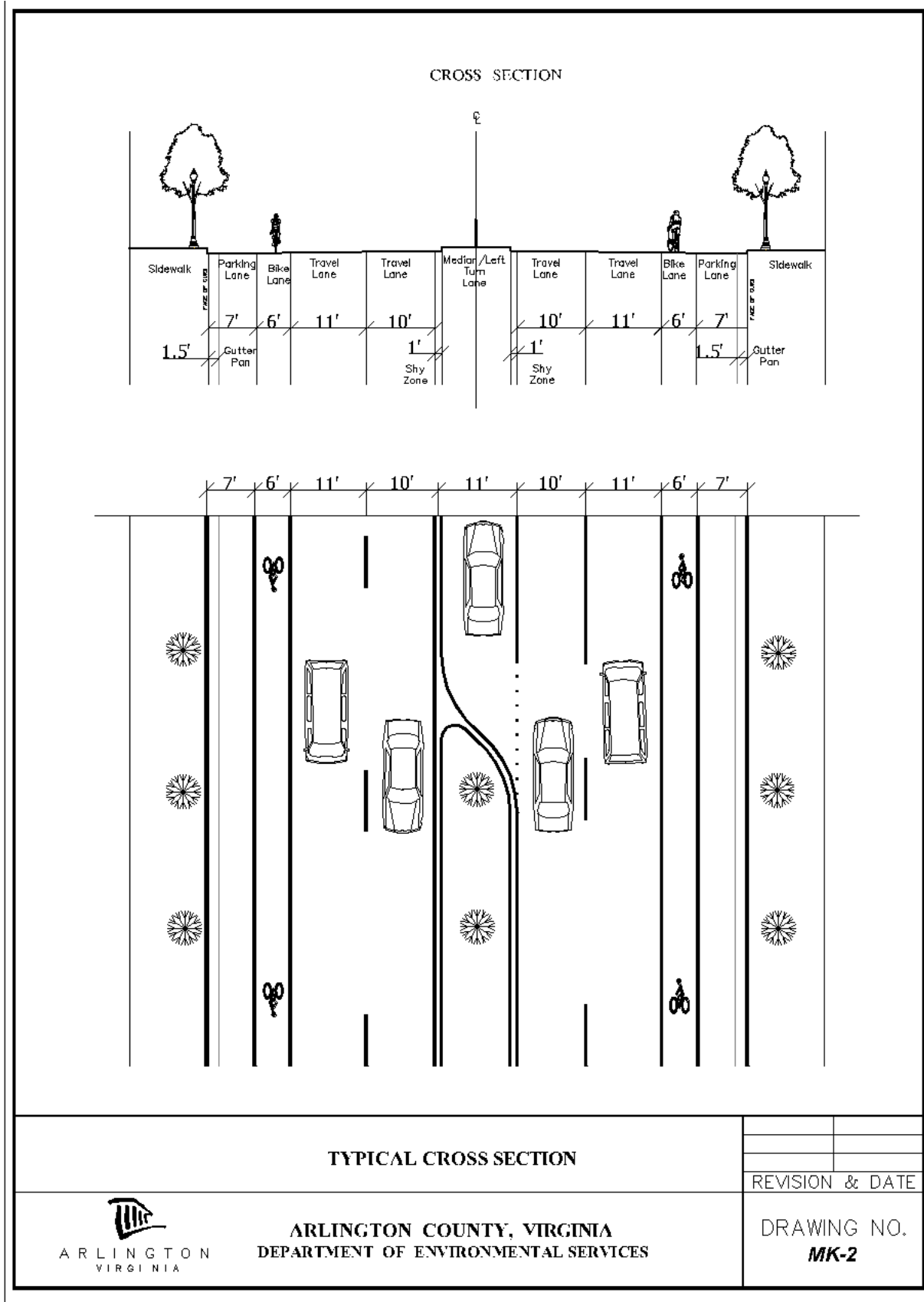
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DRAWING NO.
MK-1

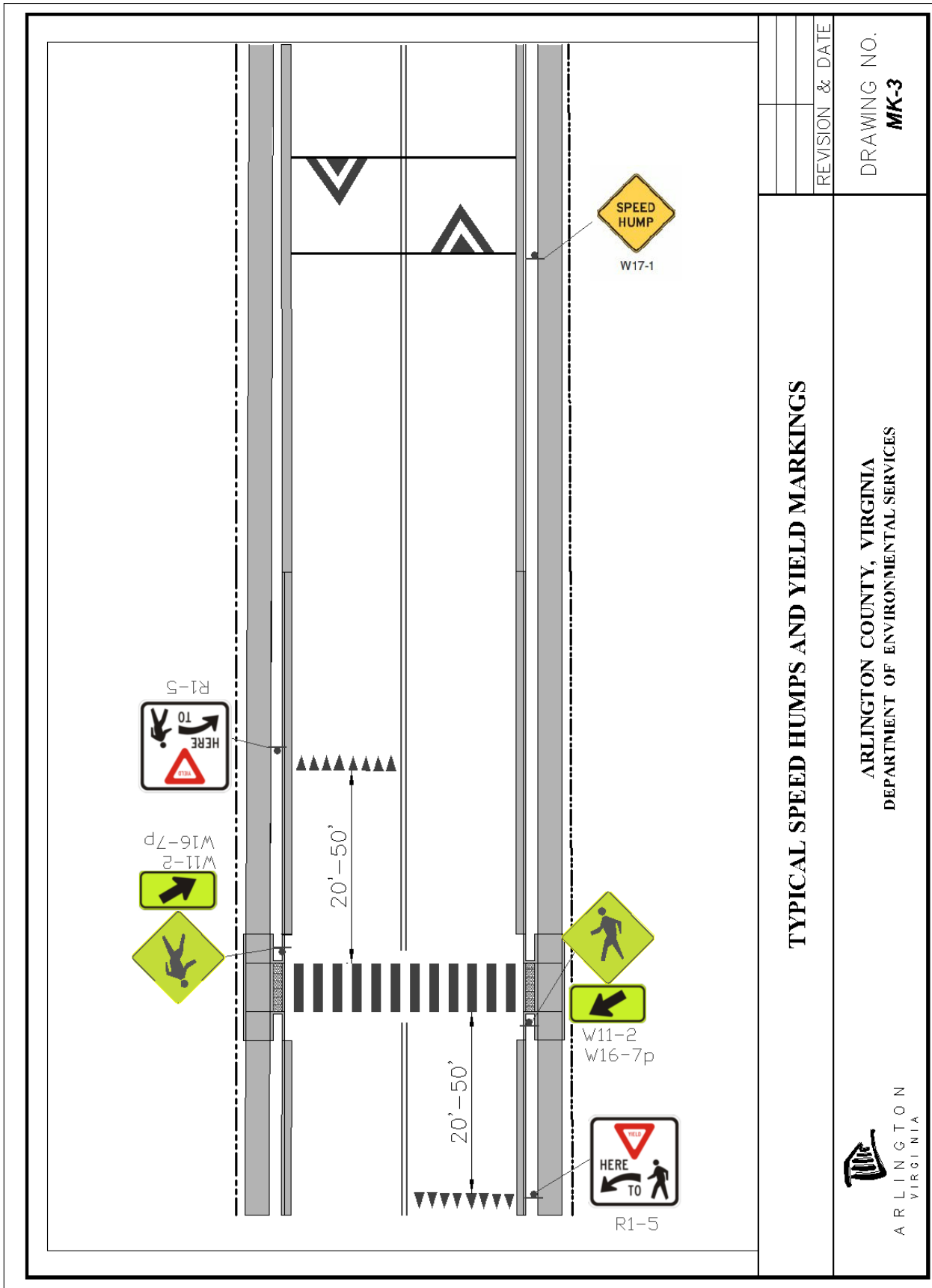
MK – 1a Typical Crosswalk Details

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<p>TYPICAL CROSSWALK DETAILS</p>					
<p>ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES</p>					
 <p>ARLINGTON VIRGINIA</p>					
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MK - 2 Typical Cross Section



MK – 3 Typical Speed Hump Markings



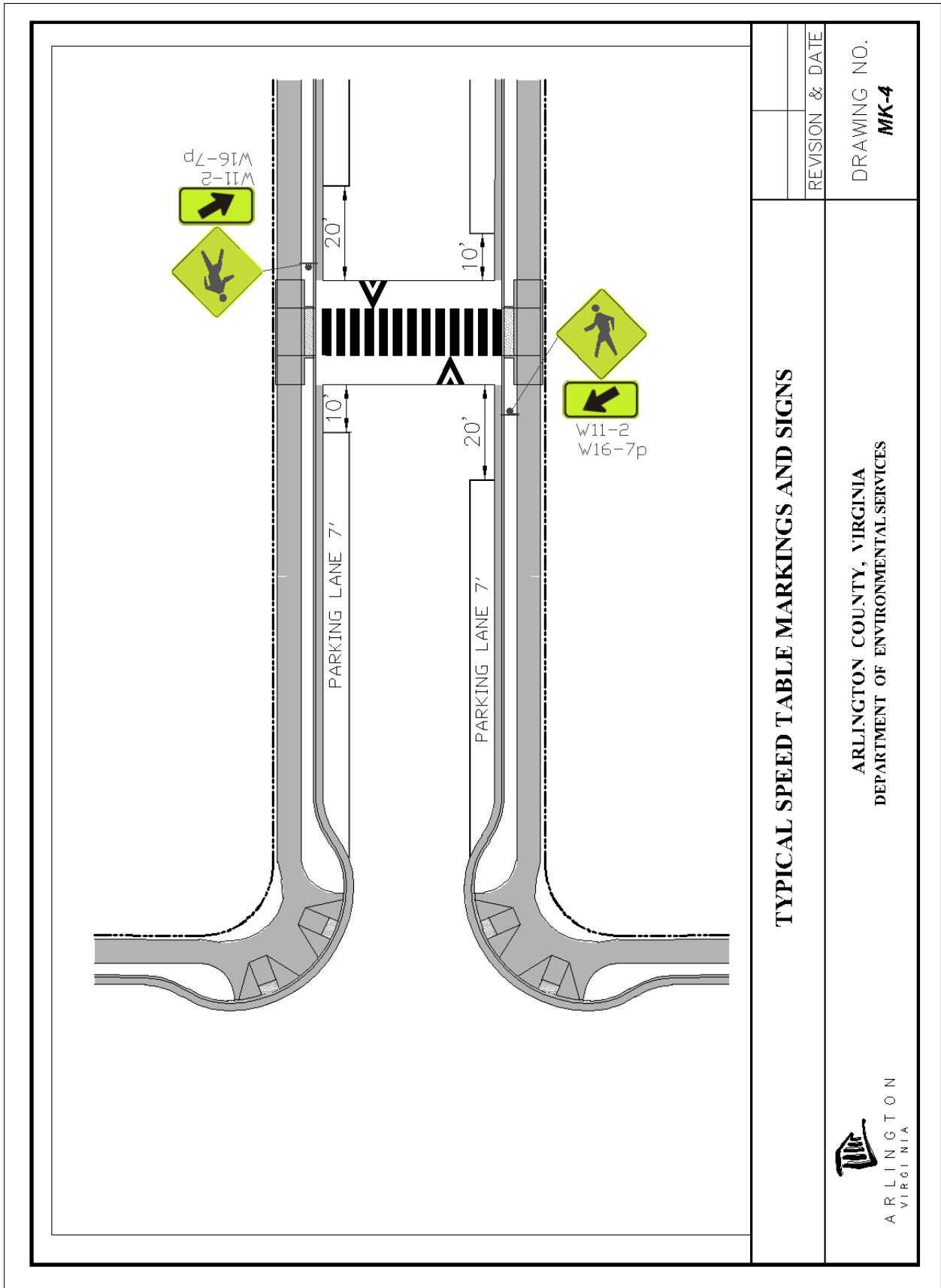
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TYPICAL SPEED HUMPS AND YIELD MARKINGS

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MK - 4 Typical Speed Table



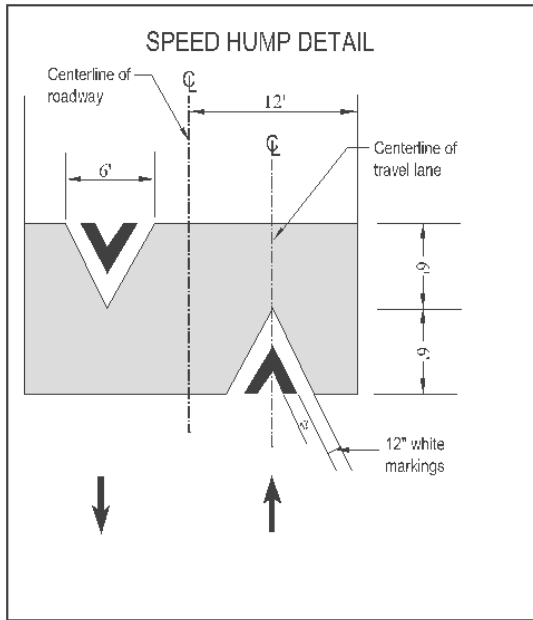
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TYPICAL SPEED TABLE MARKINGS AND SIGNS

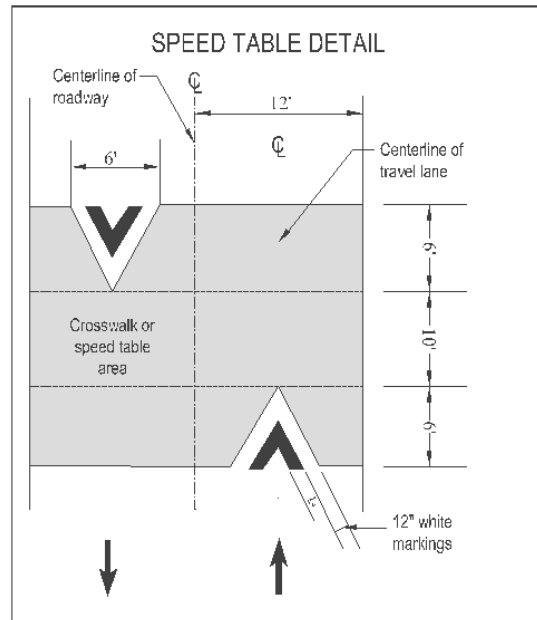
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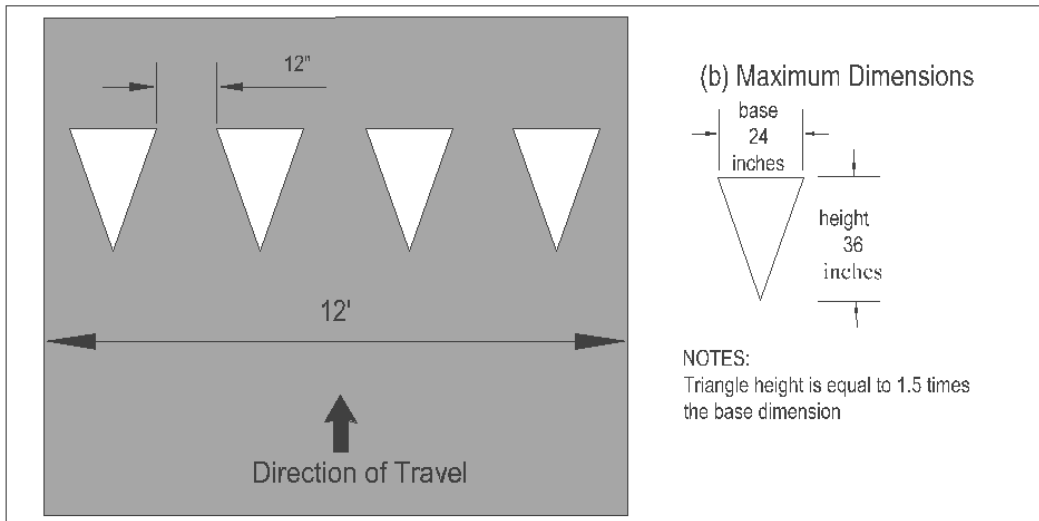
MK – 4a Typical Speed Hump Details



SPEED HUMP DETAIL



SPEED CUSHION DETAIL



YIELD MARKINGS DETAIL

SPEED HUMP AND YIELD MARKING DETAILS

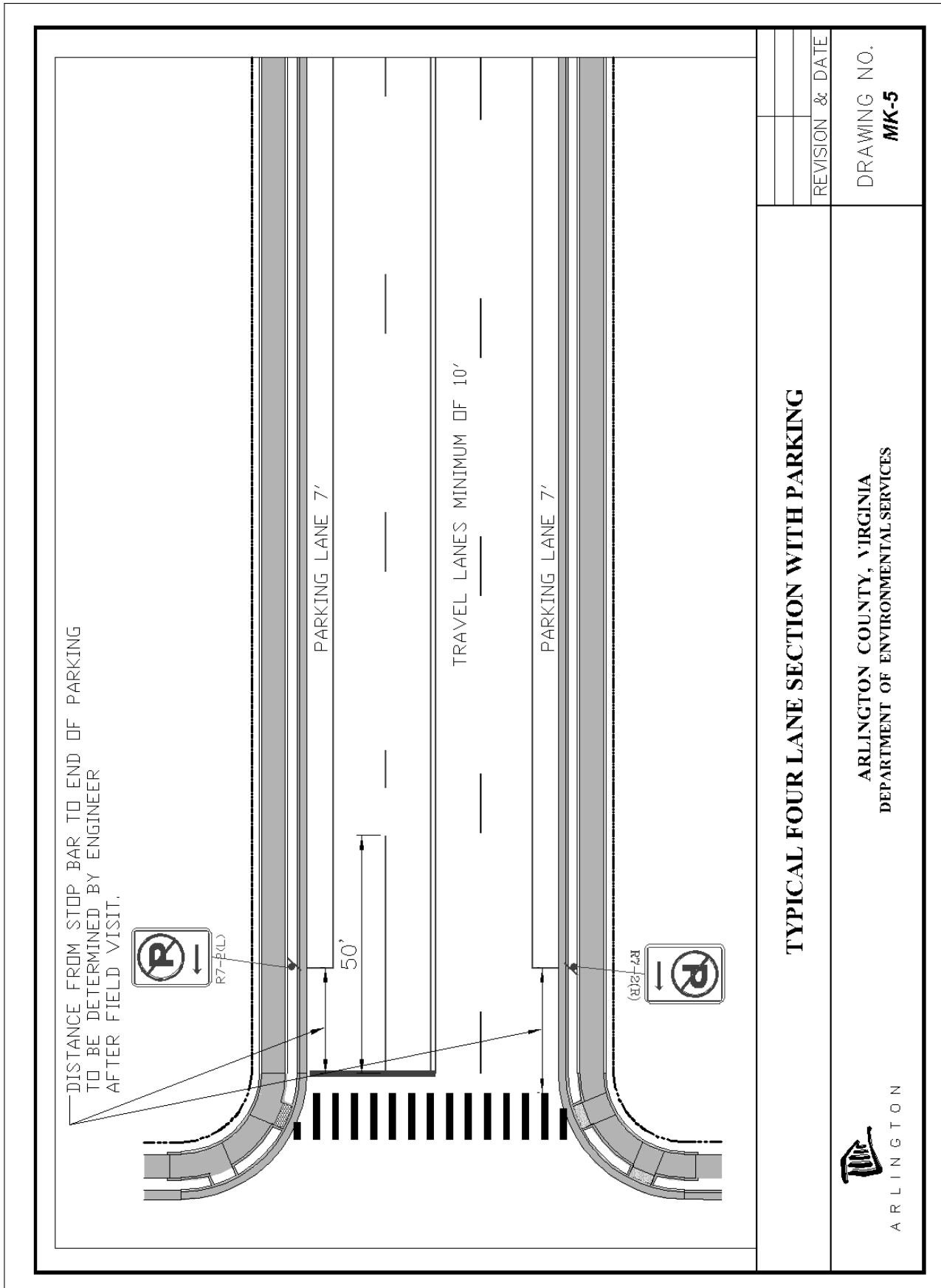


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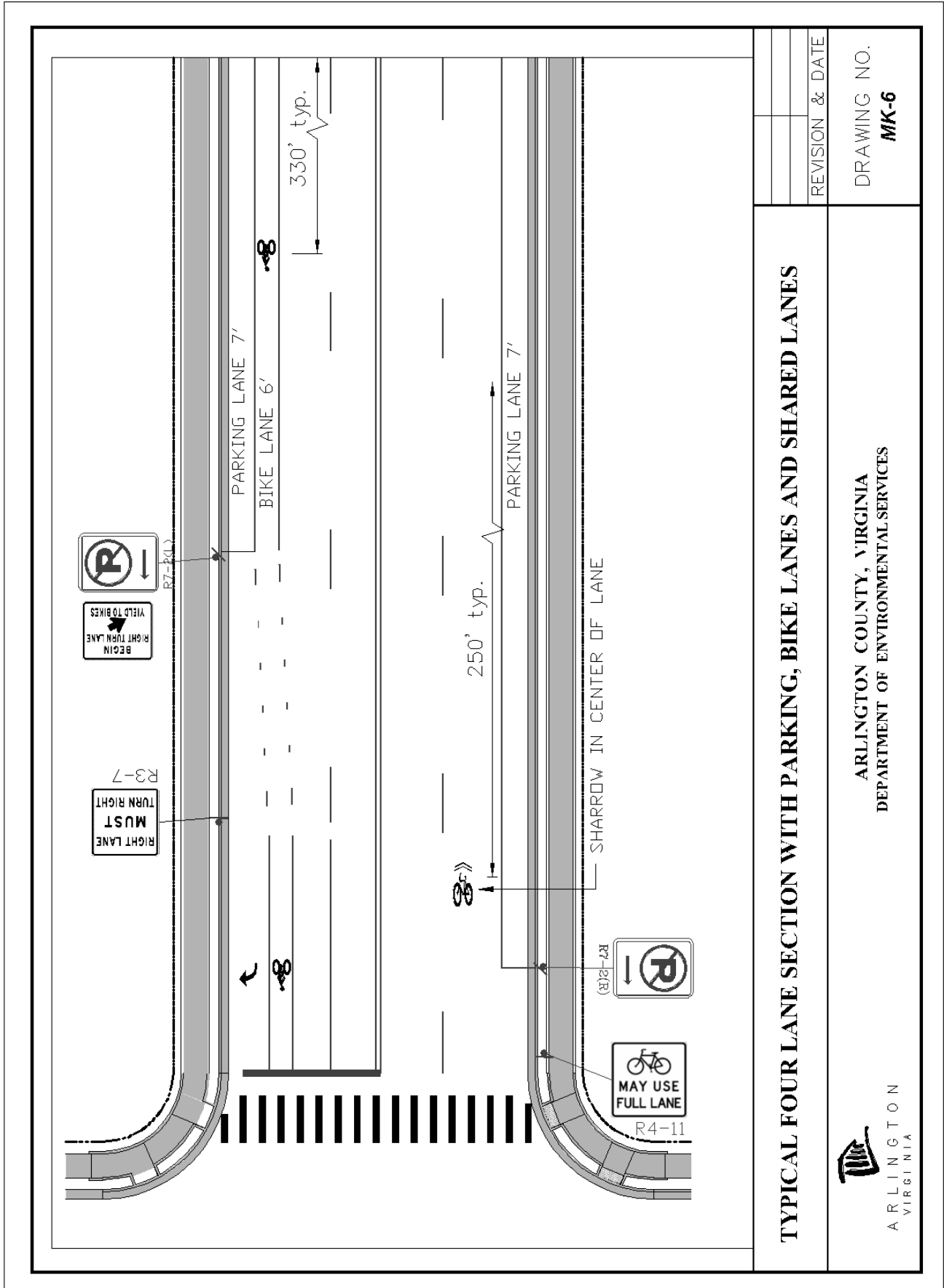
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MK – 5 Typical Four Lanes Section

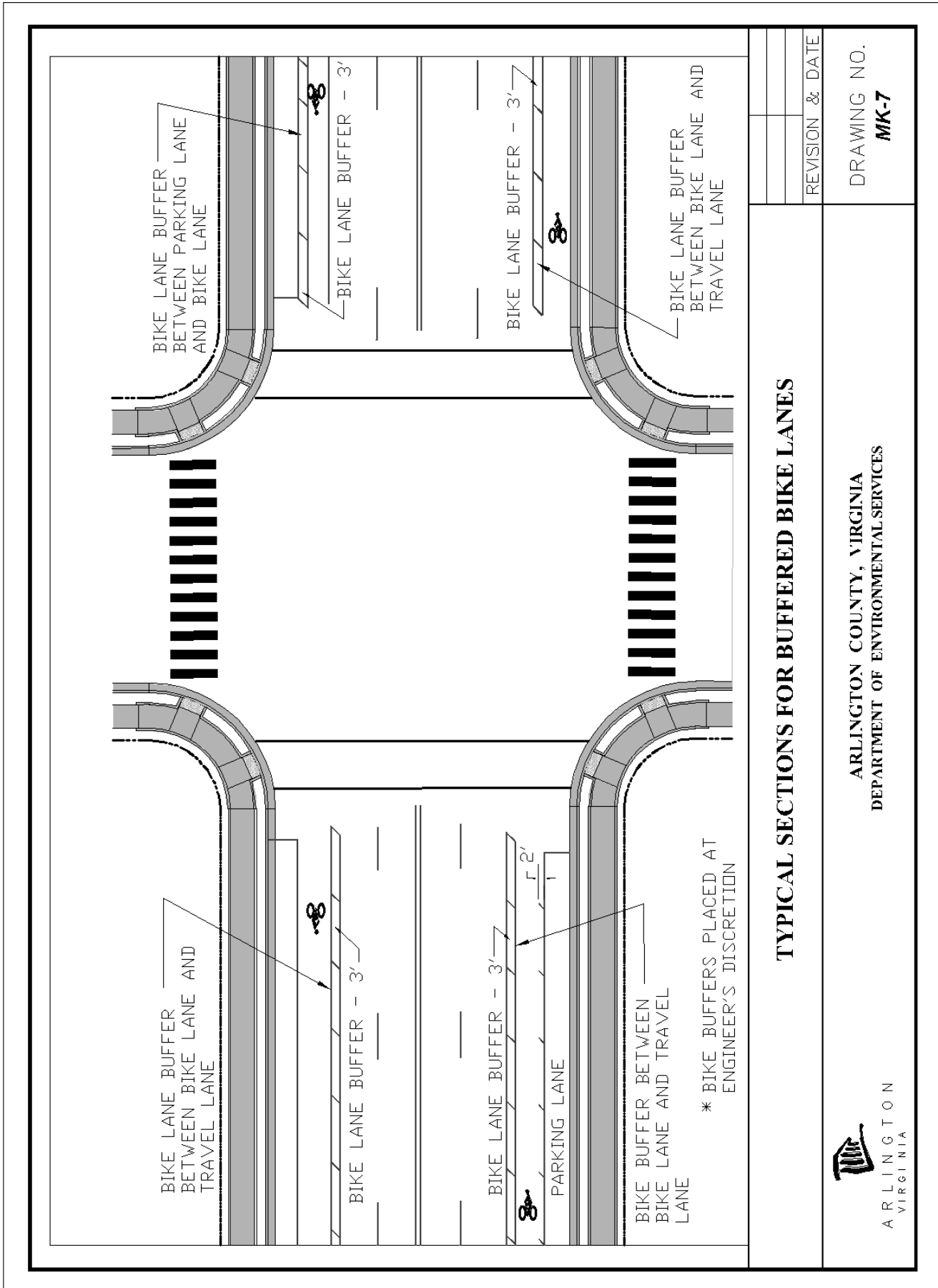


MK – 6 Typical Four Lane Section With Parking And Bike Lanes



TYPICAL FOUR LANE SECTION WITH PARKING, BIKE LANES AND SHARED LANES	REVISION & DATE
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ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
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MK - 7 Typical Sections For Buffered Bike Lanes



TYPICAL SECTIONS FOR BUFFERED BIKE LANES

REVISION & DATE

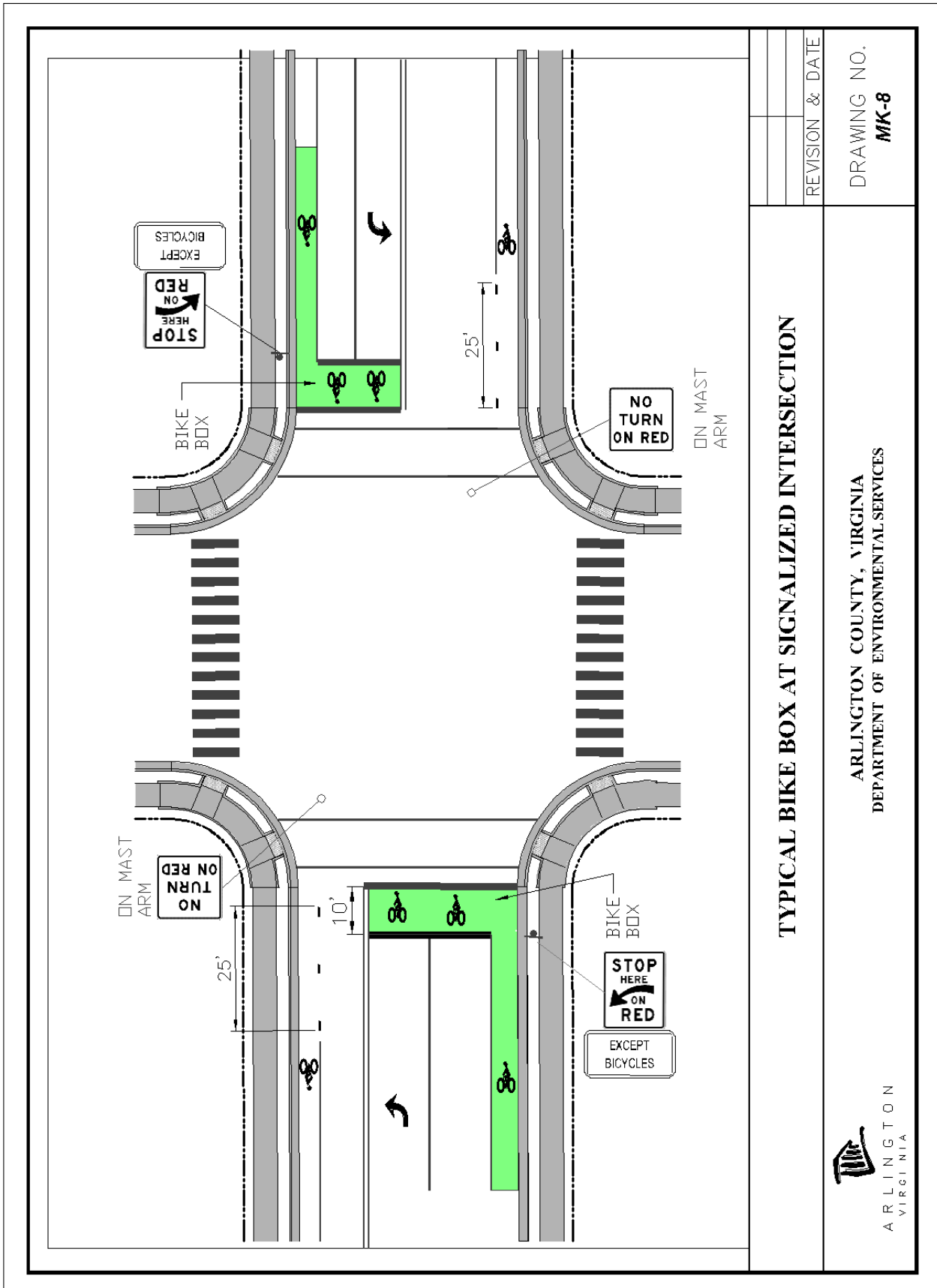
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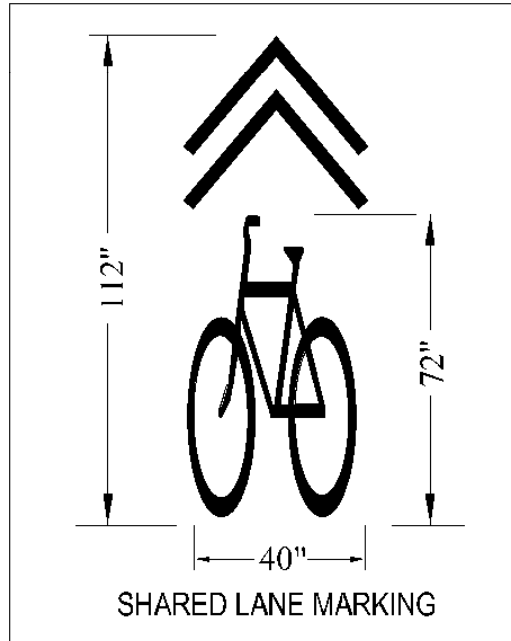
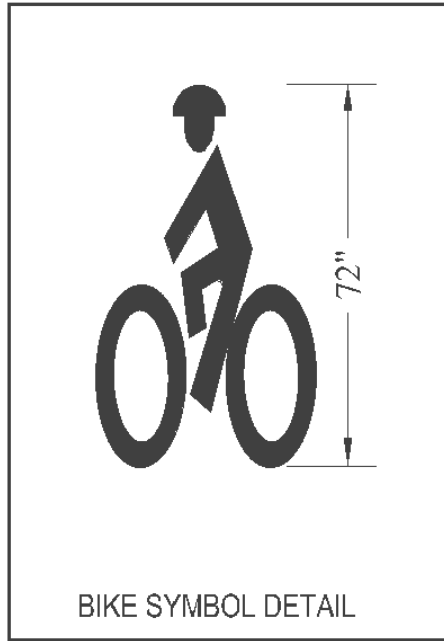


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MK – 8 Typical Bike Box At Signalized Intersection



MK – 8a Bike And Sharrow Details



BIKE AND SHARROW DETAILS

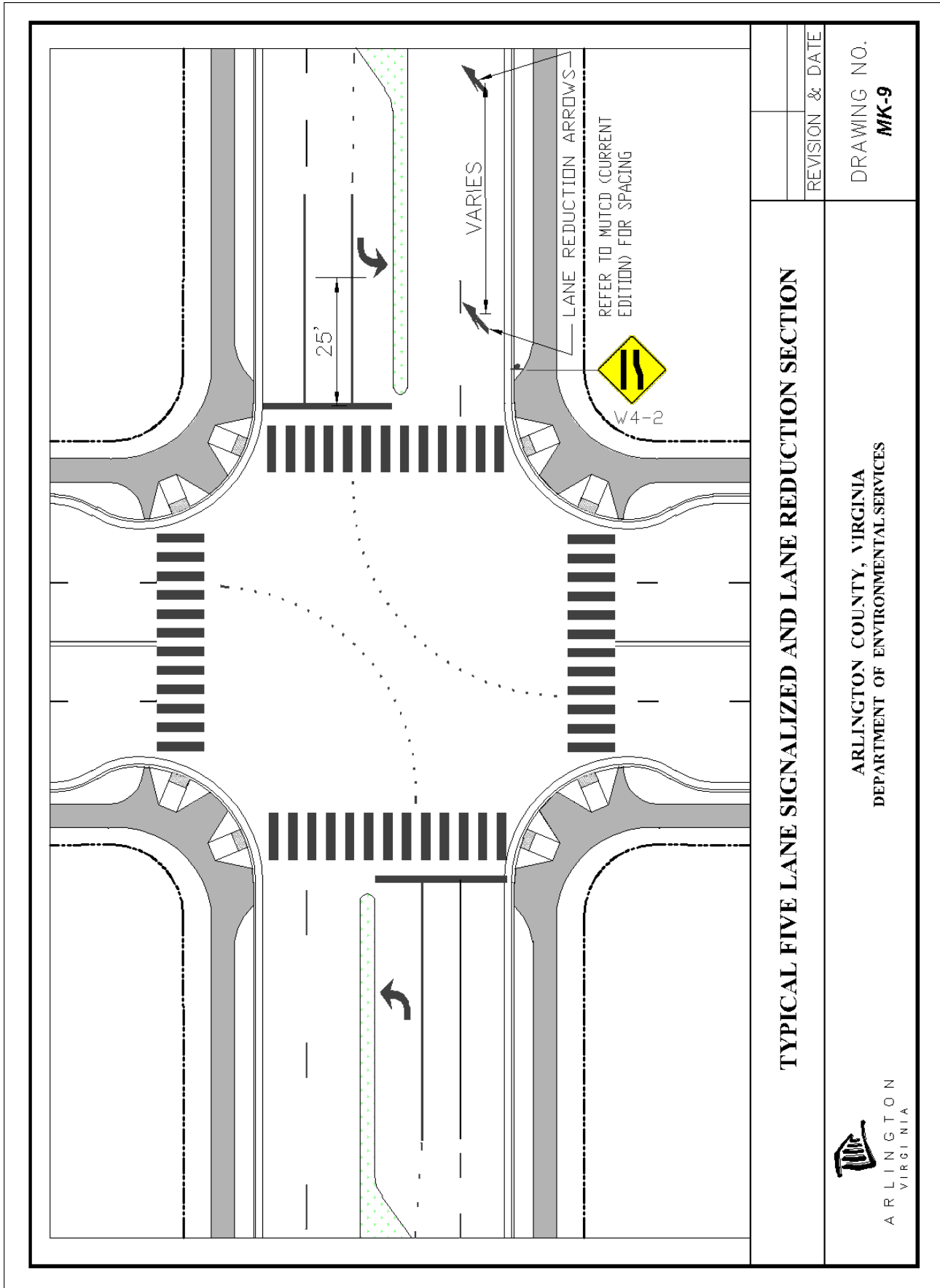
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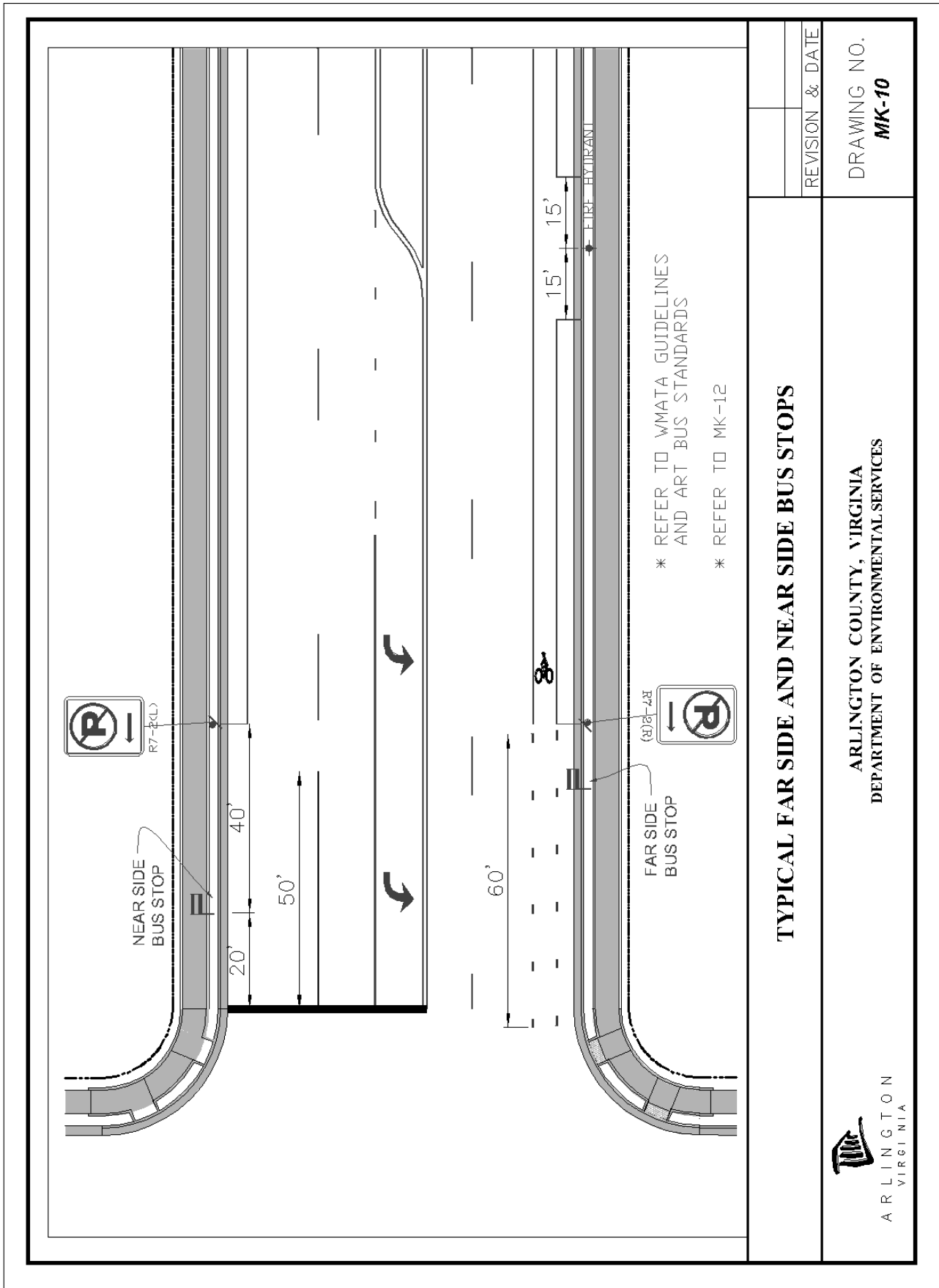
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DRAWING NO.
MK-8a

MK - 9 Typical Five Lane Section



MK – 10 Typical Near Side And Far Side Bus Stops



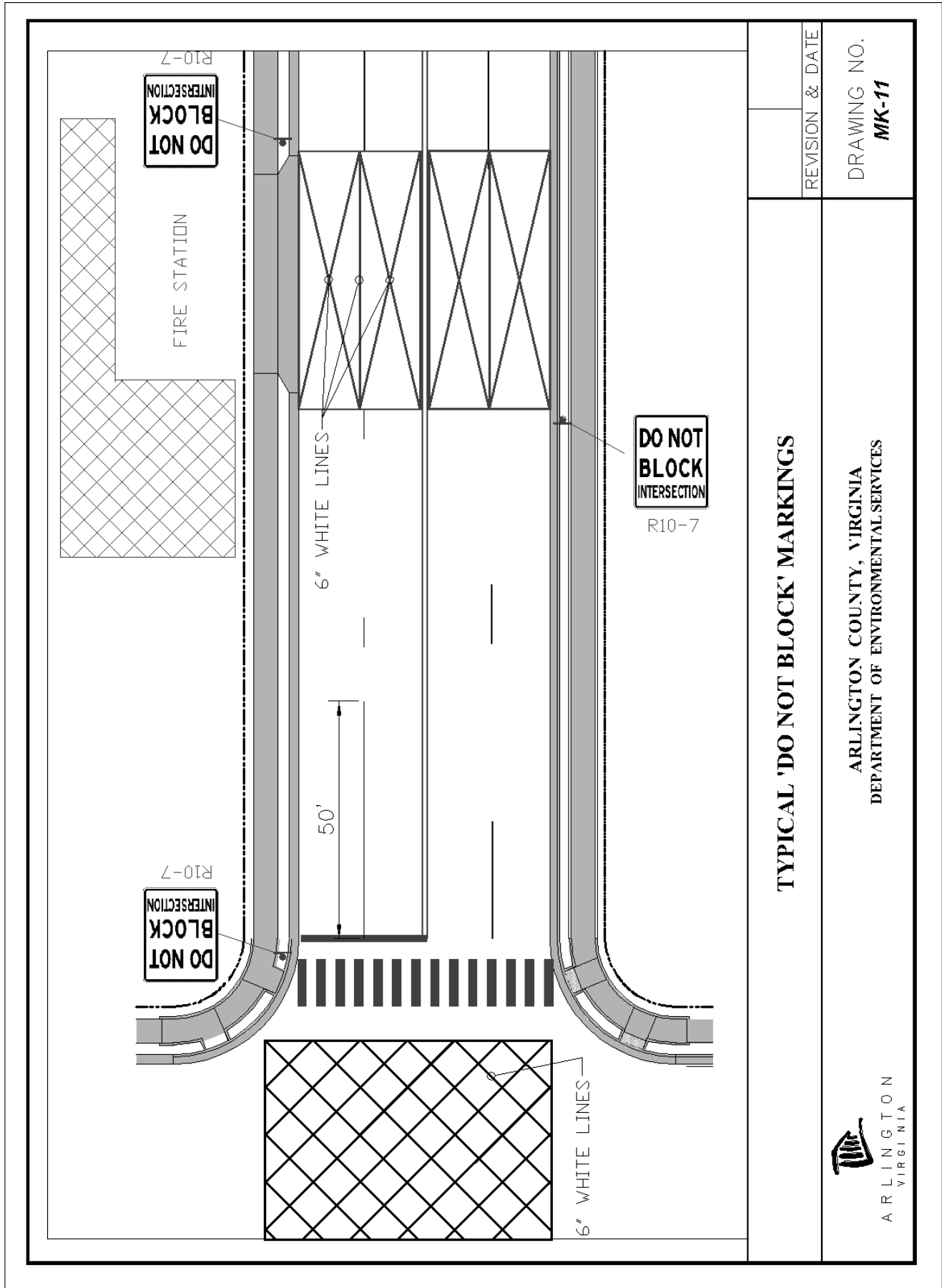
TYPICAL FAR SIDE AND NEAR SIDE BUS STOPS

REVISION & DATE
DRAWING NO. MK-10

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MK – 11 Typical 'Do Not Block' Markings



TYPICAL 'DO NOT BLOCK' MARKINGS

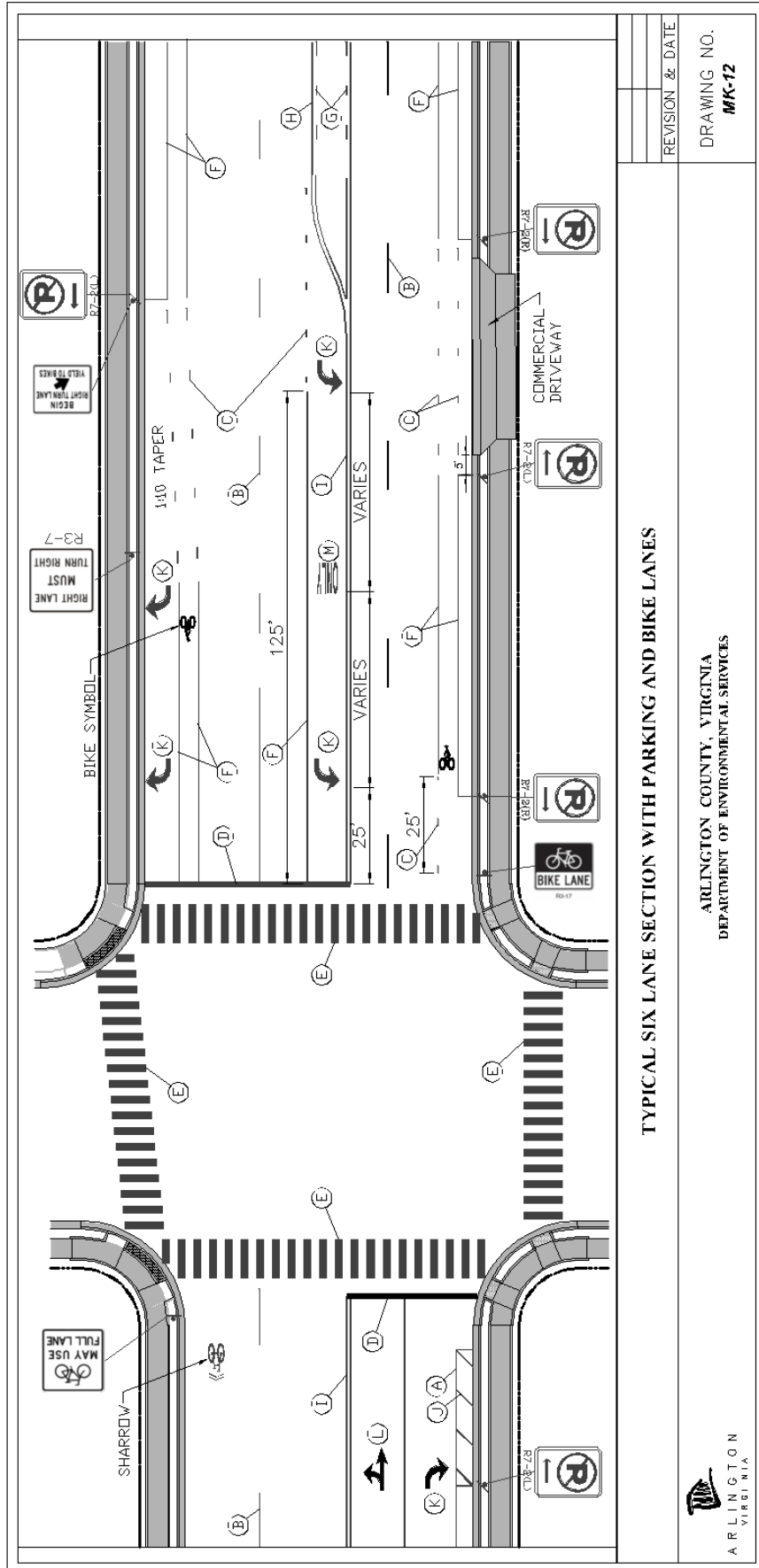
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MK-11


























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MK – 12 Typical Six Lane Section With Parking And Bike Lanes



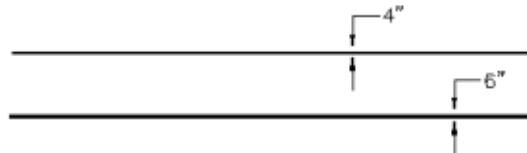
MK – 12a Standard Marking Legend

<p>STANDARD PAVEMENT MARKING LEGEND:</p> <p>(A) TYPE B CLASS 1.....WHITE 4" WIDTH (B) TYPE B CLASS 1.....WHITE 4" WIDTH, 10' LONG, 30' SPACING (C) TYPE B CLASS 1.....WHITE 4" WIDTH, 2' LONG, 10' SPACING (D) TYPE B CLASS 1.....WHITE 18" WIDTH (E) TYPE B CLASS 1.....WHITE 24" WIDTH (F) TYPE B CLASS 1.....WHITE 6" WIDTH (G) TYPE B CLASS 1.....YELLOW 4" WIDTH, 10' LONG, 30' SPACING (H) TYPE B CLASS 1.....YELLOW 4" WIDTH (I) TYPE B CLASS 1.....YELLOW 4" WIDTH, DOUBLE LINE, 4" SPACING (J) TYPE B CLASS 1.....WHITE 6" WIDTH, 10' SPACING @45 DEGREE (K) TYPE B CLASS 1.....WHITE SINGLE ARROW (L) TYPE B CLASS 1.....WHITE COMBINATION ARROW (M) TYPE B CLASS 1.....WHITE 8" LETTERS (N) TYPE B CLASS 1.....WHITE 6" WIDTH, 2' LONG, 10' SPACING (O) TYPE B CLASS 1.....WHITE 12" WIDTH, 20' SPACING @45 DEGREE (P) TYPE B CLASS 1.....YELLOW 12" WIDTH, 20' SPACING @45 DEGREE</p> <p>PARKING LANES, EDGE LINES, LANE LINES, BIKE BUFFERS DASHED LANE LINES LANE TRANSITIONS, TURN LANE SKIPS STOP BARS CONTINENTAL CROSS WALKS TURN LANES, TRANSVERSE CROSSWALKS, BIKE LANES DIVIDED TRAFFIC, TWO WAY TURN LANES EDGE LINES CENTER LINES HATCH LINES, SAFETY ZONES TURN LANES TURN LANES PAVEMENT LETTERS (STOP, YIELD, BUS, ONLY etc.) LANE TRANSITIONS, TURN LANE SKIPS GORE MARKINGS GORE MARKINGS</p>	<p style="text-align: center;"><u>STRIPING LEGEND</u></p> <p style="text-align: center;">(A) EXISTING STRIPING (A) PROPOSED STRIPING</p> <p style="text-align: center;"><u>LEGEND</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><u>EXISTING:</u></td> <td style="width: 50%; border: none;"><u>PROPOSED:</u></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	<u>EXISTING:</u>	<u>PROPOSED:</u>								
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<p>STANDARD MARKING LEGENDS</p> <p style="text-align: center;">ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES</p> <p style="text-align: center;">  ARLINGTON VIRGINIA </p>											
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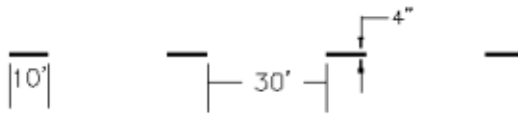
REF - 1 Standard Marking Linetypes

MARKING LINETYPES AND PROPERTIES

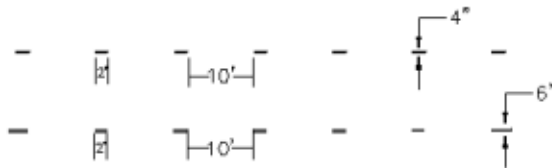
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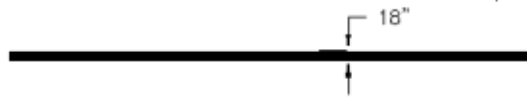
Skip Line



Mini Skip



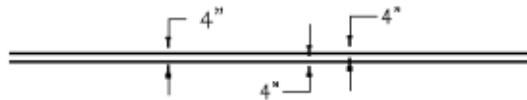
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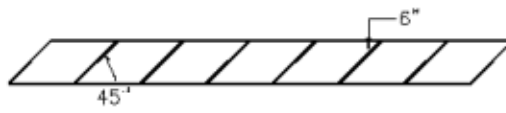
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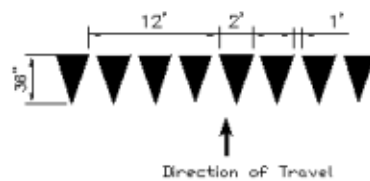
Centerline



Hatch Lines/
Safety Zone



Yield Markings



STANDARD MARKING LINETYPES

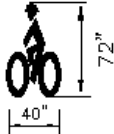
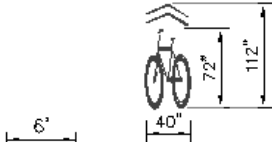
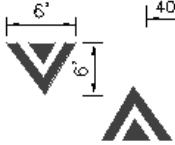

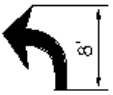

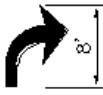


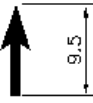
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REF – 2 Standard Marking Symbols

MARKING SYMBOLS		
Bike Symbol		STOP Marking
Sharrow		BUS Marking
Speed Hump		ONLY Marking
Bus Flag		Sign
Left Turn Arrow		 Prop. Exist
Right Turn Arrow		Fire Hydrant
Lane reduction arrow		
Left/Thru Arrow		
Straight Arrow		

STANDARD MARKING SYMBOLS

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REF-2