GENERAL

1. Description

This standard identifies minimum requirements that shall be met for all median strips in the design and construction of elements for Arlington County Horizontal Design Standards. The development of this standard is to provide greater guidance in the design and construction of median strips while meeting the County’s guiding principles for increasing pedestrian safety and accessibility, decreasing county infrastructure costs and balancing the use of the Right-of-Way between all modes of transportation.

2. Related Arlington County Standards

A. Arlington County Residential Streets Width Guide
B. Arlington County Bus Stop Design Standards
C. Arlington County Construction Standards and Specifications

3. Applicable Standards and Specifications

A. Manual of Uniform Traffic Control Devices (MUTCD)
B. Code of Virginia
C. Virginia Statewide Fire Prevention Code - Chapter 5, Section 503 Fire Apparatus Access Roads
D. Americans with Disabilities Act - Accessibility Guidelines for Building and Facilities (ADAAG)
E. American with Disabilities Accessibility Guidelines for Public Rights-of-Way (PROWAG)

4. Quality Assurance

A. Reserved

5. Submittals

A. Design and placement of all median strips shall be approved by DES Transportation Engineering and Operations (TE&O) Bureau Chief.
DESIGN CONSIDERATIONS

A. Definition

A median is a paved or landscaped strip within the street right-of-way (ROW) that is either raised or flush with the road surface, and separates lanes of traffic going in opposite directions.

A Traffic Island is a paved or landscaped strip within the street ROW that is either raised or flush with the road surface and used for channelizing traffic and traffic calming.

B. Purpose

1. Medians
   - Provide separation between traffic traveling in opposite directions
   - Provide a refuge zone for pedestrians crossing heavily trafficked areas
   - Provide an area for landscape plantings and bio-retention systems\(^1\)
   - Access control of vehicles
   - Addresses differences in grade between opposite travel lanes within the ROW
   - Location for the placement of transit stations

2. Traffic Islands
   - Provide for channelization of vehicles in intersections
   - Provide a location for the placement of lighting & traffic control devices
   - Provide a refuge zone for pedestrians crossing heavily trafficked areas
   - Provide traffic calming

PLACEMENT

A. Placement

1. Median strips may be placed on any street that has sufficient width consistent with the Arlington County Code and the Arlington County Residential Street Widths Guide and other locations as identified by the Transportation Planning Bureau and the Transportation Engineering and Operations Bureau.

2. Traffic Islands may be placed on any street where intersection geometry indicates a need as identified by the Transportation Planning Bureau and the Transportation Engineering and Operations Bureau. Islands are normally situated in areas unused for vehicle paths.

\(^{1}\) The standards for streetscape bioretention and similar stormwater management facilities will be established under the separate “Stormwater Management” standard.
A. Dimensions

1. Medians – raised medians shall be measured from face of curb to face of curb and flush medians be measured from the center of marked line to the center of marked line. The maximum radius shall be 15’ unless turning templates demonstrate a need for a larger radius.
   a. Medians shall not be less than 2’ in width
   b. Medians between 2’ and 4’ shall be paved.
   c. Medians 4’ or greater in width may be planted with ground cover and identified for use as Bio-Retention.
   d. Medians 6’ or greater in width may be used as a pedestrian refuge.
   e. Medians 8’ or greater in width may be planted with trees.
   f. Medians 9’ or greater in width may be used as bus stops.

   Plantings in landscaped medians shall reach a maximum mature height of 3’ or if trees that are determined to pose a sight distance problem then they shall be limbed up to a minimum of 7’ above the road surface.

   Once branches reach the edge of the median they shall be either trimmed back to the edge of the median or limbed up to 14’ above the road surface. Vertical and horizontal sight distances shall be considered when selecting plant species and placement, particularly near intersections and median breaks.

2. Traffic Islands

   a. The use of traffic islands shall be minimized and should be considered for use in the following circumstances:
      i. At skewed intersections
      ii. Intersections that require a large turning radius
      iii. Locations that would shorten pedestrian crossing distance
      iv. Where there is a desire to separate certain classes from general purpose traffic
      v. Locations where street retrofit occurs without moving existing curb to reduce excessive pavement.
   b. The minimum size for traffic islands shall be 50 ft²
   c. The use of traffic islands for bio-retention and landscaping may be granted based on engineering judgment on a case by case basis and shall be approved by the TE&O Bureau chief.
3. A crosswalk cut-through located within a median or traffic island shall be unobstructed for the width of the crosswalk. All cut-throughs shall be ADA compliant and ramps and landings are preferred. If ADA compliant ramps can not be installed, a flush cut-through may be used and shall have adequate drainage to ensure that no ponding or standing water remains within the median or traffic island.

4. Median Nose

   a. The use of a median nose is preferred at the end of a median.
   b. A median nose is defined as the portion of a median between the pedestrian cut-through and the center of the intersection.
   c. A median nose is preferred for all medians greater than 4’ in width with a pedestrian cut-through.
   d. The width of the median nose shall be the width of the median
   e. The minimum length of the median nose shall be 2’.
   f. The median nose shall end a minimum of 4’ from the edge of the nearest intersecting travel lane
   g. The median nose shall accommodate the turning movement of the design vehicle. Geometric modification may be made to accommodate the design vehicle. If geometric modification can not be made to accommodate the design vehicle the median nose may be removed. This will be decided on a case by case basis and shall be approved by the TE&O Bureau chief.

The standard design vehicle shall be a 40’ single unit vehicle, in some cases a larger design vehicle may be required as determined by TE&O. Exceptions to these dimensions may be granted based on engineering judgment on a case by case basis and shall be approved by the TE&O Bureau chief.

B. Materials

1. Raised medians shall be constructed of concrete using the Arlington County Standard Curb and Gutter. Paved medians shall use either concrete or pavers. Painted medians shall be designated with a 4” solid edge line.

2. Limited alternate material combinations may be considered to delineate median strips from travel lanes on a case by case basis as identified by the Transportation Division chief. Materials may include different colored surface treatments and edge markings
Medians shall be a Min 2.0' wide.

Median Nose length
Min 2.0'

Min 4.0' between end of median nose and intersecting travel lane

ADA compliant cut-through

Section A

Pedestrian crosswalk marked or unmarked

Medians may be paved, planted with ground cover/trees, used as a pedestrian refuge or a bio-retention facility depending on their width.

Note: Raised medians shall be measured from face of curb to face of curb. Flush medians shall be measured from the center of marked edge line to the center of marked edge line.

TYPICAL MEDIAN PLACEMENT and DIMENSIONS

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAWING NO. MTL-1.0
SHEET 1 OF 3
Traffic Islands shall be a Min of 50ft².

Min 3.0' between traffic island and intersecting travel lane

ADA compliant cut-through

Pedestrian crosswalk marked or unmarked
NOTE: If Alternative Flush Cut-Through is used adequate drainage shall be provided to ensure no ponding or standing water remains within the median or traffic island.