

DUKE STREET *IN MOTION*

Advisory Group Meeting #8

February 16, 2023

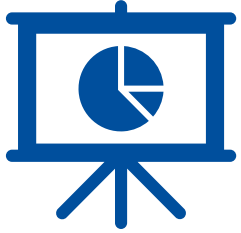


alexandriava.gov/DukeInMotion

This project is funded with Northern Virginia Transportation Authority (NVTA) regional revenues.

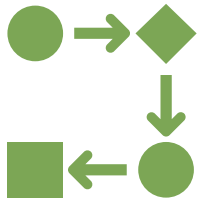


Welcome!



Introductions & Meeting Background

Public Comment



Review Elements of AG Recommendation to Council

Curb Features & Guiding Principles

Review Curb Feature Design Elements & Visuals



Curb Features Discussion

Next Steps



Approval of Meeting Minutes #7

AG Roles and Responsibilities

- ✓ Relay information
- ✓ Participate
- ✓ Provide feedback
- ✓ Respect each other
- ✓ Represent groups
- ✓ Build on decisions



Meeting Goals



Understand expectations for an ultimate recommendation on curb features



Discuss curb features and review visuals of curb feature designs



Provide input to help Project Team **refine options presented**



Provide input on whether **other options should be considered**



Provide input on **priorities** in constrained locations



Public Comment



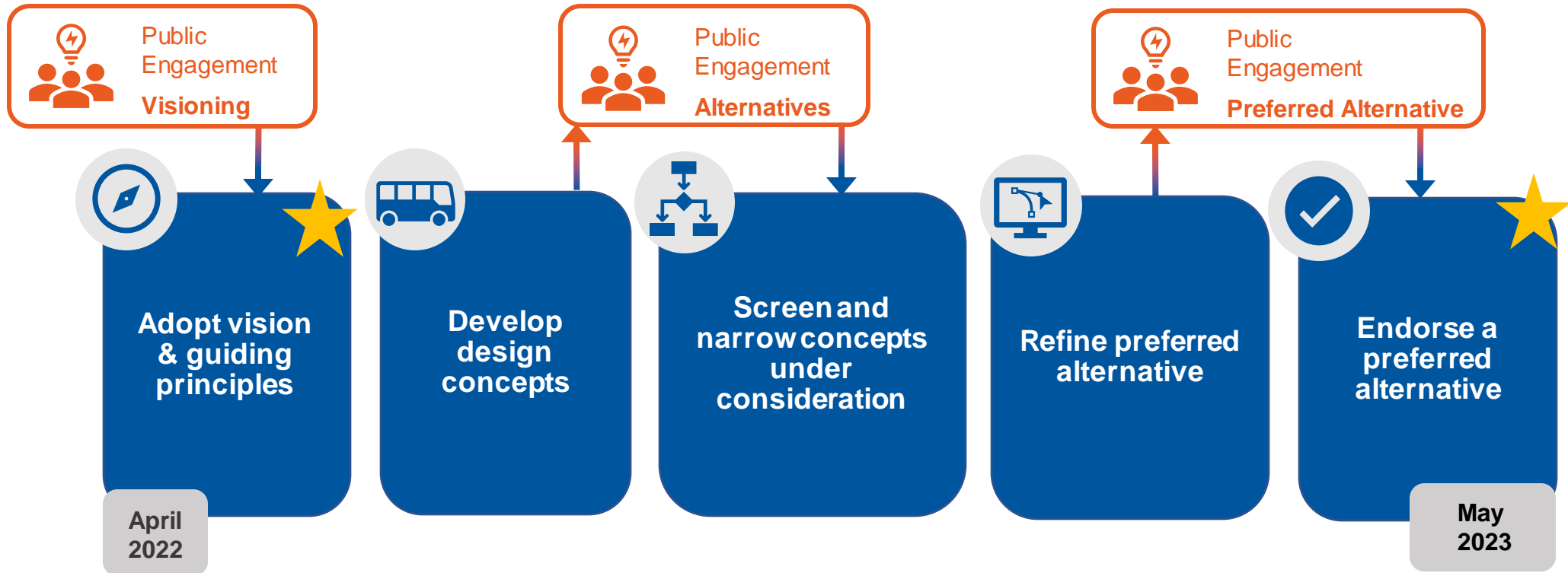
- 2 minutes to speak
- Virtual attendees can raise hand in Zoom or press *9 on your phone
- If you have questions or comments after this public comment period, please reach out to Jennifer.Monaco@alexandriava.gov
- Written comments will be shared with the Advisory Group



The background of the slide features three buses on a city street, overlaid with a semi-transparent orange filter. The bus in the foreground is a white van with a wheelchair lift, displaying the number '21804' on its front bumper and 'DASH' on its destination sign. Behind it, another white van is visible, also with 'DASH' on its destination sign. To the right, a larger white bus is visible, displaying '510' and '800' on its front. The text 'Elements of AG Recommendation to Council' is centered over the image in a large, bold, blue font.

Elements of AG Recommendation to Council

AG Process



Curb Features Elements

2012 Work Group references:

- *Examine parallel off corridor **bike** facility*
- *Provide improved **walking** conditions at intersections and near transit stations.*
- *Prioritize pedestrian safety at **Taylor Run Parkway***

1

Typical cross section for each segment

2

Priorities for constrained spaces (e.g. shared use path or dedicated pedestrian facility)



Curb Feature Goals and Guiding Principles

Guiding Principles

GUIDING PRINCIPLES

CURB FEATURE GOALS



Efficient

- Improved walking and biking access to stations



Equitable

- Improved ADA accessibility
- Additional and improved sidewalks
- Improved connectivity



Safe

- Additional crossing locations, improved crosswalk timings
- Improved safety on sidewalks
- Reduced person-vehicle interaction



Vibrant

- Improved streetscapes and green space



Sustainable

- Improved stormwater management
- Increased tree canopy volume



Curb Feature Design Elements and Visuals

Design Goals



Within City right-of-way, as possible



Best address guiding principles



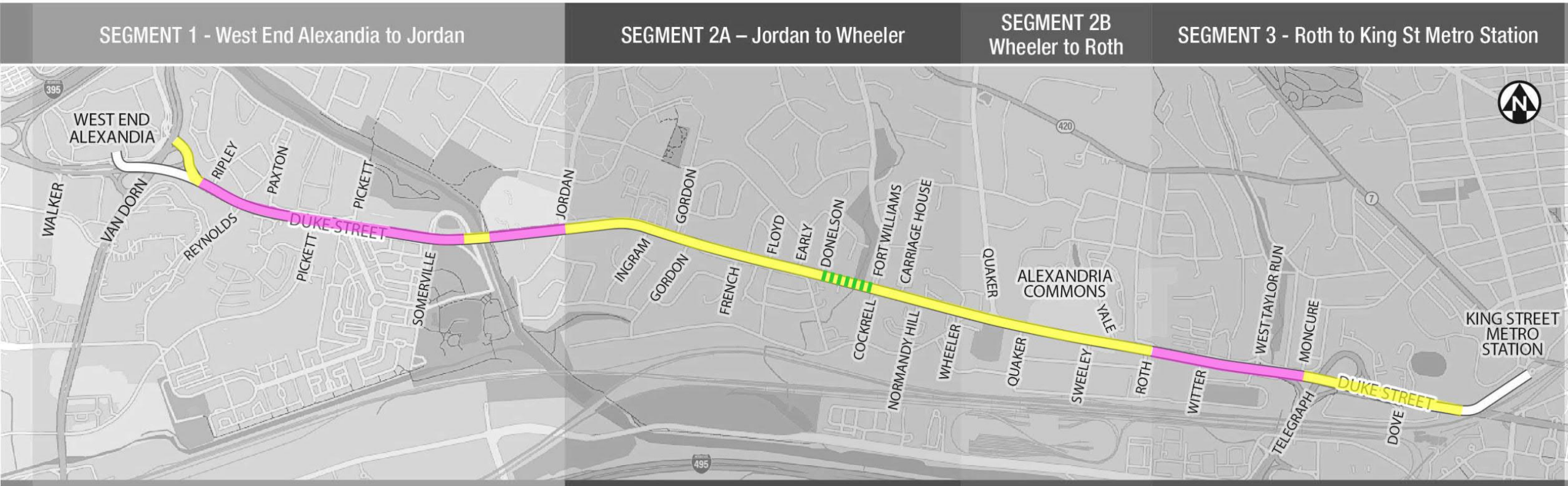
Usable buffer space, as possible






Help achieve vision of Duke Street as a designated "enhanced bicycle corridor"

Proposed East – West Curb Features

(North Side of Duke Street)



-  Shared Use Path
-  Cycle Track + Sidewalk
-  Potential Woonerf (shared street) Location on Service Road

Proposed Facility / Types: Biking

Two-way cycle track



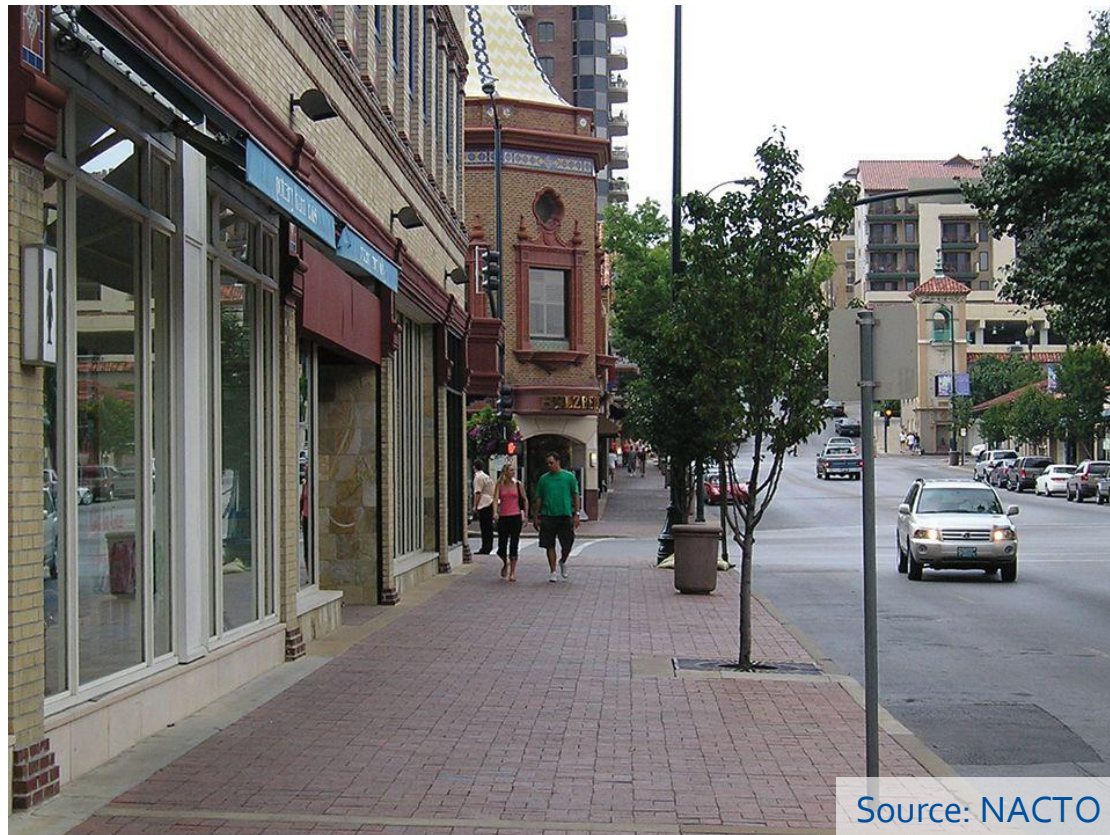
Shared use path



Source: Trillink

Proposed Facility / Types: Walking

Wide sidewalk next to curbs



Sidewalk with buffer



Proposed Facility / Types: Streetscape & Water Quality Elements

Landscaping



Source: SF Public Works

Tree canopy



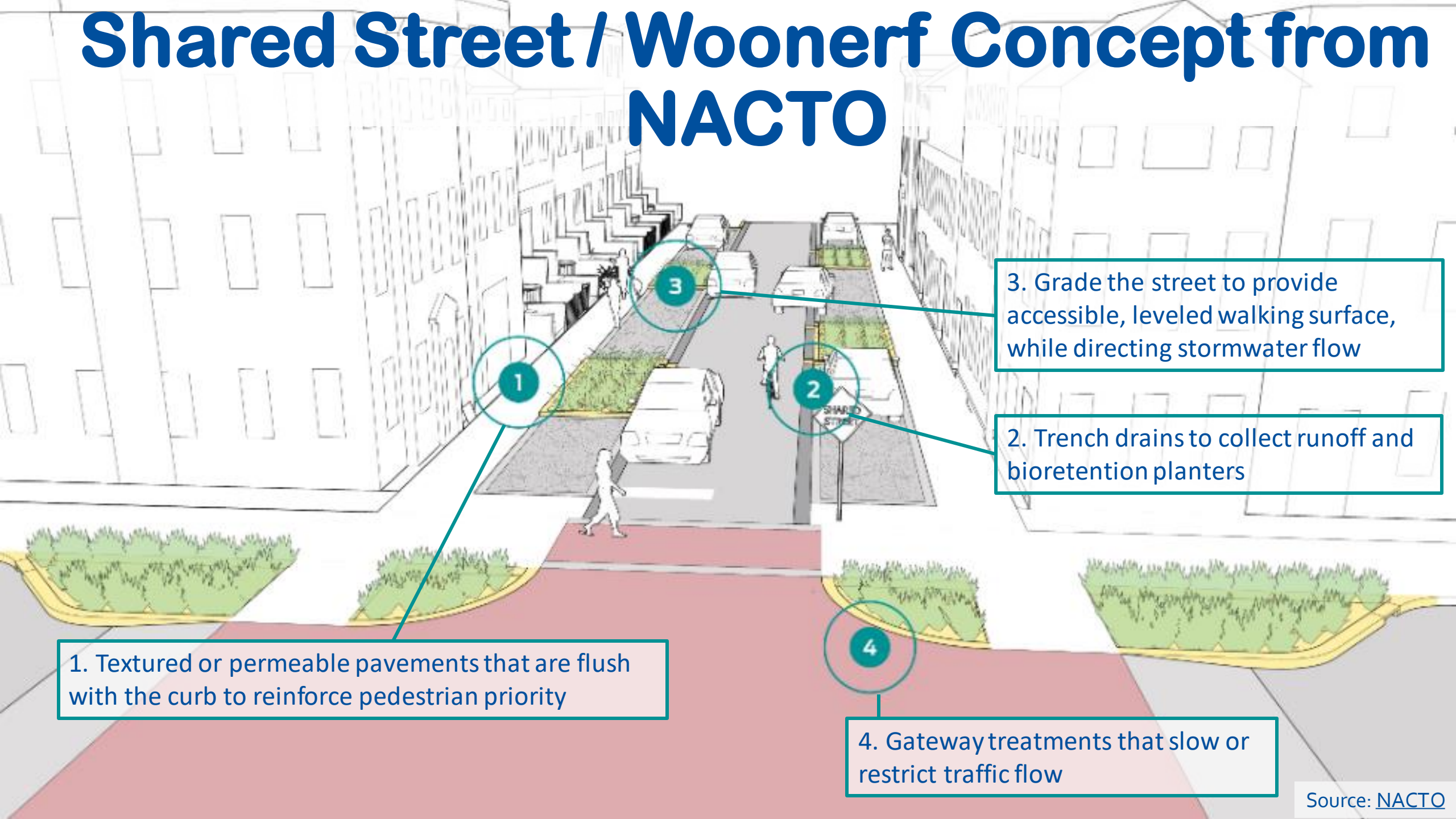
Source: WNYC

Rain gardens/stormwater features



Source: Golden Triangle BID

Shared Street / Woonerf Concept from NACTO



1. Textured or permeable pavements that are flush with the curb to reinforce pedestrian priority

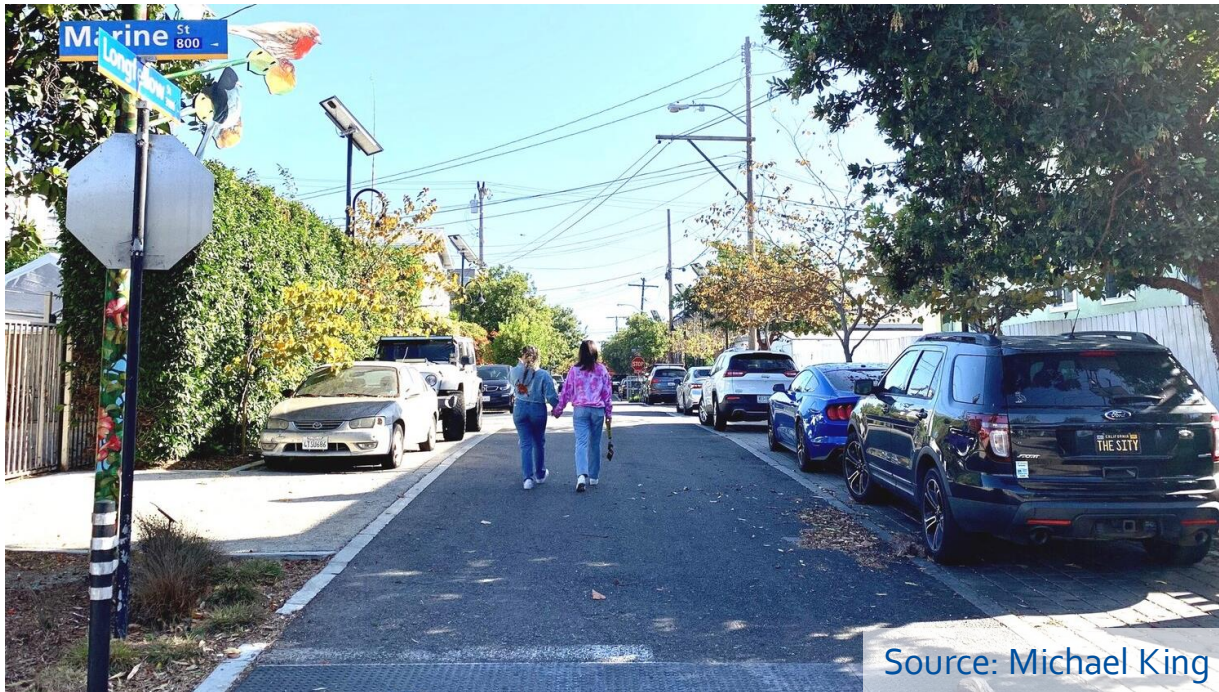
3. Grade the street to provide accessible, leveled walking surface, while directing stormwater flow

2. Trench drains to collect runoff and bioretention planters

4. Gateway treatments that slow or restrict traffic flow

Proposed Facility / Types: Woonerf

Shared Street Implementation in
Santa Monica, CA

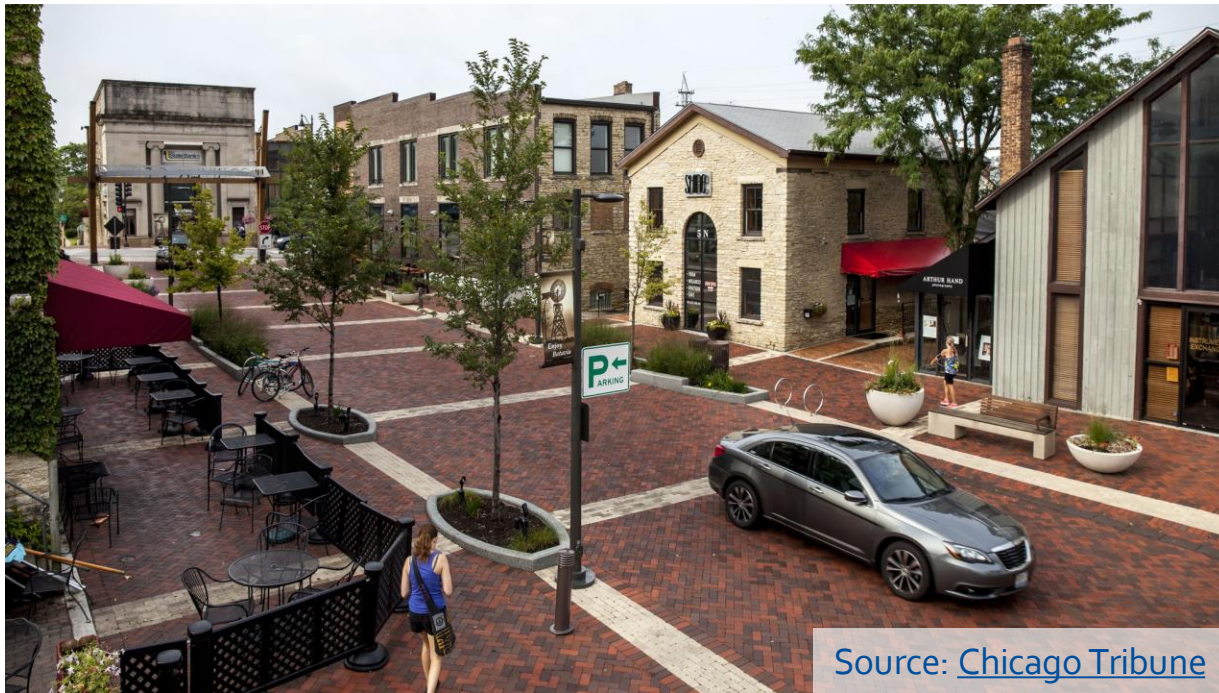


Shared Street / Woonerf in the Netherlands



Proposed Facility / Types: Woonerf

Shared Street in a Commercial District

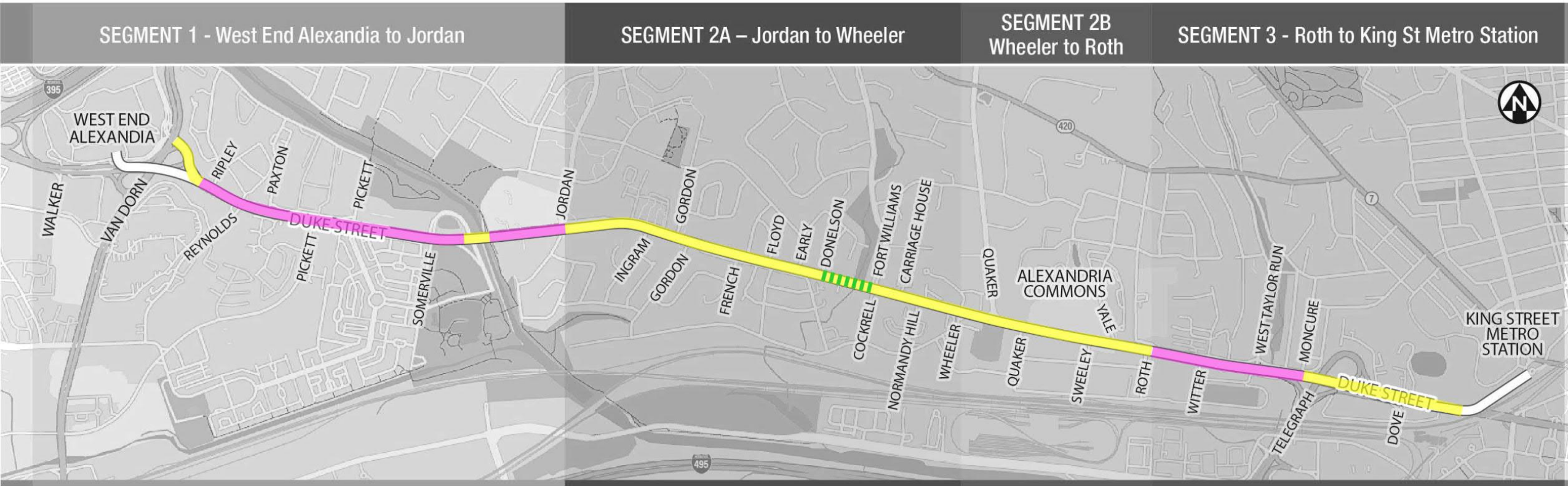


Flexible Street in Kirkland, WA



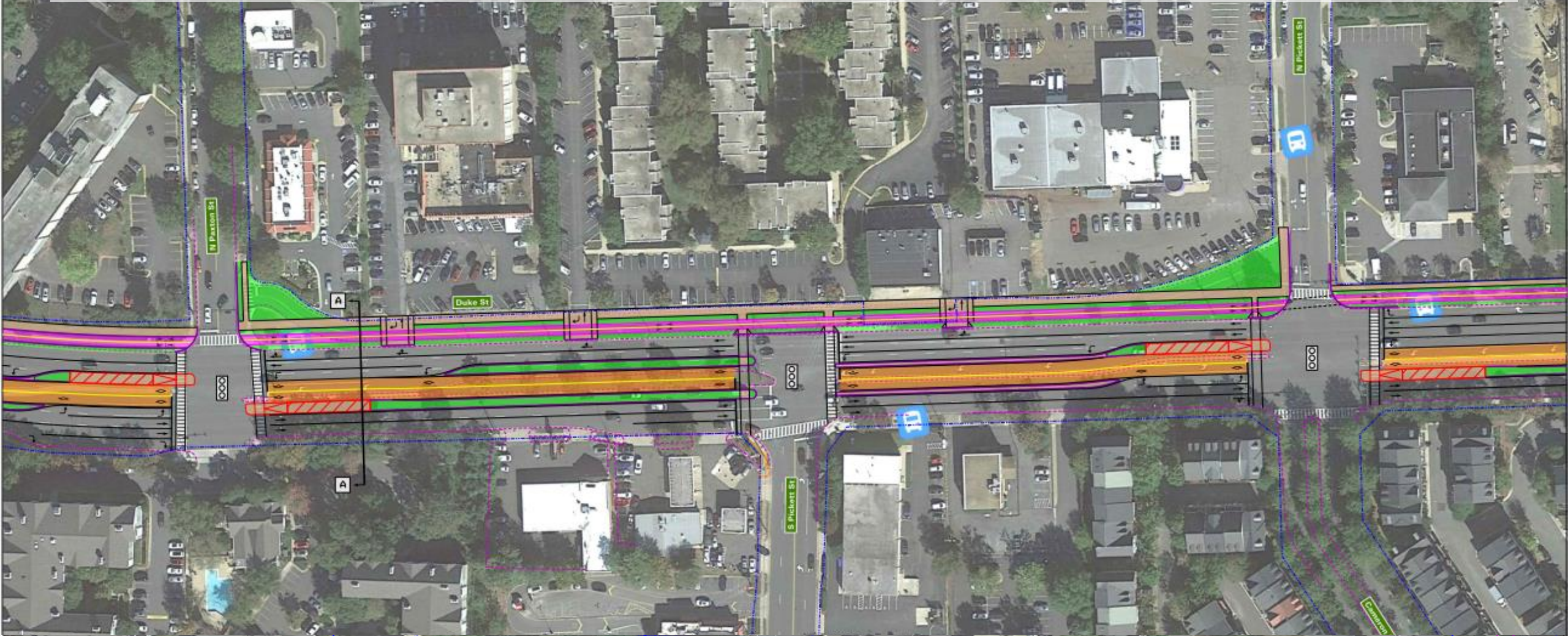
Proposed East – West Curb Features

(North Side of Duke Street)



- Shared Use Path
- Cycle Track + Sidewalk
- Potential Woonerf (shared street) Location on Service Road

Paxton to Pickett



CONCEPTUAL

FOR REVIEW ONLY
NOT FOR
CONSTRUCTION
PURPOSES

LEGEND:

- PROP. CURB
- PROP. CURB AND GUTTER
- - - EX. FACE OF CURB
- PROP. PAVEMENT MARKING LINE (SOLID)
- PROP. PAVEMENT MARKING LINE (YELLOW/CENTERLINE)
- - - PROP. PAVEMENT MARKING LINE (DASH)
- - - EX. RIGHT-OF-WAY
- PROP. DEDICATED BUS LANE
- - - PROP. BUS LANE / TURN LANE
- PROP. BIKE LANE
- PROP. GREEN SPACE
- PROP. CONCRETE MEDIAN / SIDEWALK
- PROP. SHARED USE PATH
- XXXX DEMO
- XXXX PROPOSED BUS STATION
- PROPOSED SIGNAL
- EXISTING SIGNAL



Duke Street BRT
Curb Features
Option 1

CITY OF ALEXANDRIA

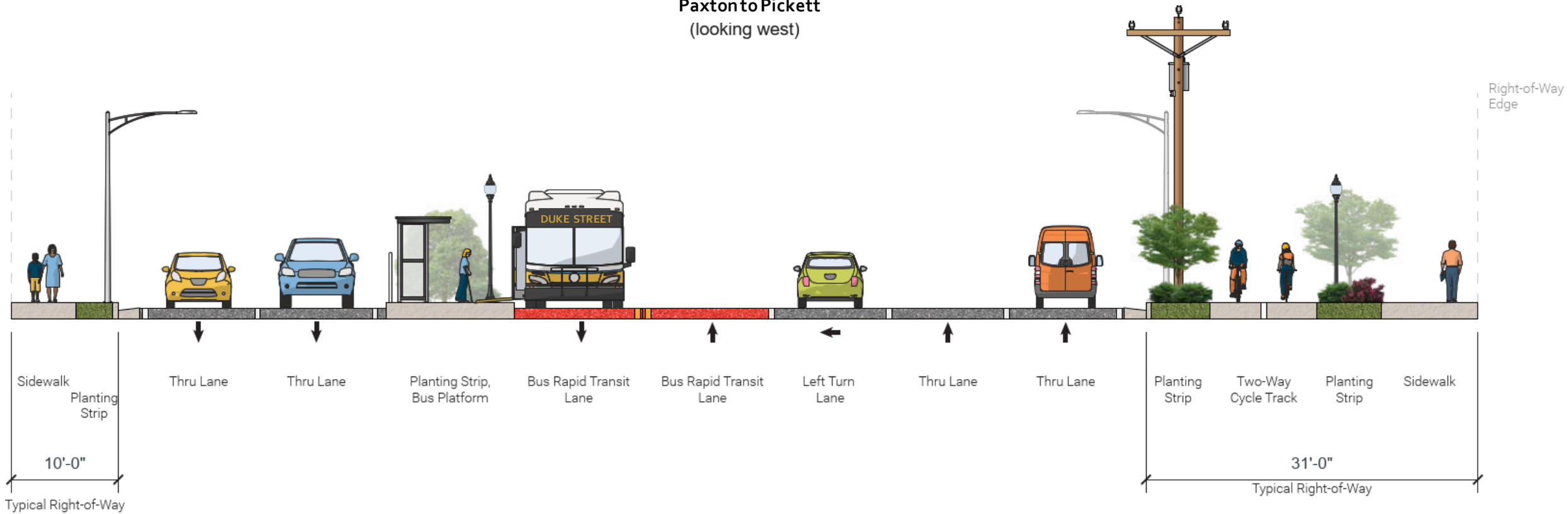
VIRGINIA

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DESIGNED BY:
DRAWN BY:
CHECKED BY:

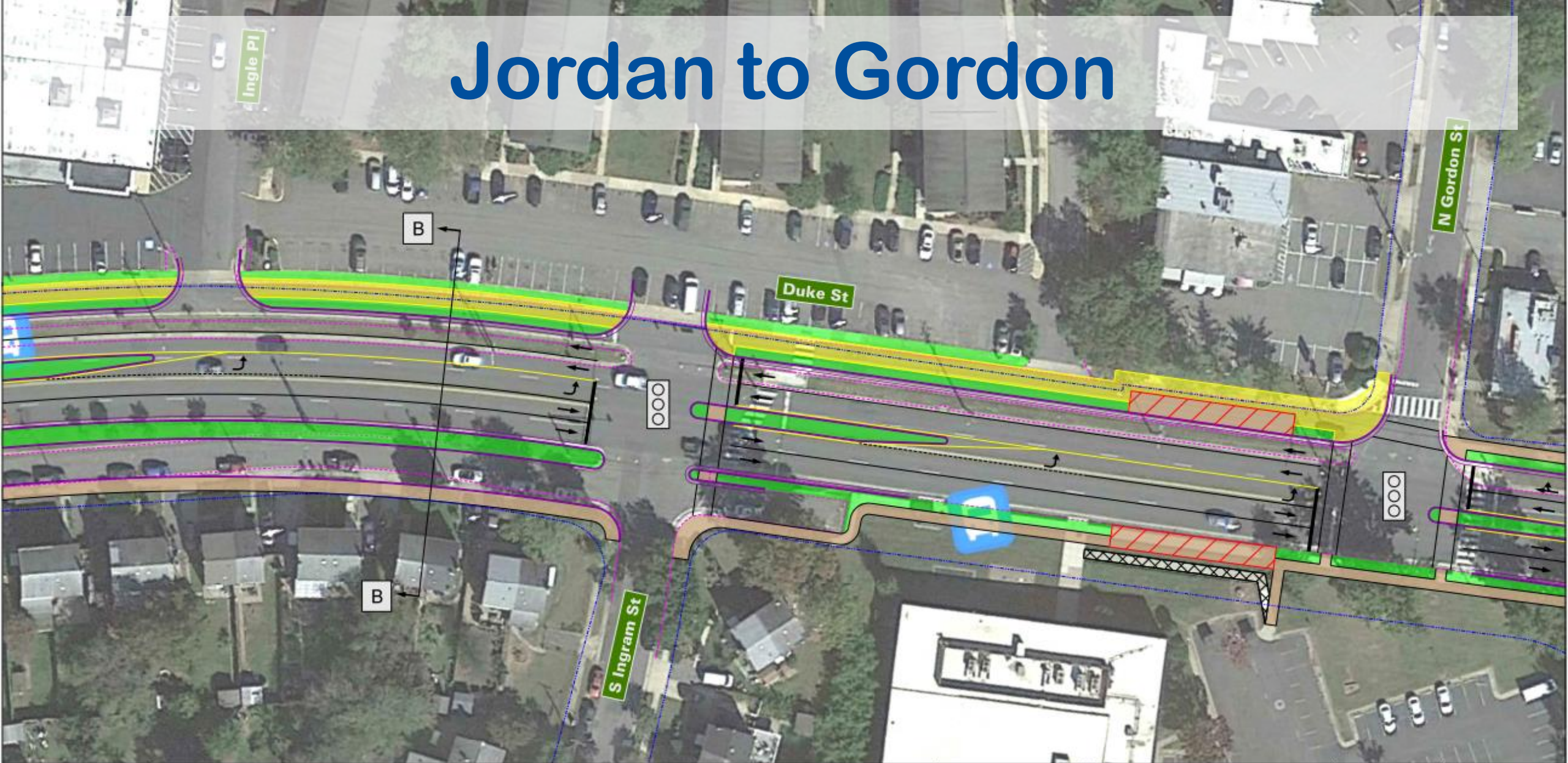
SHEET NO. 1-1
SCALE 0 50 100'

Paxton to Pickett

Section A-A
Paxton to Pickett
(looking west)



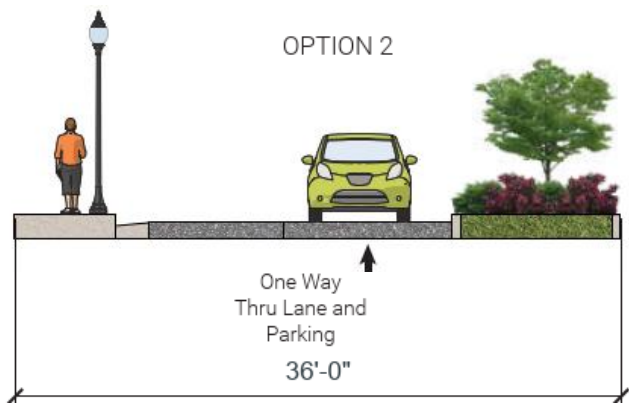
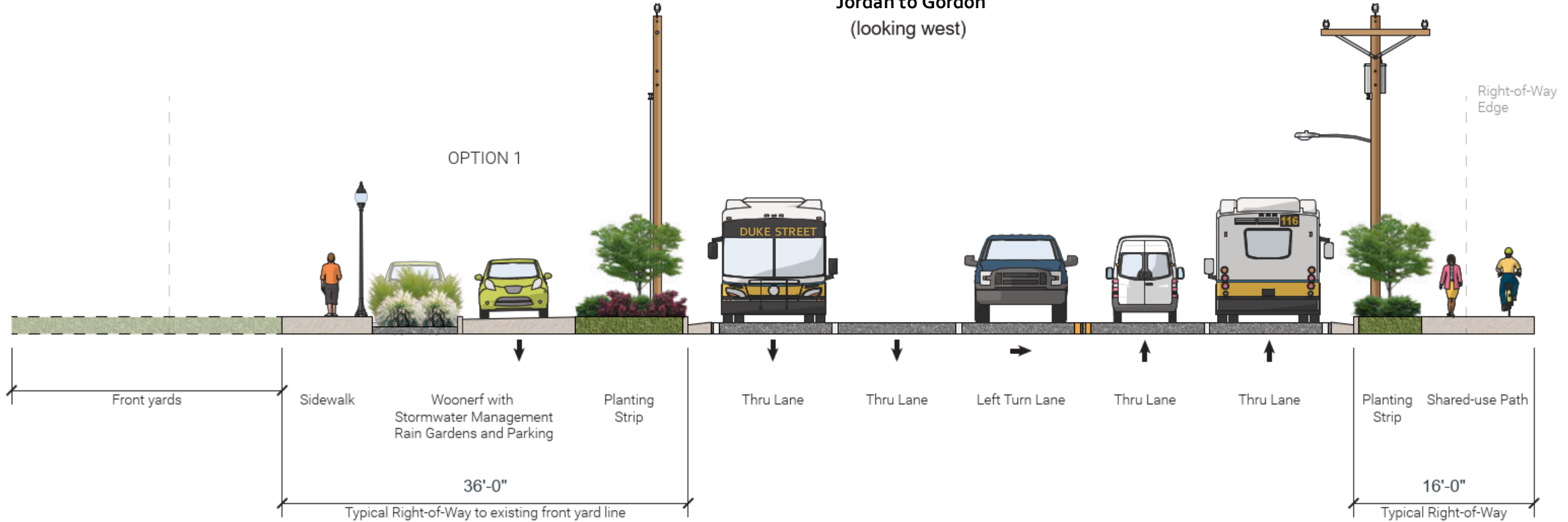
Jordan to Gordon



CONCEPTUAL FOR REVIEW ONLY NOT FOR CONSTRUCTION PURPOSES	LEGEND: — PROP. CURB — PROP. CURB AND GUTTER - - - - EX. FACE OF CURB — PROP. PAVEMENT MARKING LINE (SOLID) — PROP. PAVEMENT MARKING LINE (YELLOW CENTERLINE) - - - - PROP. PAVEMENT MARKING LINE (DASH) - - - - EX. RIGHT-OF-WAY — PROP. DEDICATED BUS LANE — PROP. BUS LANE / TURN LANE — PROP. BIKE LANE — PROP. GREEN SPACE — PROP. CONCRETE MEDIAN / SIDEWALK — PROP. SHARED USE PATH XXXX DEMO [Red Hatched Box] PROPOSED BUS STATION [Signal Icon] PROPOSED SIGNAL [Signal Icon] EXISTING SIGNAL		 DUKE STREET <i>IN MOTION</i>		Duke Street BRT Curb Features Option 1	PROJECT NO. XXXXXXXX	SHEET NO. 1-2
						DATE FEBRUARY 2023	SCALE: 1" = 25'
CITY OF ALEXANDRIA VIRGINIA						DESIGNED BY:	CHECKED BY:

Jordan to Gordon

Section B-B Jordan to Gordon (looking west)



Donelson to Fort Williams



CONCEPTUAL
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PURPOSES

LEGEND:	
	PROP. CURB
	PROP. CURB AND GUTTER
	EX. FACE OF CURB
	PROP. PAVEMENT MARKING LINE (SOLID)
	PROP. PAVEMENT MARKING LINE (YELLOW CENTERLINE)
	PROP. PAVEMENT MARKING LINE (DASH)
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	PROP. SHARED USE PATH
	DEMO
	PROPOSED BUS STATION
	PROPOSED SIGNAL
	EXISTING SIGNAL



Duke Street BRT
Curb Features
Option 1

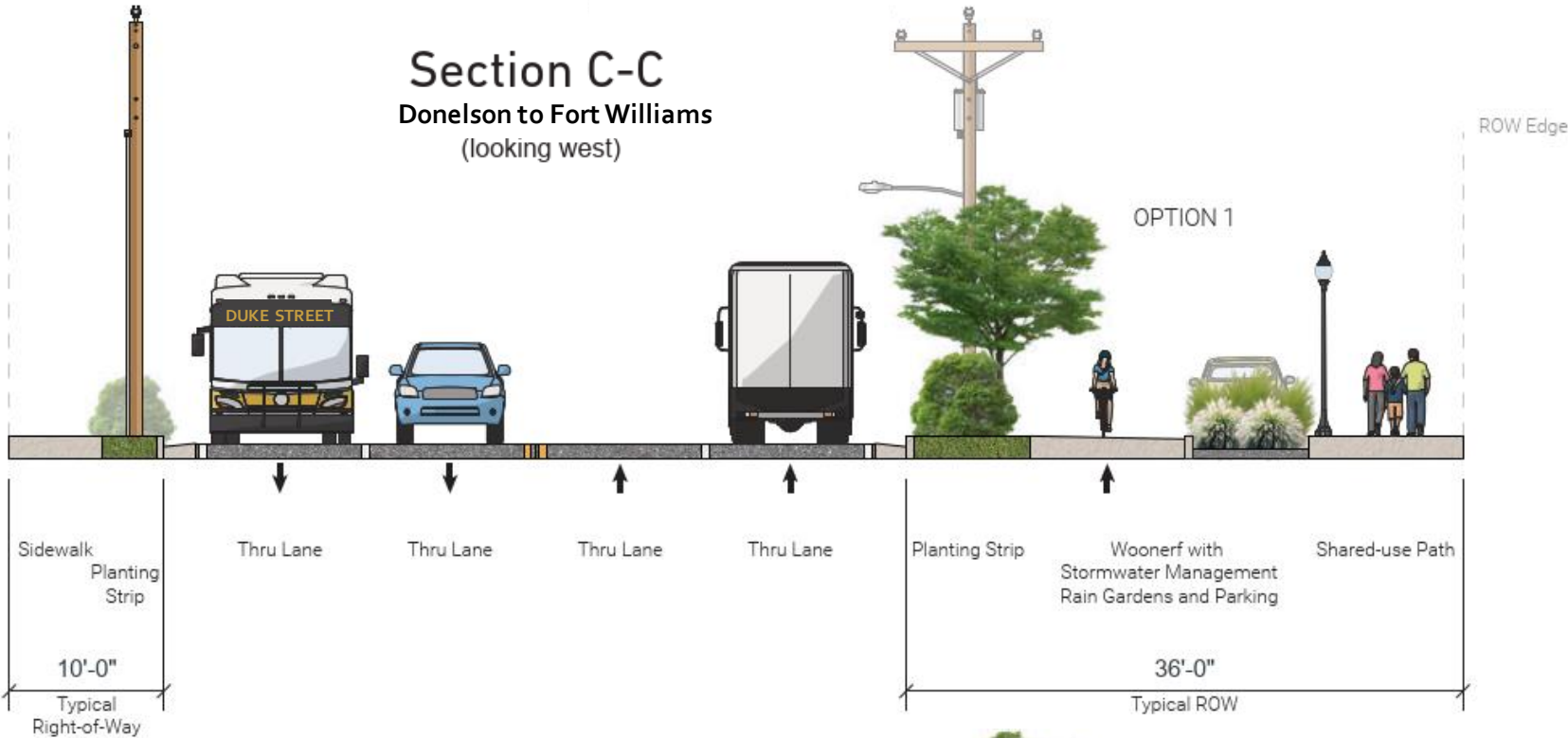
CITY OF ALEXANDRIA

VIRGINIA

PROJECT NO. XXXXXXX
DATE FEBRUARY 2023
SCALE 1" = 25'
DESIGNED BY:
DRAWN BY:
CHECKED BY:

SHEET NO. 1-3
SCALE 0 25 50'

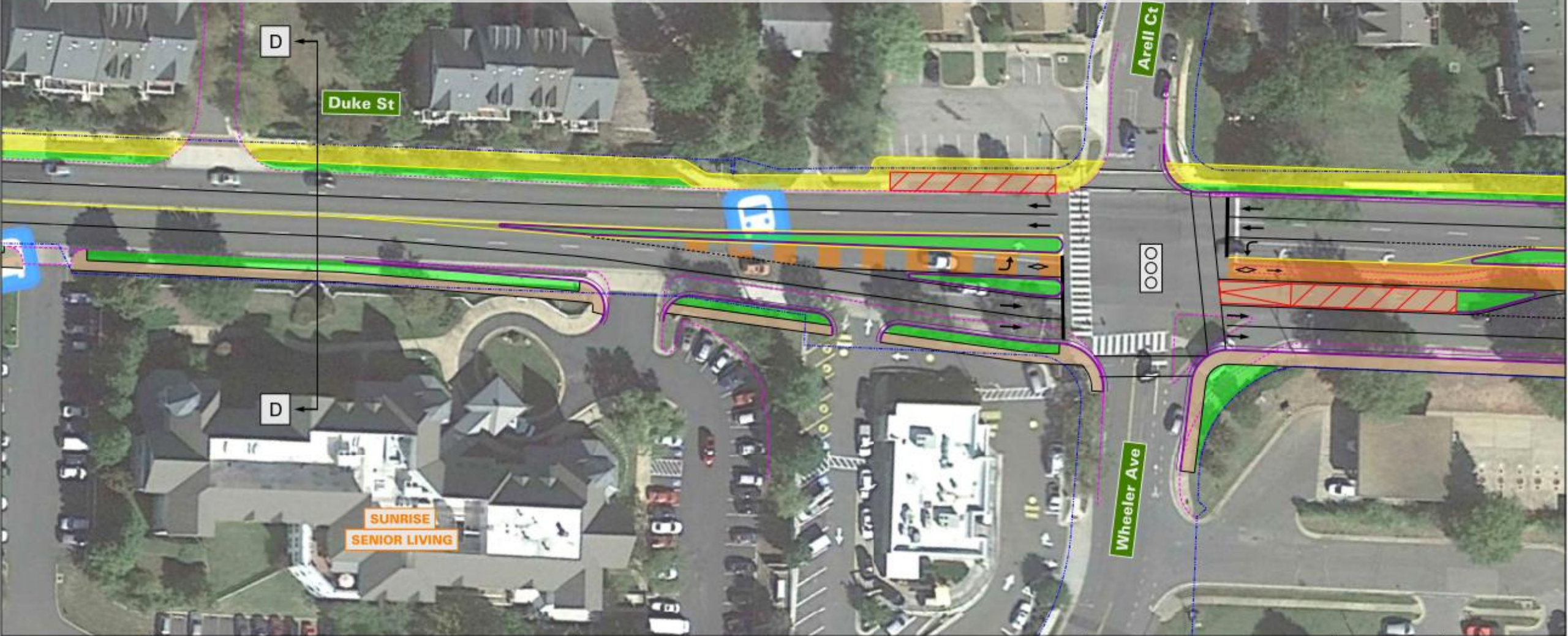
Donelson to Fort Williams



Donelson to Fort Williams



Fort Williams to Wheeler



CONCEPTUAL
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PURPOSES

LEGEND:

PROP. CURBS	PROP. DEDICATED BUS LANE	DEMO
PROP. CURBS AND GUTTER	PROP. BUS LANE / TURN LANE	PROPOSED BUS STATION
EX. FACE OF CURBS	PROP. BIKE LANE	PROPOSED SIGNAL
PROP. PAVEMENT MARKING LINE (SOLID)	PROP. GREEN SPACE	EXISTING SIGNAL
PROP. PAVEMENT MARKING LINE (YELLOW CENTERLINE)	PROP. CONCRETE MEDIAN / SIDEWALK	EXISTING SIGNAL
PROP. PAVEMENT MARKING LINE (DASH)	PROP. SHARED USE PATH	
EX. RIGHT-OF-WAY		

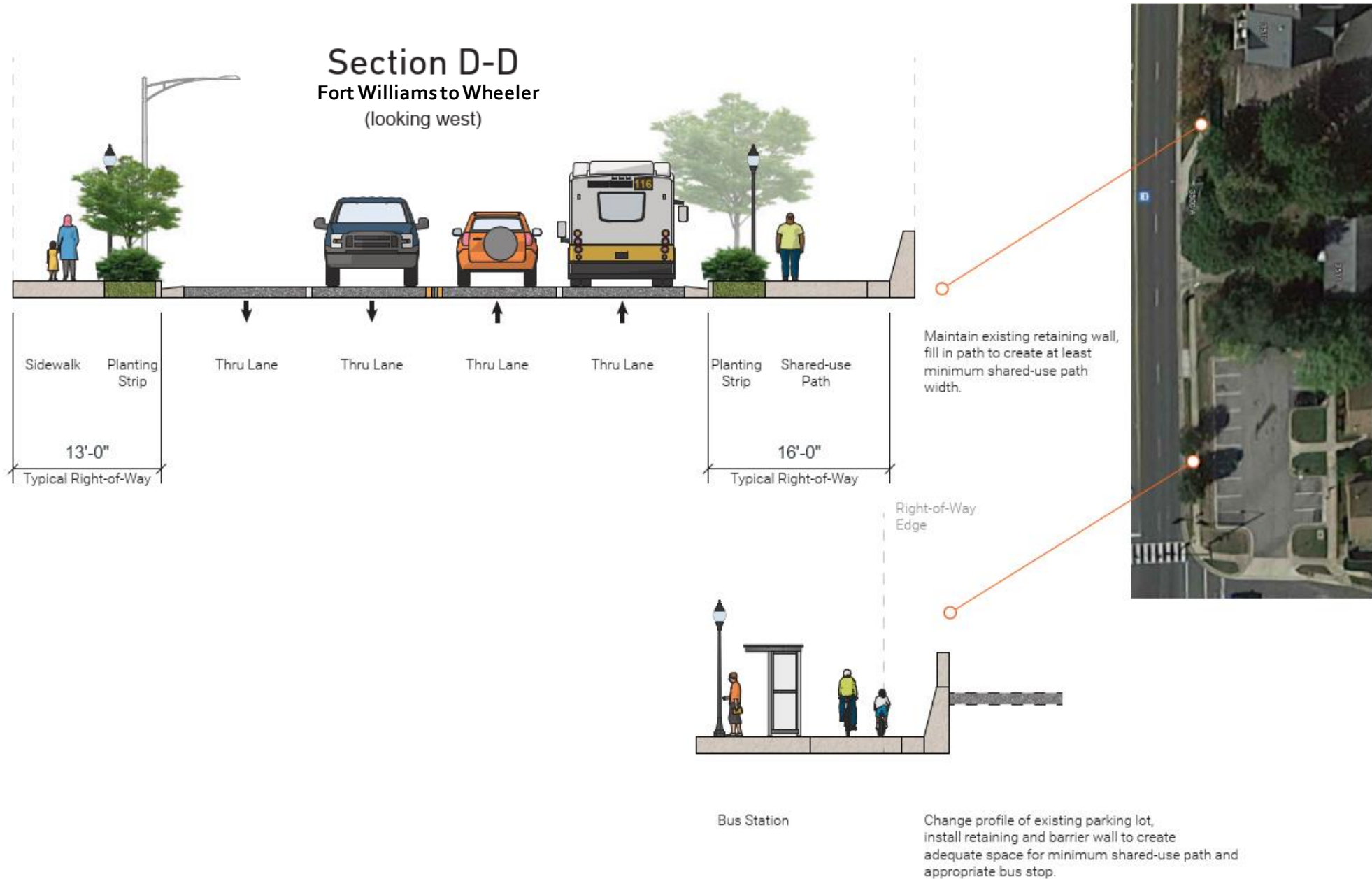


Duke Street BRT
Curb Features
Option 1
CITY OF ALEXANDRIA VIRGINIA

PROJECT NO. XXXXXXX
DATE FEBRUARY 2023
SCALE: 1" = 25'
DESIGNED BY:
DRAWN BY:
CHECKED BY:

SHEET NO. 1-4
SCALE: 1" = 25'

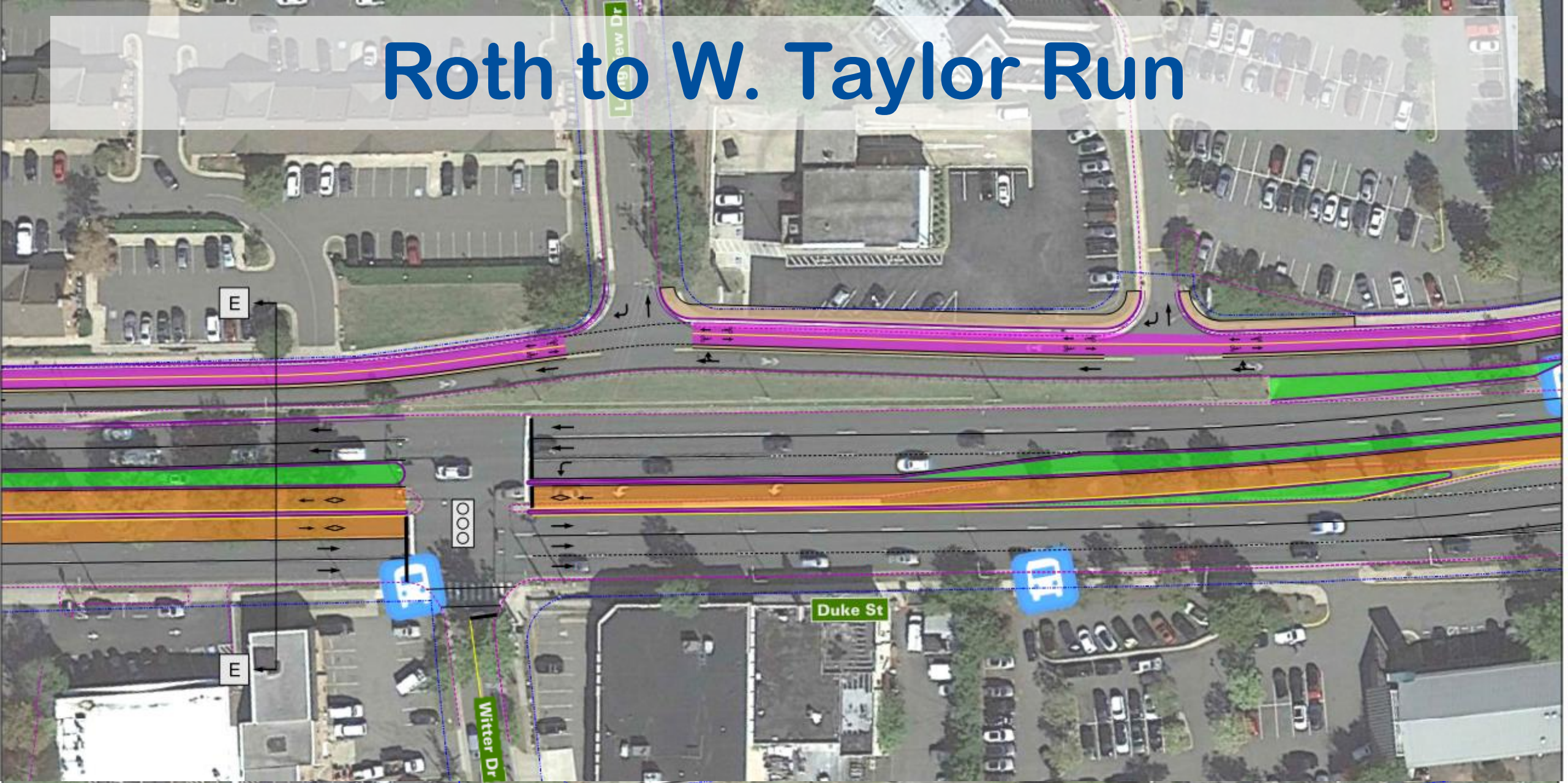
Fort Williams to Wheeler



Fort Williams to Wheeler



Roth to W. Taylor Run



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LEGEND:

PROP. CURB	PROP. DEDICATED BUS LANE	DEMO
PROP. CURB AND GUTTER	PROP. BUS LANE / TURN LANE	PROPOSED BUS STATION
EX. FACE OF CURB	PROP. BIKE LANE	PROPOSED SIGNAL
PROP. PAVEMENT MARKING LINE (SOLID)	PROP. GREEN SPACE	EXISTING SIGNAL
PROP. PAVEMENT MARKING LINE (YELLOW CENTERLINE)	PROP. CONCRETE MEDIAN / SIDEWALK	
PROP. PAVEMENT MARKING LINE (DASH)	PROP. SHARED BIKE LANE	



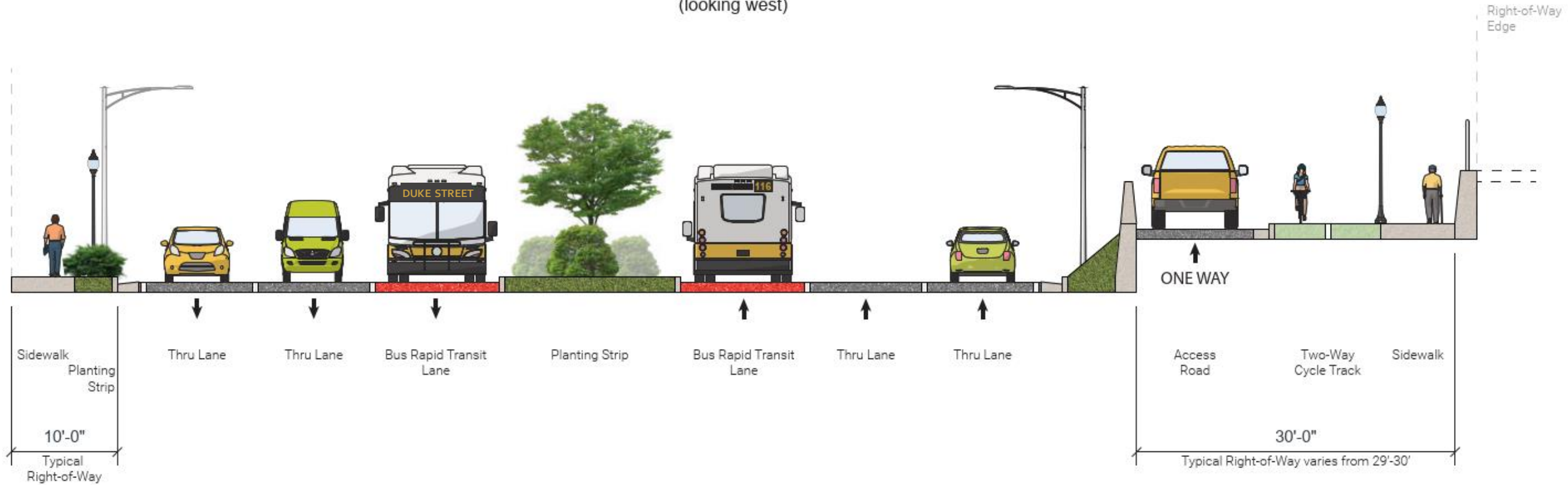
Duke Street BRT
Curb Features
Option 1

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DATE FEBRUARY 2023
SCALE 1" = 25'
DESIGNED BY:
DRAWN BY:

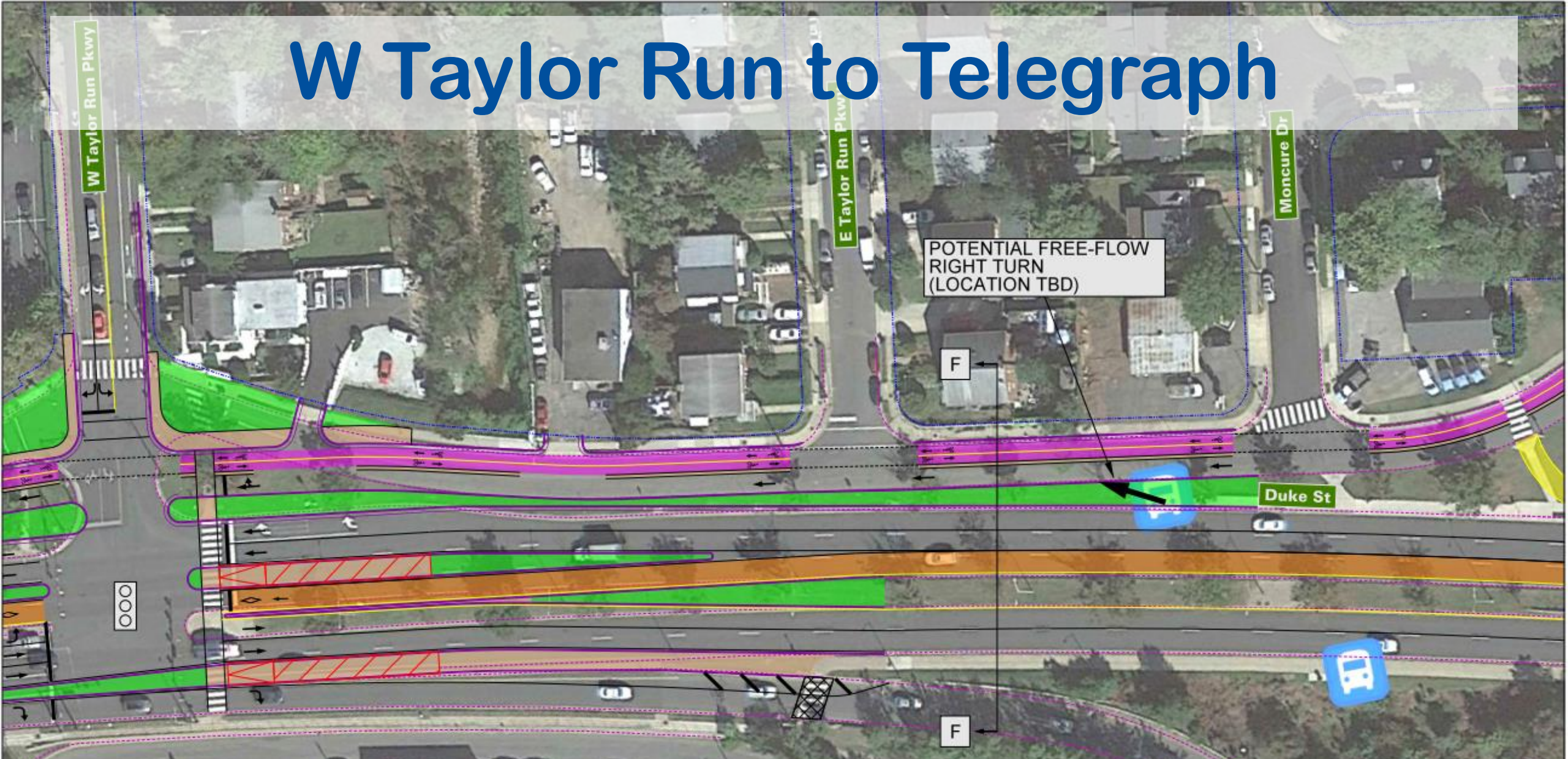
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SCALE

Roth to W. Taylor Run

Section E-E Roth to W. Taylor Run (looking west)



W Taylor Run to Telegraph

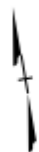


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- PROPOSED SIGNAL
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Duke Street BRT
Curb Features
Option 1

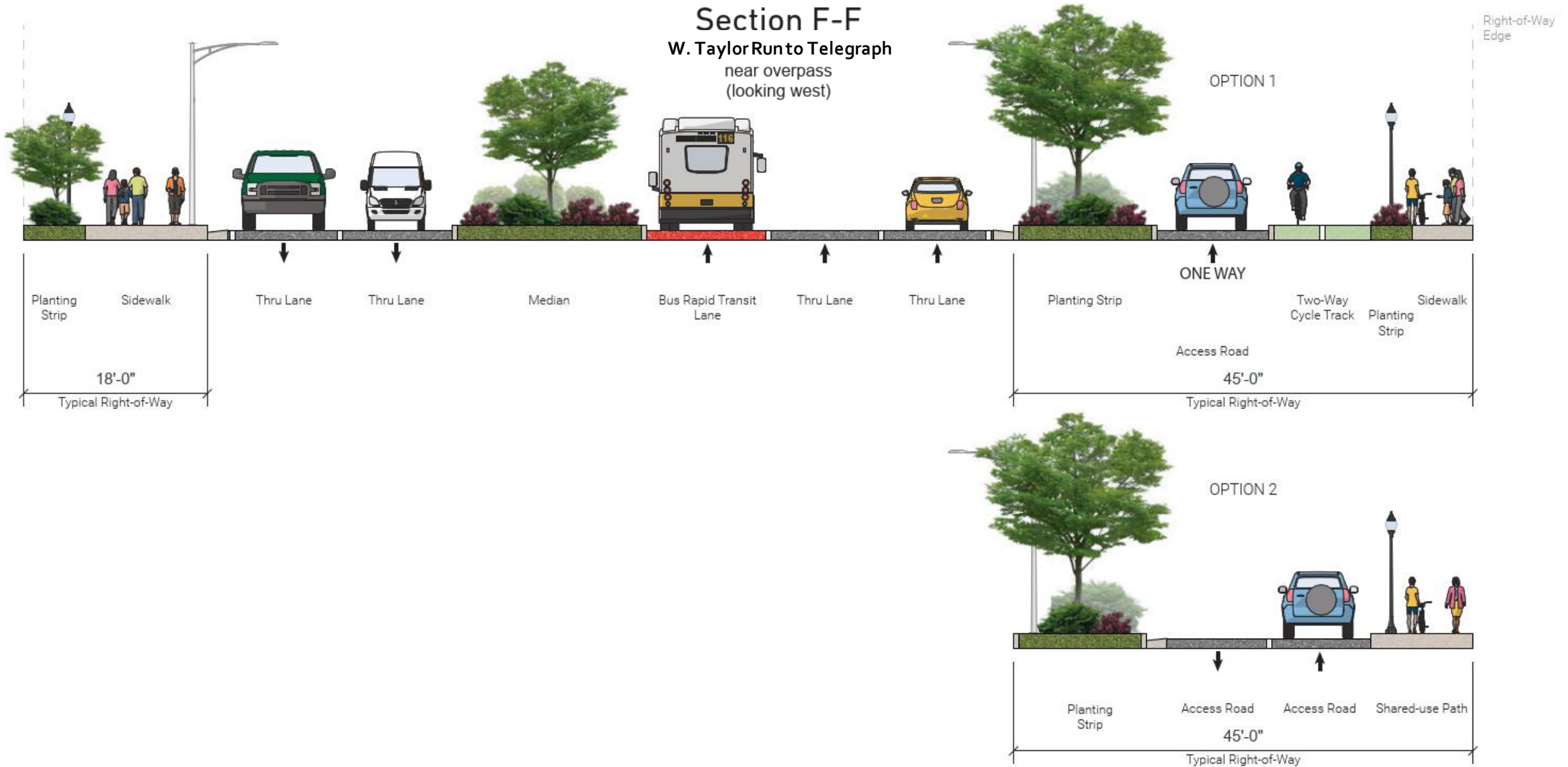
CITY OF ALEXANDRIA

VIRGINIA

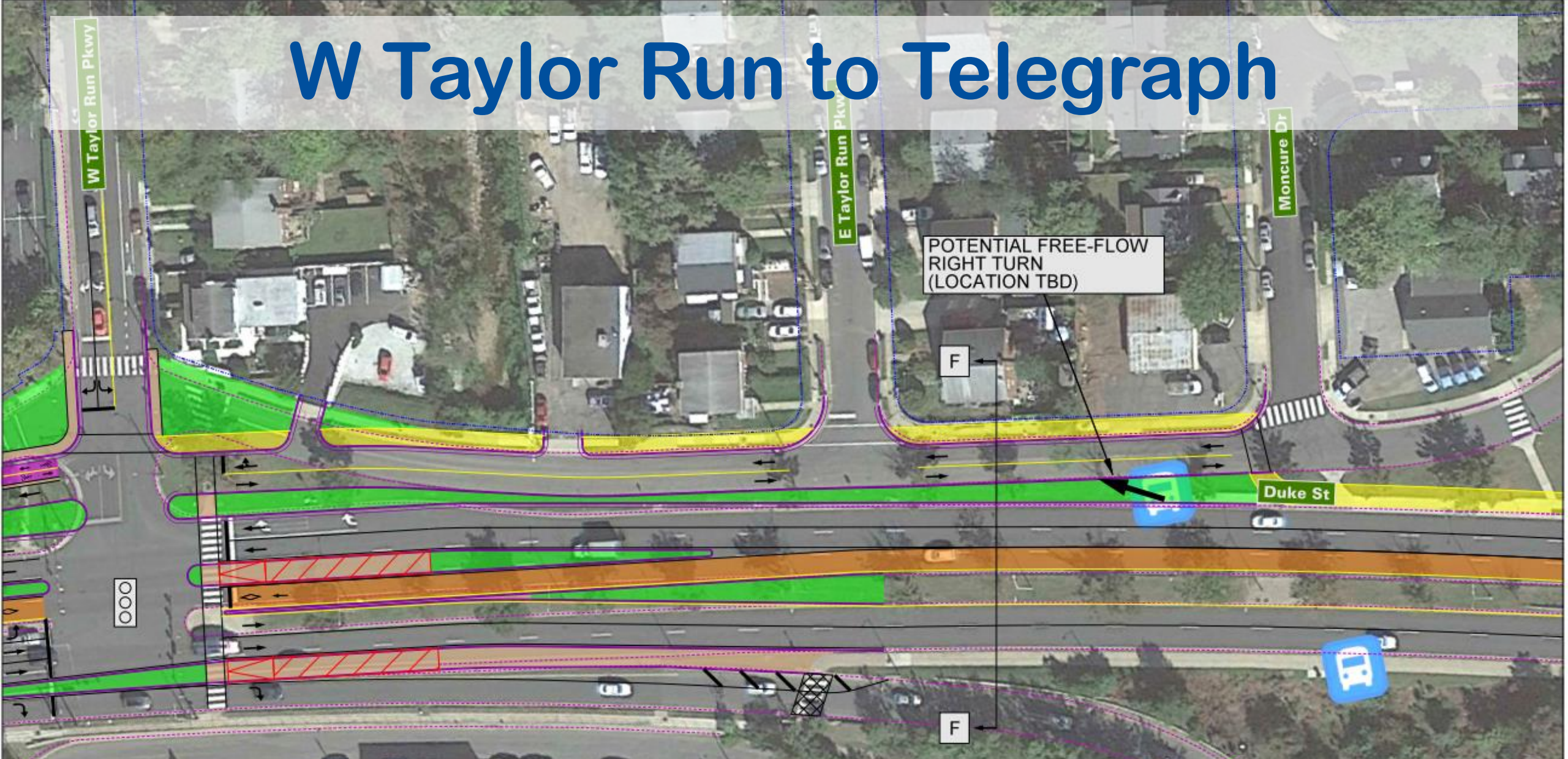
PROJECT NO. XXXXXXX
DATE FEBRUARY 2023
SCALE: 1" = 25'
DESIGNED BY:
DRAWN BY:
CHECKED BY:

SHEET NO. 1-6
SCALE 0 25 50'

W. Taylor Run to Telegraph



W Taylor Run to Telegraph



CONCEPTUAL

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CONSTRUCTION
PURPOSES

LEGEND:

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- PROP. CURB AND GUTTER
- EX. FACE OF CURB
- PROP. PAVEMENT MARKING LINE (SOLID)
- PROP. PAVEMENT MARKING LINE (YELLOW CENTERLINE)
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- PROP. BIKE LANE
- PROP. GREEN SPACE
- PROP. CONCRETE MEDIAN / SIDEWALK
- PROP. SHARED-USE PATH
- DEMO
- PROPOSED BUS STATION
- PROPOSED SIGNAL
- EXISTING SIGNAL



Duke Street BRT
Curb Features
Option 2

CITY OF ALEXANDRIA

VIRGINIA

PROJECT NO. XXXXXXX
DATE FEBRUARY 2023
SCALE: 1" = 25'
DESIGNED BY:
DRAWN BY:
CHECKED BY:

SHEET NO. 2-6
SCALE 0 25' 50'

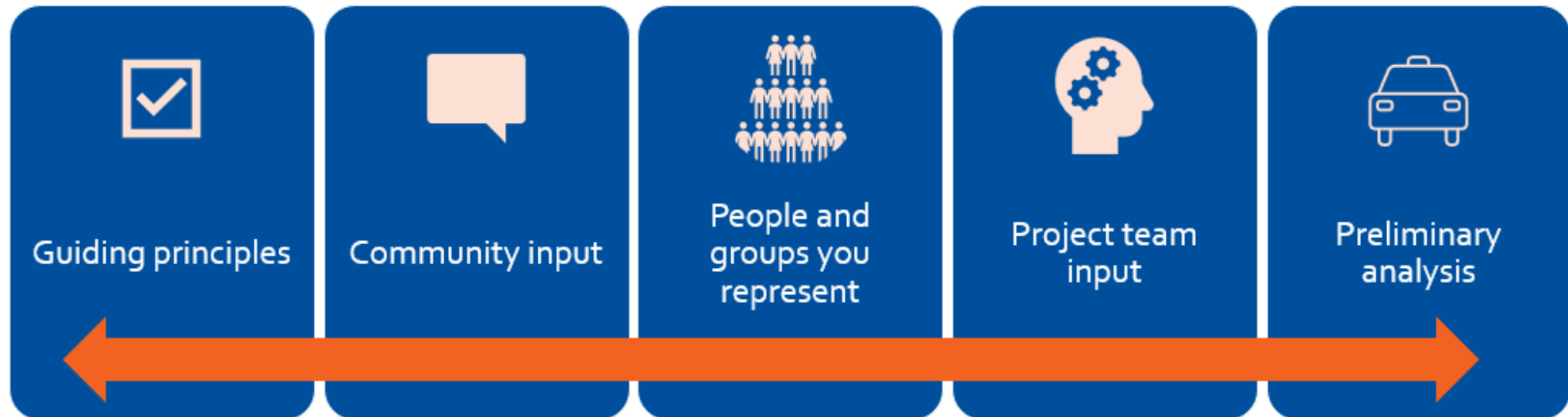


Curb Features AG Discussion

Guiding Questions

- What does the AG think about the options shown?
- Are there other approaches we should be considering?
- What priorities does the AG (and those the AG members represent) have for the curb feature elements in constrained sections?

CONSIDERATIONS



Three easy ways to join the conversation with PollEverywhere.

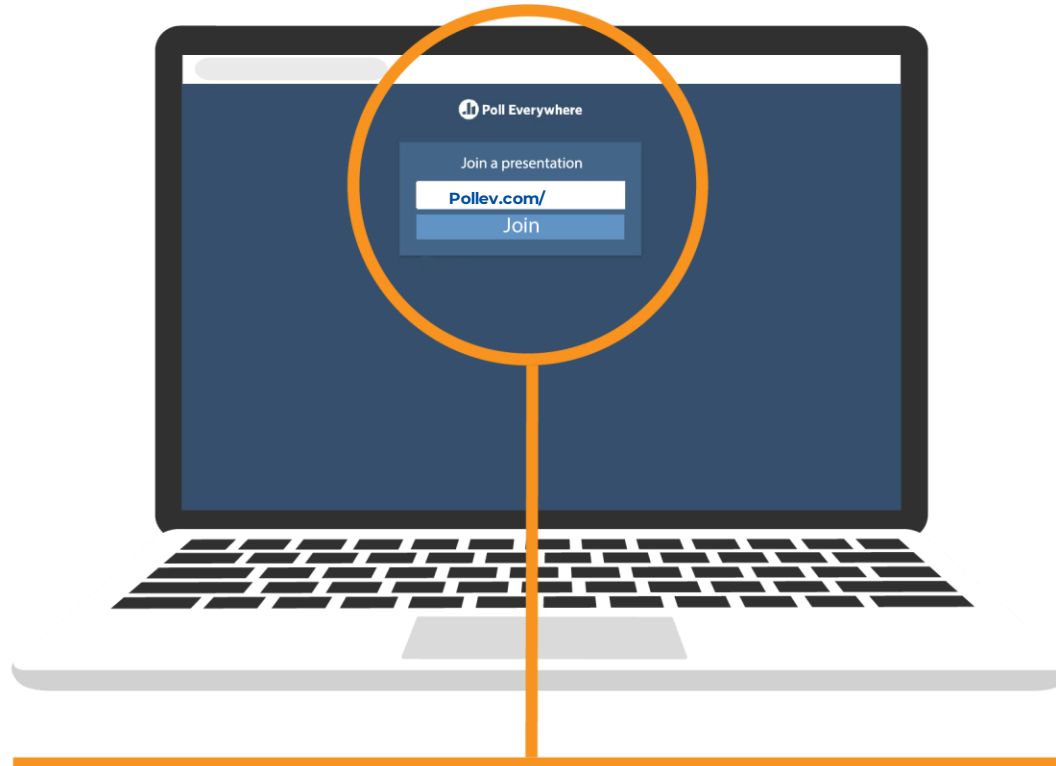
APP



Download the free PollEverywhere App and enter "INPUT" into the field reading: "PollEv.com/username"

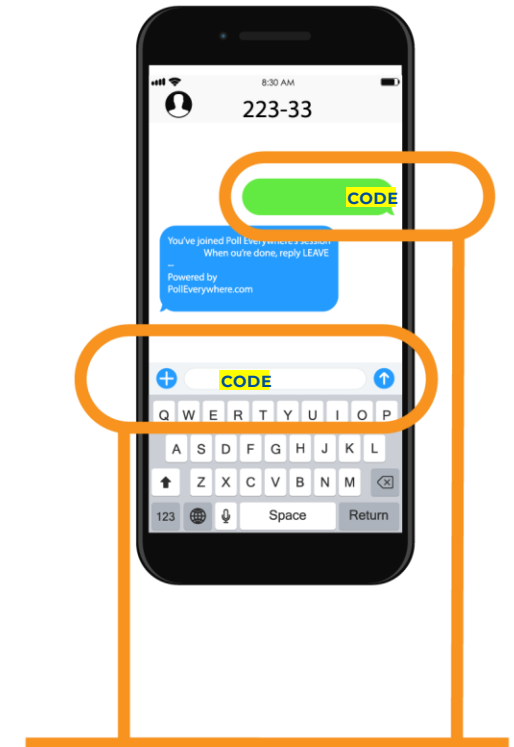


WEB



Go to Pollev.com/INPUT to enter the poll via web browser.

TEXT



Text "INPUT" to 223-33 to enter the poll via text.

**not all questions are available via text*

Is it more important to have...

a separate
bicycle/scooter space and
walking space but have
less green space

more green space but a
shared bike and walking
space

Where space is limited on the north side of Duke Street, should we consider:

combining space for walkers and bikers

separating space for the walkers and bikers
on the south side of Duke Street. This means
bikers would have to cross Duke Street to
access the separated biking space.

In areas with service roads, should we consider a shared space for bikes and cars?

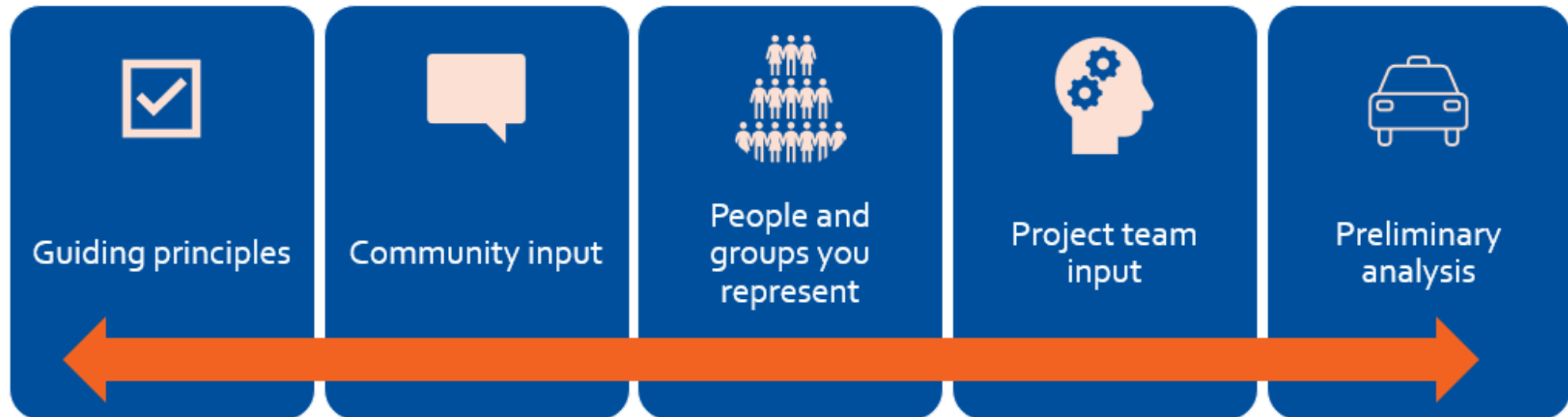
Yes

No

Guiding Questions

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CONSIDERATIONS





Status Update & Next Steps

Current Status



Analysis & Design



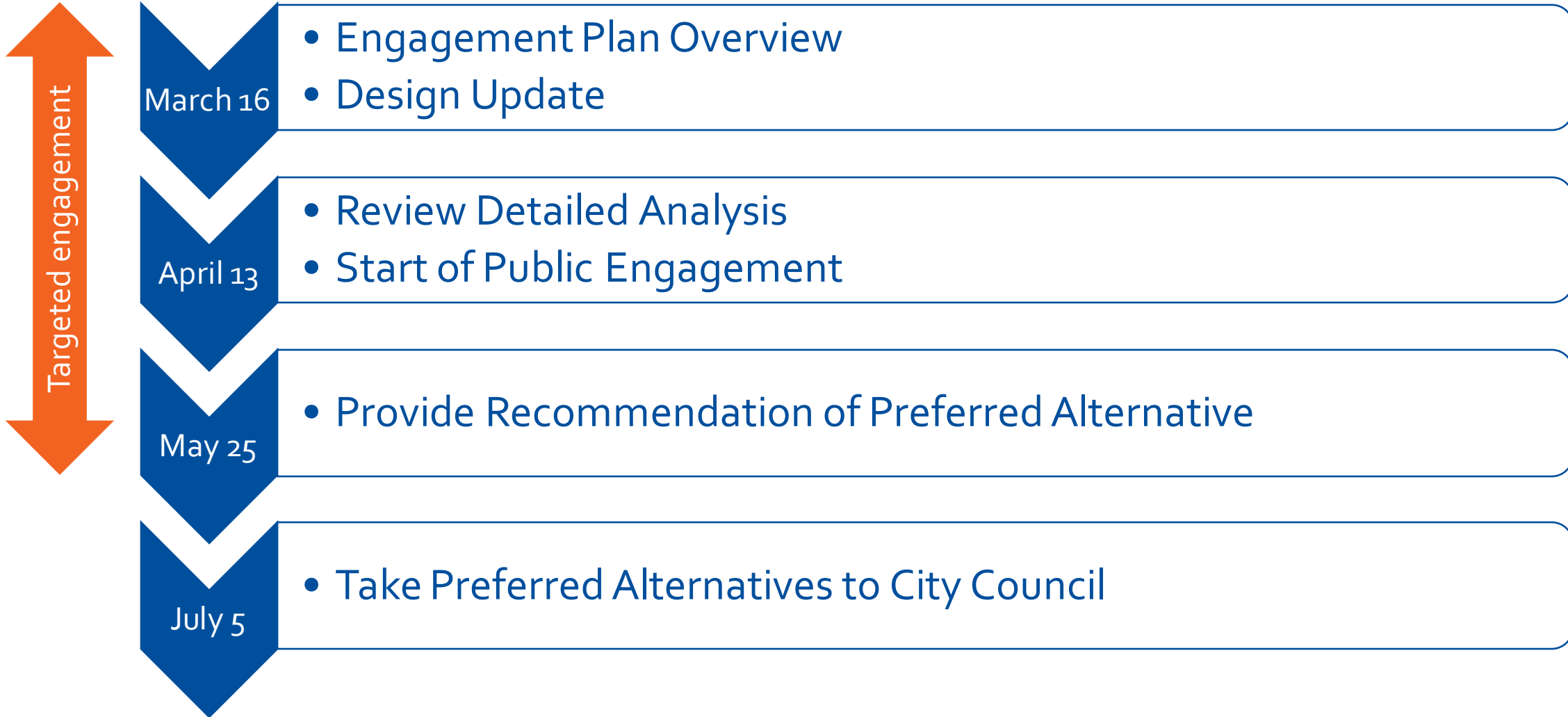
Focused
Engagement



Hello Duke Street



Next Steps





Approval of Meeting Minutes from December

The image shows three buses on a city street, all with 'DASH' branding on their front displays. The bus in the foreground is a white van-like vehicle with the number '21804' on its front. The middle bus is a larger white bus with 'DASH' written on its side. The bus in the background is another white van-like vehicle with the number '510' on its front. The entire image has a light orange tint.

Thank you!

alexandriava.gov/DukeInMotion