

COLUMBIA PIKE MULTIMODAL STREET IMPROVEMENTS



Columbia Pike Implementation Team (CPIT) Meeting

October 25, 2011



Agenda

- Introductions / purpose of meeting
- Multimodal project update:
 - *Recap*
 - *Street space design*
 - *Next Steps*
- Pike Transit Initiative update
- Summary



Recap

- Concept design complete as of last CPIT meeting (April 26, 2011)
- Modifications made due to right-of-way impacts
- Met with Columbia Heights CA (July 11, 2011)
- Received updated survey, mapping, and aerial photos
- VDOT awarded Washington Blvd/Columbia Pike interchange project to design-build contractor
- Multimodal project environmental document *approved!*
- Moving into development of 50% plans for near-term street space design

Your feedback is requested tonight on near-term design considerations

Street Space Design – Vision and Goals

- Vision: *Near-term implementation of a complete street that achieves an appropriate balance of travel modes and that supports future high-quality, high-frequency transit service*
- Goals:
 - Build on Street Space Planning Task Force recommendations
 - Coordinate with many other on-going efforts
 - Complete a *multimodal transportation analysis*
 - Complete necessary *environmental studies and NEPA documentation*
 - Provide a *complete street design* to meet Arlington, VDOT, and FHWA approvals

Complete Street

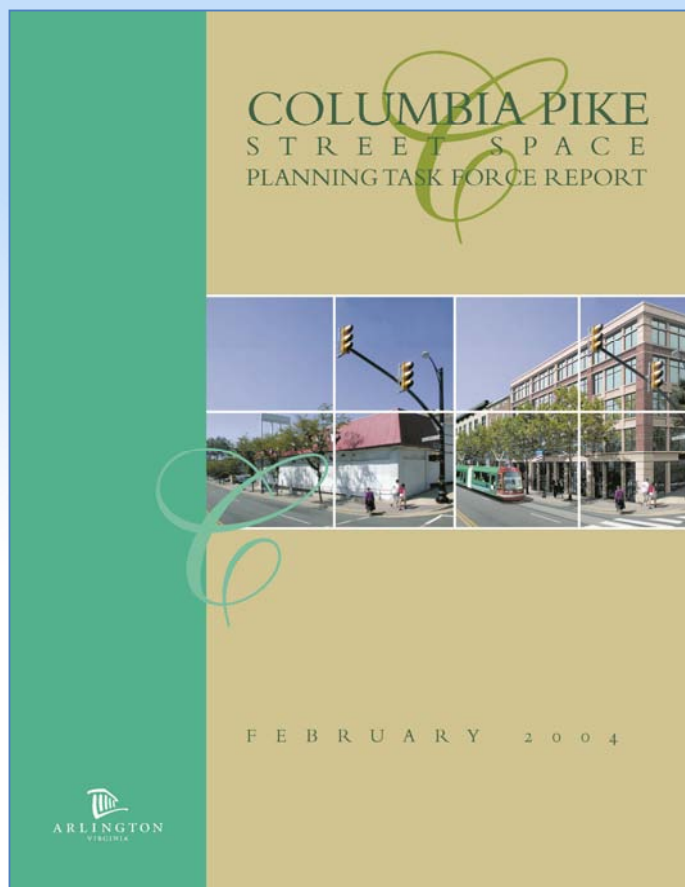


- Designed and operated to enable safe, attractive, and comfortable access and travel for all users:
 - Pedestrians
 - Bicyclists
 - Transit riders
 - Motorists



- More livable, safer, accessible
- Elements:
 - Wider sidewalks
 - Minimized crossing distances
 - Bicycle accommodations
 - Accessibility to transit
 - Public amenities

Street Space Design – Objectives



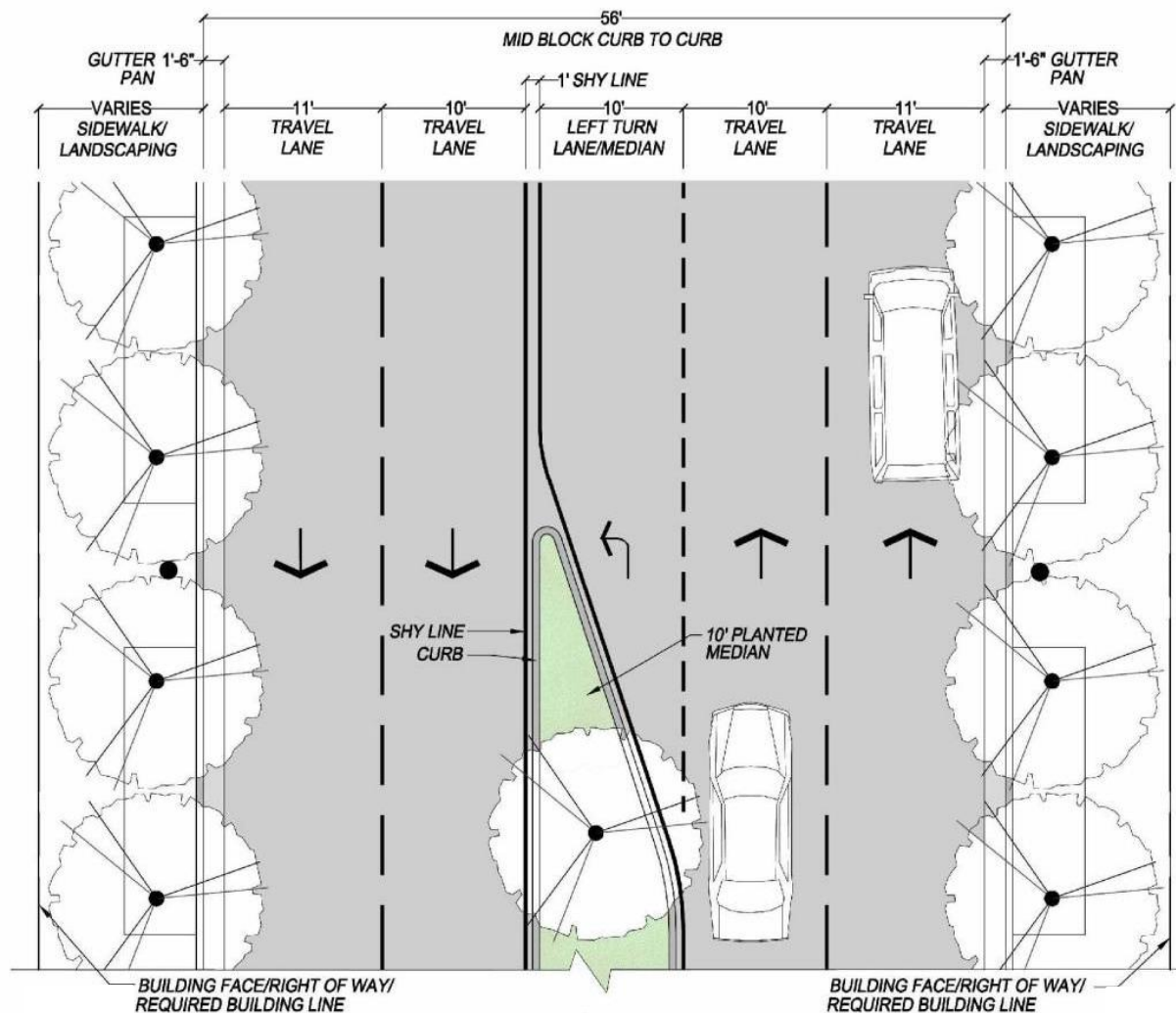
- Provide interim elements of Street Space Planning Task Force recommendations
- Design to meet Arlington, VDOT, and FHWA approvals
- Coordinate with many other on-going design and construction efforts
- Design for all modes
- Attain 56-ft curb face to curb face “cartway” dimension
- Minimize right-of-way impacts

Street Design Considerations

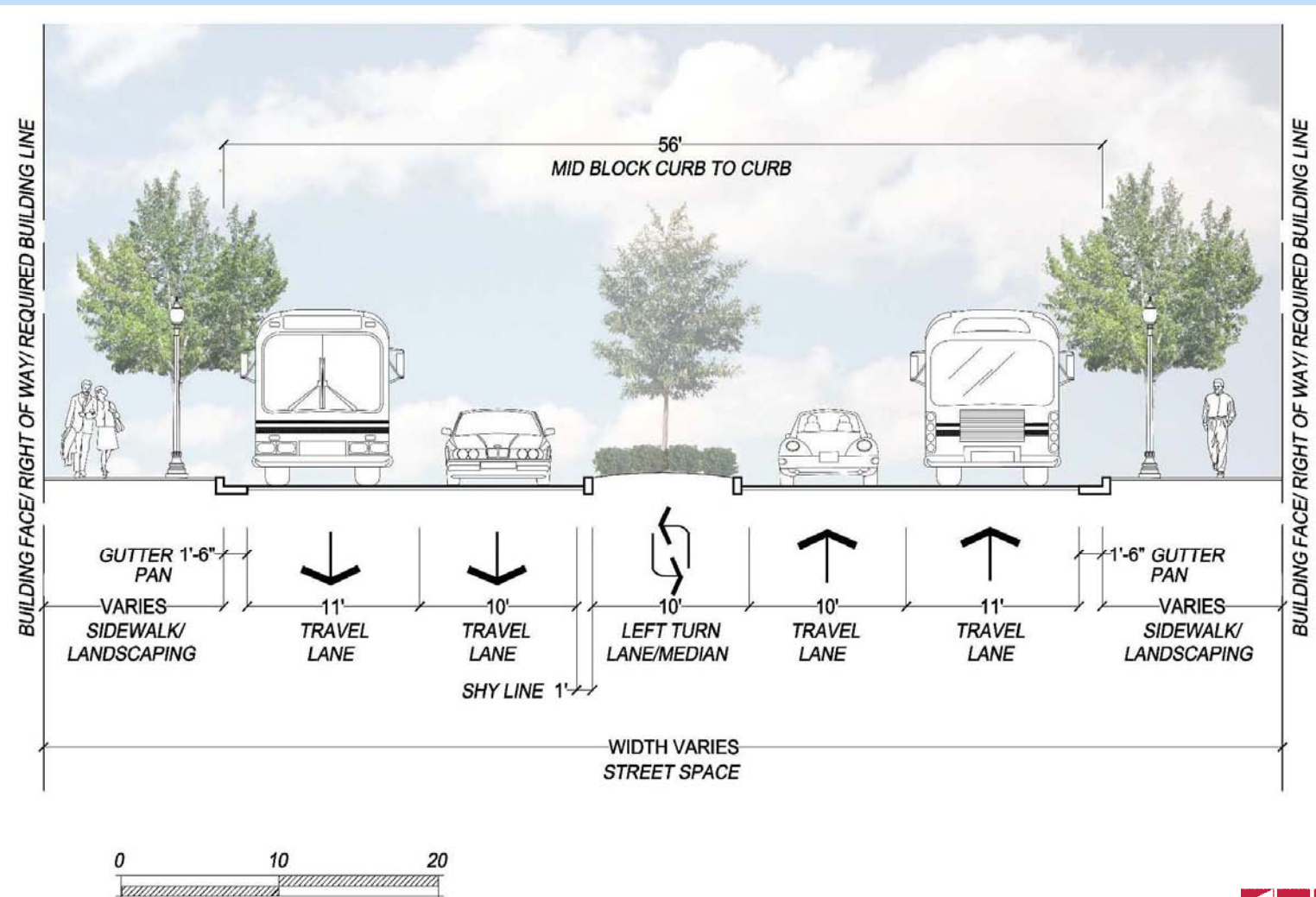
- Balance between pedestrian, bicycle, transit, and vehicle spaces
- 56-ft cross section
 - Include left turn lanes/medians
 - Eliminate right turn lanes and bus pull-outs
- Behind curb line:
 - Wider sidewalks
 - Transit shelters
 - Street trees, planting strips
 - On street parking
 - “Furniture zone”
 - Bicycle accommodations
- Drainage
- Utilities
- Additional ROW



Proposed Near-Term Typical Plan



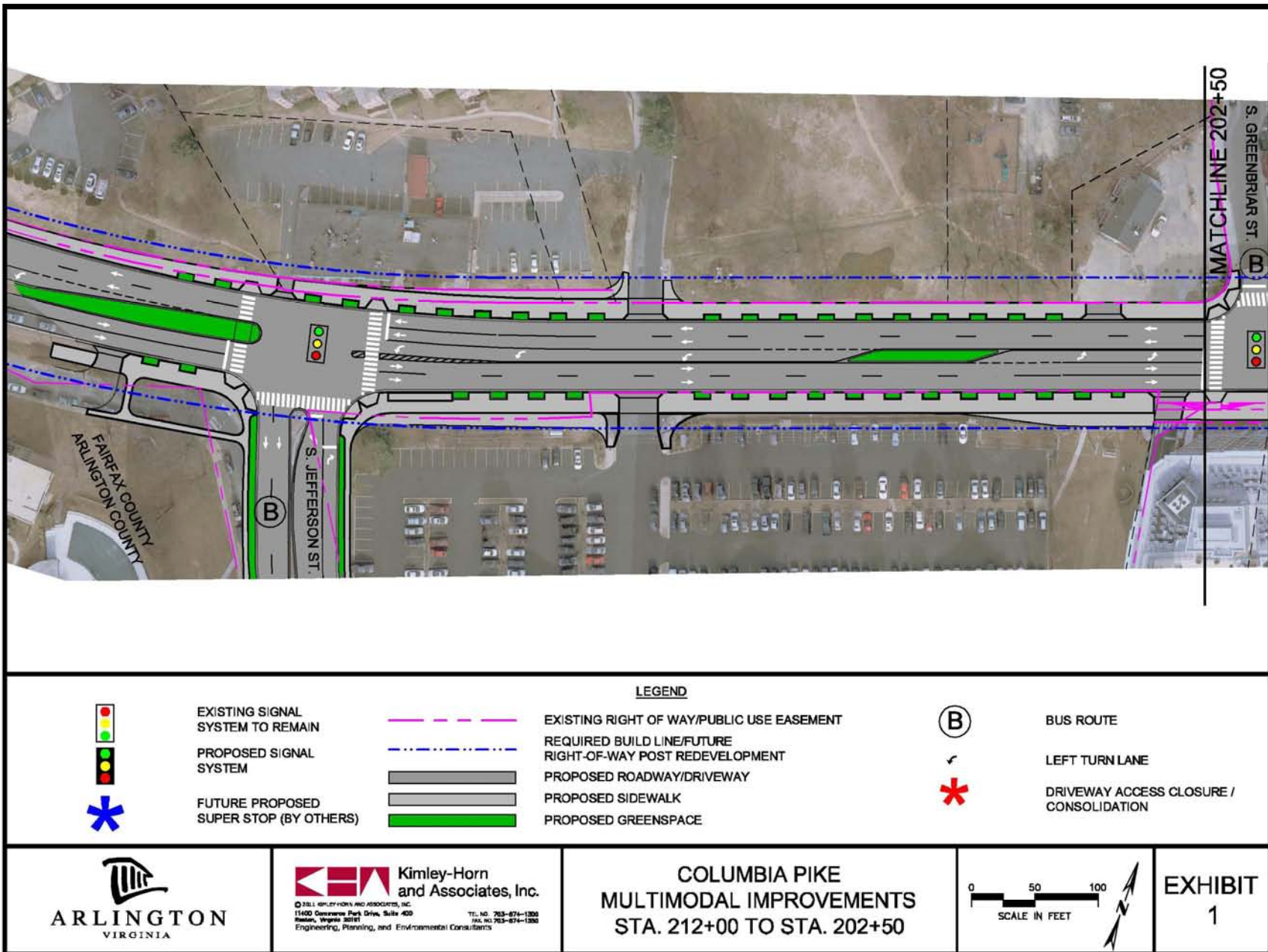
Proposed Near-Term Typical Cross Section

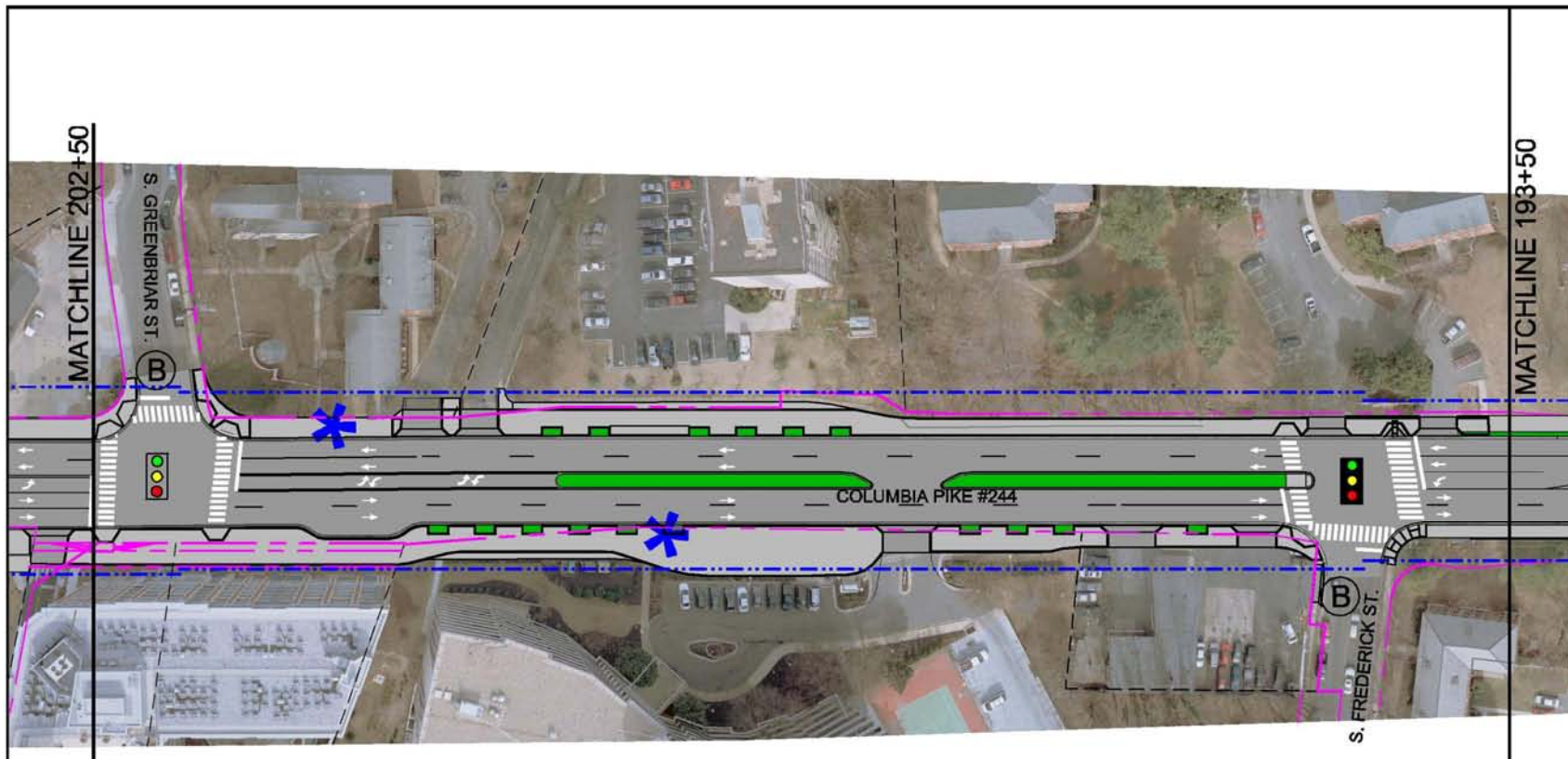


Design Considerations *S. Jefferson St. to S. Frederick St.*



- Wider sidewalks
- New traffic signal at S. Frederick St.
- Westbound left turn lane
- Underground utilities





Segment:	County line/S. Jefferson St. to east of S. Frederick St.
56-ft cross section:	✓ Achieved
Between curbs:	Medians, new traffic signal/WB left turn lane at Frederick, driveway access maintained
Behind curbs:	Wider sidewalks both sides, landscaping, on street parking, 10-ft wide sidewalk (north side, Frederick to Four Mile Run), utilities underground



COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 202+50 TO STA. 193+50

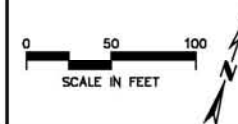


EXHIBIT
2

Design Considerations *S. Frederick St. to Four Mile Run*



- Wider sidewalks
- Medians/left turn lanes
- Roadway profile
- Pavement reconstructed
- Tie-in to Four Mile Run Bridge
- Underground utilities
- Minimal property impacts





	EXISTING SIGNAL SYSTEM TO REMAIN		EXISTING RIGHT OF WAY/PUBLIC USE EASEMENT		BUS ROUTE
	PROPOSED SIGNAL SYSTEM		REQUIRED BUILD LINE/FUTURE RIGHT-OF-WAY POST REDEVELOPMENT		LEFT TURN LANE
	FUTURE PROPOSED SUPER STOP (BY OTHERS)		PROPOSED ROADWAY/DRIVEWAY		DRIVEWAY ACCESS CLOSURE / CONSOLIDATION
			PROPOSED SIDEWALK		
			PROPOSED GREENSPACE		




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 Engineering, Planning, and Environmental Consultants

COLUMBIA PIKE MULTIMODAL IMPROVEMENTS STA. 193+50 TO STA. 184+50

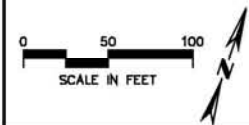
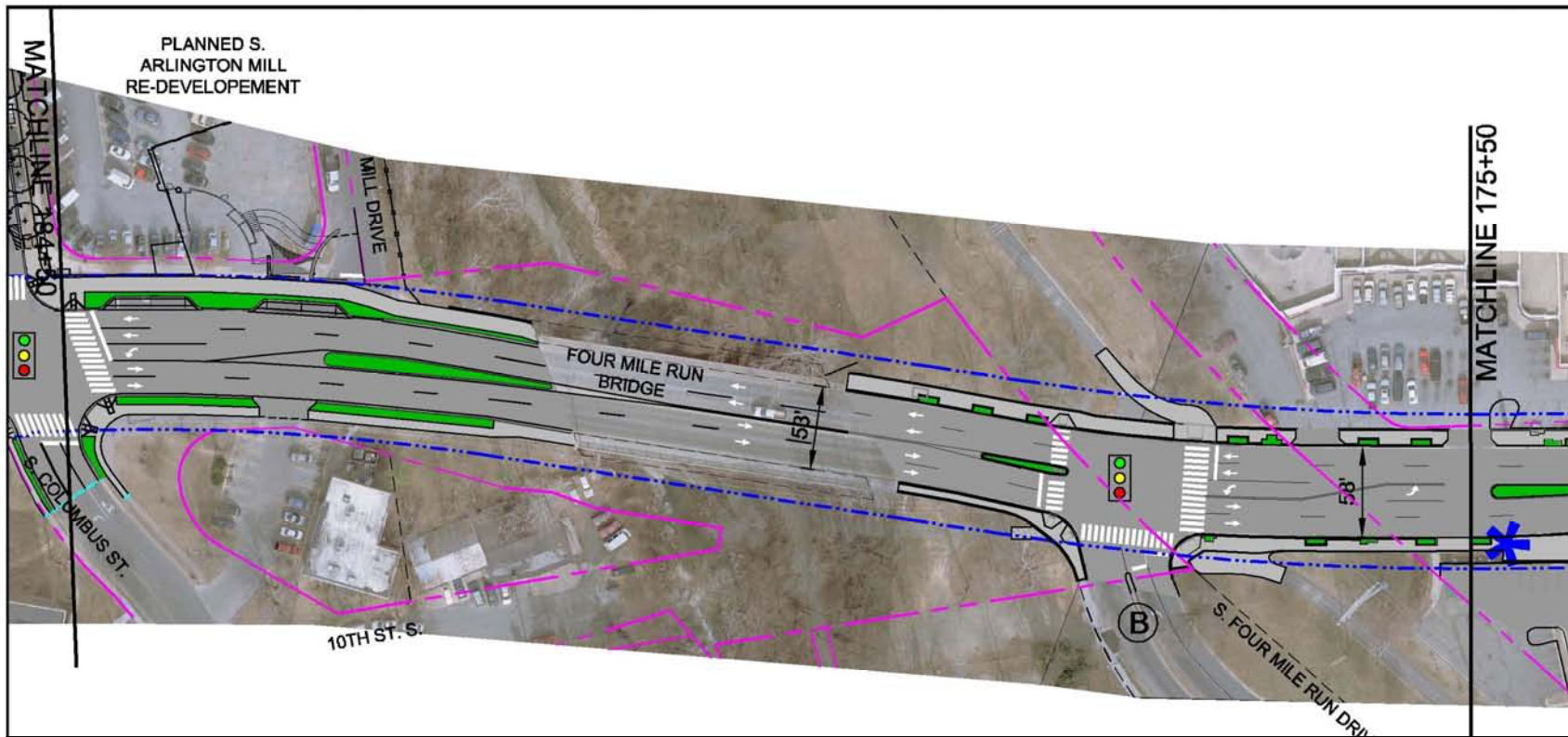


EXHIBIT
3



Segment:	East of S. Frederick St. to east of S. Four Mile Run Dr.
56-ft cross section:	✓ Achieved with exception of Four Mile Run Bridge area
Between curbs:	Medians, new WB left turn lane at Four Mile Run Dr., driveway access maintained, no left turns in/out at Arlington Mill Drive (except for emergency vehicles)
Behind curbs:	Wider sidewalk south side, 10-ft wide sidewalk north side (Frederick to Four Mile Run) landscaping, trail connections, utilities underground



COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 184+50 TO STA. 175+50

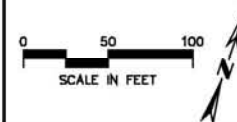


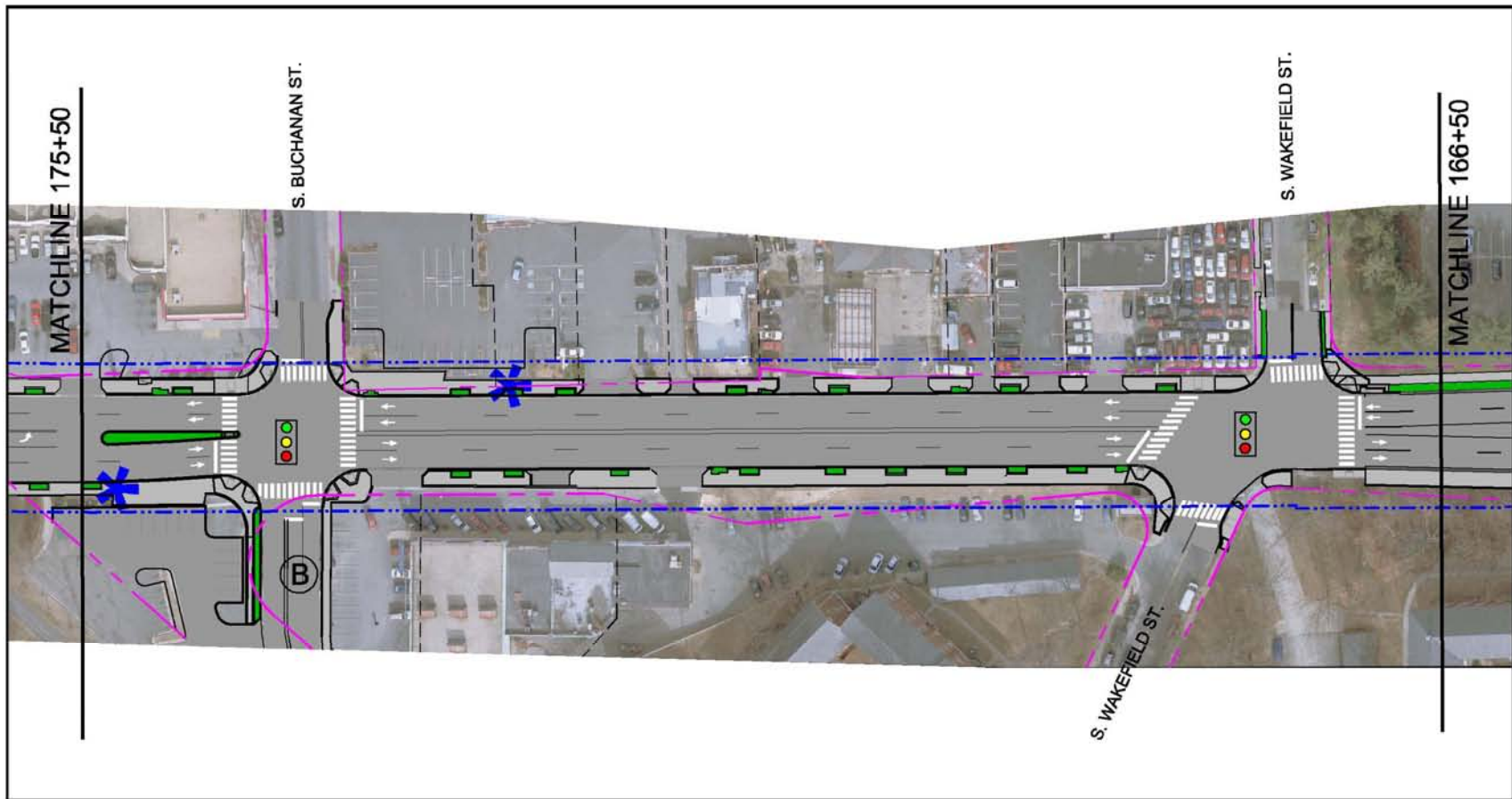
EXHIBIT
4

Design Considerations

Four Mile Run to S. Taylor St.



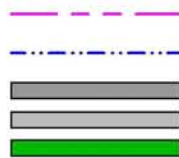
- Wider sidewalks
- S. Thomas Street realigned
- Left turn lanes
- Reconstructed retaining walls and pavement
- Underground utilities
- Minimal property impacts



EXISTING SIGNAL
SYSTEM TO REMAIN

PROPOSED SIGNAL
SYSTEM

FUTURE PROPOSED
SUPER STOP (BY OTHERS)



EXISTING RIGHT OF WAY/PUBLIC USE EASEMENT

REQUIRED BUILD LINE/FUTURE
RIGHT-OF-WAY POST REDEVELOPMENT

PROPOSED ROADWAY/DRIVEWAY

PROPOSED SIDEWALK

PROPOSED GREENSPACE

LEGEND



BUS ROUTE



LEFT TURN LANE



DRIVEWAY ACCESS CLOSURE /
CONSOLIDATION



COLUMBIA PIKE MULTIMODAL IMPROVEMENTS STA. 175+50 TO STA. 166+50

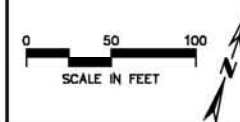
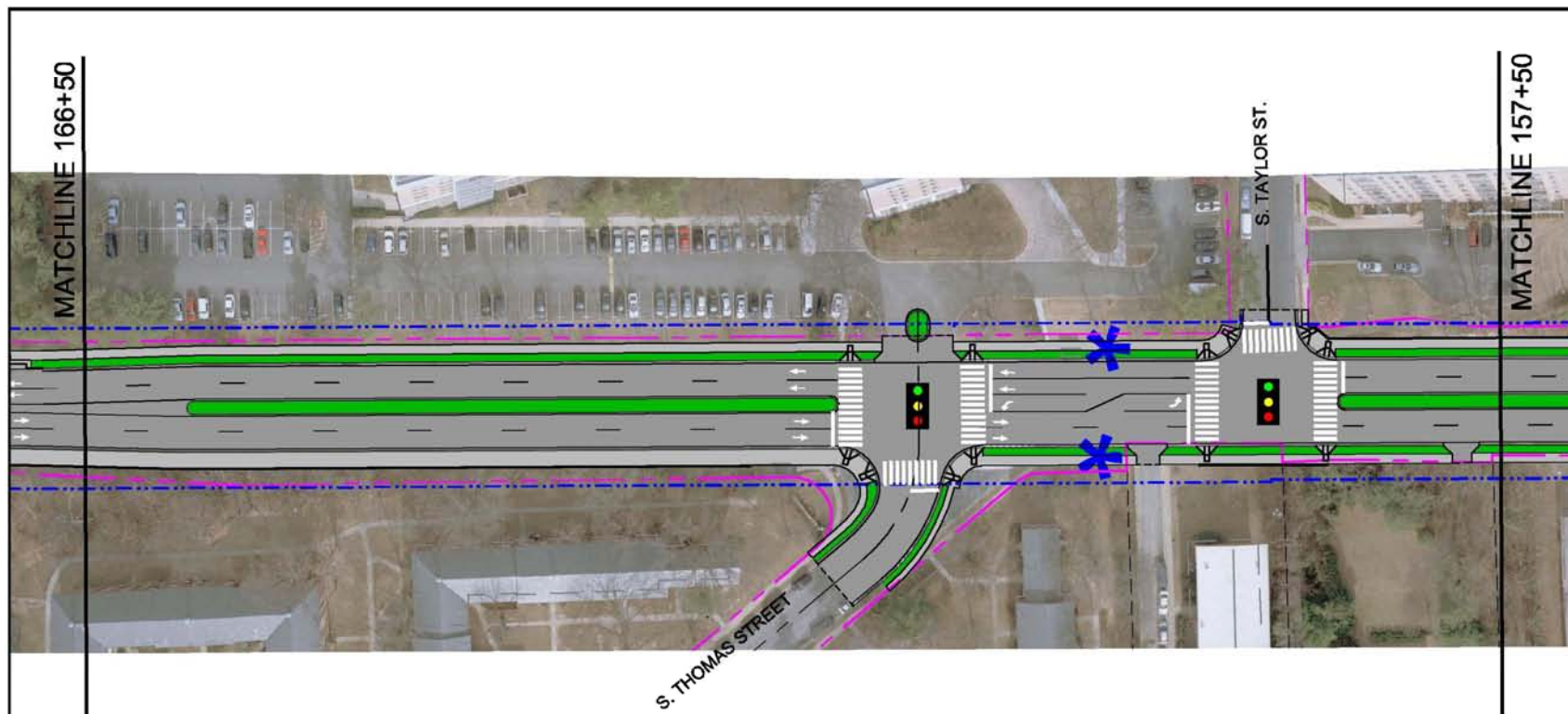


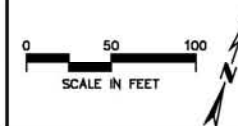
EXHIBIT
5



Segment:	East of S. Four Mile Run Dr. to east of S. Taylor St.
56-ft cross section:	Achieved east of S. Wakefield St.
Between curbs:	Medians, new left turn lanes at Thomas & Taylor, full access maintained for most driveways, left turns in/out eliminated at one driveway
Behind curbs:	Sidewalks, landscaping, realignment of S. Thomas Street, utilities underground, retaining wall(s) rebuilt



**COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 166+50 TO STA. 157+50**



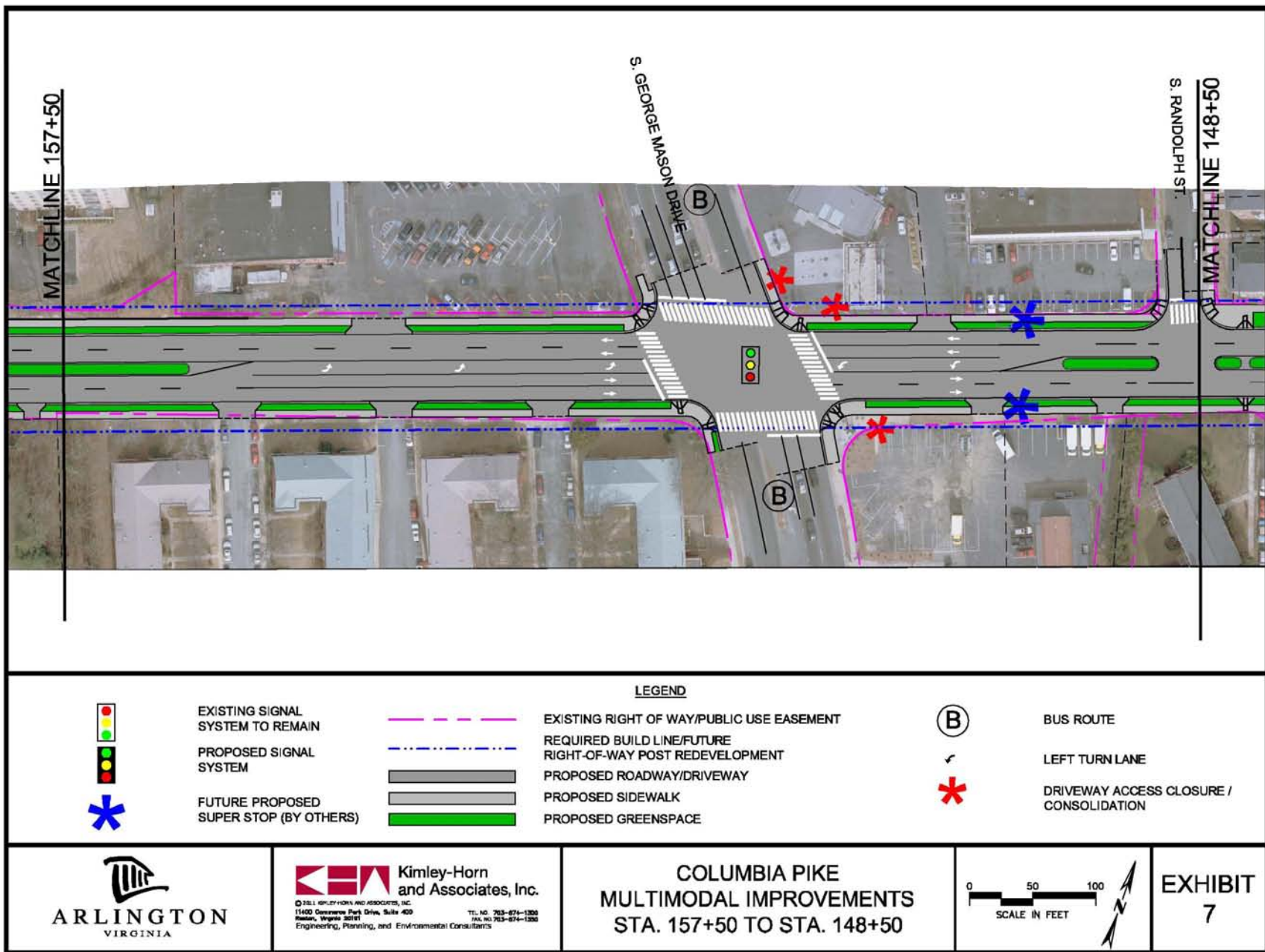
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6**

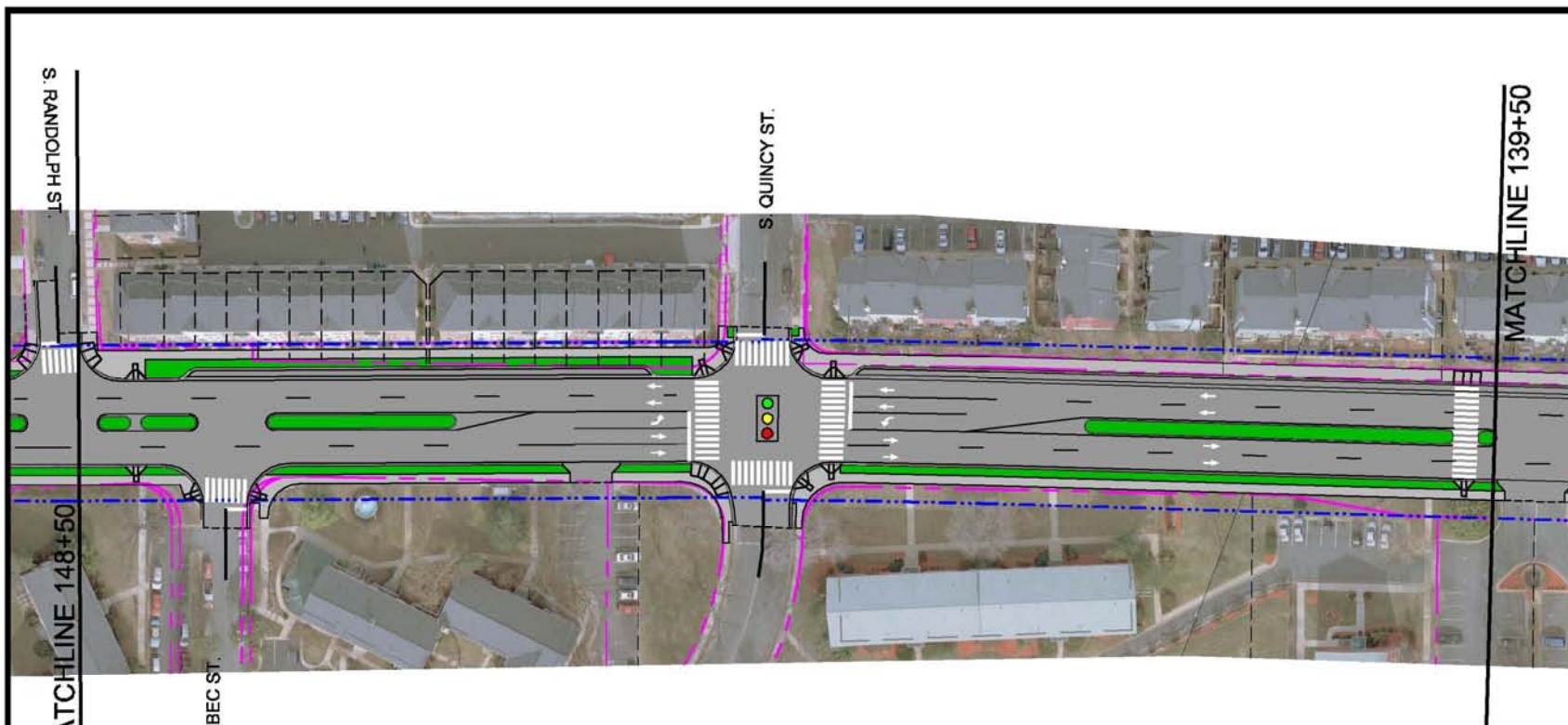
Design Considerations

S. Taylor St. to east of S. Quincy St.



- Wider sidewalks
- Right turn lane eliminated
- Left turn lanes
- Improved intersection grades
- Reconstructed pavement
- Underground utilities
- Minimal property impacts

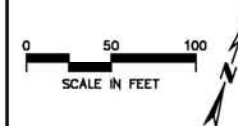




Segment:	East of S. Taylor St. to east of S. Quincy St.
56-ft cross section:	✓ Achieved
Between curbs:	Medians, pedestrian refuges, EB right turn eliminated at S. Glebe Road, new left turn lanes at Quincy, full access maintained for side streets and most driveways
Behind curbs:	Sidewalks, landscaping, on street parking, elimination of 3 driveways, utilities underground



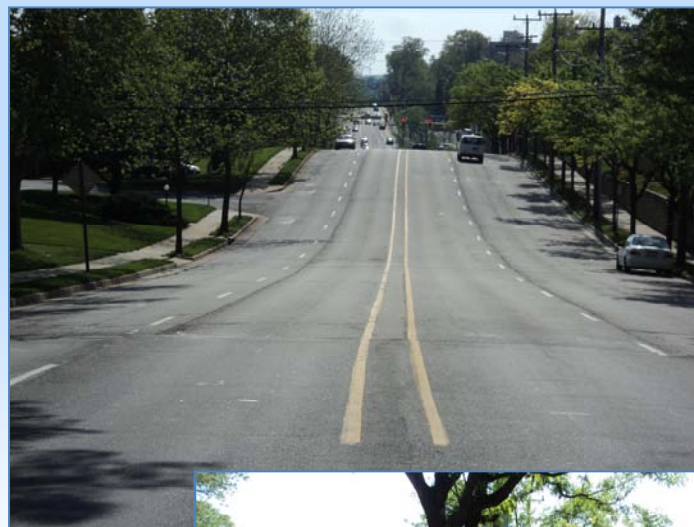
**COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 148+50 TO STA. 139+50**



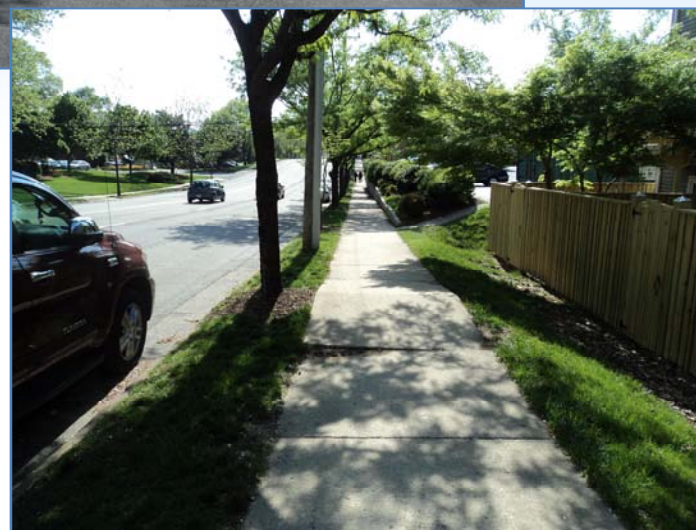
**EXHIBIT
8**

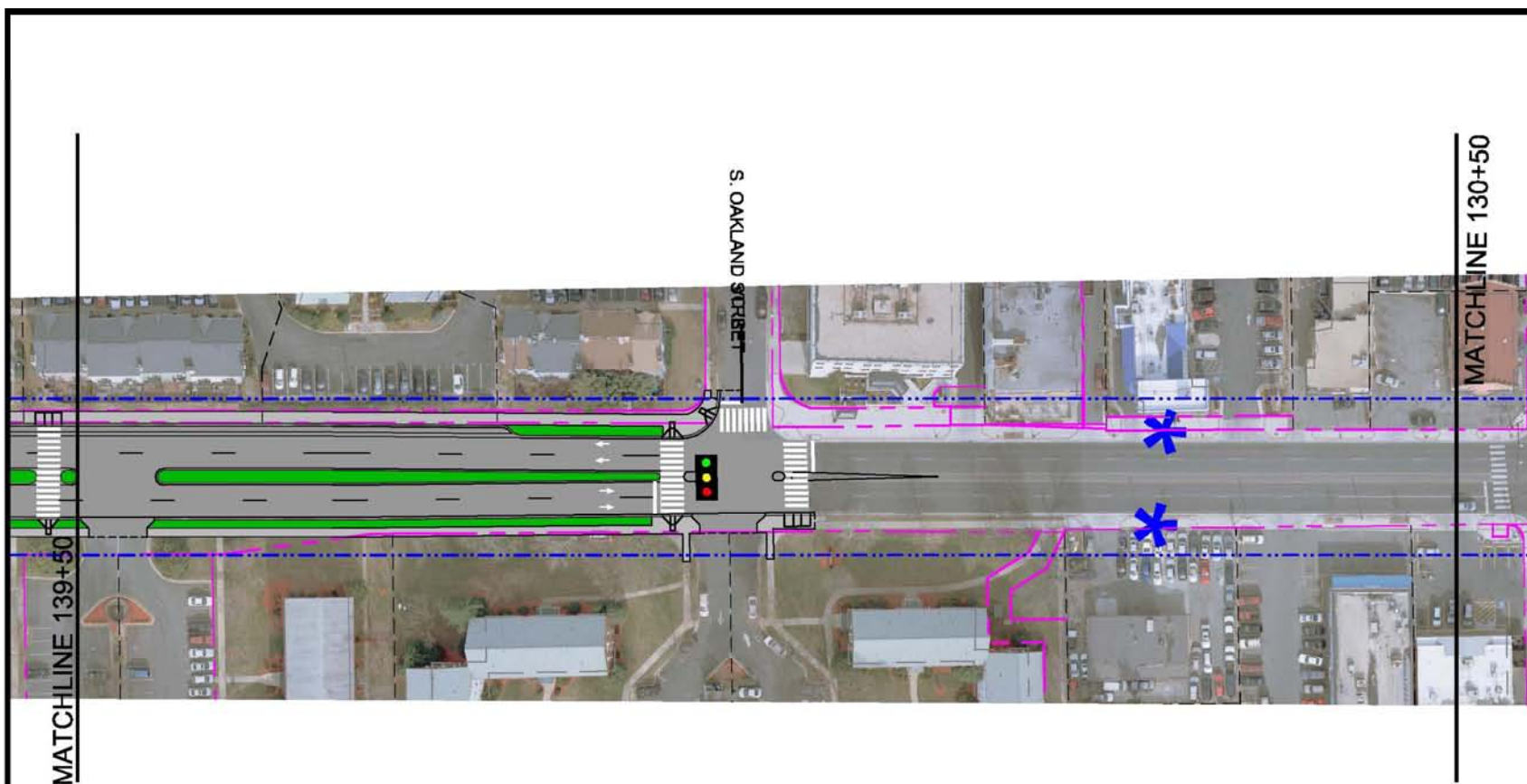
Design Considerations

East of S. Quincy St. to east of S. Glebe Rd.



- Wider sidewalks
- Medians
- New traffic signal at S. Oakland St.
- Reconstructed pavement
- Underground utilities
- Minimal property impacts

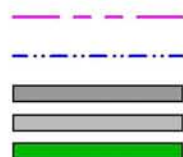




EXISTING SIGNAL
SYSTEM TO REMAIN

PROPOSED SIGNAL
SYSTEM

FUTURE PROPOSED
SUPER STOP (BY OTHERS)



LEGEND

EXISTING RIGHT OF WAY/PUBLIC USE EASEMENT

REQUIRED BUILD LINE/FUTURE
RIGHT-OF-WAY POST REDEVELOPMENT

PROPOSED ROADWAY/DRIVEWAY

PROPOSED SIDEWALK

PROPOSED GREENSPACE



BUS ROUTE

LEFT TURN LANE

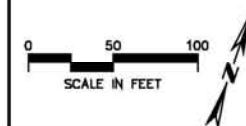
DRIVEWAY ACCESS CLOSURE /
CONSOLIDATION



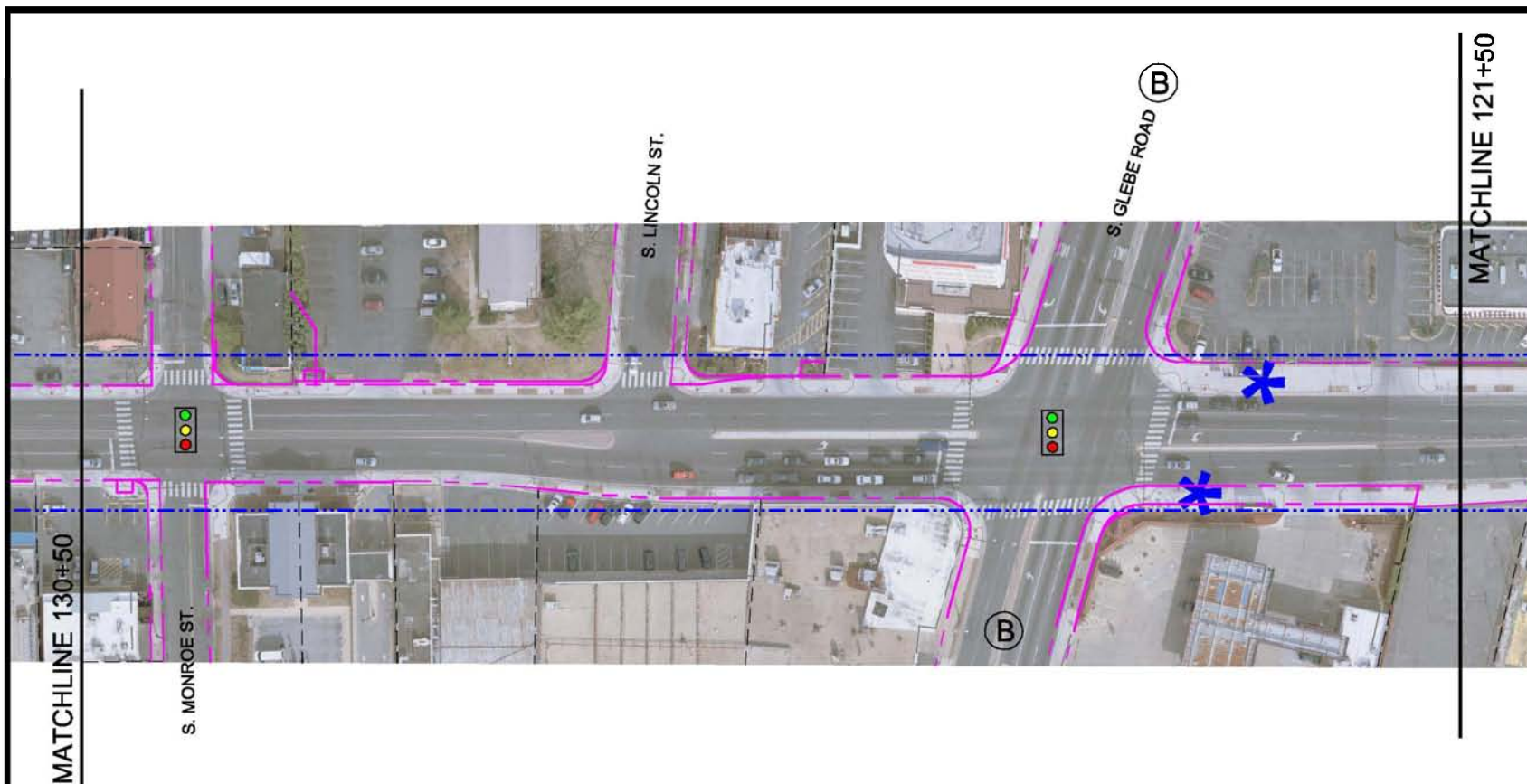
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COLUMBIA PIKE MULTIMODAL IMPROVEMENTS STA. 139+50 TO STA. 130+50



**EXHIBIT
9**



Segment: East S. Quincy St. to east of S. Glebe Road

56-ft cross section: Achieved to west of Oakland

Between curbs: Medians, pedestrian refuges, new traffic signal at S. Oakland St., access maintained for driveways

Behind curbs: Sidewalks, landscaping, on street parking



COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 130+50 TO STA. 121+50

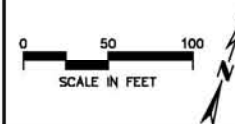


EXHIBIT
10

Design Considerations *East of S. Glebe Rd. to S. Cleveland St.*

- Wider sidewalks
- Medians
- Left turn protected phases
- Bulb outs on S. Edgewood St.
- Pavement reconstructed
- Minimal property impacts

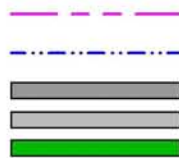




EXISTING SIGNAL
SYSTEM TO REMAIN

PROPOSED SIGNAL
SYSTEM

FUTURE PROPOSED
SUPER STOP (BY OTHERS)



EXISTING RIGHT OF WAY/PUBLIC USE EASEMENT

REQUIRED BUILD LINE/FUTURE
RIGHT-OF-WAY POST REDEVELOPMENT

PROPOSED ROADWAY/DRIVEWAY

PROPOSED SIDEWALK

PROPOSED GREENSPACE

LEGEND



BUS ROUTE

LEFT TURN LANE

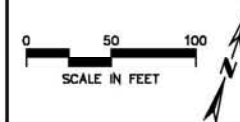
DRIVEWAY ACCESS CLOSURE /
CONSOLIDATION



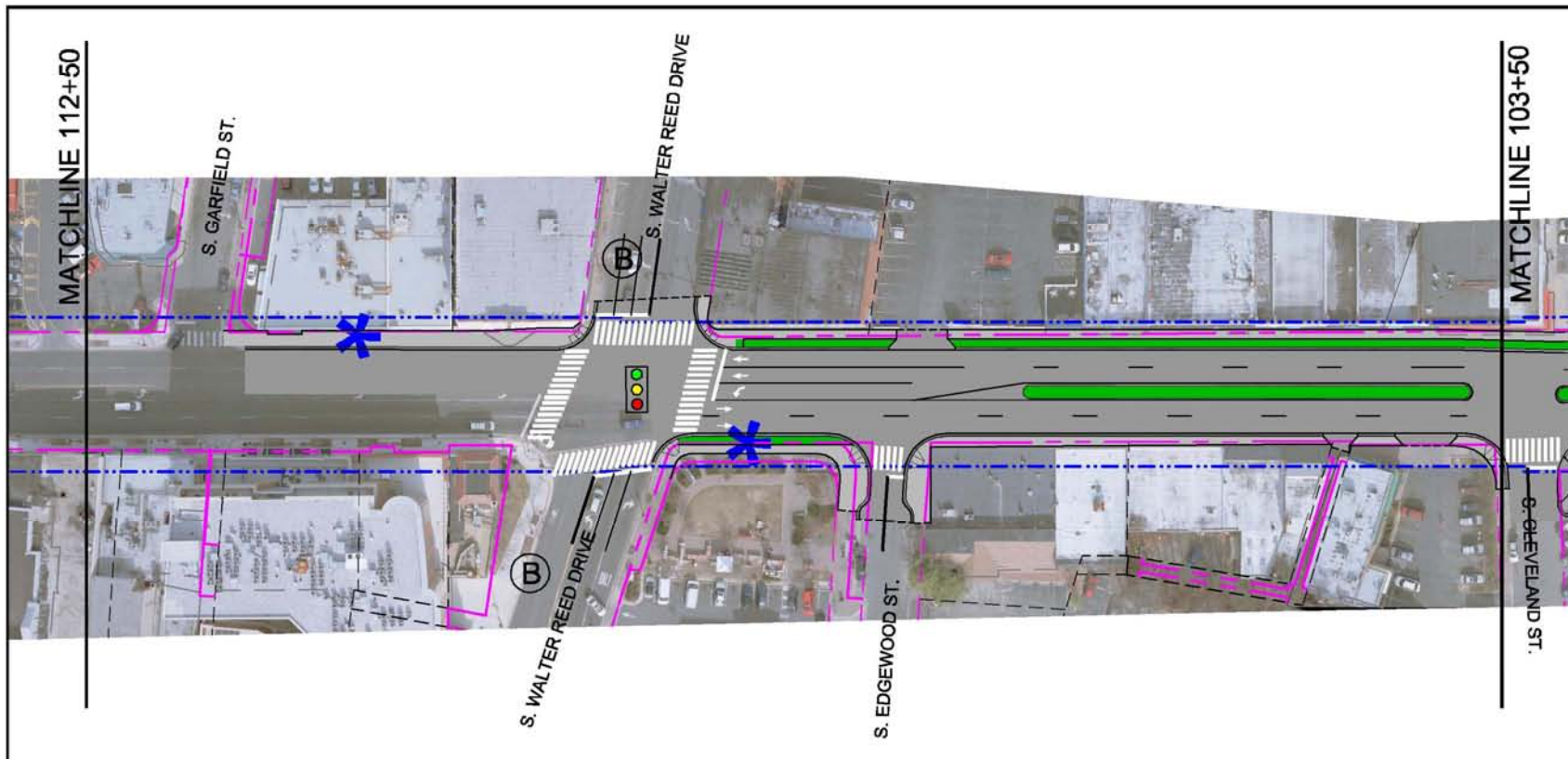
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**COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 121+50 TO STA. 112+50**



**EXHIBIT
11**



Segment: East of S. Glebe Rd. to S. Cleveland St.

56-ft cross section: Achieved east of Garfield

Between curbs: Median in Town Center area, full access maintained for most driveways, left turn phase for all approaches at Walter Reed/Col Pike intersection, bulb outs on Edgewood St.

Behind curbs: Wider sidewalks, landscaping



COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 112+50 TO STA. 103+50

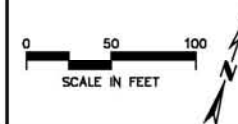


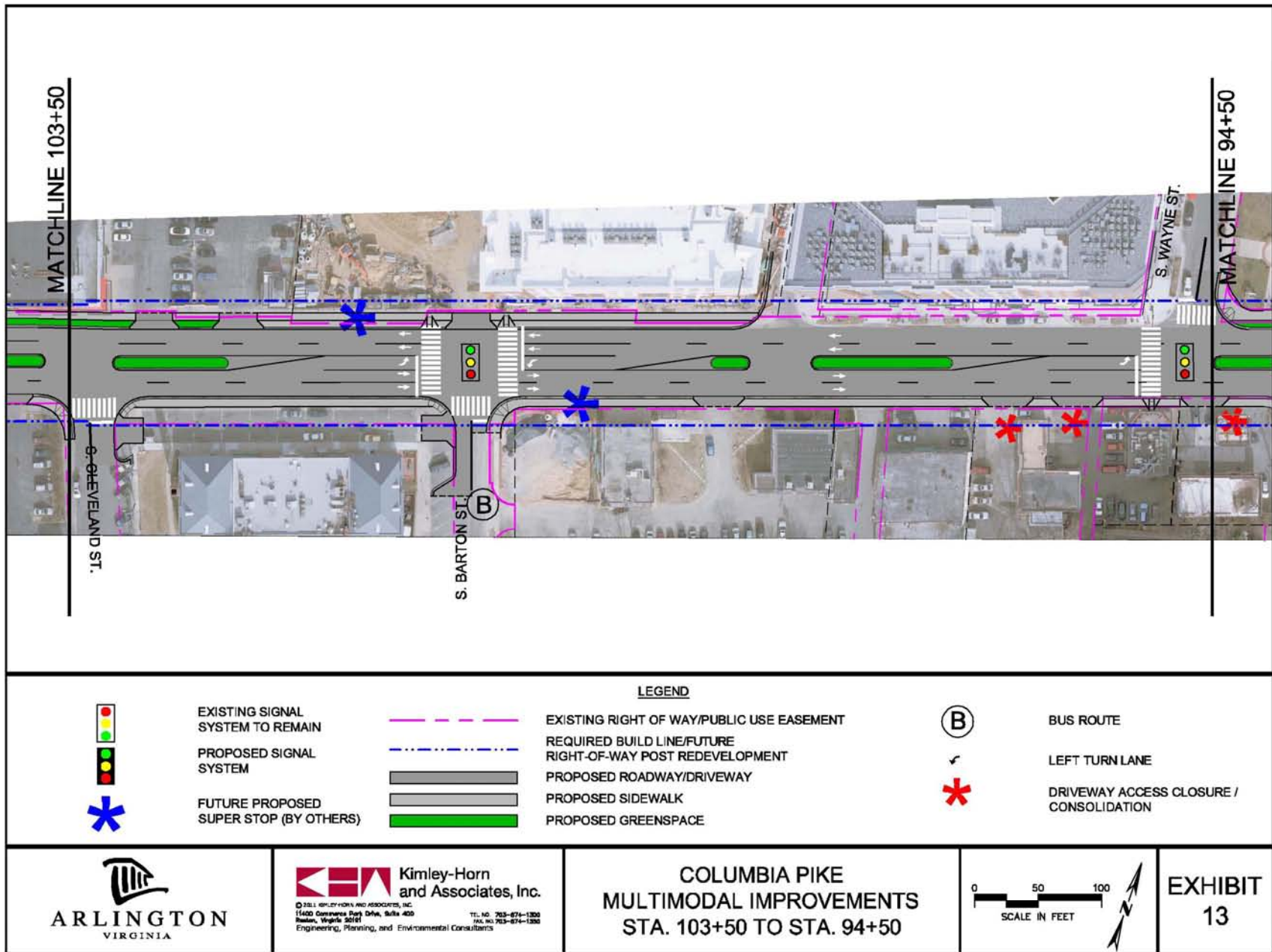
EXHIBIT
12

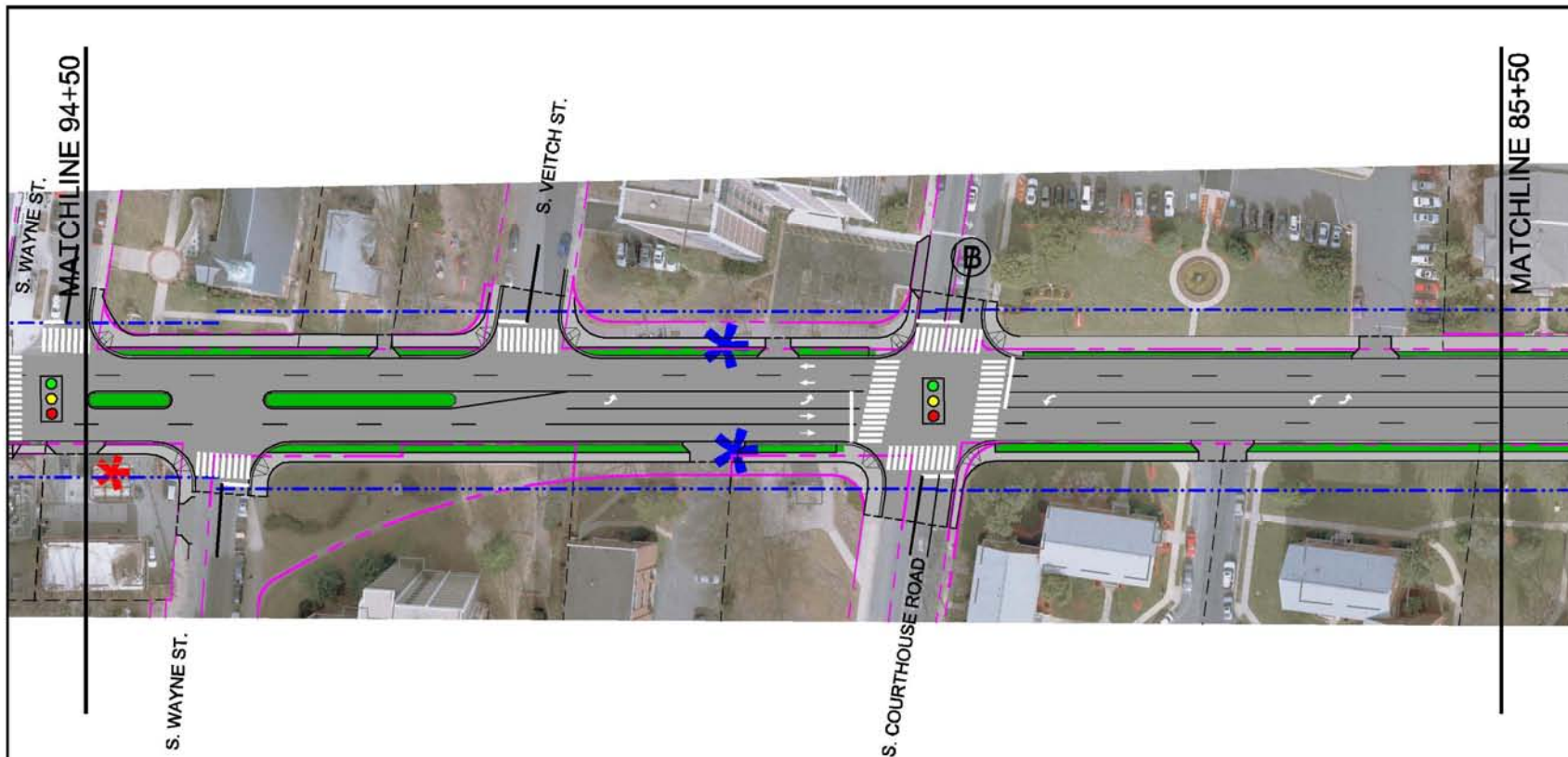
Design Considerations *S. Cleveland St. to S. Courthouse Rd.*



- Wider sidewalks
- Medians / two-way left turn lanes
- Pavement reconstructed
- Left turn protected phases
- Bulb outs on S. Edgewood St.
- Pavement reconstructed
- Minimal property impacts



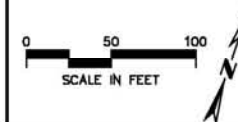




Segment:	S. Cleveland St. to east of S. Courthouse Road
56-ft cross section:	✓ Achieved
Between curbs:	Medians, pedestrian refuges, full access maintained for most driveways, consolidation of some driveways
Behind curbs:	Sidewalks, landscaping, 10-ft wide sidewalk (north side, S. Courthouse Rd. to S. Quinn St.)



**COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 94+50 TO STA. 85+50**

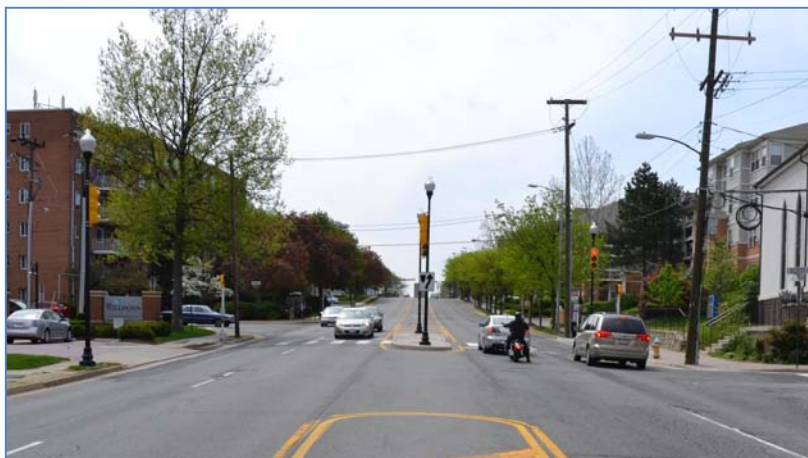


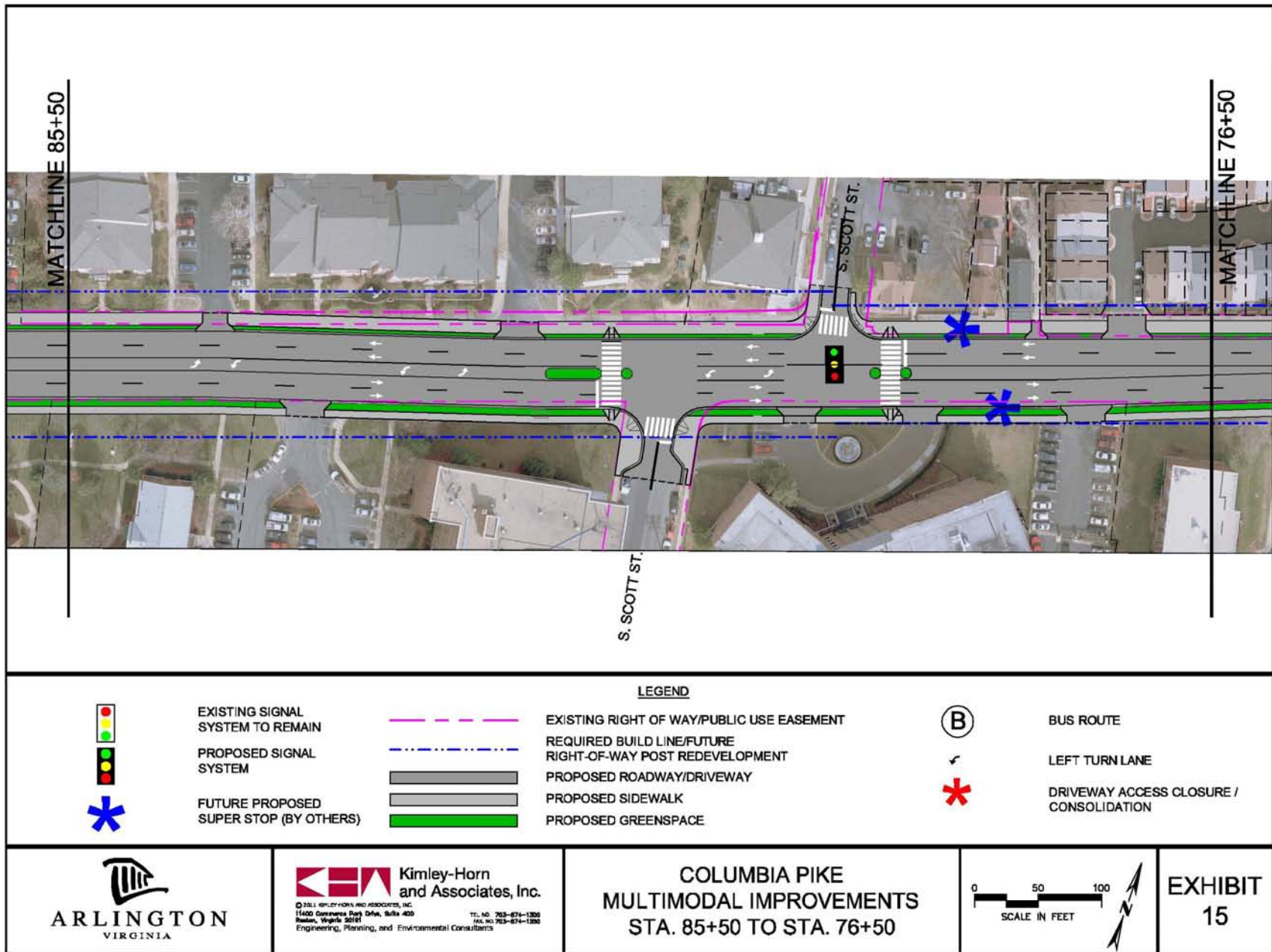
**EXHIBIT
14**

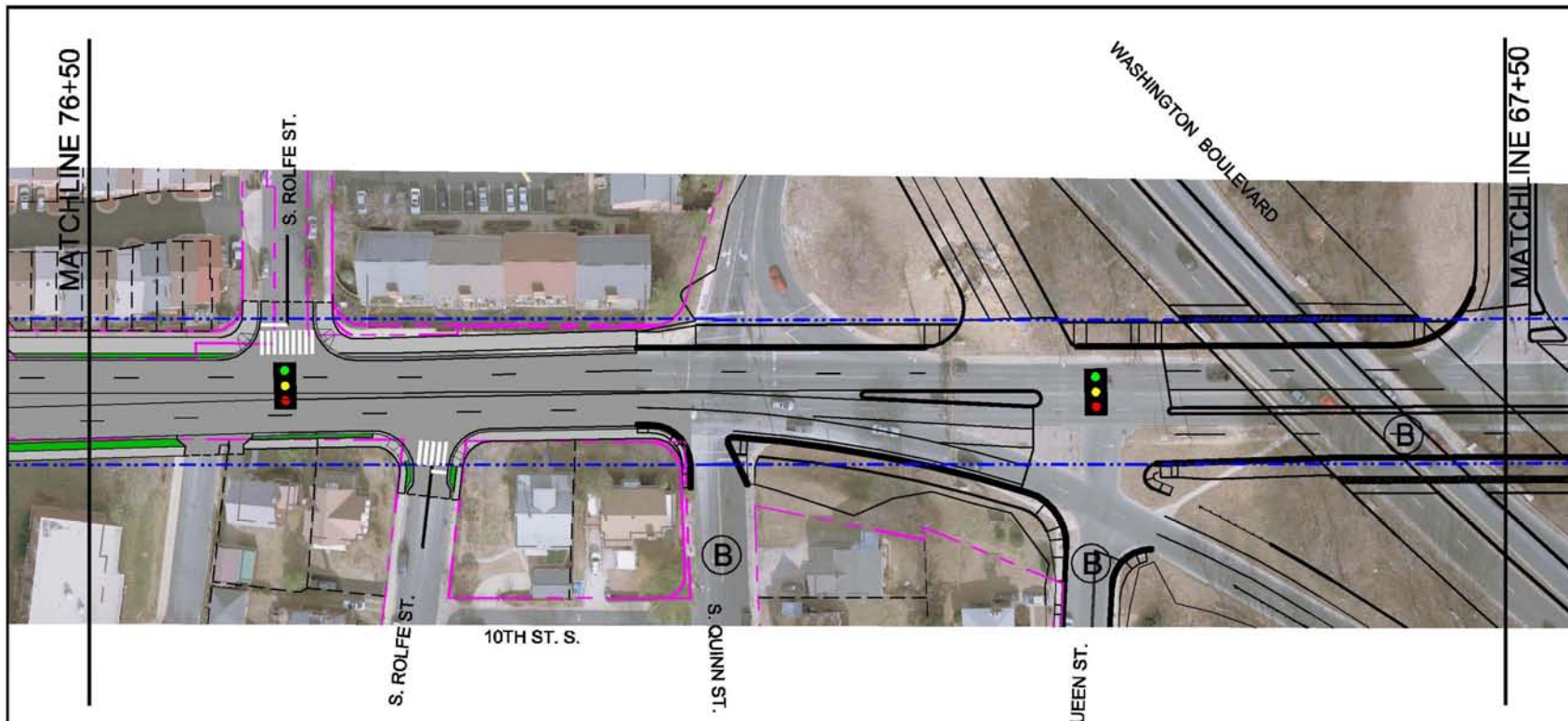
Design Considerations

S. Courthouse Rd. to Washington Blvd. Interchange

- Wider sidewalks
- Medians / two-way left turn lanes
- New signal at S. Scott St.
- Pavement reconstructed
- Utilities underground
- Minimal property impacts







Segment:	East of S. Courthouse Road to Washington Blvd interchange
56-ft cross section:	Achieved to S. Rolfe St.
Between curbs:	Two-way left turn lanes, short medians, pedestrian refuges, full access for existing driveways, new signals at Rolfe and Queen, new WB left turn lane at Queen
Behind curbs:	Wider sidewalks, landscaping, 10-ft wide sidewalk (north side, Courthouse to Quinn), utilities underground



COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 76+50 TO STA. 67+50

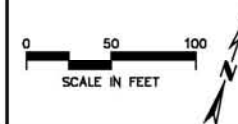


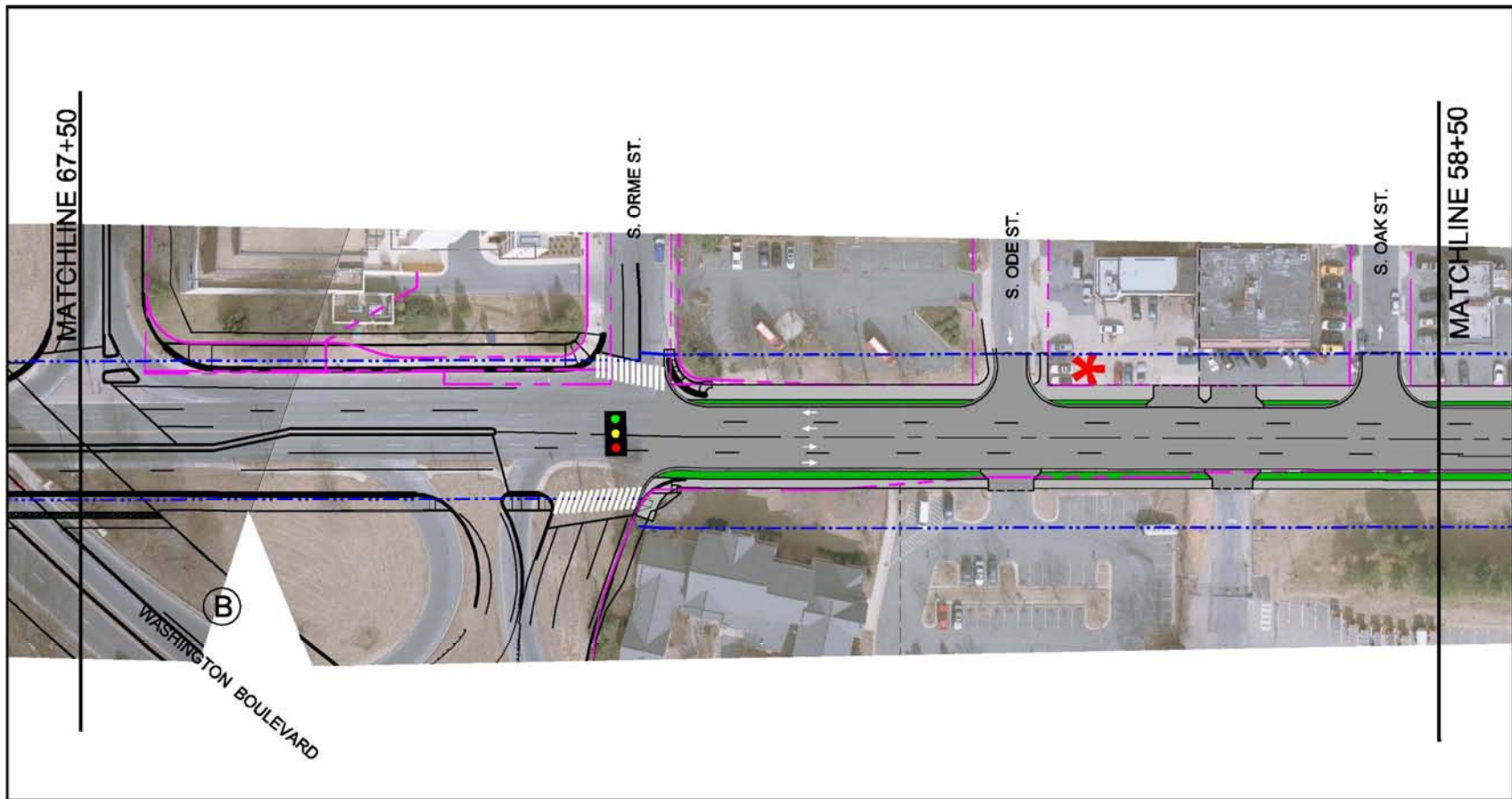
EXHIBIT
16

Design Considerations

Washington Blvd. Interchange to AF Memorial

- Wider sidewalks
- New signal at S. Orme St.
- Four lane section, Orme St. to USAF Memorial
- Pavement reconstructed
- Utilities underground
- Minimal property impacts





LEGEND			
	EXISTING SIGNAL SYSTEM TO REMAIN		EXISTING RIGHT OF WAY/PUBLIC USE EASEMENT
	PROPOSED SIGNAL SYSTEM		REQUIRED BUILD LINE/FUTURE RIGHT-OF-WAY POST REDEVELOPMENT
	FUTURE PROPOSED SUPER STOP (BY OTHERS)		PROPOSED ROADWAY/DRIVEWAY
			PROPOSED SIDEWALK
			PROPOSED GREENSPACE
	BUS ROUTE		LEFT TURN LANE
	DRIVEWAY ACCESS CLOSURE / CONSOLIDATION		



COLUMBIA PIKE MULTIMODAL IMPROVEMENTS STA. 67+50 TO STA. 58+50

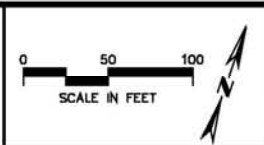
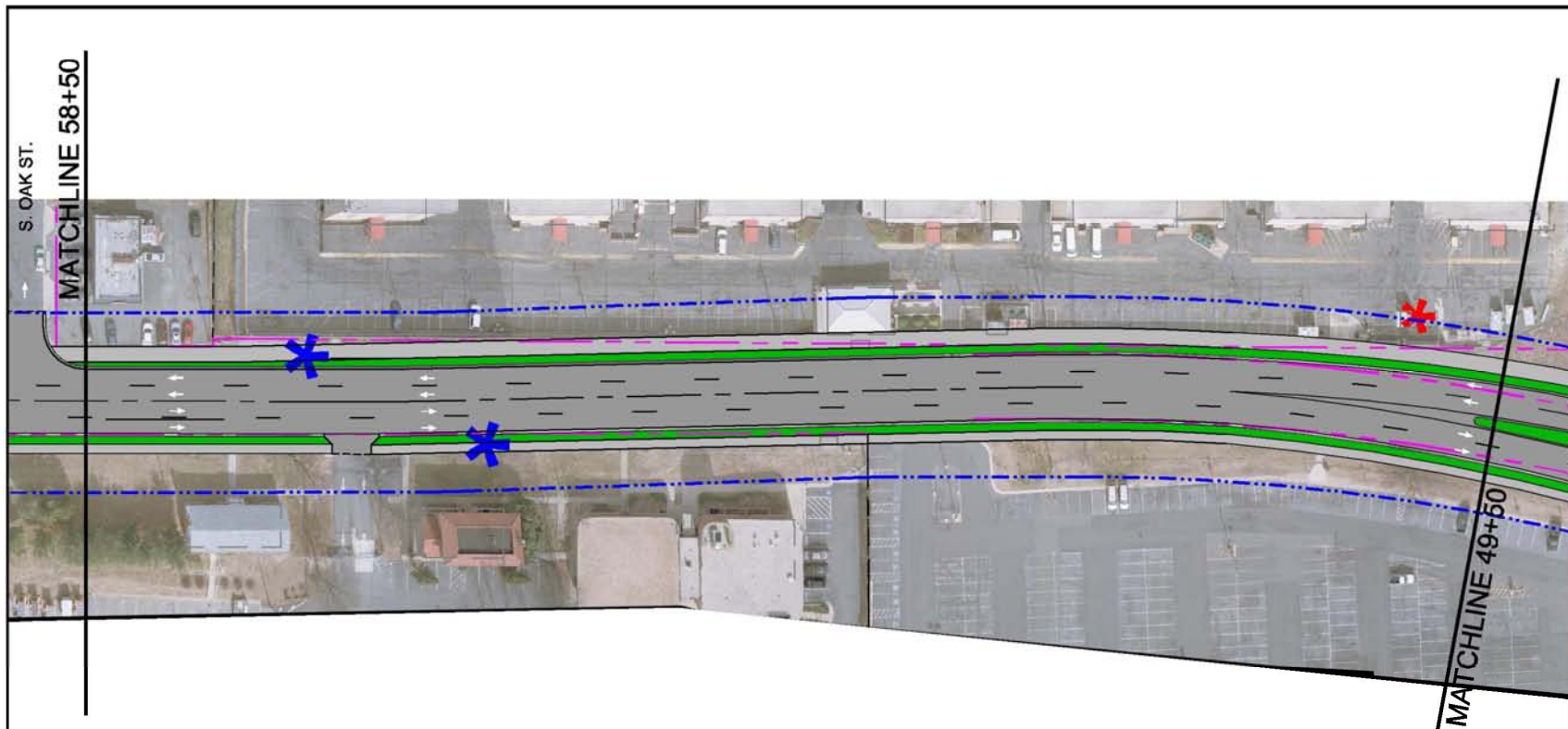


EXHIBIT
17



Segment: Washington Blvd interchange to west of Air Force Memorial

56-ft cross section: Not achieved – 4-lane cross section to mitigate property impacts

Between curbs: New signal at Orme, EB left turn lanes at Orme Street, full access maintained for side streets and driveways

Behind curbs: Wider sidewalk on south side, limited/no landscaping, 10-ft wide sidewalk on north side



COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 58+50 TO STA. 49+50

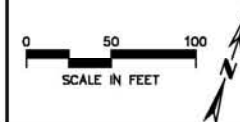
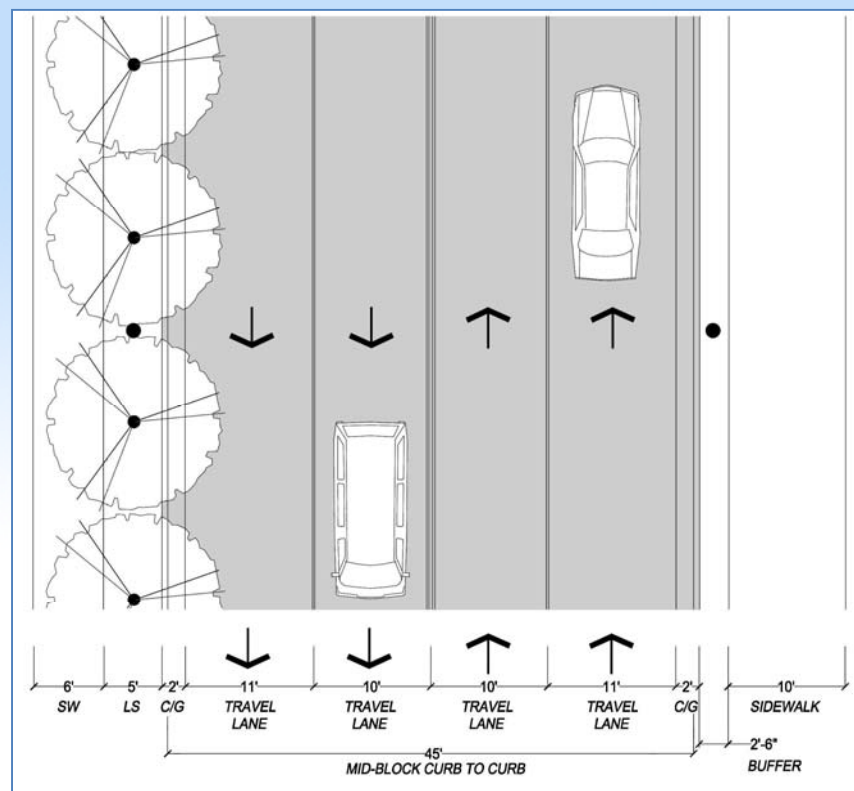
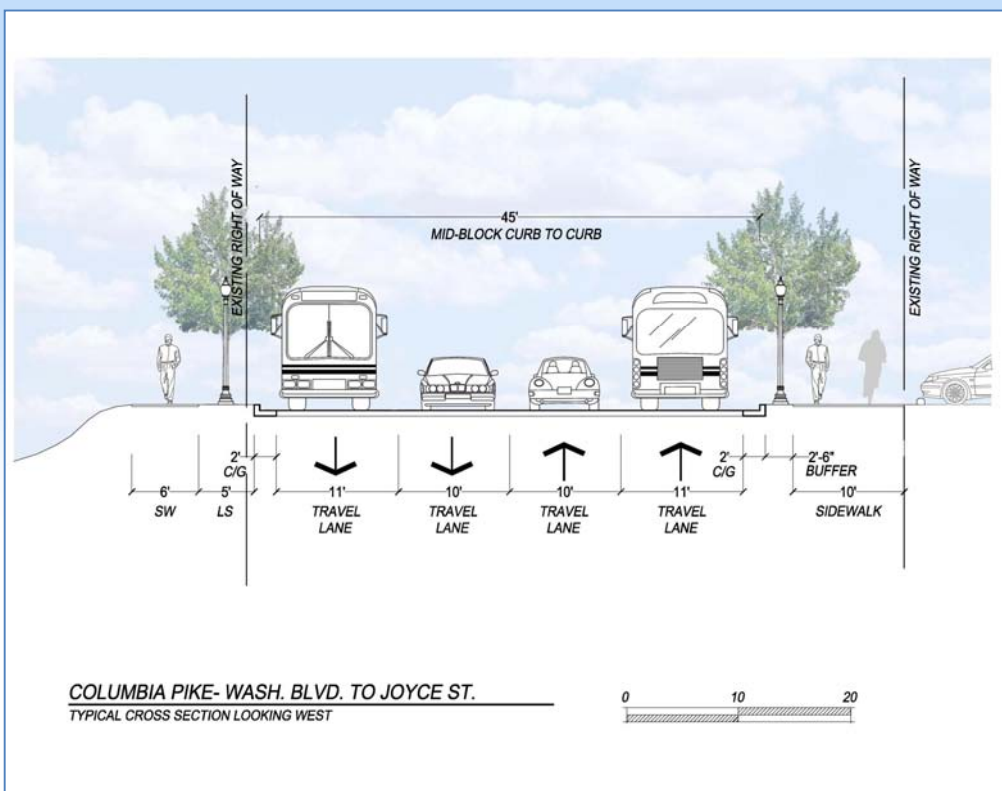


EXHIBIT
18

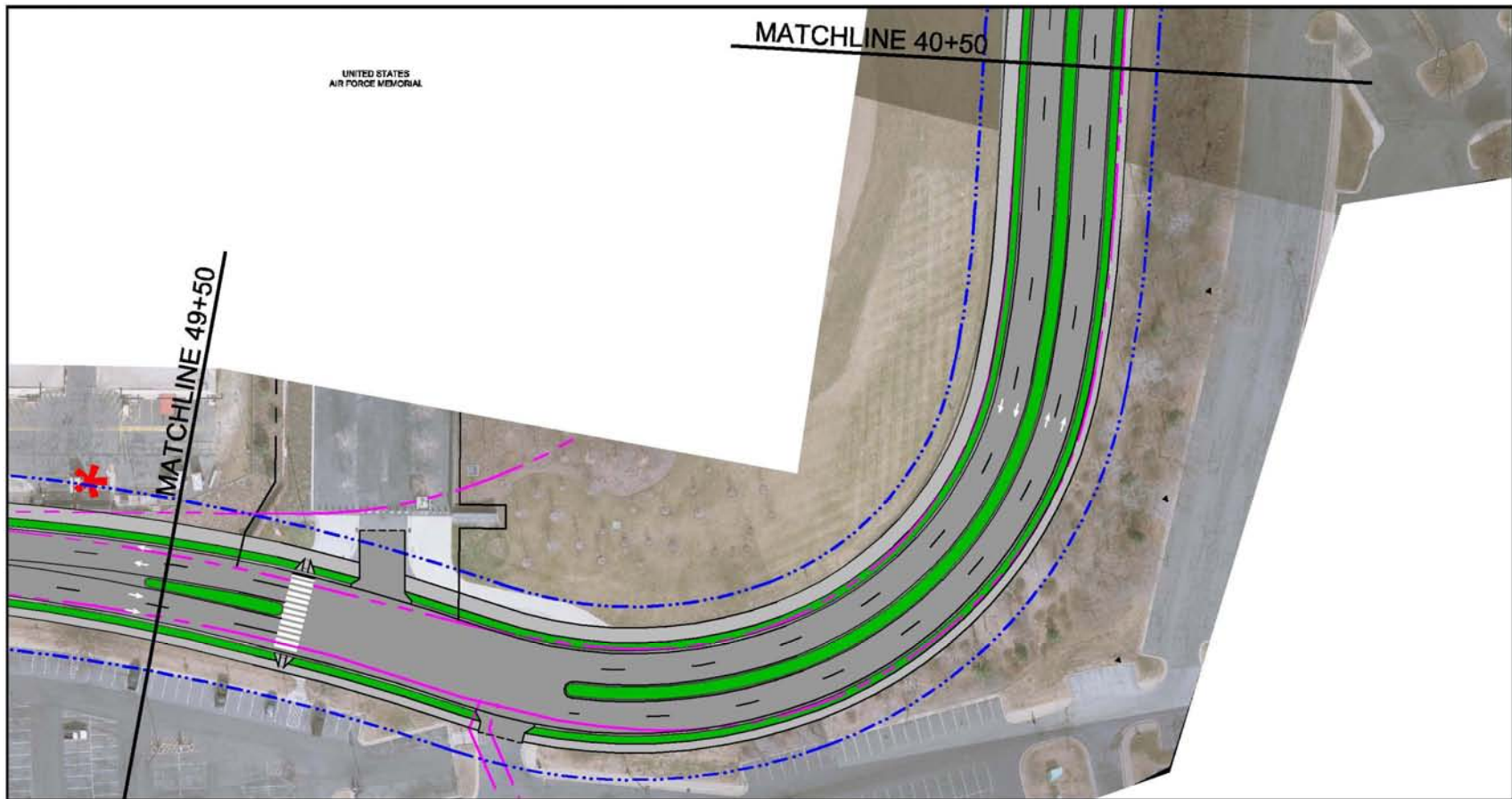
Design Consideration – Interim 4-lane section



Design Considerations *AF Memorial to S. Joyce St.*

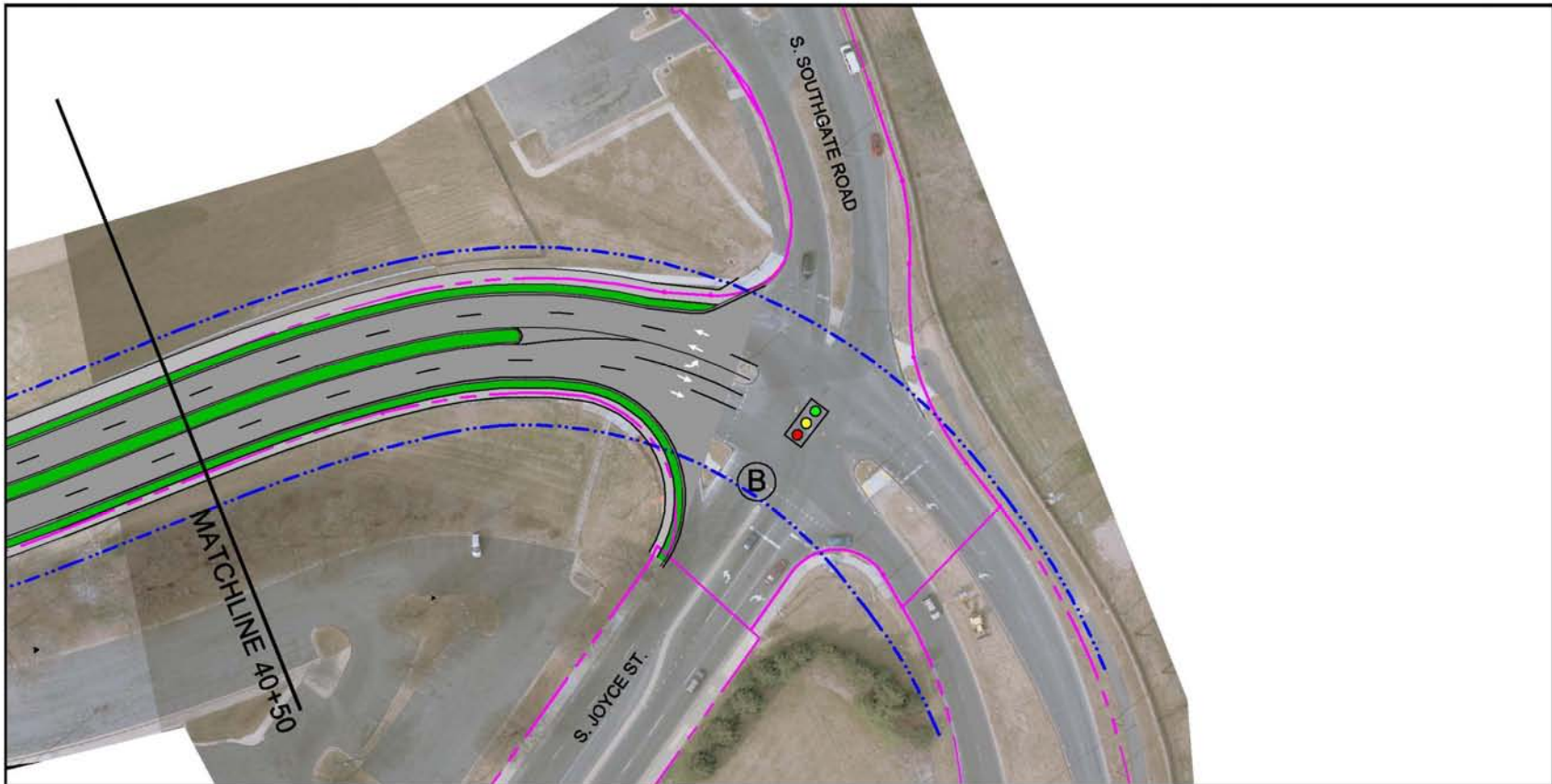
- 6-ft sidewalk on south side
- 10-ft wide sidewalk on north side
- Pavement reconstructed
- Utilities underground
- Minimal property impacts
- Possible realignment of Columbia Pike





LEGEND			
	EXISTING SIGNAL SYSTEM TO REMAIN		EXISTING RIGHT OF WAY/PUBLIC USE EASEMENT
	PROPOSED SIGNAL SYSTEM		REQUIRED BUILD LINE/FUTURE RIGHT-OF-WAY POST REDEVELOPMENT
	FUTURE PROPOSED SUPER STOP (BY OTHERS)		PROPOSED ROADWAY/DRIVEWAY
			PROPOSED SIDEWALK
			PROPOSED GREENSPACE
			BUS ROUTE
			LEFT TURN LANE
			DRIVEWAY ACCESS CLOSURE / CONSOLIDATION

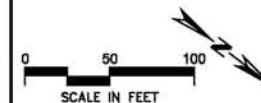
<p>ARLINGTON VIRGINIA</p>	<p>Kimley-Horn and Associates, Inc. <small>© 2011 KIMLEY-HORN AND ASSOCIATES, INC. 11620 Cornerstone Ridge Drive, Suite 400 Reston, Virginia 20191 TEL NO. 703-676-1300 FAX NO. 703-676-1300 Engineering, Planning, and Environmental Consultants</small></p>	<p>COLUMBIA PIKE MULTIMODAL IMPROVEMENTS STA. 49+50 TO STA. 40+50</p>	<p>0 50 100 SCALE IN FEET</p>	<p>EXHIBIT 19</p>
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Segment:	West of Air Force Memorial to S. Joyce St./S. Southgate Road
56-ft cross section:	✓ Achieved
Between curbs:	Wider median to match existing, pedestrian refuge, access maintained to driveways
Behind curbs:	Sidewalks, landscaping, 10-ft wide sidewalk (north side, Orme to Joyce)



**COLUMBIA PIKE
MULTIMODAL IMPROVEMENTS
STA. 40+50 TO STA. 31+50**



**EXHIBIT
20**

Summary of Multimodal Street Improvements

- New left turn lanes (4 intersections)
- Removal of right turn lanes (2 intersections)
- New traffic signals (2 + 2 VDOT)
- New medians in 9 locations
- New pavement, concrete curbs and gutters, improved drainage
- Utility relocations
- Improved bus stops and shelters
- Elimination of some driveway entrances
- Improved driveway aprons – narrower widths, integrated with sidewalk
- Wider sidewalks, improved transit access
- Street trees and benches
- 6-ft to 10-ft wide sidewalks
- Bike racks
- Bike boulevards on parallel streets



Community Input Process

- Goal: inform/seek feedback
- Website: www.pikemultimodal.com
- CPIT meetings
- Public information meeting
- “Progress on the Pike” e-newsletter on Arlington website
- Presentations
 - Transportation Commission
 - County Board



Recommendations / Next Steps

- Move into preliminary engineering for segments of the Pike
- Continue to coordinate with stakeholders and public:
 - Public meeting
 - Continued CPIT meetings



Agenda

- Introductions / purpose of meeting
- Multimodal project update:
 - *Recap*
 - *Street space design*
 - *Next Steps*
- Pike Transit Initiative update
- Summary

COLUMBIA PIKE MULTIMODAL STREET IMPROVEMENTS



Columbia Pike Implementation Team (CPIT) Meeting

October 25, 2011

