

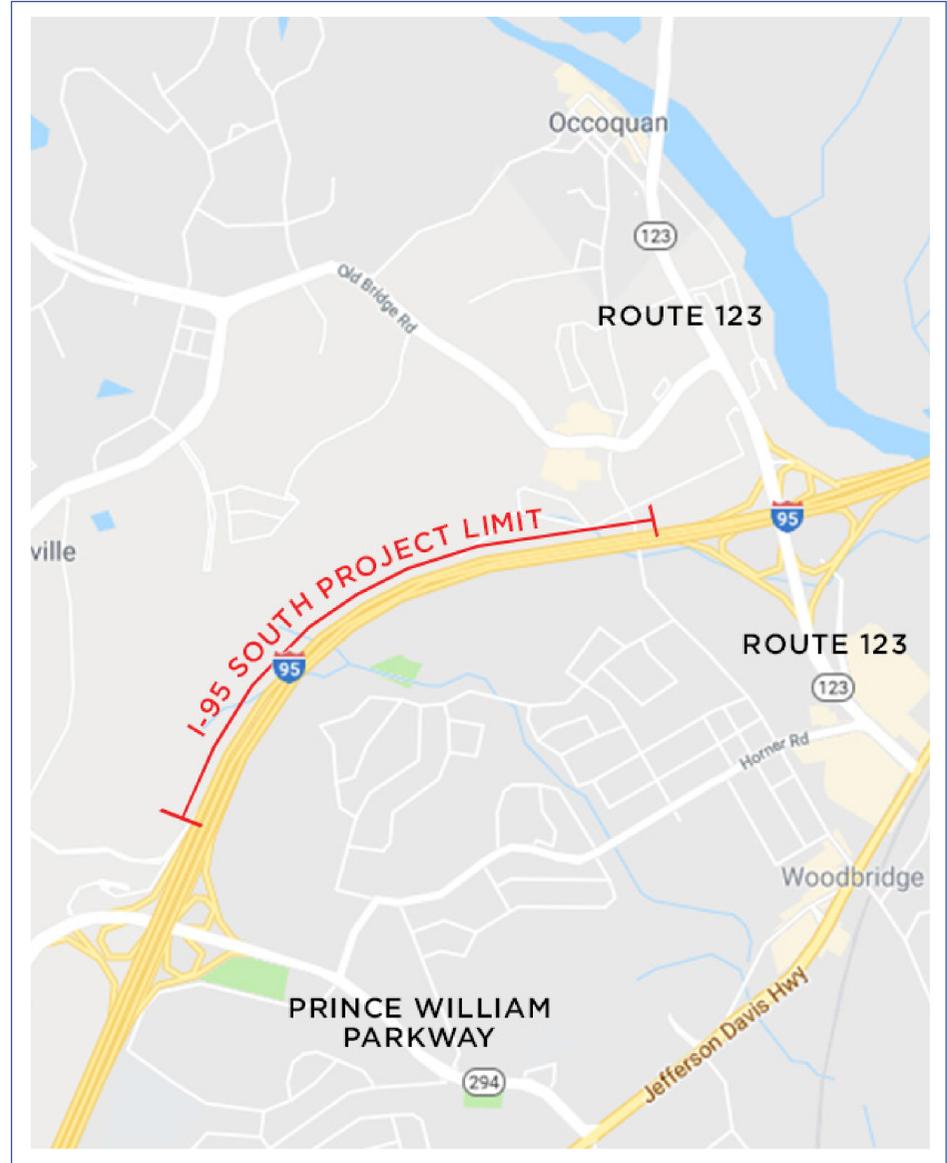
I-95 Southbound Auxiliary Lane Project

Project Description

- Construct a 1.5-mile auxiliary lane on I-95 South between Route 123 (Gordon Boulevard) and Prince William Parkway (Route 294)

Project Benefits

- Alleviate pinch points and mitigate congestion in heavily-congested area of I-95
- Provide safer weaving movements between the on-ramp and off-ramp
- Noise analysis to identify necessary noise mitigation
- All improvements within existing VDOT right of way



Funded by 95 Express Lanes Concession Fee, State, and Federal Sources

Key Milestone	Timing
Preliminary Engineering Began	Mid 2019
Design Public Hearing <i>Old Bridge Elementary School</i> <i>3501 Old Bridge Road, Woodbridge</i>	Dec. 4, 2019 6:30-8:30 p.m. (Snow date: Dec. 11)
Construction Begins	Early 2021
Construction Complete	Late 2022

UPC: 115999 State Project # 0095-076-276, P101
 Project Manager: William "Calvin" Britt, P.E., 703-259-2961, Calvin.Britt@vdot.virginia.gov

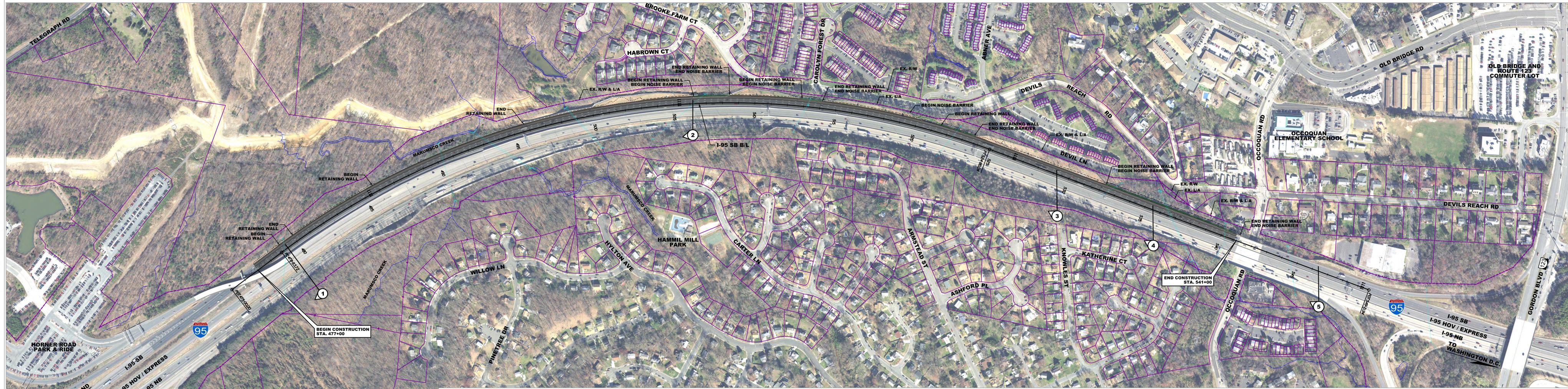


EXISTING CONDITION



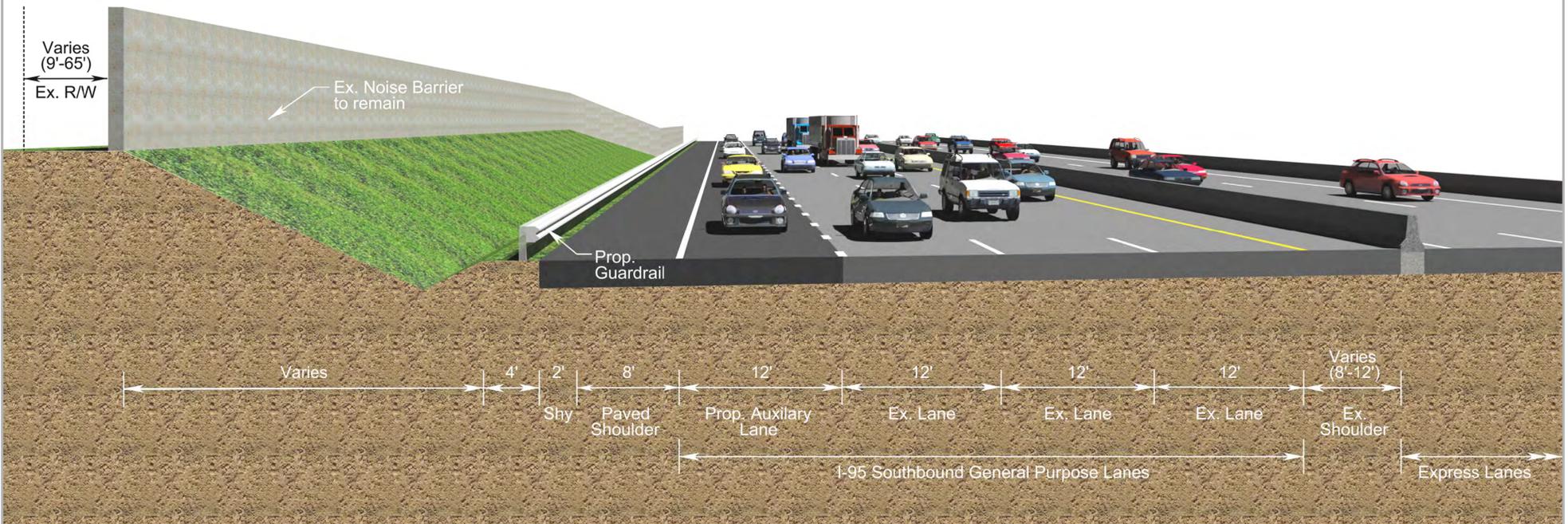
PROPOSED AUXILIARY LANE



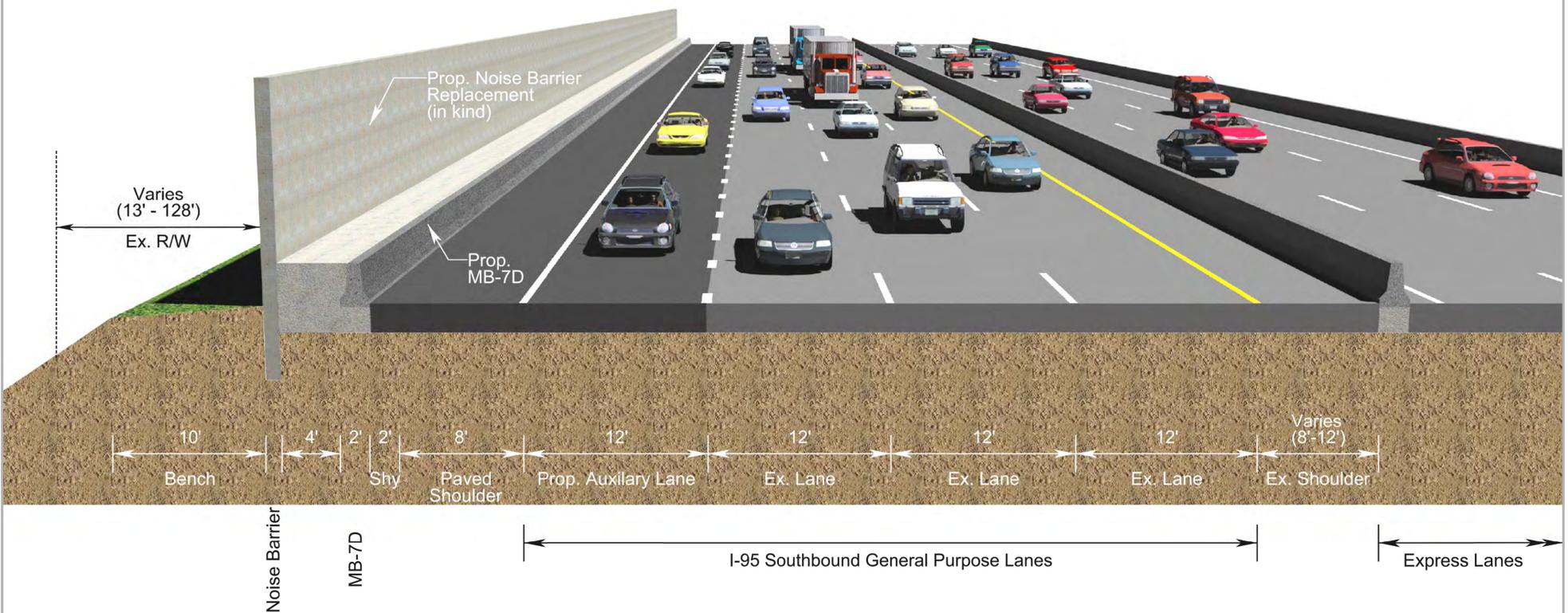


ALL PICTURES LOOKING SOUTH

<p>Contact Information</p> <p>W. Calvin Britt, PE Project Manager NOVA District Location & Design Virginia Department of Transportation 4975 Alliance Drive Fairfax, VA 22033</p> <p>Comments may also be sent to: Calvin.Britt@vdot.virginia.gov</p> <p>Disclaimer</p> <p><small>These plans are unperfected and unapproved and are not to be used for any type of construction or the acquisition of right of way. Additional assessments for utility relocations and drainage may be required beyond the proposed right-of-way.</small></p> <p><small>*Noise barrier evaluation is preliminary and a more detailed review will be completed during the final design stage. As such, noise barriers may not be found feasible and nonfeasible during the final design noise analysis. Conversely, noise barriers that were not considered feasible and nonfeasible may meet the established criteria and be recommended for construction.</small></p>	<p>Legend</p> <ul style="list-style-type: none"> PROPOSED LANE / SHOULDER PROPOSED MILL AND OVERLAY CUT LIMITS FILL LIMITS POTENTIAL NOISE BARRIER UNDER CONSIDERATION EXISTING NOISE BARRIER TO REMAIN OR BE REPLACED EXISTING WETLAND / STREAM EXISTING DRAINAGE STRUCTURE 	<p>Project Location</p> <p>North Arrow & Scale</p>
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Typical Section with Guardrail Looking North



Typical Section with Median Barrier and Noise Barrier Replacement Looking North

Traffic Analysis: Operations

- Predicting improved traffic flow for opening year conditions, especially on weekends
- Auxiliary lane is predicted to improve the Level of Service on I-95 between Route 123 and Prince William Parkway
 - LOS E to LOS D during weekdays
 - LOS F to LOS E on weekends
- Auxiliary lane will operationally improve the freeway capacity and flow by approximately 25% over conditions without it



LOS A

LOS B



LOS C

LOS D



LOS E

LOS F

I-95 SB General Purpose Lanes 2022 Opening Year							
Peak Time Period	Without Auxiliary Lane			WITH Auxiliary Lane			Improvement
	LOS	Freeway V/C Ratio	Density (cars/mile/lane)	LOS	Freeway V/C Ratio	Density (cars/mile/lane)	Overall
AM	E	0.89	35.9	D	0.65	26.8	25%
PM	E	0.96	41.4	D	0.72	29.6	
Weekend	F	1.18	*	E	0.88	35.7	

V/C = Volume to Capacity ratio

*Value cannot be computed due to overcapacity conditions

Traffic Analysis: I-95 Safety

- Project area has averaged 55 crashes per year
 - Over last 5 years - 1 crash resulted in a fatality, and 53 crashes resulted in injuries
- Improved acceleration and deceleration provides for safer merging and diverging
- Crashes cause delay and add to congestion in the corridor
- Studies have found a 20% reduction in crashes after auxiliary lane construction
 - Expected to result in 11 fewer crashes per year

