

TO: FHWA
FROM: John Muse
DATE: July 15, 2019

CATEGORICAL EXCLUSION (CE)

Date CE level document approved by VA FHWA Division: March 12, 2018

FHWA Contact: John Simkins
Route: 28 (Centreville Road)
Route Type: Primary
Project Type: Construction
State Project Number: 0028-029-269, C501, P101, R201
Federal Project Number: NHPP-5A01(810)
UPC: 108720

From: Prince William County Line
To: Route 29
County/City: Fairfax County
District / Residency: Northern Virginia District

Project in STIP: Yes No
Project in Long Range Plan: Yes No N/A Project Outside of MPO Area
Next Phase of Funding Available: Yes No

Project Description:

The proposed project would widen Route 28 from four lanes to six lanes within an eight-lane right-of-way. The initial six lanes would be designed to preserve the existing grass median (where feasible) to provide space for the two additional lanes when the roadway is widened to eight lanes in the future. Beginning at the north end at the ramps to and from the Route 29 interchange (just north of the Old Centreville Road/Upperridge Drive intersection), Route 28 would ultimately be widened to eight lanes (four lanes in each direction) to Compton Road. The southbound fourth lane would be a right turn only lane to Compton Road and the remaining southbound three lanes would transition back to the existing two lanes just north of the Bull Run Bridge. The two existing northbound lanes crossing Bull Run Bridge would transition to four lanes approximately 300 feet north of the bridge. This four-lane configuration would continue north to the Route 29 interchange where the outside fourth lane would become the ramp to Route 29.

Based on a preliminary design, additional right-of-way for the widening would be limited to no more than five to ten feet beyond the existing right-of-way, most of which is on the west side. This acquisition would not require the displacement of any existing building or structure. In the section between Machen Road and just south of New Braddock Road, the turf median would be eliminated entirely to accommodate the extra travel and turn lanes. The existing signalized intersections would remain signalized, but would include additional and/or modified turn lanes on both Route 28 and the cross streets. The unsignalized intersections would continue to have access to Route 28 and would remain unsignalized. The existing private residential driveways would also remain. These driveways would need to be modified to accommodate the widened roadway, but no additional right-of-way would be required to accommodate the

modifications. Temporary grading and construction easements would be required to modify the driveways. See Appendix A for the 30 percent design plans.

Due to the close proximity of the Route 28/Compton Road and Compton Road/Ordway Road intersections, the project would include design enhancements to improve traffic operations at these intersections. These would include an additional eastbound lane on Ordway Road that would transition to an additional left turn lane on Compton Road to northbound Route 28.

In addition to the new travel lanes, shared-use pedestrian/bike paths would be provided under the initial six-lane configuration on both sides of Route 28 throughout the entire project limits. The project's limits of disturbance would include additional rights-of-way to construct up to five stormwater management (SWM) basins that would be used to retain runoff from the widened Route 28 and release it at pre-development flow rates or allow it to gradually percolate into the ground. The five possible SWM basins would be sited adjacent to Route 28 on undeveloped properties located at the:

- 1) Southwest corner of the Compton Road intersection;
- 2) East side just south of Bradenton Drive and north of existing residences;
- 3) West side mid-block between Old Mill Road and Compton Road;
- 4) East side mid-block between New Braddock Road and Green Trails Boulevard, north of the Centreville Elementary School property; and
- 5) Northeast corner of New Braddock Road intersection.

The final locations for the SWM basins would be determined during the final design phase when more engineering information is available.

CE Category 23 CFR 771.117: (d)

Description of CE Category: Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g. parking, weaving, turning, climbing). Additional actions that meet the criteria for a CE in the CEQ regulations (40 CFR 1508.4) and paragraph (a) of this section may be designated as CEs only after Administration approval.

USGS Map Attached Yes

Logical Termini and Independent Utility:

Yes

N/A (For Non-highway construction only, explain in comments below)

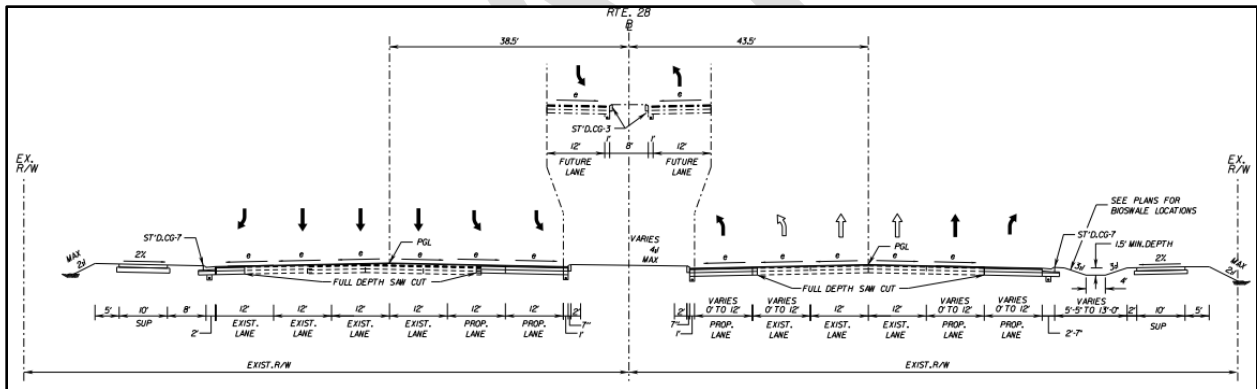
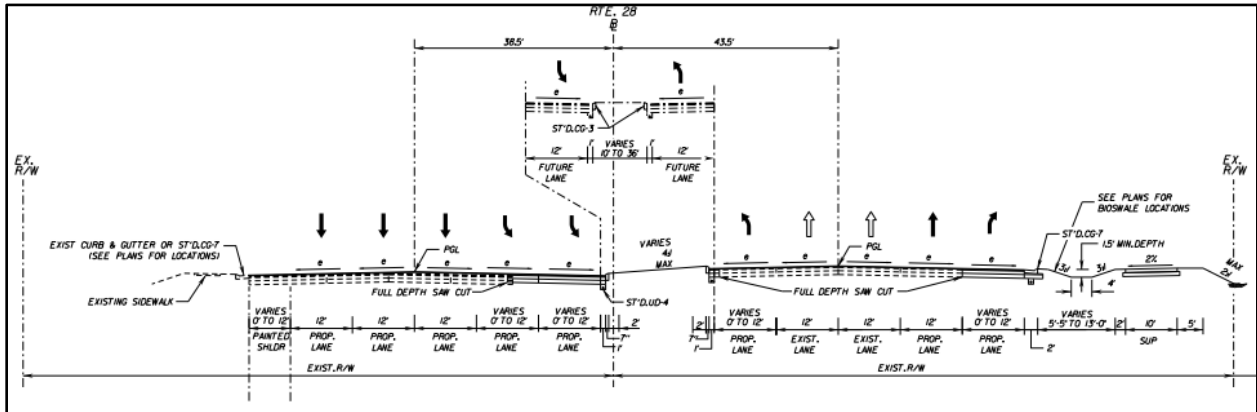
Purpose and Need Statement:

The purpose and need of the project are to address existing congestion along the Route 28 corridor between Bull Run Bridge and Route 29, which includes parallel roadways, such as Old Centreville Road. An analysis of existing traffic conditions indicates that nearly all the signalized intersections along Route 28 within the project limits are operating at poor levels-of-service (LOS). At each intersection, the peak directional traffic movements (northbound in the AM peak period and southbound in the PM peak period) generally experience LOS F conditions, or failing operations. In the opposite direction, the LOS conditions are in the C to D range, or moderate operations. In addition, because through traffic signals (north-south movement) on Route 28 are provided with long green times, nearly all cross-street traffic movements operate at LOS F due to the insufficient allocation of green time for east-west movements.

The Route 28 widening project is a justifiable and reasonable expenditure of funds even if no additional transportation improvements are made. Therefore, the project has independent utility. The project termini are rational end points for environmental review and are logical.

Comments: No additional comments.

Typical Section: The proposed typical sections of the six-lane configuration within an eight-lane right-of-way are provided below.



Structures: Barriers or walls may be erected at two locations to protect certain residences from highway-related noise from Route 28. See Noise section below. Drainage structures would include inlets, manholes, and storm sewers for the length of the project. Underground storage structures for storm water detention may be provided at several locations adjacent to the roadway shoulder, but within the right-of-way. SWM basins would also include storm water control structures. The project does not require bridges or other similar types of structures.

SOCIO-ECONOMIC	PRESENT		IMPACTS	
	YES	NO	YES	NO
Minority/Low Income Populations: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Disproportionate Impacts to Minority/Low Income Populations: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Existing or Planned Public Recreational Facilities: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source:</i> U.S. Census Bureau-American Fact Finder; site visit; project plans				
Community Services: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source:</i> Site visit, Google mapping, project plans <i>Fairfax County Fire and Rescue; Fairfax County Public Schools Transportation Services;</i>				
Consistent with Local Land Use: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
<i>Source:</i> Fairfax County Transportation Plan (Amended September 2015)				
Existing or Planned Bicycle/Pedestrian Facilities: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source:</i> Site visit; project plans				
Comments:				
<u>Environmental Justice</u>				
<p>To determine if the neighborhoods immediately surrounding the project limits contain minority or low-income populations, the demographic characteristics of the county and the Commonwealth were used for comparison. Demographic and income information was obtained from the 2010 U.S. Census.</p> <p>Within Fairfax County, racial minorities comprised a greater proportion of the overall population when compared to the overall Commonwealth: 33.3% versus 28.5%. Within the six census tracts immediately surrounding the project limits, combined racial or ethnic minority groups did not comprise at least 50 percent of the population. However, they did comprise 42.5% of the population within these six census tracts, which was meaningfully greater than the proportion of racial minorities living throughout the county (greater than 10 percentage points). The proportions of racial minorities throughout the six census tracts ranged from a low of 37.6% to a high of 49.4%, and all are meaningfully greater than in the overall county.</p> <p>In 2010, the county had almost half the poverty rate for families, as defined by low-income thresholds established by the U.S. Department of Health and Human Services (HHS), when compared to the overall Commonwealth at 3.4% versus 7.2%. The Census Bureau reported family poverty rates within the six census tracts immediately surrounding the project limits that ranged from a low of 1.6% to a high of 9.3%, or roughly comparable to the county overall. In addition, median household incomes among the six census tracts ranged from a low of \$60,737 to a high of \$120,547, which were well above HHS poverty guidelines in 2010 for a family of four (\$22,050). Therefore, the six surrounding census tracts do not appear to contain low-income populations in accordance with guidance provided by the Council on Environmental Quality in the context of compliance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.</p> <p>Despite the presence of minority populations adjacent to or near the project limits, the project would not result in disproportionately high and adverse human health or environmental effects on these populations because the roadway widening portion of the project would be done largely within the existing Route 28 right-of-way, and therefore, would not require the displacement or relocation of any residence. No minority population would experience reductions of community or emergency services. Although the widened Route 28 would increase the number of residences that experience noise impacts (as defined by the VDOT Noise Policy) from 23 to 62, two noise barriers could be built that would benefit 48 of them, in addition to benefiting many residences that would not experience noise impacts but are still affected by traffic noise from Route 28 (see Noise section).</p>				

Parks and Recreational Facilities

Two public parks, Bull Run Regional Park and Old Centreville Road Park, are in proximity to Route 28 within the project limits. Bull Run Regional Park includes the Bull Run-Occoquan Trail. There are no other existing or planned parks or recreational resources adjacent to the roadway. The project does not require right-of-way from these parks, nor would it affect their public access. The current access point to Bull Run Regional Park is located just north of Bull Run Bridge along the southbound lanes. Public access to Bull Run Regional Park and the Bull Run-Occoquan trail may need to be relocated or adjusted at some point during construction but access will be maintained at all times throughout construction. The potential impacts to Bull Run Regional Park are not significant.

Community Services

A public elementary school (Centreville Elementary School) and a private preschool (Montessori Children's Center) are located adjacent to Route 28 within the project limits. Access to either school would not be directly affected during and after construction. No additional right-of-way would be needed from the elementary school property. However, at the preschool, temporary construction easements would be needed immediately west of the right-of-way, which may affect the preschool's fencing and storm water pond. In addition, a new utility easement may traverse through the preschool's property, but would not affect the building or playground. The potential impacts to Montessori Children's Center are not significant. Furthermore, according to Fairfax County Public Schools, school bus routes should not be affected.

Fairfax County Fire and Rescue have stated that the project will not affect their ability to provide services.

Land Use

Providing additional capacity on Route 28 within the project limits was listed in the *Fairfax County Transportation Plan* that was last amended in September 2015.

The land uses surrounding the project limits are predominantly lower density residences (single-family attached and detached). The land uses on the north end also include commercial businesses within shopping centers with large parking lots. The project would not change these existing land uses, nor would it require the displacement or relocation of any residence or business. No changes are proposed to the County's Comprehensive Plans or its land use and zoning classifications within the project area. As noted under Project Description, some existing private residential driveways would need to be modified to accommodate the widened roadway, but this would not require right-of-way acquisitions.

Bicycle/Pedestrian Facilities

Currently, the east side of Route 28 has a contiguous joint-use bicycle/pedestrian path within the entire project limits, but ends short of the Bull Run Bridge. On the west side, the joint-use bicycle/pedestrian path is discontinuous, with no or very few facilities south of New Braddock Road. The project would improve bicycle and pedestrian facilities by forming contiguous paths on both sides of Route 28 from the northern end of the project to a point approximately 300 feet north of Bull Run Bridge. The joint-use bicycle/pedestrian path on the west side of Route 28 would provide direct access to the Bull Run trail through the existing Bull Run trail parking area. Also, as noted above, the Bull Run-Occoquan Trail is located to the south of the project limits, and would not be affected by the project. Impacts to the existing bicycle/ pedestrian facilities are not significant.

SECTION 4(f) and SECTION 6(f)	YES	NO
Use of 4(f) Property: Acres of use: Not applicable	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name of Resource: Not applicable		
Type of Resource:		
Individually Eligible Historic Property:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Contributing Element to Historic District	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Recreation Area:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Park:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Wildlife/Waterfowl Refuge:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Public Park, Recreation Area, Wildlife or Waterfowl Refuge:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Source: Concept plans, archaeological survey, Determination of Eligibility assessment		
De Minimis:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Type of Use:		
Permanent:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
*Constructive:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
*Temporary Non 4(f) Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Section 4(f) Evaluation Attached:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Conversion of 6(f) Property: Acres of Conversion: Not applicable	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Source: Concept plans, archaeological survey, Determination of Eligibility assessment		
Comments:		
<p>Section 4(f) resources in the general vicinity of the project limits include two parks (Bull Run Regional Park and Old Centreville Road Park) and four Civil War battlefield sites (Blackburn's Ford, Bristoe Station, First Battle of Manassas, and Second Battle of Manassas) that are on or eligible for listing in the National Register of Historic Places (National Register). The battlefields encompass large areas well beyond the project limits. No publicly-owned wildlife or waterfowl refuge is at or near the project limits. Bull Run Regional Park is also a Section 6(f) property.</p> <p>As noted under Socio-Economic, Parks and Recreational Facilities, the project would not require property acquisition or easements, or the conversion of land from the two parks. The project would also not permanently affect their public access. During construction, access to a small parking lot (5 or 6 vehicles) serving patrons of the Bull Run-Occoquan Trail may require modifications at times, but will remain open. This modification, which would also be needed to maintain access for two residences, would not require an easement from the park. The project will commit to always maintaining public access to the Bull Run-Occoquan Trail parking throughout construction.</p> <p>As noted under Cultural Resources, the project would not affect areas that contribute to the historic significance of the battlefields or their eligibility for the National Register. Within the project limits, the battlefield sites contain no Civil War-related built resources or remnants of troop movements, and therefore, do not have integrity and do not convey the historic significance of the Civil War era. Per Section 106 of the National Historic Preservation Act, a "no adverse effect" determination was rendered and the State Historic Preservation Officer (SHPO)</p>		

concluded (see Appendix B). Therefore, the FHWA may approve a *de minimis* Section 4(f) finding for the project. The SHPO agreed with the *de minimis* Section 4(f) finding (see Appendix B).

*Note that a Constructive Use and a Temporary Non 4(f) Use do not apply with a De Minimis finding.

CULTURAL RESOURCES	COMPLETE	N/A
Source:		
"No Effect" Pursuant to 1999 DHR Agreement	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Phase I Architecture Conducted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Phase II Architecture Conducted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Phase I Archaeology Conducted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Phase II Archaeology Conducted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Section 106 Effect Determination: No Adverse Effect		
DHR Concurrence on Effect: Yes <input checked="" type="checkbox"/> Date: October 23, 2018 and April 23, 2019		
MOA Attached: Yes <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Execution Date: / /		
Name of Historic Property: See below.		
Comments:		
<u>Archaeological Resources</u>		
<p>The Area of Potential Effects (APE) for archaeological resources was limited to the existing right-of-way within the project limits, but not areas within the right-of-way that were previously disturbed (e.g., roadway pavements, sections with known utilities, etc.) or places with very steep slopes, such as drainage ditches. The APE also includes areas outside the right-of-way-proposed for SWM basins. Archaeological investigations, conducted in May 2017 and from February to May, 2018, found no new archaeological sites. Although a small portion of a previously identified site (18FX1837) falls within the APE, this portion lacks sufficient integrity to warrant National Register eligibility. After reviewing the Phase I Archaeological Identification Report prepared for the project (see Appendix B), the Virginia Department of Historic Resources (VDHR) stated in a letter dated August 24, 2018 that "no additional archaeological investigation is recommended" (see Appendix B).</p>		
<u>Historic Resources</u>		
<p>The APE for historic resources encompasses properties within a 200-foot buffer from the centerline of Route 28 and areas with ground disturbing activities from Old Centreville Road/Upperridge Drive south to the Bull Run Bridge, and includes a segment surrounding the Compton and Ordway Roads intersection. VDHR agreed with this APE as communicated in a letter dated August 8, 2018 (see Appendix B).</p> <p>Within the APE, structures built on or before 1972 (greater than 45 years old at the time of establishing the APE) were evaluated for their potential eligibility to the National Register. Seventeen sites met this criterion, and all of them are residences originally constructed as early as 1925 and as late as 1962. None of the residences evaluated were assessed to be National Register eligible, and none of them would be displaced by the project (see Land Use under Socio-Economic).</p> <p>Five previously surveyed non-active cemetery sites are in proximity to the project limits. In consultation with the VDHR, the cemeteries were evaluated as architectural or historic resources, not as archaeological resources. Each site was subject to a site visit, and no above ground features were found. Stones that were found lacked</p>		

markings and could not be identified as headstones or burials. Therefore, none of cemetery sites were assessed to be eligible for the National Register as built resources, and none would be directly affected by the project.

Four Civil War battlefield sites cross the APE: (1) Blackburn's Ford Battlefield; (2) Bristoe Station Battlefield; (3) First Battle of Manassas; and (4) Second Battle of Manassas. Despite their historic designations, the battlefields are not conspicuous due to the construction of Route 28 and other roadways and infrastructure, as well as overall urban development. Within the project limits, the Civil War battlefield sites do not have integrity and do not convey the historic significance of the Civil War era. There are no Civil War-related built resources, and no remnants of troop movements. The project would not adversely affect any of the battlefields because all work would occur within areas that are non-contributing. In the August 8, 2018 letter, VDHR stated agreement with this assessment (see Appendix B).

Section 106 Compliance

In a letter dated September 28, 2018, a "no adverse effect" determination was rendered in accordance with Section 106 of the National Historic Preservation Act. The SHPO concurred with the "no adverse effect" determination on October 23, 2018 and again on April 23, 2019. See Appendix B for this correspondence.

NATURAL RESOURCES	PRESENT		IMPACTS	
	YES	NO	YES	NO
Surface Water (Name: Bull Run)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: USGS quad maps, site survey</i>				
Federal Threatened or Endangered Species:				
Terrestrial: Northern Long-Eared Bat (<i>Myotis septentrionalis</i>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Aquatic:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Plants: Harperella (<i>Ptilimnium nodosum</i>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: U.S. Fish and Wildlife Service, March 13, 2018 and April 18, 2018 correspondence</i>				
100 Year Floodplain: If "Yes" then identify the regulatory floodway zone: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: Federal Emergency Management Agency, Flood Insurance Rate Map</i>				
Tidal Waters/Wetlands:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetlands: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source: Wetland Delineation Memo Revised, August 7, 2018.</i>				
Permits Required	YES		NO	
	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
<i>Source: Preliminary Jurisdictional Determination, September 7, 2018</i>				
Comments:				
<u>Surface Waters</u>				
The project would not affect Bull Run, which is located at the southern end of the project. For instance, the project would not require changing or modifying Bull Run Bridge. The transition from the four-lane configuration				

at the bridge to the widened roadway begins a few hundred feet north of the bridge. Also, see Socio-Economic, Parks and Recreational Facilities. The project area also contains other surface waters, including wetlands and associated waters of the U.S. (WUS). See Wetlands below in this section.

Biological Resources

Within the project limits, Route 28 is surrounded by commercial, residential and institutional land uses. Therefore, biological resources tend to consist of landscaped turf, and relatively small patches of tree stands within the right-of-way and adjacent undeveloped private parcels that provide limited habitat to species adaptable to urban conditions. Flora species within these tree stands along Route 28 include eastern red cedar, red pine, white pine, Virginia pine, pin oak, white oak, crape myrtle, red maple, sumac, and sycamore. Other species include Broomsedge grass and several invasive species (see Invasive Species section below). The project would require clear cutting tree stands for the widening, but most of the clear cutting would be for SWM basins.

Threatened or Endangered Species

In accordance with Endangered Species Act, Section 7 Consultation regarding the endangered harperella and the threatened northern long-eared bat (NLEB) resulted in a determination of "not likely to adversely affect". The U.S. Fish and Wildlife Service (USFWS) did not respond to the Self Certification Letter and pertinent information submitted on April 20 (Self Certification Letter dated April 18) and May 3, 2018. See Appendix C.

The only suitable habitat for the endangered harperella within or near the project limits is in Bull Run. See Appendix C. As noted above, the project's LOD would not include Bull Run.

The NLEB hibernates in caves and mines during winter. During summer, the NLEB is known to roost in live and dead trees. The project site is not near any documented winter habitat and roost trees for the NLEB. See Appendix C. The project would require clear-cutting stands of wooded species, mostly to establish the SWM basins. Although the Self Certification Letter dated April 18, 2018 identified a time of year restriction (TOYR) of between April 14 and September 15 in the Species Conclusion Table (SCT), the USFWS now only recommends a TOYR be used as an optional precaution for projects located in areas in which there are no recorded roost trees within a 150-foot radius or hibernacula within a quarter-mile radius. FCDOT has determined that a TOYR does not appear necessary given that the project site is far from any recorded roost tree or hibernacula, and has chosen not to implement one. An updated Self Certification Letter, including a revised SCT, was submitted to the USFWS on April 22, 2019. In a telephone conversation on June 11, 2019, USFWS stated that the project is showing as closed in its system, meaning that it will not respond to the recent Self Certification Letter.

Finally, the project would not require an Eagle Act permit because the project site is not located near a Bald Eagle nest or buffer location. See Appendix C.

Floodplains

The southern end of the project limits near Bull Run is within a floodplain associated with this water resource. The floodplain is part of the Special Flood Hazard Area that is subject to inundation during a 100-year flood event in Bull Run. This floodplain may be located outside of the project's limits of disturbance, or south of the transition point between the four-lane configuration at Bull Run Bridge to the widened configuration. The project would comply with floodplain regulations and policies, including not introducing any structure that may affect this floodplain.

Wetlands

Wetlands investigations in the field were conducted on May 26, 2017, June 8, 2017, February 15, 2018 and April 27, 2018. The areas investigated included the existing right-of-way, potential sites for the SWM basins, and areas that may be acquired to improve the traffic operations between Compton and Ordway Roads. Field verification with the U.S. Army Corps of Engineers (USACE) was conducted on July 17, 2018. The investigations, verified by the USACE through a Preliminary Jurisdictional Determination (JD), identified two palustrine emergent (PEM) and five palustrine forested (PFO) wetlands. Additionally, five WUS were identified and confirmed by the Preliminary JD. For descriptive purposes, each of the identified wetlands and waters of the U.S. were identified sequentially from WET1 to WET7 and WUS1 to WUS9, respectively. The USACE determined that WUS2, WUS6, WUS8 and WUS9 are not considered to be jurisdictional waterbodies subject to permitting under Section 404 of the Clean Water Act.

Brief descriptions of the wetlands and WUS, and how they may be affected by the construction of the project are provided in the following table.

ID	Type	Location	Size or Length	Potential Impact
WET1	PFO	Southwest corner of the Route 28 and Compton Road intersection	13,340 sq ft	All by SWM Basin #1
WET2	PFO	Mid-block on the west side between New Braddock Road and Old Mill Road/Green Trails Boulevard intersections	14,580 sq ft	Partial by Route 28 widening
WET3	PEM	Same block as and north of WET2	262 sq ft	None
WET4	PFO	wooded area between Route 28 and Wheat Mill Way across from Centreville Elementary School	1,320 sq ft	None
WET5	PEM	Same block as WET2 and WET3 but on the east side of Route 28	2,140 sq ft	Partial by Route 28 widening
WET6	PFO	Wooded area north of the Centreville Elementary School	3,000 sq ft	All by SWM Basin #3
WET7	PFO	Wooded area between Route 28 and Old Centreville Road and midblock between Tallavast Drive and Bradenton Drive	233 sq ft	Partial by SWM Basin #2
WUS1	Intermittent stream	From an outfall located south of the intersection of Compton Road and Old Centreville Road	585 linear ft	Potentially none
WUS3	Ephemeral channel	Immediately south of WET3 and fed by a culvert that drains runoff from Route 28	386 linear ft	All by Route 28 widening
WET4	Ephemeral channel	Western edge of Route 28 approximately 350 feet south of WUS3 and fed from runoff from the adjacent private properties	55 linear ft	All by Route 28 widening
WUS5	Braided channel	Wooded area located near WET6 and fed from culverts under Route 28	1,294 linear ft	All by SWM Basin #3
WUS7	Intermittent stream	Wooded area between Route 28 and Old Centreville Road, connecting with WET7 and receives its hydrology from a groundwater seep located near Old Centreville Road	175 linear ft	Partial by SWM Basin #2

The Build Alternative could affect up to approximately 33,000 square feet of wetlands (including approximately 31,000 square feet of PFO wetland, and approximately 2,100 square feet of PEM wetland) and approximately

1,900 linear feet of waters of the U.S. These impacts may be less depending on decisions regarding the locations of the SWM basins and alternative SWM measures, and whether wetlands located along the right-of-way may only be partially affected by the roadway widening.

As the project advances, impacts to wetlands and streams would be avoided and minimized to the maximum extent practicable as part of the Section 404/401 permitting process. Compensatory mitigation for permanent impacts to wetlands and streams would be developed, as required, during the Section 404/401 permitting process in coordination with the appropriate state and federal agencies.

See Appendix D for further information about the wetlands and waters of the U.S. within the project site.

Permits

The project would require a U.S. Army Corps of Engineers permit pursuant to Section 404. This action would also require a Water Quality Certification and may require a Virginia Water Protection permit from the Virginia Department of Environmental Quality. The USACE indicated that a permit from the Virginia Marine Resources Commission may be required.

AGRICULTURAL/OPEN SPACE	PRESENT		IMPACTS	
	YES	NO	YES	NO
Open Space Easements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source:</i>				
Agricultural/Forestal Districts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: Fairfax County Department of Planning and Zoning Agricultural and Forestal District Map; Virginia Outdoors Foundation</i>				
Comments:	<p>The areas surrounding the project limits are largely urban, consisting of residential, commercial and institutional land uses. According to the Agricultural and Forestal District map produced by Fairfax County Department Planning and Zoning, there are no agricultural land uses or activities occurring near the roadway. In addition, according to the Virginia Outdoors Foundation, there are no open-space easements within the immediate vicinity of the project limits. Limited open space and wooded areas are located along the roadway, some of which would be used to establish SWM basins. Although the SWM locations would be cleared of wooded species, they would remain as open space.</p>			

FARMLAND	YES	NO
NRCS Form CPA-106 Attached: Rating:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alternatives Analysis Required:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If Form CPA-106 is not attached check all that are applicable:		
Land already in Urban use:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Entire project in area <i>not</i> zoned agriculture:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

NRCS responded within 45 days:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NRCS Determined no prime or unique farmland in the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: Fairfax County Department of Planning and Zoning Agricultural and Forestal District Map; site visit</i>		
Comments: The project would not affect farmlands.		

INVASIVE SPECIES	PRESENT		
	YES	NO	UNKNOWN
Invasive Species in the project area:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>There is potential for invasive species to become established along the limits of disturbance of the project during and following construction. Section 244.02(c) of VDOT's Road and Bridge Specifications (2016) includes provisions intended to control noxious weeds (which includes non-native and invasive species).</p> <p>While rights-of-ways are at risk from invasive species colonization from adjacent properties, implementing the above provisions would reduce or minimize potential for introduction, proliferation, and spread of invasive species. Additionally, the implementation of BMPs for erosion/sediment control and abatement of pollutant loading would minimize indirect impacts to adjoining communities and habitat by reducing excess nutrient loads that could encourage invasive species proliferation.</p>			
<p>Comments:</p> <p>Some invasive species identified within the project limits, such as Bradford pear, tree of heaven, Japanese honeysuckle, teasel, black locust, and bamboo, would be cleared as part of the tree stands affected by the widening and the SWM basins. Since the project has the potential to further the establishment of invasive species, soil disturbance will be minimized to help to inhibit the re-establishment of these same species or the establishment of new invasive species. Landscaping and ground cover proposed with the project will be limited to native species.</p>			

AIR QUALITY		
Carbon Monoxide (CO)	Yes	No
This project is located in a CO <input checked="" type="checkbox"/> Attainment Area <input type="checkbox"/> Maintenance Area		
CO Hotspot Analysis Required? (if "Yes", please attach analysis)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If "No", indicate which exemption it falls under:		
<input type="checkbox"/> Exempt project under 40 CFR 93.126.		
<input checked="" type="checkbox"/> Exempt project based on traffic volumes below thresholds in the current VDOT Project Level Air Quality Studies Agreement with FHWA/EPA.		
Ozone		
This project is located in an Ozone	<input type="checkbox"/> Attainment Area	<input type="checkbox"/> Maintenance Area
	<input checked="" type="checkbox"/> Nonattainment Area	<input type="checkbox"/> Early Action Compact Area

<p>Only projects located in ozone nonattainment or maintenance areas must complete this box</p> <p><input type="checkbox"/> Exempt from regional emissions requirements under 40 CFR 93.126 or 40 CFR 93.127.</p> <p><input checked="" type="checkbox"/> Properly programmed in the <u>Northern Virginia Transportation Authority TransAction 2040 Plan</u> and <u>FY 2017 - 2022 TIP</u>.</p> <p><input type="checkbox"/> The project is not regionally significant and/or is not of a type that would normally be included in the regional transportation model.</p> <p><input type="checkbox"/> This project is regionally significant; however the project was not modeled, or the scope of the project is not consistent with what was modeled in the currently conforming CLRP and TIP.</p>		
Fine Particulate Matter (PM_{2.5})	Yes	No
<p>This project is located in a PM_{2.5} <input type="checkbox"/> Nonattainment Area <input type="checkbox"/> Maintenance Area</p> <p><input checked="" type="checkbox"/> Attainment Area (if checked, do not fill out box below)</p>		
<p>PM_{2.5} Hotspot Analysis Required? (If "Yes", Please Attach Analysis) <input type="checkbox"/> <input type="checkbox"/></p> <p>Check all that apply;</p> <p><input type="checkbox"/> A. Exempt project under 40 CFR 93.126, Table 2.</p> <p><input type="checkbox"/> B. Not a project of air quality concern under 40 CFR 93.123(b)(1)(i) thru (v).</p> <p><input type="checkbox"/> C. Properly programmed in the CLRP and FY - TIP.</p> <p><input type="checkbox"/> D. This project is regionally significant; however the project was not modeled, or its scope is not consistent with what was modeled, in the currently conforming CLRP and TIP.</p>		
<p>If "B" is checked above, please indicate the following for highway projects;</p> <p>Design Year _____, Peak AADT _____, Peak Diesel Truck % _____</p>		
Mobile Source Air Toxics (MSAT)		
<p>This project <input checked="" type="checkbox"/> is exempt with no meaningful potential MSAT effects</p> <p><input type="checkbox"/> is one with low potential MSAT effects (attach qualitative MSAT analysis)</p> <p><input type="checkbox"/> is one with high potential MSAT effects (attach quantitative MSAT analysis)</p>		
<p>Check all that apply;</p> <p><input type="checkbox"/> Exempt project under 40 CFR 93.126, or qualifies as a CE under 23 CFR 771.117(c).</p> <p><input type="checkbox"/> Project with no meaningful impact on traffic volumes or vehicle mix.</p>		
<p>If a qualitative MSAT analysis is required, please indicate the following for highway projects;</p> <p>Design Year: _____ Peak AADT: _____</p>		
<p><i>Source: Air Quality Analysis Technical Report, Widening and Improvements of VA Route 28 prepared by HMMH, February 2019</i></p>		
Comments		
<p>Since the project is an attainment area for carbon monoxide (CO) per the National Ambient Air Quality Standards (NAAQS), analyses for potential CO impacts focused on potential microscale conditions at certain intersections. Consistent with the VDOT Resource Document, eleven signalized intersections located along or near Route 28 were identified as potential locations of CO impacts because they would be affected by year 2040 traffic conditions under the project. As determined through a screening process, most of them would not require project-specific CO modeling. Under a scenario in which the initial widening to six lanes remains in year 2040, two intersections along Route 28 at New Braddock Road and Compton Road would not pass the screening process. Additionally, under an eight-lane widening scenario in the year 2040, two more intersections along Route 28 at Upperridge Drive and Green Trails Boulevard would not pass the screening process. Through a weight-of-evidence approach that forms the basis of the <i>VDOT-FHWA Programmatic Agreement for Project-Level Air Quality Analyses for Carbon Monoxide</i>, the intersections that did not pass the screening process under both scenarios were determined not to require project-specific CO modeling. This approach supported the conclusion</p>		

that the project would not result in a violation of the NAAQS for CO regardless of whether Route 28 remains a six-lane highway in 2040 or is widened to eight lanes.

Federal conformity requirements would apply because the project is in a designated nonattainment area for ozone. Accordingly, there must be a currently conforming transportation plan and program at the time of project approval, and the project must come from this conforming plan and program or otherwise meet criteria specified in 40 CFR 93.109(b). The project is included in the currently conforming FY 2017-2022 Transportation Improvement Program (TIP) and the Northern Virginia Transportation Authority (NVTA) TransAction 2040 Plan.

See Appendix E for further information about the air quality analyses conducted for the project.

NOISE	YES	NO
Type I Project:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Source:		
Noise Analysis Attached:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Barriers Under Consideration:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source: Preliminary Noise Analysis Technical Report, Route 28 Widening, Fairfax County, From: Prince William County Line at the Bridge over Bull Run, To: Route 29 in Centreville prepared by HMMH, November 2018</i>		
Comments:		
<p>A traffic noise impact study was conducted for the project in accordance with federal noise regulations and the VDOT Noise Policy (see Appendix F). The study involved monitoring existing noise conditions as well as modeling both existing (2016) and design year (2040) noise conditions along the project limits using the FHWA-approved computerized Traffic Noise Model. The modeling accounted for the existing terrain and buildings, and assumed the projected loudest-hour traffic conditions. A fuller description of the noise study methodology is provided in the report contained in Appendix F.</p> <p>Based on the results, 23 residential (outdoor) and three recreational (outdoor) land uses currently experience noise impacts, defined as exceeding or approaching the Noise Abatement Criteria (NAC) identified in the VDOT Noise Policy. Under the Design Year 2040 Build conditions, the number of residential (outdoor) and recreational (outdoor) land uses experiencing noise impacts would increase to 62 and six, respectively. No planned land uses are included in the analysis. Although some planned residential developments exist near the project limits, none of them are expected to receive building permits before summer 2019 when the NEPA process is expected to be completed.</p> <p>Based on the results of the modeling, 12 common noise environments (CNEs) labeled "A" to "L" were identified along the project limits. Most receptors predicted to experience noise impacts with the project are in CNE D, which would have 21 up from 18 under existing conditions, and CNE I, which would have 26 up from zero under existing conditions. The number of receptors that are predicted to experience noise impacts in each of the other CNEs range from zero to five. The CNEs were evaluated to determine if noise abatement (i.e., noise barriers or walls) would be feasible and reasonable in accordance with the VDOT Noise Policy. In brief, to be considered feasible, a noise barrier must first be acoustically effective by reducing noise levels at affected receptors by at least five decibels. Second, it must be possible to design and construct the barrier. For a barrier to be considered reasonable, the total surface area of the proposed barrier must be 1600 square feet per benefited receptor or less. In addition, at least one receptor must achieve a reduction of seven decibels. And lastly, the majority of the</p>		

owners or residents of the benefited receptors must favor the barrier. The last step is completed during the final design stage.

Of the ten potential noise barriers evaluated, two (Barrier D1 and Barrier I) were found to meet the feasible and reasonable criteria. Barrier D1 is located east of Route 28 between New Braddock Road and Darkwood Drive. The barrier would be 18 feet tall and 1,028 feet long, with a surface area of 18,504 square feet. This barrier would benefit all 20 of the affected receptors in this section of CNE D. Barrier I is located west of Route 28 between Compton and Old Mill Roads. The barrier would be 14 feet tall and 1,175 feet long, with a surface area of 16,450 square feet. It would benefit 24 of the 26 affected receptors in CNE I, in addition to 33 non-affected receptors. The two receptors that would not benefit by the barrier are located near a cross street that prevents the full effectiveness of the barrier in relation to these receptors. Noise barriers were not considered for those CNEs representing residences with driveway access on Route 28.

The results of the noise impact study, including the evaluation of noise abatement, are considered preliminary. These results will be re-evaluated during the final design of the project.

See Appendix F for further information about the traffic noise impact study.

RIGHT OF WAY AND RELOCATIONS	YES	NO		
Residential Relocations: If "Yes", number:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Source: Project Design Plans</i>				
Commercial Relocations: If "Yes", number:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Source: Project Design Plans</i>				
Non-profit Relocations: If "Yes", number:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Source: Project Design Plans</i>				
Right of Way required: If "Yes", acreage amount: approximately 15 acres	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
<i>Source: Project plans.</i>				
	PRESENT		IMPACTS	
	YES	NO	YES	NO
Septic Systems, Wells, or Public Water Supplies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: Fairfax County Real Estate database, site visit</i>				
Hazardous Materials:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source: EDR hazardous materials database search; National Transportation Safety Board, Pipeline Accident Brief, Colonial Pipeline Company Petroleum Leak, Centreville, Virginia, June 5, 2017; Quarterly Corrective Action Plan and Monitoring Reports, and email correspondence with Colonial Pipeline dated August 16, 2018</i>				
Comments:				
Although additional right-of-way is needed, especially to provide for necessary SWM areas, none of the areas proposed for acquisition would require a displacement or relocation of an existing residence, business or				

institution. FCDOT has provided a Right of Way Relocation Assistance Report to VDOT Northern Virginia District indicating that no families, persons, businesses, farms or non-profit organizations will be displaced by this project.

Three residences on the east side of Route 28 near the southern terminus are presently served by private wells and septic systems. The project would not affect these septic systems or wells.

A hazardous materials database search identified three facilities with leaking underground storage tanks (LUST) in proximity to the project area. All three contamination cases were closed. Other LUST sites are located near the Route 29 / Route 28 interchange and south of Bull Run. Appendix G contains the executive summary of the database search report.

One of the two pipelines owned by Colonial Pipeline Company that cross Route 28 at New Braddock Road leaked an estimated 4,000 gallons of hydrocarbon product in September 2015 (National Transportation Safety Board, June 5, 2017). The leak originated in a section of pipeline at the southeast corner of the Route 28 / New Braddock Road intersection. Approximately 1,285 gallons of this product were recovered immediately from the storm water outfalls. About 700 more gallons were recovered in the week after the release, and excavation of contaminated soil contained an estimated 350 additional gallons. Since the leak was discovered from the shopping center on the northwest side of the intersection, it is possible some of the soil under Route 28 is contaminated. Colonial Pipeline is continuing to monitor conditions and is remediating the site (email correspondence with Colonial Pipeline dated August 16, 2018). A mobile, trailer-mounted remediation system was installed in late 2018 on Colonial Pipeline property located at the southeast corner of the New Braddock Road intersection.

FCDOT has coordinated with the Virginia Department of Environmental Quality (VDEQ) and Colonial Pipeline regarding the 2015 leak. Colonial Pipeline has provided copies of their quarterly Corrective Action Plan which will be included in Request for Proposal (RFP) documents for prospective design-build teams. The monitoring wells indicate that groundwater levels (with potentially contaminated groundwater) should be below the proposed limits of disturbance for project construction. The RFP will include the most recent monitoring reports and note that if any contaminated soil is found during construction, the contractor must coordinate with VDEQ to properly treat and dispose of such material. Therefore, the potential existence of soil contaminated by the Colonial Pipeline leak, which may be uncovered during construction, is not a significant impact.

CUMULATIVE AND INDIRECT IMPACTS	PRESENT		
	YES	NO	N/A
Present or reasonably foreseeable future projects (highway and non-highway) in the area:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Impact same resources as the proposed highway project (i.e. cumulative impacts):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Indirect (Secondary) impacts:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source:</i>			

Comments:

The project is in proximity to other relatively minor VDOT projects that may include construction of a shared-use path along Route 29 (UPC 59094) and intersection improvements at the Old Centreville Road/Old Mill Road intersection (UPC 109620). Prince William County is studying re-aligning Route 28 south of Bull Run Bridge to increase its capacity. The project would not preclude this potential transportation improvement project.

The project is not expected to result in significant cumulative impacts because its surrounding area is already largely urban with residential, commercial and institutional land uses, including locations to the north and south of the project termini. More likely, any minor developments in the general vicinity of Route 28 would occur with or without the project. The project is intended to address transportation issues stemming from existing land uses.

PUBLIC INVOLVEMENT	YES	NO
Substantial Controversy on Environmental Grounds:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Source:</i> April 3, 2018 public meeting at Union Mill Elementary School, Clifton, VA		
Public Hearing: If "Yes", type of hearing:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Involvement Activities: If "Yes", type of Involvement: see below	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Source:</i> Fairfax County Department of Transportation		
Comments:		
Public meetings were held on April 3, 2018 at Union Mill Elementary School and on March 12, 2019 at Centre Ridge Elementary School. Both locations are near the project site.		
Once approved, the CE will be posted on the project website and publicized through a press release. FCDOT will hold a Design Public Hearing on the project in the Fall of 2019 (after approval of the CE) to present the final design and information about construction.		

COORDINATION

The following agencies and organizations were contacted during development of this CE document (an asterisk is provided for those agencies and organizations that provided input):

- Fairfax County Department of Planning and Zoning*
- Fairfax County Economic Development Authority
- Fairfax County Fire and Rescue*
- Fairfax County Health Department
- Fairfax County Parks Authority*
- Fairfax County Public Schools*
- Fairfax County Real Estate, Finance and Development Department
- Virginia Department of Historic Resources*
- Virginia Department of Transportation*
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Army Corps of Engineers, Norfolk District*
- U.S. Fish and Wildlife Service, Virginia Field Office*

- Virginia Outdoor Foundation*

See Appendix H for further information, in addition to Appendices B, C and D.

This project meets the criteria for a Categorical Exclusion pursuant to 40 CFR 1508.4 and 23 CFR 771.117 and will not result in significant impacts to the human or natural environment.

DRAFT