



COMMONWEALTH OF VIRGINIA
County of Fairfax
 BOARD OF SUPERVISORS

12000 GOVERNMENT CENTER PKWY
 SUITE 530
 FAIRFAX, VIRGINIA 22035-0071

TELEPHONE: 703/324-2321
 FAX: 703/324-3955
 TTY: 711

chairman@fairfaxcounty.gov

JEFFREY C. MCKAY
 CHAIRMAN

December 1, 2020

The Honorable Shannon Valentine
 Secretary of Transportation
 P.O. Box 1475
 Richmond, Virginia 23218

Reference: Fairfax County Comments on I-495 Express Lanes Northern Extension Project Environmental Assessment

Dear Secretary Valentine:

On December 1, 2020, the Fairfax County Board of Supervisors approved the following comments regarding the I-495 Express Lanes Northern Extension (I-495 NEXT) Project Environmental Assessment. I-495 NEXT project is critically important to Fairfax County. The County continues to support the Commonwealth's efforts to reduce congestion and provide additional travel choices in the Capital Beltway Corridor and to move the most people as efficiently as possible in this region. Furthermore, the project's proximity to Tysons and McLean also signifies that improvements in the Corridor will have lasting effects on accessibility and increased economic opportunity for surrounding communities in Fairfax County.

Considering the implications of the I-495 NEXT project, it is essential that citizens are well informed of its scope and resulting impacts. As previously communicated, the Board requests that VDOT allow additional time for the public to provide feedback on the project prior to proceeding with execution of its final contract with the concessionaire.

Fairfax County has been engaged with this project from its inception and appreciates VDOT's efforts to address many of the project issues; however, VDOT continues to inadequately respond to stormwater management concerns. The County looks forward to continued and improved coordination as project design progresses. As part of those efforts, the County offers the following comments regarding the I-495 NEXT Environmental Assessment released in February 2020:

- 2025 Traffic Operations Prior to Maryland Managed Lanes
 - The Board acknowledges VDOT's effort to analyze the 2025 traffic conditions in the event managed lanes north of the American Legion Memorial Bridge (ALMB) in Maryland are not complete. Based on the measures of effectiveness established in the report, there are also impacts to travel time along General Purpose (GP) Lanes on I-495 NB with this Build scenario in both the AM and PM. In addition, there are intersections in the study area that are degraded in both No Build and Build scenarios, which should be mitigated. Based on the current schedule, I-495 NEXT is expected to be completed prior to Maryland's system of managed lanes. Considering the interim time period between the full operation of both systems, it is critical that VDOT address the temporary impacts of opening prior to Maryland's managed lanes.
 - Fairfax County encourages VDOT's continued coordination with Maryland. Both projects should be closely coordinated to ensure that transportation improvements are well integrated and

beneficial to the region. Efforts should also be made to minimize the time between the opening of the I-495 NEXT project and the Maryland project.

- Stormwater

- The Board recognizes the importance of transportation projects to our community. However, it is also critical to minimize the negative water quality impacts that the additional impervious area has on County watersheds. This is critically important in the McLean area adjacent to the I-495 NEXT project, which has experienced significant flooding during recent storms. Based on the current plan, VDOT anticipates about 3,000 linear feet of stream impacts, mostly located along Scotts Run between Lewinsville Road and Old Dominion Drive in McLean. Increased imperviousness from the I-495 NEXT project has a significant potential to exacerbate already prevalent stream degradation and flooding issues, particularly at Scotts Run.

For over a year, County staff has held multiple meetings with VDOT to coordinate the efforts on Stormwater management design for this project. As has been discussed in those meetings and via the attached letters to Department of Environmental Quality (Attachment 2) and to Office of the Secretary of Natural Resources (Attachment 3), VDOT should pursue on-site restoration of Scotts Run within the project limits and state transportation projects should meet local standards for stormwater management when the local standards are more stringent. The I-495 NEXT project has yet to adequately address these issues.

Along with comments in Attachment 1, the Board requests VDOT consider these requests below prior to advancing the I-495 NEXT project:

- Stormwater Management (SWM) Requirements –The Board requests that this project meet the current County SWM requirements rather than the outdated state grandfathered SWM conditions. As stated in the letter to VDOT on July 17, 2019, and presented in Attachment 3, Fairfax County’s criteria is more stringent than VSMP Parts II B and II C of VSMP Regulations, and the Board requests that this project meet these SWM requirements. If it is found that our local stormwater management requirements are not attainable, VDOT should implement requirements to the maximum extent practicable and provide documentation to the County demonstrating that the technical requirements are not fully feasible.
- Water Quantity Control – The majority of runoff from the new lanes will be piped directly to Scotts Run stream or the Potomac River with no detention, worsening downstream flooding and erosion along Scotts Run. Road flooding impacts both Fairfax County and VDOT infrastructure. There are also numerous complaints regarding tree loss due to stream erosion downstream of I-495. The Board requests VDOT pursue underground detention within the right-of-way to the extent feasible to prevent negative impacts to Scotts Run and downstream areas.
- Stream and Wetland Impacts – Based on the current plan, the project will generate up to 3,000 linear feet of stream impacts and affect 19.8 acres of impacted wetlands. The Board requests VDOT complete permittee-responsible mitigation along Scotts Run, particularly between Lewinsville Road and Old Dominion Drive. This stream section is mostly within VDOT right-of-way and directly adjacent to the project limits.

- Water Quality – VDOT’s interpretation of routine maintenance exempts the project’s existing impervious area from the state SWM requirements, so the existing impervious surface will remain largely untreated. Under county stormwater standards, the existing impervious area would also be treated. Additionally, the project will not meet its minimum on-site water quality requirements and will purchase 80 percent of its required nutrient reduction offsite outside of Fairfax County. The Board requests VDOT apply enhanced outfall stabilization practices to meet the project’s water quality requirements on site.

- Resource Protection Area (RPA) Impacts – The Environmental Assessment (EA) cites up to 75.5 acres of temporary and permanent impacts to the RPA. Public roads are conditionally exempt from RPA regulation under the Virginia Administrative Code provided that the roadway is designed and constructed in accordance with water quality protection criteria at least as stringent as VDOT requirements. Given that the project will not meet minimum water quality requirements, the Board requests that the project meet the RPA replanting requirements detailed in Fairfax County Code Chapter 118 Chesapeake Bay Preservation Ordinance and Public Facilities Manual Chapter 12 (12-0316.4) in the Scotts Run stream valley section between Lewinsville Road and Old Dominion Drive.

While Fairfax County recognizes the constraints faced by linear projects like I-495 NEXT, we also believe that transportation projects, particularly of this magnitude, should strive to minimize negative effects on water quality, local streams, and ultimately the Chesapeake Bay. The cumulative impact from the project’s failure to address each of the bullets above will worsen the already degraded condition of the Scotts Run stream valley. Although there are limited options to manage stormwater within the right-of-way, there are other mitigation opportunities within the Scotts Run watershed. The County is committed to working with VDOT to help meet the project’s stormwater obligations.

- Bike/Pedestrian Facilities

- The bicycle and pedestrian facilities are critical to addressing the varied mobility needs of the region. Fairfax County’s Comprehensive Plan recommends a major regional trail along I-495. Such a facility is intended as a link between Maryland and Virginia. The provision of this major regional trail is imperative to providing nonmotorized transportation alternatives and reducing single occupancy vehicles in the region. As the Commonwealth coordinates with Maryland on improvements to the ALMB, all efforts should be taken to ensure the continuation of this trail into Maryland for pedestrians and bicyclists.
- Tysons is located at the southern end of the I-495 NEXT project. The connection of pedestrian and bicycle facilities as part of this major regional trail and along the secondary streets to Tysons is critical to providing a comprehensive transportation network that meets the needs of this growing community. We encourage VDOT to make all efforts to provide a safe and consistent connection from this major regional trail to Tysons.
- The I-495 NEXT project should make all efforts to promote pedestrian and bicycle connections to this major regional trail and along secondary streets throughout the project corridor.

- Enhanced Transit

- A clear advantage of the managed lanes is that they support more reliable and more efficient bus service in the corridor. The Board acknowledges the I-495 American Legion Bridge Transit and TDM Study led by Maryland Department of Transportation (MDOT)/ Maryland Transit Administration (MTA) and Virginia Department of Rail and Public Transportation (DRPT), which seeks to find multimodal solutions for the corridor. In addition to this effort, Fairfax County has included a new bus route over ALMB in its Transit Network Study. Considering the potential for new transit routes via the Express Lanes, VDOT should coordinate with Fairfax County staff to promote and enhance transit access to the Express Lane facilities.
- It is Fairfax County's understanding that discussions are still ongoing with the concessionaire regarding the project agreement. As these discussions proceed, VDOT should look to ensure any transportation funds received be made available to help fund local transportation improvements and transit projects that would be beneficial towards reducing single-occupancy vehicle ridership and vehicle miles traveled in the area.

- Failing Conditions at Studied Intersections

- The Board acknowledges travel time along the Capital Beltway corridor is generally improved by I-495 NEXT in both 2025 and 2045 based on the traffic analysis. However, there are intersections that operate under failing conditions in both the 2025 and 2045 analysis and are further deteriorated compared to the No-Build scenario. VDOT should further analyze the traffic operations at these impacted intersections and investigate the mitigations to improve the level of service of these intersections. Funding should be provided from the I-495 NEXT project or VDOT to account for the improvements on these impacted intersections.

- Implementation Issues

- VDOT has made extensive efforts to coordinate with County staff on project designs, pedestrian/bicycle facilities, and stormwater, among other aspects of the project. These efforts are expected to provide substantial opportunity for input and consideration for the implementation of the I-495 NEXT project. The Board emphasizes that these efforts should continue and the following considerations be included:
 - Ensuring that sound walls are replaced rapidly after the existing wall is removed,
 - Minimizing park impacts,
 - Developing an aggressive maintenance of traffic plan for roadway and pedestrian/bicyclist accessibility,
 - Ensuring sufficient time to coordinate traffic and design changes with County staff and Supervisors office, as well as the impacted communities, ,
 - Minimizing night construction in areas adjacent to residential neighborhoods,
 - Maintaining proper erosion, siltation and stormwater management equipment and facilities during construction,
 - Developing an effective landscaping and tree replacement plan,
 - Minimizing disruption during construction,
 - Minimizing construction that impacts bus services especially at peak times,
 - Including proper temporary roadway striping capable of maintaining visibility at night and in inclement weather, and
 - Meeting the County's stormwater requirements.

- Environmental Issues

- As indicated in the Department of Planning and Development's (DPD) letter to the Department of Environmental Quality, to address the environmental objectives of the Comprehensive Plan and avoid undue impacts to community resources, the project should consider the following recommendations:
 - Avoidance or minimization of impacts to properties that are located on the National Register of Historic Places, including the George Washington Memorial Parkway and Georgetown Pike.
 - Avoidance or minimization of impacts to the two properties on the Fairfax County Inventory of Historic Sites (Beaufort Park and Shiloh Baptist Church).
 - Assessment, minimization, avoidance, and mitigation of the direct and indirect impacts to the three properties identified in the Virginia Outdoors Plan (George Washington Memorial Parkway, Scotts Run Nature Preserve, and the 4.6-acre private property near Langley Club).
 - Optimization of road alignments and designs to prevent or otherwise minimize encroachment in Resource Protection Areas (RPAs) and adverse effects on water quality.
 - Strict adherence to Fairfax County's stormwater management requirements to the maximum extent practicable for the project, per IIM-LD-195.12.
 - The use of linear stormwater controls to address water quality and quantity requirements.
 - Pursuit of mitigation opportunities within the County and which rely on Fairfax County's approved watershed management plans as guides for any project mitigation. VDOT should partner with the County to select local stream restoration and constructed wetland projects.
 - Evaluate "legacy" issues and impacts from previous highway-related work, particularly inadequacies of previous stormwater facility installations, planting efforts, and runoff impacts on local stream geomorphology, including erosion. The cumulative impacts of existing deficiencies and proposed actions should be assessed and mitigated.
 - Assessment of the impacts to Dead Run, Scotts Run, and Turkey Run and the downstream impacts to the Potomac River.
 - Perform ecological resource surveys for the Scotts Run Nature Preserve and the George Washington Memorial Parkway stream corridors.
 - Assess the environmental services and the economic, social, and health benefits of the urban forest that would be lost due to the clearing associated with this project, as well as compensation for these impacts.
 - Reforest all disturbed areas with commitments to compensation, soil rebuilding, and the restoration of native plant communities.
 - Integrate of invasives control throughout the project area.
 - Clarify of the current status of and expectations regarding noise mitigation, to include potential barrier locations and design details.

More detailed comments from DPD (Attachment 4 and Attachment 5) regarding some of these issues can also be found at the end of this letter.

- Park Impacts

- Cultural Resources:

- Any areas with ground disturbance throughout the project corridor that are not previously surveyed should undergo a Phase I archaeological survey. If sites are found that are potentially significant to the history of Fairfax County, or potentially eligible for inclusion onto the National Register of Historic Places, they should undergo Phase II archaeological testing. If sites are found significant or eligible, avoidance or Phase III data recovery is recommended.
- Park Authority staff has conducted archival cultural resources review. The Environmental Assessment report made no mention of the site, 44FX2430, specifically. The report only mentioned that any sites within their area of impact contained no sites that were eligible, or potentially eligible for inclusion onto the National Register of Historic Places (NRHP), but did not evaluate the Virginia Department of Historic Resources (VDHR) status of 44FX2430. If the site will be impacted, a Phase II study is necessary to determine county significance or eligibility for NRHP status. If found significant or eligible, avoidance, or Phase III data recovery is recommended as mitigation.

○ Natural Resources

- All development on Park Authority property must comply with its Policy 201, Natural Resources, and agency-wide Natural Resource Management Plan (NRMP). Of note is Section 7 of the NRMP:

Avoid adverse impacts to natural areas, mitigate unavoidable impacts from construction and maintenance projects and require restoration and rehabilitation of impacted natural resources.

- i. Minimize impacts to forests, meadows and other natural areas from human use.
- ii. Protect significant natural communities and species.
- iii. Require restoration of impacted natural resources when use of parkland causes damage to them.

If impacts cannot be avoided, the Board requests a design that minimizes impacts and a mitigation plan for any losses, which should be coordinated with the Park Authority. This mitigation plan will need to clarify the extent of construction that will occur on Park Authority property, as well as the impacts to natural resources.

- The Park Authority recommends the rehabilitation for any temporary impacts to natural resources to Park Authority standards and mitigate/compensate for permanent impacts to natural resources on Park Authority managed lands. This requirement applies to any natural resource impact (terrestrial or aquatic) that is not regulated under the jurisdiction of any federal or state agency.
- Due to the proximity to parkland, the Board requests the use of only common native species including perennials and seed mixes on this project since non-native species either do not fare as well as natives or are invasive, negatively impacting the environmental health of Park Authority property. The Park Authority requests that VDOT use common plant species generally native to Fairfax County, including trees, perennials, and seed mixes, to provide the greatest ecosystem benefit.

● Environmental Justice

- The EA identified one census block group with over 50% minority population. As the project proceeds, efforts should be undertaken to ensure sufficient outreach for this community as this project progresses.

- Fairfax County encourages the use of 30% or 50% of Area Median Income to more accurately accounting for economically vulnerable households given the high median income of the County.

Additional County comments can be found in the attachments to this letter. Fairfax County appreciates the work that has been undertaken to date in this study and the opportunity to provide comments. We also look forward to working closely with the Commonwealth and developing a mutually beneficial project to County residents and the region.

If you have any questions or need additional information, please contact Martha Coello of the Department of Transportation at Martha.Coello@fairfaxcounty.gov or 703-877-5682.

Sincerely,

Jeffery McKay
Chairman

Enclosure:

- Attachment 1: Combined List of Comments from Fairfax County staff on I-495 NEXT EA
- Attachment 2: DPWES Letter to DEQ on I-495 NEXT Water Quality on June 30, 2020
- Attachment 3: DPWES Letter to Natural Resources on State Transportation Project SWM Concerns August 14, 2020 and BOS Letter to VDOT on SWM Requirements July 17, 2019
- Attachment 4: DPD Letters to Comment on I-495 NEXT EA
- Attachment 5: DPD Letter to DEQ on I-495 & I-270 Managed Lanes Study Draft EIS August 31, 2020

cc: Members, Fairfax County Board of Supervisors

Bryan J. Hill, County Executive
Rachel Flynn, Deputy County Executive
Tom Biesiadny, Director, Department of Transportation
Helen Cuervo, District Administrator, VDOT, Northern Virginia
Susan Shaw, Megaprojects Director, VDOT
Barbara Byron, Director, Department of Planning and Development
Randy Bartlett, Director, Department of Public Works and Environmental Services
Kirk Kincannon, Director, Fairfax County Park Authority

Attachment 1: Fairfax County Staff Comments on I-495 NEXT Environmental Assessment Reports

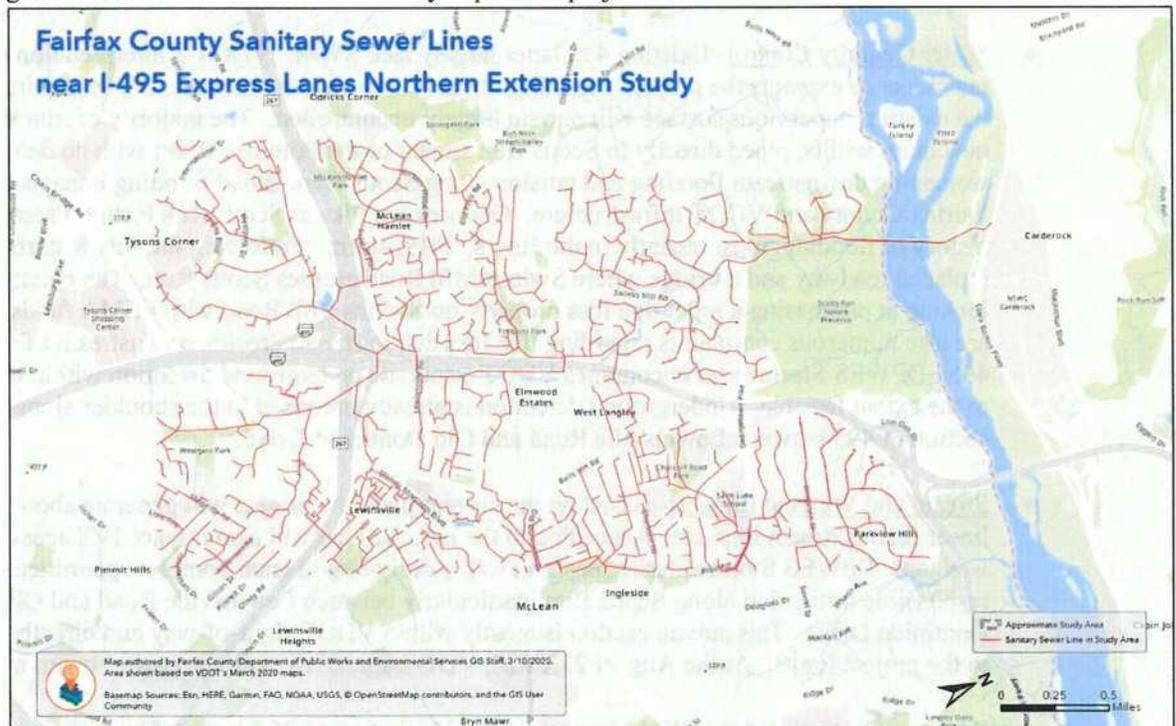
DPWES Stormwater

- **SWM Requirements**- The current plan fails to follow the county's request to meet local stormwater management (SWM) requirements. The project will meet state VSMP regulations as detailed in VDOT IIM-LD-195-12. Additionally, it is the county's understanding that the project will meet the old grandfathered SWM conditions rather than current requirements.
- **Water Quality**- The project will not meet its on-site water quality requirements. VDOT may ask for an exception from DEQ to meet up to 80% of their phosphorus reduction off site in a nutrient bank outside of Fairfax County. DPWES Stormwater urges VDOT to explore using enhanced outfall stabilization practices to meet the project's water quality requirements on site. At the August 21, 2020, meeting with VDOT, Virginia Department of Environmental Quality (DEQ), FCDOT, and DPWES staff, VDOT said that the project will incorporate several outfall enhancements into the SWM plan.
- **Water Quantity Control**- Existing 495 lanes largely lack SWM. VDOT's interpretation of routine maintenance exempts the project's existing impervious area from the state SWM requirements, so the existing impervious surface will remain largely uncontrolled. The majority of runoff from the new lanes will be piped directly to Scotts Run stream or the Potomac River with no detention, worsening downstream flooding and erosion along Scotts Run. Road flooding impacts both Fairfax County and VDOT infrastructure. Georgetown Pike at Scotts Run Nature Preserve has a history of flooding, most recently in the July 8, 2019, storm. Following the July 8 storm, VDOT replaced roadway and a bridge where Swinks Mill Road crosses Scotts Run. The county is looking at purchasing a repetitive loss property on Swinks Mill Road with FEMA funds. There are also numerous complaints regarding tree loss due to stream erosion downstream of 495. DPWES Stormwater encourages VDOT to pursue underground detention within the ROW to the extent feasible. Underground detention is already proposed in the shoulder along the section of 495 between Lewinsville Road and Old Dominion Drive.
- **Stream and Wetland Impacts**- Based on the current plan, the project will generate about 3,000 linear feet of stream impacts. According to the EA, the plan will also impact 19.8 acres of wetlands. DPWES Stormwater requests VDOT's design/build team complete permittee-responsible mitigation along Scotts Run, particularly between Lewinsville Road and Old Dominion Drive. This stream section is mostly within VDOT right-of-way and directly adjacent to the project limits. At the August 21, 2020, VDOT agreed to explore on-site stream mitigation.
- **Resource Protection Area (RPA) Impacts**- The EA cites up to 75.5 acres of temporary and permanent impacts to the RPA. Public roads are conditionally exempt from RPA regulation under the Virginia Administrative Code provided that the roadway is designed and constructed in accordance with water quality protection criteria at least as stringent as VDOT requirements. The project will not meet its on-site water quality requirements and require an exemption from DEQ. Given that the project may not meet minimum water quality requirements, DPWES Stormwater requests that the project meet the RPA replanting requirements detailed in Fairfax County Code Chapter 118 Chesapeake Bay Preservation Ordinance and Public Facilities Manual Chapter 12 (12-0316.4) in the Scotts Run stream valley section between Lewinsville Road and Old Dominion Drive.

- While DPWES Stormwater recognizes the constraints faced by linear projects like the 495 Express Lanes Northern Extension, we also feel that transportation projects, particularly of this magnitude, should strive to minimize impacts to water quality and our local streams.
- **Revegetation**- When restoring disturbed areas within the 495 project area, DPWES Stormwater requests that VDOT develop and implement a Non-Native Invasive Management Plan (NNIMP), encourages VDOT to restore areas within Waters of the United States corridors with a mix of plants, shrubs, and trees including native plant seed, live stakes, and nursery stock and provide monitoring, invasives treatment, and replanting of restoration areas for a period of two years after construction is complete and restoration vegetation is installed.

DPWES Wastewater

- Please find a map of Fairfax County wastewater infrastructure both crossing and within the general area of the 495 NEXT Beltway expansion project below



The geographic data layers produced by the Government of Fairfax County, Virginia ("Fairfax County"), and any associated maps and applications, are provided as a public resource. While every reasonable effort is made to ensure the accuracy and completeness of the data, Fairfax County makes no warranties, expressed or implied, concerning the accuracy, completeness or suitability of its data, and it should not be construed or used as a legal description. For full disclaimer visit: <https://www.fairfaxcounty.gov/maps/disclaimer>

- As the project details become more refined, Fairfax County Wastewater Planning and Monitoring Division (WPMD) will need to be given the opportunity (at an early stage) to review the project design plans for potential impacts on wastewater infrastructure (i.e. relocated storm sewer within close proximity (vertical or horizontal) to wastewater infrastructure, significant cut or fill required for road grading that impacts the depth of the existing wastewater pipes, storm water ponds on top of existing wastewater easements, heavy construction equipment on top of shallow existing sewers, etc.).

Fairfax County Public Schools

- The only concerns are if sections of Old Dominion or Lewinsville roads area going to be closed during construction. Both of these roads have house stops along them and are routes used by the majority of buses that service the Langley/McLean and Great Falls areas. Also construction/ lane closures at the 495 on and off ramps to Georgetown Pike and the backup this will cause during afternoon rush hour. An area that is already going to have backups due to Cooper Middle being under construction.

Health Department

- **Socioeconomic and Land Use Technical Report**

- *Measuring economic disparity*

Table 5-6, p. 19 – “None of the block groups within the Demographic Study Area have a median household income lower than the HHS poverty guideline for the average household size. Therefore, there are no low-income populations in the study area.”

Explanation: The Health Department disagrees with the analysis above, as written, and encourage a more nuanced analysis of economic disparities. Given the high median income of the county, and this part of the county in particular, it is unreasonable to use a nationally derived poverty line as a means by which to measure low income. While it is true there are relatively small numbers of lower income people in this part of the county, using a measure such as 30% or 50% of AMI as a cutoff for low income would be a better approach to counting true economic vulnerability for households in the impacted area.

- *Measuring racial disparity*

There is a minor discrepancy how census tracts are listed. In Table 5-5 on p.17, the census tract with the highest percent of minority population is noted as 4712.02, BG 2, while in subsequent paragraphs in section 5.2.3, it is listed as 4710.02, BG 2.

- *Commute mode – Travel to Work*

The Health Department questions the baseline assumption that because most people commute by car today (Table 6-4, p.23), there is a need to provide more lanes for cars as a means of improving mobility. This assumption is the foundation of analysis in most sections of the entire environmental report, in which the option of No Building versus Build are presented as the only options. A more complete picture of mobility choice would include a comparison of the Build and No Build options to a high speed, high occupancy transit option, which would likely have more environmental benefits over the long term. Such a comparison would also allow for a better analysis of which option best met the “Purpose and Need” of the study, as outlined in section 1-4, p.2:

- Reduce congestion;
- Provide additional travel choices; and
- Improve travel reliability.

The Health Department encourages VDOT to further examine opportunities for regional transit in this corridor.

- **Air Quality Technical Report**

The Health Department encourages tree planting in all available and feasible areas inside the LOD to promote air quality, noise abatement, and screening. If trees are not viable, we encourage

shrubs or other vegetation, as long as they do not present safety hazards, especially for cyclists and pedestrians who are more vulnerable on the roadway.

Given the extended construction period for a project of this nature, the Health Department wishes to emphasize the mitigation strategies for the construction period, proposed by VDEQ, as noted on p.10: *For Fairfax county, VDEQ comments relating to mitigation are*7 “...all reasonable precautions should be taken to limit the emissions of VOC and NOx. In addition, the following VDEQ air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-130, Open Burning restrictions8; 9 VAC 5-45, Article 7, Cutback Asphalt restrictions9; and 9 VAC 5-50, Article 1, Fugitive Dust precautions10.”

Specifically, the use of low emission construction vehicles, dust control, and limiting construction activity on high pollution days (“Code Orange” or “Code Red” days) will promote better air quality. Without such considerations, the health of constructions workers and nearby residents/workers/visitors could be negatively impacted. Construction workers are also particularly vulnerable to immediate exposure of fumes from hot asphalt and other construction materials which can be harmful to respiratory health.

- **Noise Technical Report**

The Noise Technical Report provides a lot of detail that is not easily understood. The Health Department encourages FCDOT to carefully review the results, particularly those laid out in Table 7-2, p.54, to fully understand the reasoning and impacts of the recommendations therein.

- **Indirect and Cumulative Effects Technical Report**

The Health Department questions the logic of this summary, from p.47. “*Local roadways that parallel the improved I-495 study area could see traffic volume reductions, as drivers divert from existing surface streets to the improved corridor where they would find better travel conditions. This would result in an indirect benefit to communities from the proposed project.*” There is great potential that local roads will continue to experience high traffic due to people avoiding the cost of express lanes as well as traffic in the general travel lanes.

- **Bicycle and Pedestrian Facilities**

The Health Department applauds the design and future construction of additional shared use facilities for pedestrians and cyclists. Where new facilities run parallel to 495, it is imperative that shared use paths be located outside the noise walls. This placement has multiple direct health benefits, including:

- Reduced exposure to vehicle emissions (respiratory and cardiovascular health)
- Reduced exposure to noise (aural and mental health)
- Reduced risk of direct conflict with moving **vehicles** on the highway or flying objects (physical safety and eye health)
- Increased likelihood of facility use by pedestrians and cyclists (cardiovascular and mental health)
- Easier access to the area and regional bicycle network (cardiovascular and mental health)

Department of Neighborhood and Community Services

- What did outreach and engagement entail particularly in the CT identified as having a high minority population?

- Were materials available in various languages?
- Were any special considerations or actions taken to engage seniors? Members from the Disability community?
- How was environmental justice determined? The summary just indicates no disproportionately high and adverse effect on minority or low-income populations. More information about the methodology and results used to generate this conclusion would be helpful.
- The summary indicates potential impact on three bat species, wood turtles, and local stream and wood plains. Does this project present an acceptable level of risk and how is that standard established?

Department of Transportation

- Some flyover and interchange ramps along the project have been designed with high elevations to allow for adequate clearances and connections between travel lanes. Alternative concepts to the high elevation ramps should be evaluated and considered for minimizing noise, visual and right-of-way impacts upon nearby residential communities. This is a special concern regarding the ramp from the northbound I-495 Express Lane to George Washington Parkway.
- On Page 7-56, text discusses that operations degrade at Spring Hill/Lewinsville during AM Peak from LOS E in 2045 No Build to LOS F In 2045 Build. This intersection has been looked at by FCDOT/BOS in the recent past, and mitigation of the project impacts may need to be reviewed.
- Fairfax County staff has suggested a grade-separated crossing of Lewinsville Rd in addition to the at-grade connection on the north side of Lewinsville Rd. VDOT responded that the grade separation would provide a connection to a trail system outside the scope of this project and would require a separate feasibility study but will consider to include at-grade crosswalk across Lewinsville Rd to connect the existing shared-use path on the south side. Fairfax County staff previously suggested and continues to recommend routing the proposed SUP under the bridge and connect to the existing path south of the bridge along Lewinsville Rd.
- Shared-use path should be added on the south side of Georgetown Pike from Balls Hill Rd to just east of Dead Run Dr.
- It is important to the trail system on Virginia side to include the segment in this project on the east side of I-495 cross the on ramp to George Washington Parkway with or without the managed lane project on Maryland side.
- We have concerns regarding interim road conditions during construction, particularly maintenance of striping and visible lane markings at nighttime as well as the condition of the pavement once lane markings have been eradicated. Acknowledging that VDOT is still in discussions with the concessionaire, we request that more visible lane markings be installed and that pavement area be milled and overlaid as traffic shifts occur to facilitate construction. Considering the condition of the striping and pavement during the Transform 66 project construction, additional measures by VDOT and the concessionaire should be pursued to ensure that all markings are visible pavement conditions acceptable during all weather scenarios and, particularly, at nighttime.
- The County has presented VDOT with alternative designs for the Tysons East Dulles Connector. Plans for the 495 Express lanes should not preclude the future construction of the Connector.
- There are concerns with transitions at north end of this project and the lack of provisions for continuing northbound into Maryland.
- Page 2-4 of the EA shows the proposed typical section. A gap is shown between the General Purpose Lanes' shoulder and the sound wall. Is that gap to indicate another feature of the roadway or an error in the rendered section?

- The EA indicates that access from the 1495 southbound express lanes to eastbound Route 267 is facilitated by a C-D road that also provides access to Route 123. It is unclear if the impact of additional Express Lanes traffic on the C-D road has been examined to ensure no degradation in operations.
 - Multiple intersections operate under failing conditions in both 2025 and 2045 analysis, particularly those that have deteriorated further compared to the No-Build scenario. These intersections include:
 - 2025AM
 - Route 123 and Lewinsville Road/ Great Falls Street
 - 2045 AM
 - Route 123 and Lewinsville Road/ Great Falls Street
 - Spring Hill Road and Dulles Toll Road Eastbound Ramps
 - Spring Hill Road and Dulles Toll Road Westbound Ramps
 - Spring Hill Road and Lewinsville Road
 - 2045 PM
 - Route 123 and Lewinsville Road/ Great Falls Street
 - Lewinsville Road and Balls Hill Road
 - Jones Branch Drive and Jones Branch Connector
 - Jones Branch Connector and Express Lanes Ramps
 - Jones Branch Drive and Capital One (West)
- VDOT should further analyze the traffic operations at these impacted intersections and investigate the mitigations to improve the level of service of these intersections.

Fairfax County Park Authority

Here is a summary of FCPA comments that can be found in the various correspondence for Section 4(f) de Minimis Impact, Section (6) for LWCF land, Environmental Assessment, and PH design plans

- Acquisition of Parkland:
 - The United States Department of the Interior (USDOI), Bureau of Outdoor Recreation, approved Project Proposal 51-00053, dated August 17, 1970, for the acquisition of approximately 336 acres of land that was identified as the Burling Tract, with the Land and Water Conservation Fund (LWCF). The Burling Tract was purchased by the Fairfax County Board of Supervisors (BOS), the deed was recorded in Deed Book 3343 at Page 532 on September 4, 1970. The BOS transferred the land to FCPA as recorded in Deed Book 12327 at Page 2170 on October 29, 2001. The Burling Tract includes what is now FCPA Scotts Run Nature Preserve, Tax Map #21-1((1))3, which will be impacted by the VDOT Project. VDOT's Project impacts will likely require a LWCF land conversion process and subject to approval by National Park Service.
- Cultural Resources
 - Park Authority staff recommends any areas with ground disturbance throughout the project corridor that are not previously surveyed, undergo Phase I archaeological survey. If sites are found that are potentially significant to the history of Fairfax County, or potentially eligible for inclusion onto the National Register of Historic Places they should undergo Phase II archaeological testing. If sites are found significant or eligible, avoidance or Phase III data recovery is recommended.
 - Park Authority staff has conducted archival cultural resources review for the above referenced project. The Environmental Assessment report made no mention of the site, 44FX2430, specifically. The report only mentioned that any sites within their area of

impact contained no sites that were eligible, or potentially eligible for inclusion onto the National Register of Historic Places. However, after re-checking the current Virginia Department of Historic Resources (VDHR) status of 44FX2430, the site has NOT been evaluated. Therefore, it is recommended that if the site will be impacted, a Phase II study is necessary in order to determine county significance or eligibility for National Register of Historic Places (NRHP) status. If found significant or eligible, avoidance, or Phase III data recovery is recommended as mitigation.

- Natural Resources

All development on Park Authority property must comply with its Policy 201, Natural Resources, and agency-wide Natural Resource Management Plan (NRMP). Of note is Section 7 of the NRMP:

- Avoid adverse impacts to natural areas, mitigate unavoidable impacts from construction and maintenance projects and require restoration and rehabilitation of impacted natural resources.
 - i. Minimize impacts to forests, meadows and other natural areas from human use.
 - ii. Protect significant natural communities and species.
 - iii. Require restoration of impacted natural resources when use of parkland causes damage to them.

If impacts cannot be avoided, staff requests a design that minimizes impacts and a mitigation plan for any losses, which should be coordinated with the Park Authority. This mitigation plan will need to clarify the extent of construction that will occur on Park Authority property as well as the impacts to natural resources.

- Scotts Run Nature Preserve will experience direct impacts of lost parkland, vegetation, habitat and increased storm water discharge, invasive species as well as wildlife impacts. The ecological community impacted by this effort has been classified as Mesic Mixed Hardwood Forest. The area that would be most impacted by this project scored an 11.5 out of 16 in the Non-Native Assessment and Prioritization survey. This categorization makes the area a high priority for active management. It has been treated for invasive plants for several years to maintain ecological integrity.
- Park Authority recommends the rehabilitation for any temporary impacts to natural resources to Park Authority standards and mitigate/compensate for permanent impacts to natural resources on Park Authority managed lands. This requirement shall apply to any natural resource impact (terrestrial or aquatic) that is not regulated under the jurisdiction of any federal or state agency.
- The Park Authority defines permanent impact as any habitat type conversion, for example, forest to grassland, and temporary impact as replacement of the same habitat type or better, for example, grassland to grassland.
- Mitigation/compensation for permanent impacts shall be determined using the Fairfax County Land Development Services 2020 Unit Price Schedule to determine a replacement cost. Forest, woodland, and shrubland habitat types shall be mitigated/compensated for at \$61,049 an acre, and grassland shall be mitigated/compensated for at \$14,520 an acre. Total impacts and mitigation/compensation costs shall be determined upon completion of the site design.
- Due to the proximity to parkland, staff requests the use of only common native species including perennials and seed mixes on this project since non-native species either do not fare as well as natives or are invasive, negatively impacting the environmental health of Park Authority property. The Park Authority requests that the applicant utilize common

plant species generally native to Fairfax County, including trees, perennials, and seed mixes, to provide the greatest ecosystem benefit.

- The Park Authority requests the results of any endangered species surveys conducted in preparation to or as part of this project.
- Park Authority recommends stabilization of areas within the construction footprint within Scott's Run Nature Preserve using a native seed mix as specified by the FCPA. Once construction is complete, FCPA will rehabilitate these areas to the habitat type. VDOT will compensate FCPA to design, install and maintain these rehabilitated areas for up to three (3) years.
- Any impacts that extend beyond the Limits of Disturbance (LOD), including root and branch pruning, must follow Policy 201 for Natural Resources or be mitigated/compensated for.
- The FCPA requests the results of any endangered species surveys conducted in preparation to or as part of this project.
- Staff has reviewed the Environmental Assessment and has several recommended edits and/or corrections that pertain to description of parkland, habitat classification, migratory bird, bat, and forest dwelling species impacts, and the inclusion of the Potomac Heritage National Scenic Trail within the project limits.

Attachment 2



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

June 30, 2020

Ms. Erin Belt, Mr. Robert Cooper, Ms. Hannah Zegler
Office of Stormwater Management
Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

Reference: I-495 Express Lanes Northern Extension (495 NEXT) Water Quality

Dear Ms. Belt, Mr. Cooper, and Ms. Zegler:

Per the attached May 26, 2020, meeting minutes titled, Project Next – DEQ/VDOT IIM-LD-251.5, Virginia Department of Transportation (VDOT) staff requested Fairfax County confirm the following in writing:

- The [495 NEXT] project is not in “*contravention of local water quality-based limitations*” as described in 9VAC25-870-69, Section C.2.
- Fairfax County is aware of the project’s request to DEQ for a “20% onsite facilities / 80% nutrient credit” ratio to address the total phosphorus reduction requirements (approximately 42 pounds per year of nutrient credits).

The Department of Environmental Quality’s (DEQ) *2018, 305(b)/303(d) Water Quality Assessment Integrated Report* lists Scotts Run as a Category 3C stream segment. The report defines Category 3C as, “data collected by a citizen monitoring or another organization indicating water quality problems may exist but the methodology and/or data quality has not been approved for a determination of support of designated use(s). These waters are considered as having insufficient data with observed effects. Such waters will be prioritized by DEQ for follow-up monitoring.”

While Fairfax County confirms that the project is not in a watershed with local water quality-based limitations, the county is concerned that VDOT intends to meet 80% of the project’s water quality requirements with offsite nutrient credits. Scotts Run is an urban stream with poor water quality and degraded riparian and aquatic habitats. The 2001 Fairfax County Stream Protection

Department of Public Works and Environmental Services
Director’s Office

12000 Government Center Parkway, Suite 448
Fairfax, VA 22035-0050

Phone: 703-324-5033, TTY 711, Fax: 703-653-7145
www.fairfaxcounty.gov/publicworks



Strategy Baseline Study gave Scotts Run a “very poor” composite site condition rating based on parameters that included biotic integrity, stream physical assessment, fish taxa, and percent imperviousness. Fairfax County’s 2002 Stream Physical Assessment characterized the existing habitat quality as only “fair” with inadequate buffers.

Fairfax County requests VDOT utilize enhanced outfall stabilization practices to meet the project’s water quality requirements on site. The Chesapeake Bay Program stream restoration group recently released a memo entitled, “Recommendations for Crediting Outfall and Gully Stabilization Projects in the Chesapeake Bay Watershed.” The Department of Public Works and Environmental Services (DPWES) encourages the project team to consider the use of this memo to justify water quality credit for outfall enhancements that go beyond the VDOT standard riprap protection. These outfall enhancements could address water quality within the project limits and help protect Scotts Run from further degradation.

In addition to the direct water quality impacts, the project’s Environmental Assessment cites up to 75.5 acres of temporary and permanent impacts to the Resource Protection Area (RPA) resulting in the removal of riparian buffer that benefits water quality by infiltrating runoff and filtering out pollutants. Public roads are conditionally exempt from RPA regulation under the Virginia Administrative Code provided that the roadway is designed and constructed in accordance with water quality protection criteria at least as stringent as VDOT requirements. Given that VDOT will not meet minimum water quality requirements on site, DPWES requests that the project meet the RPA replanting requirements detailed in Fairfax County Code, Chapter 118 (Chesapeake Bay Preservation Ordinance) and Public Facilities Manual Chapter 12 (12-0316.4). RPA reestablishment as proposed in the county code will protect water quality, filter pollutants out of the stormwater runoff, reduce stormwater volume, prevent erosion, and provide important ecological habitat.

Fairfax County continues to request that VDOT meet local stormwater management (SWM) requirements consistent with the July 2019, letter Fairfax County sent to the Virginia Secretary of Transportation requesting that VDOT projects meet local SWM requirements (see Attachment 2). The 495 NEXT project will meet state Virginia Stormwater Management Program (VSMP) regulations as detailed in VDOT IIM-LD-195.12. As stated in the attachment, the county believes some Fairfax County Stormwater Management Ordinance criteria is more stringent than Parts II B and II C of the VSMP Regulations and requested that VDOT projects meet the county’s local SWM regulations.

Fairfax County previously sent a letter to DEQ regarding the 495 NEXT project’s stream impacts (see Attachment 3). The county continues to request that the project’s stream and wetland impacts be minimized and avoided where feasible and that temporary stream impacts be restored onsite using natural channel design practices to reduce the need for mitigation. The county also requests that VDOT follow permittee responsible mitigation using the watershed approach as the preferred method of stream mitigation.

Ms. Erin Belt, Mr. Robert Cooper, Ms. Hannah Zegler
495 NEXT Water Quality
Page 3 of 3

While Fairfax County recognizes the constraints faced by linear projects like 495 NEXT, we also believe that transportation projects, particularly of this magnitude, should strive to minimize impacts to water quality and local streams. We respectfully request responses to these letters on the 495 NEXT project's use of off-site nutrient credits and stream impacts to meet their state stormwater and stream mitigation requirements.

Sincerely,


For Randolph Bartlett
Randolph W. Bartlett, PE
Director

Enclosure: Attachment 1: Project Next – DEQ/VDOT IIM-LD-251.5 Meeting Minutes
Attachment 2: Fairfax County Request for VDOT Projects to Meet Local SWM Requirements
Attachment 3: 495 NEXT Project Stream Impacts Letter to DEQ

cc: Rachel Flynn, Deputy County Executive
Tom Biesiadny, Director, Fairfax County Department of Transportation (FCDOT)
Craig Carinci, Director, Department of Public Works and Environmental Services (DPWES), Stormwater Planning Division (SWPD)
Matthew Meyers, Branch Chief, DPWES, SWPD
Martha Coello, Division Chief, FCDOT
Yuqing Xiong, Senior Transportation Planner, FCDOT
Abraham Lerner, Associate Manager, Virginia Department of Transportation

| | | | |
|-----------------|--|-------------|-----------------|
| Meeting | Project Next – DEQ/VDOT IIM-LD-251.5 | Date | May 26, 2020 |
| Location | Teleconference – Google Meets meet.google.com/zah-bmkf-bxz Dial-In Number: 251-262-9697 Conference Code: 427306053 | Time | 2:00pm – 3:00pm |
| | Invitees: DEQ: Erin Belt, Robert Cooper, Hannah Zegler VDOT: John Olenik, Pawan Sarang HDR: Brian Meli | | |
| Item | Subject: Project NEXT – DEQ/VDOT discussion on IIM-LD-251.5 memo | | |
| 1.0 | Introduction | | |
| 2.0 | Comments from DEQ via 2020-05-06 email from VDOT (Pawan Sarang) <ul style="list-style-type: none"> a. DEQ Comment #1 - Review the simple method computations, Chapter 11.4.4 of the 2013 DEQ Blue Book, ensuring the correct values are entered into the spreadsheet and re-verify the total load reductions lb./yr. of P needed to purchase. <ul style="list-style-type: none"> - DEQ (Erin Belt) confirmed that Equation 5-14 would apply to this Part IIC project. The “[0.05 + (0.009 x I)]” portion is related to the Part IIC, Performance-based calculation worksheets from the 1999 Virginia SWM Handbook. This confirmation will result in no changes to the Project NEXT computations. b. DEQ Comment #2 - Ensure the IIC and IIB criteria are not mixed or matched in the computations. <ul style="list-style-type: none"> - DEQ (Erin Belt) confirmed that Table 5-14 would apply to this Part IIC project. The removal efficiency of Bioretention will be 50% for the project, as listed on the table. - DEQ (Robert Cooper) confirmed that the project should use the Part IIC, 1999 Virginia SWM Handbook to design the facilities. - HDR (Brian Meli) presented the Worksheet #1 and #2 approach which utilizes an I(watershed) value of 16%. DEQ confirmed that this approach is sound and matches the worksheet methodology. c. DEQ Comment #3 - Include language from the law 62.1-44, 15:35 entered into the memo to document compliance with the law. <ul style="list-style-type: none"> - DEQ (Erin Belt) confirmed that the comment has been addressed in the May 12th, 2020 memorandum update. The Code of Virginia reference (62.1-44.15:35.D.3) was added to the memorandum at the top of page 2. | | |
| 3.0 | Additional comments from DEQ <ul style="list-style-type: none"> a. Per DEQ (Erin Belt), two (2) items are needed for DEQ to complete their review: | | |

| | |
|------------|--|
| | <ul style="list-style-type: none"> • A letter of availability from the nutrient credit bank. • Fairfax County to confirm, in writing: <ol style="list-style-type: none"> i. That the project is not in "contravention of local water quality-based limitations" as described in 9VAC25-870-69, Section C.2. ii. That per an April 27, 2020 email from Abi Lerner to Yuqing Xiong, Fairfax County is aware of the project's request to DEQ for a "20% onsite facilities / 80% nutrient credit" ratio to address the Total Phosphorus reduction requirements. This request equates to approximately 42 lbs/yr of nutrient credits. <ul style="list-style-type: none"> - Action Item: VDOT (John Olenik) to coordinate with the nutrient credit bank regarding the letter of availability. - Action Item: HDR (Brian Meli) to send an email to VDOT (Pawan Sarang) requesting written confirmation from Fairfax County regarding the above items. - Action Item: VDOT (Pawan Sarang) to forward the request to VDOT PM (Abi Lerner). - Action Item: VDOT PM (Abi Lerner) to forward the request to Fairfax County (Yuqing Xiong). <p>b. Per DEQ (Hannah Zegler), when will LD-453 be filled out?</p> <ul style="list-style-type: none"> - VDOT (Pawan Sarang) confirmed that LD-453 will be filled out by the Design/Builder, later in the process. |
| <p>4.0</p> | <p>Next Steps</p> <ul style="list-style-type: none"> - See the above action items |



SHARON BULOVA
CHAIRMAN

COMMONWEALTH OF VIRGINIA
County of Fairfax
BOARD OF SUPERVISORS

Attachment 2

SUITE 530
12000 GOVERNMENT CENTER PKWY
FAIRFAX, VIRGINIA 22035-0071

TELEPHONE 703-324-2321
FAX 703-324-3955
TTY 711

chairman@fairfaxcounty.gov

JUL 17 2019
Secretary Shannon Valentine
Virginia Department of Transportation
P.O. Box 1475
Richmond, VA 23218

Reference: Fairfax County Request for VDOT Projects to Meet Local Stormwater Management Requirements

Dear Secretary Valentine:

Fairfax County recognizes the critical importance of transportation projects to our community and continues to support the Commonwealth's efforts to advance multi-modal mobility in the region to improve our quality of life. We also know that transportation projects add significant impervious area to the Chesapeake Bay's and Fairfax County's watersheds and have significant negative impacts on water quality. Fairfax County would like to partner with the Virginia Department of Transportation (VDOT) to develop solutions to the stormwater management issues associated with transportation projects.

We reviewed VDOT Location and Design Division Instructional and Informational Memorandum IIM-LD-195.10 regarding stormwater management requirements for VDOT projects. Section 4.1 of this memorandum (starting on sheet 6) notes that, "*When requested by a locality's VSMP Authority, VDOT projects located in jurisdictions that have adopted more stringent stormwater management (SWM) technical criteria than that required by the VSMP Regulations shall be designed, to the largest extent practicable, to meet the locality's more stringent criteria.*"

Fairfax County's Stormwater Management Ordinance provides the technical criteria for regulated land-disturbing activities in Fairfax County. The criteria are provided in Article 5 of Chapter 124 of Fairfax County's Code of Ordinances, available at:
https://library.municode.com/va/fairfax_county/codes/code_of_ordinances

We believe these criteria are more stringent than Parts II B and II C of the Virginia Stormwater Management Program (VSMP) Regulations. Therefore, on March 19, 2019, the Fairfax County Board of Supervisors voted to, and now formally requests that all current projects under design for use in the public involvement phase and future VDOT projects located in Fairfax County meet the County's local stormwater management regulations. Per IIM-LD-195.10, if it is found that our more stringent local stormwater management requirements are not attainable, VDOT should implement requirements to the maximum extent practicable and provide documentation to the County demonstrating that the technical requirements are not fully feasible. Additionally, Fairfax County requests that all stormwater management facilities designed to meet local

Secretary Shannon Valentine
Request for VDOT Projects to Meet Local Stormwater Management Requirements
Page 2 of 2

stormwater management regulations be constructed, inspected, and maintained by VDOT and that the state provide sufficient funding to VDOT to adequately fulfill these needs.

VDOT and Fairfax County are both municipal separate storm sewer system (MS4) permit entities and share the same stormwater management objectives. Fairfax County wishes to partner with VDOT on efforts to find innovative ways to address stormwater management within the right-of-way and directly downstream to meet our mutual MS4 and Chesapeake Bay total maximum daily load (TMDL) goals.

Sincerely,



Sharon Bulova
Chairman
Fairfax County Board of Supervisors

cc: Ann Jennings, Deputy Secretary of Natural Resources for the Chesapeake Bay
David K. Paylor, Director, Virginia Department of Environmental Quality
Bryan J. Hill, Fairfax, County Executive
Rachel Flynn, Deputy County Executive
Randolph W. Bartlett, Director, Department of Public Works and Environmental Services (DPWES)
Bill Hicks, Director, Land Development Services
Tom Biesiadny, Director, Fairfax County Department of Transportation
Craig Carinci, Director, DPWES, Stormwater Planning Division
Chad Crawford, Director, DPWES, Maintenance and Stormwater Mangement Division
Brian Keightley, Director, DPWES, Urban Forest Management Division



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

MAY 29 2020

Hannah Schul and Mackenzie Scott
Office of Wetlands and Stream Protection
Department of Environmental Quality
1111 East Main Street, Suite 1700
Richmond, VA 23219

Reference: I-495 Express Lanes Northern Extension (495 NEXT) Project Stream Impacts

Dear Ms. Schul and Ms. Scott:

For the 495 NEXT project stream impacts, Fairfax County requests that stream and wetland impacts be minimized and avoided where feasible, and that temporary stream impacts be restored onsite using natural channel design practices to reduce the need for mitigation. Additionally, Fairfax County asks that the Virginia Department of Transportation (VDOT) follow permittee responsible mitigation (PRM) using the watershed approach as the preferred method of stream mitigation.

On April 9, 2020, VDOT, Transurban, United States Environmental Protection Agency (EPA), United States Army Corps of Engineers (COE), the Department of Environmental Quality (DEQ), and Fairfax County representatives met to discuss the 495 NEXT project stream impacts. Based on the current plan, VDOT anticipates about 3,000 linear feet of stream impacts, mostly located along Scotts Run between Lewinsville Road and Old Dominion Drive in McLean. During the meeting, DEQ staff emphasized that stream mitigation efforts should follow the mitigation strategy hierarchy outlined in the, "Compensatory Mitigation for Losses of Aquatic Resources Final Rule" (2008 Rule). Fairfax County Stormwater Management believes the 2008 Rule supports stream mitigation within the Scotts Run watershed, and requests that DEQ consider PRM using the watershed approach as a part of the Virginia Water Protection Permit (VWPP), through either PRM by the design builder as a part of the project construction or a financial contribution by the design builder to a county administered Scotts Run stream restoration project.

Restoration of the Scotts Run stream section within or directly adjacent to the project limits through PRM would reduce the project's permanent stream impacts. The VWPP regulations state that mitigation means, "sequentially avoiding and minimizing impacts to the extent practicable and then compensating for the remaining unavoidable impacts of a proposed action" (9VAC 25-210-10). Chapter 3 of the Joint Permit Application Review document recommends converting permanent impacts to temporary impacts where possible. The COE Norfolk District and DEQ "Unified Stream Methodology for Use in Virginia" guidance document states that,

**Department of Public Works and Environmental Services
Director's Office**

12000 Government Center Parkway, Suite 448
Fairfax, VA 22035-0050

Phone: 703-324-5033, TTY 711, Fax: 703-653-7145

www.fairfaxcounty.gov/publicworks



“streams that will be relocated using the principles of Natural Channel Design may be considered self-mitigating in most cases, eliminating the need to apply the Unified Stream Methodology.” This language supports on-site stream restoration to convert stream impacts from permanent to temporary and meet the VWPP regulation objective to minimize stream impacts to the extent practicable.

Given Scotts Run watershed’s deteriorated existing condition, including poor water quality, degraded riparian and aquatic habitats, and property and roadway flooding, PRM using a watershed approach is preferred to purchasing stream mitigation credits outside of the watershed. Fairfax County has received numerous complaints along Scotts Run regarding stream erosion and tree loss and property and roadway flooding. Increased imperviousness from the 495 NEXT project without local mitigation will only exacerbate already prevalent stream degradation and flooding issues.

Fairfax County has completed a Scotts Run watershed management plan that supports the PRM watershed approach requirements. Scotts Run is one of the five watersheds included in the 2008 Middle Potomac Watershed Management Plan (WMP). The county developed the WMP as a tool to address issues affecting the county’s environment, water quality, and local areas of opportunity for implementing improvement projects that protect and restore the county’s streams and other water resources. The plan identifies multiple stream restoration opportunities along Scotts Run, including SC9220 in the section of Scotts Run between Lewinsville Road and Old Dominion Drive and SCS9204 downstream of the project between I-495 and Georgetown Pike. Please see the enclosed map (Attachment 1) for additional information. To meet the WMP goals, Fairfax County has already invested millions of dollars into stream restorations at the headwaters of Scotts Run and has identified two additional stream restoration projects in their five-year capital improvement plan (CIP) for an estimated total of \$7.3 million dollars. One of these projects is SC9220 located directly adjacent to the project.

After minimizing permanent stream impacts by restoring the stream through Natural Channel Design, VDOT could meet the remaining stream mitigation requirements through PRM using the watershed approach. The 495 NEXT project stream mitigation strategy could model the 95 Express Lanes, which used PRM to meet stream compensation requirements. Approved in 2013 by COE, DEQ, and Prince William County, VDOT and the 95 Express Lane Partners (Fluor and Transurban) restored 1,435 linear feet of Swan’s Creek, a stream located outside of the project limits but within the same watershed. Like the Scotts Run stream restoration projects identified in the county’s WMP and CIP, significant erosion and tree loss made Swan’s Creek restoration a top project priority for Prince William County.

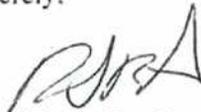
Another approach could be to have the design builder financially fund the design, construction, and monitoring of a county administered stream restoration project already identified in the county’s CIP. With over 12 miles of streams restored since 2010, Fairfax County is a national leader in designing and implementing successful and sustainable stream restoration projects. The county’s projects meet the same standards as mitigation banks for plans and success criteria.

and its stormwater management program has the capacity and expertise to ensure long-term stewardship of the restoration project. County stream restorations undergo a rigorous design process that includes not only improvements using Natural Channel Design, but also non-native, invasive plant management and riparian buffer restoration to improve water quality in the stream valley. Construction is performed by prequalified contractors with extensive stream restoration experience. An engineer from the firm responsible for the project design provides full-time construction oversight on top of regular inspection by county staff. Post construction, projects enter a robust multi-year monitoring program to ensure structural and vegetative success.

The ecological benefits of PRM using the watershed approach outweigh the benefits of purchasing credits. When evaluating the compensatory mitigation options, the 2008 Rule asks the reviewer to consider the location of the compensation site relative to the impact site and its significance in the watershed and the likelihood of ecological success and sustainability. The Middle Potomac Watershed Management Plan highlights current impairments in the Scotts Run watershed and how stream mitigation will help improve the water quality of Scotts Run. Fairfax County's comprehensive and successful stream restoration program will ensure that any project implemented in Scotts Run to satisfy VWPP stream mitigation requirements will meet or exceed mitigation bank design, construction, and monitoring standards.

Fairfax County believes on-site restoration of Scotts Run within the project limits and PRM using the watershed approach for any permanent stream impacts best comply with the regulatory objectives to first avoid and minimize stream impacts and then implement successful and sustainable compensatory stream mitigation. We respectfully request a response to this letter on the use of on-site stream restoration using Natural Channel Design along Scotts Run to meet DEQ's VWPP stream mitigation requirements. We are also available to meet to discuss options to address stream impacts from the 495 NEXT.

Sincerely,



Randolph W. Bartlett, PE
Director

Enclosure: Map

cc: Rachel Flynn, Deputy County Executive
Tom Biesiadny, Director, Fairfax County Department of Transportation (FCDOT)
Craig Carinci, Director, Department of Public Works and Environmental Service (DPWES), Stormwater Planning Division (SWPD).
Matthew Meyers, Branch Chief, DPWES, SWPD
Martha Coello, Division Chief, FCDOT
Yuqing Xiong, Senior Transportation Planner, FCDOT

Stephanie Kubico, Office of Environmental Programs, Environmental Assessment and Innovation Division, EPA Region III
Barbara Okorn, Office of Communities, Tribes and Environmental Assessment, EPA Region III
Timothy Witman, Office of Environmental Programs, EPA Region III
David Knepper, Environmental Scientist, COE Norfolk District
Bryan Campbell, Environmental Specialist, VDOT
Abraham Lerner, Associate Manager, VDOT
Robert Iosco, Associate Manager, VDOT
Amanda Baxter, Development Director, North America, Transurban
John Simkins, Planning, Environment, Realty, and Freight Team Leader, Federal Highway Administration



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

AUG 14 2020

The Honorable Deputy Secretary Ann Jennings
Office of the Secretary of Natural Resources
P.O. Box 1475
Richmond, Virginia 23218

Reference: State Transportation Project Stormwater Management Concerns

Dear Deputy Secretary Jennings:

Fairfax County recognizes the critical importance of transportation projects to our community, but we also see the negative water quality impacts that the additional impervious area has on the Chesapeake Bay and county watersheds. We are concerned about the current approach to stormwater management (SWM) on state transportation projects, particularly the purchase of stream bank credits outside of the county to mitigate stream impacts. We also noted significant discrepancies between the SWM proposed on the state transportation projects and the minimum SWM that the county would require on local development projects. Fairfax County requests your assistance in working with the Virginia Department of Environmental Quality (DEQ) and the Virginia Department of Transportation (VDOT) to develop and implement consistent application of the Virginia Stormwater Management Program (VSMP) regulations to the following transportation project SWM issues:

- **Stream Mitigation:** The "Compensatory Mitigation for Losses of Aquatic Resources Final Rule" (2008 Rule) outlines a mitigation strategy hierarchy of mitigation bank stream credits, in-lieu of fee program credits, and permittee responsible compensation using the watershed approach, respectively. Increased imperviousness from transportation projects without local mitigation will only exacerbate already prevalent stream degradation and flooding issues. Fairfax County believes that in some cases the 2008 Rule supports stream mitigation within the impacted local watershed over the purchase of stream mitigation credits outside of the watershed and requests that DEQ consider permittee responsible mitigation using the watershed approach. This approach was used successfully for the 95 Express Lanes project. Approved in 2013 by the United States Army Corps of Engineers, DEQ and Prince William County, VDOT and the 95 Express Lane Partners (Fluor and Transurban) restored 1,435 linear feet of Swan's Creek, a stream located outside of the project limits but within the same watershed.

State versus local SWM Requirements: VDOT projects meet state VSMP regulations as detailed in VDOT IIM-LD-195.12. As stated in the enclosed letter, the county believes some Fairfax County Stormwater Management Ordinance criteria is more stringent than Parts II B and II C of

Department of Public Works and Environmental Services
Director's Office

12000 Government Center Parkway, Suite 448
Fairfax, VA 22035-0050

Phone: 703-324-5033, TTY 711, Fax: 703-653-7145
www.fairfaxcounty.gov/publicworks



the VSMP Regulations and requested that VDOT projects meet the county's local stormwater management regulations. It does not appear VDOT is moving forward with this request. The I-495 Express Lanes Northern Extension (495 NEXT), the largest VDOT project under design in Fairfax County, does not appear to meet local stormwater standards.

- Interpretation of VSMP Regulations: Fairfax County interprets elements of the VSMP regulations differently than VDOT, including the "one percent rule" to determine limits of analysis and limitations to the use of off-site nutrient credits. In locations where full-depth pavement reconstruction occurs, Fairfax County's interpretations result in stricter SWM requirements and greater downstream protection.

While the Fairfax County Department of Public Works and Environmental Services SWM recognizes the constraints faced by linear projects, we also believe that transportation projects should strive to minimize impacts to water quality and local streams similar to other development projects. Fairfax County remains committed to working cooperatively and partnering with VDOT on transportation projects. We seek your assistance to ensure that DEQ and VDOT interpret and apply the VSMP regulations on transportation projects consistent with other development projects to achieve our mutual Chesapeake Bay Total Maximum Daily Load goals and protect downstream receiving channels.

Thank you for your time and support. If you have any questions or need additional information, please call Catie Torgersen at 703-639-7664.

Sincerely,



Randolph W. Bartlett, PE
Director

Enclosure: Fairfax County Request for VDOT Projects to Meet Local SWM Requirements

cc: The Honorable Nicholas Donohue, Deputy Secretary of Transportation, Commonwealth of Virginia
Rachel Flynn, Deputy County Executive
Tom Biesiadny, Director, Fairfax County Department of Transportation (FCDOT)
Bill Hicks, Director, Land Development Services
Craig Carinci, Director, Department of Public Works and Environmental Services (DPWES), Stormwater Planning Division (SWPD)
Catie Torgersen, Planner, DPWES, SWPD



SHARON BULOVA
CHAIRMAN

COMMONWEALTH OF VIRGINIA
County of Fairfax
BOARD OF SUPERVISORS

SUITE 530
12000 GOVERNMENT CENTER PKWY
FAIRFAX, VIRGINIA 22035-0071

TELEPHONE: 703/324-2321
FAX: 703/324-3955
TTY: 711

chairman@fairfaxcounty.gov

JUL 17 2019

Secretary Shannon Valentine
Virginia Department of Transportation
P.O. Box 1475
Richmond, VA 23218

Reference: Fairfax County Request for VDOT Projects to Meet Local Stormwater Management Requirements

Dear Secretary Valentine:

Fairfax County recognizes the critical importance of transportation projects to our community and continues to support the Commonwealth's efforts to advance multi-modal mobility in the region to improve our quality of life. We also know that transportation projects add significant impervious area to the Chesapeake Bay's and Fairfax County's watersheds and have significant negative impacts on water quality. Fairfax County would like to partner with the Virginia Department of Transportation (VDOT) to develop solutions to the stormwater management issues associated with transportation projects.

We reviewed VDOT Location and Design Division Instructional and Informational Memorandum IIM-LD-195.10 regarding stormwater management requirements for VDOT projects. Section 4.1 of this memorandum (starting on sheet 6) notes that, "*When requested by a locality's VSMP Authority, VDOT projects located in jurisdictions that have adopted more stringent stormwater management (SWM) technical criteria than that required by the VSMP Regulations shall be designed, to the largest extent practicable, to meet the locality's more stringent criteria.*"

Fairfax County's Stormwater Management Ordinance provides the technical criteria for regulated land-disturbing activities in Fairfax County. The criteria are provided in Article 5 of Chapter 124 of Fairfax County's Code of Ordinances, available at:

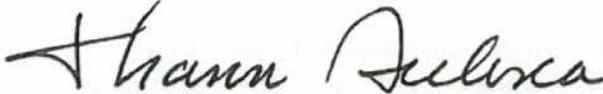
https://library.municode.com/va/fairfax_county/codes/code_of_ordinances

We believe these criteria are more stringent than Parts II B and II C of the Virginia Stormwater Management Program (VSMP) Regulations. Therefore, on March 19, 2019, the Fairfax County Board of Supervisors voted to, and now formally requests that all current projects under design for use in the public involvement phase and future VDOT projects located in Fairfax County meet the County's local stormwater management regulations. Per IIM-LD-195.10, if it is found that our more stringent local stormwater management requirements are not attainable, VDOT should implement requirements to the maximum extent practicable and provide documentation to the County demonstrating that the technical requirements are not fully feasible. Additionally, Fairfax County requests that all stormwater management facilities designed to meet local

stormwater management regulations be constructed, inspected, and maintained by VDOT and that the state provide sufficient funding to VDOT to adequately fulfill these needs.

VDOT and Fairfax County are both municipal separate storm sewer system (MS4) permit entities and share the same stormwater management objectives. Fairfax County wishes to partner with VDOT on efforts to find innovative ways to address stormwater management within the right-of-way and directly downstream to meet our mutual MS4 and Chesapeake Bay total maximum daily load (TMDL) goals.

Sincerely,



Sharon Bulova
Chairman
Fairfax County Board of Supervisors

cc: Ann Jennings, Deputy Secretary of Natural Resources for the Chesapeake Bay
David K. Paylor, Director, Virginia Department of Environmental Quality
Bryan J. Hill, Fairfax, County Executive
Rachel Flynn, Deputy County Executive
Randolph W. Bartlett, Director, Department of Public Works and Environmental Services (DPWES)
Bill Hicks, Director, Land Development Services
Tom Biesiadny, Director, Fairfax County Department of Transportation
Craig Carinci, Director, DPWES, Stormwater Planning Division
Chad Crawford, Director, DPWES, Maintenance and Stormwater Management Division
Brian Keightley, Director, DPWES, Urban Forest Management Division

Attachment 4



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

March 13, 2020

Martha Elena Coello, AICP
Fairfax County Department of Transportation

RE: I-495 NEXT Express Lanes Northern Extension Environmental Assessment Comments

Dear Ms. Coello,

Thank you for the opportunity to review and comment on the Interstate 495 Express Lanes Northern Extension Environmental Assessment. The Virginia Department of Transportation is proposing to extend the I-495 Express Lanes for approximately three miles from the I-495 and Dulles Toll Road Interchange to the vicinity of the American Legion Memorial Bridge. The project intends to reduce congestion, improve roadway safety, provide additional travel choices to single-occupancy drivers while encouraging high-occupancy travel modes, and improve travel reliability.

Based on the initial request for potential impacts, the Department of Planning and Development staff prepared a series of maps for the entire length of the project within Fairfax County, including potential impacts within 600 feet adjacent to the proposed project boundaries. Maps of potential areas of impact by tax map quadrant include:

- A map of the Fairfax County Comprehensive Land Use Plan, Development Centers current zoning applications.
- A map of Fairfax County Planning Geography, Inventory of Historic Sites, and Historic Overlay Districts.
- A parcel map of Fairfax County floodplains, Resource Protection Area's, Agricultural and Forestal Districts, and Environmental Quality Corridors.
- An aerial map of Fairfax County floodplains, Resource Protection Area's, Agricultural and Forestal Districts, and Environmental Quality Corridors.

Maps can be found here: <https://fairfaxcounty-ent.sharefile.com/d-s16f2957eec145c6b>.

If the project generates design plans for the identified potential improvements, staff asks to review the specific design to assess potential impacts. No additional comments have been received at this time, any additional comments will be sent directly to the Fairfax County Department of Transportation.



PLANNING & DEVELOPMENT

Department of Planning and Development
Planning Division
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5507
Phone 703-324-1380
Fax 703-653-9447
www.fairfaxcounty.gov/planning-development

Martha Elena Coello, AICP
3/13/2020
Page 2

Thank you again for the opportunity to comment. If you have any questions, please contact Denise James with the Department of Planning and Development at 703-324-1380.

Sincerely,



Leanna O'Donnell, Division Director, Planning Division
Department of Planning and Development

LHO:DMJ

cc: Board of Supervisors
Bryan J. Hill, County Executive
Rachel Flynn, Deputy County Executive
Barbara Byron, Director, DPD
Denise M. James, DPD



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

March 16, 2020

Martha Elena Coello, AICP
Fairfax County Department of Transportation

RE: I-495 NEXT Express Lanes Northern Extension Environmental Assessment Additional Comments

Dear Ms. Coello:

Thank you for extending the deadline to review and comment on the Interstate 495 Express Lanes Northern Extension Environmental Assessment. In addition to comments from the Department of Planning and Development sent on March 13, 2020, please find enclosed additional comments from Heritage Resources outlining impacts to the following listed roadways and historic sites:

- Georgetown Pike
- The northern section of George Washington Memorial Parkway running 9.7 miles from Arlington Memorial Bridge to the Capital Beltway in Virginia.
- Beaufort Park, located at 7303 Peter Place and within the 600 foot project buffer.
- Shiloh Baptist Church in Dranesville, is located at 8310 Turning Leaf Lane and adjacent to the 600 foot project buffer.

The historic sites listed can be found on the maps made by the Department of Planning and Development and sent on March 13, 2020, including the map of Fairfax County Planning Geography, Inventory of Historic Sites, and Historic Overlay Districts. All maps can be found here:
<https://fairfaxcounty-ent.sharefile.com/d-s16f2957eec145c6b>.

No additional comments have been received at this time; any additional comments will be sent directly to the Fairfax County Department of Transportation. Comments from Heritage Resources are attached to this letter. Thank you again for the opportunity to comment. If you have any questions, please contact Denise James with the Department of Planning and Development at 703-324-1380.

Sincerely,

Leanna O'Donnell, Division Director, Planning Division
Department of Planning and Development

LHO:DMJ

cc: Board of Supervisors
Bryan J. Hill, County Executive
Rachel Flynn, Deputy County Executive
Barbara Byron, Director, DPD
Denise M. James, DPD



PLANNING & DEVELOPMENT

Department of Planning and Development
Planning Division
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5507
Phone 703-324-1380
Fax 703-653-9447
www.fairfaxcounty.gov/planning-development

I-495 Express Lanes- Heritage Resources Comments

Laura Arseneau 3-9-2020

Heritage Resources comments:

Identification of Historic Properties

The proposed I-495 Express Lanes Project will have substantial impact on both the George Washington Memorial Parkway and Georgetown Pike. Both roadways are listed on the National Register of Historic Places, on the Virginia Landmarks Register and on the Fairfax County Inventory of Historic Sites. In addition, both roadways are designated by the Virginia Department of Transportation as Scenic Roads.

George Washington Memorial Parkway

The northern section of the George Washington Memorial Parkway runs 9.7 miles from the Arlington Memorial Bridge to the Capital Beltway in Virginia. It was constructed from 1930-1965. A byway is patterned as "formally or informally designed connectors within a system of predetermined destinations that include parks and monuments."¹ Its very nature as a byway encouraged a recreational motorist use, and the federal government outlined parkway design guidelines in 1935, which included:

- A limit to non-commercial, recreational, traffic
- Avoidance of unsightly road developments
- Wider-than-average right-of-way to provide a buffer from abutting property
- No frontage or access rights, to encourage the preservation of natural scenery
- Preference for a new site, to avoid already congested and built-up areas
- To best access native scenery
- Limitation of major grade crossings
- Well-distance entrance and exit points to reduce traffic interruptions and increase safety²

Furthermore, development along the immediate roadway has been limited and has preserved the scenic, historic and environmental aspects characterize the significance of the highway.

Georgetown Pike

The Georgetown Pike was constructed between 1813 and 1827 to connect the Georgetown Markets in DC to the agricultural interests in Leesburg and further west. The roadway is significant as a transportation turnpike, but is also significant in its construction method, which was an adapted French method called Tresaguet. This method excavated the roadbed, had two layers of compacted stones and

¹ George Washington Memorial Parkway National Register nomination, <https://catalog.archives.gov/id/117691695>.

²ibid.

was crowned in the center to improve drainage and wear. Resources from its construction dating from 1813 are visible, accessible and maintain their historic integrity. The original roadbed has been altered. The nomination and significance is only for the VDOT maintained right of way, which varies from 50-60 feet. Georgetown Pike became Virginia's first scenic and historic byway in 1973.³

Other Historic Sites

Two additional sites may be impacted by the proposed the I-495 Express Lane project. Both of these sites are in proximity to the proposed I-495 project, and depending on the scope and height of modifications, the project could negatively impact the viewshed of these two properties.

Beaufort Park, identified on the Fairfax County Inventory of Historic Sites, is located at 7303 Peter Place and at tax map number 021-3 ((26)) 10. This property is located within the 600 foot project buffer and could be impacted by any alteration to the interchange at Georgetown Pike. The residence on Beaufort Park was constructed in 1940, but there was a Georgetown Pike Toll Gate and potentially a rifle pit during the Civil War located on the original property before it was subdivided in the 1980s. The property was owned by Eugene and Lille Lou Rietzke, who founded Capital Radio Engineering Institute with was acquired by McGraw Hill.⁴ Archaeology has also been conducted on site.

Shiloh Baptist Church in Dranesville, also identified on the Fairfax County Inventory of Historic Sites, is located adjacent to the 600-foot buffer associated with the I-495 Express Lanes Project. The church is located at 8310 Turning Leaf Lane and tax map number 029-1 ((1)) 58C. The original church was constructed in 1887 and reconstructed in 1928 after a fire.⁵ The church served members of the Odricks Corner, a freed black community established by Cyrus Carter and Alfred Odricks.⁶

Potential Impact on Historic Properties

For the properties that are located on the National Register of Historic Places, George Washington Memorial Parkway and Georgetown Pike, every effort should be made to avoid any negative physical or visual impact that may result as the I-495 express lanes project. Any impact must be mitigated appropriately.

For the two properties on the Fairfax County Inventory of Historic Sites, Beaufort Park and Shiloh Baptist Church, every effort should be made to avoid any negative physical or visual impact. However, these properties have not been evaluated for eligibility for the National Register of Historic Places. Staff recommends further research be completed. Staff also recommends that the Fairfax County Park Authority Archaeological Collections Branch be consulted to analyze any archaeological impact.

³ "Georgetown Pike: Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁴ "Beaufort Park: Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁵ "Shiloh Baptist Church (Dranesville): Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁶ Netherton, Nan. Fairfax County, Virginia: A History. Fairfax County Board of Supervisors, 1992, 452.

I-495 Express Lanes- Heritage Resources Comments

Laura Arseneau 3-9-2020

Heritage Resources comments:

Identification of Historic Properties

The proposed I-495 Express Lanes Project will have substantial impact on both the George Washington Memorial Parkway and Georgetown Pike. Both roadways are listed on the National Register of Historic Places, on the Virginia Landmarks Register and on the Fairfax County Inventory of Historic Sites. In addition, both roadways are designated by the Virginia Department of Transportation as Scenic Roads.

George Washington Memorial Parkway

The northern section of the George Washington Memorial Parkway runs 9.7 miles from the Arlington Memorial Bridge to the Capital Beltway in Virginia. It was constructed from 1930-1965. A byway is patterned as “formally or informally designed connectors within a system of predetermined destinations that include parks and monuments.”¹ Its very nature as a byway encouraged a recreational motorist use, and the federal government outlined parkway design guidelines in 1935, which included:

- A limit to non-commercial, recreational, traffic
- Avoidance of unsightly road developments
- Wider-than-average right-of-way to provide a buffer from abutting property
- No frontage or access rights, to encourage the preservation of natural scenery
- Preference for a new site, to avoid already congested and built-up areas
- To best access native scenery
- Limitation of major grade crossings
- Well-distance entrance and exit points to reduce traffic interruptions and increase safety²

Furthermore, development along the immediate roadway has been limited and has preserved the scenic, historic and environmental aspects characterize the significance of the highway.

Georgetown Pike

The Georgetown Pike was constructed between 1813 and 1827 to connect the Georgetown Markets in DC to the agricultural interests in Leesburg and further west. The roadway is significant as a transportation turnpike, but is also significant in its construction method, which was an adapted French method called Tresaguet. This method excavated the roadbed, had two layers of compacted stones and

¹ George Washington Memorial Parkway National Register nomination, <https://catalog.archives.gov/id/117691695>.

²Ibid.

was crowned in the center to improve drainage and wear. Resources from its construction dating from 1813 are visible, accessible and maintain their historic integrity. The original roadbed has been altered. The nomination and significance is only for the VDOT maintained right of way, which varies from 50-60 feet. Georgetown Pike became Virginia's first scenic and historic byway in 1973.³

Other Historic Sites

Two additional sites may be impacted by the proposed the I-495 Express Lane project. Both of these sites are in proximity to the proposed I-495 project, and depending on the scope and height of modifications, the project could negatively impact the viewshed of these two properties.

Beaufort Park, identified on the Fairfax County Inventory of Historic Sites, is located at 7303 Peter Place and at tax map number 021-3 ((26)) 10. This property is located within the 600 foot project buffer and could be impacted by any alteration to the interchange at Georgetown Pike. The residence on Beaufort Park was constructed in 1940, but there was a Georgetown Pike Toll Gate and potentially a rifle pit during the Civil War located on the original property before it was subdivided in the 1980s. The property was owned by Eugene and Lille Lou Rietzke, who founded Capital Radio Engineering Institute with was acquired by McGraw Hill.⁴ Archaeology has also been conducted on site.

Shiloh Baptist Church in Dranesville, also identified on the Fairfax County Inventory of Historic Sites, is located adjacent to the 600-foot buffer associated with the I-495 Express Lanes Project. The church is located at 8310 Turning Leaf Lane and tax map number 029-1 ((1)) 58C. The original church was constructed in 1887 and reconstructed in 1928 after a fire.⁵The church served members of the Odricks Corner, a freed black community established by Cyrus Carter and Alfred Odricks.⁶

Potential Impact on Historic Properties

For the properties that are located on the National Register of Historic Places, George Washington Memorial Parkway and Georgetown Pike, every effort should be made to avoid any negative physical or visual impact that may result as the I-495 express lanes project. Any impact must be mitigated appropriately.

For the two properties on the Fairfax County Inventory of Historic Sites, Beaufort Park and Shiloh Baptist Church, every effort should be made to avoid any negative physical or visual impact. However, these properties have not been evaluated for eligibility for the National Register of Historic Places. Staff recommends further research be completed. Staff also recommends that the Fairfax County Park Authority Archaeological Collections Branch be consulted to analyze any archaeological impact.

³ "Georgetown Pike: Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁴ "Beaufort Park: Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁵ "Shiloh Baptist Church (Dranesville): Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁶ Netherton, Nan. Fairfax County, Virginia: A History. *Fairfax County Board of Supervisors*, 1992, 452.



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

August 31, 2020

Virginia Department of Environmental Quality
Office of Environmental Impact Review
ATTN: Mr. John Fisher
P.O. Box 1105
Richmond, Virginia 23218
John.Fisher@deq.virginia.gov

RE: Draft Environmental Impact Statement (EIS)
I-495 and I-270 Managed Lanes Study
Fairfax County
Project Number: DEQ #20-103F
USDOT/Federal Highway Administration

Dear Mr. Fisher:

This memorandum provides comments from the Department of Planning and Development (DPD) regarding the I-495 & I-270 Managed Lanes Study.

DESCRIPTION OF THE PROJECT

LOCATION & SCOPE

The I-495 & I-270 Managed Lanes Study is the first element of a broader I-495 and I-270 Public Private Partnership (P3) Program. The study is considering alternatives to address roadway congestion within the study scope of 48 miles of I-495 from south of the George Washington Memorial Parkway in Fairfax County, including the rebuilding of the American Legion Bridge over the Potomac River, to west of MD 5, and along I-270 from I-495 to north of I-370, including the East and West I-270 Spurs.

Within Fairfax County, the Study extends along I-495, beginning 0.4 miles south of George Washington Memorial Parkway, and extending to the Potomac River. The construction would incorporate mainline connections between I-495 and the George Washington Memorial Parkway. Managed lanes would connect directly into the proposed extension of the Virginia Express Lanes.

All build alternatives include the full replacement of the American Legion Bridge, which is nearly 60 years old, with a new, wider bridge. The new bridge would be constructed in phases to maintain the same number of existing lanes at all times and would be rebuilt in the same location.



Excellence * Innovation * Stewardship
Integrity * Teamwork * Public Service

Department of Planning and Development
Planning Division
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5507
Phone 703-324-1380
Fax 703-653-9447
www.fairfaxcounty.gov/planning-development

ALTERNATIVES

Seven alternatives were considered in the Draft EIS:

- Alternative 1: No Build.
- Alternative 5: One High-Occupancy Toll (HOT) Managed Lane Network.
- Alternative 8: Two Express Toll Lane (ETL) Managed Lanes Network on I-495 and one ETL and one High-Occupancy Vehicle (HOV) Lane Network on I-270.
- Alternative 9: Two HOT Managed Lanes Network.
- Alternative 10: Two ETL Managed Lanes Network on I-495 and I-270 and Retain one HOV Lane on I-270 only.
- Alternative 13B: Two HOT Managed Lanes Network on I-495 and two Reversible HOT Managed Lanes Network on I-270.
- Alternative 13C: Two ETL Managed Lanes Network on I-495 and two Reversible ETL Managed Lanes Network on I-270, and retention of one HOV Lane on I-270 only.

COMMUNITY EFFECTS ASSESSMENT

The Draft EIS included a Community Effects Assessment (CEA) for various community areas along the study area, including portions of the McLean community. These areas were identified primarily as either residential or park properties. The CEA Analysis Area Community is bordered roughly by the Potomac River to the north; Chain Bridge and Chain Bridge Road to the east; Georgetown Pike and Old Dominion Drive (Route 738) to the south; and Georgetown Pike (Route 193) and Difficult Run to the west. This is the southwestern-most community in the project analysis area and the only community located outside of Maryland.

Within the McLean CEA analysis area, a total of 14.4 acres would be taken for highway right-of-way, including 12.2 acres of the George Washington Memorial Parkway, of which 9.3 acres would be impacted tree canopy.

PREVIOUSLY PROVIDED INFORMATION

Fairfax County previously provided input regarding the I-495 Express Lanes Northern Extension Environmental Assessment. The Virginia Department of Transportation is proposing to extend the I-495 Express Lanes for approximately three miles from the I-495 and Dulles Toll Road Interchange to the vicinity of the American Legion Memorial Bridge.

As was done for similar roadway projects impacting large tracts of land, the Department of Planning and Development prepared a series of maps for the entire length of the project area within Fairfax County, identifying ecological and cultural resources and other land use information for areas within 600 feet of the proposed project boundaries. Maps included:

- Fairfax County Comprehensive Plan base land use designations and Development Centers.
- Current zoning applications.
- Fairfax County Planning Geography, Inventory of Historic Sites, and Historic Overlay Districts.
- Fairfax County floodplains, Resource Protection Areas (RPAs), Agricultural and Forestal Districts, and Environmental Quality Corridors (EQCs).

- Aerial coverage of Fairfax County floodplains, RPAs, Agricultural and Forestal Districts, and EQCs.

ENVIRONMENTAL ANALYSIS

POLICY GUIDANCE FOR ROADWAY DESIGN

County transportation policies support environmental goals and policies. Transportation facilities within the county are to “*minimize community disruption and adverse environmental impacts.*” More specifically, transportation facilities are to be planned and designed “*to minimize adverse impacts on Environmental Quality Corridors (EQCs), Resource Protection Areas (RPAs), other environmental resources, and heritage resources.*” Additionally, transportation facilities are to be planned and designed to “*minimize and mitigate adverse impacts to residents and neighborhoods.*” Recognizing the long-term effects of roadway construction and the creation of extensive amounts of impervious surfaces, county policies call for the minimization of “*adverse impacts of storm water runoff from transportation facilities and services*” and the use of “*innovative techniques and technologies to manage storm water run-off from transportation facilities.*” Finally, given the importance of transportation facilities in serving our communities, “*best practices for walkable communities, pedestrian and bicycle planning, quality of life, and ecological preservation*” are to be applied to all transportation facilities. (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Transportation, Amended through 3-20-2018, Pages 9-10).

Specific comments regarding these policies are provided below.

CULTURAL RESOURCES

The Draft EIS, Section 4(f) of the USDOT Act of 1966, as amended (49 U.S.C. 303(c)), stipulates that the USDOT, including the FHWA, cannot approve the use of land from a publicly-owned park, recreation area, wildlife or waterfowl refuge, or public or private historic site unless the following conditions apply:

- FHWA determines that there is no feasible and prudent avoidance alternative to the use of land from the property, and the action includes all possible planning to minimize harm to the property resulting from such use (23 CFR §774.3(a)(1) and (2)); or
- FHWA determines that the use of the Section 4(f) properties, including any measures to minimize harm committed to by the applicant, will have a de minimis impact on the property (23 CFR §774.3(b)).

A total of 111 Section 4(f) properties were identified within the corridor study boundary including public parks, recreation areas, and historic sites. Of the 111 Section 4(f) properties, 68 would have a Section 4(f) use (impact).

On March 13, 2020, maps and comments were made available to the Virginia Department of Transportation by the Fairfax County Department of Planning and Development, including the previously noted maps of Fairfax County Planning Geography, Inventory of Historic Sites, and Historic Overlay Districts, related to the I-495 Express Lanes Project. In addition to these

comments and maps, the following comments discuss impacts to the following heritage resources:

- Georgetown Pike.
- The northern section of George Washington Memorial Parkway, running 9.7 miles from Arlington Memorial Bridge to the Capital Beltway in Virginia.
- Beaufort Park located at 7303 Peter Place and within a 600-foot I-495 Express Lanes project buffer.
- Shiloh Baptist Church in Dranesville, located at 8310 Turning Leaf Lane and adjacent to the 600-foot I-495 Express Lanes project buffer.

Within Fairfax County the proposed project would have substantial impacts on both the George Washington Memorial Parkway and Georgetown Pike. Both roadways are listed on the National Register of Historic Places, the Virginia Landmarks Register, and the Fairfax County Inventory of Historic Sites. In addition, both roadways are designated by the Virginia Department of Transportation as Scenic Roads.

George Washington Memorial Parkway

The northern section of the George Washington Memorial Parkway runs 9.7 miles from the Arlington Memorial Bridge to the Capital Beltway in Virginia. It was constructed from 1930-1965. A byway is patterned as “*formally or informally designed connectors within a system of predetermined destinations that include parks and monuments.*”¹ Its nature as a byway encouraged a recreational motorist use, and the federal government outlined parkway design guidelines in 1935, which included:

- A limit to non-commercial, recreational traffic
- Avoidance of unsightly road developments
- Wider-than-average right-of-way to provide a buffer from abutting property
- No frontage or access rights, to encourage the preservation of natural scenery
- Preference for a new site, to avoid already congested and built-up areas
- To best access native scenery
- Elimination of major grade crossings
- Well-distanced entrance and exit points to reduce traffic interruptions and increase safety²

Development along the immediate roadway has been limited and has preserved the scenic, historic, and environmental aspects that characterize the significance of the highway.

Georgetown Pike

The Georgetown Pike was constructed between 1813 and 1827 to connect the Georgetown Markets in Washington, D.C. to the agricultural interests in Leesburg and further west. The roadway is significant as a transportation turnpike, but is also significant in its construction method, which was an adapted French method called “Tresaguet.” This method excavated the roadbed, had two layers of compacted stones, and was crowned in the center to improve drainage

¹ George Washington Memorial Parkway National Register nomination, <https://catalog.archives.gov/id/117691695>.

²Ibid.

and wear. Resources from its construction dating from 1813 are visible and accessible and maintain their historic integrity. The original roadbed has been altered. The nomination and significance are only for the VDOT maintained right-of-way, which varies from 50-60 feet. Georgetown Pike became Virginia's first scenic and historic byway in 1973.³

Other Historic Sites

Two additional sites may be impacted by the proposed the I-495 project. Both sites are in proximity to the proposed I-495 project. Depending on the scope and height of modifications, the project could negatively impact the viewshed of these two properties.

Beaufort Park, identified on the Fairfax County Inventory of Historic Sites, is located at 7303 Peter Place and at tax map number 021-3 ((26)) 10. This property is located within the 600-foot project buffer associated with the I-495 Express Lanes Project and could be impacted by any alteration to the interchange at Georgetown Pike. The residence on Beaufort Park was constructed in 1940, but there was a Georgetown Pike Toll Gate and potentially a rifle pit from the Civil War located on the original property before it was subdivided in the 1980s. The property was owned by Eugene and Lille Lou Rietzke, who founded Capital Radio Engineering Institute, which was acquired by McGraw Hill.⁴ Archaeology has also been conducted on the site.

Shiloh Baptist Church in Dranesville, also identified on the Fairfax County Inventory of Historic Sites, is located adjacent to the 600-foot buffer associated with the I-495 Express Lanes Project. The church is located at 8310 Turning Leaf Lane and tax map number 029-1 ((1)) 58C. The original church was constructed in 1887 and reconstructed in 1928 after a fire.⁵ The church served members of the Odricks Corner, a freed black community established by Cyrus Carter and Alfred Odricks.⁶

Virginia Outdoors Plan

The Virginia Outdoors Plan (VOP), produced by the Virginia Department of Conservation and Recreation (VDCR) is the state's comprehensive plan for land conservation, outdoor recreation, and open-space planning. Prior to initiating any project, consideration is to be given to the proximity of a project site to recreational resources identified in the VOP. The George Washington Memorial Parkway (managed by the National Park Service), the Scotts Run Nature Preserve (managed by the Fairfax County Park Authority), and a private 4.6-acre property owned by the Langley Club are all identified in the VOP.

³ "Georgetown Pike: Fairfax county Inventory of Historic Sites Report," Fairfax County Dept of Planning and Development, 2019.

⁴ "Beaufort Park: Fairfax county Inventory of Historic Sites Report," Fairfax County Department of Planning and Development, 2019.

⁵ "Shiloh Baptist Church (Dranesville): Fairfax county Inventory of Historic Sites Report," Fairfax County Department of Planning and Development, 2019.

⁶ Netherton, Nan. Fairfax County, Virginia: A History. *Fairfax County Board of Supervisors*, 1992, 452.

Comments & Recommendations

- For the properties that are located on the National Register of Historic Places (George Washington Memorial Parkway and Georgetown Pike), negative physical or visual impacts that may result as part of the related and cumulative I-495 projects should be avoided and minimized. Any impacts must be mitigated appropriately.
- For the two properties on the Fairfax County Inventory of Historic Sites (Beaufort Park and Shiloh Baptist Church), negative physical or visual impact should also be avoided and minimized. Given that these properties have not been evaluated for eligibility for the National Register of Historic Places, staff recommends that further research be completed. Staff also recommends that the Fairfax County Park Authority Archaeological Collections Branch be consulted to analyze any archaeological impact within the cumulative study areas of the related I-495 projects.
- Direct and indirect impacts to the three properties identified in the Virginia Outdoors Plan should be assessed, minimized or avoided, and appropriately mitigated, if applicable.

ECOLOGICAL RESOURCES

County Environmental Policies

The Environment Element of the Policy Plan states that the protection and restoration of the ecological integrity of streams is expected in Fairfax County. In order to minimize the impacts that new development and redevelopment projects may have on county streams, the Comprehensive Plan encourages the protection of stream channels, buffer areas along stream channels, and commitments to the restoration of degraded stream channels and riparian buffer areas. (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Pages 7-9).

Additionally, policies state that stormwater design for all stormwater facilities should be closely coordinated with county staff to avoid degradation of impacted streams. The county anticipates the implementation of *“best management practices to reduce runoff pollution and other impacts. Preferred practices include: those which recharge groundwater when such recharge will not degrade groundwater quality; those which preserve as much undisturbed open space as possible; and, those which contribute to ecological diversity by the creation of wetlands or other habitat enhancing BMPs, consistent with state guidelines and regulations.”* (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Page 9).

Draft EIS Information

The Draft EIS includes some general discussion related to water quality (DEIS, Pages 4-90 through 4-91):

- Impacts to surface water quality may occur during construction, which could include physical disturbances or alterations, accidental spills, and sediment releases.
- Large areas of soil may be exposed during construction. Soils can be severely eroded by wind and rain when the vegetation and naturally occurring soil stabilizers are removed. Erosion of these exposed soils can considerably increase the sediment load to receiving waters and adversely affect aquatic life.

- The removal of trees and other riparian buffer vegetation can greatly reduce the buffering of nutrients and other materials and allow unfiltered water to directly enter a stream channel.
- Impacts associated with the use of the road after construction are mainly based on the potential for contamination of surface waters by runoff and from new impervious roadway surfaces. The most common heavy metal contaminants are lead, aluminum, iron, cadmium, copper, manganese, titanium, nickel, zinc, and boron. Most of these contaminants are related to gasoline additives and highway maintenance. Other sources of metals include mobilization by excavation, vehicle wear, combustion of petroleum products, historical fuel additives, and catalytic-converter emissions.
- Deicing compounds that are used during the winter for highway maintenance pose a threat to water quality. Chlorides from deicing salts can cause acute and chronic toxicity in fish, macroinvertebrates, and plants.
- Organic pollutants, including dioxins and PCBs (Polychlorinated Biphenyls), have been found in higher concentrations along roadways. Sources of these compounds include runoff derived from exhaust, fuel, lubricants, and asphalt. These organic pollutants are known to accumulate in concentrations that can cause mortality and affect growth and reproduction in aquatic organisms.

Comments & Recommendations

- Streams in the area include Dead Run, Scotts Run, Turkey Run, and the Potomac River. The project analysis should assess impacts to Dead Run, Scotts Run, and Turkey Run and the downstream impacts to the Potomac River. Analysis should incorporate information from recent storm events, to include frequency, duration, and intensity of these events. Additionally, ecological resource surveys should be performed for each of these stream corridors, the Scotts Run Nature Preserve, and the George Washington Memorial Parkway. Assessment of project impacts should be considered and coordinated with impacted jurisdictions prior to the finalization of projects designs.
- Staff notes that the requirements of the Chesapeake Bay Preservation Ordinance would apply to the project. While public roads are considered “exempt,” that exemption is conditioned on the optimization of the road alignment and design to prevent or otherwise minimize encroachment in Resource Protection Areas (RPAs) and adverse effects on water quality.
- Additionally, VDOT Location and Design Division Instructional and Informational Memorandum IIM-LD-195.12 (see Attachment 1) provides direction regarding stormwater management requirements for VDOT projects. Section 4.1 of this memorandum notes that, *“When requested by a locality’s VSMP Authority, MOT projects located in jurisdictions that have adopted more stringent stormwater management (SWM) technical criteria than that required by the VSMP Regulations shall be designed, to the largest extent practicable, to meet the locality’s more stringent criteria.”*
- On March 19, 2019, the Fairfax County Board of Supervisors voted to request that all current projects under design and future VDOT projects located in Fairfax County meet the county’s local stormwater management regulations. On July 17, 2019, Fairfax County formally requested the same (see Attachment 2). IIM-LD-195.12 directs that, if it is found that our more stringent local stormwater management requirements are not practicable, VDOT will implement the requirements to the maximum extent practicable and provide documentation to the county demonstrating that the technical requirements are not practicable.

- Given that the proposed project would entail the creation of extensive areas of impervious cover, a primary consideration is the impact to county streams. In light of these issues and this guidance, staff recommends strict adherence to local stormwater management requirements to the maximum extent practicable for the project, per IIM-LD-195.12.
- The use of linear stormwater controls to address water quality and quantity requirements is strongly recommended, given that control of the rainwater runoff at its source would provide the greatest water quality and stream protection results. Alternatives include dry swales, subsurface chamber storage, gravel galleries, and oversized pipes, with manufactured filtering devices at the outfall of these facilities. Such an approach would limit the project footprint, avoid heavily wooded and steep slope areas, preserve ecologically valuable land, and reduce environmental impacts to floodplains and streams.
- The purchase of off-site nutrient credits for stream and wetlands impacts would not address the intent of county policies. Off-site credits do not provide protections for streams and other water bodies within Fairfax County. Therefore, staff recommends that mitigation opportunities be pursued within the county consistent with Fairfax County's approved watershed management plans. VDOT should partner with the county to select local stream restoration and constructed wetland projects to support improved water quality and habitat in our local waterways.
- In light of existing "legacy" issues and impacts from previous related highway work, including runoff impacts, the cumulative impacts of existing deficiencies and proposed actions should be assessed and mitigated.

Overall, for all proposed facilities, staff recommends the avoidance of significant ecological resources to the maximum extent feasible; incorporation of linear stormwater controls into facility designs to address stormwater requirements while minimizing the disturbance of ecological resources and open spaces; incorporation of ecological enhancements into any stormwater facility designs to replace the ecological functionality of disturbed areas; integration of stream protection measures; minimization of adverse impacts to downstream waterways, infrastructure, and property; assessment of the cumulative impact of multiple outfalls directed into a stream in the same general vicinity; incorporation of natural channel design where applicable; incorporation of constructed wetlands as an alternative to the traditional pond designs; adherence to current pollutant removal criteria; restoration and monitoring of disturbed areas; and assessment and mitigation of previous corridor actions and associated impacts to area resources.

FOREST RESOURCES

Forest Resources Policies

The Comprehensive Plan anticipates that new development will include an urban forestry program and be designed in a manner that retains and restores meaningful amounts of tree cover, consistent with planned land use and good silvicultural practices. Good quality vegetation should be preserved and enhanced and lost vegetation restored through replanting. (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Pages 17-18).

Impacts to Tree Canopy

Forest resources within the corridor study area within Fairfax County include those within the National Park Service (NPS) property (George Washington Memorial Parkway) and the Scotts Run Nature Preserve. The Draft EIS states that mitigation to these forests would require coordination with the NPS and the Virginia Department of Conservation and Recreation (VDCR).

In addition to tree removal, adverse impacts to forested land would include disturbance to critical root zones (CRZ), damage to tree crowns, soil compaction, and changes to drainage patterns and soil moisture due to grading. Sunscald and windthrow could also occur along newly exposed edges of retained forested areas, as trees previously sheltered from these elements may have difficulty adjusting to sun and wind. Vegetated areas could also suffer from increased roadway runoff from expanded impervious surfaces. Increased runoff could result in additional erosion and sedimentation from areas disturbed during construction and could carry increased pollutants from roadways. Disturbed areas are also more vulnerable to the introduction of invasive plant species. Any of these adverse impacts could result in additional tree loss beyond the clearing associated with construction activities.

Comments & Recommendations

- Ecological Services: The Draft EIS states that all affected property owners would be compensated for the fair market value of all land acquired for the construction of the preferred Build Alternative. Such an approach would not necessarily consider the environmental services and the economic, social, and health benefits of the urban forest that would be lost due to the clearing associated with this project. Loss of the services and benefits provided by these trees could reduce the property values of those properties affected by the construction and operation of the additional lanes. Environmental services can be quantified using the i-Tree software developed by the U.S. Forest Service. Additionally, an analysis of real estate values would provide insight into changes in property values within impacted areas. These considerations should be explored in the interest of more complete compensation for adverse impacts to affect properties.
- Reforestation: Unavoidable clearing of forested areas in Maryland would be subject to replacement planting under the Maryland Reforestation Law. However, in Virginia, negotiation with owners of affected lands would be necessary to address reforestation of cleared areas in order to restore cleared areas affected by the project as nearly as possible to the character existing before tree removal. Additionally, to help replace lost tree canopy, tree planting should take place in areas that were unforested prior to grading where buffering capacity and viewsheds could be improved. Compensation should be provided for the environmental services and benefits previously provided. Areas cleared for temporary uses such as material storage, staging, and stormwater and sediment control, are likely to be significantly degraded and unsuitable for planting without dedicated and comprehensive remedial actions. Tree planting should be incorporated extensively into the project design for all disturbed areas, including firm commitments to soil remediation for all planting areas. To ensure the viability of the proposed plantings, staff recommends a commitment to tree protection, to include adequate supervision during construction, to ensure that tree protection measures are implemented as planned. Additionally, staff recommends that all development plans avoid the following: significant changes to elevations (both “cut” and “fill” operations);

changes to water flow; and excavation within the critical root zones of all trees to be protected. Additionally, staff recommends a commitment to planting schemes featuring indigenous trees, shrubs, perennial grasses and grass-like plants, and forbs for each planting area. Only indigenous species should be used in seed mixes with a high percentage of warm season grasses. For all new planting areas, in which existing pavement is to be removed, and for staging areas staff recommends a commitment to soil rebuilding, which would help ensure the viability of the proposed plantings. Extended warranties should be enforced for all planting areas. Overall, forested areas should be restored, replaced, and mitigated to the fullest extent practicable.

- Invasives Control: Of significant concern is the introduction and spread of invasive species in areas disturbed by construction activities or in areas previously disturbed throughout the corridor but not properly restored. Control of invasive species should be fully integrated into all planting activities and throughout the project area. Invasive species should be suppressed and eliminated to allow the regeneration of native plant communities and the restoration of all degraded and disturbed areas, both for the considered project and for previous actions within the highway corridors.

Together, these measures would minimize impacts to property owners and ecological resources, increase the viability of the existing tree cover, increase the habitat value of the project, and promote water infiltration, consistent with the intent of the Comprehensive Plan.

TRAFFIC NOISE IMPACTS

New development is expected to protect people from unhealthful levels of transportation noise. *"New development should not expose people in their homes, or other noise sensitive environments, to noise in excess of DNL 45 dBA [decibels, A-weighted], or to noise in excess of 65 dBA in the outdoor recreation areas of homes."* (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Pages 11-12). Staff notes that 63 dBA is the noise level in which speech interference generally begins.

An analysis of the noise impacts of the highway construction within Virginia were not considered as part of the Draft EIS. Noise Abatement for the portion of the study area within Virginia is to be evaluated in coordination with VDOT and in compliance with the VDOT Highway Traffic Noise Impact Analysis Guidance Manual. The results of this evaluation would be included in the Final EIS.

To determine the degree of impact, VDOT has previously used the Noise Abatement Criteria (NAC) for various land use categories. The NAC for residential areas, parks, trails, playgrounds, and historic properties used by VDOT is 67 dBA. Decisions on whether to provide noise abatement along project corridors generally consider the feasibility of a design and the overall cost weighted against the benefit.

Comments and Recommendations

- Given the lack of information regarding noise impacts, staff was unable to assess the efficacy, location, and visual impacts of traffic noise mitigation measures. Staff recommends that VDOT clarify the current status and expectations regarding noise mitigation, to include potential barrier locations and design details. Staff recommends that any proposed noise

mitigation consider aesthetics, tree buffer plantings, and the efficacy of the noise abatement treatments.

SUMMARY

Transportation system components are expected to be consistent with environmental, land use, social, and economic goals. Each component is to be thoughtfully designed and sensitively integrated into the community fabric. Open space, ecological resources, heritage sites, parks, trails, and stream corridors are all critical components of the community that each transportation proposal is to consider.

To address the environmental objectives of the Comprehensive Plan and avoid undue impacts to community resources, staff recommends the following:

- Avoidance or minimization of impacts to properties that are located on the National Register of Historic Places, including the George Washington Memorial Parkway and Georgetown Pike.
- Avoidance or minimization of impacts to the two properties on the Fairfax County Inventory of Historic Sites (Beaufort Park and Shiloh Baptist Church).
- Assessment, minimization, avoidance, and mitigation of the direct and indirect impacts to the three properties identified in the Virginia Outdoors Plan.
- Optimization of road alignments and designs to prevent or otherwise minimize encroachment in Resource Protection Areas (RPAs) and adverse effects on water quality.
- Strict adherence to local stormwater management requirements to the maximum extent practicable for the project, per IIM-LD-195.12.
- The use of linear stormwater controls to address water quality and quantity requirements.
- Pursuit of mitigation opportunities within the county and which rely on Fairfax County's approved watershed management plans as guides for any project mitigation. VDOT should partner with the county to select local stream restoration and constructed wetland projects.
- An evaluation of "legacy" issues and impacts from previous highway-related work, particularly inadequacies of previous stormwater facility installations, planting efforts, and runoff impacts on local stream geomorphology, including erosion. The cumulative impacts of existing deficiencies and proposed actions should be assessed and mitigated.
- Assessment of the impacts to Dead Run, Scotts Run, and Turkey Run and the downstream impacts to the Potomac River.
- Performance of ecological resource surveys for each of these stream corridors, the Scotts Run Nature Preserve, and the George Washington Memorial Parkway.
- Assessment of the environmental services and the economic, social, and health benefits of the urban forest that would be lost due to the clearing associated with this project, as well as compensation for these impacts.
- Reforestation of all disturbed areas with commitments to compensation, soil rebuilding, and the restoration of native plant communities.
- Integration of invasives control throughout the project area.
- Clarification of the current status of and expectations regarding noise mitigation, to include potential barrier locations and design details.

Thank you for the opportunity to comment on this project. If you have any questions regarding these comments, please contact Joseph Gorney at 703-324-1380 or joseph.gorney@fairfaxcounty.gov.

Sincerely,



Leanna H. O'Donnell, AICP, Director, Planning Division
Department of Planning and Development

cc: Board of Supervisors
Bryan Hill, County Executive
Rachel Flynn, Deputy County Executive (Planning + Development)
Barbara Byron, Director, DPD
Tom Biesiadny, Director, FCDOT
Denise James, Chief, Environment & Development Review Branch (EDRB), Planning Division (PD), DPD
Laura Arseneau, Chief, Heritage Resources and Plan Development Branch, PD, DPD
Joseph Gorney, Senior Environmental Planner, EDRB, PD, DPD
Catherine Torgersen, Stormwater Planning Division, DPWES
Hugh Whitehead, Urban Forest Management Division, DPWES
Andrew Galusha, Fairfax County Park Authority

Attachments:

1. IIM-LD-195.12; Requirements for Erosion and Sediment Control and Stormwater Management Plans for VDOT Projects
2. Fairfax County Request for VDOT Projects to Meet Local Stormwater Management Requirements (July 17, 2019)

LHO: JCG

VIRGINIA DEPARTMENT OF TRANSPORTATION

LOCATION AND DESIGN DIVISION**INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM**

| | |
|--|------------------------------|
| GENERAL SUBJECT: Virginia Stormwater Management Program | NUMBER: IIM-LD-195.12 |
| SPECIFIC SUBJECT: Requirements for Erosion & Sediment Control and Stormwater Management Plans for VDOT Projects | DATE: July 19, 2019 |
| | SUPERSEDES: IIM-LD-195.11 |
| APPROVAL: Susan H. Keen, P.E. State Location and Design Engineer Approved July 19, 2019 | |

Changes are shaded.

CURRENT REVISION

Renamed Scenario's 3 & 4 and revised information in Scenario 5 detail.

EFFECTIVE DATE

Unless identified otherwise within this IIM, the information contained in this IIM is effective upon receipt.

1.0 PROGRAM PURPOSE AND NEED

1.1 VDOT's Stormwater Management Program

The Virginia Stormwater Management Act, the VSMP Regulations, the Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Construction Activities (the Construction Permit) and the VPDES Individual Permit for Discharge of Stormwater from Municipal Separate Storm Sewer System (Permit No. VA0092975) require that VDOT implement a stormwater management (SWM) Program that protects the quality and quantity of state waters from the potential harm of unmanaged stormwater runoff resulting from land-disturbing activities. This IIM addresses the application of these regulatory requirements as they relate to development of Post-Construction Stormwater Management Plans for VDOT land-disturbing activities.

Other elements of VDOT's SWM Program are addressed by the VDOT Drainage Manual and current editions of other IIMs, including:

- IIM-LD-242 which addresses the application of the VPDES General Permit for Discharges of Stormwater from Construction Activities to VDOT (Regulated Land Disturbing Activities (RLDAs));
- IIM-LD-243 which addresses signing and sealing of plans and documents including Erosion and Sediment Control (ESC)/SWM Plans and construction record drawings;
- IIM-LD-251 which addresses the purchase of nutrient credits to address post-construction water quality reduction requirements for VDOT land-disturbing activities associated with construction projects.
- IIM-LD-258 which addresses stormwater requirements for non-VDOT projects.

2.0 PROGRAM ADMINISTRATION

2.1 Administration of VDOT's ESC and SWM Standards and Specifications

VDOT's Annual ESC and SWM Standards and Specifications shall apply to all plan design, construction and maintenance activities administered by VDOT and performed either by its internal workforce or contracted to external entities, where such activities are regulated by the VESC and VSMP Law and Regulations.

VDOT's Annual ESC and SWM Standards and Specifications are a compilation of all VDOT documents related to the design, construction, inspection and maintenance of ESC measures, Pollution Prevention (P2) practices and post-development Best Management Practices (BMP) including, but not limited to, all or a portion of the following:

- Road & Bridge Standards
- Road & Bridge Specifications, Supplemental Specifications and Special Provisions
- IIMs
- Drainage Manual
- Pollution Prevention Field Guide for Construction Activities
- Road Design Manual
- Maintenance Division's BMP Inspection and Maintenance Manuals

VDOT's Annual ESC and SWM Standards and Specifications are housed in an on-line electronic database which includes both the current and previous versions of the standards and specifications. The database is dynamic and items within the database may be added to, deleted or revised at any time to reflect changes or updates to VDOT's ESC and SWM Program.

Approval to use any portions of VDOT's Annual ESC and SWM Standards and Specifications, including this IIM, on non-VDOT projects/land-disturbing activities (e.g. Locality Administered Projects and Land Use Permit projects - see section 3.2 of this IIM for definition of non-VDOT projects/land-disturbing activities) shall be secured from the respective VESCP/VSMP Authority. For non-VDOT projects, the Authority means an authority approved by the State Water Control Board to operate a VESCP or VSMP, and can include the Virginia Department of Environmental Quality (DEQ), a locality, federal entity, another state entity, or linear projects subject to annual standards and specifications. Any approval to use portions of VDOT's Annual ESC and SWM Standards and Specifications, will presumably be part of the VSMP/VESCP Authorities overall plan approval process.

2.2 Approval of VDOT's ESC and SWM Standards and Specifications

VDOT secures an annual approval of its ESC and SWM Standards and Specifications from DEQ. By this approval, DEQ authorizes VDOT to administer its ESC and SWM Program in accordance with the Annual ESC and SWM Standards and Specifications on all regulated land disturbance activities performed by VDOT's internal workforce or contracted by VDOT to external entities.

During any inspections of VDOT land-disturbing activities by DEQ, EPA, or other such regulatory agency, compliance with VDOT's Annual ESC and SWM Standards and Specifications (and all parts thereof) will be expected.

3.0 DETERMINING A REGULATED LAND-DISTURBING ACTIVITY

3.1 VDOT Regulated Land-Disturbing Activities

The SWM and ESC requirements are applicable to all land-disturbing activities where one acre or greater (2,500 square feet or greater in a designated CBPA) of land is disturbed, unless otherwise exempted. ESC requirements apply to all project which disturb greater than or equal to 10,000 square feet (2,500 square feet or greater in a designated CBPA), unless otherwise exempted. See Section 3.3 of this IIM for discussion on the exemption for routine maintenance operations.

The VSMP Regulations and application of this IIM shall apply to all VDOT regulated land-disturbing activities, both construction and maintenance, administered by VDOT and performed either by its internal workforce or contracted to external entities, including those developed/constructed under, the Design/Build (DB) process and the Capital Outlay Program. PPTA/P3 projects are a special case and, while requiring consistency with VDOT standards and specifications, are often considered by DEQ to be "non-VDOT" projects for the purposes of permit issuance and ESC and SWM Plan review and approval. PPTA/P3 entities should consider that projects may be required to meet the local technical and administrative requirements and to secure permits from the applicable VSMP and VESCP Authorities, while at the same time maintaining consistency with the VDOT standards, specifications and contract provisions related to SWM and ESC.

Provisions for VDOT SWM Program administration including plan design, review and approval are further discussed in IIM-LD-242 and Chapter 11 of the VDOT Drainage Manual.

3.2 Non-VDOT Regulated Land-Disturbing Activities

Requirements for non-VDOT projects are referenced in IIM-LD-258.

3.3 Routine Maintenance Activities

Routine maintenance is defined as those activities performed to maintain the original line and grade, hydraulic capacity or original construction of the project.

Routine maintenance activities are exempt from the Virginia Stormwater Management Act, the attending VSMP Regulations, and the VPDES Construction General Permit requirements regardless of the amount of land disturbance. The routine maintenance exemption does not apply to the ESC Program. See Chapter 10 of the VDOT Drainage Manual for more information on ESC Plan requirements.

Operations and Maintenance Activities:

Such activities include, but are not limited to: ditch cleaning operations, pipe replacement or rehabilitation operations, bridge deck replacement and the normal operational procedures for maintaining the travel surface of unpaved/gravel roadways (i.e., dragging, blading, grading, etc.). Facilities that support the routine maintenance activity (e.g., disposal areas for surplus dirt, borrow pits, or staging areas) are not considered a part of the routine maintenance operation and, therefore, are not covered under the routine maintenance activity exemption.

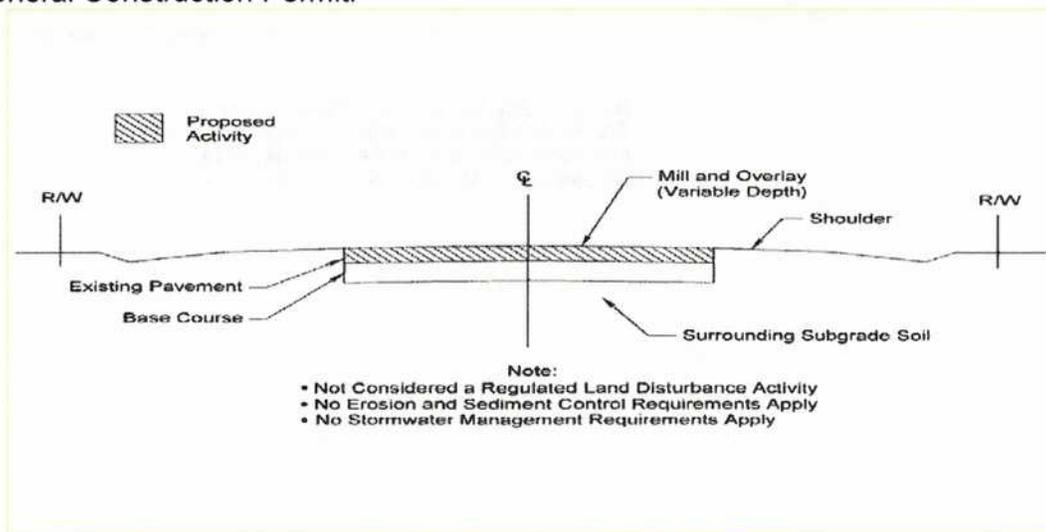
For any maintenance activity being classified as routine, proper documentation of original conditions must be kept on file at the District office. Documentation of original conditions can be in the form of old plans, photographs or other such documents depicting the original line and grade, hydraulic capacity, or original construction or purpose of the facility. Written and signed statements from those that know the history of the facility can also serve as documentation of the original conditions.

Roadway Construction and Maintenance Activities:

Scenario 1: Mill and Overlay ONLY (with no changes to geometrics)

In accordance with EPA's 2004 Q&A on the NPDES stormwater program, re-paving is not regulated under the storm water program unless one or more acres of underlying and/or surrounding soil are cleared, graded or excavated as part of the re-paving operation.

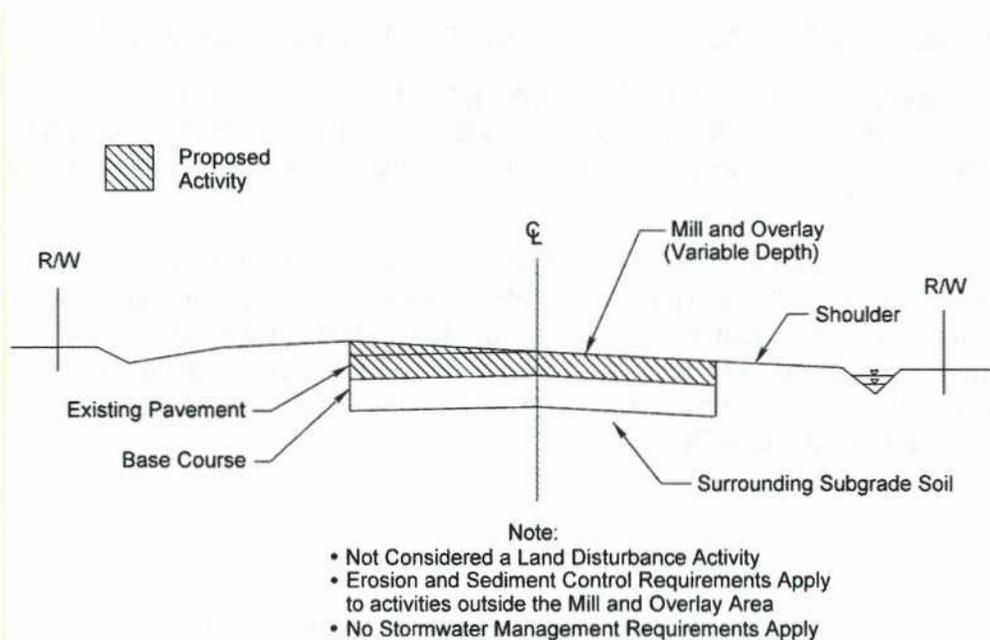
The removal and replacement of an existing pavement structure within the same footprint that DOES NOT EXPOSE the subgrade, such as mill and overlay, IS NOT a land disturbing activity under ESC or SWM. The area of such existing pavement would not be included with the other land disturbance areas of the project for the purposes of determining the applicability of the VSMP Regulations and the VPDES General Construction Permit.



Scenario 2: Mill and Overlay ONLY (with changes to geometrics)

In accordance with EPA's 2004 Q&A on the NPDES stormwater program, re-paving is not regulated under the storm water program unless one or more acres of underlying and/or surrounding soil are cleared, graded or excavated as part of the re-paving operation.

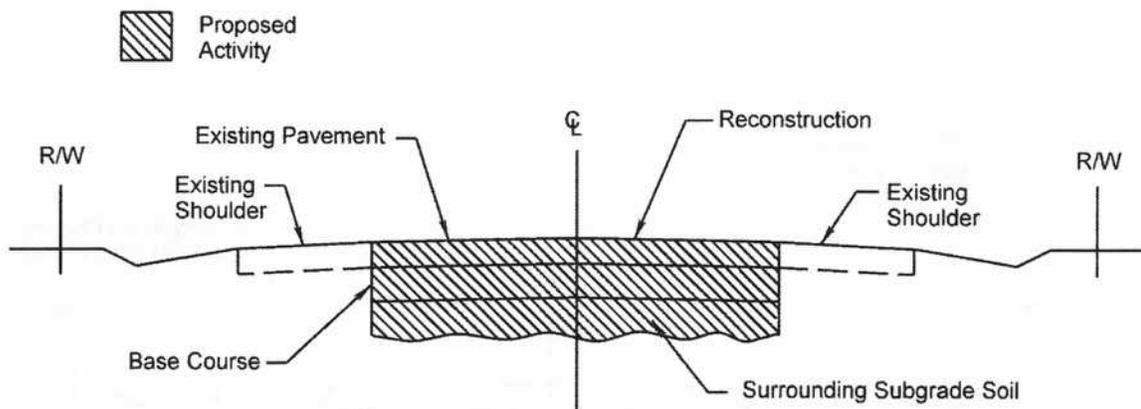
The removal and replacement of an existing pavement structure within the same footprint that DOES NOT EXPOSE the subgrade, such as mill and overlay, IS NOT a land disturbing activity under ESC or SWM. The area of such existing pavement would not be included with the other land disturbance areas of the project for the purposes of determining the applicability of the VSMP Regulations and the VPDES General Construction Permit. However, the project must take into consideration the potential changes in site hydrology for the affected conveyances, and they must be evaluated and be in accordance with the VDOT Drainage Manual.



Scenario 3: Full Depth Reconstruction of Travel Lane (within the existing footprint)

In accordance with EPA's 2004 Q&A on the NPDES stormwater program, if the surrounding soil is cleared, graded or excavated, the operation is a land disturbing activity. However, as presented in this example it meets the definition in the Virginia Stormwater Management Act's exemption for routine maintenance as defined under §62.1-44.15:34.C.7.

The removal and replacement of an existing pavement structure within the same footprint that DOES EXPOSE the subgrade IS considered a land disturbing activity; however it meets the definition of routine maintenance. Therefore, the area of such existing pavement would be included with the other land disturbance areas of the project for the purposes of determining the applicability of ESC regulations and requirements, but it would be exempt from the VSMP Regulations and the VPDES general Construction Permit.



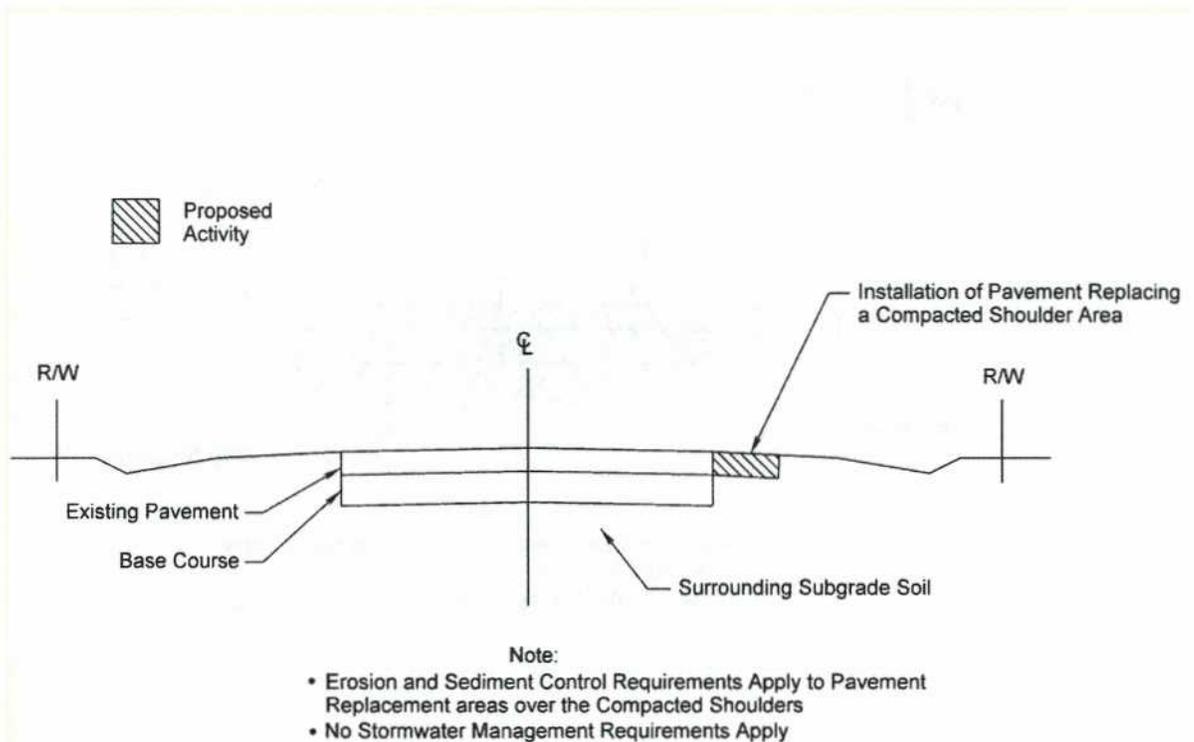
Note:

- Erosion and Sediment Control Requirements Apply to the disturbed area
- No Stormwater Management Requirements Apply

Scenario 4: Shoulder Reconstruction Within the Existing Footprint

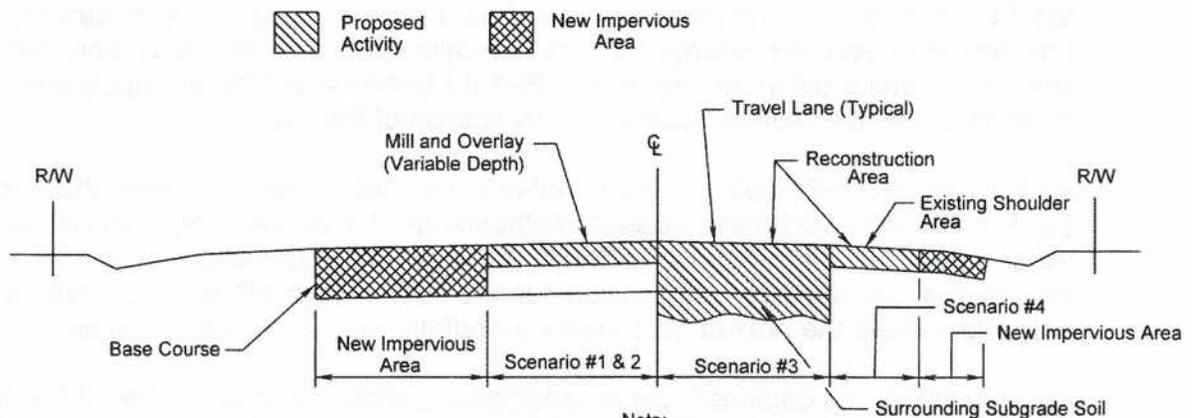
In accordance with EPA's 2004 Q&A on the NPDES stormwater program, if the surrounding soil is cleared, graded or excavated, the operation is a land disturbing activity. However, as presented in this example it meets the definition in the Virginia Stormwater Management Act's exemption for routine maintenance as defined under §62.1-44.15:34.C.7.

Shoulder Reconstruction Within the Existing Footprint, such as Safety Improvement Projects, that include paving of an existing shoulder with a compacted or impervious surface and reestablishment of existing associated ditches shall be deemed routine maintenance. Therefore, the area of such existing pavement would be included with the other land disturbance areas of the project for the purposes of determining the applicability of ESC regulations and requirements, but it would be exempt from the VSMP Regulations and the VPDES general Construction Permit. Note: this would not include paving an existing compacted shoulder to create an additional lane. If the paving effort includes increasing the post-development impervious acreage from the pre-development acreage, the increase should be identified as redevelopment under the VSMP regulations.



Scenario 5: Combination of scenarios (i.e. combination of scenarios 1 through 4)

For projects that will have a combinations of scenarios, the DHE shall coordinate the application of such combination with the State MS4 Engineer and DEQ. The coordination shall include the necessary documentation to illustrate how the different scenarios will be addressed in each case.



Note:

- | | |
|---|---|
| Scenario #1 Mill and Overlay Only (With No Changes to Geometrics): | Not Considered a Regulated Land Disturbance Activity No Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply |
| Scenario #2 Mill and Overlay (With Changes to Geometrics): | Not Considered a Regulated Land Disturbance Activity No Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply |
| Scenario #3 Reconstruction of Travel Area: | Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply |
| Scenario #4 Reconstruction of Existing Shoulder Area: | Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply |
| New Impervious Area: | Erosion and Sediment Control Requirements Apply Stormwater Management Requirements Apply |

Where there is any question as to the application of the routine maintenance definition to a land disturbing activity, the appropriate District Hydraulics Engineer should be consulted along with DEQ.

4.0 APPLICATION OF TECHNICAL CRITERIA

4.1 Applicable Technical Criteria

Part II of the VSMP Regulations (9VAC25-870-40 et. seq.) provides administrative and technical criteria for regulated land-disturbing activities.

Part IIB (9VAC25-870-62 et. seq.) contains the “new” technical criteria that include the Runoff Reduction methodology (for determining compliance with water quality requirements) and the Energy Balance Equation (for determining compliance with stream channel erosion requirements). Part IIB technical criteria are applicable to all projects unless the project qualifies for application of Part IIC.

Part IIC (9VAC25-870-93 et. seq.) contains the “old” technical criteria that include the Performance/Technology-Based methodology (for determining compliance with water quality requirements) and MS19 criteria (for determining compliance with stream channel flooding and erosion requirements). Part IIC technical criteria are only applicable if the project qualifies for grandfathering as discussed below.

Design criteria and engineering methodologies to comply with either Part IIB or IIC of the technical criteria in the VSMP Regulations can be found Chapter 11 of the VDOT Drainage Manual.

When requested by a locality’s VSMP Authority, VDOT projects located in jurisdictions that have adopted more stringent SWM technical criteria than that required by the VSMP Regulations shall be designed, to the largest extent practicable, to meet the locality’s more stringent criteria. For any requests to be considered, the VSMP Authority’s more stringent criteria must: 1.) have been adopted pursuant to the Virginia Stormwater Management Act; 2.) the request is made in writing; and 3.) such requests are received prior to the completion of the project’s plans for use in the public involvement phase of the project (or other such phase where no public involvement process is required). If it is found that the more stringent local SWM requirements are not practicable for the VDOT project, it will be the responsibility of the SWM Plan Designer to implement the requirements to the maximum extent practicable and to demonstrate to the that VSMP Authority’s that the technical requirements are not practicable. Documentation shall be kept with the SWM Plan. Early coordination should occur between the SWM Plan Designer and the local VSMP Authority, in order to identify any such potential requirements or requests.

4.2 Grandfathering

Part II of the VSMP Regulations (9VAC 25-870-48) provides provisions for locality, state and federal projects to be grandfathered under Part IIC provided certain conditions are met. For the purposes of grandfathering VDOT projects, the project shall be considered grandfathered by the VSMP authority and shall be subjected to the Part IIC technical criteria provided the project that can demonstrate an obligation of local, state or federal funding, in whole or in part, prior to July 1, 2012, or the department has approved a SWM Plan prior to this date; a state VPDES permit has not been issued prior to July 1, 2014 and a land disturbance did not commence prior to July 1, 2014.

Any project that is considering utilization of the grandfathering provision shall be evaluated and documented by the District Hydraulics Engineer. The documentation shall clearly demonstrate an obligation of funds prior to July 1, 2012.

When evaluating a project for application of the Grandfathering provision, consideration should be given as to when the project will be advertised and when construction activities will begin. If the project will not begin construction activities prior to July 1, 2019, the project should be designed in accordance with the Part IIB (or the "new") technical criteria. Land disturbing activities grandfathered under subsections A and B of the regulations shall remain subject to the Part II C technical criteria for one additional state permit cycle. After such time, portions of the project not under construction shall become subject to any new technical criteria adopted by the board.

This written evaluation and determination shall be coordinated with the State MS4 Engineer and DEQ. Upon DEQ approval, the status of a project/activity with regards to the grandfathering provision shall be documented using the appropriate note(s) in Section IV of the SWPPP General Information Sheets. If multiple UPCs exist for the project, each UPC should be evaluated separately to determine the extents or segments of the project that qualify for grandfathering. Portions of a project not under construction by July 1, 2019 will become subject to the new technical criteria adopted by the board.

In cases where governmental bonding or public debt financing has been issued for a project prior to July 1, 2012 such project shall be subjected to the Part IIC technical criteria (no limit to grandfathering period specified in regulation).

Projects eligible for grandfathering may still use Part IIB of the technical criteria. However, in doing so, the design details and pollutant removal efficiency of the BMPs shall be in accordance with the information on DEQ's BMP Clearinghouse website or identified on VDOT's approved BMP Standards and Special Provisions.

4.3 Phasing of Construction Project and Associated SWPPP

This section applies to all VDOT projects which will run design and construction in tandem efforts, including D/B projects which are on an expedited delivery schedule.

Where a project will be constructed in phases, the SWPPP shall include an ESC Plan, a SWM Plan, and P2 Plan for each phase that includes the scope and extent of land-disturbing proposed for that phase. The SWPPP for the individual phases will be self-sustaining and not incur a deficit in post construction SWM design requirements requiring mitigation on successive phases. These minimum requirements must be satisfied prior to VPDES permit registration.

The initial SWPPP shall cover, at a minimum, the following items:

- Preliminary construction plans (30-50% complete) documenting the limits of construction and work to be performed;
- ESC Plan for initial phase based upon the existing conditions and work needed for clearing and grubbing, maintenance of traffic, and proposed upland grading;
- Pollution Prevention (P2) Plan for initial phase; and
- Post-Construction SWM including required documentation and calculations, location of all outfalls, identification and description with the water quantity and quality requirements, a topographical site map, and a narrative describing the existing and proposed site conditions.

The initial SWPPP shall contain all required plan content addressed in the VPDES Construction Permit, Stormwater Management Regulations and Erosion and Sediment Control Regulations.

4.4 Selection of Manufactured Treatment Devices (MTDs) and Underground BMPs

In selecting proprietary stormwater systems (MTDs or Underground BMPs), designers and VDOT should strive to design and specify the system that provides the best value to VDOT, considering a variety of factors. Designers should evaluate and compare traditional/conventional Stormwater Management Facilities ("SWM Facilities" - detention, extended detention, filtration systems and infiltration systems) and the proposed underground or manufactured systems to ascertain if the overall value to VDOT is better. This evaluation should include a comparison of capital costs (land, materials and labor), as well as anticipated long-term operation and maintenance costs over the life cycle of the MTD or underground SWM Facilities in comparison to conventional, non-proprietary SWM Facilities alternatives open to the ground surface. When the total life cycle cost for a conventional SWM Facilities alternative is less than for a MTD or underground SWM Facilities, consideration must be given to use of the conventional system, even if the capital costs are higher, unless acquisition of additional R/W or easements are expected to delay the overall project schedule.

If an MTD or underground SWM Facilities determined to be the most appropriate solution, the plans and specifications should identify the minimum performance criterion that the system is expected to meet. Performance criteria may include geometric, hydraulic, materials, operation and maintenance, and water quality characteristics. These performance criteria become the basis for specification and procurement. Specific proprietary systems should not be specified. All products should be selected from the Approved Products List (when feasible) and any water quality performance characteristics (e.g. efficiency, allowable flow rates, etc.) shall be as approved by DEQ.

5.0 EXCEPTIONS FROM TECHNICAL CRITERIA

For those land-disturbing activities where it is determined that water quality requirements cannot be totally achieved utilizing onsite BMPs and/or offsite options (see Chapter 11 of the VDOT Drainage Manual), an exception from the portions of the technical criteria unachievable (e.g., relief from the improvement factor of Energy Balance Equation) may be considered and granted by DEQ provided that VDOT coordinates with DEQ and submits a written exception request. The designer or project manager should coordinate consideration of any exceptions directly the DHE. If deemed warranted or necessary, the DHE will assist in documenting the request for exception. This effort shall be documented in accordance with VDOT's Annual Standards and Specifications, including the completion and submittal of LD-445G form, coordinated by the DHE to the State MS4 Engineer and DEQ.

The request shall include documentation of the need for the exception. The documentation shall describe all means and methods evaluated for meeting the water quality/quantity requirements and the reasons why specific means or methods were determined not feasible. The documentation shall also state that the exception being requested is the minimum necessary to afford relief. Economic hardship alone is not sufficient reason to request an exception.

Any approved exception is to be documented and included in the SWPPP for the project/activity. The appropriate SWPPP General Information Sheet notes are to include the date the exception was approved, by whom it was approved and the nature of the exception (e.g., increased reliance on nutrient credits to ___ lbs. in exceedance of the 25% allowable off site). This same information should be noted and included with other registration information when applying for coverage under the VPDES Construction Permit.

6.0 REVIEW AND APPROVAL OF ESC PLANS

See Section 10.2.2.1 of the VDOT Drainage Manual for certification requirements and review and approval of ESC Plans.

7.0 MAINTENANCE CONSIDERATIONS

Requirements for maintenance of SWM Facilities, the schedule for inspection, maintenance operations, and the identification of persons responsible for the maintenance is addressed in the VDOT Maintenance Division's BMP Inspection and Maintenance Manuals. The long-term operations and maintenance requirements for any SWM Facility shall be considered during SWM Plan development. The applicable inspection and maintenance section of each manual shall be noted using the appropriate note(s) in Section IV of the SWPPP General Information Sheets.

8.0 RECORDKEEPING AND REPORTING

8.1 SWPPP General Information Sheets

The VPDES MS4 and Construction Permits require VDOT to annually report information to DEQ such as the location, type, acres treated and the affected receiving waters of all SWM Facilities (BMPs) installed.

8.2 LD-445D and LD-458 Submittals

BMP information is to be recorded on the SWPPP General Information Sheets and reported through the VPDES Permit Termination Notice Form LD-445D. See the current IIM-LD-242 and Chapter 10 of the VDOT Drainage Manual for additional information.

The LD-458 Surplus Tracking Form will be used to collect any additional phosphorus credit generated by a specific project that could be applied to the TMDL Action Plan in a specific watershed. This form is to be submitted to the State MS4 Engineer for coordination with the Environmental Division.

8.3 Construction Record Drawings

Construction record drawings are required for all permanent SWM Facilities, including approved shop drawings for MTDs, and shall be appropriately signed and sealed by a person registered in the Commonwealth of Virginia as a professional architect, engineer, land surveyor or landscape architect and qualified in the responsible administration of the BMP construction. Construction record documentation shall be provided for all permanent SWM Facilities. The registered professional shall certify that all SWM Facilities have been constructed and made functional in accordance with the SWM Plan. The form LD-445D shall be used to document this certification process. The official record drawings for the project include both the plan drawings and record drawing survey.

Any changes to the proposed SWM Plan or BMPs necessitated during the construction phase of the project, that affects the proposed construction details or the BMP design information shown in the construction plans or documentation, shall be coordinated by the VDOT construction manager with the appropriate VDOT District Hydraulics Engineer. If as-built documentation for permanent SWM Facilities deviates from the approved plans, the Area Construction Engineer should request a review by the District Hydraulics Engineer to determine if modifications to the facility are needed prior to acceptance. As-built documentation should be submitted as early as possible but no less than 30 days prior to expected acceptance. Significant deviation from the approved drawings may delay project acceptance. The record set of construction plans and the BMP information tables in the construction plans or documentation are to be formally revised to reflect any authorized/approved changes to the proposed SWM Plan and/or the proposed BMP construction details. All plan revisions shall be completed in accordance with the VDOT Road Design Manual and the VDOT Construction Division's IIM-CD-2013-12.01, signed and sealed in accordance with Department's sealing and signing policy IIM-LD-243 and filed with the record set of construction plans maintained in the VDOT ProjectWise Plan File Room.

Inspection forms specific to the BMP type(s) should be used to document the construction/installation process. A final inspection for SWM Facilities/BMPs shall be conducted by the VDOT construction manager, the Area Construction Engineer (ACE), the VDOT DHE, the VDOT Maintenance Division Infrastructure Manager (or designee), and the NPDES Coordinator (or their designees). The inspection shall be conducted prior to final project acceptance to identify any required corrective actions, allowing the contractor to perform these corrective actions. The final inspections should be conducted as early as practicable to allow time for corrective actions. Reinspection may be required after receipt of the as-built documentation.

8.4 Transfer of VDOT Responsibility to Others

The footprint occupied by a BMP, that is installed as part of a VDOT project and is part of VDOT's post-construction SWM Plan, may be utilized for other land use and development, provided that all VSMP requirements are transferred to another entity (e.g. developer or locality). An example project would be where a private developer intends to utilize the area occupied by the BMP for parking spaces to service a shopping center. Prior to the transfer of land and elimination of the BMP, the entity shall demonstrate certain conditions have been met:

1. The entity (e.g. developer or locality) shall provide the applicable District Hydraulics Engineer a conceptual plan of how they are going to account for VDOT's SWM requirements;

2. Upon approval from the District Hydraulics Engineer, the entity shall provide an executed agreement stating the SWM requirements are to be transferred to the entity in perpetuity. This agreement shall not preclude any requirements of the VSMP Authority including an executed maintenance agreement for the replacement BMP(s);
3. Demonstrate to the District Hydraulics Engineer that all VSMP requirements will be transferred to another entity (e.g. developer or locality) to the satisfaction of the applicable VSMP Authority. The SWM Plan and maintenance agreement that is submitted to the VSMP Authority for review and approval must include the post-construction SWM requirements that are currently being satisfied by the existing BMP;
4. Replacement BMPs have been constructed and made operational prior to removal of VDOT's BMP and transfer of land; and
5. All maintenance agreements with the applicable VSMP Authority have been executed and recorded to carry with the land.

It is important to note that the release of an existing VDOT easement requires a separate VDOT Property Management disposal process. Compensation for the release of easement rights will be required and easements will be conveyed by quitclaim deed. Easement releases should be coordinated with the Property Management Program Manager, 1401 East Broad Street, Richmond, VA. 23219.



SHARON BULOVA
CHAIRMAN

COMMONWEALTH OF VIRGINIA
County of Fairfax
BOARD OF SUPERVISORS

ATTACHMENT 2

SUITE 530
12000 GOVERNMENT CENTER PKWY
FAIRFAX, VIRGINIA 22035-0071

TELEPHONE: 703/324-2321
FAX: 703/324-3955
TTY: 711

chairman@fairfaxcounty.gov

JUL 17 2019

Secretary Shannon Valentine
Virginia Department of Transportation
P.O. Box 1475
Richmond, VA 23218

Reference: Fairfax County Request for VDOT Projects to Meet Local Stormwater Management Requirements

Dear Secretary Valentine:

Fairfax County recognizes the critical importance of transportation projects to our community and continues to support the Commonwealth's efforts to advance multi-modal mobility in the region to improve our quality of life. We also know that transportation projects add significant impervious area to the Chesapeake Bay's and Fairfax County's watersheds and have significant negative impacts on water quality. Fairfax County would like to partner with the Virginia Department of Transportation (VDOT) to develop solutions to the stormwater management issues associated with transportation projects.

We reviewed VDOT Location and Design Division Instructional and Informational Memorandum IIM-LD-195.10 regarding stormwater management requirements for VDOT projects. Section 4.1 of this memorandum (starting on sheet 6) notes that, "*When requested by a locality's VSMP Authority, VDOT projects located in jurisdictions that have adopted more stringent stormwater management (SWM) technical criteria than that required by the VSMP Regulations shall be designed, to the largest extent practicable, to meet the locality's more stringent criteria.*"

Fairfax County's Stormwater Management Ordinance provides the technical criteria for regulated land-disturbing activities in Fairfax County. The criteria are provided in Article 5 of Chapter 124 of Fairfax County's Code of Ordinances, available at:
https://library.municode.com/va/fairfax_county/codes/code_of_ordinances

We believe these criteria are more stringent than Parts II B and II C of the Virginia Stormwater Management Program (VSMP) Regulations. Therefore, on March 19, 2019, the Fairfax County Board of Supervisors voted to, and now formally requests that all current projects under design for use in the public involvement phase and future VDOT projects located in Fairfax County meet the County's local stormwater management regulations. Per IIM-LD-195.10, if it is found that our more stringent local stormwater management requirements are not attainable, VDOT should implement requirements to the maximum extent practicable and provide documentation to the County demonstrating that the technical requirements are not fully feasible. Additionally, Fairfax County requests that all stormwater management facilities designed to meet local

Secretary Shannon Valentine
Request for VDOT Projects to Meet Local Stormwater Management Requirements
Page 2 of 2

stormwater management regulations be constructed, inspected, and maintained by VDOT and that the state provide sufficient funding to VDOT to adequately fulfill these needs.

VDOT and Fairfax County are both municipal separate storm sewer system (MS4) permit entities and share the same stormwater management objectives. Fairfax County wishes to partner with VDOT on efforts to find innovative ways to address stormwater management within the right-of-way and directly downstream to meet our mutual MS4 and Chesapeake Bay total maximum daily load (TMDL) goals.

Sincerely,



Sharon Bulova
Chairman
Fairfax County Board of Supervisors

cc: Ann Jennings, Deputy Secretary of Natural Resources for the Chesapeake Bay
David K. Paylor, Director, Virginia Department of Environmental Quality
Bryan J. Hill, Fairfax, County Executive
Rachel Flynn, Deputy County Executive
Randolph W. Bartlett, Director, Department of Public Works and Environmental Services (DPWES)
Bill Hicks, Director, Land Development Services
Tom Biesiadny, Director, Fairfax County Department of Transportation
Craig Carinci, Director, DPWES, Stormwater Planning Division
Chad Crawford, Director, DPWES, Maintenance and Stormwater Management Division
Brian Keightley, Director, DPWES, Urban Forest Management Division