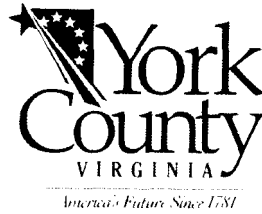


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Neil A. Morgan



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September 21, 2017

Sharon Simmons
111 Shady Bluff Pt.
Williamsburg, VA 23188

Dear Ms. Simmons:

Thank you for your letter of September 13th concerning the Interstate 64, Segment III, widening project. I too, along with a number of Queens Lake residents, wondered about the effect of the "grandfathering" decision regarding stormwater management standards. Consequently, we requested a detailed explanation from VDOT, which was provided by the Senior Project Manager, Janet Hedrick, P.E., who is overseeing the Segment III work and the detailed explanation that Ms. Hedrick provided is enclosed for your review

While I do not profess to know the intricacies of the Virginia stormwater management regulations and requirements, our County stormwater engineers have reviewed Ms. Hedrick's explanation and have found it to be consistent with their understanding of the procedures and requirements. In a nutshell, and in layman's terms, if the contractor that is ultimately selected for Segment III decides to follow the "old" (grandfathered) standards there will be fewer stormwater BMPs (wet or dry ponds), less right-of-way acquisition, and less tree clearing than would be necessary under the new standards. In either case, however, stormwater runoff associated with the widening must be mitigated so that discharges do not exceed the capacity of the receiving channel. Knowing the proximity of some Queens Lake residences to I-64, I believe the opportunity to develop a design solution that minimizes tree loss while still achieving stormwater management control that addresses volume and velocity is appropriate and desirable.

I trust you will find Ms. Hedrick's technical explanation to be helpful and informative. Thank you again for your interest in this project and if you have further questions, please let me know.

Sincerely,


Walter C. Zaremba
York County Board of Supervisors

Copy to: Neil A. Morgan, County Administrator

Enclosure

Excerpt – July 25, 2017 email

Janet Hedrick, P.E. (VDOT) to Mark Carter, Deputy County Administrator

DEQ in a letter to VDOT dated September 15, 2016, grandfathered the I-64 Segment III project to Part IIC (9VAC25-870-93) in accordance with Section 48.B. 1 of the VSMP regulation, 9VAC25-870 et seq. In the VDOT contract the Design-Builder will have the option to use the new Part IIB (9VAC25-870-62) or Part IIC (9VAC25-870-93) stormwater requirements, but not a combination of each. Due to the noted eroded outfalls in this area, Section 11.8.1.6.3 “Q1 Control – Alternative Quantity Control” of the VDOT Drainage Manual will be used for the portion of the interstate within the Queens Lake watershed. The additional Q1 (1 year design storm) requirement will ensure the amount of erosion into Queens Lake is minimized. Both Part IIB and the Part IIC requirements have their advantages and disadvantages with respect to the Queens Lake Community therefore one option is not definitively better than another. The Part IIB technical requirements are stricter regarding water quantity, however as a result, substantially more BMPs and therefore more tree clearing is required to achieve the additional volume reductions. The Part IIC regulations will require fewer BMPs reducing clearing and disturbance. The Part IIC facilities are also more likely to be dry and are easier to maintain due to their simplicity potentially improving long term performance as well. The grandfathering criterion was offered to the Contractor to reduce right of way acquisitions, construction activities and durations, long term maintenance costs, the quantity of SWM facilities and decrease tree clearing. This flexibility enables the project to minimize and/or eliminate impacts to the scenic easement overseen by the National Park Service, Waller Mill Park property, Bruton High School property, the United States of America property, Department of Interior (Camp Peary) property and other private properties and environmentally sensitive areas within the project corridor.

The proposed BMP's for I-64 Segment III will be designed and sized to capture increases in roadway runoff and satisfy the selected stormwater management technical requirements (Part IIB or IIC). Both versions of the regulations will require any receiving channel to have a demonstrated capacity for the design storm or experience a decrease in the peak discharge received from the project area. Additional discharge restrictions are included in the technical requirements for this project within the Queens Lake watershed to detain the entire 1 year storm within the BMP if the older (Part IIC) technical requirements are selected.

Typically proposed BMP basins are designed using a graduated temporary storage volume to capture the additional roadway runoff, which is then released gradually following a storm, generally over 24-30 hours. This can be achieved in a variety of ways, but the most common is a tiered release tower with a small orifice at the base (several inches in diameter) and a larger overflow for major events located several feet above the orifice. The special discharge requirements for the Queens Lake watershed will require the vast majority of storm events to be released exclusively through this orifice. This reduces the peak discharge (volume/time) from the project area to the downstream channel substantially reducing the velocity within downstream channels and therefore reducing the erosive forces on soils.

Janet M. Hedrick, P.E.

Senior Project Manager - Project Management Office |
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