<u>July 22, 2015 Huntington Levee Community Meeting</u>
<u>Questions and Answers</u>

1. **Explain the difference in water levels in minor and major storms. Explain how water height is measured in underground chambers at pump station.**

Slide 15 of the July 22, 2015 presentation illustrates the newly incorporated low flow pumping system. The slide indicates that minor storms will be handled by the low flow pumping system. For the purposes of this illustration, a minor storm is defined as a rain event of up to 1" (approximately 90% of storms). A major storm would be a defined as a rain event of intensity greater than 1". When a major storm occurs, the high flow pumping system removes the water.

Water height is measured with a series of sensors in the underground culverts. Those sensors connect to an industrial grade control system which starts and stops the pumps based on water level.

2. **Will the addition of new pumps add costs to the project? Will additional maintenance be required?**

The difference in construction and maintenance costs between the gravity outlet structures and low flow pumps is not significant. We believe the pump system will be more reliable and easier to maintain than the gravity outlet structures over the life of the project.

3. **How does the system handle flows coming from communities to the south? Will pipes back up into the neighborhood?**

The current stormwater systems get surcharged (backed up) because of their connections to Cameron Run. These pipes will connect to the levee pipes and water will be directed to the pumps. Water backups will be limited to the streets during higher flow events.

4. **Why is the box culvert being replaced with an open channel**?

The removal of approximately 1500 linear feet of concrete box culvert will reduce maintenance and safety concerns in accessing the system. Construction costs will also be reduced.

5. **How much of the open channel will be paved?**

The exact design of the channel is still underway. The goal is to minimize potential erosion and maintenance issues while leaving as much vegetation as possible.

6. **What will keep kids and other things from being washed into open channel?**

The sides of the open channel are intended to have very shallow slopes. In the limited areas where a steeper slope is required, the channel will be protected by guardrails.

7. **What will happen to the current Fenwick culvert? Where will that water go?**

There are currently three storm sewer pipes that outfall near the end of Fenwick Drive (behind the homes and at the end of the street). All three pipes will be connected to the new pipe system that routes stormwater to the pump station.

8. **Will the levee reduce the ponding that currently happens behind the homes on the west side of Fenwick Drive?**

The levee and pump station will reduce the frequency of flooding in the Huntington neighborhood. While the project will be designed to protect homes from the 100 year storm, some street flooding will continue to occur during major storm events.

9. **Why will water remain in the streets and how much will there be? How much street flooding will occur after the levee is built?**

The project is intended to protect structures during the 100 year, 24 hour duration storm. In several locations along Arlington Terrace and Fenwick Drive, the street is lower than this elevation.

Please refer to the presentations given in January and July of 2015, where flood water overlays were shown, indicating the extent of street flooding for different storm levels. The depth of water in the streets is generally expected to be not greater than 2.5 ft.

10. **Why are Huntington residents required to purchase flood insurance?**

Congress mandated federally regulated or insured lenders to require flood insurance on properties that are located in areas at high risk of flooding. Huntington area is located in a high flood risk area and therefore flood insurance is required.

11. **Which FEMA rules changed?**

In 2012, Congress passed the Biggert Waters Flood Insurance Reform Act of 2012, which calls on FEMA to make changes to how the National Flood Insurance Program (NFIP) is run. The details of these changes can be found at the following website. http://smartvent.com/pdfs/bw12-fema-factsheet.pdf

12. **How has Cameron Run changed over the years?**

Cameron Run has changed in many ways over the years, including the addition of road crossings and modifications to the channel, as significant development has taken place along its path.

13. **How does Lake Barcroft affect flooding?**

Lake Barcroft is a state-regulated facility requiring the lake to have an operation and maintenance permit. One of the conditions of the permit requires the lake to maintain a constant water level and, therefore, rules out the use of the lake for detention. The same amount of water entering the lake must also be discharged to maintain the constant level. The amount of water coming into Lake Barcroft may provide a warning of potential flooding at Huntington, but is not a regulating system.
(Question and response repeated from Jul 2014 Questions from the Community)

14. **How deep will the tree buffer be near the pump station?**

The pump station will be located approximately 230-feet from the nearest homes. An existing tree buffer, with a depth of approximately 100-feet will be protected through construction and remain after project completion.
(Question and response repeated from Jan 2015 Questions from the Community)

15. **How loud will the pumps be?**

The pumps will be located inside the pump station and the motors will be under water. Both factors help contain the noise, and pump noise is not expected to transmit beyond the pump station fence.
(Question and response repeated from Jan 2015 Questions from the Community)

16. **What will the six new outfalls do?**

The six existing storm sewer outfalls will connect to the pipe that directs stormwater to the pump station.

17. **Will the ugly metal shack next to the baseball diamond be removed?**

The metal storage building will be removed during construction.

18. **Will there be a dog park?**

While amenities such as upgrading nearby playground equipment and providing new trails around the levee and ponding area are included in the design, a dedicated dog park is not included. Note that ponding area will remain as open space.

19. **Was the 2006 flood a 60-year flood?**

The June 2006 flood event was estimated to be less than a 50-year storm. It was between a 30- and 40-year event at the project location.

20. **How many permits have been issued?**

No permits have been issued as of July 2015. The process requires a certain level of design completion before permit application. Many permits are in currently in review by the agencies in charge.

21. **What critical steps could slow down schedule? Is the project still on schedule?**

The project is still on schedule to begin construction in January of 2017. Completion of the various site permits remain on the critical path.

22. **Will the next rendering include the open channel?**

Updated renderings of the site will be provided for the next community meeting.

23. **Will the new trail be paved or an elevated boardwalk? Where will paths connect?**

The trail on top of the levee will be paved and extend the entire length of the levee. The trail will continue around the pump station allowing pedestrian traffic to bypass the fenced pump station. In addition, there will be a paved path along the southern side of the ponding area that will connect to the levee path at Fenwick Drive and Mount Vernon Drive. The surface of the trail is still to be determined.

24. **How many trees will be removed?**

Tree removal will be limited to the ponding area and within the footprint of the levee. Approximately 2 acres of trees and shrubs will be removed.

25. **Will flood insurance be lower after the levee is built?**

After accreditation is complete and the LOMR is approved, the areas behind the levee may be within Zone X. This is an area with minimal flood risk. While there is no federal mandatory insurance purchase requirement in Zone X, Fairfax County strongly recommends that Huntington residents purchase or maintain their flood insurance. It is expected that the premiums will be significantly lower.
(Question and response repeated from Jan 2015 Questions from the Community)

26. **Where will electricity for the pump station come from? Will the pump station cause power outages?**

In the past the power has been cut-off to the homes as a safety measure by the electric utility. When homes experience flooding, the power may be cut off due to the concern with electrical panels or equipment being exposed to the water. The levee system will control flooding of structures, reducing the necessity for the electric utility to cut off power. The exact connection of the pump station to Dominion Virginia Power infrastructure hasn't been established yet, but should not affect homes in the neighborhood.
(Question and response partially repeated from Jan 2015 Questions from the Community)

27. **Where will construction access be located? How will construction traffic impact neighborhood streets?**

The exact process for construction is still being evaluated. We are making every effort to minimize the need for construction traffic through neighborhood streets.