

# Huntington Levee Community Meeting

June 25, 2014

Building Design Branch



# Agenda

- I. Project Background
- II. Cameron Run Hydraulic Modeling
- III. Community Outreach
- IV. Questions



# Project Background

- **June 2006** -160 homes were flooded from a storm event
- **2009** – US Army Corps of Engineers (USACE) completed a study to evaluate flood damage reduction measures in the Huntington Community



# Project Background

- **November 6, 2012** – Fairfax County voters approved stormwater bond referendum to fund design and construction of flood damage reduction measures proposed by the USACE
- **June 2013** – Fairfax County awarded the levee design contract to ARCADIS
- **November 2013** – ARCADIS submitted the Phase I design package to Fairfax County
  - Survey, Geotechnical Investigation, Wetland Delineation, and Conceptual Design
- **January 2014** – Fairfax County and Huntington Community reach consensus on conceptual design features

# Project Background

## Final Conceptual Design Features

- Earthen Levee/I-Wall Combination
- Collection Drains
- Pump Station Location – East end of levee
- Stormwater Diversion – Concrete box culverts

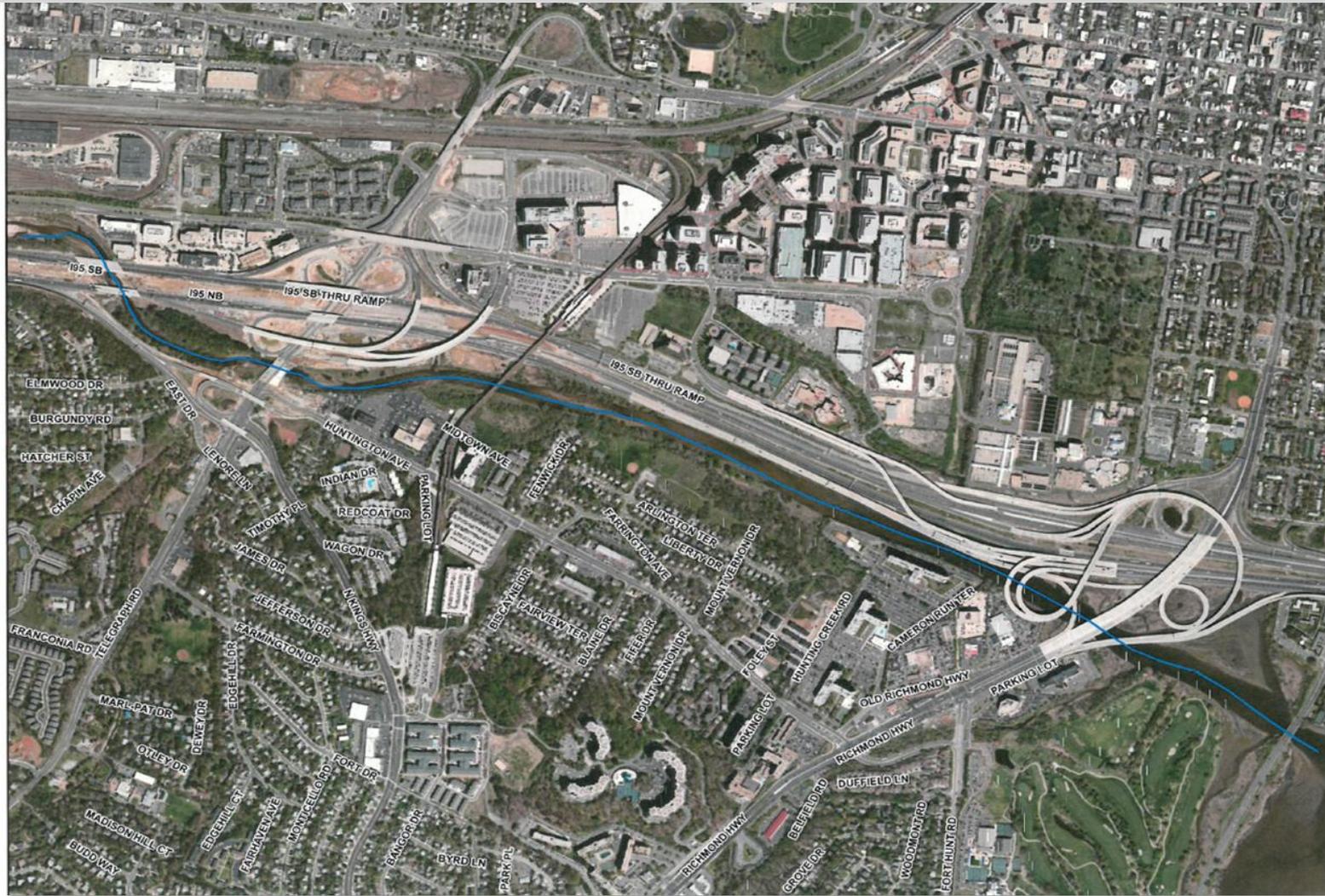


# Cameron Run Hydraulic Modeling

## Purpose

- Confirm height required to provide protection from the 100 year storm (1% chance of occurrence each year)
- Illustrate backwater impacts of the levee
- Sets the horizontal position of the levee
- Provides the data necessary for the FEMA Accreditation package and revision to the Floodplain Maps.
- Support the Floodplain Study for submission to the County Land Development Services

# Cameron Run Hydraulic Modeling



**Cameron Run**  
Huntington Levee Project  
Fairfax County, Virginia

Limit of Updated  
Model Data  
06-16-14 DRAFT

**Legend**  
— Cameron Run



0 200 400 800  
Feet



**ARCADIS**

**Baker**



# Cameron Run Hydraulic Modeling



# Cameron Run Hydraulic Modeling

## Hydraulics of Stream Flow

- Flood Elevations are impacted by:
  - Slope of the channel
  - Channel geometry – available flow area
  - Resistance to flow
    - Roughness of the channel (“n” value”)
    - Obstructions such as bridges and piers
  - Amount of flow in the channel – cubic feet per second (cfs)

# Cameron Run Hydraulic Modeling

## Hydraulics of Stream Flow (continued)

- Storm event frequency
  - 2-, 10-, 50-, and 100-year annual chance
  - 2-year annual chance event – 50% chance of the storm occurring in any given year
  - 100-year annual chance event – 1% chance of occurring in any given year

# Cameron Run Hydraulic Modeling

## Existing 100-year Water Surface Elevation



# Cameron Run Hydraulic Modeling

100-year stormwater ponding at elevation 8.0'



# Community Outreach

## Communication

- Community Meeting notes will be placed on the web site 2 weeks after the meeting
- Quarterly emails sent out to the project listserv with progress made in the past three months and what to expect in the next three months
- Schedule – adding a feature to the web site to help the Community track the progress of the active components of the project.

# Community Outreach

The screenshot shows a web browser window displaying the Fairfax County website. The address bar shows the URL <http://www.fairfaxcounty.gov/dpwes/huntingtonlevee/>. The page features the Fairfax County Virginia logo and a navigation menu with options like Home, Living Here, Doing Business, Visiting, and Departments & Agencies. A search bar is located in the top right corner. The main content area is titled "Huntington Levee" and includes a breadcrumb trail: [homepage](#) > [public works and environmental services](#) > [stormwater](#). The page contains several sections: a "Community Meeting Wednesday, June 25" announcement stating that an outdoor meeting at Fenwick Park has been cancelled and a meeting at the Huntington Community Center is planned for 7:30 p.m.; a "Project Need" section explaining the necessity of a levee and pumping station to protect the Huntington neighborhood from flooding, mentioning a \$30 million stormwater bond approved in November 2012; and a "Receive email notification of public meetings and project updates:" section with an email address input field and a "Subscribe" button. A video player for the "Huntington Levee Community Meeting" is also visible on the right side of the page.

http://www.fairfaxcounty.gov/dpwes/huntingtonlevee/

Huntington Levee - Fairfax County, Virginia

Fairfax County VIRGINIA

Home Living Here Doing Business Visiting Departments & Agencies

Search Site:  Go Advanced Search

Printer Friendly Text Size Text Only

homepage > public works and environmental services > stormwater

## Huntington Levee

### Community Meeting Wednesday, June 25

Due to the threat of inclement weather, the outdoor portion of the community meeting scheduled for 6:30 p.m. at Fenwick Park has been cancelled.

The meeting scheduled for 7:30 p.m. at the Huntington Community Center will proceed as planned.

For reasonable ADA Accommodations, please call 703-324-5800, TTY 711, or email [HuntingtonLevee@fairfaxcounty.gov](mailto:HuntingtonLevee@fairfaxcounty.gov)

Fairfax County will build a levee and pumping station to protect homes and other property in the Huntington neighborhood from flooding.

This is a complicated project that will require review by local, state and federal agencies, and will take up to seven years to design and build the levee. Completion is scheduled for spring 2019.

Voters approved a \$30 million stormwater bond in November 2012 to fund the construction of the levee and pumping station.

### Project Need

The Huntington community floods due to tidal surges from the Potomac River and flash flooding from the Cameron Run Watershed. The community was built prior to enactment of the current floodplain regulations.

Since 2002, three floods have damaged vehicles and other property in this neighborhood. There are 160 homes in the FEMA-designated floodplain that are at risk in the future.

At Fairfax County's request, the U.S. Army Corps of Engineers studied the best ways to protect Huntington from future floods. The study examined a number of options, including dredging Cameron Run, buying the flood-prone properties and flood proofing individual homes. The study found that a levee and a pumping station are the most cost effective ways to protect Huntington. Fairfax County awarded a contract to the engineering firm of ARCADIS to design the levee and pumping station based on the Corps initial concepts.

### Huntington Levee Community Meeting

January 14, 2014

Building Design Branch

Receive email notification of public meetings and project updates:

Email address:

You will be sent a subscription confirmation request which you must reply to with the word OK as the body of the message. (The message that is sent will also have instructions letting you know how to respond.)

# Community Outreach

## Schedule

- Phase II (January 2014-Winter 2017)
  - Schematic Design (30%)
  - Design Development (60%)
  - Permitting
  - Land Acquisition
  - Construction Documents (100%)
  - Bidding
- Phase III (Winter 2017-Spring 2019)
  - Construction



# Community Outreach

## Community Meetings

- Bi-annually
- Important Milestones
- Next Community meeting – January 2015
  - Interior Drainage Model
  - Pump Station Exterior
  - Construction and Pump Station Access



# Questions

- Contact Information – Huntington Levee Project
  - Phone #: 703-324-5800
  - Email address: [HuntingtonLevee@fairfaxcounty.gov](mailto:HuntingtonLevee@fairfaxcounty.gov)
- Contact Information – Stormwater Questions
  - Phone #: 703-324-5821
  - Email address: [SWPDmail@fairfaxcounty.gov](mailto:SWPDmail@fairfaxcounty.gov)
- Huntington Levee Website:  
[www.fairfaxcounty.gov/dpwes/huntingtonlevee](http://www.fairfaxcounty.gov/dpwes/huntingtonlevee)



To request this document in an alternate format call 703-324-5800, TTY 711.

