Difficult Run Stream Valley Community Meeting



December 13, 2018 Navy Elementary School

Paul Shirey, Manager Project Management Branch



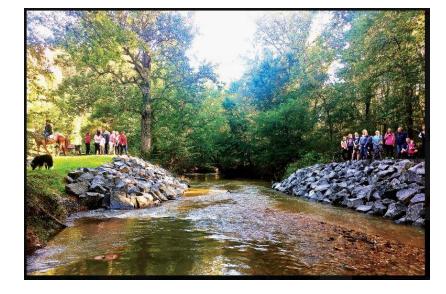
Fairfax County Park Authority Planning & Development Division

AGENDA - FCPA Staff Presentation

- Overview of Existing Conditions
- Overview of Concept Design Process
- Concept Design Process Schedule
- Next Steps
- Funding Contribution Opportunities

Existing Conditions

- Bridge constructed approximately 70 years ago - private farm road
- Eroded foundation problems reported in 2016
- County staff worked with both property owners for removal
- East Side land deeded to the County in 2018
- County removed the bridge in Summer 2018





West Side is still private property

Pre-existing Conditions



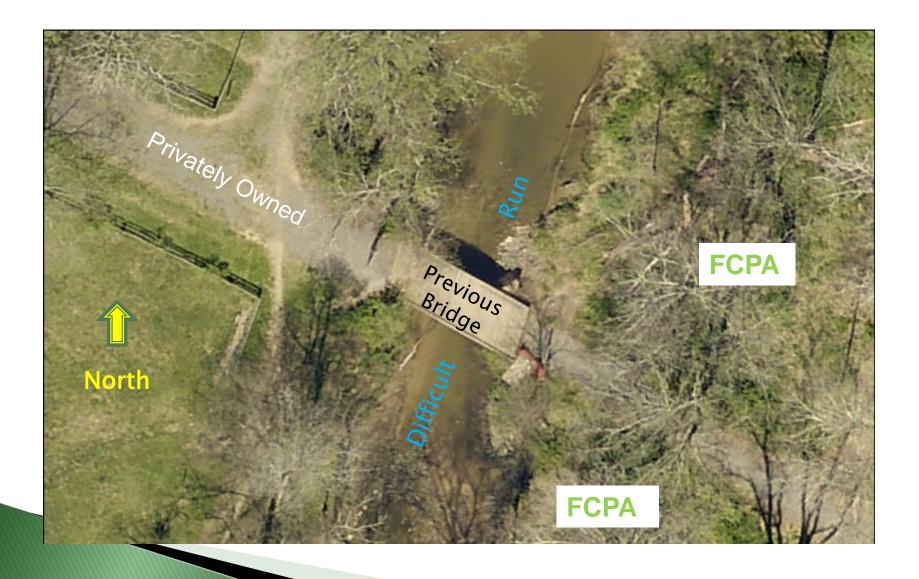
Pre-existing Conditions

Eroded Steel Substructure

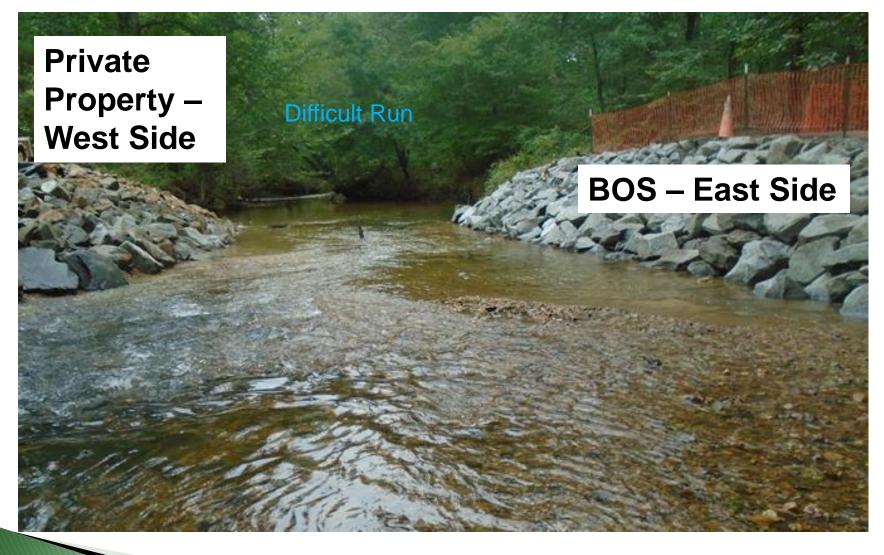
Failed/Split Abutment



Pre-existing Conditions



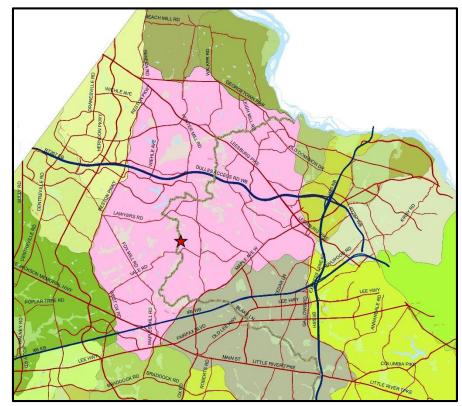
Existing Conditions



Existing Conditions – Stream Valley Crossing

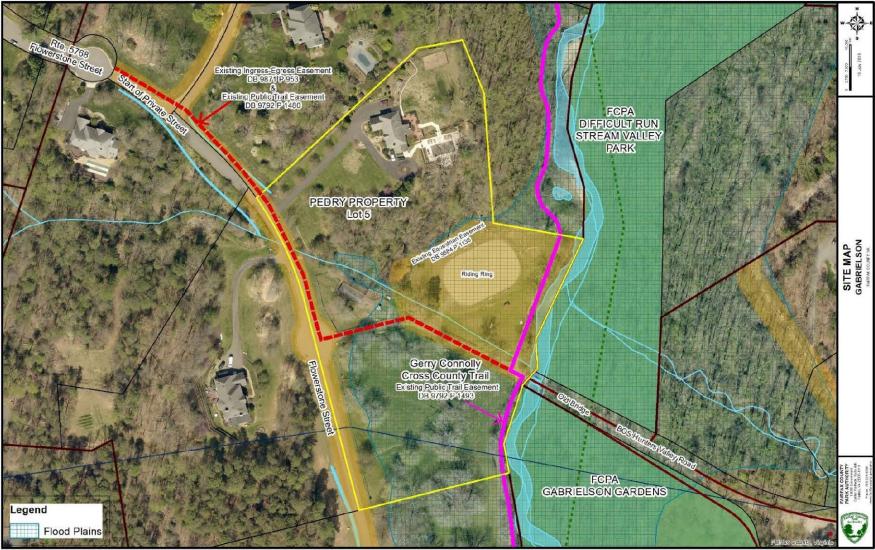
EXISTING CONDITIONS IN DIFFICULT RUN:

- Largest watershed in the county at 57 square miles.
- Includes approximately 15.9 miles of stream
- The Gerry Connolly Cross County Trail along Difficult Run extends more than 16 miles from Great Falls Park to Oak Marr RECenter in Oakton





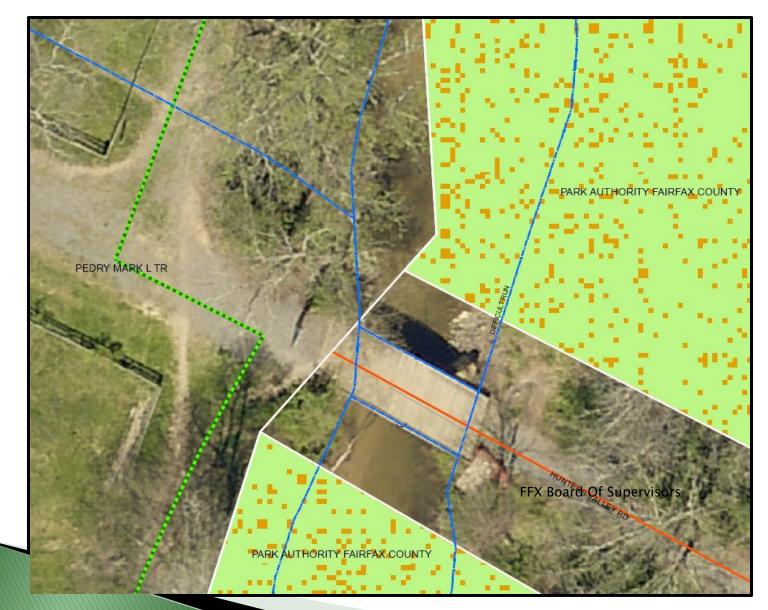
FLOOD PLAIN LIMITS



RESOURCE PROTECTION AREA LIMITS



Land Rights



Stream Valley Crossing Challenges

- Large watershed with flash flooding potential
- A bridge will be inundated during floods
- Large volume of debris during floods
- Bridge structures must be able to withstand significant stream loads







Bridge Inundation - Video



Concept Design Study Scope

- Survey site area for bridge location
- Size bridge length according to site conditions
- Determine necessary height above stream to minimize flood impacts
- Determine foundation locations



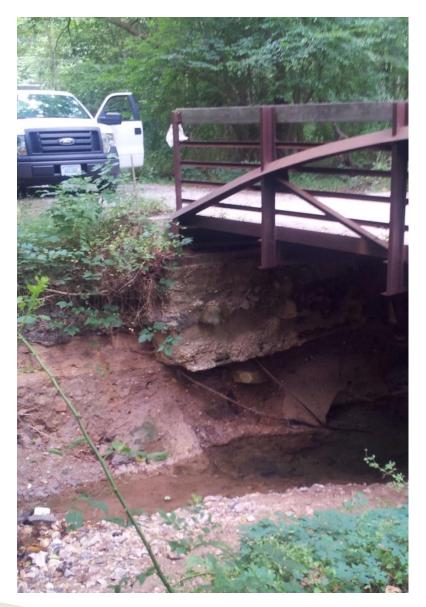
Concept Design Study Scope

- Determine need for additional land rights
- Determine impact to Floodplain and RPA
- Determine required permits: Federal, State, County
- Provide a detailed cost estimate for funding need



Other Bridge Considerations

- Sufficient set back from stream bank to avoid erosion
- Low maintenance design for expected 75-year lifespan
- Deck and width per County standards or other funding requirements
- Suitable size for pedestrian, bicycle, and equestrian uses



Bridge Study Project Schedule

Topographic Survey – In Progress

Draft Schematic Plan – Early January 2019

Final Schematic Plan – Early February 2019

 Study Completion and Identification of Required Funding and Land Rights Needs – Spring 2019

Final Design and Permitting – 12 months

Bid Process and Constuction - 6 months

Next Steps

- Public outreach meeting upon completion of the concept design study
- Project information will be available on the FCPA website
- Alternatives to County Capital Project Funding
 - Mastenbrook Grants FCPA matching funds up to \$20,000
 - Private Contributions through the Park Foundation potential tax benefits

Difficult Run Bridge Study Questions?



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