



Albemarle County

Legislation Text

File #: 18-591, **Version:** 1

AGENDA DATE: 12/5/2018

TITLE:

Update on Drainage Infrastructure Program

SUBJECT/PROPOSAL/REQUEST: Receive information related to the drainage infrastructure program - including recent findings of video assessments of drainage pipes in an urban area pilot watershed - and affirm plan for assessment continuation and other program developments.

ITEM TYPE: Regular Information Item

STAFF CONTACT(S): Richardson, Walker, Henry, Stewart, Harper

PRESENTER (S): Greg Harper

LEGAL REVIEW: Not Required

REVIEWED BY: Jeffrey B. Richardson

BACKGROUND: The Board has affirmed support for the development of a County program to adopt and proactively maintain portions of urban drainage infrastructure that lie on private property but serve a public purpose. At its April 11, 2018 meeting, the Board directed staff to “continue work to determine, through camera imaging, where grey infrastructure issues exist within the County and attempt to set aside an adequate reserve fund to be used to address maintenance and ongoing repair needs of grey infrastructure issues where such issues are identified”.

In addition, the Board’s aspirations have been made clear by the inclusion of goals related to drainage infrastructure in the both the FY17 - 19 Strategic Plan and the FY20 - 22 Strategic Plan. The FY20 - 22 Strategic Plan goal is to “determine desired levels of service for water resource protection programs based on drainage infrastructure video assessment and pilot watershed restoration program development; and recommend continuing resource requirements to fully implement those programs at varying service levels”.

STRATEGIC PLAN: Infrastructure Investment: Prioritize, plan, and invest in critical infrastructure that responds to past and future changes and improves the capacity to serve community needs.

DISCUSSION: Staff have largely completed the process of mapping drainage infrastructure throughout the County’s Development Areas. Infrastructure location and various attributes (e.g. dimensions and material) were obtained from construction drawings and field work. Work has recently begun within a pilot watershed to assess the condition of infrastructure following light cleaning. Specialized robotic crawlers fitted with a closed-circuit television (CCTV) camera capture video of the internal surface of the system. The resulting data are input into a GIS database and will be used to inform program cost projections and - potentially - serve as the basis of a long-term asset management program. Initial assessment findings will be presented to the Board.

The overall scope and cost of the infrastructure management program will be determined by the extent of service (EOS) - to be ultimately adopted by the Board. An EOS policy would dictate what portions of the

infrastructure system serve the general community and, therefore, would be appropriate for County management. For the pilot video assessment program, staff broadly interpreted the concept of “public system” to include all infrastructure conveying runoff from any public property or more than one private property. Staff will present a summary of the EOS policies of select Virginia localities. The County’s EOS policy will be the subject of future Board work sessions.

A substantial human resource component of the infrastructure management program will be obtaining the right to perform assessment and maintenance work through obtaining permissions, public easements, or other instruments granting the County right-to-work. Current assessment work is being done within private property only if the property owners grant permission to the County. Searching for existing easements and obtaining permanent, public easements to facilitate maintenance and repair work will demand significant staff or consultant time.

BUDGET IMPACT: The FY19 Board appropriation supporting the assessment work and limited repair work is \$622,588. Staff currently estimates that an additional \$1,000,000 would be required to complete the assessment of all infrastructure located within the urban area and to address critical issues. The cost of a long-term drainage infrastructure maintenance program would depend on the EOS and will be the subject of future Board work sessions.

RECOMMENDATION:

This work session is an opportunity to update the Board on preliminary findings of the assessment program and implications on program costs and to provide a review of EOS policies of other localities. Staff seeks:

- the Board’s support for continuing infrastructure assessment throughout the Development Areas and,
- authorization to develop a draft EOS policy for subsequent Board consideration.

ATTACHMENTS:

Attachment A: FY20 - 22 Strategic Plan