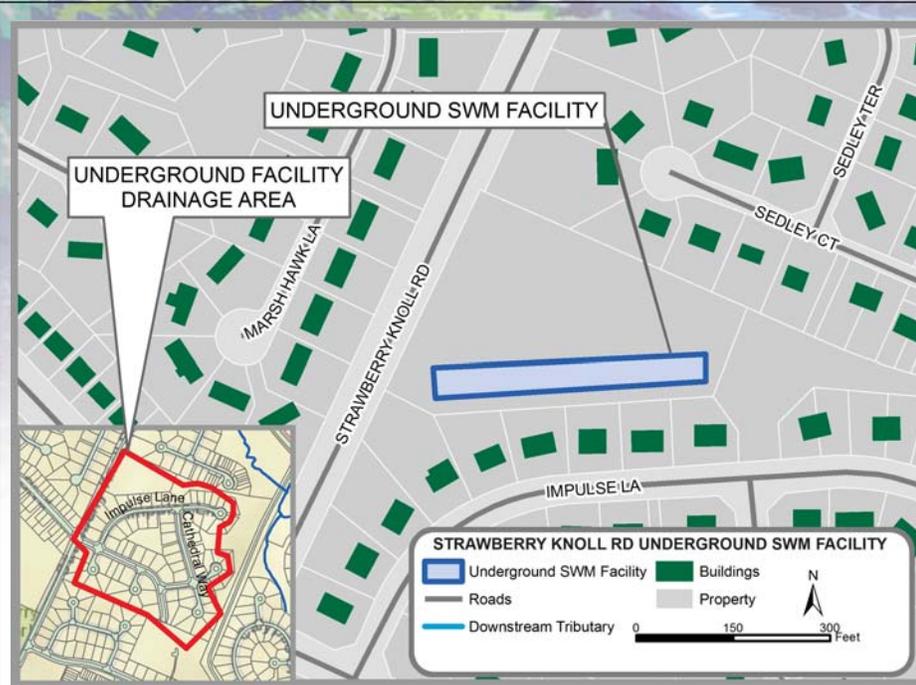




Watershed Restoration FACT SHEET

Strawberry Knoll Road Proposed Underground Stormwater Facility



Watershed Facts

Subwatershed Drainage Area: 4.8 Sq. Mi.
Subwatershed Imperviousness: 25.8%

Property Ownership

Flower Hill Central Corp. Inc.

Restoration Goals

The project goal is to improve water quality, stream health, and ecological benefits by constructing an underground filtration system to treat polluted runoff.

Restoration Project Facts

Project Length : 300 feet

Drainage Area Captured: 20.5 acres

Estimated Costs:
\$1,050,000

Project Status:

Estimated start of construction Summer 2015

Monitoring Facts

Pre- and post-restoration monitoring will be conducted, following MCDEP monitoring protocols.

Location of Strawberry Knoll Rd Proposed Underground Stormwater Facility.

Project Selection

The Montgomery County Department of Environmental Protection has identified the open space along Strawberry Knoll Rd as a beneficial location for a potential stormwater retrofit project. This parcel of land currently provides open space for the Flower Hill Community. The open space allows gravity fed utilities from the south side of the parcel to connect to the north side. Two separate stormdrain systems connect under the open space. The open space and associated utilities are easily accessible from Strawberry Knoll Road.

Similar to other restoration projects throughout the County, this project could be designed to assist in compliance with the County's Municipal Separate Storm Sewer System (MS4) permit by treating stormwater runoff and stabilizing stream channels. This project could help to restore water quality, stream health, and ecological functions in Cabin Branch and downstream waters, including Seneca Creek.



View of the existing open space at the location of proposed underground stormwater system.

Pre-Restoration Conditions

The drainage area to the site lies within the Flower Hill community. The drainage area is fully developed and includes Cathedral Way, Cathedral Drive, Bell Tower Drive, Impulse Drive, and residential lots adjacent to the roadway. This land cover is 37% impervious and consists of roadways, sidewalks, manicured lawns, and landscaping. Runoff from this drainage area is captured and conveyed by a stormdrain system which passes under the open space and conveys runoff to a downstream detention pond. The existing system does not provide water quality or channel protection functions which are currently required to mitigate adverse effects of land development. The site includes minimal surface or subsurface obstructions.



View of open space south of proposed facility.



View of existing sidewalk at location of proposed concrete apron.



View of existing inlet structure which new facility would connect to.

Restoration Actions

The proposed stormwater system is intended to intercept and treat stormwater conveyed by the existing stormdrain. The system could be located underground in order to preserve the existing open space. The underground system would be gravity driven and would consist of a pretreatment device, a box culvert storage system, and a filter system. The pretreatment device would improve maintainability of the system and would help increase the longevity of the system. This system would replace some of the natural processes which occurred prior to development and could help remove pollutants which resulted from development. These pollutants include nutrients, hydrocarbons, and metals. The system would also provide an extended release of frequent storm events to help protect downstream channels.

The completed project would have a minimum impact on the existing open space. The primary difference from existing to proposed conditions would be the addition of manholes along the south edge of the parcel. The proposed grade would remain similar to existing and the disturbed area would be re-vegetated to match the existing turf.



Contact:
 Darian Copiz
 240-777-7774
Darian.Copiz@montgomerycountymd.gov

Department of Environmental Protection
 Division of Watershed Management