

Stormwater Management Facility Repair and Retrofit FACT SHEET:

Chadswood Regional Stormwater Management Pond



Chadswood Storm Water Management Facilities Facts:
Combined Drainage Area: 323.54 acres (0.506 sq.mi.)
Combined Impervious Cover: 45.046 acres (13.9 %)
Property Ownership: Chadswood Homeowner's Association
Watershed: Great Seneca Creek
 Middle Great Seneca Creek - Asset #10803

Restoration Goals: Repair structural problems found at the facility. Upgrade storm water ponds to meet current Maryland Department of the Environment (MDE) storm water management regulations, repair and upgrade pond infrastructure to meet current safety standards.

Storm Water Management Facility Retrofit Project Facts:
Combined Limits of Disturbance: 0.87 Acres
Project Status: Design completed
Estimated Construction Start Date: November, 15 2014

Pre-Retrofit Conditions & Project Selection

During a routine inspection of the Chadswood Storm Water Management Facility, Montgomery County Department of Environmental Protection (MCDEP) observed several problems. Among the issues observed were: multiple slope failures and sink holes on the upstream side of the dam which expose a spillway pipes, steep slopes on upstream embankment,

and a partially blocked low flow pipe.

Montgomery County has a continuing commitment to protect and improve its water resources. Prior to the discovery of the dam's condition, this stormwater facility was identified for retrofit in the Great Seneca Watershed Implementation plan which details how the county will meet it's MS4 permit requirements.

The Chadswood neighborhood was developed prior to current regulations for

storm water management control. Uncontrolled storm water runoff from highly impervious areas creates erosive, high velocity or "flashy" storm water that damages receiving streams and contributes to significant sources of pollutants in those streams.

The existing storm water management pond has sufficient room for storage; however, the outlet works were not designed to meet current MDE storm water management standards and over time,

have both entered a state of disrepair and reached the end of their service life. After noticing the deteriorated condition of the dam and its need for immediate repair, MCDEP determined the dam's condition is a safety issue and has accelerated the repair and retrofit of the site. As part the stormwater pond was classified as high hazard dam by MDE. DEP will be responsible for developing and implementation of the Emergency Action Plan.



ABOVE: Sediment and debris will be removed from the bottom of the pond and rock installed to control the velocity of the stream

Proposed Repair & Retrofit Actions

Expected construction activities for the retrofit are:

- Replace the outlet works of the facility
- Properly re-build the dam embankment
- Repair slope failure and re-grade upstream embankment to be flatter
- Rebuild storm drains and other utilities currently located inside the embankment
- Remove accumulated sediment from bottom of pond



ABOVE: Slope failure on the steep upstream embankment, exposing the stormwater conveyance pipe. Structures will be replaced and slope re-graded.

BELOW: Outlet works will be replaced with concrete outlet works which have a longer service life than their metal counterparts seen here.



Construction Expectations

Construction activities will impact local traffic. For the duration of construction Cross Laurel Drive will be closed in the vicinity of the pond, and traffic to Valley Bend Drive detoured via Brandermill Drive. Appropriate erosion and sediment control measures will be provided to control dust and muddy water runoff. The contractor will be required to adhere to all OSHA safety regulations, the Montgomery County Noise Ordinance, and provide safety barriers and fencing between the construction site and public open spaces to prevent accidental or unauthorized access to the site.

Special care will be taken to minimize the utility impacts on the surrounding communities, however, interruptions in service may occur and will be restored as quickly as possible.

For more information:



Contact: Gene Gopenko/240-777-7723/gene.gopenko@montgomerycountymd.gov
 Department of Environmental Protection / Division of Watershed Management
 255 Rockville Pike, Suite 120, Rockville, MD 20850
www.montgomerycounty.gov/dep