

# Clipper Hills Gardenia Stormwater Management Facility Retrofit

## **Background:**

The Clipper Hills Gardenia stormwater management facility is an existing facility located off of Gardenia Street in Eldersburg. This facility was targeted because of the current condition of the existing dam, vegetation had grown up in the facility due to lack of maintenance, and the facility was not capturing all of the intended run-off from the subdivision. Because of the condition of the facility the County wanted to bring it up to current standards thereby ensuring that the facility provides stormwater control for the entire contributing drainage area, and it can be easily maintained.

## **Scope of Work:**

The site was analyzed by Carroll Land Service to determine if the facility was capturing the intended drainage area. The design for the facility included upgrading the existing storm drain system, while installing additional inlets to capture the drainage. A storm drain pipe running through a yard was closed and the water was directed into the new storm drain system. The existing embankment and riser were removed, and the sanitary sewer was replaced for the construction of the new embankment. The new embankment was constructed with a clay core and two anti-seep collars, and an emergency spillway. The bottom of the facility included a 18" layer of #8 stone with 6" HDPE type "SP" pipe laying on top to draw any excess water off the surface. The pipe was topped with 18" of a sand-soil green wood chip mixture. All of the slopes were designed at 3:1 to allow efficient machine mowing. The facility was designed to meet and exceed all current county and state stormwater management regulations.

## **Sequence of Construction:**

The County sent letters to the surrounding homeowners and a community meeting was held on August 12, 2010. During the process the county worked closely with the Homeowners Association to keep all the residents informed. State permits were obtained for the retrofit of this facility. The facility went out to bid in November 1, 2011 with bids due back November 30, 2011.

The job was awarded to Thomas, Bennett, & Hunter and was slated to begin over the winter. Due to wet weather the county delayed construction until after January 1, 2012. The pre construction meeting was held in March, and construction began shortly after. The contractor completed the project in August, but had to wait for a 2" stand of grass to be established before the grading completion certificate was issued. The grading completion certificate was issued on October 17, 2012. The as-built was accepted by the County on August 30, 2012.

## **Project Details:**

Watershed:	S. Branch Patapsco
Drainage Area:	33.19 acres
Impervious Surface Treated:	11.08 acres
Costs: Engineering	\$ 29,971.00
Construction	\$268,123.09
Time Frame:	24 Months

## **Submitted By:**

Janet O'Meara  
Watershed Management Specialist



04/16/2012



02/01/2006



06/20/2012



08/13/2012

