

Benjamin's Claim Stormwater Management Facility Retrofit

Background:

The Benjamin's Claim stormwater management facility is an existing facility located off of Jay Road in Eldersburg. This facility was targeted because it was no longer functioning as it was designed, 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 improving the slopes while connecting to the cross culvert under Jay Road and installing a storm drain system to convey the storm flows to the facility while providing a bypass pipe for the streams regular base flow. The new storm drain system included setting two manholes to tie the existing pipes together, a new end-wall, and a plunge pool at the outfall. The existing embankment and weir wall were modified. The bottom of the facility was excavated to accommodate the filter media. The filter media was comprised of an 18" layer of #8 stone with 8" 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 February 8, 2012. During the process the county worked closely with the neighboring property owners to keep all the residents informed. State permits were obtained for the retrofit of this facility. The facility went out to bid in October 19, 2012 with bids due back November 2, 2012.

The job was awarded to Stambaugh's Inc. and was slated to begin over the winter. Due to wet weather the county delayed construction until after January 2, 2013. The pre construction meeting was held in December 7, 2012. The contractor completed the project in June, 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 July 31, 2013. The as-built was accepted by the County on June 24, 2013.

Project Details:

Watershed:	S. Branch Patapsco
Drainage Area:	47.10 acres
Impervious Surface Treated:	15.78 acres
Costs: Engineering	\$ 37,833.00
Construction	\$ 209,875.00
Landscaping	\$ 1,524.00
Time Frame:	17 Months

Submitted By:

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01/14/2013



02/11/2013



03/22/2013



07/29/2013