# **Eldersburg Estates 3-5 Stormwater Management Facility Retrofit**

# **Background:**

The Eldersburg Estates 3-5 stormwater management facilities were three existing facilities which were located off of Becket Road and Holt Court in Eldersburg. These facilities were targeted because of the severe erosion at the outfalls of the water quality facilities. A design was completed by URS, Corporation that would consolidate the three facilities into one central facility and provide stormwater control for the entire contributing drainage area.

## **Scope of Work:**

The site was analyzed by URS to determine if the facility was capturing the intended drainage area. The design for the facility included collecting drainage from four storm drain systems, and consolidating these into three outfalls with plunge pools. A new embankment with a cut off and core trench was constructed. The emergency spillway was graded so that all of the slopes were at least 3:1 to allow efficient machine mowing. The bottom of the facility included a 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 4:1:1 mixture of sand-soil and green wood chips. Overburden from this site was hauled to the Klapp farm for disposal. The overburden was spread out per the approved Sediment and Erosion Control plan. The facility was designed to meet and exceed all current county and state stormwater management regulations.

#### **Sequence of Construction:**

The County contacted the adjoining property owners and a community meeting was held on March 14, 2012. The county entered into several license agreements with adjoining homeowners allowing the contractor to perform minor grading on their property. State and Federal permits were obtained for the retrofit of this facility. The facility went out to bid on June of 2014 with bids due back July 30, 2014. The job was awarded to Stambaugh's, Inc.

The contractor could not begin work in October as desired due to permit restrictions. Work began at the project site in February of 2015 after a permit modification was granted by MDE and ACOE. The contractor completed the project in September, 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 November 17, 2015. The as-built was accepted by the County on December 21, 2015.

## **Project Details:**

Watershed: South Branch Patapsco

Drainage Area: 34.9 acres
Impervious Surface Treated: 8.16 acres
Costs: Engineering \$ 38,197.50

Construction \$486,837.00 Watershed Management Specialist

Time Frame: 44 Months

#### **Submitted By:**

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