Oklahoma II Foothills Stormwater Management

Background:

The Oklahoma II Foothills stormwater management facility is an existing facility located off of Snowdens Run Road and Forest Lane in Eldersburg. This facility was targeted because of the current condition of the riser structure, and the facility was not capturing all of the intended run-off from the subdivision. Due to the condition of the facility, the County wanted to bring it up to current standards thereby ensuring that the facility provides stormwater control and can be easily maintained.

Scope of Work:

The site was analyzed by CLSI to determine if infiltration would be feasible. The design for the facility included a 12" 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 filter mixture. All of the slopes were designed at 3:1 to allow efficient machine mowing. A retaining wall was constructed on the backside of the facility so that 3:1 slopes could be achieved. A new emergency spillway was graded in and lined with 19" of Class I rip-rap. The facility was designed to meet and exceed all current county and state stormwater management regulations.

Sequence of Construction:

The homeowners around the facility were contacted about the retrofit in October of 2008. At that time staff members met with two adjoining property owners to discuss the proposed retrofit. The facility went out to bid on September 4, 2009 with bids due back September 18, 2009.

The job was awarded to CJ Miller, LLC. and was slated to begin in October. The contractor began working in October of 2009, but with unexpected wet conditions due to inclement weather the progress was slow. The contractor completed the project in December, but had to wait until a two inch stand of grass was established in June before it received it's final grading and sediment control inspection. The as-built was accepted by the County on June 15, 2010.

Project Details:		
Watershed:	Liberty Reservoir	
Drainage Area:	23.72 acres	Submitted By:
Impervious Surface Treated:	6.06 acres	Janet O'Meara
Costs: Engineering	\$ 24,844.80	Watershed Management Specialist
Construction	\$ 173,930.00	
Time Frame:	19 Months	







