

COLUMBIA ASSOCIATION WATERSHED BMP PROJECTS



DESCRIPTION

PHOTOS

● Columbia, Howard County, MD

BayLand is contracted with the Columbia Association (CA) to provide a variety of services including assessment, design, permitting and construction management services for stormwater management (SWM) and storm drain infrastructure projects. The task order assignments were to provide maintenance and environmental uplift to CA-owned infrastructure and amenities while providing impervious area credits toward Howard County's National Pollutant Discharge Elimination System municipal separate storm sewer system (MS4) permit. Two task order assignments are presented below.

Bioretention Facility Design-Build:

BayLand provided design services for five bioretention facility projects – Hopewell Pool, Blue Pool, Celebration Church, two best management practices (BMPs) at 6570 Dobbin Road, and Emersons Reach. Project goals were to provide maximum water quality benefits; meet all local, state and federal regulatory requirements; minimize the complexity and duration of construction; limit impacts to CA property and infrastructure; and avoid impacts to private properties. The bioretention facility designs were executed to maximize water quality benefits with minimum impact to parking and open space areas.

Stormwater BMP Inventory & Pond Assessment:

BayLand conducted a pond and stormwater BMP inventory for CA owned/managed facilities. The inventory effort included consolidating various lists and databases, as well as, developing and populating a Geographic Information System geodatabase to spatially locate facilities and catalogue pertinent site attributes. Twenty (20) priority wet ponds were selected from the database for further assessment. BayLand conducted the pond assessments, documented existing conditions and determined maintenance and restoration costs for each facility. The assessment also served to identify facilities with significant potential for retrofit/rehabilitation to fulfill SWM and/or MS4/Total Maximum Daily Load (TMDL) requirements for Howard County.



● Client | Columbia Association

Engineer | BayLand

Completed | 2017

Construction Cost | \$1,940,000