

ELVATON ROAD CULVERT REPLACEMENT



DESCRIPTION

PHOTOS

● Glen Burnie, Anne Arundel County, MD

BayLand was contracted to provide engineering design, permitting and construction management for the replacement of the Elvaton Road culvert crossing at an unnamed tributary to Marley Creek located in Glen Burnie, Maryland. The overtopping had caused dangerous undermining of the roadway that had damaged a portion of the eastbound travel lane. Considerable cracks had also formed on the driving surface and two utility lines had become exposed immediately upstream of the culvert. The downstream roadway embankment was being undercut from the culvert discharge, leading to sloughing of the roadway embankment and posing the risk of catastrophic failure of the culvert. Additionally, downstream property owners had been losing significant property from lateral stream bank erosion. Anne Arundel County's Infrastructure Management Division (IMD) requested an engineering assessment and remedial design to reduce the reoccurrences of overtopping the road, restore the driving surface, improve the overall function of the culvert and stabilize the outfall. IMD also requested improvements to the adjacent roadway drainage swale to eliminate the erosion and head cutting that was occurring adjacent to the culvert outfall.

BayLand completed the design and permitting of the culvert replacement project. Construction of the culvert replacement began in June and was completed in August 2017.

● Client | Anne Arundel County Department of Public Works

Engineer | BayLand

Completed | 2017

Construction Cost | \$340,000

