



Stream Restoration Programming Report

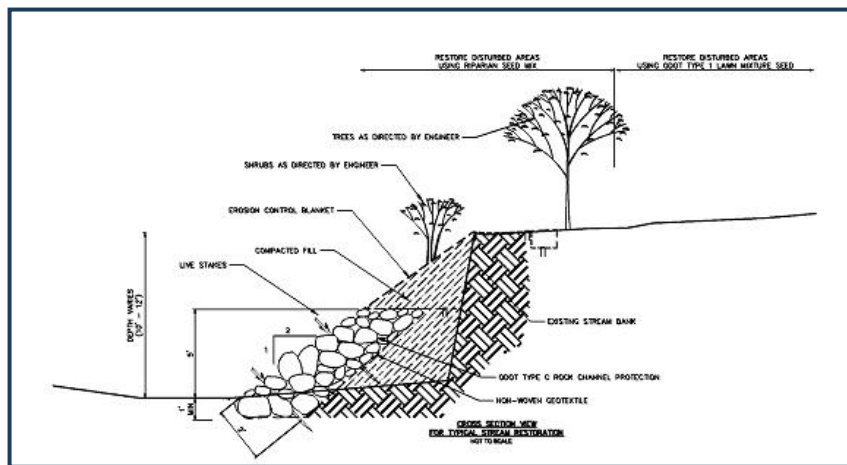
Montgomery County Engineer's Office

The Montgomery County Engineer's Office (MCEO) currently maintains 320 miles of county roads and 541 bridges. In addition to regular maintenance and even replacement of many roads and bridges, the County is also faced with the maintenance of roads or bridges that are threatened by stream channel erosion. Streams tend to meander, or migrate laterally, over time and they may move closer to a road or bridge than their historic location. The rate of channel migration is difficult to predict and oftentimes it can occur quickly during high intensity or prolonged storm events.

In 2016, the County prioritized four sites that have excessive stream channel erosion that is threatening either a roadway or bridge and private property. A team led by Coldwater Consulting is assisting the Montgomery County Engineer's Office with conceptual design alternatives, engineering and construction cost estimates, external funding opportunities and timelines, and overall public safety risk assessments for the four sites. Coldwater's team developed a Stream Restoration Programming Report which summarizes the information and data compiled for the four sites, details recommended alternatives and cost estimates for each site, describes the metrics evaluated for the overall public safety risk assessment, and provides recommendations on the next steps to securing funding to implement the recommended alternative for each site.



Lateral channel migration and non-cohesive soils have led to a steep, actively eroding streambank at this site. The top of the streambank is within 20 feet of the road.



Stream restoration alternative designed for one of the sites.

Criteria used to evaluate and prioritize actions at each of the sites included assessing the threat to capital infrastructure, consideration of public safety at each site, determining project environmental impacts and permitting requirements, identification of any additional easement requirements for project implementation, and defining previous infrastructure investments made at each of the sites.

