

PORTAGE CREEK STREAMBANK RESTORATION AT MILHAM PARK, KALAMAZOO, MICHIGAN

At Milham Park, approximately 2,900 feet of Portage Creek streambanks located within the City of Kalamazoo's most used public site were highly eroded and subject to further degradation. These concerns were cited within the approved Watershed Management Plan for Portage-Arcadia Creeks. A Clean Michigan Initiative (CMI) Grant from the Michigan Department of Environmental Quality (MDEQ) provided funding toward implementation of the necessary restoration efforts. Milham Park project goals were to establish riparian buffer/no mow zones, repair eroding streambanks, improve riparian management and long-term stability, reduce annual loss of streambank, improve upon public education, and provide in-stream grade stabilization.

As part of this project, K&A provided technical support through limited geomorphology assessment, engineering plans and specifications, City meetings and approvals, DEQ engineering review submittals, DEQ permit applications, competitive contractor bids, and construction oversight assistance. Project benefits included:

- Native riparian buffer vegetation = 1.1 acres
- No mow riparian buffer = 6,900 ft
- Streambank stabilization/bioengineering = 1,500 ft
- Grade control W-weir cross vane structure = 45 ft
- Riprap toe protection measures = 300 ft
- Supplemental vegetative plugs = 1,500 plants
- Use of photodegradable erosion control blankets
- Temporary fencing to protect new vegetation
- Permanent educational signs (3) to describe BMP benefits
- Reduction of 70.3 lbs total phosphorus/yr
- Reduction of 41.3 tons sediment/yr
- Reduction of 140.6 lbs total nitrogen/yr

Before & After Photos:



Project partners included:

- The Forum of Greater Kalamazoo • Community representatives • Quantum Construction • Wildtype Nursery
- Kalamazoo Public Schools • City of Kalamazoo • Western Michigan University • City of Portage • Master Gardeners
- Michigan Department of Environmental Quality • WildOnes Natural Landscapers • Kalamazoo River Watershed Council
- Kalamazoo County Environmental Health and Services Dept. • Kieser & Associates, LLC