

RELATED EXPERIENCE

VICTOR PARKWAY STABILIZATION

J&A has completed the design and permitting to correct an erosion problem on the open drain section of the Victor Parkway stormwater collection system that serves an office complex located in Livonia, Michigan. The design incorporated gabion steps and soil reinforcement mesh to stabilize the drain bottom and side slopes and control velocities of the stormwater flowing in the open channel.

Location:	City of Livonia, Oakland County, Michigan
Construction Date:	2001
Construction Cost:	\$300,000
Client:	Private

The severe erosion in the existing channel had exposed a watermain crossing. The gabion steps and reinforcing mats established the appropriate cover over the water main and protected the soil around the water main from further erosion.

The gabion steps allowed the transition of elevation in the open channel at control points and also allowed the drain slope to be flattened between the steps, thus slowing the velocity of the storm water.

The gabion steps allowed the transition of elevation in the open channel at control points



Victor Parkway Storm Drain

The key items in the reconstruction of the drain included:

- placement of fill in eroded areas;
- controlling the velocity of storm water;
- providing the elevation transition from the head end (top) to the discharge point (bottom) of the open channel;
- establishing erosion resistance surface treatment in the open channel.