CITY OF LAFAYETTE

WET WEATHER PROGRAM

Elliott Ditch Stream Bank Restoration

To prevent further damage to Bridge 49 in southeastern Lafayette, the city will restore the stream banks of Elliott Ditch near Poland Road.

Located south of Stonewick neighborhoods, Bridge 49, which carries Poland Road over Elliott Ditch, is frequently traveled. When the bridge was installed, the city installed gabions, which are rock-filled wire baskets, to retain the slope of the bank and strengthen it. Riprap, or loose stone, also was installed; however the erosion of the stream bank has continued. In 2007, the city found that a large tree northeast of the bridge also had been uprooted, which caused extensive damage to the stream bank.

Improved Erosion Control

To provide additional protection against erosion of the stream bank, the city proposes design of an improved erosion control system.

Along the northeast bank, a fallen tree that was blocking flow upstream of the bridge was removed. Rip rap and native vegetation will be utilized to stabilize the bank. The stormwater outlet pipe locations also will be adjusted, and the stream alignment will be modified. Upstream of Bridge 49, two sandbars will be removed, and native vegetation will be left intact along channel bottom.

Downstream of Bridge 49, a proposed high-water bypass channel will reduce erosion during and after heavy rain and high flows.

Native Vegetation, A Natural Option

Highlights

Project: Stream bank restoration
Project Cost: $662,000
Status: Planning
Project Benefits:

- Reduced erosion to the stream banks of Elliott Ditch
- Improved safety for driving and walking along Poland Road
- Enhanced aesthetics of Elliott Ditch as a result of native vegetation

The channel will allow stormwater to avoid a bend in the ditch that often is under water after heavy rain. On the southwest corner of the bridge, a modification of the Elliott Ditch alignment will reduce erosion as well.

Lafayette also will replace a portion of the curb, which has settled, along Poland Hill Road.

Stormwater improvement projects are part of Lafayette's capital improvement program to improve the water quality of the Wabash River and other local streams and to address poor drainage conditions.