

# DEVIL'S BACKBONE/SCHWOCHOW DITCH PROJECT NO. 121

Sandusky County

## PRELIMINARY REPORT

The proposed project begins approximately at the Southeast corner of Parcel No. 13-15-08-0027-01 currently owned by Angela Weaver, in Section 15 of Sandusky Township, Town 5 North, Range 15 East, Sandusky County, Ohio and then follows the existing meandering watercourse in a northerly direction, or follows a new course, or a combination of new and existing courses, through portions of Section 15 to Muskellunge Creek and there terminates.

The portion petitioned is approximately 1,850' long and drains approximately 300 acres of farm ground, residential lots, and commercial lots. The banks along this watercourse are experiencing erosion. The petition as filed requests an improvement to dispose of surplus water by following either the existing watercourse or a new course or a combination of the two for the disposal of surplus water or for the storage of water.

It is the opinion of the engineer that, for the most part, the existing watercourse is sufficient and improvements or modifications are not necessary. Much of the existing channel could be considered an "environmentally significant area" and disturbing it would not be conducive to public welfare. It is also the opinion of the engineer that the costs would exceed the benefits by either modifying the existing watercourse or constructing a new one. With that in mind, the County Engineers Office would like to propose an alternative of constructing a detention basin for the regulation of surplus water.

The new proposed project would be located on the northern end of Parcel No. 13-22—13-0003-00 currently owned by Marjorie Schwochow, in Section 22 of said township and follow the existing meandering watercourse in a northerly direction through portions of Section 15 and terminate where it empties into the extension of the C.M. Dillon Ditch, which is commonly known as Fangboner Road Ditch. This proposed project is approximately 2,000' long and drains approximately 162 acres.

The extent of this proposal is two parts. First, a detention basin is to be constructed on the previously mentioned Schwochow parcel. The purpose of the basin is to help regulate the quantity and velocity of water coming from the south before it reaches the properties on Hill Drive and erodes the banks any further. Secondly, we propose to place rip rap where necessary along the existing watercourse north of the detention basin as an aid to prevent further erosion and aid in bank stabilization. It should be noted that this proposal will not fix the damage that has already occurred. It is the intent of these improvements to prevent further damage in the future.

The scope of work to be performed on this proposal on the watercourse will consist of open channel excavation, spoil disposal, detention basin construction, installation of rock channel protection where needed, and the installation of new outlet pipes where needed. Due to the nature of this proposal, if it is pursued, an outside consultant will need to be hired to design and accomplish the project. If the petition is granted, the County Commissioners will need to transfer an estimated \$33,000 for the purpose of hiring an engineer.

The estimated cost for the project is \$220,000 and the estimated incidental cost is \$55,000 for a grand total of \$275,000. Channel excavation, spoil disposal, detention basin construction, rock channel protection, and tile extensions are included in the construction costs. Incidental costs include items such as surveying/engineering/drainage area determination (\$33,000), commissioner's expenses (\$1,000), first year's maintenance (\$2,000), a contingency fund (\$13,000), and a capital interest amount (\$6,000).

It should be pointed out that all costs are only an estimate. Final assessments would be based on actual costs. To facilitate construction and maintenance, an easement may be required on Hill Drive for the work now and also in the future.

It is the opinion of the Engineer that the proposed alternative project is feasible, that it is conducive to the public, that there is a sufficient outlet, and that the benefits will exceed the costs.

Respectfully submitted,

*James R. Moyer*

Date: 4-16-13

James R. Moyer

Sandusky County Engineer

Date: 4-16-2013

Matthew S. Reinhart

Drainage Engineer.

*Matthew S. Reinhart*