

SCHWOCHOW DITCH PETITION PROJECT NO. 131

Sandusky County, Ohio

ENGINEERS FINAL REPORT

The original petition started approximately at the southeast corner of Parcel No. 13-15-08-0027-01, currently owned by Ms. Angela Weaver, in Section 15 of Sandusky Township, Sandusky County, Ohio and followed the existing meandering watercourse in a northerly direction, through portions of Section 15, to its termination on Muskellunge Creek.

During the first hearing, it was decided to explore different options to solve the prayer of the petition. The portion of the channel petitioned originally did not show need for improvement, except for some minor erosion control. The channel located near Ms. Weaver's property and areas upstream have major erosion, and have continued to deteriorate further. The watershed that currently drains through the Schwochow Ditch is about 170 acres. This watershed includes a significant amount of commercial properties that have been developed since the mid 90's, and continue to develop, it also includes State Route 53, north of the City of Fremont.

Due to the complexity of the project and the hydraulic modeling needed to evaluate the erosion on the channel, a consultant was retained to analyze the channel, and the runoff characteristics of the watershed. Jones & Henry Engineers (J&H), out of Toledo, OH, was selected to look at different options to remedy the erosion on the channel. J&H performed a preliminary design on the Schwochow Ditch and its watershed. From that preliminary design they presented five (5) different options. The options were: 1) Check Dams, 2) Channel Realignment and Reshaping, 3) Detention Basin, 4) Bypass Ditch, and 5) Detention Basin and Erosion Control. After discussing these options with the County Commissioners, it was decided that the most feasible project was option 2) Channel Realignment and Reshaping.

J&H completed a final design based on option 2, to address the current erosion, and to prevent it in the future. The proposed scope of work is divided into four (4) different areas, which were identified as the worst locations. Area #1 is located at the Hill Drive crossover pipe, currently owned by Joe & Cheryl Darr and the areas immediately upstream and downstream from the crossover. Area #2 is located approximately 150 feet downstream from the Hill Drive crossover pipe. Area #3 is located approximately 450 feet downstream from the Hill Drive crossover pipe, and Area #4 is located approximately 650 feet downstream from the Hill Drive crossover pipe.

The scope of work to be performed on these areas consists of replacement of the Hill Drive crossover with a 48" pipe, open channel excavation, channel realignment, installation of rock channel protection, brush removal, installation of new outlet pipes, and the resurfacing of Hill Dr and Benlu Dr.

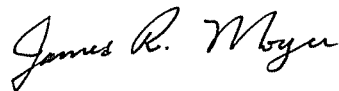
The estimated total cost for the project is \$350,000, which includes the Construction cost (\$288,948.50), The Commissioners Expense (\$2,100), first year's maintenance (\$5,500), contingency fund (\$6,170.15), and the Engineering cost for the consultant, Jones & Henry (\$47,281.35).

The proposed project right-of-way widths shall be in accordance with Sections 6131.14 and 6137.12 of the Ohio Revised Code. The construction right-of-way shall be the minimum width necessary to accomplish the work. For future Maintenance, the permanent right-of-way shall be not more than 25 feet from the top of the bank. The permanent maintenance length shall be a total of approximately 2,500 feet starting approximately 500 feet downstream from the State Route 53 ditch and located on the property line between PARCEL NO. 13-22-13-0003-00, currently owned by Marjorie Schwochow, and PARCEL NO. 13-15-00-0033-01, currently owned by Joe & Cheryl Darr. The channel then follows the existing meandering watercourse in a northerly direction where it drains into Muskellunge Creek, where it terminates.

It should be pointed out that all costs are only an estimate. Final assessments would be based on actual costs. To facilitate construction, and to allow access to areas #3, and #4, a temporary easement was acquired from Ms. Angela Weaver. Also, Hill Dr. and Benlu Dr. will be resurfaced as part of this project, as mentioned above; however, the County will not be responsible for future maintenance on these roads, but will have a permanent easement for future road access to the ditch.

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

Respectfully submitted,



Date: 7.27.17

James R. Moyer, P.E., P.S.

Sandusky County Engineer



Date: 7/27/17

Carlos A. Baez Sr., P.E.

Deputy Engineer.