LIBERTY REED SINGLE COUNTY DITCH
ENGINEER'S PRELIMINARY REPORT
June 16, 2020

The Petition submitted by the Liberty Township Trustees seeks to construct, reconstruct, widen, repair, replace, enlarge and maintain the existing open ditch from the mouth of McKinnis Run at the Blanchard River along the mainline to the intersection with Township road 95, also the West Branch near the end of Driftwood Drive, just to the east of Township Road 136 in the northwesterly direction then along the West Branch to 100 feet north of Township Road 94, also the East Branch near the end of Driftwood Drive to the east of Township Road 136.

The existing drainage system was originally known as the John Reed Ditch of 1951. Maintenance and upkeep of Ditches constructed through the County Petition Ditch process prior to August 23, 1957, are by Ohio law the responsibility of the property owners adjoining the Ditch. The Ohio Legislature passed a law, effective on August 23, 1957, whereby Ditches petitioned and approved after that date would be placed permanently on County Maintenance and a special assessment would be placed on the tax bill of all benefited property owners in the watershed for that maintenance. Based on available records in the County Engineer's office, this watershed has not been petitioned since 1957.

The existing drainage system for this Petition begins at the Blanchard River approximately 4600 feet east of TR 128. It travels in a northeasterly direction as an open watercourse through a wooded area to SR 224 a distance of 3490 feet, then it continues travelling in a northerly direction 900 feet past Driftwood Drive, the mainline continues in a northerly direction 2700 feet to TR 94 and then proceeds another 2800 feet to TR 95. The west branch begins 2000 feet past the end of Driftwood Drive and travels 1600 feet in a northwesterly direction just past TR 94. The east branch begins near the end of Driftwood drive and proceeds 740 feet in a northeasterly direction then continues 100 feet past TR 136. The entire length of the project is approximately 2.2 miles.

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A visual inspection of the drainage system makes it apparent that the drainage system has not been maintained by the property owners of the watercourse necessary to address normal rainfall events. We propose the following improvements to provide a basis for continual maintenance of this watercourse:

1. **Removal of all Brush, invasive vegetation and trees 4-inches in diameter and smaller located above the ordinary high water of the watercourse**
2. **Remove all trees leaning at an angle greater than 45 degrees**
3. **Removal of all dead trees**
4. **Removal of all debris and obstructions within the water course**
5. **Evaluate hydraulic capacity**

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Preliminary construction and maintenance estimates for the petitioned work are listed below. Please bear in mind these engineering based <u>estimates</u> are an *'educated guess'* of the potential costs:

Removal of all brush, invasive vegetation and trees 4-inches in diameter and smaller located above the ordinary high water of the watercourse.	$160,000.00
Removal of all dead trees	$40,000
Removal of All debris and obstruction within the watercourse	$30,000
Hydraulic Evaluation	$10,000
Contingency 20%	$48,000.00
Engineering	$43,000.00
Total Estimated Construction Costs	$331,000.00
Maintenance Reserve (10% of Construction)	$33,100.00

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There are approximately 142 parcels **ranging in size from single subdivision lots to 70 acres** and encompassing 1.8 square miles or approximately 1152 acres.

While the assessment methodology is not established until the engineering and construction plans are completed and just prior to the Final Hearing, there are multiple methodologies (i.e. per parcel, acreage, Benefits/ Damages, declining benefit, etc). Regardless of the methodology chosen all owners, including the County, Township, and ODOT, will be assessed based on their benefit from the project and determined to be the most equitable for the entire watershed by the County Commissioners.

Using the simplest methodology of a Per Acre assessment as an example the cost would be $316.06 which is $31.61 per acre per year when the cost is spread over 10- property tax years

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In conclusion, it is our opinion that the Ditch should proceed to the **Engineering Phase** and that the benefits received will exceed the cost of the project according to Section 6131.01(F)(3) of the Ohio Revised Code as Benefits are defined in that section:

1. Eliminate or reduce damage from floods and rainfall events

2. Remove water conditions that jeopardize public health, safety or welfare

3. Provide an outlet for the accelerated runoff from artificial drainage whenever the stream, watercourse, channel or ditch under improvement is called upon to discharge functions for which it was not designed by nature; it being the legislative intent that uplands which have been removed from their natural state by deforestation, cultivation, artificial drainage, urban development or other man-made causes, shall be considered as benefited by an improvement required to dispose of the accelerated flow of water from said uplands.

The above Benefits are enumerated as one of five benefits for recommending a Petition by the Ohio Revised Code.

End of Report

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1st Public Hearing

Next Steps....

- Receive Public Testimony
- Accept Petition Amendments
- Continue Hearing to Later Date
- Decision to Grant Petition and proceed to Engineering
- Decision to Dismiss Petition

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