

**Final Report
Chancel Gate
Drainage Improvement Petition
per Ohio Revised Code Sec. 6131
October 27, 2023**

This report has been prepared for the Final Hearing on a drainage improvement petition filed by Stephen Corvi and others on November 20, 2020. The petition was signed by seven individuals representing 5 of the 54 parcels in the watershed.

The general location and course of the requested improvements are quoted from the petition as follows:

"In Delaware County, Concord Township, within the Chancel Gate Watershed and generally following, but not limited to, the course and termini of the existing improvements."

The following is the nature of the work petitioned:

"To generally improve drainage, both surface and subsurface, to a good and sufficient outlet, by replacing, repairing or altering existing improvements as required and/or creating new surface and subsurface drainage mains or laterals, as requested, by this petition."

The Chancel Gate watershed is approximately 84 acres. The watershed is entirely rural residential in nature.

Petition Process

This petition has been submitted according to Ohio Revised Code Section 6131 which authorizes the Board of County Commissioners to act on behalf of benefited property owners to make drainage improvements. If the Commissioners decide to proceed with a project, the costs related to the improvements are collected via special assessment to the landowners in the watershed according to the benefit received. The construction assessments would be placed on the property tax bills of the benefited landowners, and can be spread over a maximum of 15 years with 30 semi-annual installments depending on the method of payment chosen by the Commissioners. Additionally, the improvements will be placed on the county drainage maintenance program per Ohio Revised Code Section 6137 with maintenance funds being collected semiannually similar to the original construction costs. These annual maintenance assessments are generally 2 to 5 percent of the construction assessment.

It should be noted that property owners are only assessed for those portions of the improvements that benefit their properties. No property is assessed for portions into which that

a given property does not drain. In addition, units of government that hold rights-of-way for public roads are assessed for both construction and maintenance costs in the same manner as private property owners.

The decision to approve a petition is a 3-step process involving a viewing, an initial, or first, hearing, and a second, or final, hearing. The Commissioners conducted the viewing for this project by drone video on May 10, 2021. Next, the first hearing was held on September 30, 2021. At the first hearing, the Commissioners found in favor of the petition. They requested the Delaware County Engineer and the Delaware Soil and Water Conservation District to proceed in the development of engineering plans and specifications and the schedule of assessments. It is this information that is before the Board of Commissioners for consideration at this second and final hearing.

Project Scope

The proposed project will begin at the east right-of-way for S. Sectionline Road approximately 400 feet north of Hyatts Road and extend upstream in a generally northeasterly direction approximately 1,600 feet to meet the request of the petition. The primary items of work will include surface drain shaping and grading, subsurface drain pipe replacement, the installation of new subsurface drain pipe, the installation of a grade stabilization structure, and the removal of brush and vegetation. All disturbed areas will be returned to their preconstruction condition, or seeded and mulched.

Project Estimate

Construction	\$ 81,568.44
Administration, Survey, and Engineering	\$ 5,935.57
Construction Supervision and Inspection	\$ 5,000.00
Contingency	\$ 13,000.00
<u>Drainage Maintenance 1st Year Payment</u>	<u>\$ 4,625.20</u>
Total Estimated Cost	\$ 110,129.21

Calculation of Assessments

The Ohio Revised Code instructs the County Engineer to calculate the assessments to individual property owners based on the benefits received from the improvements for the various properties in the watershed. The Revised Code further describes benefited land as such:

“Uplands that have been removed from their natural state by deforestation, cultivation, artificial drainage, urban development, or other human methods shall be considered to be benefited by an improvement that is required to dispose of the accelerated flow of water from the uplands.”

Assessments to individual parcels have been calculated using the following formula, a rationale that is widely used throughout the state of Ohio.

(Acres Benefited) X (Land Use Factor) X (Percent of Improvement Used) X (Remote Factor) =
(Individual Parcel Assessment Factor)

Each parcel's assessment is then determined by:

(Individual Parcel Assessment Factor) / (Total of all Individual Assessment Factors) X (Total Construction Cost) = (Parcel Assessment)

Explanation of Factors:

- **Acres Benefited**
Total number of acres within a given parcel that contribute drainage to the improvement.
- **Land Use Factor**
The relative benefit to parcels of drainage based on the amount of increased storm water runoff resulting from the land use of the parcel.
- **Percent of Improvement used**
The point at which drainage from a given parcel enters the improvement. Parcels are only assessed for the portion of the improvement that lies downstream of the parcel.
- **Remote Factor**
The remote factor is based upon a parcel's distance from the improved section of the drainage course, and is typically established in ½ mile increments. Parcels that are most “remote” from the actual improvement receive the greatest reduction on their assessment. No remote factor has been applied for this project.

Benefits versus Cost

One of the primary factors set forth for consideration in the approval or dismissal of a petition request is the actual benefit of the proposed improvements to the watershed in question.

The increased value or benefit for residential parcels is typically found in two ways: the increased marketability of the home and functionality of the home sewage treatment system and associated drainage needs. An inadequate subsurface drainage outlet can dramatically deteriorate the condition of household sewage treatment systems potentially limiting the value of the home for resale. Locally, the cost to construct an alternate sewage treatment system, should the existing system fail, ranges from \$15,000 to \$25,000 on average.

Other benefits that are commonly perceived as a result of suburban drainage improvements focus on quality of life and positive neighborhood perception. Watersheds that have planned and maintained drainage infrastructures generally have higher resale values than those communities that are known to have a history of drainage problems. When evaluating the cost of providing adequate drainage outlets for residential properties, we find that for new construction, developers or homebuilders spend on average \$8,700 per lot to attain adequate drainage infrastructure within a development. With 26 residential parcels fully within the Chancel Gate watershed, the potential average benefit is \$226,200 at minimum. While this analysis does not consider many potential variables, it could aid in the decision-making process.

For roadway drainage, the lack of an adequate drainage outlet can lead to standing water on the roadway surface resulting in traffic safety hazards and increased routine maintenance of the roadway surface.

Other benefits that are commonly perceived as a result of drainage improvements focus on quality of life and positive neighborhood perception. Communities that have planned and maintained storm water drainage infrastructures generally have higher resale values than those communities that are known to have a history of drainage problems or flooding.

The benefits to this proposed project will be realized well beyond the construction repayment term. As previously stated, the construction assessments would be placed on the property tax bills of the benefited landowners, and can be spread over a maximum of 15 years. Alternatively, assessments can be paid in full within 30 days after the close of the final hearing without paying interest. The long-term benefits will be realized by virtue of this project being placed on the County Drainage Maintenance Program in perpetuity per Ohio Revised Code Section 6137 which requires maintenance funds to be collected semi-annually similar to the construction costs. These maintenance funds are applied to the annual inspection and maintenance of this specific project.

Recommendations

Based on all of the information gathered and generated, I believe this project as proposed is technically feasible and would serve as an adequate outlet for the drainage needs of the watershed. Furthermore, the parcel assessments for this project are within the range of assessments that can be expected for a project of this scope. The testimony brought to the Board of Commissioners by the landowners as to whether the benefits of this project exceed the costs, should be given significant consideration in the decision to move forward with this project.

A resolution affirming the order to proceed, confirming the schedule of assessments, and ordering the project to be advertised for competitive bid, per Section 6131 of the Ohio Revised Code., will be necessary. The resolution by the Board of Commissioners shall also determine how long a period of time, in semi-annual installments as taxes are paid, shall be given the owners of land benefited to pay the construction assessments.

If the Board of Commissioners chooses to dismiss the Petition, I would recommend a resolution reflecting that decision, and that the costs for the proceedings, including the costs incurred by the Board of Commissioners, the County Engineer and the Delaware Soil and Water Conservation District in making surveys, plans, reports and schedules be distributed to the benefiting landowners in the same ratio as determined in the final estimated assessments presented at this hearing. This amount is estimated at \$6,000.

Prepared by,





Bret Bacon
Deputy Administrator /
Resource Conservation Program Coordinator
Delaware Soil and Water Conservation District

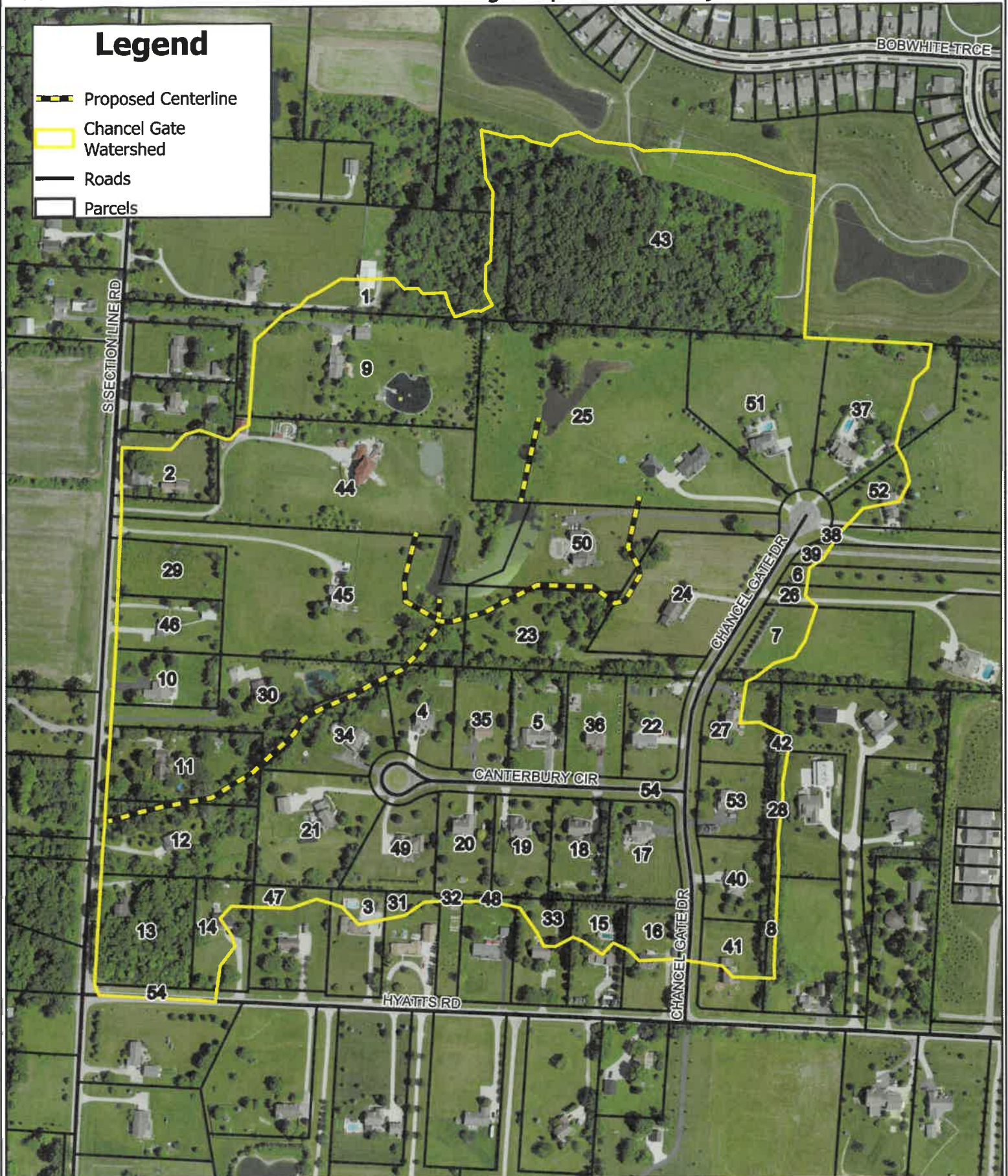
Approved by,



Chris Bauserman P.E., P.S.
Delaware County Engineer

Legend

-  Proposed Centerline
-  Chancel Gate Watershed
-  Roads
-  Parcels



Delaware Soil & Water Conservation District
 PO Box 8006
 1610 State Route 521
 Delaware, OH 43015
 (740) 368-1921
<https://soilandwater.co.delaware.oh.us>



0 200 400
 Feet

Note: The Delaware SWCD makes no guarantee or warranty as to the accuracy of the information on this map.

