



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

March 26, 2018
Preliminary Finding of No Significant Impact
Railroad Trunk Sewer
Geauga County
WPCLF No. CS390241-0009

The attached Environmental Assessment (EA) is for a nonpoint source project in your area which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the EA.

Any comments on our preliminary determination should be sent to me at the letterhead address. We will not act on this project for 30 calendar days from the date of this notice in order to receive and consider comments. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the City of Chardon can then proceed with its application for the WPCLF loan.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jerry Rouch", is written over the typed name.

Jerry Rouch, Assistant Chief
Division of Environmental & Financial Assistance
Office of Financial Assistance

JR/JS

attachment

ENVIRONMENTAL ASSESSMENT

Project Identification

Name: City of Chardon
Railroad Trunk Sewer

WPCLF#: CS390241-0009

Contact: Randal Sharpe, City Manager
City of Chardon
111 Water Street
Chardon, Ohio 44024

Proposed Project

1. Summary

The City of Chardon, in Geauga County, has requested approximately \$3,500,000 from the Ohio Water Pollution Control Loan Fund (WPCLF) to finance the installation of approximately 9,750 feet of new and replacement sanitary sewer ranging in size from 8" to 27" diameter (see Figure I).

2. Background

History and Existing Conditions

The City's wastewater is collected by a central sewer system and sent about a half mile to the city-owned wastewater treatment plant (WWTP) located on the northeast side of the City. The WWTP has a design average daily flow of 1.8 million gallons per day (MGD), with an actual average daily flow of 1.21 MGD, thus the WWTP has an excess treatment capacity of 0.6 MGD.

The City has been evaluating its wastewater collection and treatment system over the years to address current problems and deficiencies while planning for the future. The Railroad Trunk Sewer project represents a significant portion of the City's sanitary sewer master plan by upgrading sewer lines which can exceed their original design capacity in wet weather flow conditions.

On a typical day without precipitation, the sewers carry primarily only sewage. During storm events, wet weather flow includes sewage flows plus groundwater that has infiltrated into the collection system through defective pipe joints, connections and/or manhole walls and storm water from illicit connections to the sanitary sewers. The excess flow can overwhelm the sewers, and undersized sewers and/or pumps may cause wet weather overflows that discharge untreated sewage into the environment. Since 2014, the City has experienced four (4) overflows of varying duration.

Population and Flow Projections

Design flows in the proposed sewer are calculated based upon a Sanitary Sewer I&I Analysis performed by the C.W. Courtney Company between April 6, 2012 and July 13, 2012. During this period, continuous flow monitors were deployed at five locations throughout the City in conjunction with two rain gauge

stations that covered approximately 55% of the system. Two of the monitoring locations were along the proposed trunk line. From the data collected, average dry weather flows and peak wet weather flows were calculated at various locations and this data used in the design of the proposed trunk sewer.

The Railroad Trunk Sewer represents the implementation of a significant portion of the City's sanitary sewer master plan by upgrading aging sewer lines which frequently exceed their original design capacity in wet weather flow conditions.

According to 2010 - 2014 American Community Survey (ACS) estimates, the City has a population of approximately 5,161. Along with enabling new customers to connect to the sanitary system, this project will improve the flow capacity Citywide, thereby benefitting existing users.

Water Quality

Beaver Creek, a tributary of the Grand River in southern Chardon that flows east across Wilson Mills Road into a developed area, has an Ohio aquatic life use designation of Warmwater Habitat. The Chagrin River's State Scenic River designation begins about 1.5 miles downstream from the south end of the project. One purpose of the project is to eliminate overflows from manholes on Water Street that ultimately enter area surface water. This project will prevent discharges of sewage into drainages and will help improve surface water quality, remove a potential threat to human health from contact with sewage, and help Chardon comply with its National Pollutant Discharge Elimination System (NPDES) permit for its wastewater treatment system.

3. Discussion of Feasible Alternatives

This project was chosen for implementation because it addresses both a sewer system deficiency and future development. Given existing sewer system constraints, and the unsewered location of the property proposed for service, installation of a new trunk sewer was the only feasible option. Within the new sewer option, however, the City compared sewer alternatives based on type of sewer, alignment, configuration, size, materials and cost-effectiveness on a long-term basis in selecting the new trunk sewer.

4. Selected Alternative

Given the existing sewer system's deficiencies, sewer flow model results and the location of the unsewered properties proposed for service, installation of a new trunk sewer is considered the only feasible option.

The Railroad Trunk Sewer Project is located primarily in the southeast quadrant of the City of Chardon and extends into the central and northwest portions of the City. Beginning at the termination of the East Side Sanitary Trunk Sewer (also financed with a WPCLF loan) on the east side of the City, this project extends west and northwest along an abandoned railroad corridor to Water Street (U.S. 6) then west along Water Street, and north along Cherry Avenue to Center Street (S.R. 44). The main component of the project is to provide sewer capacity for approximately 85 acres of industrially zoned vacant land, overall capacity improvements and removal of a flow diversion in the Center Street sewer system. Additional components of the project include installation of gravity sewers on Seventh Avenue, Park Drive and Industrial Parkway which will allow for the elimination of four (4) existing private lift stations and will provide gravity service to approximately 40 Acres of vacant residential property (see Figure II).

Major components of the Railroad Trunk Sewer include installation of approximately 9,750 feet of new or replacement sanitary sewer ranging in size from 8" to 27" diameter including the removal of a flow diversion in Center Street at Fifth Avenue, installed as a temporary measure to address capacity issues in the Center Street and Water Street sewer systems.

5. Project Implementation

The City expects an April 2018 loan award and will borrow approximately \$3,500,000 from the WPCLF at the Standard Interest Rate (currently 2.14%; the rate is set monthly and may change for a later loan award) and will save approximately \$527,300 over a 20-year term by using WPCLF loan monies in comparison to the market rate of 3.39%.

Based on information provided with the loan application, the average residential sewer service cost is projected to be \$795 per year. This represents 1.3% of the City's median household income (MHI) of \$58,529, is in the affordable range, and compares favorably to the Ohio average of 1.2% of state MHI, based on an annual rate survey by Ohio EPA.

6. Environmental Impacts of Selected Alternative

No significant adverse environmental impacts are anticipated to occur as a result of this project. Specifically, no adverse impacts to major landforms, land use or farmland, wetlands, or air quality will result, either because they are not present in the work area or the project is not of a type that will affect them. Ground disturbing activities will occur in previously-disturbed areas, both road and railways, within the limits of construction and existing rights of way; the new infrastructure will be underground, without permanent alteration of the viewshed; and no historical properties are located within the construction limits. No residents or businesses will be displaced for the project. Standard construction best management practices will be used to address things like noise, dust, traffic disruption, and storm water runoff.

This project could directly affect environmental features. Because the project is designed to increase sewer capacity to eliminate wet weather overflows and provide additional capacity in the sewer system for economic development, the project may lead to new development and associated indirect or cumulative impacts. Adopted in 2009 by the Board of County Commissioners of Geauga County, the City utilizes Water Management and Sediment Control Regulations for all development.

a. Surface and Groundwater

This project falls within a Source Water Protection Area for Geauga County which is subject to the following use restrictions;

- Any portion of the well protection area shall not be used for equipment or material storage. This includes over-night and short-term storage and parking. When not in use, park construction equipment outside of the well protection site. Workers personal vehicles are prohibited from the area.
- Ingress and egress across the area must be limited and the work area must be minimized to the

immediate area along pipeline route.

- Trench width required to perform work must be minimized; trenches must not be left open during absence from sight (over-night, weekends, etc.). Surface restoration must be performed on the same day as pipeline installation.
- Any contaminants not required for the day's work must not be brought on-site. Any scheduled equipment refueling must occur off-site. If refueling or maintenance is required while equipment is on-site, spill capture and containment measures must be implemented.
- Any equipment which is leaking a contaminant must be immediately removed from the site and the resulting contamination must be immediately contained and cleaned. All EPA regulations must be adhered to regarding disposal of pollutants.

The City will follow the County's Drinking Water Source Protection Plan in addition to using Best Management Practices for Drinking Water Source Protection.

Beaver Creek, a tributary of the Grand River in southern Chardon that flows east across Wilson Mills Road into a developed area, has an Ohio aquatic life use designation of Warmwater Habitat. The Chagrin River's State Scenic River designation begins about 1.5 miles downstream from the south end of the project. One purpose of the project is to eliminate overflows from manholes on Water Street that ultimately enter area surface water. This project will prevent discharges of sewage into drainages and will help improve surface water quality.

b. Aquatic, Terrestrial, and Critical Habitat, including Floodplains and Wetlands

The project is not located on or near sensitive resources such as floodplains, state or federally-designated wild, scenic or recreational rivers, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, where threatened or endangered species or their critical habitat are present, or in a coastal zone. The project area is within the range of the endangered Indiana bat and northern long-eared bat. Any tree removal for trees with a trunk diameter 3" or greater will be occur only between October 1st and March 31st to avoid potential harm to these species.

c. Archaeological and Historic Resources

Based on the project location and cultural resource surveys in the greater project area that found no important archaeological resources, it is anticipated that the proposed project should not result in significant, short-or long-term, direct adverse impacts to cultural resources; ground disturbing activities will occur in previously-disturbed areas, both road and railways, within the limits of construction and existing rights of way; the new infrastructure will be underground, without permanent alteration of the viewshed; and no historical properties are located within the construction limits.

In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify the State Historic Preservation Office of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts when appropriate. Work will not resume until a survey of the find and a determination of its value and effect has been made, and Ohio EPA authorizes work to continue.

7. Public Participation

This project has been discussed in open sessions of Council, the Planning Commission, and the Service

and Water and Sewer committees over the past several years. Council meetings are held semi-monthly and are open to the public. Videos of Council meetings are available to be viewed on the City's website at www.chardon.cc. Also available on the website is the City's 5-year Capital Improvement Plan. The City Manager provides monthly updates on capital projects at council meetings. Ohio EPA is unaware of controversy about or opposition to this project.

Ohio EPA will make a copy of this document available to the public on its webpage at <http://epa.ohio.gov/defa/ofa.aspx> ("WPCLF Documents for Review and Comment") and provide copies upon request.

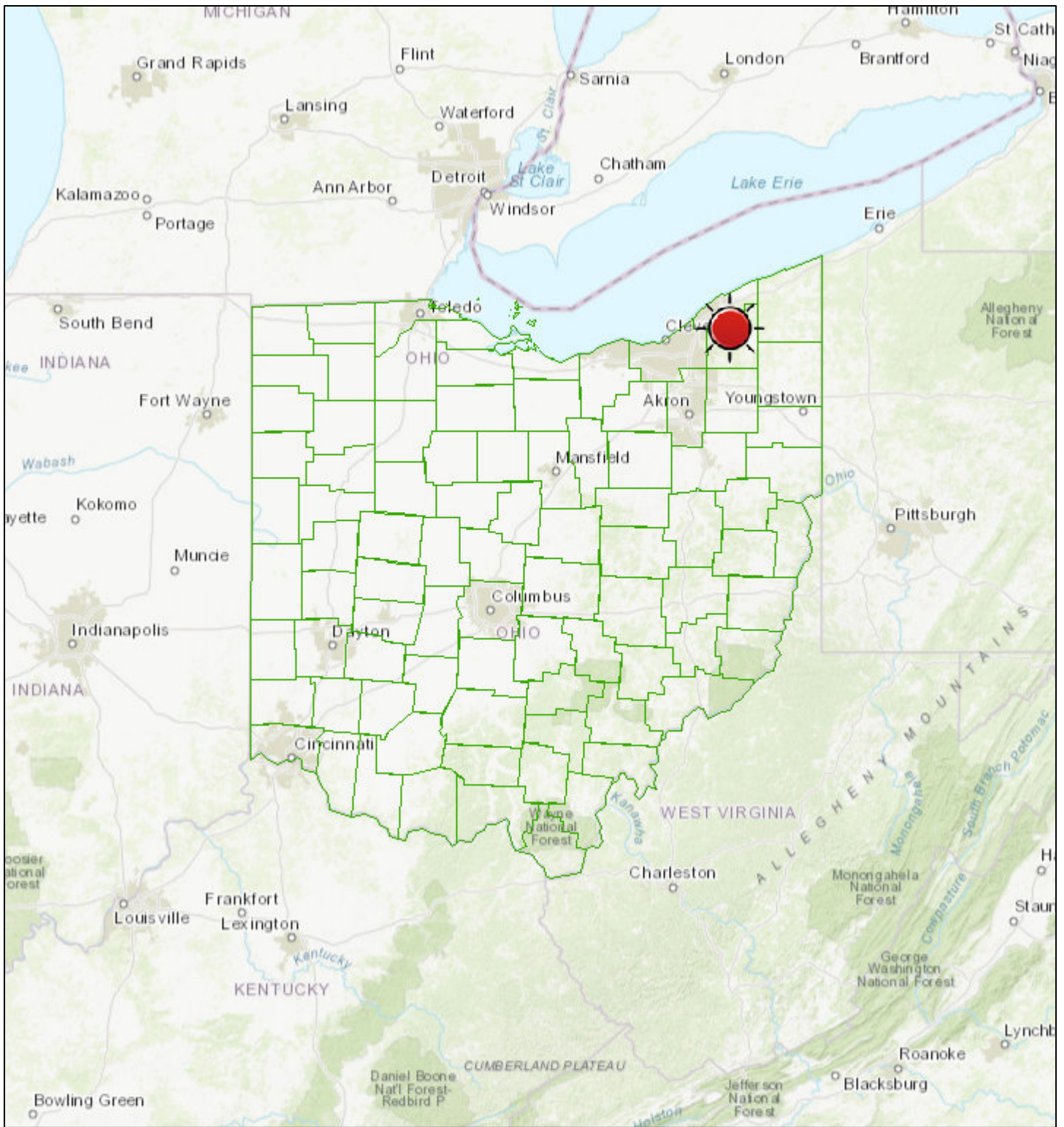
8. Reasons for a Preliminary Finding of No Significant Impact

Based upon Ohio EPA's review of the planning information and the materials presented in the Environmental Assessment, it is concluded that there will be no significant adverse impacts resulting from the City's proposed Railroad Trunk Sewer project as it relates to the environmental features discussed previously. Through the use of standard construction mitigative measures, any adverse impacts from construction should generally be short-term and insignificant. No special mitigation is needed for the proposed project.

9. For further information, please contact:

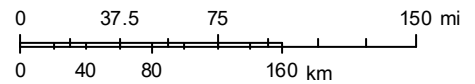
Angela Adkins
Ohio EPA - DEFA
P.O. Box 1049
Columbus, OH 43216-1049
(614) 644-3651
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Figure I



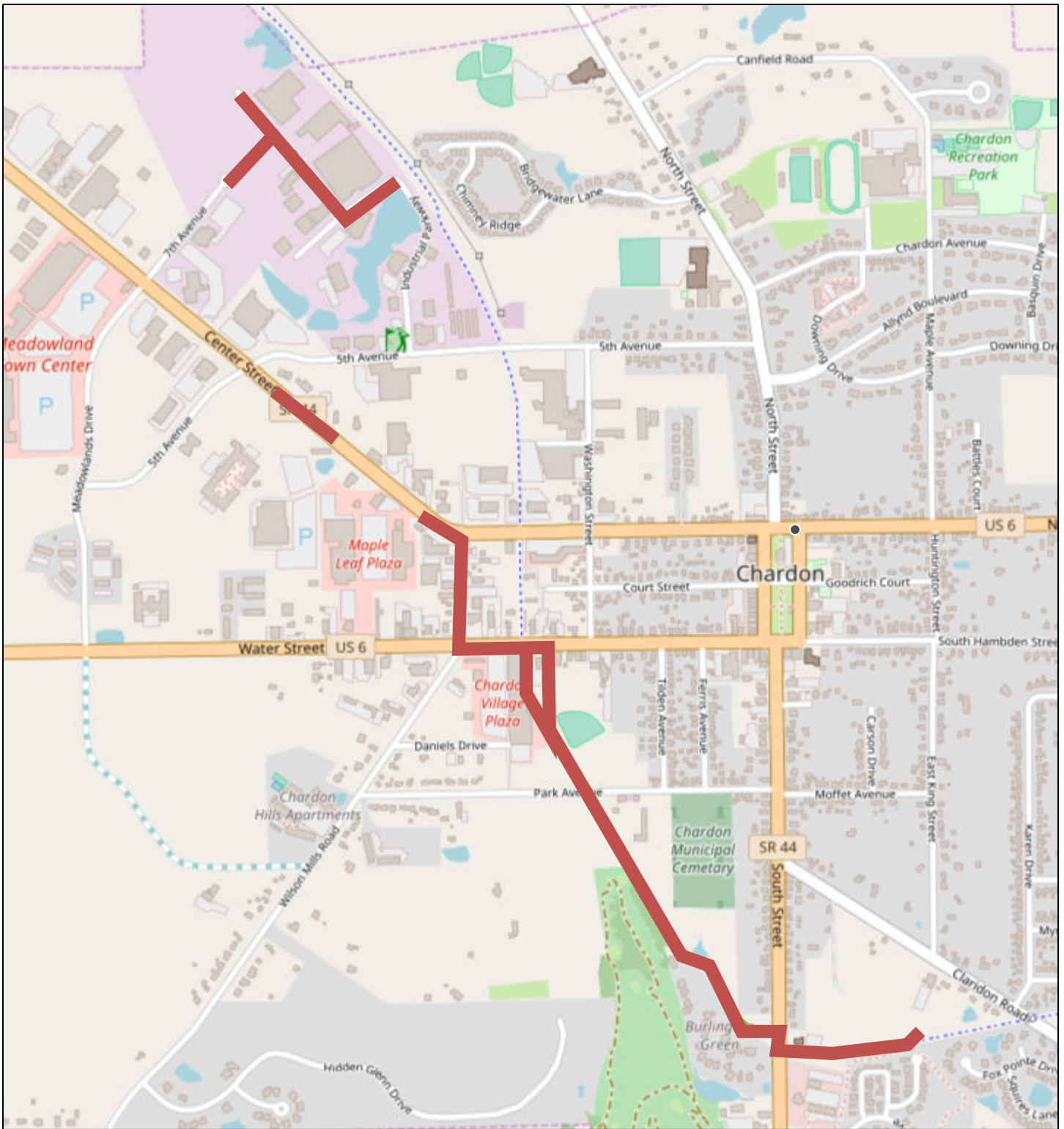
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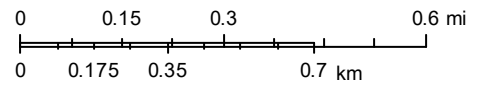
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Figure II



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