

PROJECT PLAN SUMMARY

Rehabilitation of the Ashland, Linwood,
Second Avenue, and Shiawassee Sewers



Detroit, Michigan

March 6, 2026





1.0 Introduction

The purpose of this Project Plan Summary is to provide an overview of the Great Lakes Water Authority (GLWA) Rehabilitation of the Ashland, Linwood, Second Avenue, and Shiawassee Sewers Project. The following sections provide a project summary, project needs and proposed improvements, environmental evaluations, estimated user cost impact, and proposed project schedule. The formal Project Plan document is in process and will be presented under separate cover.

2.0 Project Summary

The Great Lakes Water Authority (GLWA) wastewater conveyance system consists of over 180 miles of large diameter collector and interceptor sewers which convey wastewater flows from member communities outside of Detroit to the Water Resource Recovery Facility (WRRF) located in southwest Detroit.

As part of the Rehabilitation of the Ashland, Linwood, Second Avenue, and Shiawassee Sewers project, GLWA is planning the rehabilitation of several large diameter combined sewers located throughout the City of Detroit plan. These four sewers, collectively referred to as AL2S, comprise over 8 miles of linear assets.

The AL2S assets to be rehabilitated convey wastewater from member communities through the GLWA service area and ultimately toward the Water Resource Recovery Facility (WRRF). The Ashland Relief Sewer and Shiawassee Sewer convey flow to the Freud Pump Station and Puritan Fenkell CSO Retention Treatment Basin, respectively, while the Linwood and Second

Avenue Sewers convey flow to larger collector sewers.

3.0 Project Needs

The current condition of portions of the AL2S Sewers is poor to fair, with potential operational risk. Maintaining and repairing the sewers is necessary in continuing to allow the sewers to convey flow to the GLWA WRRF and provide relief to other components of the regional conveyance system.

Structural rehabilitation of the sewers will extend their service lives by an additional 25 to 30 years and allow them to continue to provide service in the regional wastewater conveyance system.

4.0 Proposed Improvements

This sewer rehabilitation project consists of repairing four separate combined sewers located throughout the City of Detroit. Sewer repairs are proposed to consist of the following:

- Debris/sludge removal.
- Manhole frame, cover, and step replacement.
- Installation of three new manholes along the Linwood Sewer to improve access and maintenance capabilities
- Spot repairs consisting of deep concrete repair, open joint repair, epoxy crack repair, tuckpointing, deteriorated brick repair, chemical grouting of leaks, removal of mineral deposits, and rough tap repairs.

As previously mentioned, rehabilitation of the AL2S Sewers will extend the service lives of the sewers and allow them to



continue to provide relief to other components of the regional conveyance system during wet weather events. Multiple structural repair alternatives were considered during the study phase of this project. The repair options were evaluated to minimize construction costs and minimize disruptions to the ground surface, traffic, adjacent utilities, and the environment.

5.0 Environmental Evaluation

The engineering team has evaluated environmental impacts that could occur from the operation of this project. The review included cultural and historical resources in the project area and the natural environment which includes air quality, wetlands, sensitive floodplains and high-risk erosion areas, rivers and surface waters, recreational facilities, agricultural resources, and the presence of rare and endangered species of plants and animals. It has been determined that any negative environmental impacts are short-term and will be limited to the anticipated 2-year construction phase of the project.

The majority of the construction work will be below ground, although some work at the ground surface is planned, such as manhole frame and cover replacements and manhole installation that will take place at the ground surface. Excavation methods for manhole frame and cover replacements and manhole installation will be developed to minimize any disturbances to the area. Short-term environmental impacts such as increased noise or dust and potential traffic disruption will be minimized by limiting the

contractor working hours and the implementing soil erosion and sedimentation control plans and traffic control plans as necessary.

The location of the project extends primarily through commercial areas. The project site does not extend through wetlands or endangered species areas. Several manholes are located within the Rouge River floodplain, but work is primarily expected to be completed within existing structures, with minimal at-grade disturbance. It is not expected that large amounts of environmental disturbance will be caused during construction. No long-term negative impacts are expected to occur from this project.

6.0 Estimated User Cost Impact

This proposed project is anticipated to directly or indirectly impact approximately 300,000 wastewater customers in the GLWA service area. The estimated total project cost of \$14,200,000 will be incorporated into the regional system revenue requirement and allocated to all member partners through the Sewer charges methodology process. GLWA services approximately 2.9 million residents in approximately 1.18 million households. The estimated cost per household has been determined to be less than \$1.00 per year.

7.0 Proposed Implementation Schedule

Proposed Project Schedule	
Design Notice to Proceed	February 2023
30% Design	February 2024
60% Design	May 2024
90% Design	July 2024
Bid Due	October 2026
Construction Notice to Proceed	March 2027
Construction Final Completion	May 2029