



GLWA 96-inch Water Main Relocation Project

Project Description

The Great Lakes Water Authority (GLWA) will install a new 96-inch diameter water transmission main along a new route and is decommissioning approximately 2.5 miles of existing water transmission main to improve access for future operations and maintenance. **Exhibit A** (attached) shows a Project Overview Schematic. GLWA's project includes the following major project elements:

- A new 2.5-mile segment of 96-inch water transmission main outside of the closed G&H industrial landfill, Detroit Sportsmen's Congress Gun Club and residential properties;
- Four new isolation valves to reduce time to perform future maintenance;
- Several project facilities to maintain water services during the project, including:
 - Three dechlorination/discharge facilities;
 - A temporary booster pump station;
 - New small diameter inter-tie water main;
- Roadway improvements, pedestrian safety improvements, and trail landscaping and hard-scaping enhancements.

The relocated portion of the 96-inch water transmission main will connect to the existing regional water system near the intersection of 24 Mile Road and the Macomb Orchard Trail on the north, and near the intersection of Dequindre Road and Hamlin Road on the south. **Exhibit B** (attached) shows the 96-inch water transmission main route selected by GLWA, member partner communities, and other project stakeholders.

The first phase of construction is included in the Avon Road Infrastructure Improvements. **Exhibit C** (attached) shows the coordinated Road Commission for Oakland County (RCOC) and GLWA projects that comprise the Avon Road Infrastructure Improvements.

Project Objectives

The main objectives of the GLWA 96-Inch Water Transmission Main Project include:

- Relocating a portion of 96-inch water transmission main to outside of a closed landfill and commercial and residential properties to improve access for future operations and maintenance;
- Continuing to provide essential, uninterrupted drinking water throughout construction;
- Installing improvements to traffic flow and pedestrian safety, in coordination with other area infrastructure projects;

History of Existing 96-inch Water Transmission Main

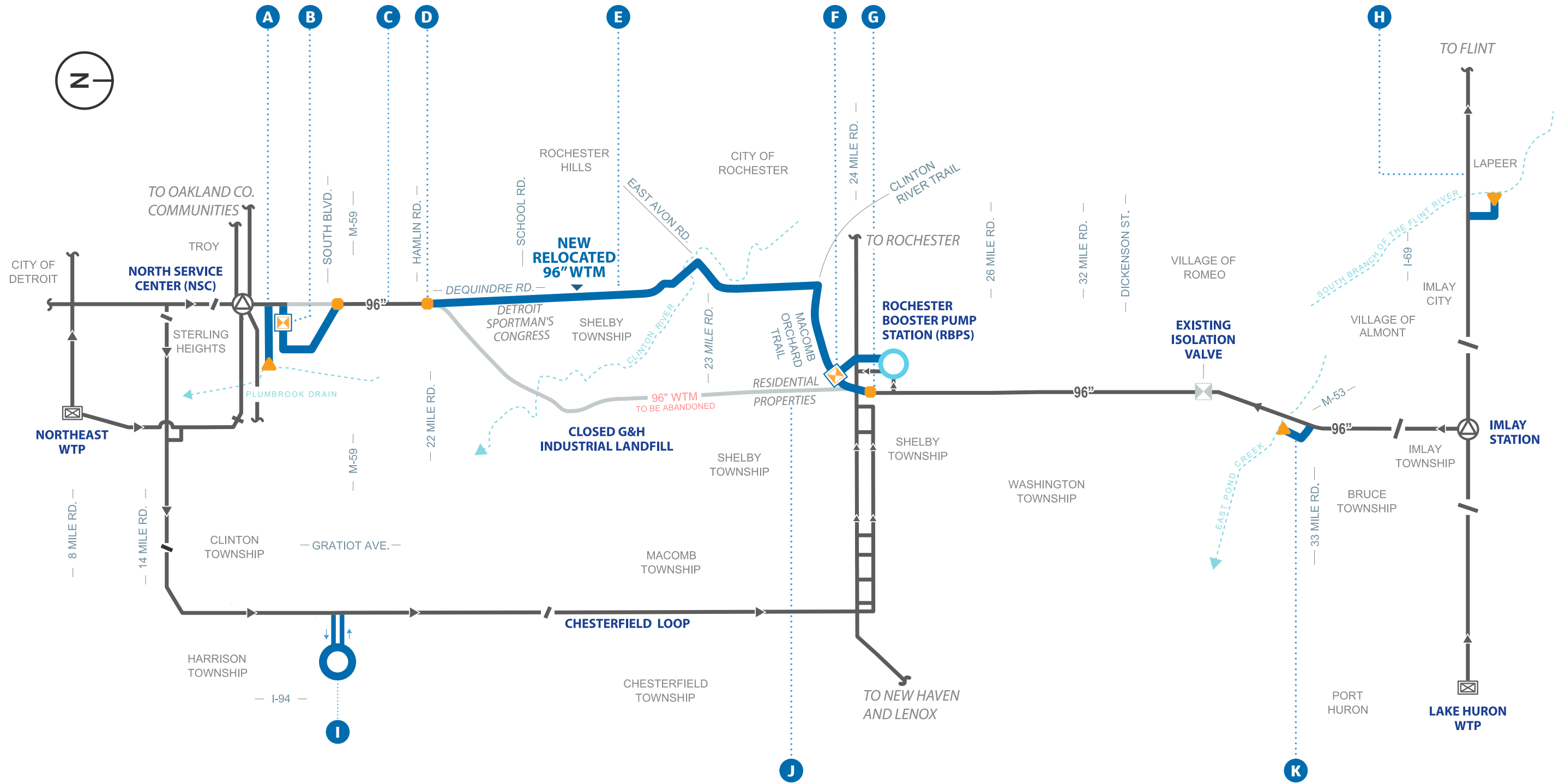
The existing 96-inch water transmission main is part of GLWA's regional drinking water transmission system that conveys treated water from the Lake Huron Water Treatment Facility to several member partner communities in Lapeer County, as well as many other member partner communities in Macomb and Oakland Counties. The 96-inch water transmission main was constructed in the mid-1960s and was placed into service in December 1967. It is approximately 32 miles long and is prestressed concrete cylinder pipe.

For more information on the project, please visit: www.glwater.org/96inchwatermain, or email 96inchwatermain@glwater.org.

Great Lakes Water Authority 96-inch Water Transmission Main Relocation

PROJECT OVERVIEW SCHEMATIC

– DRAFT –
AUGUST 2023
SUBJECT TO CHANGE

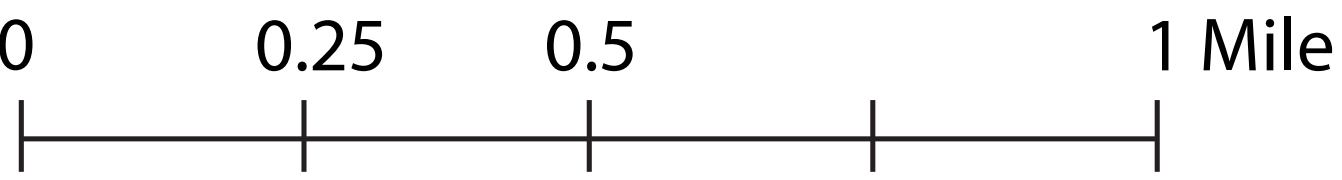
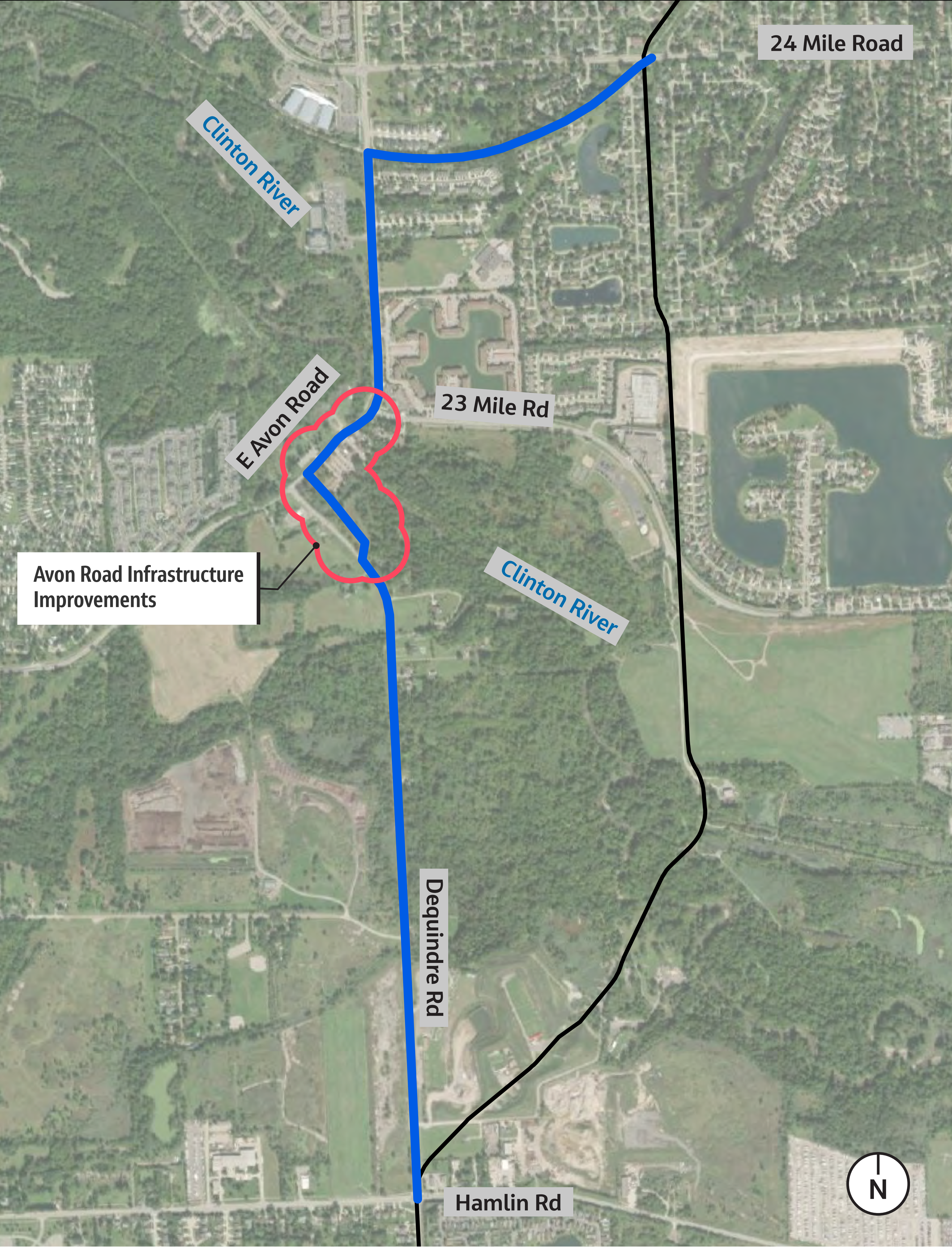


ID / Description	
A	Plumbrook Drain Discharge Facility (PDDF)
B	New NSC Valve
C	96" WTM Critical Appurtenances (Multiple Locations NSC to Hamlin Rd)
D	96" WTM Hamlin Tie-in
E	New 96" WTM
F	24 Mile Valve with Bypass to Rochester Booster Pump Station
G	96" WTM 24 Mile Tie-in
H	South Branch of the Flint River Discharge Facility (SBRDF)
I	Chesterfield Loop Temporary Booster Pump Station (CLTBPS)
J	96" WTM to be Abandoned
K	East Pond Creek Discharge Facility (EPCDF)

LEGEND:

Existing Water Transmission Main (WTM)	Existing Water Treatment Plant (WTP)	Flow Direction During Shutdown	New Tie-In
Existing WTM to be Abandoned	Existing Booster Pump Station with Reservoir	New Isolation Valve	New Discharge Facility
New WTM	Existing Booster Pump Station	Isolation Valve to be Abandoned	

Exhibit B – GLWA Proposed 96-inch Water Transmission Main Relocation



- Legend:
- Existing 96-Inch WTM
 - Relocated 96-Inch WTM

Exhibit C – Avon Road Infrastructure Improvements

