

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
GREAT LAKES WATER AUTHORITY
AND THE
ROAD COMMISSION FOR OAKLAND COUNTY
PERTAINING TO
SCOPE, SCHEDULE AND COST SHARING
DURING DESIGN AND CONSTRUCTION OF THE 96-INCH DIAMETER WATER
TRANSMISSION MAIN RELOCATION PROJECT

This Memorandum of Understanding (MOU) is entered into on _____, 2021, between the **Great Lakes Water Authority (GLWA)** with municipal offices at 735 Randolph 19th Floor Detroit, MI 48226 and the **Road Commission for Oakland County (RCOC)**, with municipal offices at 31001 Lahser Road, Beverly Hills, MI 48025. The RCOC agrees to the terms and conditions specified below regarding the scope, schedule, and cost sharing agreements relating to the design and construction of GLWA's 96-inch diameter drinking water transmission main relocation project.

DEFINITIONS

GLWA Construction Project: Includes relocation of a portion of GLWA's 96-inch diameter drinking water transmission main and construction of additional facilities located in both Oakland and Macomb Counties to support the regional drinking water transmission system. The project site consists of six separate locations. The 96-inch water transmission main begins at GLWA's Imlay Station, which is a booster pump station and reservoir facility in Imlay Township, Michigan. The existing water transmission main continues south through the Village of Romeo, Washington Township and Shelby Township, and terminates at GLWA's North Service Center (NSC) facility in the City of Troy. Five of the project sites are located along the route of the 96-inch water transmission main, beginning to the north at 33 Mile Road and McKay Road and terminating at the southernmost location at the NSC located near the intersection of Dequindre Road and South Boulevard in the City of Troy. The sixth location is in Harrison Township along a GLWA 42-inch water main at the Snover Road Flow Control Facility, which is located on the south side of Hall Road (M-59) and west of the I-94 expressway. Also includes roadway restoration/improvements and pedestrian safety improvements identified herein. These roadway restoration/improvements and pedestrian safety improvements will be designed in accordance with current Michigan Department of Transportation (MDOT) standards, RCOC standards and Macomb County Department of Roads (MCDR) standards, where applicable.

Cost Sharing: Mutually agreed upon funding allocation for design and construction of roadway, pedestrian improvements, or transportation elements above and beyond what is considered as a replacement in kind in accordance with RCOC standards. See **Cost Sharing Table** in the section below.

Planning and Coordination: Mutually beneficial cooperation and coordination by RCOC and GLWA to execute the *GLWA Construction Project*, including but not limited to, meetings, issuance of permits, approval of construction plans, inspections, public engagement, and other special conditions defined herein.

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Public Engagement: Proactive planning and delivery of public information addressing community concerns that may occur during roadway construction activities related to the *GLWA Construction Project*. Public engagement elements may include informing constituents about potential road closures and detours relating to the *GLWA Construction Project* and education about the overall benefits of the project.

GLWA Project Schedule: The schedule for the GLWA Construction Project that includes design, permitting, bidding, construction and construction observation and project close-out. As of the date of this MOU, the GLWA is in the preliminary design phase of the project. Design and permitting with local and state agencies are anticipated in 2021. GLWA pipeline construction is currently anticipated to begin in January 2022. Construction close-out is anticipated to occur in November 2027. These dates are subject to change.

RECITALS

1. GLWA plans to relocate a portion of its 96-inch diameter water transition main that currently runs through the closed G&H Industrial Landfill (an EPA Superfund site) in Shelby Township, Macomb County, Michigan.
2. The 96-inch diameter water transmission main transports drinking water from its Lake Huron Water Treatment Plant and is critical infrastructure used by GLWA to supply drinking water to several member partner communities in Oakland and Macomb Counties.
3. The proposed pipeline relocation will replace the portion of the water main through the landfill (to be abandoned) with a new 96-inch diameter water transmission main outside the limits of the landfill. The pipeline relocation limits are Dequindre Road from Hamlin Road to the Macomb Orchard Trail and in the Macomb Orchard Trail from Dequindre Road to 24 Mile Road in Oakland and Macomb Counties.
4. The Road Commission for Oakland County has been engaged with the local communities to perform a corridor study along East Avon Road between Dequindre Road and 23 Mile Road in Rochester Hills, Michigan. A preliminary concept has been developed and will be presented to the Rochester Hills Historic Districts Commission and Rochester Hills City Council and shared with GLWA in August 2020. Following that, the corridor study will go to public comment. The RCOC will then finalize the scope of work of the East Avon Road roadway improvements and coordinate those improvements with the GLWA pipeline project. It is assumed that the East Avon Road roadway improvements east of a mutually agreed upon line of demarcation will be designed by Jacobs and constructed by GLWA's construction contractor as part of the *GLWA Construction Project*.
5. The majority of Dequindre Road is a County Section Line Road and is a boundary line between Oakland and Macomb Counties. The entire roadway width of Dequindre Road between Hamlin Road and 24 Mile Road is under the jurisdiction of the RCOC. The road right-of-way east of Dequindre Road is under the jurisdiction of the MCDR. Permitting/approvals will be required for transportation elements defined below of the *GLWA Construction Project* through both the RCOC and the MCDR.
6. The Macomb Orchard Trail property is owned solely by Macomb County Government. The *GLWA Construction Project* in the Macomb Orchard Trail will be subject to approvals by the Executive

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Office of Macomb County and the Board of Commissioners in collaboration with the Macomb Orchard Trail Commission and standards set forth by MCDR.

TERMS AND CONDITIONS

Based on the aforementioned explanation, GLWA agrees to the following terms in relation to the *GLWA Construction Project*.

- A. **Transportation Elements Included in *GLWA Construction Project*.** GLWA agrees to include the following transportation elements in the scope of work for design and construction of the *GLWA Construction Project*. These transportation elements include roadway restoration and improvements and pedestrian safety improvements. Cost sharing for the transportation elements below are presented in the Cost Sharing Table in the next section.
- **Item No. 1: Dequindre Road (Hamlin Road to approximately 1,000 feet south of East Avon Road)**: Full-depth reconstruction to current RCOC standards for a 2-lane pavement with shoulders. Replacement of a 6-feet high by 8-feet wide corrugated metal pipe (CMP) arch culvert (approximate dimensions) located under Dequindre Road approximately 1,900 feet north of School Road. *Note: Culvert replacement is included as an incidental cost to the GLWA Construction Project.*
 - **Item No. 2: Dequindre Road and School Road Intersection**: Full-depth reconstruction of intersection to add turn lanes on Dequindre Road and School Road.
 - **Item No. 3: East Avon Road (East of Clinton River Bridge to Dequindre Road north of 23 Mile Road)**: Full-depth reconstruction to current RCOC standards for a 3-lane pavement with curb and gutter. One roundabout at Dequindre Road and 23 Mile Road intersection with pedestrian pathway connecting Iron Belle Trail to Yates Park and refuge island at East Avon Road pedestrian crossing to the nearby cider mill. Replace approximately 126 feet of Mill Race culvert (61-inch-high by 84-inch-wide corrugated metal arch pipe starting at and including the existing inlet headwall on the north side of East Avon Road and terminating approximately 15 feet from an existing concrete well at the cider mill building. *Note: Culvert replacement is included as an incidental cost to the GLWA Construction Project.*
 - **Item No. 4: Dequindre Road (23 Mile Road to Westridge Drive)**: Full-depth reconstruction to current RCOC standards for a 3-lane pavement with shoulders. Remove existing passing lanes and reconstruct deceleration lanes and/or tapers where they currently exist with curb and gutter as required.
- B. **Design Standards and Specifications.** Transportation elements that are included in the *GLWA Construction Project* will be prepared in accordance with the Road Commission for Oakland County standards and specifications, where applicable, and subject to review/approval by the RCOC.
- C. **Restoration.** Fully restore the construction zones of the pipeline and appurtenant structures and surrounding areas after construction according the scope of work outlined above.

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Based on the foregoing factors, the RCOC, to the extent possible, agrees to the following terms for a period equal to the life of the project.

- A. **Coordinate RCOC Transportation Projects with GLWA Pipeline Project.** RCOC will continue to put forth a good faith effort to coordinate, support and collaborate with the GLWA project team through completion of the *GLWA Construction Project* in accordance with *GLWA Project Schedule*.

RCOC has identified transportation projects that include a roundabout at Dequindre Road and Avon Road, replacement of the East Avon Road bridge over the Clinton River and other roadway improvements along East Avon Road to 23 Mile Road. These RCOC projects will directly impact the delivery of the *GLWA Construction Project*.

RCOC currently anticipates for the Avon Road/Dequindre Road roundabout and the East Avon Road bridge replacement projects a construction start date of November 2021 and a construction substantial completion date of August 2022. The *GLWA Construction Project* is currently anticipated to begin pipeline construction in and/or near East Avon Road in January 2022.

- B. **Obtain Additional Right-of-Way.** RCOC will obtain additional road right-of-way (ROW) needed for all transportation improvements in Oakland County for the *GLWA Construction Project*. For example, additional road ROW is required for the proposed Dequindre Road/23 Mile Road intersection roundabout. RCOC will also be responsible for obtaining additional road ROW along East Avon Road and Dequindre Road as required to construct deceleration lanes/taper and drainage improvements. In addition, RCOC will be responsible for obtaining additional road ROW at the intersection of Dequindre Road and School Road for turn lanes. RCOC will obtain these additional road ROW in advance of the *GLWA Construction Project* start date.
- C. **Expedite Permit Reviews.** RCOC will expedite, as much as possible, permit reviews and approvals for the planned *GLWA Construction Project*.
- D. **Utility Relocation Coordination and Support.** RCOC will provide support to the GLWA Project Team for requests to utility providers for relocation of utilities in conflict with planned roadway improvements.
- E. **Cost Sharing.** Design fees for the transportation elements of the *GLWA Construction Project* as defined herein will be paid by GLWA. The RCOC agrees to the following cost allocations for the construction of transportation elements of the *GLWA Construction Project* in accordance with the following Cost Sharing Table. RCOC permit construction inspection fees will be based upon a reasonable level-of-effort agreed upon by both parties in advance of construction but shall not exceed 20 hours/week, on average, for the duration of the construction in RCOC right-of-way.

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Cost Sharing Table: Rough Order of Magnitude (ROM) Opinion of Construction Costs – Subject to Change

Item No.	Transportation Element of GLWA Construction Project	GLWA		RCOC		Total ROM Construction Costs
		Amount	Percent	Amount	Percent	
1	Dequindre Road Restoration (Hamlin Road to East Avon Road)	\$2,407,806.00	100%	\$0.00	0%	\$2,407,806.00
2	Dequindre Road/School Road Intersection Improvements	\$140,728.00	37%	\$236,047.00	63%	\$376,775.00
3	East Avon Road Improvements (East of Clinton River Bridge to Dequindre Road north of 23 Mile Road)	\$1,966,721.00	74%	\$695,905.00	26%	\$2,662,626.00
4	Dequindre Road Improvements (23 Mile Road to Westridge Drive)	\$1,070,381.00	63%	\$622,338.00	37%	\$1,692,719.00
	Total	\$5,585,636.00	78%	\$1,554,290.00	22%	\$7,139,926.00

F. **Transportation Items Not Included in GLWA Construction Project.** The RCOC acknowledges that the following transportation items will not be included in the *GLWA Construction Project*.

- Dequindre Road and East Avon Road: Roundabout and Bridge Replacement. This work is planned under a separate RCOC contract. The RCOC design is in progress and final plans are projected to be completed in Spring 2021.
- Hamlin Road and Dequindre Road: Intersection Improvements. The existing 96-inch pipeline crosses at this intersection and the new proposed 96-inch pipeline tie-in will be in this general vicinity (final location to be determined during preliminary design). No additional roadway widening, or other improvements are planned for this intersection as part of the *GLWA Construction Project*.
- Dequindre Road (Westridge Drive to 24 Mile Road). Additional roadway construction in this area is not included. The proposed point-of-ending on Dequindre Road will tie into the existing three lane cross-section near Westridge Drive.

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- G. **Termination.** The RCOC may immediately terminate this MOU without penalty in the event anticipated funding is no longer available or if the estimated cost set forth above increases.
- H. **Modifications.** This MOU may be extended or modified by mutual agreement in writing.
- I. **Permits.** GLWA and its contractors shall comply with all RCOC permit requirements.

GREAT LAKES WATER AUTHORITY:

ROAD COMMISSION FOR OAKLAND COUNTY:

Sue F. McCormick
Chief Executive Officer

Approved as to form, GLWA Office of the
General Counsel