November 1, 2022

Ms. Tracey Balint, P.E.
Public Utilities Engineering Manager
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309

RE: Proposal for Professional Engineering Consulting Services
        Asset Management Data Integration

Dear Ms. Balint:

During the SAW Grant project, the City was able to inspect 54.4 miles of pipeline inspection data and 822 manholes. Per RFP-RH-21-035, another 247.2 miles of sewer and 6,490 manholes are expected to be inspected as a part of the Wastewater Pipe Condition Assessment project. Based on previous discussions with City staff members, OHM Advisors has prepared a scope of work to assist with the processing and integration of asset inspection data collected during both the SAW Grant project and the current Wastewater Pipe Condition Assessment project into the City's geographic information system (GIS). The following section is a detailed description of our proposed scope of work to assist the City.

SCOPE OF SERVICES

Details of the recommended tasks can be seen below.

TASK 1 – Project Initiation Coordination

◥ Project kick-off meeting, set up, and initiation of project
◥ Coordination with the City and RedZone for data transfer

TASK 2 – SAW Grant Inspection Data Integration

◥ Compile inspection data into final tables for integration.
◥ Update any FacilityIDs that may have changed in recent City data cleanup efforts
◥ Integrate inspection data into the City's geodatabase.
◥ Integrate asset criticality information for both manhole and sewer segment features into the City's geodatabase.

TASK 3 – RedZone Inspection Data Integration

◥ Compile inspection data into final tables for integration.
◥ Update any FacilityIDs that may have changed in recent City data cleanup efforts
◥ Integrate inspection data into the City's geodatabase.
◥ Incorporate lateral GIS data provided by RedZone into the City's geodatabase. RedZone confirmed the deliverable with include two layers:
    1. Point feature class representing the tap connection locations with associated PACP coding details
    2. Polyline feature class containing 50 foot long pipe segments for each lateral connection

◤ Finalize geodatabase deliverable.

TASK 4 – GIS Application Creation

◤ Create an internal Utilities GIS Application viewer for City staff to view inspection status and condition rating from the Wastewater Pipe Condition Assessment project and SAW Grant project. Exact details to be determined based upon future discussions with City staff.

◤ Develop a custom internal tracking Esri Dashboard designed to display collection system inspection metrics. *NOTE: Only inspection data from the Wastewater Pipe Condition Assessment project and SAW Grant project will be incorporated into the dashboard at this time.

◤ Application utilization training will be included as well.

TASK 5 – PACP Multiple Inspection Analysis

◤ Analyze PACP data for each pipe segment with multiple inspections.

◤ Combine non-overlapping coding where possible to reduce rating confusion.

◤ Generate final pipe condition ratings.

COMPENSATION

OHM Advisors will perform the outlined services above based on an hourly, not to exceed basis, in accordance with the terms of our continuing services agreement with the City. The following is a summary of proposed not-to-exceed budgets:

▪ TASK 1 - Project Coordination	$ 10,000
▪ TASK 2 - SAW Grant Inspection Data Integration	$ 9,000
▪ TASK 3 - RedZone Inspection Data Integration	$ 20,000
▪ TASK 4 - GIS Application Creation	$ 7,000
▪ TASK 5 - PACP Multiple Inspection Analysis	$ 10,000
Project Total	**$ 56,000**

ASSUMPTIONS & EXCLUSIONS

◤ **Inspection data will be submitted to the City in multiple forms**

  ▪ Related tables within a copy of the City's GIS geodatabase schema.

    ▪ Task 3 & 4: The schema that was provided at the start of each project is what will be submitted to the City. If the GIS sewer system schema has changed, then others will need to do the conversion to match the new City GIS sewer system schema.

  ▪ Microsoft Excel tables.

  ▪ PACP export database files (provided by RedZone)

◤ **OHM will be granted VPN access to the City's ArcGIS Enterprise**

  ▪ If either option below is preferred instead by the City, this will require an addendum to this contract or a separate proposal altogether.

    i. If access is not granted via VPN, OHM requests on-site access with City staff

    ii. If access cannot be granted altogether, OHM staff will be very limited in what assistance can be provided to create the applications mentioned in TASK 5 on the City's GIS

Enterprise.

- ▪ Task 5 – application development will be created on the City's Enterprise Portal. Editing access will be required in order to create these applications.

◤ **Generating asset rehabilitation recommendations.**

- ▪ OHM views this project as a pure inspection and data integration project where our firm works with RedZone to deliver the inspection data in a format that is usable to the City. If the City wants engineering judgement on how to correct the deficiencies the inspectors discover, OHM would be happy to assist with that endeavor, but envision that work occurring under a separate contract.

◤ **Creating detailed or complex digital tools for the City.**

- ▪ Task 5 only includes a viewer and dashboard showing the findings of the Wastewater Pipe Condition Assessment project and SAW Grant project data. If advanced widgets or additional dashboards beyond the basic tools listed in Task 5 are requested, an addendum to this contract or a separate proposal will be required.

◤ **Data Delivery**

- ▪ City has determined storage location and will provide details to OHM for delivery
- ▪ To eliminate duplication of data, OHM will integrate previous data deliverables and make one complete resubmission.

CONCLUSION

Work will be done in accordance with the terms and conditions of the Continuing Services Agreement between OHM and the City.

Thank you for giving us the opportunity to be of service. We look forward to working with you on this project.

Sincerely,
OHM Advisors

Rhett Gronevelt, P.E.
Principal In Charge

cc: Chris Shepard, City of Rochester Hills
         Michael Cousins, OHM Advisors

CITY OF ROCHESTER HILLS
Recommended:

BY:_____   _____
     Tracey Balint, P.E., Public Utilities Engineer   Date

Approved:

BY:_____   _____
     Bryan K. Barnett, Mayor   Date

OHM Advisors®
2365 PONTIAC RD, SUITE 201   **T** 248.751.3100
AUBURN HILLS, MICHIGAN 48326   **F** 248.287.4201   **OHM**-Advisors.com