



City of Rochester Hills  
AGENDA SUMMARY  
FINANCIAL ITEMS

1000 Rochester Hills Dr.  
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[www.rochesterhills.org](http://www.rochesterhills.org)

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Legislative File No: 2021-0288

**TO:** Mayor and City Council Members

**FROM:** Allan E. Schneck, P.E., Director Department of Public Services

**DATE:** July 26, 2021

**SUBJECT:** Wastewater Pipeline Condition Assessment, Documentation and Inspection Results

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**REQUEST:**

City Council is requested to authorize a contract/blanket purchase order for wastewater pipeline condition assessment, documentation and inspection result services in the amount not-to-exceed \$2,676,500.00 to RedZone Robotics, Inc., Warrendale, Pennsylvania and further authorizes the Mayor to execute an agreement on behalf of the City.

**REASON FOR PURCHASE:**

The City's Purchasing Division, in partnership with the Department of Public Services (DPS), issued a Wastewater Pipeline Condition Assessment Request for Proposals utilizing the MITN system with five (5) proposal responses received. The responses received were evaluated by a committee consisting of staff from the City's DPS and Engineering Division. The committee evaluated the proposal responses on the following categories: references, capacity, methodology, timeline, completeness of proposal, and cost.

The City's sanitary sewer collection system consists of over 350 miles of piping of various sizes, ranging from 6" to 48" and over 6,000 access structures (manholes). To operate a sanitary sewer collection system that is reliable and dependable, it is vital to know and understand the condition of said system so that strategic capital improvements can be planned and budgeted accordingly. This approach to system operation prevents unexpected system disruptions and costly emergency responses. It also provides additional insight into vital routine preventative maintenance which otherwise may not be prioritized.

One major difficulty with this project is access to manhole locations that are known to be inaccessible with DPS equipment. The approach and/or technology which contractors are proposing to use to access these areas is a major factor in the evaluation of proposals. RedZone Robotics specifically addressed in their proposal response that they have developed a robotic unit whereby they can walk to the location, place the device directly into the manhole, and deploy the robotic unit to televise the sanitary sewer piping run. The access equipment referenced in the other proposals is comparable to what the DPS already has and is known to be insufficient for accessing some of these manhole locations. Based on the City's knowledge of the work and areas in which work is to be performed, it was apparent the RedZone Robotics approach would yield the desired data collection, pipe & manhole condition assessment ratings and the standing up of a software application for system evaluation and capital investment.

RedZone Robotics is recommended for award of this contract based on their methodology, expertise, and capacity to perform the work, most notably the above mentioned ability to access remote locations for data collection. As part of the requested amount, additional funding (approximately 6%) is being requested in case any blockages are encountered during the televising inspection in which the pipeline may have to

be cleaned or bypassed. The data received from this project will be utilized to create a future rehabilitation program to ensure the City's infrastructure is maintained and to assist in conducting repairs and/or replacements prior to significant failures in the system. It is anticipated that, in the absence of this project, comparable or even greater costs will ultimately be accrued while responding to inevitable system failures, only at times which cannot be predicted or planned for.

**PROCESS:**

**Vendor Name and Address:**

RedZone Robotics, Inc.  
195 Thorn Hill Road, Suite 110  
Warrendale, PA 15086

**Reason for Selection:**

Best Value

**Method of Purchase:**

Blanket Purchase Order/Contract

**BUDGET:**

Funding is included in the FY 2021 Adopted Budget and FY 2022 Projected Budget.

Fund Name	Department Account No	Account No. Description	2-Year Budget Amount	2-Year Cost	Remaining Budget
W/S Capital	593.972000	Mains & Services	\$3,000,000	\$2,676,500	\$323,500

**RECOMMENDATION:**

It is recommended that City Council authorize a contract/blanket purchase order for wastewater pipeline condition assessment, documentation and inspection result services in the amount not-to-exceed \$2,676,500.00 to RedZone Robotics, Inc., Warrendale, Pennsylvania and further authorizes the Mayor to execute an agreement on behalf of the City.

APPROVALS:	SIGNATURE	DATE
Department Review		
Department Director		
Budget Content: Chief Financial Officer		
Purchasing Process: Supervisor of Procurement		
Mayor		
Deputy Clerk		

Contract Reviewed by City Attorney       Yes       N/A

# Solo

**Minimum Access:** 8 in (200 mm)

**Pipe Size:** 8-12 in (200-300 mm)

**Water Level:** 0-25%

**Reports:** NASSCO PACP/MACP, WRc, WSSA



RedZone Robotics Solo

# MD Profiler

**Minimum Access:** 19 in (480 mm)

**Pipe Size:** 15-36 in (400-915 mm)

**Water Level:** 0-50%

**Reports:** Corrosion, Debris, Flow, Height, Pipe Size, Ovality



RedZone Robotics MD Profiler

# SuperMD

**Minimum Access:** 19 in (480 mm)

**Pipe Size:** 36-125 in (915-3200 mm)

**Water Level:** 25-75%

**Reports:** Corrosion, Debris, Flow, Height, Pipe Size, Ovality



RedZone Robotics SuperMD

# Responder

**Minimum Access:** 22.5 in (570mm)

**Pipe Size:** 36-240 in (915-6000 mm)

**Water Level:** 0-100%

**Reports:** Corrosion, Debris, Alignment, Flow Height, Pipe Size, Ovality, Virtual Mandrel, H2S Gas/Temperature



RedZone Robotics Responder