

**CITY OF MT. MORRIS
CITY COUNCIL AGENDA
11649 N. Saginaw Street
Mt. Morris, MI 48458
October 25th, 2021
7:15 P.M.**

- 1. MEETING CALLED TO ORDER:** Mayor Jeffrey N. Roth
- 2. PLEDGE OF ALLEGIANCE**
- 3. ROLL CALL**
- 4. APPROVAL OF AGENDA**
- 5. APPROVAL OF MINUTES**
 - a. Approval of regular meeting minutes from October 11th, 2021.
- 6. COMMUNICATIONS:**
 - a. None.
- 7. APPROVAL OF WARRANT:** Approval of Warrant #21-19 in the amount of \$138,505.11
- 8. PUBLIC COMMENT (Agenda Items Only /Five Minute Time Limit).**
- 9. UNFINISHED BUSINESS:**
 - a. None
- 10. NEW BUSINESS:**
 - a. **RESOLUTION 21-48: Water System Reliability Study**
- 11. PUBLIC COMMENT (Five Minute Time Limit).**
- 12. COUNCIL MEMBER AND STAFF COMMENTS**
- 13. ADJOURNMENT**

PLEASE SILENCE ALL CELL PHONES AND OTHER ELECTRONIC DEVICES PRIOR TO THE MEETING.

Police Chief Mihailoff stated that because it is an active investigation, he cannot speak on it too much, but that they do know who some of these kids are and who some of their friends are. They will be conducting interviews with three of the kids this week. Chief Mihailoff stated that he stresses calling 911 if you see anybody walking that looks suspicious, and report it. Also, some good measures for your home as well is using good exterior lighting, and cameras if you can. Chief Mihailoff stated that he would be more than happy to speak with Corinne after the meeting to discuss a neighborhood watch program, and what the community can do to help.

Roy Rogers 825 South Street – The same group of kids have stolen property from his back yard. He filled a complaint with Officer Butcher the following morning when he noticed his property was gone. Roy is also interested in what can be done community wise with dealing with these kids.

COUNCIL MEMBER AND STAFF COMMENTS:

Council Member Sorensen stated he thanks the public for coming out to voice their concerns, and that he had thought there was a gentleman who used to head up a neighborhood watch for the city, but was unsure if he was still around or not.

Council member Irwin thanked both of the residents for coming out tonight. Council member Irwin stated that growing up with 5 brothers, he learned a few things, and a really good one is a trip wire with some party poppers. The community watch program would be strictly on a volunteer basis, but does sound like it would be a great idea for the community.

Fire Chief Young stated that R&R will be out next week to perform annual preventative maintenance.

Police Chief Mihailoff stated that they will have a couple extra cars on for Halloween and devil's night. The Humane Society is taking donations for a microchip scanner, to be able to read stray/lost dogs' microchip and find the owner. The Humane Society stated that you could purchase a microchip reader for \$300-\$500, but that they are hoping to get enough donations in order to give one to each police department. No Shave November has started and will go from October, November, December for the police department. The money raised from this will go towards the Christmas donation for kids as well. Also, the police department will be playing Santa Claus again this year and getting presents from local businesses to donate to local kids around the city that are unfortunate. Chief has also contacted the Voices for Children Center, and they are going to give him a list of kids within the City. Chief Mihailoff also showed everyone the teddy bears he has received from a donation from St. Luke's, and they are to be used as comfort bears for children, whether they are involved in domestic violence, car accidents, or anything that would be traumatic for the kids.

City Manager/Treasurer Vicki Corlew stated that if anyone knew of any other families in need of help for the holidays, to get their information to Chief Mihailoff.

ADJOURNMENT:

With no further business, the Council Meeting was adjourned at **7:55 p.m.**

Spencer Lewis, City Clerk

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 101 General					
Dept 000					
101-000-066.000	UNDISTRIBUTED FRINGE BENEFITS	BLUE CARE NETWORK	HEALTH INSURANCE	6,807.95	
101-000-066.000	UNDISTRIBUTED FRINGE BENEFITS	HUMANA HEALTH PLAN INC	DENTAL/VISION INSURANCE	1,213.53	
101-000-066.000	UNDISTRIBUTED FRINGE BENEFITS	UNUM LIFE INSURANCE CO.	INSURANCE	990.04	
101-000-256.000	DEPOSITS PAYABLE	TABITHA BURKS	COMM. ROOM DAMAGE/KEY REFUND	75.00	
		Total For Dept 000		9,086.52	
Dept 212 ACCOUNTANT					
101-212-801.000	PROFESSIONAL SERVICES	PLANTE & MORAN	FINANCIAL STATEMENT YR. ENDING 06.30.	30,640.00	
		Total For Dept 212 ACCOUNTANT		30,640.00	
Dept 215 ADMINISTRATION					
101-215-740.000	OPERATING EXPENSE	CNA SURETY	PUBLIC NOTARY	55.00	
101-215-740.000	OPERATING EXPENSE	HUNTINGTON NATIONAL BANK	CREDIT CARD	72.59	
101-215-740.000	OPERATING EXPENSE	PURCHASE POWER	POSTAGE	252.12	
101-215-740.000	OPERATING EXPENSE	STATE OF MICHIGAN	NOTARY FEE	10.00	
101-215-740.000	OPERATING EXPENSE	US BANK EQUIPMENT FINANC	COPIER LEASE	141.83	
101-215-740.000	OPERATING EXPENSE	XTREME SHREDS	SHREDDING	17.50	
101-215-825.000	MAINTENANCE AGREEMENTS	BS&A SOFTWARE	ANNUAL SERVICES	552.59	
101-215-874.000	RETIREE INSURANCE BENEFITS	BLUE CARE NETWORK	HEALTH INSURANCE	1,737.79	
101-215-990.000	COPIER	US BANK EQUIPMENT FINANC	COPIER LEASE	68.83	
		Total For Dept 215 ADMINISTRATION		2,908.25	
Dept 253 TREASURER					
101-253-740.000	OPERATING EXPENSE	HUNTINGTON NATIONAL BANK	CREDIT CARD	25.59	
101-253-740.000	OPERATING EXPENSE	PURCHASE POWER	POSTAGE	126.06	
101-253-825.000	MAINTENANCE AGREEMENTS	BS&A SOFTWARE	ANNUAL SERVICES	1,359.25	
		Total For Dept 253 TREASURER		1,510.90	
Dept 265 CITY HALL & GROUNDS					
101-265-740.000	OPERATING EXPENSE	GILL-ROY'S HARDWARE	FLUSH VALVE KIT	7.96	
101-265-801.000	PROFESSIONAL SERVICES	CURBCO	STREET SWEEPING	270.00	
101-265-920.000	PUBLIC UTILITIES	CONSUMERS ENERGY	CITY HALL GAS	22.12	
101-265-920.000	PUBLIC UTILITIES	CONSUMERS ENERGY	CITY HALL ELEC.	470.04	
		Total For Dept 265 CITY HALL & GROUNDS		770.12	
Dept 269 OTHER CITY PROPERTY					
101-269-920.000	PUBLIC UTILITIES	CONSUMERS ENERGY	PARKING LOT	59.57	
		Total For Dept 269 OTHER CITY PROPERTY		59.57	
Dept 305 POLICE DEPARTMENT					
101-305-740.000	OPERATING EXPENSE	HUBBARD'S MILITARY SUPPL	WALLET BADGE	104.00	
101-305-740.000	OPERATING EXPENSE	HUNTINGTON NATIONAL BANK	CREDIT CARD	2.83	
101-305-740.000	OPERATING EXPENSE	PURCHASE POWER	POSTAGE	126.06	
101-305-740.000	OPERATING EXPENSE	US BANK EQUIPMENT FINANC	COPIER LEASE	55.42	
101-305-740.000	OPERATING EXPENSE	XTREME SHREDS	SHREDDING	17.50	
101-305-825.000	MAINTENANCE AGREEMENTS	PRO-VISION, INC.	YEARLY PLAN	2,064.00	
101-305-990.000	DEBT SERVICE - PRIN	US BANK EQUIPMENT FINANC	COPIER LEASE	119.52	
		Total For Dept 305 POLICE DEPARTMENT		2,489.33	
Dept 336 FIRE DEPARTMENT					
101-336-714.800	FRINGE BENEFIT-NON PAYROLL	LINCOLN NATIONAL LIFE IN	LIFE INSURANCE	68.25	
101-336-759.000	UNIFORMS	MUNICIPAL EMERGENCY SERV	UNIFORM	1,866.00	
101-336-825.000	MAINTENANCE AGREEMENTS	MUNICIPAL EMERGENCY SERV	DELTAIR FIT TEST MASK	507.49	

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 101 General Dept 336 FIRE DEPARTMENT					
		Total For Dept 336 FIRE DEPARTMENT		2,441.74	
Dept 441 PUBLIC WORKS 101-441-920.000	PUBLIC UTILITIES	CONSUMERS ENERGY	DPW GARAGE	196.22	
		Total For Dept 441 PUBLIC WORKS		196.22	
Dept 738 LIBRARY 101-738-740.000	OPERATING EXPENSE	ACTION MUNICIPAL SUPPLY	TOILET PAPER	34.50	
	OPERATING EXPENSE	GILL-ROY'S HARDWARE	FLUSH VALVE KIT	25.99	
	PUBLIC UTILITIES	CONSUMERS ENERGY	LIBRARY	273.10	
		Total For Dept 738 LIBRARY		333.59	
		Total For Fund 101 General		50,436.24	
Fund 202 Major Street Dept 463 STREET ROUTINE MAINTENANCE 202-463-801.000	PROFESSIONAL SERVICES	CURBCO	STREET SWEEPING	1,000.00	
		Total For Dept 463 STREET ROUTINE MAINTENANCE		1,000.00	
		Total For Fund 202 Major Street		1,000.00	
Fund 203 Local Street Dept 463 STREET ROUTINE MAINTENANCE 203-463-801.000	PROFESSIONAL SERVICES	C.B. LAWN CARE	TREE REMOVAL	1,000.00	
	PROFESSIONAL SERVICES	CURBCO	STREET SWEEPING	1,200.00	
		Total For Dept 463 STREET ROUTINE MAINTENANCE		2,200.00	
		Total For Fund 203 Local Street		2,200.00	
Fund 591 Water Fund Dept 000 591-000-255.000	WATER DEPOSITS PAYABLE	CITY OF MT. MORRIS	WATER DEPOSIT - 12221 WALTER	250.00	
		Total For Dept 000		250.00	
Dept 215 ADMINISTRATION 591-215-740.000	OPERATING EXPENSE	PURCHASE POWER	POSTAGE	252.13	
	MAINTENANCE AGREEMENTS	BS&A SOFTWARE	ANNUAL SERVICES	878.08	
	RETIREE INSURANCE BENEFITS	BLUE CARE NETWORK	HEALTH INSURANCE	608.77	
	COPIER	US BANK EQUIPMENT FINANC	COPIER LEASE	68.83	
		Total For Dept 215 ADMINISTRATION		1,807.81	
Dept 537 WATER DISTRIBUTION 591-537-714.800	FRINGE BENEFIT-NON PAYROLL	CINTAS CORP	UNIFORMS	43.80	
	FRINGE BENEFIT-NON PAYROLL	CINTAS CORP	UNIFORMS	43.80	
	OPERATING EXPENSE	GENESEE COUNTY DRAIN COM	WATER SAMPLING	75.00	
	PUBLIC UTILITIES	CONSUMERS ENERGY	310 W.MT. MORRIS	34.26	
	PUBLIC UTILITIES	CONSUMERS ENERGY	321 LINCOLN	34.42	
	COST OF SEWER/WATER	GENESEE COUNTY DRAIN COM	AUGUST-SEPTEMBER 2021	59,344.37	
	REPAIR & MAINTENANCE - VEHICL	JENKINS' SUNOCO SERVICE	REPAIRS #47	769.50	
		Total For Dept 537 WATER DISTRIBUTION		60,345.15	
		Total For Fund 591 Water Fund		62,402.96	
Fund 592 Sewer Fund					

INVOICE GL DISTRIBUTION REPORT FOR CITY OF MT MORRIS
 EXP CHECK RUN DATES 10/5/2021 - 10/26/2021
 BOTH JOURNALIZED AND UNJOURNALIZED
 BOTH OPEN AND PAID
 WARRANT 21-19

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 592 Sewer Fund					
Dept 215 ADMINISTRATION					
592-215-740.000	OPERATING EXPENSE	PURCHASE POWER	POSTAGE	252.13	
592-215-825.000	MAINTENANCE AGREEMENTS	BS&A SOFTWARE	ANNUAL SERVICES	878.08	
592-215-874.000	RETIREE INSURANCE BENEFITS	BLUE CARE NETWORK	HEALTH INSURANCE	608.75	
592-215-990.000	COPIER	US BANK EQUIPMENT FINANC	COPIER LEASE	68.82	
		Total For Dept 215 ADMINISTRATION		1,807.78	
Dept 536 SEWER DISTRIBUTION					
592-536-921.000	COST OF SEWER	GENESEEE COUNTY DRAIN COM	AUGUST 2021	19,844.51	
592-536-930.000	REPAIR & MAINTENANCE - VEHICL	JACK DOHENY COMPANIES, I	PARTS/LABOR	545.76	
592-536-930.000	REPAIR & MAINTENANCE - VEHICL	JACK DOHENY COMPANIES, I	FOOTAGE COUNTER	267.86	
		Total For Dept 536 SEWER DISTRIBUTION		20,658.13	
		Total For Fund 592 Sewer Fund		22,465.91	

INVOICE GL DISTRIBUTION REPORT FOR CITY OF MT MORRIS
 EXP CHECK RUN DATES 10/5/2021 - 10/26/2021
 BOTH JOURNALIZED AND UNJOURNALIZED
 BOTH OPEN AND PAID
 WARRANT 21-19

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
			Fund Totals:		
			Fund 101 General	50,436.24	
			Fund 202 Major Street	1,000.00	
			Fund 203 Local Street	2,200.00	
			Fund 591 Water Fund	62,402.96	
			Fund 592 Sewer Fund	22,465.91	
			Total For All Funds:	<u>138,505.11</u>	

**CITY OF MT. MORRIS
RESOLUTION 21-48**

WHEREAS: The City is required to submit to the State of Michigan Department of Environment, Great Lakes, and Energy (EGLE) a water system reliability study every 5 years, this study analyzes existing conditions and identify potential improvements to the water system, and

WHEREAS: The last one submitted was in 2013, and

WHEREAS: The City has received proposals from 2 different firms, which are highly qualified to perform this study, copies of which is attached hereto, and

WHEREAS: The first proposal is from Rowe Professional Services Company for a cost of \$12,300.00. The said cost can be reduced by \$700.00 if City staff performs the hydrant flow testing without assistance from Rowe staff, and

WHEREAS: The second proposal is from Fleis & Vandenberg for a cost of \$17,800. The said cost can be reduced to \$11,800 if the previously prepared WaterCAD files are available, and

WHEREAS: Rowe Professional Services Company did the original study so the DPW Superintendent is recommending staying with them, and

NOW THEREFORE BE IT RESOLVED:

That this council does hereby approve a contract for said project with Rowe Professional Services Company for the above indicated price, and does hereby authorize the City Manager to take appropriate action in implementation hereof, including the execution of contract and such other documentation as may be necessary to proceed with the project, and

BE IT FURTHER RESOLVED:

that the sum of twelve thousand three hundred dollars (\$12,300.00) is hereby appropriated for said purpose.

Moved by Council member _____, seconded by Council member _____, and thereafter adopted by the City Council of the City of Mt. Morris at a regular meeting held Monday, October 25, 2021 at 7:15 p.m.

_____ Yea _____ Nay _____ Absent

Jeffrey N. Roth, Mayor

Spencer Lewis, City Clerk



ROWE PROFESSIONAL SERVICES COMPANY

Large Firm Resources. Personal Attention.™

July 20, 2021(Rev September 28, 2021)

Mr. Paul Zumbach, Director of Public Works
City of Mt. Morris
11649 North Saginaw Street
Mt. Morris, Michigan 48458-2092

RE: Engineering Proposal
Water System Reliability Study and General Plan

Dear Mr. Zumbach:

ROWE Professional Services Company is pleased to submit this proposal for engineering services regarding the above referenced project. Per your request, we are providing a proposal to complete a Water System Reliability Study and General Plan for the City of Mt. Morris.

Please see attached, Exhibit A which lists the scope of work proposed for this project. ROWE proposes to perform the services listed in Exhibit A on an hourly basis with a not to exceed fee of **\$12,300**. If city staff can perform the hydrant flow testing without assistance from ROWE staff, the price can be reduced by \$700.

ROWE is prepared to begin work on this project as soon as we have written authorization to proceed. If you are in agreement with this proposal, please sign in the space provided below and return to our office. Should you have any questions or comments, please do not hesitate to contact me on my cell phone at (810) 869-5112.

Sincerely,
ROWE Professional Services Company

Doug Skylis

Digitally signed by Doug Skylis
DN: C=US, E=dsyklis@rowepsc.com, O=Rowe
Professional Services, CN=Doug Skylis
Date: 2021.09.28 12:38:30-0400

Doug Skylis, P.E.
Sr. Project Manager

Attachments

Having reviewed this proposal, including the attached statement of terms and conditions which is a part thereof, acceptance of this proposal is hereby confirmed. ROWE Professional Services Company is authorized to proceed with the work.

Accepted by: _____
Signature

_____ Date: _____
Print Name and Title

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EXHIBIT A

SCOPE OF WORK:

The overall scope of work for this project is to perform a Water Reliability Study and develop a General Plan for the City of Mt. Morris. The study will analyze existing conditions and identify potential improvements to the water system. The study will be performed to the standards set by The Michigan Department of Environment, Great Lakes, and Energy (EGLE) for Water Reliability Studies and General Plans. EGLE policy requires that reliability studies include the present and projected five and twenty year demands for average daily demand, maximum daily demand, maximum hourly demand, and fire flow demand, also include the basis for these demand projections. In order to complete the project, it is anticipated the following tasks will be necessary:

1. *Update Hydraulic Model* - ROWE will update the water model of the city's water system using the latest version of WaterCAD. Improvements made to the water system since the previous water study was performed will be included in the updated model. The model will include the entire water main distribution network and connection points to the Genesee County System. The model will be used to show existing pressures and fire flows available throughout the system, identify areas that need improvement, develop options for improving the system, and illustrate the anticipated effects of potential projects. Prior to commencing with this work, ROWE will hold a kick-off meeting with city staff to identify specific areas of concern with the water system, gather information, and review the hydrant testing requirements.
2. *Hydrant Flow Tests* – ROWE (one staff member) will perform fire hydrant flow testing, (with the assistance of City of Mt. Morris Department of Public Works (DPW) staff), to measure the actual flow rates and pressures at key points within the existing water distribution system. This information will be used to calibrate the water model to ensure it is accurately representing existing conditions.
3. *Calibrate the Model* – Once the model has been created, ROWE will calibrate the model and perform a steady-state analysis of the water system including the following:
 - a. Average Daily Demands, Maximum Daily Demands and Peak Hour Demands and resulting system pressures.
 - b. A fire flow analysis of the water system.
 - c. Existing and proposed conditions
4. *Water System General Plan* – ROWE will create the general plan drawing in accordance with EGLE requirements. This drawing will show the layout of the distribution system including watermains, valves, hydrants, connection points to the Genesee County System, and backup well. The rated capacity of the backup supply well will be shown on the map. The watermain will be labeled by diameter, material, and age. A watermain inventory table will also be included on this drawing. The water system service area boundary will be shown, along with pressure contours under peak hour demand. This drawing will also show recommended 5- and 20-year improvements.

5. *Report and Presentation* – Upon completion of the modeling, ROWE will assemble a draft report which will include a summary of findings, recommendations for improvements, and estimated cost opinions for improvements. The report will include a detailed discussion of the distribution system and a prioritized list of watermain replacement and loop closure projects. The report will satisfy EGLE requirements for a water reliability study. ROWE will meet with city staff to review these preliminary findings and submit a draft report to city staff for review and comment. ROWE will incorporate any comments from the city staff in the final report. Once the report is finalized, a presentation will be made to city staff and council. A total of five copies of the report will be provided to the City of Mt. Morris. Upon approval from the city, ROWE can submit a copy of the final report to EGLE for their review. Having an approved Water Reliability Study on file with EGLE can be beneficial in obtaining loans or grants for water system improvement projects.

The proposal is based on the following:

1. ROWE staff will complete the hydrant flow tests. City of Mt. Morris DPW employees will be available to assist with hydrant flow tests and will provide other pertinent data, such as Genesee County supply pressures at the time of the hydrant flow tests. The price provided in this proposal assumes that one ROWE employee and City of Mt. Morris DPW employees would work together to perform the tests.
2. The city will provide data that indicates the total annual amount of water billed for the entire system and the total annual amount supplied by Genesee County each year over the past five years, as well as recent water usage data for the 10 largest water customers in the system. Upon acceptance of this proposal, ROWE will provide the City of Mt. Morris with a list of additional information needed to complete this study.
3. The proposal does not include a water rate study.
4. No topographic survey will be necessary.
5. Proposal assumes a maximum of one meeting with the city to gather and verify data, one meeting to review the preliminary findings, and one presentation to city staff and officials.
6. Proposal assumes that work on the project will commence within two weeks of receiving written approval and the draft report will be available approximately 10 weeks after receiving the results of the hydrant flow tests.
7. Five hard copies and one flash drive with a PDF of the final report will be delivered to the City of Mt. Morris.

TERMS AND CONDITIONS

The Owner will designate a representative with the authority to provide direction, receive and review information, and make decisions regarding the project. Decisions and direction shall be provided in a timely manner, so as to not delay the project.

The Engineer will perform services in a timely manner, consistent with sound professional practice. The Engineer will strive to perform the services within the established schedule, if any. Services are considered to be complete when deliverables have been presented to the Owner.

The Owner will provide the Engineer with all available information pertinent to the site of the project and access to the project site.

The Engineer will assist the Owner in preparing applications and documents to secure approvals and permits. The Owner is responsible for payment of permit application fees and charges.

Services provided by the engineer shall be performed with the care and skill normally exercised by other members of the profession practicing under similar conditions.

The Owner shall promptly notify the Engineer of defects or suspected defects in the work.

The Engineer's opinions of construction costs will be based upon experience and historical information.

The Engineer will be responsible for the safety precautions and programs of its employees only.

If the Engineer is reviewing work by contractors or others on behalf of the Owner, the Engineer may only recommend to the Owner that work which does not conform to the project requirements be rejected.

Payment for work completed shall be made within thirty days of invoicing. Unless otherwise provided, invoices will be submitted monthly as the work progresses.

In the event additional work is needed because of a change in scope or unforeseen conditions, the Engineer will submit a proposal defining the modified scope of work and any modifications to the schedule and fee for the Owner's approval.

This agreement may be terminated by either party with fourteen days written notice; however, the Engineer shall be paid for work completed prior to the date of termination.

All documents prepared by the Engineer in completing this work are considered the Engineer's property as instruments of service and are not intended for re-use by the Owner or others.

The Engineer is an independent contractor, responsible to the Owner for the results of this undertaking and is not an employee or agent of the Owner.

The Owner agrees to limit ROWE Professional Services Company's total liability to the Owner and any contractors on the project to \$12,300 or the Engineer's fee, whichever is greater.

The Owner and Engineer each bind themselves and any partners, successors, and assigns of the other party to this agreement. Neither party will assign, sublet, or transfer their interest in this agreement without the consent of the other party.

The terms of this agreement shall be governed by the laws of the State of Michigan. In the event a provision of this agreement is rendered unlawful, the remaining terms and provisions shall remain in effect.

In performance of this work, the Engineer will comply with their policies regarding non-discrimination against employees on the basis of race, color, religion, national origin or ancestry, age or sex.



October 20, 2021

Via Email

Mr. Paul Zumbach, Superintendent
City of Mt. Morris
Department of Public Works
11649 N. Saginaw Street
Mt. Morris, Michigan 48458

RE: Proposal for Water Reliability Study and General Plan Update

Dear Paul,

We are pleased to provide you with this proposal for professional engineering services to assist the City with an update to your water reliability study and general plan as required by EGLE.

Project Understanding

The City desires to complete an update to your Water Reliability Study and General Plan, which was last updated in 2013. EGLE generally requires that this study be updated every 5 years unless there are no significant changes to the water system. Improvements to the system would warrant updates to the hydraulic model, system inventory, and fire flow analysis. Hydrant flow tests should be completed to properly calibrate the hydraulic model.

The previous study evaluated the water system using the WaterCAD hydraulic software. At this time, it is unknown if the WaterCAD file would be available for our use. Without these files, we will need to recreate the model for this update, which unfortunately adds quite a bit of expense to this update.

Scope of Service

Our proposed scope of work includes:

- WaterCAD hydraulic model updates
 - Coordination of hydrant pressure and flow tests to be completed by the City
 - Assist the City with up to 8 hours of setup/testing
 - Create model and calibrate to hydrant tests
 - Evaluate system pressures, fire flows, and optimization
 - Analysis and review of improvements needed to meet desired pressures and fire flows

- Report updates
 - Water main inventory
 - Hydrant flow test summary
 - Hydrant flow test tables
 - Update current and future flow and pressure scenarios summaries and tables
 - Prepare water distribution system maps

9475 Holly Road, Suite 201
Grand Blanc, MI 48439
P: 810.743.9120
F: 810.771.7860
www.fveng.com

- Capital Improvement Plan (CIP) updates
 - Identify recommended water system improvements
 - Prepare improved water distribution system map based on recommended improvements
 - Prepare current and future pressure result tables as a result of proposed improvements
 - Prepare CIP listing and anticipated costs

On the attached sheet we have identified some of the background data that is generally required to be provided by the City for the completion of this study. A rate methodology is not included in our scope of services and should be completed by a Municipal Financial Advisor if requested.

Fee Budget

If the previously prepared WaterCAD files are available for our use, our recommended budget for the above outlined professional services is **\$11,800**. If these files are not available and the hydraulic model needs to be recreated as part of this update, our recommended budget is **\$17,800**.

Schedule

We are prepared to begin this project upon receiving authorization to proceed and anticipate completion prior to the new year. The hydrant flow tests will need to be completed prior to beginning the hydraulic analysis.

We appreciate the opportunity in providing our services to the City of Mt. Morris. Upon acceptance of our proposal, we will prepare our Professional Services Agreement for signature.

If you need any additional information or have any questions, please contact me at (810) 244-1729 or (586) 675-6549.

Sincerely,

FLEIS & VANDENBRINK



Geric L. Rose, P.E., P.S.
Operations Manager, Associate

City of Mt Morris Water Reliability Study and General Plan Update

October 20, 2021

To complete the Water Reliability Study and General Plan update, the following information shall be provided by the City. Some of this information is available in the current study and may just need to be confirmed.

1. Water usage records.
 - a) Total amount of water used each month for the last 5 years (monthly reports are sufficient).
 - b) Large water users, their usage and location within the City.
 - c) Copies of amount billed vs amount metered for last five years to compare water loss.
 - d) Number of water customers; breakdown of residential, commercial, and industrial.
2. Most Recent EGLE Water System Sanitary Survey.
3. Most Recent EGLE Water System Evaluation.
4. Most recent Insurance Services Office (ISO) report.
5. Most recent pump capacity test for the one City pump (or rated capacity if not available). Copies of pump curves. Any performance problems with the well?
6. Method of water disinfection, if any (e.g. Sodium Hypochlorite or Chlorine Gas).
7. Other chemical additions currently being used (e.g. Fluoride or Polyphosphate).
8. Past two years of water quality analytical testing including the most recent full scan of volatiles and metals (raw and finish water quality if applicable).
9. Type of emergency power for well. Size and type of backup generator, if applicable. Is the emergency power portable or permanent? Is it shared with sewer system?
10. Age and material of watermains. Indication of scale or sediment in distribution piping?
11. Copies of construction/record drawings of the water supply system.
12. Identified areas of low pressure.
13. Potential new service areas where watermain may be extended.
14. Does the City have a wellhead protection program? If so, please provide a copy. Please also provide copies of the source water assessment report for the well if an assessment has been done.
15. The number of City employees that operate the system and their license level.
16. Describe the yearly maintenance work that is done for the water system – such as flushing, exercising valves, well inspections (please provide copies of well reports).
17. The number of metered connections and how the meters are read.
18. Water system improvements completed since last WRS in 2013.