



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Water System Leak Detection Program		
Presenter & Title:	Bob VanGyseghem, Superintendent of Water and Wastewater Franco Bottalico, Administrative Analyst		
Date:	August 3, 2020		
Please Check Appropriate Box:			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective: EMS-II			
Estimated Cost: \$31,000 annually	Budgeted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Other Funding," please explain how the item will be funded:</i>			
Executive Summary:			
<p>The water system leak detection program has been budgeted over a three-year period beginning in FY 2021. Along with the City of Batavia, staff published a joint Statement of Qualifications and Request for Proposals and received three proposals. The proposals were evaluated at the end of March 2020. In compliance with the law, staff from both cities evaluated the three proposals on the basis of demonstrated competence and qualifications to perform the services. Among the three, M.E. Simpson Co., Inc. (Valparaiso, IN) ranked the highest in the evaluations. Staff from both cities agree that M.E. Simpson Co., Inc. is a reputable professional services firm for leak detection based on their previous experience. The entire distribution system will be surveyed for leaks each of the three years. Each FY has a cost of \$30,697.79, for a total amount of \$92,093.37. The second and third fiscal years of the contract would be dependent upon budgetary approval by the City Council.</p>			
Attachments: <i>(please list)</i>			
<ul style="list-style-type: none"> • Resolution • Proposal Form • M.E. Simpson Co., Inc. SOQ 			
Voting Requirements:			
<p><i>This motion requires <u>5</u> affirmative votes for passage.</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the aldermen or trustees has resulted in a tie; (b) when one half of the aldermen or trustees elected have voted in favor of an ordinance, resolution, or motion even though there is no tie vote; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
Recommendation / Suggested Action: <i>(how the item should be listed on agenda)</i>			
<p>Recommend approval of Resolution authorizing the City Administrator to enter into a contract with M.E. Simpson Co., Inc. in the amount not-to-exceed \$92,093.37 for a three-year water system leak detection program.</p>			

RESOLUTION NO. 2020-51

**RESOLUTION AUTHORIZING EXECUTION OF
Contract for a 3-Year Leak Detection Program**

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, a Contract with M.E. Simpson Co., Inc., subject to the proposal attached hereto as Exhibit "A", relating to a 3-year leak detection program.

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this ____ day of _____, 2020

AYES: __ **NAYS:** __ **ABSENT:** __ **ABSTAINING:** __ **HOLDING OFFICE:** __

Approved by me this ____ day of _____, 2020.

Mayor

ATTEST:

City Clerk



Proposal Form

The undersigned proposes to provide professional services for a three-year leak detection survey of the water distribution system in the City of Geneva, IL.

May 1, 2020 to April 30, 2021	Approximate Footage	Cost Per Foot	Total Cost
Geneva	<u>829,670</u>	\$ <u>0.037</u>	\$ <u>30,697.79</u>
May 1, 2021 to April 30, 2022	Approximate Footage	Cost Per Foot	Total Cost
Geneva	<u>829,670</u>	\$ <u>0.037</u>	\$ <u>30,697.79</u>
May 1, 2022 to April 30, 2023	Approximate Footage	Cost Per Foot	Total Cost
Geneva	<u>829,670</u>	\$ <u>0.037</u>	\$ <u>30,697.79</u>
Total Cost			\$ <u>92,093.37</u>

Emergency Service Cost

Cost \$ *Please see attached.

Per *Please see attached.

By submission of this bid, I certify that this bid has been arrived at independently and has been submitted without collusion between or among any vendor of materials, supplies equipment of services.

Vendor Name: M.E. Simpson Company, Inc.

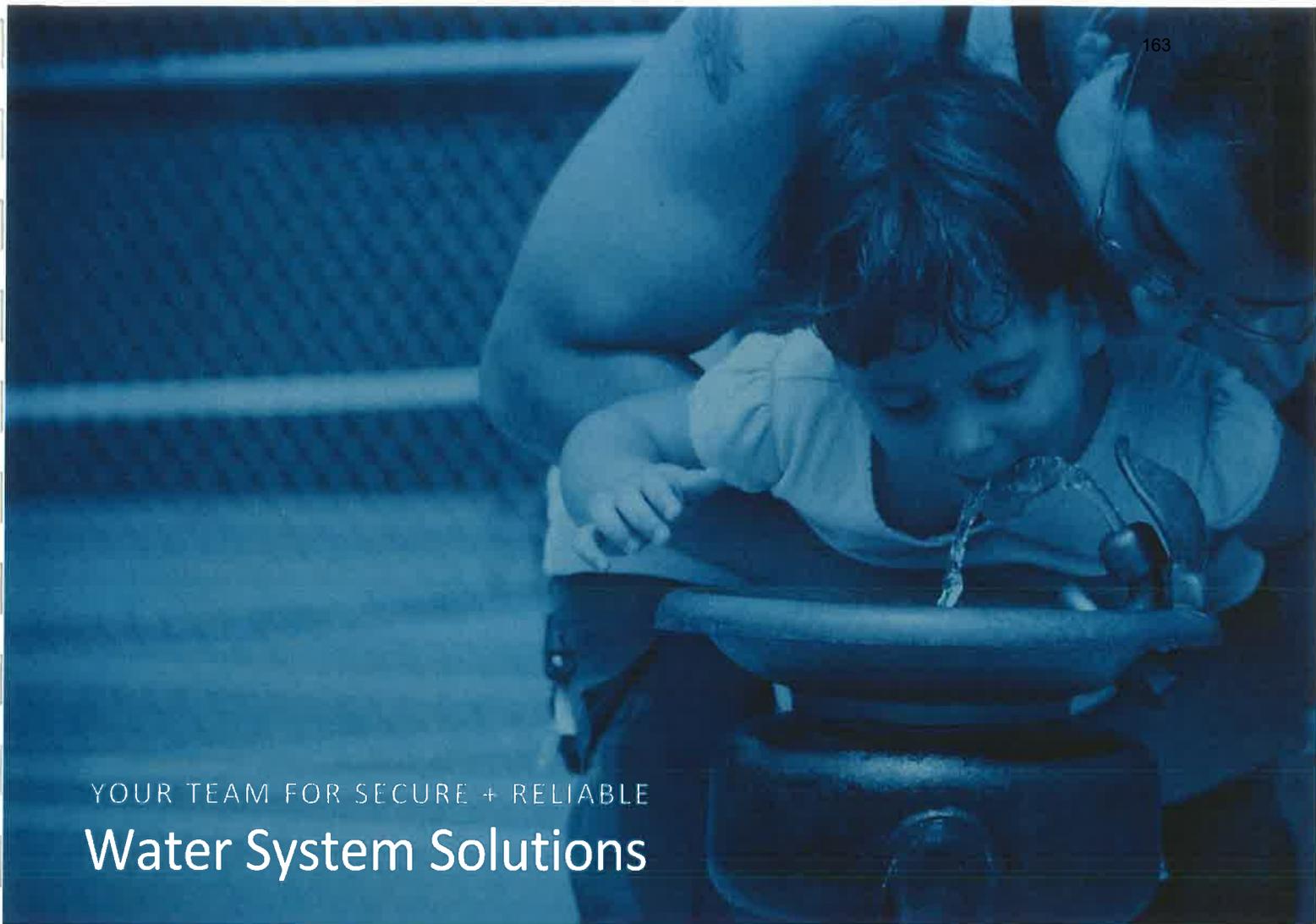
Address, State: 3406 Enterprise Ave, Indiana

Phone Number: (800) 255-1521

Authorize Signature *John H. Van Arsdel*

Title: John H. Van Arsdel, Vice President

Date: March 17, 2020



YOUR TEAM FOR SECURE + RELIABLE
Water System Solutions



STATEMENT OF QUALIFICATIONS AND RFP TO PROVIDE

City of Batavia, Illinois & City of Geneva, Illinois
Joint Leak Detection Program

Due: March 20, 2020 at 3:00 PM



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March 20, 2020

City of Geneva Public Works
Leak Detection Program
1800 South Street
Geneva, IL 60134

RE: PROPOSAL FOR A WATER DISTRIBUTION SYSTEM JOINT LEAK DETECTION PROGRAM

Dear Mr. VanGyseghem,

M.E. Simpson Co., Inc. is pleased to present the City of Geneva Public Works our proposal for a Water Distribution System Joint Leak Detection Program. We are honored to be considered for this work and are confident our team will help make the project a success.

M.E. Simpson Co., Inc. is a Professional Services Firm dedicated to developing and providing programs and services designed to maximize peak performance for our clients' water distribution systems. Many of these programs are universally recognized as a part of "Best Management Practices" (BMPs) for utilities. We pride ourselves on delivering solid solutions using the highest quality technical and professional services by way of state-of-the-art technology and a skilled and well-trained staff of professionals. Our highly-educated engineers and technical team are committed to the success of this project. They will be ready at a moment's notice to relieve your staff's burden and ensure a seamless continuation of your services.

Our services were developed and refined to provide utilities with programs that can be customized to meet their needs. From complete "Turn-Key" services to assisting with the development of "in-house" programs for utilities, M.E. Simpson Co., Inc. serves our clients with this ultimate goal: to deliver to the public the implicit faith that **"the water is always safe to drink"**.

Thank you for your consideration and this opportunity to acquaint you with our leak detection services and offer this response. We are committed to exceeding your expectations.

Sincerely,

A handwritten signature in black ink that reads "John H. Van Arsdel".

John H. Van Arsdel
Vice President

John H. Van Arsdel
Vice President

3406 Enterprise Avenue
Valparaiso, IN 46383

800.255.1521 P
888.531.2444 F

John@mesimpson.com

FIRM HISTORY

M.E. Simpson Co., Inc. was founded in 1979 by Marvin E. Simpson. We are based out of Valparaiso, Indiana, near Chicago, Illinois. Our firm has become the industry leader in developing and providing water loss assessment and distribution system asset management programs and services, aiding our clients in maximizing their peak performance for their water distribution systems. We offer the highest quality Technical and Professional Services, using state-of-the art technologies and highly skilled and trained professionals. Our staff has developed a host of high-tech programs that will ensure that your Utility will be proactive in dealing with your water distribution systems. "Crumbling infrastructure, inaccurate records, conservation, sustainability, water quality, water loss, economic conditions, revenue shortfalls, being green, having enough water"; these are all statements and buzz words in today's society. Currently in the water industry, these words are our reality, thus making them our responsibility.

We've maximized distribution system performance and optimized distribution system data, records, and mapping for all our clients. To date, we have provided Water Loss Control programs that have included over 80,000 Large Water Meters serviced (including several utilities in Georgia), 100,000 miles of Leak Detection services and numerous water audit programs. Our Asset Management services have documented over 500,000 valves located and exercised. Our Fire Hydrant Flow testing program has recorded 80,000 fire hydrants inspected, flow tested, and water main capacity information developed.

Leak Detection History

M.E. Simpson Co., Inc. developed its Water Distribution Leak Survey services in 1987. Since then, we've improved the program so now it is a fundamental water loss control program for our clients.

Our Water Distribution Leak Survey services have been employed since 1987 in a majority of municipalities around the Chicago Metro Area and the Midwest and have spread to other utilities across the US. These programs have benefited municipalities from small systems consisting of 5 miles of pipe to systems with several thousands of miles of pipe.

Additionally, our crews have been deployed to several locations throughout the United States including Georgia, California, and overseas to help utilities with their distribution system leakage issues. Our crews have the unique ability to be able to respond to individual Utility requests because of the cross training they have received performing all the services M.E. Simpson Co. Inc. provides.

Our project manager and personnel have all the equipment and abilities necessary to perform your leak survey and respond to any needs that the Utility may have. We are proud of the work we have performed using the latest technology and meeting the needs of "our customer" the Water Works Industry. We have played an important role in educating utilities about the need for and efficiency of annual water loss programs.

Leak Survey Project Understanding

The Cities of Geneva and Batavia are seeking a qualified firm to provide services for a Water Distribution System Leak Survey. The program is needed to be able to identify and quantify specific leakage issues that are occurring in the water distribution system with the end aim of being able to provide specific directions for location and ultimate repair of the leaks and an overall reduction in the system's water losses.

M.E. Simpson Co., Inc. (MESCO) has been providing leak detection programs for over thirty years.

MESCO has been providing water distribution system leak surveys and emergency leak location services for Chicago suburbs in some cases for over 30 years as well as conducting leak surveys in various locations in the US. Our firm has performed leak surveys on a combined total of over 100,000 miles of pipe since 1987. We have provided Apparent loss assessments, having assessed over 80,000 commercial/industrial large meters for accuracy. Our crews have assessed numerous production water meters (up to 108" in diameter) not only in the Midwest but in several larger cities in the US. Our firm has provided formal water auditing to several cities and towns since 2003 when the IWA/AWWA Water Audit methodology was developed and released for use by the American Water Works Association (AWWA) Water Loss Committee. We have active members on several AWWA committees, including a Past Chair of the Water Loss Control Committee (2010-2014) and past AWWA Vice Presidents and Directors.

MESCO has been producing successful water system leak survey programs in the Chicago metro suburban area since 1987 and understands the complexity of implementing long range distribution system water loss programs for several water systems ranging from Water Commissions to individual municipal systems. MESCO believes that through this work we have established a proven history of delivery, responsiveness, ingenuity and environmental stewardship. We share the same mission as the Cities of Geneva and Batavia and are encouraged by the leadership role that the Cities of Geneva and Batavia is assuming towards a holistic approach to address water system and water loss challenges.

SCOPE OF WORK

Water Distribution System Leak Survey

The Field Scope of Service for the Leak Survey is understood to be the following:

M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to survey the water distribution system areas selected by the City. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified. **There will be a minimum of Two Persons per team working on the survey at all times.**

- ◆ Work in an orderly and **safe** manner to ensure protection of the local residents, Utility employees, and the Field Staff so that no **avoidable** accidents occur.
- ◆ All Field Staff will have readily observable identification badges worn while in the field.
- ◆ The leak detection equipment to be used will be that which was described in the "Equipment to be used" section.
- ◆ Initially listen to **all fire hydrants, all accessible main line valves**, and when necessary, selected service connections in the entire distribution system by making physical contact with the valve, hydrant, pipe, or B-box. (Listening points that are not accessible will be given to the Utility and when corrected they will be listened to.)
- ◆ Listening points of contact will be: valves, hydrants, service valves or meter settings. The preference of listening points in order as follows; direct contact with the pipe, main line valves, hydrant valves, hydrants, then service valves or meter settings.
- ◆ Specific listening distances will be determined by pipe material. Metallic type pipes; no greater than 500' between listening points. Non-Metallic AC/Concrete type pipes; no greater than 300' between listening points. Non-Metallic PVC/HDPE type pipes; no greater than 150' between listening points.
- ◆ A "suspected leak" log shall be maintained indicating all areas where suspected leak noise was heard. This log will be reviewed when the Project Team is verifying the suspected leak area for confirmation of the actual existence of a leak. This log will be a part of the periodic reports turned into the Utility regardless of an actual leak located in the area or not, **with an explanation of the noise source.**
- ◆ When leak noise has been detected and or suspected, the Project Team will verify the suspected area a second time to confirm the noise. At least four hours will pass between the initial listening of the area before a second listen and confirmation is attempted.
- ◆ The Project Team will **line locate** the water main and service lines in the immediate area so the correct pipe distances can be input into the leak correlator and also so that the Water Utility will have an idea of where the water main is located prior to excavation. Non-metallic pipe locations will be "interpolated" as best that can be identified, given the line location of metallic services, Utility knowledge of the area, or other information regarding the actual location of the main.
- ◆ The Project Team will use "State of the Art" **Electronic Leak Correlators** to determine if a leak is present and use the same equipment to pinpoint the leak.
- ◆ For PVC water mains only the Echologics LeakFinder-ST w/hydrophones leak correlator or Fluid Conservation Systems (FCS) TriCorr Touch leak correlator, will be used for correlations because of the ability for these correlators to be able to analyze the particular sound frequencies inherent to PVC pipe.
- ◆ The leak location will be marked in the field (on the surface) using environmentally formulated Precautionary Blue paint.
- ◆ The Project Team will document all leak locations with a diagram indicating the location of the leak. Other information related to that correlation will be included as part of the field sheet such as the filters used for the correlation, line locations, distances between sensors, etc.
- ◆ The locations of leaks requiring **immediate attention (immediate threat to life, injury or traffic)** will be turned in as quickly as possible to facilitate the repair process.
- ◆ The Project Team will report daily or per request of the Utility, to assigned Utility Professional and go over the progress of the previous day, as well as cover what will be surveyed the current day.
- ◆ It may be necessary to conduct parts of the Leak Survey during "off hours" such as at night. This may be required in areas of high traffic volume where traffic noise may affect the ability to detect leak noise, and traffic volume may affect the ability of the Project Team to be able to safely access main line valves in the middle of the street. The Project Team will give 24-hour advanced notice of intent to survey a particular area that may require after hours surveying or nighttime surveying. This is so the Utility can plan for the area to be surveyed,

give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.

- ◆ As a part of the leak program, mapping discrepancies found, distribution assets found in disrepair will be noted and turned into the utility.
- ◆ Leaks verified on the customer's side of a service shut-off will not be located beyond the shut-off. If a leak appears to be on the Customers' side, the Utility will be notified first, then the customer notified and permission granted prior to the water being shut off even for short periods of time where possible and as time allows, as well as the ability for the customer to respond.
- ◆ If the Utility requests leak locations beyond the service shut off on the customer's side of the service line, this will result in an additional charge to the leak survey based on an hourly rate and this service must be agreed upon between the Utility and M.E. Simpson Co., Inc. prior to the start of the survey.
- ◆ Valves and hydrants will not be operated without Utility permission. Valves and hydrants that break during this type of operation are the sole responsibility of the Utility. M.E. Simpson Co., Inc. cannot be responsible for valves and hydrants that break due to pre-existing conditions.
- ◆ The Utility is encouraged to dig up and repair the leaks located as soon as possible so that the area may be re-surveyed while the Project Team is still working on the survey in that general geographical location to ensure no other leaks are present in that area.

Quality Control and Accuracy of Leak Locations

The level of accuracy of leak detection is a matter of taking in all the above considerations and applying those considerations to each individual potential leak location as it is being evaluated. Any statement made as to the level of accuracy of leak locations must be considered based on the individual conditions of each leak.

Locating leaks on a distribution system can be very challenging. It is not a perfect science. Pipes and fittings can leak for a variety of reasons (age, poor installation, material failures, bad soils, etc.), and the ability to locate leaks is dependent on the stated variables listed in the "Project Approach". By employing a strict methodology in the field for conducting a leak survey, these variables can be accounted for and mitigated. The depth of experience of the Project Team is extremely important to maintaining the ability to have accurate locations of leaks. Additionally, crews work as Two-Person Teams in the field, double checking the progress of the work as the survey progresses. The systematic procedure for leak confirmation has been stated in the Scope of Field Service and is restated here.

"Suspected leak areas are always listened to a second time, preferably at a different time of day than originally listened to. The mains and services will be line located to ensure correct pipe distances are used for the correlations. Correlations may need to be performed several times with several configurations to ensure all the possible scenarios have been covered. Sewer manholes may need to be opened and flows observed. If there is any doubt as to the existence of a leak, the area may be checked and correlated at different times to rule out water usage or other factors. The progress of the survey will be monitored by the use of daily logs and a progression map with suspected leak noise indications marked and possible leak locations will be maintained. Field leak location forms will be turned into the Utility according to the agreed schedule. The Project Team will follow up on leak locations by monitoring the repair schedule of the Utility. That way in case a potential leak location is wrong, the Project Team can return to the site and determine why the leak location was incorrect and correct it. This means maintaining a good level of communication between the Project Team in the field, and the Utility. [As a matter of Quality Control for leaks in the field, our Correlators, FCS TriCorr Touch and Echologics LeakFinder-ST have the distinct ability to be able to detect and pinpoint more than one leak in the same relative area, thus allowing better leak coverage and insuring that one leak is not "masking" another leak in the same area.](#) The use of progress reports and meetings will allow for open discussions of problems encountered so solutions can be examined."

Equipment to be used

The following equipment will be used for acoustic leak detection work. All material listed will be on the job site at all times during the callout.

- ◆ State of the Art Leak Correlators
 - Echologics LeakFinderST® w/hydrophones FCS Tri-Corr Touch®; Vivax-Metrotech HL6000;
- ◆ State of the Art Listening Devices:
 - FCS S-30 electronically enhanced listening device
 - Gutermann AquaScope 3 electronically enhanced listening device.
- ◆ RADIO DETECTION LINE LOCATORS.

M.E. Simpson Co., Inc. | **The City of Geneva, Illinois and the City of Batavia, Illinois Joint Leak Detection Program,
Scope of Work**

- ◆ SCHONSTEDT, Fisher Labs or CHICAGO TAPE magnetic locators.
- ◆ All necessary hand tools and valve keys
- ◆ All required traffic control devices and truck mounted directional arrow boards

Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the Leak Survey is in progress. They will be happy to explain and demonstrate the equipment and techniques that are employed by M.E. Simpson Co., Inc. for detecting and locating leaks on the Water System.

Final Reports, Documentations & Communications

M.E. Simpson Co, Inc. will perform the following:

- ◆ Project Team will **meet daily** with assigned Utility personnel to go over areas of survey for prior workday and plan current day and area to survey.
- ◆ The field technicians will be readily available by cellular phone. This will facilitate communications between the Utility and the field technicians. A **24-hour toll-free 800 number** is available for direct contact with M.E. Simpson Co., Inc. for emergencies.
- ◆ **Diagram all leak locations**, date of location, and classify according to severity and an estimate of loss.
- ◆ **The Project Manager will** meet with the Utility regularly for a progress report.
- ◆ **Prepare a progress report** at monthly intervals for the Utility if requested.
- ◆ Develop a **Leak Survey log** of activity which will also have confirmed leaks listed and this list will be turned in weekly (in Excel format). The list will also be included with the final report that will include the following:
 - Mechanical deficiencies discovered
 - Mapping errors on the water atlas
 - Type of monitored appurtenances
 - Location of same for leaks discovered
 - Total estimated loss
- ◆ **Prepare the final report** at the completion of the project which will include all leak location reports with drawings, total of estimated water loss, total pipe distance investigated, a description of the area surveyed, and other problems found in the system during the course of the survey that need the attention of the Water Utility. The leak summary will list leak types such as main leaks, service line leaks, valve leaks, or hydrant leaks. A cost benefit analysis of the survey based on the "cost to produce" water will also be included that describes the financial impact to the Utility for water loss. Recommendations for system maintenance will be a part of this report based on field observations made during the survey. **This final report shall be made available for submission to the Utility within thirty (30) working days of the completion of the fieldwork.**

Assumptions & Services Provided by the Utility

- ◆ The Utility will furnish all maps in an electronic format or paper atlases (two copies) and records necessary to properly conduct the survey.
- ◆ The Utility will assist as necessary to clean out service valves, meter pits and valve-boxes needed for listening.
- ◆ The Utility will provide a Primary Contact Person and/or secondary contact person for the Field Staff to report to on a periodic basis. This person shall act as the official liaison for the duration of the Leak Survey. This person shall have a working knowledge of the water system and will be helpful in attempting to locate particularly hard-to-find water valves for listening and for general information about the water system. *This person will not need to assist the Project Team on a full-time basis,* but only on an "as needed" basis.
- ◆ The Utility will assist, if needed, to help gain entry into sites that may be difficult to get into due to security issues or other concerns.
- ◆ The Utility will assist, if needed, to locate all nonmetallic pipe within the service area. This would include all Concrete Cylinder pipe, Asbestos Cement Pipe, PVC pipe and HDPE pipe.
- ◆ We will encourage the immediate digging of major leaks (main breaks) so that if there are problems with the leak location, the problems can be corrected while the Project Team is close by and can verify the site.

PROJECT MANAGEMENT APPROACH

M.E. Simpson Co., Inc.'s project management approach is what leads to our proven track record to complete projects on time and within the budget established. Based on our past experience, we have developed project management practices that will ensure the Cities of Geneva and Batavia, Illinois of effective communication and project tracking throughout this project. We will follow the Project Management Institute (PMI) standards, including the Project Management Body of Knowledge (PMBOK). These globally accepted standards will assure this project is planned, executed, monitored and controlled in accordance with world class procedures. M.E. Simpson Co., Inc. has seasoned and experienced managers and technicians that will have continuous input, ensuring the results of the Water Distribution System Leak Survey exceed the expectations of the Cities of Geneva and Batavia, Illinois.

Our project management system establishes - the single project manager – who has the responsibility and authority to act on behalf of M.E. Simpson Co., Inc. This project manager will stay with the project from beginning to the successful completion. The project manager's specific responsibilities include:

- ◆ Coordination of all activities in this project.
- ◆ Establishing key decisions and review milestones during this project.
- ◆ Preparing an initial project development plan identifying the schedule of work tasks and key personnel. to perform the work in the field to meet the milestones and objectives.
- ◆ Coordinate communications and meetings with the Utility as needed or required to review technical. concepts and alternatives, soliciting staff input and coordinating activities with the project team.
- ◆ Prepare periodic reports as needed and meet with the Utility on a regular basis summarizing project. scheduling, progress and maintaining the project within the budget stipulated.
- ◆ Oversee the execution and development of the project deliverables.

Project management remains an important activity during the course of the project and does not stop with the Project Manager. For the water distribution leak survey, each member of the project team is dedicated to providing the best leak detection program that can be attained using the state-of-the-art technology and equipment, field experience and engineering knowledge. Our team will be made up of experienced water professionals that are experts in water loss control such as leak surveys and pinpointing, water meter evaluation/testing (residential, commercial, wholesale, and production meters), and water distribution system hydraulic modeling, fire hydrant maintenance/flow testing and valve assessment and exercising.

It is this combination of experience and knowledge that has helped shape our approach to leak surveys in distribution systems because the team members have the capacity to make on the spot decisions regarding any fine tuning of the program. They will maintain constant communication with the Cities of Geneva and Batavia, Illinois District and the Project Manager regarding their progress as well as any major issues needing immediate attention and discussion.

For the leak survey program, each Project Team member assigned to specific tasks is dedicated to providing the best leak detection knowledge that can be attained. MESCO team members have been highly active with the AWWA Water Loss Control Committee helping with the rewrite of the M36 Manual, M33 Manual and revisions to the free Water Audit Software tool. Each team member is highly experienced in the implementation of leak surveys as well as other water loss control programs. It is our team's combination of field experience and engineering knowledge that has shape our approach to water loss control programs in distribution systems. The individual team members have the capacity to make sound decisions regarding any fine tuning of the leak survey. They will maintain constant communication with the Cities of Geneva and Batavia, Illinois and the Project Manager regarding leak survey progress.

MESCO is sure that the selection of our team to perform this work will provide the Cities of Geneva and Batavia, Illinois with exceptional experience, sound decision making, and a level of service providing the following advantages:

- ◆ A professional team with a specialized expertise in leak detection and water loss management.
- ◆ One of the finest and highly experienced technical and engineering team with the capacity to provide the highest quality work for the Cities of Geneva and Batavia, Illinois.
- ◆ A project approach that incorporates interim reporting and continuous input opportunities by the Cities of Geneva and Batavia, Illinois.
- ◆ Innovative proven analysis techniques developed from the completion of several similar projects that sought the same scope and results as this project.

EXPERIENCE OF KEY PERSONNEL

Our team brings the necessary experience for a project of this magnitude, as well as the personal attributes needed to serve the Cities of Geneva and Batavia, Illinois Water Distribution System with distinction. We offer our clients the highest quality technical and professional services, using state-of-the-art technologies and highly skilled and trained professionals. The M.E. Simpson Co., Inc. team members selected to serve the Cities of Geneva and Batavia, Illinois bring significant experience and a proven track record of delivering timely, cost-effective and sound leak survey solutions.

They share a passionate commitment to client service and attention to detail required for a successful project. One of the two Project Leaders listed will lead the Project Team in the field. **Two-Man Project Teams will be used at all times during the course of the project for reasons of safety and quality assurance.**

Project Manager: Aaron M. Horbovetz, PE, PMP

Aaron Horbovetz has been with the Company since September of 1999. He earned his degree in Mechanical Engineering from Purdue University, and is a licensed Civil Engineer in the state of Indiana. He is also a certified Project Management Professional (PMP®). Aaron is a regular presenter at AWWA conferences since 2012, both at section meetings and at the ACE conferences. He has attended numerous classes and lectures related to the operation, maintenance and installation of water meters, and completed classes in plumbing. Aaron has experience in the following: maintenance and installation of water meters; valve location, exercising and mapping, fire hydrant and main capacity flow testing, and the use of state-of-the-art leak detection equipment. He manages the company's hydraulics services division, including all Pitot testing, pump curve analysis, and C-Factor testing.

He is currently Chair of the national AWWA's Customer Metering Practices Committee, and also serves as Chair of the ISAWWA's Water for People Committee.

Professional Certifications:

- ◆ Licensed Professional Engineer, Indiana
- ◆ Certified Project Management Professional (PMP)
 - Member of Project Management's Institute Calumet Chapter
- ◆ 10 Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified
- ◆ Extensive traffic control training
- ◆ Extensive confined space training

Assistant Project Manager: Adam Zagorac

Adam Zagorac has been with the Company since December of 2007. Adam has attended numerous classes and lectures related to the operation, maintenance, and installation of water meters, and completed classes in plumbing. Adam has experience in the following: maintenance and installation of water meters; valve location, exercising and mapping; fire hydrant and main capacity flow testing; and the use of state-of-the-art leak detection equipment. He is also experienced in the use of all of our Polcon® Flow Testing equipment.

Professional Certifications:

- ◆ 10 Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified
- ◆ Extensive traffic control training
- ◆ Extensive confined space training

Project Leader: Bill Thomas

Bill Thomas has been with the Company since August of 2014. He previously worked in the water industry working for a local water utility for 19 years performing water distribution system operations and maintenance. He also worked in the utility industry locating gas, electrical and cable service lines where he received advance line locating classes. Bill has attended numerous classes and lectures related to leak location and pinpointing and recently completed advanced non-intrusive leak detection training and acoustic wave velocity measurement training which can pinpoint leaks on previously difficult piping of non-metallic and large diameter pipe. Bill has experience in the following: testing and evaluation of water meters; valve location and operation, exercising and mapping; fire hydrant and main capacity flow

testing; and the use of state-of-the-art leak detection equipment. He is also experienced in the use of all of our Polcon® Flow Testing equipment.

Professional Certifications:

- ◆ 10-Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified
- ◆ Extensive traffic control training
- ◆ Extensive confined space training

Project Leader: [Kevin Nadelhoffer](#)

Kevin Nadelhoffer has been with the Company in since October 2016. Kevin has traveled all over the country completing various projects including projects in Wisconsin. Kevin is currently involved with the drafting of paperless database programs. Kevin has attended numerous classes and lectures on the operation and maintenance of water meters. He has experience in the maintenance and installation of water meters; in valve location, exercising and mapping; and in the use of state-of-the-art leak detection equipment. Kevin is experienced in water meter, fire hydrant and water main capacity flow testing, and the operation of our Polcon® Flow Testing equipment.

Professional Certifications:

- ◆ 10-Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified
- ◆ Extensive traffic control training
- ◆ Extensive confined space training

Field Technician: [Zachary Brown](#)

Zachary Brown has been with the Company since August 2018. Zachary has attended numerous classes and lectures related to the operation, maintenance, and installation of water meters as well as leak detection. Zachary has experience in the following: maintenance and installation of water meters; valve location, exercising and mapping; fire hydrant and main capacity flow testing; and the use of state-of-the-art leak detection equipment.

Professional Certifications:

- ◆ 10-Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified
- ◆ Extensive traffic control training
- ◆ Extensive confined space training

Field Technician: [Perris Perry](#)

Perris Perry has been with the Company since August 2016. Prior to working for M.E. Simpson Company, Inc., Perris worked as a pharmacy technician. Perris has attended numerous classes and lectures related to the operation, maintenance, and installation of water meters as well as leak detection. Perris has experience in the following: maintenance and installation of water meters; valve location, exercising and mapping; fire hydrant and main capacity flow testing; and the use of state-of-the-art leak detection equipment.

Professional Certifications:

- ◆ 10-Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified
- ◆ Extensive traffic control training
- ◆ Extensive confined space training

LEAK SURVEY REFERENCES

[Village of Shorewood, IL \(2014-2018\)](#)

M.E. Simpson Co., Inc. conducted a Leak Survey on approximately 105.5 miles in 2018 as a way for the Village to reduce water losses occurring in the distribution system. The most recent completed Leak Survey Program in 2018 resulted in the location of 23 leaks totaling 59,040 gallons of water per day. Using a production price of \$3.50 per thousand gallons these leaks were estimated to be costing the utility in excess of \$201.60 per day or **\$73,840.00** annually. The 2018 leak survey paid for itself within 3 months. This project costed a total of \$19,500.00 and was completed in 25 days.

Mr. Chris Drey
 Superintendent of Public Works
 Village of Shorewood
 1 Towne Center Boulevard
 Shorewood, Illinois 60404
 815.725.2150

cdrey@vil.shorewood.il.us

- ◆ Terrence Williams and Adam Zagorac were the Project Managers for this project. Alfred Kapcia was the Project Leader. Thomas Boatner and Daniel Gunkel were Field Technicians for this project.

[Village of Mokena, IL \(2015 – Current\)](#)

M.E. Simpson Co., Inc. conducted a Leak Survey on approximately 115 miles as a way for the Village to reduce water losses occurring in the distribution system. The most recent completed Leak Survey Program was in 2019. Using a selling price of **\$7.10** per thousand gallons is used, these leaks were costing the utility in excess of **\$2,300.40** per day or **\$839,646.00** annually. With the present cost of water and the discovery of 3 leaks, the cost of this 2019 leak survey paid for itself within 1 month. This project costed a total of \$20,700.00 and was completed in 57 days.

Mark Detloff
 Water Superintendent
 Village of Mokena
 11004 Carpenter Street
 (708) 479-3926
 Mokena, Illinois 60448

mdetloff@mokena.org

- ◆ Adam Zagorac was the Project Manager for this Project. Rick Anderson was the Project Leader. Perris Perry and Aaron Embrey were two of the Field Technicians for this project.

[Village of Downers Grove, IL \(2011-2019\)](#)

M.E. Simpson Co., Inc. conducts a Leak Survey on approximately 233 miles per year as a way for the Village to reduce water losses occurring in the distribution system. The completed Leak Survey Program in 2019 resulted in the location of 17 leaks. The leaks were estimated to be costing the utility in excess of **\$566,854.34** annually or **\$1,553.03** per day. This project costed a total of \$40,775.00 and was completed in 60 days.

Mr. David Moody
 Water Division Manager
 Village of Downers Grove
 5101 Walnut Avenue
 Downers Grove, IL 60515-4074
 630-434-5462

dmoody@downers.us

- ◆ Adam Zagorac and Terrence Williams were the Project Managers for this Project. Sandison Petretta was the Project Leader. Konrad Kapcia and Daniel Gunkel were two of the Field Technicians for this project.

WATER DISTRIBUTION SYSTEM EMERGENCY LEAK DETECTION CALL OUTS

M.E. Simpson Co. Inc. has been providing Emergency Leak Location services since 1989. We pride ourselves in operating a professional and timely service when main breaks/leaks occur and the need for an accurate leak location is critical to public safety. It is our pleasure to provide you with the following detailed scope:

- ◆ A minimum of two experienced team members on call 24 hours per day, seven days a week.
- ◆ Phones manned 24 hours per day, seven days per week:
 - Toll-free phone number – 800.255.1521
- ◆ Response time:
 - Phone calls returned within 15 to 30 minutes
 - Response once the call has been made and a plan established with the utility, two (2) hour arrival time on site.
- ◆ Locations:
 - Griffith, Indiana – 69 miles
 - Waukegan, Illinois – 70 miles
 - Valparaiso, Indiana – 96 miles
- ◆ Call-Out Hours, detailed:
 - Standard Weekday Hours (Monday – Friday), 7:00 a.m. to 3:30 p.m.
 - After Hours Weekday Hours (Monday – Friday), 3:30 p.m. to 7:00 a.m.
 - Saturdays, Sundays and Holidays; 24 hours

INVESTMENT

A commitment to improving and maximizing the City of Batavia and City of Geneva’s water distribution system for future generations.

M.E. Simpson Co., Inc. is pleased to present our “Proposal” for Emergency Services Leak Detection for the City of Batavia and City of Geneva, Illinois. M.E. Simpson Co., Inc. will perform our Emergency Leak Detection services on an emergency call out basis on Batavia and Geneva’s water distribution systems. The emergency services will be performed by M.E. Simpson Co.’s highly skilled and trained personnel with all the equipment furnished by M.E. Simpson Co., Inc. as described within this document. The project will also include complete reporting of all emergency leaks located.

Emergency Leak Detection Services 2020 through 2022

- | | |
|---|-------------------|
| 1) Regular Business Hours (7:00 a.m. to 3:30 p.m., Monday through Friday) - | |
| a. Onsite/in the City of Batavia or City of Geneva performing regular (Non-Leak Survey) services: | \$235.00 per hour |
| 2) Regular Business Hours (7:00 a.m. to 3:30 p.m., Monday through Friday) - | |
| a. First Hour: | \$395.00 |
| b. Each Additional Hour: | \$235.00 per hour |
| 3) Saturdays, Sundays & Holidays - | |
| a. First Hour: | \$525.00 |
| b. Each Additional Hour: | \$250.00 per hour |
-

We thank you for this opportunity to acquaint you with our Water Distribution System Emergency Leak Detection services and offer this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

CITY OF GENEVA
PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT, made this 17th day of Aug., 2020 by and between the CITY OF GENEVA, (hereinafter referred to as the "City"), and M.E. Simpson Company, Inc., (hereinafter referred to as the "Company"), with regard to certain services in connection with the **2020 – 2022 JOINT LEAK DETECTION PROGRAM** (hereinafter referred to as the "Project".)

NOW THEREFORE, the City and the Company, in consideration of the mutual covenants hereinafter set forth, agree to as follows:

1. The Company agrees to perform services in connection with the Project as hereinafter stated. The Company shall at all times observe and comply with all laws, ordinances, and regulations of the federal, state, and local governments, which may in any manner affect the preparation of proposals or the performance of the Agreement.
2. The Company has made a proposal to the City, dated March, 17, 2020, attached hereto Exhibit 1 and expressly made a part hereof.
3. This contract will constitute the entire agreement and understanding by and between the parties hereto, and it shall not be considered modified, altered, changed, or amended in any respect unless done so in writing with signatures by both the City and the Company.
4. The terms and conditions of this agreement will be the sole terms and conditions followed for this Agreement, unless otherwise approved in writing by the City Attorney and attached as an exhibit to this agreement. Any and all terms and conditions contained in Company's Proposal will be superseded by the terms and conditions of this agreement.
5. The Company shall obtain, at its own expense, all permits and licenses which may be required to complete the Agreement, and/or required by federal, state, and local regulations and laws.
6. The City does not discriminate on the basis of handicapped status in the admission of, access to, or treatment of employment in its programs and activities.
7. Any payment made to the Company shall be strictly on the basis of quantum meruit. The Company shall submit to the City a detailed breakdown of hourly rates billed to date with each pay request. The detailed breakdown shall be based on the hourly rate breakdown contained in the approved proposal. The City will pay the Company for the performance of the Agreement as follows:



GENEVA - PROFESSIONAL SERVICES AGREEMENT

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Re: 2020 – 2022 JOINT LEAK DETECTION PROGRAM

- a. Monthly payments based on actual work satisfactorily completed, less 10% retainage until final completion of the work
 - b. The total Agreement payment will not exceed \$92,093.37.
 - c. Additions or deductions to the approved total amount for services must be authorized in writing by the City. Any out of scope work must be authorized in writing by the City. Any work performed without written approval from the City shall be solely at the expense of the Company.
 - d. Final payment to the Company will be made once the project has been completed, all paperwork completed and turned into the City of Batavia and/or State of Illinois and approved with the State of Illinois and/or the City of Batavia.
8. The Company shall perform those phases of the Project to which this Agreement applies and shall give consultation and advice to the City during the performance of the services.
9. The Company shall secure and maintain in force throughout the duration of this Agreement, Comprehensive General Liability including Products Liability/Completed Operations insurance naming the City as an additional insured with a \$5,000,000 general liability Certificate of Insurance.

The insurance provided by Company shall be primary, and not contributory to any insurance purchased by the City. All insurance policies required by this contract shall be underwritten by insurance companies with a minimum A.M. Best rating of A:VIII. The certificate of insurance shall provide that it will not be canceled, reduced, or materially changed without providing the City thirty (30) days advance notice, via certified mail.

The Company shall not commence work under this contract until they have obtained all insurance required and such insurance has been approved by the City, nor shall the Company allow any subcontractors (hereafter Subs) to commence work on their subcontract until the same insurance has been obtained by the Sub. The Company and their Subs shall maintain all insurance for not less than one (1) year after completion of this contract.

If the Company is providing architectural, engineering, or surveying services, Company shall also file a certificate of insurance for professional liability, errors and omissions coverage subject to final acceptance by the City of said coverage.

In the event the City requires contractors or subcontractors working on City projects to acquire and provide proof of insurance covering public liability, death, and property damage naming the City as an insured, the City shall require said contractors or subcontractors to name the Company as an additional insured.



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10. The Company shall provide the services as required herein in accordance with the Project Schedule.
11. The Company shall attend conferences and visit the site of the work as may be outlined in the Request for Proposal at any reasonable time when requested to do so by the City.
12. The Company represents and warrants that they are technically qualified and entirely conversant with the requirements of this Project; and that they have sufficient properly trained, organized, and experienced personnel and/or subcontractors to perform the services enumerated herein.
13. The City and the Company each binds themselves and their partners, successors, executors, administrators, and assigns to the other party of this Agreement and to the partners, successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Agreement; except as above, and as noted in the attachments, neither the City nor the Company shall assign, subcontract, or transfer their interest in this Agreement without the written consent of the other. Nothing herein will be construed as creating any personal liability on the part of any officer or agent of any public body, which may be a party hereto, nor will it be construed as giving any rights or benefits hereunder to anyone other than the City and Company.
14. The Company shall indemnify, defend, and hold harmless the City, its officers, agents and employees, from and against any and all claims, losses or liability, or any portion thereof, arising from injury or death to persons or damage to property occasioned by the negligent act, omission, or failure of the Company, its officers, agents and employees, in performing the work required by this Agreement
15. The City agrees to review each and every phase of the Project as in the aforementioned proposal in a timely manner. Upon approval of each phase, the Company shall then proceed to the next phase.
16. All drawings, specifications, reports, and any other project documents prepared by the Company in connection with any or all of the services to be furnished hereunder shall be delivered to the City for the expressed use of the City. The Company does have the right to retain original documents but shall cause to be delivered to the City such quality of documents so as to assure total reproducibility of the documents delivered. All information, worksheets, reports, design calculations, plans, and specifications shall be the sole property of the City unless otherwise specified in the negotiated agreement. The Company agrees that the basic survey notes and sketches, charts, computations, and other data prepared or obtained by the Company pursuant to the Agreement will be made available, upon request, to the



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City without cost and without restriction or limitations as to their use. All field notes, test records, and reports shall be available to the City upon request.

17. The City reserves the right by written amendment to make changes in requirements, amount of work, or engineering time schedule adjustments. The Company and the City shall negotiate appropriate adjustments acceptable to both parties to accommodate any changes.
18. The City may, at any time by written order, require the Company to stop all or part of the services required by this Agreement. Upon receipt of such an order the Company shall immediately comply with its terms and take all steps to minimize the occurrence of costs allocable to the services covered by the order. The City will pay for costs associated with suspension provided, they are deemed reasonable by the City.
19. The City reserves the right to terminate the whole or any part of this Agreement, upon ten (10) calendar day's written notice to the Company. The City further reserves the right to cancel the whole or part of the Agreement, if the Company fails to perform any of the provisions in the Agreement or fails to make delivery within the time stated. The Company will not be liable to perform if situations arise by reason of acts of God or public enemy, acts of City, fires, or floods.
 - e. Should any of the key personnel identified in the Proposal become unavailable to work on the project, and no permanent substitute personnel reasonably satisfactory to the City is provided by the Company within thirty (30) days, and/or no temporary replacement personnel is provided by the Company immediately following the commencement of the subject Key Personnel's unavailability, the City may, at its election, declare such contract terminated and at an end, reserve the right to maintain and action to recover damages arising due to breach of contract
 - f. The City reserves the right to terminate in whole or any part of this contract, upon written notice to the Company, in the event of default by the Company. Default is defined as failure of the Company to perform any of the provisions of this contract or failure to make sufficient progress so as to endanger performance of this contract in accordance with its terms. In the event of default and termination, the City may procure, upon such terms and in such manner as the City may deem appropriate, supplies or services similar to those so terminated.

The Company shall be liable to the City for all excess costs for such similar supplies or service unless evidence is submitted to the City that in the sole opinion of the City clearly proves that failure to perform the contract was due to causes beyond the control and without the fault or negligence of the Company.



- g. Upon termination, the Company shall cause to be delivered to the City all surveys, reports, permits, agreements, calculations, drawings, specifications, partially and completed estimates, and data, as well as products of computer aided drafting, design, and writing that have been paid for by the City. Cost of termination incurred by the Company before the termination date will be reimbursed by the City only, if prior to the effective termination date, the City receives from the Company a list of actions necessary to accomplish termination and the City agrees in writing that those actions be taken. Upon receipt of the termination notice, the Company shall stop all work until said Agreement is reached.
20. The City agrees to notify the Company at least twenty-four (24) hours in advance of the need for personnel or services.
21. Nothing contained in this Agreement, nor the performance of the parties hereunder, is intended to benefit, nor shall inure to the benefit of, any third party, including the City's Contractors, if any.
22. A notice relating to claims for damages or relating to allegations of default shall be in writing and shall be made by certified or registered mail, postage prepaid, return receipt requested, or reliable overnight courier, to the parties as follows:
- If to Company:* _____

- If to the City:* City of Geneva – Public Works Dept.
Attention: Leak Detection Program
1800 South Street
Geneva, IL 60134
- with copies to:* City of Geneva
Attention: Bob VanGyseghem
1800 South Street
Geneva, IL 60134
23. This Agreement contains the entire agreement between the parties. No other writing, discussion or any other communication about possible terms is to be construed as forming part of the agreement between the parties. Any terms and conditions submitted by the Company as part of its proposal are specifically disavowed and such terms and conditions shall not supersede this Agreement.



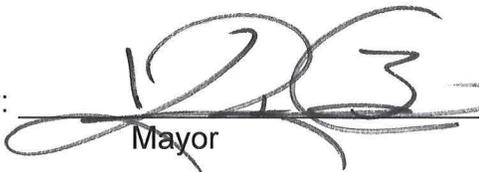
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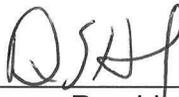
24. This Agreement shall be binding upon the partners, heirs, successors, executors, administrators, and assigns of all the parties hereto.
25. This Agreement shall be construed in accordance with the laws of the State of Illinois. Venue for any litigation arising from this Agreement shall be limited to the Courts of the Sixteenth Judicial Circuit, Kane County, Illinois.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the date first above written.

CITY OF GENEVA, an Illinois
Municipality,

Company,

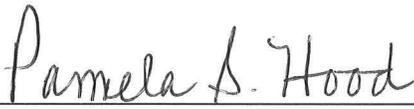
By:  Mayor

By:  President

Attest:

By:  Deputy City Clerk

Attest:

By:  Secretary



Proposal Form

The undersigned proposes to provide professional services for a three-year leak detection survey of the water distribution system in the City of Geneva, IL.

May 1, 2020 to April 30, 2021	Approximate Footage	Cost Per Foot	Total Cost
Geneva	<u>829,670</u>	\$ <u>0.037</u>	\$ <u>30,697.79</u>
May 1, 2021 to April 30, 2022	Approximate Footage	Cost Per Foot	Total Cost
Geneva	<u>829,670</u>	\$ <u>0.037</u>	\$ <u>30,697.79</u>
May 1, 2022 to April 30, 2023	Approximate Footage	Cost Per Foot	Total Cost
Geneva	<u>829,670</u>	\$ <u>0.037</u>	\$ <u>30,697.79</u>
Total Cost			\$ <u>92,093.37</u>

Emergency Service Cost Cost \$ *Please see attached. Per *Please see attached.

By submission of this bid, I certify that this bid has been arrived at independently and has been submitted without collusion between or among any vendor of materials, supplies equipment of services.

Vendor Name: M.E. Simpson Company, Inc.

Address, State: 3406 Enterprise Ave, Indiana

Phone Number: (800) 255-1521

Authorize Signature *John H. Van Arsdel*

Title: John H. Van Arsdel, Vice President

Date: March 17, 2020