

---

---

**THE VILLAGE OF TINLEY PARK**

**Cook County, Illinois**

**Will County, Illinois**

---

---

**RESOLUTION  
NO. 2022-R-102**

---

---

**A RESOLUTION APPROVING A CONTRACT BETWEEN THE VILLAGE OF TINLEY  
PARK AND M.E. SIMPSON FOR WATER ASSESSMENT PROGRAM**

---

---

**MICHAEL W. GLOTZ, PRESIDENT  
NANCY M. O'CONNOR, VILLAGE CLERK**

**WILLIAM P. BRADY  
WILLIAM A. BRENNAN  
DIANE M. GALANTE  
DENNIS P. MAHONEY  
MICHAEL G. MUELLER  
COLLEEN M. SULLIVAN  
Board of Trustees**

---

---

**RESOLUTION NO. 2022-R-102**

**A RESOLUTION APPROVING A CONTRACT BETWEEN THE VILLAGE OF TINLEY PARK  
AND M.E. SIMPSON FOR WATER ASSESSMENT PROGRAM**

**WHEREAS,** the Village of Tinley Park, Cook and Will Counties, Illinois, is a Home Rule Unit pursuant to the Illinois Constitution of 1970; and

**WHEREAS,** the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have considered entering into a Contract with M.E. Simpson a true and correct copy of such Contract being attached hereto and made a part hereof as **EXHIBIT 1**; and

**WHEREAS,** the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interests of said Village of Tinley Park that said Contract be entered into by the Village of Tinley Park;

**NOW, THEREFORE, Be It Resolved** by the President and Board of Trustees of the Village of Tinley Park, Cook and Will Counties, Illinois, as follows:

**Section 1:** The Preambles hereto are hereby made a part of, and operative provisions of, this Resolution as fully as if completely repeated at length herein.

**Section 2:** That this President and Board of Trustees of the Village of Tinley Park hereby find that it is in the best interests of the Village of Tinley Park and its residents that the aforesaid "Contract" be entered into and executed by said Village of Tinley Park, with said Contract to be substantially in the form attached hereto and made a part hereof as **EXHIBIT 1**.

**Section 3:** That the President and Clerk of the Village of Tinley Park, Cook and Will Counties, Illinois are hereby authorized to execute for and on behalf of said Village of Tinley Park the aforesaid Contract.

**Section 4:** That this Resolution shall take effect from and after its adoption and approval.

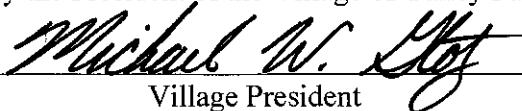
**ADOPTED** this 6th day of September, 2022, by the Corporate Authorities of the Village of Tinley Park on a roll call vote as follows:

**AYES:** Brady, Brennan, Galante, Mahoney, Mueller, Sullivan

**NAYS:** None

**ABSENT:** None

**APPROVED** this 6th day of September 6, 2022, by the President of the Village of Tinley Park.

  
Village President

**ATTEST:**

  
Village Clerk

# **EXHIBIT 1**

**A RESOLUTION APPROVING A CONTRACT BETWEEN THE VILLAGE OF TINLEY PARK  
AND M.E. SIMPSON FOR WATER ASSESSMENT PROGRAM**

STATE OF ILLINOIS        )  
COUNTY OF COOK         )       SS  
COUNTY OF WILL         )

CERTIFICATE

I, NANCY M. O’CONNOR, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 2022-R-102, “**A RESOLUTION APPROVING A CONTRACT BETWEEN THE VILLAGE OF TINLEY PARK AND M.E. SIMPSON FOR WATER ASSESSMENT PROGRAM,**” which was adopted by the President and Board of Trustees of the Village of Tinley Park on September 6, 2022.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 6th day of September, 2022.

---

VILLAGE CLERK

## VILLAGE OF TINLEY PARK

### SERVICE CONTRACT

This contract is by and between the **Village of Tinley Park**, an Illinois home-rule municipal corporation (the "Village"), and **M.E. Simpson** (the "Contractor"), for the project or work described in Exhibit A, attached hereto and made a part hereof.

1. In consideration of the compensation stated in paragraph 2, the Contractor shall provide all the services described in the Scope of Services attached hereto as Exhibit "A" and incorporated herein by reference. The express terms of this Contract shall take precedence and control over any term or provision of the Scope of Services (Exhibit A) that in any way conflicts with, differs from, or attempts to alter the terms of this Contract.
2. Except in the event of a duly authorized change order approved by the Village as provided in this Contract, and in consideration of the Contractor's final completion of all work in conformity with this Contract, the Village shall pay the Contractor an amount not to exceed **One Hundred Forty Nine Thousand Three Hundred and 00/100 Dollars (\$149,300.00)**. Within thirty (30) calendar days of completion of the work, the Contractor shall submit his application for payment to the Village, and the Village shall pay Contractor for the work performed no later than **thirty (30)** calendar days from the date of the Village's receipt and the Village's approval of the work and the application for payment. No payment shall be made by the Village until the Contractor has submitted to the Village (i) a Contractor's Affidavit listing all subcontractors and material suppliers utilized on the project and (ii) final waivers of lien from the Contractor, all subcontractors and all material suppliers.
3. No changes shall be made, nor will invoices for changes, alterations, modifications, deviations, or extra work or services be recognized or paid except upon the prior written order from authorized personnel of the Village. The Contractor shall not execute change orders on behalf of the Village or otherwise alter the financial scope of the Project.
4. Written change orders may be approved by the Village Manager or his designee provided that the change order does not increase the amount set forth in paragraph 2 of this Contract to more than \$10,000.00. Changes in excess of this amount must be approved by the Village Board prior to commencement of the services or work. **If a requested change causes an increase or decrease in the cost of or time required for the performance of the contract, Contractor will agree to an equitable adjustment in the contract price or performance schedule, or both. Neither party is obligated to comply with requested changes unless and until both parties execute a written change order.**
5. **Time is of the essence on this Contract.** The Contractor shall complete all work under this Contract by the dates set forth below:
6. No "Notice to Proceed" may be given nor any work commenced until this Contract is fully executed and all exhibits and other attachments are completely filled out and attached hereto.
7. It is understood and agreed by the parties that the Contractor is an independent contractor retained for the above-mentioned purpose. The Village shall not control the manner nor the means of the Contractor's performance, but shall be entitled to a work product as described herein. The term "subcontractor" shall mean and include only those hired by and having a direct contract with Contractor for performance of work on the Project. The

Village shall have no responsibility to any subcontractor employed by a Contractor for performance of work on the Project, and all subcontractors and material suppliers shall look exclusively to the Contractor for any payments due. The Village will **not** be responsible for reporting or paying employment taxes or other similar levies that may be required by the United States Internal Revenue Service or other State or Federal agencies. Every subcontractor shall be bound by the terms and provisions of this Contract as far as applicable to their work. The Contractor shall be fully responsible to the Village for the acts and omissions of its subcontractors, and shall ensure that any subcontractors perform in accordance with the requirements of this Contract. Nothing contained herein shall create any contractual or employment relations between any subcontractor and the Village. The Contractor is solely responsible for the safety procedures, programs and methods of its employees and agents and shall hold the Village harmless for any and all damages resulting from violations thereof. The Contractor shall comply with all applicable federal, State and local safety laws and regulations.

8. **It is further agreed that the Contractor shall indemnify, hold harmless, and defend the Village, its officers, agents, and employees from and against any and all claims, losses, damages, causes of action, suits, and liability of every kind, including all expenses of litigation, court costs, and attorneys' fees, for injury to or death of any person or for damage to any property arising out of or in connection with the Contractor's negligence under this Contract.**
9. **The Contractor assumes full responsibility for the work to be performed hereunder and hereby releases, relinquishes, and discharges the Village, its officers, agents, and employees from all claims, demands, and causes of action of every kind and character, including the cost of defense thereof, for any injury to or death of any person and any loss of or damage to any property that is caused by, alleged to be caused by, arising out of, or in connection with the Contractor's negligence in its work to be performed hereunder. The Contractor shall maintain insurance coverage in an amount and from a carrier suitable to the Village, and the Village shall be named as an additional insured where required. Certificates of Insurance are attached hereto as Exhibit B.**
10. The Village is exempt from payment of state and local sales and use of taxes on labor and materials incorporated into the project. If necessary, it is the Contractor's responsibility to obtain a sales tax permit, resale certificate, and exemption certificate that shall enable the Contractor to buy any materials to be incorporated into the project and then resale the aforementioned materials to the Village without paying the tax on the materials at the time of purchase. In no event will the Village be liable for or pay any sales or use taxes incurred by the Contractor in performing the services under this contract.
11. The Contractor shall comply with all applicable federal, state, and local statutes, regulations, ordinances, and other laws, including but not limited to the Immigration Reform and Control Act (IRCA). The Contractor may not knowingly obtain the labor or services of an unauthorized alien. The Contractor, not the Village, must verify eligibility for employment as required by IRCA.
12. At any time, the Village may terminate this Contract for convenience, upon written notice to the Contractor. The Contractor shall cease work immediately upon receipt of such notice. The Contractor shall be compensated for services performed and accepted by the Village up to the date of termination.

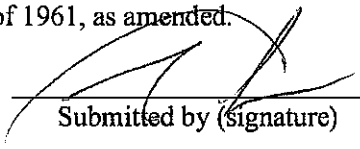
13. No waiver or deferral by either party of any term or condition of this Contract shall be deemed or construed to be a waiver or deferral of any other term or condition or subsequent wavier or deferral of the same term or condition.
14. This Contract may only be amended by written instrument approved and executed by the parties.
15. This Contract and the rights and obligations contained herein may not be assigned by the Contractor without the prior written approval of Village.
16. The parties hereby state that they have read and understand the terms of this Contract and hereby agree to the conditions contained herein.
17. This Contract has been made under and shall be governed by the laws of the State of Illinois. The parties agree that performance and all matters related thereto shall be in Cook County, Illinois.
18. Contractor, its employees, associates or subcontractors shall perform all the work hereunder. Contractor agrees that all of its associates, employees, or subcontractors who work on this Project shall be fully qualified and competent to do the work described hereunder. Contractor shall undertake the work and complete it in a timely manner.
19. If any provision of this Contract shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court of competent jurisdiction finds that any provision of this Contract is invalid or unenforceable, but that by limiting such provision it may become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.
20. This Contract represents the entire and integrated agreement between the Village and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral.
21. This Contract will be effective when signed by the last party whose signing makes the Contract fully executed.
22. The Contractor agrees to comply with the Illinois Prevailing Wage Act, if the work to be performed under this Contract is covered by said Act.
23. The Contractor agrees to comply with the Illinois Substance Abuse Prevention on Public Works Projects Act.

### Eligibility to Contract

The undersigned hereby certifies that the Contractor is not barred from bidding on or entering into this contract as a result of a violation of either the bid-rigging or bid-rotating provisions of Article 33E of the Criminal Code of 1961, as amended.

M.E. Simpson Company, Inc.

Name of Contractor (please print)

  
Submitted by (signature)

Chief Executive Officer

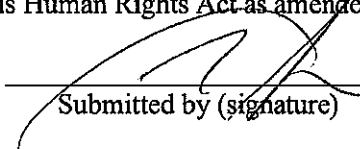
Title

### Certificate of Compliance with Illinois Human Rights Act

The undersigned hereby certifies that the Contractor is in compliance with Title 7 of the 1964 Civil Rights Act as amended and the Illinois Human Rights Act as amended.

M.E. Simpson Company, Inc.

Name of Contractor (please print)

  
Submitted by (signature)

Chief Executive Officer

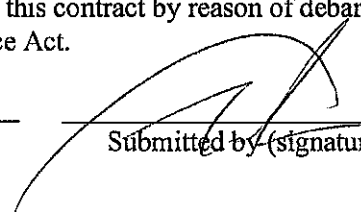
Title

### Certificate of Compliance with Illinois Drug-Free Workplace Act

The undersigned, **having 25 or more employees**, does hereby certify pursuant to section 3 of the Illinois Drug Free Workplace Act (30 ILCS 580/3) that it shall provide a drug-free workplace for all employees engaged in the performance of the work under the contract by complying with the requirements of the Illinois Drug-Free Workplace Act and, further certifies, that it is not ineligible for award of this contract by reason of debarment for a violation of the Illinois Drug-Free Workplace Act.

M.E. Simpson Company, Inc.

Name of Contractor (please print)

  
Submitted by (signature)

Chief Executive Officer

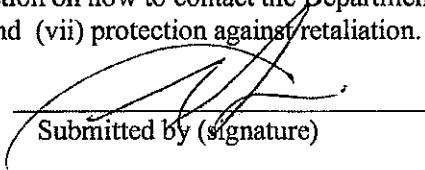
Title

### Certificate Regarding Sexual Harassment Policy

The undersigned does hereby certify pursuant to section 2-105 of the Illinois Human Rights Act (775 ILCS 5/2-105) that it has a written sexual harassment policy that includes, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under State law; (iii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Department of Human Rights and Human Rights Commission; (vi) direction on how to contact the Department of Human Rights and Human Rights Commission; and (vii) protection against retaliation.

M.E. Simpson Company, Inc.

Name of Contractor (please print)

  
Submitted by (signature)

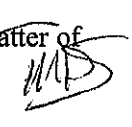
Chief Executive Officer

Title

### Certificate of Compliance with Substance Abuse Prevention on Public Works Projects Act

The undersigned hereby certifies that:

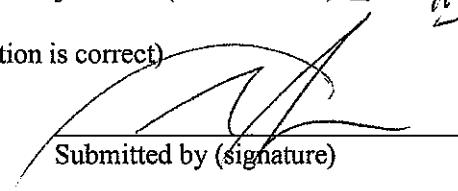
A. There is in place a written program which meets or exceeds the program requirements of the Substance Abuse Prevention on Public Works Projects Act (P.A. 95-0635), and has provided a written copy thereof to the Village of Tinley Park.

~~B. There is in place a collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (P.A. 95-0635)~~ 

(Cross out either A or B depending upon which certification is correct)

M.E. Simpson Company, Inc.

Name of Contractor (please print)

  
Submitted by (signature)

Chief Executive Officer

Title

### Certificate of Compliance with Prevailing Wage Requirements

The undersigned hereby certifies that:

This contract calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/01 et seq. ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://www.state.il.us/agency/idol/rates/rates.HTM>. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding

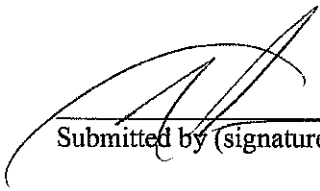
current prevailing wage rates, please refer to the Illinois Department of Labor's website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

M.E. Simpson Company, Inc.

Name of Contractor (please print)

Chief Executive Officer

Title

  
Submitted by (signature)

**Certificate of Compliance with the Village of Tinley Park Responsible Bidder Ordinance**

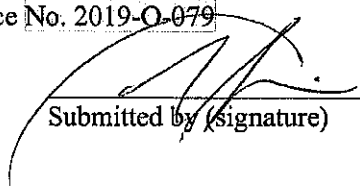
The undersigned or the entity making the proposal or bid has reviewed and is in compliance with the Village of Tinley Park Responsible Bidder Ordinance No. 2019-O-079

M.E. Simpson Company, Inc.

Name of Contractor (please print)

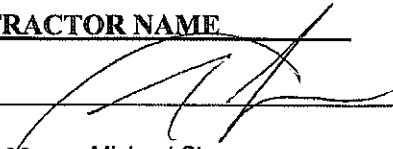
Chief Executive Officer

Title

  
Submitted by (signature)

**[Signature Page to Follow]**

**CONTRACTOR NAME**

BY: 

8/29/22

Date

Printed Name: Michael Simpson

Title: Chief Executive Officer

**VILLAGE OF TINLEY PARK**

BY: 

9-6-2022

Date

Michael W. Glotz, Village President  
(required if Contract is \$20,000 or more)

ATTEST:



9-6-2022

Date

Village Clerk

(required if Contract is \$20,000 or more)

**VILLAGE OF TINLEY PARK**

BY: \_\_\_\_\_

Village Manager

\_\_\_\_\_  
Date

## **SCOPE OF SERVICES**

### **Scope of work as detailed below:**

1. Perform a fire hydrant assessment on the distribution system to such an extent as to locate, evaluate, and improve the operability of the fire hydrants through hands on-field activities.
2. Perform water main capacity assessment on the distribution system to such an extent as to assess, record water flowed, mark, and grease fire hydrants through hands-on field activities.
3. Perform leak detection on the distribution system to such an extent as to locate, known and unknown leaks through active leak detection and correlation methods.
4. Perform a valve assessment on the distribution system to such an extent as to locate, evaluate, and improve the operability of the valves in the water distribution system through hands on field activities.
5. Document, integrate and analyze location, operational and physical information of fire hydrants, valves, and identify leaks in the water distribution system through this program.

## SCOPE OF WORK

### Fire Hydrant Maintenance Program

The Field Scope of Service for the Fire Hydrant Maintenance and Flow Testing is understood to be the following:

Fire hydrants are very important components in a water distribution system. Not only do they provide fire suppression, but serve many other useful functions as well. Hydrants are routinely used for flushing water mains, testing chlorine residuals, street and sewer cleaning, and providing water for construction purposes. However, fire hydrants must be operable and capable of providing adequate fire-flow at all times; that is their primary function. To assure hydrants can be used at any time, a systematic inspection and maintenance program should be in place. By methodically examining all of the hydrants in a distribution system, problems can be identified and corrected before they become catastrophic.

### Inspection Process

Hydrants should be inspected on a regular basis, at least once a year. To maintain ISO certification, twice a year inspections need to be performed. Dry-barrel hydrants require two inspections per year, summer and winter, to mitigate the possibility of water freezing in the barrel. This is especially important in areas with high ground water where proper drainage could be affected.

Insurance ratings and ISO certifications are based in part, on the condition of the hydrants, and how closely they meet the standards for operation. Public safety depends on the ability to identify malfunctioning hydrants and being able to repair them in a timely fashion.

### General Hydrant Inspection

- ✦ **Appearance:** The color and condition of the paint, based on the Utilities color scheme, will be assessed. Hydrants that have been displaced due to ground-shifting or collision will be documented and the Utility notified immediately. If necessary, bollards will be recommended to protect the hydrant from future collisions. Hydrants located very close to roadways and vehicle traffic will be documented, so they can be moved by the Utility.
- ✦ **Accessibility:** A recommendation will be made to raise or lower a hydrant when improper distance from the ground inhibits proper function. Pumper ports and nozzles that do not face the correct direction will be documented, so that the hydrant can be rotated.
- ✦ **Location:** If GPS option is chosen, the exact location will be determined using GPS and “x-y” coordinates, based on permanent local features.
- ✦ **Leakage:** An electronic listening device will be used to ensure that the fire hydrant is not leaking.
- ✦ **Functionality:** The condition of the pumper/nozzle threads and caps will be assessed for damage and proper function, and will be lubricated for ease of operation. Dry-barrel hydrants will be checked for proper drainage. The condition of the operating nut will be determined, with regard to excessive wear or rounding. Hydrants that are difficult to operate will be exercised, by repeatedly opening and closing the main-valve with the pumper/nozzle caps securely fastened. Hydrants that exhibit evidence of unauthorized operation will be documented so that security devices can be installed to protect against unauthorized usage in the future.

The above is a general description of the type of information gathered during an inspection to determine the condition of the hydrant, and would be used to schedule any necessary repairs. Detailed procedures for inspecting fire hydrants are given below (based on AWWA M17 – ‘Installation, Field Testing, and Maintenance of Fire Hydrants’). Our technicians will use the following methodology when performing hydrant maintenance.

## Dry-Barrel Hydrant Inspection & Maintenance Procedure

- Check and record static pressure.
- Check the hydrants appearance. Condition of paint and proper color-coding will be assessed.
- Hydrants that need to be raised or lowered will be documented, as well as accessibility issues.
- Remove one nozzle/pumper cap and, using a listening device, check for main valve leakage. Repair or schedule a repair, as necessary.
- Replace the nozzle/pumper cap, loose enough for air to escape. Open hydrant a few turns, allowing air to vent from loose cap. Tighten the cap.
- Open hydrant fully, checking for ease of operation. Repeatedly exercise the operating stem, as needed, to remove buildup and promote better operation. If lubrication or stem replacement is required, perform or schedule the necessary work.
- With the hydrant fully pressurized, check for leakage around the flanges, nozzles/pumpers, seals, and operating nut. Repair or schedule a repair, as necessary.
- Partially close the hydrant to open the drain outlets, with the caps in place to ensure static pressure against the weep holes.
- Completely close the hydrant, and then turn the operating nut ¼ turn to ½ turn closed to relieve the pressure on the thrust bearing or packing.
- Remove a nozzle/pumper cap, and attach a diffuser. Flush the hydrant to remove foreign material.
- Close the hydrant and remove the diffuser. Place your hand over the nozzle/pumper to check for suction as the water drains out of the barrel. For no-drain hydrants, the water must be pumped from the barrel.
- Check for main valve leakage with an amplified listening device.
- Remove all nozzle/pumper caps and inspect the threads. Clean and apply approved lubricant to caps and nozzles/pumpers.
- Inspect cap chains for binding and ease of movement. Unbind or replace, as necessary.
- Replace the caps and tighten them to the Utilities specification.
- Check operating nut lubrication and maintain as needed.
- Inspect breakaway device for damage.
- **Collect or verify the GPS location of hydrant and the “x-y” location** to the same GPS requirements of the valve assessments (sub foot accuracy).
- Notify the Utility immediately of inoperable hydrants needing major repair.
- Lubrication based on manufacturer’s procedures and recommendations (On fully assembled hydrant)

## ISO Requirements

Hydrant maintenance and upkeep is one of many steps leading to ISO certification. ISO certification, with respect to hydrants, requires that a Utility perform hydrant maintenance every six months, including:

- ✦ Location and number identification
- ✦ Identification of physical damage or defect
- ✦ Removing obstructions and debris on or around the hydrant
- ✦ Insure hydrant outlets face the proper direction
- ✦ Make sure **there is a minimum 15" clearance between lowest outlet and the ground** and ensure traffic feature, if present, is visible and above grade to ensure that it works as intended
- ✦ Insure the auxiliary valve is visible
- ✦ Determine the condition of paint and correct color code
- ✦ All outlets have been cleaned and lubricated
- ✦ Determine the status: Public, Private, or Non-Potable hydrant
- ✦ Obtain static pressure reading
- ✦ **Operating stem has been exercised and lubricated per manufacturer's recommendations and procedures**
- ✦ Hydrant reflectors and markers have been installed and/or repaired
- ✦ An amplified listening device is used to check for leaks

M.E. Simpson Co., Inc.'s approach to hydrant maintenance comes directly from the AWWA M17 manual, and meets or surpasses all ISO requirements.

## Reports

- ✦ All of the information regarding the hydrant, the inspection, and the repair work, will be summarized in a detailed report.
- ✦ Records will be kept electronically, permitting the efficient accumulation and storage of all hydrant data, which can be used to spot trends and to maximize asset management.
- ✦ All inspection and flow data will be managed using web-based Pro-Maps® software, which allows for remote access to all of the hydrant inspection and maintenance records.
- ✦ The progress of the maintenance program will be easily tracked. This helps to determine the effectiveness of the program, and to make decisions regarding future actions that may be needed.

## Fire Hydrant Flow/Watermain Capacity Testing Program

The Field Scope of Service for the Fire Hydrant Flow/Watermain Capacity Testing Program is understood to be the following:

M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to flow test hydrants in the water distribution system selected by the Utility. 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 hydrant flow testing program at all times.**

### Customer Notification

- ✦ M.E. Simpson Co., Inc. can provide the Utility an informational letter briefly explaining the fire hydrant flow-testing program to include with the customer's normal water bill. Frequently, special mailings are used for customer notification. If you choose a special mailing, the Utility will be responsible for the postage and printing costs.
- ✦ M.E. Simpson Co., Inc. can help issue a press release to briefly explain the fire hydrant flow-testing program and the areas affected. The press releases can be sent to; local newspapers, local radio stations and the Cable Company. This type of customer notification can greatly reduce the number of customer complaints about dirty water.
- ✦ M.E. Simpson Co., Inc. will use large flushing signs in designated areas to notify areas to be flow tested and inspected.

### Field Scope

- ✦ Work in an orderly and **safe** manner to insure 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. All vehicles used in the field will have company signs attached.
- ✦ **The flow testing equipment to be used will be that which was described in the "Equipment to be used" section.**
- ✦ M.E. Simpson Co., Inc. Personnel will meet with the Utility to review the project guidelines and answer any questions on procedures.
- ✦ The initial layout of the project will need to involve distribution Utility staff to help identify the flow patterns in the distribution system, flow testing from larger mains into smaller mains, from the water sources (pump stations and water storage structures), out into the system loops and dead ends.
- ✦ Any pressure zones in the distribution system will be identified on the water atlas prior to developing the fire hydrant flow-testing program. This will need to be done with distribution personnel prior to the start of the program.
- ✦ As a part of the hydrant flow testing program, mapping discrepancies found on the current water atlas will be noted and included as a part of the final report so the Utility can make needed corrections. This will be included as a part of the periodic reporting to the Utility, thus enabling the Utility to keep up with mapping corrections.
- ✦ A progression map shall be maintained for each section under study indicating hydrants assessed on the map. This will be especially helpful in quickly determining the work progress of the crews in the field.

- ✦ It may be necessary to conduct parts of the hydrant flow testing during “off hours” such as at night. This may be required in areas of high traffic volume where traffic may affect the ability to conduct safe flow testing, and traffic volume may affect the ability of the Project Team to be able to safely access hydrants on busy streets. The Project Team will give 24-hour advanced notice of intent to flow test hydrants in a particular area that may require after hours work or nighttime work. This is so the Utility can plan for the area to be worked in, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.
- ✦ All of the fire hydrants will be recorded on the water atlas and assigned numbers, using your existing numbering system or by creating a numbering system for you, prior to the development of the fire hydrant flow-testing program. This data is critical to establishing an effective and water conserving fire hydrant flow-testing program.
- ✦ All of the pertinent information for each fire hydrant that is flow-tested will be documented. This data is critical to establishing an ongoing flow-testing and maintenance program. The following is a list of the information gathered.
  - If requested, all Fire Hydrant caps will be lubricated using approved food grade grease for ease of operation
  - Fire Hydrant nozzle size used for each test will be recorded
  - Residual Pressure will be recorded for each Fire Hydrant tested
  - Static Pressure will be recorded for each Fire Hydrant
  - Flow, GPM (Gallons Per Minute), will be recorded for each Fire Hydrant flowed
  - The amount of time it takes to flush each Fire Hydrant will be recorded. An estimate will be made of the amount of water used during the operation of each Fire Hydrant test
  - Fire Hydrants that are in need of repair, painting, color coding, or have operation defects will be noted with an estimate of repairs needed to make the hydrant operational.
  - The date tested and technicians operating the Fire Hydrant will be recorded.
  - The Fire Hydrant address or location will be recorded.
- ✦ The Project team will set up the flow testing program in such a way that hydrants are operated near the water source first, then the team will move away from the water source in an organized manner to keep **water discoloration and distribution disturbances to a minimum. The “flush” hydrant shall be downstream of the “residual” hydrant, thus insuring proper residual readings for full potential fire flow** (re: AWWA M-17 manual, page 41).
- ✦ Fire hose and deflection tubes will be utilized, as required, to direct flushing water away from traffic, pedestrians, underground Utility vaults, and private property.
- ✦ Pressure gauges are used to determine the residual pressure during the flow-testing process while insuring that the distribution system pressure remains above 20 psi. Any incidents of the distribution system being unable to supply a residual of 20 psi in the surrounding area will be brought to the immediate attention of the Utility Superintendent.
- ✦ After the Fire Hydrant has been flushed, M.E. Simpson Co., Inc. will verify that the hydrant is seated and is draining properly. We will also check the Fire Hydrant with a FCS S30 or L-Mic electronic listening device to ensure that the hydrant is not leaking. A majority of fire hydrant leaks go un-noticed because they are small leaks draining out through the drain holes at the base of the hydrant. Using the S30 or L-Mic will help eliminate this type of leakage.
- ✦ All pressure gauges used in the field will undergo **daily testing against a “standard” gauge to insure the field gauges are accurate during the flow-testing project.** Any gauges that are found to not be within

acceptable limits will be replaced with gauges that are within accepted standards. This will insure the observed static and residual pressures are accurate and reliable.

## Fire Hydrant Operation, Flow-Testing

M.E. Simpson Co., Inc. takes great care when operating, flow-testing the customer's fire hydrants in their water distribution system. Even with our years of proven experience in water system operations problems occasionally occur. Any valves or fire hydrants that break or fail during the flow-testing program will be repaired or replaced at the expense of the water Utility. M.E. Simpson Co., Inc. cannot be held responsible for possible valve or hydrant failures during their operation. M.E. Simpson Co., Inc. cannot be held responsible for damage done to the water system during fire hydrant flow testing, such as water leaks, discolored water and turbidity that can possibly occur during the flow testing process. M.E. Simpson Co., Inc. cannot be held responsible for possible damage to the water utilities' individual water customer.

## NFPA Color Coding Standards

Municipal, Private, and Non-Potable fire-hydrants should not be painted the same color (the body of the hydrant) according to the NFPA. Each of the three types should follow the color code listed below. The bonnet and nozzle/pumper caps are also to be color-coded according to the hydrants' rated flow rate at 20 psi (see below).

The NFPA has published standards regarding the maintenance and color coding of fire hydrants (NFPA 291). The scheme is as follows:



<u>Supply</u>	<u>Body Color</u>
Municipal System:	Chrome Yellow
Private System:	Red
Non-Potable System:	Violet (Light Purple)

### Hydrant ratings at 20 psi.

<b>Class C</b>	Less than 500 GPM	<b>Red</b>
<b>Class B</b>	500-999 GPM	<b>Orange</b>
<b>Class A</b>	1000-1499 GPM	<b>Green</b>
<b>Class AA</b>	1500 GPM & above	<b>Light Blue</b>

## Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the maintenance/flow testing program 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 calculations of fire flows. This may be useful for the staff of the Utility in understanding the parameters of hydrant flow testing, especially during an emergency such as a fire where proper flow is needed for the fire department.

## Reports, Documentation & Communications

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

- Project Team will **meet daily** with assigned Utility personnel to go over areas of flow testing for prior **workdays and plan current day and next two days' areas to flow test.**
- At the end of each day, or as requested, a list of any broken or inoperable valves or hydrants will be turned in.
- Each step of the fire hydrant flow-testing program will be identified and the hydrants used for each flow-test will be documented in a fire hydrant flow-testing report.
- Maintain a progression map to be included with the final report of the project indicating areas flow tested and areas that have been tagged for flow testing.
- The Utility will be provided with flow information in Pro-Maps™ an electronic database and mapping program. This documentation allows for the flow-testing program to be repeated at a later date. This electronic program is designed to be a complete system for your Utility to establish an effective fire hydrant flow testing, flushing and maintenance program. The electronic database provides an inventory record system, hydrant maintenance and scheduling. The database includes a complete hydrant flow-testing program for calculating flow test results. Pro-Maps™/Pro-Hydrant® is a hydrant record database (ODBC). This data will be available in an electronic format to the Utility with the appropriate access. The data will be maintained offsite at a secure location.
- This program will have the capability to generate upon demand:
  - The individual Hydrant Flow Test reports that includes the flow test data, static pressure and residual pressure, and potential flow at 20psi.
  - A summary listing of all Hydrants with identified defects.
  - A complete listing of all Hydrants by numerical or indexed order.
  - A complete listing of all Hydrants by alphabetically reference to street and cross street names.
  - All pertinent information such as port size, number of ports, flow test results, general condition of the hydrant, and color coding for the **NFPA rating.**
  - Hydrant location will be documented from existing landmarks and will be a part of each Hydrant record.
- Information collected by M.E. Simpson Co., Inc. during the program and any other information provided by the Utility shall be regarded as CONFIDENTIAL and will not be shared without permission from the Utility or unless required by law.
- Develop a Flow Testing log of activity to be included with the final report that will include the following;

1. Type of problems observed
  2. Location of same for problems discovered
  3. Total estimated water used (to be included on each flow test result)
  4. Mapping errors on the water atlas
- ✦ **Prepare the final report** at the completion of the project which will include all Fire Hydrant Flow/Watermain Capacity Testing reports, other problems found in the system during the course of flow testing that need the attention of the Water Utility. This final report shall be made available for submission to the Water Department within thirty (30) work days of the completion of the fieldwork.

### PRO-MAPS™/PRO-HYDRANT®

The Utility will have access to their GIS data through Pro-Maps™. Pro-Maps™ Online Subscription program is an online application technology that brings your water, wastewater, and stormwater system maps and data with you wherever you go. This web based real-time product allows Utility staff to view, inspect, and collect data on the water, wastewater, and stormwater systems in real time. The features included in this subscription are:

- ✦ The data will be collected in the field on a tablet. The data is then transferred simultaneously over the internet to our corporate office. Once the data has been received by our administration staff, it is reviewed for Q/QC, then imported into our Pro-Maps™/Pro-Hydrant® database. All reports will be generated from this database and made readily available as a deliverable to the Utility.
- ✦ The Utility will be provided with a username and password to access the data on our online Pro-Maps™ data collection program. This information is housed on a secure, cloud-based server. The Utility will have the ability to receive the data into a format that is compatible with the Utility's current GIS system.
- ✦ Pro-Maps™ has the ability to display the base map view in multiple formats such as; ESRI Topo, ESRI World Street and ESRI Aerial.
- ✦ Photographs of each asset will be collected and stored within Pro-Maps™. These photographs will display the current visual conditions as well as the locations of the assets.
- ✦ Pro-Maps™ is an online subscription program that will give the user access to their data in an online application and is limited to the data provided by the Utility. The validity of the Utility's additional data on other assets in the water system will be the responsibility of the Utility and will be added into the data set collected in the field by the field teams for inclusion in Pro-Maps™. This process requires a thorough inspection, importation, and construction of each individual client's data. This program gives the user access to their water distribution system's assets only. Access to and the creation of water atlas information regarding water mains is not included in this program. Features including, but not limited to, leak isolation, specialty reports, and dashboard information will not be included and data manipulation such as water main creation will be the sole responsibility of the Utility. M.E. Simpson Co., Inc. offers a Pro-Maps™ Atlas Update Program that includes these features.

## Assumptions & Services Provided by the Utility

- ✦ The Utility will furnish, in an electronic format, all maps, atlases, (two copies) and records necessary to properly conduct the flow testing program.
- ✦ The Utility will make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful with 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 supply information regarding pressure zone boundary valves, and any other information that may make the job of flow testing easier to perform.
- ✦ The Utility will assist, if needed, to help gain entry into sites that may be difficult to enter due to security issues or other concerns.

## Equipment to be Used

The following equipment will be used for fire hydrant operation and maintenance work during the fire hydrant maintenance and flow testing program for the Utility. All materials listed will be on the job site at all times.

- ✦ 4.5” Pumper Port Diffuser, Hose Monster
- ✦ Two 2.5” Port diffusers, Pollards with flow gauges
- ✦ Certified and field tested flow gauges
- ✦ Food grade grease for lubricating the pumper and nozzle ports
- ✦ FCS S30 or Gutermann AquaScope listening device to ensure the hydrant isn’t leaking
- ✦ Grease to lubricate the hydrants operating nut and stem
- ✦ All necessary hand tools
- ✦ Truck mounted Arrow Board/Signage, and warning lights on trucks
- ✦ Traffic control equipment, including properly sized traffic cones with reflective stripes, when needed or required
- ✦ A “Schonstedt”/“Chicago Tape” magnetic locator
- ✦ A “Radio Detection RD4000” series line locator

## SCOPE OF WORK

### *Project Field Approach*

When leaks occur on a water pipe, the water escaping the pipe under pressure produces friction, and thus “leak noise.” The ability to detect, and then pinpoint leaks on water pipe is dependent on several variables. All these variables need to be analyzed by the Project Team during the course of the Leak Survey in order for successful leak locations to occur. These variables include:

- ◆ *Pipe Material* - different pipe materials cause sound waves to travel at different velocities
- ◆ *Pipe sizes* - different pipe sizes cause sound waves to travel at different velocities. Larger pipes will cause the sound to travel slower than on smaller pipe due to the amount of pipe material for the sound to be absorbed into
- ◆ *Water pressure on the pipe* - lower pressure will not produce as much leak noise as higher pressure
- ◆ *Flow velocity in the pipe* - water moving through the pipe can affect the transmission of leak noise on the pipe and the ability to detect leakage
- ◆ *Water table* - high levels of ground water can affect ability to hear leaks on the pipe. *Soil conditions*- types of soils can affect ability to detect leaks due to the density of the soil surrounding the pipe
- ◆ *Size of the leak in the pipe* - larger leaks can in some circumstances produce lower noise levels than smaller leaks
- ◆ *Mechanical noise* - Pump noise from a nearby pump station can affect the ability to detect leaks as well as noise from electrical transformers

“M.E. Simpson Co., Inc.’s extensive field experience in leak detection methodology will allow for a thorough examination of the Utility’s distribution system”

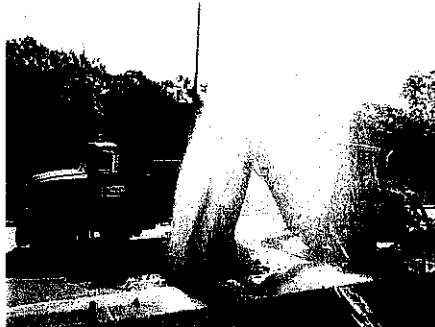
The success of this program will be dependent upon reviewing all available data regarding the operation of the distribution system. The following will need to be gathered; all as-built drawings of the water distribution system, all original atlases, all books, field cards, notes, computer copies of the distribution system, valve cards, hydrant cards and a copy of a digital map of the Utility, if available. Additionally, other records such as amounts pumped into the system may need to be reviewed. The field verification of leaks and associated locations, along with the records being reviewed, shall yield updated location records of the Utility’s leak locations as well as supplying valuable information regarding the general condition of the distribution system.

### An organized field approach to this Leak Survey project will include the following:

- ◆ **Introduce and maintain an interactive role** with the Utility Staff for the Leak Survey Program. Conduct short interviews with staff about particulars of the distribution system such as problem areas prone to leaks, age of pipe, pressure problems in the distribution system. This will allow for a greater understanding of how the distribution system is functioning allowing priorities to be assigned to particular segments of the work
- ◆ **Divide areas of the distribution system** into geographic areas that can be surveyed in progression and leak areas pinpointed in an orderly fashion. This would include setting a schedule and maintaining a level of Field Staffing that will insure completion of the Leak Survey within the

schedule and budget allotted. This will require all maps of the distribution system to be examined during the course of the planning sessions to formulate a workable plan of action

- **Perform a Leak Survey on the distribution system** and document confirmed leak locations in a manner that will allow a prioritized list of leak repairs to be pursued according the described “Scope of Work”
- **Locate** all confirmed leaks in a manner that will allow their positions to be known and readily re-creatable by Utility personnel upon demand
- **Document** each located leak to such an extent as to provide information characteristic to each specific attribute as defined by the Utility including map grade GPS locations of each leak.
- **Provide constant communication** with the Utility staff so located leaks can be addressed in a timely manner
- **Provide instruction and council to Utility staff** during the course of the Leak Survey so once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting leak surveys with the established goal of reducing the total water loss in the system
- **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the leak survey program.
- **Provide recommendations for future leak survey programs** such as a methodology and frequency for surveying the distribution system

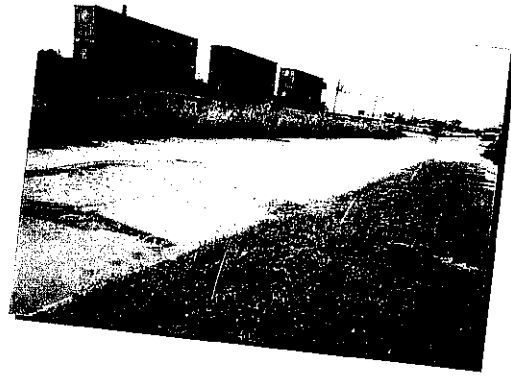


### *Potential Problems*

Problems can occur at any point during the course of the leak survey. As outlined above, all variables need to be accounted for so these issues can be mitigated. This is done with having a good QA/QC program built into the project. Despite all precautions, things can and do go wrong.

When a major leak has been located, the Utility will need to excavate as soon as is prudent while the field team is performing the remainder of the leak survey. It is rare that a leak is missed and the Utility digs a dry hole. However, when this happens, M.E. Simpson Co., Inc. will assist in any way possible to determine why the pinpoint of the leak was off. It is imperative that if a leak is missed, that the Utility contact the project field team immediately so the field team can mobilize to the open excavation to be able to assess if a mistake was made because incorrect information was used in the initial evaluation such as; incorrect pipe material, incorrect distance between points used for correlation, size of pipe, pipes not line located correctly, or some other issue. The field team will retrace all steps used for the initial leak pinpoint and re-locate the leak. This may involve placing one or both of the transducer

microphones directly on the pipe in the open excavation and performing a leak correlation to obtain a pinpoint. What matters is correctly locating the leak so it can be repaired and service restored. Once the leak has been located and confirmed, then a determination of how the pinpoint was miscalculated can be determined and rectified.



Other issues that can cause potential problems can be avoided by simply following the established field procedure described under the "Scope of Service" as well as the established QA/QC procedure. These procedures have established sequences, that when followed, yields accurate leak locations. Leak pinpointing becomes inaccurate when some or all of the variables cannot be accounted for or mitigated.

## 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 Utility. 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.



**Leak Detection has come a long way since the early 1900's.**

- 💧 Work in an orderly and **safe** manner to insure 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 main line valves, and when necessary, selected service connections in the entire distribution system with the **FCS 530** electronic listening device or the **Gutermann AquaScope 3** electronic listening device 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.**) This will be done on the Utility's distribution system.
- 💧 Listening distances on metallic pipe, as well as AC or concrete type pipe, will not exceed 500' between points. **For PVC/HDPE pipe, listening distances will not exceed 150' between points.** I.E.: valves, hydrants auxiliary valves, hydrants, service valves or meter settings will be used with preference of listening points in order as follows; direct contact with the pipe, main line valves, hydrant auxiliary valves, hydrants, then service valves or meter settings.
- 💧 All accessible points along PVC water mains will be physically listened to including services, main line valves, and hydrants.

- Valve vaults full of water may be pumped out to facilitate listening. Sometimes full vaults can mask leak noise.
- **Large diameter pipe (18"-36") may need** to have additional listening performed by listening directly above the pipe at intervals of 6-10 feet.
- 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 the following Electronic Leak Correlators (either a FCS Accu-Corr, Digi-Corr, Tri-Corr Touch; Vivax Metrotech HL5000X; Echologics LeakFinderST w/hydrophones leak correlator), to determine if a leak is present and use the same equipment to pinpoint the leak.
- For PVC water mains only the Echologics LeakFinderST w/hydrophones 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.
- GPS locations of confirmed leaks will be collected. Sub-foot accuracy of the location will be confirmed.
- The field sheets will be copied, and turned into the assigned Water Department Manager daily or an agreed time period so the leak can be dug and repaired immediately. They will be classified as to the potential severity of water loss, as well as potential danger to the general public.
- 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.
- **"Ground miking" will not be used as the primary determination for leak locations.** Grounding miking will be done per Utility request, or when it has been deemed to be the most efficient means to listen to the water main running under ground. Large diameter mains (18" – 36") may need this additional evaluation. This method may be used to assist in confirmation of a leak

location. However, “ground miking” is solely dependent on conditions beyond the direct observations of the leak technician such as soil conditions and composition, water table, depth of pipe bury, assumed location of the water main (such as concrete pressure pipe) and compaction of pavement material causing leak sounds to scatter and echo or simply be absorbed.

- The Project Team will report daily or per request of the Utility, to the assigned Utility Manager 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.
- A progression map shall be maintained for each section under survey indicating leak locations on the map. This will be especially helpful in quickly determining leak locations that correspond to the field leak diagrams turned into the Utility.
- As a part of the leak program, mapping discrepancies found on the current water atlas will be noted and included as a part of the final report so the Utility can make needed corrections. This will be included as a part of the periodic reporting to the Utility, thus enabling the Utility to keep up with mapping corrections.
- Distribution assets found to be in disrepair such as issues with hydrants, valves, and service lines, 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.



**Leak surfacing at intersection**



**Hidden leak running into drain tile**

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 insure correct pipe distances are used for the correlations. Correlations may need to be performed several times with several configurations to insure 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, the Echologics LeakFinderST has 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."**



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, atlases, and records necessary to properly conduct the survey. All corrected maps are to be returned to the Utility at the completion of the project.
- ✦ 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 and Asbestos Cement 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.



Leak Located



Leak repaired.

The leak survey work includes monitoring all accessible main line valves, all hydrants, and all services as needed to keep listening distances within the accepted bounds and Scope of the survey.

## SCOPE OF WORK

### Valve Assessment Services

The Field Scope of Service for the Valve Assessment Services Program is understood to be the following:

The Project Team (M.E. Simpson Co., Inc.) will furnish all labor, material, transportation, tools, and equipment necessary to perform valve assessments on the water distribution system. The Project Team 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 performing the valve assessments at all times.**

- Work in an orderly and **safe** manner to insure 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. All vehicles used in the field will have company signs attached.
- Project Team Personnel will **meet with the Utility to review the project** guidelines and answer any questions on procedures.
- Any **pressure zones** in the distribution system will be identified on the water atlas prior to developing the valve assessment program. This will need to be done with distribution personnel prior to the start of the program to avoid having pressure zone problems due to valves opened when they need to be closed.
- As a part of the valve program, mapping discrepancies found on the current water atlas will be noted and included as a part of the final report so the Utility can make needed corrections. This will be included as a part of the periodic reporting to the Utility, thus enabling the Utility to keep up with mapping corrections.
- A progression map shall be maintained for each section under study indicating valves assessed on the map. This will be especially helpful in quickly determining the work progress of the crews in the field.
- It may be necessary to conduct parts of the valve assessment during "off hours" such as at night. This may be required in areas of high traffic volume where traffic may affect the ability to conduct safe valve assessment, and traffic volume may affect the ability of the Project Team to be able to safely access valves on busy streets. The Project Team will give 24-hour advanced notice of intent to operate valves in a particular area that may require after hours work or nighttime work. This is so the Utility can plan for the area to be worked in, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.

## VALVE LOCATION

### The Project Team will:

- ✦ **Examine the water maps** to determine the anticipated location of each water valve.
- ✦ **Attempt to verify** the existence of all water valves shown on the water maps by visual inspection.
- ✦ **Search for water valves** shown, but not identified by visual inspection, using a magnetic locator.
- ✦ **Employ a combination** of recorded information, manual and technical testing techniques as needed to establish the location of remaining water valves.
- ✦ **Identify locations where a water valve is expected**, but not shown on the water map, and proceed through verification and search process.
- ✦ **Two attempts shall be made to locate "lost" valves** before these are turned into the Utility for location. The Project Team will ask permission to trace existing water mains by means of line locating equipment to establish the configuration of existing water mains and probable location of water valves should search by magnetic locator fail. If the Utility cannot locate the valve within five working days, The Project Team shall be paid for the attempted locate.
- ✦ **Valve enclosures will be cleaned out** to be able to see the operating nut.
- ✦ **Corrections to the Utility maps** shall be drawn on the paper maps provided by the Utility and returned to the Utility after the project is completed.
- ✦ **Located valve boxes or valve vault covers** shall be painted with an environmentally formulated precautionary blue paint for future identification.

## GPS VALVE LOCATION

**Once the valves have been located, the Project Team will perform the following for valves that do not already have GPS coordinates:**

- ✦ **The Project Team will collect GPS Coordinates** of all valves assessed using the above "Scope of Work"
- ✦ The Project Team will work with the Utility to develop a dictionary" which will define the information to be collected for each attribute. The Data dictionary shall the following but not limited to:
  - Date and time the information was gathered.
  - The unique identifying number for each attribute consistent and compatible with system presently employed by the *Utility*.
  - Location for each attribute referenced by Northing and Easting coordinates generated from the GPS location in the Utility's local State Plane Coordinate system.
  - Type of Attribute (mainline valve).
  - Offset information if the attribute needs to have the location determined by an offset coordinate due to blocked signals from the GPS satellites.



"data  
have

- Any other data required to be collected as part of the attribute data set as defined by the Data Dictionary. This Data Dictionary will be assembled by the Project Team and the Utility.
- ☛ **The accuracy of each GPS location** will be sub-foot.
- ☛ **GPS locations will need to have readings** from at least four satellites in position and a reading from a local GPS beacon, or five satellites for the position to be considered accurate as a differentially corrected GPS location.
- ☛ **“PDOP” readings need to be less than 5.** “PDOP” readings greater than 5 will not be considered as accurate locations.
- ☛ **A minimum of 30 readings** for each position shall be taken.
- ☛ **Position of the GPS satellites shall be given primary consideration.** The position of the satellites shall be recorded as part of the data. If the satellites are low on the horizon, it is expected that the project team will wait until the position is better before attempting to gather the GPS position. Data collected with the satellites low on the horizon and/or poorly distributed shall not be considered valid.
- ☛ **The information collected** will be compiled into the **Pathfinder Office** or **TerraSync™** software database with the ability to export the information into a format acceptable to the Utility such as Microsoft Access, Microsoft Excel, .DXF file, or .SHP file for use in the Utility’s GIS system or CAD mapping program, and also included in the Polcon Pro Valve® database.
- ☛ **All locations will be differentially corrected** for accuracy. A stationary beacon or mobile beacon can be set up to allow differential correction. All data will be “Post-Processed”, so that a comparison can be made to a Local stationary GPS receiver. The locations of the stationary GPS stations can be obtained from the Internet. The particular stationary GPS receiver shall be listed in the final report as the station used for differential correction. This will allow for a greater accuracy of the GPS locations.

#### DOCUMENTATION OF GPS VALVE LOCATIONS

**The Project Team will provide a location report for each documented valve located, and/or a database on a CD in a format agreed upon between the Utility and M.E. Simpson Co., Inc.**

- ☛ The GPS location data collected will be exported into a database for Utility use
- ☛ The GPS data collected shall include but is not limited to the following information:
  - a. *Identifying number consistent and compatible with system presently employed by the Utility.*
  - b. *Location referenced by coordinates using the **Illinois State Plane Coordinate System**.*
  - c. *Location by street and cross-street names.*
  - d. *Type of structure.*
  - e. *Date and time data was collected.*

## VALVE OPERATING

### The Project Team will:

- ✦ Operate selected valves in accordance with the AWWA manual M-44, "Distribution Valves: Selection, Installation, Field Testing and Maintenance"
- ✦ Attempt to operate each of the valves manually.
- ✦ Valves requiring an operating torque greater than one hundred (100) foot-pounds shall be operated by a portable and/or truck mounted hydraulic valve machine. The valve operators used by the Project Team have torque-limiting capabilities that allow incremental settings from fifty (50) to twenty five hundred (2500) foot-pounds of torque.
- ✦ The machine shall be solely and completely dependent upon the operator for continuous control of direction and torque, otherwise known as "non-locking" or "torque limiter" capability.
- ✦ All valves will be operated with the minimum torque required preventing valve damage.
- ✦ Maximum torques shall be as follows:
  - 4" gate valves – 300 ft. lbs.
  - 6" and larger gate valves – 600 ft. lbs.
  - Butterfly valves – 200ft. lbs.
- ✦ During initial valve closure, the valve will be turned no more than five (5) turns before turn direction is reversed to two (2) turns, thus allowing the threads of the stem and gate to free themselves. This closure and partial reversal process shall be repeated until the valve has achieved full closure.
- ✦ The valves will then be operated from full open to full closure until such time as this can be done without further turn range improvement or no further reduction in the required operating torque is noted, through a **minimum of two (2) consecutive ranges of operations and a maximum of seven (7) operations.**
- ✦ **The Project Team shall notify the *Water Superintendent*, of intent to operate a certain group of water valves.** The Team shall obtain permission to perform the work, at least twenty-four (24) hours or one (1) working day in advance of the intended start of that work.
- ✦ **Valves found in the closed position** shall be reported to the Utility immediately so verification can be made for operating or not.
- ✦ **Valve vaults and boxes shall be cleaned or pumped out** to gain access to the valve and for inspection of the operating nut.
- ✦ **If there is reasonable evidence that a valve might break during the operating process,** the Utility will be notified immediately and a decision will be made by the Utility to attempt or not to attempt the process. **Any valves that fail or break during operation will be repaired or replaced by the Utility.** The Project Team cannot be held responsible for possible valve failures during the operating procedure.

## DOCUMENTATION OF VALVE OPERATING

The Project Team will provide a valve report for each valve located in ProMaps® Online. This data can also be provided to the Utility in a database on a CD in Microsoft Access, a .SHP file for Arcview GIS or another format agreed upon between the Utility and the Project Team. The database format will be provided by the Utility prior to the start of the Valve Program and will include the following:

- ✦ *Identifying number consistent and compatible with system presently employed by the Utility.*
  - Valve Number
  - Size of Valve
  - Type of Valve (Gate, Butterfly, Other)

- Valve Box/Vault
- Direction of Closure
- Depth of Operating Nut
- Valve Use (Mainline, Crossover, Service Line)
- *Location information*
  - Street Name
  - Cross Street Name
  - House Number (if available)
  - Centerline distances from each street centerline (N-S, E-W) in feet
  - Distance to other landmark (if needed)
  - Site Location (Street, Parkway, Driveway, Easement, Centerline)
- *Box/ Vault Condition*
  - Valve Box full of Debris
  - Valve Vault full of water
  - Paved Over
  - Valve Box Misaligned
  - Valve Box Buried
- *Operational Conditions of Valve*
  - Final Number of turns to close
  - Final Position
  - Date Turned
  - Crew performing operation
  - Valve Problems (Bent stem, Packing Leak, Missing Operating Nut, Rounded Operating Nut, Broken Stem, Inaccessible)
  - Comments

#### *Valve Operations*

**Our Project Team takes great care when operating and operating valves in the water distribution system.** Even with our years of proven experience in water system operations problems occasionally occur. Any valves that break or fail during the assessment program will be repaired or replaced at the expense of the water Utility. The Project Team cannot be held responsible for possible valve failures during their operation due to pre-existing conditions. The Project Team cannot be held responsible for damage done to the water system during valve operating, such as water leaks, discolored water and turbidity that can possibly occur during the process.

#### PRO-MAPS™

The Utility can elect to have access to their GIS data through Pro-Maps™. Pro-Maps™ Online Subscription program is an online application technology that brings your water, wastewater, and stormwater system maps and data with you wherever you go. This web based real-time product allows Utility staff to view, inspect, and collect data on the water, wastewater, and stormwater systems in real time. The features included in this subscription are:

- The data will be collected in the field on a tablet. The data is then transferred simultaneously over the internet to our corporate office. Once the data has been received by our administration staff, it is reviewed for Q/QC, then imported into our Pro-Maps™/Pro-Hydrant® database. All reports will be generated from this database and made readily available as a deliverable to the Utility.
- The Utility will be provided with a username and password to access the data on our online Pro-Maps™ data collection program. This information is housed on a secure, cloud-based server. The

Utility will have the ability to receive the data into a format that is compatible with the Utility's current GIS system.

- ✦ Pro-Maps™ has the ability to display the base map view in multiple formats such as; ESRI Topo, ESRI World Street and ESRI Aerial.
- ✦ Pro-Maps™ is an online subscription program that will give the user access to their data in an online application and is limited to the data provided by the Utility. The validity of the Utility's additional data on other assets in the water system will be the responsibility of the Utility and will be added into the data set collected in the field by the field teams for inclusion in Pro-Maps™. This process requires a thorough inspection, importation, and construction of each individual client's data. This program gives the user access to their water distribution system's assets only. Access to and the creation of water atlas information regarding water mains is not included in this program. Features including, but not limited to, leak isolation, specialty reports, and dashboard information will not be included and data manipulation such as water main creation will be the sole responsibility of the Utility. M.E. Simpson Co., Inc. offers a Pro-Maps™ Atlas Update Program that includes these features.

Pro-Maps® continues to be developed in house at M.E. Simpson Co. Inc. allowing us total control over the design of the product. Our program is based online in a secure server that only allows selected users access to the information through login/passwords. The advantage of this program allows you the flexibility to view your valve information from any where.

The data saved in Polcon Pro-Maps® can be read and manipulated with any other database product that supports Object Database Connectivity (ODBC). This provides flexibility to a user that needs to cross platforms. This software was developed to keep track of all the information that is associated with main line water valves. There are three areas of information that are recorded in Pro-Maps®. The first area is the valve card. The valve card keeps all the information about the valve that normally doesn't change year to year including:

- ✦ Valve number
- ✦ Map page number
- ✦ Street name
- ✦ Cross street name
- ✦ Size
- ✦ Turn Direction
- ✦ Type
- ✦ Operating nut depth
- ✦ Position
- ✦ Box style
- ✦ Site
- ✦ x-y Coordinates of the valve

The second area is the exercising history. As valves are turned year to year some information changes, this information is kept in ascending order by date so that the most recent information for the valve is always on top. Probably the most important piece of history information is the valve code. The valve code is used to organize the valves into groups. For example: a valve with no problems is coded "Valve OK" a valve that cannot be exercised because of debris in the box is coded "Box full of debris". There are many other valve codes describing the condition of the valves. The history section includes:

- ✦ Turn date
- ✦ Number of turns
- ✦ Technician
- ✦ Machine torque ratings
- ✦ Valve Codes
- ✦ Comments

Information alone is useless. In order to make the information worth having it must be used and Pro-Maps® makes that easier to do. Pro-Maps® online/web based database pulls all the valve information together into a variety of reports. Reports include:

- ✦ Valve Card Books
- ✦ Exception Report
- ✦ Valve Listing by Number
- ✦ Valve Listing by Street
- ✦ Problem Valve List (Useful for Work Orders)

#### FINAL REPORTS, DOCUMENTATIONS and COMMUNICATIONS

- ◆ Project Team will **meet daily** with assigned Utility personnel to go over progress for prior workday and plan current day and area of valves to be operated.
- ◆ **Document all valve operating and locating** as indicated in the “Scope of Work”.
- ◆ **Maintain a progression valve report** of the project indicating valves operated.
- ◆ **Valves found with problems** shall be documented and turned into the assigned Utility personnel daily so the Utility can make the necessary corrections so the valve can be turned.
- ◆ **Prepare the final report** at the completion of the project which will include all valve documentation per “Scope of Work” for the Utility, for the total number of valves operated, valves requiring maintenance, as well as other problems found in the system during the course of the program that need the attention of the Water Utility. This report shall be made available for submission to the Utility within thirty (30) days of the completion of the fieldwork.
- ◆ **The equipment used** will be that which is described in the “Equipment to be used” section.

“Effective Communication ...  
Accurate Documentation...

Insuring the success for the  
Valve program.”

#### ASSUMPTIONS AND SERVICES PROVIDED BY THE UTILITY

- ◆ The *Utility* will furnish all maps, atlases, (two copies) and records necessary to properly conduct the valve-operating program.
- ◆ The *Utility* will provide records such as old valve cards or any additional information that would make the valve location and operating easier to perform. This information shall be regarded as **CONFIDENTIAL** by the Project Team, and will not be shared with anyone outside of the Water Utility without consent of the Water Utility.
- ◆ The *Utility* will notify other departments in the Utility, town, or Utility as to the activity of valve operating so that various departments are aware that a program is in progress. This is to insure that if there should be a problem with part of the distribution system, notification can be made promptly.
- ◆ The *Utility* will also make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful in attempting to locate particularly hard-to-find valves 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. This may be required of areas where distribution mains run in easements on private property.
- ◆ The Utility will provide all Valve ID numbers, type of valve (if known), Map page numbers or grid number, and any other additional information that can aide in helping the overall success of the program.

#### **VALVES TO BE ASSESSED**

Approximately 830 valves per year are to be assessed for the Utility through the duration of the project.

#### **Reports, Documentation & Communications**

- ✦ Project Team will meet daily with assigned Utility personnel to go over areas of valve assessments for prior workdays and plan current day and next two days' areas to flow test.
- ✦ At the end of each day, or as requested, a list of any broken or inoperable valves will be turned in.
- ✦ Each step of the valve assessment program will be identified in a valve report.
- ✦ Maintain a progression map to be included with the final report of the project indicating areas where valve assessments have been performed
- ✦ The Utility will be provided with valve assessment information in Pro-Maps™ an electronic database and mapping program. This documentation allows for the valve program to be repeated at a later date. This electronic program is designed to be a complete system for your Utility to establish an effective valve assessment and maintenance program. The electronic database provides an inventory record system, valve maintenance and scheduling. Pro-Maps™ is a valve assessment record database (ODBC and will be available in an electronic format to the Utility with the appropriate access. The data will be maintained offsite at a secure location.
- ✦ This program will have the capability to generate upon demand:
  - The individual valve assessment reports that includes the turn data, location data, and valve condition.
  - A summary listing of all valves with identified defects.
  - A complete listing of all valves by numerical or indexed order.
  - A complete listing of all valves by alphabetically reference to street and cross street names.
  - All pertinent information such as GPS coordinates, turn data, size, and general condition of the valve
  - Valve location will be documented from existing landmarks in addition to the GPS location and will be a part of each record.
- ✦ Information collected by the Project Team during the program and any other information provided by the Utility shall be regarded as CONFIDENTIAL and will not be shared without permission from the Utility or unless required by law.
- ✦ Develop a log of activity to be included with the final report that will include the following;
  1. Type of problems observed
  2. Location of same for problems discovered
  3. Mapping errors on the water atlas
- ✦ **Prepare the final report** at the completion of the project which will include all valve assessment reports, other problems found in the system during the course of flow testing that need the attention of the Water Utility. This final report shall be made available for submission to the Water Department within thirty (30) work days of the completion of the fieldwork.

### Assumptions & Services Provided by the Utility

- ✦ The Utility will furnish, in an electronic format, all maps, atlases, (two copies) and records necessary to properly conduct the flow testing program.
- ✦ The Utility will make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful with 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 supply information regarding pressure zone boundary valves, and any other information that may make the job of flow testing easier to perform.
- ✦ The Utility will assist, if needed, to help gain entry into sites that may be difficult to enter due to security issues or other concerns.

### Equipment to be Used

The following equipment will be used for fire hydrant operation and maintenance work during the fire hydrant maintenance and flow testing program for the Utility. All materials listed will be on the job site at all times.

- ✦ All necessary hand tools
- ✦ Truck mounted Arrow Board/Signage, and warning lights on trucks
- ✦ Traffic control equipment, including properly sized traffic cones with reflective stripes, when needed or required
- ✦ A “Schonstedt”/“Chicago Tape” magnetic locator
- ✦ Truck mounted or trailer mounted hydraulic valve operator with adjustable torque control
- ✦ Portable hydraulic valve operator adjustable torque control
- ✦ Truck mounted or trailer mounted Vacuum capable of 300 CFM
- ✦ Trucks are equipped with either a Honda 6.5 horsepower pump capable of discharging 150 GPM or a Stanley Hydraulic pump capable of discharging 450 GPM
- ✦ Extendable valve keys for manual operation

**Exhibit B**

**INSURANCE REQUIREMENTS**

(See Risk Manager for Insurance Requirements)



MESIMPS-02

SRUTKOWSKI

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/21/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER General Insurance Services, Inc. 407 E. Lincolnway Valparaiso, IN 46383	CONTACT NAME: <b>Stacy Rutkowski</b>	
	PHONE (A/C, No, Ext): <b>(219) 510-6209</b>	FAX (A/C, No): <b>(219) 510-6427</b>
INSURED  <b>M E Simpson Co Inc</b> <b>3406 Enterprise Ave</b> <b>Valparaiso, IN 46383</b>	E-MAIL ADDRESS: <b>srutkowski@genins.com</b>	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A : <b>Cincinnati Insurance</b>	
	INSURER B : <b>Cincinnati Casualty</b>	
	INSURER C : <b>Landmark American Insurance Company</b>	
	INSURER D : INSURER E : INSURER F :	

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.


INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liab <input checked="" type="checkbox"/> XCU Cov is included GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	X	X	EPP 0417637	12/23/2021	12/23/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	X		EPP 0417637	12/23/2021	12/23/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED RETENTION \$			EPP 0417637	12/23/2021	12/23/2022	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A	X EWC 0417638	12/23/2021	12/23/2022	<input checked="" type="checkbox"/> PER STATUTE E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Professional Liab			LHR793479	12/23/2021	12/23/2022	Each Claim \$ 3,000,000
A	Leased & Rented			EPP 0417637	12/23/2021	12/23/2022	Ded \$1,000 \$ 25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Water System Assessment Program  
The Village of Tinley Park; its officers, officials, employees and volunteers are Additional Insureds on a Primary & Non-Contributory basis with respect to General Liability and Auto Liability when required by written contract. A Waiver of Subrogation applies in favor of the Additional Insureds with respect to General Liability and Workers Compensation. A 30 Day Notice of Cancellation applies.

## CERTIFICATE HOLDER

## CANCELLATION

Village of Tinley Park 16250 South Oak Park Avenue Tinley Park, IL 60477	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 



## CONTRACT AND DOCUMENT APPROVAL CHECKLIST

Ordinance/Resolution No: 2022-R-102 Water Assessment Program Renewal M.E. Simpson

Exhibits Attached: Yes ☒ No ☐

Contracting Party/Vendor: ME Simpson Attn: Randy Lusk

Contract Contact Info: 500 E. Ridge Road Suite 310 Griffith, IN 46319

Bid Opening Date (If applicable): \_\_\_\_\_

Mylar (Rcvd by Clerk's Office): Y / N - Date Sent for Recording: \_\_\_\_\_ Date Recorded: \_\_\_\_\_

Certificates of Insurance Received: Yes ☐ No ☐

Contract Expiration: Date: \_\_\_\_\_

Signature of Contracting Party received: Yes ☒ Date: 8/29/2022

Staff Review Date: 8/30/2022 Approved Via: email By: PW

Attorney Review: Date: \_\_\_\_\_ Approved Via: \_\_\_\_\_ By: \_\_\_\_\_

Village Manager Review: Date: \_\_\_\_\_ Approved Via: \_\_\_\_\_ By: \_\_\_\_\_

Committee Review Date: 9/6/2022 Committee Type: COW

Committee Approval Date: \_\_\_\_\_ Committee Type: \_\_\_\_\_

Village Board Meeting: Date: 9/6/2022

Village Board Approval: Date: \_\_\_\_\_ Approved: \_\_\_\_\_ Denied: \_\_\_\_\_

Notes: