

AGENDA
HIGHLAND WATERWORKS
BOARD OF DIRECTORS
THURSDAY, APRIL 27, 2023
6:30 P.M.
PLENARY MEETING

PLEDGE OF ALLEGIANCE

ROLL CALL:

President George A. Smith

Vice President Jason Tharp

Secretary Rick Volbrecht

Director Curt Schroeder

Director Larry Kondrat

MINUTES OF PREVIOUS SESSION: *Minutes of the Plenary Meeting - March 23, 2023*

SPECIAL ORDERS:

COMMUNICATIONS:

COMMENTS FROM THE PUBLIC OR VISITORS (LIMITED TO MATTERS ON THE AGENDA):

REPORTS: 1. Waterworks Superintendent
 2. Waterworks Attorney
 3. Waterworks Engineer
 4. Fire Department

UNFINISHED BUSINESS AND GENERAL ORDERS:

1. Highland Water Works
Board of Directors
Resolution No. 2023-04

A Resolution accepting and approving a proposal from M.E. Simpson Company, Inc. for a Water Distribution System Valve Exercising and Assessment Program (Three-Year Program) at a total cost of \$76,116.00.

2. Highland Water Works
Board of Directors
Resolution No. 2023-05

A Resolution accepting and approving a proposal from M.E. Simpson Company, Inc. for a Fire Hydrant Flow Testing and Flushing Program (Three-Year Program) at a total cost of \$55,434.00.

NEW BUSINESS:

BUSINESS FROM THE FLOOR:

COMMENTS FROM THE DIRECTORS ON ANY ITEM OF INTEREST TO THE DIRECTORS:

CLAIMS:

Per the docket in the amount of:

6101	Waterworks Operating	\$339,934.46
6102	Water Works District	\$0.00
6104	Consumer Deposits	\$37.26
6105	Water Improvements	\$54,223.21
6108	Water Capital	\$0.00
Total		\$394,194.93

NEXT MEETING:

The next Plenary Meeting will be held on Thursday, May 25, 2023 at 6:30 p.m.

ADJOURNMENT:

Meeting Adjourned at: _____

**ENROLLED MINUTES OF THE
HIGHLAND WATER WORKS BOARD OF DIRECTORS
THURSDAY, MARCH 23, 2023**

Regular Meeting: The Highland Water Works Board of Directors met in a Regular Plenary Session on Thursday, March 23, 2023 in the lower meeting chambers of the Highland Municipal Building, 3333 Ridge Road, Highland, Indiana. President Smith opened the Regular Plenary meeting at 6:31 p.m. with no study session. The meeting was opened with the Pledge of Allegiance. The minutes were recorded by Kim Webb, Recording Secretary.

ROLL CALL: Present on roll call were Directors George A. Smith, Rick Volbrecht, Larry Kondrat, and Jason Tharp. Director Curt Schroeder was absent. A quorum was present. Also present were Mark Knesek, Public Works Director; Derek Snyder, NIES Engineering; Robert F. Tweedle, Board Attorney; Bernie Zemen, Town Council; and Kim Webb, Recording Secretary.

MINUTES: President Smith asked if there were any corrections to the Minutes of the Regular Plenary Meeting of February 23, 2023 as prepared and posted. Director Volbrecht moved to approve the Minutes of the February 23, 2023 meeting. Director Tharp seconded. Upon a voice vote, there were (4) affirmations and no negatives. The motion passed.

Special Orders:

Communications:

Comments from the Public or Visitors (Limited to Matters on the Agenda): None.

Reports:

1. Water Works Superintendent – Mark Knesek informed the Board that restorations from water main leaks over the winter are in process. Crews have also been repairing or replacing b-boxes from residents on the shut-off list where they are unable to shut off due to the b-box being broken.
2. Water Works Attorney – Robert Tweedle, Board Attorney, discussed with the Board the ongoing negotiation of the Dyer Transport Rate. An amendment to the Dyer Water Purchase Agreement is in process and will be made retroactive back to February of this year.
3. Water Works Engineer – None.
4. Fire Department – None.

Unfinished Business and General Orders: None.

New Business: None.

Business from the Floor: None.

Comments from the Directors on any Item of Interest to the Directors: Director Volbrecht thanked Director Smith and the rest of the Board for all their efforts with the Dyer Transport rate negotiations.

Claims:

Per the docket in the amount of:

6101	Water Works Operating	\$364,950.15
6102	Water Works District	\$0.00
6104	Consumer Deposits	\$132.15
6105	Water Improvements	\$54,395.59
6108	Water Capital	\$0.00
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Total		\$419,477.89

Director Volbrecht moved to approve the claims per the March 23, 2023 docket in the amount of \$419,477.89. Director Tharp seconded. Upon a voice vote, there were (4) affirmations and no negatives. The motion passed.

Next Meeting:

The next Plenary Meeting will be held in-person at Town Hall on Thursday, April 27, 2023 at 6:30 p.m.

ADJOURNMENT: With no other business to come before the Board of Water Works Directors, the meeting was adjourned.

Meeting Adjourned at 6:47 p.m.

Respectfully Submitted,

Kim Webb, Recording Secretary

**WATER WORKS DISTRICT OF HIGHLAND
BOARD OF WATER WORKS DIRECTORS
RESOLUTION NO. 2023-04**

A RESOLUTION ACCEPTING AND APPROVING A PROPOSAL FROM M.E. SIMPSON COMPANY, INC. FOR A WATER DISTRIBUTION SYSTEM VALVE EXERCISING AND ASSESSMENT PROGRAM (THREE-YEAR PROGRAM) AT A TOTAL COST OF \$76,116.00.

Whereas, the Water Works District of Highland (District) is governed by its Board of Water Works Directors, pursuant to the provisions of IC 8-1.5-4 et seq.; and

Whereas, IC 8-1.5-4-4 specifically provides that the Board of Directors shall manage and control all works of the Water Works and may purchase, acquire, construct, reconstruct, operate, repair and maintain all water works; and

Whereas, the District owns and maintains approximately 1,454 mainline valves throughout the water distribution system; and

Whereas, the Water Works Superintendent has determined a need to locate, map, and exercise each valve within the system for future benefit and efficiency, and has solicited a proposal to perform the work from M.E. Simpson Company, Incorporated (M.E. Simpson), a technical service company providing professional services for the Water Works industry; and

Whereas, M.E. Simpson has submitted a proposal for a Water Distribution System Valve Exercising and Assessment Program, dated April 25, 2023, that details the terms and conditions for services to be performed, and includes a cost summary estimate for the work as follows:

2023 – Valves Exercised and Documented at \$51.00/Valve (Approx. 473)	\$24,123.00
2024 – Valves Exercised and Documented at \$53.00/Valve (Approx. 516)	\$27,348.00
<u>2025 – Valves Exercised and Documented at \$53.00/Valve (Approx. 465)</u>	<u>\$24,645.00</u>
Total	\$76,116.00

Whereas, the Board of Water Works Directors, pursuant to §31.17(E) of the HMC serves as the purchasing agency for the Department of Water Works; and

Whereas, the express approval of the purchasing agency is required, pursuant to §31.18(C) of the HMC, since the agreement exceeds both \$10,000.00 and one-year in duration; and

Whereas, the Water Works Superintendent, pursuant to §31.19(D)(1) of the HMC, serves as the purchasing agent for the Highland Water Works District; and

Whereas, the purchase will be supported by the Water Works District Operating fund and there is sufficient appropriation in order to support the purchase; and

Whereas, the Board of Water Works Directors now desires to approve and authorize the Water Works Superintendent to complete the purchase, pursuant to the terms stated herein.

Now, Therefore Be it Hereby Resolved by the Board of Water Works Directors of the Town of Highland, Lake County, Indiana:

Section 1. That the proposal for a Water Distribution System Valve Exercising and Assessment Program (incorporated by reference and made a part of this Resolution) from M.E. Simpson is hereby accepted and approved in each and every respect;

Section 2. That M.E. Simpson is hereby authorized to exercise approximately 473 valves in 2023, approximately 516 valves in 2024, and approximately 465 valves in 2025;

Section 3. That the terms and charges under the proposal for professional services in the total amount of \$76,116.00 over a three-year period, as described herein, is found to be reasonable and fair;

Section 4. That the Water Works District of Highland, through its Board of Directors, believes that M.E. Simpson has demonstrated professional competence and qualifications to perform the particular professional technical services called for in the proposal and associated project, pursuant to I.C. 5-16-11.1-5;

Section 5. That the Water Works District Superintendent be authorized to execute the proposal with his signature.

Duly Adopted and Resolved by the Water Works Board of Directors of Highland, Lake County, Indiana, this 27th day of April, 2023. Having been passed by a vote of ____ in favor and ____ opposed.

**HIGHLAND WATER WORKS
BY ITS BOARD OF DIRECTORS:**

George A. Smith, President

Attest:

Richard E. Volbrecht, Jr., Secretary



April 25, 2023

Mr. Mark Knesek
Director of Public Works
Town of Highland
3333 Ridge Road
Highland, IN 46322

RE: PROPOSAL FOR A WATER DISTRIBUTION SYSTEM VALVE EXERCISING PROGRAM

Dear Mr. Knesek,

M.E. Simpson Co., Inc. is pleased to present the Town of Highland our proposal for a Water Distribution System Valve Assessment and Exercising Program. We are honored to be considered for this work and are confident our team will help make the project a success.

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

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

Thank you for your consideration and this opportunity to acquaint you with our Valve Exercising and Assessment Services and offer this response. We are committed to exceeding your expectations.

Sincerely,

Randy Lusk
Regional Manager

Randy Lusk
Innovations & Solutions Manager

3406 Enterprise Avenue
Valparaiso, IN 46383

800.255.1521 P
888.531.2444 F

Randy.Lusk@mesimpson.com

SCOPE OF WORK

Valve Assessment and Exercising Program Scope of Services

Project Field Approach

The [Valve Assessment and Exercising Program](#) is conducted in the field by our technicians. M.E. Simpson Co., Inc. will locate and operate all designated valves in the system in accordance with AWWA standards (American Water Works Association Manual M-44, "Distribution Valves: Installation, Field Testing and Maintenance"). The important operation, location and asset management details of the valves will be noted and compiled on our "Valve Exercising and Assessment Report" and submitted to your office for your permanent records.

Valve Assessment and Exercising

The [Water Distribution System Valve Assessment and Exercising Program](#) is conducted in the field by our Project Team (M.E. Simpson Co., Inc. uses **TWO** trained technicians on each valve team). All valves are operated manually and when necessary, M.E. Simpson Co., Inc. uses a hydraulic valve machine capable of operating 2" through 60" valves. This machine can be set with a torque as low as 5 foot pounds and is capable of increasing up to 2500 foot pounds. The hydraulic valve operator with the "adjustable torque control" feature, along with experienced operating personnel, prevents excessive breakage during valve operating. M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to perform the program. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified. We will locate and operate each main line valve in the system. The important operation and location details of each valve will be noted and compiled on our "Valve Assessment and Exercising Report" and submitted to your office, in an electronic format, for your permanent records.

The importance of the [Valve Assessment and Exercising Program](#) is apparent when major emergencies arise and Utility personnel are unable to either locate or close a valve or several valves during a water main break. The same problem occurs when valves that are normally closed need to be opened during a firefighting effort and these valves then fail in the closed position. These situations can occur when valves are not operated annually or at least every two years.

[An organized field approach to this Valve Exercising and Assessment project will include the following:](#)

- ◆ **Introduce and maintain an interactive role** with the Utility Staff for the Valve Program. Conduct short interviews with staff about particulars of the distribution system such as problem areas prone to poor fire flow, age of pipe, and 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 assessed in progression and problems identified in an orderly fashion. This would include setting a schedule and maintaining a level of Field Staffing that will insure completion of the valve assessments 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 valve assessments on the distribution system** and document all locations and valves in a manner that will allow a prioritized list of maintenance items to be pursued according to the described “Scope of Work”
- ◆ **Locate** all valves in a manner that will allow their positions to be known and readily re-creatable by Utility personnel upon demand. (GPS Coordinates can be taken or the Utility can provide their GPS data for the records)
- ◆ **Document** each valve operated and individual valve data to such an extent as to provide information characteristic to each specific attribute as defined by the Utility
- ◆ **Provide constant communication** with the Utility staff so valves with issues can be addressed in a timely manner
- ◆ **Provide instruction and council to Utility staff** during the course of the valve exercising and assessments so once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting valve exercising and assessments with the established goal of reducing the amount of maintenance required for the distribution system while providing up to date data for the Utility for each and every valve
- ◆ **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the Valve Assessment and Exercising Program.
- ◆ **Provide recommendations for future valve assessment and exercising programs** such as a methodology and frequency for valve operating

Valve Location - General

- ◆ **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 atlas 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. M.E. Simpson Co. 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, M.E. Simpson Co. shall be paid for the attempted locate.
- ◆ **Located valve boxes or valve vault covers** shall be painted with an environmentally formulated **precautionary blue paint** for future identification.

Information & Data Collection

- ◆ All of the information and data collected will be provided in an electronic format so that it may be uploaded to the Utility's GIS-Based application. This will be accomplished either live as the project is proceeding by the means of a laptop or tablet type device with a wireless connection to the internet and login onto the Utility's GIS-Based application or Pro Maps. Data will also be delivered to the Utility at the end of the project in an electronic format.
- ◆ The data collected shall include, but not be limited to, the following water valve information:
- ◆ Identifying number presently employed by the Utility's GIS-Based application or created by M.E. Simpson Co., Inc.
- ◆ Location referenced by coordinates in landmark system presently employed by the Utility's GIS-Based application
- ◆ Location by street and cross-street names
- ◆ Photo showing location of each valve
- ◆ Size
- ◆ Type
- ◆ Identified Problems: Box/Vault full of debris and/or water, Paved Over, Sealed Shut, Misaligned, Buried, Chlorination Whip in Vault, Bent Stem, Packing Leak, Missing Operating Nut, Rounded Operating Nut, Bolt Deterioration, Broken Stem, Inaccessible, Structural Deficiencies
- ◆ Operating nut depth
- ◆ Enclosure type
- ◆ Number of turns to achieve full closure
- ◆ Direction of closure
- ◆ Present valve position
- ◆ Date operated
- ◆ **Documentation:** As stated above; all documentation will be performed either "live", online through the Utility's GIS-Based online application or Pro Maps. Data will also be delivered to the Utility at the end of the project in an electronic format.
- ◆ All of the information and data collected will be compiled by means of electronic tablet or laptop computer.
- ◆ The data collected shall include, but not be limited to, the following water valve information:
 - Identifying number consistent and compatible with system presently employed by the Utility
 - Location referenced by coordinates in landmark system approved by the Utility
 - Size
 - Type
 - Operating nut depth
 - Enclosure type
 - Number of turns to achieve full closure

- Direction of closure
- Present valve position
- Date operated

GPS Locations

M.E. Simpson Company's Project Team will furnish all labor, material, transportation, tools, and equipment necessary to perform GPS locations on specified appurtenances in the distribution system, then take these GPS locations and import them into a GPS database, showing all the important locational details needed and desired by the Utility. 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 asset 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.
- ◆ The field equipment to be used will be that which was described in the "Equipment to be used" section.
- ◆ Project Team Personnel will meet with the Utility to review the project guidelines and answer any questions on procedures.
- ◆ As a part of the program, mapping discrepancies found on the current atlases will be noted and included as a part of the final report so the Utility will have a listing of 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 made by the Project Team.
- ◆ A progression map shall be maintained for each section under study indicating all assets located 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 asset 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 collection of GPS points, and traffic volume may affect the ability of the Project Team to be able to safely GPS valves on busy streets. The Project Team will give 24-hour advanced notice of intent to GPS 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.
- ◆ Examine the water maps to determine the anticipated location of each asset/appurtenance chosen.
- ◆ Attempt to verify the existence of all selected assets shown on the atlases by visual inspection.
- ◆ Search for assets 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 assets.
- ◆ Identify locations where a main line valve or water main is expected, but not shown on the current maps, and proceed through verification and search process.

GPS Asset Location

- ◆ Once the assets have been physically located, the Project Team will perform the following:
- ◆ The Project Team will collect GPS Coordinates of all assets assessed using the above “Scope of Work”
- ◆ The Project Team will work with the Utility to develop a “data dictionary” which will define the information to be collected for each attribute. The data dictionary shall have 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 (Example: mainline valve, hydrant, tee, elbow, four-way cross, major service line, etc.).
 - Offset information if the attribute needs to have the location determined by an offset coordinate due to blocked signals from the GPS satellites.
 - 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-meter.
- ◆ 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 (below 15 degrees), it is expected that the project team will wait until the position is better before attempting to gather the GPS position.
- ◆ The information collected will be differentially corrected using Pathfinder 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 if a valve program is part of the work.
- ◆ 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 will be obtained from the Internet. This will allow for a greater accuracy of the GPS locations.

Documentation of GPS Locations

- ◆ The Project Team will provide a location report for each asset located, included in a database or excel spreadsheet on a USB in a format agreed upon between the Utility and the Project Team.
- ◆ The GPS data collected shall include but is not limited to the following information:
 - *Identifying number consistent and compatible with system presently employed by the Utility.*
 - *Location referenced by coordinates using the Illinois State Plane Coordinate System.*
 - *Type of structure.*
 - *Date and time data was collected.*

Valve Exercising

The M.E. Simpson Co., Inc. Project Team will:

- ◆ Operate/Exercise selected valves in accordance with the AWWA manual M-44, “Distribution Valves: Selection, Installation, Field Testing and Maintenance”
- ◆ 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 M.E. Simpson Co., Inc. 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.
- ◆ Using AWWA C500-02 Standards, the following maximum torques shall be as follows:
 - 4” gate valves – **200 ft. lbs.**
 - 6” through 12” gate valves – **300 ft. lbs.**
 - Gate valves larger than 12” – **600 ft. lbs.**
 - Butterfly valves – **200ft. lbs.**
- ◆ With guidance, review by M.E. Simpson Co. staff engineers, Utility review and Utility permission, maximum torque limits **may** be exceeded on a case by case basis to attempt to get the valve to operate.
- ◆ 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 three (3) consecutive ranges of operations**, or the valve is easily turning below 70 ft. lbs. of torque. All valves, regardless of operating torque, will be exercised repeatedly towards the closed position or “working the bottom” until there is

no further increase in the number of turns from the fully opened position to the full closed position.

- ◆ **The M.E. Simpson Co., Inc. Project Team shall notify** the Utility, 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.
- ◆ **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. M.E. Simpson Company cannot be held responsible for possible valve failures during the operating procedure.**

Documentation of Valve Exercising

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)
 - 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 Exercising

M.E. Simpson Co., Inc. takes great care when exercising/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. M.E. Simpson Co., Inc. cannot be held responsible for possible valve failures during their operation due to pre-existing conditions. M.E. Simpson Co., Inc. 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.

Equipment

The following equipment will be used for valve exercising/assessment work during the valve program for the Utility. All material listed will be on the job site at all times.

- ◆ 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
- ◆ All necessary hand tools needed
- ◆ 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 “Fischer M-Scope” / “Schonstedt” / “Chicago Tape” magnetic locator
- ◆ A “Radio Detection RD4000” series line locator
- ◆ **For *OPTIONAL GPS Location Services (if chosen)***: A Trimble GPS GeoExplorer 6000 Series GeoXH hand held receiver, and related equipment

Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the Valve Assessment and Exercising 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 assessing and exercising valves in the Water System.

Final Reports, Documentations & Communications

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

- ◆ Project Team will **meet daily** with assigned Utility personnel to go over areas of assessment program for prior workday and plan current day and valves exercised.
- ◆ The field technicians will be readily available by cellular phone. This will facilitate communications between the Utility and the field technicians. A **24-hour toll-free 800 number** is available for direct contact with M.E. Simpson Co., Inc. for emergencies.
- ◆ **The Project Manager will** meet with the Utility regularly for a progress report.
- ◆ **Prepare a progress report** at selected intervals for the Utility if requested.
- ◆ Provide a list of material deficiencies such as, broken valves, valves with minor issues and mapping discrepancies on a weekly (in Pro-Maps™ format). The list will also be included with the final report that will include the following;
 1. Mechanical deficiencies discovered
 2. Mapping errors on the water atlas
 3. Broken Valves
 4. Major Deficiencies
 5. Minor Deficiencies
- ◆ **Prepare the final report** at the completion of the project which will include all valve location, information and documentation reports, total of valves assessed and exercised, and a list of problems found in the system during the course of the valve assessment and exercising program that need the attention of the Water Utility. **This final report shall be made available for submission to the Utility within thirty (30) working days of the completion of the fieldwork.**

Effective communication...
accurate documentation...
**Ensuring the success for
the valve exercising program**

Assumptions & Services Provided by the Utility

- ◆ The Utility, in an acceptable electronic format, will furnish all maps, atlases, and records, necessary to properly conduct the valve-operating program.
- ◆ The Utility, in an acceptable electronic format, will provide all Valve ID numbers, type of valve (if known), Map page numbers or grid number, and any other additional information that can aid in helping the overall success of the program.
- ◆ The Utility, in an acceptable electronic format, will furnish all GPS Coordinate data.
- ◆ The Utility, in an acceptable electronic format, 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 M.E. Simpson Co., Inc., and will not be shared with anyone outside of the Utility without consent of the Utility.

- ◆ The Utility will notify other departments as to the activity of Valve Assessment and Exercising Program 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.

PROJECT SAFETY PLAN

M.E. Simpson Co., Inc.'s Safety Programs cover all aspects of the work performed by M.E. Simpson Co., Inc. We take great pride in our safety plan/policy/program and that is evident in our EMR scores over the last five years. The safety of our employees, the utilities employees and that of the general public is our #1 priority.

Our Safety Plan/Policy/Program, with all of its parts, is 60 pages in length. In an effort to be more efficient and less wasteful we do not print copies of the safety program for RFPs. There is nothing secretive or proprietary contained within our plan/policy/program and we are happy to share its contents. If you would like a PDF copy of our plan/policy/program please contact Terrence Williams, Operations Manager, at 800.255.1521 and a copy of our program will be sent via email to you.

Below is an overview of our plan/policy/program:



Safety is a major part of any project. M.E. Simpson Co., Inc. always provides a safe work environment for its employees. **Our staff is trained in General Industry OSHA rules, Confined Space Entry & Self-Rescue, First Responder First Aid, CPR, and Traffic Control.**

While in the field on your project, M.E. Simpson Co., Inc. and its employees will follow all of the necessary safety procedures to protect themselves, your staff and the general public.

M.E. Simpson Co., Inc. uses Two-Man Teams for Safety and Quality Assurance.

Therefore M.E. Simpson Co., Inc. adheres to the following:

- ◆ **The Project Manager and the Field Manager will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an OSHA 10 Hour or 30 Hour Card.**
- ◆ **Any listening points located in a "confined space" such as pit and vault installations that require entry will be treated in accordance with the safety rules regarding **Confined Space Entry, designated by the Utility, The Department of Labor and OSHA.**
 - All personnel are **trained and certified** in Confined Space Entry & Self-Rescue.**
- ◆ **We will follow all safety rules regarding **First Responder First Aid & CPR, designated by the Utility, The Department of Labor and OSHA.****
 - All personnel are **trained and certified** in First Responder First Aid & CPR.
- ◆ **We will follow all **traffic safety rules, designated by the Utility, The Department of Labor, OSHA, and the State Department of Transportation (per MUTCD).****
 - All personnel are **trained and certified**, by the **AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA)** in Traffic Control and Safety.

Current documentations of safety training and certifications can be provided for all project personnel for the Utility. These certifications are current and up to date (for 2023) for all project personnel.

VALVES TO BE EXERCISED

The total number of valves to be exercised for the Utility is approximately **1454** main line valves over a 3 year period. The number of valves exercised and assessed may vary from the estimated number above. Any additional valves shall be charged a per unit price.

PROPOSED PROJECT SCHEDULE

Project Start Date: TBD

Hold Kick-off meeting: TBD, to cover goals and objectives of Project.

Fieldwork to be completed and documented: TBD days depending on number of valves to be exercised and assessed.

Valves Reports: Thirty (30) working days after fieldwork is completed for the project.

INVESTMENT

A commitment to improving and maximizing the Town of Highland's water distribution system for future generations.

M.E. Simpson Co., Inc. is pleased to offer the Town of Highland our proposal for a Valve Assessment and Exercising program. This program is based on locating, exercising, assessing and documenting approximately **1454** valves in the Town of Highland's water distribution system. The exercising and documentation will be done by one of our two-man teams', in accordance with the above Scope of Service, with all necessary equipment furnished by M.E. Simpson Co., Inc. as described within this document.

2023 Valves Assessed and Exercised at \$51.00 each (Group 1: 473)	\$24,123.00
2024 Valves Assessed and Exercised at \$53.00 each (Group 2: 516)	\$27,348.00
2025 Valves Assessed and Exercised at \$53.00 each (Group 3: 465)	\$24,645.00

*** Any additional valves beyond the original sated amount per year will be assessed a per valve fee for that year.*

These fees are all based on [approximate](#) numbers of valves to be exercised and assessed. **The total price will change according to the actual number of valves completed.** All procedures will be followed according to the above scope of services.

We thank you for this opportunity to acquaint you with our Valve Exercising and Assessment Program and offer this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

**WATER WORKS DISTRICT OF HIGHLAND
BOARD OF WATER WORKS DIRECTORS
RESOLUTION NO. 2023-05**

A RESOLUTION ACCEPTING AND APPROVING A PROPOSAL FROM M.E. SIMPSON COMPANY, INC. FOR A FIRE HYDRANT FLOW TESTING AND FLUSHING PROGRAM (THREE-YEAR PROGRAM) AT A TOTAL COST OF \$55,434.00.

Whereas, the Water Works District of Highland (District) is governed by its Board of Water Works Directors, pursuant to the provisions of IC 8-1.5-4 et seq.; and

Whereas, IC 8-1.5-4-4 specifically provides that the Board of Directors shall manage and control all works of the Water Works and may purchase, acquire, construct, reconstruct, operate, repair and maintain all water works; and

Whereas, the District has the responsibility of flushing, testing, and maintaining fire hydrants in the Town of Highland; and

Whereas, the Water Works Superintendent has determined a need to flow test and flush fire hydrants within the system, and has solicited a proposal to perform the work from M.E. Simpson Company, Incorporated (M.E. Simpson), a technical service company providing professional services for the Water Works industry; and

Whereas, M.E. Simpson has submitted a proposal for a Fire Hydrant Flow Testing and Flushing Program, dated April 25, 2023, that details the terms and conditions for services to be performed, and includes a cost summary estimate for the work as follows:

Three-year agreement, inclusive of door tag notices

2023 – Approximately 233 fire hydrants	\$65.00/each	\$15,145.00
2024 – Approximately 324 fire hydrants	\$65.00/each	\$21,060.00
<u>2025 – Approximately 287 fire hydrants</u>	<u>\$67.00/each</u>	<u>\$19,229.00</u>
Total		\$55,434.00

Three-year agreement, no door tag notices

2023 – Approximately 233 fire hydrants	\$50.00/each	\$11,650.00
2024 – Approximately 324 fire hydrants	\$50.00/each	\$16,200.00
<u>2025 – Approximately 287 fire hydrants</u>	<u>\$52.00/each</u>	<u>\$14,924.00</u>
Total		\$42,774.00

Whereas, the Board of Water Works Directors, pursuant to §31.17(E) of the HMC serves as the purchasing agency for the Department of Water Works; and

Whereas, the express approval of the purchasing agency is required, pursuant to §31.18(C) of the HMC, since the agreement exceeds both \$10,000.00 and one-year in duration; and

Whereas, the Water Works Superintendent, pursuant to §31.19(D)(1) of the HMC, serves as the purchasing agent for the Highland Water Works District; and

Whereas, the purchase will be supported by the Water Works District Operating fund and there is sufficient appropriation in order to support the purchase; and

Whereas, the Board of Water Works Directors now desires to approve and authorize the Water Works Superintendent to complete the purchase, pursuant to the terms stated herein.

Now, Therefore Be it Hereby Resolved by the Board of Water Works Directors of the Town of Highland, Lake County, Indiana:

Section 1. That the proposal for a Hydrant Flow Testing and Flushing Program with door tag notices (incorporated by reference and made a part of this Resolution) from M.E. Simpson is hereby accepted and approved in each and every respect;

Section 2. That M.E. Simpson is hereby authorized to flow test and flush approximately 233 fire hydrants in 2023, approximately 324 fire hydrants in 2024, and approximately 287 fire hydrants in 2025;

Section 3. That the terms and charges under the proposal for professional services in the total amount of \$55,434.00 over a three-year period, as described herein, is found to be reasonable and fair;

Section 4. That the Water Works District of Highland, through its Board of Directors, believes that M.E. Simpson has demonstrated professional competence and qualifications to perform the particular professional technical services called for in the proposal and associated project, pursuant to I.C. 5-16-11.1-5;

Section 5. That the Water Works District Superintendent be authorized to execute the proposal with his signature.

Duly Adopted and Resolved by the Board of Water Works Directors of Highland, Lake County, Indiana, this 27th day of April, 2023. Having been passed by a vote of ____ in favor and ____ opposed.

**HIGHLAND WATER WORKS
BY ITS BOARD OF DIRECTORS:**

George A. Smith, President

Attest:

Richard E. Volbrecht, Jr., Secretary



April 25, 2023

Mr. Mark Knesek
Director of Public Works
Town of Highland
3333 Ridge Road
Highland, IN 46322

RE: PROPOSAL FOR FIRE HYDRANT FLOW/WATERMAIN CAPACITY TESTING

Dear Mr. Knesek,

M.E. Simpson Co., Inc. is pleased to present the Town of Highland our proposal for its Fire Hydrant Flow/Watermain Capacity Testing Program. We are honored to be considered for this work and are confident our team will help make the project a success.

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

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

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

Sincerely yours,

Randy Lusk
Regional Manager

Randy Lusk
Innovations & Solutions Manager

3406 Enterprise Avenue
Valparaiso, IN 46383

800.255.1521 T
888.531.2444 F

Randy.Lusk@mesimpson.com

SCOPE OF WORK

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 Fire Hydrant Flow/Watermain Capacity Testing program 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.
- ◆ 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 Fire Hydrant Flow/Watermain Capacity 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 Fire Hydrant Flow/Watermain Capacity 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.
- ◆ M.E. Simpson Co., Inc. will use large flow testing signs in designated areas to notify areas to be tested and inspected.
- ◆ 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 Village will be responsible for the postage and printing costs.

- ◆ M.E. Simpson Co., Inc. can 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.
- ◆ 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 greased 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 “flow” 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 Gutermann AquaScope 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 Gutermann AquaScope 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.

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

Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the flushing 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.

Final 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™/Pro-Hydrant®** an electronic fire hydrant database. 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.
- ◆ M.E. Simpson Co., Inc. can also provide the **Pro-Maps™/Pro-Hydrant®**, electronic database, that has the abilities to access and reproduce and edit all aforementioned hydrant location and flow testing information. 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.**

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 unidirectional flushing program for the Utility. All materials listed will be on the job site at all times.

- ◆ Pumper Port Diffuser, Hose Monster
- ◆ 2.5” Port diffusers, Hose Monster / Pollards
- ◆ Certified and field tested flow gauges
- ◆ Valve keys
- ◆ FCS S30 or Gutermann AquaScope listening device to ensure the hydrant isn’t leaking
- ◆ 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”/“Fisher” magnetic locators
- ◆ A “Radio Detection line locators

PROJECT SAFETY PLAN

M.E. Simpson Co., Inc.'s Safety Programs cover all aspects of the work performed by M.E. Simpson Co., Inc. We take great pride in our safety plan/policy/program and that is evident in our EMR scores over the last five years. The safety of our employees, the utilities employees and that of the general public is our #1 priority.

Our Safety Plan/Policy/Program, with all of its parts, is 60 pages in length. In an effort to be more efficient and less wasteful we do not print copies of the safety program for RFPs. There is nothing secretive or proprietary contained within our plan/policy/program and we are happy to share its contents. If you would like a PDF copy of our plan/policy/program please contact Terrence Williams, Operations Manager, at 800.255.1521 and a copy of our program will be sent via email to you.

Below is an overview of our plan/policy/program:



Safety is a major part of any project. M.E. Simpson Co., Inc. always provides a safe work environment for its employees. **Our staff is trained in General Industry OSHA rules, Confined Space Entry & Self-Rescue, First Responder First Aid, CPR, and Traffic Control.** While in the field on your project, M.E. Simpson Co., Inc. and its employees will follow all of the necessary safety procedures to protect themselves, your staff and the general public.

M.E. Simpson Co., Inc. uses Two-Man Teams for Safety and Quality Assurance.

The use of a "one-person" leak detection team is dangerous and impractical where water mains run under roadways. It would be a dangerous precedent to allow a "one-person" team to access main line valves located in the roadway, attempt to listen to the valve with headphones on, and at the same time try to control traffic flow at that person's location in the street.

Therefore M.E. Simpson Co., Inc. adheres to the following:

- ◆ The Project Manager and the Field Manager will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an OSHA 10 Hour or 30 Hour Card.
- ◆ Any listening points located in a "confined space" such as pit and vault installations that **require entry** will be treated in accordance with the safety rules regarding **Confined Space Entry, designated by the Utility, The Department of Labor and OSHA.**
 - All personnel are **trained and certified** in Confined Space Entry & Self-Rescue.
- ◆ We will follow all safety rules regarding **First Responder First Aid & CPR, designated by the Utility, The Department of Labor and OSHA.**
 - All personnel are **trained and certified** in First Responder First Aid & CPR.
- ◆ We will follow all **traffic safety rules, designated by the Utility, The Department of Labor, OSHA, and the Illinois Department of Transportation (per MUTCD).**
 - All personnel are **trained and certified**, by the **AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA)** in Traffic Control and Safety.

Current documentations of safety training and certifications can be provided for all project personnel for the Utility. These certifications are current and up to date (for 2023) for all project personnel.

HYDRANTS TO BE FLOW TESTED

The total number of hydrants to be flow tested for the Utility is approximately **844**. The number of hydrants tested may vary from the estimated number above. Any additional hydrants shall be charged a per unit price.

PROPOSED PROJECT SCHEDULE

Project Start Date: TBD

Hold Kick-off meeting: TBD, to cover goals and objectives of Project.

Fieldwork to be completed and documented: TBD days depending on number of hydrants to be flow tested.

Hydrant Reports: Twenty (20) working days after fieldwork is completed for the project.

INVESTMENT

A commitment to improving and maximizing the Town of Highland's water system for future generations.

M.E. Simpson Co., Inc. is pleased to offer the Town of Highland our proposal for a Fire Hydrant Flow/Watermain Capacity Testing program. This program is based on locating, documenting, and flow testing **844** fire hydrants in the Town of Highland's water distribution system. All procedures and practices will be done in accordance with the above Scope of Services. The flow testing and documentation will be done by one of our two-man teams with all necessary equipment furnished by M.E. Simpson Co., Inc. as described within this document.

2023 Fire Hydrant Flow Tests at \$50.00 each (Group 1: 233)	\$11,650.00
Optional Door Tagging at \$15.00 each (Approx. 233)	\$3,495.00
2024 Fire Hydrant Flow Tests at \$50.00 each (Group 2: 324)	\$16,200.00
Optional Door Tagging at \$15.00 each (Approx. 324)	\$4,860.00
2025 Fire Hydrant Flow Tests at \$52.00 each (Group 3: 287)	\$14,924.00
Optional Door Tagging at \$15.00 each (Approx. 287)	\$4,305.00

These fees are all based on approximate numbers of fire hydrants to be flow tested. **The total price will change according to the actual number of fire hydrants completed.** All procedures will be followed according to the above scope of services. This will include the Pro-Maps™ Unity database loaded with the fire hydrant database and flow testing information for all fire hydrants completed.

We thank you for this opportunity to acquaint you with our Fire Hydrant Flow/Watermain Capacity Testing services and present you with this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

GL Number	Invoice Line Desc	Ref #	Vendor	Invoice Description	Amount	Check #
Fund 6101 WATER OPERATING						
Dept 0000						
6101-0000-00100	PIPE CUTTER	102699	AMAZON	CLOSE QUARTERS PIPE CUTTER FOR WAT	37.79	24344
6101-0000-00100	18638 CERTIFIED POWER QUICK JET	102700	LINDCO EQUIPMENT SALES, INC	CERTIFIED POWER QUICK JET/BANJO FI	224.46	24345
6101-0000-00100	1575.7 UNLEADED	102726	TOWN OF HIGHLAND GASOLINE FUEL	FUEL BY USAGE WATER	9,997.28	24346
6101-0000-00100	5012600077,3732 RIDGE RD	102780	NISOURCE INC.	WATER	9,737.62	999366
6101-0000-00100	APR/23 POSTAGE FOR 7920 BILLS	102820	LITHOGRAPHIC COMMUNICATIONS	APRIL 2023 UTILITIY BILL MAILINGS	3,562.13	24349
6101-0000-00100	3"x2"x3/16"x7' ANGLE	103040	AAA SUPPLY CORPORATION	ANGLE - WATER DEPT	28.88	
6101-0000-00100	CHLORINE CYLINDER RENTAL	103041	ALEXANDER CHEMICAL CORPORATI	CHLORINE CYLINDER RENTAL 2/27/23 -	174.00	
6101-0000-00100	SOD	103103	ALLEN LANDSCAPE IN HIGHLND,LL	SOD - WATER DEPT	5.35	
6101-0000-00100	ANNUAL MEMBERSHIP	103043	ALLIANCE OF INDIANA RURAL WA	ANNUAL MEMBERSHIP 3/28/23 TO 3/26/	650.00	
6101-0000-00100	RUG AND BATTERIES	103044	AMAZON	RUG AND RECHARGEABLE BATTERY FOR F	111.42	
6101-0000-00100	SHREDDER	103110	AMAZON	SHREDDER	92.40	
6101-0000-00100	PIZZA	103045	AMICI GRILL AND PIZZERIA	PIZZA FOR WATER MAIN BREAK - WATER	69.50	
6101-0000-00100	3/9/2023 INV # 337-426388	103046	AUTO-WARES	MARCH 2023 INVOICES - WATER DEPT	189.76	
6101-0000-00100	BIWEEKLY MEET/RECURRING PHONE	102834	BAKER TILLY MUNICIPAL ADVISO	BIWEEKLY MEET/RECURRING PHONE CAL	73.33	
6101-0000-00100	BANK REC	102648	BAKER TILLY MUNICIPAL ADVISO	BANK REC	5,000.00	
6101-0000-00100	BANK REC	102693	BAKER TILLY MUNICIPAL ADVISO	BANK REC	5,000.00	
6101-0000-00100	CONF REIMBURSEMENT	103112	BERNIE ZEMEN (R)	4/10/23-4/12-23 CONF	951.84	
6101-0000-00100	REPLACE DUAL FLOW CONTROL	103047	CIVES CORPORATION	REPLACE DUAL FLOW CONTROL FOR UNIT	1,221.79	
6101-0000-00100	4 - HATS	103048	FIRE SERVICE, INC.	HATS FOR NEW EMPLOYESS - WATER DEP	64.00	
6101-0000-00100	PW UNIFORMS - NEW EMPLOYEES	103049	FIRE SERVICE, INC.	PUBLIC WORKS UNIFORMS FOR NEW EMPL	332.96	
6101-0000-00100	100 RZ 3/8	103053	GREAT LAKES DISTRIBUTING INC	NEW HOSE FOR HOTSY - WATER DEPT	340.00	
6101-0000-00100	NOZZLES	103054	GREAT LAKES WELDING	NOZZLES - WATER DEPT	38.75	
6101-0000-00100	ELECTRODE	103055	GREAT LAKES WELDING	ELECTRODE /ARC - WATER DEPT	190.90	
6101-0000-00100	CYLINDER RENTAL FOR FEBRUARY 21	103050	GREAT LAKES WELDING	CYLINDER RENTAL FOR FEBRUARY 2023	58.80	
6101-0000-00100	CYLINDER RENTAL FOR MARCH 2023	103051	GREAT LAKES WELDING	CYLINDER RENTAL FOR MARCH 2023 - W	65.10	
6101-0000-00100	FRONT WHEEL ALIGNMENT	103052	GRIMLER AUTOMOTIVE, INC	FRONT WHEEL ALIGNMENT FOR TRUCK #	134.14	
6101-0000-00100	METER #17625365 UNITS 40713	102778	HAMMOND WATER WORKS DEPARTME	#962410000 WATER USAGE 2/28/2023 -	44,784.30	
6101-0000-00100	METER # 18840149 UNITS 45519	102779	HAMMOND WATER WORKS DEPARTME	#962410107 WATER USAGE 2/28/23-3/3	50,070.90	
6101-0000-00100	50 - 100PK WHITE CUSTOM 4"x5"	103057	HD SUPPLY, INC.	50 100PK WHITE CUSTOM FLAGS - WATE	902.00	
6101-0000-00100	40-100PK BLUE MARKING FLAGS	103058	HD SUPPLY, INC.	MARKING FLAGS - WATER DEPT	1,097.11	
6101-0000-00100	LT2Y5/T5R16 TIRES	103056	HELLMANS AUTO SPPLY CO.	TIRES FOR UNIT # 12 - WATER DEPT	718.92	
6101-0000-00100	2 X 4 LIGHT LENS	103059	HOME DEPOT CORPORATION	LIGHT LENS/C6 JACK - WATER DEPT	65.26	
6101-0000-00100	ANNUAL TANKS FEE D/S - WT	103060	INDIANA DEPT OF ENVIRON MGT	ANNUAL TANKS FEE D/S - WT	90.00	
6101-0000-00100	MARCH 811 TICKETS	103061	IUPPS,INC	LOCATE TICKETS FOR MARCH	190.00	
6101-0000-00100	2 - THERMOPLASTIC FOG NOZZLE	103062	J & L FASTENERS, INC.	NOZZLE/MILL HOSE - WATER DEPT	290.86	
6101-0000-00100	3/13/2023 #191180 BLACK DIRT	103063	KROOSWYK MATERIALS, INC	BLACK DIRT FOR RESTORATION - WATER	208.00	
6101-0000-00100	3/8/2023 #190970	103064	KROOSWYK MATERIALS, INC	BLACK DIRT/STRAW/SEED FOR RESTORAT	764.98	
6101-0000-00100	BLACK DIRT	103065	KROOSWYK MATERIALS, INC	BLACK DIRT FOR RESTORATION - WATER	78.00	
6101-0000-00100	4/3/2023 #256754 3/4" STONE	103066	KROOSWYK TRUCKING & EXCAVATI	GRADE 8 STONE FOR RESTORATION - WA	2,221.96	
6101-0000-00100	MAILING	102849	LITHOGRAPHIC COMMUNICATIONS	APR 2023 UTILITIES BILL	1,507.50	
6101-0000-00100	URT/ENGAGE BOB REYNOLDS	102808	LONDON WITTE GROUP, LLC	URT/ENGAGE BOB REYNOLDS	450.00	
6101-0000-00100	ANNUAL SUBSCRIPTION PROMAPS	103069	M E SIMPSON COMPANY INC	ANNUAL SUBSCRIPTION MAY 9 - MAY 8	3,450.00	
6101-0000-00100	HOTEL/MILEAGE/FOOD	103067	MARK KNESEK (R)	REIMBURSE EXPENSES FOR 2023 AWWA C	963.95	
6101-0000-00100	INV # P15770 3/27/2023 / STAR	103068	MCCANN INDUSTRIES,INC	STARTER FOR UNIT # 38 - WATER DEPT	329.64	
6101-0000-00100	CLASSIC X 2' CROSS TEE	103070	MENARDS	CLASSIC X CROSS TEES FOR FRONT OFF	97.30	
6101-0000-00100	KEYSTONE WALL PLATE	103071	MENARDS	WALL PLATES/INSER - WATER DEPT	13.89	
6101-0000-00100	PURDY 3-PK ROLLER	103072	MENARDS CORP - SCHERERVILLE	MISC PAINT SUPPLIES - WATER DEPT	230.36	
6101-0000-00100	6-1/2" TIE WIRE - 25 BAG	103073	MENARDS CORP - SCHERERVILLE	WIRE TIES - WATER DEPT	36.45	
6101-0000-00100	7FT CORD	103074	MENARDS CORP - SCHERERVILLE	POWER CORDS - WATER DEPT	23.87	
6101-0000-00100	FLINT STRIKER	103075	MENARDS CORP - SCHERERVILLE	SUPPLIES FOR FRONT OFFICE - WATER	40.10	
6101-0000-00100	BASE LWM620 PFJPINE	103076	MENARDS CORP - SCHERERVILLE	BASE BOARD FOR FRONT OFFICE - WATE	111.96	
6101-0000-00100	WIRE BRUSH SET 3PC	103077	MENARDS CORP - SCHERERVILLE	MISC SUPPLIES - WATER DEPT	66.39	

INVOICE GL DISTRIBUTION REPORT FOR TOWN OF HIGHLAND
 EXP CHECK RUN DATES 03/25/2023 - 04/28/2023
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GL Number	Invoice Line Desc	Ref #	Vendor	Invoice Description	Amount	Check #
Fund 6101 WATER OPERATING						
Dept 0000						
6101-0000-00100	FUEL PREMIX	103078	MENARDS CORP - SCHERERVILLE	FUEL PREMIX/POINT BAR/CABLE TIE/NI	307.90	
6101-0000-00100	2-1/8" HOLE SAW CARBIDE	103079	MENARDS CORP - SCHERERVILLE	HOLE SAW CARBIDE/ABOR SYSTEM - WAT	35.46	
6101-0000-00100	HOTEL/MILEAGE/FOOD	103080	MICHAEL PIPTA (R)	REIMBURSE EXPENSE FOR 2023 AWWA CO	930.55	
6101-0000-00100	COLIFORM SAMPLING FOR MARCH	103081	MICROBAC LABORATORIES, INC	COLIFORM SAMPLING FOR MARCH	1,137.50	
6101-0000-00100	SNOW20	103082	NAPA AUTO PARTS	SNOW20 FOR UNIT # 5 - WATER DEPT	71.76	
6101-0000-00100	PURPLE POWER CAR WASH	103083	NAPA AUTO PARTS	PURPLE POWER CAR WASH - WATER DEPT	41.36	
6101-0000-00100	PITMAN ARM ASSEMBLY	103084	NAPA AUTO PARTS	PITMAN ARM ASSEMBLY FOR UNIT #12 -	160.12	
6101-0000-00100	JAN/FEB/MAR RETAINER	103086	NIES ENGINEERING, INC.	1ST QTR RETAINER WATER BOARD	1,140.00	
6101-0000-00100	25 TON PIN STYLE JACK STAND	103087	NORTHERN TOOL&EQUIPMENT COMP	JACK STANDS - WATER DEPT	519.90	
6101-0000-00100	RETURN MAIL	103108	PETTY CASH-GENERAL FUND	RETURN MAIL	13.32	
6101-0000-00100	PAPER, SUPPLIES	102833	PULSE TECHNOLOGY OF INDIANA	PAPER, SUPPLIES	68.30	
6101-0000-00100	PRINTER INK, SUPPLIES	102649	PULSE TECHNOLOGY OF INDIANA	PRINTER INK, SUPPLIES	123.06	
6101-0000-00100	HAMMOND WATER RATE INCREASE	103088	ROBERT F TWEEDLE	SERVICES RENDERED FEB AND MARCH	2,185.00	
6101-0000-00100	JAN/FEB/MAR RETAINER	103089	ROBERT F TWEEDLE	1ST QTR RETAINER WATER WORKS BOARD	300.00	
6101-0000-00100	TIRE SUPPLIES	103090	SAM'S TECH SUPPLY INC	TIRE SUPPLIES - WATER DEPT	31.43	
6101-0000-00100	MAY 2023 MONITORING FEES	103091	SECURITAS TECHNOLOGY CORPORA	MAY 2023 5/1/23-5/31/23 MONITORING	47.72	
6101-0000-00100	BACKFLOW CERTIFICATION CLASS	103092	TEST GAUGE & BACKFLOW SUPPLY	BACKFLOW CERTIFICATION CLASS STEVE	1,237.00	
6101-0000-00100	WA BASE/SEW BASE BRADLEY PUMP	102824	TOWN OF HIGHLAND UTILITIES	#0382023660 BRADLEY 2/22-3/22	237.54	
6101-0000-00100	.25" SET SCREW FOR NOZZLE	103094	UTILITY SUPPLY COMPANY	SET SCREW/5" STORZ - WATER DEPT	639.00	
6101-0000-00100	SPACER COMPOUND METER	103095	UTILITY SUPPLY COMPANY	SPACER - WATER DEPT	1,076.92	
6101-0000-00100	FULL FACE METER FLANGE GASKET	103096	UTILITY SUPPLY COMPANY	FLANGE METER GASKET - WATER DEPT	85.65	
6101-0000-00100	HYMAX COUPLING	103097	UTILITY SUPPLY COMPANY	COUPLINGS/REPAIR CLAMPS/MUELLER ST	2,237.90	
6101-0000-00100	MUELLER CC X CTS COMP CORP STC	103102	UTILITY SUPPLY COMPANY	MUELLER CC X CTS COMPCORP STOP - W	1,087.50	
6101-0000-00100	CASSETTE SEAL	103098	VERMEER-ILLINOIS, INC	SEAL/SNAP RING/BEARING FOR UNIT #	93.37	
6101-0000-00100	246.9 GALLONS	103099	WARREN OIL COMPANY	FUEL FOR GENERATOR AT BRADLEY PUMP	842.45	
6101-0000-00100	LED HIGHLIGHTER	103101	WHOLESALE DIRECT, INC	LED HIGHLIGHTER - WATER DEPT	290.64	
6101-0000-16000	WATER BASE	103104	ARDENA PDL LLC	CONSUMER DEP REFUND: 024-15007-37	10.51	
6101-0000-16000	HYDRANT	102734	CGW LLC	CONSUMER REFUND 026-16017-75	0.69	
6101-0000-16000	WATER BASE	102829	HEDGES THOMAS E	CONSUMER DEPOSIT 022-14028-50	5.50	
6101-0000-16000	WATER USAGE	102731	HIGHLAND APARTMENTS	CONSUMER REFUND : 029-17002-01	36.56	
6101-0000-16000	WATER USAGE	102733	MC DONALD GERALD N	CONSUMER REFUND: 025-16002-50	9.77	
6101-0000-23600	WATER SALES TAX	102837	INDIANA DEPT OF REVENUE	MAR2023 WATER SALES TAX	25,899.51	999367
6101-0000-34023	HEALTH AND DENTAL INSURANCE	102748	TOWN OF HIGHLAND INS FUND (V	APR 2023 HEALTH/LIFE INS PREM WATE	38,903.19	24347
6101-0000-34043	LIFE INSURANCE	102748	TOWN OF HIGHLAND INS FUND (V	APR 2023 HEALTH/LIFE INS PREM WATE	164.56	24347
6101-0000-45200	WATER OPER TRANSFERS GROSS	102640	PAYROLL ACCOUNT	3/24PRL D/S TRANSFER WATER	34,635.62	24303
6101-0000-45200	WATER OPER TRANSFERS GROSS	102817	PAYROLL ACCOUNT	4/7PRL D/S TRANSFER WATER	40,285.09	24348
6101-0000-45200	WATER OPER TRANSFERS GROSS	103036	PAYROLL ACCOUNT	4/21PRL D/S TRANSFER WATER	37,886.21	24350
Total For Dept 0000					339,934.46	
Total For Fund 6101 WATER OPERATING					339,934.46	
Fund 6104 CONSUMER DEPOSIT						
Dept 0000						
6104-0000-20200	DEPOSIT REFUND	102732	HIGHLAND APARTMENTS	CONSUMER DEPOSIT REFUND: 029-17002-	11.81	
6104-0000-20200	DEPOSIT REFUND	102777	LEE CRYSTINA	CONSUMER DEPOSIT REFUND: 070-32028-	5.61	
6104-0000-20200	DEPOSIT REFUND	102735	REGION HOME BUYERS	CONSUMER DEPOSIT REFUND: 025-16011-	7.04	
6104-0000-20200	DEPOSIT REFUND	102827	REGION HOME BUYERS	CONSUMER DEPOSIT REFUND: 038-2003!	12.80	
Total For Dept 0000					37.26	
Total For Fund 6104 CONSUMER DEPOSIT					37.26	
Fund 6105 WATER IMPROV						
Dept 0000						

GL Number	Invoice Line Desc	Ref #	Vendor	Invoice Description	Amount	Check #
Fund 6105 WATER IMPROV						
Dept 0000						
6105-0000-34301	5/8" WATER METERS	103100	WATER RESOURCES	5/8" WATER METER FOR REPLACEMENTS	38,188.80	
6105-0000-43003	3 OF 4 PAYMENTS	103093	US BANCORP GOVERNMENT LEASIN	3 OF 4 SUPERVISOR TRUCK PAYMENTS -	9,801.91	
6105-0000-43072	PARKWAY DR (PE)	103085	NIES ENGINEERING, INC.	PARKWAY DRIVE WATER MAIN REPLACEME	6,232.50	
Total For Dept 0000					<u>54,223.21</u>	
Total For Fund 6105 WATER IMPROV					<u>54,223.21</u>	

INVOICE GL DISTRIBUTION REPORT FOR TOWN OF HIGHLAND
EXP CHECK RUN DATES 03/25/2023 - 04/28/2023
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GL Number	Invoice Line Desc	Ref #	Vendor	Invoice Description	Amount	Check #
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Fund Totals:

Fund 6101 WATER OPERATING	339,934.46
Fund 6104 CONSUMER DEPOSIT	37.26
Fund 6105 WATER IMPROV	54,223.21
	<u>394,194.93</u>

February	\$ 368,289.93	\$ 96,263.91	\$ -	\$ -	\$ 464,553.84	\$445,168.55	\$ 19,385.29	\$ 464,553.84	\$ 19,385.29
March	\$ 372,497.42	\$ 109,207.59	\$ 12,542.67	\$ -	\$ 481,705.01	\$420,903.31	\$ 60,801.70	\$ 494,247.68	\$ 73,344.37
April	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
May	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
June	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
July	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
August	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
September	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
October	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
November	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -
December	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00	\$ -	\$ -	\$ -

Total:	\$ 1,112,142.11	\$ 317,765.13	\$ 12,542.67	\$ -	\$ 1,429,907.24	\$1,254,106.45	\$ 175,800.79	\$ 1,442,449.91	\$ 188,343.46
31-Mar-23	Fourth Quarter			31-Mar-23				Percentage of prior year	270%

Prior year

	Receipts by Month				SUB TOTAL of OPERATING & IMPROVEMENT RECEIPTS	Disbursements TOTAL DISBURSEMENTS of OPERATING & IMPROVEMENT	2022 O&M plus Improvement NET RECEIPTS for MONTH	TOTAL RECEIPTS from O&M IMPROVEMENT & RESERVE	GROSS NET RECEIPTS for MONTH
	FUND WATER OPERATING RECEIPTS	FUND WATER IMPROVEMENT RECEIPTS	FUND WATER CASH RESERVE RECEIPTS	FUND CONSUMER DEPOSIT RECEIPTS					
January	\$ 293,928.61	\$ 23,233.33	\$ -	\$ -	\$ 317,161.94	\$390,834.43	\$ (73,672.49)	\$ 317,161.94	\$ (73,672.49)
February	\$ 261,000.31	\$ 44,277.25	\$ -	\$ -	\$ 305,277.56	\$269,701.82	\$ 35,575.74	\$ 305,277.56	\$ 35,575.74
March	\$ 244,511.92	\$ 62,755.96	\$ 23,114.59	\$ -	\$ 307,267.88	\$289,978.29	\$ 17,289.59	\$ 330,382.47	\$ 40,404.18
April	\$ 319,992.91	\$ 8,326.73	\$ -	\$ -	\$ 328,319.64	\$330,030.77	\$ (1,711.13)	\$ 328,319.64	\$ (1,711.13)
May	\$ 339,804.56	\$ 27.14	\$ -	\$ -	\$ 339,831.70	\$344,110.48	\$ (4,278.78)	\$ 339,831.70	\$ (4,278.78)
June	\$ 309,682.36	\$ 61,642.52	\$ 45,655.21	\$ -	\$ 371,324.88	\$300,583.76	\$ 70,741.12	\$ 416,980.09	\$ 116,396.33
July	\$ 447,938.61	\$ 112.66	\$ -	\$ -	\$ 448,051.27	\$454,037.29	\$ (5,986.02)	\$ 448,051.27	\$ (5,986.02)
August	\$ 390,555.34	\$ 381,820.62	\$ 31,421.20	\$ -	\$ 772,375.96	\$617,266.66	\$ 155,109.30	\$ 803,797.16	\$ 186,530.50
September	\$ 357,822.06	\$ 57,180.50	\$ -	\$ -	\$ 415,002.56	\$592,180.90	\$ (177,178.34)	\$ 415,002.56	\$ (177,178.34)
October	\$ 291,916.40	\$ 73,128.50	\$ -	\$ -	\$ 365,044.90	\$478,315.44	\$ (113,270.54)	\$ 365,044.90	\$ (113,270.54)
November	\$ 222,293.91	\$ 86,296.77	\$ -	\$ -	\$ 308,590.68	\$311,252.41	\$ (2,661.73)	\$ 308,590.68	\$ (2,661.73)
December	\$ 499,665.57	\$ 387.14	\$ -	\$ -	\$ 500,052.71	\$430,534.09	\$ 69,518.62	\$ 500,052.71	\$ 69,518.62

TOTAL:	\$ 3,979,112.56	\$ 799,189.12	\$ 100,191.00	\$ -	\$ 4,778,301.68	\$ 4,808,826.34	\$ (30,524.66)	\$ 4,878,492.68	\$ 69,666.34
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