

ITEM MOT 2015-6141

VILLAGE OF DOWNERS GROVE
Report for the Village Council Meeting
3/17/2015

SUBJECT:	SUBMITTED BY:
Fire Hydrant Maintenance and Flow Testing	Nan Newlon Director of Public Works

SYNOPSIS

A motion is requested authorizing the execution of a three-year contract for fire hydrant maintenance and flow testing services to M.E. Simpson Co., Inc. of Valparaiso, Indiana in the amount of \$339,202 (approximately \$113,000 per year).

STRATEGIC PLAN ALIGNMENT

The goals for 2011-2018 include *Top Quality Infrastructure*.

FISCAL IMPACT

The FY15 budget includes \$110,000 in the Water Fund for fire hydrant maintenance and flow testing services. The proposed contract would total \$112,142 for services in FY15. There is sufficient budget authority in the Water Fund for this contract.

RECOMMENDATION

Approval on the March 17, 2015 Consent Agenda.

BACKGROUND

In order to ensure the operation of the Village's fire hydrants, the Village contracts with a vendor to inspect and test the Village's 2,776 fire hydrants.

A Request for Proposals (RFP) seeking services from a qualified vendor to provide the hydrant maintenance and flow testing program for 2015-17 was issued and two proposals were received with pricing information summarized in the table below.

Three Year Contract Summary

Service Provider	Proposed Price 2015	Proposed Price 2016	Proposed Price 2017	3-Year Contract Total
M.E. Simpson Co., Inc., Valparaiso, Indiana	\$112,142	\$112,142	\$114,918	\$339,202
Utility Service Group, Atlanta, Georgia	\$233,184	n/a	n/a	n/a

The proposal submitted by Utility Service Group was disqualified as non-responsive because the RFP requested pricing for hydrant maintenance and flow testing on all hydrants each year for a period of three years. Utility Service Group submitted a proposal that included hydrant maintenance and flow testing in 2015 and no work in 2016 or 2017.

Staff recommends award of a three-year contract for fire hydrant maintenance and flow testing services with M.E. Simpson Co., Inc. M.E. Simpson's contract cost for 2015 and 2016 reflects a 0% increase from the 2014 contract cost. M.E. Simpson completed the Village's fire hydrant maintenance and flow testing program for the years from 2012-14 with good results.

ATTACHMENTS

Contract Documents

Contractor Evaluation Form



February 19, 2015

Ms. Theresa H. Tarka
Purchasing Assistant
Village of Downers Grove
801 Burlington Avenue
Downers Grove, Illinois 60515

Dear Village of Downers Grove,

M.E. Simpson Co., Inc. is pleased to present our proposal for Fire Hydrant Maintenance & Flow Testing Services for the Village of Downers Grove, IL, RFP-0-13-2015/tt.

M.E. Simpson Co., Inc. is a **Technical 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" (BMP's) for utilities. We provide our clients the highest quality Technical and Professional Services, with highly skilled and trained professionals using state-of-the art technologies.

These services were developed and refined to provide Utilities with programs customizable to meet their needs. From complete "Turn-Key" services to assisting with the development of "In-House" programs utilized by a utility, M.E. Simpson Co., Inc. provides our services to our clients knowing that the public has the implicit faith that *"the water is always safe to drink"*.

This **Proposal** is being submitted as follows:

- ◆ **Required Documents**
- ◆ **Firm History**
- ◆ **Related Project Experience, References**
- ◆ **Employee Qualifications, Project Staffing**
- ◆ **Project Understanding and Approach**
- ◆ **Scope of Services**
- ◆ **Proposed Schedule**
- ◆ **Proposal Fee**

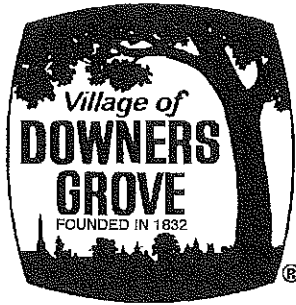
We thank you for your consideration and this opportunity to acquaint you with our **Fire Hydrant Maintenance and Flow Testing Services** and offer this proposal. If there are any inquiries regarding this proposal, please do not hesitate to contact us. We look forward to hearing from you soon.

Sincerely yours,

John H. Van Arsdel
Vice President
JHV/jph

1	Required Documents
2	Firm History
3	Related Project Experience, References
4	Employee Qualifications, Project Staffing
5	Project Understanding & Approach
6	Scope of Services, Proposed Schedule
7	Proposal Fee
8	Report Examples

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**REQUEST FOR PROPOSAL**

Name of Proposing Company: M.E. Simpson Co., Inc.

Project Name: Fire Hydrant Maintenance & Flow Testing Services

Proposal No.: RFP-0-13-2015/tt

Proposal Due: February 19, 2015, 2:00 p.m.

Required of All Proposers:

Deposit: No

Letter of Capability of Acquiring Performance Bond: No

Required of Awarded Contractor:

Performance Bond/Letter of Credit: No

Certificate of Insurance: Yes

Legal Advertisement Published: February 6, 2015

Date Issued: February 6, 2015

This document consists of 30 pages.

Return **original** and two duplicate copies, and one **cd**, of **Flash Drive** of proposal in a sealed envelope marked with the Proposal Number as noted above to:

THERESA H. TARKA
PURCHASING ASSISTANT
VILLAGE OF DOWNERS GROVE
801 BURLINGTON AVENUE
DOWNERS GROVE, IL 60515
PHONE: 630/434-5530
FAX: 630/434-5571
www.downers.us

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The VILLAGE OF DOWNERS GROVE will receive proposals Monday thru Friday, 8:00 A.M. to 5:00 P.M. at the Village Hall, 801 Burlington Avenue, Downers Grove, IL 60515.

SPECIFICATIONS MUST BE MET AT THE TIME THE PROPOSAL IS DUE.

The Village Council reserves the right to accept or reject any and all proposals, to waive technicalities and to accept or reject any item of any proposal.

The documents constituting component parts of this contract are the following:

- I. REQUEST FOR PROPOSALS
- II. TERMS & CONDITIONS
- III. DETAILED SPECIFICATIONS
- IV. PROPOSER'S RESPONSE TO RFP
- V. PROPOSAL/CONTRACT FORM

DO NOT DETACH ANY PORTION OF THIS DOCUMENT. INVALIDATION COULD RESULT. Proposers MUST submit an original, and 2 additional paper copies of the total proposal. Upon formal award of the proposal, the successful Proposer will receive a copy of the executed contract.

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I. REQUEST FOR PROPOSALS**1. GENERAL**

- 1.1 Notice is hereby given that Village of Downers Grove will receive sealed proposals up to **February 19, 2015, 2:00 p.m. .**
- 1.2 Proposals must be received at the Village of Downers Grove by the time and date specified. Proposals received after the specified time and date will not be accepted and will be returned unopened to the Proposer.
- 1.3 Proposal forms shall be sent to the Village of Downers Grove, ATTN: **Theresa Tarka**, in a sealed envelope marked "SEALED PROPOSAL". The envelope shall be marked with the name of the project, date, and time set for receipt of proposals.
- 1.4 All proposals must be submitted on the forms supplied by the Village and signed by a proper official of the company submitting the proposal. Telephone, email and fax proposals will not be accepted.
- 1.5 By submitting this proposal, the proposer certifies under penalty of perjury that they have not acted in collusion with any other proposer or potential Proposer.

2. PREPARATION OF PROPOSAL

- 2.1 It is the responsibility of the proposer to carefully examine the specifications and proposal documents and to be familiar with all of the requirements, stipulations, provisions, and conditions surrounding the proposed services.
- 2.2 No oral or telephone interpretations of specifications shall be binding upon the Village. All requests for interpretations or clarifications shall be made in writing and received by the Village at least five (5) business days prior to the date set for receipt of proposals. All changes or interpretations of the specifications shall be made by the Village in a written addendum to the Village's proposers of record.
- 2.3 In case of error in the extension of prices in the proposal, the hourly rate or unit price will govern. In case of discrepancy in the price between the written and numerical amounts, the written amount will govern.
- 2.4 All costs incurred in the preparation, submission, and/or presentation of any proposal including any proposer's travel or personal expenses shall be the sole responsibility of the proposer and will not be reimbursed by the Village.
- 2.5 The proposer hereby affirms and states that the prices quoted herein constitute the total cost to the Village for all work involved in the respective items and that this cost also includes all insurance, bonds, royalties, transportation charges, use of all tools and equipment, superintendence, overhead expense, all profits and all other work, services and conditions necessarily involved in the work to be done and materials to be furnished in accordance with

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the requirements of the Contract Documents considered severally and collectively.

3. PRE- PROPOSAL CONFERENCE

- 3.1 A pre-proposal conference may be offered to provide additional information, inspection or review of current facilities or equipment, and to provide an open forum for questions from proposers. This pre-proposal conference is not mandatory (unless stated "Required" on the cover of this document), but attendance by proposers is strongly advised as this will be the last opportunity to ask questions concerning the proposal.
- 3.2 For those unable to attend the meeting, questions may be posed in writing to the Village (faxed and emailed questions are acceptable), but must be received by the Village prior to the scheduled time for the pre-proposal conference. Questions received will be considered at the conference. An addendum may be issued as a result of the pre-proposal conference. Such an addendum is subject to the provisions for issuance of an addendum as set forth in Section 2.2 above.

4. MODIFICATION OR WITHDRAWAL OF PROPOSALS

- 4.1 A Proposal that is in the possession of the Village may be altered by a letter bearing the signature or name of the person authorized for submitting a proposal, provided that it is received prior to the time and date set for the bid opening. Telephone, email or verbal alterations of a proposal will not be accepted.
- 4.2 A Proposal that is in the possession of the Village may be withdrawn by the proposer, up to the time set for the proposal opening, by a letter bearing the signature or name of the person authorized for submitting proposals. Proposals may not be withdrawn after the proposal opening and shall remain valid for a period of ninety (90) days from the date set for the proposal opening, unless otherwise specified.

5. SECURITY FOR PERFORMANCE

- 5.1 The awarded contractor, within thirteen (13) calendar days after acceptance of the proposer's proposal by the Village, shall furnish security for performance acceptable to the Village when required under the documents. Such security shall be either a satisfactory performance bond (bonding company must be licensed to do business in Illinois) or a letter of credit on the form provided by the Village and available from the Village's Purchasing Manager. Any bond shall include a provision as will guarantee faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq. **NOTE: As evidence of capability to provide such security for performance, each proposer shall submit with the proposal either a letter executed by its surety company indicating the proposer's performance bonding capability, or a letter from a bank or savings and loan within twenty-five miles of the corporate boundaries of the Village indicating its willingness and intent to provide a letter of credit for the proposer.**

6. DELIVERY

- 6.1 All proposal prices are to be quoted, delivered F.O.B. Village of Downers Grove, 801 Burlington, Downers Grove, IL 60515.

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7. TAX EXEMPTION

- 7.1 The Village is exempt from Illinois sales or use tax for direct purchases of materials and supplies. A copy of the Illinois Sales Tax Exemption Form will be issued upon request. The Village's federal identification will also be provided to selected vendor.

8. RESERVED RIGHTS

- 8.1 The Village of Downers Grove reserves the exclusive right to waive sections, technicalities, irregularities and informalities and to accept or reject any and all proposals and to disapprove of any and all subcontractors as may be in the best interest of the Village. Time and date requirements for receipt of proposal will not be waived.

II. TERMS AND CONDITIONS**9. VILLAGE ORDINANCES**

- 9.1 The successful proposer will strictly comply with all ordinances of the Village of Downers Grove and laws of the State of Illinois.

10. USE OF VILLAGE'S NAME

- 10.1 The proposer is specifically denied the right of using in any form or medium the name of the Village for public advertising unless express permission is granted by the Village.

11. SPECIAL HANDLING

- 11.1 Prior to delivery of any product which is caustic, corrosive, flammable or dangerous to handle, the Proposer will provide written directions as to methods of handling such products, as well as the antidote or neutralizing material required for its first aid before delivery. Proposer shall also notify the Village and provide material safety data sheets for all substances used in connection with this contract which are defined as toxic under the Illinois Toxic Substances Disclosure to Employees Act.

12. INDEMNITY AND HOLD HARMLESS AGREEMENT

- 12.1 To the fullest extent permitted by law, the Proposer shall indemnify, keep and save harmless the Village and its agents, officers, and employees, against all injuries, deaths, losses, damages, claims, suits, liabilities, judgments, costs and expenses, which may arise directly or indirectly from any negligence or from the reckless or willful misconduct of the Proposer, its employees, or its subcontractors, and the Proposer, its employees, or its subcontractors, and the Proposer shall at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and, if any judgment shall be rendered against the Village in any such action, the Proposer shall, at its own expense, satisfy and discharge the same. This Agreement shall not be construed as requiring the Proposer to indemnify the Village for its own negligence. The Proposer shall indemnify, keep and save harmless the Village only where a loss was caused by the negligent, willful or reckless acts or omissions of the Proposer, its employees, or its Subcontractors.

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13. NONDISCRIMINATION**13.1** Proposer shall, as a party to a public contract:

- (a) Refrain from unlawful discrimination in employment and undertake affirmative action to assure equality of employment opportunity and eliminate the effects of past discrimination;
- (b) By submission of this proposal, the Proposer certifies that he is an "equal opportunity employer" as defined by Section 2000(e) of Chapter 21, Title 42, U.S. Code Annotated and Executive Orders #11246 and #11375, which are incorporated herein by reference. The Equal Opportunity clause, Section 6.1 of the Rules and Regulations of the Department of Human Rights of the State of Illinois, is a material part of any contract awarded on the basis of this proposal.

13.2 It is unlawful to discriminate on the basis of race, color, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge for military service. Proposer shall comply with standards set forth in Title VII of the Civil Rights Act of 1964, 42 U.S.C. Sec. 2000 et seq., The Human Rights Act of the State of Illinois, 775 ILCS 5/1-101 et. seq., and The Americans With Disabilities Act, 42 U.S.C. Sec. 12101 et. seq.

14. SEXUAL HARASSMENT POLICY

14.1 The proposer, as a party to a public contract, shall have a written sexual harassment policy that:

- 14.1.1 Notes the illegality of sexual harassment;
- 14.1.2 Sets forth the State law definition of sexual harassment;
- 14.1.3 Describes sexual harassment utilizing examples;
- 14.1.4 Describes the Proposer's internal complaint process including penalties;
- 14.1.5 Describes the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and how to contact these entities; and
- 14.1.6 Describes the protection against retaliation afforded under the Illinois Human Rights Act.

15. EQUAL EMPLOYMENT OPPORTUNITY

15.1 In the event of the Proposer's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the Proposer may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the Proposer agrees as follows:

- 15.1.1 That it will not discriminate against any employee or applicant for employment

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because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, sexual orientation, sexual identity or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

- 15.1.2 That, if it hires additional employees in order to perform this contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 15.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military services.
- 15.1.4 That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Proposer's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Proposer in its efforts to comply with such Act and Rules and Regulations, the Proposer will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 15.1.5 That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 15.1.6 That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purpose of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 15.1.7 That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the Proposer will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In

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addition, the Proposer will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivision or municipal corporations.

16. DRUG FREE WORK PLACE

Proposer, as a party to a public contract, certifies and agrees that it will provide a drug free workplace by:

- 16.1 Publishing a statement: (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the Village's or proposer's workplace. (2) Specifying the actions that will be taken against employees for violations of such prohibition. (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will: (A) abide by the terms of the statement; and (B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- 16.2 Establishing a drug free awareness program to inform employees about: (1) the dangers of drug abuse in the workplace; (2) the Village's or proposer's policy of maintaining a drug free workplace; (3) any available drug counseling, rehabilitation and employee assistance programs; (4) the penalties that may be imposed upon employees for drug violations.
- 16.3 Providing a copy of the statement required above to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- 16.4 Notifying the contracting or granting agency within ten (10) days after receiving notice of any criminal drug statute conviction for a violation occurring in the workplace from an employee or otherwise receiving actual notice of such conviction.
- 16.5 Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is so convicted as required by section 5 of the Drug Free Workplace Act.
- 16.6 Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.
- 16.7 Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

17. SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT

- 17.1 In the event this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, Proposer agrees to comply with the Substance Abuse Prevention on Public Works Projects Act, 820 ILCS 265/1 *et seq.*, and further agrees that all of its subcontractors shall comply with such Act. As required by the Act, Proposer agrees that it will file with the Village prior to commencing work its written substance abuse prevention program and/or

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that of its subcontractor(s) which meet or exceed the requirements of the Act.

18. PREVAILING WAGE ACT

18.1 This contract is not subject to prevailing wages.

19. PATRIOT ACT COMPLIANCE

The Proposer represents and warrants to the Village that neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Proposer further represents and warrants to the Village that the Proposer and its principals, shareholders, members, partners, or affiliates, as applicable are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as a Specially Designated National and Blocked Person. The Proposer hereby agrees to defend, indemnify and hold harmless the Village, and its elected or appointed officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities and expenses (including reasonable attorney's fees and costs) arising from or related to any breach of the foregoing representations and warranties.

20. INSURANCE REQUIREMENTS

20.1 Prior to starting the work, Contractor and any Subcontractors shall procure, maintain and pay for such insurance as will protect against claims for bodily injury of death, or for damage to property, including loss of use, which may arise out of operations by the Contractor or Subcontractor or any Sub-Sub Contractor or by anyone employed by any of them, or by anyone for whose acts any of them may be liable. Such insurance shall not be less than the greater of coverages and limits of liability specified below or any coverages and limits of liability specified in the Contract Documents or coverages and limits required by law unless otherwise agreed to by the Village.

Workers Compensation	\$500,000	Statutory
Employers Liability	\$1,000,000	Each Accident
	\$1,000,000	Disease Policy Limit
	\$1,000,000	Disease Each Employee
Comprehensive General Liability	\$2,000,000	Each Occurrence
	\$2,000,000	Aggregate <i>(Applicable on a Per Project Basis)</i>
Commercial Automobile Liability	\$1,000,000	Each Accident

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Professional Errors & Omissions (pursuant to section .9 below)	\$2,000,000 \$2,000,000	Each Claim Annual Aggregate
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Umbrella Liability	\$ 5,000,000
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- 20.2 Commercial General Liability Insurance required under this paragraph shall be written on an occurrence form and shall include coverage for Products/Completed Operations, Personal Injury with Employment Exclusion (if any) deleted, Blanket XCU and Blanket Contractual Liability insurance applicable to defense and indemnity obligations and other contractual indemnity assumed under the Contract Documents. The limit must be on a "Per Project Basis".
- 20.3 Comprehensive Automobile Liability Insurance required under this paragraph shall include coverage for all owned, hired and non-owned automobiles.
- 20.4 Workers Compensation coverage shall include a waiver of subrogation against the Village.
- 20.5 Comprehensive General Liability, Employers Liability and Commercial Automobile Liability Insurance may be arranged under single policies for full minimum limits required, or by a combination of underlying policies with the balance provided by Umbrella and/or Excess Liability policies.
- 20.6 Contractor and all Subcontractors shall have their respective Comprehensive General Liability (including products/completed operations coverage), Employers Liability, Commercial Automobile Liability, and Umbrella/Excess Liability policies endorsed to add the "Village of Downers Grove, officers, officials, employees and volunteers" as "additional insureds" with respect to liability arising out of operations performed; claims for bodily injury or death brought against Village by any Contractor or Subcontractor employees, or the employees of Subcontractor's subcontractors of any tier, however caused, related to the performance of operations under the Contract Documents. Such insurance afforded to the Village shall be endorsed to provide that the insurance provided under each policy shall be ***Primary and Non-Contributory***.
- 20.7 Contractor and all Subcontractors shall maintain in effect all insurance coverages required by the Contract Documents at their sole expense and with insurance carriers licensed to do business in the State of Illinois and having a current A. M. Best rating of no less than A- VIII. In the event that the Contractor or any Subcontractor fails to procure or maintain any insurance required by the Contract Documents, the Village may, at its option, purchase such coverage and deduct the cost thereof from any monies due to the Contractor or Subcontractor, or withhold funds in an amount sufficient to protect the Village, or terminate this Agreement pursuant to its terms.
- 20.8 All insurance policies shall contain a provision that coverages and limits afforded hereunder shall not be canceled, materially changed, non-renewed or restrictive modifications added,

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without thirty (30) days prior written notice to the Village. Renewal certificates shall be provided to the Village not less than five (5) prior to the expiration date of any of the required policies. All Certificates of Insurance shall be in a form acceptable to Village and shall provide satisfactory evidence of compliance with all insurance requirements. The Village shall not be obligated to review such certificates or other evidence of insurance, or to advise Contractor or Subcontractor of any deficiencies in such documents, and receipt thereof shall not relieve the Contractor or Subcontractor from, nor be deemed a waiver the right to enforce the terms of the obligations hereunder. The Village shall have the right to examine any policy required and evidenced on the Certificate of Insurance.

20.9 Only in the event that the Work under the Contract Documents includes design, consultation, or any other professional services, Contractor or the Subcontractor shall procure, maintain, and pay for Professional Errors and Omissions insurance with limits of not less than \$2,000,000 per claim and \$2,000,000 annual aggregate. If such insurance is written on a claim made basis, the retrospective date shall be prior to the start of the Work under the Contract Documents. Contractor and all Subcontractors agree to maintain such coverage for three (3) years after final acceptance of the Project by the Village or such longer period as the Contract Documents may require. Renewal policies during this period shall maintain the same retroactive date.

20.10 Any deductibles or self-insured retentions shall be the sole responsibility of the Insured. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Village, its officers, officials, employees and volunteers; or the Proposer shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

21. COPYRIGHT/PATENT INFRINGEMENT

21.1 The Proposer agrees to indemnify, defend, and hold harmless the Village against any suit, claim, or proceeding brought against the Village for alleged use of any equipment, systems, or services provided by the Proposer that constitutes a misuse of any proprietary or trade secret information or an infringement of any patent or copyright.

22. COMPLIANCE WITH OSHA STANDARDS

22.1 Equipment supplied to the Village must comply with all requirements and standards as specified by the Occupational Safety and Health Act. All guards and protectors as well as appropriate markings will be in place before delivery. Items not meeting any OSHA specifications will be refused.

23. CERCLA INDEMNIFICATION

23.1 In the event this is a contract that has environment aspects, the Awarded Proposer shall, to the maximum extent permitted by law, indemnify, defend, and hold harmless the Village, its officers, employees, agents, and attorneys from and against any and all liability, including without limitation, costs of response, removal, remediation, investigation, property damage, personal injury, damage to natural resources, health assessments, health settlements, attorneys' fees, and other related transaction costs arising under the Comprehensive

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Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 U.S.C.A. Sec. 9601, et seq., as amended, and all other applicable statutes, regulations, ordinances, and under common law for any release or threatened release of the waste material collected by the Awarded Proposer, both before and after its disposal.

24. BUY AMERICA

24.1 The Contractor agrees to comply with 49 U.S.C.5323(j), the Federal Transportation Administration's (FTA) Buy America regulations at 49 C.F.R. Part 661, and any amendments thereto, and any implementing guidance issued by the FTA, with respect to this contract, when financed by Federal funds (through a grant agreement or cooperative agreement).

24.2 As a condition of responsiveness, the Contractor agrees to submit with its Bid submission, an executed Buy America Certificate, attached hereto.

25. CAMPAIGN DISCLOSURE

25.1 Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate, attached hereto.

25.2 The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

25.3 Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

25.4 By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

26. SUBLETTING OF CONTRACT

26.1 No contract awarded by the Village shall be assigned or any part sub-contracted without the written consent of the Village Manager. In no case shall such consent relieve the Awarded Proposer from their obligation or change the terms of the contract.

All approved sub-contracts shall contain language which incorporates the terms and conditions of this contract.

27. TERM OF CONTRACT

27.1 This term of this contract will be from award through December 31, 2017 unless terminated sooner in accordance with paragraph 28.



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28. TERMINATION OF CONTRACT

28.1 The Village reserves the right to terminate the whole or any part of this contract, upon written notice to the Awarded Proposer, for any reason and/or in the event that sufficient funds to complete the contract are not appropriated by the Village.

28.2 The Village further reserves the right to terminate the whole or any part of this contract, upon written notice to the Awarded Proposer, in the event of default by the Awarded Proposer. Default is defined as failure of the Awarded Proposer to perform any of the provisions of this contract or failure to make sufficient progress so as to endanger performance of this contract in accordance with its terms. In the event that the Awarded Proposer fails to cure the default upon notice, and the Village declares default and termination, the Village may procure, upon such terms and in such manner as the Village may deem appropriate, supplies or services similar to those so terminated. The Awarded Proposer shall be liable for any excess costs for such similar supplies or services unless acceptable evidence is submitted to the Village that failure to perform the contract was due to causes beyond the control and without the fault or negligence of the Awarded Proposer. Any such excess costs incurred by the Village may be set-off against any monies due and owing by the Village to the Awarded Proposer.

29. BILLING & PAYMENT PROCEDURES

29.1 Payment will be made upon receipt of an invoice referencing Village purchase order number. Once an invoice and receipt of materials or service have been verified, the invoice will be processed for payment in accordance with the Village payment schedule. The Village will comply with the Local Government Prompt Payment Act, 50 ILCS 505/1 et seq., in that any bill approved for payment must be paid or the payment issued to the Proposer within 60 days of receipt of a proper bill or invoice. If payment is not issued to the Proposer within this 60 day period, an interest penalty of 1.0% of any amount approved and unpaid shall be added for each month or fraction thereof after the end of this 60 day period, until final payment is made.

29.2 The Village shall review in a timely manner each bill or invoice after its receipt. If the Village determines that the bill or invoice contains a defect making it unable to process the payment request, the Village shall notify the Proposer requesting payment as soon as possible after discovering the defect pursuant to rules promulgated under 50 ILCS 505/1 et seq. The notice shall identify the defect and any additional information necessary to correct the defect.

29.3 If this contract is for work defined as a "fixed public work" project under the Illinois Prevailing Wage Act, 820 ILCS 130/2, any contractor or subcontractor is required to submit certified payroll records along with the invoice. No invoice shall be paid without said records.

29.4 Please send all invoices to the attention of Village of Downers Grove, Accounts Payable, 801 Burlington, Downers Grove, IL 60515.

30. RELATIONSHIP BETWEEN THE PROPOSER AND THE VILLAGE

30.1 The relationship between the Village and the Proposer is that of a buyer and seller of

Village of Downers Grove

professional services and it is understood that the parties have not entered into any joint venture or partnership with the other.

31. STANDARD OF CARE

31.1. Services performed by Proposer under this Contract will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representations express or implied, and no warranty or guarantee is included or intended in this Contract, or in any report, opinions, and documents or otherwise.

31.2 If the Proposer fails to meet the foregoing standard, Proposer will perform at its own cost, and without reimbursement from the Village, the professional services necessary to correct errors and omissions caused by Proposer's failure to comply with the above standard and reported to Proposer within one (1) year from the completion of Proposer's services for the Project.

31.3 For Professional Service Agreements (i.e. Engineer, Consultant): Project site visits by Proposer during construction or equipment installation or the furnishing of Project representatives shall not make Proposer responsible for: (i) construction means, methods, techniques, sequences or procedures; (ii) for construction safety precautions or programs; or (iii) for any construction contractor(s)' failure to perform its work in accordance with contract documents.

32. GOVERNING LAW

32.1 This Contract will be governed by and construed in accordance with the laws of the State of Illinois without regard for the conflict of laws provisions. Venue is proper only in the County of DuPage and the Northern District of Illinois.

33. SUCCESSORS AND ASSIGNS

33.1 The terms of this Contract will be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party will assign this Contract in whole or in part without the prior written approval of the other. The Proposer will provide a list of key staff, titles, responsibilities, and contact information to include all expected subcontractors.

34. WAIVER OF CONTRACT BREACH

34.1 The waiver by one party of any breach of this Contract or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof will be limited to the particular instance and will not operate or be deemed to waive any future breaches of this Contract and will not be construed to be a waiver of any provision except for the particular instance.

35. AMENDMENT

35.1 This Contract will not be subject to amendment unless made in writing and signed by all parties.

Village of Downers Grove

36. NOT TO EXCEED CONTRACT

- 36.1 The contract price is a "not-to-exceed" cost. At any time additional work is necessary or requested, and the not-to-exceed price is increased thereby, any change, addition or price increase must be agreed to in writing by all parties who have executed the initial contract.
- 36.2 Change orders for public works projects which authorize an increase in the contract price that is 50% or more of the original contract price or that authorize or necessitate any increase in the price of a subcontract under the contract that is 50% or more of the original subcontract price must be resubmitted for bidding in the same manner by which the original contract was bid. (50 ILCS 525/1)

37. SEVERABILITY OF INVALID PROVISIONS

- 37.1 If any provisions of this Contract are held to contravene or be invalid under the laws of any state, country or jurisdiction, contravention will not invalidate the entire Contract, but it will be construed as if not containing the invalid provision and the rights or obligations of the parties will be construed and enforced accordingly.

38. NOTICE

- 38.1 Any notice will be in writing and will be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party at the party's place of business. Notices shall be addressed to the Village as follows:

**Village Manager
Village of Downers Grove
801 Burlington Ave.
Downers Grove, IL 60515**

And to the Proposer as designated in the Contract Form.

39. COOPERATION WITH FOIA COMPLIANCE

- 39.1 Contractor acknowledges that the Freedom of Information Act may apply to public records in possession of the Contractor or a subcontractor. Contractor and all of its subcontractors shall cooperate with the Village in its efforts to comply with the Freedom of Information Act. 5 ILCS 140/1 et.seq.

Village of Downers Grove

III. DETAILED SPECIFICATIONS**FIRE HYDRANT MAINTENANCE & FLOW TESTING SERVICES****BACKGROUND**

The Village of Downers Grove's water system covers an area of approximately 16 square miles including areas outside the corporate limits of the Village, and serves a population of more than 50,000 people. The potable water system includes 233 miles of water mains ranging in size from 4-inches to 24-inches in diameter. Within the water system there are 2,776 public fire hydrants.

INTRODUCTION

The Village of Downers Grove is seeking a qualified firm to be responsible for routine annual maintenance of all fire hydrants within the water system. This routine maintenance shall consist of inspecting, cleaning, and clearing of weeds and debris to insure that each hydrant is in serviceable condition. More importantly, the qualified firm will be required to complete flow testing of 20% of the Village's hydrants per year to determine the current availability of water supply for fire suppression. The information derived from these inspections and tests will be recorded and maintained to be compatible with the Village's Geographic Information System (GIS). The Village utilizes GIS to generate operational maps used during an emergency and for planning of future improvements to the water system. The Village currently utilizes *Lucity* as its asset management system.

The contractor shall be required to maintain a staffed office within a 100 mile radius of the Village of Downers Grove for the duration of this contract. Further, the contractor shall provide 24-hour, 7-day a week emergency service for the duration of this contract.

MAINTENANCE PROCEDURES**Customer Notification**

- 1) The selected firm will assist the Village in developing a press release to briefly explain the fire hydrant flow testing program in the areas affected.
- 2) The selected firm's personnel will go door to door forty-eight (48) hours before the scheduled flow testing and hand deliver a door hanger that explains when the fire hydrants will be flow tested in the area and how the customers' services may be affected.

General Guidelines for Testing and Flushing

- 1) Hydrant maintenance shall be performed in accordance with the American Water Works Association (AWWA) manual M-17, Chapter 5.
 - a. The Village shall be notified prior to the commencement of any flushing or testing procedures. The anticipated location and duration of such activity should be given. The Village shall also be notified upon completion of such activities.
 - b. Care shall be taken to reduce discharge to minimize water loss. For the discharge that occurs, care shall be taken to reduce, to the least degree possible, the potential damage and inconvenience caused by hydrant discharge. Flush elbows or diffusers shall be used to reduce the velocity pressure of the discharge stream. Any loose

Village of Downers Grove

debris left by hydrant discharge shall be swept or cleared from roads, streets, and drives.

- c. Whenever operating hydrant valves, care shall be taken to open and close the valve slowly so as to reduce as much as possible, the effects of water hammer on the distribution system.
- d. Whenever a hydrant is opened, it should be flowed at least until the water runs clear.
- e. The Public Works Department shall be notified in writing daily if broken valves are found.

Routine Hydrant Maintenance Procedure (See AWWA M-17, Chapter 5)

Shall consist of the following activities:

- 1) Check hydrant to make sure that it is visible from the roadway and is clear of any landscaping or plant growth, or other obstructions that could impair locating the hydrant or interfere with its use.
- 2) Minor obstructions such as weed growth or wild plant growth should be trimmed to provide clear access to the hydrant.
- 3) Obstructions caused by utilities, landscaping or ornamental plant growth shall be noted and reported to the Village of Downers Grove Public Works Department.
- 4) Minor build-up of dirt/sand, which provides insufficient ground clearance, may be removed with a shovel. Excessive build-up, or improperly installed hydrants shall be reported to the Village of Downers Grove Public Works Department on a weekly basis.
 - a. Inspect hydrant in accordance with the procedure outlined in AWWA M-17, Chapter 5.
 - b. Fire hydrants shall be maintained also in accordance with the manufacturer's specifications, proper greasing, for instance.
 - c. Any fire hydrant that for any reason must be removed from service shall be reported immediately to the Village of Downers Grove Public Works Department.

Whenever such a hydrant is returned to service it shall undergo the same maintenance and testing procedure as outlined herein.

Flow Testing Procedure (See AWWA M-17, Chapter 6)

Shall consist of the following:

- 1) Fire flow tests shall be conducted in accordance with the procedure outlined in AWWA M-17, Chapter 6.

Include but not limited to the following details:

- 1) Fire hydrant nozzle size used for each test
- 2) Residual Pressure (Any incidents of residual pressure below 20 psi will be brought to the attention of the Village immediately)
- 3) Static Pressure
- 4) Flow rate in gallons per minute (gpm)
- 5) The hydrant address and location
- 6) The amount of time it takes to flush each fire hydrant
- 7) An estimate of the water used during the operation of each fire hydrant

Village of Downers Grove

- 8) The date tested and technicians operating the fire hydrant
- 9) Hydrants that are in need of repair, painting, color coding, or have operational defects will be noted.

Energy Dissipation

- 1) Fire hose and deflection tubes are utilized, as required, to direct flushing water away from traffic, pedestrians, underground utility vaults, and private property.

Fire Hydrant Closure, Drainage and Leakage

- 1) After the fire hydrant has been flowed, the firm will verify that the hydrant is seated and is draining properly.
- 2) The firm will also check the fire hydrant with a FCS, S30, L-MIC electronic listening device or approved equal to ensure that the hydrant is not leaking.

Fire Hydrant Maintenance and Testing Records

The selected contractor shall be responsible for maintaining and updating the appropriate fire hydrant maintenance and testing records on the forms shown at the end of AWWA M-17, Chapter 5. Upon completion of each week's fire hydrant maintenance, the updated Fire Hydrant Master Record, Hydrant Maintenance Report, Hydrant Inspection Report, Flow Test Report, and Hydrant Test form for each hydrant inspected and tested shall be submitted in electronic format to the Village of Downers Grove Public Works Department so that it is compatible with the Village's GIS and Lucity Asset Management System. The data from flow tests shall be recorded on the Flow Test Report, Hydrant Test Form, and Master Hydrant List. Any maintenance performed on the hydrant shall be recorded on the space provided on the Fire Hydrant Master Record and Hydrant Maintenance Report, along with the date the maintenance was performed. The selected contractor shall print a copy of each form and retain these in his file. The master fire hydrant list will be updated instantaneously from this information.

Work Schedule

Working hours shall be from 7:00 a.m. to 3:30 p.m., Monday through Friday. No hydrant maintenance or flow testing shall be conducted during the Village's water conservation period from May 15 through September 15, or on Village holidays.

Holidays consist of the following days:

- 1) New Year's Day
- 2) Memorial Day
- 3) Independence Day
- 4) Labor Day
- 5) Thanksgiving Day
- 6) Day After Thanksgiving
- 7) Christmas Day
- 8) Floating Christmas Holiday

Weekend and evening work requires special permitting but may be necessary.

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EXPERIENCE REQUIREMENTS

The firm shall be required before the award of any contract to show to the complete satisfaction of the Water Manager that it has the necessary facilities, ability and resources to provide the services specified herein in a satisfactory manner. The firm shall be required to give past history and references in order to satisfy the Water Manager in regard to the firm's qualifications. The Water Manager shall make reasonable investigations deemed necessary and proper to determine the ability of the firm to perform the work. The Village reserves the right to reject any proposal if the evidence submitted by, or investigation of, the firm fails to satisfy the Water Manager that the firm is properly qualified to carry out the obligations of the contract and to complete the work described herein. Evaluation of the firm's qualifications shall include:

1. The ability, capacity, skill and resources to perform the work or provide the service required.
2. The ability of the firm to perform the work or provide the service promptly or within the time specified, without delay or interference.
3. The character, integrity, reputation, judgment, experience, and efficiency of the firm.
4. The quality of performance of previous hydrant maintenance and flow testing contracts or services with the Village and other municipalities within the last five (5) years. At least two (2) of the municipal references must be for individual hydrant maintenance and flow testing contracts in excess of 1,300 hydrants annually. These references and the quantity of hydrants maintained and flow tested must be indicated clearly in the proposal.

SERVICES PROVIDED BY THE VILLAGE

The Village will furnish all maps, atlases, and records necessary to properly conduct the hydrant maintenance flow testing program.

The Village 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.*

The Village will supply any other information that may make the job of easier to perform.

PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS

Proposal Format

In order to be considered responsive, and evaluate proposals fairly and completely, each prospective firm must follow the format set out in this RFP and provide all information requested. Proposals shall be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content. A detailed tabbed index in a 3-ring binder is highly suggested (do not use spiral, comb or glue binding) and must include the following:

Introduction

Proposals must include the complete name and address of firm and the name, mailing address, and telephone number of the person the Village should contact regarding the proposal.

Village of Downers Grove

- Proposals must be signed by an authorized representative confirming that the vendor will comply with all provisions in this RFP.

Experience/Staff Resumes

- Firm shall indicate the expertise and experience of the Firm relative to the requirements contained in this RFP.
- Submit resumes for the individuals who will be performing the services for the Village.

Resumes shall be formatted in the following order;

- 1) Position with the Company
- 2) Role in the Project
- 3) Experience with the requirements and tasks being requested
- 4) Work history on similar projects with the company
- 5) Legal relationship of the named person with the prime contractor

- Past Experience

Technical Approach/Implementation

A detailed work plan and methodology your firm would follow in performing services under the contract. ***Do not restate the Village's Scope of Work*** but rather provide the approach your firm will take and any recommendations. If your firm's approach is different than stated in the Village's Scope of Work, explain how and why. Demonstrate a complete understanding of hydrant maintenance and water main capacity testing/hydrant flow testing methodologies. Describe the planned testing methodology and field approach to the project. Planned hydrant operation techniques, as well as flow analysis techniques shall be outlined. Account for potential problems to be expected and the possible techniques to be employed for solving those problems.

Provide sample reports, protocol, procedures, or spreadsheets representative of those that will be provided to the Village.

The firm should present a schedule for the project. The schedule will highlight important milestone dates with a description of what these tasks include. Please include a Gantt-type chart depicting the project from start to final acceptance.

Cost Proposal

In conjunction with the proposal, firms shall also submit one (1) original and two (2) copies of the cost proposal (all costs). Proposals shall include an all-inclusive cost per hydrant to complete the scope of services for all three years. While the level of effort may vary from hydrant to hydrant, the proposed average cost per hydrant should be based on the firm's past experience and expertise in this type of work.

PROPOSAL EVALUATION PROCESS

Firm Selection

A technical review team will evaluate the proposals. Final selection will be based on the evaluation of proposals unless it is deemed necessary by the committee to conduct interviews. The firm

Village of Downers Grove

determined best qualified to perform this project will be recommended to the Village Council for contract award. The Village of Downers Grove reserves the right to reject any and all proposals for any reason deemed appropriate by the Village.

PROPOSAL FEE

February 19, 2015

M.E. Simpson Co., Inc. is pleased to present our "Proposal" for a Fire Hydrant Maintenance Program for the Village of Downers Grove, Illinois. The Fire Hydrant Maintenance Program will be conducted on approximately **2,776** fire hydrants in the Utility's water distribution system and flow test 20% of the system hydrants. M.E. Simpson Co., Inc. will perform this service with one of our two man teams, with all necessary equipment, described within this document, furnished by M.E. Simpson Co., Inc. All procedures will be followed as described within this document. All travel, lodging and meals are included in the proposal price. The program will also include a complete individual hydrant flow test report, contained in our Polcon® Pro-Hydrant-Lite database available on line and a final comprehensive report.

 2015:

Maintenance 2,222 fire hydrants at \$39.00 each ----- (\$86,658.00)
 Flow Test 20% (554) at \$46.00 each ----- (\$25,484.00)

2016:

Maintenance 2,222 fire hydrants at \$39.00 each ----- (\$86,658.00)
 Flow Test 20% (554) at \$46.00 each ----- (\$25,484.00)

2017:

Maintenance 2,222 fire hydrants at \$40.00 each ----- (\$88,880.00)
 Flow Test 20% (554) at \$47.00 each ----- (\$26,038.00)

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

Sincerely Yours,



John H. Van Arsdel
 Vice President
 JHV/jph

Village of Downers Grove

IV. PROPOSER'S RESPONSE TO RFP

(Proposer must insert response to RFP here. DO NOT insert a form contract, the RFP document including detail specs and Proposer's response will become the contract with the Village.)

Village of Downers Grove

V. PROPOSAL/CONTRACT FORM

*****THIS PROPOSAL, WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE VILLAGE OF DOWNERS GROVE, SHALL BECOME A CONTRACT BINDING UPON BOTH PARTIES.**

Entire Block Must Be Completed When A Submitted Bid Is To Be Considered For Award

PROPOSER:

M.E. Simpson Co., Inc.
Company Name

Date: 2/19/2015

3406 Enterprise Avenue
Street Address of Company

johnnyv@mesimpson.com
Email Address

Valparaiso, IN 4638
City, State, Zip

John H. Van Arsdel
Contact Name (Print)

800-255-1521
Business Phone

800-255-1521
24-Hour Telephone

888-531-2444
Fax

Signature of Officer, Partner or
Sole Proprietor

John H. Van Arsdel, Vice President
Print Name & Title

ATTEST: If a Corporation

Pamela Hood
Signature of Corporation Secretary

VILLAGE OF DOWNERS GROVE:

Authorized Signature

ATTEST:

Title

Signature of Village Clerk

Date

Date

In compliance with the specifications, the above-signed offers and agrees, if this Proposal is accepted within 90 calendar days from the date of opening, to furnish any or all of the services upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified above.

Village of Downers Grove



VENDOR W-9 REQUEST FORM

The law requires that we maintain accurate taxpayer identification numbers for all individuals and partnerships to whom we make payments, because we are required to report to the I.R.S all payments of \$600 or more annually. We also follow the I.R.S. recommendation that this information be maintained for all payees including corporations.

Please complete the following substitute W-9 letter to assist us in meeting our I.R.S. reporting requirements. The information below will be used to determine whether we are required to send you a Form 1099. Please respond as soon as possible, as failure to do so will delay our payments.

BUSINESS (PLEASE PRINT OR TYPE):

NAME: M.E. Simpson Co., Inc.

ADDRESS: 3406 Enterprise Avenue

CITY: Valparaiso

STATE: Indiana

ZIP: 46383

PHONE: 800-255-1521 **FAX:** 888-531-2444

TAX ID #(TIN): 35-1474720

(If you are supplying a social security number, please give your full name)

REMIT TO ADDRESS (IF DIFFERENT FROM ABOVE):

NAME: _____

ADDRESS: _____

CITY: _____

STATE: _____ **ZIP:** _____

TYPE OF ENTITY (CIRCLE ONE):

- | | |
|----------------------|---|
| Individual | Limited Liability Company –Individual/Sole Proprietor |
| Sole Proprietor | Limited Liability Company-Partnership |
| Partnership | Limited Liability Company-Corporation |
| Medical | Corporation |
| Charitable/Nonprofit | Government Agency |

SIGNATURE: *John W. Van Arsdale*

DATE: 2/19/2015

Village of Downers Grove

PROPOSER'S CERTIFICATION (page 1 of 3)

Fire Hydrant Maintenance

With regard to & Flow Testing, proposer M.E. Simpson Co., Inc. hereby certifies
(Name of Project) (Name of Proposer)
the following:

1. Proposer is not barred from bidding this contract as a result of violations of Section 720 ILCS 5/33E-3 (Bid Rigging) or 720 ILCS 5/33E-4 (Bid-Rotating);
2. Proposer certifies that it has a written sexual harassment policy in place and is in full compliance with 775 ILCS §12-105(A)(4);
3. Proposer certifies that not less than the prevailing rate of wages as determined by the Village of Downers Grove, DuPage County or the Illinois Department of Labor shall be paid to all laborers, workers and mechanics performing work for the Village of Downers Grove. All bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause. Proposer agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*, for all work completed. Proposer agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this contract or related subcontract. Proposer and each subcontractor shall keep or cause to be kept an accurate record of names, occupations and actual wages paid to each laborer, workman and mechanic employed by the Proposer in connection with the contract. This record shall be sent to the Village on a monthly basis along with the invoice and shall be open to inspection at all reasonable hours by any representative of the Village or the Illinois Department of Labor and must be preserved for five (5) years following completion of the contract. Proposer certifies that proposer and any subcontractors working on the project are aware that filing false payroll records is a class B misdemeanor and that the monetary penalties for violations are to be paid pursuant to law by the proposer, contractor and subcontractor. The Village shall not be liable for any underpayments. If applicable: Since this is a contract for a fixed public works project, as defined in 820 ILCS 130/2, Contractor agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed.
4. Proposer certifies that it is in full compliance with the Federal Highway Administrative Rules on Controlled Substances and Alcohol Use and Testing, 49 C. F.R. Parts 40 and 382 and that all employee drivers are currently participating in a drug and alcohol testing program pursuant to the Rules.
5. Proposer further certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue, or that Proposer is contesting its liability for the tax delinquency or the amount of a tax delinquency in accordance with the procedures established by the appropriate Revenue Act. Proposer further certifies that if it owes any tax payment(s) to the Department of Revenue, Proposer has entered into an agreement with the Department of

Village of Downers Grove

PROPOSER'S CERTIFICATION (page 2 of 3)

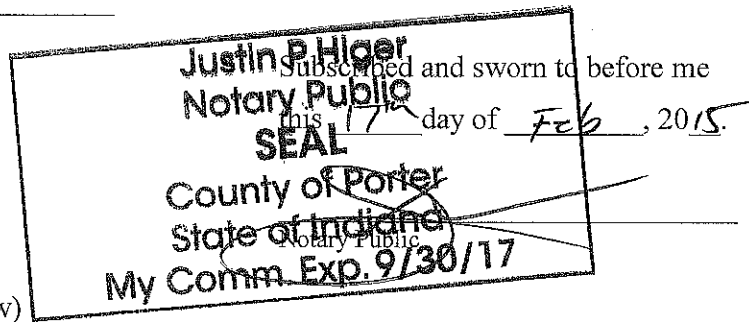
Revenue for the payment of all such taxes that are due, and Proposer is in compliance with the agreement.

BY: John H. Van Arsdale
Proposer's Authorized Agent

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FEDERAL TAXPAYER IDENTIFICATION NUMBER

or _____
Social Security Number



(Fill Out Applicable Paragraph Below)

(a) Corporation

The Proposer is a corporation organized and existing under the laws of the State of Indiana, which operates under the Legal name of M.E. Simpson Co., Inc., and the full names of its Officers are as follows:

President: Dan E. Hood

Secretary: Pamela Hood

Treasurer: Bernadette Simpson

and it does have a corporate seal. (In the event that this bid is executed by other than the President, attach hereto a certified copy of that section of Corporate By-Laws or other authorization by the Corporation which permits the person to execute the offer for the corporation.)

(b) Partnership

Signatures and Addresses of All Members of Partnership:

Village of Downers Grove

PROPOSER'S CERTIFICATION (page 3 of 3)

The partnership does business under the legal name of: _____
 which name is registered with the office of _____ in the state of
 _____.

(c) Sole Proprietor

The Supplier is a Sole Proprietor whose full name is: _____
 and if operating under a trade name, said trade name is: _____
 which name is registered with the office of _____ in the state of
 _____.

6. Are you willing to comply with the Village's preceding insurance requirements within 13 days of the award of the contract? Yes

Insurer's Name General Insurance Services

Agent Mark Berendt

Street Address 4208 Calumet Avenue, Suite 100 PO Box 1818

City, State, Zip Code Valparaiso, IN 46383

Telephone Number 219-464-3511

I/We affirm that the above certifications are true and accurate and that I/we have read and understand them.

Print Name of Company: M.E. Simpson Co., Inc.

Print Name and Title of Authorizing Signature: John H. Van Arsdel, Vice President

Signature: *John H. Van Arsdel*

Date: 2/16/15

Village of Downers Grove

Apprenticeship and Training Certification

(Does not apply to federal aid projects. Applicable only to maintenance and construction projects that use Motor Fuel Tax funds or state grant monies.)

Name of Proposer: M.E. Simpson Co., Inc.

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the proposer certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the proposer will perform with its own forces. The proposer further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Illinois Department of Labor, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The proposer shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the proposer is a participant and that will be performed with the proposer's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The proposer is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. Return this with the bid.**

NA

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

Print Name and Title of Authorizing Signature: NA

Signature: NA

Date: NA

Village of Downers Grove

Suspension or Debarment Certificate
--

Non-Federal entities are prohibited from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement for goods or services equal to or in excess of \$100,000.00. Contractors receiving individual awards for \$100,000.00 or more and all sub-recipients must certify that the organization and its principals are not suspended or debarred.

By submitting this offer and signing this certificate, the bidder certifies to the best of its knowledge and belief, that the company and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal, state or local governmental entity, department or agency.
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction, or convicted of or had a civil judgment against them for a violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal/contract had one or more public transactions (Federal, State or local) terminated for cause or default.

If the bidder is unable to certify to any of the statements in this certification, bidder shall attach an explanation to this certification.

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

Address: 3406 Enterprise Avenue

City: Valparaiso, IN Zip Code: 46383

Telephone: (800) 255-1521 Fax Number: (888) 531-2444

E-mail Address: johnnyv@mesimpson.com

Authorized Company Signature: 

Print Signature Name: John H. Van Arsdel Title of Official: Vice President

Date: 2/19/2015

Village of Downers Grove

CAMPAIGN DISCLOSURE CERTIFICATE

Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate.

The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the Five (5) year period preceding the date of the bid or proposal release.

By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

Under penalty of perjury, I declare:

Bidder/vendor has not contributed to any elected Village position within the last five (5) years.

John H. Van Arsdel
Signature

John H. Van Arsdel
Print Name

Bidder/vendor has contributed a campaign contribution to a current member of the Village Council within the last five (5) years.

Print the following information:

Name of Contributor: _____
(company or individual)

To whom contribution was made: _____

Year contribution made: _____ Amount: \$ _____

Signature

Print Name

FIRM HISTORY

M.E. Simpson Co., Inc. was founded in 1979 by Marvin E. Simpson. Our firm has become the industry leader in developing and providing programs and services aiding our clients in maximizing their peak performance for their water distribution and wastewater collection systems. We offer our clients the highest quality Technical and Professional Services, using state-of-the art technologies and highly skilled and trained professionals. Our staff has developed a host of high tech programs that will insure that your Utility will be proactive in dealing with both your water distribution and wastewater collection systems.

"Crumbling infrastructure, inaccurate records, conservation, sustainability, water quality, water loss, economic conditions, revenue shortfalls, being green, having enough water"; these are all statements and buzz words in today's society. Currently in the water and wastewater industry, these words are our reality, thus making them our responsibility.

Since our humble beginnings over thirty years ago, we have provided services that have improved water accountability and increased revenues for both water and wastewater Utilities. We've also maximized distribution system performance and optimized distribution system data, records, and mapping. To date we have provide Water Loss Control programs that have included over 50,000 Large Water Meters serviced and 75,000 miles of Leak Detection services. Our Asset Management services have documented over 400,000 valves located and exercised. Our Fire Hydrant Flow testing program has recorded 60,000 fire hydrants flowed and water main capacity information developed.

Though our Wastewater Services are much newer, they have given us the opportunity to maximize collection system performance and optimize collection system data, records and mapping. Our Manhole Inspection services have located, documented and mapped over 15,000 manholes. We have provided Smoke Testing services to over 25 collection systems, discovering hundred's of documented infractions. This service continues to be a steady area of growth for our firm.

We know service and we can assist you with your Utility. M.E. Simpson Co., Inc. provides its clients with water and wastewater system service technologies for the 21st Century.

The company began operations in Rochester, Indiana. The corporate headquarters moved to Valparaiso, Indiana in 1988. In 1989 the Indiana Section of the American Water Works Association honored Marvin with the "Water Wheel Award" for his outstanding service to his profession. In 1995 Marvin was honored as a lifetime Member of the American Water Works Association.

Marvin's belief in service to our Industry and our Country has established M.E. Simpson Co., Inc.'s commitment to community and organizations such as the United Way, Abused Women and Children, Mental Health Association, Boys and Girls Club, Kiwanis and Jaycees (Junior Chamber of Commerce) for example, as well as local Police and Fire organizations. We encourage all of our employees to be active within their own communities serving with various organizations such as the Boys and Girls Club, Jaycees and Kiwanis.

M.E. Simpson Co., Inc. is active in Water Works Organizations at the national and state levels such as American Water Works Association, Water Environment Federation, Water Operators Association, Rural Water Association, American Backflow Prevention Association, American Public Works Association as well as local Districts, Branches, and Suburban Groups.

FIRM HISTORY

Our support of these groups goes beyond Membership to truly taking an active role by allowing employees to fill elected and appointed positions as officers and committee chairpersons. M.E. Simpson Co., Inc. has always taken an active role in education by making presentations at no charge at meetings, training seminars, and providing continuing education credits for water operators through the various water groups. We have presented programs on Water Meter Evaluation and Maintenance, Water Distribution System Leak Surveys, Water Distribution System Valve Location, Exercising and Computerized Mapping, and Best Management Practices for distribution system maintenance at state and national AWWA conventions.

Fire Hydrant History

M.E. Simpson Co., Inc. developed its Fire Hydrant Flow Testing program in 1986 and expanded it to include Fire Hydrant Maintenance. Since that time we've improved the program that it is now a fundamental asset management and condition assessment program for our clients. We've also developed Pro-Hydrant®, a Microsoft Access showing all the pertinent information needed to readily recreate fire hydrant flow data and reports. Today that database is being developed into an internet based program to be accessible by clients online.

Our Fire Hydrant Flow Testing Programs have been employed since 1986 in a majority of municipalities around the Chicago Metro Area and the Midwest. Additionally, our crews have been deployed to locations throughout the United States including California. Our crews have the unique ability to be able to respond to individual Utility requests because of the cross training they have received performing all the services M.E. Simpson Co. Inc. provides.

M.E. Simpson Co., Inc. is proud of the work we have performed and the maintenance programs we have developed using the latest technology and meeting the needs of "our customer" the Water Works Industry. We have played an important role in educating utilities about the need for and efficiency of annual maintenance programs; including the development of Polcon Pro-Valve® our computer software program for valve location and exercising records, Pro-Hydrant® a computer software program for fire hydrant flow testing records, and the continuing development and manufacturing of the Polcon® Flow Monitoring Equipment. We have moved beyond the competition in flow / pressure recording, computerization and record management.

RELATED PROJECT EXPERIENCE

M.E. Simpson Co., Inc. has been in business since 1979. The company continues to perform services for numerous Cities across Indiana, Illinois, Michigan, Minnesota, Wisconsin, Ohio, Arizona, California, Maryland and other regions of the United States. We have listed below; a few project examples with references. Please feel free to call any of these gentlemen and ask them about their project and our services.

Hydrant Flow Testing Projects

Village of Westmont, Illinois (2000, 2003, 2006, 2010, 2014)

M.E. Simpson Co., Inc. performs water main capacity and fire hydrant operating program for the Village. Every third year over 1150 fire hydrants in the distribution system are inspected, operated and flow tested. This program not only is saving the Village time and money in the areas of water production, distribution system maintenance, and overtime, but the program is also benefiting the Village's Fire Department's fire flow records. The annual costs for flow testing have been \$47,150.

Mr. Mike Ramsey
Water Division Supervisor
Village of Westmont, Illinois
(630) 829-4450 office

Village of Lansing, Illinois (2002, 2004, 2006, 2007-2011, 2014)

M.E. Simpson Co., Inc. performs water main capacity and fire hydrant operating program for the Village. Each year over 300 fire hydrants in a specified area with in the distribution system are inspected, operated and flow tested. This program not only is saving the Village time and money in the areas of water production, distribution system maintenance, and overtime, but the program is also benefiting the Village's Fire Department's fire flow records. The annual costs for flow testing have been \$13,800.

Mr. Jim Nickias
Foreman/Water Operator
Village of Lansing
3300 171st Street
Lansing, IL 60438
(708) 895-7221 office

Village of Downers Grove, Illinois (2009-2014)

M.E. Simpson Co., Inc. performs water main capacity and fire hydrant operating program for the Village. Over 2,600 fire hydrants in the distribution system have been inspected, operated and flow tested. Currently along with fire flow testing the Village has contracted M.E. Simpson Co., Inc. to perform a hydrant maintenance program. The fire hydrant maintenance program included inspecting 2,267 fire hydrants for ISO compliance. This program not only is saving the Village time and money in the areas of water production, distribution system maintenance, and overtime, but the program is also benefiting the Village's Fire Department's fire flow records.

Mr. David Bird
Water Manager
5101 Walnut Avenue
Downers Grove, Illinois 60515
(630) 434-5462 office

RELATED PROJECT EXPERIENCE

City of Bloomington, Indiana (1998 - 2012)

M.E. Simpson Co., Inc. performs an ongoing water main capacity and fire hydrant operating program for the City annually. Each year 1,200 fire hydrants out of a total of 4800 hydrants in a specified area within the distribution system are inspected, operated and flow tested. The annual budget is approximately \$45,600. The program has benefitted the City's hydraulic computer model and Fire Department's fire flow records. Private hydrants are also included as part of this program to insure all hydrants work if/when needed.

Mr. Mike Bengtson
Asst. Director of Utilities
1969 S. Henderson
Bloomington, IN 47401
(812) 349-3653
bengtsom@bloomington.in.gov

Village of Orland Park, Illinois (2000 – 2003, 2008-2011, 2013-2014)

M.E. Simpson Co., Inc. performs an ongoing water main capacity testing and fire hydrant flushing program for the Village on distribution system fire hydrants. To date we have flow tested and service over 4500 fire hydrants. We found a number of closed valves along with fire hydrants that were inoperable. This program in the past has saved the Village time and money in the areas of water production, distribution system maintenance, and overtime. The program also benefitted the Village's hydraulic computer model and found some water main leaks when each hydrant was listened to after flushing that helped to lower water loss. The current program approximate annual cost is \$42,000.

Mr. John Ingram
Village of Orland Park
15665 South Ravinia Avenue
Orland Park, IL 60462
(708) 403-6350
JIngram@orland-park.il.us

Village of Niles, Illinois (2004-2006)

M.E. Simpson Co., Inc. performed a water main capacity and fire hydrant operating program for the Village. 1,000 fire hydrants within the distribution system were inspected, operated and flow tested. This program saved the Village time and money in the areas of water production, distribution system maintenance, and overtime. The program has also identified problem hydrants that were able to be corrected by the Village on a timely basis. The approximate annual cost for the 2004-2006 was \$37,000.

Mr. Bob Pilat
Assistant Public Service Director
Village of Niles
6849 Touhy Ave.
Niles, IL 60714
(847) 588-7926
rmp@vniles.com

RELATED PROJECT EXPERIENCE

ADDITIONAL REFERENCES

Below are several references that use our services. Please feel free to call any of these gentlemen and ask them about our services and us.

Mr. Gale Gerber
Water Superintendent
Town of Nappanee, IN
(574) 773-4623
Ggerber_46550@yahoo.com

Mr. Steve Gerdes
Water Director
Town of Normal, IL
(309) 454-9564
sgerdes@normal.org

Mr. Chuck McIntire
Superintendent
Valparaiso Water Works
(219) 462-3800
cmcintire@valpo.us

Mr. Lon Schemel
Water Superintendent
City of Shakopee, MN
(952) 445-1988
LSchemel@shakopeeutilities.com

Mr. Scott Ham
Manager
Silver Creek Water Corp.
(812) 246-2889
scott@silvercreekwater.org

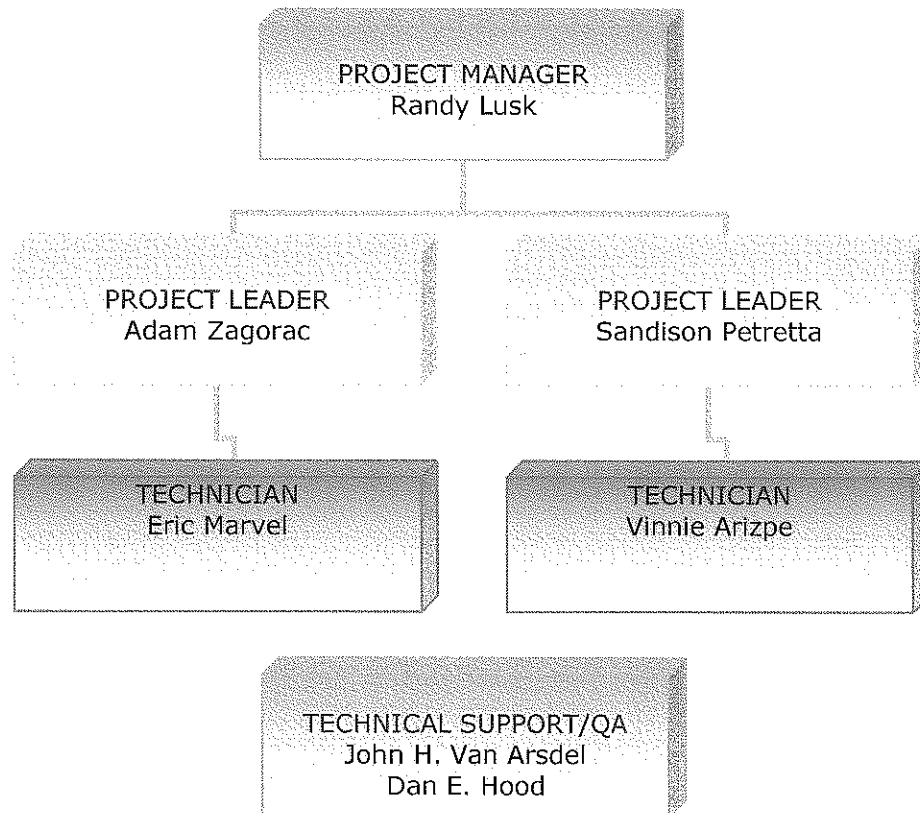
Mr. Dan Lueder
Development Services GM
City of Cottonwood, AZ
(928) 634-0186
dlueder@ci.cottonwood.az.us

EMPLOYEE QUALIFICATIONS / PROJECT STAFFING

The chart below outlines the **Project Team** to be used during the Fire Hydrant Maintenance Program for the **Village of Downers Grove**. One of the two Project Managers listed will lead the **Project Team** in the field. **Two-Man Project Teams will be used at all times during the course of the Project for reasons of Safety and Quality Assurance.**

The **Project Manager (Randy Lusk)** shall be on site at project startup, make periodic inspections of the worksite and oversee all work production in the field, be responsible for field reports, meet with the Utility periodically to monitor the progress of the program, and will be in communication with the Director of Utilities and the Project Leader throughout the project. He shall be responsible for the overall success of the Hydrant Maintenance Program.

The **Field Leader (Sandison Petretta and/or Adam Zagorac)** will lead the **Project Team** in the field and will be responsible for the day to day operations of the project. Daily contact with the Director of Utilities or appointed Utility personnel shall be maintained and progress of the day to day operations discussed. The Field Leader will be responsible to report any issues with individual hydrants, especially broken hydrants, or any other problem areas that need the immediate attention of the Utility during the course of the project. This shall be done to assure direct quality control in the field for the Hydrant Maintenance Program.



EMPLOYEE QUALIFICATIONS / PROJECT STAFFING

Qualifications of Staff for Fire Hydrant Maintenance

PROJECT MANAGER

Randy Lusk, Regional Manager-Dyer

Randy was the Project Leader for the following selected Hydrant projects.

- ◆ (2014) City of Munster – Munster, IN
- ◆ (2008 - 2014) Village of Orland Park – Orland Park, IL
- ◆ (2002-2004, 2009, 2011, 2014) Village of Lansing Water Department – Lansing, IL
- ◆ (2008 - 2014) Town of Griffith – Griffith, IN
- ◆ (2011, 2013-2014) Town of Highland – Highland, IN
- ◆ (2014) Village of Tinley Park – Tinley Park, IL
- ◆ (2007, 2010, 2012, 2014) Village of Westmont – Westmont, IL
- ◆ (2014) Village of Hinsdale – Hinsdale, IL
- ◆ (2012-2014) Village of Itasca – Itasca, IL
- ◆ (2013) Village of Thornton – Thornton, IL
- ◆ (2013-2014) South Stickney Sanitary District

PROJECT LEADERS

Sandison Petretta, Project Leader

Sandison was the Project Leader for the following selected Hydrant projects.

- ◆ (2012-2014) Village of Downers Grove – Downers Grove, IL
- ◆ (2014) City of Beverly Hills – Beverly Hills, CA
- ◆ (2009 – 2010, 2014) Village of Orland Park – Orland Park, IL
- ◆ (2007, 2010, 2012) Village of Westmont – Westmont, IL
- ◆ (2011) City of Country Club Hills – Country Club Hills, IL
- ◆ (2008, 2011) Village of Countryside – Countryside, IL
- ◆ (2004, 2009) Village of Lansing Water Department – Lansing, IL
- ◆ (2007 - 2008) Village of Brookfield – Brookfield, IL
- ◆ (2005) City of Rochester Water Department – Rochester, IN
- ◆ (2004) Village of Niles Water Department – Niles, IL

Adam Zagorac, Project Leader

Adam was the Project Leader for the following selected Hydrant projects.

- ◆ (2012-2013) Village of Itasca – Itasca, IL
- ◆ (2013-2014) Village of Tinley Park – Tinley Park, IL
- ◆ (2012) Town of St. John – St. John, IN
- ◆ (2011) City of Countryside – Countryside, IL
- ◆ (2011) Village of Thornton – Thornton, IL
- ◆ (2011) Village of South Holland – South Holland, IL
- ◆ (2010) Village of Orland Park – Orland Park, IL



Michael D. Simpson
CEO

Experience:

Michael D. Simpson has been with the Company since February of 1983. He completed two years at Purdue University where he studied Industrial Technology. Michael began his career with M.E. Simpson Co., Inc. as a meter technician. He implemented the Company's leak detection program which has now developed into the Company's Water Loss Reduction and Water Distribution System Evaluation Programs.

While working for the Company, Michael developed many of the techniques used today by M.E. Simpson Co., Inc. personnel when performing water loss reduction programs and water distribution system evaluations. With that experience Michael taught these special techniques to several employees. Along with that experience Michael has completed classes, as well as given lectures on hydraulics that are specifically related to the Polcon[®] Flow Testing equipment.

As a dedicated member of numerous organizations, he has taught classes on water loss reduction and water distribution system evaluations throughout the United States. Michael has gained invaluable experience as he has been personally responsible for over 100 water loss control and water distribution evaluation programs. Currently, as CEO of M.E. Simpson Company, Inc., Michael oversees the Company as a whole and manages all daily functions of all corporate and regional offices, its personnel and financial management.

Professional Certifications:

- ◆ 10/30 Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified

Professional Associations:

- ◆ American Water Works Association (AWWA)
 - Vice President – 2013 - 2015
 - Manufacturers Associates Council – 2009 to 2014
 - Water Loss Control Committee – 2003 to present
 - Diversity & Member Inclusion Committee – 2012 – 2015
- ◆ AZWater
 - Leadership Committee – 2009 to 2012
 - Tri-State Director, AZ – 2008 to 2012
 - Tri-State Treasurer – 2008 to 2012
 - Tri-State Exhibitor Chair – 2006 to 2008
- ◆ Illinois Section AWWA
 - MAC Committee – 2008 to 2011
 - Editor of Splash – 2001 to 2005
 - Chair of the Water for People Committee – 2003 to 2008
- ◆ Indiana Section AWWA
 - Director of the Indiana Section – 2012 - 2015
 - Chair of the Indiana Section – 2010 - 2011
 - Awarded the "George Warren Fuller Award" – 2012
 - Chair of the MAC of Indiana – 2003 to 2008
 - Awarded the "Exception Community Service Award" – 2008
 - Awarded the "Kenneth J. Miller Founders Award" for his outstanding volunteerism for Water For People. – 2002
 - Awarded the "Water Wheel Award" – 2001
- ◆ California-Nevada, Michigan, Minnesota, Ohio, Ontario, Texas, Wisconsin Section's of AWWA
- ◆ Arizona, California, Illinois, Indiana, Nevada MEA's of WEF
- ◆ Arizona, Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin Rural Water Associations



Dan E. Hood President

Experience:

Dan E. Hood has been with the Company since October 1985. Dan is a graduate of Purdue University where he earned his Bachelor of Science in Industrial Technology. With his experience in Industrial Technology, Dan has implemented various computer programs which are used by M.E. Simpson Co., Inc. for its services which are provided to water utilities. These various programs help to improve many aspects of evaluations of water distribution systems such as leak detection, fire hydrant flow testing, and valve exercising.

Along with his formal education at Purdue University, he has attended classes on hydraulics which are specifically related to the Polcon® Flow Testing equipment, completed workshops on hydraulic modeling and has been performing flow testing since 1988. With that experience Dan became instrumental in pioneering the development of our valve location and exercising programs, the development of our Polcon Pro-Valve® software, and has trained all of our personnel in this area. With his knowledge of computers and development of the Polcon Pro-Valve® software, Dan has spent extensive time and training on integrating data gathered into existing GIS systems.

Since the start of his tenure, Dan has gained extensive experience in meter evaluation, maintenance and installation. Dan has also completed numerous classes and lectures related to the operation and maintenance of water meters and taught these techniques to our employees who continue to use the techniques today.

As a dedicated member of numerous organizations he has devoted his time and taught Water Loss Reduction and Water Distribution System Improvement classes for the Indiana Section of the AWWA and the Indiana Department of Environmental Management. As president of M.E. Simpson Co., Inc., Dan is in charge of the Midwest operations. He oversees data collection and processing, and quality control Company wide. He also provides technical assistance to all M.E. Simpson Co., Inc. personnel and customer/utility personnel.

Professional Certifications:

- ◆ 10/30 Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified

Professional Associations:

- ◆ Illinois Section AWWA
- ◆ Indiana Section AWWA
Past Chair (2007)
Awarded the "George Warren Fuller Award" by the Indiana Section for distinguished service in the water supply field - 2011.
Awarded the "John Lechner Award" by the MAC of Indiana for distinguished service to the MAC - 2011.
Recipient of the "Kenneth J. Miller - Founders Award" from Water-for-People for outstanding volunteer service.
- ◆ American Water Works Association (AWWA)
Vice President - 2012
Recipient of the "Ambassador" and the "Silver", and "Gold" Presidential Awards" from AWWA for membership recruitment.
Meter Madness Committee - member and past Co-Chair
Water Meter Standards Committee - member
- ◆ Indiana Rural Water Association
- ◆ Wisconsin Rural Water Association
- ◆ AZ Water
- ◆ Tri-State Seminar on the River
Serving Currently - Exhibitor Committee Chair
Recipient of the 2006 Outstanding Service Award.



John H. Van Arsdel
Vice President

Experience:

John H. Van Arsdel has been with M.E. Simpson Co., Inc. since May 1989. He graduated from Valparaiso University with a B.A. in Geography with an emphasis in Locational Evaluation and Research Design. He has completed water operators classes and seminars on Water Filtration and Distribution, Vulnerability Assessment Class for the Sandia Labs RAM-W method and the RAM-W "modified" for small to medium systems (*currently licensed to use the Sandia Labs RAM-W Method, and licensed to teach the RAM-W "modified" for small to medium water systems*), along with classes related to the operation and maintenance of water meters, and system hydraulics specifically related to the Polcon® Flow Testing equipment.

John has over 25 years of experience directing projects for water utilities concerning water audits, loss prevention, leak detection programs, meter evaluation and maintenance, flow testing using the Polcon® Flow Testing method (large flow meter assessments, C-factors, pump curves, zone flow measurements), mainline valve assessments (location, exercising and mapping programs), and fire hydrant and main capacity flow testing programs. John has been responsible for the analysis, evaluation, and CAD updating of Water Distribution, Sanitary, and Storm Sewer Atlases using GPS locating. He developed the Company's Unidirectional Main Flushing Program and Utility Atlas Updating Program. He has presented classes for continuing education credits for water operators for over eighteen years to several local and state Water Works Organizations on Water Loss Reduction including Water Audits, Leak Detection, Meter Testing and Flow Testing. He has presented papers at the AWWA ACE in 2007, 2008, 2009, and 2012, At the 2010, 2011, and 2012 AWWA DSS he presented papers on water loss reduction. Since 2003, he has conducted classes on Vulnerability Assessments and Emergency Response Planning for water utilities as well as conducting several VA and ERP projects. He served from 2010 to 2014 as Chair of the AWWA Water Loss Control Committee. As Vice President of M.E. Simpson Co., Inc., John serves as the main point of contact for client development, business sales and customer relations for the Eastern U.S.

Professional Certifications:

- ◆ 10 Hour and 30 Hour OSHA Certified for General Industry
- ◆ American Red Cross First Aid and CPR with AED Certified
- ◆ American Traffic Safety Services Association Flagging Certified

Professional Associations:

- ◆ American Water Works Association (AWWA)
 Water Loss Control Committee, Chair, 2010-2014
 Apparent Water Loss Sub Committee
- ◆ Illinois Section AWWA Board of Directors
 Past Chair, 2014-2015
 Chair, 2013-2014
 Chair Elect, 2012-2013
 Vice Chair, 2011-2012
 Secretary/Treasurer, 2009 -2011
 Membership Committee, Chair 2006-2009
 Education Committee
 Water For People Committee
 Water Efficiency Committee
- ◆ Indiana, Michigan, Wisconsin, North Carolina, South Carolina, Georgia, Chesapeake, Virginia, and Florida Sections AWWA
- ◆ Illinois and Wisconsin Rural Water Association
- ◆ North Suburban Water Works Association
 Past President, Past Vice President, Past Secretary, 1999-2001
- ◆ West Shore Water Producers Association
- ◆ Water Environment Federation

Awards:

- ◆ 2006 and 2008 National AWWA Zenno Gorder Membership Award for recruitment
- ◆ 2006 and 2008 Diamond Pin for National AWWA membership
- ◆ 2008 AWWA Ambassador Award for AWWA Membership
- ◆ 2010-2011 Water Professional of the Year, Illinois Section AWWA



Randy Lusk Regional Manager

Experience:

Randy Lusk has been with ME Simpson Co., Inc. since November of 2000. He previously worked in the retail business as a Regional Manager for 10 years then was given the opportunity to work in the water industry after learning the value of water and wanting to make a difference. He has attended many classes and lectures on the operations and maintenance of water systems, small and large. Before becoming a Regional Manager he worked in the field for 5 years where he had hands on experience with water systems and this is where he learned such skills and knowledge as valve location and exercising, hydrant flow testing and maintenance and how to find and successfully locate water leaks for communities. Randy is also an Illinois Class D Water Operator which is his proudest accomplishment to date in the water industry.

Randy is also a certified teacher where he travels throughout the state of Illinois and offer CEU's through organizations that include ISAWWA, APWA, IRWA and local operator groups. Randy teaches classes on Water Loss, Water Audits, Main Capacity Testing, Hydrant Maintenance, Leak Detection, Meter testing and calibration and Unidirectional Flow Testing.

Professional Associations:

South Suburban Water Works Association

- ◆ Website Chair
- ◆ Golf Chair
- ◆ Holiday Party Chair
- ◆ Joint Products Day Committee
- ◆ Past Chair of SSWWA

Mid Central Water Works Association

- ◆ Website Chair

Illinois Section AWWA

- ◆ Membership Coordinator
- ◆ Winner of the "Zenno A. Gorder Award" 3 years in a row
- ◆ Winner of Volunteer of the year award
- ◆ Winner of Education Award
- ◆ Meter Madness Committee
- ◆ Water for People Committee
- ◆ Hydrant Hysteria Committee
- ◆ Member Social Events Committee

National AWWA

- ◆ MEDC – Member Engagement and Development Committee
- ◆ Attend Membership Summit Training every other year

Indiana Section AWWA

Professional Certifications:

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



**Sandison Petretta
Project Leader
Dyer, Indiana**

Experience:

Sandison Petretta has been with the Company since July of 2000. He previously worked in the commercial painting industry. Sandison has attended numerous classes and lectures related to the operation, maintenance, and installation of water meters, and completed classes in plumbing. Sandison has experience in the following; maintenance and installation of water meters; valve location, exercising and mapping; fire hydrant and main capacity flow testing; and the use of state of the art leak detection equipment. He is also experienced in the use of all of our Polcon® Flow Testing equipment.

Professional Certifications:

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

* * * * *

**Adam Zagorac
Project Leader
Dyer, Indiana**

Experience:

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

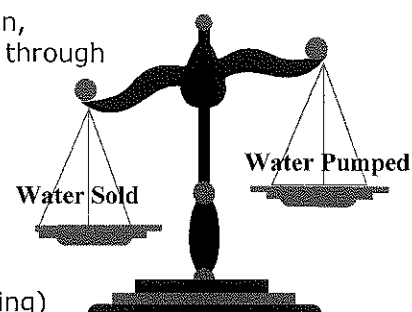
Professional Certifications:

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

PROJECT UNDERSTANDING AND APPROACH

M.E. Simpson Co., Inc.'s philosophy behind fire hydrant maintenance and flowing services, as described in this work plan, is to provide the Village of Downers Grove with the following benefits:

- ◆ Conserve freshwater resources by reducing the number
- ◆ of repairs needed through proper hydrant location, operation, and assessment and by reducing the amount of water used through proper hydrant flushing/flow testing
- ◆ Promote proper compliance with ISO and NFPA rules regarding fire hydrant maintenance and operation
- ◆ Assist the utility in monitoring distribution-system conditions, used to assess capital planning issues
- ◆ Promote the adherence to proper accounting and financial reporting principles (GASB 34)
- ◆ Reduce the risk of failure when emergency usage (fire fighting) is required, by insuring that the fire hydrants function properly
- ◆ Ensure sound and reliable water service and fire protection for customers of the Utility



A number of items uniquely qualify M.E. Simpson Co., Inc. in performing this fire hydrant maintenance and flowing program. The Project Team's extensive practical experience in fire hydrant location, operation, and data collection methodology coupled with experience performing other extensive Water Distribution System Assessment Programs, such as Water Audits, Valve Assessments, Unidirectional Water Main Flushing, and Distribution System Leakage Assessments, will allow for a thorough examination of the Distribution systems' fire hydrants. This will help assess the condition as well as the operational status of the fire hydrants in the distribution system. From start-up to completion, our firm is committed to furnishing a quality service in a timely manner.

Project Management Approach

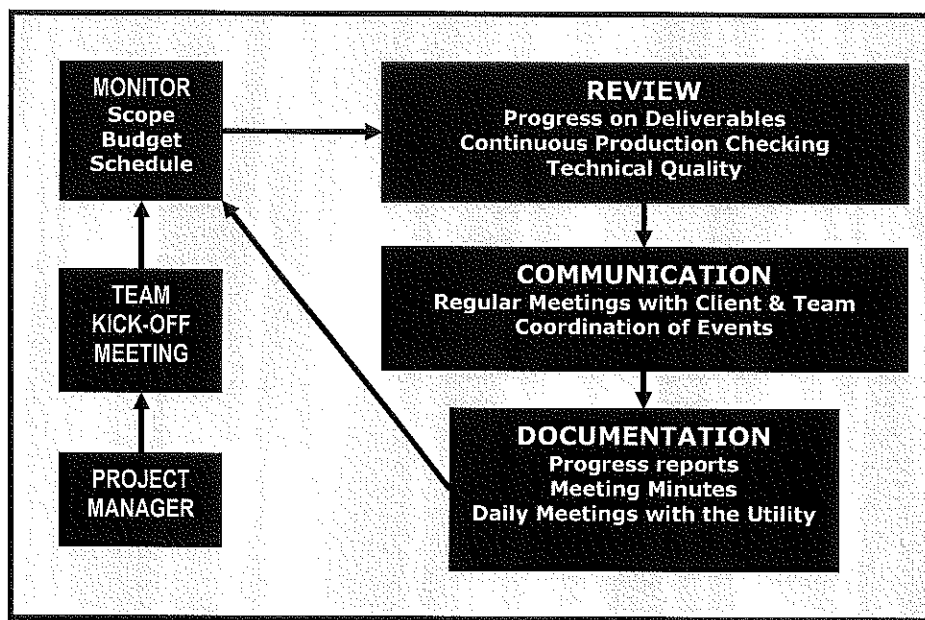
M.E. Simpson Co., Inc.'s project management approach is responsible for our proven track record of completing projects on time and within the established budget. Based on our past experience, we have developed a project approach that will insure the Utility of effective communication throughout this project.

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

- ◆ Coordination of all activities in the project
- ◆ Making key decisions which directly affect the success of the project
- ◆ Establishing milestones throughout the life of the project, for the purpose of review and assessment
- ◆ Preparing an initial project development plan identifying the schedule of work, project tasks, and key personnel to perform the work in the field, to meet the milestones and objectives
- ◆ Coordinating communications and meetings with the Utility, as needed or required, to review technical concepts and alternatives, and to solicit staff input for coordinating activities with the project team

PROJECT UNDERSTANDING AND APPROACH

- ◆ Preparing periodic reports, as needed, and meeting with the Utility on a regular basis, summarizing project scheduling and progress, and maintaining the project within the budget stipulated
- ◆ Overseeing the execution and development of the project deliverables



Project management remains an important activity during the course of the project and does not stop with the project manager. Each project team deployed in the field is dedicated to providing the best Fire Hydrant Maintenance coverage attainable using state of the art equipment, tools, field experience, and knowledge. Each field team will be made up of two experienced distribution system technicians that have also been cross trained in other disciplines of water distribution system field maintenance, such as Distribution System Condition Assessment, Unidirectional Water Main Flushing, Valve and Leakage Assessment, as well as Water Loss Control, and Water Meter Assessment (residential, commercial, wholesale, and production meters). It is this combination of experience and knowledge that has helped shape our approach to Fire Hydrant Maintenance, because our technicians have the capacity to make on the spot decisions regarding any fine tuning of the Fire Hydrant program while in the field. They maintain constant communication with the Utility and the project manager regarding their daily progress as well as any major issues needing immediate attention and discussion.

M.E. Simpson Co., Inc. believes that by selecting our team to perform hydrant maintenance and flowing, the Utility will gain the benefit of exceptional experience, sound decision making, and a high-quality level of service, providing the following advantages:

- ◆ A professional Fire Hydrant Maintenance & Flow team with a specialized expertise in hydrant operation, hydrant maintenance, location of hydrants, and field data collection for GIS
- ◆ An experienced team with the capacity to provide the highest quality work for the Utility
- ◆ A project approach that incorporates interim reporting and continuous feedback
- ◆ Innovative, proven analysis techniques developed from the completion of several similar sized projects that possessed the same goals and scope

PROJECT UNDERSTANDING AND APPROACH

Project Quality Assurance/Quality Control

Quality is of the utmost importance to M.E. Simpson Co., Inc., not merely because Utilities and other clients' require it, but because it is vital to our continued success and viability. Quality management and services bring to us all the reward of a job well done, a satisfied Utility, and successfully completed projects.

M.E. Simpson Co., Inc.'s QA/QC program is built around several key elements of M.E. Simpson Co., Inc.'s mission and values which consist of:

- ◆ Maintaining a reputation for quality performance
- ◆ Client satisfaction
- ◆ Continuous process improvement
- ◆ Open communication with the field staff and the Utility
- ◆ Team Work

The QA/QC plan for this project is very simple. No work will leave M.E. Simpson Co., Inc. until it has been verified that all the requirements and objectives of the project as well as the requirements of the project QA/QC managers have been met. During the course of the project, the project manager and/or the QA/QC manager will meet with the Utility to ensure the work product is technically correct, and also meets the needs and expectations of the Utility.

M.E. Simpson Co., Inc.'s professional services are grounded in sound principles that have stood the test of time, based on the past successes of hundreds of water system projects and will satisfy the quality requirements of the Scope of Service. Each member of the project team will have a thorough understanding of the project objectives. They will apply sound methodology and principles, and are expected to produce high-quality, accurate, and complete documents. The QA/QC procedure has been developed and implemented based on proven methodologies. The prevention of poor quality service is based on four sound principles:

- ◆ Quality management of the project by using experienced personnel committed to excellence
- ◆ Conformance to requirements by being knowledgeable of all local conditions in the field and keeping abreast of new cutting edge distribution system assessment and data collection methods
- ◆ Prevention of rework and errors by using teamwork in the field, cross checking the procedure every step of the way, and having data entry staff knowledgeable in all aspects of fire hydrant maintenance projects
- ◆ Quality is built in - not added on. The project management and field staff have shown that quality service is produced when the project tasks are properly sequenced and carried out to the final termination of the program using a built in system of checks and balances



PROJECT UNDERSTANDING AND APPROACH

Project Field Approach

The **Fire Hydrant Maintenance Program** is conducted in the field by our technicians. M.E. Simpson Co., Inc. will locate, operate, perform routine maintenance, and document all designated fire hydrants in the system in accordance with AWWA standards (American Water Works Association Manual M-17, "Installation, Field Testing, and Maintenance of Fire Hydrants") and the ISO hydrant maintenance standards. The important operation, routine maintenance, location, and asset management details of the fire hydrants will be noted and compiled on our "Fire Hydrant Maintenance Report" and submitted to your office for your permanent records.

Fire Hydrant Maintenance

The **Water Distribution System Fire Hydrant Maintenance Program** is conducted in the field by our Project Team (M.E. Simpson Co., Inc. uses **TWO** trained technicians on each hydrant team). The team will manually operate and assess fire hydrants when necessary. M.E. Simpson Co., Inc. will use a hydraulic valve machine capable of operating particularly difficult fire hydrants. An adaptor can be fitted to the hydrant operating nut allowing the hydraulic operator to exercise the hydrants' main valve assembly. This machine can be set with a torque limit as low as 5 foot pounds with an upper limit of 2,500 foot pounds. The hydraulic operator with the "adjustable torque control" feature, along with experienced operating personnel, prevents excessive breakage during hydrant operation. 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, trained personnel and equipment, as necessary to complete the work herein specified. These field personnel are required to have a minimum of three years field experience in hydrant location, operation, and documentation. The Project Manager will have at least five years experience in managing hydrant programs. We will locate and access each hydrant in the system. The important operation and location details of each hydrant will be noted and compiled on our "Hydrant Maintenance Assessment Report" and submitted to your office for your permanent records.



The Fire Hydrant information will be entered into **Pro-Hydrant-Lite**[®] (detailed later), a computer software program, now a web based program, designed and exclusively marketed by M.E. Simpson Co., Inc. All pertinent fire hydrant information is entered into Pro-Hydrant-Lite[®] such as make, model, year, number and size of ports, static pressure, presence of auxiliary valve, types of maintenance conducted, and a notation of the general condition of the hydrant.

The importance of the **Fire Hydrant Maintenance Program** is apparent when major emergencies arise and Utility personnel are unable to either locate or operate a fire hydrant. These situations often occur when fire hydrants are not operated and maintained annually or at least every two years, and can also affect a Utilities ISO certification.

PROJECT UNDERSTANDING AND APPROACH

An organized field approach to this Fire Hydrant Maintenance project will include the following:

- ◆ **Introduce and maintain an interactive role** with the Utility Staff for the Fire Hydrant Maintenance Program. Conduct short interviews with staff about particulars of the distribution system, such as problem areas prone to poor fire flow due to the age of the pipe, and pressure problems within 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, so problems can be identified in an orderly fashion. This would include setting a schedule and maintaining a level of Field Staffing ensuring completion of the fire hydrant maintenance 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 fire hydrant maintenance in the distribution system** and document all fire hydrant conditions in a manner allowing for a prioritized list of maintenance items to be pursued according to the described "Scope of Work".
- ◆ **Document** each fire hydrant operated/maintained and individual fire hydrant 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 fire hydrants with issues can be addressed in a timely manner.
- ◆ **Provide instruction and council to Utility staff** during the course of the fire hydrant maintenance program so that once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting fire hydrant maintenance with the established goal of reducing the amount of maintenance required on the distribution system while providing up-to-date data for the Utility for each and every fire hydrant.
- ◆ **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the fire hydrant maintenance program.
- ◆ **Provide recommendations for future fire hydrant maintenance programs** such as a methodology and frequency for fire hydrant operation and maintenance.



PROJECT UNDERSTANDING AND APPROACH

Project Field Approach

The **FIRE HYDRANT FLOW TEST PORTION** is conducted in the field by our technicians. M.E. Simpson Co., Inc. will operate and flow designated fire hydrants in the system (20% of the total hydrants per year) in accordance with AWWA standards (American Water Works Association Manual M-17, "Installation, Field Testing and Maintenance of Fire Hydrants"), NFPA 25, and the NFPA chapter 291 for "Flow Testing of Fire Hydrants". The important operation, location and flow test details of the hydrant tests will be noted and compiled on our "Fire Hydrant Flow Test Report" and submitted to your office for your permanent records.

Fire Flow Testing

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 manor 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).

There are a few items for consideration that the field crew will need to take into account during the flow tests. The following will be considered because without these considerations, fire flow results may be different at different times of day.

- ◆ *Water main sizes* - different pipe sizes affect the amount of potential fire flow available at any given location. Pipe sizes also will affect the physical layout and progress of the flow testing program.
- ◆ *Water pressure on the pipe* - this is dependent on such issues as amount of water in the elevated storage tanks, variable speed pumps, number of pumps on line at any given moment, and local demand in areas of the distribution system at the time of the tests.
- ◆ *Flow velocity in the pipe* - water moving through the pipe can be affected by water main C- factors, partially closed or fully closed valves. This can also have a major impact on the correct calculation of the potential available fire flow.

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, and 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 hydrant conditions and fire flow data and associated locations, along with the records being reviewed, shall yield updated fire flow performance and location records of the Utility's fire hydrants as well as supplying valuable information regarding the general condition of the distribution system.



PROJECT UNDERSTANDING AND APPROACH

An organized field approach to this Hydrant Assessment project will include the following:

- ◆ **Introduce and maintain an interactive role** with the Utility Staff for the Hydrant Assessment and Flow Testing Program. Conduct short interviews with staff about particulars of the distribution system such as problem areas prone to poor fire flow, 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 flow tested 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 fire flow testing and hydrant 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 fire flow testing and hydrant assessments on the distribution system** and document all test results, hydrant assessments in a manner that will allow a prioritized list of maintenance items to be pursued according the described "Scope of Work"
- ◆ **Identify and locate** all hydrants in a manner that will allow their positions to be known and readily re-creatable by Utility personnel upon demand
- ◆ **Document** each fire flow test and individual hydrant 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 hydrants with issues can be addressed in a timely manner
- ◆ **Provide instruction and council to Utility staff** during the course of the fire flow testing and hydrant assessments so once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting fire flow testing and hydrant assessments with the established goal of reducing the amount of maintenance required for the fire hydrants while providing up to date data for the Utility for each and every hydrant
- ◆ **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the hydrant assessment program.
- ◆ **Provide recommendations for future fire flow testing and hydrant assessments programs** such as a methodology and frequency for fire flow testing the distribution system



PROJECT UNDERSTANDING AND APPROACH

EQUIPMENT TO BE USED

The following equipment will be used for fire hydrant operation and maintenance work during the fire hydrant maintenance 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 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**
- ◆ **All necessary safety equipment including "fall-protection" - confined space entry equipment, and Crowcon Air Monitoring / Gas Detection and mechanical ventilation when needed or required**
- ◆ **A "Schonstedt" / "Chicago Tape" magnetic locator**
- ◆ **A "Radio Detection RD4000" series line locator**

SCOPE OF SERVICE

The Field Scope of Service for the Fire Hydrant Maintenance Program 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.

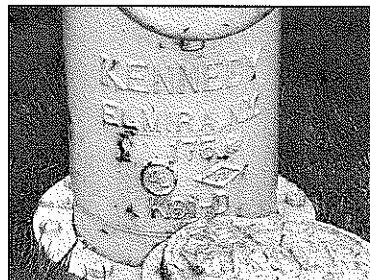
Inspection Process

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. Soil conditions will be assessed, to ensure that the ground is capable of supporting the hydrant (important for proper breakaway).
- ◆ **Location** – If GPS option is chosen, the exact location will be determined using GPS and "x-y" coordinates, based on permanent local features.
- ◆ **Leakage** – With the pumper port and nozzle caps removed, an amplified listening device will be used to ensure that the main-valve 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



SCOPE OF SERVICE

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 and 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, and flush for 10 to 15 seconds.
- ◆ 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.

SCOPE OF SERVICE

- ◆ Check operating nut lubrication and maintain as needed.
- ◆ Inspect breakaway device for damage.
- ◆ If GPS option is chosen, Collect or verify the GPS location of hydrant and the "x-y" location.
- ◆ Notify the Utility immediately of inoperable hydrants needing major repair.
- ◆ Lubrication based on manufacture'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 6 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
- ◆ 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 data will be managed using web-based Pro-Hydrant-Lite® 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.

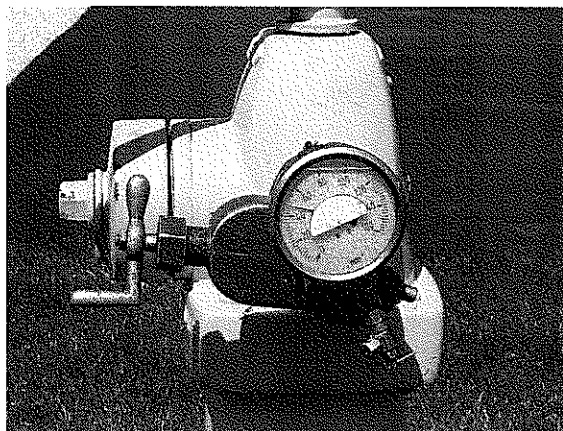
SCOPE OF SERVICE

- ◆ If optional GPS is selected, locations of all hydrants are gathered via GPS using a Trimble Geo XH. This unit is a twelve-channel receiver that receives correction factors from a differential beacon or low flying satellite. Data is transferred into the GPS Pathfinder Office software which supports all aspects of GIS data collection and data maintenance and can be exported into Microsoft Access, ESRI shape files, or any other industry-standard GIS and database format.

The Field Scope of Service for the Hydrant Flow 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.



- ◆ 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.

SCOPE OF SERVICE

- ◆ 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.
- ◆ **M.E. Simpson Co., Inc. will use large flushing signs in designated areas to notify areas to be flushed and inspected.**
- ◆ The Project Team will go door-to-door forty-eight hours before the scheduled flushing and hang door hangers that explain when the fire hydrants will be flow tested and flushed in the area. We will also note on the door hanger about the potential for discolored water and the potential damage to clothing. We will place our toll free number on the door hanger so that the water customer can call and ask questions.
- ◆ **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 effected. 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.**

SCOPE OF SERVICE

- ◆ 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 manor 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 and Flushing

M.E. Simpson Co., Inc. takes great care when operating, flow-testing and flushing 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 flushing and 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 flushing and flow testing, such as water leaks, discolored water and turbidity that can possibly occur during the flushing process. M.E. Simpson Co., Inc. cannot be held responsible for possible damage to the water utilities' individual water customer.

SCOPE OF SERVICE

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



SCOPE OF SERVICE

GPS HYDRANT LOCATION

Once the hydrants have been located, the M.E. Simpson Co., Inc. Project Team will perform the following:

- ◆ **The Project Team will collect GPS Coordinates** of all hydrants 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 (fire hydrant / auxiliary valve).
 - 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.
- ◆ **The location of "offset" GPS locations** shall be accomplished by use of a Laser Rangefinder with an accuracy of 1/10th of a foot with an automatic Electronic Compass coupled to the GPS data collector. This is so a bearing and distance from the offset location to the target GPS location can be recorded as part of the attribute data. This will allow coordinates to be generated in high tree canopy and urban canyons where normal coverage would not be possible.
- ◆ **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 Pro-Hydrant-Lite® database.



SCOPE OF SERVICE

- ◆ **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 OPTIONAL GPS HYDRANT LOCATIONS

M.E. Simpson Co., Inc. will provide a location report for each fire hydrant 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 Plane Coordinate System**.*
 - c. *Location by street and cross-street names.*
 - d. *Type of structure.*

Date and time data was collected.

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, DOCUMENTATIONS and 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.

"Effective Communication ...
Accurate Documentation...
Insuring the success for the
Hydrant Flow Testing
Program"

SCOPE OF SERVICE

- ◆ **The Utility will be provided with flow information in Pro-Hydrant®** an online fire hydrant database. This documentation allows for the flow-testing program to be repeated at a later date. This software program is designed to be a complete system for your Utility to establish an effective fire hydrant flow testing, flushing and maintenance program. The software provides an inventory record system, hydrant maintenance and scheduling. The software includes a complete hydrant flow-testing program for calculating flow test results. Pro-Hydrant® is a hydrant record database (ODBC). **This data will be available "online" to the Utility with the appropriate password and login name. The data will be maintained offsite at a secure location.**

M.E. Simpson Co., Inc. can also provide the Polcon Pro-Hydrant®, software driven hydrant 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.

There is no subscription fee to be assessed to the Utility for this software use.

- ◆ **Information collected by M.E. Simpson Co., Inc. during the Hydrant Flow Testing 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 hydrant flow 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.

SCOPE OF SERVICE

ASSUMPTIONS AND SERVICES PROVIDED BY THE UTILITY

- ◆ The *Utility* will furnish 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.

FIRE HYDRANTS TO BE OPERATED AND MAINTAINED AND FLOWED.

The total number of Fire Hydrants to be located, operated, maintained, flow tested and documented for the *Utility* is approximately **2,776** fire hydrants over a four year period. The number of fire hydrants operated and maintained may vary from the estimated number above.

SCOPE OF SERVICE



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, CPR, and Traffic Control.** While in the field on your project, M.E. Simpson Company 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.

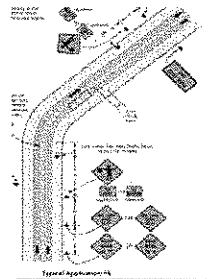
The use of a "one person" fire flow testing and hydrant assessment team is dangerous and impractical where water mains run under roadways and hydrants are close to traffic. It would be a dangerous precedent to allow a "one-person" team to access hydrants located near the roadway, park a vehicle nearby and flow test the hydrant 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 30 Hour Card.**
- ✦ Any work 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.



ATSSA Certified
Traffic Control Personnel



Work Zone Safety Plans
will be used

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

PROPOSED SCHEDULE

Proposal Due: February 19, 2015, 2:00 pm

Notice To Proceed: TBD

Provide Insurance Certificate naming the Utility as additionally insured:

Within 14 calendar days after "Notice to Proceed".

Kick Off Meeting and Commencement of work: Within 14 days of "Notice to Proceed" or as agreed upon between the Utility and M.E. Simpson to meet with Utility staff to go over project goals and objectives. Field work will begin the same day or agreed upon by the Utility and M.E. Simpson Co., Inc.

Fieldwork to be completed and documented: Field work will be started as agreed upon by the Utility and M.E. Simpson Co., Inc. Assume one crew (2 person), 44-50 in the field for completion of field work for the hydrant maintenance and flow testing. Additional hydrant maintenance work beyond the original 2,776 hydrants per year will be based on per unit fee and may cause a shift in the completion date.

Daily Work Hours

Normal "on site" daily work hours will be 7:00 AM to 3:30 PM. Any work that needs to be performed outside the normal work hours will be discussed with the Water Superintendent at least 24 hours in advance.

Daily Reporting: The Field staff will meet with assigned Utility staff daily or as needed and determined by the assigned Utility Manager. Hydrants needing immediate attention will be documented and submitted immediately for the Utility's attention. Minor repairs (such as hydrants that function but need painting, gaskets, leaks, etc) will be reported daily for scheduling of repair. Copies of hydrant sheets where hydrants need moderate to severe repair will be turned in to assigned Utility Manager daily or as agreed upon by, prioritized by severity.

Final Reports: The final summary report will be available 30 work days after field work has been completed for the program. This report will have all the hydrant sheets printed and flow data compiled during the course of the project. The hydrant database will be available on line as well, or on a disc if requested.

PROPOSAL FEE

February 19, 2015

M.E. Simpson Co., Inc. is pleased to present our "Proposal" for a Fire Hydrant Maintenance Program for the Village of Downers Grove, Illinois. The Fire Hydrant Maintenance Program will be conducted on approximately **2,776** fire hydrants in the Utility's water distribution system and flow test 20% of the system hydrants. M.E. Simpson Co., Inc. will perform this service with one of our two man teams, with all necessary equipment, described within this document, furnished by M.E. Simpson Co., Inc. All procedures will be followed as described within this document. All travel, lodging and meals are included in the proposal price. The program will also include a complete individual hydrant flow test report, contained in our Polcon® Pro-Hydrant-Lite database available on line and a final comprehensive report.

2015:	
Maintenance 2,222 fire hydrants at \$39.00 each -----	(\$86,658.00)
Flow Test 20% (554) at \$46.00 each -----	(\$25,484.00)
2016:	
Maintenance 2,222 fire hydrants at \$39.00 each -----	(\$86,658.00)
Flow Test 20% (554) at \$46.00 each -----	(\$25,484.00)
2017:	
Maintenance 2,222 fire hydrants at \$40.00 each -----	(\$88,880.00)
Flow Test 20% (554) at \$47.00 each -----	(\$26,038.00)

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

Sincerely Yours,



John H. Van Arsdel
 Vice President
 JHV/jph



March 5, 2014

Mr. Ken Ritter
Water Division Manager
Village of Oak Lawn
Water Division
9446 S. Raymond Avenue
Oak lawn, Illinois 60453

Dear Mr. Ritter,

M.E. Simpson Co., Inc. is pleased to submit this report on the fire hydrant maintenance project for the Village of Oak Lawn, conducted by our crews between November 7, 2013 and December 3, 2013. Fire hydrant maintenance is performed to determine operability and ensuring they are capable of providing adequate fire-flow at all times. This along with routine flushing, chlorine residual testing and fire flow tests may help ensure a greater ISO rating for the Utility (Maintenance must be performed twice annually ISO Certification).

Procedure

M.E. Simpson Co., Inc. has been contracted to inspect approximately four hundred thirty-four (434). The logistics behind fire flow testing this number of hydrants are quite extensive. The planning, cooperation and communication between the Village of Oak Lawn and M.E. Simpson Co., Inc. was an ongoing process throughout the project. The first step in this project was to determine the area in which inspections would take place. Next, the public was notified of the areas that would be tested in the Fire Flow Test portion of the project. The utility and local fire departments were also informed of these areas. Inspections were generally performed between 8:00 a.m. and 4:00 p.m.

Inspection Process

Hydrants should be inspected on a regular basis, at least once a year. 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 was inspected and recorded. Hydrants that have been displaced due to ground-shifting or collision have been documented and the Utility immediately notified. If necessary, bollards were recommended to protect the hydrant from future collisions. Hydrants located very close to roadways and vehicle traffic were documented so they can be moved by the Utility.

- ◆ **Accessibility** – Recommendations have been made to raise or lower a hydrant when improper distance from the ground inhibited proper function. Pumper ports and nozzles not facing the correct direction have been documented, so that the hydrant can be rotated. Soil conditions will be assessed, to ensure that the ground is capable of supporting the hydrant (important for proper breakaway).
- ◆ **Location** – Locations of the exact location determined using GPS and “x-y” coordinates, based on permanent local features.
- ◆ **Leakage** – With the pumper port and nozzle caps removed, an amplified listening device was used to ensure the main-valve was not leaking.
- ◆ **Functionality** – The condition of the pumper/nozzle threads and caps was assessed for damage and proper function and lubricated for ease of operation. Dry-barrel hydrants were checked for proper drainage. The condition of the operating nut was determined, with regard to excessive wear or rounding. Hydrants which were difficult to operate were exercised by repeatedly opening and closing the main-valve with the pumper/nozzle caps securely fastened. Hydrants exhibiting evidence of unauthorized operation have been documented so 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 the inspections to determine the condition of the hydrant and may be used to schedule any necessary repairs.

Dry-Barrel Hydrant Inspection and Maintenance Procedure

- ◆ Checked and recorded static pressure.
- ◆ Checked the hydrants appearance. Condition of paint and proper color-coding assessed.
- ◆ Hydrants needing to be raised or lowered were documented, as well as accessibility issues.
- ◆ Removed one nozzle/pumper cap and, using a listening device, check for main valve leakage. Repaired or scheduled a repair, as necessary.
- ◆ Using a plumb-bob, checked the inside of the barrel for water or ice. Pumped water out of hydrant barrel, wait a few minutes, and then rechecked with plumb-bob to verify water is not passing through the valve on the hydrant lead. If ice was present, notified the Utility immediately so hydrant can be thawed out and put back into service.
- ◆ Replaced the nozzle/pumper cap, loose enough for air to escape. Opened hydrant a few turns, allowing air to vent from loose cap. Tightened the cap.
- ◆ Opened hydrant fully, checking for ease of operation. Repeatedly exercised the operating stem, as needed, to remove buildup and promote better operation.
- ◆ With the hydrant fully pressurized, checked for leakage around the flanges, nozzles/pumpers, seals, and operating nut. Repaired or scheduled a repair, as necessary.
- ◆ Partially closed the hydrant to open the drain outlets, and flushed for 10 to 15 seconds.
- ◆ Completely closed the hydrant, and then turn the operating nut ¼ turn to ½ turn closed to relieve the pressure on the thrust bearing or packing.
- ◆ Removed a nozzle/pumper cap, and attach a diffuser. Flushed the hydrant to remove foreign material.
- ◆ Closed 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 was pumped from the barrel.
- ◆ Checked for main valve leakage with an amplified listening device.
- ◆ Removed all nozzle/pumper caps and inspect the threads. Cleaned and applied approved lubricant to caps and nozzles/pumpers.
- ◆ Inspected cap chains for binding and ease of movement. Unbound or replaced, as necessary.
- ◆ Replaced the caps and tighten them to the Utilities specification.

- ◆ Checked operating nut lubrication and maintain as needed.
- ◆ Inspected breakaway device for damage.
- ◆ If GPS option is chosen, Collect or verify the GPS location of hydrant and the "x-y" location.
- ◆ Notified the Utility immediately of inoperable hydrants needing major repair.
- ◆ Lubrication based on manufacture's procedures and recommendations (On fully assembled hydrants)

Repair

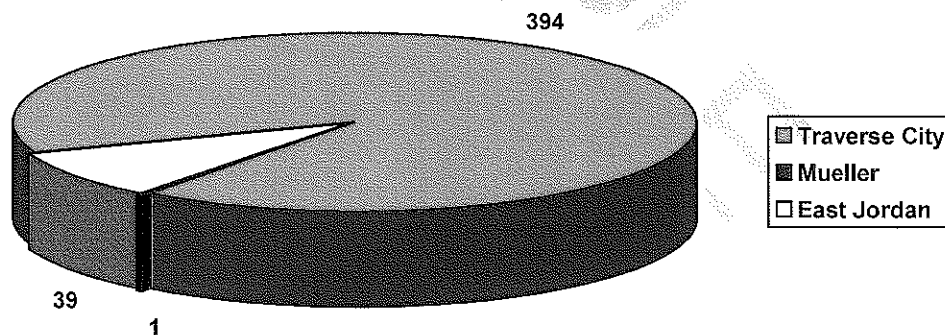
Some hydrants found with problems that are not easily fixed during the course of inspection and maintenance, such as leakage, difficult operation, corrosion, broken components, or even damage due to impact have been reported to the Utility. The following is the set of general guidelines which our technicians will follow for hydrant repair (non excavation).

- ◆ Closed the auxiliary valve or use another means of disengaging the hydrant from the distribution system (cut-off flow and pressure).
- ◆ Disassembled the hydrant as specified by the manufacturer.
- ◆ Replaced all parts which exhibit damage or wear; always replace all of the gaskets and seals
- ◆ Reassembled the hydrant, and open the auxiliary valve (or 'reconnect' it to the distribution system).
- ◆ Checked the hydrant for leakage using an amplified listening device. The main-valve should not leak.
- ◆ Manipulated the operating nut to open the main-valve, vent the air from the hydrant, and then re-inspected the hydrant, under pressure, checked for leakage, ease of operation, and drainage.
- ◆ Notified the Utility upon completion of the repair.

Fire Hydrant Maintenance Results

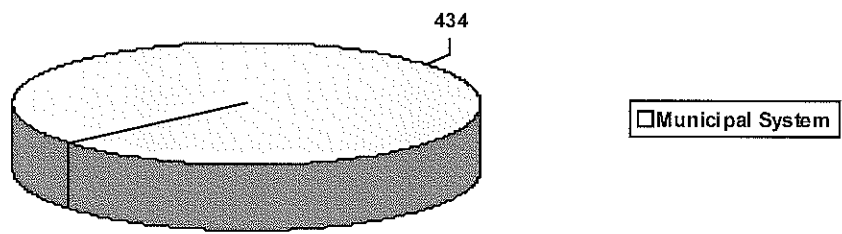
Fire hydrant Brands

M.E. Simpson Co., Inc. located and inspected four hundred thirty-four (434) hydrants for the Village of Oak Lawn. The brands of hydrants varied slightly. 394 (91%) are Traverse City hydrants. 39 (9%) are East Jordan hydrants. 1 (less than 1%) was a Mueller hydrant.



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. All four hundred thirty-four (434) hydrants are coded as Chrome Yellow (Municipal System) and no (0) hydrants are coded as Red (Private System). Hydrants requiring new paint have been noted.



Inspection Results

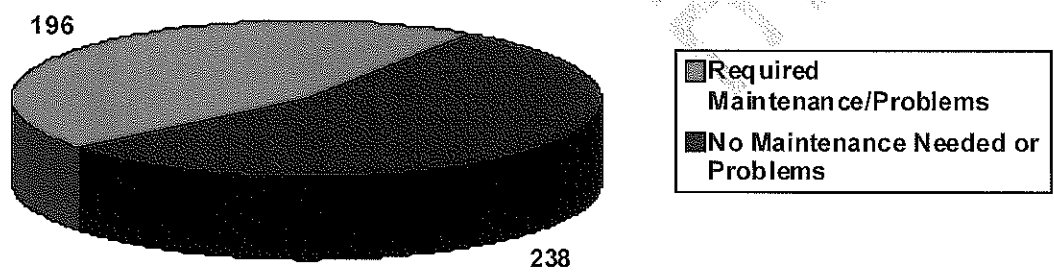
The most important part of the Fire Hydrant Maintenance Program is detailing of problems with hydrants and maintenance that has occurred. This is done so proper work orders can be generated and hydrants brought to fully functional status. The following was found in the field during the Maintenance Project. Any problems or maintenance required can be found on individual hydrant report sheets.

434 Hydrants Were Inspected For the Project

238 Hydrants Were Inspected with No Problems

196 Hydrants Had Some Defect or Problem

- 2 Nozzles Missing/Gaskets Replaced
- 3 Hydrant Needs Paint
- 17 Operating Nut Had Defect / Needed Replaced
- 2 Auxiliary Valve Not Found
- 9 Auxiliary Valve Needs Riser
- 33 Hydrant Leaks (While Pressurized)
- 1 Debris Round Hydrant Cannot Be Removed
- 25 Pumper Port Has Improper Ground Clearance
- 41 Pumper Gasket Needed to be Replaced

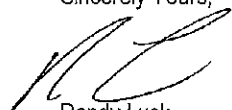


Conclusion and Recommendations

The 2013 Fire Hydrant Maintenance Program has provided the Village of Oak Lawn with extremely important information regarding their fire hydrants. Care should be taken to correct any defects on hydrants and properly maintain the hydrants for Proper ISO certification and fire flow protection.

The 2013 Fire Hydrant Maintenance Program had very few logistical or public relation problems and the overall procedure was extremely successful. We thank you for the opportunity to provide the Village of Oak Lawn with this service and we look forward to continuing the Program in the upcoming years. If you have any questions regarding this report or any other portion of the project please don't hesitate to call.

Sincerely Yours,



Randy Lusk
Regional Manager – Dyer
RL/jph

EXAMPLE

Oak Lawn, IL

Numerical Index

<i>Hydrant Number</i>	<i>Address</i>	<i>Cross Street</i>
15NE-H001	Pulaski Road	103rd Street
15NE-H002	10336 Pulaski Road	
15NE-H003	10350 Pulaski Road	
15NE-H004	10424 Pulaski Road	
15NE-H005	10458 Pulaski Road	
15NE-H006	4000 105th Place	Pulaski Road
15NE-H007	4001 106th Street	Pulaski Road
15NE-H008	4001 106th Place	Pulaski Road
15NE-H009	4100 107th Street	
15NE-H010	Kedvale Avenue	107th Street
15NE-H011	10624 Kedvale Avenue	
15NE-H012	4019 106th Place	
15NE-H013	4040 106th Place	Karlov Avenue
15NE-H014	4041 106th Street	Karlov Avenue
15NE-H015	4021 106th Street	
15NE-H016	4028 105th Place	
15NE-H017	10520 Karlov Avenue	
15NE-H018	4100 105th Street	
15NE-H019	4032 105th Street	
15NE-H020	10418 Komensky Avenue	104th Place
15NE-H021	10360 Komensky Avenue	
15NE-H022	10324 Komensky Avenue	
15NE-H023	10302 Komensky Avenue	103rd Street
15NE-H024	10417 Karlov Avenue	104th Place
15NE-H025	10320 Karlov Avenue	
15NE-H026	10316 Karlov Avenue	
15NE-H027	10300 Karlov Avenue	103rd Street
15NE-H028	10300 Kedvale Avenue	103rd Street
15NE-H029	10320 Kedvale Avenue	
15NE-H030	10344 Kedvale Avenue	
15NE-H031	10420 Kedvale Avenue	
15NE-H032	10444 Kedzie Avenue	105th Street
15NE-H033	10520 Kedvale Avenue	
15NE-H034	10544 Kedvale Avenue	106th Street

Oak Lawn, IL

Street/Cross Street Index

<i>Hydrant Number</i>	<i>Street</i>	<i>Cross Street</i>	<i>Owner</i>
6NW-H054	5543 103rd Street		Oak Lawn, IL
16NE-H004	105th Place	Cicero Avenue (W)	Oak Lawn, IL
15NE-H006	4000 105th Place	Pulaski Road	Oak Lawn, IL
15NE-H016	4028 105th Place		Oak Lawn, IL
5NW-H044	4617 105th Place		Oak Lawn, IL
5NW-H055	4637 105th Place		Oak Lawn, IL
5NW-H058	4735 105th Place		Oak Lawn, IL
16NE-H017	4830 105th Place		Oak Lawn, IL
16NE-H018	4900 105th Place	Lamon Avenue	Oak Lawn, IL
16NE-H019	4928 105th Place		Oak Lawn, IL
16NE-H058	5120 105th Place		Oak Lawn, IL
16NE-H064	5140 105th Place		Oak Lawn, IL
6NW-H004	5200 105th Place		Oak Lawn, IL
6NW-H011	5220 105th Place		Oak Lawn, IL
6NW-H024	5300 105th Place	Lockwood Avenue	Oak Lawn, IL
6NW-H026	105th Street	Lockwood Avenue	Oak Lawn, IL
6NW-H034	105th Street	Long Avenue	Oak Lawn, IL
15NE-H019	4032 105th Street		Oak Lawn, IL
15NE-H018	4100 105th Street		Oak Lawn, IL
5NW-H044	4621 105th Street		Oak Lawn, IL
5NW-H055	4637 105th Street		Oak Lawn, IL
5NW-H061	4739 105th Street		Oak Lawn, IL
6NW-H011	5221 105th Street		Oak Lawn, IL
6NW-H026	5313 105th Street		Oak Lawn, IL
5NW-H061	106th Place	Cicero Avenue (E. of)	Oak Lawn, IL
15NE-H008	4001 106th Place	Pulaski Road	Oak Lawn, IL
15NE-H012	4019 106th Place		Oak Lawn, IL
15NE-H013	4040 106th Place	Karlof Avenue	Oak Lawn, IL
5NW-H038	4616 106th Place		Oak Lawn, IL
5NW-H054	4636 106th Place		Oak Lawn, IL
5NW-H055	4712 106th Place		Oak Lawn, IL
16NE-H007	4800 106th Place	Cicero Avenue (W)	Oak Lawn, IL
16NE-H014	4824 106th Place		Oak Lawn, IL
16NE-H012	4902 106th Place	Lamon Avenue	Oak Lawn, IL

Village of Oak Lawn, Illinois Fire Hydrant Maintenance Program

Hydrant ID: 15NE-H001	Address:	Street: Pulaski Road	Cross Street: 103rd Street
Make East Jordan	Model: 5BR	Date Stamped: 2002	Color: Red
Location: Parkway	Public/Private?	1	Maintenance Date: 11/13/2013
			Valve Opening: 5.25

Pumper:	Missing?	No <input type="checkbox"/>	Op. Nut:	Condition:		Nozzles:	Missing?	No <input type="checkbox"/>
	Gasket Repl.?	No <input type="checkbox"/>		OK?	Yes		Gasket Repl.?	No <input type="checkbox"/>
	Greased?	Yes		Replace?	No <input type="checkbox"/>		Greased?	Yes
Chains:		Yes	Operating Nut Bushing OK?		Yes	Nozzle Type:		Lead
			Replaced?		No <input type="checkbox"/>			

Paint:	No <input type="checkbox"/>	Aux. Valve:	Found?	Yes	Hydrant Extension?	No	
Needs Paint:	Yes <input checked="" type="checkbox"/>		Need Riser?	No <input type="checkbox"/>		Length:	
			Inches Needed?				

Comments:

Flushed:	Minutes:	2	Drainage:	OK?	Yes	Checked for Leaks:	Hydrant Leaks?	No <input type="checkbox"/>
	Water Quality:	Clear		Slow?	No <input type="checkbox"/>		Where?	
Pressure:	Static PSI:	42		Doesn't Drain?	No <input type="checkbox"/>	Leaks While Pressurized	Leaks?	No <input type="checkbox"/>
	GPM:	0			Where?			

Comments:

Debris Around Hydrant	Debris?	No <input type="checkbox"/>	Hydrant Facing Correct Direction?			Pumper Port Clearance (Min. 18")		
	Removed?	No <input type="checkbox"/>	Yes	Need to be turned:		Yes	Raise / Lower	

Stem Oiled? Yes

Comments

Additional Comments:

Repairs Made by Utility: _____ **Repair Date:** _____



Check Mark =
Some Attention Required

Village of Oak Lawn, Illinois Fire Hydrant Maintenance Program

Hydrant ID: 15NE-H002	Address: 1033	Street: Pulaski Road	Cross Street:
Make: Traverse City	Model:	Date Stamped: 1956	Color: Red
Location: Parkway	Public/Private?:	1	Maintenance Date: 11/13/2013
		Valve Opening: 5.25	

Pumper:	Missing?	No <input type="checkbox"/>	Op. Nut:	Condition:		Nozzles:	Missing?	No <input type="checkbox"/>
	Gasket Repl.?	No <input type="checkbox"/>		OK?	Yes <input type="checkbox"/>		Gasket Repl.?	No <input type="checkbox"/>
	Greased?	Yes <input type="checkbox"/>		Replace?	No <input type="checkbox"/>		Greased?	Yes <input type="checkbox"/>
Chains:		Yes <input type="checkbox"/>	Operating Nut Bushing OK?		Yes <input type="checkbox"/>	Nozzle Type:		Mechanical
			Replaced?		No <input type="checkbox"/>			

Paint:	Yes <input type="checkbox"/>	Aux. Valve:	Found?	Yes <input type="checkbox"/>	Hydrant Extension?	No	
Needs Paint:	No <input type="checkbox"/>		Need Riser?	No <input type="checkbox"/>		Length:	
			Inches Needed?				

Comments:

Flushed:	Minutes:	2	Drainage:	OK?	Yes <input type="checkbox"/>	Checked for Leaks:	Hydrant Leaks?	No <input type="checkbox"/>
	Water Quality:	Clear		Slow?	No <input type="checkbox"/>		Where?	
Pressure:	Static PSI:	0		Doesn't Drain?	No <input type="checkbox"/>	Leaks While Pressurized	Leaks?	Yes <input checked="" type="checkbox"/>
	GPM:	0			Where?		Pumper Port	

Comments:

Debris Around Hydrant	Debris?	No <input type="checkbox"/>	Hydrant Facing Correct Direction?		Pumper Port Clearance (Min. 18")		
	Removed?	No <input type="checkbox"/>	Yes	Need to be turned:	Yes	Raise / Lower	<input type="text"/>

Stem Oiled? Yes

Comments:

Additional Comments:

Repairs Made by Utility: _____ **Repair Date:** _____



Check Mark =
Some Attention Required

Village of Oak Lawn, Illinois Fire Hydrant Maintenance Program

Hydrant ID: 15NE-H003	Address: 1035	Street: Pulaski Road	Cross Street:
Make: Traverse City	Model:	Date Stamped: 1957	Color: Red
Location: Parkway	Public/Private? 1	Maintenance Date: 11/13/2013	Valve Opening: 5.25

Pumper:	Missing?	No <input type="checkbox"/>	Op. Nut:	Condition:		Nozzles:	Missing?	No <input type="checkbox"/>
	Gasket Repl.?	No <input type="checkbox"/>		OK?	Yes		Gasket Repl.?	No <input type="checkbox"/>
	Greased?	Yes		Replace?	No <input type="checkbox"/>		Greased?	Yes
Chains:		Yes	Operating Nut Bushing OK?		Yes	Nozzle Type:		Mechanical
			Replaced?		No <input type="checkbox"/>			

Paint:	Yes <input type="checkbox"/>	Aux. Valve:	Found?	Yes	Hydrant Extension?	No	
Needs Paint:	No <input type="checkbox"/>		Need Riser?	No <input type="checkbox"/>		Length:	
			Inches Needed?				

Comments:

Flushed:	Minutes:	2	Drainage:	OK?	Yes	Checked for Leaks:	Hydrant Leaks?	No <input type="checkbox"/>
	Water Quality:	Clear		Slow?	No <input type="checkbox"/>		Where?	
Pressure:	Static PSI:	41		Doesn't Drain?	No <input type="checkbox"/>	Leaks While Pressurized	Leaks?	No <input type="checkbox"/>
	GPM:	0			Where?			

Comments:

Debris Around Hydrant	Debris?	No <input type="checkbox"/>	Hydrant Facing Correct Direction?		Pumper Port Clearance (Min. 18")		
	Removed?	No	Yes	Need to be turned:	Yes	Raise / Lower	<input type="text"/>

Stem Oiled?	Yes
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Comments

Additional Comments:

Repairs Made by Utility: _____ **Repair Date:** _____



Check Mark =
Some Attention Required

Village of Oak Lawn, Illinois Fire Hydrant Maintenance Program

Hydrant ID: 15NE-H004	Address: 1042 Street: Pulaski Road	Cross Street:
Make: Traverse City	Model:	Date Stamped: 1959
Location: Parkway	Public/Private?: 1	Color: Red
		Maintenance Date: 11/13/2013
		Valve Opening: 5.25

Pumper:	Missing?	No <input type="checkbox"/>	Op. Nut:	Condition:		Nozzles:	Missing?	No <input type="checkbox"/>
	Gasket Repl.?	No <input type="checkbox"/>		OK?	Yes		Gasket Repl.?	No <input type="checkbox"/>
	Greased?	Yes		Replace?	No <input type="checkbox"/>		Greased?	Yes
Chains:		Yes	Operating Nut Bushing OK?		Yes	Nozzle Type:		Mechanical
			Replaced?		No <input type="checkbox"/>			

Paint:	Yes	Aux. Valve:	Found?	Yes	Hydrant Extension?	No	
Needs Paint:	No <input type="checkbox"/>		Need Riser?	No <input type="checkbox"/>		Length:	
			Inches Needed?				

Comments:

Flushed:	Minutes:	2	Drainage:	OK?	Yes	Checked for Leaks:	Hydrant Leaks?	No <input type="checkbox"/>
	Water Quality:	Clear		Slow?	No <input type="checkbox"/>		Where?	
Pressure:	Static PSI:	42		Doesn't Drain?	No <input type="checkbox"/>	Leaks While Pressurized	Leaks?	No <input type="checkbox"/>
	GPM:	0			Where?			

Comments:

Debris Around Hydrant	Debris?	No <input type="checkbox"/>	Hydrant Facing Correct Direction?		Pumper Port Clearance (Min. 18")		
	Removed?	No	Yes	Need to be turned:	Yes	Raise / Lower	<input type="text"/>

Stem Oiled? Yes

Comments

Additional Comments:

Repairs Made by Utility: _____ **Repair Date:** _____



Check Mark =
Some Attention Required

Village of Oak Lawn, Illinois Fire Hydrant Maintenance Program

Hydrant ID: 15NE-H005	Address: 1045	Street: Pulaski Road	Cross Street:
Make: Traverse City	Model:	Date Stamped: 1970	Color: Red
Location: Parkway	Public/Private?:	1	Maintenance Date: 11/13/2013
			Valve Opening: 5.25

Pumper:	Missing?	<input type="checkbox"/>	Op. Nut:	Condition:		Nozzles:	Missing?	<input type="checkbox"/>	
	Gasket Repl.?	<input type="checkbox"/>		OK?	<input type="checkbox"/>		Yes	Gasket Repl.?	<input type="checkbox"/>
	Greased?	<input type="checkbox"/>		Replace?	<input type="checkbox"/>		No	Greased?	<input type="checkbox"/>
Chains:		<input type="checkbox"/>	Operating Nut Bushing OK?		<input type="checkbox"/>	Nozzle Type:		Mechanical	
			Replaced?		<input type="checkbox"/>				

Paint:	<input type="checkbox"/>	Aux. Valve:	Found?	<input type="checkbox"/>	Hydrant Extension?	No		
Needs Paint:	<input type="checkbox"/>		Need Riser?	<input type="checkbox"/>		Length:		
			Inches Needed?					

Comments:

Flushed:	Minutes:	2	Drainage:	OK?	<input type="checkbox"/>	Checked for Leaks:	Hydrant Leaks?	<input type="checkbox"/>
	Water Quality:	Clear		Slow?	<input type="checkbox"/>		No	Where?
Pressure:	Static PSI:	42		Doesn't Drain?	<input type="checkbox"/>	No	Leaks While Pressurized	Leaks?
	GPM:	0				Where?		

Comments:

Debris Around Hydrant	Debris?	<input type="checkbox"/>	Hydrant Facing Correct Direction?		Pumper Port Clearance (Min. 18")		
	Removed?	<input type="checkbox"/>	Yes	Need to be turned:	No	Raise / Lower	<input type="text" value="2"/>

Stem Oiled? Yes

Comments

Additional Comments:

Repairs Made by Utility: _____ **Repair Date:** _____



Check Mark =
Some Attention Required



March 3, 2014

Mr. David Bird
Water Manager
Village of Downers Grove
5101 Walnut Avenue
Downers Grove, Illinois 60515-4074

Dear Mr. Bird,

M.E. Simpson Co., Inc. is pleased to submit this report on the fire hydrant flow testing project for the Village of Downers Grove, conducted by our crews between September 19, 2013 and December 13, 2013. Fire-flow tests are conducted to determine pressure and flow-producing capabilities at any location within the distribution system. Primarily, the tests determine how much water is available for fighting fires; however, the tests also serve as a way to determine the general condition of the distribution system. The tests can point to an area of the distribution system that may have lower flow-carrying capacities due to tuberculation of the pipes or perhaps a closed valve. The testing also allows inspection and maintenance to occur on a regular basis.

Procedure

M.E. Simpson Co., Inc. has been contracted to fire flow test approximately six hundred eight (608) hydrants. The logistics behind fire flow testing this number of hydrants are quite extensive. The planning, cooperation and communication between the Village of Downers Grove and M.E. Simpson Co., Inc. was an ongoing process throughout the project. The first step in this project was to determine the area that the flow testing would occur and to plan the hydrant by hydrant progression throughout this area. Next, the public was notified of the areas that would be tested. The utility and local fire departments were also informed of these areas. Flow testing was generally performed between 8:00 a.m. and 4:00 p.m.

Area of Flow Testing

The basic method of progression was to flow test the hydrants from the water sources (pump stations, reservoirs, etc.) outwards into the system. Flow testing started at the largest supply main toward the smaller water mains. This was to allow any discolored water to be flushed out of the flow hydrants in the most efficient manner. Also considered in this process was the fact that different pressure zones were involved. Each zone had to be flowed separately from the others.

Public Notification

Public notification can greatly reduce the number of customer complaints regarding dirty water. M.E. Simpson Co., Inc. worked in partnership with the utility to inform citizens of the process. M.E. Simpson Co., Inc. crews went door to door with tags to notify the residents of what days their area would be affected. These tags included test dates and warnings regarding doing laundry on the test date. The tags also had M.E. Simpson Co., Inc.'s toll free number and instructions to call us with questions that were concerning the hydrant testing. M.E. Simpson Co., Inc. logged very few calls during the testing program from customers of the Village of Downers Grove. Most of the calls were simple questions regarding a specific time that the crew would be in the area.

Utility/Fire Department Notification

Department notification took place before the flow testing was to occur. Broken hydrants and maintenance problems were reported as soon as possible to the control center so appropriate corrections could be made.

Testing Procedure

Three pieces of information are needed for testing a fire hydrant and the calculation of fire flow. The testing requires static pressure at the test hydrant, flow rate at the flow hydrant, and residual pressure at the test hydrant taken while the flow hydrant is flowing.

Before the static pressure can be obtained the test hydrant is inspected for safety (loose ports, caps and bolts etc.). A port cap is then removed and the hydrant is flushed to remove any debris in the hydrant, hydrant leg or water main in the area and then the hydrant is shut down. A pressure gauge is attached to the port and the hydrant is charged. A static pressure reading is then taken and recorded.

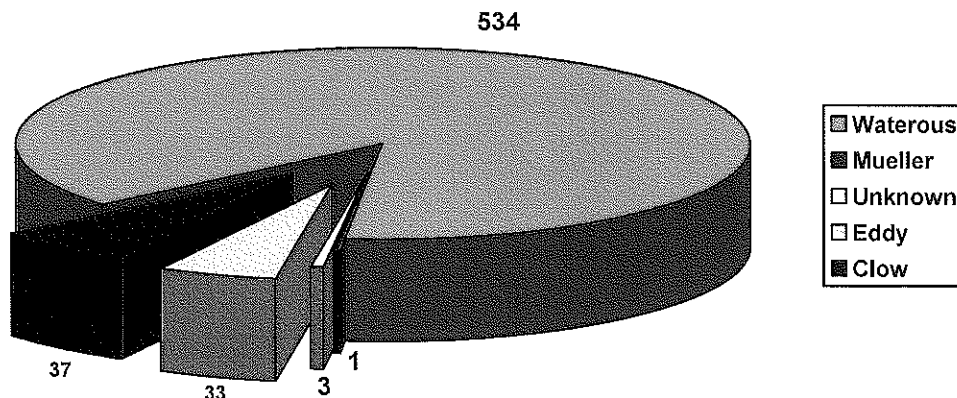
A flow hydrant is chosen in an area that will be both effective and safe. The flow hydrant chosen was always on the down stream side of the hydrants being tested. This resulted in some of hydrants being flowed and inspected only. When the technician at the test hydrant is ready he signals the technician at the flow hydrant to begin flowing. The flow hydrant technician then reports the flow readings to the test hydrant technician and the information is recorded.

While the flow hydrant is flowing, the test hydrant technician takes a residual pressure reading from the gauge on the test hydrant. This information is recorded and the test technician signals the flow hydrant technician to shut down the flow hydrant. The hydrant was then lubricated and grease was applied to all the port caps. The fire hydrant was then checked with a FCS S30 electronic listening device to ensure that the hydrant was not leaking.

This procedure is followed on all the hydrants unless there are maintenance or logistic problems that cannot be dealt with in the field at the time of the test. All the information is then brought to M.E. Simpson Co., Inc.'s office and entered into the Pro-Hydrant® database to be analyzed and documented.

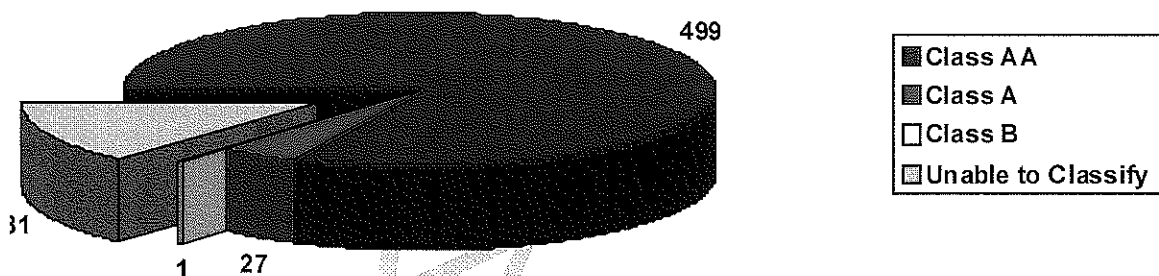
Fire Hydrant Flow Testing Results

M.E. Simpson Co., Inc. located and inspected six hundred eight (608) hydrants for the Village of Downers Grove. The brands of hydrants varied slightly. 534 (88%) are Waterous hydrants, 37 (6%) are Clow hydrants, 33 (5%) are Eddy hydrants, 1 (less than 1%) was a Mueller hydrant. 3 (less than 1%) hydrant brands could not be identified.

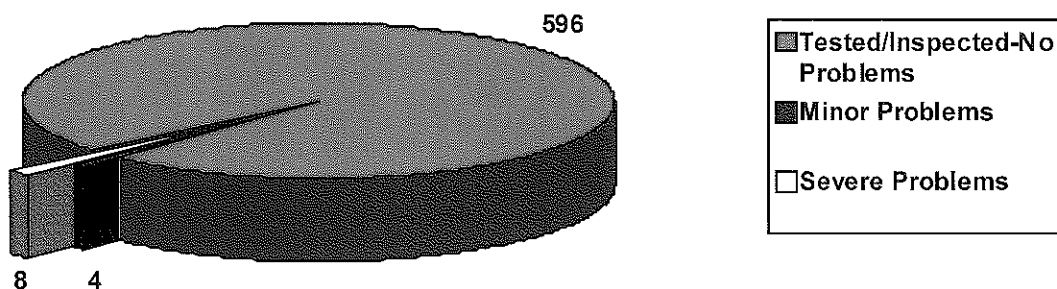


The National Fire Protection Association (NFPA) uses flow capacity to classify hydrants. Any hydrant with a rated capacity of 1,500 GPM or greater is classified "AA" (color - Blue). Any hydrant with a rated capacity of between 1,000 and 1,499 GPM is classified "A" (color - Green). Any hydrant with a rated capacity of between 500 and 999 GPM is classified "B" (color - Yellow). Any hydrant with a rated capacity less than 500 GPM is classified "C" (color - Red).

Five hundred twenty-seven (527) hydrants are classified in the 2013 Hydrant Flow Program. Four hundred ninety-nine (499) that were classified are classified "AA". Twenty-seven (27) are classified "A". One (1) is classified "B". Eighty-one (81) were not classified for various reasons, including hydrants with problems, they could be dead end hydrants, but the majority were inspected and not flowed due to freezing weather conditions



One of the most important outcomes of the testing program are the problems that are found with hydrants that in some cases could be dangerous. The problems that should be corrected first are on the Unusable-Severe Problem hydrants. If a hydrant cannot be opened or a pumper port cap cannot be removed that hydrant would be classified unusable. Some problems are easily correctable and not as serious as others, these hydrants are Usable-Minor Problems. Four (4) hydrants were categorized as Usable-Minor Problems. Eight (8) hydrants were classified as being Severe/Unusable.



There were no (0) instances of the distribution system being unable to supply a residual pressure of 20 psi or greater in the surrounding area during a test. This situation could have occurred because of tuberculation in the water mains, a closed valve or because of an inadequate water supply.

Another piece of information that is recorded during the flow test is the length of time the flow hydrant was flowed. This time is then multiplied by the flow rate to get an estimated amount of water used for the flow test. The amount of water used on any individual test is recorded on that test sheet. On average approximately 26,224.5 gallons of water per day was used to flow test the hydrants. The total amount of water used for this project is estimated at 472,041 gallons.

Conclusion and Recommendations

The 2013 Fire Hydrant Flow Test Program has provided the Village of Downers Grove with extremely important information regarding their fire hydrants. Five hundred twenty-seven (527) were able to be given NFPA classifications and colors. Eighty-one (81) hydrants were not testable and/or were not able to be given a NFPA classification because some had problems and others were located at the dead-end of water mains. The hydrants were all inspected and lubricated and the threads of the ports had grease applied.

Eight (8) hydrants were reported as Unusable-Severe Problem. Four (4) hydrants were reported as Usable-Minor Problem. Because these problems were reported as they were found, a comparison should be made between the Problem lists and what has already been fixed. We recommend the proper repairs be made to the problem hydrants and the information be updated in the Pro-Hydrant® database.

The 2013 Fire Hydrant Flow Test Program had very few logistical or public relation problems and the overall procedure was extremely successful. We thank you for the opportunity to provide the Village of Downers Grove with this service and we look forward to continuing the Program in the upcoming years. If you have any questions regarding this report or any other portion of the project please don't hesitate to call.

Sincerely Yours,

Randy Lusk
Regional Manager – Dyer
RL/jph

Downers Grove, IL

Street/Cross Street Index

<i>Hydrant Number</i>	<i>Street</i>	<i>Cross Street</i>	<i>Owner</i>
18A-43			Downers Grove, IL
13D-19	2340 163rd Street	Puffer Road	Downers Grove, IL
09C-31	100 2nd Street	Victor Street	Downers Grove, IL
09C-33	124 2nd Street		Downers Grove, IL
09C-03	8 2nd Street	Williams Street	Downers Grove, IL
29C-21	1000 31st Street		Downers Grove, IL
29C-20	1000 31st Street	Highland Avenue	Downers Grove, IL
29C-22	1020 31st Street		Downers Grove, IL
32A-21	1140 31st Street		Downers Grove, IL
32A-20	1140 31st Street	Hydrant #32A-21 (N. of)	Downers Grove, IL
32A-03	1080 35th Street		Downers Grove, IL
32C-28	1120 35th Street		Downers Grove, IL
32C-27	1140 35th Street	Saratoga Avenue	Downers Grove, IL
31D-09	1201 35th Street		Downers Grove, IL
31D-08	1341 35th Street		Downers Grove, IL
31D-07	1367 35th Street		Downers Grove, IL
31D-06	1407 35th Street		Downers Grove, IL
31D-05	1413 35th Street		Downers Grove, IL
31D-02	1511 35th Street		Downers Grove, IL
31D-01	1611 35th Street		Downers Grove, IL
32A-02	3402 35th Street		Downers Grove, IL
32D-22	405 36th Street		Downers Grove, IL
32D-21	429 36th Street		Downers Grove, IL
32D-20	521 36th Street	Douglas Road (W. of)	Downers Grove, IL
32D-19	531 36th Street		Downers Grove, IL
32D-18	601 36th Street		Downers Grove, IL
32D-17	641 36th Street		Downers Grove, IL
32D-26	548 37th Street	Sterling Road (E. of)	Downers Grove, IL
32D-11	711 37th Street	Woodland Lane	Downers Grove, IL
33C-08	38th Street		Downers Grove, IL
33C-05	2919 38th Street	Cumnor Road	Downers Grove, IL
32D-05	3760 38th Street		Downers Grove, IL
33C-09	3800 38th Street		Downers Grove, IL
33C-07	3816 38th Street		Downers Grove, IL

Downers Grove, IL

NFA Class AA - Blue

<i>Hydrant Number</i>	<i>Street</i>	<i>Cross Street</i>	<i>Owner</i>	<i>Class</i>
01C-01	2500 Warrenville Road		Downers Grove, IL	AA
01C-02	2550 Warrenville Road		Downers Grove, IL	AA
01C-03	2600 Warrenville Road		Downers Grove, IL	AA
01C-04	Warrenville Road	Commerce Drive	Downers Grove, IL	AA
01C-05	Commerce Drive	Warrenville Road (N. of)	Downers Grove, IL	AA
01C-06	2650 Warrenville Road		Downers Grove, IL	AA
01C-07	2650 Warrenville Road	Hydrant #01C-06 (W. of)	Downers Grove, IL	AA
01C-08	Authority Drive	Warrenville Road	Downers Grove, IL	AA
01C-09	Authority Drive	Hydrant #01C-08 (S. of)	Downers Grove, IL	AA
01C-10	Authority Drive	Hydrant #01C-09 (S. of)	Downers Grove, IL	AA
01C-11	Authority Drive	Ogden Avenue	Downers Grove, IL	AA
01C-12	2551 Warrenville Road	Cross Street	Downers Grove, IL	AA
01C-13	4340 Cross Street		Downers Grove, IL	AA
01C-14	Walnut Avenue	Burlington Avenue	Downers Grove, IL	AA
01C-15	Walnut Avenue	Burlington Avenue	Downers Grove, IL	AA
01C-17	Walnut Avenue	Burlington Avenue	Downers Grove, IL	AA
01C-18	2701 Ogden Avenue		Downers Grove, IL	AA
01C-19	2701 Ogden Avenue		Downers Grove, IL	AA
01C-20	2589 Ogden Avenue		Downers Grove, IL	AA
01C-21	Ogden Avenue	Authority Drive	Downers Grove, IL	AA
01C-22	2539 Ogden Avenue		Downers Grove, IL	AA
01C-23	2525 Ogden Avenue		Downers Grove, IL	AA
01C-24	2415 Ogden Avenue		Downers Grove, IL	AA
01C-25	4502 Drendel Road		Downers Grove, IL	AA
01C-26	4510 Drendel Road		Downers Grove, IL	AA
01C-27	4600 Drendel Road		Downers Grove, IL	AA
01C-28	2533 Indianapolis Avenue		Downers Grove, IL	AA
01C-29	4416 Cross Street		Downers Grove, IL	AA
01C-30	4512 Cross Street		Downers Grove, IL	AA
01C-31	4601 Cross Street	Indianapolis Avenue	Downers Grove, IL	AA
01C-33	2500 Warrenville Road		Downers Grove, IL	AA

Downers Grove, IL

NFPA Class B - Yellow

<i>Hydrant Number</i>	<i>Street</i>	<i>Cross Street</i>	<i>Owner</i>	<i>Class</i>
06D-31	4500 Linscott Avenue	Grant Street	Downers Grove, IL	B
07D-22	Turvey Road	Brookbank Road	Downers Grove, IL	B
07D-23	1323 Turvey Lane		Downers Grove, IL	B
07D-24	1313 Turvey Lane		Downers Grove, IL	B
08D-43	5408 Fairmount Avenue		Downers Grove, IL	B
18D-24	1400 61st Street	Dunham Road	Downers Grove, IL	B

6 Hydrants - Color Class B

EXAMPLE

Downers Grove, IL

NFFPA Class A - Green

<i>Hydrant Number</i>	<i>Street</i>	<i>Cross Street</i>	<i>Owner</i>	<i>Class</i>
04A-07	141 39th Street		Downers Grove, IL	A
04A-08	101 39th Street		Downers Grove, IL	A
04A-09	41 39th Street		Downers Grove, IL	A
04A-12	3928 William Street		Downers Grove, IL	A
04A-13	4008 William Street		Downers Grove, IL	A
04A-14	4020 William Street		Downers Grove, IL	A
04A-16	4162 Roslyn Road	41st Street	Downers Grove, IL	A
04A-19	4002 Roslyn Street		Downers Grove, IL	A
04A-27	4122 Long Meadow Road		Downers Grove, IL	A
04A-29	4002 Long Meadow Road		Downers Grove, IL	A
04A-30	3922 Long Meadow Road		Downers Grove, IL	A
04A-31	212 Cumnor Road		Downers Grove, IL	A
04C-13	4516 Florence Avenue	Otis Avenue	Downers Grove, IL	A
04C-21	326 Chicago Avenue		Downers Grove, IL	A
04C-23	301 Indianapolis Avenue		Downers Grove, IL	A
05A-05	4108 Forest Avenue		Downers Grove, IL	A
05A-06	3948 Forest Avenue		Downers Grove, IL	A
05B-24	3926 Sterling Road		Downers Grove, IL	A
05B-27	3950 Douglas Road		Downers Grove, IL	A
05B-30	4040 Douglas Road		Downers Grove, IL	A
05C-28	1149 Prince Street		Downers Grove, IL	A
05C-31	4434 Prince Street		Downers Grove, IL	A
05C-32	1130 Prince Street		Downers Grove, IL	A
05C-34	4602 Prince Street		Downers Grove, IL	A
05C-35	4608 Forest Avenue	Lincoln Street	Downers Grove, IL	A
05D-07	4404 Fairview Avenue	Sherman Street	Downers Grove, IL	A
05D-08	4436 Fairview Avenue	Davis Street	Downers Grove, IL	A
05D-11	4510 Fairview Avenue		Downers Grove, IL	A
05D-43	504 Indianapolis Avenue	Douglas Road	Downers Grove, IL	A
06D-18	4604 Linscott Avenue		Downers Grove, IL	A
06D-19	4515 Linscott Avenue		Downers Grove, IL	A

Downers Grove, IL

Severe Problems

Hydrant Number	Street	Cross Street	Inspection Date
01D-01	2200 Warrenville Road	Finley Road	10/28/2011
	Nozzle threads are stripped Unable to get static cap on hydrant		Downers Grove, IL
04A-38	336 Fairview Avenue		10/17/2011
	Out of service Hydrant has a black bag over it		Downers Grove, IL
04C-07	200 Cumnor Road		10/11/2011
	Water is coming up from the bottom of the hydrant		Downers Grove, IL
04C-14	330 Otis Avenue		10/11/2011
	Can move hydrant back and forth		Downers Grove, IL
05A-52	420 40th Street		10/19/2011
	Untestable per SP		Downers Grove, IL
06D-01	1532 Downers Drive		9/21/2011
	Leaking from the base of the hydrant Leaking badly from the bottom of the hydrant		Downers Grove, IL
08C-24	5336 Lyman Avenue	Summit Street	10/8/2014
	Leaking from the base of hydrant badly Untestable		Downers Grove, IL
08C-47	830 55th Street	Washington Street (E. of)	10/8/2014
	Hydrant could not open Untestable		Downers Grove, IL
08D-03	5220 Fairview Avenue	4th Street	10/1/2014
	Broke while testing		Downers Grove, IL
08D-12	5440 Park Avenue	55th Street	10/8/2014
	Leaking from the base of hydrant badly Untestable		Downers Grove, IL
08D-38	5252 Benton Avenue		10/1/2014
	Leaking from the base of Hyd. Badly Untestable		Downers Grove, IL
09C-12	2 8th Street	Williams Street	9/23/2014
	Untestable Could not open with cheater bar		Downers Grove, IL
09C-15	5340 Cumnor Road	7th Street	9/23/2014
	Cannot open with cheater bar		Downers Grove, IL
09C-20	2 6th Street	Williams Street	9/23/2014
	Test good/unable to close/closed by aux valve		Downers Grove, IL
18D-25	6120 Dunham Road		11/12/2013
	Couldn't open hydrant - hydrant nut is missing Hydrant nut is missing		Downers Grove, IL
18D-29	1522 62nd Street		11/12/2013
	Hydrant broke while testing. The hydrant stem broke while testing - Had to use the auxilliary valve to close the hydrant		Downers Grove, IL

Downers Grove, IL

Minor Problems

Hydrant Number	Street	Cross Street	Inspection Date
01D-02	Warrenville Road	Hydrant #01D-01 (W. of)	10/28/2011
	Leaking from pumper port		Downers Grove, IL
07A-09	4708 Cornell Avenue		9/23/2011
	Small leak on big cap		Downers Grove, IL
07A-10	4700 Chicago Avenue		9/23/2011
	Small leak in the middle of the hydrant		Downers Grove, IL
12B-03	4842 Woodward Avenue		9/23/2011
	Loose cap on top (Hydrant nut)		Downers Grove, IL
17A-07	5500 Washington Street	55th Street	9/30/2014
	Pumper cap has a crack		Downers Grove, IL
17D-16	438 63rd Street		9/25/2014
	Hard to open		Downers Grove, IL
17D-17	630 63rd Street		9/25/2014
	Hard to open		Downers Grove, IL
17D-23	6212 Park Avenue		9/24/2014
	Could not stop hydrant leak		Downers Grove, IL
17D-48	6210 Grand Avenue		9/25/2014
	Hard to open		Downers Grove, IL
17D-49	6228 Grand Avenue		9/25/2014
	Hard to open		Downers Grove, IL
17D-51	6124 Blodgett Avenue		9/25/2014
	Hard to open		Downers Grove, IL
17D-53	6033 Blodgett Avenue		9/25/2014
	Hard to open		Downers Grove, IL
18A-42	2000 55th Place	Woodward Avenue	11/3/2010
	Bottom of base leaks		Downers Grove, IL
18C-47	1730 Brian Grant Court		11/8/2013
	The south side nozzle port of hydrant is stripped		Downers Grove, IL
19A-01	1970 Oxnard Drive		10/14/2013
			Downers Grove, IL
19A-16	1840 Bolson Drive	Stonewall Avenue / Bolson Drive	10/14/2013
	Could no get the hydrant to shut down - We listened to it and it still had noise - We tried to shut down the hydrant using a cheater bar, the noise went down, but it didn't stop		Downers Grove, IL
19D-14	6730 Dunham Road		10/1/2009
	Front cap does not seal at full pressure		Downers Grove, IL
20D-48	6728 Osage Place		10/18/2012
	Nut spins after hydrant is closed		Downers Grove, IL
24B-17	2170 Midhurst Road	Oxnard Drive	10/15/2013
	Hydrant south side nozzle cap nut is rounded.		Downers Grove, IL

Downers Grove, IL

ProHydrant®

Capacity Test Report

Hydrant #13A-01

Residual Hydrant Information

Residual Hydrant ID: 13A-01 Feature ID: _____ Owner: Downers Grove, IL
 Address: 2612 Street: College Road
 Cross Street / Intersection:
 Location: Parkway Sect: 8-13A Qtrr Sect:
 Make: Waterous Model: 150 Date stamped: 1987 GPS:
 Main size: 8 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Flow Hydrant Information

Flow Hydrant ID: 13A-04 Feature ID: _____ Owner: Downers Grove, IL
 Address: 5617 Street: Katrine Avenue
 Cross Street / Intersection: College Road
 Location: Parkway Sect.: 8-13A Qtrr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS::
 Main size: 8 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Capacity Test Results

Test Date: 11/6/2013 Time of Day: 9:09 Technicians: SP/JR
 Static Pressure: 60 Residual Pressure: 52 GPM Obtained: 802
 Static HGL: Residual HGL: Pressure Zone: Main
 Class: AA Bonnet Color: Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage
13A-04	2.39	0.89	28.00	802	2	1,605
				Total GPM	802	Usage: 1,605

Available Flow at 20 PSI: **1,910.31**
 Available Flow at 25 PSI: 1,777.41
 Available Flow at 30 PSI: 1,635.45
 Available Flow at 35 PSI: 1,482.11

Test Comment:

Downers Grove, IL

ProHydrant®

Capacity Test Report

Hydrant #13A-02

Residual Hydrant Information

Residual Hydrant ID: 13A-02 Feature ID: Owner: Downers Grove, IL
 Address: 5710 Street: Katrine Avenue
 Cross Street / Intersection:
 Location: Parkway Sect: 8-13A Qtr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS:
 Main size: 6 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Flow Hydrant Information

Flow Hydrant ID: 13A-04 Feature ID: Owner: Downers Grove, IL
 Address: 5617 Street: Katrine Avenue
 Cross Street / Intersection: College Road
 Location: Parkway Sect.: 8-13A Qtr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS::
 Main size: 8 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Capacity Test Results

Test Date: 11/6/2013 Time of Day: 9:35 Technicians: SP/JR
 Static Pressure: 59 Residual Pressure: 50 GPM Obtained: 802
 Static HGL: Residual HGL: Pressure Zone: Main
 Class: AA Bonnet Color: Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage
13A-04	2.39	0.89	28.00	802	2	1,605
Total GPM				802	Usage:	1,605

Available Flow at 20 PSI: **1,768.25**
 Available Flow at 25 PSI: 1,641.98
 Available Flow at 30 PSI: 1,506.83
 Available Flow at 35 PSI: 1,360.45

Test Comment:

Downers Grove, IL

ProHydrant®

Capacity Test Report

Hydrant #13A-03

Residual Hydrant Information

Residual Hydrant ID: 13A-03 Feature ID: Owner: Downers Grove, IL
 Address: 5901 Street: Katrine Avenue
 Cross Street / Intersection:
 Location: Parkway Sect: 8-13A Qtrr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS:
 Main size: 6 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Flow Hydrant Information

Flow Hydrant ID: 13A-04 Feature ID: Owner: Downers Grove, IL
 Address: 5617 Street: Katrine Avenue
 Cross Street / Intersection: College Road
 Location: Parkway Sect.: 8-13A Qtrr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS::
 Main size: 8 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Capacity Test Results

Test Date: 11/6/2013 Time of Day: 9:18 Technicians: SP/JR
 Static Pressure: 60 Residual Pressure: 53 GPM Obtained: 802
 Static HGL: Residual HGL: Pressure Zone: Main
 Class: AA Bonnet Color: Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage
13A-04	2.39	0.89	28.00	802	2	1,605
Total GPM				802	Usage:	1,605

Available Flow at 20 PSI: **2,053.15**
 Available Flow at 25 PSI: 1,910.31
 Available Flow at 30 PSI: 1,757.73
 Available Flow at 35 PSI: 1,592.92

Test Comment:

Downers Grove, IL

ProHydrant®

Capacity Test Report

Hydrant #13A-04

Residual Hydrant Information

Residual Hydrant ID: 13A-04 Feature ID: Owner: Downers Grove, IL
 Address: 5617 Street: Katrine Avenue
 Cross Street / Intersection: College Road
 Location: Parkway Sect: 8-13A Qtr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS:
 Main size: 8 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

Flow Hydrant Information

Flow Hydrant ID: 13A-33 Feature ID: Owner: Downers Grove, IL
 Address: 5636 Street: Lomond Avenue
 Cross Street / Intersection: College Road
 Location: Parkway Sect.: 8-13A Qtr Sect:
 Make: Waterous Model: 150 Date stamped: 1988 GPS:
 Main size: 8 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:
 Elevation: # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northing:

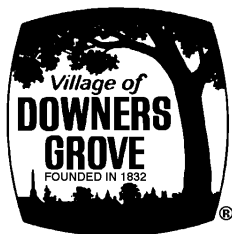
Capacity Test Results

Test Date: 11/6/2013 Time of Day: 10:00 Technicians: SP/JR
 Static Pressure: 58 Residual Pressure: 51 GPM Obtained: 802
 Static HGL: Residual HGL: Pressure Zone: Main
 Class: AA Bonnet Color: Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage
13A-33	2.39	0.89	28.00	802	2	1,605
Total GPM				802	Usage:	1,605

Available Flow at 20 PSI: **1,997.06**
 Available Flow at 25 PSI: 1,850.57
 Available Flow at 30 PSI: 1,693.45
 Available Flow at 35 PSI: 1,522.79

Test Comment:



Village of Downers Grove

Contractor Evaluation

Contractor: M.E. Simpson Co., Inc.

Project: Water Distribution Valve Assessment Program

Primary Contact: Randy Lusk Phone: 1-800-255-1521

Time Period: 2012 – 2014

On Schedule: X yes ● no

Provide details if early or late completion: Proposals were due 1-23-12. Contract awarded on 3-20-2012. Contractor finished on time each of the three years of the contract with no requests for time extensions. As per contract, a final report of the program was submitted annually for each of the three years of work.

Change Orders (attach information if needed):

Difficulties / Positives: The contractor inspected approximately 2,150 fire hydrants and flow tested about 530 annually for the term of the contract in accordance with American Water Works Association (AWWA) standards. The contractor communicated their activities to Village staff daily and placed signs in neighborhoods to notify the public while work was taking place. Their work has contributed toward the Village's improved ISO rating.

Interaction with public:

X excellent ● good ● average ● poor

(Attach information on any complaints or compliments)

General Level of Satisfaction with work:

X Well Satisfied ● Satisfied ● Not Satisfied

Should the Village contract with this vendor in the future? X Yes ● No

Reviewer: Dave Bird

Date: March 12, 2015