ITEM MOT 00-05679

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL MEETING
SEPTEMBER 2, 2014 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Water System Leak Detection Services	Resolution Ordinance ✓ Motion Discussion Only	Nan Newlon, P.E. Director of Public Works

SYNOPSIS
A motion is requested authorizing the execution of a three-year contract for water system leak detection services with M.E. Simpson Co., Inc. of Valparaiso, Indiana in the amount of $135,840.

STRATEGIC PLAN ALIGNMENT
The goals for 2011 to 2018 identified *Top Quality Infrastructure.*

FISCAL IMPACT
The FY14 budget provides $45,000 in the Water Fund for water system leak detection services. Of this amount, $8,000 is budgeted for leak detection services to identify the location of water leaks prior to excavation and $37,000 for an annual leak detection survey.

RECOMMENDATION
Approval on the September 2, 2014 consent agenda.

BACKGROUND
Each year the Village conducts proactive leak detection of the entire water system. This program involves employing a technical service company to use highly accurate, state-of-the-art acoustic equipment to find subsurface water system leaks and other sources of water loss for the Village's entire 233 mile water distribution system. This program is important for the following reasons:

1) Reducing the cost of lost water through leakage
2) Monitoring potential system operation and maintenance problems
3) Conserving freshwater resources, and
4) Ensuring sound and reliable water service for the customer.

The 2013 leak detection survey completed by M.E. Simpson pinpointed 33 leaks with an average daily water loss of 165,600 gallons per day. The repair of these leaks equates to a savings of $180,123 annually.

In addition to the village-wide survey, the Public Works department also requests site-specific leak detection services during some watermain breaks and leaks. In many situations the exact location of an underground break or leak is difficult to determine because many factors influence the path the water takes before it ultimately surfaces. Using leak detection services prior to excavating shortens the length of time needed to find and repair the broken pipe and reduces the size of the excavation which minimizes the cost of restoration.

Staff developed a Request for Proposals (RFP) seeking services from a qualified vendor to provide water system leak detection services for 2014-16 in accordance with established procurement procedures. Two proposals were received with pricing information summarized in the table below.

Three Year Price Summary for Leak Detection Survey

Service Provider	Proposed Price 2014	Proposed Price 2015	Proposed Price 2016	3-Year Total	
M.E. Simpson Co., Inc., Valparaiso, IN	$37,280	$37,280	$37,280	$106,015	
Associated Technical Services, Villa Park, IL	$36,900	n/a	n/a	n/a	Disqualified

Price Summary for Emergency Leak Detection Services

Service Provider	Regular Business Hours	After Hours	
M.E. Simpson Co., Inc., Valparaiso, IN	$375 1st hour and $195 each additional	$500 1st hour and $215 each additional	
Associated Technical Services, Villa Park, IL	$350	n/a	Disqualified

The proposal submitted by Associated Technical Services was disqualified because it did not contain the requested pricing information and did not contain any of the required, completed contract forms. M.E. Simpson's contract cost, which would remain the same for the three contract years, reflects a 3.2% increase from the 2013 contract cost. M.E. Simpson Company completed the prior three-year contract with good results.

ATTACHMENTS

Contract Documents
Contractor Report Card

M.E. SIMPSON Co., Inc.

July 17, 2014

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

Dear Ms. Tarka,

M.E. Simpson Co., Inc. is pleased to present our response to the request for bids for RFP No.: RFP-0-50-2014/TT, "Water Distribution System Leak Detection Services" for the Village of Downers Grove, IL.

M.E. Simpson Co., Inc. is a **Professional Services** firm dedicated to developing and providing programs and services designed to maximize peak performance for our clients' water distribution and wastewater collection 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 Professional and Technical Services, with highly skilled and trained professionals using state-of-the art technologies.

These services were developed and refined to provide Utilities with programs that can be customized to meet their needs. From complete "Turn-Key" services to assisting with the development of "In-House" programs 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**
  QA/QC, Equipment to be used
- **Scope of Services**
- **Proposed Schedule**
- **Proposal Fee**
- **Leak Report Example**

We thank you for your consideration and this opportunity to acquaint you with our **Water Distribution System Leak Detection Services** and offer this response. 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

John H. Van Arsdel
Vice President
JHV/jph

3406 Enterprise Ave., Valparaiso, IN 46383 | Ph: (800) 255-1521 | Fax: (888) 531-2444 | www.mesimpson.com | salesinfo@mesimpson.com

www.downers.us

COMMUNITY RESPONSE CENTER
630.434.CALL (2255)

CIVIC CENTER
801 Burlington Avenue
Downers Grove
Illinois 60515-4782
630.434.5500
TDD 630.434.5511
FAX 630.434.5571

FIRE DEPARTMENT ADMINISTRATION
20 Main Street
Downers Grove
Illinois 60515-4834
630.434.5980
FAX 630.434.5998

POLICE DEPARTMENT
825 Burlington Avenue
Downers Grove
Illinois 60515-4783
630.434.5600
FAX 630.434.5690

PUBLIC WORKS DEPARTMENT
5101 Walnut Avenue
Downers Grove
Illinois 60515-4046
630.434.5460
FAX 630.434.5495

ADDENDUM 01-

RFP-0-50-2014/TT

WATER DISTRIBUTION SYSTEM LEAK DETECTI0N SERVICES

July 9, 2014

An addendum has been posted to correct the due date to July 22, 2014, at 2:00 p.m., and replace page 1-3.

Please return, and sign with bid documents.

Sincerely,

VILLAGE OF DOWNERS GROVE

Theresa H. Tarka

Theresa H. Tarka

Purchasing

REQUEST FOR PROPOSAL

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

* Received ADENDUM 1 - 7.17.14 John M. Van Arsdel

Project Name: **Water Distribution System Leak Detection Services**
Proposal No.: RFP-0-50-2014/TT
Proposal Due: July 22, 2014, 2:00 p.m.
Pre-Proposal Conference: Not Required

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: July 8, 2014
Date Issued: July 8, 2014
This document consists of 32 pages.

Return **original** and **two duplicate copies** 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

I. REQUEST FOR PROPOSALS

1. GENERAL

1.1 Notice is hereby given that the Village of Downers Grove will receive sealed Proposals up to **July 22, 2014, 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

REQUEST FOR PROPOSAL

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

Project Name: **Water Distribution System Leak Detection Services**
Proposal No.: RFP-0-50-2014/TT
Proposal Due: August 22, 2014, 2:00 p.m.
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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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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

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 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 Proposal 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.

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 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 Proposals 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 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.

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 it 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. Secs. 2000 et seq., The Human Rights Act of the State of Illinois, 775 ILCS 5/1-101et. seq., and The Americans With Disabilities Act, 42 U.S.C. Secs. 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

because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, 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 disability unrelated to ability, military status, order of protection status, sexual orientation, 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 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 subdivisions 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 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 the Prevailing Wage Act.

19. PATRIOT ACT COMPLIANCE

19.1 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 Contract 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 or 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
		(Applicable on a Per Project Basis)
Commercial Automobile	$1,000,000	Each Accident

Liability

Professional Errors & Omissions (pursuant to section .9 below)	$2,000,000 $2,000,000	Each Claim Annual Aggregate
Umbrella Liability	$ 5,000,000	

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, its 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 the 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 Contract 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, without thirty (30) days prior written notice to the Village. Renewal certificates shall be provided to the Village not less than five (5) days 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 of 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 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 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 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 proposal 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 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 or proposal 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 subcontracted without the written consent of the Village Manager. In no case shall such consent relieve the Contractor from their obligation or change the terms of the contract.

All approved subcontracts shall contain language which incorporates the terms and conditions of this Contract.

27. TERM OF CONTRACT

27.1 The term of this Contract will be for three (3) years unless terminated sooner in accordance with paragraph 28.

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 Contractor, 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 Contractor, in the event of default by the Contractor. Default is defined as failure of the Contractor 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 Contractor 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 Contractor 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 Contractor. Any such excess costs incurred by the Village may be set-off against any monies due and owing by the Village to the Contractor.

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 Contractor 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 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) constructions means, methods, techniques, sequences or procedures; (ii) for construction safety precautions or programs; or (iii) for any construction contactor(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.

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.

III. DETAILED SPECIFICATIONS

WATER DISTRIBUTION SYSTEM LEAK DETECTION SERVICES

Intent: The intent of this RFP is to solicit lump sum proposals for a leak survey and hourly rates for emergency leak locating services from reputable technical service providers who are capable of providing highly accurate global positioning system (GPS) equipment, state-of-the-art acoustic equipment and skilled professional staff to find subsurface water system leaks within the Village of Downers Grove (hereafter Village). The technical service provider shall be able to detect and locate the smallest of leaks and other sources of water loss for the Village's water distribution system.

Scope of Work

Leak Survey: The work to be done under these specifications includes furnishing of all labor, material, transportation, tools, and supplies necessary to acoustically survey the Village's entire water distribution system once each year for the duration of this contract. The water system covers an area of approximately 16 square miles including areas outside the corporate limits of the Village, and includes approximately 233 miles of water main ranging in size from 4-inches to 24-inches in diameter.

The Village will furnish all maps and records necessary to properly conduct the leak detection survey. The Contractor shall be responsible for and shall provide personnel qualified to conduct waterline locating activities during the course of the leak detection survey.

The technical service provider shall listen on **all** hydrants, valves, and when necessary b-boxes with sensitive sound intensifying instruments to determine areas of leakage. When a leak is discovered, the technical service provider shall conduct further investigations using an Electronic Leak Correlator to pinpoint the leaks for repairs.

The technical service provider shall submit daily reports to the Water Manager indicating the location, severity and estimated water loss of each leak. The location of all identified leaks shall be recorded using GPS equipment with sub-meter accuracy and provided to the Village. Upon completion of the leak survey a final report shall be submitted indicating the following, at a minimum:

1) A description of the area surveyed including lineal feet of the system surveyed;

2) The methodology of the survey including a description of the equipment used and an explanation of how this equipment works in relation to water mains (ductile/cast/PVC), hydrants and valves, and services.

3) A summary list of leaks including a description of the type of leak (main line, service line, valve or hydrant), the location of the leak and an estimate as to the size of the leak measured in gallons per day (GPD);

4) An estimate of the daily and annual financial impacts of the water loss based on the unit price the Village pays the DuPage Water Commission for water.

5) General recommendations based on the technical service provider's investigation including an estimate on the payback period of the survey.

6) Individual leak detection reports incorporating a diagram of the area surveyed for the suspect leak, as well as information relative to the date and time the leak was detected, the address/location of the leak and the number and type of connection points used.

7) A list of all valve defects and map errors observed during the survey.

Minimum work crew of two (2) is required.

Emergency Services

The technical service provider shall be called upon from time to time to respond after business hours (3:30 p.m. to 7 a.m. Monday - Friday), weekends (Saturdays and Sundays), holidays or during regular business hours (7 a.m. to 3:30 p.m. Monday - Friday) when not performing leak survey work to assist crews with locating possible water main breaks. Under these circumstances the technical service provider shall be compensated at an hourly rate per crew that shall be inclusive of all labor, materials, and equipment as identified herein. The technical service provider will not be compensated for travel time to the site for emergency services.

Any emergency services needed are to be provided with 90 minutes of notification. The technical service provider shall provide a 24-hour emergency telephone number to contact a representative in case of emergency.

Technical Service Provider Qualifications: The technical service provider 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 technical service provider shall be required to give past history and references in order to satisfy the Water Manager in regard to the technical service provider's qualifications. The Water Manager shall make reasonable investigations deemed necessary and proper to determine the ability of the technical service provider to perform the work. The Water Manager reserves the right to reject any proposal if the evidence submitted by, or investigation of, the technical service provider fails to satisfy the Water Manager that the technical service provider is properly qualified to carry out the obligations of the contract and to complete the work described herein. Evaluation of the technical service provider'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 technical service provider 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 technical service provider.

4. The quality of performance of previous leak detection 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 leak detection contracts in excess of 116 miles of water main annually. These references shall be indicated clearly in the proposal.

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

General Notes: Proposers must completely familiarize themselves with the specifications in this RFP. The technical service provider shall furnish all equipment and staffing necessary to handle the leak detection survey services in a timely and safe manner, at the price stated.

The technical service provider will be responsible for any work that is not acceptable to the Village, and will be responsible for the correction of the condition within two (2) working days of notification, at no additional cost to the Village.

Work Hours: The technical service provider shall work the same hours as the Public Works Department unless other arrangements are agreed upon ahead of time. The Department's current hours are 7:00 a.m. to 3:30 p.m., Monday through Friday.

Right to Change Scope of Work: Due to budget constraints, the Village reserves the right to add or delete from the contract as required. No adjustments in contract unit prices or additional compensation will be made for alteration in the quantities or services from the contract. The quantities listed are **estimates** only and may be altered.

Safety: The technical service provider shall exercise every precaution at all times for the protection of persons and properties. The safety provisions of all applicable laws and ordinances shall be strictly observed. The technical service provider shall abide by all EPA and OSHA safety standards and regulations. **The Village is not responsible for site safety. The technical service provider is solely and exclusively responsible for construction means, methods, technologies and site safety.**

The technical service provider upon his receipt of instructions from the Contract Administrator, to discontinue such practice shall, immediately discontinue any practice obviously hazardous in the opinion of the Contract Administrator.

The technical service provider at all times during the life of this contract shall observe and abide by all Federal, state and local laws which in any way affect the conduct of the work and with all decrees and orders of courts of competent jurisdiction.

Traffic Control and Protection: The Technical service provider shall provide adequate traffic control for work area protection in compliance with the most current edition of the Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways, (MUTCD),

the State of Illinois Illinois Vehicle Code, the Illinois Department of Transportation Highway Standards, and the Illinois Department of Transportation Handbook of Traffic Engineering Practice for Small Cities. All personnel, signs, barricades, and any other items or devices necessary shall be provided by the Technical service provider. The Village shall make no separate payment for this work. Traffic control shall include but not be limited to the following:

a. Whenever possible, work vehicles shall be parked on the same side of the street as the work site. Vehicles shall park with right wheels to the curb or to the right edge of the right-hand shoulder as required by Municipal Code 14-92.

b. Whenever possible the work site on a two lane street or highway shall be confined to one traffic lane leaving the opposite lane open to traffic.

c. Work area protection shall take into account the duration of the project, the size of the project, the lanes of traffic, the volume of traffic, the speed limit, and the distance to the work area from the pavement.

d. Work vehicles shall have flashing lights lit but not as a substitute for any traffic control devices for work area protection that may be necessary.

e. Warning signs such as "Workers Ahead" shall be diamond shaped having a black symbol or message on an orange reflective background. Such signs shall have a minimum size of 30 inches by 30 inches with a maximum size of 48 inches by 48 inches. Such signs shall be posted at a minimum height of 24 inches above the pavement.

f. Cones used as daytime channeling devices shall be at least 18 inches tall, conical or tubular in shape with a broadened base, and orange in color. Cones shall be spaced equal in feet to the posted speed limit or closer along the taper length.

g. Channeling devices shall be positioned to provide adequate taper length before the work area to guide traffic through the work area. Taper length shall be calculated using the following formulas.

L = taper length in feet
W = width of lane closure in feet
S = posted speed limit
For streets of speed limit 40 mph or less L = [Wx(S Squared)] /60
For streets of speed limit 45 mph or greater L = WxS

h. For lane closures on multilane highways, appropriate warning signs such as "Right Lane Closed" and channeling devices at the appropriate intervals shall be used depending on the speed limit.

i. Should complete street closure be required for a minimum of 8 hours on any given day in order to complete contract work, the Technical service provider shall notify the Traffic

Division and the Police Department, and the appropriate barricades (at least 3 Type III barricades at each intersection), and "Road Closed" and "Detour" arrow signs shall be used to direct traffic around the work area.

j. Flaggers shall be appropriately dressed (reflective vest, etc.) to alert motorists, and shall stand in a conspicuous position facing approaching traffic, and shall use the proper traffic control sign when directing traffic.

Operation Standards: All water leak detection operations will be done following the standards outlined below:

- The technical service provider will perform all work in a manner that minimizes road hazards for the motoring public. All reasonable precautions will be taken to protect public and private property, such as sidewalks, pavement, lawns, fences, bushes, trees, shrubs, buildings, and other property from undue damage. If the Contract Administrator determines that technical service provider has unnecessarily damaged or destroyed property, it shall be repaired or replaced to the satisfaction of the Village at the technical service provider's expense.

- All accidents occurring on the job which damage public or private property, or result in injuries to workers or other persons, or damage to utilities shall be promptly reported to the Village's Police Department at 630-434-5600, and to the Public Works Department at 630-434-5460.

PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS

Proposal Format:
In order to be considered responsive, and evaluate proposals fairly and completely, each prospective vendor must follow the format set out in this RFP and provide all information requested. Proposals should 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 vendor and the name, mailing address, and telephone number of the person the Village should contact regarding the proposal.

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

Experience/Staff Resumes:

- Vendor shall indicate the expertise and experience of the Vendor 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 technical service provider

- 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.

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

The vendor will 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, vendors shall also submit one (1) original and two (2) copies of the cost proposal (all costs). Proposals should include an all inclusive cost to complete the scope of services.

Submission Requirements:
- The return of this complete Request for Proposal signed and filled out as required.
- Completed References
- Cost proposal Sheet

PROPOSAL EVALUATION PROCESS

Vendor 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 team to conduct interviews. The firm 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.

The Village may conduct negotiations with the top vendor(s) if required to determine the acceptability of the proposal in regards to specifications, terms and conditions and cost; therefore, the proposal(s) submitted should contain the vendor's most favorable terms and conditions as well as cost with detailed specifications as proposed, since the selection and award may be made without discussion.

The Village will select the highest rated, fully qualified and best suited vendor to continue forward the project. Should the first selected vendor be unable to fulfill the terms of the contract, the Village reserves the right to enter into a contract with the 2nd selected vendor. If the Village does not find that any vendor meets the needs and requirements, the Village is not obligated to enter into agreement for water leak detection services.

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.)

PROPOSAL FEE

M.E. Simpson Co., Inc. is pleased to present our *"Cost Proposal"* for Leak Detection Services for the **Village of Downers Grove, Illinois.** The leak survey program will be conducted on approximately **233** miles of pipe in the Utility's water distribution system per year. M.E. Simpson Co., Inc. will perform this leak survey with one or two 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 professional services agreement price. The survey will also include complete pinpointing of all leaks found, with an individual report on each leak location, and a final comprehensive report.

A Complete Water Distribution System Leak Survey on approximately **233** miles of water main:

2014 Leak Detection Survey at $160.00 per mile (Approx. 233) -------- ($37,280.00)
2015 Leak Detection Survey at $160.00 per mile (Approx. 233) -------- ($37,280.00)
2016 Leak Detection Survey at $160.00 per mile (Approx. 233) -------- ($37,280.00)

Emergency Leak Detection Services:
Reg. Business Hours (7:00 am – 3:30 pm, M-F) at $375.00 1st Hr & $195.00 each additional

After Hours (3:30 pm – 7:00 am) Mon-Friday, Weekends & Holidays at $500.0 1st Hr. & $215.00 each additional.

We thank you for this opportunity to acquaint you with our Leak Detection Services and offer this professional services agreement. 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

John H. Van Arsdel
Vice President
JHV/jph

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 Proposal Is To Be Considered For Award

PROPOSER:

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

3406 Enterprise Ave.
Street Address of Company

Valparaiso, IN 46383
City, State, Zip

800-255-1521
Business Phone

888-531-2444
Fax

Date: 7/17/2014

johnnyv@mesimpson.com
Email Address

John H. Van Arsdel
Contact Name (Print)

800-255-1521
24-Hour Telephone

John H. Van Arsdel
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

_____
Title

_____
Date

ATTEST:

_____
Signature of Village Clerk

_____
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.

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 Ave.

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 H. Van Arsdel DATE: 7/17/14

PROPOSER'S CERTIFICATION *(page 1 of 3)*

Water Distribution Leak

With regard to Detection Services (Name of Project), Proposer M.E. Simpson Co., Inc. (Name of Proposer) hereby certifies 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 5/2-105(A)(4);

3. 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.

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

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

3	5	-	1	4	7	4	7	2	0

FEDERAL TAXPAYER IDENTIFICATION NUMBER

or _____
Social Security Number

Subscribed and sworn to before me
this 17th day of July, 2014

Justin P. Higer
Notary Public

Justin P. Higer
Notary Public
SEAL
County of Porter
State of Indiana
My Comm. Exp. 9/30/17

PROPOSER'S CERTIFICATION *(page 2 of 3)*

(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 Proposal 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:

_____

_____

_____

_____

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 Proposer 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 _____.

PROPOSER'S CERTIFICATION *(page 3 of 3)*

5. 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 Berhendt

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: 2/12/14

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

BUY AMERICA CERTIFICATION

Certification requirement for procurement of steel, iron, or manufactured products when Federal funds (Grant Agreement or Cooperative Agreement) are used.

Instructions:
Bidder to complete the Buy America Certification listed below. Bidder shall certify EITHER COMPLIANCE OR NON-COMPLIANCE (not both). This Certification MUST BE submitted with the Bidder's bid response.
Special Note: Make sure you have signed only one of the above statements – either Compliance OR Non-Compliance (not both).

Certificate of Compliance

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1), as amended, and the applicable regulations in 49 CFR Part 661.

Signature John H. Van Arsdel

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

Title Vice President

Date 7/17/2014

Certificate of Non-Compliance

The bidder or offeror hereby certifies that it **cannot comply** with the requirements of 49 U.S.C. 5323(j)(1), as amended, and 49 C.F.R. 661, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Signature _____

Company Name _____

Title _____

Date _____

AFTER THIS CERTIFICATE HAS BEEN EXECUTED, A BIDDER MAY NOT SEEK A WAIVER.

Note: The U.S/Canadian Free Trade Agreement does not supersede the Buy America requirement.

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 Proposer 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 Proposer is unable to certify to any of the statements in this certification, Proposer 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: John H. Van Arsdel

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

Date:

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 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 or proposal 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 Ardel
Signature

John H. Van Ardel
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 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 waste water 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.

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.

Leak Detection History

M.E. Simpson Co., Inc. developed its Leak Detection program in 1986. 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 a Microsoft Access leak database with leak location drawings showing all the pertinent information needed to readily recreate leak locations from field data. Today the database is being developed into an internet based program to be accessible by clients online.

M.E. Simpson Co., Inc. is proud of the work we have performed and the maintenance programs that we have developed utilizing 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.

Our leak detections services have been employed since 1986 to now in a majority of municipalities around the Chicago metro area. Additionally, our crews have been deployed to locations throughout the United States, including Alaska, as well as American Samoa, Guantanamo Bay, Cuba, and Sigonella, Italy. 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.

RELATED PROJECT EXPERIENCE, REFERENCES

Village of South Holland, IL (2012)

M.E. Simpson Co., Inc. conducted a Leak Survey in the fall of 2012 on approximately **102 miles of the distribution system** as a way for the Village to reduce water losses occurring in the distribution system. M.E. Simpson Co., Inc. found 15 leaks in this recent survey. During the 2012 Leak Detection Program, these leaks found in the system were costing the Utility in excess of $598.58 per day or $217,388.16 annually when using the cost of water sold. This leak survey paid for itself within 2 months.

Mr. Jeff Hon
Director
16226 Wausau Avenue
South Holland, IL 60473
708-339-2323

City of West Bend, Wisconsin (1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2012, 2013)

M.E. Simpson Co., Inc. has been conducting a Leak Survey on the **125 mile distribution system** every other year as a way for the West Bend Water Utility to reduce water losses occurring in the distribution system. The Utility owns Leak detection equipment; however, the staff of M.E. Simpson Co., Inc. performs leak detection work daily and has a greater understanding of the parameters of detection and locating leaks. The leak surveys have found numerous leaks on this system since the start of the leak detection program; however, because of the vigilance of the program, these water losses have subsided to a point of regular distribution system preventative maintenance.

Mr. John Hemauer
Water Utility Superintendent
251 Municipal Drive
City of West Bend, WI 53095
(414) 335-5040
hemauerj@ci.west-bend.wi.us

City of South Bend, IN (2005 – 2011, 2013)

M.E. Simpson Co., Inc. has been working with the City of South Bend, IN for many years. One of the city's more recent projects was a leak survey conducted in 2011n approximately 580 miles of water main. This leak survey was successful, finding 73 leaks across the City. Using an estimated production price of $.85 per thousand gallons, these leaks were costing South Bend in excess of $290.39 per day or $105,993.81 annually. M.E. Simpson Co., Inc. has recommended South Bend repeat this survey every two years.

Mr. Bob Krol
Manager of Operations
City of South Bend, IN
(574) 235-5660

RELATED PROJECT EXPERIENCE, REFERENCES

Village of Carpentersville, IL (2011)

M.E. Simpson Co., Inc. conducted a Leak Survey on approximately 120 miles as a way for the Village to reduce water losses occurring in the distribution system. The most recent completed Leak Survey Program in 2011 in the location of 35 leaks totaling 70,560 gallons of water per year. Using a selling price of $3.10 per gallon these leaks were estimated to be costing the utility in excess of $982.08 per day or $358,459.20 annually. This leak survey paid for itself within 2 months.

Mr. Bob Cole
Superintendent of Distribution
1200 L.W. Besinger Drive
Carpentersville, Illinois 60110
(847) 551-3493

New Jersey American Water Corporation, (2010, 2011, 2012)

M.E. Simpson Co., Inc. has conducting a Leak Survey on 112 miles of distribution main on selected water systems in the Hunterdon Warren New Jersey American Water Corporation service areas in 2010 and 102 miles of main in 2011. New Jersey American Water has a very aggressive leak detection program that employs leak sensors installed at water meters at customer meter settings. Despite the leak detection devices at these locations our surveys located almost *250,000 gallons per day* in estimated leakage the first year and just under *100,000 gallons per day* the second year. In addition, the Utility owns leak detection equipment; however, the staff of M.E. Simpson Co., Inc. performs leak detection work daily and has a great understanding of the parameters of leak detection and locating leaks and provided additional leak detection support for this area. In the fall of 2012, the eastern shores of New Jersey were hit by Hurricane Sandy where New Jersey American Water has water distribution systems. Some of those water systems were shut down completely from the effects of the storm. M.E. Simpson Co., Inc. was called in on very short notice to field a Leak Detection team for rapid response to assist in the remediation and recovery efforts for these devastated areas. As the water systems were brought back on line, our field crews were deployed to survey areas and locate leakage where ocean front homes' water services had been damaged from the storm surge.

Russell G Titus
Operations Supervisor
Maintenance Operations: Water Loss Management
New Jersey American Water
Hillsborough, New Jersey 08844
908-431-3211

RELATED PROJECT EXPERIENCE, REFERENCES

City of Joliet, IL (2008-2009, 2010-2011)

In early 2009, a leak survey was performed on **180** miles of water main out of an estimated 375 miles of water main in the City of Joliet's distribution system and continued in 2010. This program was based on an RFP issued by the City for the leak survey program. In years past, low bid was used to solicit leak detection vendors. The 2009 program discovered 149 leaks. There were **33** main breaks, **59** service line leaks (7 on the customer side of the shut off valve), **46** hydrant leaks, and **11** valve leaks (packing and bonnet bolts). The majority of these leaks did not surface because the local geology of Joliet is limestone. The estimate of the annualized water losses in dollars was $918,354 based on the average costs of pumpage and water treatment (wholesale costs) for this 180 mile survey. GPS coordinates were taken for each leak location as a part of this contract. The City has since extended the contract for the remainder of the system with a renewal of the contract for the next year.

Mr. James Eggen, P.E.
Director of Utilities
921 East Washington Street
Joliet, Illinois 60433
(815) 724-4222
jeggen@jolietcity.org

City of Lincoln Park, MI (2012)

M.E. Simpson Co., Inc. in the fall of 2012 performed a leak survey for the City of Lincoln Park, Michigan. The Leak survey was conducted on approximately 675,840 feet of water main. This leak survey was successful, finding 24 leaks across the City. Using a selling price of $8.32 per thousand gallons, these leaks were costing Lincoln Park, MI in excess of $2,084.66 per day or $760,900.61 annually.

Mr. Robert J. Bartok
Director of Public Services
City of Lincoln Park
(313) 386-9000

City of Hamilton, Ohio (2012)

M.E. Simpson Co., Inc. performed a leakage assessment program a **339-mile water distribution system**. During the course of this survey 103 leaks were found totaling losses of 452,880 gallons of water per day. The estimated cost saving over one year in lost water production was $1585.08 per day and $578,554.20 annually. The payback period for the investment of the leak survey was approximately five weeks.

Mr. James Collins, P.E.
Director of Underground Utilities
Gas & Water Administration
City of Hamilton
(513) 785-7206

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

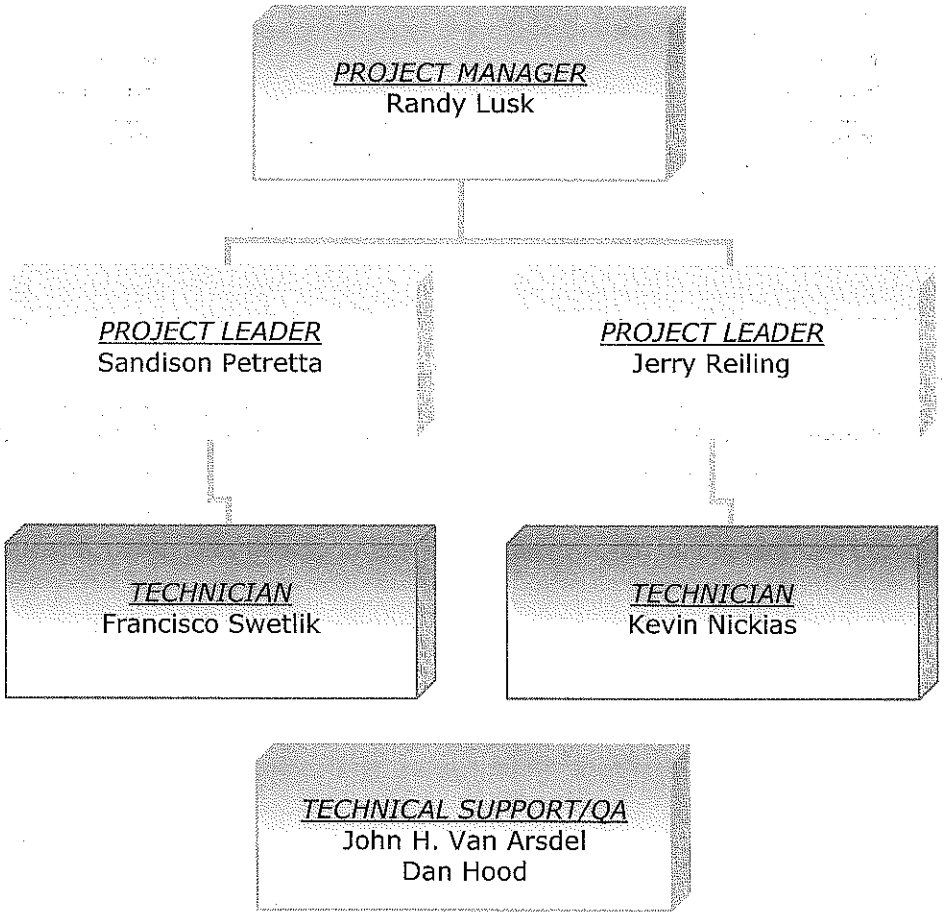
Mr. Dan Lueder
Development Services GM
City of Cottonwood, AZ
(928) 634-0186
dlueder@ci.cottonwood.az.us

EMPLOYEE QUALIFICATIONS, PROJECT STAFFING

The chart below outlines the **Project Team** to be used during the Water Distribution System Leak Survey 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, meet with the Utility periodically to monitor the progress of the program, be responsible for the QA/QC of the field work, and be responsible for the production of field reports. He 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 Leak Survey Program.

The **Field Leader (Sandison Petretta and/or Jerry Reiling)** 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 for performing work done in the field, including locations of leaks, field paperwork, supervision of field crews, daily production records, and serve as liaison between the field crew and Project Manager. He will report any 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 Leak Survey Program.



Qualifications of Staff for Leak Detection Services

PROJECT MANAGER/SUPERVISOR RECENT LEAK DETECTION PROJECT EXPERIENCE

Randy Lusk, Regional Manager-Dyer

Randy was the Project Manager for the following selected Leak projects.

- (2008, 2011, 2013) Village of Westmont – Westmont, IL
- (2012-2013) Village of Flossmoor—Flossmoor, IL
- (2012-2013) Village of Mokena—Mokena, IL
- (2012-2013) City of Hickory Hills—Hickory Hills, IL
- (2012-2013) City of Country Club Hills – Country Club Hills, IL
- (2012-2013) Village of Evergreen Park – Evergreen Park, IL
- (2012) Village of Tinley Park—Tinley Park, IL
- (2012) Village of Glenwood—Glenwood, IL
- (2012) City of Markham—Markham, IL
- (2012) City of South Chicago Heights—South Chicago Heights, IL
- (2012) Town of Lowell—Lowell, IN
- (2007 – 2008, 2011) Village of Hazel Crest – Hazel Crest, IL

PROJECT LEADER RECENT LEAK DETECTION PROJECT EXPERIENCE

Sandison Petretta, Project Leader

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

- (2011, 2013) City of Countryside – Countryside, IL
- (2011, 2013) City of Palos Heights – Palos Heights, IL
- (2013) Village of Burr Ridge – Burr Ridge, IL
- (2009 – 2010, 2012-2013) Village of Palos Hills – Palos Hills, IL
- (2008, 2012) Village of Flossmoor – Flossmoor, IL
- (2007, 2011) City of Country Club Hills – Country Club Hills, IL
- (2010 – 2011) Village of Downers Grove – Downers Grove, IL
- (2007, 2011) Village of Evergreen Park – Evergreen Park, IL
- (2007, 2011) Village of Henry – Henry, IL
- (2009, 2011) Village of Hickory Hills – Hickory Hills, IL
- (2011) City of Springfield Light and Water – Springfield, IL
- (2011) Village of Woodridge – Woodridge, IL

Jerry Reiling, Field Services Manager

Jerry was the Project Leader for the following selected Leak projects.

- (2005, 2011, 2013) City of Countryside Water Department – Countryside, IL
- (2005, 2013) Village of Beecher Water Department – Beecher, IL
- (2012-2013) City of Hickory Hills—Hickory Hills, IL
- (2013) City of Lynwood – Lynwood, IL
- (2013) Village of Western Springs – Western Springs, IL
- (2012) Village of Mokena—Mokena, IL
- (2012) Village of Glenwood—Glenwood, IL
- (2012) City of Markham—Markham, IL
- (2012) City of South Chicago Heights—South Chicago Heights, IL
- (2008 - 2011) Village of Mokena – Mokena, IL
- (2011) Village of Tinley Park – Tinley Park, IL

TECHNICAL SUPPORT/QUALITY ASSURANCE

Dan Hood, President

John H. Van Arsdel, Vice President

M.E. SIMPSON Co., Inc.

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, system hydraulics specifically related to the Polcon® Flow Testing equipment, and backflow prevention.

John has over 24 years of experience directing projects for water utilities concerning water loss prevention and audits, 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 fifteen years to several local and state Water Works Organizations on Water Loss Reduction including Water Audits, Leak Detection, Meter Testing and Flow Testing. At 2007 ACE, he presented a paper on "Best Management Practices for Distribution System Maintenance". At 2009 ACE, he presented a paper on "Unequal sized Meters in Parallel Settings". At 2012 ACE he presented two papers, one on "Pump Curve Testing and Venturi Analysis", and one on "Finding Lost dollars in Water Loss Prevention". At the 2010, 2011, and 2012 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.

John has maintained an active role in several water works organizations including holding offices on various Boards of Directors. 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, 2010-2013
  Apparent Water Loss Sub Committee
- Illinois Section AWWA
  Chair , 2013-2014, Board of Directors
  Chair Elect, 2012-2013, Board of Directors
  Vice Chair, 2011-2012, Board of Directors,
  Secretary/Treasurer, 2009 -2011 Board of Directors,
  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

M.E. SIMPSON Co., Inc.

Randahl E. Lusk
Regional Manager
Dyer, Indiana

Experience:

Randy Lusk has been with the Company since November 2000. Randy previously worked in the retail business as a Regional Manager. Randy has attended many classes and lectures on the operations and maintenance of water systems. Randy has experience in valve location, exercising and mapping. He has years of experience in the use of state of the art leak detection equipment and line location devices. He is experienced in the operation and maintenance of water meters, fire hydrants, water main capacity flow testing, GPS units and GIS systems.

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

Professional Associations:

- South Suburban Water Works Association
  Past President
  Website Chair and Involved with many other committees

  Mid-Central Water Works Association
  Website Chair

- Illinois Section AWWA
  Membership Chair
  Winner of the "Zenno A. Gorder Award"
  Meter tester for " Meter Madness"

- Indiana Section AWWA

M.E. SIMPSON Co., Inc.

Jerry D. Reiling
Field Services Manager
Dyer, Indiana

Experience:

Jerry Reiling has been with the Company since May 1996. He is a graduate of Purdue University with a B.A. in Physical Education. Jerry previously worked in both the environmental services industries and HVAC for 10 years. He has completed classes and attended lectures on the operation and maintenance of water meters. Jerry is experienced in the following: the operation and maintenance of water meters; valve location, exercising and mapping; use of state of the art leak detection equipment, and the operation of our Polcon® Flow Testing equipment.

Professional Certifications:

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

* * * * * * * * * * * * * *

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

M.E. SIMPSON Co., Inc.

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

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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.

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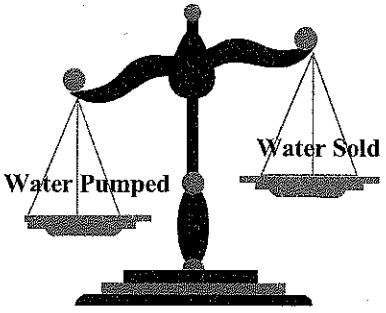
PROJECT UNDERSTANDING AND APPROACH

This Leak Detection program is needed to be able to help the Utility control the water losses in the distribution system. Therefore, it is imperative the selection of a qualified Project Team be conducted with the utmost care with thorough research. Any team selected should have no trouble finding large leaks. When the first large leak is located, it will be impressive and the project team will look great. However, it is especially important to be able to locate *all the leaks that can be possibly located*, including all the small leaks that possibly can be masked by the larger leaks. That will be the real true test of the mettle and ability of the leak detection crew. In addition, gathering field data for the general condition of the distribution system is something the project team will need to be well versed in. Flowmeter maintenance and flowmeter testing is also a practical way of controlling real water losses in the system. Therefore, a practical project management plan with a proven QA/QC plan is needed to insure that this happens.

M.E. Simpson Co., Inc.'s philosophy behind water distribution system leak surveys and leak detection services as incorporated in this work plan is to provide the Utility the following benefits:



- Conserve freshwater resources
- Reduce the cost of lost water through leakage
- Conserve energy and reducing treatment costs by reducing pumpage
- Help in monitoring potential system operation and maintenance problems
- Promote proper accounting and financial reporting (GASB 34)
- Reduce the risk of water shortage and customer hardship (drought management)
- Ensure a sound and reliable water service for customers of the Utility

A number of items uniquely qualify M.E. Simpson Co., Inc. in performing this leak detection program. The Project Team's extensive practical experience in leak detection methodology coupled with other extensive Water Loss Assessment Program experience such as Water Audits, Meter Testing, and Master Meter Assessments, will allow for a thorough examination of the Distribution system to help reduce the total water loss occurring in the distribution system. From start up to completion, our firm is committed to furnishing a quality service in a timely manner.

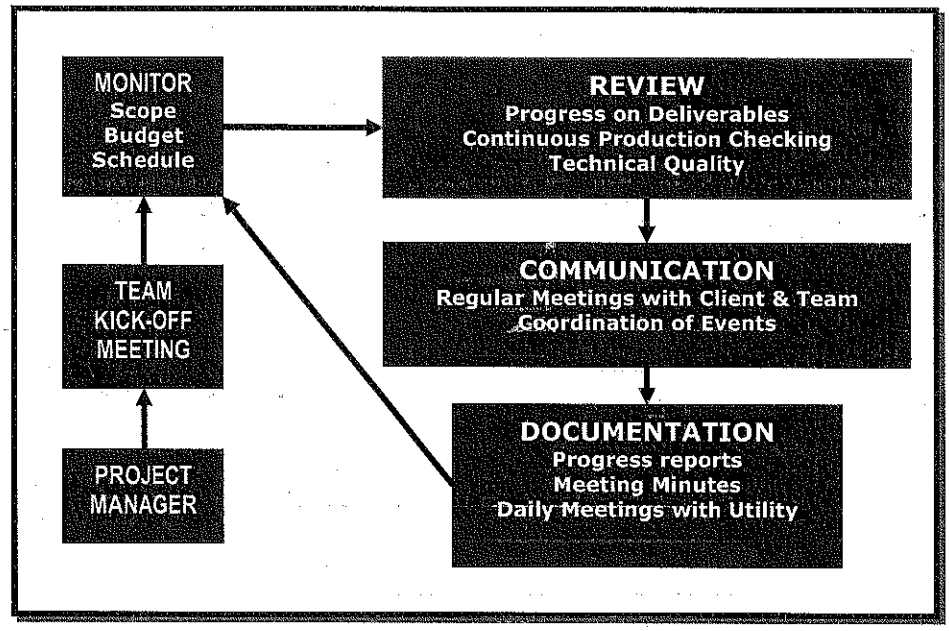
Project Management Approach

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

PROJECT UNDERSTANDING AND APPROACH

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

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



Project management remains an important activity during the course of the project and does not stop with the project manager. Each project team deployed into the field is dedicated to providing the best leak survey coverage that can be attained using the state of the art leak detection equipment, tools, field experience and knowledge. Each field team will be made up of two experienced leak detection technicians that also have been crossed trained in other disciplines of water loss control such as water meter assessments (residential, commercial, wholesale, and production meters), and water distribution system field maintenance such as distribution flow testing, valve exercising and locational assessments, and Unidirectional water main flushing. It is this combination of experience and knowledge that has helped shape our approach to water loss assessments in distribution systems because the technicians have the capacity to make on the spot decisions regarding any fine tuning of the leak detection program while in the field. They will 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.

PROJECT UNDERSTANDING AND APPROACH

M.E. Simpson Co., Inc. believes that the selection of our team to perform this survey will provide the Utility with exceptional experience, sound decision making, and a level of service providing the following advantages:

- A professional leak detection team with a specialized expertise in water loss management
- An experienced team with the capacity to provide the highest quality work for the Utility
- A project approach that incorporates interim reporting and continuous input opportunities
- Innovative proven analysis techniques developed from the completion of several hundred similar projects that sought the same scope and results as this project

Project Quality Assurance/Quality Control

Quality is of the utmost importance to M.E. Simpson Co., Inc. – not merely because of the Utility's and other client's requirements, but because it is vital to our continued success and viability. Quality management and services bring to all of us the rewards of jobs well done, satisfied Utility staff, and successful 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:

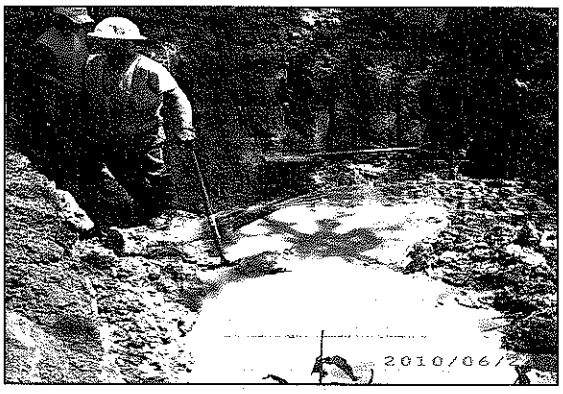
- Maintaining a reputation for quality performance
- Client satisfaction
- Continuous process improvement
- Open communication with the field staff and the Utility
- Team Work

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 that the work product is technically correct, but also meets the needs and expectations of the Utility.

PROJECT UNDERSTANDING AND APPROACH

M.E. Simpson Co., Inc.'s professional services are grounded in sound principles that meet the tests of time from past successes of hundreds of water loss 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 quality, accurate and complete documents. The QA/QC procedure has been developed and implemented based on tried and 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 leak detection 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 leak detection projects.
- Quality is built in - not added on. The project management and field staff have shown that a quality service is produced when the project tasks are properly sequenced and carried out to the final termination of the program using the built in system of checks and balances.



The above images were taken of a main break discovered by M.E. Simpson Co., Inc. in Princeton, Indiana in June of 2010. This leak, along with 64 others, was costing the utility upwards of $128,246.40 a year.

Equipment to be used

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

- **FCS Accu Call Leak Correlator, FCS AC Digital Leak Correlator or Vivax-Metrotech HL6000 Leak Correlator.**
- **FCS S-30 electronically enhanced listening device or L-Mic electronically enhanced listening device.**
- **RADIO DETECTION LINE LOCATORS.**
- **SCHONSTEDT or CHICAGO TAPE magnetic locator.**

The first items listed are Leak Correlators manufactured by Fluid Conservation Systems, of Milford, Ohio. These Correlators have a proven record of achievement in locating leaks on water distribution systems under some very extreme circumstances. M.E. Simpson Co., Inc. uses FCS equipment exclusively in its leak detection programs for water utilities.

The FCS S-30 or FCS L-Mic will be used during the initial surveying process. Both units use highly sensitive transducers to detect leak noise along the pipe or appurtenances attached to the pipe. There is an adapter plate that can be used with the transducer as a "ground microphone" so that this type of leak detection method is available for the crew to use if needed.

The FCS Correlators, amplifiers, and related equipment are sent in to the manufacturer annually for software upgrades as well as system checks to insure the equipment is operating at optimum levels. Records of these system checks and calibrations are kept on file and are available upon request. Furthermore, stamps have been attached by FCS to the Correlators and amplifiers indicating dates of the last calibration.

The Radio Detection Line Locator is used to locate buried metallic water pipe. Line locating the water main and services in areas of suspected leaks is necessary so that the layout of the pipe and correct distances of the pipe can be verified. When a leak correlation is being performed on a suspected leak, the proper distance will be entered into the leak correlator. If the water lines are not properly located, it is possible that incorrect pipe distances could be entered into the correlator, thus the leak location could be inaccurate causing the digging of a dry hole. Also, when the Utility crews are ready to dig up the leak area for repair, having the proper location of the pipe is necessary.

The Magnetic locator is a required tool so that buried mainline valves and curb-stops can be located for listening and /or leak correlation if needed.

Project Field Approach

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

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

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

The success of this program will be dependent upon reviewing all available data regarding the operation of the distribution system. The following will need to be gathered; all as-built drawings of the water distribution system, all original atlases, all books, field cards, notes, computer copies of the distribution system, valve cards, hydrant cards and a copy of a digital map of the Utility, if available.

Additionally, other records such as amounts pumped into the system will need to be reviewed. The field verification of leaks and associated locations, along with the records being reviewed, shall yield updated location records of the Utility's leak locations as well as supplying valuable information regarding the general condition of the distribution system.

PROJECT UNDERSTANDING AND APPROACH

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

- **Introduce and maintain an interactive role** with the Utility Staff for the Leak Survey Program. Conduct short interviews with staff about particulars of the distribution system such as problem areas prone to leaks, age of pipe, pressure problems in the distribution system. This will allow for a greater understanding of how the distribution system is functioning allowing priorities to be assigned to particular segments of the work

- **Divide areas of the distribution system** into geographic areas that can be surveyed in progression and leak areas pinpointed in an orderly fashion. This would include setting a schedule and maintaining a level of Field Staffing that will insure completion of the Leak Survey within the schedule and budget allotted. This will require all maps of the distribution system to be examined during the course of the planning sessions to formulate a workable plan of action

- **Perform a Leak Survey on the distribution system** and document confirmed leak locations in a manner that will allow a prioritized list of leak repairs to be pursued according the described "Scope of Work"

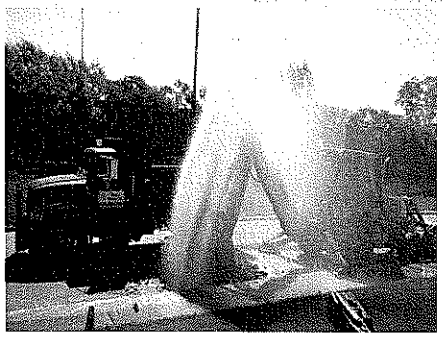
- **Locate** all confirmed leaks in a manner that will allow their positions to be known and readily re-creatable by Utility personnel upon demand

- **Provide constant communication** with the Utility staff so located leaks can be addressed in a timely manner

- **Provide instruction and council to Utility staff** during the course of the Leak Survey so once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting leak surveys with the established goal of reducing the total water loss in the system

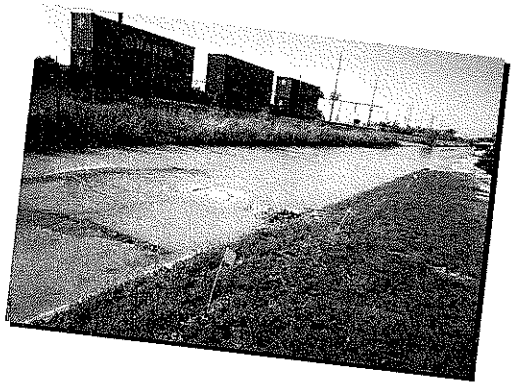
- **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the leak survey program.

- **Provide recommendations for future leak survey programs** such as a methodology and frequency for surveying the distribution system



Potential Problems

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



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

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

SCOPE OF SERVICES

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

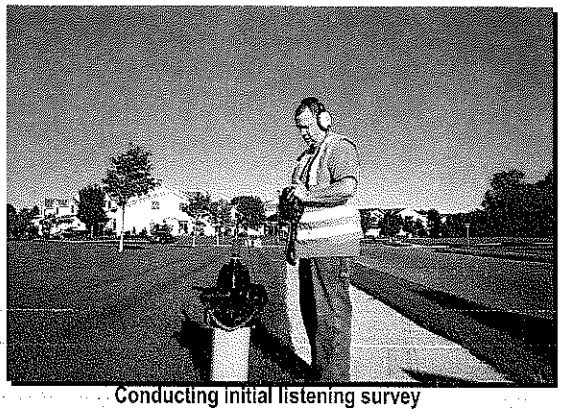
M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to survey the water distribution system areas selected by the Village of Downers Grove. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary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

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

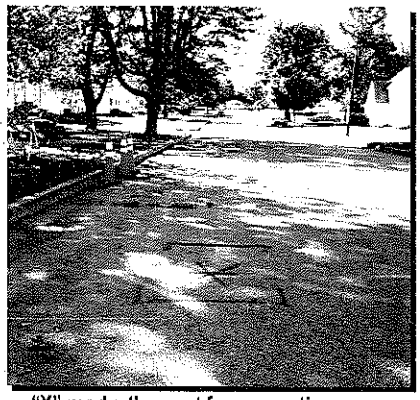
- Work in an orderly and **safe** manner to insure protection of the local residents, Utility employees, and the Field Staff so that no **avoidable** accidents occur.
- All Field Staff will have readily observable identification badges worn while in the field.
- The leak detection equipment to be used will be that which was described in the "Equipment to be used" section.
- Initially listen to **all fire hydrants, all main line valves**, and when necessary, selected service connections in the entire distribution system with the **S30** electronic listening device or the **L-Mic**, by making physical contact with the valve, hydrant, pipe, or B-box. (Listening points that are not accessible will be given to the Utility and when corrected they will be listened to.) This will be done on the Utility's distribution system.
- Listening distances will not exceed 500' between points. I.E.:, valves, hydrants, service valves or meter settings will be used with preference of listening points in order as follows; direct contact with the pipe, main line valves, hydrant valves, hydrants, then service valves or meter settings.
- Valve vaults full of water may be pumped out to facilitate listening. Sometimes full vaults can mask leak noise.
- Large diameter pipe (18"-36") may need to have additional listening performed by listening directly above the pipe at intervals of 6-10 feet.
- **All accessible points** along PVC water mains will be physically listened to including services, main line valves, and hydrants.

SCOPE OF SERVICES

- A "suspected leak" log shall be maintained indicating all areas where suspected leak noise was heard. This log will be reviewed when the Project Team is verifying the suspected leak area for confirmation of the actual existence of a leak. This log will be a part of the periodic reports turned into the Utility regardless of an actual leak located in the area or not, with an explanation of the noise source.
- When leak noise has been detected and or suspected, the Project Team will verify the suspected area a second time to confirm the noise. At least four hours will pass between the initial listening of the area before a second listen and confirmation is attempted.
- The Project Team will line locate the water main and service lines in the immediate area so the correct pipe distances can be input into the leak correlator and also so that the Water Utility will have an idea of where the water main is located prior to excavation. Non-metallic pipe locations will be "interpolated" as best that can be identified, given the line location of metallic services, Utility knowledge of the area, or other information regarding the actual location of the main.
- The Project Team will use the following Electronic Leak Correlators (either a FCS Accu Corr / Digi Corr or Vivax Metrotech HL6000X leak correlator), to determine if a leak is present and use the same equipment to pinpoint the leak.
- For PVC water mains only the FCS Accu Corr / Digi Corr leak correlator, will be used for correlations because of the ability for these correlators to be able to analyze the particular sound frequencies inherent to PVC pipe.



Conducting initial listening survey



"X" marks the spot for excavation

- The leak location will be marked in the field (on the surface) using environmentally formulated Precautionary Blue paint.
- The Project Team will document all leak locations with a diagram indicating the location of the leak. Other information related to that correlation will be included as part of the field sheet such as the filters used for the correlation, line locations, distances between sensors, etc.
- The field sheets will be copied, and turned into the assigned Water Department Manager daily or an agreed time period so the leak can be dug and repaired immediately. They will be classified as to the potential severity of water loss, as well as potential danger to the general public.
- The locations of leaks requiring immediate attention (immediate threat to life, injury or traffic) will be turned in as quickly as possible to facilitate the repair process.

SCOPE OF SERVICES

- **"Ground miking" will not be used as the primary determination for leak locations.** Grounding miking will be done per Utility request, or when it has been deemed to be the most efficient means to listen to the water main running under ground. Large diameter mains (18" – 36") may need this additional evaluation. This method may be used to assist in confirmation of a leak location. However, "ground miking" is solely dependent on conditions beyond the direct observations of the leak technician such as soil conditions and composition, water table, depth of pipe bury, assumed location of the water main (such as concrete pressure pipe) and compaction of pavement material causing leak sounds to scatter and echo or simply be absorbed.
- The Project Team will report daily or per request of the Utility, to the assigned Utility Manager and go over the progress of the previous day, as well as cover what will be surveyed the current day.
- It may be necessary to conduct parts of the Leak Survey during "off hours" such as at night. This may be required in areas of high traffic volume where traffic noise may affect the ability to detect leak noise, and traffic volume may affect the ability of the Project Team to be able to safely access main line valves in the middle of the street. The Project Team will give 24-hour advanced notice of intent to survey a particular area that may require after hours surveying or nighttime surveying. This is so the Utility can plan for the area to be surveyed, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.
- A progression map shall be maintained for each section under survey indicating leak locations on the map. This will be especially helpful in quickly determining leak locations that correspond to the field leak diagrams turned into the Utility.
- As a part of the leak program, mapping discrepancies found on the current water atlas will be noted and included as a part of the final report so the Utility can make needed corrections. This will be included as a part of the periodic reporting to the Utility, thus enabling the Utility to keep up with mapping corrections.
- Distribution assets found to be in disrepair such as issues with hydrants, valves, and service lines, will be noted and turned into the Utility.
- Leaks verified on the customer's side of a service shut-off will not be located beyond the shut-off. If a leak appears to be on the Customers' side, the Utility will be notified first, then the customer notified and permission granted prior to the water being shut off even for short periods of time where possible and as time allows, as well as the ability for the customer to respond.
- If the Utility requests leak locations beyond the service shut off on the customer's side of the service line, this will result in an additional charge to the leak survey based on an hourly rate and this service must be agreed upon between the Utility and M.E. Simpson Co., Inc. prior to the start of the survey.
- Valves and hydrants will not be operated without Utility permission. Valves and hydrants that break during this type of operation are the sole responsibility of the Utility. M.E. Simpson Co., Inc. cannot be responsible for valves and hydrants that break due to pre-existing conditions.
- The Utility is encouraged to dig up and repair the leaks located as soon as possible so that the area may be re-surveyed while the Project Team is still working on the survey in that general geographical location to ensure no other leaks are present in that area.

SCOPE OF SERVICES

GPS OF LEAK LOCATIONS

Once leak locations have been confirmed, the M.E. Simpson Co., Inc. Project Team will perform the following:

- **The Project Team will collect GPS Coordinates** of all leak locations 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 leak location. 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, as well as Latitude and Longitude.
  - Type of Attribute (main break on pipe, mainline valve leak, hydrant leak, service leak).
  - 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** will 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 that 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 Leak Location Excel database.
- **All locations will be differentially corrected** for accuracy. A stationary beacon or mobile beacon can be set up to allow differential correction. All data will be "Post-Processed", so that a comparison can be made to a Local stationary GPS receiver. The locations of the stationary GPS stations can be obtained from the Internet. The particular stationary GPS receiver shall be listed in the final report as the station used for differential correction. This will allow for a greater accuracy of the GPS locations.

DOCUMENTATION OF GPS LEAK LOCATIONS

M.E. Simpson Co., Inc. will provide a location report for each leak located, including the following:

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

Quality Control and Accuracy of Leak Locations

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

Leak surfacing at intersection

Hidden leak running into drain tile

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

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

SCOPE OF SERVICES

Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the Leak Survey is in progress. They will be happy to explain and demonstrate the equipment and techniques that are employed by M.E. Simpson Co., Inc. for detecting and locating leaks on the Water System. This may be useful for the staff of the Utility in understanding the parameters of Leak Detection, especially during an emergency such as a main break on a critical line where a major disruption of service could occur.

FINAL REPORTS, DOCUMENTATIONS and COMMUNICATIONS

"Effective Communication ... Accurate Documentation... Insuring the success for the Leak Survey"

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

- Project Team will **meet daily** with assigned Utility personnel to go over areas of survey for prior workday and plan current day and area to survey.
- The field technicians will be readily available by cellular phone as well as Nextel Direct Connect Radio. This will facilitate communications between the Utility and the field technicians. A **24-hour toll free 800 number** is available for direct contact with M.E. Simpson Co., Inc. for emergencies.
- **Diagram all leak locations**, date of location, and classify according to severity and an estimate of loss. These will be turned in daily to appointed Utility Personnel.
- **The Project Manager will meet** with the Utility regularly for a progress report.
- **Prepare a progress report** at monthly intervals for the Utility if requested.
- **Maintain a progression map to be included with the progress reports and final report** of the project indicating leak locations with symbols indicating type and severity corresponding to the individual leak diagrams.
- Develop a **Leak Survey log** of activity which will also have confirmed leaks listed and this list will be turned in weekly (in an Excel format). The list will also be included with the final report that will include the following;

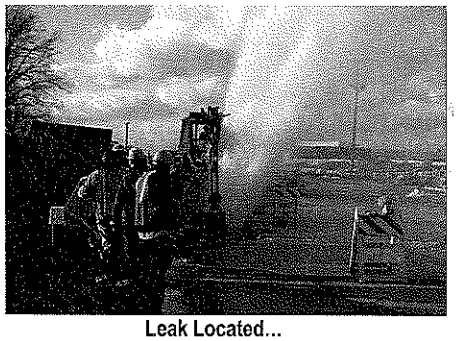
  1.) Mechanical deficiencies discovered
  2.) Mapping errors on the water atlas
  3.) Type of monitored appurtenances
  4.) Location of same for leaks discovered
  5.) Total estimated loss

- **Prepare the final report** at the completion of the project which will include all leak location reports with drawings, total of estimated water loss, total pipe distance investigated, a description of the area surveyed, and other problems found in the system during the course of the survey that need the attention of the Water Utility. The leak summary will list leak types such as main leaks, service line leaks, valve leaks, or hydrant leaks. A cost benefit analysis of the survey based on the "cost to produce" water will also be included that describes the financial impact to the Utility for water loss. Recommendations for system maintenance will be a part of this report based on field observations made during the survey. **This final report shall be made available for submission to the Utility within thirty (30) working days of the completion of the fieldwork.**

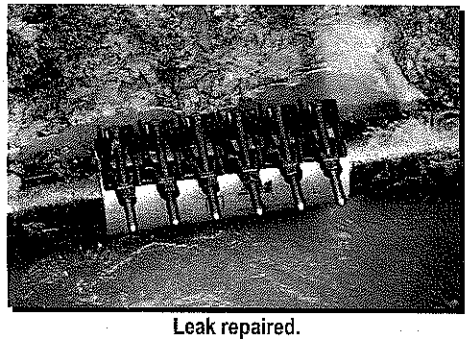
SCOPE OF SERVICES

ASSUMPTIONS AND SERVICES PROVIDED BY THE UTILITY

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



Leak Located...



Leak repaired.

AREA TO BE SURVEYED

The total miles of pipe to be surveyed are approximately **233** miles for the Utility. This may change during the project.

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

SCOPE OF SERVICES

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

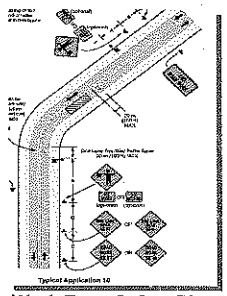
M.E. Simpson Co., Inc. uses Two-Man Teams for Safety and Quality Assurance.

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

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

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

PROPOSED SCHEDULE

Project Schedule

Proposal Due: July 22, 2014, 2:00 pm

Possible Notice of Award: TBD

Notice to Proceed: TBD, within 10 days of Notice of award or in agreement with the Utility.

Kick Off Meeting and Commencement of work: TBD with agreement of Utility. Meet with Utility staff to go over project goals and objectives. Field work will begin on day agreed upon by the Utility and M.E. Simpson Co., Inc.

Fieldwork to be completed and documented: Assume one (2 person crew), 24-30 days in the field for completion of field work per year for the acoustic leak survey and all pinpointing per "Scope of Work". Additional leak detection work outside of the leak survey area will be based on fees as stated in the Cost Proposal and may cause a shift in the completion date. It is assumed the water main sizes, types, and lengths are correct as stated by the Utility.

Daily Work Hours
Normal "on site" daily work hours will be 7:00 AM to 4:30 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 (such as night work).

Daily Leak Reporting: The Field staff will meet with assigned Utility staff daily or as needed and determined by the assigned Utility Manager. Leaks needing immediate attention will be documented and submitted immediately for the Utility's attention. Minor leaks (such as hydrant leaks, service line leaks, valve packing leaks) will be reported daily for scheduling of repair. Photo copies of leak locations will be turned in to assigned Utility Manager daily or as agreed upon by, prioritized by leak severity.

Microsoft Excel format Leak logs will be turned in weekly (e-mailed or printed) or as agreed upon to the Utility. Leak logs will have all suspected leak areas identified whether an actual leak is confirmed or not. If a "no leak" condition is confirmed, the noise source will be identified. These logs will be included as part of the final report.

Final Leak Reports: The final summary report will be available 20 work days after field work has been completed each year. This report will have all the leak location drawings and suspected leak logs compiled during the course of the project. In addition the final report will have a summary of the entire program with quantified levels of project payback detailed.

PROPOSAL FEE

M.E. Simpson Co., Inc. is pleased to present our *"Cost Proposal"* for Leak Detection Services for the **Village of Downers Grove, Illinois.** The leak survey program will be conducted on approximately **233** miles of pipe in the Utility's water distribution system per year. M.E. Simpson Co., Inc. will perform this leak survey with one or two 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 professional services agreement price. The survey will also include complete pinpointing of all leaks found, with an individual report on each leak location, and a final comprehensive report.

A Complete Water Distribution System Leak Survey on approximately **233** miles of water main:

2014 Leak Detection Survey at $160.00 per mile (Approx. 233) -------- ($37,280.00)
2015 Leak Detection Survey at $160.00 per mile (Approx. 233) -------- ($37,280.00)
2016 Leak Detection Survey at $160.00 per mile (Approx. 233) -------- ($37,280.00)

Emergency Leak Detection Services:
Reg. Business Hours (7:00 am – 3:30 pm, M-F) at $375.00 1st Hr & $195.00 each additional

After Hours (3:30 pm – 7:00 am) Mon-Friday, Weekends & Holidays at $500.0 1st Hr. & $215.00 each additional.

We thank you for this opportunity to acquaint you with our Leak Detection Services and offer this professional services agreement. 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

John H. Van Arsdel
Vice President
JHV/jph

M.E. SIMPSON Co., Inc.

September 30, 2013

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

Dear Mr. Bird,

M.E. Simpson Co., Inc. is a technical service company providing Leak Survey Programs, Large Meter Testing and Repair Programs, Water Main Location, Valve Assessment, and Computer Mapping Programs. These "Technical Services" offered by M.E. Simpson Co., Inc. are designed to aid a utility in reducing unaccounted for water and lost revenue.

M.E. Simpson Co., Inc. is pleased to submit this report of our leak detection survey for the Village of Downers Grove. This survey addressed the Downers Grove water distribution system, consisting of approximately 233 miles of water main. The report contains the results of our investigation including the following:

1. A DESCRIPTION OF THE AREA SURVEYED
2. METHODOLOGY OF THE SURVEY
3. A LIST OF LEAKS AND TYPE OF LEAKS LOCATED
4. GENERAL RECOMMENDATIONS BASED ON OUR INVESTIGATION

DESCRIPTION OF THE AREA SURVEYED

Approximately 1,230,240 lineal feet were surveyed as part of the system investigation. This included all fire hydrants, accessible mainline valves and selected services.

METHODOLOGY

Your survey was conducted using the latest state of the art leak computers, the **FLUID CONSERVATION SYSTEMS' FCS Accu-Corr / Digi-Corr or Vivax Metrotech HL6000 leak correlator.** The **FCS S-30** is a tool used as an electronically enhanced listening device. All of these correlators are manufactured by Fluid Conservation Systems of Milford, Ohio. These electronic instruments are microprocessor units that measure the time it takes the sound of the leak to travel from the leak to the point where the leak Correlator is connected to the water line. By connecting the leak correlator to the water line at two locations, it will compute the distance from the leak to each connection point thus enabling us to determine the exact leak location. Our experienced technicians used these devices, along with the S30 electronically enhanced listening device or the L-Mic electronic listening device, as listening equipment to survey your pipeline network. Each hydrant and accessible valve was used as listening points to identify leaks. Selected services, b-boxes, were used on an as needed basis to keep the listening distances under five hundred feet (500'). "Pinpointing" of the leak, as well as locating leaks that other methods fail to reveal was also done with this equipment.

LEAKAGE LOCATED

All water mains within the Project area were surveyed and 33 leaks were located. These leaks have been grouped as follows: Main Line Leak - 6, Service Line Leak - 3, Fire Service Leak -0, Valve Leak - 4, Hydrant Leak - 20, Other Type Leak - 0. All of these leaks have been verbally reported to your office with these locations, so many have probably been repaired already. Following are the leak locations with an estimated GPD (Gallons Per Day) leakage potential.

Type	Location		SIZE
Main Line	4435 Middaugh Avenue see enclosed diagram		21,600 GPD
Main Line	Chase Avenue & 62nd Street see enclosed diagram		21,600 GPD
Main Line	1036 62nd Place see enclosed diagram		14,400 GPD
Main Line	Lee Avenue & Virginia Avenue see enclosed diagram		14,400 GPD
Main Line	Midhurst Road & Westfield Drive see enclosed diagram		14,400 GPD
Main Line	6243 Pershing Avenue see enclosed diagram		12,960 GPD
Service Line	4729 Stonewall Avenue see enclosed diagram		11,520 GPD
Service Line	6340 Woodward Avenue see enclosed diagram		7,200 GPD
Service Line	Janes Avenue & 62nd Street see enclosed diagram		4,320 GPD
Valve (packing)	Chase Avenue & Hobson Road see enclosed diagram		2,880 GPD
Valve (packing)	Cumnor Road & Grant Street see enclosed diagram		2,880 GPD
Valve (packing)	6320 Saratoga Avenue see enclosed diagram	**Fixed**	1,440 GPD
Valve (packing)	6324 Saratoga Avenue see enclosed diagram	**Fixed**	1,440 GPD
Hydrant	5245 Park Avenue see enclosed diagram		7,200 GPD
Hydrant	1424 62nd Street see enclosed diagram		1,440 GPD
Hydrant	1480 Golden Bell Court see enclosed diagram		1,440 GPD
Hydrant	1801 Chicago Avenue see enclosed diagram		1,440 GPD
Hydrant	4834 Pershing Avenue see enclosed diagram		1,440 GPD
Hydrant	5704 Pershing Avenue see enclosed diagram	**Fixed**	1,440 GPD

EXAMPLE

Type	Location	SIZE
Hydrant	6009 Brookbank Road	
	see enclosed diagram	1,440 GPD
Hydrant	6700 Meadowcrest Drive	
	see enclosed diagram **Fixed**	1,440 GPD
Hydrant	7827 Rohrer Drive	
	see enclosed diagram	1,440 GPD
Hydrant	Bryan Place & Grant Street	
	see enclosed diagram	1,440 GPD
Hydrant	Carpenter Street & 55th Street	
	see enclosed diagram	1,440 GPD
Hydrant	Cumnor Road & Ogden Avenue	
	see enclosed diagram **Fixed**	1,440 GPD
Hydrant	Duchess Court & Brookside Lane	
	see enclosed diagram **Fixed**	1,440 GPD
Hydrant	Elm Street & Chicago Avenue	
	see enclosed diagram	1,440 GPD
Hydrant	Fairview Avenue & 75th Street	
	see enclosed diagram **Fixed**	1,440 GPD
Hydrant	Katrine Avenue & Wisconsin Avenue	
	see enclosed diagram	1,440 GPD
Hydrant	Lee Avenue & Carol Street	
	see enclosed diagram **Fixed**	1,440 GPD
Hydrant	Linden Place & Austin Street	
	see enclosed diagram **Fixed**	1,440 GPD
Hydrant	Prospect Avenue & Prairie Avenue	
	see enclosed diagram	1,440 GPD
Hydrant	Williams Street & 6th Street	
	see enclosed diagram	1,440 GPD
33 Leaks Located	**ESTIMATED LEAKAGE TOTAL**	**165,600 GPD**

EXAMPLE

LEAK QUANTITIES

Quantifying leaks is difficult because there is not any accurate means of doing so. Pipe material, size of the leak, system pressure, soil material and water table will affect the noise that a leak makes. Small leaks under high system pressure will make more noise than a large leak under low system pressure. However, the above leaks are of sufficient noise levels that the above estimates should be very conservative. If a production price of $2.98 per thousand gallons is used, these leaks were costing your utility in excess of $493.49 per day or $180,123.12 annually. It's obvious this Leak Survey Program has proven to be cost effective. Naturally the main line leaks have the greatest potential for loss followed by service line, valves, and finally hydrants. Once leaks have been repaired, we would recommend that the Utility compare pumping rates before and after. This information will be more meaningful and accurate.

RECOMMENDATIONS

This survey confirms the Village of Downers Grove's water distribution system will benefit from this project by a reduction in underground leakage. There is always a concern over the cost effectiveness of leak detection because of the uncertainty of the number of leaks located. However, with your present cost of water and the discovery of these 34 leaks, the cost of this 2013 leak survey will pay for itself within 3 months. It only takes a recovery of about 165,000 gallons per day on an annual basis (165,000 per day is only 115 gallons per minute throughout your entire water distribution system) to recover your investment. We would recommend that you conduct a Leak Survey Program every year. This recommendation becomes more critical as your cost of water increases.

We appreciate your cooperation and that of the Utility staff we were available to answer our questions during this project. If you have any questions with the information in this report, please do not hesitate to contact us.

Sincerely Yours,

Randy Lusk
Regional Manager – Dyer
RL/jph

EXAMPLE

M.E. SIMPSON COMPANY, INC.

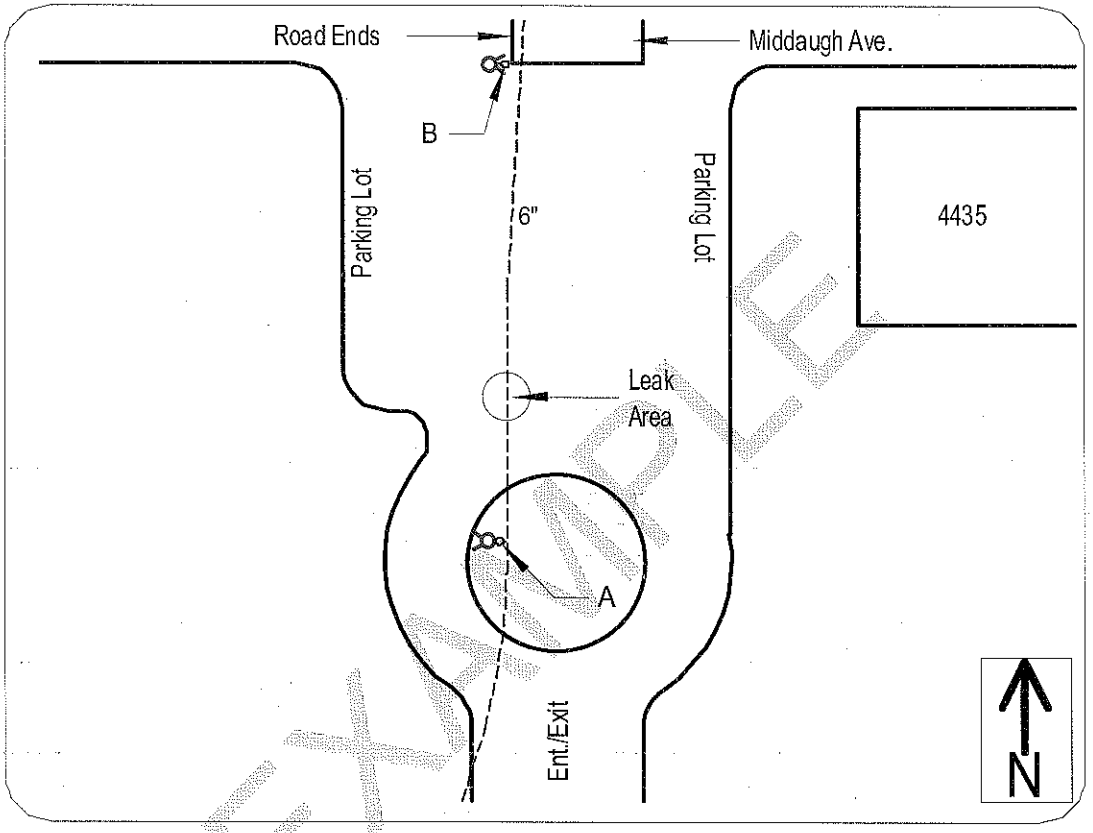
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 9:30:00 AM **Leak#** 08

Date: Monday, August 05, 2013 **Tech:** Rick H. & C.J. B.

Address: 4435 Middaugh Avenue

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 369' from A to B

Connection point: A= Hydrant Auxiliary Valve

Connection point: B= Hydrant Auxiliary Valve

Connection point:

Connection point:

Leak Location: 64' from A

Comments: This is a leak on a 6" main. This drawing is not to scale.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

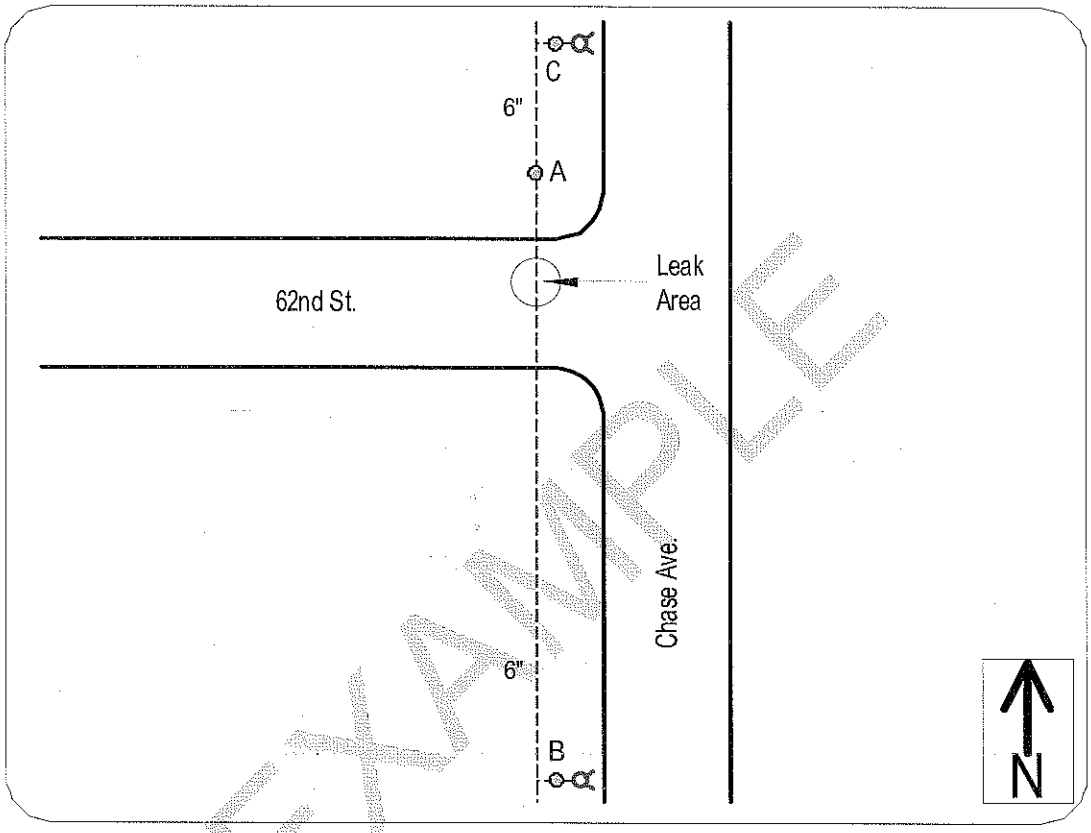
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 8:30:00 AM **Leak#** 14

Date: Tuesday, August 13, 2013 **Tech:** Rick, Todd, & C.J.

Address: Chase Avenue & 62nd Street

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 266' from A to B / 311' from B to C

Connection point: A= Main Line Valve

Connection point: B= Hydrant Auxiliary Valve

Connection point: C= Hydrant Auxiliary Valve

Connection point:

Leak Location: 25' from A

Comments: This is a leak on a 6" main.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

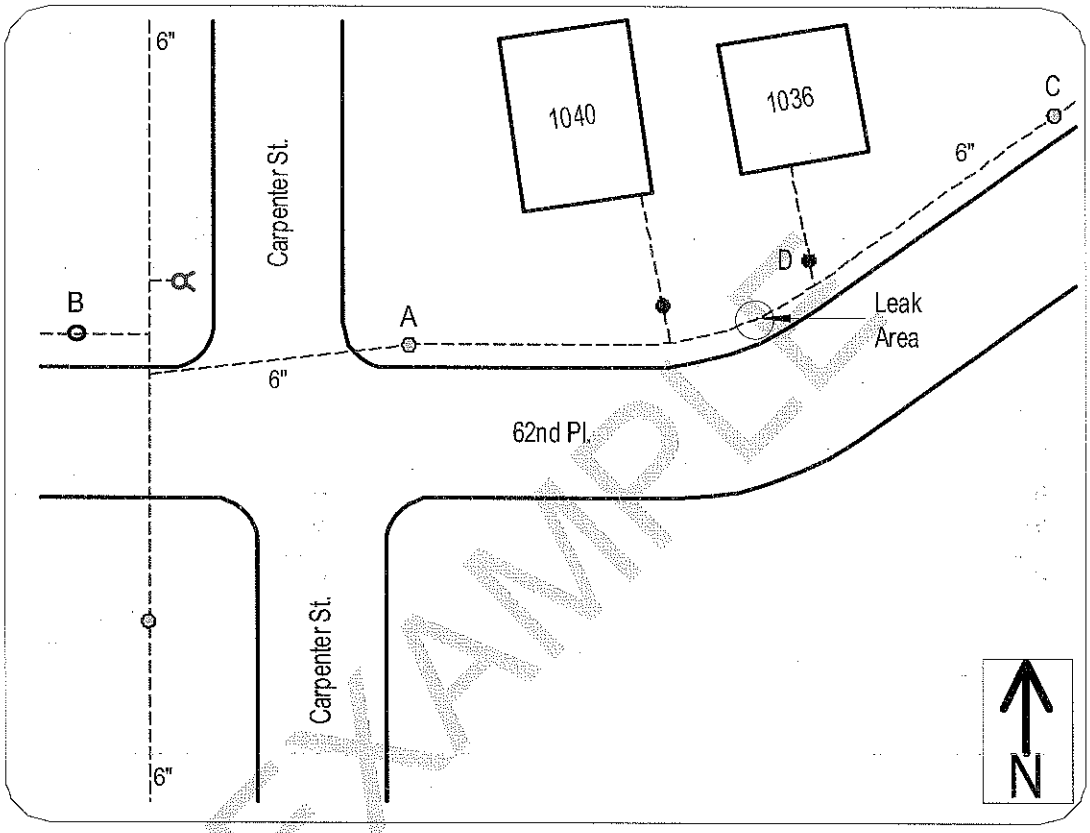
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 1:00:00 PM **Leak#** 17

Date: Wednesday, August 14, 2013 **Tech:** Rick H. & Todd S.

Address: 1036 62nd Place

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 76' from A to B / 228' from A to C / 140' from A to D / 304' from B to C

Connection point: A= Main Line Valve

Connection point: B= Main in Vault

Connection point: C= Main Line Valve

Connection point: D= Service to 1036

Leak Location: 29' from D

Comments: This is a leak on a 6" main. This drawing is not to scale.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

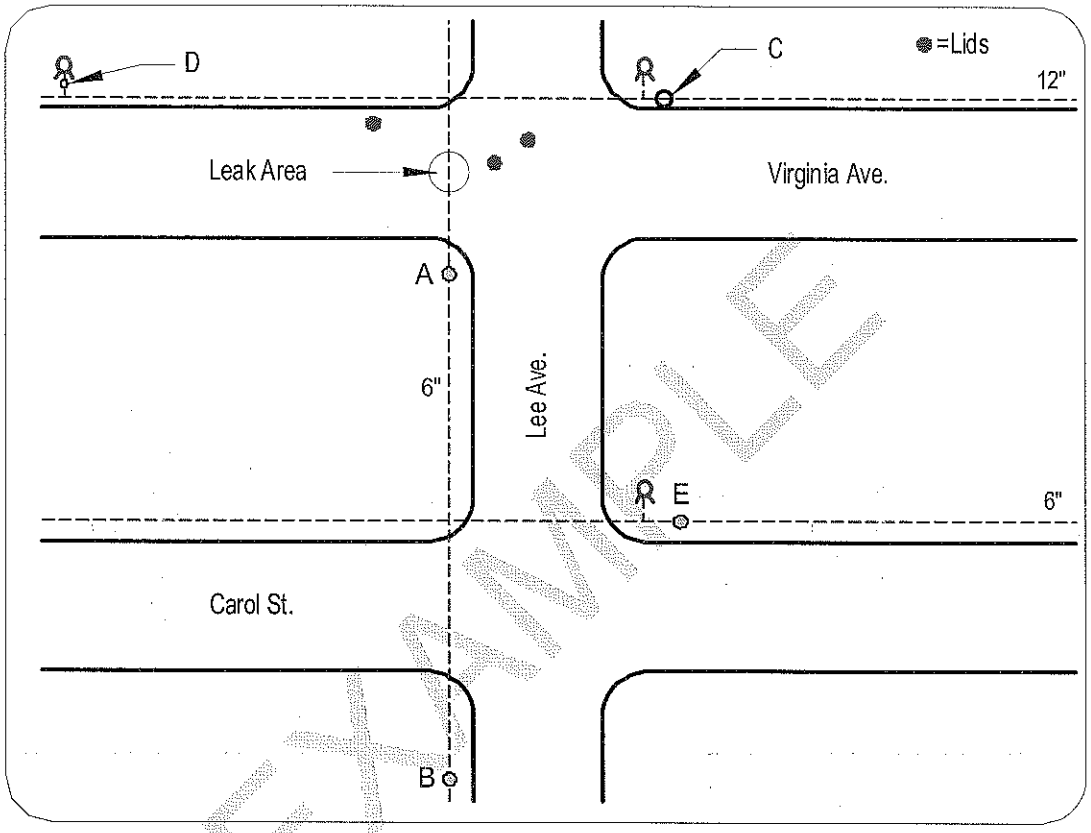
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 7:15:00 AM **Leak#** 31

Date: Tuesday, September 17, 2013 **Tech:** Rick H. & Mike H.

Address: Lee Avenue & Virginia Avenue

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 603' from A to B / 111' from A to C / 425' from A to E / 715' from B to C / 347' fro

Connection point: A, B, & E= Main Line Valves

Connection point: C= Exposed Main

Connection point: D= Hydrant Auxiliary Valve

Connection point:

Leak Location: 37' from A

Comments: This is a leak on a 6" main. This drawing is not to scale.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

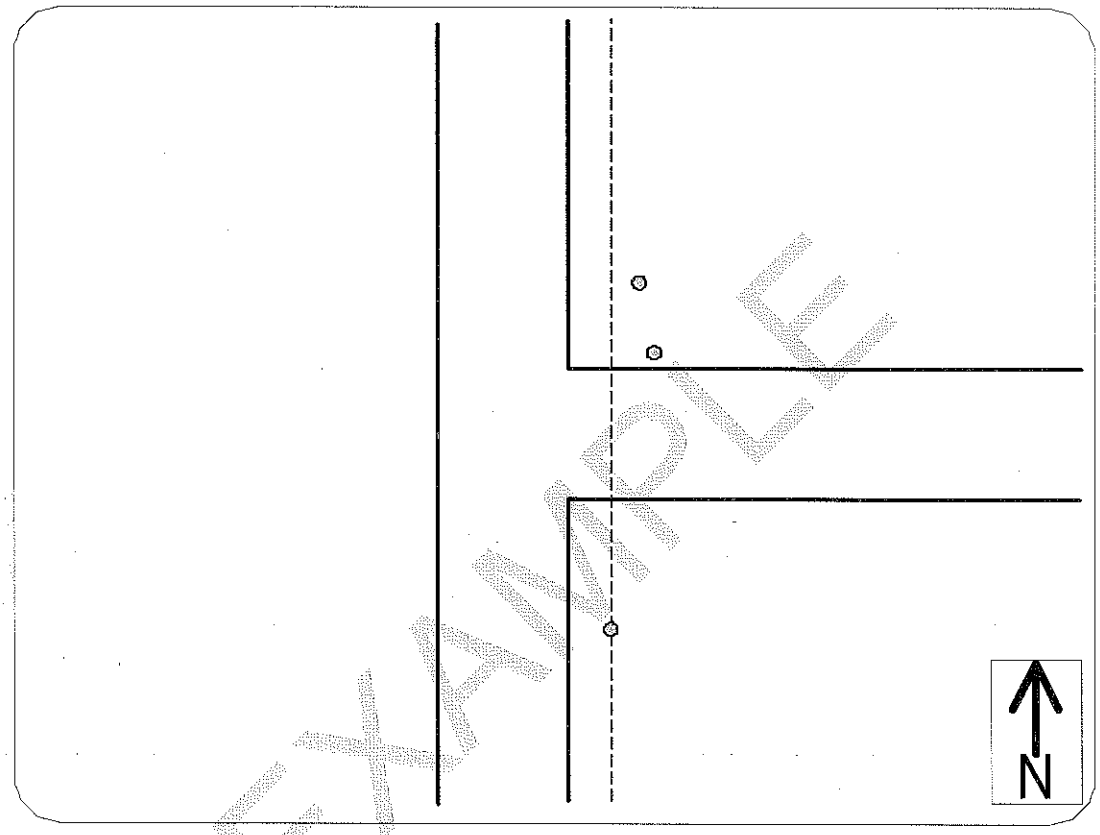
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 9:30:00 AM **Leak#** 11

Date: Monday, August 12, 2013 **Tech:** Rick, C.J., & Todd

Address: Midhurst Road & Westfield Drive

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 87' from A to B / 73' from A to C / 114' from A to D

Connection point: A= Main Line Valve

Connection point: B= Hydrant Auxiliary Valve

Connection point: C= Main Line Valve

Connection point: D= Stub Valve

Leak Location: 40' from A

Comments: This is a leak on a 6" main.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

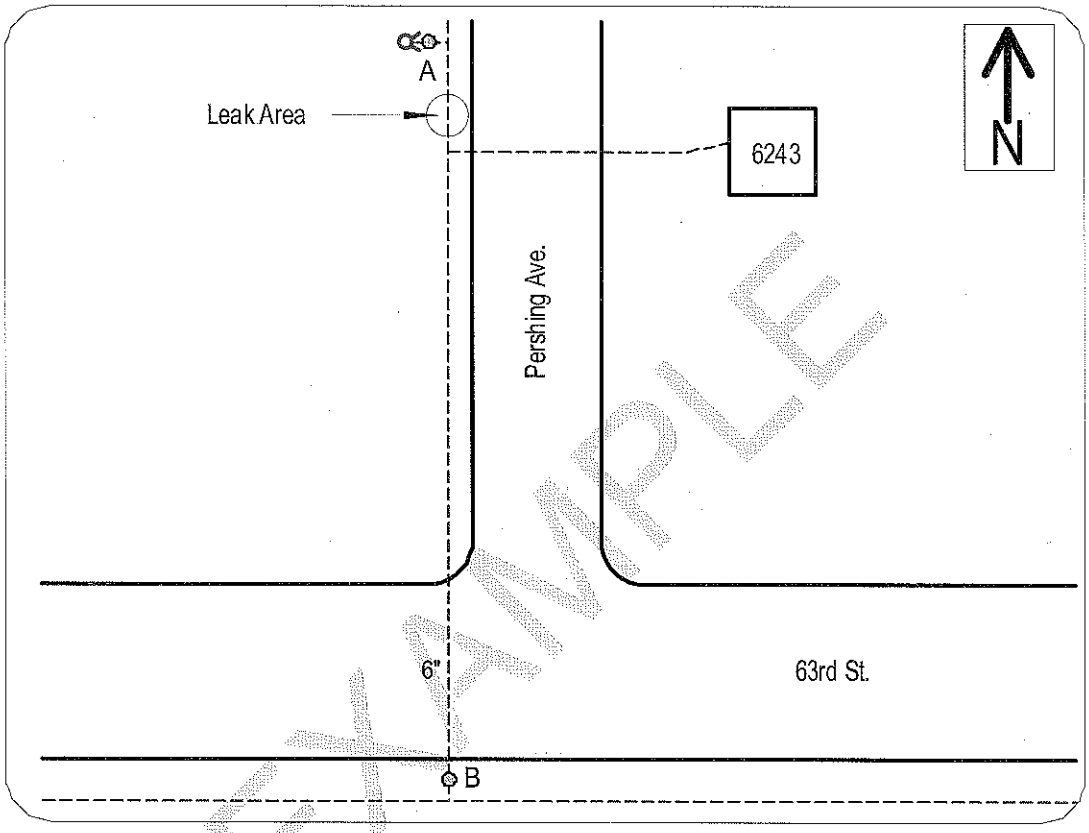
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 10:30:00 AM **Leak#** 26

Date: Monday, September 09, 2013 **Tech:** Rick H. & Mike H.

Address: 6243 Pershing Avenue

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 389' from A to B

Connection point: A= Hydrant Auxiliary Valve

Connection point: B= Main Line Valve

Connection point:

Connection point:

Leak Location: 18' from A

Comments: This is a leak on a 6" main. This drawing is not to scale.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

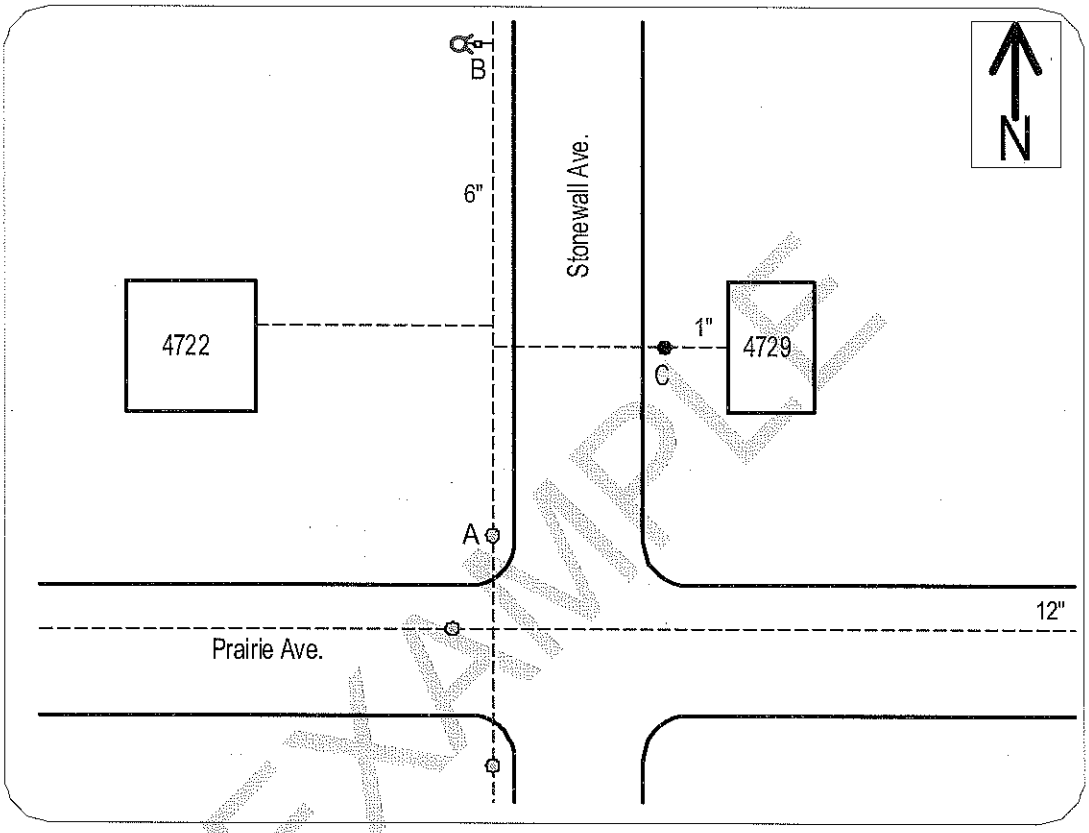
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 10:45:00 AM **Leak#** 33

Date: Wednesday, September 18, 2013 **Tech:** Rick H. & Mike H.

Address: 4729 Stonewall Avenue

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 420' from A to B / 179' from A to C

Connection point: A= Main Line Valve

Connection point: B= Hydrant Auxiliary Valve

Connection point: C= Service to 4729

Connection point:

Leak Location: 39.5' from C

Comments: This is a leak at or near the service corporation to 4729 Stonewall Avenue. This drawing is not to scale.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

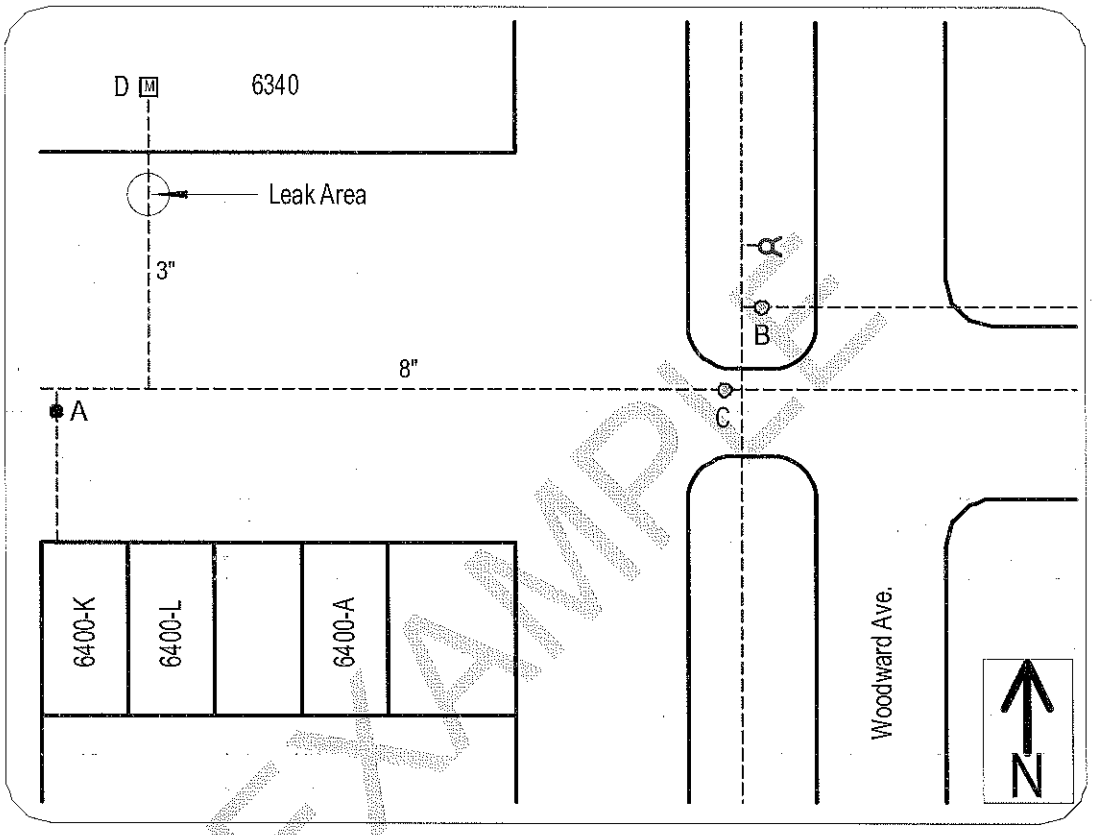
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 7:30:00 AM **Leak#** 15

Date: Wednesday, August 14, 2013 **Tech:** Rick H. & Todd S.

Address: 6340 Woodward Avenue

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 224' from A to B / 207' from A to C / 106' from A to D

Connection point: A= Service to 6400-K

Connection point: B= Main Line Valve

Connection point: C= Main Line Valve

Connection point: D= Meter to 6340

Leak Location: 35' from D

Comments: This is a leak on the service line to 6340 Woodward Avenue. This drawing is not to scale.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

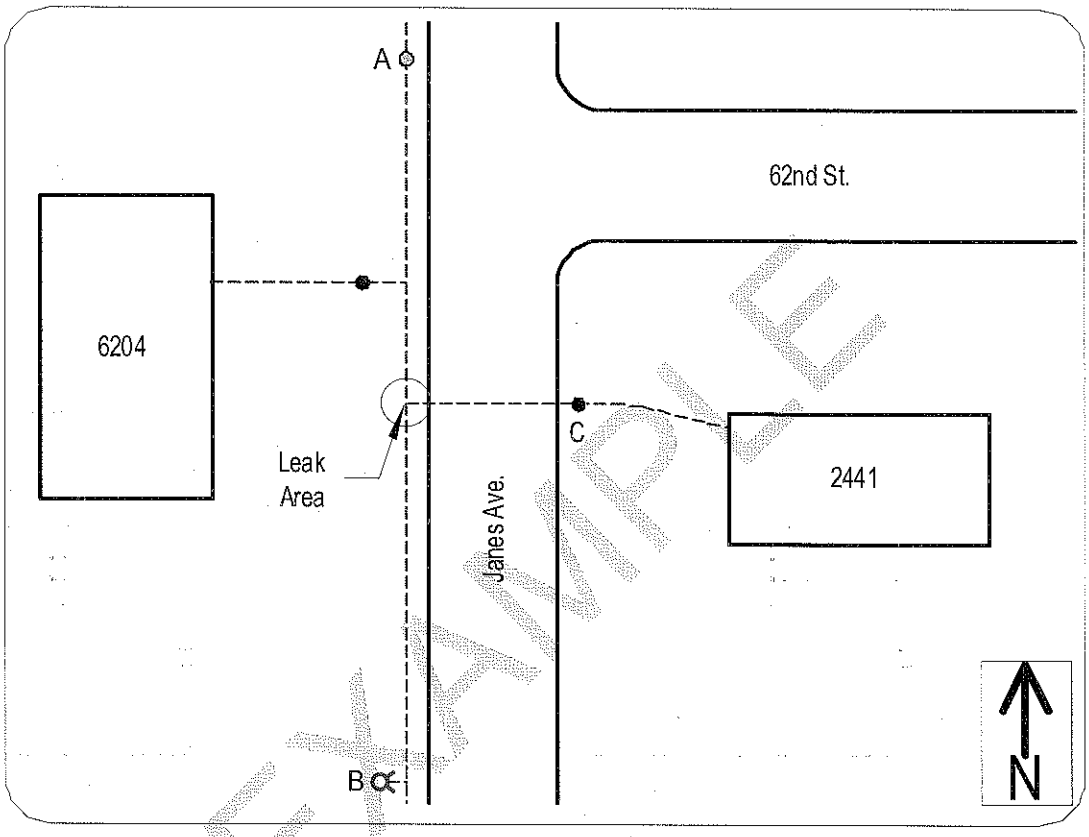
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 9:30:00 AM **Leak#** 13

Date: Tuesday, August 13, 2013 **Tech:** Rick, Todd, & C.J.

Address: Janes Avenue & 62nd Street

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 171' from A to B / 130' from A to C

Connection point: A= Main Line Valve

Connection point: B= Hydrant

Connection point: C= Service to 2441

Connection point:

Leak Location: 79' from A

Comments: This is a leak at or near the service corporation to 2441 62nd Street.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M.E. SIMPSON COMPANY, INC.

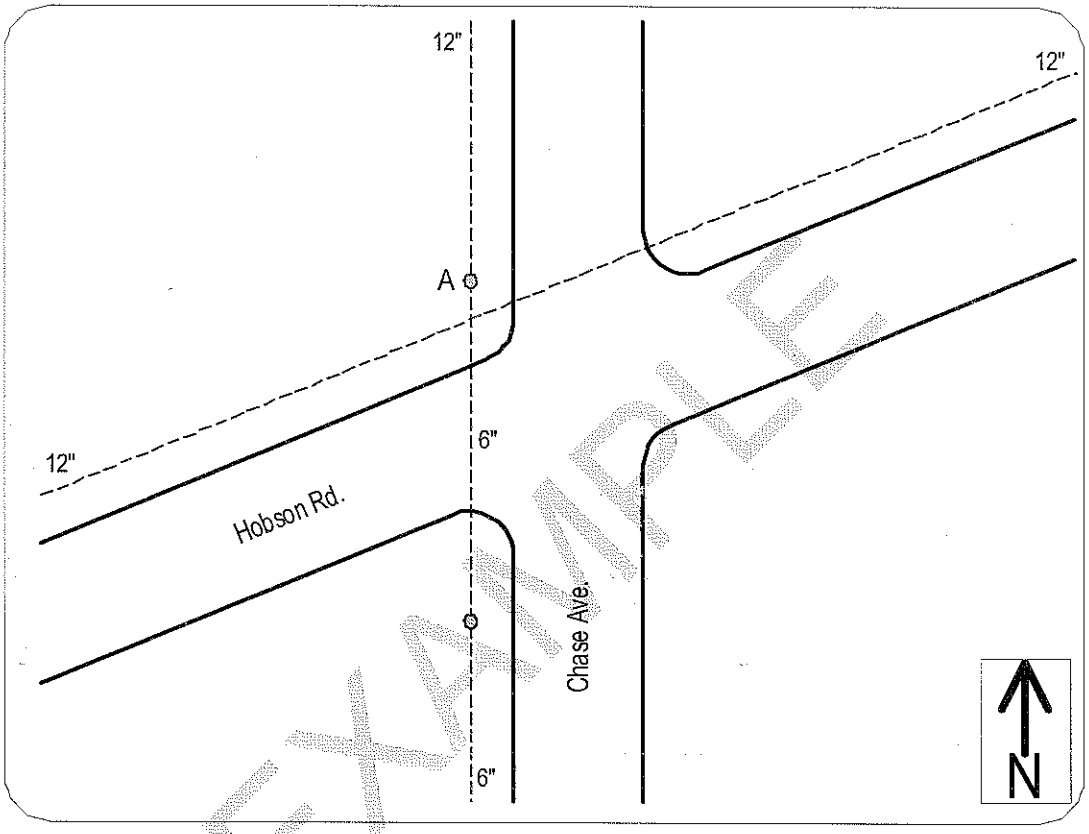
LEAK LOCATION REPORT

Client: Downers Grove, Illinois **Time:** 12:35:00 PM **Leak#** 05

Date: Wednesday, July 31, 2013 **Tech:** Todd S. & C.J. B.

Address: Chase Avenue & Hobson Road

Below is a diagram of the area surveyed for a suspect leak.



EXAMPLE

Distance: 0' from A

Connection point: A= Main Line Valve

Connection point:

Connection point:

Connection point:

Leak Location: 0' from A

Comments: This is a severe packing leak on a main line valve.

We thank you for the opportunity to work for your Utility and look forward to serving you again. If you have any questions please don't hesitate to call.

M. E. Simpson Company, Inc. - Leak Survey Log

Leak Survey Client:	Downers Grove, Illinois							Technicians:	Rick, Mike, Todd, C.J., & Wayne	Page 1
Map Page or Section #	Street	Cross Street	Date of Initial Listening	Date of Pinpoint	Listening Point (H,V,S,P)	Leak (Y / N)	Leak Fixed? (Y / N)	Leak Type (Main, Service, Hydrant, Valve)	Noise Source (if not a leak)	GPM	Leak DWG # (Field Sheet #)
SW	62nd Street	1424 62nd Street	7/30/2013	7/30/2013	Hydrant	Yes	No	Hydrant		1	1
SW	Dunham Road	61st Street	7/30/2013	7/30/2013	Hydrant/ Valve	No			Usage		
SW	Brookbank Road	6009 Brookbank Road	7/30/2013	7/30/2013	Hydrant	Yes	No	Hydrant		1	2
SW	Saratoga Avenue	6320 Saratoga Avenue	7/30/2013	7/30/2013	Valve	Yes	Yes	Valve		1	3
SW	Saratoga Avenue	6324 Saratoga Avenue	7/30/2013	7/30/2013	Valve	Yes	Yes	Valve		1	4
SW	Midhurst Road	2136 Midhurst Road	7/31/2013	8/2/2013	Hydrant	No			Usage		
SW	Midhurst Road	Westfield Drive	7/31/2013	8/2/2013	Hydrant/ Valve	Yes	No	Main		10	11
SW	Bush Place	Prentiss Drive	7/31/2013	8/11/2013	Hydrant/ Valve	No			Usage		
SW	Star Street	Prentiss Drive	7/31/2013	8/12/2013	Valve	No			Usage		
SW	Woodward Avenue	6340 Woodward Avenue	7/31/2013	8/14/2013	Service/ Valve	Yes	No	Service		5	15
SW	Whidden Avenue	Hathaway Lane	7/31/2013	8/13/2013	Valve	No			Usage		
SW	Stonewall Avenue	Brighton Street	7/31/2013	8/13/2013	Valve	No			Usage		
SW	Chase Avenue	Hobson Road	7/31/2013	7/31/2013	Valve	Yes	No	Valve		2	5
SW	Janes Avenue	62nd Street	7/31/2013	8/13/2013	Hydrant/ Valve	Yes	No	Service		3	13
SW	Chase Avenue	62nd Street	7/31/2013	8/13/2013	Hydrant/ Valve	Yes	No	Main		10-12	14
SW	Pershing Avenue	5704 Pershing Avenue	8/1/2013	8/1/2013	Hydrant	Yes	Yes	Hydrant		1	6
SW	College Avenue	Janes Avenue	8/2/2013	8/12/2013	Hydrant/ Valve	No			Usage		
SW	Carpenter Street	55th Street	8/5/2013	8/5/2013	Hydrant	Yes	No	Hydrant		1	7
NE	Middaugh Avenue	4435 Middaugh Avenue	8/5/2013	8/5/2013	Hydrant/ Valve	Yes	No	Main		10-15	8
SW	Brookbank Road	Maple Avenue	8/5/2013	8/12/2013	Hydrant/ Valve	No			Usage		
SW	Katrine Avenue	Wisconsin Avenue	8/7/2013	8/7/2013	Hydrant	Yes	No	Hydrant		1	9

Village of Downers Grove
Contractor Evaluation

Contractor: M.E. Simpson Co.

Project: Leak Detection Survey 2013

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

Time Period: July 29, 2013 to Sept 23, 2013

On Schedule (allowing for uncontrollable circumstances) Yes

Provide details if early or late completion:

Contractor completed the survey in a timely manner with no complaints from residents. All of their vehicles were marked with their company logo and used two man crews at all times. They were also responsible for traffic control while working in town

Change Orders (attach information if needed): None

Difficulties / Positives:
The Overall project completed satisfactorily. Contractor provided reports that were accurate with locations of all the leaks detected. A total of 33 Leaks were located and 6 of those were main leaks, 3 Service Lines, 4 Valves and 20 Hydrants. Village crews had made all the repairs prior to the snow season.

Interaction with public:

Excellent

(Attach information on any complaints or compliments)

General Level of Satisfaction with work:

Well Satisfied

Reviewers: Dave Bird, Water Manager

Date: 8/21/2014