

NORWICH PUBLIC UTILITIES

16 South Golden Street
Norwich, Connecticut



Specifications For:

Gas Leak Detection Survey

Bid No. 7488

Opens
March 23, 2015



CITY OF NORWICH, CONNECTICUT
PLEASE RETURN THIS FORM IMMEDIATELY!

Acknowledgement: Receipt of Bid Documents

Bid No.: 7488
Title: Gas Leak Detection Survey

Please take a moment to acknowledge receipt of the attached documents. Your compliance with this request will help the City of Norwich to maintain proper follow-up procedures and will ensure that your firm will receive any addendum that may be issued.

Date Issued: 02/27/2015
Date Documents Received: _____ / _____ / _____
Do you plan to submit a response? _____ Yes _____ No

Print or type the following information:

Company Name: _____
Address: _____

Telephone: _____ Fax: _____
E-mail Address: _____
Received by: _____

Note: Faxed or e-mailed acknowledgements are requested.

Fax No.: (860)823-3812
E-mail: whathaway@cityofnorwich.org

Fax or e-mail this sheet only. A cover sheet is not required.

DO NOT FAX OR E-MAIL YOUR RESPONSE TO THIS BID

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BID NO. 7488

ADVERTISEMENT FOR BIDS
NORWICH PUBLIC UTILITIES (NPU)

IS SOLICITING BIDS FOR

Gas Leak Detection Survey

Sealed bids for GAS LEAK DETECTION SURVEY will be received at the Office of the Purchasing Agent at City Hall, 100 Broadway, Norwich, Connecticut 06360 until **2:00 PM on Monday March 23, 2015**, prevailing time, at which time they will be publicly opened and read aloud.

The Contract consists of supplying all labor, materials and equipment, as required by NPU for performing mobile leak survey, business and residential walking leak surveys.

Bid surety in the form of cash, a certified check or bid bond in the amount of 5% of contract amount required and must accompany the bid response.

On or after February 27, 2015, Specifications may be viewed and downloaded from the following websites:

- City of Norwich www.norwichct.org
- State of Connecticut www.das.state.ct.us
- Public Purchase www.publicpurchase.com

Questions regarding this bid should be directed to Ms. Jackie Roy 860-823-4503 Norwich Public Utilities, or at jackieroy@npumail.com.

Norwich Public Utilities reserves the right to reject any or all bids, in whole or in part, to award any item, group of items, or total bid, and to waive any informality in the bids received if it deems it to be in the best interest of the Norwich Public Utilities to do so.

No Bidder may withdraw their bid within 90 days after the actual date of bid opening thereof. Should there be reason why the contract cannot be awarded within the specific period, this time may be extended by mutual agreement between the City and the designated, qualified low Bidder.

All final awards of the bid subject to comply with Ordinance No. 1235 adopted December 3, 1991.

All bids must be submitted in a sealed envelope bearing the bidder's name and bid number.

Responding bidders must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, age, handicap, familial status, sex, or national origin.

William Hathaway
PURCHASING AGENT

NOTE: BIDDERS ARE HEREBY ADVISED THAT ONLY BID SURETIES FOR THE THREE LOWEST BIDDERS WILL BE HELD. ALL OTHERS WILL BE RELEASED WITHIN SEVEN DAYS.

REQUIRED DOCUMENTS – BIDDER’S CHECKLIST

Gas Leak Detection Survey

- | | | |
|----|--|-------|
| 1 | Proposal | _____ |
| 2 | Cost Proposal | _____ |
| 3 | Equipment List | _____ |
| 4 | Statement of Bidder’s Qualifications | _____ |
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INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS

Sealed bids for the *Gas Leak Detection Survey* will be received at the office of the Purchasing Agent, City Hall, Norwich, Connecticut, at the time specified in the advertisement for bids, then opened and read aloud. The envelopes containing the bids must be sealed and designated as “*Bid # 7488 Gas Leak Detection Survey*”.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities in or reject any and all bids. Conditional or qualified bids will not be accepted. Any bid received after the time and date specified shall not be considered. Should there be reasons why the contract cannot be awarded within the specified period the time may be extended by mutual agreement between the Owner and the bidder.

This bid is for the 2015 Calendar year with two (2) one-year extensions negotiated at the option of the Owner. If the Owner does not renew this contract, the contract shall terminate on the date provided for in the contract.

2. PREPARATION OF BID

Each Bid must be submitted on the prescribed form(s) included with these documents. All blank spaces for bid prices must be filled in, in ink or typewritten, with the information requested or with the notation ‘N/A’ for not applicable. All bids must be prepared in conformity with and shall be based on and submitted subject to all requirements of the Specifications and any Drawings together with all Addenda thereto.

Bids which are incomplete, not properly endorsed or signed, or otherwise contrary to the instructions in this specification, shall be rejected. Conditional bids will not be accepted.

Minus bidding on any item is prohibited. Bids should be made on each separate item of work shown in the bid (Proposal) with reasonable relation to the probable cost of doing the work included in such item and the right is reserved to reject wholly any bid in case any item or items thereof are obviously unbalanced or appear to the Owner to be so unbalanced as to affect or to be liable to affect adversely any interests of the Owner. The attention of the bidder is called to the fact that unbalancing of bids may adversely affect the Contractor if certain portions of the work are increased or decreased as provided in the Contract Documents.

All bidders shall complete and return the “Statement of Bidder’s Qualifications” which is attached to the bid.

3. PRICES

Bidders shall state the proposed price for the work by which the bids will be compared. This price is to cover all expenses incidental to the completion of the work in full conformity with the Contract and the Specifications.

No bid will be accepted which does not contain a unit price for every item contained in the bid form.

4. INFORMATION SUPPLIED TO BIDDERS

The owner shall provide to bidders prior to bidding, all information that is pertinent to, and delineates and describes, the work to be done. The Contract Documents contain the provisions required for completion of the work. Information obtained from any officer, agent, or employee of the owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the Contract.

5. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Specifications, or other pre-bid documents will be made to any bidder orally. Every request for such interpretation shall be in writing, addressed to: Ms. Jackie Roy, Norwich Public Utilities, 16 South Golden Street, Norwich, CT 06360, jackieroy@npumail.com. In order to be given consideration, such request must be made at least 5 days prior to the date fixed for the opening of bids. Any and all interpretations and any supplemental instructions will be in the form of written Addenda to the Specifications, which, if issued, will be made available to all prospective bidders, not later than three (3) days prior to the date fixed for the opening of bids and found on one the following websites:

1. www.norwichct.org
2. www.das.state.ct.us
3. www.publicpurchase.com

Addenda so issued shall become a part of the Contract Documents

6. BID MODIFICATION

Any bidder may modify his bid by electronic communication at any time prior to the scheduled closing time for receipt of bids, provided such communication is received by the Owner prior to the closing time. The electronic communication should not reveal the bid price but should provide the addition or subtraction or other modifications so that the final prices or items will not be known by the Owner until the sealed bid is opened.

7. CORRECTIONS

Erasures or other changes in the bid must be explained or noted over the signature of the bidder.

8. WITHDRAWAL OF BIDS

Bids may be withdrawn personally or on written or electronic request dispatched by the bidder in time for delivery in the normal course of business prior to the time fixed for the opening. Negligence on the part of the bidder in preparing his bid confers no right of withdrawal or modification of his bid after such bid has been opened.

9. OBLIGATIONS OF THE BIDDER

It is the responsibility of each bidder, before submitting a proposal, to become familiar with local conditions that might affect cost, progress, performance or furnishing of the work. Before submitting a bid, each bidder shall, at the respondent's own expense, make or obtain any additional examination, investigations, tests or studies and obtain any additional information and data which may affect cost, progress, performance of furnishing of the work and which the bidder deems necessary to determine his/her bid for performing and furnishing the work in accordance with the terms and conditions of the contract documents. The submission of any bid will be accepted by the owner as satisfactory proof that the bidder has satisfied himself in these respects.

The bidder shall not at any time after the submission of a bid dispute or complain of such statements or information, nor, assert that there was any misunderstanding in regard to the nature, or amount of work to be done. The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve the bidder of his obligation to furnish all materials, except those materials furnished by the owner, and labor necessary to carry out the provisions of the Contract Documents and to complete the contemplated work for the considerations set forth in his bid, if his bid is accepted.

10. BID SECURITY

Each bid must be accompanied by a certified check of the bidder, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 5% of project amount. Such checks or bid bonds will be returned to all but the three lowest bidders within five days after the opening of bids, and the remaining checks or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract; or if no award has been made within 90 days after the date of the opening of the bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

11. POWER OF ATTORNEY

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

12. METHOD OF AWARD-LOWEST QUALIFIED BIDDER

The term "lowest responsible bidder" shall mean the bidder whose bid is the lowest of those bidders possessing the skill, ability and integrity and experience necessary for the faithful performance of the work. The Owner reserves the right to award the work based upon information contained in the bidder's Narrative submitted with their bid. Cost shall not be the sole determining factor in the selection process, however, cost will be a significant factor in the selection and will be the determining factor if two or more bids are equal or near equal in desirability. This bid shall be awarded based on price, equipment, worker availability and experience.

If, at the time this Contract is to be awarded, the lowest bid submitted by a qualified bidder does not exceed the amount of funds then estimated by the owner as available to finance the Contract; the Contract will be awarded to that bidder. If the bid exceeds such amount, the owner expressly reserves the right to increase or decrease any class, item, or part of the work. This reservation includes the omission of any such item, items, class, or part of the work as may be decided by the owner at prices submitted by the bidder to bring the Contract within available funds; or the owner may reject all bids.

13. EXECUTION OF THE AGREEMENT

A Contract in the form set forth hereinafter will be required to be executed by the successful bidder and the owner. The party to whom the Contract is awarded will be required to obtain the performance bond and payment bond and insurance certificates within ten (10) calendar days from the date when the Notice of Award is delivered to the bidder. The Notice of Award shall be accompanied by the necessary Agreement and bond forms.

14. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the owner, as liquidated damages for such failure or refusal the surety deposited with his bid.

15. NOTICE TO PROCEED

The Notice to Proceed shall be issued within ten (10) days of the execution of the Agreement by the owner. Should there be reasons why the Notice to Proceed cannot be issued within such period; the time may be extended by mutual agreement between the owner and Contractor.

16. UNCERTAINTY OF QUANTITIES

The Owner cannot and will not guarantee any continuous work. Any quantities listed in the bid (proposal) are approximate and are given for use in comparing bids and to indicate approximately the total amount of the Contract. Notwithstanding any projections contained in this request for proposals, the Owner makes **no commitment** on the amount of work. The Owner does not expressly or by implication represent that the actual amounts of work will even

approximately correspond therewith, but does call particular attention to the uncertainty of the quantities of that work which cannot be predicted in advance. The quantity under certain items may be materially greater or less than that given in the bid.

Only such quantities of the respective items of work actually performed and accepted will be paid for. An increase or decrease in the quantity for any item shall not be regarded as grounds for an increase or decrease in the bid prices.

17. QUALIFICATIONS OF THE BIDDER

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the owner all such information and data for this purpose as the owner may request. The owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the owner that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. Conditional bids will not be accepted.

18. CONDITIONS OF WORK

Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with traffic, with the use of existing facilities and utilities, with the use of municipally or State or privately owned lands, or with the work being performed by others.

19. PAYMENT SCHEDULE

Payment for the work will be made when the work outlined in the specifications is performed in accordance with the terms stated herein. The Contractor may submit periodically, but not more than once each month, a Request for Payment for work done. Invoices shall be prepared in prescribed form by the Contractor and shall be submitted to the Owner's Representative for checking and certifications.

All contract payments shall be understood to be subject to appropriation by Norwich Public Utilities on an annual budget basis.

20. LAWS AND REGULATIONS

The Bidder's attention is directed to the fact that all applicable federal and state laws and municipal ordinances for the work and the rules and regulations of all authorities having jurisdiction over the work shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

21. TAXES

The City of Norwich is considered exempt from the payment of Federal excise taxes, Connecticut Sales Taxes, etc. and such taxes shall be identified separately or excluded from the bid prices.

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GENERAL CONDITIONS

1. CONTRACT AND CONTRACT DOCUMENTS

The specifications, and addenda enumerated in the General Conditions, Special Conditions the Advertisement for Bid, the Information for Bidders, and the Bid Proposal as accepted by the Owner, shall be binding upon the parties to this Agreement as if fully set forth therein. Whenever the term Contract Documents is used it shall mean and include the conditions, specifications and addenda. In case of conflict or inconsistency between the provisions of the signed portions of the Contract Documents and those of the specifications, the provisions of the signed portions shall govern.

2. REPRESENTATIONS OF THE CONTRACTOR

The Contractor represents and warrants:

- a. That he is financially solvent and that he is experienced and competent to perform the type of work required under this contract and that he is able to furnish the plant, materials, supplies, or equipment that may be necessary to perform the work as specified.
- b. That he is familiar with all Federal, State and municipal laws, ordinances, orders, and regulations which may in any way effect the project work, or the employment of persons thereon, including but not limited to any special acts relating to the work or to the project of which it is a part.
- c. That he has carefully examined the specifications and addenda, if any, and that from his own investigations, he has satisfied himself as to the nature of the work, the character of equipment and other facilities needed for the performance of the work, the general and local conditions, and all other items that may affect the work.

3. CONTRACTOR'S OBLIGATIONS

The Contractor shall perform all work in a good workmanlike manner, and in accordance with the specifications and any supplements thereto, and according to any directions or orders given by the Owner unless otherwise stipulated. He shall furnish all supplies, equipment, tools and anything else necessary or proper to perform and complete the work required by this contract, except for those items furnished by the owner. He alone shall be responsible for the safety, efficiency, and adequacy of his plant, equipment, and methods and for any damage which may result from their failure or their improper construction maintenance, or operation. The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the contract and shall perform the work to the satisfaction of the Owner.

The Contractor shall be solely responsible for all the work and shall provide all precautionary measures necessary for preventing injury to persons or damage to property. All injury or damage of whatever nature resulting from the work or resulting to persons, property, or the work during its progress, from whatever cause, shall be the responsibility of the Contractor.

The Contractor shall bear all losses resulting to him, including but not limited to losses sustained on account of the character, quality, or quantity of any part of the work, or all parts of the work, or because the nature of the conditions in or on the project site are different from what was estimated or indicted, or on account of the weather, elements, or other causes.

4. SUPERINTENDENCE BY THE CONTRACTOR

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Owner in every possible way.

5. COMPETENT HELP TO BE EMPLOYED

The Contractor shall employ experienced workers competent in the work in which they are to be engaged. All work shall be accomplished by able, skilled and competent personnel. If any person employed on the work by the Contractor shall appear to be incompetent or unreliable in any way, he shall be discharged immediately upon the request of the Owner and shall not again be employed on the work.

6. GENERAL WARRANTY

Neither payment for work performed nor any provision in the contract documents shall constitute an acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty workmanship or materials. The Contractor shall remedy any defects in the work and pay for any damage resulting therefrom, at no additional cost to the Owner. The Owner will give notice of observed defects with reasonable promptness.

7. SUBCONTRACTORS

If subcontractors are employed, they shall be paid for at the established prices in the Proposal without further markups. All subcontractors must be capable of performing the work to the satisfaction of the Owner and shall be held to the same qualifications and standards as the Contractor.

The Contractor shall not award work to any subcontractor other than those listed in his bid, without the prior written approval of the Owner, which approval will not be given until the Contractor submits a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work, to bind the subcontractors to the contract documents insofar as applicable to the subcontract work and to give the Contractor under any provisions of the contract documents.

Nothing contained in this contract shall create any contractual relationship between the Owner and any subcontractor.

8. ASSIGNMENTS

The Contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without the written consent of the Owner. In case the Contractor assigns all or part of any monies due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms, or corporations for services rendered or materials supplied for the performance of the work called for in this contract.

9. PAYMENT TO SUB-CONTRACTOR

The Owner assumes no obligation to pay to or to see to the payment of any sum to any sub-contractor.

10. SAFETY AND HEALTH REGULATIONS

The Contractor shall take necessary precautions for the safety of his employees, his subcontractor's employees, the Owner's employees and representatives, and the public during the duration of the Contract.

If the Contractor, in the Owner's opinion, fails to provide a safe condition at the work area, then the Owner may take control of the site and provide needed safety measures at the Contractor's expense. The fact that the Owner may retain control of the premises shall not relieve the Contractor's obligations hereunder.

In addition to the above, when and as necessary, or when required by the Owner, the Contractor shall post sign and employ watchmen or flagmen for the direction of traffic at the site.

The Contractor shall perform all work in accordance with the Norwich Public Utilities' Safety guidelines included in this document.

These contract documents are to be governed, at all times, by the applicable provisions of the Federal law(s) including but not limited to the following:

1. Williams-Steiger Occupational Safety and Health Act, 1970, Public Law 92-596;
2. Part 1910 of the Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.

3. This project is subject to all of the Safety and Health Regulations (CFR 29, Part 1926 and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974.
4. Any and all safety and health standards as noted in the Technical Specification.

In the event of any inconsistencies between the above laws and regulations and the provisions of these contract documents, the laws and regulations shall prevail.

11. THE OWNER'S AUTHORITY

The Owner shall give all orders and directions considered under this contract and specifications relative to the execution of the work. The Owner shall determine the amount, quality, acceptability, and fitness of the equipment which are to be used under this contract. The Contractor shall employ no plant, equipment, materials, methods or men to which the Owner objects. The Owner's decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Owner shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected by such questions.

12. RIGHT OF THE OWNER TO TERMINATE THE CONTRACT

The contractor agrees that if at any time during the term of this contract the Owner determines that the contractor is negligently, incompetently, or unsafely performing the work or any part thereof, or is unable to the satisfaction of the Owner to perform the same, or is not complying with the direction of the Owner or its agents or is otherwise failing to perform this contract in accordance with all of its terms and provisions, the Owner may, at its election at any time thereafter, terminate this contract. Upon the date so specified, this contract shall terminate; but upon such termination shall not prejudice or waive any rights of action which the Owner may have against the contractor because of any default or failure in performance of this contract.

13. TERMINATION FOR CONVENIENCE

The Owner hereby reserves the right to terminate the performance of this contract for any reason the Owner deems appropriate. The Owner will pay all actual costs to date of termination; however, the Contractor shall not be entitled to any profit on unearned work.

14. INSPECTION

The Owner shall have the right, at its own expense, to inspect all written licenses, permits, or approvals issued to the Contractor which are applicable to this contract, inspect all work covered by this contract and inspect or audit any of the Contractor's or Subcontractor's records and accounts pertaining to this contract.

15. OWNER'S RIGHT TO DO WORK

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this contract, the Owner, after five (5) days written notice to the Contractor may, without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment, then or thereafter due the Contractor.

16. SEPARATE CONTRACTS

The Owner reserves the right to let other contracts in connection with the work associated with this contract. The primary, or successful bidder, shall understand that in the event of an emergency, or if so many projects are occurring simultaneously that their workers and equipment cannot do the work, the Owner reserves the right to call upon the secondary bidder for the use of their workers and equipment.

17. CONTRACTOR'S INSURANCE

Each Bidder must be able to enter into contract, covering the work, within 10 days from the acceptance of his proposal. The successful bidder must, within 10 days from the date of acceptance of his proposal, file with the Owner, Workmen's Compensation, Comprehensive General Liability, Comprehensive Auto Liability, Certificates of Insurance satisfactory to the Owner, in compliance with the law, and in the following form and amount:

Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:

1. Premises Operations, including X, C and U coverage as applicable.
2. Independent Contractor' Protective.
3. Products and Completed Operations.
4. Personal Injury Liability with Employment Exclusion deleted.
5. Contractual.
6. Owned, non-owned and hired motor vehicles.
7. Broad Form Property Damage including Completed Operations.

Workers' Compensation

State:	Statutory
Voluntary Compensation (by any exempt entities)	Same as State Workers' Compensation
Employer's Liability	\$1,000,000 Each Accident \$1,000,000 Disease, Policy Limit \$1,000,000 Disease, Each Employee

General Liability (Including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage):

- (a) Bodily Injury: \$1,000,000 Each Occurrence
 \$3,000,000 Aggregate

 - (b) Property Damage: \$1,000,000 Each Occurrence
 \$3,000,000 Aggregate

 - (c) Contractual Liability (Hold Harmless Coverage) or included in Commercial
General Liability Coverage:
 - (1) Bodily Injury: \$1,000,000 Each Occurrence

 - (2) Property Damage: \$1,000,000 Each Occurrence
 \$3,000,000 Aggregate

 - (d) If General Liability policy includes a General Aggregate, such General Aggregate
shall not be less than \$3,000,000. Policy shall be endorsed to have General
Aggregate apply to this Project only.
3. Umbrella Excess Liability or \$5,000,000 excess which would not require retention.
\$5,000,000 over Primary Insurance
4. Comprehensive Automobile Liability (owned, non-owned, hired):
- (a) Bodily Injury: \$1,000,000 Each Occurrence
 \$3,000,000 Aggregate

The City of Norwich (Owner) and Norwich Public Utilities shall be named as additional insured on the above coverage's.

If subcontractors are employed, same limits as named above shall apply and the certificate of insurance must be filed with the Owner.

No contract shall be binding upon the Owner until Comprehensive General Liability, Comprehensive General Auto Liability and Workmen's Compensation policy certificates indicated above have been filed with the Owner and approved as to form and sufficiency by the Owner. The insurance policy certificate provided by the successful bidder and all subcontractors shall carry a statement by the insurance company that the Owner will receive at least ten (10) days' notice prior to cancellation of any portion of the policies or any modifications in the insurance coverage that may affect the Owner's interest. The cost of all insurance coverage shall be included in the price of the contract cost.

The insurance company must be licensed to do business in the State of Connecticut and must be satisfactory to the Owner.

18. INDEMNITY OF OWNER BY CONTRACTOR

The Contractor shall indemnify and save harmless the Owner against any and all damages to property, or injuries to or death of any person or persons, including property and employees or agents of the Owner. The Contractor shall defend, indemnify and save harmless the Owner from any and all claims, demands, suits, actions or proceedings of any kind or nature including workmen's compensation claims, of or by anyone whomsoever, in any way resulting from or arising out of the operations in connection herewith.

19. SPIRITUOUS LIQUORS AND DRUGS

The Contractor shall neither permit nor suffer the introduction or use of spirituous liquors upon the work embraced in this contract. Illegal substances or drugs of any kind unless ordered by a physician are prohibited. Any employee found using spirituous liquors, illegal substances or drugs of any kind unless ordered by a physician shall be immediately discharged.

20. PROHIBITING EMPLOYEE DISCRIMINATION BY CONTRACTOR

The Contractor agrees and warrants that in the performance of this contract he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religion, national origin, sex, or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved in any manner prohibited by the laws of the United States or of the State of Connecticut, and further agrees to provide the commission on human rights and opportunities with such information requested by the commission concerning the employment practices and procedures of the Contractor as relate to the provisions of this section.

21. CLAIMS FOR ADDITIONAL COMPENSATION

The contractor shall perform and provide services under the contract and shall not be entitled to any compensation in addition to the amount provided under the contract for the term of the contract.

22. USE OF "HE", "HIS" OR "HIM"

Whenever in these specifications the masculine words, "he", "his", or "him" are used pertaining to the Contractor, Owner, Engineer or any other entity or person it shall be for brevity, and in no way is any sexual discrimination intended.

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Special Conditions / Specifications

1. Qualifications of Bidder:

- A. Assign and identify a Project Manager who has a minimum of five years of gas project management experience
- B. Provide at least three references of utility customers who have experience with the proposed vendor for similar work in the past.
- C. Have an established real-time web-based Operation's Dashboard that provides real-time leak survey status metrics.
- D. Established call center for the use of scheduling inaccessible (inside) meter inspections during the Public and Residential walking surveys.
- E. Personnel Qualifications:
 - a. All personnel performing surveys will have a minimum of 2 years' experience performing mobile and walking gas leakage surveys. Details and references to be provided on experience sheet.
 - b. All personnel will be Operator Qualified (OQ) through the Northeast Gas Association
 - i. Minimum NGA tasks 6, 8, 18, 19, 20, 23, 24, 70
 - ii. OQ documentation provided prior to bid award
 - iii. OQ documentation provided prior to any personnel changes
 - c. All personnel will be subject to DOT Drug & Alcohol testing per 49 CFR Part 199
 - i. Drug & Alcohol program documentation provided prior to bid award
 - ii. Drug & Alcohol documentation provided prior to any personnel changes
 - iii. NPU will be notified immediately of any failures
 - iv. Annual report will be provided to NPU providing test results for 49 CFR Parts 199.119 and 199.229

2. Equipment Requirements

- A. The bidder's equipment shall be of good quality and it shall be maintained in good working condition so as to preclude any unnecessary breakdowns causing job hold-ups, as would be caused by improper maintenance. Therefore, bidder shall, as an integral part of this bid, list all equipment that is mandatory for use on these jobs, whether portable or vehicular, stating the name, manufacturer, year, model, capacity, present condition, number of breakdowns the previous year, average length of time for repairs. The Owner reserves the right to inspect the equipment before awarding the bid. The Owner is not responsible to pay for delays resulting from equipment breakdown.
- B. Flame Ionization (FI) Unit - Bascom Turner or equivalent
- C. Combustible Gas Indicator (CGI) unit - Bascom Turner or equivalent
- D. Global Positioning System (GPS) unit with field data collection device
 - a. All GPS/GIS data must meet the following requirements
 - i. Data must be delivered in an ESRI compatible format
 - ii. GPS locations collected at sub-meter accuracy
 - iii. Data delivered in State Plane NAD 83 horizontal datum
 - iv. Unique identifier to reference back to NPU's gas distribution GIS data

- E. Vehicle and pump system for mobile driving survey
- F. All survey equipment is required to follow manufactures recommended calibration procedures. Documentation of calibrations shall be submitted to owner every month.

3. Project Scope

- A. Mobile Patrol:** Mobile leak survey of all 150 miles of natural gas distribution mains by use of a vehicle equipped with a flame ionizer detector (FI) driving less than 5mph and a portable FI for areas where vehicle access is prohibited including but not limited to non-paved right of ways, meter regulator stations and bridge crossings. In addition the contractor needs to collect GPS breadcrumb data during survey in order to properly document if a main has been surveyed. In order to comply with 192.721 this phase needs to be completed during April-May time frame.

- B. Business District \ Public Walking Survey:** Walking leak survey of approximately 900 services in NPU designated Business Districts and other public buildings for example schools, places of worship and community centers. The survey is from main to meter using FI for underground piping and Combustible Gas Indicators CGI for all above ground piping and meter set. In order to comply with 192.723 this phase needs to be completed during June-July time frame.

- C. Walking Residential Survey:** Walking leak survey of a 1/3 of NPU's residential services and all bare steel services totaling approximately 3000. The survey is from main to meter using FI for underground piping and Combustible Gas Indicators CGI for all above ground piping and meter set. In order to comply with 192.723 this phase needs to be completed during August-October time frame.

- D. Winter Patrol:** Mobile leak survey of all 15 miles of cast iron natural gas distribution mains by use of a vehicle equipped with a flame ionizer detector (FI) driving less than 15mph and a portable FI for areas where vehicle access is prohibited including but not limited to non-paved right of ways. In addition the contractor needs to collect GPS breadcrumb data during survey in order to properly document if a main has been surveyed. In order to comply with 192.721 this phase needs to be completed once a month starting in November and ending in March.

- E. Customer Communication:** An NPU approved postcard will be mailed to all customers affected by walking surveys (Project Scope items 3B and 3C). The mailing list will be supplied by NPU.

- F. Inside Meter Management:** The vendor is responsible for the management of inside meter inspections including the scheduling, communications and documentation of all levels of inspections. Below is a step by step process NPU requires.
 - i. Field Inspector will attempt cold call
 - ii. If step (i) is unsuccessful then the technician will leave an NPU approved door hanger that includes contact information to schedule appointment with Vendor.
 - iii. If step (ii) is unsuccessful after 2 weeks, an NPU approved postcard will be sent by Vendor to customer attempting to schedule an appointment with Vendor for inspection.
 - iv. If step (iii) is unsuccessful after an additional 2 weeks a final phone call performed by Vendor.
 - v. If step (iv) is unsuccessful then Document as No Access

4. Leak Classification

- A. Classify Leaks per NPU Operations and Maintenance Manual
- B. Notify NPU Gas General Foreman or his designee of all class I leaks by phone as they are found
- C. Notify NPU Gas General Foreman and Field Service General Foreman of all class II & III leaks daily
- D. During Leak inspection it is expected that the contractor barhole all 4 directions from highest reading until 0% gas found and document accordingly

5. Required Deliverables

- A. Daily log of work performed handed into Field Service General Foreman
- B. Daily Leak Inspection Sheets handed into Field Service General Foreman
- C. End of Phase Data Deliverables
 - i. GIS file of all gas main surveyed during Mobile Survey Phase including survey date, technician, breadcrumb count within 25 feet of main and any other notes pertinent to survey.
 - ii. A surveyed main is defined by having a minimum count of GPS points (bread crumbs) within 25 feet of pipe. The minimum count of breadcrumbs is calculated by length (feet) of pipe divided by max speed of surveying vehicle and will be supplied by NPU.
 - iii. If the pipe has been confirmed as surveyed but doesn't meet the above requirements then an explanation needs to be included in data (ex. Poor GPS Quality, Confirmed with Tech).
 - iv. All breadcrumb data used for calculated surveyed mains
 - v. GPS location with attribution data of all Leak inspections
 - vi. GIS file of all services surveyed with survey date and technician. *This does not have to conform to breadcrumb validation rules above.*
 - vii. GIS file of all meter inspections including those inaccessible including all attempts.
 - viii. All final data is expected within 30 days of completion of survey phase
- D. Owner reserves the right to request survey data at any time during the project.

6. GIS Data to be supplied by NPU at Project Kick-off

- A. Distribution Mains with relevant attribution data (Material, Size, Install date etc)
- B. Services to be surveyed for given year
- C. Known existing leaks in our system at time of data extract.
- D. Schema of all data to be captured as described above.
- E. Mailing lists

PROPOSAL
NORWICH PUBLIC UTILITIES
NORWICH, CONNECTICUT

Gas Leak Detection Survey

Date: _____

City of Norwich
City Hall
Norwich, Connecticut 06360

The undersigned _____ doing
business in _____
County of _____ State of _____, has examined
the site where the proposed work is to take place and has carefully read the Information to
Bidders, General Conditions, Special Conditions, Technical Specifications, Addenda, and
examined any drawings therein referred to and he proposes and agrees that he will contract with
the City of Norwich, CT in the form of Contract deposited in the Office of the Purchasing Agent,
City Hall, Norwich, Connecticut to provide all necessary machinery, tools, apparatus, equipment,
and do all the work and furnish all the materials specified in the contract, called for in the
specifications or shown on the drawings in the manner and time prescribed and according to the
requirements of the engineer, as herein set forth and that he will take in full payment, therefore,
the following sums to wit:

This Bid includes Addenda numbered (to be filled in by Bidder if Addenda are issued).

- 1. The Contractors has read and familiarized themselves with the Norwich Public Utilities Safety Guidelines included in these Specifications. _____ (Check on line).**

BID PROPOSAL
NORWICH PUBLIC UTILITIES
NORWICH, CONNECTICUT

Gas Leak Detection Survey

TO: City of Norwich
City Hall
Norwich, Connecticut 06360

FROM: _____

The undersigned, having familiarized (himself, itself, themselves) with the existing conditions affecting the cost of the work, and with the Contract Document for the ***Gas Leak Detection Survey*** and hereby proposes to furnish all supervision, technical personnel, labor, materials, equipment, tools, appurtenances, services, materials not supplied by the Owner, and anything else necessary, including utility and transportation services required to perform and complete this Contract, all in accordance with the Contract Documents at and for the unit prices for work in place for the following work items.

The quantity of the units shown below is given for the purpose of determining the Award. The Owner reserves the right to increase or decrease these quantities. Payment to the Contractor will be based on completed measured quantities of these work items.

The contractor shall be responsible to furnish all necessary labor, supervision, equipment, tools, and everything else needed to perform leak surveys. All work shall be performed in accordance with the City's specifications, the City of Norwich Department of Public Utilities (NPU) Regulations, and all applicable Federal, State, and Local codes and Standards as amended.

COST PROPOSAL

Bid Cost Sheet			
Line Item Description	Estimated total	Per Unit Price	Subtotal
<u>Mobile Patrol</u> <i>(Special Conditions / Specifications Section 3A)</i>	150 miles	\$ /mile	\$
Leak Pin-Pointing	100 Leaks	\$ /leak	\$
<u>Public & Residential Walking Survey</u> <i>(Special Conditions / Specifications Section 3B & 3C)*</i>	4000 services	\$ /service	\$
Meter Inspection (revisits)**	450 revisits	\$ /insp.	\$
Header repair***	250 repairs	\$ /repair	\$
<p><i>*The per service unit price includes all accessible meter inspections</i></p> <p><i>**The meter revisit price includes all meter inspections at a location</i></p> <p><i>***Header repair cost includes (permanent or temporary) that can be completed within 15 minutes at a location.</i></p>			
<u>Winter Patrol</u> <i>(Special Conditions / Specifications Section 3D)</i>	15 miles (each month)	\$ /mile	\$
<u>Customer Communication</u> <i>(Special Conditions / Specifications Section 3E)</i>	6000 mailings	\$ /mailing	\$
<u>Inside Meter Management post card mailings</u> <i>(Special Conditions / Specifications Section 3F(iii))</i>	200 mailings	\$ /mailing	\$
<u>Inside Meter Management final phone call</u> <i>(Special Conditions / Specifications Section 3F(iv))</i>	100 calls	\$ /call	\$
Total Bid Price			\$

The undersigned has checked carefully all the above figures and understands that the Owner will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informality in the bidding. The bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

Bidder understands that the Owner reserves the right to perform any portions of the above unit price work on prospective projects without invalidating this bid.

Respectfully submitted:

By _____
(Signature)

(Printed Name)

(Title)

(Business Address)

(SEAL - if bid is by a corporation)

(Telephone Number)

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder:
2. Permanent main office address:
3. When organized:
4. If a corporation, where incorporated:
5. How many years have you been engaged in the contracting business under your present firm or trade name?
6. Contracts on hand: (Schedule these, showing amount of each contract and the appropriate dates of completion)
7. General character of work performed by your company:
8. Have you ever failed to complete any work awarded to you? If so, where and why?
9. Have you ever defaulted on a contract? If so, where and why?
10. List projects similar to this that your organization completed within the last 5 years? The contractor shall attach a summary of such work that identifies:
 - Name of Owner
 - Date of Work
 - Contract Amount
 - Brief Description of Work
11. Experience in work similar in importance to this project.

PROPOSED SUBCONTRACTORS

THE BIDDER SHALL STATE THE NAMES OF ALL THE SUBCONTRACTORS THAT HE PROPOSES TO USE. ATTACH ADDITIONAL SHEETS IF NEEDED.

If none, write "None" _____

.....
*Description of Work _____

Proposed Subcontractor, Name _____

Address _____

.....
*Description of Work _____

Proposed Subcontractor, Name _____

Address _____

.....
*Description of Work _____

Proposed Subcontractor, Name _____

Address _____

.....
*Insert description of work and subcontractors' names as may be required.

This is to certify that all names of the above-mentioned subcontractors are submitted with full knowledge and consent of the respective parties.

The Bidder warrants that none of the proposed subcontractors have any conflict of interest as respects this contract.

Bidder _____
(Fill in Name)

By _____
(Signature and Title)

PROPOSED SUPPLIERS

THE BIDDER SHALL STATE THE NAMES OF PROPOSED MATERIAL SUPPLIERS FOR THE PROJECT. ATTACH ADDITIONAL SHEETS IF NEEDED.

If none, write "None" _____

.....
*Description of Material _____

Proposed Supplier, Name _____

Address _____

.....
*Description of Material _____

Proposed Supplier, Name _____

Address _____

.....
*Description of Material _____

Proposed Supplier, Name _____

Address _____

.....
*Insert description of work and suppliers names as may be required.

This is to certify that all names of the above-mentioned suppliers are submitted with full knowledge and consent of the respective parties.

The Bidder warrants that none of the proposed suppliers have any conflict of interest as respects this contract.

Bidder _____
(Fill in Name)

By _____
(Signature and Title)

The Bidder acknowledges the receipt of the following Addenda:

Norwich Public Utilities
Gas Leak Detection Survey

Addendum No. _____, dated _____

Addendum No. _____, dated _____

Addendum No. _____, dated _____

Enclosed is the Bidder's Bond, Certified Check or Cashier's Check No. _____ in the amount of Ten Thousand Dollars.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informality in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

Respectfully submitted:

By _____
(Title)

(Business Address)

(Telephone Number)

(Email / Fax Number)

(SEAL - if bid is by a corporation)

BID BOND

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned, _____ of _____ (hereinafter called the Principal) as Principal, and _____ a corporation organized and existing under the laws of the State of _____ and duly authorized to transact a surety business in the State of Connecticut (hereinafter called the Surety), are held and firmly bound unto the City of Norwich as Owner, in the penal sum of _____ in lawful money of the United States of America, for the payment of which sum, well and truly made to the Owner, we bind ourselves, our heirs, successors, and assigns, jointly and severally, firmly by these presents has herewith submitted a bid for the for the contract for the _____ project, bids for which are scheduled to be opened on _____

THE CONDITION OF THIS OBLIGATION is such, that whereas the Principal has herewith submitted a bid for the contract for the above referenced project

NOW, THEREFORE, if the following conditions are satisfied, this obligation shall become void:

- a) the Principal shall not withdraw its bid within _____ days after the bid opening of the same without the consent of the Owner, and
- b) the Owner shall award said project to the Principal in writing, and
- c) the Principal shall, as required by the Owner pursuant to the bid specifications for the project, execute a contract in writing for the project within the time specified by the Owner, after being notified by the Owner in writing of the award, including all submissions relating to that contract execution as may be required by the bid specifications, to be submitted to the Owner prior to contract execution, and
- d) the Principal shall deliver such surety bond as shall be acceptable to the Owner for the performance of the work according to said written agreement (contract), and shall in all other respects perform the agreement created by the acceptance of said bid.

Otherwise, the Principal and Surety hereto agree to pay unto the Owner the difference between the amount of the bid of said Principal, submitted herewith, and the amount for which the Owner may contract with another party to perform the work covered by the said bid of the Principal.

The Surety executing this instrument hereby agrees that its obligation shall not be impaired by any extension(s) of the time for contract execution that the Principal and Owner may agree to, notice of which extension(s) to the Surety being hereby waived; provided that such waiver of notice shall apply only with respect to extensions aggregating not more than _____ calendar days in addition to the original _____ days allowed for expiration of this bid bond.

IN TESTIMONY WHEREOF, the said Principal and Surety have caused this bond to be signed by their duly-authorized representatives and have caused their names and corporate seals to be affixed on this form on the respective dates of their signatures.

Surety

Principal

Print Surety Name

Print Name

Agent's signature and date. **Enclose a valid date**

Signature of Authorized Representative and

Power of Attorney

Norwich Public Utilities
Gas Leak Detection Survey

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal was then _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was his duly signed, sealed, and attested to for and in behalf of said corporation by authority of this governing body.

(Corporate Seal)

Title: _____

NORWICH PUBLIC UTILITIES SAFETY GUIDELINES

CONTRACTOR REQUIREMENTS

1.0 Contractor Responsibilities

Introduction:

The following are the Norwich Public Utilities contractor safety requirements. You, the Contractor are to read this material carefully and be prepared to sign and date the back page indicating that you will comply with these requirements. Please feel free to contact Klaus F. Broscheit, Norwich Public Utilities Safety Officer (508) 776-9713 with any questions.

Prior to Operation:

- 1.1 General safety operating requirements will be discussed at the Contractor's Orientation Meeting, prior to the start of the job.
- 1.2 The contractor must advise the Norwich Public Utilities Project Manager of hazards associated with their proposed work operation (chemicals, gases, dusts, radiation). Contractors will not be permitted to bring hazardous chemicals or materials onto Norwich Public Utilities property without first providing the Material Safety Data Sheet, in advance, to the General Manager of Operations for approval by the Norwich Public Utilities Safety Officer. (See Guide 1 and 2 for additional Hazcom and Chemical Handling information and requirements).

2.0 Supervision of Employees

- 2.1 All contractors who conduct work at any Norwich Public Utilities facility will be responsible for complying with all applicable Federal, State, Local, OSHA and Norwich Public Utilities Environment, Health and Safety regulations. The contractor is responsible for notifying his/her personnel of specific hazards, emergency procedures, safe work practice, and safety rules which must be followed while on the job site.
- 2.2 The contractor is responsible for supervision of his/her work force and any subcontractors with regard to all aspects of the project. He/She agrees that all procedures discussed during the orientation are understood by the workers and will be followed.

- 2.3 The contractor will be responsible for providing his/her employees with medical care and first aid treatment.
- 2.4 Loose or hanging clothing, jewelry and long hair are prohibited near moving machines or parts.
- 2.5 Smoking is not permitted at any Norwich Public Utilities facility. Fire prevention and control is critical at any Norwich Public Utilities facility. Please review Guide 3 "Fire Protection and Prevention" for additional requirements.

3.0 Safety Equipment

- 3.1 The contractor is responsible for compliance with Norwich Public Utilities and OSHA regulations with regard to furnishing their employees with all necessary personal protective equipment and all tools and equipment needed to perform service at a Norwich Public Utilities facility. Norwich Public Utilities PPE; tools and equipment shall not be allowed to be used by contract personnel unless authorized in advance by NPU.
- 3.2 Hard hats must be worn in all areas where work is being performed.
- 3.3 Eye protection shall be worn when performing a task which may endanger sight, and in all designated areas where safety glasses are required. (See Guide 4 "Personal Protective Equipment" for additional PPE information and requirements).
- 3.4 Hearing protection shall be worn as required. (See Guide 5 "Hearing Conservation" for additional information and requirements).

4.0 Work Area

- 4.1 The contractor is not permitted to manipulate any switch controls, valves or instruments without advance approval. The contractor will request permission, in advance, before commencement of any work on piping, electrical distribution systems, or utility systems.
- 4.2 Equipment lock-out mechanisms (locks and tags) shall be used in accordance with OSHA standards Lockout/Tagout Procedures.
 - A. Contractors will comply with OSHA 29 CFR 1910.269(d) or 29 CFR 1910.147 standards, "The Control of Hazardous Energy", and shall not

begin work until procedures are coordinated with Norwich Public Utilities representatives.

B. Norwich Public Utilities locks and/or tags may be added (in addition) to outside contractor locks, and shall not be removed until a Norwich Public Utilities representative determines that it is safe to re-engage the energy source.

4.3 Practice good housekeeping at all times. Do not leave materials or equipment blocking aisles, walkways, stairs or other paths of egress.

4.4 Defective tools or equipment shall not be used. All tools and extension cords shall meet or exceed applicable standards.

4.5 Equipment requiring guards and safety devices shall be in good operating condition and shall have all guards in place and all safety devices working properly.

4.6 All ladders shall be ANSI approved and used in accordance with OSHA standards. All ladders shall be inspected each time before use.

4.7 Machinery and equipment shall not be started before a thorough check of the work area has been made by the project manager to assure that people are clear of any moving parts or operations, and all affected employees have been notified.

4.8 No person shall activate or operate powered industrial equipment without proper authorization.

4.9 No confined space will be entered by contractor personnel unless they follow recognized safe confined space entry procedures such as in U.S. NIOSH guidelines, ANSI Standard or other comparable State, Local, or Federal regulations. A confined space is defined as a vessel, tank, pipeline, pit or enclosed space where dangerous air contamination or lack of oxygen may be present due to a manufacturing process or work procedure, or where an egress path may be limited.

A. The Norwich Public Utilities Safety Consultant shall be notified of any planned confined space entries.

B. No personnel shall enter a confined space before a permit has been completed and posted on site.

C. All contractors must supply their own monitoring and safety equipment for confined space entry.

- 4.10 Contractors will observe and honor all signs posted in the area in which they are working. Restricted areas are not to be entered without the express direction of the project manager.
- 4.11 Personal fall protection is required when working on unprotected surfaces 6 feet or more above ground. (See Guide 6 “Working at Elevations” for additional information and requirements when working at elevations).
 - 4.11.1 Electrical Safety is a critical concern to Norwich Public Utilities. All work related equipment is to be de-energized unless live circuit/equipment testing and maintenance is required. Line work can only be performed by “Qualified and Trained Employees” wearing the appropriate PPE and arc blast protection. NFPA 70-E requirements are to be enforced for all live work. (See Guide 7 “Electrical Safety” for additional information and requirements).
- 4.12 Any required Excavations shall follow the applicable OSHA standards. See “Guide # 8 – Excavations and Trenches” for additional contractor information and requirements.

5.0 Disclaimer

The provisions of this section should be considered as an introduction and not a substitute for a thorough understanding of the subjects. Furthermore, it is for information purposes only. This Document does not relieve the Contractor of its obligations to (1) control the manner and means by which it and its employees, subcontractors and agents perform work or services for Norwich Public Utilities and (2) independently ascertain what health and safety practices are appropriate and necessary for the performance of such work or services. Contractors are expected to be familiar with and follow appropriate health and safety practices, including those required by the Federal Occupational Health and Safety Act (“OSHA”) and those set forth in applicable Occupational Safety and Health Administration (OSHA) regulations, as well as any other applicable federal, state or local code.

**CONTRACTORS SAFETY REQUIREMENTS
ACKNOWLEDGEMENT FORM**

I have received copies and read all the NORWICH PUBLIC UTILITIES
"Contractors Safety Requirements" including the accompanying Guides. I
understand these rules and agree to comply with them in entirety.

Contractor Representative

Company Name

Date

This signed document was given to the following NORWICH PUBLIC UTILITIES
representative:

NORWICH PUBLIC UTILITIES Representative

Date

GUIDE 1: HAZARD COMMUNICATION

OVERVIEW

OSHA requires that the hazards associated with all chemicals used or stored at a job site be evaluated. This information must be communicated to employees who may be exposed to these chemicals or use them in their daily jobs. The process for informing employees about the chemicals, their locations and potential hazards is called a Hazard Communication (HAZCOM) program. In general, this program includes requirements and procedures for container labeling and other forms of warning procedures for obtaining and retaining material safety data sheets (MSDSs) and employee training.

MINIMUM HAZCOM REQUIREMENTS

In order to work at any Norwich Public Utilities facility or on any project, all contractors must, at least, meet the following requirements:

1. If any hazardous material is used or stored at the job site, the contractor's written HAZCOM program must be available to all contractor and Norwich Public Utilities personnel for review upon request.
2. The HAZCOM program must include procedures for:
 - Labeling containers and the use of warning forms;
 - Obtaining and retaining MSDSs;
 - Specific worker training requirements;
 - Documentation that these training requirements have been completed by each worker;
 - A list or inventory of hazardous material at the job site.
3. The contractors' supervisor must inform all workers about the hazardous material at the job site when they are first assigned to a project and whenever a new hazardous material is brought to the site.
4. Workers must be informed of the location of:
 - The HAZCOM program;
 - The list/inventory of hazardous substances;
 - The locations of MSDSs and the procedures for obtaining a copy of an MSDS;
 - These must all be available for each worker to review during their work period.
5. The Norwich Public Utilities representative must be informed of all chemicals brought to the site.
6. Each contractor must obtain information from the Norwich Public Utilities representative regarding chemicals that Norwich Public Utilities uses or stores at the site.
7. When more than one contractor is working at a job site, each contractor must inform the other(s) concerning the location of their MSDSs and procedures for labeling and worker protection.
8. **THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE HAZCOM PROGRAM ON THE JOB SITE.**
9. All containers will be labeled.
 - Labels on hazardous material containers will not be defaced or removed.
 - The labels will identify the substance in the container and appropriate warnings about the substance.
 - The material identity will match the material currently in the container, its MSDS, and the overall list/inventory.

10. An MSDS must be available at the job site for every chemical that is present at the site.

- A documented training program will be provided to every worker at the job site. This training will include:
 - Information regarding the HAZCOM program;
 - Health and environmental hazards of every chemical used at the job site;
 - Ways to detect the presence of hazardous materials at a job site (including monitoring methods and devices used);
 - How to read and understand the information contained on an MSDS; and
 - How workers can protect themselves from harmful exposure (e.g., safe work practices, personal hygiene, and protective equipment).

GUIDE 2: CHEMICAL SAFETY AND HANDLING

OVERVIEW

Federal and State laws as well as Norwich Public Utilities require that specific procedures are followed to properly handle chemicals to protect workers and prevent spills. These procedures include those for storing, handling, transferring and processing chemicals.

MINIMUM CHEMICAL SAFETY AND HANDLING REQUIREMENTS

Prior to working at any Norwich Public Utilities facility or project, all contractors must, at a minimum, meet the following requirements.

1. The contractor must assure that the equipment brought into a Norwich Public Utilities site to deliver or store hazardous chemicals is in good condition and that all equipment required is operating.
2. Contractor personnel must be licensed and/or have the necessary handling permits or certifications. Documentation must be present with the driver or on the vehicle at all times for inspection by a Norwich Public Utilities representative.
3. Contractor personnel must be thoroughly familiar with operation of equipment and the use of materials or chemicals used at any Norwich Public Utilities facility.
4. Contractor personnel should have knowledge of the physical properties, hazards and personal protective equipment (PPE) required. All contractor personnel shall be provided with appropriate PPE for the chemicals and hazards present.
5. Spill response equipment shall be available on location to contain or control a reasonably anticipated release or spill. All chemical spills at a Norwich Public Utilities facility or location must be reported to a Norwich Public Utilities authorized representative immediately upon discovery.
6. Contractor will provide to Norwich Public Utilities a complete inventory of chemicals brought onto a Norwich Public Utilities facility or location. Contractor must have all material safety data sheets (MSDS) for the material carried and available on request.
7. At the end of the project the contractor shall remove any chemicals that were not used.

GUIDE 3: FIRE PROTECTION AND PREVENTION

OVERVIEW

Fire safety and prevention is critical to the effective operations of Norwich Public Utilities facilities. Norwich Public Utilities focuses on responsibly safeguarding human and business assets to avoid a fire or explosion that may cause injury or disrupt operations. All contractors performing construction and maintenance operations must implement measures to prevent and control fires, if one occurs.

FIRE PREVENTION AND FIRE CONTROL REQUIREMENTS

Prior to working at any Norwich Public Utilities facility or project, all contractors must, at a minimum, meet the following requirements.

1. The contractor program must identify the fire protection requirements and procedures.
2. The contractor must identify personnel who are trained in the use of fire extinguishers and fire fighting techniques and can fight a fire during the early or incipient stage.
3. A Norwich Public Utilities Representative will be informed of all fire or explosion occurrences.
4. Ensure all field offices, shanties and storage facilities are constructed in accordance with applicable codes and fabricated noncombustible material for protection against fire.
5. The contractor must identify and inform Norwich Public Utilities operations that present a potential fire hazard, for example hotwork (welding, grinding and cutting) and the use of flammable liquids and gases.
6. Contractor must implement procedures to eliminate and control fire hazards including housekeeping, electrical safety, safety procedures for hot work, storage and handling of flammable and combustible liquids and compressed gases.
7. Good housekeeping standards must be enforced in the work area, including the requirements that waste, rubbish and flammable materials and rags be removed from the area daily.
8. All waste, rubbish and flammable materials must be stored in approved containers.
9. Non combustible tables or shelves, or protected work area will be used for hot work.
10. Storing flammable liquids in approved safety cans that are painted red with a yellow band around the can and labeled to identify the contents.
11. Storing combustible liquids in green safety cans that are labeled to identify the contents.
12. Storing all Flammable Combustible Liquids (FCL's) in closed approved metal cabinets and only storing quantities of these liquids on-site that do not exceed the minimum amount required for efficient operation.
13. Prohibit the use of gasoline and other highly flammable liquids for cleaning.
14. Using approved pumps or approved self-closing faucets and drip pans when dispensing FCL from drums or portable tanks.
15. Class B/C rated fire extinguishers will be located in close proximity to FCL areas and monthly and annual inspections will be performed to ensure that the units are ready for use.

16. In the event of a fire involving compressed gases, the gases will be permitted to burn and not extinguished, under any circumstances.
17. Oil, grease and highly volatile liquids must not be stored near oxygen cylinders.
18. Smoking is prohibited near flammable or combustible liquids and gases.
19. Using liquefied petroleum gas (LPG) indoors for cutting and/or welding operations shall be limited to small quantities and no more than a 1-pound bottle shall be stored in the building.
20. Open flames or spark-producing tools must not be used in any enclosure where an explosion concern may exist until testing indicates that an explosion hazard does not exist.
21. Obtain a NPU Hot Work permit if working in vicinity of a natural gas regulator or LNG facility.

GUIDE 4: PERSONAL PROTECTIVE EQUIPMENT

OVERVIEW

For many tasks, personal protective equipment (PPE) is as essential to the job as any tool. OSHA requires that every employer evaluate all tasks associated with a project to determine the hazards associated with these tasks and the appropriate PPE to be worn by each affected employee. This hazard assessment must be documented.

MINIMUM PPE REQUIREMENTS

In order to perform work at any Norwich Public Utilities facility or project, all contractors must, at least, meet the following requirements.

1. All employers must conduct a hazard assessment prior to the start of every project and as conditions change on the project to determine the types of PPE necessary for each task.
2. The results of the hazard assessment must be communicated to every employee on the project prior to the start of work and as conditions change.
3. All workers must be trained to recognize the need for and types of PPE necessary, the proper use of PPE, the limitations of PPE, and proper care and disposal of PPE.
4. All workers must be trained in the procedures for inspecting PPE prior to use to ensure it provides the required protection.
5. All PPE used must meet applicable American National Standards Institute (ANSI) standards.
6. All PPE must be maintained in a sanitary and reliable condition.
7. Where employees supply their own PPE, the employer is responsible for ensuring the adequacy, maintenance and sanitation of this PPE.
8. Hard hats must never be changed or modified in any way and must be appropriate for the type of work being performed.
9. Eye protection must be appropriate for the type of work being performed and must be equipped with side shields.
10. Burning goggles must be equipped with appropriate filtering lenses for the work being performed.
11. Gloves must provide adequate wrist and hand protection based on the tasks being performed and must be compatible with and resistant to any potential hazard (sharps, chemical, electrical, etc.)
12. Safety shoes or boots must be fitted with protective toe guards.
13. Additional PPE may be necessary for certain situations, for example overboots or rubber boots should be worn for wet conditions or chemical spills, etc.
14. Protective clothing (reusable or disposable) must be appropriate for the type of work being performed.
15. Orange or lime colored reflective vests, approved by the U.S. Department of Transportation must be worn when working in areas exposed to or adjacent to vehicle traffic.

16. Workers required to wear hearing protection must be allowed to select the type of devices they wish to wear from a number of suitable devices.
17. Flame resistant garments are required in areas where there is a potential for arc or flash.

GUIDE 5: HEARING CONSERVATION

OVERVIEW

Noise is defined as unwanted sound. Noise can cause sudden traumatic temporary hearing loss, long-term slowly occurring hearing loss that is irreversible, disruption of communication and masking of warning devices and alarms. These long-term effects may occur at noise levels lower than are constant and daily.

MINIMUM HEARING CONSERVATION REQUIREMENTS

In order to perform work at any Norwich Public Utilities facility or project, all contractors must, at least, meet the following requirements.

1. Workers must not be exposed to noise levels above those stated in the regulations.
2. All noise levels must be measured on the A-weighted scale by a trained person.
3. When noise exposure includes two or more periods at different noise levels, the combined noise exposure must be calculated.
4. When noise levels exceed the permissible limits, worker exposure must be controlled through engineering controls, administrative controls, personal protective equipment (PPE) or a combination of these.
5. Engineering controls consist of isolating, enclosing or insulating equipment or operations or substituting quieter equipment or operations.
6. Engineering controls are always preferred over other controls.
7. Administrative controls involve rotating workers to jobs having lower noise exposures and reducing the time that each worker is exposed.
8. PPE, for example earplugs and earmuffs, must be rated to reduce the noise exposure to within acceptable limits.
9. A noise exposure at or above 85 decibels on the A-weighted scale (dBA) averaged over an 8-hour time period (with or without PPE) requires a formal written hearing conservation program.
10. A hearing conservation program must include:
 - Noise monitoring;
 - Procedures for employee notification;
 - Provisions to permit employees to observe monitoring;
 - Initial and annual audiometric testing and an evaluation of the audiogram by a qualified professional;
 - A noise training program for all affected workers, and;
 - Formal record keeping.

11. The following table is a guide to common noise levels:

<u>Permissible Duration (dBA)</u>	<u>Examples of Noise Sources</u>
15	Wooded Forest
25	Quiet Bedroom
35	Library
65	Normal Speaking
75	General Office Area
85	Average Machine Shop

Action Level for Hearing Conservation Program – 85 dBA

8 Hours	90
6 Hours	92
4 Hours	95
3 Hours	97
2 Hours	100 Air Spray Operation
1.5 Hours	102
30 Minutes	110 Power Table Saw
15 Minutes	115
7.5 Minutes	120
4 Minutes	125 Rock-n-Roll Concert
2 Minutes	130 Aircraft Jet Engine/Ear Pain Threshold
NOT TO EXCEED	140

12. A standard rule of thumb for noise states that when standing face-to-face at a distance of 1 to 2 feet, if it is necessary to raise your voice to be heard, the background noise exceeds 85 dBA.

GUIDE 6: WORKING AT ELEVATIONS

OVERVIEW

Falls from elevated work areas are one of the leading causes of death each year in occupational settings. Fall prevention is provided by engineering controls such as safety railings or personal fall protection systems. Precautions should also be taken to protect personnel from falling objects. A competent person is required to manage all processes involving scaffolding to ensure that scaffolding is erected, moved, used and dismantled safely.

MINIMUM WORKING ELEVATION REQUIREMENTS

In order to perform work at any Norwich Public Utilities facility or project, all contractors must, at least, meet the following requirements.

1. Elevated surfaces include openings (pits), open-sided platforms, floors or runways, stairs, ladders, mobile scaffolding, lifting equipment (aerial lifts and ladders).
2. Work performed at elevations must include safety harnesses and lifelines including:
 - Working on unprotected surfaces 6 feet or more above the ground or water.
 - Working on scaffolding 6 feet or more above the ground not equipped with proper railing.
 - Work on lifts where portions of the railing must be removed.
3. Lifelines/harnesses must be inspected and comply with the American National Standards Institute (ANSI) standards and be used according to manufacturers' operating procedures.
4. The lanyard must be a minimum of one-half inch nylon or equivalent and must not allow a fall of greater than 6 feet or one that would contact any lower level.
5. A body harness must be worn and a lanyard attached to the boom strap when working from an aerial lift device. Body belts are prohibited.
6. All open-sided floors, platforms or runways where a fall of 6 feet or more may occur must have railings and toeboards on all open sides.
7. Approved ladders will be used and inspected before each use to ensure their integrity.
8. Scaffold planking, guardrails, ladders and toeboards must be installed on scaffolds as required by the regulations. A scaffold must be rated for four times its intended load.
9. CLIMBING ON SCAFFOLD CROSS MEMBERS IS PROHIBITED.
10. Scaffolding must be cross-braced or braced diagonally and be plumb, square and rigid. Sections of scaffolding are locked together with cotter pins if uplifting may occur.
11. Lean-to scaffolds are prohibited.
12. Loading limitation of scaffold must not be exceeded.
13. The erection, installation and use of various scaffold types will be in compliance with all laws and regulations and manufacturers operating procedures.

GUIDE 7: ELECTRICAL SAFETY

OVERVIEW

Electrical safety is an important component to any safety program. To minimize personal injury from contact with energized sources, workers must be trained in fundamentals of electrical safety and all electrical hazards on a project must be identified and corrected. Only properly licensed electricians may perform any electrical work on Norwich Public Utilities projects.

MINIMUM ELECTRICAL SAFETY REQUIREMENTS

In order to perform work at any Norwich Public Utilities facility or project, all contractors must, at least, meet the following requirements.

1. Before work begins, all electric circuits, exposed or concealed, that may be contacted by workers must be posted with warning signs.
2. All workers must be notified of the location and hazard involved with nearby electrical circuits and protective measures taken.
3. Workers must not work near any part of an electrical circuit unless they are protected against shock by guarding or by de-energizing and grounding the circuit.
4. Workspaces, walkways and similar locations must be kept free of electrical cords and tools.
5. Equipment must not be stored around electrical cabinets to prevent access.
6. Workers must inspect all electrical equipment, including extension cords, for the following hazards:
 - Missing ground pins on plugs (except double-insulated);
 - Insulation pulled free from plugs or support connections;
 - Damaged insulation;
 - Exposed wires; and
 - Evidence of arcing, sparking or smoking.
7. When any conditions are identified on equipment that makes it unsafe to operate, the equipment must be removed from the site until repaired by a qualified person.
8. Portable lamps must be covered by a fixed, grounded (if metal) guard and equipped with an insulated handle.
9. All underground utilities must be marked prior to any groundbreaking activities.
10. Flexible cords must be suitable for the condition and location of use and must be used as appropriate.
11. Three-wire extension cords must be used and must be rated for hard or extra-hard use.
12. Splices and/or taps are prohibited in extension cords.
13. Extension cords must not be fastened with staples, hung on nails or suspended on wires.
14. Workers must be trained in the safety-related work practices that pertain to their job and cannot work near electrical hazards without training to recognize and avoid the hazard.

15. Electrical workers must test all equipment to verify if energy is present.
16. Only qualified, trained workers may test electrical equipment.
17. Workers must properly lockout and tagout any circuit or equipment being worked on and verify the equipment is de-energized.
18. Personal protective equipment used by electrical workers must be appropriate and in good condition.
19. Portable metal ladders and ladders with metal reinforcement are prohibited near energized electrical equipment.
20. ALL electrical equipment used on a project (hand tools, etc.) must be protected with a ground-fault circuit interrupter (GFCI).
21. Materials must not be stored in transformer vaults.
22. AC and DC wiring systems must be properly grounded.
23. Proper clearance from overhead power lines must be maintained at all times.

Guide 8: Excavation and Trenching

Overview

Excavation operations are among the first actions taken at a project site. Accidental cave-ins of earth that has been excavated account for a large majority of fatalities each year. In many cases, workers receive no warnings when excavated ground collapses and are suddenly trapped under tons of soil.

Minimum Excavation Requirements

In order to perform work on any Norwich Public Utilities facility or project, all contractors must, at least, meet the following requirements. Please note that additional requirements may be necessary based on job-specific activities.

- ALL UTILITIES MUST BE MARKED-OUT BY APPROPRIATE AUTHORITIES PRIOR TO ANY EXCAVATION.
- A trench is considered an excavation.
- All underground hazards (electric lines, gas/water lines, boulders, etc.) must be de-energized or removed/supported appropriately.
- Hand digging must be conducted near known or suspected underground systems.
- Ramps or runways used as a means of entry/exit for excavations must be designed by a competent person.
- A ladder or other safe means of exit must be used in excavations greater than 4 feet deep and cannot be greater than 25 feet from all workers in the excavation.
- Entering an excavation during digging is prohibited.
- When the atmosphere in an excavation is/can become hazardous, Proper atmospheric testing must be conducted as required by the Confined Space Program, Section 6 in this Safety Guideline.
- Daily inspections of the excavation and surrounding areas must be conducted by a competent person before work begins and as needed during the shift.
- Excavations must be shored or braced if nearby structures (buildings, sidewalks, etc.) may become unstable.
- All material, including excavated soil, must be stored at least 2 feet from the side of the excavation.
- Workers may only pass over an excavation on properly constructed walkways/bridges with guardrails in place.
- Adequate physical barriers must be provided around all excavations.
- Adequate protective systems must be used in excavations unless:
 - The excavation is entirely in stable bedrock; or
 - The excavation is less than 5 feet deep AND has been examined by a competent person who has found no signs of potential cave-ins.

- All excavations greater than 5 feet deep must be properly sloped, shored, braced, shielded, or protected by a system designed by a professional engineer.
- If a potentially hazardous material is encountered during excavation, all work must stop until the material can be evaluated by a Safety Professional.

Regulatory

A complete text of the requirements for Excavations can be found in Title 29 Code of Federal Regulations, Part 1926, Subpart P.

Guide 9: Asbestos Awareness

Overview

Asbestos has been used in hundreds of different types of insulation products and building materials. Asbestos-containing materials (ACM) can release asbestos fibers into the air if damaged. To minimize the release of fibers and the potential for exposure concerns, the handling and removal of ACM is highly regulated. The highlights of our Company program are:

- * Contractors are required to ensure that ACM is not inadvertently contacted or disturbed.
- * Suspect ACM must be assumed to be ACM until results of sampling by a certified individual and analysis by a certified lab proves the material to be non-ACM.
- * Contractors will comply with the local, state and federal regulations for ACM work.

Minimum Asbestos Awareness Requirements

When working in any Norwich Public Utilities facility or on any Norwich Public Utilities project, all contractors must meet, at a minimum, the following requirements. The contractor is responsible for ensuring that all controls and requirements are identified to address job-specific activities.

- * All contractors handling ACM will be required to be certified and in accordance with applicable OSHA standards and be trained in the specific tasks they will perform.
- * When contractor personnel contacts or disturbs ACM, the contractor will develop an Asbestos Abatement Work Plan that outlines the procedures for planning and completing the project/activity and will submit the Work Plan to the Norwich Public Utilities Project Coordinator for approval. The Contractor is responsible for the proper filing, permits and fees for projects that will disturb ACM.
- * The contractor will use necessary equipment (negative pressure air machines, respirators, etc.) for activities that disturb ACM to control the releases of fibers and to ensure the safety of personnel.
- * The contractor will comply with federal, state and local regulations, including approved site work procedures, asbestos abatement, disturbance control, personal and facility decontamination procedures, housekeeping practices, final cleanup requirements and clearance procedures, and project engineering control methods.
- * The contractor will use the proper personal protective equipment and air monitoring procedures.
- * The contractor will provide and maintain a Medical Surveillance Program for employees.
- * The Storage/transport/disposal of ACM will comply with federal, state and local regulations.
- * The contractor will maintain asbestos project and employee records for projects including, but not limited to, exposure monitoring records, medical records, training records, fit-test records, and project specific records, such as the amounts and types of asbestos abated, logbooks, waste transportation information and site identification information, etc.

Regulatory

- * Title 29, Code of Federal Regulations (CFR), Occupational Safety and Health Administration (OSHA), Part 1910.1001 - General Industry Standards for Asbestos.
- * Title 29, CFR, OSHA, Part 1926.1101 - Construction Standards for Asbestos.