



**AGENDA
COHASSET CITY COUNCIL
305 NORTHWEST FIRST AVENUE
MONDAY, JANUARY 27, 2025
6:00 PM OPEN WORK SESSION**

6:00 pm – Open Work Session

Agenda

- 1. Discussion on going projects with Public Utilities**
 - A. Water/ Sewer Etc. – Walt**
 - B. Natural Gas Extensions – Prepare for gas bids**
 - C. Lake Country Power**
 - D. Discussion on Sheriff Patrol Hours – Dean Scherf**

CITY OF COHASSET COUNTY RD 177, CIMMERON TRAIL AND STATE HWY 38 GAS MAIN EXTENSION AND SERVICES CONSTRUCTION CONTRACT

PART I – SUMMARY OF WORK

Article 1 – Technical Documents

The Technical Documents shall consist of the following, all of which are attached hereto as Parts I through III and by this reference made a part hereof:

- Part I Summary of Work
- Part II Additional General Terms and Conditions
- Part III Construction Specifications

Article 2 – Specific Project Scope of Work

The contractor shall perform the following breakdown of construction activities that will be used for the Owner's gas project.

The project generally involves the following:

All of Cimмерon Trail from North Shoal Lake Road north to Co Rd 177, Co Rd. 177 from Co Rd 62 heading east to State HWY 38, and State HWY 38 from Co Rd 177 to North Shoal Lake Rd.

Planned routes are as indicated on this link of our utility maps upon request. Full scope of installations may be amended by the Owner following customer sign-up meetings and/or during construction, particularly in the case of ½” and 1” polyethylene pipe both inside and outside city limits.

Installation of service lines throughout the system. Potential for 150 services.

Estimated quantities of pipe by installation method are as follows:

4” PE pipe by plowing and or boring	4,400 LF
2” PE pipe by plowing and or boring	42,500 LF
1” PE pipe by plowing and or boring	8,500LF
½” PE pipe by plowing and or boring	50,000LF

Quantities indicated above are estimates and Owner makes no warranty of their accuracy. Note that the Bid Form requires a blended bid, which does not determine installation method. Owner does not anticipate the need for any open-trench installation. The contractor shall be responsible for conducting its own field survey to determine the

appropriate installation method (plow, bore, or open trench) and shall use this survey to calculate its per-foot-bid prices submitted.

For mains & services installed before Owners specified commissioning dates:

- Upon completion of pressure tests, leave piping pressurized to 40 psig.
- Tie in all mains upon completion of pressure test, and leave full system pressurized to 40 psig.
- Punch all service tap tees when installed, immediately following service line pressure test. Leave the service and main pressurized to 40 psig.

During Owner's specified commissioning dates:

- Provide assistance to Owner's inspectors as requested to conduct purging operations.
- Perform restoration work and other items that do not require direct oversight of Owner's inspectors, unless approved by Owner.

No extra payments will be made for mobilization or demobilization of crews during commissioning dates.

For mains & services installed after Owner's specified commissioning dates:

- Upon completion of pressure tests, reduce pressure in new segment to 5 psig below that in the existing main, then connect new main or service to existing main, then purge the new main or service.
- Each main segment must be commissioned before any service tap tees are connected to it.
- Service tap tees are to be connected to both the main and service line, punched, and purged up to the riser prior to backfilling.

The contractor is responsible for all excavation, plowing, boring, directional boring, restoration and cleanup.

Per-foot price for bid items shall include installing fittings, accessories, sewer lateral clearance, pressure tests of all installed pipe and fittings, leak checking the tie-in joint to the existing main, purging, backfill, restoration, clean up and installation of gas line markers where required by owner. Restoration consists of backfill and compaction to prevent future settling, and re-paving where necessary to match pre-construction conditions.

The contractor shall determine location of septic system and ensure no conflict prior to installing pipe across the property.

Costs of any and all excavations required, including any for the purposes of septic line clearance, shall be included in the per-foot or unit price bid. Boring costs shall be included in the per-foot or unit price. The contractor shall install any pipe passing under paved (bituminous or concrete) surfaces, and any pipe passing under culverts or streams, using boring or directional boring.

The contractor is not required to bid on all listed bid items, and declining to bid on one or more items will not affect Owner's acceptance or rejection of the contractor's bid(s). Owner reserves the right to award individual bid items to separate the contractors.

The contractor shall install tracer wire approximately six inches above all plastic gas pipe installed by plowing or open trench methods. Tracer wire shall be installed adjacent to gas pipe installed by boring. Tracer wire shall not be wrapped around gas pipe. The contractor may elect to install a second wire with any pipe, but such wire will be supplied by the contractor and must be electrically continuous insulated solid copper wire with a minimum gauge of #14 AWG. Warning tape shall be installed approximately six inches below the ground surface directly above all mains installed by methods other than by boring. Gas line markers shall be installed at 1000' and at each end of each road crossing. No payment beyond the installed per foot price will be made for these items of work.

These prices include all hauling, loading, cutting, sawing, temporary repairs and removal, and any other related costs.

If the boring equipment becomes "lost" and needs additional excavations to recover or if damages to paved surfaces or lawns occur, the cost involved in making these excavations or in repairing damages will be the responsibility of the contractor.

Article 3 – Items Furnished by Owner

Owner shall furnish all materials (pipe, fittings, valves, regulators, tracer wire, warning tape, etc.) and rights-of-way needed for the completion of the work described in the contract documents. Gas pipe and fittings shall be PE 2406 and shall meet the requirements of ASTM D2513. Gas mains shall have a maximum SDR of 11.5. Tracer wire shall be electrically continuous insulated solid copper wire and shall have a minimum gauge of #14 AWG.

Article 4 – Items Furnished by The contractor

The contractor shall furnish all labor, equipment, consumables and supplies necessary for the completion of the work.

Article 5 – Work Schedule

The contractor bids are due to Owner by February 18, 2025. Owner anticipates awarding contract(s) by February 24, 2025.

Construction is expected to commence after bids are awarded and be complete by October 1, 2025.

PART II – ADDITIONAL GENERAL TERMS AND CONDITIONS

Article 1 – Definitions

The word "work" as used herein shall mean the completion of all items described in the contract documents.

To "commence work" shall mean to begin actual performance of the work at the job site.

The word "inspector" as used herein shall mean an individual (or his duly appointed successor) named by Owner as a person having general authority to decide questions and resolve problems raised by the contractor or occurring in relation to the work. The inspector(s) shall also have authority to delegate to other personnel, including engineers, or engineering consultants, designated duties in connection with the quality, inspection and progress of the work.

The word "notice" shall mean written notice.

The term "timely completion" shall mean completion of the work by the date specified in Article 5 of Part I of this document.

The term "contract documents" refers to the contract signatory document, summary of work, general terms and conditions, construction specifications, and drawings.

The term "change order" shall mean a written change order on a form acceptable to the Owner, signed by Owner and the contractor, which modifies the contract.

Article 2 – Owner's authorized inspector

Owner shall notify the contractor of the name(s) of its authorized inspector(s) at the time Owner issues its instruction or notice to commence work.

Article 3 – Labor, Material and Equipment Furnished by the contractor

The contractor shall furnish all labor, technical capability, tools, equipment, warning signals, barricades, traffic control, excavation, transportation, consumables, and other facilities and items necessary or convenient to complete the work (except such materials and facilities which Owner herein agrees to provide). The contractor shall pay any and all applicable sales or use taxes on supplies, materials, equipment or services furnished by the contractor. The parties hereto agree that all listed prices herein include any and all such applicable sales taxes.

Article 4 – Force Majeure

Neither the contractor nor the Owner shall be liable for any failure of performance due to causes beyond its reasonable control, the occurrence of which could not have been

prevented by the exercise of due diligence, such as acts of God, strikes, floods, riots or military authority.

Article 5 – Termination, Cancellation, and Interruption

A. Termination for cause - The contractor's default

Should The contractor at any time during its performance of this contract: (a) fail, or refuse, or neglect to supply a sufficient number of properly skilled workmen or equipment or the materials and supplies it is bound to supply hereunder to maintain the rate of progress necessary to the timely completion of the work; or (b) fail in any other respect to prosecute the work or any separable portion thereof with the promptness and diligence required for timely completion; or (c) fail in the performance of any other agreement or undertaking on its part contained herein; or (d) be adjudged bankrupt, or make a general assignment for benefit of creditors, or become insolvent, or a receiver be appointed; or (e) in case The contractor is cited for failure or failures to observe the Occupational Safety and Health Act of 1970 (as may be amended) and the regulations issued thereunder, which citations and failures in the judgment of Owner will adversely affect the proper and timely completion of the work; then Owner may, after forty-eight (48) hours' written notice to The contractor, provide necessary labor or materials or both and deduct the cost thereof from any money due or thereafter to become due The contractor under this contract; and Owner may also terminate The contractor's right to proceed with the work or any part thereof.

In the event of such termination, Owner may enter upon premises and, for the purpose of completing the work, may take possession of all materials, equipment, tools and appliances thereon, belonging to or under the control of The contractor or require the contractor to forthwith remove its equipment, tools and appliances from site of the work by whatever method Owner may deem expedient including the hiring of another The contractor or The contractors under such form of contract as Owner may deem advisable. In such case, the contractor shall not be entitled to receive any further payment until the work is finished. If such expense, compensation, costs and damages shall exceed such unpaid balance, The contractor and its sureties shall be liable for and shall pay the difference to Owner. Failure of Owner to exercise any of the rights given it under this paragraph in any instance or instances shall not be deemed or adjudged a waiver of such rights in other instances nor shall such failure to exercise said rights excuse the contractor from compliance with the provisions of this contract nor prejudice rights of Owner to recover damages for such defaults.

B. Cancellation

In the event it appears to Owner at any time that the work will be indefinitely delayed due to a lack of materials or right-of-way or if any federal, state, or other regulatory authority shall take any action, or shall refrain from doing any act, or should any other conditions arise which, in Owner's judgment, shall make it advisable to cease all or any part of the work under this contract, Owner may terminate all or any part of the contract by giving

The contractor written notice of the termination of any part of the work hereunder and The contractor shall then finish only such work as it may be directed to finish by the Owner. Owner shall pay the contractor for the work performed by the contractor to the time of such notice.

C. Interruption

Owner may temporarily interrupt or shut down all or a portion of the work in the event Owner is unable to provide right-of-way or necessary materials which it is obligated by the contract documents to supply, or if any state, federal or other regulatory authority shall take any action or shall refrain from doing any act or issuing authority which, in Owner's judgment, shall make proceeding with the work inadvisable or impossible.

Article 6 – Owner Furnished Material

Owner shall furnish to the contractor, at Owner's expense, certain materials and supplies needed for the completion of the work as set out in the contract documents. Such materials will be delivered to the contractor at a single local site designated by the contractor. All excess materials supplied by Owner not needed and used in the work will be returned to Owner.

All risk of damage or loss to said stocks of material by pilferage, vandalism, or casualty of any nature shall be the contractor's risk after delivery and unloading of such materials, except that Owner shall be liable for damages or losses due to his own negligence.

Article 7 – Right-of-Way

Owner shall secure all right-of-way (including the right of ingress and egress and highway and waterway crossing permits) required for the completion of the work. The term "right-of-way" as used herein shall not include special use permits or permission needed and to be procured by the contractor in order to move its equipment on, along, or across highways or waterways.

Owner shall notify the contractor of any special or unusual limitations appearing in the right-of-way easements and permits secured by Owner and pertaining to the work; making copies of such easements or permits available to the contractor shall satisfy this obligation to notify. The contractor agrees to abide by and be bound by and liable for complying with all conditions and limitations in such easements of which it is notified; provided, however, no notification shall be required with respect to the usual terms and conditions contained in the indemnification clauses contained in the highway and public land crossing permits, material storage permits, and leases, and similar instruments secured by Owner, with which The contractor should familiarize itself as a part of the conditions inherent in the work, and for the observance of which and the liability for which The contractor assumes full responsibility with respect to the performance and accomplishment of the work, and further assumes liability for the obligations of indemnity expressed in each of said instruments.

Article 8 – Status and Obligations of Parties

A. The contractor's status

The contractor agrees to undertake the work as an independent contractor, at its sole risk, and agrees to employ and direct any persons performing any work hereunder, and such persons shall be and remain the sole employees and subject to the direction and control of the contractor and shall not be the employees or subject to the control and direction of Owner. The contractor is to determine the manner and method in which the work is to be performed to attain results required by this contract, and Owner's general right of direction of the work shall not make the contractor or its agents and employees, agents or employees of the Owner.

B. Owner's Status

Within the requirements of the contract, Owner shall have the right to review and approve or disapprove the manner in which all work under the contract shall be conducted, insofar as may be necessary to secure the proper progress and the specified quality of the work, including specifically the right to coordinate The contractor's work with the work of Owner and other The contractors and subcontractors, if any working on the job site. Since Owner is relying on the contractor's expertise and experience, nothing in the contract shall be construed as making Owner liable or responsible for the manner in which the contractor performs the work.

Article 9 – Protection of Materials and Finished Work

The contractor shall be responsible for any and all materials supplied by Owner and for all work until acceptance thereof by Owner and shall be required to replace or repair to the satisfaction of Owner or pay for, any loss, injury or damage which said materials or work may sustain from any source or cause whatever before completion and acceptance of the work.

Article 10 – Contract for Compensation

As full consideration for the work, Owner shall pay to the contractor, the accumulated unit prices as adjusted pursuant to the terms of any change order(s).

Article 11 – Payment

Payments to the contractor by Owner will be made in accordance with this contract. Payments by Owner to the contractor shall be made within 30 days of receipt of invoices accompanied by approved application(s) for payment, and shall be based on unit prices of completed and accepted work. The contractor shall submit to Owner's inspector(s) an application for payment in the form agreed to by the contractor and Owner (the "application for payment"). Each invoice shall also be accompanied by pressure test

records for all installed pipe noted in the application(s). Each invoice shall also be accompanied by release and waiver forms stating that, except as stated, there are no liens outstanding as of the date of the invoice; all known due and payable bills with respect to the work have been paid to date or are included in the amount released in the invoice; except for such bills not paid but so included, there is no known basis for the filing of a mechanic's or materialmen's liens on the work.

Each application for payment shall show the extent of work completed and accepted by the inspector(s) for each portion of the work as of the end of the period covered by such application for payment. Work shall not be considered complete, and payment application shall not be approved by the Owner's inspector, until pressure test records for the associated pipe have been provided to the inspector. The extent of work completed report will indicate the dollars due to the contractor based on the level of the completion of activity detailed in the bid proposal.

Except as provided in article 12, Owner shall, within 30 days of receipt of invoices accompanied by approved application(s) for payment, pay the contractor 100% of the value of the work completed pursuant to the application for payment, less the aggregate of all payments previously made or charged to the contractor.

Upon completion and final acceptance of the work in accordance with article 13, the contractor shall submit an application for payment and all required final release and waiver forms in accordance with article 14. Within thirty (30) days thereafter, and subject to article 12, Owner will pay the contractor the unpaid balance of the contract price.

Article 12 – Payments Withheld

Owner may, but is not obligated to, retain from any payment provided for herein such amount or amounts as owner may reasonably deem necessary, from time to time, to cover;

- A. Defective work, material, equipment or performance not remedied;
- B. Third party claims whether then asserted or upon reasonable evidence of probable assertion;
- C. Anticipated costs by reason of doubt that the contract can be completed for the balance then unpaid;
- D. Damages caused to the Owner, or to another the contractor, or any of their officers, agents, or employees or the public, or
- E. Unsatisfactory prosecution of the work by the contractor or failure to comply with the terms of the contract, including human rights provisions.

Any amounts retained by Owner by reason of the foregoing shall become due and

payable to the contractor thirty (30) calendar days after the grounds for retainage have been removed. In no event shall the contractor be entitled to interest on any amount retained. Payment may also be withheld if the contractor has not submitted an application for payment complying with all of the provisions of the contract. Nothing contained herein shall be construed to limit the right of Owner to set off against or retain from monies due to the contractor any other amounts permitted by law.

Article 13 – Final Completion and Acceptance of the Work

Upon The contractor's written notice to the Owner that all work is completed and ready for final inspection, testing and acceptance, the Owner shall (to the extent possible and practical) promptly make inspections and tests to determine if the work is acceptable and totally complete. If the work is not acceptable or totally complete, the Owner will advise the contractor of the outstanding items required to complete or correct the work. Upon completion of such items, Owner shall then perform any remaining necessary inspections and tests. Once the inspection and testing indicate that the work is acceptable and totally complete and the contractor has furnished all required documents, the Owner will indicate its final acceptance of the work.

Upon acceptance of the work by Owner, Owner shall be responsible for the work. However, notwithstanding the provisions of this article 13, The contractor shall remain obligated under those provisions of this contract which by their nature extend beyond completion of the work. Owner's acceptance of work or the making of any payments shall not constitute a waiver of Owner's rights and shall not release the contractor from any obligation hereof.

Article 14 – Liens

As a condition to receive any payment for the work hereunder, the contractor agrees to furnish with each application for payment, a partial release and waiver in the form requested by the Owner. As a condition to receiving final payment for the work, the contractor shall furnish with its final application for payment, a final release and waiver in the form requested by Owner.

The contractor agrees that no laborers', mechanics', or materialmen's or any other lien, claim, charge or encumbrance of any kind whatsoever will be filed, asserted, or maintained by The contractor or by any vendor of The contractor against the work, or any property of the Owner, or any monies retained by the Owner or due or to become due from Owner to The contractor, arising out of work performed by The contractor or by a vendor or subcontractor of The contractor, in connection with this contract, provided that Owner is not in breach of this contract.

The contractor further agrees that no action will be taken by any vendor furnishing things under or in connection with this contract for the work. The contractor shall include provisions in each purchase order The contractor enters into in connection with the work that will obligate the contractor or vendor to the same extent that the contractor is

obligated under this section.

The contractor, at its own expense, shall secure the prompt discharge of any lien or liens which arise out of the prosecution of the work under this contract and which are filed on or attached to the work; provided, however, The contractor may in good faith contest any such lien if The contractor gives written notice to Owner of such fact and provides, at The contractor's sole expense, a bond or other security satisfactory to Owner covering the entire amount of the contested lien. The contractor shall indemnify and hold Owner harmless from and against any and all liability, loss, cost, damage or expense (including, without limitation, reasonable attorney's fees) which Owner may suffer, sustain or incur by reason of the filing or assertion of a lien or liens by any person, firm or corporation, for any reason. The provisions of the foregoing sentence shall survive the completion of the work, its final acceptance, and the making of final payment by Owner. The final payment shall not become due until the conditions of this section have been satisfied. Owner shall have the right to withhold any payment otherwise due hereunder in the event of the filing of any such lien until such lien shall have been secured and indemnified to Owner's satisfaction.

Article 15 – Assignment and Contracting

The contractor shall not assign this contract or assign any payment or part of any payment which may accrue hereunder or subcontract the work or any part thereof without first having obtained Owner's written approval. In the event Owner grants such approval, The contractor shall nonetheless be obligated to Owner to complete the work in the time and manner herein agreed. The contractor shall further cause each subcontractor hereunder to the full extent same may be applicable to the portion of the work subcontracted.

The contractor shall be liable for all acts and omissions of any assignee subcontractor, or any of their agents, as if performed or omitted by the contractor.

Article 16 – General Indemnity

The contractor shall, except as otherwise expressly provided herein, indemnify, protect and save Owner, their directors, officers, consultants, and employees harmless from and against any and all actions or causes of action, claims, demands, liabilities, loss damage, injury, cost or expense of whatever kind or nature, including costs of litigation, attorney fees and reasonable expenses in connection therewith, brought or presented by any person, firm, or corporation whatsoever, (including but not limited to, third parties, employees of Owner, employees of the contractor or of any subcontractor, and their dependents and personal representatives) for injuries to or the death of any person, or damage to or loss of property alleged or claimed to have been caused by, or to have arisen out of or in connection with, or to be incidental to any of the work, including guarding of the work.

The contractor agrees that in case Owner or any agent, representative or employee of

Owner, successors, or assigns shall be made defendant in any suit, action, or proceeding wherein it is sought to recover from Owner or any of its agents, representatives or employees, damage on account of such personal injuries or property loss or damage, The contractor, immediately upon notice from Owner, shall be bound and obligated to assume the defense thereof, including settlement negotiations, and shall pay, liquidate, discharge, and satisfy any and all settlements, judgments, awards, or expenses resulting from or arising out of such injuries, death or damages without reimbursement from Owner. It is understood and agreed by The contractor that in case Owner is made defendant in any such suit or action, and the contractor fails or neglects to assume the defense thereof, after having been notified to do so by Owner that Owner may compromise and settle or defend any such suit or action, and The contractor shall be bound and obligated to reimburse Owner the amount expended by Owner in paying any judgment rendered therein, together with all reasonable attorney's fees incurred by Owner by reason of its defense or settlement of such claim. Any judgment rendered against Owner in compromising or settling such claim shall be conclusive as determining the amount for which the contractor is liable to reimburse Owner hereunder. Notwithstanding any of the foregoing, the contractor shall not be obligated hereunder to hold harmless or indemnify Owner for loss, cost or expense of incident or accident arising out of the work and proximately caused by the sole negligence of Owner, its employees, or agents.

The contractor further agrees, except as may be otherwise specifically provided herein, that its obligations to indemnify hereunder include, but are not limited to, the following:

- A. Liens by third persons against Owner or its property because of labor, services, materials or any other subject of lien, furnished to the contractor, his assignees or subcontractors, in connection with the work performed by the contractor hereunder.
- B. Expenses, claims, etc. resulting from failure of the contractor to abide by any and all valid applicable laws, rules or regulations of any governmental authority with jurisdiction.

Article 17 – Patent Indemnity

The contractor shall indemnify and hold Owner harmless from any and all claims arising out of infringement of patent rights because of use of any method, process, equipment or apparatus employed by the contractor, its assignees or subcontractors in the performance of the work.

Article 18 – Insurance

The contractor shall purchase and maintain insurance to protect itself and Owner, including a general liability limit of at least one million dollars. Before commencing the work, the contractor shall furnish the Owner with a certificate of insurance.

The contractor shall not commence work under this contract until it has obtained all the insurance required hereunder and such insurance certificate has been delivered to the

Owner. Acceptance of the insurance certificate by the Owner shall not affect the obligations or liability of the contractor.

All certificates of insurance furnished by the contractor to evidence its insurance coverage shall provide for 30 days written notice by the insurer to Owner prior to the cancellation of any insurance referred to therein.

In case of the breach of any provision of this article 18, the Owner, at its option, may take out and maintain, at the expense of the contractor, such insurance as the Owner may deem proper and may deduct the cost of such insurance from any monies which may be due or become due the contractor under article 10 hereof.

The contractor must also provide the Owner with proof of workmen's compensation and employer's liability insurance prior to commencement of the work.

Article 19 – Performance and Labor and Material Bond(s)

Bonds shall be furnished as required by other sections of this contract.

Article 20 – General Warranties

The contractor represents and warrants to Owner as follows:

A. The contractor has full experience and expertise and the proper qualifications to perform the work. The contractor understands and acknowledges that Owner is relying upon the contractor's representation of its experience, expertise, skill, and judgment in the proper selection of the design, material, equipment, tools and methods of performance of the work and in furnishing goods, materials and equipment suitable for the purpose herein intended to ensure the satisfactory and safe completion of the work and the satisfactory and safe function or operation of the work after completion.

B. The contractor has: (i) examined the contract documents thoroughly; (ii) familiarized itself with federal, state and local laws, ordinances, safety codes, rules and regulations; (iii) studied jobsite information and plans provided by the Owner; (iv) visited and carefully examined the jobsite to ascertain the nature and location of the work, the character and accessibility of the jobsite, the existence of obstacles in the way of construction (if any), the availability of facilities and utilities, the location and character of existing or adjacent work or structures, the jobsite ground and soil conditions, and all local conditions which might affect the performance of the work or the cost thereof.

C. The contractor has good and marketable title, free and clear of all encumbrances and liens, to all goods, materials and equipment supplied by the contractor to be incorporated into or used in the work and that all goods, materials and equipment supplied by The contractor to be incorporated into or used in the work shall be new, unless otherwise approved by Owner.

D. The contractor warrants all work, goods and equipment furnished or installed by any of its subcontractors or vendors to be of good quality and free from faults or defects and to be in conformance with the requirements of the contract.

Article 21 – Workmanship and Material Warranties

The contractor will perform the work in strict accordance with the contract and in a good and workmanlike manner. The work shall be without defects, of good quality design and workmanship, and in conformity with the best standards, practices and usages in the industry. The contractor further warrants to Owner that notwithstanding any statements or omission thereof in the contract, the work will be complete and suitable and sufficient for the intended purpose.

Notwithstanding acceptance of the work by Owner, the contractor shall be responsible for all liability, injury or damages incurred by Owner on account of failure of The contractor to comply as to location, depth, or otherwise, with the contract documents together with right-of-way maps or plats, and the grants, limitations, terms and conditions of right-of-way instruments; and because of other defects or failures occasioned by faulty workmanship or materials furnished by contract.

In the event of any breach of warranty, the contractor shall be liable to Owner for all losses and damages resulting therefrom and all costs and expenses necessary to cure its breach. If The contractor is present on the jobsite it shall immediately take all necessary steps to cure its breach, including but not limited to (i) repairing and correcting all defects, or replacing the work and/or equipment, goods and/or materials incorporated therein which constitute a breach; (ii) repairing or replacing all work, materials, equipment and goods disturbed, destroyed or damaged as a result of the breach or in curing any such breach. If the contractor is not present at the jobsite or does not immediately comply with the terms of this article, Owner may take whatever action it deems necessary to correct the breach, and all costs and expenses so incurred shall be charged to and paid by The contractor. In the event the contractor is not present at the jobsite, Owner is not required to provide the contractor the opportunity to correct the breach and the contractor shall remain liable for the losses and damage stated above.

Article 22 – Taxes and Unemployment Insurance

The contractor assumes full responsibility for and agrees to pay all contributions and taxes payable under federal and state social security acts and unemployment compensation laws and income tax laws as to all of its employees engaged in the performance of work hereunder. The contractor shall pay all applicable sales, consumer, use, excise and other taxes required by law on the goods and services that the contractor supplies.

The contractor further agrees to indemnify Owner from any tax, interest or penalty which Owner may be required by law to pay on account of its failure to withhold any amount from payments made to the contractor or, on account of the rules and regulations of

administrative officials or boards charged with the enforcement of the state and federal acts referred to above.

Article 23 – Law and Regulations, Permits

The contractor represents that it has authority to do business in the State of Minnesota.

The contractor agrees to secure and maintain a manual on uniform traffic control devices for streets and highways, ANSI D6.

The contractor shall comply with all valid applicable federal, state and local laws and ordinances and regulations thereunder as well as all wages and hour laws and regulations, issued or promulgated by units of government and regulatory bodies with jurisdiction over any aspect of the work.

The contractor shall secure, at its expense, all necessary permits and the licenses (except those which other provisions hereof specifically require Owner to furnish) necessary to the performance and completion of the work, including but not limited to the operation, hauling and transporting of its equipment, and hauling and transporting of all materials needed, used or supplied in and for the work and shall pay in connection therewith all valid and applicable fees, assessments or taxes levied by units of government with jurisdiction.

Article 24 – Safety Requirements

The contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. The contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

all employees on the work and other persons who may be affected thereby, and

all the work and the materials and equipment to be incorporated therein, whether in storage on or off the site.

The design features and configuration of all equipment and facilities provided under this contract shall fully conform with all applicable safety and health statutes.

The contractor must promptly report to Owner, in writing, all accidents whatsoever arising out of, or in connection with, the performance of the work, whether on or adjacent to the site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to Owner.

If any claim is made by anyone against the contractor or any subcontractor on account of any accident, the contractor shall promptly report the facts to owner in writing, giving full details of the claim.

Article 25 – Public Relations

The contractor shall exert all reasonable efforts to maintain good will for the benefit of Owner with the landowners, tenants, and lessees along the right-of-way and with the general public. The contractor shall immediately report any problems or disagreements to Owner.

Article 26 – Work Changes

Work modifications or changes which are within the general scope of the contract documents may be made at any time by Owner's written order to the contractor. If such changes cause an increase or decrease in the contractor's cost of or time required for the completion of the work, a fair and proportionate adjustment shall be made therefore by the Owner. Such an adjustment shall be confirmed in writing. Disagreements regarding such adjustments shall not entitle the contractor to delay or refuse to implement Owner's written orders to effect such changes, however.

Owner shall decide as to the meaning and intent of any portion of the work where the same may be thought to be obscure or where the same is in dispute, and Owner shall have the right to correct any errors or omissions therein when corrections are necessary to properly fulfill the intent of such work.

Article 27 – Other Contractors

Owner reserves the right, at all times, to let other contracts in connection with the work. At such times as Owner may engage other The contractors to work concurrently on the project, The contractor shall cooperate with the program and coordinate their work with that of others to the satisfaction of the Owner, and so conduct their operation as to avoid interference with other The contractor's activity to the maximum extent possible and in the best interest of the entire project; provided, however, that Owner shall use its best efforts to insure that other The contractors shall carry out their activity with a minimum of interference with The contractor's responsibilities, job sequence, and schedule.

Article 28 – Inspection

The contractor shall provide the Owner's inspectors with every reasonable facility for the purpose of inspection, including, at the Owner's direction, the dismantling of portions of finished work. If, in the judgment and discretion of Owner's inspector(s), the work is found to be defective, then the contractor shall, at its own expense immediately replace or repair (at Owner's discretion) the work found to be defective.

Article 29 – The contractor's Employment Practices

The contractor agrees as follows:

A. The contractor, in accordance with the policy of Owner to assure equal opportunities to every citizen, will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin.

B. The contractor and its subcontractors shall agree:

1. To post in a conspicuous place notices summarizing the provision of nondiscrimination;
2. In all solicitations or advertisements for employees placed by or on behalf of the contractor and subcontractors, to state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin;
3. Pursuant to Executive Order 11246, EEO, Section 202, Article A, Section 1 - 7, as amended, and Article b, Section 1 and 2 are hereby included by reference and the contractor represents that he does not maintain or provide any segregated facilities for his employees;
4. To notify each subcontractor or labor union of these commitments, with the provision that in the event of noncompliance with the nondiscrimination clauses of the contract by any subcontractor, the contract may be canceled, terminated or suspended in whole or in part.

C. The contractor agrees that in the event of the contractor's noncompliance herewith, the contract may be canceled, terminated, or suspended in whole or in part.

Article 30 – The contractor's Responsibility to be Informed

It shall be the responsibility of the contractor, and the contractor represents that it has: carefully examined all contract documents, become familiar with same, inspected the site or route of the work and acquainted himself thoroughly with all conditions likely to be encountered in performing the work hereunder.

Article 31 – Intent of this Contract

It is the intent of this contract to provide for the proper and complete performance of the work to be accomplished; and the contract shall comprise the agreement between Owner and the contractor. No oral agreements or conversation with any officer, representative,

agent or employee of Owner or other parties, either before or after the execution of the contract, shall modify the terms or obligations therein contained.

- A. The precedence of the contract documents and their several provisions, is in the following sequence;
- B. The contract signatory document and general terms and conditions, including written addenda or modifications thereto;
- C. The construction specifications where, if there is a conflict, Owner will determine which specifications best meet the intent of the design;
- D. The drawings, where the precedence shall be drawings of larger scale over those of smaller, figured dimensions and noted equipment and materials over graphic indications;
- E. Conflicts between drawings or specifications and applicable codes and standards shall be referred to Owner for a decision therein.

The captions used in this contract are for convenience only and shall not control or affect the meaning or construction of any of the provisions thereof.

Article 32 – Legal Requirements

The contractor shall do all work in such a manner as to comply with all regulations, ordinances and laws of the city, county, state and federal government as apply to the work herein outlined. The contractor shall also obtain all necessary licenses and permits and keep necessary records as required (except those which other provisions hereof specifically require Owner to furnish).

Article 33 – References and Usages

Reference in the contract documents to standard specifications of any technical society, organization or association, or to codes of local, state or federal authorities, shall mean the latest standard, code, specifications or tentative specifications adopted and published at the date of taking bids unless otherwise specifically stated herein. Words and abbreviations used herein having well known technical or trade meanings are used in accordance with such recognized meanings.

Article 34 – Governing Law

This contract shall be governed by the laws of the State of Minnesota.

Article 35 – Rights and Remedies

The duties and obligations imposed by the contract and the rights and remedies available

hereunder shall be in addition to and not in limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.

No failure to act by the Owner shall constitute a waiver of any right or duty afforded to it under the contract, nor shall any such action or failure to act constitute an approval of or an acquiescence in any breach of this contract, except as may be specifically agreed to in writing by Owner.

PART III – CONSTRUCTION SPECIFICATIONS

Section 1. General

The construction specifications are intended to cover the various operations incident to the work described hereunder, the intent and purpose being to specify the kind, character and quality of work required by owner. Where these specifications conflict with the drawings covering this work, it shall be left to the judgment of Owner's inspector as provided in article 1 of the general terms and conditions, or in the case of omitted specifications, the work shall be performed as specified by Owner.

“Install PE pipe” includes all labor, equipment and supplies necessary to assemble, install to the lines and grades indicated using either approved open trench or trenchless methods, test, clean, and assist Owner with purging the newly-installed pipe. Each dead-end main shall terminate with a butt-fused cap.

Cleaning of newly-installed pipe entails running cleaning pig(s) with air until no water, trash, or dirt emerges with pig.

The contractor is expected to use all necessary and appropriate preventive measures to minimize adverse impact to humans and the environment.

Dust that is caused by construction equipment and proves unacceptable to nearby residents should be controlled by spraying the work area with water. Construction equipment will be properly equipped with factory installed muffler devices so as to minimize excessive off-site noise. Furthermore, typical hours of operation will occur Monday through Saturday and from 7:00 am through 7:00 pm, daylight hours permitting. Construction equipment shall be locked when unattended and parked in areas that are somewhat removed from high density population areas or areas of extensive public use. The contractor is expected to minimize the "attractive nuisance" aspects of construction equipment to children who may frequent the area, thus reducing the potential for accidents.

The Owner's inspector will keep a written record of all complaints including the date, description, how resolved, and when resolved of each incident.

Section 2. Route of line and staking

Owner will establish the pipeline route. The contractor will be furnished easement limits and it will be his responsibility to stay within the easements.

Section 3. Right-of-way

Right-of-way is within the city, county or state road right-of-way, or as otherwise specified in permits or as depicted on the construction drawings. Brush and trees shall be felled parallel to the right-of-way to minimize damages to structures and trees on adjacent

property. All such felled brush and trees shall then be removed from right-of-way. Timber shall be cut into 8-foot lengths and neatly piled along the right-of-way. The contractor will be responsible for properly disposing of all timber cut from the right-of-way if the land owner and/or tenant does not want to keep the timber. Stumps and other loose debris shall be cleared from the ditch area of the right-of-way so that the spoil bank from the ditching operations will not fall on any foreign matter that might become mixed with the excavated soil. All brush, treetops, stumps and other debris must be hauled at the contractor's expense to a disposal site not on the right-of-way. Right-of-way clearing is incidental to the work and no separate payment will be made for clearing.

Clearing on any temporary right-of-way should be selective, limited and minimal.

Section 4. Gates and fences

The contractor shall furnish suitable materials to install a substantial gate in every fence at the point of intersection of the proposed line for access to land crossed by the line and for passage of trucks, tractors and other equipment during construction. Gate posts shall be adequately braced; where fences are old and deteriorated, new posts and wire shall be furnished and used.

The contractor shall not open gates, remove or take down fences without first notifying the property owners and tenants. Upon completion of the construction of the line, the fences shall be replaced by the contractor. New posts and fence material required to rebuild fence shall match existing fence.

The contractor shall maintain all fences and gates until fences have been rebuilt. The contractor shall be responsible for all damages resulting from negligence of his employees in failing to keep gates securely closed at all times.

Section 5. Delivery, unloading, and stringing pipe, valves and other materials.

The contractor shall place orders for pipe, valves, fittings, regulators, and similar material (except where noted otherwise on the drawings) required for this work.

All pipe, valves, fittings and miscellaneous material will be shipped to destinations designated by the contractor. The contractor will provide adequate equipment to unload, receive and store materials. The contractor will coordinate with pipe supplier to unload pipe at the job site during the stringing operation. The contractor is responsible for storing any pipe that is not strung.

The contractor will be responsible for all materials delivered to the contractor and its disposition until final acceptance of completed work and release of the contractor from its obligations hereunder. Any pipe or other materials damaged by the carrier must be reported for inspection to the carrier in writing on the freight bills by the contractor. All materials having machined surfaces and all valves and fittings shall be handled and stored in a manner so as to protect them from damage.

The contractor shall string the pipe within the confines of the right-of-way in such a manner as to cause the least interference with the normal use of the land crossed by the right-of-way. Gaps shall be left in the stringing to permit the regular use of the land and the passage of farm stock and equipment across the right-of-way. Pipe shall be strung so that the time between stringing and burial does not exceed one week. All pipe not strung will rest on skids of suitable material, such as wood, to keep the pipe from becoming damaged. All pipe will be blocked to prevent movement or rolling.

Plastic pipe and fittings shall not be rolled, dragged, dropped, or allowed to contact sharp or hard objects which could cause injury to the pipe. Care shall be exercised at all times to protect plastic material from fire, excessive heat, and harmful chemicals.

Plastic pipe and tubing shall be adequately supported during storage. Plastic pipe, tubing, and fittings shall be protected from long term exposure to direct sunlight.

Extra care shall be taken when handling plastic pipe in cold weather (below 40 degrees f) to avoid damage to the pipe ends caused by impact with hard surfaces such as frozen earth or concrete. Pipe shall not be dropped. Coils of pipe shall be mounted on a device which rotates to permit a straight pipe when unreeled. Sprung or spiraled pipe shall be straightened by hand.

Plastic pipe shall be inspected for cuts, scratches, gouges, kinks, severe out-of-roundness and other imperfections before stringing.

Pipe boring depths. The contractor will be required to follow owner bored depth requirements of all bored pipe not to exceed 60" depth. In areas where pipe needs to be bored deeper than 60" in specific areas needs to have owner approval and needs to be documented so that info can be placed on maps.

Section 6. Ditching

Unless staked differently, all plastic pipe outside of the city limits shall be installed with a minimum cover of 36", unless pipe is in agricultural lands, then the minimum cover shall be 52".

The contractor shall provide more cover if needed to protect against hazards not usually encountered, if so directed by Owner's inspector(s).

If open-cut methods are used, the bottom of the ditch shall be cut to a uniform grade and the bottom corners graded so the full width of the ditch will be available for providing slack in the line when laid. The bottom of the ditch shall be smooth and free of all hard clods, rock, or other foreign objects. All excavated rocks larger than 3" in diameter must be removed and properly disposed of to the satisfaction of the Owner's inspector(s), landowner and tenant.

The contractor shall be responsible for locating and protecting all underground facilities and lines. When pipe is installed using trenchless technology in or adjoining property upon which a building with a sewer system exists, each sewer lateral shall be located and, if the pipe to be installed crosses or encroaches within two feet laterally of the sewer line, that sewer lateral shall be exposed to verify separation. The contractor shall document compliance with this requirement on a form acceptable to Owner. In the event that underground facilities or lines are damaged, the contractor shall immediately notify Owner's inspector and officials having jurisdiction over the damaged facilities. The contractor shall be responsible for repair of all damaged facilities. Underground facilities or utility crossings falling within the limits of the pipe ditch shall be completely exposed by hand excavation. The Gopher State One-Call system shall be notified 48 hours in advance of any excavation using powered equipment.

Where the ditch is excavated through lands where livestock is confined, or through land under cultivation, or across lanes, driveways, and roadways, The contractor shall construct temporary bridges or leave dirt plugs in ditch for the full width of same or as required by Owner's inspector, to permit safe crossing from one side of the ditch to the other. Where necessary, the spoil bank will be opened to prevent impounding water.

Any excavations made through driveways shall not be left open overnight without the owner or user's consent. When the owner or user of the driveway requires it, the contractor shall provide safe temporary means for crossing the excavation or materials.

No driveway shall be blocked, either by excavation or materials, unless its owner or user has been notified of the time and duration of such blocking at least 24 hours in advance. All concrete driveways and sidewalks shall be bored when feasible. Should concrete driveways or sidewalks not scheduled for removal and replacement under this contract be broken or become damaged by the contractor, they shall be replaced by the contractor to the satisfaction of the property owner and the Owner.

The contractor will minimize the time in which the ditch is open, especially in areas of high public exposure.

The contractor must repair all damaged drain tile to the satisfaction of the landowner and the Owner's inspector. Owner shall reimburse the contractor his expenses for such repairs.

The contractor shall furnish all materials and supplies necessary for the completion and maintenance of the ditch, including water control, shoring, cofferdams, and sheet piling.

Section 7. Road crossings

All surfaced road crossings will be bored or directionally drilled. A minimum depth of cover of 36" from the lowest point within the road right-of-way is required unless a different depth is specified by the permit or the Owner's inspector.

The contractor is responsible for repair of any and all road damage. Repairs must be to the satisfaction of the applicable governmental agency having jurisdiction of the road in question.

Section 8. Cleaning

The completed pipeline shall be cleaned in the presence of the Owner's inspector as follows:

Plastic pipe smaller than 2" IPS shall be blown with air.
Plastic pipe 2" IPS and larger shall have a foam pig blown through with compressed air.

All pigs shall be provided by the contractor at the contractor's expense.

Section 9. Joining pipe and fittings

The contractor is to make all connections required in the work.

Joining of plastic pipe shall be performed as follows:

<u>Type of joint:</u>	<u>Type of fusion:</u>
butt	butt fusion
service tee	saddle fusion

All fusion joining shall be done only by persons currently certified according to the Owner's and the pipe manufacturer's standards and satisfying Owner's inspector's approval.

Inspection provisions shall be adequate to assure that sound joints are being made. The quality of the joints shall be checked visually. If there is any reason to believe that any joint is defective, it shall be removed and replaced. Sonic testing of 4" and larger fusion joints may be made by Owner's inspector on a random basis.

Section 11. Lowering-in and tie-ins

Repairs of defects during the construction of plastic pipelines shall be accomplished by cutting out the defective parts and replacing the section by using the same materials and methods for new construction. A tracer wire shall be installed within 6" of all plastic pipe. Connections in tracer wire shall be made with connectors approved by the Owner's inspector. Tracer wire on main shall, at intervals not to exceed 5,000 feet, have a branch connection made, brought up, wrapped about a warning stake bearing a green label, and placed through a drilled 1/4" hole in the stake.

Plastic pipe, when installed by open trenching, shall be laid with uniform support on undisturbed or well-compacted soil. Pipe bed shall not contain large rocks, blocks, or any

other material which could injure the pipe or result in non-uniform support. Pipe shall be laid and backfilled with its natural slack in trenches. Excessive tension to straighten out pipe is not permitted.

Bending plastic pipe is permitted provided the bend radius is equal to or greater than the radius of its shipping coil. Pipes 4" and larger may be deflected to a minimum radius of 125 times pipe diameter at joints and 20 times the pipe diameter otherwise.

Pulling plastic pipe through auger and bore holes or installing plastic pipe by pulling with a plow may be done only if a "weak link" section, approved by the Owner's inspector, is used in the pulling assembly.

Pipe shall not be installed in cold weather (40 degrees F or less) except in a special arrangement and with approval of the Owner.

Installation of plastic pipe by plowing is permitted provided the pipe is not stretched at any time in the operation. Plow chute, if used, shall not bend pipe tighter than a radius of 15 times pipe diameter.

Where the trench runs through rock¹, excavation shall be halted until terms acceptable to the Owner and to the contractor can be reached. The sides and bottom of any rock excavation shall be cleared of all loose or projecting rock which might damage the pipe. The contractor shall provide a continuous bedding of 4 inches minimum compacted thickness on the bottom of any rock excavation before the pipe is lowered in.

The grade of the gas main shall as nearly as practical follow the natural contours of the land and shall have a minimum cover as prescribed herein.

Section 12. Backfilling of ditches

Immediately following the lowering of the pipe into the ditch and after the pipe has been inspected in the ditch and approved, the contractor shall center-fill each section. The remaining backfill shall follow closely so that a minimum amount of ditch shall remain open at any time. Rocks larger than 3" diameter, skids, stumps and trees or other foreign materials shall not be backfilled into the ditch.

When backfilling, the subsoil shall be replaced and compacted in the bottom of the ditch and all separated topsoil will be restored as nearly as possible to the top of the pipeline ditch. Any excess subsoil shall be removed by the contractor.

Where the trench runs through rock or other conditions that could damage the pipe, The contractor shall furnish and install a minimum of 4" of compacted material meeting Minnesota DOT specifications for granular backfill under the pipe. In addition, the pipe

¹ Rock under this specification shall be construed to mean solid rock in its original formation which cannot be removed by ditching machines, rock plow, backhoe or other mechanical means, but can be removed only by air hammer, hydraulic breaker or drilling and blasting.

shall be padded by backfilling around and over the pipe a minimum of 4" compacted thickness with material meeting the same specification.

Where pipelines and mains are located outside urban areas, their location shall be marked with Owner's sign at each line fence, road crossing, river, lake, stream, or drainage ditch crossing and any other place considered necessary by the Owner.

Section 13. Testing and repair

All fusers must pass, to Owner's satisfaction, the Owner's fusion qualification test. The contractor must also have documentation that all covered employees have passed the drug testing requirements of Part 199 of Title 49 of the Code of Federal Regulations and the operator qualification requirements of Part 192 of the same title.

The contractor shall make available, without interference to his pipeline construction operations, equipment, personnel, and material necessary for use in fabricating, installing, and removing manifolds, installing and removing pigs, locating and repairing breaks and all other work connected with the testing.

The term "manifolds" includes all fabrications for closing open ends on all special tests and providing for the sending and receiving of pigs.

All testing materials shall be new or pretested to eliminate testing delays.

The contractor will provide all necessary equipment and materials for air or nitrogen testing.

Test pressures will be as follows but are subject to final approval by Owner's inspector prior to actual testing.

<u>Testing pressures (psig)</u>	<u>Min.</u>	<u>Max.</u>	<u>Test medium</u>
3408 PE pipe	150	160	nitrogen
2406 PE pipe	110	120	air or nitrogen
Services	110	120	air or nitrogen

During all testing operations, personnel will be available who are capable of operating, maintaining and calibrating all instrumentation which can be field calibrated. All instruments which require "laboratory" calibration will be so calibrated and adjustments sealed prior to use on the first test section. All instrumentation shall be available to Owner for inspection and approval a minimum of one week before using on the first test section. The instrumentation shall be tested and calibrated, if necessary, before using on each test section.

Instrumentation found to be inaccurate during or after any test may require the test to be repeated.

Instrumentation for separate pressure tests of service lines shall consist of a test gauge calibrated within the past calendar year and having a full scale reading of not more than 200% of minimum test pressure. Separate service line pressure tests shall have a minimum duration of fifteen minutes, or longer if indicated in Table 1 or 2. When a service line is tested separately, service tees shall not be punched until after satisfactory completion of the pressure test on the attached service line.

Instrumentation for pressure testing of mains shall be a pressure gauge with readings documented every 15 minutes, or a pressure recorder with a range of approximately 0-250 psig. Each pressure test will have a duration as indicated in Table 1 or 2. If a decrease in pressure during this test indicates a leak, The contractor shall locate and repair leak; then, section shall be repressured and a new test begun.

The contractor shall furnish complete records on all phases of the testing program including recording charts and all information on breaks and leaks. A final report shall be made detailing the test procedures followed and the results obtained.

The equipment and personnel to be used during testing shall be submitted to the Owner's inspector before beginning tests.

Section 14. Warning signs

The contractor shall supply and utilize at all times during the progress of construction an adequate number of flags, flashers, flares, barricades, warning signs, flagmen, or any other means of warning to prevent accident and injury to persons and property. Such warning signals shall be placed in a prominent and easily noticeable location at the right hand edge of all roads and highways and at a distance of not less than 600 feet from and at each side of said road and highway crossings, and such warning signs shall be in entire accord with and satisfy completely all safety requirements of state or other governmental authorities.

Section 15. Cleaning up

The contractor shall keep the right-of-way clear of boxes, skids, defective material and all other construction debris immediately behind the operations to the satisfaction of the property owners and Owner's inspector. All surplus material furnished by Owner shall be delivered to points designated by Owner. Clean up of personal litter, bottles, paper, etc. deposited by right-of-way preparation and construction crews shall be done on a daily basis.

Large rocks (rocks larger than 3" diameter), stumps, or other materials shall be removed from the right-of-way by the contractor and hauled at the contractor's expense to a disposal site not on the right-of-way.

Sidewalk or paved surface restoration shall be completed within 60 days of the work.

Completed backfill shall be well-compacted except for topsoil in agricultural lands. When excavation of agricultural lands has been made, care shall be taken to avoid excessive compaction of the topsoil which may adversely affect crop production. If such compaction is detected, "subsoiling" will be performed as requested by the landowner to relieve compaction. This may include chisel plowing or disk harrowing.

Table 1. PE test times

Length of Plastic Pipe (in feet)

Pipe Diameter, Plastic	Pipe ID (in)	0-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1500	1501-2000	2001-3000	3001-4000	4001-5000
1/2" CTS	0.501	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
3/4" CTS	0.751	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
1" CTS	1.001	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
1 1/4" CTS	1.251	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
1/2" IPS	0.66	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
3/4" IPS	0.86	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
1 1/4" IPS	1.324	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
2" IPS	1.943	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
3" IPS	2.892	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
4" IPS	3.718	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
6" IPS	5.473	30 min	1 hr	2 hr	2 hr	3 hr	3 hr	4 hr	4 hr	5 hr	5 hr	6 hr	6 hr	7 hr	7 hr	7 hr
8" IPS	7.07	1 hr	2 hr	2 hr	3 hr	4 hr	5 hr	5 hr	6 hr	7 hr	8 hr	12 hr	15 hr	18 hr	18 hr	24 hr

For longer lengths, add times together, up to a total test duration of 48 hours (e.g. 7000 ft of 2" IPS PE = 3000' + 4000' = 2 hr + 3 hr = 5 hr)
 **test durations over 48 hours not allowed; segment pipe into shorter test segments or, if approved by Director of Pipeline Operations, test with water

Table 2. Steel test times

Length of Steel Pipe (in feet)

Pipe Diameter, Steel	Pipe ID (in)	0-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1500	1501-2000	2001-3000	3001-4000	4001-5000
3/4"	0.824	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
1"	1.049	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
1 1/4"	1.52	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
2"	2.067	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
3"	3.068	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
4"	4.026	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
6"	6.065	1 hr	2 hr	2 hr	3 hr	3 hr	4 hr	4 hr	5 hr	5 hr	6 hr	6 hr	7 hr	7 hr	8 hr	8 hr
8"	8.071	1 hr	2 hr	3 hr	3 hr	4 hr	4 hr	5 hr	5 hr	6 hr	6 hr	7 hr	7 hr	8 hr	8 hr	10 hr
10"	10.192	2 hr	4 hr	5 hr	5 hr	7 hr	7 hr	8 hr	8 hr	9 hr	10 hr	10 hr	11 hr	11 hr	12 hr	12 hr
12"	12.09	3 hr	5 hr	7 hr	7 hr	9 hr	9 hr	11 hr	11 hr	13 hr	13 hr	14 hr	14 hr	15 hr	15 hr	17 hr
16"	15.25	4 hr	7 hr	11 hr	11 hr	14 hr	14 hr	18 hr	18 hr	20 hr	20 hr	22 hr	22 hr	24 hr	24 hr	24 hr
20"	19.25	6 hr	11 hr	17 hr	17 hr	22 hr	22 hr	28 hr	28 hr	32 hr	32 hr	36 hr	36 hr	40 hr	40 hr	40 hr
24"	23.25	9 hr	17 hr	26 hr	26 hr	34 hr	34 hr	39 hr	39 hr	44 hr	44 hr	48 hr	48 hr	52 hr	52 hr	52 hr

For longer lengths, add times together, up to a total test duration of 48 hours (e.g. 7000 ft of 4" steel = 3000' + 4000' = 8 hr + 10 hr = 18 hr)
 **test durations over 48 hours not allowed; segment pipe into shorter test segments or, if approved by Director of Pipeline Operations, test with water

Cohasset Industrial Park Electric Capacity Upgrade



Project Overview:

Lake Country Power, in coordination with the City of Cohasset, has been working to develop the Cohasset Industrial Park to attract and expand business inside the Cohasset Industrial Park.

Currently, the Industrial Park is near capacity for available electricity and will need additional infrastructure upgrades to facilitate the expansion of the park and addition of new businesses.

Lake Country Power targets any infrastructure upgrades for new services at 60/40 cost split for total project costs. Cost is absorbed 60% by LCP membership and 40% to the business or entity requesting the upgrades.

Currently, the Cohasset Industrial Park has roughly 1 MW of capacity for any additional business. With this infrastructure upgrade, we will increase that to appx 7 MW of excess capacity and position the industrial park strongly for various types of business. In recent years working with the City of Cohasset and regional organizations to pursue business, we have experienced a loss in business specifically due to the lack of capacity in the Cohasset Industrial Park. With this loss, we have decided to pursue the necessary upgrades with the support of the City of Cohasset and Itasca County to move the project forward.

Project Specifics:

Lake Country Power will need to upgrade an existing 3.1-mile-long overhead circuit from our Cohasset substation to a larger diameter wire (477 ACSR) and reconfigure neighboring lines to transfer a portion of existing loads to different substations. We then will need to install a mile of new underground cable into the industrial park as well as some equipment to accommodate any new business that may move into the industrial park.

The project is set to begin construction in October 2025 with a completion date of December 2025.

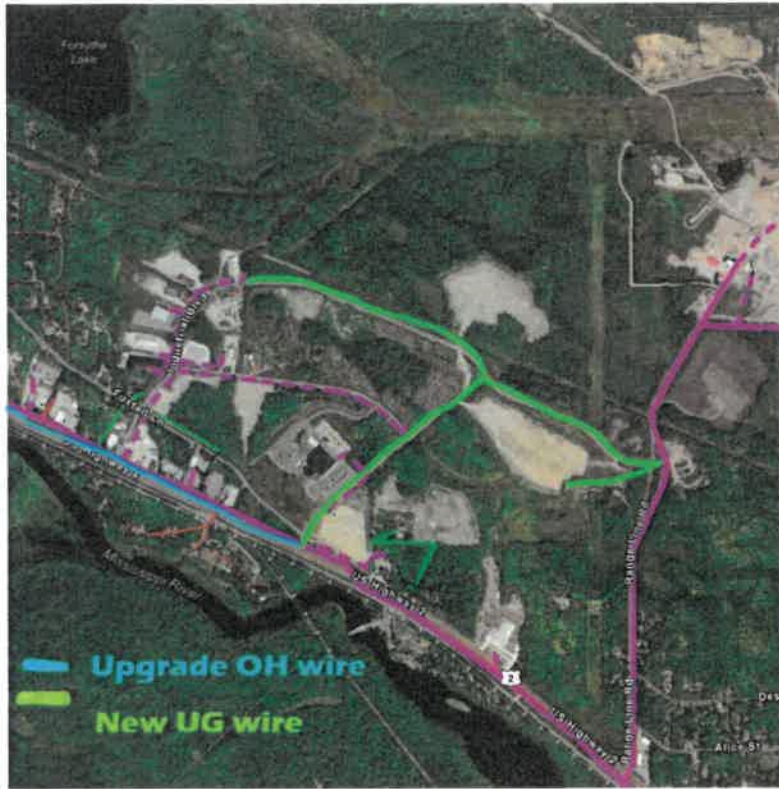
Cost Breakdown: Total Project Cost is \$1,256,400

1. Lake Country Power 60% contribution: \$753,840
2. City of Cohasset & Itasca County 28% contribution: \$360,000
 - a. City of Cohasset: \$268,000
 - b. Itasca County: \$92,000
3. Remaining funds to be submitted to the IRRR: \$142,560

Maps of Project:



Figure 1: Route from Cohasset Substation to Cohasset Industrial Park



2: Cohasset Industrial Park